



VCE HEALTH AND HUMAN DEVELOPMENT

Units 3 & 4

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USING THIS RESOURCE TO TEACH AND LEARN



1

Student tip

LEARN THE THEORY

Every dot-point in your study design is covered in our video lessons and textbook theory - perfect to use for pre-learning, during class, and as revision.

Teacher tip

EVALUATE STRENGTHS AND AREAS FOR IMPROVEMENT

Teachers see class-level data and individual student responses - use this to provide feedback, differentiate student learning, plan future lessons, and inform the revision program of your students.



4

1A Health and wellbeing

23 questions

Q5

I have outlined an advantage of the WHO definition of health	8/13	
	5/13	
I have outlined an disadvantage of the WHO definition of health	5/13	
	8/13	



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Q15b (4 marks) 

Tibet is a region in East Asia located in the Himalayas. In 1949, China invaded Tibet and has ruled the region. Since the Chinese military took over, there has been resistance from Tibetans, general have resulted in violent conflict and imprisonment of many Tibetan people. These prisons have inhumane treatment of Tibetans, including torture. The conflict between China and Tibet has rights for Tibetan people, including imprisonment for religious and political beliefs, inhumane speech, and an inability to leave Tibet.

Source: adapted from New Internationalist, China's suppression of Tibetans has dramatically increased. <https://newint.org/features/web-exclusive/2019/03/chinas-suppression-tibetans-dramatically-increased>

Peace and social justice are prerequisites for health.

Explain why the prerequisites peace and social justice must be available for Tibetan people to improve their health.

Write your answer



10 QUESTIONS 12

1D QUESTIONS

Theory review questions

Ques ion 1

For whom does access to all nine of the WHO's 9 equities for health: w ill have optimal health and we ll being?

A True
B False

Ques ion 2

The prerequisites of peace and social justice are related to each other:

A True
B False

Ques ion 3

Income and education influence each other:

A True
B False

Ques ion 4

Social justice and equity are p reci. ically the same thing

A True
B False

Ques ion 5

Which of the following is a way that income impacts health outcomes? (Select all that apply)

I Having an income can dec. ease stress and anxiety
II Income enables people to access essential resources such as food
III An adequate income enables people to focus on activities they enjoy

Ques ion 6

What will definitely lead to optimal health outcomes?

A True
B False

Ques ion 7

Sustainable resources only concern future generations

A True
B False

Ques ion 8

Which of the following statements about a stable ecosystem is correct? (Select all that apply)

I A stable ecosystem is essential for physical health and well-being as it provides clean air
II A stable ecosystem helps to control the negative which can increase mortality: e.g.
III Human as we ll as plants can permanently change a ecosystem forever

Ques ion 9

Given money should ensure that population has access to all nine of the WHO prerequisites

A True
B False

5b 5c

Perfect your ph. writing

Question 10

Which of the following sentences is most clear?

A Peace is the absence of conflict
B War is the absence of conflict, which involves the absence of conflict

Question 11

Which of the following sentences is most clear?

A Social justice is where everyone has equal rights whereas equity relates to people living free / on discrimination
B Social justice is where everyone has equal rights whereas equity relates to people being treated fairly

Exam style questions

Question 12 (1 MARK)

Describe the prerequisite for health as 'peace'

Question 13 (1 MARK)

Shelter is a prerequisite for health

a Describe shelter as a prerequisite for health. (1 MARK)
b Explain how shelter can contribute to improved health outcomes. (2 MARKS)

Question 14 (2 MARKS)

Apart from shelter, diet and exercise, describe one WHO prerequisite for health and explain how it promotes one dimension of health and well-being

Question 15 (3 MARKS)

Tibet is a region in East Asia located in the Himalayas. In 1949 China invaded Tibet and has since been under China's rule. There has been resistance from Tibetans, which has resulted in violent conflict and imprisonment of many Tibetans, who have suffered in violent conflict and imprisonment of many Tibetan people. These prisons have reported to involve inhumane treatment of Tibetans, including torture. The conflict between China and Tibet has resulted in a lack of human rights and an inability to leave Tibet and an inability to leave Tibet. Write a short paragraph about the conflict and the inhumane treatment in terms of health and well-being.

Please note: social justice is a principle for health

a Select at least one peace or social justice and explain one way it promotes health via its pathway. (1 MARK)
b Explain why the prerequisites peace and social justice must be available for it to be an people to improve their health and well-being. (2 MARKS)

Ques ions from my tiggle lessons

Question 16 (4 MARKS)

a Income and a stable ecosystem are prerequisites for health. Describe the income and a stable ecosystem with... (2 MARKS)
A set of 4 or 5 key features = 2
B set of 6 or 7 key features = 3
C set of 8 or 9 key features = 4

b Select at least one income or a stable ecosystem and explain why it is a prerequisite for health at an individual level and a global level. (2 MARKS)

A set of 4 or 5 key features = 2
B set of 6 or 7 key features = 3
C set of 8 or 9 key features = 4

2

Student tip

CHECK FOR UNDERSTANDING

Each lesson has theory review questions, skills questions, and exam-style questions so you can apply your knowledge in different ways and consolidate your learning. You'll also find tests/exams within each area of study.

3

Student tip

SELF-ASSESS AND GET FEEDBACK

At the back of your textbook you'll find exemplar responses and checklists for every exam-style question. In your Edrolo account, you'll find video solutions as well as the interactive checklists and exemplar responses. Use these answers to target your revision and get the greatest impact from your study time. This enables you to focus on the parts of the theory you struggled with, and ask your teacher for support if you get totally stuck!

→ belonging = spiritual, h&w

Edinson plays volleyball for his local **community team**. He loves playing volleyball because it has enabled him to develop meaningful relationships with other members of his team, who he often catches up with after training. However, because he broke his ankle during a team training session, Edinson is now unable to complete daily tasks, such as continuing to play volleyball and regularly attending school. This has caused Edinson to feel stressed about keeping up with homework and maintaining his friendships with his teammates.

If Edinson had also begun to feel a loss of belonging to his volleyball community after 'he broke his ankle during a team training session', this would reflect Impaired spiritual health and wellbeing.

A True. ✓✓
B False.

*Spiritual = meaning, purpose
and belonging*

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Q14 (2 marks) ↗

Jax is on the top football team at his school. He has recently developed a serious cough. He went to the doctor, who told him that he had bronchitis, and prescribed him antibiotics. The doctor told Jax that he has to rest and recover and is not allowed to exercise for the next week.

Explain how Jax's current situation could have an impact on his physical health and wellbeing.



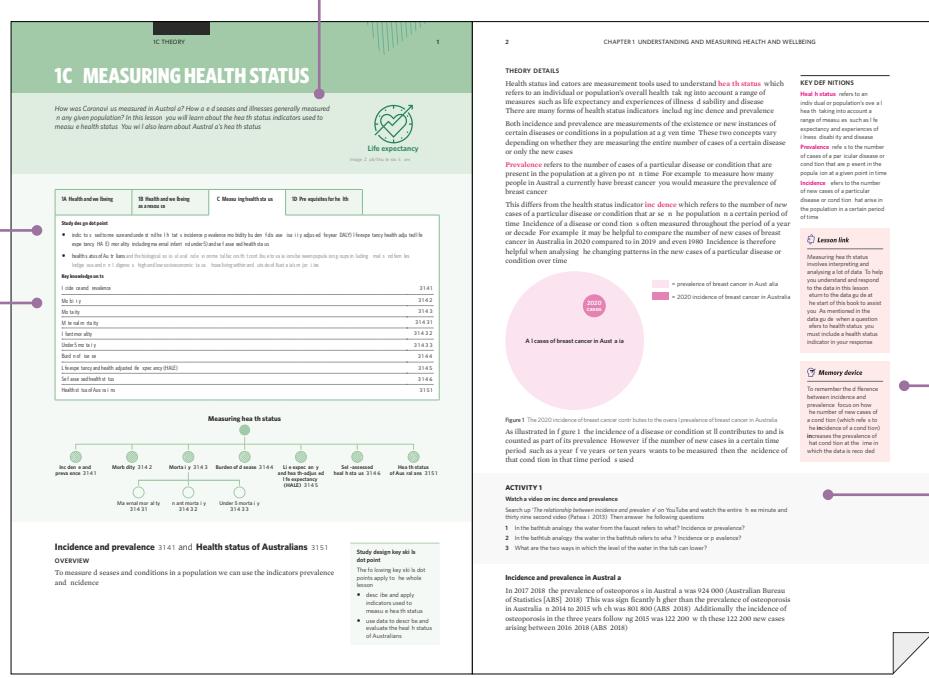
FEATURES OF THIS BOOK

Edrolo's VCE Health and Human Development Units 3 & 4 textbook has the following features.

Study design dot points from the VCAA curriculum provide explicit links between our lessons and the syllabus.

Key knowledge units break down the theory into smaller chunks and can be used to help navigate the corresponding theory lesson videos online.

Hooks describe the relevance of the concepts of a lesson to your own life, often by posing thought-provoking questions that you should be able to solve by the end of the lesson.



Explore boxes
include want to know more, useful tips, memory devices, lesson links and real-world examples.

Activities include things like class discussions, quizzes, a model to fill in, or a video or article to read or watch and respond to.

Theory review questions test if students can remember the basic theory and overcome common misconceptions. They are stepping stones between the content and exam-style questions.

Exam-style questions reflect the style of your end-of-year exam in Year 12. These include questions from both within the lesson and from multiple lessons.

CHAPTER 1 UNDERSTANDING HEALTH AND WELLBEING

1A QUESTIONS

Theory review questions

Question 1

Which of the following best fills in the blank?

- Perfect
- Optimal

Experiencing the highest possible level of health and wellbeing when taking unique characteristics into account refers to health and wellbeing

Question 2

Maintaining a healthy body weight and supporting immune system functioning relates to:

- Physical health and well-being
- Spiritual health and well-being

Question 3

Which of the following are aspects related to positive mental health and well-being? (Select all that apply)

- The ability to use log c
- Low levels of stress
- Not feeling sad

Question 4

Optimal oral health and well-being only occurs if an individual never experiences negative emotional responses.

- True
- False

Question 5

An individual automatically has optimal social health and well-being if they have more than two relationships with others in their life.

- True
- False

Question 6

Which of the following are aspects related to positive spiritual health and well-being? (Select all that apply)

- Having a sense of hope for the future
- Having strong common cultural skills
- Displaying resilience

Question 7

Perceptions of health and well-being remain the same for all individuals regardless of individual characteristics such as culture or gender.

- True
- False

Self-test

Perfect your phrasing

Question 8

Which of the following sentences is most correct?

1A QUESTIONS	
A	Optimal health and wellbeing involves an individual experiencing the highest possible level of health and well being when in the best physical, emotional, social and mental state. Optimal health and wellbeing is an individual experiencing perfect health and well being when taking into account the unique personalities characteristics and life style.
B	Describe the concept of optimal health and wellbeing.
C	Describe the spiritual dimension of health and wellbeing.
D	Describe the mental dimension of health and wellbeing.
E	Jax is on the top football team at his school. He has recently developed a serious cough. He went to the doctor who told him that he had bronchitis and prescribed him antibiotics. The doctor told Jax that he has to rest and recover and s' allowed to exercise for the next week. Explain how Jax's current situation could have an impact on his physical health and wellbeing.
F	Outline an advantage and a disadvantage of the WHO definition of health.
G	Marcus just broke up with his girlfriend two days ago. Since breaking up with his girlfriend, he has been upset and has been questioning whether he made the right decision breaking up with her. His friends Nathaniel and Dara have made sure to check on him.
H	1. Health and wellbeing
I	Theory review questions
J	1. E Explain the highest possible level of health for each individual's ability to optimise health and well-being. Perfect health and well-being should not be aimed for individuals as it is not possible to be attained.
K	2. A Explain what is meant by the spiritual dimension of health referring to religion and health if we are being asked. This is due to both of our components supporting the functioning of the body and its systems.
L	3. I The WHO definition of health is based on the four levels of health. It is important to be able to use logic and low levels of it to apply meaning to each component of the WHO definition of health.
M	4. F The advantage of the WHO definition of health is that it is more objective than subjective. It is being more objective means negative emotions such as fear, anxiety and depression are not included in the definition.
N	5. F Optimal health and well-being does not have a negative relationship. Instead optimal health and well-being is a positive relationship. If we are being asked to explain the negative relationship between the two, then we can mention that we do not have relationships with other people or for a person.
O	6. H Having a sense of hope for the future relates to an individual's value and the sense of purpose in their life. Referring back to spiritual health and well-being, having a sense of hope for the future is linked to spiritual health and well-being as sense reflects emotional health and so is living.
P	7. F An individual's character is in such a way that they have greatly impacted their personal health and well-being. The relation to the subjective nature of health and well-being is that it is subjective.
Q	14. J I'm sorry. I know it is a bit hard to be negative impacting by his development of bronchitis, as he is unable to exercise while recovering and is lacking a strong immune system. For example, Jax's definition of health is that he is not playing football because of the damage of his body and its systems as he is not able to make an regular exercise due to his experienced an illness.
R	15. J I have explained how Jax's physical health and well-being has been impacted by his current situation?
S	16. J I always go on an example to illustrate how Jan's physical health and well-being has been impacted by her diet. Due to one component of physical health and well-being.
T	17. J I have referred to the character's name in my response (Jan) and to the scenario.
U	18. H One advantage of the WHO definition of health is that it is more objective than subjective. It is being more objective means negative emotions such as fear, anxiety and depression are not included in the definition. Another advantage of the WHO definition of health is that it is more objective than subjective. It is being more objective means negative emotions such as fear, anxiety and depression are not included in the definition.
V	19. J I have not had an advantage of the WHO definition of health.
W	20. J I have lived a disadvantage of the WHO definition of health.
X	Other acceptable answers include:
Y	a) other advantages and disadvantages of the WHO definition of health

Exemplar responses are provided for every exam-style question to show you what a full mark response could look like.

Checklists break answers down into the smallest components required to get full marks. Each numbered checklist item details what is required for one full mark. Checklist items that are not numbered also show you how to articulate your response coherently, for example, by including key terms or comparative language.

Other acceptable responses are included when there are multiple answers that could achieve full marks.

FEATURES OF THIS BOOK

Reviews are outlines of the knowledge from the entire chapter that use models and diagrams to emphasise key theory details. They also show connections between lessons to help you zoom out and see the big picture.

Chapter review activities help to revise chapter concepts and develop your understanding of content throughout the whole chapter so as to prepare you for the chapter test that follows and any assessments you have at school.

CHAPTER 1 REVIEW

CHAPTER SUMMARY

This chapter introduced you to the fundamental concepts of VCE Health and Human Development. You learnt about the concept of health and well-being, how optimal health and well-being can act as a resource, the indicators which are used to measure and understand health status and the World Health Organisation's (WHO's) prerequisites for health.

In lesson 1A: **Health and well-being**, you were introduced to the concepts of health and well-being, and illness. You learnt that health and well-being and illness are both dynamic (constantly changing) and subjective (influenced by individual opinion). You also learnt about the five dimensions of health and well-being, which are summarised in the following table e.

Dimension of health and well-being	Example of components of this dimension
Physical	<ul style="list-style-type: none"> • regular exercise • driving, nervous system, contribute to minimal illnesses • a balanced diet, in which nutrition needs are met
Mental	<ul style="list-style-type: none"> • the ability to use logic • the ability to make decisions • the ability to independently form opinions
Emotional	<ul style="list-style-type: none"> • the appropriate expression of emotions, such as in the right environment and in front of the right people • managing emotions in an effective manner, such as learning techniques to cope with stress • having appropriate emotional reactions to events
Social	<ul style="list-style-type: none"> • having a strong support network provided by family, friends and the wider community • the ability to maintain positive relationships with others, including the ability to express emotions and overcome conflict • the ability to form new social networks with others
Spiritual	<ul style="list-style-type: none"> • a sense of hope about the future • a sense of meaning or value which guides an individual through their life • the ability of an individual to reflect on their place in the world

It is important to memorise these dimensions as you require this knowledge for the entire course. Specifically when a question asks you to talk about 'health and well-being' or 'health outcomes' or 'health', you are required to refer to the dimensions.

Finally, you learnt that the dimensions of health and well-being are interrelated; meaning a change to one dimension could positively or negatively affect the other four dimensions in some way.

In lesson 1B: **Health and well-being as a resource**, you learnt about how optimal health and well-being can act as a resource for individual, national and global health. This is summarised in the following table e.

Individuality	Nationality	Globally
<ul style="list-style-type: none"> • the ability to participate in sporting recreational and leisure activities • effective participation at work and school • the ability to carry out daily tasks • the ability to participate in meaningful relationships with others • lower healthcare costs 	<ul style="list-style-type: none"> • greater community participation • greater levels of volunteering • less reliance on social support systems • less burden placed on the healthcare system • higher national income (as reflected by GDP), due to greater productivity and a range of other investment opportunities and less absenteeism 	<ul style="list-style-type: none"> • increased access to opportunities • lower levels of conflict • greater health outcomes, such as life expectancy • reduced spread of communicable diseases

CHAPTER 1 UNDERSTANDING AND MEASURING HEALTH AND WELLBEING

CHAPTER REVIEW ACTIVITIES

Review activity 1: Fill in the table

This table focuses on linking scenario to its effect on health status or a dimension of health and well-being. Read each scenario and state its impact on health outcomes as directed.

Scenario	Link to health status indicator or dimension of health and well-being
Vishnu has broken his leg and cannot play soccer with his team because of a injury.	Impact on two dimensions of V Vishnu's health and well-being.
COVID-19 has impacted Australian students' ability to attend school in person. Explain how this could impact two dimensions of Australian students' health and well-being.	Impact on two dimensions of Australian students' health and well-being.

Review activity 2: Match the terms to its description

Match the key terms relevant to this chapter on the left with the correct description on the right.

Peace	the ability to express control and manage feelings in a positive way and display resilience
Social health and well-being	a permanent structure that provides protection from the outside environment
Morbidity	a set perceived negative state of health and well-being in which an individual believes that they are experiencing something which makes them unwell
Dynamism	ill health in an individual and the levels of ill health in a given population group
Illness	a state of harmony and tranquility which involves freedom from civil disturbance and conflict
Emotional health and well-being	something that is constantly changing over time
Burden of disease	the ability to form meaningful and satisfying relationships with others as well as the ability to appropriately manage and adapt to social situations
Sheer	a measurement of the impact of disease and injuries specifically measuring the gap between the current health status and ideal situation

The **chapter test** includes exam-style questions from content throughout the chapter in order to provide thorough preparation for upcoming tests. The chapter test also includes questions from multiple chapters so as to continue to develop a more holistic understanding of content throughout Health and Human Development.

CHAPTER 1 TEST

Question 1 (2 MARKS)
Describe mental health and well-being

Question 2 (2 MARKS)
Using one example, outline why health and well-being is said to be subjective

Adapted from 2020 Health and Human Development exam Q1a

Question 3 (5 MARKS)
Under 5 mortality rate (per 1000 live births) 1970–2019

Year	Australia (per 1000 live births)	Nigeria (per 1000 live births)
1970	~15	~300
1980	~15	~250
1990	~15	~180
2000	~15	~150
2010	~15	~120
2019	~15	~120

Source: Adapted from the World Bank. <https://doi.org/10.1787/81c4520d-en>. Accessed 10/03/2020.

a. Describe under 5 mortality rate. (1 MARK)
b. Describe a trend which is evident in the graph. (2 MARKS)
c. Explain how the WHO prerequisite shelter could decrease the under 5 mortality rate in Nigeria. (2 MARKS)

Question 4 (2 MARKS)
Outline how prevalence differs from incidence

Adapted from 2020 Health and Human Development exam Q1b

Question 5 (6 MARKS)
Jean and Claude are a married couple who own a French cafe in Miami. Alongside two bakers, Claude makes an assortment of pastries and cakes each morning and Jean is responsible for managing the cafe. Recently Claude has given birth to their first baby and has taken two months off work. However Claude has been struggling mentally since giving birth due to experiencing high levels of stress in caring for the new baby and has decided to take another month off work.

a. Explain how Claude's current situation could impact her mental health and well-being. (2 MARKS)
b. Explain how Claude's mental health and well-being could have an impact on her social and spiritual health and well-being. (4 MARKS)

Adapted from 2020 Health and Human Development exam Q1d

Question 6 (2 MARKS)
Outline one benefit of optimal health and well-being as a resource globally

Adapted from 2020 Health and Human Development exam Q1e

AOS reviews are 50 mark practice SACs for each area of study. They only include questions from within that area of study so as to prepare you for an upcoming SAC.

UNIT 3 AOS 1 REVIEW

Complete the following 50 mark practice SAC, which tests all content from within Unit 3 AOS 1.

Quest on 1 (1 MARK)
Describe the health status indicator of morbidity

Quest on 2 (2 MARKS)
Outline one way in which smoking contributes to Australia's health status

Quest on 3 (3 MARKS)
a. Describe the prerequisite for health education. (1 MARK)
b. Suggest one way in which the prerequisite for health education can impact Australia's health status. (1 MARK)
c. Explain one important prerequisite for health and is also one component of socioeconomic status (SES). Identify an example of a difference in health status between those low SES and high SES Australians. (1 MARK)

Quest on 4 (1 MARK)
Outline the dynamic nature of health and well-being

Quest on 5 (3 MARKS)
a. Identify one biological factor that contributes to variations in health status between population groups. (1 MARK)
b. Explain how a year defined factor in part a could contribute to differences in burden of disease between male and female Australians. (2 MARKS)

Quest on 6 (6 MARKS)
Female genital mutilation (FGM) is a traditional practice in some countries which involves injury to or removal of part or all of external female genitalia. This practice has no health benefits, it usually performed without consent and causes harm. As such FGM has been described as a breach of human rights due to violating a person's right to health dignity and freedom from torture. At the time of writing, more than 200 million girls have experienced FGM across the world. FGM interferes with the natural functioning of female bodies and can lead to many negative health outcomes such as infections and haemorrhages (excessive bleeding) both of which can lead to death.

Source: Adapted from the World Health Organization. <https://doi.org/10.1787/81c4520d-en>. Accessed 10/03/2020.

a. Explain how female genital mutilation (FGM) can negatively impact physical health and well-being. (2 MARKS)
b. Outline how female genital mutilation negatively impacts health status. (2 MARKS)
c. According to the Ottawa Charter for Health Promotion, what is a prerequisite for health? Explain why social justice must be made available to females experiencing FGM to improve health and well-being. (2 MARKS)

Adapted from UC4A 2020 exam Q2a

Quest on 7 (6 MARKS)
Socioeconomic status is a measure used to determine the social status of an individual using the factors of income occupation and education. Lower levels of socioeconomic status can also be called socioeconomic disadvantage with higher levels of socioeconomic status being socioeconomic advantage. Levels of socioeconomic disadvantage can be measured in three ways of quintiles with each quintile representing 20% of Australia's population. The first quintile reflects the greatest level of socioeconomic disadvantage and the fifth quintile reflects the lowest level of socioeconomic disadvantage.

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GUIDE TO INTERPRETING DATA IN HEALTH AND HUMAN DEVELOPMENT

Throughout Units 3 and 4 in VCE Health and Human Development, you will be required to interpret and use data. To do so, you need to have an understanding of the different ways in which data can be presented and the steps required to correctly interpret them. VCAA has identified that this can be difficult for students in exams, so this guide will provide you with approaches to looking at and understanding health-related data. You can refer back to this guide for a refresher on these concepts at any point in the course.



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Interpreting data

There are many different ways in which health data can be presented. There are some general questions that need to be addressed for all data forms. These include:

- What is the context of the data?
 - What is the health issue the data is about?
 - What population is the data representing?
- What is the unit of measurement of the data?
 - A *unit of measurement* refers to a standardised quantity you can use to measure things. In real life, examples include centimetres and kilograms.
 - In VCE Health and Human Development, there are multiple units of measurement commonly used, such as *percentages* of a population, the total number of cases of a condition in a population, the number of cases of a condition per 1000 in the population, the average number of years a person is expected to live, and so on.
 - When considering the unit of measurement, we need to consider *what* is being measured and *how* it is being measured. For example, if we were learning about how many people in Australia have cancer, there are different ways in which we can look at this. This included:
 - The *percentage* of Australians diagnosed with cancer at a given time.
 - The *number* of Australians diagnosed with cancer in a year.
 - The *number* of Australians diagnosed with cancer *per 100,000 in the population*.
 - All of these different ways of measuring cancer, which have been italicised, are different units of measurement.

Interpreting data is a necessary skill in VCE Health and Human Development. It is guaranteed that there will be health data that you need to interpret in the VCE exam, as well as in your SACs. This data will usually refer to health status indicators, which are measurement tools used to understand health status. You will first be introduced to health status indicators in lesson 1C: *Measuring health status*, and they will be included in most lessons of the textbook.

Useful tip

When looking at a visual presentation of data, it is crucial to carefully examine the numerical values being used in a unit of measurement. In VCE Health and Human Development, we often work with large values, such as 26,000 individuals suffering from a given disease. If we were to always label data with these large values, the visual presentation may be crowded. Therefore, it is common for graphs to use brackets with a ' ('000) so that they can visually present data more cleanly.

The number of zeros included in the brackets should be added to the end of the number on the axis. For example:

- If the bracket is ('000) and the number on the axis is 50, the exact value = 50,000.
- If the bracket is ('000) and the number on the axis is 5, the exact value = 5000.
- If the bracket is ('00) and the number on the axis is 5, the exact value = 500.

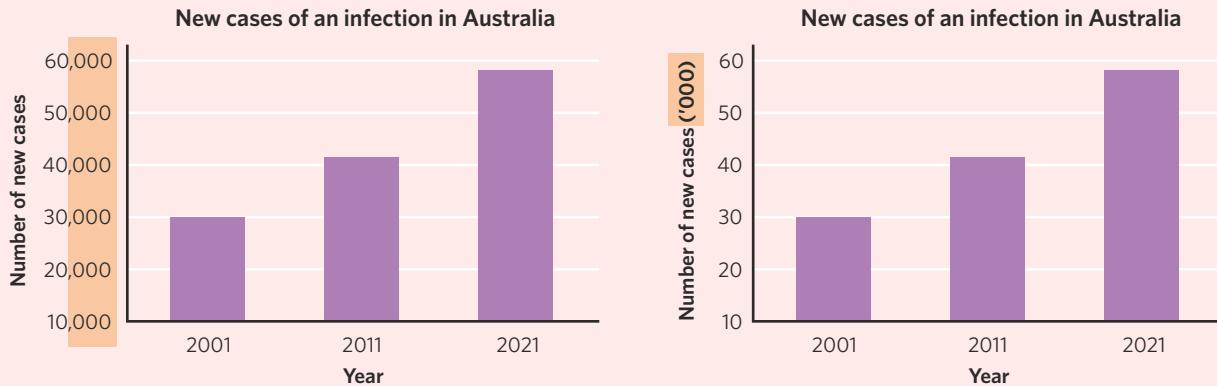


Figure 1 Example of the use of brackets to indicate the unit of measurement when large data values are used

As can be seen in figure 1, when large data values are used to label the axes of a graph, it can be crowded and overwhelming to read. The graph on the right uses ('000) instead to make the graph easier to read. When using even larger data values, this is even more useful.

It is important to note that if you were answering a question and referring to any data from either of these two graphs, you would need to state the whole number rather than the shortened version, such as 20,000 rather than 20. Overall, this demonstrates the need to always check the units of measurement in data visualisations (especially if brackets have been used) and ensure you use the correct unit of measurement when responding to questions.

Visual presentations of data

There are many ways in which data can be presented visually, such as in a graph or table. Let's now have a look at some types of visual data presentations and some tips on how to best interpret them.

Tables

Tables are a helpful visual presentation used to neatly arrange data into rows and columns.

When looking at tables, it is important to look at:

- the context of the data in the table, which is usually provided in the heading of the table.
- the different groups included in the table, such as different years or different population groups. These are typically presented in each row and column.
- the unit of measurement used in the table, such as the number of deaths per 1000 people.

You can refer to tables 1 and 2 as examples of how health data can be presented in tables.

Table 1 Brazil's life expectancy (World Health Organisation [WHO], 2021)

	Life expectancy at birth (years)		
	Both sexes	Male	Female
2019	75.9	72.45	79.39
2015	75.13	71.67	78.64
2010	74.09	70.57	77.68
2000	71.47	67.9	75.18

Context of the data
Units of measurement
Population groups

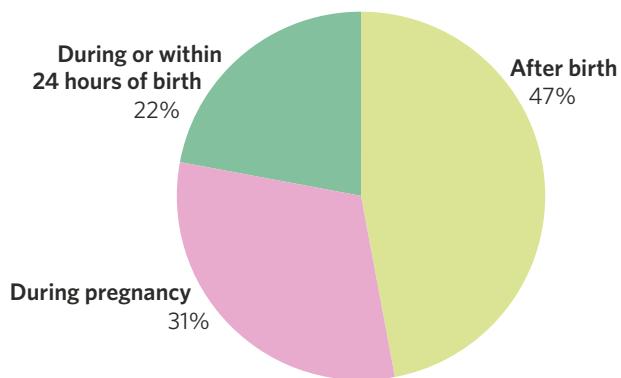
Table 2 New HIV infections in Brazil (WHO, 2021)

	New HIV infections (<i>per 1000 uninfected population</i>)		
	Both sexes	Male	Female
2019	0.23	0.34	0.13
2015	0.25	0.36	0.14
2010	0.21	0.27	0.15
2005	0.25	0.3	0.21
2000	0.29	0.35	0.24

As previously mentioned, it is important to look at the units of measurement used in tables. Table 1 measures life expectancy at birth in *years*, while table 2 measures new HIV infections *per 1000 uninfected population*. In question answers, you will need to correctly identify the units of measurement used in tables to get full marks for your response.

Pie charts

Pie charts are a visual presentation tool often used to compare smaller groups within an overall group. For example, deaths caused by cancer could be the overall data shown in the pie chart, with types of cancer making up the smaller groups. To compare these groups, we need to look at the size of each ‘slice’ of the pie chart, with larger ‘slices’ representing a larger proportion within the overall pie. When looking at pie charts, it is important to interpret them by understanding their context, the groups included in the pie chart, and the units of measurement.

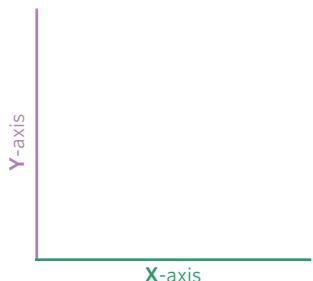
**Figure 2** The timing of maternal mortalities in Australia in 2018 (Australian Institute of Health and Welfare [AIHW], 2020)

As we can see in figure 2, this pie chart is displaying maternal mortalities in Australia in 2018 (which is the overall group of data). You can see that maternal mortalities ‘after birth’ made up the biggest proportion of the pie chart, accounting for 47% of maternal mortalities in Australia in 2018. This was followed by 31% ‘during pregnancy’ and 22% ‘during or within 24 hours of birth’.

Graphs

Graphs are commonly used to present data. Particularly when representing data changes over time. When looking at a graph, you need to be aware of the X- and Y-axis.

As shown in figure 3, the Y-axis is the vertical axis, while the X-axis is horizontal. Each graph is made up of these two axes, with each often representing different variables. For example, in figure 6, the Y-axis represents the number of road mortalities (‘000) and the X-axis represents the year.

**Figure 3** The difference between an X- and Y-axis

Want to know more?

Variables and graphs

A variable is something that is likely to vary or change.

Graphs typically have two types of variables:

- independent variable (most commonly found on the X-axis of a graph)
- dependent variable (most commonly found on the Y-axis of a graph)

The independent variable is a variable that is *manipulated* and can result in a change in the dependent variable. The dependent variable is the variable we are *measuring*. It is the variable that we observe a change in, based on the change in the independent variable.

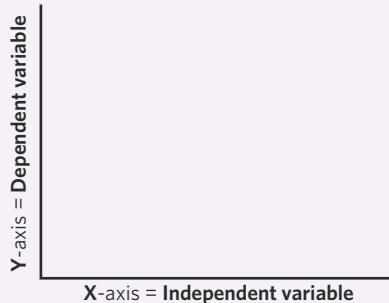


Figure 4 Types of variables in a graph

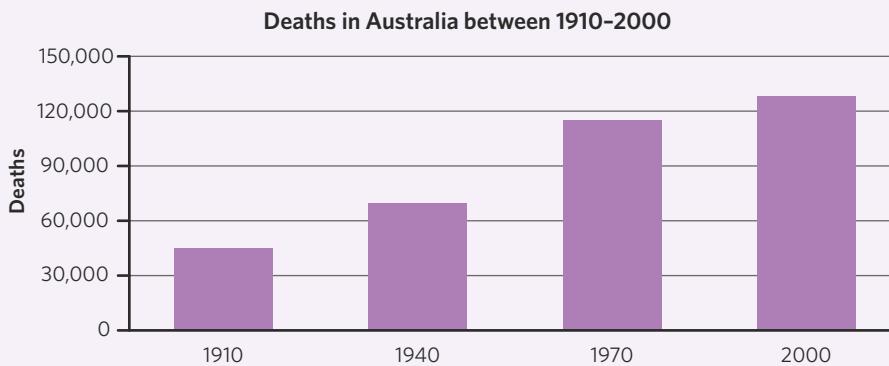


Figure 5 This graph has two variables, year and deaths (AIHW, 2020)

The graph in figure 5 measures the number of deaths in Australia between 1970 and 2000. There are two variables presented in the graph: the independent variable is year, whereas the dependent variable is deaths. This is because as the year changes, the number of deaths change (a change in the independent variable causes a change in the dependent variable, which is the variable we are measuring).

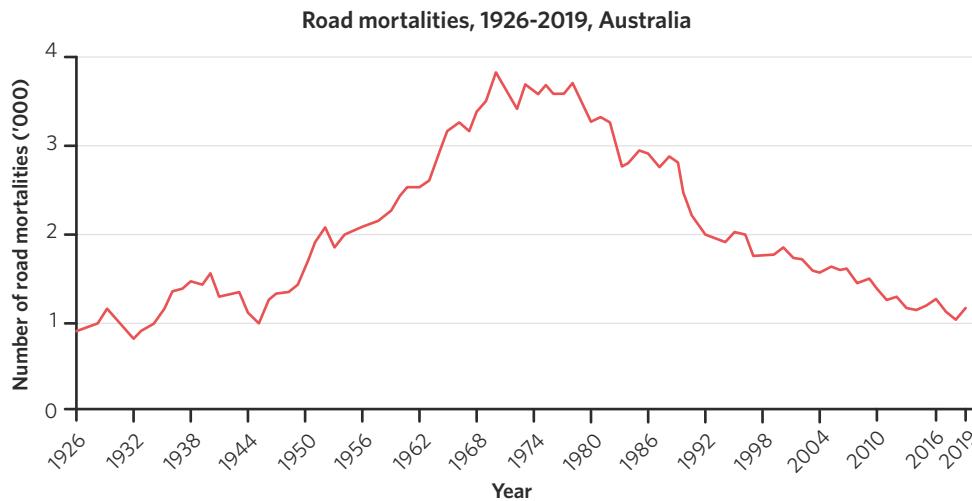


Figure 6 Road mortalities in Australia from 1926-2019 (Australian Bureau of Statistics, 2012; National Road Safety Strategy, n.d.)

In figure 6, the X-axis represents the year while the Y-axis represents the number of road mortalities ('000). We can use these axes to understand each individual data point, such as that in 1944 there were *approximately* 1000 road mortalities.

This graph shows a pattern over time, which reflects a trend. We will look at trends in data later on in this guide.

Useful tip

When answering questions about data, it is important that you use words, such as 'approximately', in your response; for example, 'there were approximately 3500 deaths in ...'. This is to leave room for error as it is unlikely that a visual representation of data, such as a graph, will clearly show the exact figure. To help you remember this, exemplar answers for exam-style questions throughout this textbook that refers to data have the checklist item:

-   I have used a qualifier, such as 'approximately', when referring to data.

Want to know more?

Stacked graphs

There are many different types of graphs. Stacked graphs, also known as stacked area charts, are one type of graph that students sometimes find difficult to interpret. Stacked graphs are typically used to show changes in data over time across different groups. To do this, each segment of the graph is stacked on top of each other. There are multiple types of stacked graphs; we will look at a stacked area graph in figure 7 as an example.

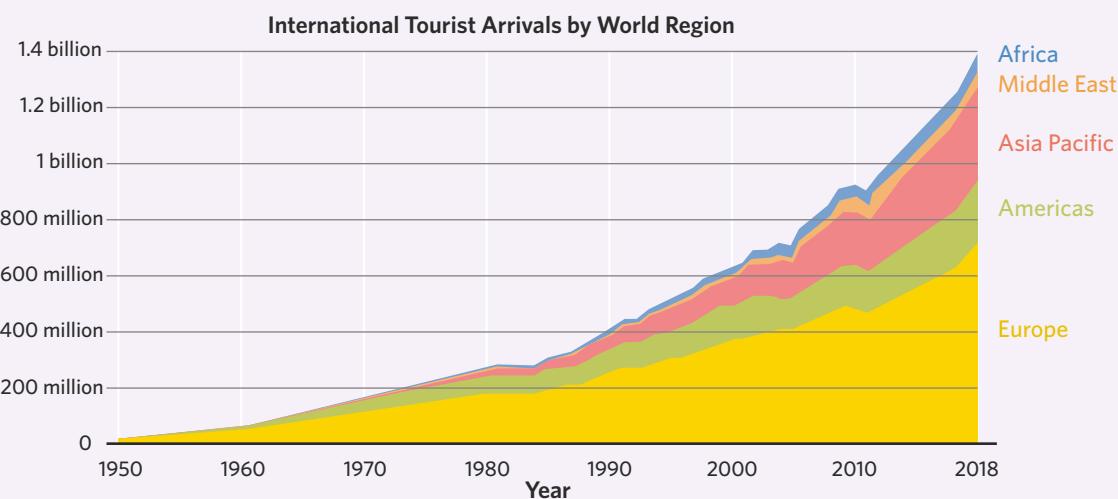


Figure 7 In this stacked area graph, different world region groups (Africa, Europe etc.) have been stacked on top of each other (Our World in Data, n. d.)

As we can see in figure 7, the number of international tourist arrivals from each region stack on top of each other. For example, the number of international tourists arrivals in the Americas (green) stacks on top of Europe (yellow). When you look at the top of the stack for each year, you can see how many international tourist arrivals there were across all world regions. For example, in 2018, there were approximately 1.4 billion tourist arrivals in total across all world regions.

Although stacked graphs are useful to see the total data value, such as the number of international tourist arrivals across groups, it can be difficult to interpret the data value of each group. As a result, you are unlikely to be asked to provide the exact figure of each group, but you may need to interpret which groups have the highest and lowest data values.

Stacked graphs help us visually compare groups; for example, it is obvious that there were a greater number of international tourists from Europe (yellow) compared with Africa (blue). Let's take a further look at how to interpret this graph.

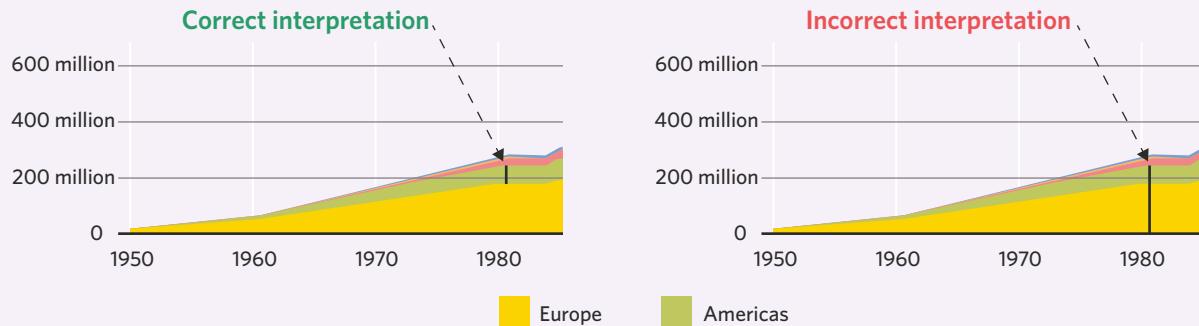


Figure 8 How to interpret the data value of each group in a stacked graph

Figure 8 provides instruction on how to interpret the value of each group, using the Americas in 1980 as an example. As can be seen in figure 8, the value of each group starts from the top of the stack of the group below and continues to the bottom of the stack of the group above. It does not stretch all the way to the bottom of the yellow stack (the bottom of the stack below), as this data represents the group below, in this case, Europe. As such, it is clear that there were approximately 190 million international tourist arrivals to Europe in 1980 and approximately 40 million international tourist arrivals to the Americas in 1980. As mentioned previously, you are unlikely to be asked about a specific number and are more likely to need a general understanding of the differences between each group. If you use the word 'approximately' when referring to data, you will be covered.

Trends in data

One main component of data interpretation in VCE Health and Human Development is looking at trends. A trend (in data) is considered to be a pattern or relationship in the data, often observed over time. For example, it can be an upwards or downwards (increasing or decreasing) shift in the data. For example, a trend could be the number of deaths due to cancer decreasing in Australia over time.

Useful tip

In the 2020 Health and Human Development report, VCAA outlined that trends relate to patterns within data over time. For example, one question asked students to outline a trend in data relating to life expectancy for males and females. VCAA stated that outlining the difference in life expectancy between males and females at one point in time did *not* answer the question. Instead, you would have to outline the difference between males and females over time, which are represented as two or more separate data points. For example: the following were accepted as correct responses:

- 1 Both male and female life expectancy at birth increases over time.
- 2 Female life expectancy is always higher than males throughout time.

It is useful to look at trends when trying to understand how health status has changed over time. For example, one major focus related to health has been trying to improve life expectancy around the world, which is the number of years an individual is expected to live. To understand if life expectancy is increasing over time, data from a range of years needs to be collected and organised, and a trend needs to be identified. Trends can be observed in different data presentations, such as in tables and graphs.

When looking at trends in data, there are four components you should identify and consequently include in an answer for an exam-style question to gain full marks if a single trend is worth two marks. These are:

- 1 The general direction of the trend.
- 2 At least two pieces of data to support the direction you have identified.
- 3 The context of the data and trend.
- 4 The units of measurement used in the presentation of the trend.

Table 3 Explanation of the components of a trend

Trend component	How to refer to this component in your answer
Direction of trend	<ul style="list-style-type: none"> • What is the general pattern in the data? Is it increasing or decreasing? Or has there been no change?
Two pieces of data to support identified direction	<ul style="list-style-type: none"> • If you have outlined that the number of deaths in a population has increased over time, you need data to support this claim. This may involve you identifying and outlining exact data supporting that life expectancy was lower in earlier years and increased to a higher life expectancy in later years. • When identifying what data to select to support your trend, it is important it illustrates the direction of the trend you described in the first part of your answer. It may be best to select values from two extremes of the data presentation, such as from the first data point and last data point of a graph.
The context of the trend	<ul style="list-style-type: none"> • What is the trend looking at? Is it looking at the number of cancer diagnoses? In what period of time? Over a year, over 10 years? In what country or region? You need to ensure that you have an understanding of the context of the data so that you can form a thorough understanding of the trend and use this to formulate your answer.
The units of measurement used	<ul style="list-style-type: none"> • The units of measurement refer to both: <ul style="list-style-type: none"> - what is actually being measured, such as the number of deaths or life expectancy. - how the measurement is represented, such as as a percentage. For example, if death is being measured, is it the total number of deaths per population, or deaths per 1000 population? • The units of measurement are usually outlined on the axes of a graph, or in the heading of rows and columns of a table.

Useful tip

If a question asks you to outline a trend in data and is worth *two marks*, you should include the four components in your answer to gain full marks. If instead, the question is worth *one mark* you should:

- 1 Outline the general direction of the trend.
- 2 Prove the context of the data and trend.

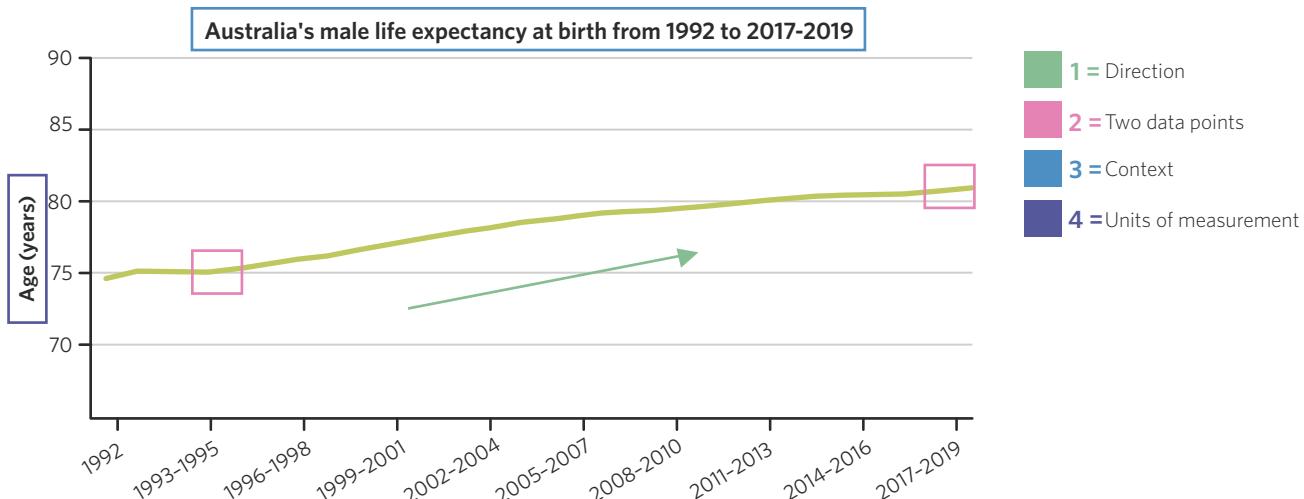


Figure 9 The trend of Australia's male life expectancy at birth from 1992 to 2017-2019, annotated (ABS, 2020)

Useful tip

When choosing the two data points to demonstrate a trend, it is best to choose two data points at each extreme (such as one of the first data points and one of the last). It is also important that you choose data points that are clear and easy to identify. For example, in the example provided, 1993-1995 was selected as it was easy to identify this point as 75 years of age.

Figure 9 displays each of the four components to consider when answering trend questions:

- 1 The green arrow displays that the trend among males is *increasing* over time (between 1992 to 2017-2019).
- 2 Two data points have been identified to demonstrate this trend.
- 3 The title of the graph displays the context of the trend.
- 4 The Y-axis outlines the units of measurement used in the trend.

Let's put these four components together now to write out an analysis of a trend. This response would be appropriate for a question that simply asked you to 'Outline a trend in the graph in figure 9'.

- In the graph referring to Australia's male life expectancy at birth from 1992 to 2017-2019 (**3. Context**), male life expectancy has increased over time (**1. Direction**). This is demonstrated by the life expectancy for males being approximately 75 years of age (**4. Unit of measurement**) in 1993-1995 (**2. First data point**), which increased to a life expectancy of approximately 81 years of age for males (**4. Unit of measurement**) in 2017-2019 (**2. Second data point**).

Useful tip

When you first learn about trends, it can be hard to remember all the components that you should include in your response. This will take practice, so for each exemplar answer to an exam-style question on trends in this textbook, we have included the following checklist items to help you remember all the components that you should include:

- I have outlined the general direction of the trend.¹
- I have referred to at least two points of data in the graph to illustrate the direction of the trend.²
- I have provided the context of the graph.
- I have included the correct units of measurement (e.g. per 1000 live births), ensuring to check the axis titles.

Useful tip

When identifying trends in data, we are looking for the general direction of a trend. To do so, we need to identify whether there has been an increase or decrease in the trend, or no change/difference at all. However, within this general, overall trend, *there can be fluctuations*.

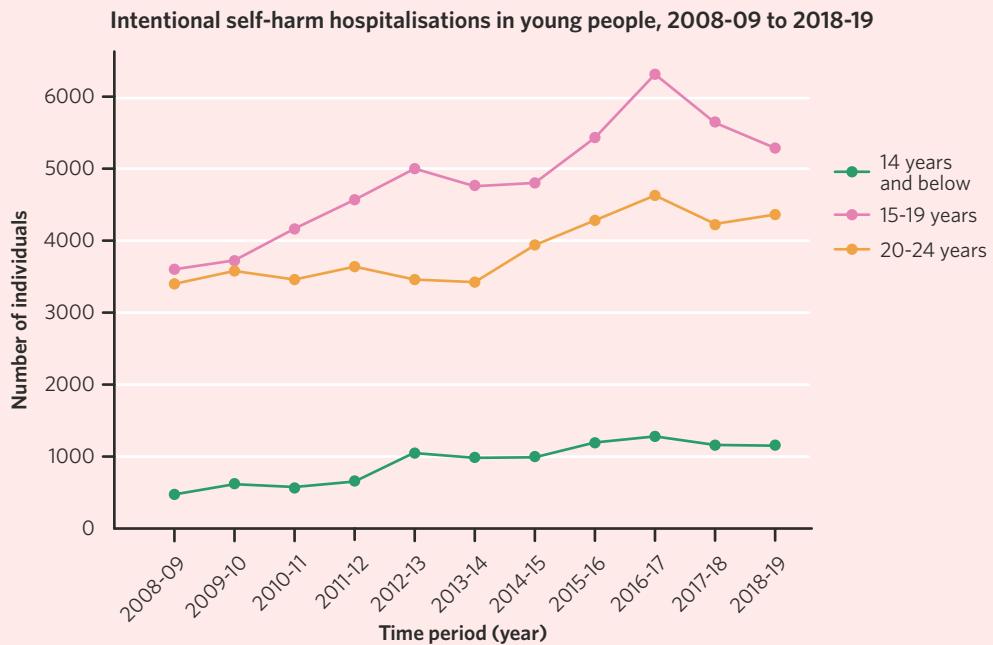


Figure 10 It is rare that data follows a smooth consistent pattern. Often we see fluctuations in data as seen in this graph (AIHW, 2021)

For example, as seen in figure 10, overall, the number of hospitalisations due to self-harm in Australians aged 20-24 years has *increased* between 2008-2009 and 2018-2019. This can be seen as in 2008-2009 there were approximately 3400 individuals aged 20-24 years hospitalised due to self-harm, which *increased* to around 4400 individuals aged 20-24 years hospitalised due to self-harm in 2018-2019.

However, we can also see that there have been fluctuations in this increase over time. For example, for Australians aged 20-24, there was a *decrease* in hospitalisations due to self-harm in 2017-2018 compared to 2016-2017. Even though there was this fluctuation and others, it is important that we recognise the general trend over time, where the data has *increased*.

Drawing comparisons between groups

In VCE Health and Human Development, there are multiple topics where you will need to compare data between population groups. To do this, you will most commonly look at the differences in health status between different population groups. When comparing population groups, you will most likely compare one health status indicator or factor between these groups, and then support this statement with data.

When looking to draw comparisons, consider the following:

- Is there a difference between the two population groups? Is one group higher than the other in a certain measure, such as one group having a greater life expectancy than the other?
- Is there clear data to support this?
- If there are multiple data points over time, is this difference consistent over the data points presented? For example, if one population group has a greater number of deaths for one out of ten years, it is important that you specify that it is *only* for that year.

Table 4 Percentage of Australian youth who rated their level of psychological distress as high, 2018 and 2020 (National Youth Mental Health Foundation, 2020)

	12-14 years	15-17 years
2018	20%	33%
2020	25%	38%

For example, using the data in table 4, let's draw a comparison between high psychological distress amongst young people aged 12-14 and those aged 15-17 in 2020. A comparison we can draw is young people aged 15-17 have higher rates of high psychological distress in 2020 compared to 12-14-year-olds. This is supported by the data, with 38% of 15-17-year-olds having high psychological distress in 2020 compared to 25% of 12-14-year-olds.

Useful tip

When drawing comparisons between groups, it is important to use a comparison word. For example, if you were asked to compare the life expectancy between two countries in an exam-style question, an answer that 'country A has a life expectancy of X year *and* country B has a life expectancy of Y years' may not adequately show a comparison.

What would a better answer look like? 'Country A has a life expectancy of X year, *whereas* country B has a life expectancy of Y years' better demonstrates a clear comparison between two different groups, in this case populations of country A and B.

To help you remember this, exemplar answers to exam-style questions throughout this textbook that refers to comparisons between groups has the checklist item:

-   I have used comparison words, such as 'whereas'.

Lesson link

There are many times in this course where you will need to draw comparisons between population groups. You will first be introduced to this in lesson **2B: Health variations between population groups: Part 2**.

Data in VCAA exams

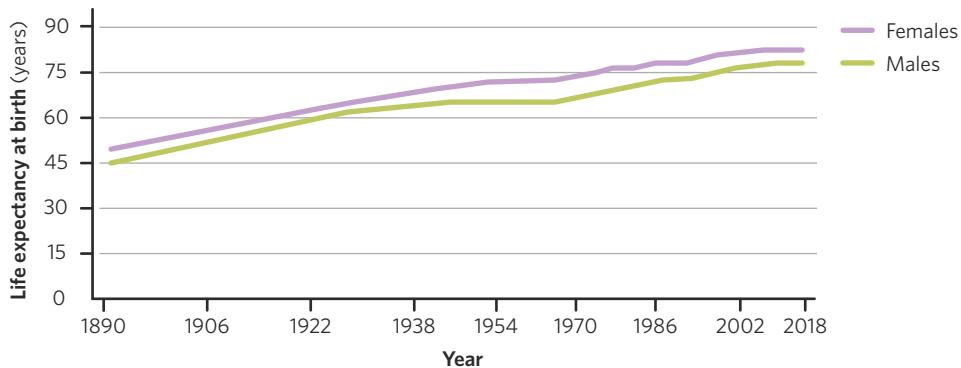
As previously mentioned, data is always included in the questions of VCAA Health and Human Development exams and SACs. This section will outline examples of the use of data in VCAA exam questions.

Example A

The following question includes a *graph* and involves *identifying trends*. The question was asked in the 2020 Health and Human Development Exam.

Question 5a

Life expectancy at birth (years) by sex, 1890–2017



Source: adapted from the Australian Institute of Health and Welfare, *Deaths in Australia*, cat. No. PHE 229, AIHW, Canberra, 2019; ABS 2014a, ABS 2014b, ABS 2015, ABS 2016, ABS, 2017, ABS 2018a

'Identify **two** trends that are evident in the graph above. (2 MARKS).'

NOTE

As outlined previously in this guide, if a trend is only worth *one mark* (as each of the two trends in question 5a are), you should only include the following two components of a trend:

- 1 The general direction of the trend.
- 2 The context of the trend.

As you can see, this question requires us to identify **two** trends and is worth 2 marks, meaning each trend is worth only one mark. The following is an example of a full-scoring response to this exam question from the VCAA examination report.

Question 5a - Response

[Both male and female life expectancy at birth increased over time from 1890-2017.¹] [Female life expectancy at birth was always higher than male life expectancy at birth throughout time from 1890-2017.²]

I have identified the general direction of a trend and its context.¹

I have identified the general direction of another trend and its context.²

NOTE

Some trend questions require a more in-depth response. If the exam-style question required you to only identify **one** trend but was worth **two** marks, the following is an example of what a full-scoring response could look like:

[Female life expectancy at birth was always higher than male life expectancy at birth throughout time from 1890-2017.¹] [This is demonstrated by females having a greater life expectancy at birth in 1890 of approximately 47 years than males who had a life expectancy of birth of approximately 45 years in 1890, which is consistent with 2018, as females had a greater life expectancy at birth than males of approximately 82 years and 75 years respectively.²]

I have outlined the general direction of the trend.¹

I have referred to at least two points of data in the graph to illustrate the direction of the trend.²

I have provided the context of the graph.

I have included the correct units of measurement (years), ensuring to check the axis titles.

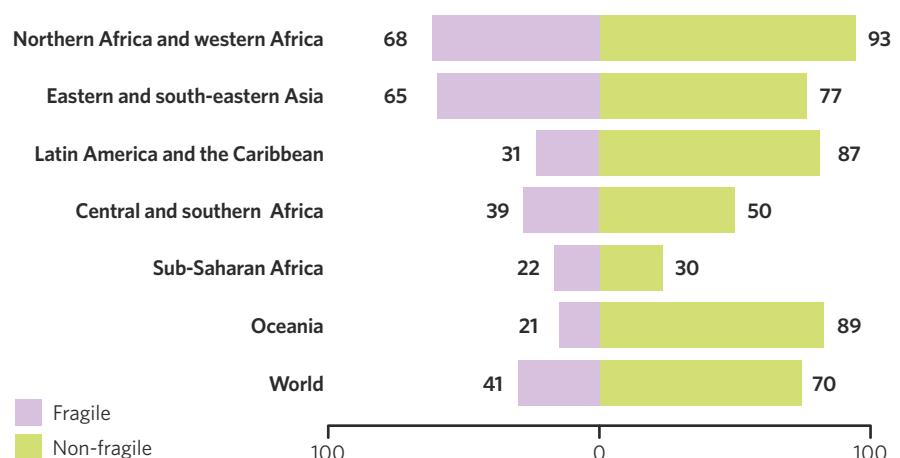
Example B

The following question includes a *graph* and involves *drawing comparisons* between population groups. The question was asked in the 2019 Health and Human Development Exam.

Question 12b

The World Bank classifies countries as fragile or non-fragile. A fragile state is a country that experiences conflict, violence and instability.

Proportion of the population using basic sanitation services in fragile and non-fragile states, 2015 (percentage)



Source: adapted from United Nations, *The Sustainable Development Goals Report 2018*, United Nations, New York, 2018, p. 19, © 2018 United Nations

'Using information from the graph, compare the use of basic sanitation services in fragile and non-fragile states. (2 MARKS)'

The following is an example of a full-scoring response from the VCAA examination report.

Question 12b – Response

[Greater proportions of populations in non-fragile states use basic sanitation services compared with those of fragile states.¹] [For example, in 2015 the proportion of people using basic sanitation services in 'northern Africa and western Asia' was measured at 93 percent for non-fragile states compared to 68 percent for fragile states.²]

- I have compared the use of basic sanitation services in fragile and non-fragile states.¹
- I have used information from the graph to support my comparison.²
- I have used comparison words, such as 'compared with'.
- I have included the correct unit of measurement (percent).

Example C

The following question includes a *table* and involves *drawing comparisons* between population groups. The question was asked in the 2016 Health and Human Development Exam.

Question 2a

The following data relates to the health status of Indigenous and non-Indigenous Australians.

	Prevalence of diabetes mellitus (age-standardised per cent)*	Incidence of type 1 diabetes (per 100,000)	Mortality with diabetes as underlying cause (per 100,000)*
Indigenous	15	7	89.4
Non-Indigenous	4.7	10	15.6

Sources: adapted from the Australian Institute of Health and Welfare, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples 2015*, cat. No. IHW 147, AIHW, Canberra, 2015; the Australian Institute of Health and Welfare, *Incidence of Type 1 Diabetes in Australia 2000–2013*, 'Diabetes' series no. 23, cat. No. CVD 69, AIHW, Canberra, 2015

'Use data from the **table** to **compare the health status** of Indigenous and non-Indigenous Australians. (2 MARKS.)'

The following is an example of a full-scoring response from the VCAA examination report.

Question 2a – Response

[Non-Indigenous Australians have a higher health status compared to Indigenous Australians. The prevalence of diabetes mellitus (age-standardised) is lower for non-Indigenous with 4.7% compared to Indigenous with 15%.¹] [Non-Indigenous have lower mortality with diabetes as an underlying cause with 15.6 deaths per 100000 compared to 89.4 deaths per 100000 for Indigenous Australians.²]

- I have outlined the overall comparison in health status between Indigenous and non-Indigenous Australians, with reference to a health status indicator.¹
- I have outlined a comparison in health status between Indigenous and non-Indigenous Australians from the table, with reference to a health status indicator.²
- I have used comparison words, such as, 'compared to'.
- I have included the correct units of measurement (age-standardised and per 100,000).

NOTE

There are alternative ways in which you could answer question 2a (from the VCAA Health and Human Development 2016 exam). For example, rather than drawing two comparisons between Indigenous and non-Indigenous Australians (each for a mark each), you could draw one comparison and use data to support this comparison. The following is an example of how you could draw **one** comparison and get full marks:

[Non-Indigenous Australians have a greater health status compared to Indigenous Australians, as indicated by significantly lower mortality with diabetes as an underlying cause (per 100,000) compared to Indigenous Australians.¹] [This can be identified as non-Indigenous Australians have a significantly lower mortality with diabetes as an underlying cause of 15.6 per 100,000, compared to the much higher mortality with diabetes as an underlying cause for Indigenous Australians of 89.4 per 100,000.²]

I have outlined one comparison in health status between Indigenous and non-Indigenous Australians.¹

I have used data from the table to support my comparison.²

I have used comparison words, such as, 'compared to'.

I have included the correct units of measurement (per 100,000).

You have now learnt skills that you will need to use to interpret and analyse data in VCE Health and Human Development. If you ever feel like you need a refresher on how to interpret health data, you can return to this guide. There are also 'Data analysis' skills questions, as well as exam-style questions including data throughout the textbook to help you practice your ability to interpret data and prepare you for SACs and the exam.

GUIDE TO RESPONDING TO HEALTH TERMS IN QUESTIONS

The following guide outlines the key health terms in VCE Health and Human Development Units 3/4, including how you are to respond to these health terms when they appear in exam questions.

This guide is to be used as a reference point when you are preparing for SACs and the final exam.

The theory components that these health terms relate to are covered at a later point in their own lessons.

What are 'health terms' in Health and Human Development?

There are several foundational concepts in VCE Health and Human Development Units 3/4. These foundational concepts constitute the core of VCE Health and Human Development Units 3/4; many topics throughout the course are related back to these foundational concepts.

'Health terms' in this guide refer to the terms that are used in SAC and exam questions to signify each of these foundational Health and Human Development concepts. You need to be very familiar with the meaning of these terms as well as how to answer SAC or exam questions according to the health terms that are used in the question. This ensures that you address the concept that each health term relates to.

The fundamental health terms in Health and Human Development

There are four fundamental health terms in VCE Health and Human Development Units 3/4: health and wellbeing, health status, health, and human development. Each of these health terms relate to different concepts that contain different key ideas that you need to refer to in your SAC and exam responses.

Health and wellbeing

What does 'health and wellbeing' refer to?

'Health and wellbeing' relates to an individual's physical, mental, emotional, social, and spiritual states, where an individual can experience balance and an overall level of satisfaction, enabling them to effectively function. The concept of 'health and wellbeing' is covered in lesson **1A: Health and wellbeing**.

What are the key elements of 'health and wellbeing'? What do I need to refer to in my answers to questions on 'health and wellbeing'?

'Health and wellbeing' includes the key elements of health and wellbeing dimensions. The health and wellbeing *dimensions* include:

- physical health and wellbeing
- mental health and wellbeing
- emotional health and wellbeing
- social health and wellbeing
- spiritual health and wellbeing.

Any change to 'health and wellbeing' (i.e. either an improvement or impairment) results in a corresponding change to the *dimension(s)* of health and wellbeing. For example, promoting 'health and wellbeing' will result in the promotion of health and wellbeing *dimension(s)*. This means that a question that includes the term 'health and wellbeing' requires you to mention health and wellbeing *dimension(s)* in your answer. When referring to a dimension, you should refer to one of the examples of that dimension. You can choose any health and wellbeing *dimensions* relevant to the question to use in your responses unless the question asks for a specific *dimension* to be used.

Health status

What does 'health status' refer to?

'Health status' refers to an individual or population's overall health, taking into account a range of measures, such as life expectancy and experiences of illness, disability, and disease. The concept of 'health status' is covered in lesson **1C: Measuring health status**.

How is 'health status' measured? What do I need to refer to in my answers to questions on 'health status'?

'Health status' is instead measured by health status *indicators*. The health status *indicators* include:

- incidence
- prevalence
- morbidity
- burden of disease
- disability-adjusted life year (DALY)
- life expectancy
- health-adjusted life expectancy (HALE)
- mortality (including maternal, infant, and under 5)
- self-assessed health status.

Any change to 'health status' (i.e. either an improvement or impairment) results in a corresponding change to health status *indicator(s)*. For example, promoting 'health status' will result in the promotion of health status *indicator(s)*. This means that a question that includes the term 'health status' requires you to mention health status *indicator(s)* in your answer. You can choose any health status *indicators* relevant to the question to use in your responses unless the question asks for a specific *indicator* to be used.

Health

What does 'health' refer to?

The term 'health' in VCE Health and Human Development Units 3/4 is a broad term that includes both 'health and wellbeing' and 'health status'.

What are the key elements of 'health'? What do I need to refer to in my answers to questions on 'health'?

'Health' can be referred to in different ways; a question may ask how a particular idea in the course improves 'health outcomes' or 'population health.' In the case that this occurs, it is usually acceptable for you to refer to the impact of that idea on either 'health and wellbeing' (i.e. by referencing its impact on health and wellbeing *dimensions*) or 'health status' (i.e. by referencing its impact on health status *indicators*). As demonstrated by the following flowchart, the components of 'health' can be summarised by the statement that 'health' equals 'health and wellbeing' and/or 'health status.'



Figure 1 The concept of health is made up of health and wellbeing and/or health status

Human development

What does 'human development' refer to?

'Human development' involves creating an environment which empowers individuals to develop to their full potential and lead a long, healthy, and productive life by expanding their choices, their capabilities, and their freedom. It also involves having access to a decent standard of living and resources, such as education, reducing the cycle of poverty, and enhancing the ability to participate in the community and live according to needs and interests. The concept of 'human development' is covered in lesson **8B: Human development**.

What are the key elements of ‘human development’? What do I need to refer to in my answers to questions on ‘human development’?

‘Human development’ in its broadest sense can be broken down into a series of more detailed *components*. The human development *components* include:

- development to full potential
- leading a long, healthy, and productive life
- expansion of choices
- expansion of capabilities
- access to a decent standard of living
- access to resources such as education and healthcare
- breaking the cycle of poverty
- ability to participate in the community
- access to freedom
- ability to live according to individual needs and interests.

Any change to ‘human development’ (i.e. either an improvement or impairment) results in a corresponding change to the *component(s)* of human development. This means that a question that includes the term ‘human development’ requires you to mention the *component(s)* of human development in your answer. ‘Human development’ is measured more directly using the Human Development Index (HDI). That being said, it will be mentioned in the question itself when you are required to refer to the HDI in your responses. ‘Human development,’ including its *components*, is covered in lesson **8B: Human development**. You can choose any human development *component* relevant to the question to use in your responses.

Health terms flowchart

See the following flowchart for a summary of the distinction between each of the key health terms in VCE Health and Human Development Units 3/4, including the different components that you need to mention in your responses for each.

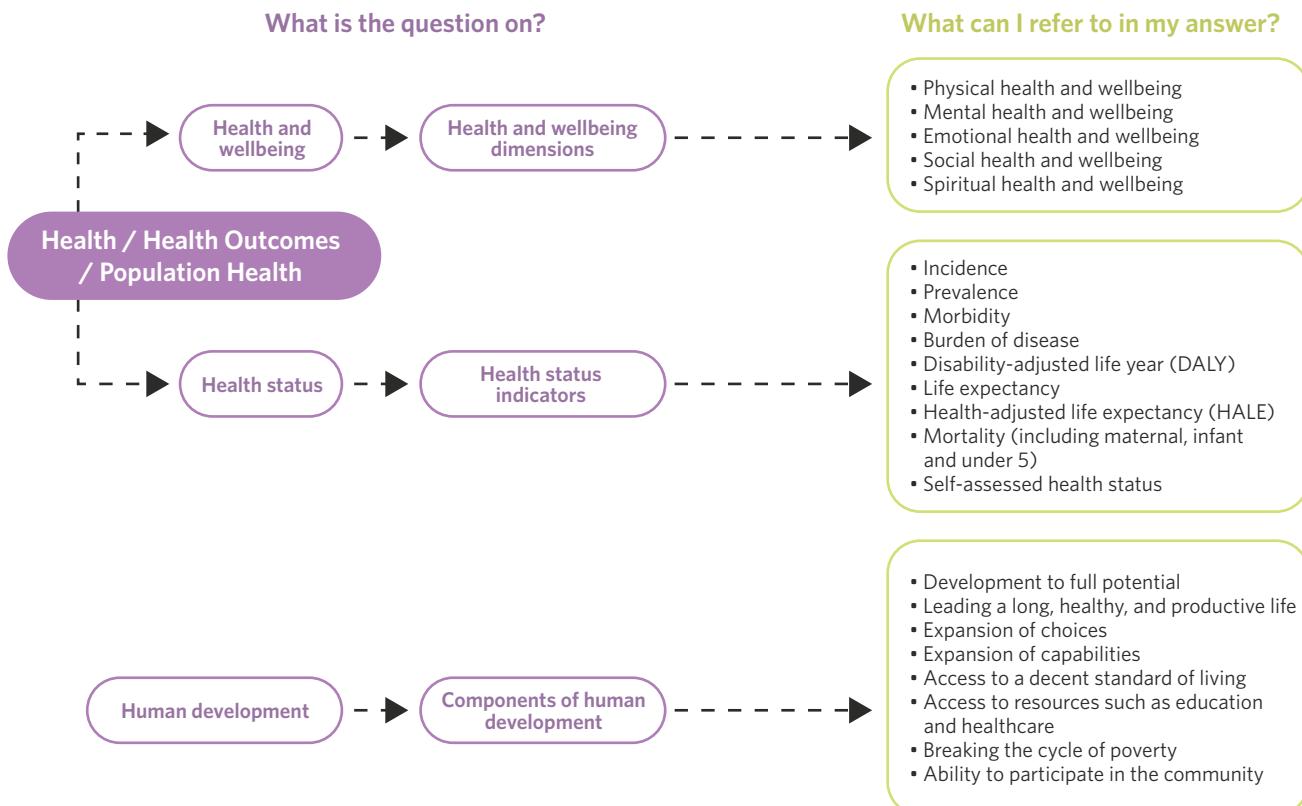


Figure 2 The different health terms require you to mention different components in your responses

Health terms in VCAA exams

An example of an exam question for each of the key health terms is provided below. The health terms in questions have been bolded and their corresponding components are also bolded in the exemplar response. This helps to illustrate how each exemplar response addresses the health term mentioned in the exam question.

Health and wellbeing question example

The following question that includes the health term ‘health and wellbeing’ was asked in the 2020 Health and Human Development Exam.

Question 7b

‘Identify one example of the work of the WHO and outline how this example contributes to good **health and wellbeing**. (2 MARKS).’

NOTE

Because this question is on ‘health and wellbeing,’ you should refer to one of the following:

- physical health and wellbeing
- mental health and wellbeing
- emotional health and wellbeing
- social health and wellbeing
- spiritual health and wellbeing.

The following is an example of a full-scoring response. You can see that the answer incorporates a health and wellbeing *dimension*.

Question 7b – Response

[One example of the work of the WHO is helping to build sustainable health systems.¹] [Through helping countries build stable health systems that can be accessible to all, the WHO is able to reduce stress and anxiety caused by concerns about becoming ill and not being able to access healthcare, therefore promoting **mental health and wellbeing**.²]

I have identified one example of the work of the WHO.¹

I have outlined how this example of the work of the WHO contributes to good health and wellbeing, with reference to a **health and wellbeing dimension**.²

Health status question example

The following question that includes the health term ‘health status’ was asked in the 2020 Health and Human Development Exam.

Question 2b

‘Provide two examples of how the **health status** of Indigenous people compares to the health status of non-Indigenous people. (2 MARKS).’

NOTE

Because this question is on ‘health status,’ you should refer to one of the following:

- incidence
- prevalence
- morbidity
- burden of disease
- disability-adjusted life year (DALY)
- life expectancy
- health-adjusted life expectancy (HALE)
- mortality (including maternal, infant, and under 5)
- self-assessed health status.

The following is an example of a full-scoring response. You can see that the answer incorporates health status *indicators*.

Question 2b – Response

[One difference in health status between Indigenous people and non-Indigenous people is that Indigenous people are more likely to experience higher **maternal mortality rates** than non-Indigenous people.¹]
 [Another difference in health status between Indigenous and non-Indigenous people is that Indigenous people have a lower **life expectancy** than non-Indigenous people.²]

- I have provided an example of a difference in health status between Indigenous people and non-Indigenous people, with reference to a **health status indicator**.¹
- I have provided another example of a difference in health status between Indigenous people and non-Indigenous people, with reference to a **health status indicator**.²

Health question example

The following question that includes the health term ‘health’ was asked in the 2018 Health and Human Development Exam.

Question 13

‘Explain how peace can lead to improved **health** outcomes. (2 MARKS).’

NOTE

Because this question is on ‘health,’ you should refer to either a health status *indicator* or a health and wellbeing *dimension*.

The following is an example of a full-scoring response. You can see that this answer incorporates a health status *indicator*.

Question 13 – Response 1

[Infrastructure is less likely to be damaged due to war when a country achieves peace.¹][This ensures that healthcare infrastructure is not damaged, ensuring that people are able to visit hospitals to receive surgeries for potentially life-threatening conditions, therefore increasing **life expectancy**.²]

- I have provided an example of peace.¹
- I have explained how this example of peace can lead to improved health outcomes, with reference to a **health status indicator** or a health and wellbeing dimension.²

The following is another example of a full-scoring response. You can see that this answer incorporates a health and wellbeing *dimension*.

Question 13 – Response 2

[Living in peace ensures that a person does not need to worry about getting injured due to violent behaviour in the community.¹][This decreases stress and anxiety associated with getting injured when completing daily tasks, therefore promoting **mental health and wellbeing**.²]

- I have provided an example of peace.¹
- I have explained how this example of peace can lead to improved health outcomes, with reference to a health status indicator or a **health and wellbeing dimension**.²

Human development question example

The following question that includes the health term ‘human development’ was asked in the 2018 Health and Human Development Exam.

Question 8b

Afghan Farmers Adopt Modern Agricultural Practices on Orchards

Farmer Abdul Azim ... is able to irrigate his orchard in Zarshakh village, thanks to the recently installed solar water pump. Zarshakh ... is one of the most water deficient villages in Paghman district in eastern Kabul Province [Afghanistan]. While residents derive most of their income from horticulture, they were hardly ever able to enjoy fresh farm produce themselves ...

In March 2016, the National Horticulture and Livestock Project (NHLP)¹ ... dug a water well and installed the solar water pump for Azim ... The total cost was around 670000 afghanis (about US\$10 000), of which NHLP covered 75 per cent while the rest was paid by Azim. [A US\$190 million grant was provided by the World Bank to assist the Afghan Government in funding the project.]

Source: The World Bank, ‘Afghan Farmers Adopt Modern Agricultural Practices on Orchards’, feature story, 23 August 2017, <www.worldbank.org>

‘Explain how this program promotes **human development**. (2 MARKS).’

NOTE

Because this question is on ‘human development,’ you should refer to one of the following:

- development to full potential
- leading a long, healthy, and productive life
- expansion of choices
- expansion of capabilities
- access to a decent standard of living
- access to resources such as education and healthcare
- breaking the cycle of poverty
- ability to participate in the community
- access to freedom
- ability to live according to individual needs and interests.

The following is an example of a full-scoring response. You can see that the answer incorporates a human development *component*.

Question 8b – Response

[This program ensures that Afghan farmers can obtain water for irrigation so that they can grow vegetables and fruit.¹] [This helps to ensure that these farmers are **able to participate in the community** by selling or gifting their crops to others, therefore promoting human development.²]

I have provided an example of the work of this program.¹

I have explained how the work of this program promotes human development, with reference to a **human development component**.²

UNIT

Australia's health in a globalised world

This unit looks at health, wellbeing and illness as multidimensional, dynamic and subject to different interpretations and contexts. Students begin to explore health and wellbeing as a global concept and to take a broader approach to inquiry. As they consider the benefits of optimal health and wellbeing and its importance as an individual and a collective resource, their thinking extends to health as a universal right. Students look at the fundamental conditions required for health improvement, as stated by the World Health Organization (WHO).

They use this knowledge as background to their analysis and evaluation of variations in the health status of Australians. Area of Study 2 focuses on health promotion and improvements in population health over time. Students look at various public health approaches and the interdependence of different models as they research health improvements and evaluate successful programs. While the emphasis is on the Australian health system, the progression of change in public health approaches should be seen within a global context.

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UNIT 3

AOS1

Understanding health and wellbeing

This area of study explores health and wellbeing and illness as complex, dynamic and subjective concepts. While the major focus is on the health of Australians, this area of study also emphasises that Australia's health is not isolated from the rest of the world. Students inquire into the WHO's prerequisites for health and wellbeing and reflect on both the universality of public health goals and the increasing influence of global conditions on Australians. Students develop their understanding of the indicators used to measure and evaluate health status, and the factors that contribute to variations between population groups in Australia.

Outcome 1

On completion of this unit the student should be able to explain the complex, dynamic and global nature of health and wellbeing, interpret and apply Australia's health status data and analyse variations in health status.

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CHAPTER

1

Understanding and measuring health and wellbeing

1A Health and wellbeing

1B Health and wellbeing as a resource

1C Measuring health status

1D Prerequisites for health

Key knowledge

- concepts of health and wellbeing (including physical, social, emotional, mental and spiritual dimensions) and illness, and the dynamic and subjective nature of these concepts
- benefits of optimal health and wellbeing and its importance as a resource individually, nationally and globally
- indicators used to measure and understand health status: incidence, prevalence, morbidity, burden of disease, disability-adjusted life year (DALY), life expectancy, health-adjusted life expectancy (HALE), mortality (including maternal, infant and under 5) and self-assessed health status
- prerequisites for health as determined by the WHO including peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice and equity



Image: Art Stocker/Shutterstock.com

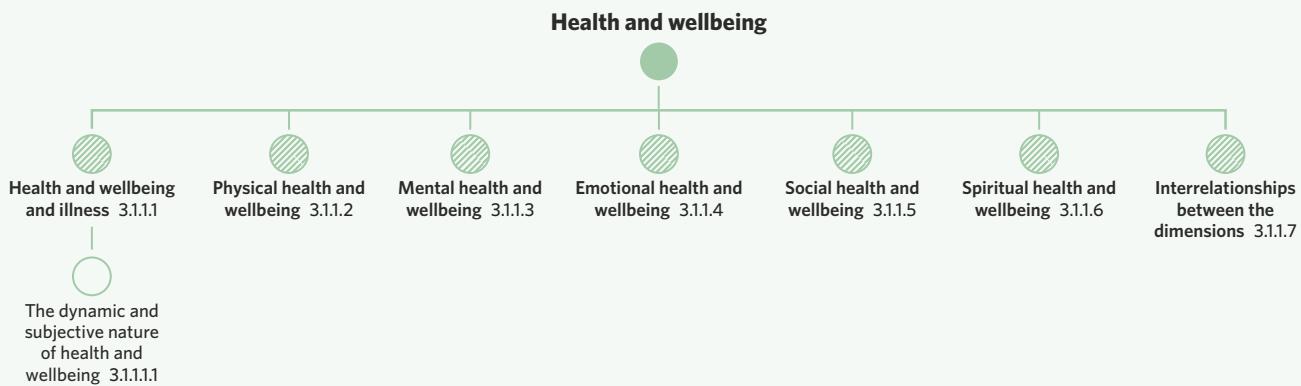
1A HEALTH AND WELLBEING

Are you healthy? Do you have a strong sense of wellbeing? How can you tell? An individual's health and wellbeing is determined by their level of effective functioning and a level of happiness which is achieved when their physical, social, mental, emotional, and spiritual states are balanced. In this lesson, you will learn more about the concept of health and wellbeing including its dynamic and subjective nature. You will also learn about the dimensions of health and wellbeing, and how they are related and interrelated.



Image: Studio_G/Shutterstock.com

1A Health and wellbeing	1B Health and wellbeing as a resource	1C Measuring health status	1D Prerequisites for health
Study design dot point			
<ul style="list-style-type: none"> concepts of health and wellbeing (including physical, social, emotional, mental and spiritual dimensions) and illness, and the dynamic and subjective nature of these concepts 			
Key knowledge units			
Health and wellbeing and illness			3.1.1.1
The dynamic and subjective nature of health and wellbeing			3.1.1.1
Physical health and wellbeing			3.1.1.2
Mental health and wellbeing			3.1.1.3
Emotional health and wellbeing			3.1.1.4
Social health and wellbeing			3.1.1.5
Spiritual health and wellbeing			3.1.1.6
Interrelationships between the dimensions			3.1.1.7



Health and wellbeing and illness 3.1.1

OVERVIEW

The quality of an individual's life is heavily impacted by their level of health and wellbeing. The concept of health and wellbeing has five dimensions: physical, mental, emotional, social, and spiritual. Health and wellbeing is dynamic and subjective, and is related to the concept of illness.

Study design key skills dot point

- explain the dynamic and subjective nature of the concepts of health and wellbeing and illness

THEORY DETAIL

Health and wellbeing is an all-encompassing term which describes an individual's overall state of being. In such a way, **health and wellbeing** relates to an individual's physical, mental, emotional, social, and spiritual states, where an individual can experience balance and an overall level of satisfaction, enabling them to effectively function.

Lesson link

In the **Guide to responding to health terms in questions** at the start of this book, you learnt about the concept of health and wellbeing, how it is measured, and what VCE Health and Human Development health and wellbeing questions look like. For a refresher on this, you can turn back to this guide.

There are five dimensions of health and wellbeing. These dimensions are:

- physical health and wellbeing
- mental health and wellbeing
- emotional health and wellbeing
- social health and wellbeing
- spiritual health and wellbeing.

Optimal health and wellbeing involves an individual experiencing the highest possible level of health and wellbeing when taking their unique experiences, characteristics and lifestyle into account. To achieve optimal health and wellbeing, an individual needs to focus on prioritising all five dimensions of health and wellbeing to ensure that the five dimensions are balanced and effectively interacting with each other. For example, an individual may exercise every day, therefore having optimal physical health and wellbeing. However, their overall level of health and wellbeing may be poor if they ignore the other four dimensions of health and wellbeing.

Want to know more?

Previous understandings of the terms 'health' and 'wellbeing'

The World Health Organisation (World Health Organisation [WHO], 2021) created the first globally accepted definition of health in 1946. The WHO's definition of health is '*a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity*'.

This definition created a shift in the understanding of the concept of health, which previously considered health to exist only in physical terms, and only among those who were not experiencing a disease, illness, injury, or infirmity.

Health and wellbeing is currently described as one single concept. In the past, 'health' and 'wellbeing' were considered to be separate concepts. During this time, the concept of health centred more on the physical functioning of the body, while wellbeing was a more holistic concept which described an individual's perceptions on their quality of life. Due to the limiting nature of these terms, these concepts are now accepted as one: health and wellbeing.

The concept of health and wellbeing is closely related to the concept of **illness**. Illness is a self-perceived negative state of health and wellbeing, in which an individual believes that they are experiencing something which makes them unwell. Illness is an individual's personal experience which exists when they are unwell and is impacted by multiple factors, such as their previous experiences of diseases and conditions, their personality, and their attitudes. Although the experience of illness is unique to each individual, it is a normal experience which occurs for everyone.

Useful tip

Understanding the concept of disease is helpful as it can aid in your understanding of illness (which is examinable). However, the concept of disease is not examinable, so you do not need to memorise it.

KEY DEFINITIONS

Health and wellbeing relates to an individual's physical, mental, emotional, social, and spiritual states, where an individual can experience balance and an overall level of satisfaction, enabling them to effectively function

Optimal health and wellbeing involves an individual experiencing the highest possible level of health and wellbeing when taking their unique experiences, characteristics and lifestyle into account

Memory device

To help remember all five dimensions, you can think of the acronym **P-MESS**.

Physical health & wellbeing

Mental health & wellbeing

Emotional health & wellbeing

Social health & wellbeing

Spiritual health & wellbeing.

ADDITIONAL TERMS

Infirmity is a state of weakness or a lack of energy, usually due to old age

KEY DEFINITIONS

Illness is a self-perceived negative state of health and wellbeing, in which an individual believes that they are experiencing something which makes them unwell



Illness differs from the concept of **disease**, which is an experience of being unwell that can be diagnosed, such as the flu, which involves symptoms. Illnesses instead are more subjective and are based on how an individual negatively perceives their health and wellbeing. Therefore, an individual could be experiencing illness which has arisen due to the existence of a disease.

The dynamic and subjective nature of health and wellbeing 3.1.1.1

Health and wellbeing is **dynamic**, which means that it is constantly changing over time in response to an individual's environment. For example, someone may believe that they have optimal health and wellbeing due to having strong relationships, being in control of their emotions, and being physically active most days of the week. However, this evaluation of health and wellbeing may shift in response to changes in that individual's environment, such as the individual sustaining an injury (negatively affecting their physical health and wellbeing), or being fired from their job (which may negatively affect their mental health and wellbeing due to stress). This example demonstrates how an individual's health and wellbeing can shift and change quite quickly, with every individual being likely to experience fluctuations in their health and wellbeing over time. This can be visualised in a continuum as shown in figure 1.



Figure 1 Health and wellbeing as a dynamic concept

Health and wellbeing is also said to be **subjective**, which means it is influenced by unique and individual opinions and judgements. Different people may consider their health and wellbeing in various ways depending on unique characteristics, such as their past experiences, their level of resilience, their personality, and their attitude towards certain occurrences, such as illness and injury. Refer to figure 2 for a visual example of how health and wellbeing is said to be subjective.

Occurrence: Jasper, Dervla and Harriet catch a cold

They all evaluate their health and wellbeing differently in response to catching a cold

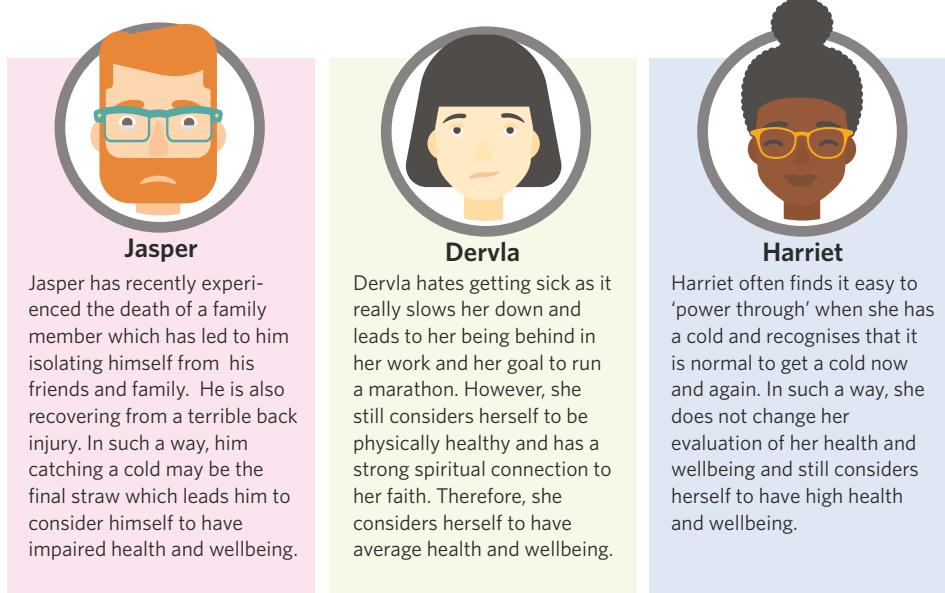


Image: Visual Generation/Shutterstock.com

Figure 2 An example of the subjective nature of health and wellbeing

ADDITIONAL TERMS

Disease is a diagnosable negative state of health and wellbeing which is accompanied by symptoms

KEY DEFINITIONS

Dynamic refers to something that is constantly changing over time

Subjective refers to something which is influenced by unique and individual opinions and judgements

The concept of illness is similarly dynamic and subjective. It is subjective due to relying on an individual's own negative perceptions of their current health and wellbeing. For example, one person may consider themselves to be ill when having a sore throat, while someone else may consider this to be a frequent occurrence which does not impair their health and wellbeing. Additionally, it is dynamic because illnesses occur at some stages of life and not others. This is due to an individual being likely to experience multiple different illnesses at different times, meaning their experience of illness constantly changes.

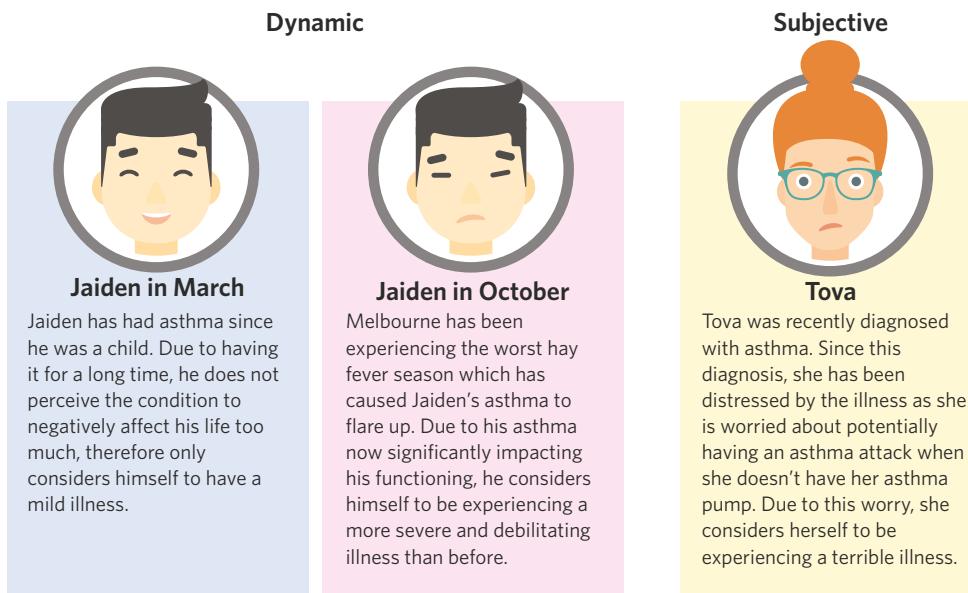


Image: Visual Generation/Shutterstock.com

Figure 3 An example of the subjective and dynamic nature of illness



Want to know more?

The subjective nature of health and wellbeing is difficult for researchers to measure as different individuals may rate their health and wellbeing in different ways. For example, two people experiencing the same physical condition who have similar levels of stress and the same amount of social support may vary in how they rate their health and wellbeing due to their own unique opinions and experiences. Consequently, one individual may rate their health and wellbeing as poor and the other as good on the rating scale shown in figure 4.



Figure 4 Due to the subjective nature of health and wellbeing, individuals may vary on how they evaluate their health and wellbeing

Physical health and wellbeing 3.1.1.2

OVERVIEW

Would you consider yourself to be healthy? When asked this question, it is likely that you first think about the food you eat and whether you regularly exercise. These concepts relate to the physical dimension of health and wellbeing.

THEORY DETAILS

The first dimension of health and wellbeing we will discuss is **physical health and wellbeing**, which is the functioning of the body and its systems, including the body's capacity to perform daily tasks and activities. To make it more likely for optimal health and wellbeing to be achieved, it is important for an individual to consider all areas of physical health and wellbeing and make healthy decisions, such as exercising and resting to avoid illnesses and injuries. Optimal physical health and wellbeing involves the highest level of

KEY DEFINITIONS

Physical health and wellbeing is the functioning of the body and its systems, including the body's capacity to perform daily tasks and activities



functioning of the body and its systems possible for each individual, which leads to the capacity to perform daily tasks and activities.

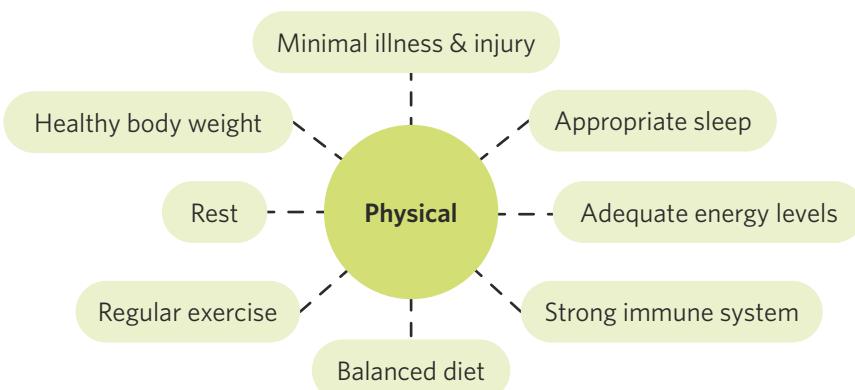


Figure 5 The components of optimal physical health and wellbeing

Components of optimal physical health and wellbeing include:

- regular exercise
- a strong immune system, contributing to minimal illnesses
- a balanced diet in which nutrition needs are met
- an appropriate amount and quality of sleep
- allowing the body to recover by providing adequate amounts of rest
- the maintenance of a healthy body weight
- minimal experiences of illness, disease and injury.

(VCAA, 2021)

Lesson link

In lesson **2A: Health variations between population groups**: Part 1, you will learn about biological factors that contribute to variations between population groups. These biological factors, such as blood cholesterol and body weight, directly impact physical health and wellbeing as they can weaken an individual's physical functioning and thereby limit their capacity to carry out everyday tasks.

Similarly, in lessons **2C: Contributions to Australia's health status: Part 1** and **2D: Contributions to Australia's health status: Part 2**, you will learn about the effects of smoking, alcohol, high body mass index, and dietary risks, all of which directly impact physical health and wellbeing.

! Useful tip

For each dimension of health and wellbeing you should be aware of:

- The key terms in its definition e.g. 'the functioning of the body and its systems'
- A few components within the dimension e.g. 'regular exercise'.

This will help you to form strong answers to questions about the dimensions of health and wellbeing in SACs and the exam. In the exam, you won't be asked to define the dimensions but may be asked to describe, explain, or discuss the dimensions.

A common question on past VCE Health and Human Development examinations involves referring to the dimensions of health and wellbeing. For these questions, it is important that you refer to the key terms in the definition and support your answer by referring to relevant components of the dimension. For example, the following question was asked in the 2018 Health and Human Development Exam.

Question 3b

'Explain the spiritual dimension of health and wellbeing. (2 MARKS)'

The answer had to refer to the key terms in the definition of spiritual health and wellbeing, as well as some relevant components of spiritual health and wellbeing to gain full marks.

A high-scoring response was '*Spiritual health and wellbeing refers to the values, beliefs and ideas that arise in the conscience of humans. Additionally, spiritual health and wellbeing relates to a person having a guiding sense of purpose and meaning within their lives*'.

(VCAA, 2018)

The first sentence in this high-scoring response refers to the key terms in the definition of spiritual health and wellbeing, and the second sentence refers to components of the dimension.

Mental health and wellbeing 3.1.1.3

OVERVIEW

Can you form your own opinions? Do you use logic to make effective decisions? These questions relate to the concept of mental health and wellbeing.

THEORY DETAILS

Mental health and wellbeing is the current state of wellbeing of the mind, involving the ability to think and process information. Optimal mental health and wellbeing involves the ability to effectively form opinions, use logic, and make decisions effectively and independently. Having optimal mental health and wellbeing allows an individual to function independently, which involves effectively carrying out day-to-day tasks and responding to changes and demands in the environment.

KEY DEFINITIONS

Mental health and wellbeing is the current state of wellbeing of the mind, involving the ability to think and process information

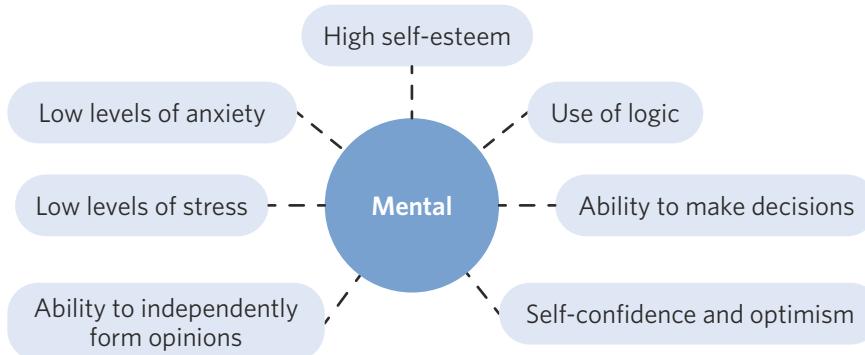


Figure 6 The components of optimal mental health and wellbeing

Components of optimal mental health and wellbeing include:

- the ability to use logic
- the ability to make decisions
- the ability to independently form opinions
- low levels of stress and anxiety
- high self-esteem
- a sense of self-confidence and optimism.

(VCAA, 2021)



Want to know more?

There are many support services in the community if you want to talk to someone about your own mental health, or the mental health of someone you know.

This includes visiting:

- Your GP
- Your school counsellor
- Non-profit organisation mental health resources. Headspace and BeyondBlue provide assistance for young adults, with many resources including online chats and forums. You can visit **Headspace** at www.headspace.org.au and **BeyondBlue** at www.beyondblue.org.au.



Image: © Beyond Blue

Figure 7 Beyond Blue is an Australian organisation founded in 2000 which works to address a range of mental health issues



Emotional health and wellbeing 3.1.1.4

OVERVIEW

Can you recognise your own feelings? Do you have coping mechanisms in place to regulate your emotions and express them in a positive way? If the answer to both of these questions is yes, you likely have optimal emotional health and wellbeing.

THEORY DETAILS

Emotional health and wellbeing is the ability to express, control, and manage feelings in a positive way and display resilience. This involves having appropriate and proportionate emotional reactions to events. Emotional health and wellbeing also involves being able to display resilience, which can mean ‘bouncing back’ from adverse (difficult or unwanted) events.

KEY DEFINITIONS

Emotional health and wellbeing is the ability to express, control and manage feelings in a positive way and display resilience

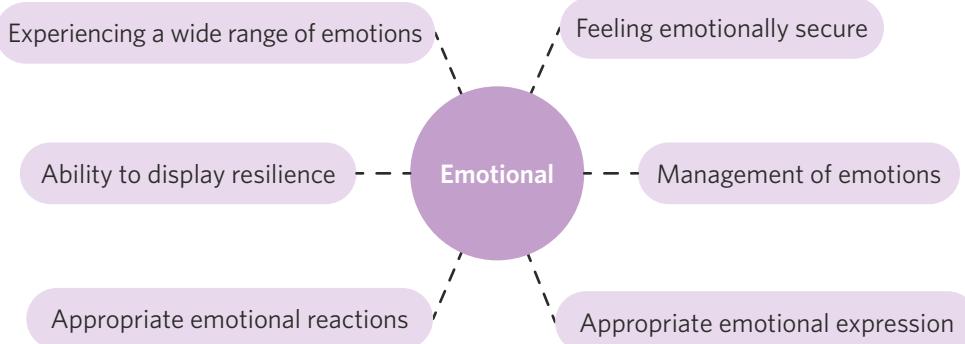


Figure 8 The components of optimal emotional health and wellbeing

Although emotional health and wellbeing involves positively expressing emotions, it does not mean that people who experience negative emotions have poor emotional health and wellbeing. ‘Positive’ does not necessarily mean ‘happy’ emotions, but rather any emotions that are expressed in a constructive and appropriate manner. Negative emotions are a normal part of life, and the ability to recognise and distinguish negative emotions is an essential component of optimal health and wellbeing. Constantly experiencing negative emotions or being unable to manage them in a constructive way results in poor emotional health and wellbeing.

Components of optimal emotional health and wellbeing include:

- the appropriate expression of emotions, such as in the right environment and in front of the right people
- managing emotions in an effective manner, such as learning techniques to cope with emotions
- having appropriate emotional reactions to events
- experiencing a wide range of emotions
- the ability to display resilience
- feeling emotionally secure and relaxed in day-to-day life.

(VCAA, 2021)

! Useful tip

It can sometimes be difficult to distinguish between emotional and mental health and wellbeing as these two dimensions are highly interrelated (you will learn about interrelationships at the end of this lesson). To help remember the difference between these two dimensions focus on:

- *Emotional health and wellbeing* refers to the expression and management of *feelings*. E.g. someone lacks resilience, or has trouble expressing emotions in the appropriate settings.
- *Mental health and wellbeing* refers to *thoughts* and *mental processes*. E.g. someone is experiencing stress and anxiety, has difficulty concentrating, or struggles to form opinions and make decisions.

Social health and wellbeing 3.1.1.5

OVERVIEW

Do you feel supported by your friends and family? How do you feel when one of your relationships is not going well? As humans are naturally social beings, the dimension of social health and wellbeing greatly affects our overall sense of health and wellbeing.

THEORY DETAILS

The dimension of **social health and wellbeing** refers to the ability to form meaningful and satisfying relationships with others, as well as the ability to appropriately manage and adapt to social situations. Human beings have an innate drive to interact and connect with others, highlighting the importance of strong social health and wellbeing.

Having optimal social health and wellbeing involves individuals having a strong support network which they can rely on when experiencing hardship, and feeling connected to their family, friends, and community. Optimal social health and wellbeing is characterised by components such as strong communication skills, and having a high level of empathy (understanding how someone else feels).

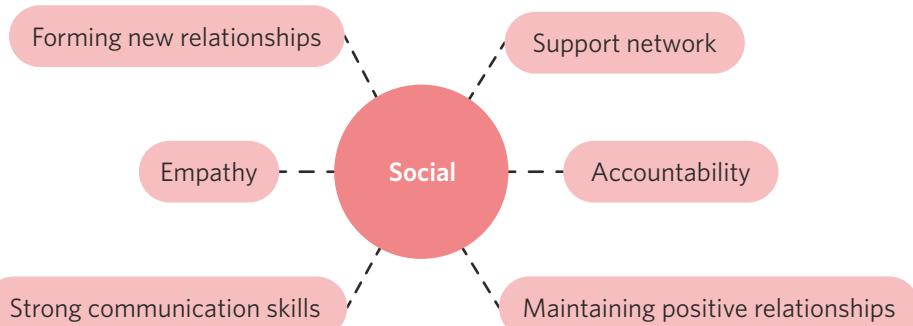


Figure 9 The components of optimal social health and wellbeing

Components of optimal social health and wellbeing include:

- having a strong support network provided by friends, family, and the wider community
- the ability to maintain positive relationships with others, including the ability to express emotions and overcome conflict
- the ability to form new relationships with others
- having strong communication skills
- having empathy for others
- having a sense of personal accountability, leading to more positive actions in relationships.

(VCAA, 2021)



Want to know more?

The recent rise of social media sites has greatly impacted social health and wellbeing, as well as other dimensions of health and wellbeing. Social media sites are meant to make us feel more socially connected, right? Although this is true at times, with social media allowing individuals who are geographically isolated (as was common during the COVID-19 pandemic) the opportunity to connect, social media has also contributed to feelings of social isolation (Clark et al., 2017). This sense of isolation or loneliness can occur due to feelings of FOMO (fear of missing out) and social comparison (Clark et al., 2017). When social media users view a carefully curated highlight reel of people's lives, they may feel as if they are missing out on something more.

Additionally, individuals can focus so heavily on social media sites that it can lead to them ignoring their friends and family who they are physically surrounded by, leading to less conversation and fewer social connections as visualised in figure 10. This demonstrates how social media is both beneficial and harmful to social health and wellbeing.



Image: BRO.vector/Shutterstock.com

Figure 10 An issue of social media site usage is that it can lead to withdrawal from others in an individual's physical environment



Spiritual health and wellbeing 3.1.1.6

OVERVIEW

Do you feel like you have a sense of purpose? Do you feel like you belong? Both of these questions relate to the dimension of spiritual health and wellbeing.

THEORY DETAILS

The last dimension of health and wellbeing is spiritual health and wellbeing. **Spiritual health and wellbeing** refers to the ideas, beliefs, values, and ethics that an individual possesses, contributing to a sense of meaning, purpose, and belonging. Spiritual health and wellbeing is different for each individual depending on their own unique beliefs and values. For example, some individuals have optimal spiritual health and wellbeing due to feeling connected to and like they belong to their community, while others may have optimal spiritual health and wellbeing due to practicing their religion everyday in a way that is meaningful and positive to them. It is important to remember that there are many different ways in which spiritual health and wellbeing can exist, and that an individual's experiences and environment heavily impact where their sense of spirituality comes from.

KEY DEFINITIONS

Spiritual health and wellbeing includes the ideas, beliefs, values and ethics that an individual possesses, contributing to a sense of meaning, purpose, and belonging

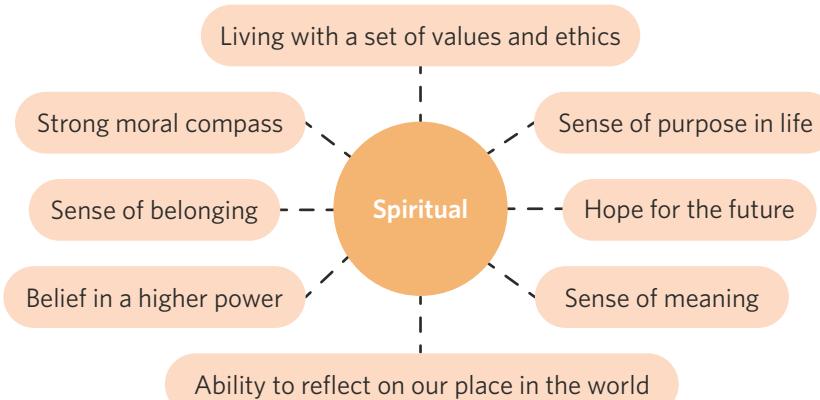


Figure 11 The components of optimal spiritual health and wellbeing

Components of optimal spiritual health and wellbeing include:

- a sense of hope about the future
- a sense of meaning or value which guides an individual through their life
- the ability for an individual to reflect on their place in the world
- believing in a higher power, such as an organised religious group
- having a strong moral compass
- living with a set of values and ethics
- having a sense of purpose in life
- a sense of connection to others and a sense of belonging.

(VCAA, 2021)

ACTIVITY 1

Read the following scenarios and fill in the gaps with the dimensions being affected. The options for the dimensions are listed below. This activity illustrates the dynamic nature of health and wellbeing.

- Physical
- Mental
- Social

Ophelia recently broke her hip which has led to her having to take a break from her dance classes.

- 1 Her _____ health and wellbeing is likely to improve when her broken hip recovers as she will be able to resume socialising with her classmates to strengthen her network of friends.
- 2 Ophelia's _____ health and wellbeing is likely to improve when she can begin dancing and therefore exercising to maintain a healthy body weight once her hip has healed.
- 3 Ophelia's _____ health and wellbeing is likely to improve when she can resume dancing, as the benefits of exercise will help reduce her stress levels, as well as lower her levels of anxiety about not feeling a part of her dance class.

Interrelationships between the health and wellbeing dimensions 3.1.1.7

OVERVIEW

As you may have noticed, the dimensions of health and wellbeing overlap and influence each other in many ways. This demonstrates the interrelated nature of the dimensions of health and wellbeing.

**Study design key skills
dot point**

- describe interrelationships between dimensions of health and wellbeing

THEORY DETAILS

The dimensions of health and wellbeing are all interrelated, which means a change to one dimension has the ability to positively or negatively affect the other four dimensions in some way. For example, if an individual sustains a severe injury (physical health and wellbeing), this may lead them to lash out at their friends and family due to them being stressed about the impact the injury will have on their social life (social health and wellbeing). This may be particularly important if the individual maintains relationships with others by playing netball with their friends. By lashing out on their friends and potentially harming these relationships, it may be more difficult to recover as the injured person may need day-to-day assistance to carry out tasks, such as getting dressed and getting out of bed (physical health and wellbeing). In such a way, it is clear how a change in one dimension can impact other dimensions to varying degrees and in turn how this can impact the original dimension. Figure 12 outlines two examples of interrelationships between the dimensions of health and wellbeing.

Interrelationship 1

Physical health and wellbeing:

Josephine was recently in a car accident and has been in the hospital for a week due to her injuries. She will have surgery tomorrow. Her injury demonstrates a negative impact on physical health and wellbeing as she is unable to carry out daily tasks.

Physical health and wellbeing:

Josephine's high level of stress and anxiety has led to her having a poor quality and quantity of sleep, negatively impacting her physical health and wellbeing.

Mental health and wellbeing:

Her upcoming surgery has led her to experience a great amount of stress and anxiety, particularly because she is scared of needles. This demonstrates a negative impact on her mental health and wellbeing.

Mental health and wellbeing:

Theo has recently been promoted at work and is now feeling more confident in his ability to lead and make effective decisions for his team, demonstrating the promotion of mental health and wellbeing.

Social health and wellbeing:

His confidence to lead the team has led to him engaging in greater communication skills with his team. For example, he has been clearer in outlining how his direct reports could improve at work, promoting social health and wellbeing.

Interrelationship 2

Figure 12 Examples of interrelationships between the dimensions of health and wellbeing



This interrelationship between the dimensions affects whether optimal health and wellbeing is achieved. To be achieved, an individual needs to balance out and equally focus on maintaining optimal levels of all five dimensions. When all five dimensions are at optimal levels, they function and affect each other in a positive and effective way, leading to optimal health and wellbeing overall for that individual. This is visualised in figure 13.



Figure 13 Optimal health and wellbeing occurs when all five dimensions are in balance

Useful tip

It is important to understand the differences between relationships and interrelationships so you can effectively answer related questions. When asked to outline a relationship, you need to outline one link only. For example, if asked to outline a relationship between social health and wellbeing and physical health and wellbeing, you could outline how strong social health and wellbeing impacts physical health and wellbeing.

In contrast, interrelationships require you to outline how two or more concepts bidirectionally (flowing in both directions) relate to each other. For example, if asked to outline an interrelationship between social health and wellbeing and physical health and wellbeing, you could first outline how strong social health and wellbeing impacts physical health and wellbeing. You would then add an additional link explaining how physical health and wellbeing also impacts social health and wellbeing. When adding this additional (second) link, it may be helpful to use a different component of the dimension. The difference between relationship and interrelationship questions are outlined in figure 14.

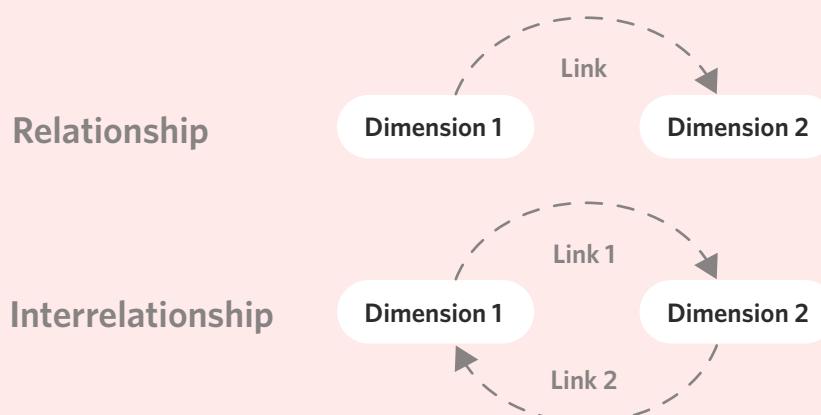


Figure 14 Relationships involve one link, while interrelationships involve two or more links

ACTIVITY 2

Can you understand the interrelationships between the dimensions of health and wellbeing?

Scenario 1:

Ryan firmly believes that there is a higher power and that everything happens for a reason. He is a member of a group who share similar beliefs who he sees every second day. One day Ryan experiences the natural disaster of a severe flood which makes him question his beliefs and leads to him leaving the group. After leaving this group, he starts feeling lonely and as if he does not belong anywhere.

Scenario 2:

Florence is a manager at an engineering company who is known for being able to understand complex problems and make effective decisions independently. When considering how to make such decisions, she always ensures that she remains resilient in front of her team members by managing how she displays her emotions. This helps her feel assured that her team members trust her ability as a leader, reducing her levels of stress.

After reading the scenarios, place a tick on the two dimensions which are interrelated in each scenario.

Health and wellbeing dimension					
	Physical	Social	Emotional	Mental	Spiritual
Scenario 1					
Scenario 2					

Theory summary

In this lesson, you have learnt about the concepts of health and wellbeing and illness, and how they are dynamic (constantly changing) and subjective (influenced by individual opinions). You have also learnt about the dimensions of health and wellbeing, which are outlined in table 1. Finally, you learnt about how the dimensions of health and wellbeing are interrelated.

Table 1 Overview of the dimensions of health and wellbeing

Dimension	Definition	Some components of optimal health and wellbeing
Physical	The functioning of the body and its systems, including the body's capacity to perform daily tasks and activities	<ul style="list-style-type: none"> • regular exercise • a strong immune system
Mental	The current state of wellbeing of the mind, involving the ability to think and process information	<ul style="list-style-type: none"> • high self-esteem • low levels of stress and anxiety
Emotional	The ability to express, control and manage feelings in a positive way and display resilience	<ul style="list-style-type: none"> • the appropriate expression of emotions • the ability to display resilience
Social	The ability to form meaningful and satisfying relationships with others, as well as the ability to appropriately manage and adapt to social situations	<ul style="list-style-type: none"> • strong support network • strong communication skills
Spiritual	The ideas, beliefs, values and ethics that an individual possesses, contributing to a sense of meaning, purpose and belonging	<ul style="list-style-type: none"> • having a sense of purpose in life • a sense of belonging in their environment



1A QUESTIONS

Theory-review questions

Question 1

To have optimal health and wellbeing all an individual must do is eat healthy and regularly exercise.

- A True.
- B False.

Question 2

Which of the following are aspects related to optimal health and wellbeing? (*Select all that apply*)

- I A sense of belonging.
- II Regular exercise.
- III A fulfilling career.

Question 3

Which of the following are aspects related to positive physical health and wellbeing? (*Select all that apply*)

- I Healthy body weight.
- II Effective communication with others.
- III A strong immune system.

Question 4

Which of the following are aspects related to positive social health and wellbeing? (*Select all that apply*)

- I A sense of belonging.
- II Effectively communicating with others.
- III A strong immune system.

Question 5

Which of the following are aspects related to positive mental health and wellbeing? (*Select all that apply*)

- I Low levels of stress and anxiety.
- II High levels of self-esteem.
- III Adequate energy levels.

Question 6

One aspect of optimal emotional health and wellbeing is to have a high level of resilience.

- A True.
- B False.

Question 7

Which of the following best fills in the blank?

- A positive
- B negative

A strong sense of belonging within a community would be expected to have a _____ effect on one's spiritual health and wellbeing.

Question 8

Which of the following best fills in the blank?

- A positive
- B negative

High levels of stress and anxiety would be expected to have a _____ effect on one's mental health and wellbeing.

Question 9

A negative impact on an individual's physical health and wellbeing can have an impact on their social health and wellbeing.

- A True.
- B False.

Question 10

The idea that health and wellbeing is dynamic means that individuals' health is subject to constant change.

- A True.
- B False.

Skills**Unpacking the case study**

Use the following information to answer Questions 11-14.

Edinson plays volleyball for his local community team. He loves playing volleyball because it has enabled him to develop meaningful relationships with other members of his team, who he often catches up with after training. However, because he broke his ankle during a team training session, Edinson is now unable to complete daily tasks, such as continuing to play volleyball and regularly attending school. This has caused Edinson to feel stressed about keeping up with homework, with his high levels of stress negatively affecting his immune system and making him more susceptible to developing an illness, such as a cold.

Question 11

Edinson's social health and wellbeing being enhanced through playing volleyball is reflected by the statement that

- A 'Edinson is now unable to complete daily tasks, such as continuing to play volleyball'.
- B 'He loves playing volleyball because it has enabled him to develop meaningful relationships with other members of his team'.

Question 12

Edinson's physical health and wellbeing being negatively impacted through playing volleyball is reflected by the statement that

- A 'because he broke his ankle during a team training session, Edinson is now unable to complete daily tasks'.
- B 'This has caused Edinson to feel stressed about keeping up with homework'.

Question 13

The interrelationship between Edinson's impaired physical health and wellbeing (due to breaking his ankle) and his mental health and wellbeing is reflected by the statement that

- A 'This has caused Edinson to feel stressed about keeping up with homework, with his high levels of stress negatively affecting his immune system and making him more susceptible to developing an illness, such as a cold'.
- B 'it has enabled him to develop meaningful relationships with other members of his team, who he often catches up with after training'.

Question 14

If Edinson had also begun to feel a loss of belonging to his volleyball community after 'he broke his ankle during a team training session', this would reflect impaired spiritual health and wellbeing.

- A True.
- B False.



Perfect your phrasing

Question 15

Which of the following sentences is most correct?

- A Health and wellbeing is considered to be dynamic as an individual's level of health and wellbeing is *constantly changing*.
- B Health and wellbeing is considered to be dynamic as health and wellbeing *can change*.

Exam-style questions

Question 16 (2 MARKS)

Describe the spiritual dimension of health and wellbeing.

Question 17 (2 MARKS)

Explain the emotional dimension of health and wellbeing.

Question 18 (2 MARKS)

Compare the subjective and dynamic nature of health and wellbeing.

Question 19 (2 MARKS)

Arlo is 17 years old and loves to swim competitively. Arlo has recently suffered a broken arm and cannot train and compete with his squad for three months. Arlo can still attend training with his friends, however he can only swim at a leisurely pace without using his arm. Missing out on training and competing has resulted in Arlo feeling disappointed and upset.

Explain why Arlo could still have optimal social health and wellbeing.

Adapted from the VCAA 2018 exam Q3c

Question 20 (2 MARKS)

Mimi is a 39-year-old mother of two. Mimi and her husband own and manage a restaurant. They both spend a lot of time with their children and friends. Mimi recently injured her back and has been unable to go to work, play with her children, and go out with her friends. This has had a big impact on Mimi's health and wellbeing.

Explain how Mimi's current situation could have an impact on her physical health and wellbeing.

Adapted from VCAA 2020 exam Q2c

Question 21 (3 MARKS)

Describe the concept of illness. Outline how illness can be subjective and dynamic.

Question 22 (4 MARKS)

Susan has recently been hired for her first job at a local cafe. This has enabled Susan to meet new people and she has begun to develop some meaningful relationships with her colleagues. She feels supported by her work friends and experiences minimal stress knowing that if she cannot work she has colleagues that would be happy to cover her shift. This has caused Susan to feel a sense of belonging to the cafe's staff community.

Using the information provided above, describe the interrelationships between the dimensions of health and wellbeing.

Question 23 (4 MARKS)

With the use of an example, outline the difference between impaired physical and spiritual health and wellbeing.

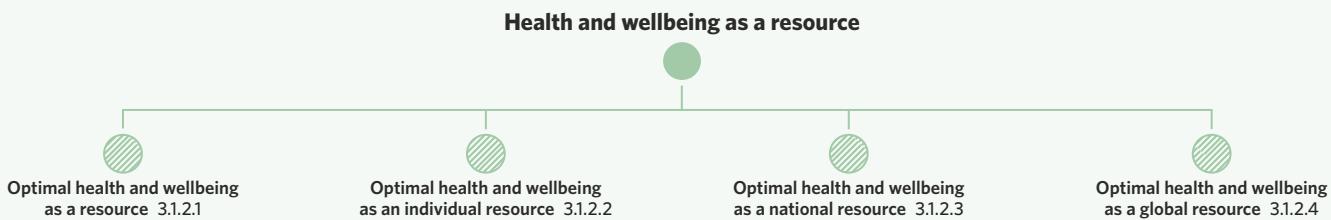
1B HEALTH AND WELLBEING AS A RESOURCE

Do you feel like you are constantly striving to achieve optimal health and wellbeing? Or does optimal health and wellbeing support your functioning in day-to-day life? According to the World Health Organisation, it should be the latter, with optimal health and wellbeing facilitating, rather than dictating, your everyday activities. In this way, health and wellbeing is a resource which provides benefits, such as having a greater ease in functioning independently and coping with daily stresses. In this lesson, you will learn about optimal health and wellbeing as a resource and the subsequent benefits. More specifically, you will learn about health and wellbeing as a resource individually, nationally, and globally.



Image: Introwiz1/Shutterstock.com

1A Health and wellbeing	1B Health and wellbeing as a resource	1C Measuring health status	1D Prerequisites for health
Study design dot point			
<ul style="list-style-type: none"> benefits of optimal health and wellbeing and its importance as a resource individually, nationally and globally 			
Key knowledge units			
Optimal health and wellbeing as a resource			3.1.2.1
Optimal health and wellbeing as an individual resource			3.1.2.2
Optimal health and wellbeing as a national resource			3.1.2.3
Optimal health and wellbeing as a global resource			3.1.2.4



Optimal health and wellbeing as a resource 3.1.2.1

OVERVIEW

Does life seem easier when you have optimal health and wellbeing? In what ways does optimal health and wellbeing benefit you? Throughout this lesson, we will learn about optimal health and wellbeing and how it can act as a resource.

THEORY DETAILS

In the previous lesson, you learnt about the concept of optimal health and wellbeing. **Optimal health and wellbeing** involves an individual experiencing the highest possible level of health and wellbeing when taking their unique experiences, characteristics and lifestyle into account. The concept of optimal health and wellbeing was informed by the World Health Organisation's (WHO) definition of health. Both definitions emphasise how optimal health and wellbeing enable individuals to recognise and meet their aspirations, meet their needs, and cope with everyday challenges in the environment (WHO, 1986). As such, health and wellbeing is viewed as a resource for everyday life, rather than the **objective** of life (WHO, 1986).

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- explain the individual and collective importance of health and wellbeing as a resource

KEY DEFINITIONS

Optimal health and wellbeing

involves an individual experiencing the highest possible level of health and wellbeing when taking their unique experiences, characteristics, and lifestyle into account

ADDITIONAL TERMS

Objective refers to something aimed at or sought; a target



Health and wellbeing is not something that an individual should constantly be striving to achieve. As explained earlier in the chapter, health and wellbeing is **dynamic**, with health and wellbeing often changing in response to changes in the environment. Therefore, it would be difficult, and potentially even impossible, for an individual to constantly attempt to meet the objective of optimal health and wellbeing.

Instead, optimal health and wellbeing should arise naturally when an individual prioritises all five dimensions of health and wellbeing, ensuring that they are all balanced. When this occurs, optimal health and wellbeing acts as a resource as it provides many benefits. In this lesson, we will focus on the benefits of optimal health and wellbeing as a resource individually, nationally, and globally. These benefits will highlight the importance of optimal health and wellbeing from either an individual or **collective** perspective. When viewed from a collective perspective the importance of health and wellbeing applies to a group of people, and as such, refers to the national and global benefits of optimal health and wellbeing as a resource.

Optimal health and wellbeing as an individual resource 3.1.2.2

OVERVIEW

How can optimal health and wellbeing as a resource benefit you? When experiencing optimal health and wellbeing, it is usually easier to function effectively and carry out day-to-day tasks. You will now learn about additional individual benefits of optimal health and wellbeing as a resource.

THEORY DETAILS

Have you realised that your life is often more enjoyable when you are experiencing optimal health and wellbeing? You have likely found it easier to carry out everyday tasks and reach an overall level of satisfaction when your dimensions of health and wellbeing are in an optimal state. As such, it makes sense that there are many benefits of optimal health and wellbeing as a resource at an individual level. These benefits include providing a greater ease in meeting daily needs, functioning independently, and coping with everyday challenges.

Firstly, optimal *physical health and wellbeing* can provide many individual benefits. Effective functioning of the body and its systems can provide many benefits to an individual, including:

- the ability to participate in sporting, recreational, and leisure activities.
- reduced healthcare costs due to fewer experiences of illnesses and injuries.
- a greater ability to function independently and carry out daily tasks.
- enabling effective participation in everyday activities, such as school and work, due to minimal experiences of illnesses and injuries. This can lead to further benefits by providing more meaningful employment opportunities in the future.

There are other individual benefits of optimal health and wellbeing that stem from the other dimensions. For example, having optimal *social health and wellbeing* involves having empathy for others and strong communication skills. This can enable individuals to maintain meaningful relationships with others.

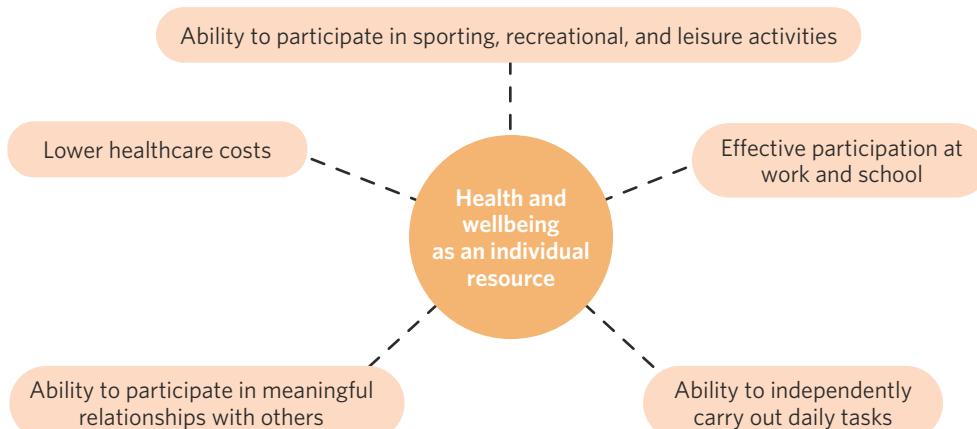


Figure 1 Summary of the benefits of optimal health and wellbeing as an individual resource

ADDITIONAL TERMS

Dynamic refers to something that is constantly changing over time

Collective refers to a group of individuals or things; it also describes things of this nature

Lesson link

To explain how optimal health and wellbeing is a resource, you need to remember the components which make up optimal health and wellbeing of each of the dimensions. If you need a refresher on these components, return to lesson **1A: Health and wellbeing**.

Optimal health and wellbeing as a resource can provide benefits for other individuals beyond simply the person experiencing this level of health and wellbeing. For example, parents with optimal health and wellbeing have a greater ability to raise children. This could involve parents having an increased ability to make healthy nutritional decisions for their children, which would not only promote the physical health and wellbeing of their children, but also lead to many long-lasting benefits, such as the development of healthy habits.

As you will learn throughout this lesson, the benefits of optimal health and wellbeing as a resource at an individual level can also provide benefits at a national and global level. For example, having a greater ability to participate in the workplace can improve productivity at work, leading to greater economic outcomes at workplaces and contributing to greater national incomes.

Optimal health and wellbeing as a national resource 3.1.2.3

OVERVIEW

How does optimal health and wellbeing benefit a nation? Optimal health and wellbeing presents mainly social and economic benefits from a national perspective.

THEORY DETAILS

When optimal health and wellbeing is experienced amongst a country's population, many benefits can occur at a national level. As such, optimal health and wellbeing acts as a national resource in many ways, providing many social and economic benefits.

As mentioned, optimal health and wellbeing as a resource can provide many national benefits, including many *social* benefits. When citizens in a country have optimal health and wellbeing, they are able to support other members in their community. This can lead to greater connections within the community and contribute to social benefits in a broader context, such as providing support for the most vulnerable in society. This is due to the components of optimal health and wellbeing, such as strong communication skills (optimal social health and wellbeing), as well the physical capacity to support members of the community (optimal physical health and wellbeing). Some of the social benefits of optimal health and wellbeing as a national resource include:

- increasing the level of participation in the community, such as in community sporting clubs and leisure centres.
- increasing the level of volunteering in society, as individuals are better equipped to give up their time for those in need.

Optimal health and wellbeing also has many *economic* benefits due to increasing the amount of financial resources available for the government to spend. This is mainly because when a country's population is of optimal health and wellbeing (or has reduced poor health) there is a reduced need to spend money on resources, such as healthcare. A healthier population also leads to reduced absenteeism from work and a more productive workforce. These both contribute to individuals earning greater incomes, leading to a greater amount of **tax** revenue collected by the government. Specific ways in which optimal health and wellbeing acts as a national resource economically include:

- less reliance on social support systems, such as welfare payments, as individuals with optimal health and wellbeing find it easier to gain meaningful employment and earn an income meaning governments can invest money elsewhere.
- less burden being placed on the healthcare system, with lower levels of injury and illness meaning that the government can spend less money on hospitals and other healthcare services.
- less absenteeism from work due to reduced levels of stress (mental health and wellbeing) and lower levels of illness and injury. This reduces the need for workplaces to pay absent employees wages and removes the cost of managing absenteeism (such as replacing absent workers). Additionally, when more people are earning higher incomes, the government can collect more tax from citizens.
- a more productive workforce, with individuals experiencing meaningful employment feeling a greater sense of purpose at work. Additionally, workplace productivity is likely to increase because a healthier population means less experience of fatigue and illness, (physical health and wellbeing) and stress (mental health and wellbeing), increasing the likelihood that work is produced to a higher quality. This in turn has financial benefits for the company, and therefore the nation.

ADDITIONAL TERMS

Tax is a compulsory financial contribution to state revenue made by citizens or residents which is used to finance government spending, including the provision of public goods and services, such as public healthcare, public schools, public infrastructure, and police services



ACTIVITY 1

The danger of being too productive

It is clear that there are many benefits of productivity, such as leading to a greater amount of tax collected by the government. However, constantly striving to be productive can have many negative effects, such as burnout, which can actually be unproductive in the long run. Burnout can have many negative effects, such as an inability to concentrate, lower energy levels, less excitement and motivation, and in extreme cases, depression. As such, workplaces and individuals have to strive to find a good level of productivity without leading to burnout.

Watch the eight minute YouTube video '*Productivity and how not to burn out*' (Tedx Talks, 2020). After watching the video, discuss the following questions.

- 1 What measures can you put in place to ensure that you don't become burnt out?
- 2 Why is it important for companies to make sure that their employees don't burnout?
- 3 How could burnout have negative implications at a national level?



Image: Visual Generation/Shutterstock.com

Figure 2 Being productive has become an increasing focus in workplaces in recent decades

The money saved on social support and healthcare systems and gained from greater average incomes due to greater productivity and less absenteeism from work can therefore be spent by the government in other ways. This can include increasing funding to education, which has many flow-on effects, such as enhancing the opportunities of children in the country to seek meaningful employment when reaching adulthood, allowing further economic benefits to occur in the future. This can also promote health and wellbeing, with additional money to be spent on infrastructure, such as roads, which can reduce the number of road accidents, promoting *physical health and wellbeing*.



Figure 3 Summary of the benefits of optimal health and wellbeing as a national resource

! Useful tip

When asked to outline a benefit of optimal health and wellbeing as a resource, you will have to use an example component of optimal health and wellbeing. As such, it is important that you are familiar with the components of optimal health and wellbeing for each dimension of health and wellbeing. For example, the following question was asked in the 2020 Health and Human Development Exam.

Question 1b

'Outline one benefit of optimal health and wellbeing as a resource nationally. (2 MARKS)'

To gain full marks, students had to identify an example component (specific to a dimension) of optimal health and wellbeing, and then explain how this could benefit a country as a resource.

A high-scoring response was '*If a person is physically healthy, as shown by strong immune system functioning, they are able to complete their education and gain meaningful employment, and therefore a taxable income, in which the taxes can be used by the government to fund infrastructure, such as education, acting as a national resource*'.

Optimal health and wellbeing as a global resource 3.1.2.4

OVERVIEW

Now that we have learnt about the individual and national benefits of optimal health and wellbeing as a resource, it is time to zoom out and take a broader view. How does optimal health and wellbeing affect multiple, or even all, countries across the world?

Study design key skills dot point

- describe global benefits of the pursuit of optimal health and wellbeing

THEORY DETAILS

Due to the process of **globalisation**, the world is more interconnected than ever before. This means that the benefits of optimal health and wellbeing as a resource has the ability to affect many countries, and occasionally, the whole world.

We have already learnt how optimal health and wellbeing is likely to lead to greater productivity and lower levels of absenteeism in a country's workforce. This not only improves national income, but also has global benefits. Mainly, this includes the benefit of increased **trade** opportunities, with countries able to produce more goods and services that they can exchange with other countries to receive financial compensation.



Image: Golden Sikorka/Shutterstock.com

Figure 4 Globalisation has led to greater ease of trade across borders

Optimal health and wellbeing also relates to fewer experiences of stress and anxiety (mental health and wellbeing), greater connections with others (social health and wellbeing), and a sense of belonging (spiritual health and wellbeing). These components of optimal health and wellbeing contribute to greater levels of peace in society. This has the global benefit of reducing the likelihood of conflict occurring globally. Furthermore, when all individuals across the world have access to resources, such as food and clean water required to maintain effective functioning of the body and its systems (physical health and wellbeing), there is a reduced likelihood of conflict with other countries over access to resources. This further highlights the benefit of less global conflict as a result of optimal health and wellbeing as a resource globally.

Another global benefit of optimal health and wellbeing as a resource is improving health outcomes worldwide, such as greater life expectancy. This is due to numerous reasons, particularly a greater ease in exchanging medical knowledge and resources across borders as a result of globalisation. This has led to countries experiencing difficulties, such as an infectious disease outbreak, to be provided with emergency medical resources and sometimes healthcare worker assistance. Additionally, low-income countries have been provided with advanced medical technology, such as vaccinations, by high-income countries.

Finally, optimal health and wellbeing leads to the global benefit of a reduction in the spread of **communicable diseases** across borders. Due to the interconnected nature of the world, with it being easy to travel to other countries and exchange goods with other countries, the risk of communicable diseases spreading at a rapid rate is heightened. However, when optimal health and wellbeing is attained, such as minimal experiences of illness and disease and the provision of strong hygiene practices (physical health and wellbeing), there is a reduction in the spread of communicable diseases across borders. This is a major global benefit of optimal health and wellbeing as a resource.

Real world example

G7 summits involve an annual meeting of the alleged seven largest advanced economies. These economies are Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States of America. The G7 summit in 2021 included a pledge to deliver one billion COVID-19 vaccinations to low-income countries. This highlights global benefits of optimal health and wellbeing as a resource. By vaccinating lower-income countries, individuals in these countries will be more likely to achieve optimal health and wellbeing as their physical health and wellbeing will be promoted due to less susceptibility to the communicable disease of COVID-19. This will lead to many benefits, including a reduced spread of this communicable disease around the world, bringing the end of the pandemic nearer. This will also lead to greater health outcomes, such as increased life expectancy and reduced mortality.

(Lee & Morton, 2021)

ADDITIONAL TERMS

Globalisation refers to the process of countries across the world becoming increasingly interconnected due to transport and technological communication developments

Trade involves the exchange of goods and services between countries in exchange for financial compensation

Lesson link

Health outcomes are measured by the measurement tools of health status indicators, which include life expectancy. You will learn more about health status indicators, in lesson **1C: Measuring health status**.

ADDITIONAL TERMS

Communicable diseases are infectious diseases that are transmitted from the environment, including through air, food, water, and other infected organisms



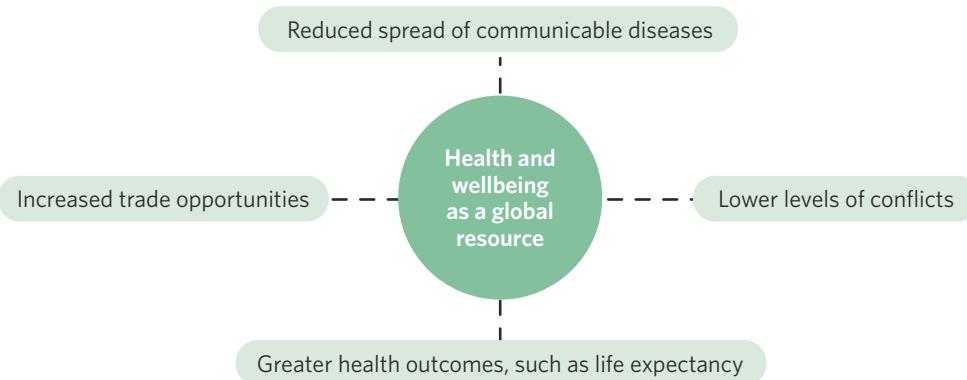


Figure 5 Summary of the benefits of optimal health and wellbeing as a global resource

As mentioned earlier in the lesson, the benefits provided by optimal health and wellbeing as a resource can lead to flow-on effects. This may involve the national benefit of greater national income due to more meaningful employment opportunities leading to the global benefit of increased trade opportunities. The increased trade opportunities may arise due to the government having the financial resources to invest in manufacturing, facilitating an increase in trade opportunities for that country with other countries. The flow-on effects are visualised in figure 6.

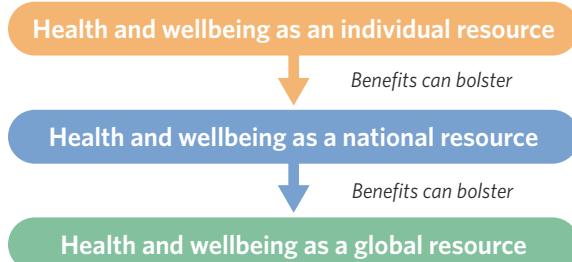


Figure 6 The benefits of health and wellbeing as a resource can bolster (support) the next collective level of health and wellbeing as a resource

! Useful tip

It is important to understand the connections between the dimensions of optimal health and wellbeing, how they contribute to optimal health and wellbeing as a resource, and the benefits that subsequently occur.

Dimensions of optimal health and wellbeing **'Levels' of optimal health and well being as a resource**

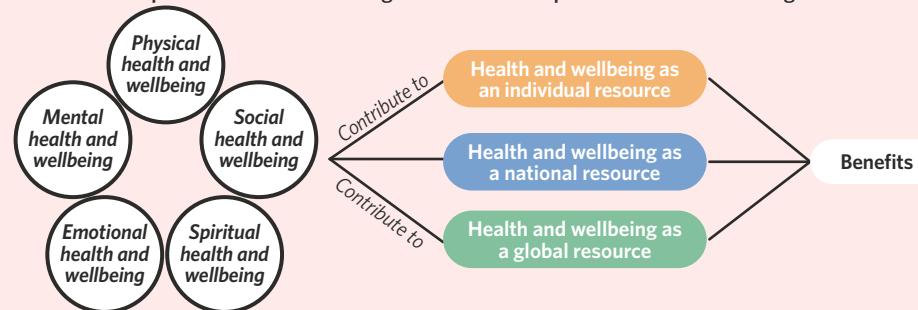


Figure 7 The dimensions of optimal health and wellbeing can contribute to each of the three levels of optimal health and wellbeing as a resource, with benefits therefore occurring at each of these levels

As shown in figure 7, there are three separate stages outlined when understanding this lesson. When answering questions about optimal health and wellbeing as a resource, it is important that you sequentially move through these stages. Firstly, you need to outline at least one dimension of optimal health and wellbeing, referring to at least one component of that dimension. This explanation forms the foundation used to explain the level of optimal health and wellbeing as a resource that occurs as a result. You then need to explain how this is a benefit for the specific level of optimal health and wellbeing as a resource. For example,

- you could explain how physical optimal health and wellbeing involves minimal experience of illnesses.
↓
- This then links to health and wellbeing as a national resource, leading to less absenteeism from work.
↓
- This is a benefit nationally as it contributes to a greater national income, meaning that the government has more money to invest into infrastructure.

Theory summary

In this lesson, you have learnt about optimal health and wellbeing as a resource. Specifically, you have learnt about optimal health and wellbeing as a resource individually, nationally, and globally. Table 1 outlines some ways in which optimal health and wellbeing can act as a resource individually, nationally, and globally.

Table 1 Overview of the benefits of optimal health and wellbeing as a resource individually, nationally, and globally

Individually	Nationally	Globally
<ul style="list-style-type: none"> Ability to participate in sporting, recreational, and leisure activities Effective participation at work and school Ability to carry out daily tasks Ability to participate in meaningful relationships with others Lower healthcare costs 	<ul style="list-style-type: none"> Greater community participation Greater levels of volunteering Less reliance on social support systems Less burden placed on the healthcare system Greater national income (as collected by tax) due to greater productivity, more meaningful employment opportunities, and less absenteeism 	<ul style="list-style-type: none"> Increased trade opportunities Lower levels of conflict Greater health outcomes, such as life expectancy Reduced spread of communicable diseases

1B QUESTIONS

Theory-review questions

Question 1

Optimal health and wellbeing should be the objective of life according to the World Health Organisation.

- A True.
B False.

Question 2

Which of the following best fills in the blank?

- A spiritual
B physical

Some individual benefits of optimal health and wellbeing as a resource include lower healthcare costs and greater ability to participate in recreational activities and work. These benefits mainly occur due to optimal _____ health and wellbeing.

Question 3

Optimal health and wellbeing as a national resource mainly has (*Select all that apply*)

- I economic benefits.
II environmental benefits.
III social benefits.

Question 4

Many of the benefits of optimal health and wellbeing as a resource have occurred due to the effects of globalisation.

- A True.
B False.

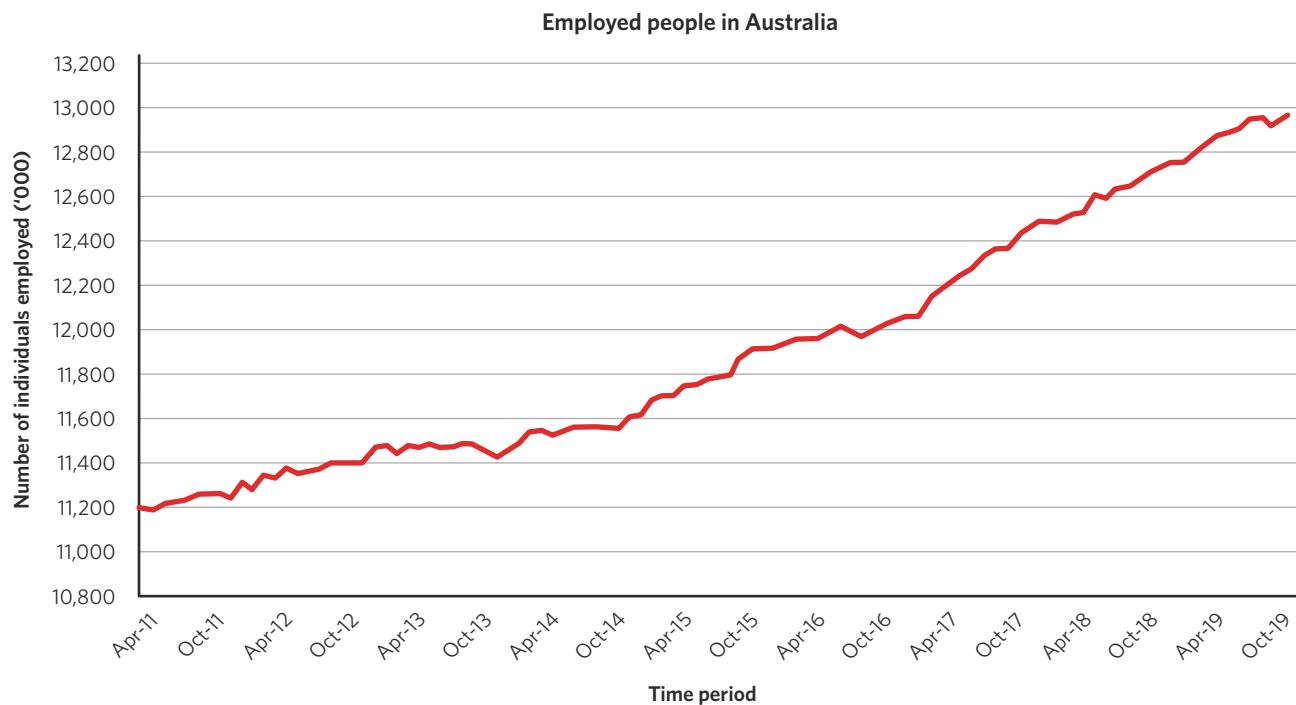


Skills

Data analysis

Use the following information to answer Questions 5-7.

The number of employed individuals in Australia has increased over time. This is due to many reasons, including greater levels of health and wellbeing among the population as a whole.



Source: adapted from Australian Bureau of Statistics, *Labour Force, Australia*, <<https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia/latest-release>>

Question 5

Which time period had the greatest number of employed individuals?

- A April 2016.
- B April 2013.
- C April 2019.

Question 6

The overall trend of the graph indicates

- A an increase in the number of unemployed individuals in Australia.
- B an increase in the number of employed individuals in Australia.
- C no change in the number of employed individuals in Australia.

Question 7

Identify which of the following statements about the data is correct.

- A There was a significant increase in the number of employed individuals between April 2013 and October 2013.
- B There was a significant increase in the number of employed individuals between October 2016 and October 2017.

Exam-style questions

Question 8 (1 MARK)

Suggest why optimal health and wellbeing is a resource.

Question 9 (2 MARKS)

Describe **one** benefit of optimal health and wellbeing as a resource individually.

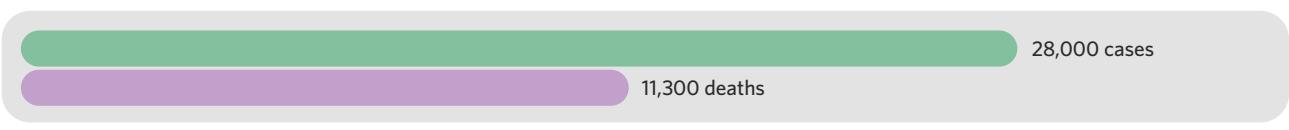
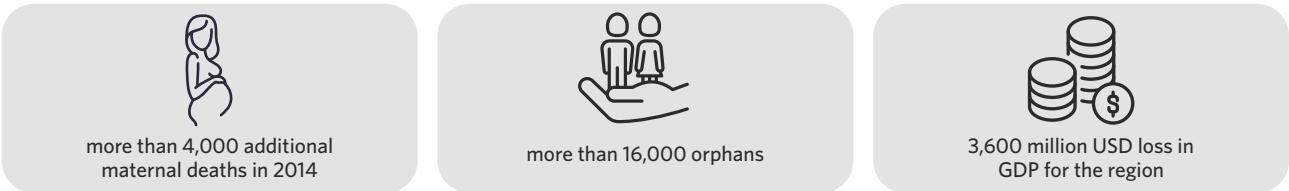
Adapted from VCAA 2020 exam Q1b

Question 10 (2 MARKS)

Describe **one** benefit of optimal health and wellbeing as a resource globally.

Question 11 (2 MARKS)

The Ebola virus disease (EVD) is a severe disease which can often lead to death, with the fatality rate being around 50%. The virus is transmitted to people from animals and then spread by both contact with bodily fluids, such as blood, and on surfaces. The EVD has led to devastating effects particularly in Africa, with almost 12,000 deaths recorded at the start of 2016 in Guinea, Liberia, and Sierra Leone. Since the start of the EVD outbreak, more than 1.5 billion dollars (USD) in resources has been provided to these countries in Africa, including resources to promote hygiene practices, trace infected individuals, prevent future outbreaks, and support healthcare systems. This has involved financial resources being provided to these countries to stimulate the economy and therefore lead to economic recovery.

EVD health outcomes**Consequences**

Images: Mascha Tace, Alex Blogoodf, davooda/Shutterstock.com

Sources: adapted from Barcelona Institute for Global Health, *Ebola: Two years and 11,300 deaths later*, <<https://www.isglobal.org/en/ebola>>; World Health Organization, *Ebola virus disease*, <https://www.who.int/health-topics/ebola#tab=tab_1>

Explain how the provision of resources to countries in Africa suffering with EVD outbreaks could act as a benefit of optimal health and wellbeing globally.

Question 12 (3 MARKS)

In the past, Lorna has really struggled to manage her anxiety. She has recently started seeing a psychologist and noticed major improvements in her mental health. These improvements have also led to other benefits, such as greater energy to exercise. This has led to her joining a netball team with her friends, promoting her physical and social health and wellbeing. Overall, she has reached optimal health and wellbeing since she started seeing a psychologist as her health has improved in many ways.

- Identify whether benefits of optimal health and wellbeing as a resource is most clearly demonstrated at an individual, national, or global level in the case study. (1 MARK)
- Using information from the case study, outline a benefit of optimal health and wellbeing as related to the resource level (individual, national, or global) you identified in **part a**. (2 MARKS)

Question 13 (4 MARKS)

Explain **two** benefits of optimal health and wellbeing as a resource nationally.

Questions from multiple lessons**Question 14** (3 MARKS)

- Explain the dynamic nature of health and wellbeing. (1 MARK)
- With reference to the dynamic nature of health and wellbeing, suggest why it would be difficult for optimal health and wellbeing to be the objective of life. (2 MARKS)



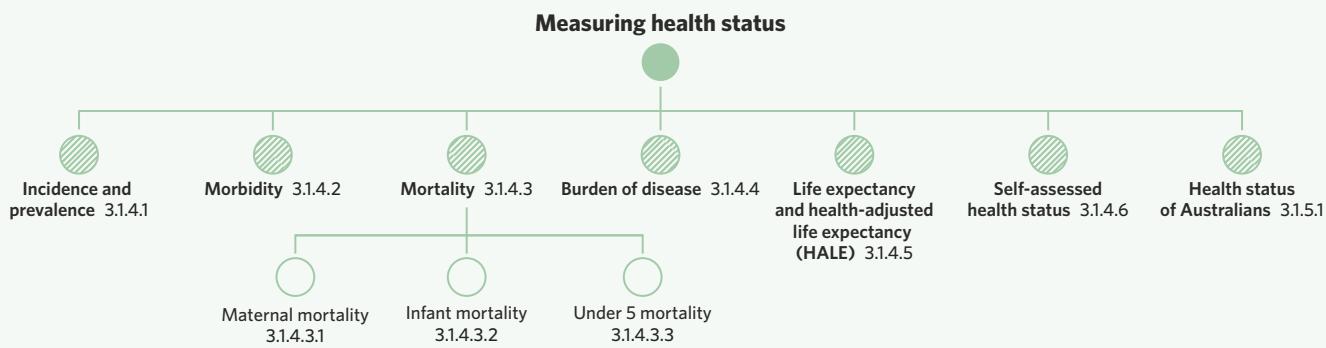
1C MEASURING HEALTH STATUS

How was Coronavirus measured in Australia? How are diseases and illnesses generally measured in any given population? In this lesson, you will learn about the health status indicators used to measure health status. You will also learn about Australia's health status.



Image: Zilu8/Shutterstock.com

1A Health and wellbeing	1B Health and wellbeing as a resource	1C Measuring health status	1D Prerequisites for health
Study design dot points			
<ul style="list-style-type: none"> indicators used to measure and understand health status: incidence, prevalence, morbidity, burden of disease, disability-adjusted life year (DALY), life expectancy, health-adjusted life expectancy (HALE), mortality (including maternal, infant and under 5) and self-assessed health status health status of Australians and the biological, sociocultural and environmental factors that contribute to variations between population groups including: – males and females – Indigenous and non-Indigenous – high and low socioeconomic status – those living within and outside of Australia's major cities 			
Key knowledge units			
Incidence and prevalence			3.1.4.1
Morbidity			3.1.4.2
Mortality			3.1.4.3
Maternal mortality			3.1.4.3.1
Infant mortality			3.1.4.3.2
Under 5 mortality			3.1.4.3.3
Burden of disease			3.1.4.4
Life expectancy and health-adjusted life expectancy (HALE)			3.1.4.5
Self-assessed health status			3.1.4.6
Health status of Australians			3.1.5.1



Incidence and prevalence 3.1.4.1 and Health status of Australians 3.1.5.1

OVERVIEW

To measure diseases and conditions in a population we can use the indicators prevalence and incidence.

Lesson link

Measuring health status involves interpreting and analysing a lot of data. To help you understand and respond to the data in this lesson, return to the **Guide to interpreting data in Health and Human Development** at the start of this book to assist you. As mentioned in the data guide, when a question refers to health status, you must include a health status indicator in your response. You can also return to the **Guide to responding to health terms in questions** at the start of the book which explains the concept of health status.

Study design key skills dot point

The following key skills dot points apply to the whole lesson:

- describe and apply indicators used to measure health status
- use data to describe and evaluate the health status of Australians

THEORY DETAILS

Health status indicators are measurement tools used to understand **health status**, which refers to an individual or population's overall health, taking into account a range of measures, such as life expectancy and experiences of illness, disability and disease. There are many forms of health status indicators, including incidence and prevalence.

Both incidence and prevalence are measurements of the existence or new instances of certain diseases or conditions in a population at a given time. These two concepts vary depending on whether they are measuring the entire number of cases of a certain disease, or only the new cases.

Prevalence refers to the number of cases of a particular disease or condition that are present in a population at a given point in time. For example, to measure how many people in Australia currently have breast cancer, you would measure the prevalence of breast cancer.

This differs from the health status indicator **incidence** which refers to the number of *new* cases of a particular disease or condition that arise in a population in a certain period of time. Incidence of a disease or condition is often measured throughout the period of a year or decade. For example, it may be helpful to compare the number of new cases of breast cancer in Australia in 2020 compared to in 2019, and even 1980. Incidence is therefore helpful when analysing the changing patterns in the new cases of a particular disease or condition over time.

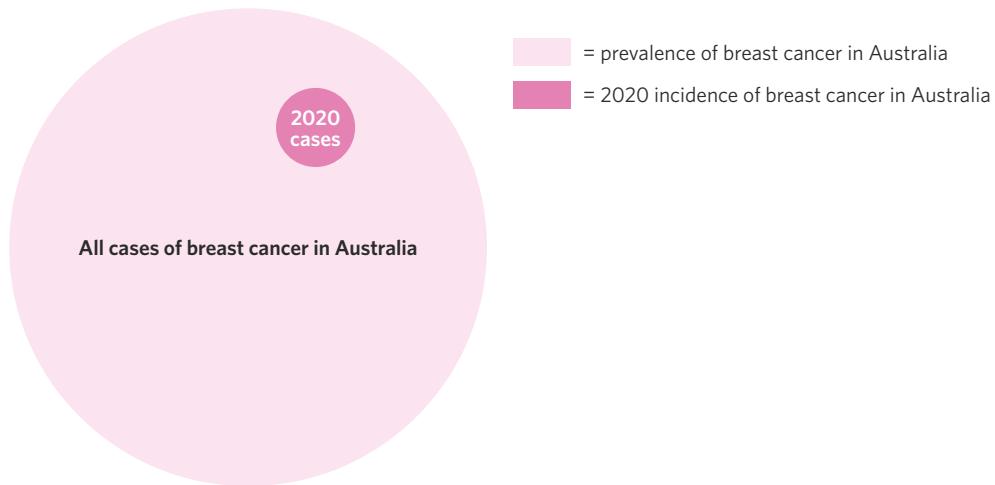


Figure 1 The 2020 incidence of breast cancer contributes to the overall prevalence of breast cancer in Australia

As illustrated in figure 1, the incidence of a disease or condition still contributes to and is counted as part of its prevalence. However, if the number of new cases in a certain time period, such as a year, five years, or ten years, wants to be measured, then the incidence of that condition in that time period is used.

KEY DEFINITIONS

Health status refers to an individual or population's overall health, taking into account a range of measures, such as life expectancy and experiences of illness, disability and disease

Prevalence refers to the number of cases of a particular disease or condition that are present in a population at a given point in time

Incidence refers to the number of new cases of a particular disease or condition that arise in a population in a certain period of time

ADDITIONAL TERMS

Health status indicators are measurement tools used to understand health status, which refers to an individual or population's overall health, taking into account a range of measures, such as life expectancy and experiences of illness, disability, and disease



Memory device

To remember the difference between incidence and prevalence, focus on how the number of new cases of a condition (which refers to the **incidence** of a condition) **increases** the prevalence of that condition at the time in which the data is recorded.

ACTIVITY 1

Watch a video on incidence and prevalence

Search up '*The relationship between incidence and prevalence*' on YouTube and watch the entire three minute and thirty nine second video (Patwari, 2013). Then answer the following questions:

- 1 In the bathtub analogy, the water from the faucet refers to what? Incidence or prevalence?
- 2 In the bathtub analogy, the water in the bathtub refers to what? Incidence or prevalence?
- 3 What are the two ways in which the level of the water in the tub can lower?

Incidence and prevalence in Australia

In 2017-2018, the prevalence of osteoporosis in Australia was 924,000 (Australian Bureau of Statistics [ABS], 2018). This was significantly higher than the prevalence of osteoporosis in Australia in 2014 to 2015 which was 801,800 (ABS, 2018). Additionally, the incidence of osteoporosis in the three years following 2015 was 122,200, with these 122,200 new cases arising between 2016-2018 (ABS, 2018).



Morbidity 3.1.4.2 and Health status of Australians 3.1.5.1

OVERVIEW

Levels of ill health in a population due to diseases and conditions are measured by the health status indicator morbidity.

THEORY DETAILS

Morbidity refers to ill health in an individual and the levels of ill health in a given population group. We will focus more on morbidity at a population level. Morbidity measures the presence of injuries, diseases, illnesses, and any other conditions which are non-fatal. Morbidity levels in a population can be measured as a whole, or for specific conditions. For example, it is possible to measure the morbidity in a population due to a certain condition, such as multiple sclerosis. Morbidity can be represented in multiple numerical forms, such as calculating the percentage that a condition proportionally contributes to the overall amount of morbidity in a population, or as a number of cases of a condition which reflects ill health in a population.

It can sometimes be hard to gain accurate morbidity data as it relies on health professionals recording data on diseases and conditions existing in the population, which can be timely and costly. This can sometimes lead to inaccurate morbidity data.

Study design key skills dot point

The following key skills dot point applies to 3.1.4.2 *Morbidity* and 3.1.4.3 *Mortality*:

- analyse patterns in morbidity and mortality in Australia over time

KEY DEFINITIONS

Morbidity refers to ill health in an individual and the levels of ill health in a given population group

! Useful tip

The health status indicator morbidity is related to the indicators prevalence and incidence. In fact, you can think of morbidity as an umbrella term with prevalence and incidence sitting underneath the umbrella. This is due to incidence and prevalence measuring the levels of particular diseases and conditions that cause ill health (morbidity) in a population.

In your responses, it is important that you do not refer to incidence and prevalence as measures of morbidity and instead refer to incidence and prevalence separately to morbidity. However, it may be helpful conceptually to understand the relationship between these indicators.



Image: Lidia Koval/Shutterstock.com

Figure 2 The relationship between morbidity, incidence, and prevalence

Morbidity in Australia

As mentioned, the level of morbidity in Australia can be recorded according to a particular condition or group of conditions. For example, almost half of Australians (47.3%) experienced chronic conditions in 2017-2018, which contributed to the overall level of morbidity in Australia (ABS, 2018). In the past ten years, levels of morbidity due to chronic health conditions have significantly increased from 42% to 47.3% (ABS, 2018). Some of the chronic health conditions experienced at this time are outlined in table 1.

Table 1 Chronic health conditions experienced by Australians between 2017 and 2018 (ABS, 2018)

Chronic health condition	Number of Australians experiencing the condition
Mental and behavioural problems	4.8 million
Arthritis	3.6 million
Asthma	2.7 million
Osteoporosis	924,000
Cancer	432,400
Kidney disease	237,8000

Mortality 3.1.4.3 and Health status of Australians 3.1.5.1

OVERVIEW

The number of deaths in a population is measured by the health status indicator mortality. We will focus on three specific forms of mortality: maternal, infant, and under 5 mortality.

THEORY DETAILS

In everyday life, you may have heard of the word mortality, which refers to the experience of death. In VCE Health and Human Development, **mortality** refers to the number of deaths in a population. **Mortality rates** refer to the number of deaths in a population in a certain period, usually expressed per 1000 or 100,000 live births in a twelve month period. Therefore, mortality rates can be presented in numerous ways, such as according to different groups in the population. For example, maternal mortality, infant mortality, and under 5 mortality are different categories of mortality which can be expressed as different mortality rates. Figure 3 outlines how mortality rates can be calculated.

$$\text{Mortality rate} = \frac{\text{Number of deaths in a given population}}{\text{Number of people within the given population}}$$

Figure 3 Mortality rates are usually calculated by dividing the number of deaths in a given population by the number of people within the given population

It is common for mortality rates to be calculated according to specific diseases or conditions. For example, the mortality rate of pneumonia would be calculated by dividing the number of deaths due to pneumonia in a population by the total population.

Useful tip

The health status indicators morbidity and mortality are related, with morbidity referring to all existing diseases and conditions within a population that cause ill-health, while mortality refers to the number of deaths in a population. Therefore, some diseases and conditions can be recorded as the morbidity of that condition when they are only causing ill-health, and can then be recorded under mortality if the condition leads to death. For example, an individual experiencing cardiovascular disease such as a heart attack can be recorded under the health status indicator of morbidity, and then under mortality if it later leads to death.

Want to know more?

The terms maternal mortality, infant mortality, and under 5 mortality are related to maternal mortality rates, infant mortality rates, and under 5 mortality rates respectively. This is due to these concepts being the exact same, except for the rate having to specifically consider the time period and number of live births being measured. For example, to explain maternal mortality rate, you would explain maternal mortality and then add that it is measured 'per 100,000 live births'.

Table 2 Description of the indicators of mortality

Indicators of mortality	Description
Maternal mortality 3.1.4.3.1	Maternal mortality rate refers to the number of deaths of pregnant women before birth, during birth or within the first six weeks after birth, per 100,000 live births. It is important to measure maternal mortality rates as pregnancy and childbirth have significant effects on the health of women.
Infant mortality 3.1.4.3.2	Infant mortality rate refers to the number of deaths of infants between birth and their first birthday per 1000 live births. Infants in this case refer specifically to individuals who have just been born up until their first birthday.
Under 5 mortality 3.1.4.3.3	Under 5 mortality rate refers to the number of deaths of children under five years of age per 1000 live births. In such a way, under 5 mortality measures the number of deaths occurring during early childhood.

KEY DEFINITIONS

Mortality refers to the number of deaths in a population

ADDITIONAL TERMS

Mortality rate refers to the number of deaths in a population in a certain period, usually expressed per 1000 or 100,000 live births in a twelve month period



Lesson link

In lesson **3B: Old public health and the biomedical approach**, you will learn about medical and technological advancements as well as improvements in infrastructure and sanitation practices. These developments have contributed to lower maternal mortality rates, particularly in high-income countries which have developed healthcare systems.

Similarly, in lesson **3C: New public health and the social model of health**, you will learn about the social model of health, which focuses on the prevention of diseases and conditions. This involves educating pregnant women on what behaviours are harmful during pregnancy, childbirth, and after childbirth, which has also contributed to reduced maternal mortality rates.

Useful tip

It is important to remember the different rates used for each type of mortality. This includes remembering that infant and under 5 mortality refers to the number of deaths per 1000 live births, while maternal mortality refers to the number of deaths per 100,000 live births. To get full marks on these questions you may need to include these specific numbers in your exam responses.

Useful tip

It can sometimes be difficult to understand high and low mortality rates. High mortality rates are bad and should be avoided, as this means there is a high number of deaths in a population, while low mortality rates mean there are few deaths in a population.

Mortality in Australia

As a whole, mortality has decreased in Australia over time due to the advancement of medical technology. However, when measured for specific conditions, mortality rates have increased in some circumstances.

One of the leading causes of death in Australia in 2018 was cardiovascular disease, which encompasses multiple conditions, such as coronary heart disease, stroke, and peripheral vascular disease. The mortality rates of these conditions are presented in table 3.

Table 3 Mortality rates due to cardiovascular disease conditions in Australia in 2018 (Australian Institute of Health and Welfare [AIHW], 2020)

Condition	Overall deaths	Male deaths	Female deaths
Coronary heart disease	17,533	10,269	7,264
Stroke	8,420	3,480	4,940
Peripheral vascular disease	1,845	1,013	832

Maternal mortality in Australia

In 2018, the maternal mortality rate in Australia was five deaths per 100,000 women giving birth (AIHW, 2020). The timing of these deaths as occurring either before birth, during or within 24 hours of giving birth, or the six weeks following birth are visualised in figure 4.

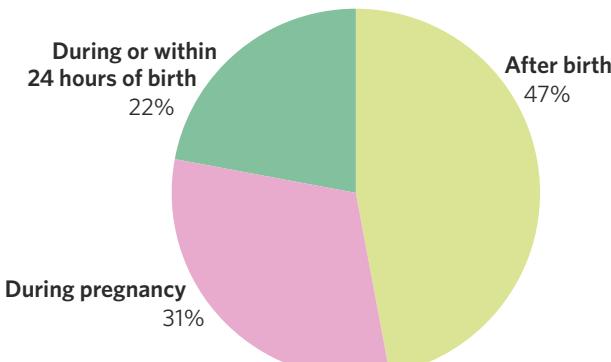


Figure 4 The timing of maternal mortalities in Australia in 2018 (AIHW, 2020)

Infant mortality in Australia

In 2017, there were around 1000 deaths of infants in Australia (those from birth until their first birthday; ABS, 2018). Therefore, the infant mortality rate for 2017 was 3.3 deaths per 1000 live births (AIHW, 2018).

This infant mortality rate is consistent with the steadily declining infant mortality rate in Australia. This is visualised in figure 5.

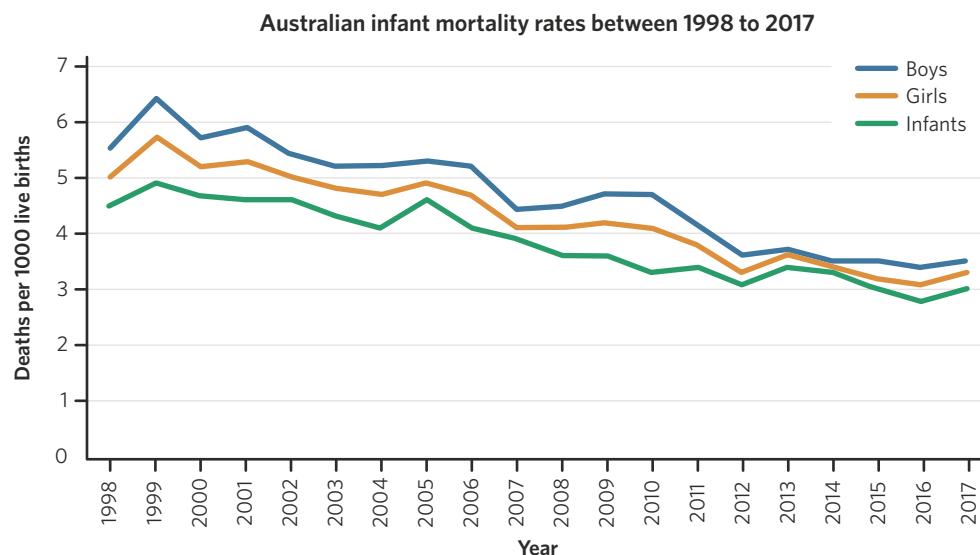


Figure 5 Infant mortality rates in Australia between 1998 to 2017 (AIHW, 2018)

Under 5 mortality in Australia

Australia's under 5 mortality rate in 2019 was 3.6 deaths per 1000 live births (Unicef Data, 2021). This mortality rate also follows the declining trend in under 5 mortality in Australia. This is visualised in figure 6.

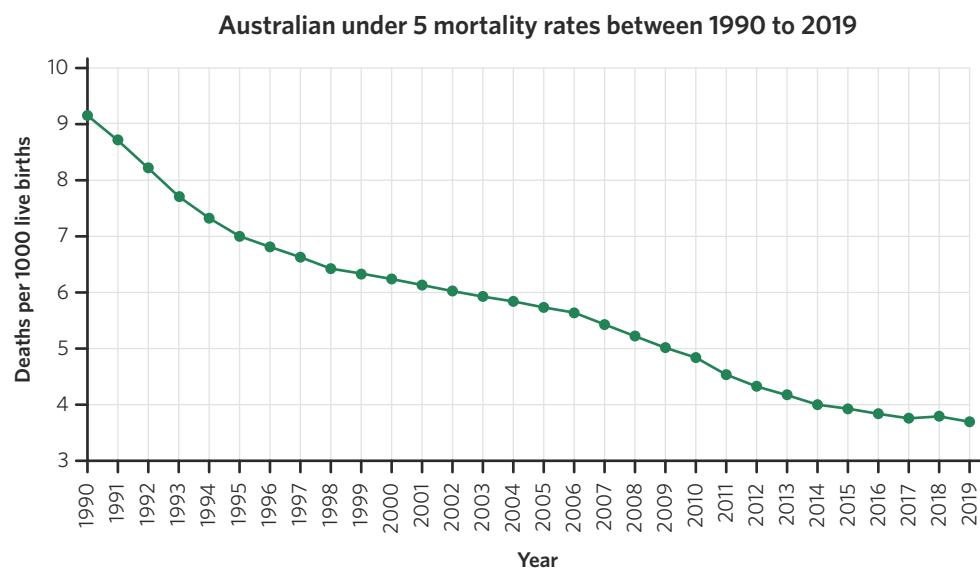


Figure 6 Under 5 mortality rates in Australia between 1990 to 2019 (Unicef Data, 2021)



Want to know more?

Although infant, maternal, and under 5 mortality rates in Australia and other high-income countries are declining, this is not the case in low-income countries. For example, Chad's under 5 mortality rate was significantly higher than Australia's in 2019.

- 2019 under 5 mortality rate in Australia = 3.6 deaths per 1000 live births
- 2019 under 5 mortality rate in Chad = 113.8 deaths per 1000 live births

(Unicef Data, 2021)



Burden of disease 3.1.4.4 and Health status of Australians 3.1.5.1

OVERVIEW

How do we measure the overall impact of all diseases, disabilities, and deaths? These occurrences all contribute in different ways to the burden which is placed on society, and more specifically, the health care system. Therefore, it is measured by the health status indicator burden of disease, which is measured by the unit disability-adjusted life year (DALY).

THEORY DETAILS

Diseases, disabilities, and deaths place a strain on the healthcare system in Australia. This strain on the health care system can lead to the experiences of diseases and deaths becoming a burden to society. To measure the burden of diseases and deaths, the health status indicator burden of disease is used. **Burden of disease** is a measurement of the impact of disease and injuries, specifically measuring the gap between the current health status and an ideal situation where everyone lives to an old age, free of disease and disability. Burden of disease is specifically measured by the unit of disability-adjusted life years (DALYs).

Burden of disease can be viewed as a holistic and overarching measurement of the existence of diseases, disabilities, and death in a society. Diseases, disabilities, and death place a burden on society to different extents, such as placing a financial or time burden on health care services. Examples of different conditions that contribute to burden of disease are visualised in table 4.

Table 4 Examples of how diseases, illnesses, or injuries can place a burden on society

Disease, illness or injury	How does this contribute to burden of disease?
Individual experiencing arthritis	<ul style="list-style-type: none"> Costs of treatments and medications <ul style="list-style-type: none"> These might be partially covered by public health insurance, therefore placing a financial burden on the government Time burden on health care services such as physiotherapists
Individual involved in a car accident	<ul style="list-style-type: none"> Time burden of emergency services such as an ambulance and police car Costs of treatments and medications Time burden on health care services such as at a hospital

As mentioned, burden of disease is measured by the unit **disability-adjusted life year (DALY)**, in which one disability-adjusted life year (DALY) equals one healthy year of life lost due to the experience of a disability or disease (YLD) or premature death (YLL).

A healthy year of life can be lost in two ways, either due to:

- years of life lost due to disability or disease (YLD), or
- years of life lost due to premature death (YLL).

Therefore, DALY is a measure that numerically represents burden of disease by summing the total number of healthy years of life lost due to disability or disease (YLD) and premature death (YLL). This sum is then subtracted from the total amount of years an individual is expected to live based on when they were born. After this final calculation, the DALY has been calculated and the burden of disease has therefore been measured. The difference between YLL and YLD is that YLL is **fatal**, whereas YLD is non-fatal. This difference, demonstrated with examples, is outlined in table 5.

Table 5 The difference between years of life lost due to disability (YLD) and years of life lost due to premature death (YLL)

Description	Fatal vs non-fatal	Examples include:
Years of life lost due to disability (YLD) refers to the non-fatal contribution to the burden of disease measurement of disability-adjusted life year (DALY).	Non-fatal	<ul style="list-style-type: none"> living with a chronic disease such as asthma living with a physical disability living with a mental health condition.
Years of life lost due to premature death (YLL) refers to the fatal contribution to the burden of disease measurement of disability-adjusted life year (DALY).	Fatal	<ul style="list-style-type: none"> death due to a fatal car-accident death due to lung cancer death due to a heart attack.

KEY DEFINITIONS

Burden of disease is a measurement of the impact of disease and injuries, specifically measuring the gap between the current health status and an ideal situation where everyone lives to an old age, free of disease and disability. Burden of disease is specifically measured by the unit disability-adjusted life years (DALYs)

Disability-adjusted life year (DALY) is a measure of burden of disease in which one disability-adjusted life year (DALY) equals one healthy year of life lost due to the experience of a disability or disease (YLD) or premature death (YLL)

ADDITIONAL TERMS

Fatal refers to something that can cause or lead to death

KEY DEFINITIONS

Years of life lost due to disability (YLD) refers to the non-fatal contribution to the burden of disease measurement of disability-adjusted life year (DALY)

Years of life lost due to premature death (YLL) refers to the fatal contribution to the burden of disease measurement of disability-adjusted life year (DALY)

Useful tip

When answering questions about burden of disease, VCAA has specified that you must write out disability-adjusted life year, years of life lost and years of life lost due to disability in full. When outlined once and if accompanied by the relevant acronym (DALY, YLL, and YLD respectively), you can then use the acronym instead of the full title of the health status indicator for that question. However, if you use the acronym without first outlining the title in full you may not receive full marks for your response.

Due to measuring the amount of healthy years of life lost, DALY considers the age of those who experience diseases, disabilities, or death. For example, if two individuals died of cancer, one two years old and the other 86 years old, the two year old would contribute to the measurement of DALY significantly more, as a much greater amount of healthy years of life was lost. This reflects the way in which YLL is measured.

Similarly, YLD is a complex measurement as it considers the level of severity of a disability or disease. For more debilitating diseases, such as the late stages of dementia in which an individual finds it difficult to get through day-to-day life without assistance, a greater contribution to DALY will be made compared to someone experiencing a mild, but bearable disease.

Years of life lost due to premature death (YLL) + years of life lost due to disability or disease (YLD)
= disability-adjusted life year (DALY)

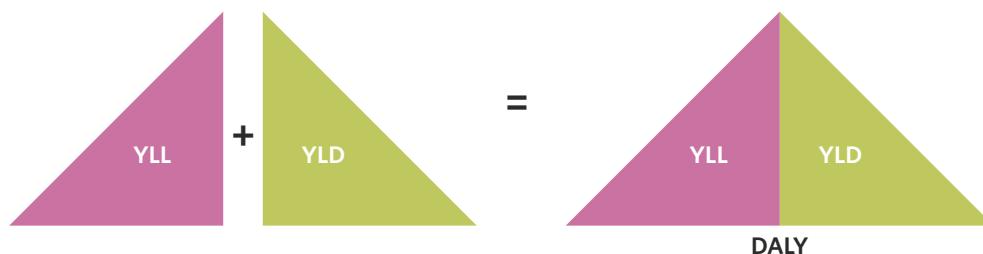


Figure 7 Disability-adjusted life year (DALY) is made up of years of life lost due to premature death (YLL) and years of life lost due to disability or disease (YLD)

As seen in figure 7, the combination of YLL and YLD contribute to the overall measurement of DALY, the unit which represents burden of disease. This can be thought of as the calculation for DALY.

Useful tip

If a question asks you to describe burden of disease, it is likely to be worth at least two marks. In this response, you must outline the description of burden of disease, ensuring to refer to the unit of measurement of disability-adjusted life year (DALY), as well as refer to DALY being made up of years of life lost due to premature death and years of life lost due to disability to gain full marks.

Lesson link

In lesson **7B: Similarities and differences in health status and burden of disease globally**, you will learn about the concept of double burden of disease, which impacts low-income countries.

Burden of disease in Australia

A 2015 study on burden of disease conducted by the Australian Institute of Health and Welfare (2020) identified the following:

- There were 2,394,031 healthy years of life lost due to disability (YLD) in the total Australian population.
- There were 2,358,384 healthy years of life lost due to premature death (YLL) in the total Australian population.
- Therefore, the DALY in the total Australian population in 2015 was 4,752,415 healthy years of life lost.



The disease groups which most greatly contributed to the burden of disease are presented in figure 8.

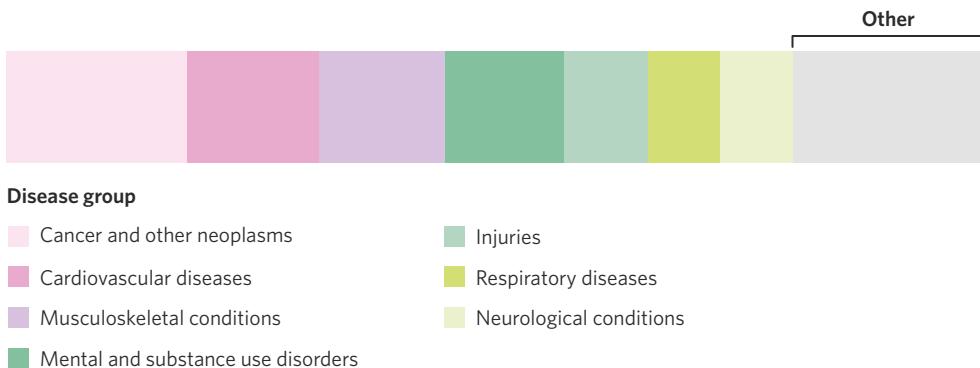


Figure 8 Proportion of total burden of disease by disease group in Australia in 2015 (AIHW, 2020)

In 2015, the DALY in Australia was 4.8 million years of healthy life lost due to illness or death (AIHW, 2020). The DALY in 2015 in Australia by age group is outlined in figure 9.

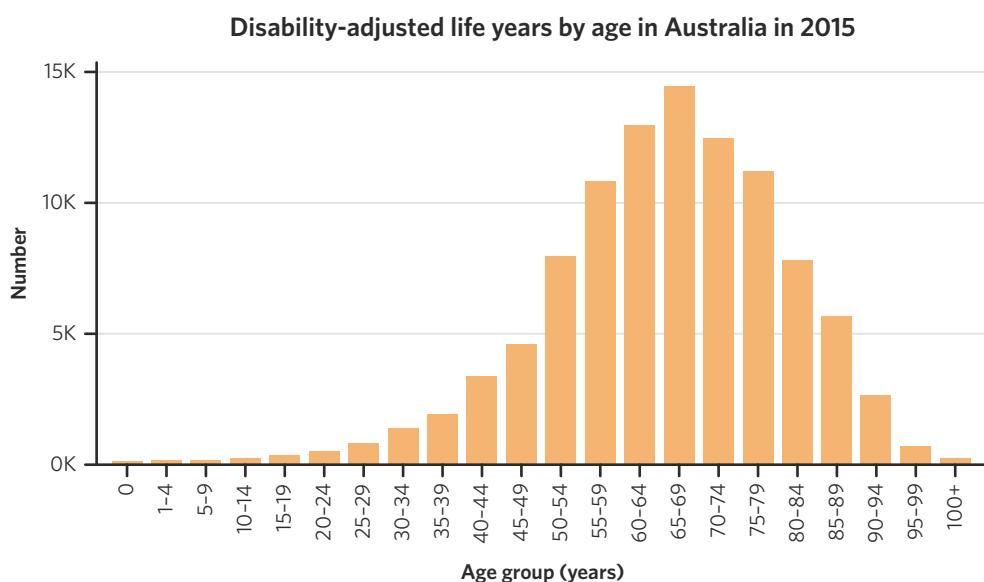


Figure 9 DALY in persons by age in Australia in 2015 (AIHW, 2020)

ACTIVITY 2

Explore the interactive data on burden of disease in Australia for 2003, 2011, and 2015

Type the URL aihw.gov.au/reports/burden-of-disease/abds-2015-interactive-data-disease-burden/contents/burden-of-disease-in-australia into your browser to explore the interactive data on burden of disease in Australia (AIHW, 2020). This resource allows you to look at the data from 2003, 2011, and 2015 on burden of disease in general and in relation to specific disease groups or diseases. You are also able to change the measurement to either DALY, YLL, or YLD.

When looking at this website, see if you can find the answers to the following questions.

- What was the overall DALY in Australia in 2003?
- What was the YLL and YLD in Australia in 2011?
- What was the overall DALY in Australia due to Gastrointestinal disorders in 2015?
- What was the overall DALY in Australia due to Type 2 diabetes in 2015?

Life expectancy and health-adjusted life expectancy (HALE) 3.1.4.5

and Health status of Australians 3.1.5.1

OVERVIEW

Over time, people have been living longer. The health status indicators life expectancy and health-adjusted life expectancy (HALE) are ways in which the length of life can be measured.

THEORY DETAILS

Life expectancy measures the number of years a person is expected to live, on the basis that current health conditions do not change. This is measured by reflecting on the health conditions existing at the time at which life expectancy is measured. By reflecting on these health conditions, the extent to which they may shorten life expectancy is taken into account. For example, if a severe and fatal disease exists at a certain point in time, life expectancy at that time will shift to reflect this. Similarly, medical and technological advancements can increase life expectancy. In such a way, life expectancy is a dynamic concept which fluctuates over time in line with current health conditions and medical technologies.

! Useful tip

Although HALE can be used as an additional measure of burden of disease, it is important to remember that DALY is the official measurement of burden of disease. Therefore, if you are asked a question about how burden of disease is measured or represented, you must refer to DALY.

! Useful tip

Although life expectancy can be measured at any stage of a person's life, it is extremely common to be measured and reported at birth. For example, when asked about Australia's current life expectancy, it is likely that the life expectancy of people born in the current year would be reported.

In such a way, most sources of data in questions refer to life expectancy at birth specifically. To gain full marks for questions, it is important to mention whether the data used in a question refers to life expectancy at birth.



Want to know more?

The longer a person lives, the more their life expectancy increases. This is due to life expectancy at birth taking into consideration all potential conditions or causes which may lead to an early death. For example, young adults have a greater susceptibility to death from road accidents. Once young adults have passed this heightened susceptibility to death and are well and truly into adulthood, their life expectancy increases in accordance.

You can think of each of these moments of heightened susceptibility to death as hurdles to jump over. These hurdles are laid out at the start of someone's life and begin to decrease as they jump over more hurdles. In such a way, life expectancy increases gradually as each hurdle is passed.



Image: yokunen/Shutterstock.com

Figure 10 Jumping over the hurdles of heightened susceptibility to death increases life expectancy

Although a valuable health status indicator, life expectancy fails to consider the quality of a person's life and instead solely focuses on the quantifiable value of their lives by measuring the number of years they expect to live. This differs from the indicator of **health-adjusted life expectancy (HALE)**, which is a measure of burden of disease based on life expectancy at birth, but including an adjustment for time spent in poor health. It is the number of years in full health that a person can expect to live, based on current rates of ill health and mortality in a population. The number of years a person is expected to live in good health is obtained by taking into consideration the number of years a person can expect to live with diseases and injuries. The number of years that an individual can expect to live in full health is then subtracted from the number of years captured by the measurement of life expectancy at that time. Therefore, the greater the number of years a person can expect to live with diseases and injuries, the lower their HALE.

KEY DEFINITIONS

Life expectancy measures the number of years a person is expected to live, on the basis that current health conditions do not change

KEY DEFINITIONS

Health-adjusted life expectancy (HALE) is a measure of burden of disease based on life expectancy at birth, but including an adjustment for time spent in poor health. It is the number of years in full health that a person can expect to live, based on current rates of ill health and mortality



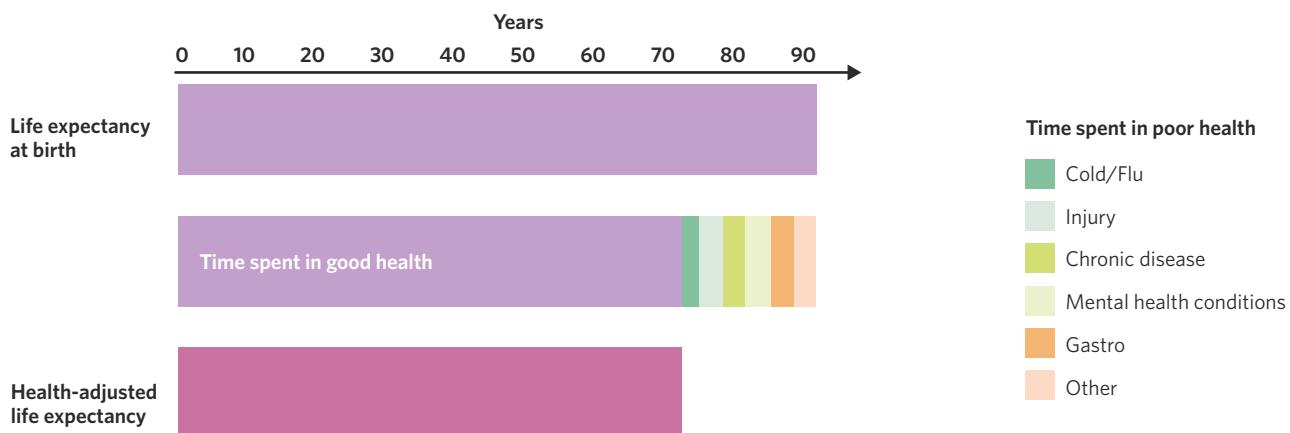


Figure 11 Health-adjusted life expectancy compared to life expectancy

Figure 11 visualises the difference between health-adjusted life expectancy and life expectancy. In this figure, you can see how an individual's potential life expectancy at birth of 90 years is reduced to a HALE of around 80 when considering time spent in poor health. Therefore, this means that the gap between life expectancy and HALE is about 10 years. The figure outlines some examples of diseases and conditions which can contribute to time spent in poor health.

Australia's life expectancy and health-adjusted life expectancy

In 2017-2019, Australia's life expectancy at birth was 80.9 years for males and 85.0 years for females (ABS, 2020). Life expectancy in Australia has steadily increased due to improvements, such as increased access to healthcare, medical and technological advancements, and safer working environments (ABS, 2020). Figure 12 illustrates this increasing life expectancy from 1992 to 2017-19.

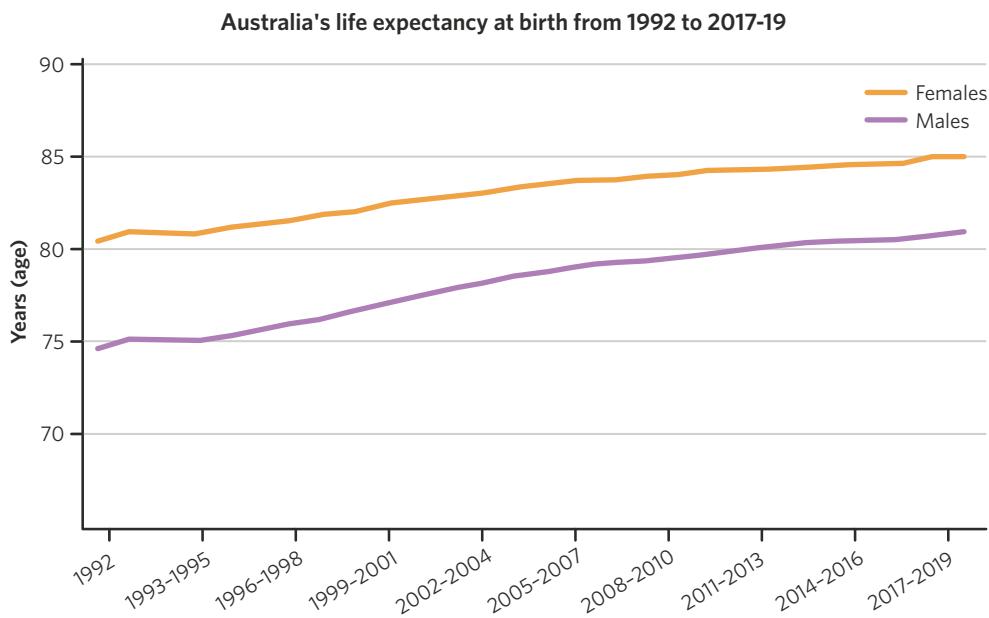


Figure 12 Australia's life expectancy at birth from 1992 to 2017-19 (ABS, 2020)

In 2019, Australia's life expectancy at birth was 82.5 years. However, when adjusted for time spent in ill health, Australia's health-adjusted life expectancy at birth was 71.9 years, meaning that Australians born in 2019 could expect to live 71.9 years in good health and 10.6 years in poor health (Grattan Institute, 2019). This gap of about ten years between life expectancy and health-adjusted life expectancy is common in most high-income countries.

Lesson link

In lesson 3A: *Australia's health status*, you will learn about improvements in Australia's health status, such as increased life expectancy, and why these improvements have occurred in more depth.

Self-assessed health status 3.1.4.6 and Health status of Australians 3.1.5.1

OVERVIEW

So far in this lesson, all of the health indicators we have looked at are objective measures. But how do we measure an individual's subjective feelings about their health? This is when the health status indicator self-assessed health status is used.

THEORY DETAILS

Self-assessed health status measures health status by asking individuals how they feel about their health. Therefore, **self-assessed health status** measures an individual's overall perception of their own health status at a given point in time. This measure is therefore subjective, as it relies on each individual's unique interpretations of their health status. In such a way, the characteristics of each individual, such as their level of optimism and their perception of all dimensions of health and wellbeing will influence how they rate their health status. Self-assessed health status is most commonly measured through the use of a rating-scale, in which individuals rate their health according to multiple descriptions. An example of this is visualised in figure 13.

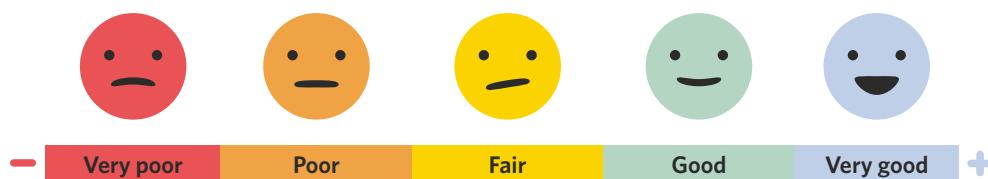


Figure 13 Self-assessed health status is often measured through the use of a rating scale, in which individuals may select whether their health status is very poor, poor, fair, good, or very good

Australia's self-assessed health status

Younger Australians are typically more likely to rate themselves as having a better health status than older Australians. This general pattern is illustrated in table 6, where Australians aged 15-24 were much more likely to rate their health as excellent or very good (67.6%) than those aged 75 and over (36.7%; ABS, 2018). This consistent pattern can be due to chronic illnesses and diseases being much more prevalent in older age.

Table 6 2017-18 self-assessed health status for individuals aged 15 years and over (ABS, 2018)

Age group	Fair/Poor (%)	Good (%)	Excellent/Very good (%)
15-24	8.1	24.3	67.6
25-34	8.5	27.3	64.0
35-44	10.7	29.0	60.0
45-54	14.8	30.8	54.2
55-64	20.1	28.7	51.0
65-74	22.1	33.0	45.1
75 years and over	32.1	31.2	36.7

Theory summary

In this lesson, you have learnt about the health status indicators which are used to measure health status. These health status indicators are outlined in table 7. You have also learnt about Australia's health status.

KEY DEFINITIONS

Self-assessed health status

measures an individual's overall perception of their own health status at a given point in time

Lesson link

In lesson **1A: Health and wellbeing**, you learnt about the subjective nature of health and wellbeing and illness. Self-assessed health status is a valuable health status indicator which is often used to measure this subjectivity of health. Refer to this lesson if you need a refresher on what it means for health and wellbeing and illness to be subjective.

Lesson link

In lesson **2A: Health variations between population groups: Part 1**, you will learn about the concept of socioeconomic status (SES). SES is made up of an individual's income, occupation, and education level.

In 2017-2018, differences in self-assessed health status occurred due to different levels of SES, with those with higher levels of SES having greater self-assessed health status outcomes. These outcomes were as follows:

- 64.9% of people with the highest level of SES rated their health as being excellent or very good.
- Only 45.1% of people with the lowest level of SES rated their health as excellent or very good.

(ABS, 2018)



Table 7 Overview of the health status indicators

Health status indicator	Description
Prevalence	The number of cases of a particular disease or condition that are present in a population at a given point in time.
Incidence	The number of new cases of a particular disease or condition that arise in a population in a certain period of time.
Morbidity	The ill health in an individual and the levels of ill health in a given population group.
Mortality	The number of deaths in a population.
Maternal mortality rate	The number of deaths of pregnant women before birth, during birth or within the first six weeks after birth, per 100,000 live births.
Infant mortality rate	The number of deaths of infants between birth and their first birthday per 1000 live births.
Under 5 mortality rate	The number of deaths of children under five years of age per 1000 live births.
Burden of disease	A measurement of the impact of disease and injuries, specifically measuring the gap between the current health status and an ideal situation where everyone lives to an old age, free of disease and disability. Burden of disease is specifically measured by the unit disability-adjusted life years (DALYs).
Disability-adjusted life years (DALY)	A measure of burden of disease in which one disability-adjusted life year (DALY) equals one healthy year of life lost due to the experience of a disability or disease (YLD) or premature death (YLL).
Life expectancy	The number of years a person is expected to live, on the basis that current health conditions do not change.
Health-adjusted life expectancy	A measure of burden of disease based on life expectancy at birth, but including an adjustment for time spent in poor health. It is the number of years in full health that a person can expect to live, based on current rates of ill health and mortality.
Self-assessed health status	An individual's overall perception of their own health status at a given point in time.

1C QUESTIONS

Theory-review questions

Question 1

There are many health status indicators. Health status indicators include under 5 mortality, self-assessed health status, and incidence.

- A True.
- B False.

Question 2

Two health status indicators are incidence and prevalence. Incidence refers to the number of cases of a condition present in a population while prevalence refers to the number of new cases of a condition present in a population.

- A True.
- B False.

Question 3

Morbidity is another health status indicator. It measures the level of ill health that an individual experiences or that is present in a population. Which of the following does morbidity concern? (Select all that apply)

- I Experience of a disease.
- II Death due to a chronic disease.
- III Existence of a disability.

Question 4

Mortality refers to the number of deaths in a population. There are three types of mortality, with each type referring to specific conditions.

- A True.
- B False.

Question 5

Which of the following best fills in the blank?

- A healthy years of life lost
- B disease and disability and lives to an old age

Burden of disease is a health status indicator which measures the gap between the current health status and an ideal situation where everyone is free of _____.

Question 6

Australia's life expectancy at birth in 2019 was 82.5 years, while the health-adjusted life expectancy at birth was 71.9 years. Which of the following correctly outlines the amount of years Australians born in 2019 could expect to live in poor health?

- A 10.6 years.
- B 71.9 years.

Question 7

Self-assessed health status is able to be measured by health professionals such as doctors and nurses for other individuals.

- A True.
- B False.

Skills**Perfect your phrasing****Question 8**

Which of the following sentences is most correct?

- A Incidence refers to the number of cases of a particular disease or condition which exist in a population in a certain period of time.
- B Incidence refers to the number of new cases of a particular disease or condition which arise in a population in a certain period of time.

Question 9

Which of the following sentences is most correct?

- A Infant mortality refers to the number of deaths of infants between birth and their first birthday per 1000 live births.
- B Infant mortality refers to the number of deaths of infants between birth and their first birthday per 100,000 live births.

Question 10

Which of the following sentences is most correct?

- A Disability-adjusted life years (DALY) is a measure of burden of disease in which one DALY equals a healthy year of life *lived*.
- B Disability-adjusted life years (DALY) is a measure of burden of disease in which one DALY equals a healthy year of life *lost*.

Exam-style questions**Question 11** (1 MARK)

Describe health-adjusted life expectancy (HALE) as a measure of health status.

Adapted from VCAA 2019 exam Q8a

Question 12 (1 MARK)

Describe the health status indicator incidence.

Question 13 (1 MARK)

Describe the health status indicator prevalence.

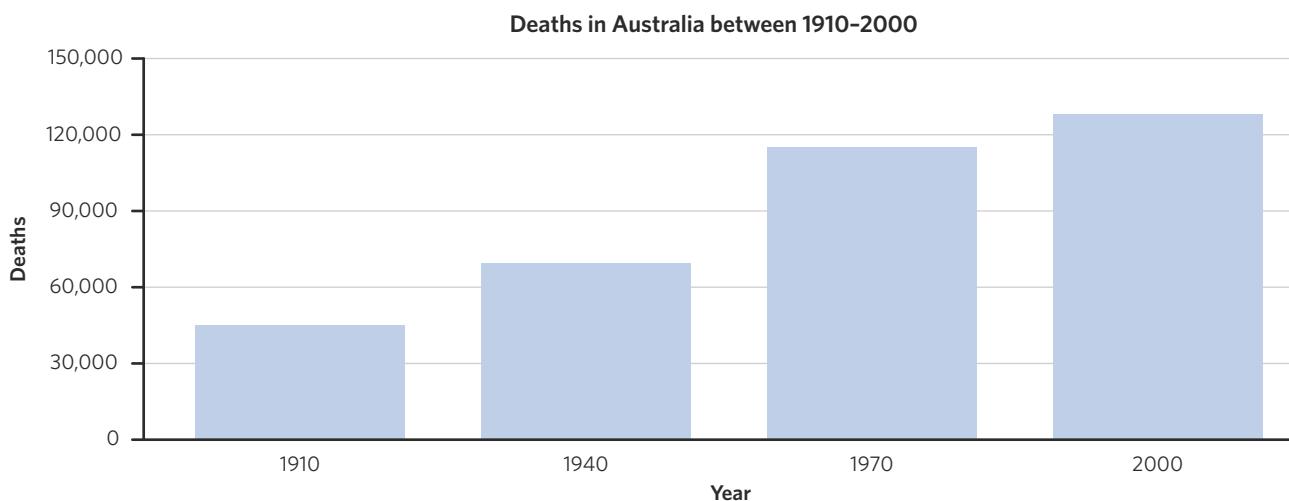


Question 14 (2 MARKS)

Explain the difference between maternal and under 5 mortality rates.

Question 15 (2 MARKS)

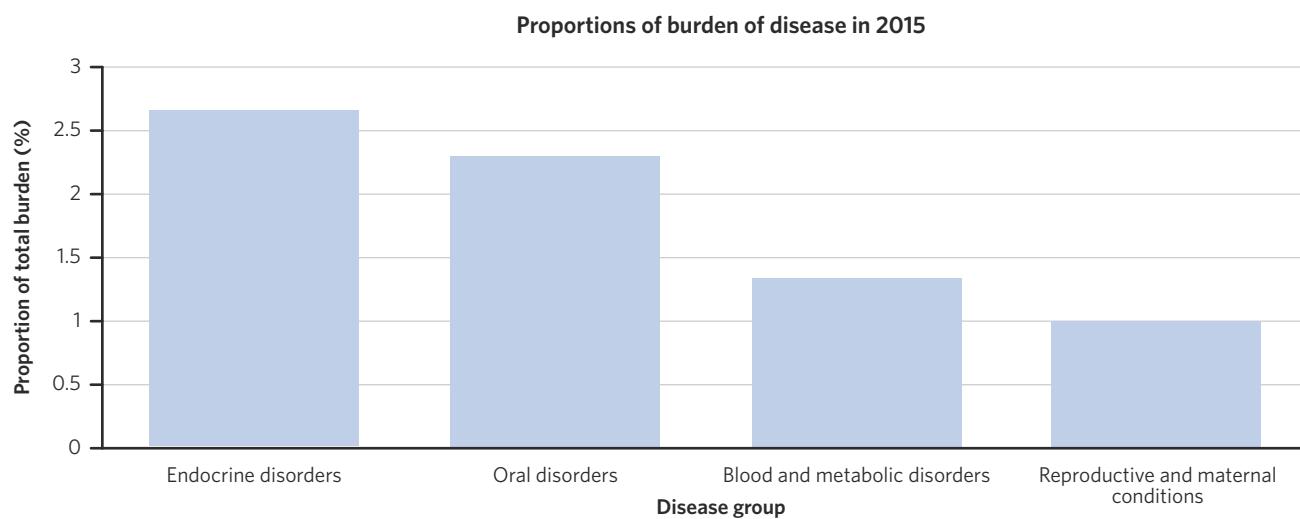
Explain the difference between morbidity and mortality.

Question 16 (3 MARKS)

Source: adapted from Australian Institute of Health and Welfare, *Deaths in Australia*, AIHW, Canberra, 7th of August 2020

- Identify the health status indicator which is reflected in the graph. (1 MARK)
- Identify a trend which is evident in the graph. (2 MARKS)

Adapted from VCAA 2020 exam Q5a

Question 17 (3 MARKS)

Source: adapted from Australian Institute of Health and Welfare, *Deaths in Australia*, <<https://www.aihw.gov.au/reports/life-expectancy-death/deaths-in-australia/contents/summary>>

- Identify the greatest contributor to burden of disease in the graph. (1 MARK)
- Explain the concept of burden of disease and explain how it is measured. (2 MARKS)

Adapted from VCAA 2016 exam Q8

Questions from multiple lessons

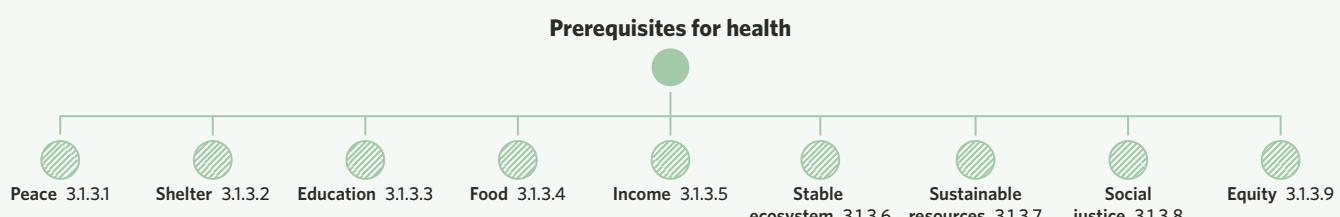
Question 18 (3 MARKS)

- Outline the health status indicator of self-assessed health status. (1 MARK)
- Examine how self-assessed health status represents the subjective nature of illness. (2 MARKS)

1D PREREQUISITES FOR HEALTH

In 1986, the WHO determined nine prerequisites for health, which are deemed essential resources and conditions for an individual to achieve optimal health and wellbeing. By identifying these prerequisites, it assists governments in developing an environment which promotes health and wellbeing.

1A Health and wellbeing	1B Health and wellbeing as a resource	1C Measuring health status	1D Prerequisites for health
Study design dot point			
<ul style="list-style-type: none"> prerequisites for health as determined by the WHO including peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice and equity 			
Key knowledge units			
Peace			3.1.3.1
Shelter			3.1.3.2
Education			3.1.3.3
Food			3.1.3.4
Income			3.1.3.5
Stable ecosystem			3.1.3.6
Sustainable resources			3.1.3.7
Social justice			3.1.3.8
Equity			3.1.3.9



Peace 3.1.3.1

OVERVIEW

Globally, there are 415 million children living in a conflict zone - this is one in six children (Save the Children, 2020). When people are not afforded peace, health cannot be achieved. Conflict results in the denial of fundamental rights essential to health, including healthcare, education, corruption, mass killings, and injuries.

THEORY DETAILS

In 1986, the WHO developed nine prerequisites for health. The WHO determines these prerequisites to be fundamental conditions for individuals to achieve optimal health and wellbeing.

Peace is a state of harmony that involves freedom from civil disturbance and conflict. Peace involves respectful interactions between citizens, as well as productive and stable relationships between countries. Countries that experience peace foster an environment that enables their citizens to access essential resources and services, such as healthcare, public transport, workplaces, and education. Peace means citizens can live freely without the threat of conflict and violence.

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- identify the WHO's prerequisites for health and explain their links to improved health outcomes

KEY DEFINITIONS

Peace is a state of harmony that involves freedom from civil disturbance and conflict



While peace is a central aspect in determining an individual's level of health, the world is seeing a significant amount of war, conflict, **extremism**, and violence. These issues both directly and indirectly impact a community's level of health and wellbeing.

Useful tip

When understanding the WHO prerequisite 'peace', it is important not to present it as only meaning the 'absence of conflict'. Rather, understand it from a positive perspective where peace means an environment that is in harmony and enables its citizens to live with freedom.

Table 1 How peace impacts health outcomes

Impact of peace	Link to health outcomes
Countries that experience peace can spend more money on resources, such as healthcare, education, and infrastructure, as they do not have to spend as much money on things relating to conflict and war, such as their army and weapons. For example, Australia, which is currently not in a state of war, has been able to build a world-renowned healthcare system.	<ul style="list-style-type: none"> Citizens of a peaceful country are able to access fundamental resources their government invests in, such as a high-quality healthcare system. Access to essential healthcare services means individuals can receive diagnosis and treatment for illnesses, promoting physical health and wellbeing. Treatment through healthcare services decreases the likelihood and severity of illnesses, reducing a country's morbidity.
When there is an absence of peace, conflict and war can directly injure and cause deaths amongst a population, such as through an airstrike.	<ul style="list-style-type: none"> Conflict and violence can cause death, increasing a country's mortality rate. Injury caused by violence negatively impacts physical health and wellbeing.
When an individual's country is experiencing peace, they can freely live, work, and play without the threat of violence or war causing harm to themselves or their family.	<ul style="list-style-type: none"> Being able to live without the fear, stress, and anxiety of the potential of violence promotes mental health and wellbeing. Being able to make the choice to go to work and school everyday, without being limited due to danger from nearby conflict, means people can develop professionally and intellectually, which contributes to a sense of purpose in life, promoting spiritual health and wellbeing.
Armed conflict and violence can be due to discrimination of certain religious beliefs. A peaceful environment empowers people to safely exercise their religious beliefs and practices.	<ul style="list-style-type: none"> Peaceful communities enable their members to safely visit their place of worship, and demonstrate their religious beliefs, promoting spiritual health and wellbeing.
In times of peace, infrastructure is more likely to be maintained and developed. Infrastructure, such as transport and roads, can often be destroyed in conflict.	<ul style="list-style-type: none"> Access to infrastructure enables citizens to move freely, and travel to socialise, such as by seeing their friends and family, promoting social health and wellbeing.

ACTIVITY 1

Watch a video on the impact of conflict on children in Syria

Search up 'Growing up with War: Children of Syria. The tragedy of kids who have never known peace' on YouTube and watch up until 6:37 (RT Documentary, 2017). Then answer the following questions:

- How many children have been killed since 2011 (the beginning of the Syrian civil war)?
- How was Ahmad's injury caused? Elaborate on how children like Ahmad are forced to limit everyday activities due to the threat of conflict.
- Describe how Ahmad's injury impacts his physical, mental, social, emotional and spiritual health and wellbeing.

ADDITIONAL TERMS

Extremism refers to beliefs, usually religious or political, which are considered radical compared to mainstream beliefs, and can be accompanied by measures, such as violence

Shelter 3.1.3.2

OVERVIEW

During the COVID-19 pandemic, the WHO prerequisite of shelter became even more important as we spent a significant amount of time at home. For many Australians, their houses became their workplace, place of education, and place of leisure. The world had to adjust to the new normal of spending more time at home.

THEORY DETAILS

Shelter is a permanent structure that provides protection from the outside environment. Adequate shelter is essential for human survival, protection, and privacy. However, 1.6 billion people worldwide lack adequate shelter, and 100 million people are homeless (Homeless World Cup Foundation, 2021). That is 1 in 5 people. Therefore, the inability to access appropriate shelter among millions of people worldwide is a key contributor to poor health outcomes.

Having adequate shelter involves the structure being able to protect from adverse weather conditions and provide privacy, appropriate space, security, appropriate temperature, sanitation, and a safe water supply. Appropriate shelter includes access to resources, such as cooking facilities for food, toilets and showers, electricity, and a comfortable place to sleep. Housing enables members of a household to have a base where they can re-energise and engage in everyday activities, such as socialising, work, school, and leisure. Inadequate shelter, or homelessness, poses various risks to health. When people do not have access to appropriate shelter, they are forced to spend time finding where they will sleep each night, which may stop them from finding employment and going to school.

Table 2 How shelter impacts health outcomes

Impact of shelter	Link to health outcomes
Shelter provides protection from weather conditions, such as rain, heavy wind, and extreme heat.	<ul style="list-style-type: none"> Adequate shelter protects people from cold weather conditions, which promotes immune system functioning. A strong immune system promotes an individual's level of physical health and wellbeing. Shelter protects people from exposure to severe weather, such as floods, reducing the risk of injury which therefore decreases morbidity.
Adequate shelter includes an environment where someone is able to get an appropriate amount of sleep. Getting enough sleep promotes health in various ways.	<ul style="list-style-type: none"> The right amount of sleep is essential for optimal brain functioning, including productivity, performance, and problem-solving. Individuals who are able to obtain enough sleep in an adequate shelter are better equipped to use logic and make decisions in everyday life, workplaces, and education, promoting mental health and wellbeing. Adequate sleep is also important for the body and its systems to function effectively, immunity, and the prevention of various diseases as it allows the body to rest and recover, promoting physical health and wellbeing. Sleep is linked to the processing and management of emotions, meaning shelter that enables optimal sleep improves emotional health and wellbeing.
Suitable shelter is private and secure from the outside world and any dangers. This privacy can also involve people being afforded their own space.	<ul style="list-style-type: none"> People who have access to private and secure shelter do not have to stress as much about safety, such as assault and theft, promoting mental health and wellbeing. The ability to have privacy can promote relaxation and decrease stress levels, which can also improve an individual's mental health and wellbeing.
Structures which provide shelter are often part of a community, such as in a neighbourhood.	<ul style="list-style-type: none"> Being a part of a community can increase someone's sense of belonging, promoting spiritual health and wellbeing.
Shelter provides a place for the use of essential resources, such as cooking facilities, sanitation, and heating.	<ul style="list-style-type: none"> Being able to use facilities in a shelter, such as cooking facilities, enables people to meet their nutritional needs for optimal body functioning, promoting physical health and wellbeing. Safe sanitation reduces transmission from communicable diseases, such as diarrhoea. As diarrhoea is a common cause of death in countries with poor sanitation facilities, adequate shelter can decrease mortality rates.

KEY DEFINITIONS

Shelter is a permanent structure that provides protection from the outside environment



Useful tip

For the prerequisites peace and shelter, you should consider how their presence impacts health and wellbeing, rather than how their absence negatively impacts health and wellbeing. Questions examining the discussion of prerequisites require how they influence health and wellbeing, rather than their lack thereof.

For example, question 12a in the 2020 VCE exam was '*Explain why each of these prerequisites must be available for the Rohingya people to improve or maintain their health and wellbeing*' (peace and shelter) for four marks. The answer had to explain how **shelter** and **peace** is necessary for improving or maintaining health and wellbeing. Students did not sufficiently answer the question if they explained how the lack of peace or shelter impacts health and wellbeing.

A high-scoring response for the two marks allocated to shelter was '*Shelter is essential to protect the Rohingya people from dangers within the external environment e.g. animal attacks. Attacks can result in injuries e.g. cuts that are vulnerable to infection, therefore decreasing the threat of dangers in the environment can enable them to be well enough to complete daily physical activities, therefore improving / maintaining their physical health and wellbeing.*

(VCAA, 2020)

The first sentence in this high-scoring response refers to how the presence of shelter protects Rohingya people from the outside environment, and the second sentence links this to its impact on a dimension of health and wellbeing.

Education 3.1.3.3

OVERVIEW

Education is an incredibly important way to improve health outcomes globally. However, one in five children are currently out of school (Upskilled, 2019).

THEORY DETAILS

Education is the process of gaining knowledge and building skills, typically in environments such as school and university. Education involves individuals gaining knowledge and skills and can occur in environments, such as school and university. Education builds **health literacy** that enables people to make healthy choices, such as accessing healthcare services, eating well, and avoiding risky behaviours, such as tobacco smoking. Earning an income, as well as increasing the amount a person can earn, is linked with a person's level of education, which impacts their ability to afford basic resources. Education is also a key way to combat major global issues that impact people's level of health, including gender inequality, poverty, climate change, and conflict.

Table 3 How education impacts health outcomes

Impact of education	Link to health outcomes
Education improves the skills of an individual, increasing their number of choices and opportunities. Specifically, education is associated with higher levels of employment and earning potential.	<ul style="list-style-type: none"> As education increases the ability to earn an income, people are more likely to afford basic resources, such as shelter and food, which are essential for the survival and functioning of body systems, promoting physical health and wellbeing. Gaining higher levels of employment due to education can increase self-esteem, promoting mental health and wellbeing. Education can also create a sense of meaning and hope for the future, thereby also improving spiritual health and wellbeing.
Education improves an individual's level of health literacy, which increases the likelihood they will exhibit healthy behaviours, such as eating well, prioritising sleep, and exercising.	<ul style="list-style-type: none"> Exhibiting healthy behaviours, such as consuming a nutritious diet, can improve the body's functioning, promoting physical health and wellbeing.
Places of education, including school, university, and TAFE, are often a place where people form friendships.	<ul style="list-style-type: none"> Students can develop a network of friendships and improve their social skills in these environments, promoting social health and wellbeing.

KEY DEFINITIONS

Education is the process of gaining knowledge and building skills, typically in environments such as school and university

ADDITIONAL TERMS

Health literacy is the ability to obtain, read, and understand health information to make informed health-related decisions

cont'd

Table 3 Continued

Impact of education	Link to health outcomes
Education emphasises the importance of pregnant women accessing appropriate healthcare, as well as avoiding risky behaviours while pregnant, such as the consumption of alcohol and illicit substances.	<ul style="list-style-type: none"> Women who are educated on healthy and risky behaviours while pregnant are more likely to exhibit choices that have a positive impact on their baby. For example, pregnant women who are aware of the risks of alcohol consumption, such as low birth weight, are less likely to drink alcohol, decreasing under 5 mortality rates.
Education is important for increasing awareness of risky behaviours, such as unprotected sex, excessive alcohol consumption, and tobacco smoking.	<ul style="list-style-type: none"> Being aware of the risk of behaviours, such as unprotected sex, decreases the prevalence of sexually transmitted infections. Education about the health risks of excessive alcohol consumption and tobacco smoking, such as developing cancer, decreases cancer mortality rates.



Want to know more?

Investing in a females' education is necessary to combat gender inequality globally. Worldwide, 132 million girls are out of school (UNICEF, 2019). Barriers, such as poverty, gender norms, child marriage, and violence against women impede on a female's ability to receive an education. When families are financially disadvantaged, they are more likely to prioritise boys in the family gaining an education. There are countless benefits of prioritising a female's education for everyone. The following points outline some of these benefits.

- Educating people leads to higher levels of employment, which increases economic growth and productivity. Countries that fail to educate girls to the same level as boys are estimated to lose more than \$1 billion a year (Their World, 2016).
- Children are more likely to survive past the age of five when their mother is literate, decreasing under 5 mortality rates (Their World, 2016).
- Educating females decreases overpopulation, as educated women are more likely to have fewer children later in life.

ACTIVITY 2

In 2020, the COVID-19 pandemic meant the majority of school students were learning from home for months. Since 2020, there is still the potential to be learning from home in the case of another lockdown, which occurred numerous times in 2021. Consider the following questions on how your education was impacted due to COVID-19.

- Did you enjoy the experience of learning from home?
- Was learning at home stressful in any way?
- What did you miss most about being at school?

Food 3.1.3.4

OVERVIEW

Food is a central aspect of our lives. We need food to fuel ourselves, as well as a source of enjoyment when having a nice meal or snack. Food is directly related to our health, and having a nutritious diet is essential to having optimal health.

THEORY DETAILS

Food provides us with the nutrients and energy we need to function everyday. Food is directly related to our ability to think, grow, work, exercise, learn, and move as it contains nutrients that are essential for our physical and mental state. People get nutrients through various food sources. However, many people across the world do not have the privilege of **food security**. In 2019, it was estimated that 2 billion people faced food insecurity, and 746 million people faced severe food insecurity (Global Citizen, 2020). Therefore, food security is not experienced by many people globally, which significantly impacts health outcomes worldwide.

ADDITIONAL TERMS

Food security is when a person has reliable access to adequate quantities of nutritious, safe, and culturally appropriate food at all times, from non-emergency sources



Table 4 How food impacts health outcomes

Impact of food	Link to health outcomes
Food is fuel for the body and provides it with nutrients required for the body and its systems to function effectively.	<ul style="list-style-type: none"> As food is essential for the body to function, nutritious food promotes physical health and wellbeing.
Nutritious food strengthens our immune system, meaning it can better recover from infections and diseases, as well as fight off germs that cause disease.	<ul style="list-style-type: none"> A strong immune system promotes physical health and wellbeing. Better immune systems also increase life expectancy as less individuals experience premature death from diseases and illnesses. People who do not have access to nutritious food will have a weakened immune system, which cannot fight off germs that cause the flu or a common cold as easily, increasing morbidity for these illnesses. People with a weak immune system are more likely to die from illnesses, such as respiratory diseases, increasing mortality rates for various diseases.
Food security is important for the health of women who are pregnant and their babies. A nutritious diet enables babies to be strong, grow, and develop, increasing the chance of a healthy birth weight and reducing the risk of birth defects.	<ul style="list-style-type: none"> Women who do not have access to sufficient amounts of nutritious food risk their baby being born at a low birth weight which can be fatal, increasing infant mortality rates. Women who consume sufficient amounts of nutritious food are less likely to become ill during pregnancy, decreasing maternal mortality rates.
Food and mealtimes are often at the centre of many social gatherings for many cultures, and bring people together.	<ul style="list-style-type: none"> Catching up with friends and family over a meal or celebration strengthens social networks, promoting social health and wellbeing. Food can also be central to a cultural celebration, and strengthen certain religious beliefs, promoting spiritual health and wellbeing.
People who experience food insecurity need to think about how they will obtain their next meal, and feel stress about when they will be able to eat next.	<ul style="list-style-type: none"> Food insecurity can cause stress and anxiety regarding when your next meal will be, which negatively impacts mental health and wellbeing.

Income 3.1.3.5

OVERVIEW

Without money, we cannot access resources and services we need to survive. Access to income enables people to access resources, such as food, clean water, and shelter, as well as engage in activities for recreation.

THEORY DETAILS

Income is money that is earned by an individual through providing labour, producing a good or service, or money received from investments, which enables them to access various resources. Income is a gateway to accessing many resources and services required for survival and achieving optimal health. The WHO prerequisite of income can be analysed from two perspectives. Individuals who have access to an adequate income can afford to access basic resources which are required for health and wellbeing, including nutritious food, adequate shelter, clean and safe water, sanitation, education, and healthcare. Moreover, governments gain an income through collecting **tax** from individuals and businesses. When governments have a greater national income by collecting more taxes they have a greater capacity to deliver public services, including healthcare services, education, public housing, social security, infrastructure, and communal areas, such as parks. Figure 1 displays the opportunities and resources available to people who earn an income. The cycle displayed in this diagram also suggests how it is difficult to break a poverty cycle of having a lack of income.

KEY DEFINITIONS

Income is money that is earned by an individual through providing labour, producing a good or service, or money received from investments, which enables them to access various resources

ADDITIONAL TERMS

Tax is a compulsory payment which is used to finance the provision of public goods and services, such as public healthcare, courts, and police services

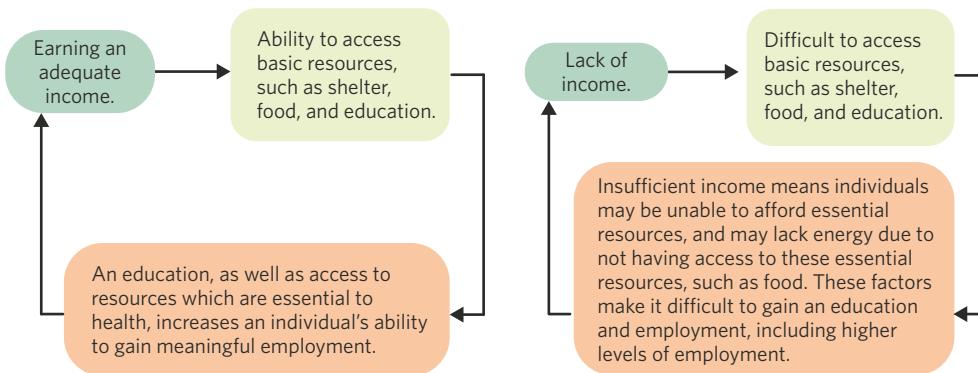


Figure 1 The cyclical nature of earning an income

Table 5 How income impacts health outcomes

Impact of income	Link to health outcomes
An adequate income enables people to access basic resources required for optimal health, including shelter, food, education, healthcare, safe sanitation, and clean water.	<ul style="list-style-type: none"> An adequate income ensures people can obtain essential resources for survival, which decreases stress and anxiety about not having these resources, promoting mental health and wellbeing. Income enables people to access items, such as nutritious food and adequate shelter, which reduces the risk of illness, promoting physical health and wellbeing. Being able to afford safe sanitation and clean water prevents the transmission and deaths from communicable diseases, such as cholera, decreasing mortality rates from communicable diseases.
Earning an income through meaningful employment can improve how someone feels about their achievements.	<ul style="list-style-type: none"> Earning an income can increase an individual's self-esteem, promoting mental health and wellbeing.
Access to income allows people to pursue activities that they enjoy, such as sport, travelling, and hobbies.	<ul style="list-style-type: none"> Being able to pursue activities you enjoy can contribute to a positive purpose in life, promoting spiritual health and wellbeing. Doing activities that make you happy increases feelings of relaxation and enjoyment, promoting emotional health and wellbeing.
Governments that have a greater level of income are better equipped to provide high-quality services to their citizens. This includes healthcare, education, recreation areas such as gardens and parks, social security, and infrastructure.	<ul style="list-style-type: none"> Governments that collect significant income through tax can provide their citizens with a high-quality healthcare system, such as by subsidising the cost of basic healthcare services for everyone. Being able to access affordable healthcare means people can treat illnesses, which reduces morbidity rates and promotes physical health and wellbeing. Adequate infrastructure means people can travel to work and maintain employment. Having employment can increase an individual's level of self-esteem and confidence, promoting mental health and wellbeing.



Want to know more?

Australia is regarded as one of the top countries in providing public services. A recent study has found that Australia is the third best country in providing governmental services (Institute for Government, 2017). Australia is able to provide services, such as a world-renowned healthcare system, public housing, and social security through 'Centrelink', as it collects tax from the **income** of Australian citizens and businesses. These services are essential for the health and wellbeing of the population.



Stable ecosystem 3.1.3.6

OVERVIEW

Our world is made up of many different ecosystems. Some of these include marine and forest ecosystems. The stability of the ecosystems we live in is essential for health as it ensures that our environments stay as a safe environment to inhabit and produces resources we rely on to survive.

THEORY DETAILS

An **ecosystem** is a community of living and non-living things that exist and interact within their specific environment. Living things in an ecosystem include plants, animals, and micro-organisms, such as algae and bacteria. Non-living components include rocks, water, sunlight, soil, and weather.

KEY DEFINITIONS

Ecosystem is a community of living and nonliving things that exist and interact within their specific environment



Want to know more?

Are you scared of spiders? Would you rather a world without the daddy long-legs in your bathroom? Spiders are actually an incredibly important aspect of our ecosystem. Spiders eat approximately 2000 insects a year (Treehugger, 2021). Without spiders, humans would experience famine, as insects would eat all of our crops. Therefore, we actually need spiders to keep our ecosystems balanced and live free from an insect-ridden world!

The interactions between organisms contribute to the stability of an ecosystem. Every plant and animal species relies on another species for its survival. A stable ecosystem is achieved when there is a balance between living and non-living components of an ecosystem. A functioning ecosystem can meet the food, water, air, and shelter needs of all the living components within that region, without causing major damage to the natural environment. Ecosystems will not always remain the same, and even the most stable ones are constantly evolving.



Want to know more?

A functioning and stable ecosystem maintains the balance of its food chains. A food chain displays how energy is transferred from one living thing to another. Humans must understand how an ecosystem's food chain works to avoid causing serious damage to a natural ecosystem, and can continue to rely on various food sources to survive. Ultimately, the food chain begins where animals eat plants, and these animals are then eaten by other animals, and so on. This process provides energy from one animal to another, to ensure its survival. The following visuals show food chains for various ecosystems. There are numerous food chains in an ecosystem which make up a food web.

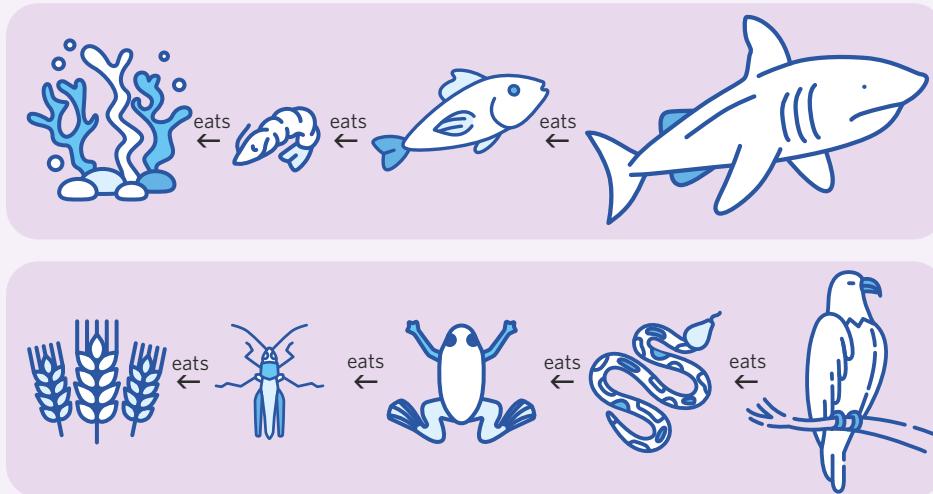


Image: bsd/Shutterstock.com

Figure 2 An ecosystem is made up of numerous food chains

Human activity has a significant impact on natural ecosystems. For example, farming, building infrastructure, and using natural resources, such as coal, can permanently impact an ecosystem. Therefore, it is important that individuals, businesses, and governments are aware of how to keep ecosystems stable, so we can rely on our environment for resources.

ACTIVITY 3

Watch the video on the restoration of Yellowstone's natural ecosystem

Search up 'How Wolves Change Rivers' on YouTube and watch the entire video (Sustainable Human, 2014). Then complete the following activity:

Yellowstone is a major national park in the United States. In the early 1900s, the government eradicated wolves from Yellowstone as they were a major predator to many animals in the park, including deers and elk. As a result of there being no wolves, the deer and elk population substantially increased. The increased presence of deers and elk meant they grazed the park's vegetation important to its structure, making this site vulnerable to erosion. In 1995, Yellowstone reintroduced wolves, which restored the natural balance to this ecosystem.

In your exercise book, create a flowchart describing the impacts of the reintroduction of wolves in Yellowstone national park.



Image: Lane V. Erickson/Shutterstock.com

Figure 3 The prismatic pool at the Yellowstone national park

Now that you have an understanding of what a stable ecosystem means, we can look at how a stable ecosystem impacts our health.

Table 6 How a stable ecosystem impacts health outcomes

Impact of a stable ecosystem	Link to health outcomes
A stable ecosystem provides us with access to food sources and clean water.	Access to food and water is essential for survival and the functioning of our body and its systems, promoting physical health and wellbeing.
A stable ecosystem enables humans to safely enjoy the natural environment, such as by having clean air. The natural environment is a place humans rely on for leisure and recreation.	Being able to relax in the natural environment, such as by going to the beach, can decrease stress and anxiety levels, as well as increase feelings of optimism, promoting mental health and wellbeing. The natural environment can also provide people with a sense of meaning and purpose, promoting spiritual health and wellbeing.
Humans utilise various materials from the environment, such as the use of wood and stone, in building shelter.	Shelter provides protection from the outside environment, such as by providing heating facilities during cold weather. Avoiding cold weather maintains a person's strong immune system, reducing mortality rates from respiratory conditions, such as pneumonia. A strong immune system also promotes physical health and wellbeing.

Sustainable resources 3.1.3.7

OVERVIEW

Sustainable use of resources enables the natural environment to function properly and maintain a stable ecosystem, as well as ensure resources will be available for future generations. As the world's population increases, so does the demand for resources. Therefore, it is crucial that we consider how to sustainably use resources to meet our current and future needs.

THEORY DETAILS

Humans use resources from the environment to survive. Resources, such as oil, coal, wood, clean water, and land used for agriculture promote health and wellbeing. These resources are used for essential things, such as food, clean water, energy production, heating, cooling, and shelter. Resources must be used in a sustainable manner so they are available for future generations. **Sustainability** involves meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. Therefore, current and future generations must have ongoing access to resources required for health and wellbeing. Human activities can deplete natural resources for future generations. Table 7 depicts various ways that humans impact our world's resources.

KEY DEFINITIONS

Sustainability involves meeting the needs of the present generation without compromising the ability of future generations to meet their own needs



Table 7 Human activities that are not sustainable

Human activity	Explanation	Solution
Generation of non-renewable energy	The main energy sources used for electricity are fossil fuels, which include oil, coal, and gas. Humans are currently using fossil fuels at a faster rate than they can be reproduced, as it takes millions of years for fossil fuels to be reproduced. Therefore, fossil fuels are a non-sustainable resource because they cannot be readily replenished in a lifetime. It is estimated that fossil fuels will be depleted by 2060, meaning they won't be available for future generations (Octopus Energy, 2019). The use of fossil fuels is also one of the biggest contributors to climate change and air pollution, compromising the safety of the Earth for current and future generations.	<ul style="list-style-type: none"> To slow the depletion of fossil fuels, there needs to be a greater reliance on renewable energy sources, such as solar and wind power. These sources do not run out. Governments making decisions to implement initiatives for industries and individuals to use renewable energy is the key way for this to be achieved.
Fishing	Billions of people rely on seafood as a nutritious source of food. However, a threat to a diverse fish supply is overfishing . Overfishing is caused by fisheries that have been enabled to catch large amounts of fish at a faster rate than the species can reproduce. If the fishing industry does not abide by sustainable practices, we could face a food crisis due to the extinction of marine species.	<ul style="list-style-type: none"> There must be policies imposed on fisheries to ensure they do not overfish marine species. At an individual level, we can limit our consumption of fish. We can also choose to purchase seafood from sustainable fisheries.
Agriculture	<p>As the global population grows, so does the demand to grow food crops. More than half the world's suitable land is used for crops (National Geographic, 2020). Agriculture requires a significant amount of land, water, and energy. Unsustainable agricultural practices include:</p> <ul style="list-style-type: none"> Some forms of irrigation. Agriculture accounts for 70 percent of freshwater consumption (National Geographic, 2020). This use of freshwater supply can deteriorate the quality of fresh water. Animals grazing and chemicals used. Large amounts of animals grazing, and various chemicals used in agriculture can compromise the quality and stability of land which impacts the ability of plants and animals in that environment to survive and reproduce. Greenhouse gases. Agriculture also produces a large amount of greenhouse gases, making it one of the largest contributors to climate change. 	<ul style="list-style-type: none"> Sustainable land management practices, such as assessing capacity of the land to resist erosion. Manage amounts of livestock to avoid land degradation. Implement irrigation practices that promote using water efficiently.

Table 8 How sustainable resources impacts health outcomes

Impact of sustainable resources	Link to health outcomes
Sustainable practices in obtaining food sources, such as sustainable fishing, will enable people to have ongoing access to nutritious foods and prevent a food crisis.	<ul style="list-style-type: none"> Being able to access nutritious food is essential for the functioning of the body and its systems, promoting physical health and wellbeing. Ongoing access to nutritious food decreases stress and anxiety about going hungry, promoting mental health and wellbeing. Nutritious food promotes immune system functioning, which reduces the likelihood of death from diseases, such as diarrhoeal disease, decreasing mortality rates.
Reducing our reliance on fossil fuels to a more sustainable source, such as shifting to renewable energy, is essential to combating climate change and improving air quality.	<ul style="list-style-type: none"> Tackling climate change is imperative for current and future generations, as a negative effect of climate change is severe weather conditions, such as flooding. Flooding can destroy shelter, meaning people are not protected from severe weather conditions, which can lead to injury, increasing morbidity rates from injury. Air pollution can cause death from lung cancer and cardiovascular disease, increasing mortality rates.
Sustainable use of land and water sources will enable future generations to access clean water.	<ul style="list-style-type: none"> Access to clean and safe water prevents the spread and death from water-borne diseases, such as cholera, reducing mortality rates for water-borne diseases.

ADDITIONAL TERMS

Overfishing refers to catching fish at a higher rate than can repopulate, resulting in the underpopulation and extinction of various fish species

Irrigation is artificially watering land to assist in growing agricultural crops

Social justice 3.1.3.8

OVERVIEW

Promoting values of social justice globally is essential to combating many problems, such as violence, war, gender inequality, and inequities in health status. A socially just world enables the global population to reach their full potential.

THEORY DETAILS

Social justice involves equal opportunities and rights for everyone. Therefore, a socially just world ensures everyone lives free from **discrimination**, is treated fairly, and receives equal treatment. This is about equal access to resources and opportunities to enable people to reach their full potential. Discrimination can account for differences in health status between groups, such as higher rates of mental health and physical conditions.

Table 9 How social justice impacts health outcomes

Impact of social justice	Link to health outcomes
People who live in a socially just environment do not have to worry about being treated unfairly.	<ul style="list-style-type: none"> Being treated justly reduces stress and anxiety about discrimination, promoting mental health and wellbeing.
When there is social injustice, discrimination is often the basis for conflict and violence. Therefore a socially just environment will likely have less conflict and violence.	<ul style="list-style-type: none"> A socially just community reduces the morbidity from physical injury from violent discrimination.
Social justice ensures all groups of people are provided with equal opportunities. Therefore, women and girls are more likely to receive education and employment opportunities in socially just countries.	<ul style="list-style-type: none"> Females who are educated are more likely to make healthy choices while pregnant, such as avoiding alcohol and tobacco smoking, reducing the number of babies born with defects or low birth weight, which decreases infant mortality rates. Women who receive an education and gain employment are more likely to have a sense of meaning and positive purpose, promoting spiritual health and wellbeing.
Social justice ensures that everyone can access services, such as healthcare, and are not refused treatment due to personal characteristics.	<ul style="list-style-type: none"> More people accessing healthcare services increases the treatment of various illnesses, reducing morbidity.

Equity 3.1.3.9

OVERVIEW

The WHO prerequisite equity is about people being treated fairly based on their needs. While a socially just world encompasses people being treated fairly and equally, equity zooms in on the concept of fairness and focuses on disadvantaged people's needs being met.

THEORY DETAILS

Equity refers to being fair and just, which includes catering for different people's needs. An equitable society provides the population with fair access to health promoting resources, such as clean water, food, income, education, social security, and healthcare. Therefore, equitable practices take into account the disadvantages that someone is experiencing, and caters for their needs to assist them in achieving health and wellbeing. For a country to demonstrate equity, it must focus on reducing the disparities in health status experienced by different groups of people. Equity is about providing people with opportunities and resources to achieve optimal health and wellbeing.

Useful tip

It is easy to confuse equity and equality as the same thing. As mentioned, equality is described as treating everyone equally/the same. Social justice encompasses equality. Equity is about responding to people's various needs, which could involve providing more support to those that need it. For example, low-income earners in Australia do not have to pay certain taxes imposed on the rest of the population.

KEY DEFINITIONS

Social justice involves everyone having equal opportunities and rights, being free from discrimination, and being afforded fundamental human rights

ADDITIONAL TERMS

Discrimination is the unjust treatment of a person or group of people due to personal characteristics, such as their gender, age, race, or disability

KEY DEFINITIONS

Equity refers to being fair and just, which includes catering for different people's needs

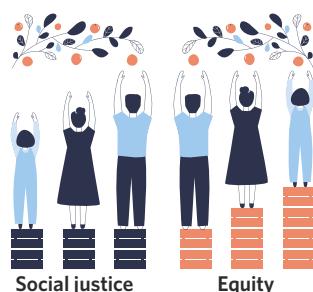


Image: Batsheva/Shutterstock.com

Figure 4. Equity is about levelling the playing field, whereas social justice is about treating people equally



Useful tip

Equity and social justice are related concepts. For the world to be socially just, people must be treated equally and fairly. However, equity has more of a specific focus on fairness, meaning people who are disadvantaged receive extra support.

For example, question 1a in the 2019 VCE exam was 'Describe social justice and equity' for two marks. The answer had to show a specific understanding of both.

A high-scoring response was '*Social justice includes being free from discrimination, having human rights upheld and having equal access to resources and opportunities, regardless of personal characteristics. Equity relates to social justice but has a greater focus on fairness, meaning that those who are disadvantaged receive more support.*' (VCAA, 2020)

The first sentence in this high-scoring response refers to how social justice encompasses equality, a lack of discrimination, and fairness, and the second sentence explains how equity is about fairness, particularly disadvantaged people who require extra assistance.

Table 10 How equity impacts health outcomes

Impact of equity	Link to health outcomes
A community that is based on values of equity demonstrates a concern for the health and wellbeing of all of its members.	A community that values equity means its members are more likely to feel cared about and valued, which can create a sense of belonging, promoting spiritual health and wellbeing.
Equity means disadvantaged groups, such as people with disabilities, are provided with employment opportunities tailored to their needs.	Increasing employment among a community increases people's level of self-esteem, as well as reducing stress about earning an income, promoting mental health and wellbeing.
A society that promotes equity ensures everyone can access essential healthcare services, and provides extra assistance to disadvantaged groups, such as low-income earners.	Ensuring that people access healthcare checkups reduces the number of deaths from preventable causes through early diagnosis and treatment, such as colorectal cancer, reducing cancer mortality rates.

Theory summary

The prerequisites for health determined by the WHO are essential for an individual to achieve an optimal level of health and wellbeing. Therefore, these prerequisites for health have a significant impact on health outcomes globally.

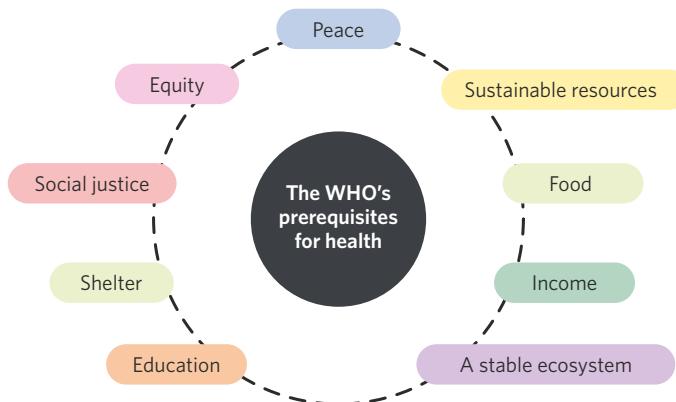


Figure 5 The WHO prerequisites for health

Memory device

To help you remember the prerequisites for health, you can use the acronym I-PRESS FEE.

Income

Peace

Resources (Sustainable)

Education

Shelter

Social justice

Food

Equity

Ecological system (Stable)

1D QUESTIONS

Theory-review questions

Question 1

If someone has access to all nine of the WHO's prerequisites for health, they will have optimal health and wellbeing.

- A True.
- B False.

Question 2

The prerequisites of peace and social justice are related to each other.

- A True.
- B False.

Question 3

Income and education influence each other.

- A True.
- B False.

Question 4

Social justice and equity are practically the same thing.

- A True.
- B False.

Question 5

Which of the following are ways that income impacts health outcomes? (*Select all that apply*)

- I Having an income can decrease stress and anxiety.
- II An income enables people to access essential resources, such as food.
- III An adequate income enables people to focus on activities they enjoy.

Question 6

Shelter will definitely lead to optimal health outcomes.

- A True.
- B False.

Question 7

Sustainable resources only concern future generations.

- A True.
- B False.

Question 8

Which of the following statements about stable ecosystems are correct? (*Select all that apply*)

- I A stable ecosystem is essential for physical health and wellbeing as it provides clean water.
- II An unstable ecosystem refers to conflict in the region, which can increase mortality rates.
- III Human activity can permanently change an ecosystem forever.

Question 9

Governments should ensure their population has access to all nine of the WHO prerequisites.

- A True.
- B False.



Skills

Perfect your phrasing

Question 10

Which of the following sentences is most correct?

- A Peace is the absence of conflict.
- B Peace is civil harmony, which *involves* the absence of conflict.

Question 11

Which of the following sentences is most correct?

- A Social justice is where everyone is treated equally, whereas equity relates to people *living free from discrimination*.
- B Social justice is where everyone is treated equally, whereas equity relates to people *being treated fairly*.

Exam-style questions

Question 12 (1 MARK)

Describe the prerequisite for health 'peace'.

Question 13 (3 MARKS)

Shelter is a prerequisite for health.

- a Describe shelter as a prerequisite for health. (1 MARK)
- b Explain how shelter can lead to improved health outcomes. (2 MARKS)

Adapted from VCAA 2018 exam Q13

Question 14 (3 MARKS)

Apart from peace and shelter, identify and describe one WHO prerequisite for health and explain how it promotes **one** dimension of health and wellbeing.

Question 15 (5 MARKS)

Tibet is a region in East Asia located in the Himalayas. In 1949, China invaded Tibet and has since been under China's regime. Since the Chinese military took over, there has been resistance from Tibetans, generally peaceful protests, which have resulted in violent conflict and imprisonment of many Tibetan people. These prisons have been reported to involve inhumane treatment of Tibetans, including torture. The conflict between China and Tibet has resulted in a lack of human rights for Tibetan people, including imprisonment for religious and political beliefs, inhumane punishment, no freedom of speech, and an inability to leave Tibet.

Source: adapted from New Internationalist, *China's oppression of Tibetans has dramatically increased*, <<https://newint.org/features/web-exclusive/2016/02/04/chinas-oppression-of-tibetans-has-dramatically-increased>>

Peace and social justice are prerequisites for health.

- a Select **either** peace **or** social justice and explain one way it promotes health status globally. (1 MARK)
- b Explain why the prerequisites peace and social justice must be available for Tibetan people to improve their health and wellbeing. (4 MARKS)

Adapted from VCAA 2020 exam Q12a

Questions from multiple lessons

Question 16 (6 MARKS)

- a Income and a stable ecosystem are prerequisites for health. Describe income and a stable ecosystem. (2 MARKS)

Adapted from VCAA 2019 exam Q1a

- b Select **either** income **or** a stable ecosystem and explain why it is a prerequisite for health at an individual level and a global level. (4 MARKS)

Adapted from VCAA 2019 exam Q1b

CHAPTER 1 REVIEW

CHAPTER SUMMARY

This chapter introduced you to the fundamental concepts of VCE Health and Human Development. You learnt about the concept of health and wellbeing and its dimensions, how optimal health and wellbeing can act as a resource, the indicators which are used to measure and understand health status, and the World Health Organisation's (WHO's) prerequisites for health.

In lesson **1A: Health and wellbeing**, you were introduced to the concepts of health and wellbeing, and illness. You learnt how health and wellbeing and illness are both dynamic (constantly changing) and subjective (influenced by individual opinions). You also learnt about the five dimensions of health and wellbeing, which are summarised in the following table:

Dimension of health and wellbeing	Examples of components of this dimension
Physical The functioning of the body and its systems, including the body's capacity to perform daily tasks and activities.	<ul style="list-style-type: none"> regular exercise a strong immune system, contributing to minimal illnesses a balanced diet in which nutrition needs are met
Mental The current state of wellbeing of the mind, involving the ability to think and process information.	<ul style="list-style-type: none"> the ability to use logic the ability to make decisions the ability to independently form opinions
Emotional The ability to express, control and manage feelings in a positive way and display resilience.	<ul style="list-style-type: none"> the appropriate expression of emotions, such as in the right environment and in front of the right people managing emotions in an effective manner, such as learning techniques to cope with emotions having appropriate emotional reactions to events
Social The ability to form meaningful and satisfying relationships with others, as well as the ability to appropriately manage and adapt to social situations.	<ul style="list-style-type: none"> having a strong support network provided by friends, family, and the wider community the ability to maintain positive relationships with others, including the ability to express emotions and overcome conflict the ability to form new relationships with others
Spiritual The ideas, beliefs, values and ethics that an individual possesses, contributing to a sense of meaning, purpose, and belonging.	<ul style="list-style-type: none"> a sense of hope about the future a sense of meaning or value which guides an individual through their life the ability for an individual to reflect on their place in the world

It is important to memorise these dimensions as you require this knowledge for the entire course. Specifically, when a question asks you to talk about 'health and wellbeing', 'health outcomes', or 'health', you are required to or can refer to the dimensions.

Finally, you learnt that the dimensions of health and wellbeing are interrelated, meaning a change to one dimension could positively or negatively affect the other four dimensions in some way.

In lesson **1B: Health and wellbeing as a resource**, you learnt about how optimal health and wellbeing can act as a resource individually, nationally, and globally. This is summarised in the following table:

Individually	Nationally	Globally
<ul style="list-style-type: none"> ability to participate in sporting, recreational, and leisure activities effective participation at work and school ability to carry out daily tasks ability to participate in meaningful relationships with others lower healthcare costs 	<ul style="list-style-type: none"> greater community participation greater levels of volunteering less reliance on social support systems less burden placed on the healthcare system greater national income (as collected by tax) due to greater productivity, more meaningful employment opportunities, and less absenteeism 	<ul style="list-style-type: none"> increased trade opportunities lower levels of conflict greater health outcomes, such as life expectancy reduced spread of communicable diseases



In lesson **1C: Measuring health status**, you were introduced to the indicators that are used to measure and understand health status. Similar to the dimensions of health and wellbeing in 1A, it is essential to memorise these indicators as this knowledge is required for the entire course. Specifically, when a question asks you to talk about ‘health status’, ‘health outcomes’, or ‘health’, you can refer to health status indicators. The indicators are summarised in the following table:

Health status indicator	Description
Prevalence	The number of cases of a particular disease or condition that are present in the population at a given point in time.
Incidence	The number of new cases of a particular disease or condition that arise in the population in a certain period of time.
Morbidity	The ill health in an individual and the levels of ill health in a given population group.
Mortality	The number of deaths in a population.
Maternal mortality rate	The number of deaths of pregnant women before birth, during birth or within the first six weeks after birth, per 100,000 live births.
Infant mortality rate	The number of deaths of infants between birth and their first birthday per 1000 live births.
Under 5 mortality rate	The number of deaths of children under five years of age per 1000 live births.
Burden of disease	A measurement of the impact of disease and injuries, specifically measuring the gap between the current health status and an ideal situation where everyone lives to an old age, free of disease and disability. Burden of disease is specifically measured by the unit disability-adjusted life years (DALYs).
Disability-adjusted life years (DALY)	A measure of burden of disease in which one disability-adjusted life year (DALY) equals one healthy year of life lost due to the experience of a disability or disease (YLD) or premature death (YLL).
Life expectancy	The number of years a person is expected to live, on the basis that current health conditions do not change.
Health-adjusted life expectancy	A measure of burden of disease based on life expectancy at birth, but including an adjustment for time spent in poor health. It is the number of years in full health that a person can expect to live, based on current rates of ill health and mortality.
Self-assessed health status	An individual’s overall perception of their own health status at a given point in time.

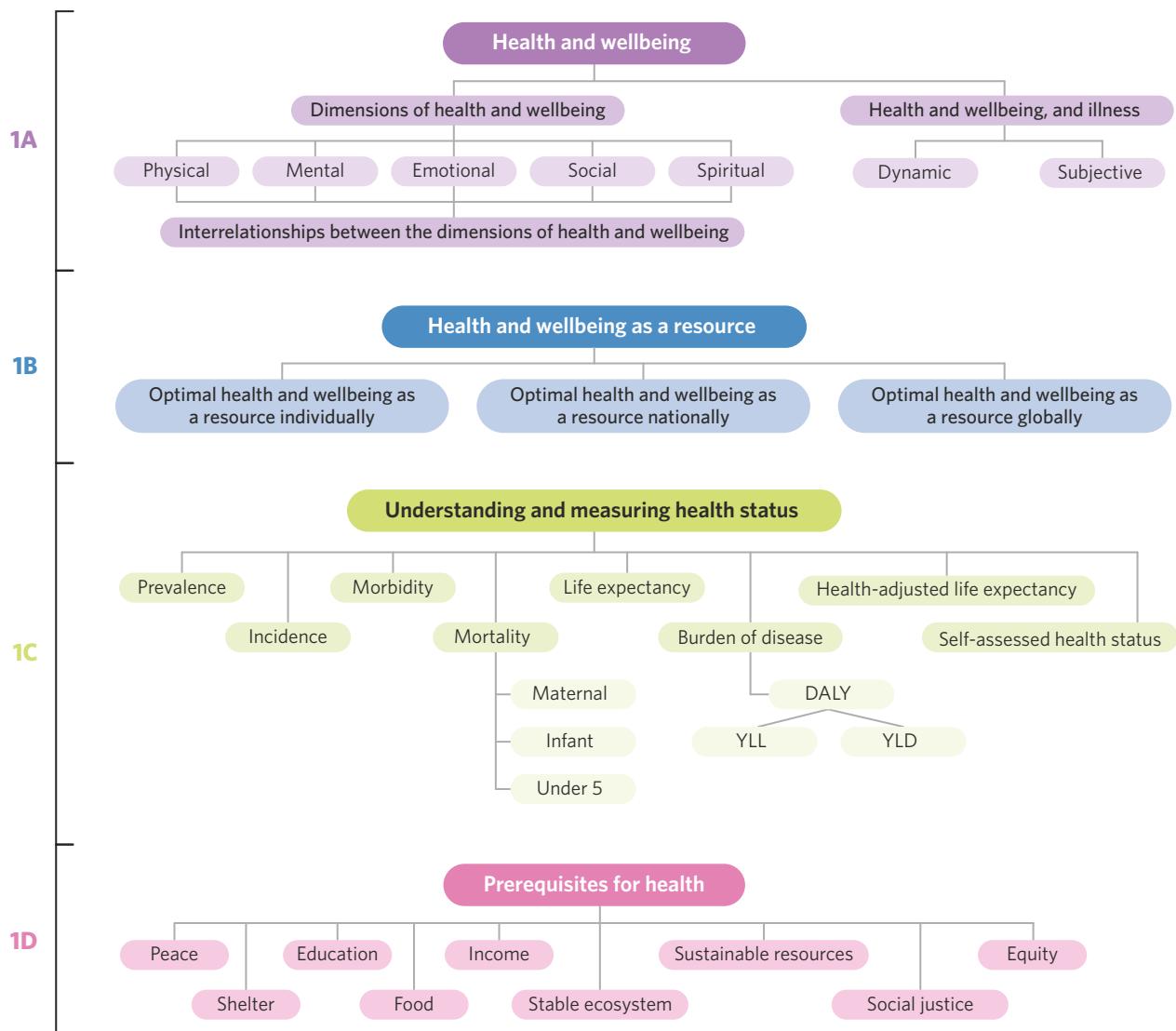
Finally, in lesson **1D: Prerequisites for health**, you learnt the nine prerequisites for health which were developed by the WHO. The WHO presents these prerequisites as essential conditions that must be available to an individual to reach their full potential and achieve an optimal level of health and wellbeing. You must be able to link how each prerequisite improves health outcomes, which requires knowledge of the dimensions from 1A, and health status indicators from 1C. The following table summarises the prerequisites and impact on health outcomes.

WHO prerequisite for health	Example of how the prerequisite can improve health outcomes
Peace	Citizens of a peaceful country are able to access fundamental resources that their government invests in, such as a high-quality healthcare system, as the government does not have to spend significant amounts of money on military and defence. Access to essential healthcare services means individuals can receive diagnosis and treatment for illnesses, promoting physical health and wellbeing.
Shelter	Adequate shelter includes essential resources, such as safe sanitation facilities. Safe sanitation reduces transmission from communicable diseases, such as diarrhoea. As diarrhoea is a common cause of death in countries with poor sanitation facilities, adequate shelter can decrease mortality rates.
Education	Education settings, such as school and university, can be places where people form positive relationships. Students can develop a network of friendships and improve their social skills in these environments, promoting social health and wellbeing.
Food	Pregnant women who do have access to sufficient amounts of nutritious food are less likely to give birth to a baby that has a low birth weight. Given that low birth weight contributes to infant deaths, food security during pregnancy decreases infant mortality rates.
Income	Earning an income and being self-sufficient can increase an individual’s self-esteem, promoting mental health and wellbeing.
Stable ecosystem	A stable ecosystem enables us to utilise materials from the natural environment, such as wood, which means we can build adequate shelter. Shelter provides protection from the outside environment, such as by providing heating facilities during cold weather. Avoiding cold weather maintains a person’s strong immune system, reducing mortality rates from respiratory conditions, such as pneumonia.

cont'd

WHO prerequisite for health	Example of how the prerequisite can improve health outcomes
Sustainable resources	Reducing our use of non-renewable resources, such as decreasing the amount of fossil fuels we use, can reduce air pollution. Decreasing air pollution can reduce deaths from lung cancer and cardiovascular disease, decreasing mortality rates.
Social justice	Social justice ensures equal treatment for women, such as equal education and employment opportunities. Women who receive an education and gain employment are more likely to have a sense of meaning and positive purpose in life, promoting spiritual health and wellbeing.
Equity	An equitable community ensures employment opportunities for disadvantaged groups. Increasing employment among a community increases people's level of self-esteem, as well as reducing stress about earning an income, promoting mental health and wellbeing.

Understanding and measuring health and wellbeing



CHAPTER REVIEW ACTIVITIES

Review activity 1: Fill in the table

This table focuses on linking scenarios to its effect on health status or a dimension of health and wellbeing. Read each scenario and state its impact on health outcomes as directed.

Scenario	Link to health status indicator or dimension of health and wellbeing
The world is experiencing the COVID-19 pandemic. Explain how the transmission of this disease impacts Australia's health status.	
Vishnu has broken his leg and cannot play soccer with his team. Explain how this injury impacts two dimensions of Vishnu's health and wellbeing.	
COVID-19 has impacted Australian students' ability to attend school in-person. Explain how this could impact two dimensions of Australian students' health and wellbeing.	
Countries experiencing conflict often have poorer quality healthcare systems compared to countries experiencing peace. Explain how a poor quality healthcare system can impact health status.	

Review activity 2: Match the terms to its description

Match the key terms relevant to this chapter on the left with the correct description on the right.

Peace	the ability to express, control, and manage feelings in a positive way and display resilience
Social health and wellbeing	a permanent structure that provides protection from the outside environment
Morbidity	a self-perceived negative state of health and wellbeing in which an individual believes that they are experiencing something which makes them unwell
Dynamic	ill health in an individual and the levels of ill health in a given population group
Illness	a state of harmony and tranquility, which involves freedom from civil disturbance and conflict
Emotional health and wellbeing	something that is constantly changing over time
Burden of disease	the ability to form meaningful and satisfying relationships with others, as well as the ability to appropriately manage and adapt to social situations
Shelter	a measurement of the impact of disease and injuries, specifically measuring the gap between the current health status and an ideal situation

CHAPTER 1 TEST

Question 1 (2 MARKS)

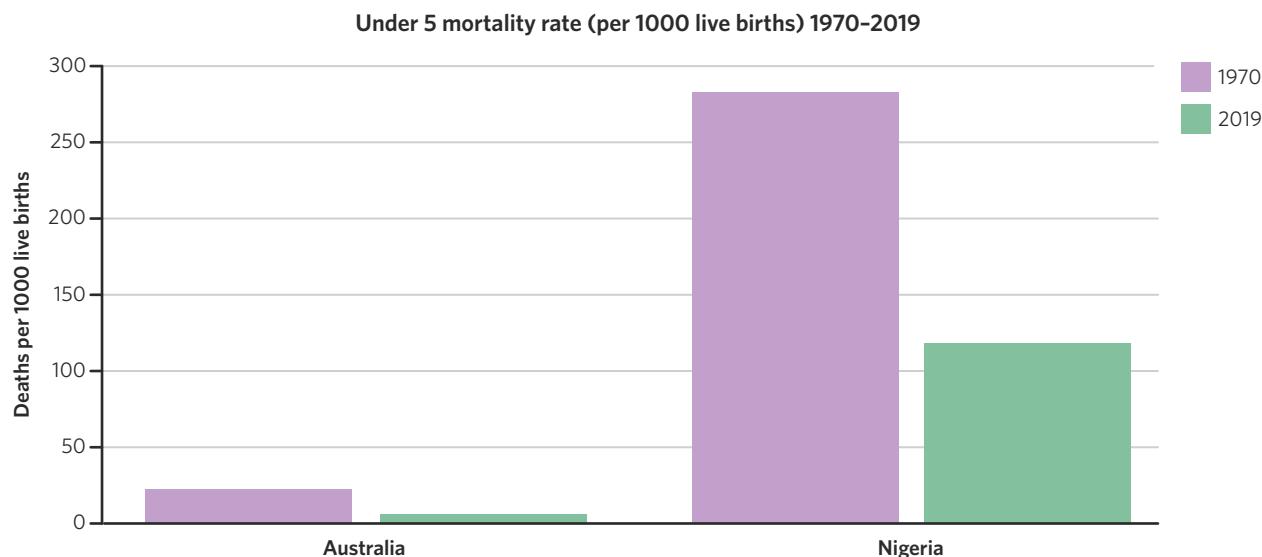
Describe mental health and wellbeing.

Question 2 (2 MARKS)

Using **one** example, outline why health and wellbeing is said to be subjective.

Adapted from 2020 VCAA exam Q1a

Question 3 (5 MARKS)



- Describe under 5 mortality rate. (1 MARK)
 - Describe a trend which is evident in the graph. (2 MARKS)
- Adapted from 2020 VCAA exam Q5a*
- Explain how the WHO prerequisite, shelter, could decrease the under 5 mortality rate in Nigeria. (2 MARKS)

Question 4 (2 MARKS)

Outline how prevalence differs from incidence.

Adapted from 2018 VCAA exam Q1a

Question 5 (6 MARKS)

Jean and Claude are a married couple who own a French cafe called Miam. Alongside two bakers, Claude makes an assortment of pastries and cakes each morning, and Jean is responsible for managing the cafe. Recently, Claude has given birth to their first baby, and has taken two months off work. However, Claude has been struggling mentally since giving birth due to experiencing high levels of stress in caring for the new baby, and has decided to take another month off work.

- Explain how Claude's current situation could impact her mental health and wellbeing. (2 MARKS)
- Adapted from 2020 VCAA exam Q2c*
- Explain how Claude's mental health and wellbeing could have an impact on her social and spiritual health and wellbeing. (4 MARKS)
- Adapted from 2020 VCAA exam Q2d*

Question 6 (2 MARKS)

Outline one benefit of optimal health and wellbeing as a resource globally.

Adapted from 2020 VCAA exam Q1b



Question 7 (6 MARKS)

Yemen is experiencing a civil war. This conflict is intensified by other countries, such as Saudi Arabia, attempting to intervene. As a result, Yemen is currently facing the worst humanitarian crisis in the world. Almost all food sources, hospitals, and schools have been bombed, which is causing a devastating effect. 80 percent of Yemen's population is currently experiencing food insecurity. At least one child dies every ten minutes from diseases, such as diarrhoea, respiratory conditions, and malnutrition. The majority of Yemen's population have difficulty accessing clean water, safe sanitation facilities, and adequate shelter.

Source: adapted from Oxfam Australia, *Yemen crisis*, <<https://www.oxfam.org.au/what-we-do/emergencies/learn-about-current-emergencies/yemen-crisis/>>

- a** List two WHO prerequisites for health that are not sufficient in Yemen. (2 MARKS)
- b** Explain how the **two** WHO prerequisites for health you chose in **part a** would improve health outcomes for people living in Yemen. (4 MARKS)

CHAPTER**2**

The health status of Australians

2A Health variations between population groups: Part 1

2B Health variations between population groups: Part 2

2C Health variations between population groups: Part 3

2D Contributions to Australia's health status: Part 1

2E Contributions to Australia's health status: Part 2

Key knowledge

- health status of Australians and the biological, sociocultural and environmental factors that contribute to variations between population groups including:
 - males and females
 - Indigenous and non-Indigenous
 - high and low socioeconomic status
 - those living within and outside of Australia's major cities
- the contribution to Australia's health status and burden of disease of smoking, alcohol, high body mass index, and dietary risks (under-consumption of vegetables, fruit and dairy foods; high intake of fat, salt and sugar; low intake of fibre and iron)

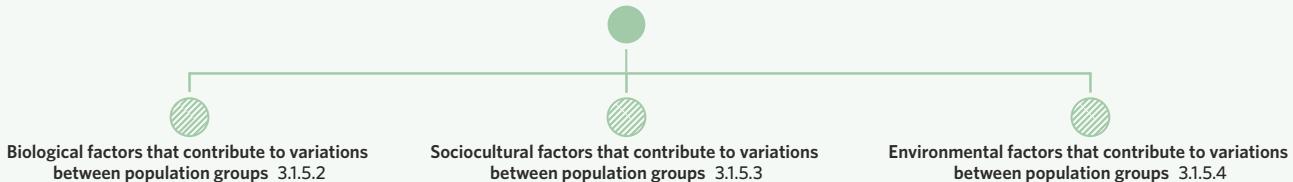


2A HEALTH VARIATIONS BETWEEN POPULATION GROUPS: PART 1

Which factors contribute to your health? Does the environment you live in impact your health? Your genetic makeup? How about where you work? There are many factors that play a part in determining the health of individuals, population groups, and nations. In this lesson, you will be learning about the biological, sociocultural, and environmental factors that contribute to Australia's health status.

2A Health variations between population groups: Part 1	2B Health variations between population groups: Part 2	2C Health variations between population groups: Part 3	2D Contributions to Australia's health status: Part 1	2E Contributions to Australia's health status: Part 2
Study design dot point				
<ul style="list-style-type: none"> health status of Australians and the biological, sociocultural and environmental factors that contribute to variations between population groups including: <ul style="list-style-type: none"> males and females Indigenous and non-Indigenous high and low socioeconomic status those living within and outside of Australia's major cities 				
Key knowledge units				
Biological factors that contribute to variations between population groups				3.1.5.2
Sociocultural factors that contribute to variations between population groups				3.1.5.3
Environmental factors that contribute to variations between population groups				3.1.5.4

Health variations between population groups: Part 1



Biological factors that contribute to variations between population groups 3.1.5.2

OVERVIEW

Biological factors relate to the body, including the systems that function within it. These factors include genetics, body weight, blood pressure, blood cholesterol, glucose regulation, and birth weight.

THEORY DETAILS

Biological factors are influences on health that stem from the body, including its systems and functioning, as well as the systems that function within it. Biological factors have the ability to increase the chance of developing various conditions. Some biological factors are unable to be controlled, such as genetics. However, there are biological factors that can be controlled through behaviour change and healthy lifestyle choices such as body weight, blood pressure, glucose regulation and blood cholesterol.

KEY DEFINITIONS

Biological factors are influences on health that stem from the body, including its systems and functioning, as well as the systems that function within it

Genetics

Genetics can influence many aspects of the body, such as an individual's sex, hormone production, and predisposition to **hereditary diseases**. Genetics can have a direct impact on the conditions an individual may be susceptible to.

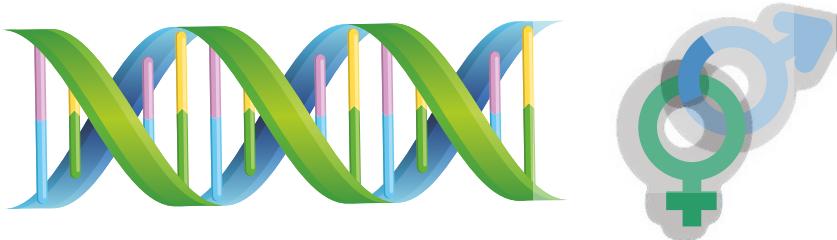


Image: K3Star/Shutterstock.com

Figure 1 Genetics can influence our susceptibility to various health conditions

Table 1 How genetics can impact individuals' health

Influencing factor	Description
Sex	<p>Some conditions are only carried in male genes, whereas other conditions are only carried in female genes. The likelihood of developing certain conditions can also be significantly more likely for one sex compared to the other.</p> <p>For example:</p> <ul style="list-style-type: none"> Only males can get prostate or testicular cancer. Only females can get cervical or ovarian cancer. Males are significantly less likely to develop breast cancer.
Hormone production	<p>Male and female genes both produce different types and amounts of hormones. Therefore, our male/female genes determine our hormone production and the hormone production that occurs in males and females is different. This can lead to different health outcomes. Males produce higher amounts of testosterone than females as testosterone is the primary male sex hormone. In contrast, oestrogen is the primary female sex hormone, leading to females producing higher levels of oestrogen than males:</p> <ul style="list-style-type: none"> A higher level of testosterone production by males can lead to increased risk-taking behaviour, such as engaging in violence and drink-driving, which may put them at a higher level of risk of injury compared to females. A higher level of oestrogen production in females helps to keep bone density strong (testosterone plays this role for males). However, when females begin menopause, oestrogen production slows down placing them at a higher risk of osteoporosis.
Hereditary diseases	<p>Some individuals are subject to higher risk of suffering from particular conditions due to genetic predisposition. This can increase the risk of certain conditions for individuals such as cancers, heart disease, diabetes, or mental illness if the conditions happen to run in their families genes.</p>

Birth weight

Birth weight is the weight measured of a newborn immediately after birth. A low birth weight is considered to be 2.5 kilograms (kg) or less. Babies that are born at a low birth weight are more likely to be susceptible to conditions at infancy and later on in their life.

Babies born with a low birth weight (2.5kg or less) at infancy are more susceptible to:

- underdeveloped immune systems (making them more susceptible to infection)
- premature death
- speech and learning difficulties
- eye conditions.

Babies born with a low birth weight are more susceptible to certain conditions in adulthood. These include:

- high blood pressure (hypertension)
- type 2 diabetes
- cardiovascular disease.

ADDITIONAL TERMS

Genetics refers to the unique, heritable makeup of each individual's cells

Hereditary diseases are diseases or disorders that are inherited genetically due to being passed to offspring from biological parents

Hormones are chemical substances that act like a messenger of information in the body

Osteoporosis is a condition in which bones become fragile and brittle from loss of tissue



Image: Beneda Miroslav/Shutterstock.com

Figure 2 Low birth weight can contribute to poor health outcomes both early and later in life



Pregnant mothers can take preventative action to reduce the risk of their baby having a low birth weight. Some of the leading causes for low birth weight include:

- smoking and alcohol use during pregnancy
- premature birth
- inadequate nutritional intake by the mother
- illness during pregnancy
- age of the mother (women aged between 15–17 or women over 45 years are more likely to give birth to a baby with a low birth weight).

Body weight

Body weight has a strong influence on health outcomes. Body weight can be evaluated using an indicator known as Body Mass Index (BMI). An individual is considered to be obese if they have a BMI above 30. A normal BMI is considered to be between 18.5 and 25, whilst between 25 and 30 is considered to be overweight. Obesity is a leading contributor to various health conditions in Australia.



Want to know more?

Body Mass Index (BMI) can be a useful indicator for body weight. It is calculated by taking an individual's weight (in kg) and then divided by their height (in meters squared).

Note that there are some limitations with BMI as a measurement. For example, BMI as a measurement fails to distinguish between excess fat, muscle, and bone mass. BMI also doesn't provide any indication of the distribution of fat among individuals.

$$\text{Body mass index (BMI)} = \frac{\text{Weight (kg)}}{\text{Height (m}^2\text{)}}$$

Figure 3 BMI calculation

The higher someone's body weight, the more susceptible they are to the following conditions:

- type 2 diabetes
- respiratory issues
- cardiovascular disease
- arthritis
- mental health conditions such as depression
- some cancers such as colorectal cancer
- musculoskeletal conditions.

Blood pressure

Your blood circulates through your body in little structures called blood vessels. When blood circulates through your body, there is pressure placed on the blood vessel walls. Blood pressure is not constant, in fact it changes, rising and falling throughout the day. Blood pressure is measured using systolic pressure (the highest point measured in the pressure cycle) and diastolic pressure (the lowest point measured in the pressure cycle). The number first expressed is the systolic pressure and the number expressed second is the diastolic pressure. A normal blood pressure level is considered to be less than 120/80 mmHg (millimetres of mercury).

As a general rule, a blood pressure of 140/90mmHG (millimetres of mercury) or higher is considered to be high. High blood pressure is also referred to as hypertension. If an individual has hypertension it means that blood is unable to flow as easily through the blood vessels relative to someone who has normal blood pressure.

Hypertension can increase an individual's risk of the following conditions:

- kidney disease
- type 2 diabetes
- **atherosclerosis**
- increased pressure on the heart and kidneys
- cardiovascular disease (such as heart attacks and strokes).

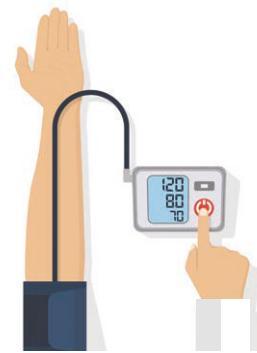


Image: hvostik/Shutterstock.com

Figure 4 Regular blood pressure checkups are the only way to monitor hypertension

ADDITIONAL TERMS

Atherosclerosis is a disease involving built up cholesterol plaque in the walls of arteries, causing obstruction of blood flow

However, hypertension may also be prevented through lifestyle changes, such as:

- eating a balanced diet
- reducing alcohol and tobacco consumption
- maintaining a healthy body weight
- maintaining regular exercise.

Blood cholesterol

Cholesterol is a type of fat found in the blood which is essential for the functioning of the body and a variety of its processes. Whilst the body creates its own cholesterol, many people consume excess cholesterol through fatty foods, such as meats and dairy products.

Cholesterol is carried around the bloodstream by **lipoproteins**, of which there are two types: high density lipoproteins (HDL) and low density lipoproteins (LDL). High levels of LDL are considered to be harmful for the body as they get stuck on the blood vessel walls. This leads to plaque building up and hardening the arteries which increases the risk of atherosclerosis.

High levels of LDL can increase the risk of conditions such as:

- atherosclerosis
- cardiovascular disease (such as heart attacks and strokes).

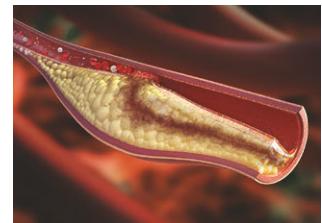


Image: Rocos/Shutterstock.com

Figure 5 Plaque can build up in the arteries when an individual has high levels of LDL

ADDITIONAL TERMS

Cholesterol is a waxy, fat-like substance that is found in cells of the body

Glucose is a simple sugar which is an important energy source in living organisms and is a component of many carbohydrates

Lipoproteins are particles that carry cholesterol through the body

Glucose regulation

Glucose is a simple sugar and is an important source for energy production in the cells. When carbohydrates are consumed the body breaks them down into glucose, which is then absorbed into the bloodstream. When glucose is released into the bloodstream, insulin is released from the pancreas. This increase in insulin levels ensures that the glucose can travel through the bloodstream into cells and then be used for energy.

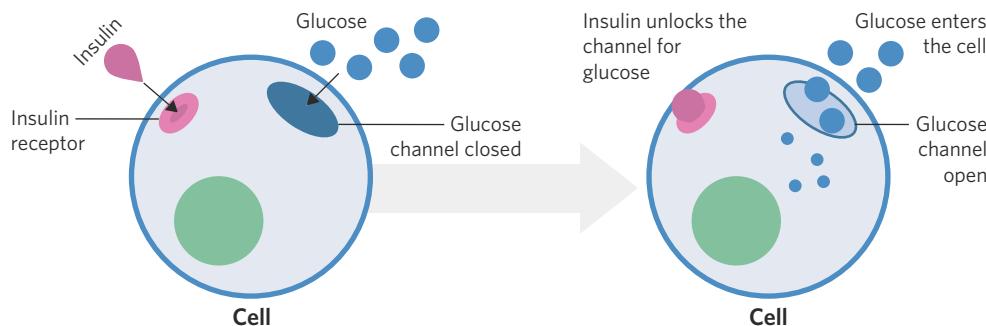


Figure 6 Insulin ensures that glucose can be absorbed by cells in the body which is then used as energy

Impaired glucose regulation occurs when blood glucose (also known as blood sugar) levels are higher than normal. Impaired glucose regulation can cause glucose to be prevented from being absorbed into the cells, which may lead to health complications in the future such as type 2 diabetes. Some of the common causes for impaired glucose regulation include:

- excessive tobacco and alcohol consumption
- hypertension
- high levels of low density lipoproteins (LDL)
- obesity
- regularly consuming foods that are high in fat.

Individuals who experience impaired glucose regulation are more susceptible to the following conditions:

- type 2 diabetes
- kidney disease
- cardiovascular disease (such as heart attacks and strokes).



Sociocultural factors that contribute to variations between population groups 3.1.5.3

OVERVIEW

Sociocultural factors encompass a range of factors from the social and cultural environment that an individual experiences throughout their lifetime. These factors include socioeconomic status, access to healthcare, food security, early life experiences, unemployment, social exclusion, and social isolation.

THEORY DETAILS

Sociocultural factors are the social and cultural conditions that people experience throughout their lifetime. Although sociocultural factors are often unable to be controlled, sociocultural factors can have an impact on health outcomes both on individuals and population groups.

Socioeconomic status

Socioeconomic status (SES) is a measure used to determine the social status of an individual using the factors of income, occupation, and education. Often, a low socioeconomic status can have adverse effects on health outcomes as it may limit the resources available to an individual to live a healthy and productive life.



Figure 7 Socioeconomic status is measured using three factors: income, education, and occupation.

Table 2 Components of socioeconomic status (SES)

Component	Influence on health outcomes
Income  <small>Image: vladwel/Shutterstock.com</small>	<p>Income has a direct influence on the resources people can have access to live a healthy and productive life. Having a low income can prevent individuals from accessing some of the following resources:</p> <ul style="list-style-type: none"> nutritious food adequate housing healthcare (private health insurance) transport educational resources. <p>Inability to access these resources can prevent individuals from maintaining a healthy body weight, preventing disease, and living a healthy and productive life.</p>
Education  <small>Image: Mary Long/Shutterstock.com</small>	<p>Education can have a direct impact on the health outcomes of individuals. For example, those who are more educated are typically more likely to have higher levels of health literacy, on the other hand those who are less educated are likely to have lower levels of health literacy. Lower levels of health literacy often means that people are less likely to:</p> <ul style="list-style-type: none"> attend regular health checkups maintain a nutritious diet take notice of health promotion campaigns regularly exercise. <p>Additionally, lower levels of health literacy often means that people are more likely to:</p> <ul style="list-style-type: none"> use tobacco and alcohol products overconsume processed foods. <p>Higher education levels can also lead to higher paying jobs and thus a higher income, allowing individuals to have access to more resources.</p>

KEY DEFINITIONS

Sociocultural factors are the social and cultural conditions that people experience throughout their lifetime

Socioeconomic status (SES) is a measure used to determine the social status of an individual using the factors of income, occupation, and education

ADDITIONAL TERMS

Health literacy is the ability to obtain, read, and understand health information to make informed health related decisions

cont'd

Table 2 Continued

Component	Influence on health outcomes
Occupation  <small>Image: johavel/Shutterstock.com</small>	<p>Occupation can also have an impact on the health outcomes of individuals. Different occupations require different levels of physical labour and different hazards. For example, manual occupations such as building and other trades require high levels of physical labour which can increase risk of injury and body pain. Manual occupations also pose greater risks of hazard around the workplace, which can increase the chance of injury.</p> <p>On the other hand, some occupations require little to no physical labour, such as administrative positions. This may increase the likelihood of obesity if the individual is not partaking in physical activity outside of the workplace.</p>

Access to healthcare

Having access to healthcare is vital to ensure individuals have good health. Health professionals such as doctors, dentists, surgeons, physiotherapists, and specialists are needed to treat a variety of health conditions. However, many individuals face various barriers to healthcare and are often unable to access health professionals when needed.

Table 3 Factors preventing access to health care

Factors preventing access to health care	Description
Financial barriers	Financial barriers may prevent low-SES individuals from seeking certain health services that are not covered by Medicare. This can limit these people's access to private health insurance and services it covers, including dental services and physiotherapy.
Cultural barriers	In some cases, cultural barriers can affect an individual's access to healthcare. For example, Indigenous Australians are less likely to access western medical services for treatment. However, Indigenous Australians often seek medical advice and treatment from people in their own culture that is in line with their own practices and beliefs. Furthermore, certain religious beliefs may prevent some individuals from accessing some health services.



Want to know more?

Aboriginal Australians may feel uncomfortable accessing healthcare due to being misunderstood and/or mistreated by health professionals. Due to this, the healthcare industry has recently promoted the concept of *cultural competency*, in which healthcare workers are trained to have appropriate and effective interactions with patients from other cultures. This training equips healthcare workers with skills such as understanding the religious and cultural beliefs of other cultures. Furthermore, health clinics have been established in which medical practices from Indigenous cultures are incorporated into the care and treatment of Indigenous Australians.

Food security

Having **food security** is essential to lead a healthy and productive life. Food insecurity occurs when individuals are unable to have access to a consistent source of safe, nutritious food. The inability to safely access nutritious and culturally appropriate food can increase the risk of various health complications. Food insecurity often occurs in low-SES environments where people either lack the financial ability or knowledge (health literacy) to access a nutritious diet. In other cases, geographical location can sometimes prevent individuals from having food security, as they may live far away from adequate food sources.

When people are unable to access adequate food sources due to financial ability or health knowledge, they often end up consuming cheap, processed foods, which are often high in fats, sugar, and salt. This can increase the risk of health complications such as obesity, type 2 diabetes, and cardiovascular disease.

ADDITIONAL TERMS

Food security is when a person has reliable access to adequate quantities of nutritious, safe, and culturally appropriate food at all times, from non-emergency sources



Image: Romariolen/Shutterstock.com

Figure 8 Access to nutritious food is essential to living a healthy and productive life



Early life experiences

Early life experiences refer to how an individual is brought up. Early life experiences shape the way individuals view the world. The behaviour of mothers both during pregnancy and infancy can affect a child's health and wellbeing. During pregnancy, behaviours such as maternal smoking, alcohol consumption, poor nutrition, and drug use can all have a detrimental effect on a child's health. Poor nutrition and maternal smoking and alcohol consumption can increase the risk of birth complications such as low birth weight, poor immune systems, and maternal mortality. In addition, these behaviours can also increase the risk of health complications later in life, such as type 2 diabetes and cardiovascular disease.

Experiences during infancy can also have an effect on a child's health and wellbeing. Infants who are brought up to practice healthy behaviours such as regular physical activity and consuming nutritious foods are more likely to have stronger immune systems and a healthy body weight. Moreover, infants who are shown emotional support from their family during early life stages are likely to have positive emotional health and wellbeing later in life. On the other hand, if children are neglected in the early stages of life they are more likely to engage in poor behaviour later in life, such as smoking or drug use.



Image: Undrey/Shutterstock.com

Figure 9 Experiences during pregnancy and infancy can affect a child's health outcomes

Unemployment

Unemployment has shown to have a clear link to poor health outcomes. When individuals are unemployed it can significantly affect their financial position, the resources they have access to, and their mental health and wellbeing. Losing employment can significantly increase levels of stress and anxiety for individuals, especially if they are required to provide for their family. Furthermore, long term unemployment can lead to more serious mental health conditions such as depression, suicide or self-harm. Unemployment can also increase the risk of behaviours such as substance abuse or smoking, which can increase the risk of cardiovascular disease.



Image: FGC/Shutterstock.com

Figure 10 Unemployment can have detrimental impacts on an individual's health and wellbeing

Social isolation

Social isolation occurs when individuals are not in regular contact with others. Social isolation can be caused by geographical isolation, which often occurs when people live in remote areas, preventing them from being able to regularly interact with others. Other factors such as language barriers and disability can also contribute to social isolation. Regular interaction with others is an important part of maintaining optimal social, mental, and emotional health and wellbeing. Those that lack regular interaction with others are more likely to suffer from mental health conditions such as depression, which can increase their risk of self-harm, substance abuse, and suicide.

ADDITIONAL TERMS

Social isolation occurs when individuals are not in regular contact with others

Social exclusion occurs when people fail to actively participate in the society that they live in



Image: Marc Bruxelle/Shutterstock.com

Figure 11 Social isolation can have a detrimental impact on an individual's health

Environmental factors that contribute to variations between population groups 3.1.5.4

OVERVIEW

Environmental factors encompass a range of factors from the surrounding physical environment that we live in. The physical environment that people live in can have an impact on their health outcomes. This includes factors such as housing, work environment, water and air quality, climate, and urban infrastructure.

THEORY DETAILS

Environmental factors refer to the physical conditions in the environment that individuals work, live and play. The physical environment that we spend our lives in can have an impact on our health outcomes.

Housing

The housing environment that individuals live in can play a significant role in determining health outcomes. People spend large amounts of time in their homes, meaning that the conditions in which they live can impact their health and wellbeing. There are various housing factors that may have an influence on the health outcomes of individuals.

Table 4 Factors in the housing environment that can affect health status

Housing environment factors	Description
Safety and design	Housing must be adequately maintained to ensure that they are safe to live in. If aspects of the house are left unmaintained, such as electrical wiring, stairs, balconies, or plumbing, there is an increased risk of injury for those living inside the house.
Sleeping conditions	Housing should have adequate sleeping conditions for those that live there. Having sufficient sleeping conditions and bedding can ensure that people receive a good night's sleep, which is important for mental and physical health and wellbeing, as well as other dimensions of health and wellbeing.
Ventilation	Adequate ventilation systems are required in houses to reduce the risk of respiratory conditions, such as asthma.
Overcrowding	Individuals who live in overcrowded housing conditions are more likely to suffer from mental health conditions. This is because overcrowding prevents individuals from finding their own space, which can increase stress and anxiety. Additionally, overcrowding conditions can also mean that home facilities such as bathrooms, kitchens, and laundries are overused and left in an unsanitary condition, which can increase the risk of infection, negatively impacting physical health and wellbeing.

Work environment

Individuals spend large amounts of time in the environment that they work in. Thus, the work environment can have an impact on individuals' health outcomes. The physical work environment has many factors that can impact health status.

Table 5 Factors in the working environment that can affect health status.

Job type	Environmental factors relevant to the job type
Outdoor jobs	Outdoor jobs can expose individuals to higher rates of UV (ultraviolet radiation) which can increase the risk of developing skin cancer.
Labour based jobs	Jobs that are heavily labour based such as mining or farming can often mean that individuals spend a large time operating heavy machinery, which can increase the risk of injury.
Transportation jobs	Those who work in the transportation industry spend a large amount of time driving on the road, which can increase the risk of being in a roadside accident.
Jobs involving chemicals/hazardous substances	Individuals that work with chemicals and hazardous substances, such as asbestos, chemicals, or fuel are more likely to be at risk of respiratory conditions and some cancers.

KEY DEFINITIONS

Environmental factors refer to the physical conditions in the environment that individuals work, live and play



Image: Jemastock/Shutterstock.com

Figure 12 The housing environment can have an impact on health outcomes



Image: xiao yu/Shutterstock.com

Figure 13 Different working environments can have an effect on health status



Water and air quality

The air and water quality within our environment can have an impact on health outcomes. Poor air quality from industrial pollution, car emissions, or even smoking can have adverse impacts on health and increase the risk of respiratory conditions such as asthma or even lung cancer.

Although Australia has a relatively high quality of water, poor water quality can still arise from natural disasters such as floods, droughts, or bushfires. When individuals lack access to a source of clean, safe drinking water they are at higher risk of waterborne diseases such as cholera. In addition, poor water quality can also lead to decreased immune functionality and impaired nutrition.

Climate

The Australian climate is known to be one of the driest, hottest climates in the world. Due to Australia's climate, the nation finds itself more susceptible to high UV exposure and natural disasters such as droughts and bushfires. With higher UV exposure, individuals are more at risk of melanoma skin cancer.

In recent decades, climate change has seen temperatures increase even further, which can increase the risk of natural disasters such as droughts and bushfires, particularly for those living in rural Australia. Droughts and bushfires can have a huge effect on health outcomes as they limit access to resources, such as a safe supply of food and water, as well as affect mental health through increased levels of stress.

Urban infrastructure

Infrastructure relates to road networks, transport systems, communication networks, sewage and water networks, and electrical networks. Having adequate infrastructure can significantly improve the health outcomes of individuals. For instance, ensuring that road networks are maintained with adequate roads, traffic lights and signage can significantly reduce the risk of roadside accidents. In addition, having reliable public transport and communication systems can ensure that individuals without their own transport can maintain social relationships, which can positively impact social and mental health and wellbeing. Moreover, having adequate and safe water systems ensures that people have access to safe water, which can reduce the risk of waterborne diseases. Furthermore, Australians living in rural areas may find it harder to access healthcare professionals, especially healthcare specialists that are usually situated in urban cities. Health services and hospitals may be far away, meaning rural Australians may have to travel lengths to seek medical attention.



Image: totajla/Shutterstock.com

Figure 14 Australia's hot and dry climate can impact health status



Image: Taras Vyshnya/Shutterstock.com

Figure 15 High quality infrastructure can have positive effects on health status

ACTIVITY 1 - CLASS DISCUSSION

The factors which contribute to variations in health status are interrelated, meaning that they influence each other.

Discuss ways in which the following factors may impact each other. To do so, focus on how the first factor influences the second, and then how the second factor influences the first.

Factor 1	Factor 2	Questions to consider
Urban Infrastructure	Food security	<ul style="list-style-type: none"> Does having developed infrastructure (such as roads and transport) help individuals access food? How so? How may food security help increase the level of urban infrastructure in a country? Does food security lead to better health outcomes which can lead to greater work productivity?
Birth weight	Access to healthcare	<ul style="list-style-type: none"> Does having greater access to healthcare affect the likelihood of a baby being born with low birth weight? How so? Will being born with low birth weight impact the need to access healthcare?
Unemployment	Housing	<ul style="list-style-type: none"> Does the quality and safety of someone's housing impact their likelihood of becoming unemployed? How so? Can the stress of an unsafe house lead impact workplace performance? Does unemployment impact the ability of an individual to live in and maintain a safe and high quality house?

Theory summary

In this lesson, you have learnt about various biological, sociocultural, and environmental factors that can all have an impact on health status.

Table 6 Biological, sociocultural, and environmental factors summary

Biological factors	Sociocultural factors	Environmental factors
<ul style="list-style-type: none"> • genetics • body weight • blood pressure • blood cholesterol • glucose regulation • birth weight. 	<ul style="list-style-type: none"> • socioeconomic status • access to healthcare • food security • early life experiences • unemployment • social exclusion • social isolation. 	<ul style="list-style-type: none"> • housing • work environment • water and air quality • climate • urban infrastructure.

2A QUESTIONS

Theory-review questions

Question 1

We are able to control all biological, sociocultural, and environmental factors that affect our health status.

- A True.
B False.

Question 2

Which of the following biological factors are individuals mainly able to control? (Select all that apply)

- I Genetics.
II Birth weight.
III Body weight.

Question 3

Which of the following are sociocultural factors? (Select all that apply)

- I Socioeconomic status.
II Working environment.
III Housing.

Question 4

Which of the following indicators are used to measure socioeconomic status? (Select all that apply)

- I Education.
II Income.
III Geographical location.
IV Occupation.

Question 5

Which of the following best fills in the blank?

- A income
B education

Low _____ can prevent individuals from accessing resources such as nutritious food and adequate housing.



Question 6

Which of the following are environmental factors? (Select all that apply)

- I Housing.
- II Work environment.
- III Social exclusion.

Question 7

Which of the following best fills in the blank?

- A work
- B infrastructure

Having an outside _____ environment can expose individuals to higher levels of UV and increase the risk of skin cancer.

Question 8

Which of the following best fills in the blank?

- A housing
- B food security

Having _____ can ensure that an individual can have access to a safe, consistent source of nutritious food, thereby strengthening their immune system.

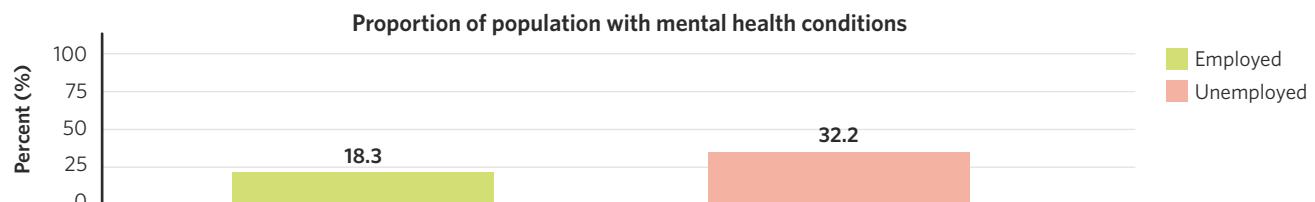
Question 9

Glucose regulation, unemployment, and work environment are all

- A sociocultural factors.
- B environmental factors.
- C biological, sociocultural, and environmental factors respectively.

Skills**Data analysis**

Use the following information to answer Questions 10 and 11.



Source: adapted from Australian Bureau of Statistics, National Health Survey: First results, <<https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-first-results/latest-release>>

Question 10

Which population group has a higher proportion of mental health conditions?

- A Employed individuals.
- B Unemployed individuals.

Question 11

Identify which of the following statements about the data are likely to be correct. (Select all that apply)

- I From the data, it is evident that unemployed people have a lower proportion of mental health conditions in comparison to employed people.
- II From the data, it is evident that unemployed people have a higher proportion of mental health conditions in comparison to employed people.
- III It is likely that unemployed people have a higher proportion of mental health conditions because they are more likely to experience higher levels of stress, anxiety and depression.

Unpacking the case study

Use the following information to answer Questions 12 and 13.

Bruce is a carpenter tradesman who works outside for most of the jobs he completes. Living in Western Australia, Bruce often spends long hours working in the sun which often leads to him feeling fatigued. Bruce also operates heavy machinery on a day-to-day basis to complete certain jobs.

Question 12

The environmental factor of Bruce's work environment influences his health. This is best reflected in the scenario by the statement that

- A 'Bruce often spends long hours working in the sun which often leads to him feeling fatigued.'
- B 'Bruce is a carpenter tradesman who works outside for most of the jobs he completes.'

Question 13

Identify which of the following statements about the case study is true. (Select all that apply)

- I As Bruce's work environment is outside, he is more at risk of suffering from mental conditions, such as depression.
- II As Bruce's work environment is outside, he is more likely to be exposed to high UV levels, increasing his risk of skin cancer.
- III As Bruce's work environment involves heavy machinery, he is at a higher risk of injury compared to an administrative job.

Exam-style questions

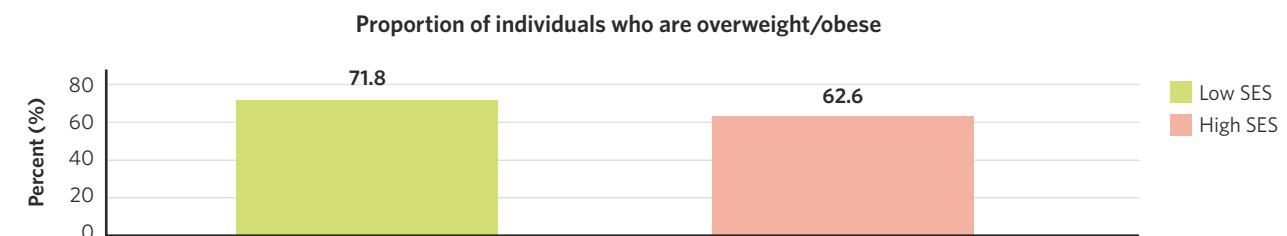
Question 14 (2 MARKS)

Identify and describe **one** environmental factor that can have an impact on Australia's health status.

Question 15 (2 MARKS)

Explain how social isolation can have an impact on Australia's health status.

Question 16 (3 MARKS)



Source: adapted from Australian Bureau of Statistics, *National Health Survey: First results*, <<https://www.abs.gov.au/statistics/health/health-conditions-and-risks/national-health-survey-first-results/latest-release>>

- a From the graph above, identify and outline the sociocultural factor. (1 MARK)

Adapted from VCAA 2020 exam Q3a

- b Using an example, outline one relationship between low socioeconomic status (SES) and the prevalence of obesity. (2 MARKS)

Question 17 (4 MARKS)

Identify one sociocultural factor and one biological factor and explain how they can have an effect on Australia's health status.

Questions from multiple lessons

Question 18 (2 MARKS)

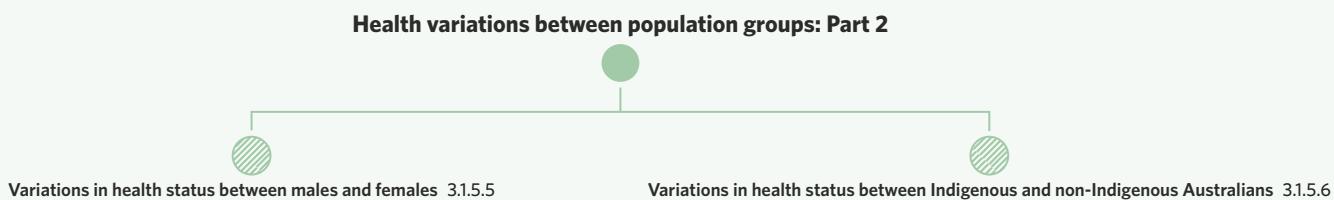
Explain how food security relates to one of the WHO's prerequisites for health.



2B HEALTH VARIATIONS BETWEEN POPULATION GROUPS: PART 2

Although the health status of Australians has been improving over the past 100 years, we still find there to be variations in the health status between certain population groups. Why do different population groups, such as males and females, experience differences in health status? In this lesson, you will learn about the factors that contribute to differences in health status between males and females, as well as Indigenous and non-Indigenous Australians.

2A Health variations between population groups: Part 1	2B Health variations between population groups: Part 2	2C Health variations between population groups: Part 3	2D Contributions to Australia's health status: Part 1	2E Contributions to Australia's health status: Part 2
Study design dot point				
<ul style="list-style-type: none"> health status of Australians and the biological, sociocultural and environmental factors that contribute to variations between population groups including: <ul style="list-style-type: none"> males and females Indigenous and non-Indigenous high and low socioeconomic status those living within and outside of Australia's major cities 				
Key knowledge units				
Variations in health status between males and females				3.1.5.5
Variations in health status between Indigenous and non-Indigenous Australians				3.1.5.6



Variations in health status between males and females 3.1.5.5

OVERVIEW

Did you know that females generally live around four years longer than males? What could be the cause of this difference? In this lesson, we will look into a range of factors that contribute to the differences in health status we see between males and females in Australia.

Useful tip

When looking at differences in health status between population groups, there is a lot of reference to differences in lifestyle behaviours. It is important to remember that the differences outlined here are generalised and do not apply to all members of said population groups, and can be described in overly simplistic ways.

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- analyse health information to explain factors that contribute to variations in health status between population groups

THEORY DETAILS

An individual's biological sex can influence the biological, sociocultural, and environmental factors they experience in life. In this way, we see differences in the health status of males and females. There is a range of core differences in the health status between males and females in Australia:

- Males have a lower life expectancy (80.7 years) in comparison to females (84.9 years) (Australian Institute of Health and Welfare [AIHW], 2020).

- Males experience a higher level of burden of disease (as measured by DALY) in comparison to females.
- Males experience higher rates of chronic health conditions, such as cancer, cardiovascular disease, diabetes, liver disease, kidney disease, and chronic obstructive pulmonary disease (COPD) in comparison to females (AIHW, 2010).
- Males experience higher rates of premature death (YLL) (62%) in comparison to females (38%) (AIHW, 2020).
- Males experience higher rates of injuries and suicides compared to females (AIHW, 2015).
- Males experience higher rates of mental disorders and substance abuse disorders than females (AIHW, 2015).
- Females experience higher rates of osteoporosis (6.2%) in comparison to males (1.4%) (AIHW, 2020).
- Females experience higher rates of arthritis (17.9%) than males (12.1%) (AIHW, 2020).

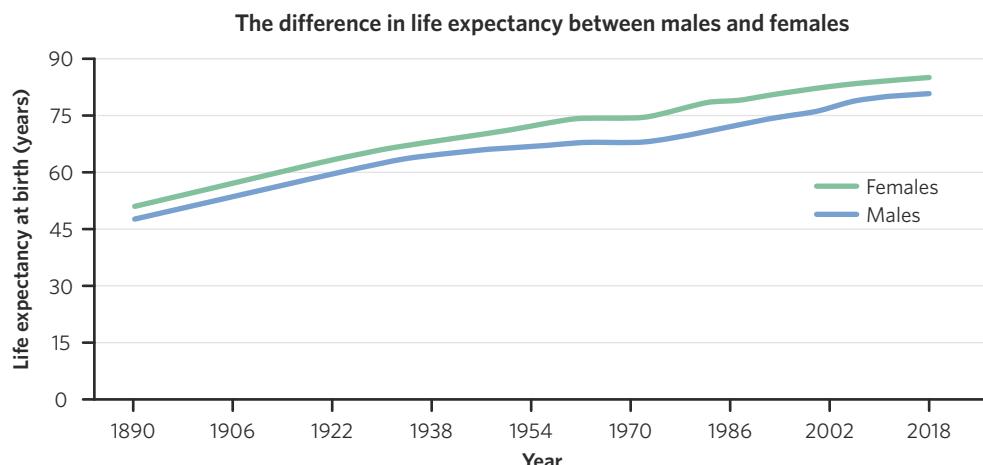


Figure 1 This graph depicts that females have a higher life expectancy than males (AIHW, 2020)

There are a range of biological, sociocultural, and environmental factors that contribute to the difference in health status experienced between males and females.

Biological factors for males and females

Table 1 Biological factors that contribute to variations in health status between males and females

Biological factor	Description
Genetics	<p>Some conditions are only carried in male genes, whereas other conditions are only carried in female genes:</p> <ul style="list-style-type: none"> • males have higher rates of prostate and testicular cancer than females. • females have higher rates of cervical, ovarian, and breast cancer than males. <p>Males produce higher amounts of testosterone, whereas females produce higher levels of oestrogen.</p> <ul style="list-style-type: none"> • A higher level of testosterone production by males can lead to increased risk-taking behaviour, which can contribute to the higher rates of injuries experienced by men compared to women. • A higher level of oestrogen production in females helps to keep bone density strong (testosterone is responsible for bone density in males). However, when females begin menopause, oestrogen production slows down placing them at a higher risk of osteoporosis than males. <p>Males are more likely to store fat around their abdomens than females:</p> <ul style="list-style-type: none"> • This can place a higher strain on their organs which increases the risk of cardiovascular disease for males.

cont'd

Lesson link

Head to lesson 2A: **Health variations between population groups: Part 1** if you need a refresher on the explanations of the different biological, sociocultural, and environmental factors.



Table 1 Continued

Biological factor	Description
Blood pressure	<p>Men tend to have higher blood pressure than females, with 33.7% of men having high blood pressure compared to 31.4% of females (AIHW, 2019). This is seen in all age groups, apart from 75+ years, where females tend to have higher blood pressure than males.</p> <ul style="list-style-type: none"> As men have on average higher blood pressure, this can explain their higher rates of cardiovascular disease, type 2 diabetes, and kidney disease compared to females.
Body weight	<p>Males have shown higher rates of overweight and obesity (74.5%) compared to females (59.7%) (AIHW, 2019).</p> <ul style="list-style-type: none"> This can explain the higher rates of cardiovascular disease and type 2 diabetes among males compared to females.
Impaired glucose regulation	<p>Males are more likely to experience impaired glucose regulation (5.1%) in comparison to females (2.9%) (AIHW, 2019).</p> <ul style="list-style-type: none"> This puts males at a higher risk of type 2 diabetes than females.

Sociocultural factors for males and females

Table 2 Sociocultural factors that contribute to variations in health status between males and females

Sociocultural factor	Description
Access to healthcare	<p>Although societal attitudes have started to shift, the stereotype that males are strong and robust can prevent males from seeking medical help when unwell, or having regular health checkups. This may be due to males not wanting to appear 'weak' for requiring help.</p> <ul style="list-style-type: none"> This puts males at a higher risk than females of developing chronic conditions, as they are less likely to seek medical attention which can detect conditions and treat earlier.
Unemployment	<p>Males tend to suffer greater consequences from being unemployed. This is due to the fact that often males have historically been considered as the providers for their families. Although it is much more likely in contemporary society for both males and females to provide for their families, the notion that males should be the 'breadwinner' still exists in some cultures and groups.</p> <ul style="list-style-type: none"> When males are unemployed, they are at more risk of suffering from psychological distress and mental health conditions, such as depression. As a result, unemployed males experience higher rates of morbidity and mortality in comparison to unemployed females.
Socioeconomic status	<p>Males tend to have a higher socioeconomic status than females, due to having higher average incomes. The Workplace and Gender Equality Agency (2021) found that on average for full-time workers across all industries and occupations, women earned \$1,558.40 weekly, whereas males earned \$1,812.00. This difference in average income is due to a range of factors, including it sometimes being harder for females to be promoted due to taking time off to have children, and being more likely to perform caregiving duties at home than males.</p>
Gender stereotypes	<p>Due to the gender stereotype that males need to be 'strong', males are more likely to engage in violence and other forms of risks, such as drink-driving compared to females.</p> <ul style="list-style-type: none"> This leads to males being more likely to gain injuries from violent encounters than females, as well as other forms of risk-taking. <p>Men are more likely to participate in contact sports than females, such as AFL or Rugby.</p> <ul style="list-style-type: none"> This also contributes to males having higher levels of injury in comparison to females.

Environmental factors for males and females

The main environmental factor that contributes to the differences that we see between male and female health status is the work environment. Males are more likely than females to be employed in farming, mining and trade jobs, which require the use of heavy machinery on a daily basis. This can put males at a greater risk of suffering from an injury in the workplace, in comparison to females who are less likely to be operating heavy machinery in their everyday employment. In addition, males are also more likely to be employed in outdoor work environments. This can lead males to have a higher risk of skin cancer in comparison to females, as they are exposed to high UV levels within their work environments.

Variations in health status between Indigenous and non-Indigenous Australians 3.1.5.6

OVERVIEW

Indigenous Australians experience worse health status in comparison to non-Indigenous Australians. This part of the lesson will look into the range of factors that contribute to the differences in health status between these population groups.

THEORY DETAILS

Although the overall trend of health status for Australians has been improving over the past century, the improvements have not been shared equally between all population groups. Indigenous Australians account for 3.3% of Australia's population and tend to experience worse health status than the rest of the Australian population. The following is a range of key differences in health status of Indigenous and non-Indigenous Australians.

The difference in life expectancy between Indigenous and non-Indigenous Australians



Figure 2 Non-Indigenous Australians have a higher life expectancy than Indigenous Australians (AIHW, 2020).

- Indigenous males have a lower life expectancy (71.6) by 8.6 years in comparison to non-Indigenous males (80.2) (AIHW, 2020).
- Indigenous females have a lower life expectancy (75.6) by 7.8 years in comparison to non-Indigenous females (83.4) (AIHW, 2020).
- Indigenous Australians have higher rates of mortality due to cancer in comparison to non-Indigenous Australians (AIHW, 2020).
- Indigenous Australians have higher rates of mortality associated with type 2 diabetes, cardiovascular disease, respiratory diseases, and kidney disease in comparison to non-Indigenous Australians (AIHW, 2020).
- Indigenous Australians experience an under 5 mortality rate 1.8 times higher than non-Indigenous Australians (Australian Government, 2020).
- Indigenous Australians experience a higher maternal mortality rate (20.2 per 100,000 births) in comparison to non-Indigenous Australians (5.5 per 100,000 births) (AIHW, 2020).



Useful tip

Although you don't need to remember exact statistics about the differences in health status between population groups, you do need to remember differences in health status indicators. For example, females have a greater life expectancy than males. Take a look at the following question from the 2020 Health and Human Development Exam. To gain full marks for this response, you would have to outline two differences in relation to specific health status indicators.

Question 7c

'Identify two differences in health status between high and low SES groups. (2 MARKS).'

Therefore, it is important that you remember a few specific examples of differences in health status between population groups outlined in lessons 2B: Health variations between population groups: Part 2 and 2C: Health variations between population groups: Part 3.

There are a number of biological, sociocultural, and environmental factors that can contribute to the difference in health status experienced between Indigenous and non-Indigenous Australians. These factors are complex and stem from a variety of sources. Many of these differences are linked to the impact of **colonisation**, which continues to have a negative effect on Indigenous Australians and their health status.

ACTIVITY 1

Search up 'Australia's Indigenous people say they're still suffering legacy of British colonialism - BBC News' on YouTube and watch the entire four minute and fifty four second video (BBC News, 2020).

Discuss with your class your thoughts and feelings about the video. Use the questions below to get you thinking.

- Why do you think that Indigenous Australians experience a significantly lower health status than non-Indigenous Australians?
- Where do you think areas could be improved to help reduce the differences in health status that are evident between Indigenous and non-Indigenous Australians?



Want to know more?

It is important to remember that the colonisation of Australia in 1788 had and continues to have detrimental effects on the Indigenous population for centuries. For example, British colonisation introduced things, such as tobacco, alcohol, diseases and processed foods that have had a negative impact on the health status of Indigenous Australians. The trauma of the dispossession of Indigenous Australian peoples' land due to British settlement has also significantly impacted Indigenous peoples' health status. Although there are significant efforts to close the gap that exists between Indigenous and non-Indigenous Australians' health status, the overall cause of the poorer health status experienced by Indigenous Australians is linked back to the traumatic effects of Australia's colonisation.

If you wish to learn more about colonisation, search up 'Intergenerational Trauma Animation' on YouTube and watch the entire four minute and two second video (The Healing Foundation, 2018).

Biological factors for Indigenous and non-Indigenous Australians

Table 3 Biological factors that contribute to variations in health status between Indigenous and non-Indigenous Australians

Biological factor	Description
Impaired glucose regulation	<p>Indigenous Australians experience higher rates of impaired glucose regulation in comparison to non-Indigenous Australians. This contributes to Indigenous Australians having higher rates of mortality associated with the following conditions, as impaired glucose regulation are risk factors for the following conditions:</p> <ul style="list-style-type: none"> • type 2 diabetes • kidney disease • cardiovascular disease (such as heart attacks and strokes). <p style="text-align: right;"><i>cont'd</i></p>

ADDITIONAL TERMS

Colonisation is the process of settling among and establishing control over the indigenous people of an area

Table 3 Continued

Biological factor	Description
Birth weight	<p>Indigenous mothers are twice as likely to give birth to a newborn with a low birth weight, in comparison to non-Indigenous mothers (12.6% and 6.0% respectively; AIHW, 2014). This can explain the higher under 5 mortality rate experienced by Indigenous Australians.</p> <p>Higher rates of low birth weight can contribute to worse health outcomes in adulthood. This therefore provides an explanation as to why Indigenous Australians experience a higher prevalence of the following conditions in comparison to non-Indigenous Australians:</p> <ul style="list-style-type: none"> • high blood pressure (hypertension) • type 2 diabetes • cardiovascular disease.
Body weight	<p>Indigenous adults are 1.5 times more likely to be obese compared to non-Indigenous adults (AIHW, 2020). This contributes to Indigenous Australians experiencing a higher prevalence of the following conditions, in comparison to non-Indigenous Australians:</p> <ul style="list-style-type: none"> • type 2 diabetes • respiratory issues • cardiovascular disease (such as heart attacks and strokes) • cancers, such as colorectal cancer • musculoskeletal conditions.
Blood pressure	<p>Indigenous Australians are 1.2 times more likely to experience high blood pressure (hypertension) than non-Indigenous Australians (Australian Bureau of Statistics, 2013). Higher rates of hypertension may provide an explanation why Indigenous Australians experience a higher prevalence of the following conditions:</p> <ul style="list-style-type: none"> • kidney disease • type 2 diabetes • cardiovascular disease (such as heart attacks and strokes).

Sociocultural factors for Indigenous and non-Indigenous Australians

Table 4 Sociocultural factors that contribute to variations in health status between Indigenous and non-Indigenous Australians

Sociocultural factor	Description
Access to healthcare	<p>Indigenous Australians are less likely to access Western medical services for treatment for multiple reasons. Some Indigenous Australians may feel uncomfortable accessing Western healthcare, due to the potential of experiencing racism, poor communication with a doctor, and healthcare services not being delivered in a culturally appropriate way. The provision of culturally appropriate healthcare which meets the needs of Indigenous people, such as having healthcare delivered by an Indigenous healthcare worker or someone trained in culturally competent healthcare specifically for the Indigenous population, is often limited especially in rural areas, which creates a cultural barrier for accessing healthcare. As a result, this can increase the risk of conditions being undetected and untreated among Indigenous Australians. In turn, this contributes to higher rates of morbidity and mortality, as well as lower life expectancy.</p>
Socioeconomic status	<p>Indigenous Australians experience a disadvantage in all socioeconomic status indicators (Australian Human Rights Commission, 2007).</p> <ul style="list-style-type: none"> • Indigenous Australians (aged 16-64) are 1.9 times more likely to be unemployed relative to non-Indigenous Australians (AIHW, 2019). • Indigenous Australians are also likely to have lower levels of education than non-Indigenous Australians, with Indigenous Australians less likely to complete year 12 than non-Indigenous Australians (60% in 2016 compared to 86% in 2016 respectively; AIHW, 2017). • Indigenous Australians, on average, have lower household incomes in comparison to non-Indigenous Australians. <p>With lower levels of employment, education, and income, Indigenous Australians are less likely to have access to resources to lead a healthy life. Lower levels of education can also mean that Indigenous Australians have lower levels of health literacy, increasing the likelihood of engaging in poor dietary choices, and smoking and alcohol consumption.</p>

cont'd



Table 4 Continued

Sociocultural factor	Description
Early life experiences	Indigenous mothers have higher rates of smoking and alcohol consumption during pregnancy in comparison to non-Indigenous mothers. In turn, this contributes to Indigenous Australians having higher rates of low birth weight and under 5 mortality. Moreover, this can also contribute to a higher prevalence of type 2 diabetes and cardiovascular disease later in life.
Food security	Indigenous Australians are more likely to suffer from food insecurity in comparison to non-Indigenous Australians. This can be attributed to the lower incomes, lower health literacy (education), and employment rates that the Indigenous population faces due to a variety of complex factors, including the adverse effects of colonisation. As a result, this contributes to Indigenous Australians experiencing a higher prevalence of the following conditions: <ul style="list-style-type: none"> • obesity • type 2 diabetes • cardiovascular disease.
Social exclusion	Indigenous Australians are significantly more likely to experience social exclusion in comparison to non-Indigenous Australians. Studies showed that 47% of Indigenous Australians experience social exclusion at some point (Brotherhood of St Laurence, 2018). This contributes to feelings of isolation, which contributes to the Indigenous population having higher rates of mental health conditions, such as depression, as well as substance abuse.

Environmental factors for Indigenous and non-Indigenous Australians

Table 5 Environmental factors that contribute to variations in health status between Indigenous and non-Indigenous Australians

Environmental factor	Description
Housing	Housing quality for Indigenous Australians has shown to be considerably worse in comparison to non-Indigenous Australians. A 2014-15 National Aboriginal and Torres Strait Islander Social Survey showed: <ul style="list-style-type: none"> • Nearly one in five Indigenous Australians were living in a house that failed to meet an acceptable standard (at least one basic household facility deemed unavailable or there were more than two structural problems). • 29% of Indigenous Australians were living in households with major dwelling or structural problems. • 20% of Indigenous Australians were living in overcrowded housing. (AIHW, 2019) As a result, this contributes to Indigenous Australians experiencing a higher prevalence of the following conditions: <ul style="list-style-type: none"> • injury, potentially due to hazards in the house • mental illness, such as those arising from the stress of living in an overcrowded house • respiratory conditions, these may arise due to inadequate housing ventilation systems.
Access to healthcare	From a geographical perspective, Indigenous Australians are more likely to live in rural and remote areas in comparison to non-Indigenous Australians. Specifically, in 2016, 1.5% of non-Indigenous Australians lived in remote or very remote areas, while 19% of Indigenous Australians lived in remote or very remote areas (AIHW; 2019). However, within their own population group, Indigenous Australians are actually more likely to live in major cities than rural and remote areas, so it is important not to stereotype them as mostly living in rural and remote areas. Health services and hospitals may be far away, meaning Indigenous Australians living in these areas may have to travel lengths to seek medical attention. This can leave conditions to go untreated, further contributing to a higher burden of disease faced by Indigenous Australians.

cont'd

Table 5 Continued

Environmental factor	Description
Infrastructure	As mentioned, Indigenous Australians are more likely to live in rural and remote areas compared to non-Indigenous Australians, relative to their respective population group. In rural areas, the road infrastructure is relatively poor compared to urban areas. This can contribute to Indigenous Australians having a higher prevalence of injury, such as those arising from road accidents.
Access to safe water	Indigenous Australians are more likely than non-Indigenous Australians to live in rural and remote areas (relative to their population group) where there may be inadequate access to safe water. This can contribute to Indigenous Australians experiencing a higher prevalence of infectious diseases, such as diarrhoea and gastroenteritis.

! Useful tip

When answering questions about differences in health status between population groups, it is important to refer to both population groups in your response. For example, if asked to outline a difference in health status between Indigenous and non-Indigenous Australians, you would not gain full marks if you only outlined that 'Indigenous Australians have higher rates of mortality associated with type 2 diabetes'. Instead, you need to compare Indigenous Australians to non-Indigenous Australians by adding 'in comparison to non-Indigenous Australians' to the end of the sentence.

Theory summary

In this lesson, you have learnt about the biological, sociocultural, and environmental factors that contribute to differences in health status among population groups, namely males and females, as well as Indigenous and non-Indigenous Australians. It is important to consider the surrounding biological, sociocultural, and environmental factors when assessing differences in health status amongst population groups.

2B QUESTIONS

Theory-review questions

Question 1

Biological, sociocultural, and environmental factors contribute to the differences we see in health status between different population groups.

- A True.
- B False.

Question 2

Indigenous Australians experience lower life expectancy in comparison to non-Indigenous Australians.

- A True.
- B False.

Question 3

Males experience a higher life expectancy in comparison to females.

- A True.
- B False.



Question 4

Which of the following best fills in the blank?

- A Males
- B Females

_____ are more likely to work in jobs that require higher amounts of physical labour and require the operation of machinery, which can place them at higher risk of injury.

Question 5

Which of the following best fills in the blank?

- A Males
- B Females

_____ are more likely to access health services when they need them, in turn reducing the risk of conditions being left unnoticed.

Question 6

Indigenous Australians are less likely to seek and access western medical services in comparison to non-Indigenous Australians.

- A True.
- B False.

Question 7

Which of the following best fills in the blank?

- A Indigenous Australians
- B Non-Indigenous Australians

_____ have higher rates of smoking and alcohol consumption during pregnancy, in turn contributing to them facing higher rates of low birth weight and infant mortality.

Question 8

Indigenous Australians have a higher prevalence in comparison to non-Indigenous Australians of the following conditions (*Select all that apply*)

- I Type 2 diabetes.
- II Cardiovascular disease.
- III Respiratory conditions.

Question 9

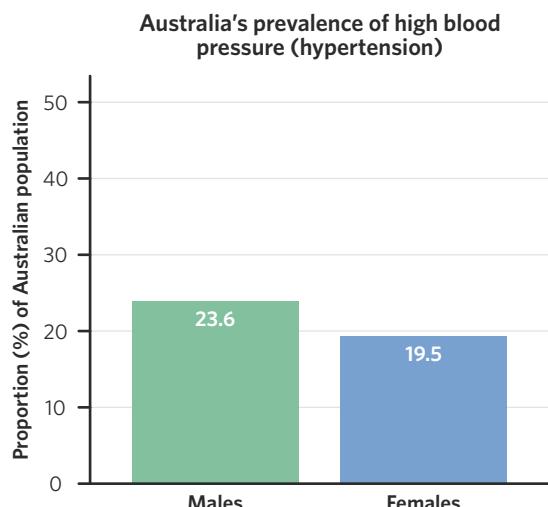
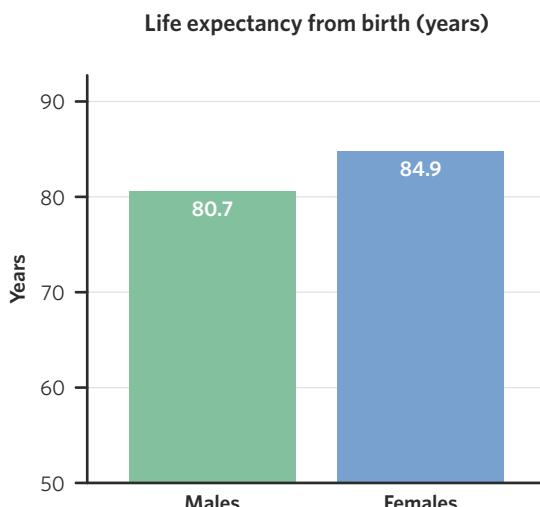
Males have a higher prevalence in comparison to females of the following conditions (*Select all that apply*)

- I Osteoporosis.
- II Arthritis.
- III Injury.
- IV Suicide.



Skills**Data analysis**

Use the following information to answer Questions 10–12.



Sources: adapted from Australian Institute of Health and Welfare, *Deaths in Australia*, AIHW, Canberra, 7th of August 2020; adapted from Australian Bureau of Statistics, *National Health Survey: First results*, ABS, Canberra, 12th of December 2018

Question 10

Which population group has a higher life expectancy?

- A Males.
- B Females.

Question 11

Which of the following statements is correct?

- A Males have a higher prevalence of hypertension in comparison to females.
- B Females have a higher prevalence of hypertension in comparison to males.

Question 12

Which of the following inferences are correct? (Select all that apply)

- I As males have a higher prevalence of hypertension than females, this can explain why males experience a higher prevalence of cardiovascular disease.
- II As females have a higher prevalence of hypertension than males, this can explain why males experience a higher prevalence of osteoporosis.
- III As males have a higher prevalence of hypertension than females, this can explain why males experience a higher prevalence of type 2 diabetes.

Exam-style questions**Question 13** (1 MARK)

Identify **one** example of a difference in health status between Indigenous and non-Indigenous Australians.

Adapted from VCAA 2019 exam Q9b

Question 14 (2 MARKS)

Provide **two** examples of how the health status of males compares to the health status of females.

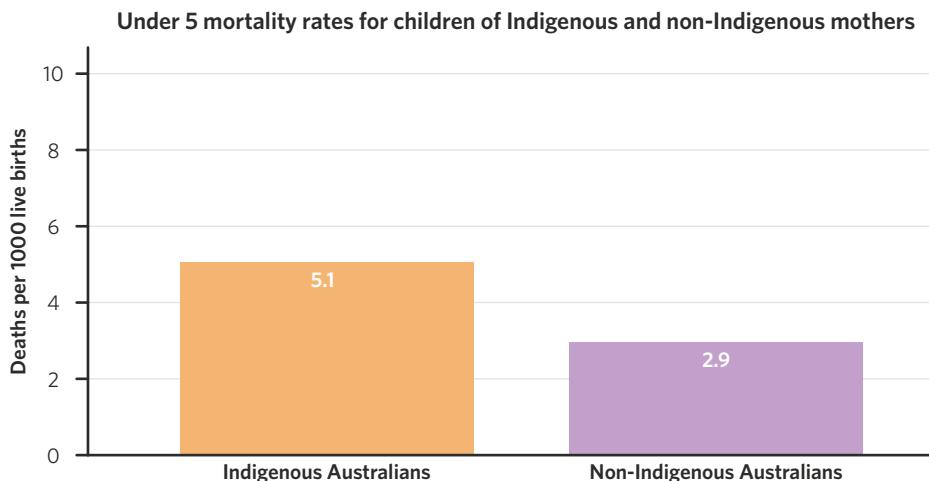
Adapted from VCAA 2019 exam Q2b

Question 15 (2 MARKS)

Outline **two** differences in health status between Indigenous and non-Indigenous Australians.

Adapted from VCAA 2020 exam Q7c



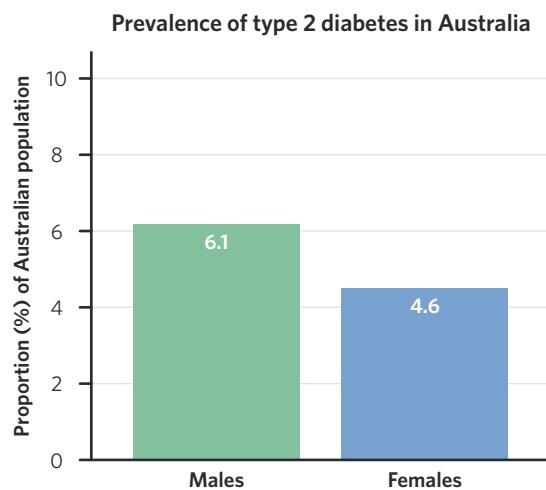
Question 16 (3 MARKS)

Source: adapted from Australian Government, *Closing The Gap Report 2020*, <<https://ctgreport.niaa.gov.au/>>

- a Identify one sociocultural factor that could contribute to the difference in under 5 mortality rates between Indigenous and non-Indigenous Australians. (1 MARK)

Adapted from VCAA 2019 exam Q9a

- b Explain how your identified factor in **part a** could contribute to a difference in under 5 mortality between Indigenous and non-Indigenous Australians. (2 MARKS)

Question 17 (5 MARKS)

Source: adapted from Australian Institute of Health and Welfare, *Diabetes*, AIHW, Canberra, 15th of July 2020

- a From the graph provided, identify **one** biological factor that could contribute to the difference in the prevalence of type 2 diabetes between males and females. (1 MARK)

Adapted from VCAA 2020 exam Q3a

- b Explain how **one** biological factor and **one** sociocultural factor could contribute to the difference in the prevalence of type 2 diabetes between males and females. (4 MARKS)

Questions from multiple lessons
Question 18 (2 MARKS)

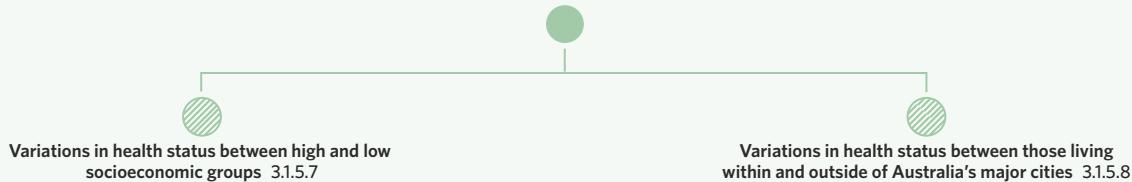
Explain how improving access to culturally appropriate healthcare for Indigenous Australians can contribute to optimal health and wellbeing as a resource nationally.

2C HEALTH VARIATIONS BETWEEN POPULATION GROUPS: PART 3

Do all Australians experience similar health status? Which population groups experience poorer health status and why? In this lesson, you will learn about how biological, sociocultural, and environmental factors contribute to differences in health status between people of high socioeconomic status and people of low socioeconomic status, and between people living within and outside of Australia's major cities.

2A Health variations between population groups: Part 1	2B Health variations between population groups: Part 2	2C Health variations between population groups: Part 3	2D Contributions to Australia's health status: Part 1	2E Contributions to Australia's health status: Part 2
Study design dot point				
<ul style="list-style-type: none"> health status of Australians and the biological, sociocultural and environmental factors that contribute to variations between population groups including: <ul style="list-style-type: none"> males and females Indigenous and non-Indigenous high and low socioeconomic status those living within and outside of Australia's major cities 				
Key knowledge units				
Variations in health status between high and low socioeconomic groups				3.1.5.7
Variations in health status between those living within and outside of Australia's major cities				3.1.5.8

Health variations between population groups: Part 3



Variations in health status between high and low socioeconomic groups 3.1.5.7

OVERVIEW

An individual's socioeconomic status (SES) can have a significant impact on their ability to access resources so that they can experience healthy and productive lives. With this in mind, people in high SES groups are likely to experience better health status in comparison to those in low SES groups.

THEORY DETAILS

An individual's **socioeconomic status (SES)**, a measure used to determine the social status of an individual using the factors of income, occupation, and education, can influence the biological, sociocultural, and environmental factors they experience in life. This can contribute to the variations in health status that exist between people in low SES groups and people in high SES groups. Differences in the health status between those in high SES groups compared to those in low SES groups in Australia include:

- People in low SES groups have a lower life expectancy in comparison to people in high SES groups (for males 77.5 years compared to 83.9 years; for females 82.7 years compared to 86.8 years respectively) (Australian Institute of Health and Welfare [AIHW], 2015).
- People in low SES groups experience a higher burden of disease (as measured by DALY) compared to people in high SES groups (AIHW, 2015).

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- analyse health information to explain factors that contribute to variations in health status between population groups

KEY DEFINITIONS

Socioeconomic status (SES)

is a measure used to determine the social status of an individual using the factors of income, occupation, and education



- People in low SES groups experience higher rates of premature death (years of life lost due to premature death [YLL]) in comparison to people in high SES groups (AIHW, 2015).
- People in low SES groups experience higher prevalence of chronic health conditions, such as cancer, cardiovascular disease, diabetes, liver disease, kidney disease, and chronic obstructive pulmonary disease (COPD) in comparison to people in high SES groups (AIHW, 2010).
- People in low SES groups experience a higher prevalence of respiratory conditions such as asthma in comparison to those in high SES groups (Australian Bureau of Statistics, 2018).
- People in low SES groups experience a higher prevalence of mental health conditions in comparison to those in high SES groups (Australian Bureau of Statistics, 2018).
- People in low SES groups experience a higher prevalence of musculoskeletal conditions such as arthritis and osteoporosis in comparison to those in high SES groups (Australian Bureau of Statistics, 2018).
- People in low SES groups experience higher infant mortality rates (4.2 per 1000 live births) in comparison to those in high SES groups (2.2 per 1000 live births) (AIHW, 2020).

Useful tip

Data related to socioeconomic status (SES) is sometimes broken down into five 'quintiles'. Each quintile represents 20% of Australia's population, with the first quintile representing individuals of the lowest SES and the fifth quintile representing individuals of the highest SES. The Australian Bureau of Statistics (ABS) uses a range of different census variables including income, education, employment, occupation, and housing characteristics to determine the SES of different individuals. Figure 1 demonstrates how data can be presented in the form of the five SES quintiles.

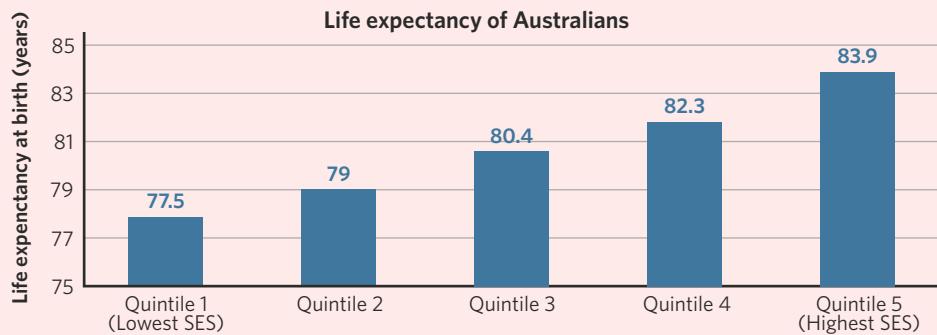


Figure 1 The life expectancy at birth between individuals of high and low socioeconomic status (AIHW, 2015)

Biological factors for low and high SES groups

There are biological factors that contribute to variations in health status between high SES and low SES groups. These biological factors are presented in table 1.

Table 1 Biological factors that contribute to variations in health status between high SES and low SES groups

Biological factor	Description
Impaired glucose regulation	<p>People in low SES groups experience higher rates of impaired glucose regulation in comparison to those in high SES groups. This contributes to low SES groups having higher rates of mortality associated with the following conditions for which impaired glucose regulation is a risk factor:</p> <ul style="list-style-type: none"> • type 2 diabetes • kidney disease • cardiovascular disease (such as heart attacks and strokes).
Birth weight	<p>People in low SES groups have higher rates of low birth weight (7.6%) in comparison to those in high SES groups (5.5%) (AIHW, 2018). Higher rates of low birth weight can contribute to poorer health outcomes in adulthood. This may explain why those in low SES groups experience a higher prevalence of the following conditions, for which low birth weight is a risk factor, in comparison to those in high SES groups:</p> <ul style="list-style-type: none"> • high blood pressure (hypertension) • type 2 diabetes • cardiovascular disease.

Lesson link

Head to lesson **2A: Health variations between population groups: Part 1** if you need a refresher on the explanations of the different biological, sociocultural, and environmental factors.

cont'd

Table 1 Continued

Biological factor	Description
Body weight	Those in low SES groups are more likely to be obese or overweight (66%) compared to those in high SES groups (58%) (AIHW, 2016). This contributes to individuals in low SES groups experiencing a higher prevalence of the following conditions, for which obesity is a risk factor, in comparison to those in high SES groups: <ul style="list-style-type: none"> • type 2 diabetes • respiratory issues • cardiovascular disease (including heart attack and strokes) • cancers, such as colorectal cancer • musculoskeletal conditions.
Blood pressure	Individuals in low SES groups experience higher rates of hypertension (23.8%) in comparison to individuals in high SES groups (19.3%) (AIHW, 2019). Higher rates of hypertension may explain why individuals in low SES groups experience a higher prevalence of the following conditions, for which hypertension is a risk factor, in comparison to those in high SES groups: <ul style="list-style-type: none"> • kidney disease • type 2 diabetes • cardiovascular disease (such as heart attacks and strokes).

Sociocultural factors for low and high SES groups

There are sociocultural factors that contribute to variations in health status between high SES and low SES groups. These sociocultural factors are presented in table 2.

Table 2 Sociocultural factors that contribute to variations in health status between high SES and low SES groups

Sociocultural factor	Description
Access to healthcare	As education is a key component of socioeconomic status, people in low SES groups are more likely to have lower levels of health literacy in comparison to those in high SES groups. Lower levels of health literacy amongst individuals in low SES groups may mean that they are less likely to seek medical attention or attend regular health checkups. This may mean that individuals in low SES groups are more likely to have health conditions go unnoticed or untreated in comparison to those in high SES groups. Due to going untreated, conditions can worsen in severity, leading to a greater likelihood of mortality from a treatable condition.
Early life experiences	Mothers in low SES groups have higher rates of smoking and alcohol consumption during pregnancy in comparison to mothers in high SES groups. As a result, this contributes to individuals in low SES groups having higher rates of low birth weight and under 5 mortality in comparison to those in high SES groups. Moreover, this can also contribute to a higher prevalence of type 2 diabetes and cardiovascular disease later in life, contributing to greater levels of morbidity.
Food security	Individuals in low SES groups have lower incomes, lower levels of health literacy (education), and lower employment rates in comparison to individuals in high SES groups. This may mean that low SES groups are more likely to suffer from food insecurity, as they may be unable to afford nutritious food, or may be uneducated about the importance of consuming a nutritious diet. This contributes to individuals in low SES groups experiencing a higher prevalence of the following conditions in comparison to those in high SES groups: <ul style="list-style-type: none"> • obesity • type 2 diabetes • cardiovascular disease.
Social exclusion	Individuals in low SES groups are more likely to experience social exclusion in comparison to those in high SES groups. People who experience social exclusion are at greater risk of feeling disconnected from society. This contributes to low SES groups having a greater prevalence of substance abuse, as well as mental health conditions such as depression in comparison to those in high SES groups.



Environmental factors for low and high SES groups

There are environmental factors that contribute to variations in health status between high SES and low SES groups. These environmental factors are presented in table 3.

Table 3 Environmental factors that contribute to variations in health status between high SES and low SES groups

Environmental factor	Description
Housing	<p>Those in low SES groups are less likely to be able to afford adequate housing. Consequently, individuals in low SES groups are more likely to experience the following when compared to individuals in high SES groups:</p> <ul style="list-style-type: none"> • overcrowded housing. • housing with facilities that fail to meet acceptable standards, such as cooking facilities. • housing with major dwelling or structural problems. • housing with inadequate ventilation. <p>This contributes to individuals in low SES groups experiencing a higher prevalence of the following conditions:</p> <ul style="list-style-type: none"> • injury, potentially due to hazards in the house such as unsafe electrical wiring. • mental illness, arising from the stress of living in an overcrowded or unsanitary house. • respiratory conditions such as asthma, arising from inadequate housing ventilation systems.
Work environment	<p>Individuals in low SES groups are more likely to work in occupations that are considered to be more dangerous. These occupations may involve working in a factory that exposes the individual to chemicals and heavy machinery. As a result, this may contribute to individuals in low SES groups experiencing a higher prevalence of respiratory illnesses such as asthma and injury in comparison to individuals in high SES groups.</p>
Geographical location	<p>Individuals in low SES groups are more likely to live further away from metropolitan cities than individuals in high SES groups. It is common to find a greater number of fast food outlets and less restaurants offering fresh food in outer suburbs. This can place individuals in low SES groups at a higher risk of food insecurity, thus contributing to the higher prevalence of obesity in low SES groups in comparison to high SES groups.</p>

Variations in health status between those living within and outside of Australia's major cities 3.1.5.8

OVERVIEW

Australia's land mass is very large, and although the majority of Australians live in major cities, there is still a significant percentage of the population (29% or 7 million people) that live in rural and remote areas (AIHW, 2018). Australians living outside of major cities tend to have poorer health status in comparison to Australians living in major cities. Examples of major cities in Victoria are Melbourne and Geelong. Regional cities such as Bendigo, Ballarat, and Mildura are not considered to be major cities.

THEORY DETAILS

Whether an individual lives within or outside of a major city can influence the biological, sociocultural, and environmental factors they experience in life. In this way, we see differences in the health status between those living within and outside of Australia's major cities. Differences in health status between Australians living within and outside of Australia's major cities include:

- People living outside of Australia's major cities have a lower life expectancy in comparison to those living within Australia's major cities. This difference in life expectancy depends on the level of remoteness, as detailed in table 4.

Table 4 Variations in life expectancy between individuals living within major cities and individuals living outside of major cities (AIHW, 2019)

Level of remoteness	Male life expectancy	Female life expectancy
Major cities	81 years	84 years
Inner and outer regional areas	79 years	83 years
Remote and very remote areas	76 years	79 years

- People living outside of Australia's major cities experience a higher burden of disease (as measured by DALY) compared to individuals living within Australia's major cities (AIHW, 2015).
- People living outside of Australia's major cities experience higher rates of premature death (YLL) compared to individuals living within Australia's major cities (AIHW, 2015).
- People living outside of Australia's major cities experience higher prevalence of chronic health conditions, such as cancer, cardiovascular disease, diabetes, liver disease, kidney disease, and chronic obstructive pulmonary disease (COPD), in comparison to individuals living within Australia's major cities (AIHW, 2010).
- People living outside of Australia's major cities experience a higher prevalence of respiratory conditions such as asthma, in comparison to individuals living within Australia's major cities (Australian Bureau of Statistics, 2018).
- People living outside of Australia's major cities experience a higher prevalence of injuries, in comparison to individuals living within Australia's major cities (AIHW, 2020).
- People living outside of Australia's major cities experience a higher prevalence of mental health conditions, in comparison to individuals living within Australia's major cities (Australian Bureau of Statistics, 2018).
- People living outside of Australia's major cities experience a higher prevalence of musculoskeletal conditions, such as arthritis and osteoporosis, in comparison to individuals living within Australia's major cities (Australian Bureau of Statistics, 2018).
- People living outside of Australia's major cities experience higher infant mortality rates (5.9 per 1000 live births), in comparison to individuals living within Australia's major cities (2.9 per 1000 live births) (AIHW, 2020).

Biological factors for those living within and outside of Australia's major cities

There are biological factors that contribute to variations in health status between those living within major cities and those living outside of major cities. These biological factors are presented in table 5.

Table 5 Biological factors that contribute to variations in health status between individuals living within major cities and individuals living outside of major cities

Biological factor	Description
Impaired glucose regulation	<p>People living outside of Australia's major cities experience higher rates of impaired glucose regulation (4.5%) compared to individuals living within Australia's major cities (2.7%) (AIHW, 2017). This contributes to those living outside major cities having higher rates of mortality associated with the following conditions, for which impaired glucose regulation is a risk factor, in comparison to those living within major cities:</p> <ul style="list-style-type: none"> • type 2 diabetes • kidney disease • cardiovascular disease (such as heart attack and stroke).
Birth weight	<p>People living outside of Australia's major cities have higher rates of low birth weight (8.6%) compared to individuals living within Australia's major cities (6.4%) (AIHW, 2018).</p> <p>Higher rates of low birth weight can contribute to poorer health outcomes in adulthood. This may explain why those living outside of major cities experience a higher prevalence of the following conditions, for which low birth weight can be a risk factor, in comparison to those who live in major cities:</p> <ul style="list-style-type: none"> • high blood pressure (hypertension) • type 2 diabetes • cardiovascular disease.

cont'd



Table 5 Continued

Biological factor	Description
Body weight	People living outside of Australia's major cities are more likely to be overweight or obese (71%) compared to individuals living within major cities (65%) (AIHW, 2020). This contributes to individuals living outside of major cities experiencing a higher prevalence of the following conditions for which being overweight is a risk factor, in comparison to those living within major cities: <ul style="list-style-type: none"> • type 2 diabetes • respiratory issues • cardiovascular disease (such as heart attack and stroke) • cancers, such as colorectal cancer • musculoskeletal conditions.
Blood pressure	People living outside of Australia's major cities experience higher rates of hypertension (23.5%) compared to individuals living within major cities (21.5%) (AIHW, 2019). Higher rates of hypertension may explain why individuals living outside of major cities experience a higher prevalence of the following conditions, for which hypertension is a risk factor, in comparison to those living within major cities: <ul style="list-style-type: none"> • kidney disease • type 2 diabetes • cardiovascular disease (such as heart attack and stroke).

Sociocultural factors for those living within and outside of Australia's major cities

There are sociocultural factors that contribute to variations in health status between those living within major cities and those living outside of major cities. These sociocultural factors are presented in table 6.

Table 6 Sociocultural factors that contribute to variations in health status between individuals living within major cities and individuals living outside of major cities

Sociocultural factor	Description
Socioeconomic status	People living outside of Australia's major cities experience poorer outcomes in all socioeconomic status indicators, in comparison to individuals living within major cities: <ul style="list-style-type: none"> • Individuals living outside of major cities have on average lower household incomes (\$880 weekly) compared to those living within major cities (\$1,072 weekly) (National Rural Health Alliance INC, 2017). • Individuals living outside of major cities have lower levels of educational attainment compared to those living within major cities (ABS, 2008). • Individuals living outside of major cities have fewer employment opportunities and higher unemployment rates compared to those living within major cities. With lower levels of income, education, and employment, individuals living outside of major cities are less likely to have access to resources they need to lead a healthy and productive life. Lower levels of education may also mean that individuals living outside of major cities have lower levels of health literacy, increasing the likelihood of engaging in risk-taking behaviours such as smoking and alcohol consumption. This may mean that individuals living outside of major cities are more likely to experience diseases such as cancer and cardiovascular disease, increasing morbidity and mortality rates.
Early life experiences	Maternal smoking and alcohol consumption is more common for mothers living outside of major cities in comparison to mothers living within major cities. As a result, individuals living outside of major cities experience higher rates of infants with low birth weight and under 5 mortality, in comparison to those living within major cities. Moreover, this can also contribute to individuals living outside of major cities experiencing a higher prevalence of type 2 diabetes and cardiovascular disease later in life.

cont'd

Table 6 Continued

Sociocultural factor	Description
Food security	Outside of major cities, specifically in rural or very remote areas, fresh and nutritious food can be expensive relative to prices in metropolitan areas. The expensive price of nutritious food, combined with lower incomes that individuals living outside of major cities face, means that they are more likely to experience food insecurity compared to individuals living within major cities. This contributes to individuals living outside of major cities experiencing a higher prevalence of the following conditions, in comparison to individuals living within major cities: <ul style="list-style-type: none"> • obesity • type 2 diabetes • cardiovascular disease.
Social isolation	Individuals living outside of major cities are more likely to experience social isolation, which occurs when individuals are not in regular contact with others. As social isolation may increase feelings of stress and loneliness, this can place individuals living outside of major cities at a higher risk of developing mental illness, such as depression, in comparison to those living within major cities. Therefore, there is increased prevalence of mental illnesses amongst those living outside major cities compared to those living within major cities.

Environmental factors for those living within and outside of Australia's major cities

There are environmental factors that contribute to variations in health status between those living within major cities and those living outside of major cities. These environmental factors are presented in table 7.

Table 7 Environmental factors that contribute to variations in health status between individuals living within major cities and individuals living outside of major cities

Environmental factor	Description
Housing	Due to lower incomes, those living outside of major cities are less likely to be able to afford adequate housing in comparison to those living within major cities. Consequently, individuals living outside of major cities are more likely to experience the following conditions: <ul style="list-style-type: none"> • overcrowded housing • housing with facilities that fail to meet acceptable standards, such as cooking facilities • housing with major dwelling or structural problems • housing with inadequate ventilation. This contributes to individuals living outside of major cities experiencing a higher prevalence of the following conditions, in comparison to those living within major cities: <ul style="list-style-type: none"> • injury, potentially due to hazards in the house • mental illness, arising from the stress of living in an overcrowded house • respiratory conditions, arising from inadequate housing ventilation systems.
Access to healthcare	Individuals living outside of major cities may have to travel longer distances to access essential medical services in comparison to those living within major cities. This can increase the risk of conditions going unnoticed, undetected and untreated, contributing to a higher DALY for individuals living outside of Australia's major cities compared to those living within Australia's major cities.
Work environment	Individuals living in regional and remote areas outside of major cities are more likely to have occupations that require them to work outside, such as farming or mining. Farming and mining occupations often involve the use of heavy machinery, thus exposing those who work in these occupations to a more hazardous working environment. This can contribute to individuals living outside of major cities experiencing a higher prevalence of injury in comparison to those living within major cities.
Climate change	Individuals living outside of major cities are more likely to work in occupations that heavily rely on the environment, such as farming. As a result, those living outside of major cities are more likely to be impacted by the effects of climate change compared to those living within major cities. Harsh weather events, such as droughts, can destroy crops and ruin farmland, which may increase stress levels for farmers, and the risk of developing mental illness, such as anxiety, for those living outside of major cities.



Theory summary

In this lesson, you have learnt about the biological, sociocultural, and environmental factors that contribute to differences in health status among population groups, namely individuals in high and low SES groups, as well as individuals living within and outside of Australia's major cities. It is important to understand that differences in these biological, sociocultural and environmental factors contribute to differences in health status between population groups.

2C QUESTIONS

Theory-review questions

Question 1

Biological factors are the only factors that contribute to the differences in health status that exist between different population groups.

- A True.
- B False.

Question 2

Individuals from high SES groups experience a higher life expectancy compared to those from low SES groups.

- A True.
- B False.

Question 3

Individuals living outside of major cities experience a higher life expectancy compared to those living within major cities.

- A True.
- B False.

Question 4

Which of the following best fills in the blank?

- A Individuals living outside of major cities
- B Individuals living within major cities

_____ are more likely to experience food insecurity, as they are more likely to have lower average incomes, and nutritious food is more expensive in the areas they reside.

Question 5

Which of the following best fills in the blank?

- A Individuals in low SES groups
- B Individuals in high SES groups

_____ are less likely to access health services when they need them, as they are more likely to have limited health literacy, and therefore may not know the importance of regular health checkups.

Question 6

Which of the following best fills in the blank?

- A low SES groups
- B high SES groups

Mothers from _____ are more likely to smoke and consume alcohol during pregnancy, contributing to higher rates of low birth weight and under 5 mortality.

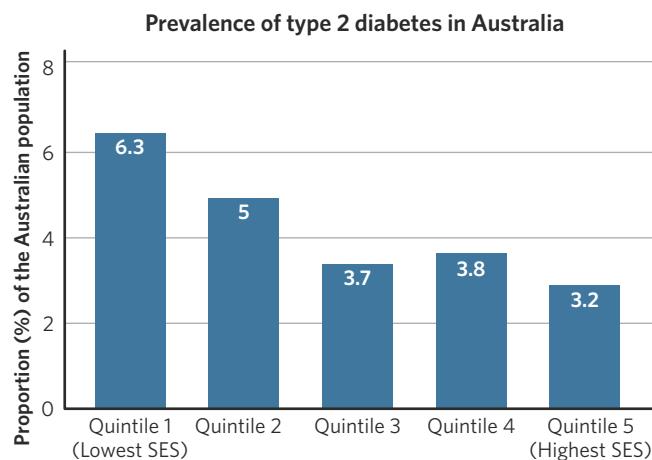
Question 7

Generally speaking, measures of health status reflect that people of low SES have poorer health than those of high SES.

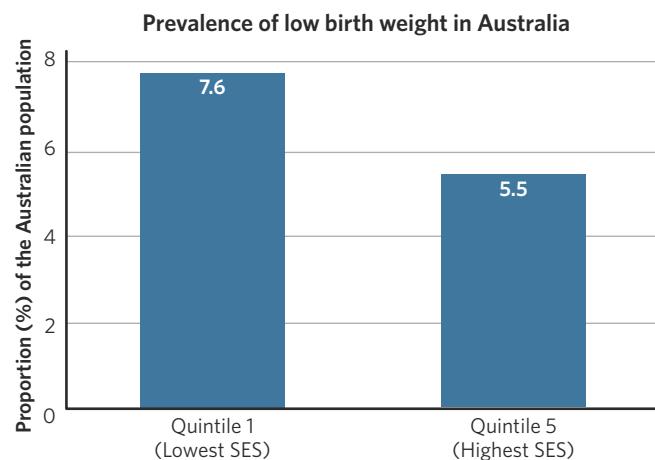
- A True.
- B False.

Skills**Data analysis**

Use the following information to answer Questions 8-10.



Source: adapted from Australian Institute of Health and Welfare, *Children's Headline Indicators*, AIHW, Canberra, 18th of September 2018



Source: adapted from Australian Institute of Health and Welfare, *Diabetes*, AIHW, Canberra, 23rd of July 2020

Question 8

Which of the following statements is correct?

- A Individuals in high SES groups have a higher prevalence of low birth weight compared to individuals from low SES groups.
- B Individuals in low SES groups have a higher prevalence of low birth weight compared to individuals in high SES groups.

Question 9

Which of the following statements are correct? (Select all that apply)

- I Individuals in high SES groups have a higher prevalence of type 2 diabetes in comparison to individuals in low SES groups.
- II Individuals in low SES groups have a higher prevalence of type 2 diabetes in comparison to individuals in high SES groups.
- III The data suggests that the prevalence of type 2 diabetes decreases as the SES quintile number increases.

Question 10

Which of the following inferences made from the data is correct?

- A As individuals from high SES groups have a higher prevalence of low birth weight, this may explain why they experience a higher prevalence of type 2 diabetes, in comparison to individuals from low SES groups.
- B As individuals from low SES groups have a higher prevalence of low birth weight, this may explain why they experience a higher prevalence of type 2 diabetes, in comparison to individuals from high SES groups.
- C As individuals from low SES groups have a higher prevalence of low birth weight, this may explain why they experience a lower prevalence of type 2 diabetes, in comparison to individuals from high SES groups.

Exam-style questions**Question 11** (1 MARK)

Identify **one** example of a difference in health status between low SES and high SES Australians.

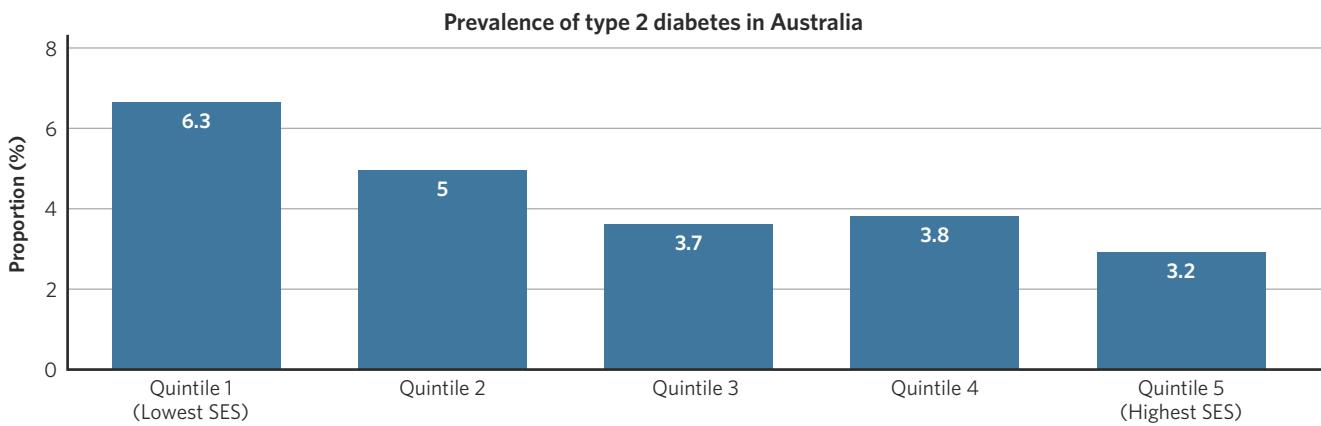
Question 12 (2 MARKS)

Provide **two** examples of how the health status of those living outside of major cities compares to those living in major cities.



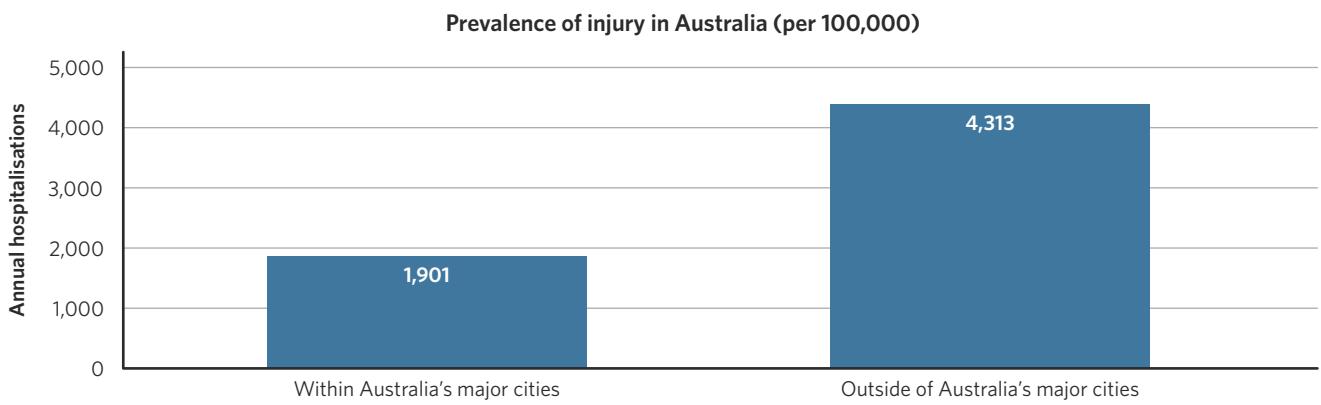
Question 13 (2 MARKS)

Explain **one** biological factor that could contribute to a difference in health status between those living outside of major cities compared to those living in major cities.

Question 14 (3 MARKS)

Source: adapted from Australian Institute of Health and Welfare, *Diabetes*, AIHW, Canberra, 23rd of July 2020

- Identify **one** sociocultural factor that could contribute to the difference in the prevalence of type 2 diabetes between low SES and high SES Australians that is shown in the graph provided. (1 MARK)
- Explain how your identified factor in **part a** could contribute to a difference in prevalence of type 2 diabetes between low SES and high SES Australians. (2 MARKS)

Question 15 (3 MARKS)

Source: adapted from Australian Institute of Health and Welfare, *Injury in Australia*, AIHW, Canberra, 10th of March 2021

- Identify **one** environmental factor that could contribute to the difference in the prevalence of injury between those living outside of major cities compared to those living in major cities that is shown in the graph provided. (1 MARK)
- Explain how your identified factor in **part a** could contribute to a difference in the prevalence of injury between those living outside of major cities compared to those living in major cities. (2 MARKS)

Questions from multiple lessons

Question 16 (2 MARKS)

Homeless Australians are one of the most socioeconomically disadvantaged population groups, placing them in the first SES quartile (in the lowest 20% of the Australian population). The life expectancy for a homeless male in Australia is only 46 years, which is significantly lower than the life expectancy for males in most third-world countries.

Source: adapted from ABC News, *Homeless Australians have shorter lifespan than Africans: study*, ABC, 12th of September 2014

Explain how shelter as a prerequisite for health can improve health status for those in the lowest SES groups.

2D CONTRIBUTIONS TO AUSTRALIA'S HEALTH STATUS: PART 1

Did you know that 37.9% of Indonesia's population are daily smokers (*Macrotrends*, 2018)? We are lucky to live in a country with a much lower smoking rate (11.6%) that has been on a steady decline over the past decades (*Australian Institute of Health and Welfare [AIHW]*, 2020). Despite Australia's significant decline in smoking rates over time, smoking still remains the biggest preventable cause of poor health and death in Australia and thus still contributes significantly to Australia's health status and burden of disease (AIHW, 2019). In this lesson, you will learn about the contribution to Australia's health status and burden of disease of smoking, as well as alcohol, and high body mass index.

2A Health variations between population groups: Part 1	2B Health variations between population groups: Part 2	2C Health variations between population groups: Part 3	2D Contributions to Australia's health status: Part 1	2E Contributions to Australia's health status: Part 2
Study design dot point				
<ul style="list-style-type: none"> the contribution to Australia's health status and burden of disease of smoking, alcohol, high body mass index, and dietary risks (under-consumption of vegetables, fruit and dairy foods; high intake of fat, salt and sugar; low intake of fibre and iron) 				
Key knowledge units				
Smoking				3.1.6.1
Alcohol				3.1.6.2
High Body Mass Index				3.1.6.3



Smoking 3.1.6.1

OVERVIEW

Although there has been a significant decrease in smoking rates (of daily tobacco smokers) in Australia over the past few decades (25% in 1991 compared to 11.6% in 2019), smoking still contributes significantly to Australia's burden of disease (AIHW, 2020). In 2015, smoking (of tobacco) contributed to 9.2% of Australia's total disability-adjusted life years (DALY), which is the unit of measurement for burden of disease.

! Useful tip

When answering questions about burden of disease you must mention DALY, as well as YLL or YLD in your response. VCAA has specified that you must write out disability-adjusted life years, years of life lost and years of life lost due to disability in full. When outlined once and if accompanied by the relevant acronym (DALY, YLL, and YLD respectively), you can then use the acronym instead of the full title of the health status indicator for that question. However, if you use the acronym without first outlining the title in full, you may not receive full marks for your response.

Lesson link

In lesson **1C: Measuring health status**, you learnt about the burden of disease, as well as other health status indicators. Return to this lesson if you need a refresher of these concepts.



THEORY DETAILS

The decrease in Australia's smoking rates in the past decades have been driven by government interventions, such as advertising bans, plain packaging laws, increases in tobacco tax, and prohibiting smoking in certain public places. Despite the success of interventions implemented to reduce Australia's smoking rates, **tobacco smoking** still remains the leading preventable cause of poor health and death in Australia (AIHW, 2019). Tobacco smoking kills approximately 15,500 Australians every year and whilst this number is relatively low compared to low and middle-income countries, there is still a proactive focus to decrease deaths and illness related to tobacco (AIHW, 2019).

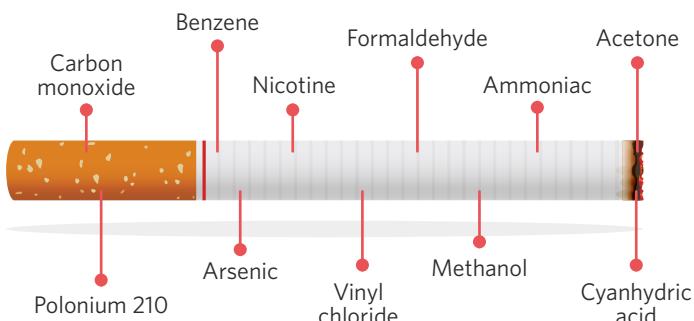


Image: Tond Van Graphcraft/Shutterstock.com

Figure 2 Cigarettes contain many toxic chemicals that are harmful to the body and its organs

Cigarette smoke contains over 7000 chemicals, many of which are considered to be toxins and harmful to the body. Toxic chemicals such as carbon monoxide, polonium 210, and benzene can have detrimental effects on the body and its organs (US Food and Drug Administration, 2020). Many of the toxic chemicals found in cigarette smoke are considered to be **carcinogenic**, meaning that they have the potential to cause cancer.

Smoking is a key risk factor for a variety of health conditions and can have long lasting impacts on an individual's long-term health. As shown in figure 3, there is a large percentage of **burden of disease** for a range of conditions that can be directly attributed to tobacco smoking. Burden of disease is a measurement of the impact of disease and injuries, specifically measuring the gap between the current health status and an ideal situation where everyone lives to an old age, free of disease and disability. Burden of disease is specifically measured by the unit disability-adjusted life years (DALYs).

Disability-adjusted life year (DALY) is a measure of burden of disease in which one disability-adjusted life year (DALY) equals one healthy **year of life lost due to the experience of a disability or disease (YLD)** or **premature death (YLL)**.

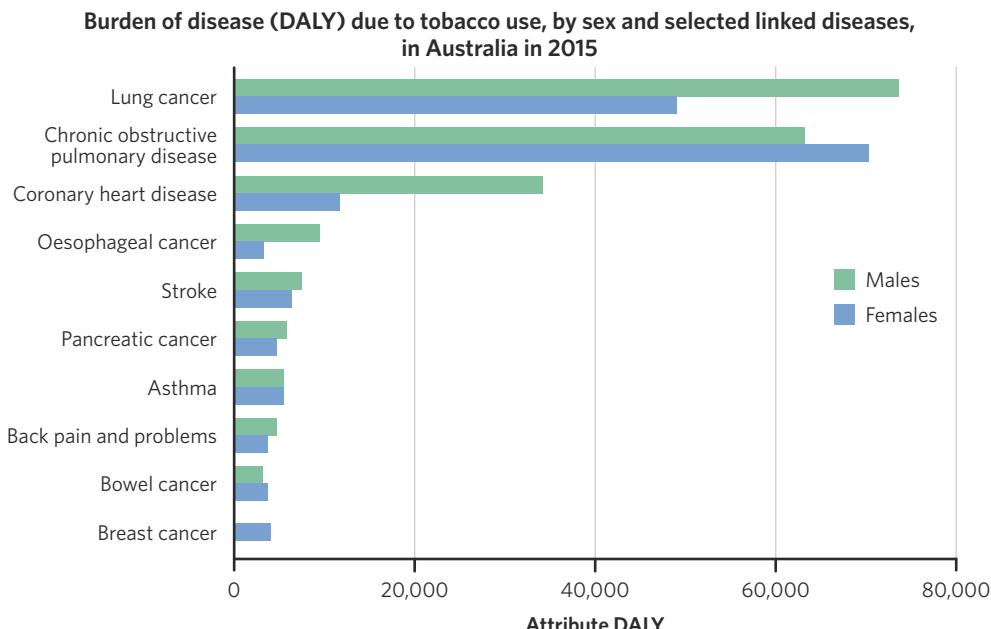


Figure 3 Disability-adjusted life years (DALY) attributable to tobacco use (AIHW, 2015)

ADDITIONAL TERMS

Tobacco smoking refers to the process of burning tobacco and inhaling the smoke produced



Image: fongbeeredhot/Shutterstock.com

Figure 1 Smoking contributes significantly to Australia's burden of disease

KEY DEFINITIONS

Burden of disease is a measurement of the impact of disease and injuries, specifically measuring the gap between the current health status and an ideal situation where everyone lives to an old age, free of disease and disability. Burden of disease is specifically measured by the unit disability-adjusted life years (DALYs)

Disability-adjusted life year (DALY) is a measure of burden of disease in which one disability-adjusted life year (DALY) equals one healthy **year of life lost due to the experience of a disability or disease (YLD)** or **premature death (YLL)**

ADDITIONAL TERMS

Carcinogenic refers to substances or chemicals that, when ingested, have the potential to cause cancer

Years of life lost due to disability (YLD) refers to the non-fatal contribution to the burden of disease measurement of disability-adjusted life year (DALY)

Years of life lost due to premature death (YLL) refers to the fatal contribution to the burden of disease measurement of disability-adjusted life year (DALY)

Burden of disease (DALY) attributable to tobacco use due to fatal and non-fatal burden, by selected linked disease and sex in Australia in 2015

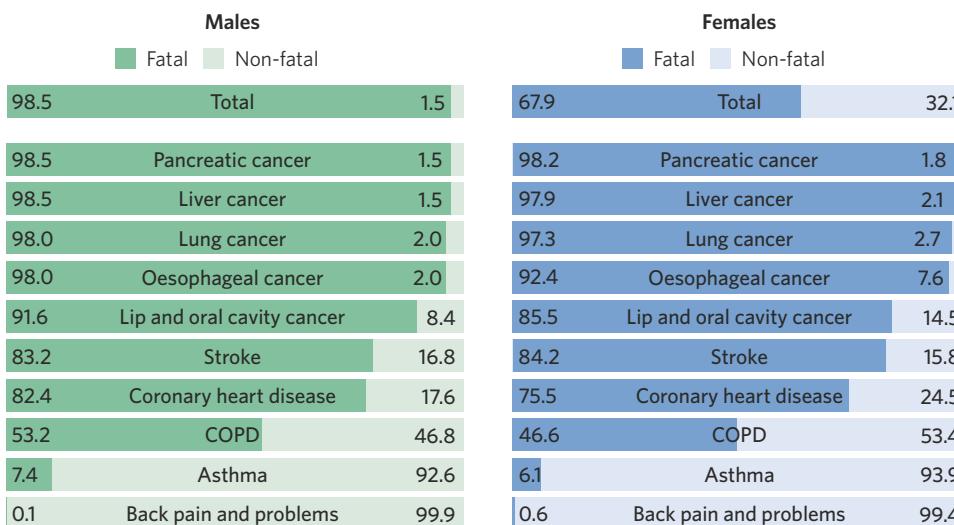


Figure 4 Burden of disease attributable to tobacco use (AIHW, 2015)

Many people believe that smoking only increases the risk of developing lung cancer, however this is not true. As presented in table 1, smoking acts as a risk factor for various health conditions.

Table 1 How smoking acts as a risk factor for various health conditions

Condition	How smoking acts as a risk factor
Cardiovascular disease	Tobacco smoke contains harmful chemicals that are toxic to the body. Inhaling tobacco smoke, which contains toxic chemicals, such as carbon monoxide, can reduce blood oxygen levels. Low blood oxygen levels can lead to increased heart rate and blood pressure (hypertension). Furthermore, smoking can also accelerate the process of atherosclerosis (the buildup of plaque in and on artery walls). This can significantly increase the risk of heart attack or stroke, as atherosclerosis is a key risk factor for both of these health conditions.
Chronic Obstructive Pulmonary Disease (COPD)	Inhaling tobacco smoke can cause significant damage to the airways, such as restricting airflow in the lungs, thus increasing the risk of developing respiratory conditions, such as Chronic Obstructive Pulmonary Disease (COPD).
Cancers	When tobacco smoke is inhaled, carcinogens enter the lungs which damages lung tissue. Over time as lung tissue is damaged, this can increase the risk of lung cancer. Furthermore, smoking can also damage cells within other parts of the body, increasing the risk of tumours developing, which can ultimately lead to many types of cancer.
Asthma	If babies and infants are exposed to tobacco smoke regularly in their early life, the chance of them developing conditions in their life time, such as asthma, significantly increases. Exposure to smoke can irritate the airways, causing them to become narrow, swollen and filled with mucus. Exposure to tobacco smoke can thus increase the risk of developing asthma and also increase the risk of asthma attacks.

Lesson link

As tobacco smoking remains the leading preventable cause of poor health and death in Australia, there have been many government and non-government initiatives introduced in the attempt to reduce smoking rates. One key initiative that has been introduced is *Quitline* which operates as a telephone service that smokers can call to receive advice on how to achieve their goals of quitting smoking. In lesson **5A: Health promotion: Smoking**, you will learn about health promotion initiatives introduced to improve population health related to smoking.



Alcohol 3.1.6.2

OVERVIEW

The consumption of alcoholic beverages has been common in Australian society for decades. There are many reasons why people consume alcohol, whether that be to socialise or relax. Whilst the consumption of alcohol in moderation can have minimal effects on health, excessive consumption can increase the risk of various health conditions.

THEORY DETAILS

Alcohol contributes to 5.4% of the total burden of disease in Australia (AIHW, 2021). Despite alcohol consumption having minimal health effects when consumed in moderation, excessive use can lead to many health complications. **Binge drinking** is the action of consuming large amounts of alcohol in one sitting. Rather than leading to long-term health conditions, binge drinking increases the risk of alcohol-related injuries, such as violence or road accidents. **Alcoholism** refers to a disease in which an individual cannot control their consumption of alcohol and constantly feels the need to consume alcohol. Individuals suffering from alcoholism tend to over consume alcohol for long periods of time, which can subsequently lead to various chronic health conditions. Both alcoholism and binge drinking contribute to the burden of disease in Australia.

There are many ways that alcohol consumption can act as a risk factor for various health conditions. These are presented in table 2.

Table 2 How alcohol acts as a risk factor for various health conditions

Condition	How alcohol acts as a risk factor
Obesity	As alcohol typically contains a large number of kilojoules it is considered to be energy dense. Thus, when consumed in excess for long periods of time, alcohol can add excess kilojoules to an individual's diet and increase their risk of becoming overweight or obese. As a result, becoming obese can place an individual at risk of many other conditions, such as cardiovascular disease and type 2 diabetes.
Liver disease	When consumed, alcohol is processed by and filtered through the liver. Excess alcohol consumption can cause liver scarring and liver cells to die, which can prohibit the liver's ability to function and filter toxins. Therefore, excessive alcohol use over time can increase the risk of liver related diseases, such as liver cirrhosis .
Cancers	Alcohol is known as a carcinogen, meaning it is a substance that has the potential to cause cancer. There has been strong evidence that links long term excessive alcohol consumption to increased risk of various cancers, including breast, mouth, liver and bowel cancer (Cancer Council Victoria, n. d.).
Mental health conditions	There is strong evidence to suggest that long term excessive alcohol consumption can increase the risk of developing mental health conditions such as depression or anxiety (National Institute on Alcohol Abuse and Alcoholism, 2002). Furthermore, alcohol use combined with mental health conditions can increase the risk of suicide.
Injuries	The consumption of alcohol can have a significant influence on individuals' behaviour, as well as their motor skills and ability to function. Individuals' motor skills significantly decline when under the influence of alcohol, thus driving after consuming alcohol can significantly increase the risk of road-related injuries. Alcohol is a depressant drug, meaning it can also affect the behaviour of individuals. For example, it can increase the probability that people will engage with risk-taking and aggressive behaviours, which can subsequently increase the risk of alcohol-related injuries.
Maternal-related concerns	Alcohol consumption during pregnancy can lead to birth complications such as low birth weight. Furthermore, maternal alcohol consumption can also lead to Foetal Alcohol Spectrum Disorder (FASD), which is a group of conditions that can occur as a result of exposing the fetus to alcohol during pregnancy.

ADDITIONAL TERMS

Alcohol is a type of depressant drug that slows central nervous system activity and communication between the brain and the body

Binge drinking is the action of drinking a large amount of alcohol in one session. Binge drinking is classified by the Australian Bureau of Statistics (ABS) as 7 or more drinks for males or 5 or more drinks for females in one sitting

Alcoholism is a chronic disease categorised by uncontrolled consumption of alcohol

Liver cirrhosis is a type of liver damage in which healthy liver cells are replaced by scarring tissue



Image: Axel Bueckert/Shutterstock.com

Figure 5 Prolonged excessive alcohol use can lead to various chronic health conditions

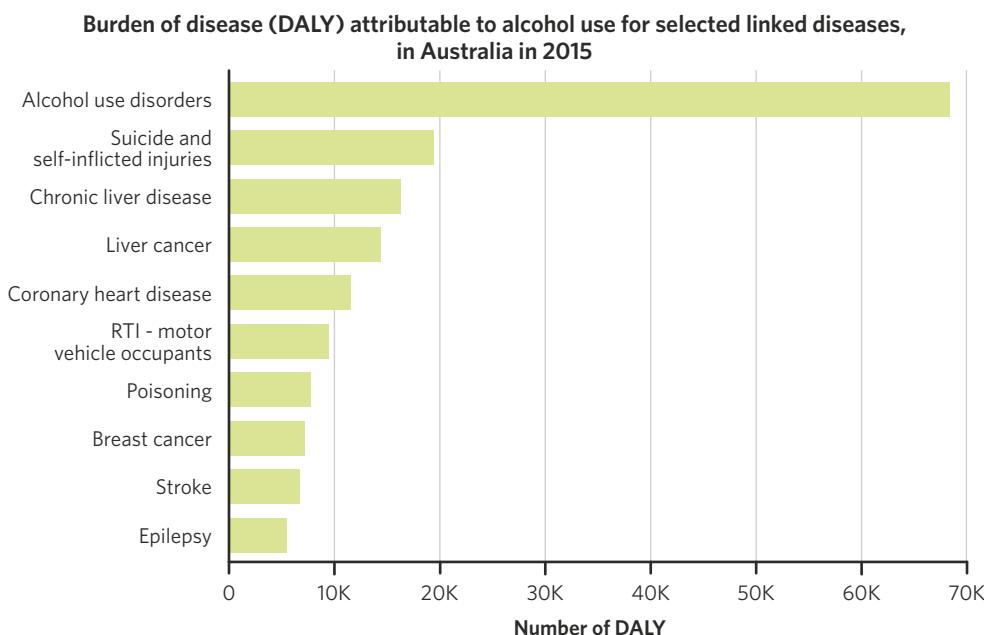


Figure 6 Burden of disease (DALY) attributable to alcohol use (AIHW, 2015)

Proportion (%) of burden of disease attributable to alcohol use by fatal versus non-fatal burden

	Total	Fatal	Non-fatal
61.3	Stroke	0.0	
100.0	Suicide or self-inflicted injuries	1.1	
98.9	Poisoning	1.2	
98.8	Chronic liver disease	3.7	
96.3	RTI - motor vehicle occupants	15.7	
84.3	Coronary heart disease	28.1	
71.9	Falls	64.3	
35.7	Alcohol use disorders	88.1	
11.9			

Figure 7 Proportion (%) of burden of disease attributable to alcohol use (AIHW, 2011)

High Body Mass Index 3.1.6.3

OVERVIEW

Obesity is a growing health concern for Australia's health status and burden of disease. In 2017, it was estimated that approximately two in three (67%) Australian adults were considered to be overweight or obese (AIHW, 2020). This is a key concern for Australia, as obesity is a risk factor for various health conditions.

THEORY DETAILS

An individual's body weight can have a significant influence on their health and wellbeing. Obesity has a major impact on Australia's burden of disease as it is a key risk factor for many chronic health conditions. One way to evaluate an individual's body weight is through using **body mass index** (BMI), which is a measure used to classify someone's weight and is calculated by dividing an individual's weight, in kilograms, by their height, in metres squared. As shown in figure 8, an individual's body mass index is calculated by dividing an individual's weight in kilograms by their height in metres squared.

KEY DEFINITIONS

Body mass index is a measure used to classify someone's weight and is calculated by dividing an individual's weight, in kilograms, by their height, in metres squared

$$\text{Body Mass Index (BMI)} = \frac{\text{Weight (kg)}}{\text{Height (m}^2\text{)}}$$

Figure 8 How to calculate an individual's body mass index



Body mass index can be used as a measure to classify individuals weight ranges. Each body mass index figure calculated fits into one of the following four intervals: underweight, healthy weight, overweight, and obese. The intervals for body mass index classification are shown in table 3.

Table 3 Body mass index (BMI) classifications

Classification	BMI interval
Underweight	Under 18.5
Healthy weight	Between 18.5 and 24.9
Overweight	Between 25 and 29.9
Obese	Over 30

As shown in table 3, a healthy weight (body mass) is a BMI score between 18.5 and 24.9. Furthermore, a BMI score between 25 and 29.9 is considered to be overweight, whilst a high body mass index score (over 30) is considered to be obese. We should also note that there are some limitations with BMI as a measurement of body mass. For example, BMI as a measurement fails to distinguish between excess fat, muscle, and bone mass. BMI also doesn't provide any indication of the distribution of fat among individuals. Despite this, BMI still remains a useful indicator to the prevalence of high body mass (obesity) in Australia. Obesity is a risk factor for many diseases and thus can impact the prevalence of various health conditions.

Table 4 How a high body mass index acts as a risk factor for various health conditions

Condition	How smoking acts as a risk factor
Cardiovascular disease	Individuals with a high body mass index (BMI) are at increased risk of hypertension, as a high BMI can place extra strain on the heart. Hypertension speeds up the process of atherosclerosis, thus increasing the risk of cardiovascular disease.
Type 2 diabetes	Type 2 diabetes is a condition where the pancreas fails to produce enough insulin (reduced insulin production) or the body resists insulin (insulin resistance). Excess body weight can cause increased levels of fatty acids and inflammation, leading to insulin resistance, which in turn can lead to type 2 diabetes. Thus, having a high BMI significantly increases the risk of developing type 2 diabetes.
Cancers	There has been evidence to suggest that a high BMI increases the risk of several cancers, including bowel, kidney, liver, ovarian, stomach, pancreas and prostate cancer (Cancer Council Victoria, n. d.).
Mental health conditions	There is some evidence to suggest that having a high BMI increases the risks of mental health conditions such as depression or anxiety (Rajan & Menon, 2017).

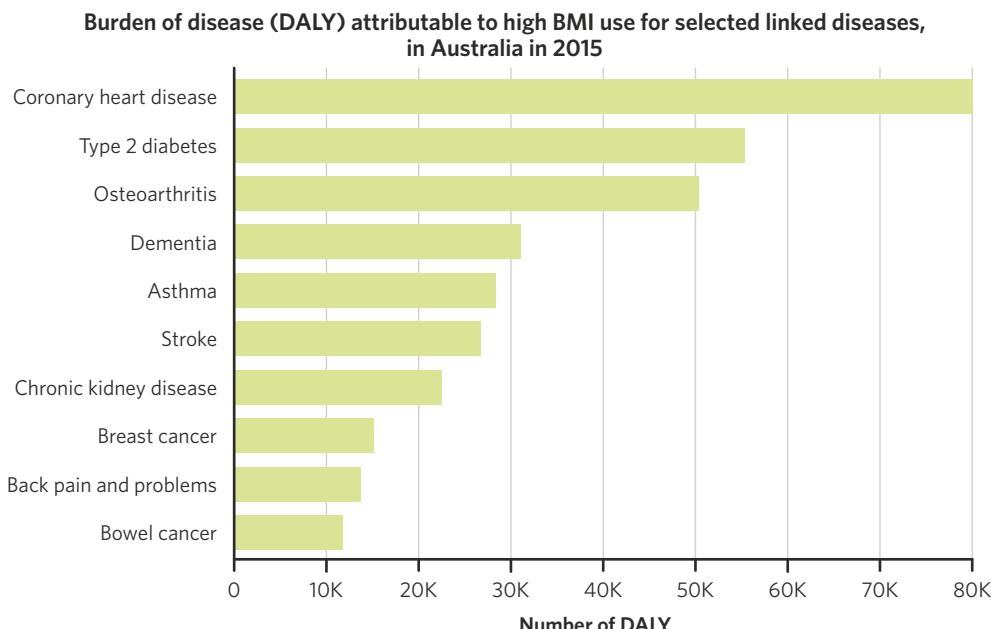


Figure 9 Burden (DALY) attributable to high BMI (AIHW, 2015)

Proportion (%) of burden of disease attributable to high BMI by fatal versus non-fatal burden

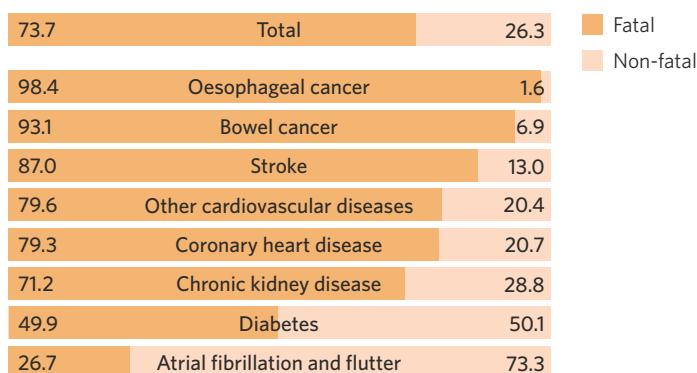


Figure 10 Proportion (%) of burden of disease attributable to high BMI (AIHW, 2011)

Theory summary

In this lesson, you learnt about how smoking, alcohol, and a high body mass index (BMI) can impact Australia's health status and burden of disease. Smoking, alcohol, and a high BMI all can act as risk factors for various health conditions. Furthermore, smoking, alcohol and a high BMI are all considered to be preventable risk factors.

2D QUESTIONS

Theory-review questions

Question 1

Smoking, alcohol and high body mass index (BMI) all have the potential to contribute to Australia's burden of disease.

- A True.
- B False.

Question 2

Smoking is the leading preventable cause of poor health and death in Australia.

- A True.
- B False.

Question 3

The overconsumption of alcohol is a risk factor for obesity as it is high in kilojoules.

- A True.
- B False.

Question 4

Consumption of alcohol can increase risk-taking behaviours that can result in alcohol-related injuries.

- A True.
- B False.

Question 5

A high body mass index can increase the risk of type 2 diabetes.

- A True.
- B False.



Question 6

Which of the following conditions is a high body mass a risk factor for? (Select all that apply)

- I Type 2 diabetes.
- II Cardiovascular disease.
- III Lung cancer.

Question 7

Which of the following conditions is overconsumption of alcohol a risk factor for? (Select all that apply)

- I Cardiovascular disease.
- II Liver disease.
- III Obesity.

Question 8

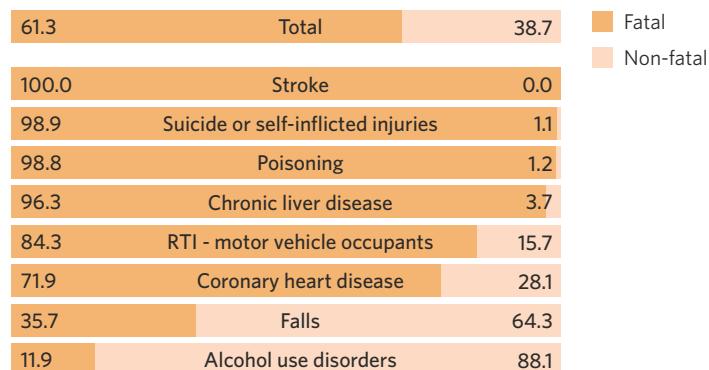
Binge drinking is more likely to contribute to burden of disease through

- A chronic health conditions.
- B alcohol-related injuries.

Skills**Data analysis**

Use the following information to answer Questions 9 and 10.

Proportion (%) of burden of disease attributable to alcohol use by fatal versus non-fatal burden



Source: adapted from Australian Institute of Health and Welfare, *Australian Burden of Disease Study: impact and causes of illness and death in Australia 2011*, <<https://www.aihw.gov.au/reports/burden-of-disease/abds-impact-and-causes-of-illness-death-2011/contents/highlights>>

Question 9

What proportion of the burden of disease of road traffic injuries attributable to alcohol use was fatal (YLL)?

- A 100%.
- B 84.3%.
- C 15.7%.

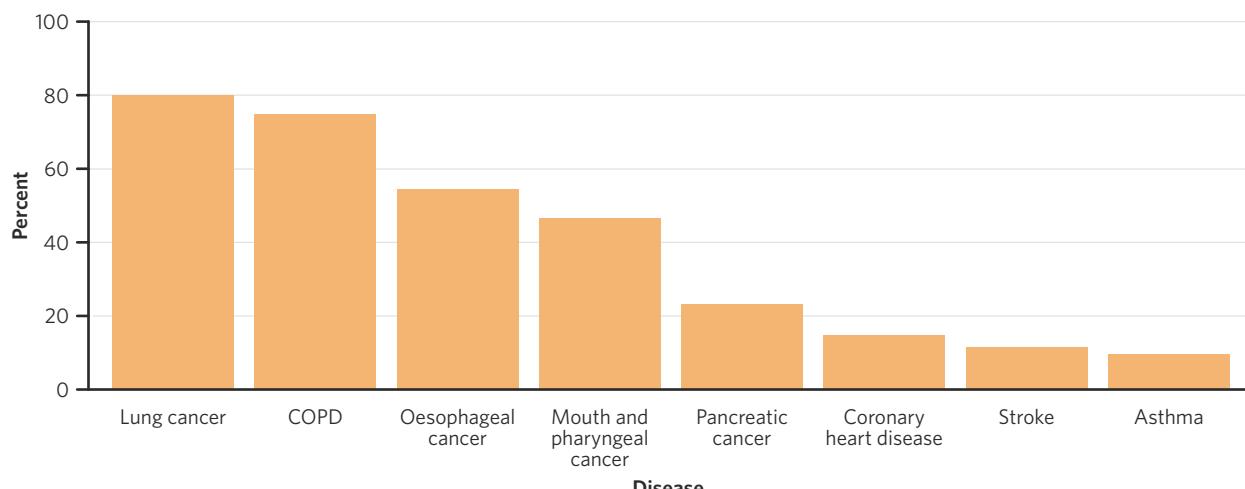
Question 10

What proportion of the burden of disease of stroke attributable to alcohol use was years of life lost due to disability (YLD)?

- A 100%.
- B 88.1%.
- C 0%.

Question 11

Burden of disease (percentage of linked disease) attributable to tobacco use, top eight diseases, in Australia in 2011



Source: adapted from Australian Institute of Health and Welfare, *Australian Burden of Disease Study: impact and causes of illness and death in Australia 2015*, <<https://www.aihw.gov.au/reports/burden-of-disease/burden-disease-study-illness-death-2015/summary>>

Which of the following conditions had the highest percentage of burden of disease attributable to tobacco use?

- A** Lung cancer.
- B** Esophageal cancer.
- C** Chronic obstructive pulmonary disease (COPD).

Exam-style questions

Question 12 (2 MARKS)

Describe burden of disease as a health status indicator.

Question 13 (2 MARKS)

Outline how a high body mass index (BMI) can contribute to Australia's health status.

Question 14 (4 MARKS)

Explain how smoking can contribute to Australia's burden of disease.

Question 15 (4 MARKS)

Explain how overconsumption of alcohol can affect Australia's health status.

Question 16 (4 MARKS)

Explain how a high body mass index (BMI) can contribute to Australia's burden of disease.

Questions from multiple lessons

Question 17 (4 MARKS)

The Aboriginal Connection Program is a dedicated alcohol and other drug treatment service for Aboriginal people living within or frequenting the inner city area of Adelaide. This program provides:

- assistance in connecting clients with relevant support and counselling services.
- services provided in a culturally appropriate manner.
- case workers who are flexible and responsive to individual needs.

Source: adapted from Government of South Australia, *Aboriginal drug and alcohol services and programs*. <<https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/services/mental+health+and+drug+and+alcohol+services/drug+and+alcohol+services/dassa+services/aboriginal+services+and+programs>>

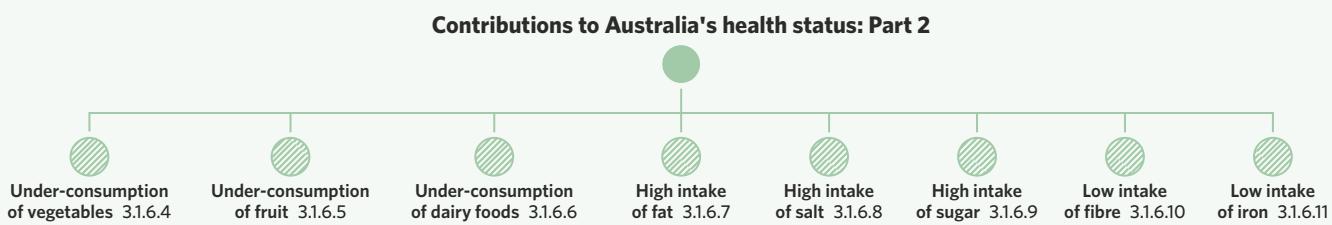
With reference to the effect of alcohol on health status and burden of disease, describe how Aboriginal Connection Program can improve the health status and burden of disease of Indigenous Australians.



2E CONTRIBUTIONS TO AUSTRALIA'S HEALTH STATUS: PART 2

Did you know that 49% of Australia's adults failed to consume the recommended daily two servings of fruit (Australian Institute of Health and Welfare [AIHW], 2019)? Or perhaps even more surprising, 92% of Australian adults failed to consume the recommended daily five to six servings of vegetables? Why is this the case? Could it be that the majority of the population is unaware of these serving recommendations? In this lesson, you will learn about the contribution to Australia's health status and burden of disease of dietary risks (under-consumption of vegetables, fruit and dairy foods; high intake of fat, salt and sugar; low intake of fibre and iron).

2A Health variations between population groups: Part 1	2B Health variations between population groups: Part 2	2C Health variations between population groups: Part 3	2D Contributions to Australia's health status: Part 1	2E Contributions to Australia's health status: Part 2
Study design dot point				
<ul style="list-style-type: none"> the contribution to Australia's health status and burden of disease of smoking, alcohol, high body mass index, and dietary risks (under-consumption of vegetables, fruit and dairy foods; high intake of fat, salt and sugar; low intake of fibre and iron) 				
Key knowledge units				
Under-consumption of vegetables				3.1.6.4
Under-consumption of fruit				3.1.6.5
Under-consumption of dairy foods				3.1.6.6
High intake of fat				3.1.6.7
High intake of salt				3.1.6.8
High intake of sugar				3.1.6.9
Low intake of fibre				3.1.6.10
Low intake of iron				3.1.6.11



Under-consumption of vegetables 3.1.6.4

OVERVIEW

Vegetables are considered to be one of the most nutritious food sources. There are a variety of vegetables that all contain different minerals, vitamins, and antioxidants. Vegetables are therefore a core component of any nutritious diet, as the nutrients they provide can help the body to function effectively. Therefore, the under-consumption of vegetables is considered to be a preventable risk factor for various health conditions that contribute to Australia's health status and burden of disease.

Lesson link

In lesson **1C: Measuring health status**, you learnt about the burden of disease, as well as other health status indicators. Return to this lesson if you need a refresher of these concepts.

THEORY DETAILS

! Useful tip

When answering questions about burden of disease you must mention DALY, as well as YLL or YLD in your response. VCAA has specified that you must write out disability-adjusted life years, years of life lost and years of life lost due to disability in full. When outlined once and if accompanied by the relevant acronym (DALY, YLL, and YLD respectively), you can then use the acronym instead of the full title of the health status indicator for that question. However, if you use the acronym without first outlining the title in full, you may not receive full marks for your response.

It is important to consume an adequate amount of vegetables as they are rich in nutrients required for optimal body functioning. Vegetables contain many minerals, vitamins, and antioxidants, meaning they are an essential component of any nutritious diet.

The **antioxidants** contained in vegetables help to reduce **free radicals** in the body, which are oxygen-containing molecules that can damage cells and have the potential to cause illness and speed up aging. The under-consumption of vegetables in an individual's diet can act as a risk factor for many conditions.

Table 1 How under-consumption of vegetables acts as a risk factor for various health conditions

Condition	How under-consumption of vegetables acts as a risk factor for health conditions
High body mass index (BMI)	<p>Vegetables are typically rich in fibre, a type of carbohydrate that helps to keep the body feeling full. Thus, the under-consumption of vegetables can mean that individuals consume a high amount of energy-dense foods. Consuming a diet high in energy-dense foods can increase the risk of weight gain and thus a high body mass index. As we learned in lesson 2D, a high body mass index is a risk factor for various health conditions including:</p> <ul style="list-style-type: none"> • Cardiovascular disease • Cancers • Type 2 diabetes • Mental health conditions.
Colorectal cancer	<p>Fibre is essential for a nutritious diet and adds bulk to faeces, assisting the body in keeping the digestive tract clean. Having a clean digestive tract and healthy bowel movements can act as protective factors against the development of colorectal cancer. Thus, fibre can act as a protective factor against colorectal cancer. As vegetables are a great source of fibre, the under-consumption of vegetables can increase the risk of colorectal cancer.</p>
Cardiovascular disease	<p>Vegetables are a rich source of antioxidants, which reduce free radicals in the body. Free radicals have the ability to damage body cells and can contribute to the development of cardiovascular disease. As a result, the under-consumption of vegetables can increase the risk of cardiovascular disease.</p>

Under-consumption of fruit 3.1.6.5

OVERVIEW

Similar to vegetables, fruit is also essential for a nutritious diet. The Heart Foundation Australia suggests that a nutritious diet should include two servings of fruit per day (The Heart Foundation Australia, n.d.). Therefore, the under-consumption of fruit is considered to be a preventable risk factor for various health conditions that contribute to Australia's health status and burden of disease.

THEORY DETAILS

Fruit is an essential part of a nutritious diet as fruits are rich in nutrients required for optimal body functioning. Fruits contain many minerals, vitamins, and antioxidants that assist in reducing free radicals in the body. The under-consumption of fruit in an individual's diet can act as a risk factor for many conditions.

ADDITIONAL TERMS

Free radicals are oxygen-containing molecules that can damage cells, causing illness and speeding up aging

Antioxidants are substances that may protect your cells against free radicals



Image: LDprod/Shutterstock.com

Figure 1 Vegetables are an essential part of a nutritious diet



Table 2 How under-consumption of fruit acts as a risk factor for various health conditions

Condition	How under-consumption of fruit acts as a risk factor for health conditions
High body mass index (BMI)	Much like vegetables, fruits are also rich in fibre. Consuming an adequate intake of fruit can therefore provide the feeling of fullness, resulting in a lower consumption of energy dense foods and acting as a protective factor against weight gain. Under-consumption of fruit can mean that individuals are more likely to consume a high amount of energy dense foods. Consuming a diet high in energy dense foods can increase the risk of weight gain and thus a high body mass index. A high body mass index is a risk factor for various health conditions. These health conditions include: <ul style="list-style-type: none"> • Cardiovascular disease • Cancers • Type 2 diabetes • Mental health conditions.
Colorectal cancer	Fibre can act as a protective factor against colorectal cancer. Fibre adds bulk to faeces, assisting the body in keeping the digestive tract clean. Having a clean digestive tract and healthy bowel movements can act as protective factors against the development of colorectal cancer. As fruit is a great source of fibre, the under-consumption of fruit can increase the risk of colorectal cancer.
Cardiovascular disease	Adequate consumption of fruit provides a rich source of antioxidants, which reduce free radicals in the body. Free radicals have the ability to damage body cells and can contribute to the development of cardiovascular disease. As a result, the under-consumption of fruit can increase the risk of cardiovascular disease.



Image: leonori/Shutterstock.com

Figure 2 Fruit is an essential part of a nutritious diet

Under-consumption of dairy foods 3.1.6.6

OVERVIEW

Dairy foods are foods that contain the milk of mammals. There are a variety of dairy foods, including milk, cream, yoghurt, and cheese. Dairy is considered to be an essential part of a nutritious diet as it provides the body with a rich source of **calcium**.

THEORY DETAILS

Dairy is an essential part of a nutritious diet as it provides the body with calcium, a nutrient essential for bone and tooth health. One of the core functions of calcium as a nutrient is to strengthen bones and keep them healthy. Furthermore, calcium can also strengthen teeth. A lack of calcium can be a risk factor for many conditions. Therefore, the under-consumption of dairy is considered to be a preventable risk factor for various health conditions that contribute to Australia's health status and burden of disease.

Table 3 How under-consumption of dairy foods acts as a risk factor for various health conditions

Condition	How under-consumption of dairy foods acts as a risk factor for health conditions
Osteoporosis	Dairy foods are rich in the nutrient calcium, which promotes the maintenance and strengthening of bones. Osteoporosis is a condition where bones become weak and fragile from loss of bone tissue. The adequate consumption of calcium can protect against osteoporosis. Thus, the under-consumption of dairy foods can increase the risk of osteoporosis.
Dental caries	Calcium can promote the maintenance of teeth, ensuring teeth stay strong and healthy. Therefore, consuming an adequate amount of calcium can protect against dental caries , which is the decay of tooth enamel that can lead to cavities in teeth. Thus, the under-consumption of dairy foods can increase the risk of dental caries.

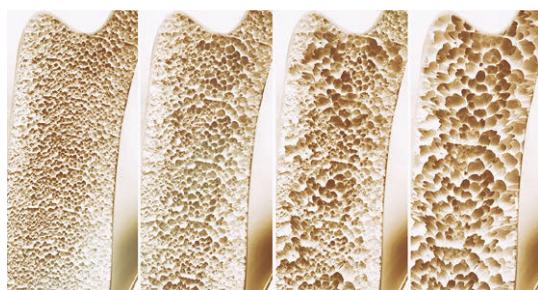


Image: Crevis/Shutterstock.com

Figure 3 Low calcium intake is a key risk factor for osteoporosis, a disease condition where bones become weak and fragile

ADDITIONAL TERMS

Calcium is a nutrient that is stored in bones and teeth which assists the body in keeping bones strong and healthy

Osteoporosis is a condition where bones become weak and fragile from loss of bone tissue

Dental caries are the decay of tooth enamel which can lead to cavities (small holes) in teeth

High intake of fat 3.1.6.7

OVERVIEW

Fat provides the body with a source of energy production. However, when fats are consumed excessively and the energy is not used they can contribute to weight gain. For this reason, a high intake of fat is considered to be a preventable risk factor for various health conditions that contribute to Australia's health status and burden of disease.

THEORY DETAILS

Fat is still an essential part of any diet as it provides the body with a primary source of energy. Different types of fats can be further classified as being 'healthier' or 'unhealthy' types of fats. Monounsaturated and polyunsaturated fats are typically considered to be 'healthier' types of fats and can be found in foods like avocado and nuts. Note the term 'healthier' is used here because any fat consumed in excess has the potential to act as a risk factor for various health conditions. On the other hand, saturated and trans fats are considered to be 'unhealthy' and are found in foods, such as processed meat and doughnuts. Whilst it is considered to be okay to consume fats in moderation, a high intake of fat, especially saturated and trans fats, can act as a risk factor for various health conditions.

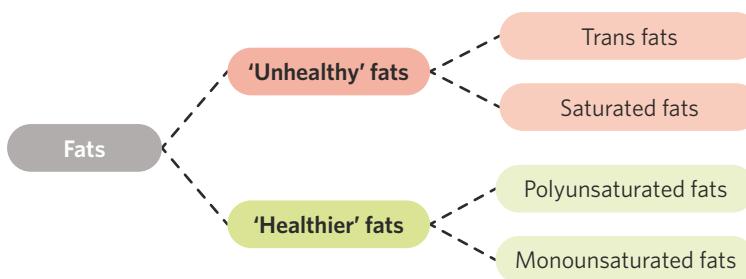


Figure 4 The classification of 'healthier' fats and 'unhealthy' fats

One of the main ways that types of fats are categorised as either 'healthier' or 'unhealthy' is how they affect the cholesterol levels in the bloodstream. Cholesterol is carried around the bloodstream by **lipoproteins**, of which there are two types: high density lipoproteins (HDL) and low density lipoproteins (LDL). High levels of LDL are considered to be harmful for the body as they attach themselves to the blood vessels of the walls and can build up plaque, which can restrict blood flow. The 'healthier' fats, monounsaturated and polyunsaturated fats, reduce the level of LDL cholesterol. By contrast, the 'unhealthy' fats, saturated, and trans fats increase the LDL cholesterol levels in the bloodstream.

Table 4 How a high intake of fat acts as a risk factor for various health conditions

Condition	How a high intake of fat acts as a risk factor for health conditions
High body mass index (BMI)	When fat is consumed in excess and the energy provided goes unused, it has the potential to contribute to weight gain and thus increases the risk of a high body mass index (BMI). As a result, a high intake of fat acts as a risk factor for a high BMI. A high body mass index is a risk factor for various health conditions. These health conditions include: <ul style="list-style-type: none"> • Cardiovascular disease • Cancers • Type 2 diabetes • Mental health conditions.
Colorectal cancer	Diets that are high in saturated fats can increase the risk of developing colorectal cancer (Better Health Channel, n.d.). Thus, a high intake of fat can increase the risk and prevalence of colorectal cancer.
Cardiovascular disease	Diets that are high in saturated and trans fats can increase the low density lipoproteins (LDL) cholesterol levels in the bloodstream. High levels of LDL can increase the risk of cardiovascular disease (such as heart attacks and strokes). Thus, a high intake of fat can increase the risk and prevalence of cardiovascular disease.
Type 2 diabetes	A protective factor against type 2 diabetes is to reduce saturated fat intake (AIHW, 2021). Consuming excess amounts of saturated fats can increase the risk of type 2 diabetes. Thus, a high intake of fat can increase the risk and prevalence of type 2 diabetes.

ADDITIONAL TERMS

Lipoproteins are particles that carry cholesterol through the body



Image: Nadya_Art/Shutterstock.com

Figure 5 Individuals should aim to consume less of trans and saturated fats and instead consume monounsaturated and polyunsaturated fats



High intake of salt 3.1.6.8

OVERVIEW

The core component of salt is sodium. Similar to fat, sodium is essential for any diet. However, when consumed in excess, sodium can increase the risk of various health conditions. A high intake of salt is considered to be a preventable risk factor for various health conditions that contribute to Australia's health status and burden of disease.

THEORY DETAILS

Sodium is both an electrolyte and a mineral and is essential for any diet as it helps the body to maintain the water and electrolyte balance. However, when consumed in excess amounts, sodium can increase the risk of negative health outcomes.

Table 5 How a high intake of salt acts as a risk factor for various health conditions

Condition	How a high intake of salt acts as a risk factor for health conditions
Osteoporosis	Consuming a high intake of salt can cause calcium to be excreted in urine, depleting calcium levels in the body. As calcium is essential for maintaining bone density and is a key protective factor against osteoporosis, this can increase the risk of osteoporosis. Thus, a high intake of salt can increase the risk and prevalence of osteoporosis.
Hypertension	High blood pressure is referred to as hypertension. Consuming a high intake of salt can cause water to be pulled into the blood vessels, increasing the total amount (volume) of blood inside them. When blood volume is increased, this can increase the risk of hypertension. Thus, a high intake of salt can increase the risk and prevalence of hypertension.
Cardiovascular disease	Consuming a high intake of salt can increase the risk of hypertension, which is a key risk factor for cardiovascular disease. Hypertension can significantly increase the risk of heart attack or stroke. Thus, a high intake of salt can increase the risk and prevalence of cardiovascular disease.

ACTIVITY 1

Search up '*Why is too much salt bad for you?*' on YouTube and watch the entire two minute and forty one second video (British Heart Foundation, 2020). Discuss with your class your thoughts and feelings about the video. Use the questions below to get you thinking.

- 1 What measures could be taken by individuals to ensure they are not exceeding 6 grams of salt intake per day?
- 2 What are some healthier alternatives to use instead of salt when cooking?
- 3 What are some of the long term health conditions that may result from a diet with a high intake of salt?

High intake of sugar 3.1.6.9

OVERVIEW

Sugar is a type of carbohydrate that can be found both naturally and also be added into foods or drinks. As sugar is a carbohydrate, it provides the body with fuel for energy production; however, much like fats when consumed in excess, it can lead to negative health outcomes. A high intake of sugar is considered to be a preventable risk factor for various health conditions that contribute to Australia's health status and burden of disease.

THEORY DETAILS

Sugar provides the body with fuel for energy production. However, when consumed excessively and the energy is not used, sugar can contribute to weight gain. Thus, a high intake of sugar can increase the risk of various health conditions.

Table 6 How a high intake of sugar acts as a risk factor for various health conditions

Condition	How a high intake of sugar acts as a risk factor for health conditions
High body mass index (BMI)	When sugar is consumed in excess and the energy provided goes unused, it has the potential to contribute to weight gain and thus increases the risk of a high body mass index (BMI). A high body mass index is a risk factor for various health conditions including: <ul style="list-style-type: none"> • Cardiovascular disease • Cancers • Type 2 diabetes • Mental health conditions.
Dental caries	Sugars provide a food source for bacteria in the mouth which can further increase the risk of tooth decay. Thus, a high intake of sugar can increase the risk and morbidity of dental caries.

Low intake of fibre 3.1.6.10

OVERVIEW

Fibre is essential to a nutritious diet. Fibre is a type of carbohydrate that helps to keep the body feeling full and acts as a protective factor against various conditions. A low intake of fibre is considered to be a preventable risk factor for various health conditions that contribute to Australia's health status and burden of disease.

THEORY DETAILS

Fibre is essential to a nutritious diet as it assists the body by keeping the digestive tract clean and also by providing the feeling of fullness and satiety. There are many foods that are rich in fibre, such as fruits, vegetables, lentils, and oats. Consuming an adequate amount of fibre can act as a protective factor against various negative health outcomes.

Table 7 How a low intake of fibre acts as a risk factor for various health conditions

Condition	How a low intake of fibre acts as a risk factor for health conditions
High body mass index (BMI)	Consuming an adequate intake of fibre provides the feeling of fullness, which can lower consumption of energy-dense foods and act as a protective factor against weight gain. Under-consumption of fibre can mean that individuals are more likely to consume a high amount of energy dense foods, as they are less likely to feel full for longer. Consuming a diet high in energy dense foods can increase the risk of weight gain and thus a high body mass index. A high body mass index is a risk factor for various health conditions. These health conditions include: <ul style="list-style-type: none"> • Cardiovascular disease • Cancers • Type 2 diabetes • Mental health conditions.
Colorectal cancer	Fibre can act as a protective factor against colorectal cancer. Fibre adds bulk to faeces, assisting the body in keeping the digestive tract clean. Having a clean digestive tract and healthy bowel movements can act as protective factors against the development of colorectal cancer. Thus, a low intake of fibre can increase the risk and prevalence of colorectal cancer.
Type 2 diabetes	Research has shown that a low intake of fibre can increase the risk of developing type 2 diabetes. Fibre acts as a protective factor against type 2 diabetes as it reduces the absorption of glucose and helps to improve blood sugar levels. Thus, a low intake of fibre can increase the risk and prevalence of type 2 diabetes.
Cardiovascular disease	Fibre can assist the body in reducing levels of low density lipoproteins (LDL) cholesterol and thus serves as a protective factor against cardiovascular disease. Thus, a low intake of fibre can increase the risk and prevalence of cardiovascular disease.



Image: marilyn barbone/Shutterstock.com

Figure 6 Fibre is essential for providing the feeling of fullness and keeping the digestive tract clean



Low intake of iron 3.1.6.11

OVERVIEW

Iron is a mineral that is essential to a nutritious diet. A diet with a low intake of iron can lead to iron-deficiency anemia. A low intake of iron is considered to be a preventable risk factor for various health conditions that contribute to Australia's health status and burden of disease.

THEORY DETAILS

Iron is essential to a nutritious diet. Iron acts as a core component of **haemoglobin**, which is a type of protein responsible for transporting oxygen in the blood. There are many foods that are rich sources of iron, such as spinach, red meat, legumes, nuts, and brown rice. A low intake of iron can lead to iron-deficiency anemia, which is a condition where there is a lack of healthy red blood cells. Iron-deficiency anemia can cause an individual to feel weak or fatigued, which can prevent them from completing their daily activities, such as school or work.

ADDITIONAL TERMS

Haemoglobin is a type of protein responsible for transporting oxygen in the blood

Theory summary

In this lesson, we learnt about a range of preventable dietary risks that all contribute to Australia's burden of disease and health status. Fruits, vegetables, and dairy foods are essential to a nutritious diet and thus individuals should aim to consume an adequate amount every day. Furthermore, sugars, fats, and salts are also essential to a nutritious diet, however they should be consumed responsibly as excess consumption can increase the risk of various health conditions. Finally, fibre and iron are a core component to a nutritious diet and thus there should be a focus on consuming adequate amounts of both fibre and iron on a daily basis.

2E QUESTIONS

Theory-review questions

Question 1

Dietary risks are considered to be preventable risk factors.

- A True.
- B False.

Question 2

Consuming an adequate amount of fruits and vegetables can act as a protective factor for colorectal cancer.

- A True.
- B False.

Question 3

Which of the following conditions is the under-consumption of dairy foods a risk factor for? (Select all that apply)

- I Type 2 diabetes.
- II Osteoporosis.
- III Dental caries.

Question 4

Which of the following conditions is a low intake of fibre a risk factor for? (Select all that apply)

- I Colorectal cancer.
- II Osteoporosis.
- III High body mass index (BMI).

Question 5

Which of the following conditions is the high intake of salt a risk factor for? (Select all that apply)

- I Osteoporosis.
- II Hypertension.
- III Colorectal cancer.

Question 6

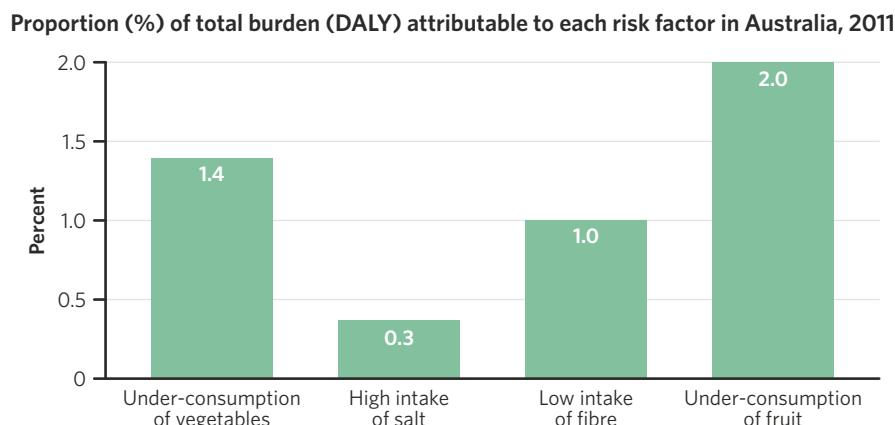
Fats are not essential to a nutritious diet and thus should be avoided all together.

- A True.
- B False.

Question 7

A low intake of iron can act as a risk factor for anemia.

- A True.
- B False.

Skills**Data analysis****Question 8**

Source: adapted from Australian Institute of Health and Welfare, *Australian Burden of Disease Study: impact and causes of illness and death in Australia 2011*, <<https://www.aihw.gov.au/reports/burden-of-disease/abds-impact-and-causes-of-illness-death-2011/contents/highlights>>

Which of the following dietary risk factors contributed the highest proportion of DALY?

- A Under-consumption of vegetables.
- B Under-consumption of fruit.
- C Low intake of fibre.
- D High intake of salt.

Use the following information to answer Questions 9 and 10.

Proportion (%) of burden of disease attributable to under-consumption of fruit by fatal versus non-fatal burden, Australia, 2011

	Total	Fatal	Non-fatal
86.1	13.9		
98.4	1.6		
97.7	2.3		
94.2	5.8		
93.5	6.5		
87.1	12.9		
79.8	20.2		

Source: adapted from Australian Institute of Health and Welfare, *Australian Burden of Disease Study: impact and causes of illness and death in Australia 2011*, <<https://www.aihw.gov.au/reports/burden-of-disease/abds-impact-and-causes-of-illness-death-2011/contents/highlights>>



Question 9

What proportion of the burden of disease of strokes attributable to under-consumption of fruit was fatal (YLL)?

- A 12.9%.
- B 86.1%.
- C 87.1%.

Question 10

What proportion of the burden of coronary heart disease attributable to under-consumption of fruit was non-fatal (YLD)?

- A 79.8%.
- B 20.2%.
- C 13.9%.

Exam-style questions**Question 11** (2 MARKS)

List two major food sources that contain calcium.

Adapted from VCAA 2019 exam Q3a

Question 12 (2 MARKS)

Identify two major food sources that contain iron.

Adapted from VCAA 2019 exam Q3a

Question 13 (2 MARKS)

Describe how a high intake of sugar can impact Australia's health status.

Question 14 (2 MARKS)

Describe how a high intake of salt can impact Australia's burden of disease.

Question 15 (2 MARKS)

Describe how an under-consumption of dairy can impact Australia's health status.

Question 16 (3 MARKS)

The Australian Dietary Guidelines recommend the number of 'standard serves' we should consume from the five core food groups each day, for a nutritious and balanced diet. One of the five core food groups included in the standard serves recommended by The Australian Dietary Guidelines is fruit. The Australian Dietary Guidelines recommends that adults consume a daily intake of 2 servings of fruit on a daily basis.

Source: adapted from Nutrition Australia, *Australian Dietary Guidelines: Recommended daily intakes*, <<https://nutritionaustralia.org/fact-sheets/australian-dietary-guidelines-recommended-daily-intakes/>>

Explain how consuming the Australian Dietary Guidelines' recommended amount of fruit would have an impact on the burden of disease in Australia.

Adapted from VCAA 2019 exam Q4a

Questions from multiple lessons**Question 17** (4 MARKS)

Using the example of a low dietary intake of fibre, describe the interrelationships between the dimensions of health and wellbeing.

CHAPTER 2 REVIEW

CHAPTER SUMMARY

This chapter was all about the health status of Australians. In this chapter, you learnt about the factors that contribute to differences in health status between different population groups. You also learnt about how a range of behavioural risk factors contribute to Australia's health status and burden of disease.

In lesson **2A: Health variations between population groups: Part 1**, you were introduced to the three categories of factors that contribute to variations in health status between population groups: biological, sociocultural, and environmental factors. The following table presents a summary of this lesson.

Biological factors	Sociocultural factors	Environmental factors
<ul style="list-style-type: none"> genetics body weight blood pressure blood cholesterol glucose regulation birth weight. 	<ul style="list-style-type: none"> socioeconomic status access to healthcare food security early life experiences unemployment social exclusion social isolation. 	<ul style="list-style-type: none"> housing work environment water and air quality climate urban infrastructure.

In lesson **2B: Health variations between population groups: Part 2**, you learnt about the biological, sociocultural, and environmental factors that contribute to differences in health status among two population groups. In particular, this included:

- variations in health status between males and females
- variations in health status between Indigenous and non-Indigenous Australians.

In lesson **2C: Health variations between population groups: Part 3**, you learnt about the biological, sociocultural, and environmental factors that contribute to differences in health status among two population groups. In particular, this included:

- variations in health status between high and low socioeconomic status (SES) groups
- variations in health status between those living within and outside of Australia's major cities.

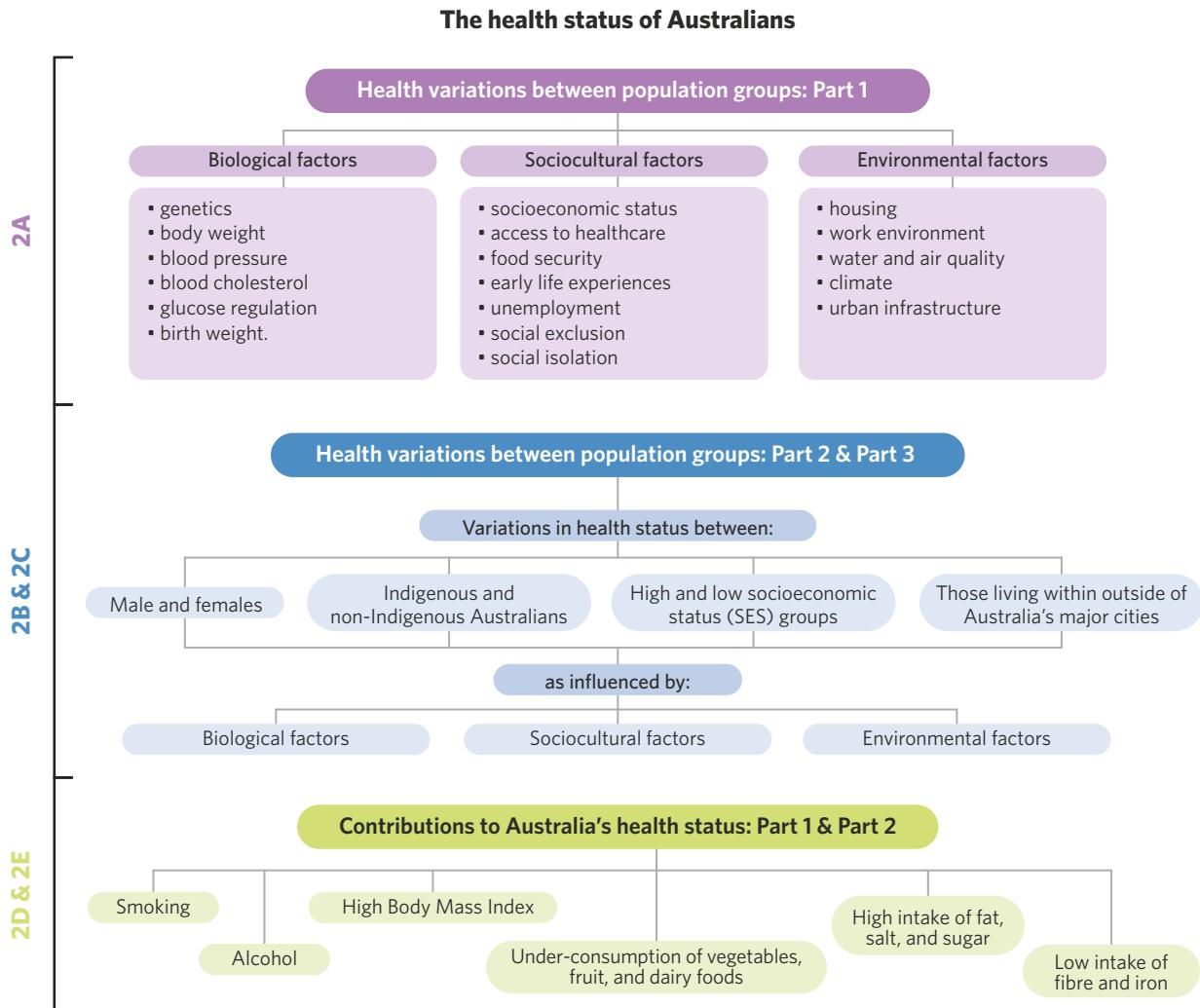
In **2D: Contributions to Australia's health status: Part 1**, you learnt about a range of factors and their contributions to Australia's health status. In particular, this included:

- smoking and its contribution to Australia's health status
- alcohol and its contribution to Australia's health status
- high body mass index (BMI) and its contribution to Australia's health status.

In lesson **2E: Contributions to Australia's health status: Part 2**, you learnt about dietary risks and their contributions to Australia's health status. In particular, this included:

- under-consumption of vegetables, fruit and dairy foods, and its contribution to Australia's health status.
- high intake of fat, salt, and sugar, and its contribution to Australia's health status.
- low intake of fibre and iron, and its contribution to Australia's health status.





CHAPTER REVIEW ACTIVITIES

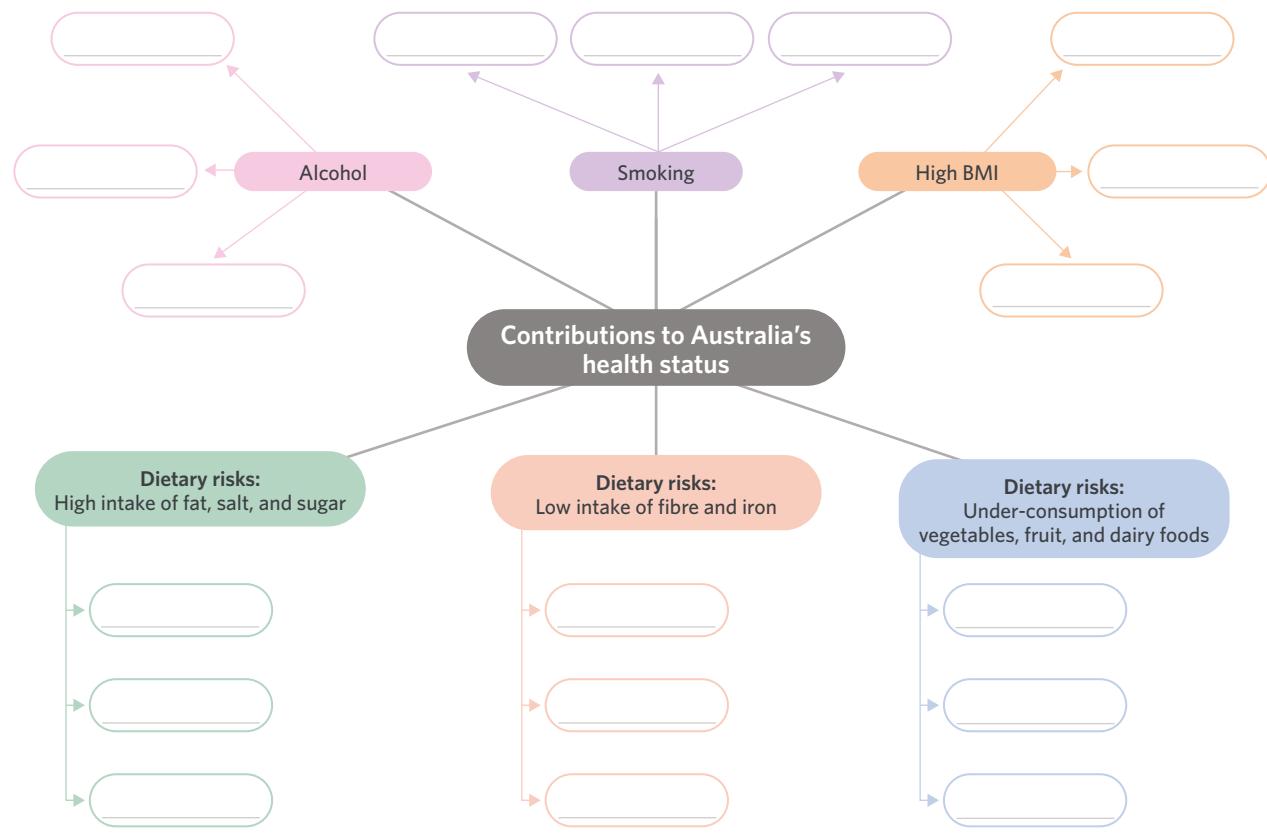
Review activity 1: Summary table

You have learnt a lot about variations in health status between different population groups. There are many different factors you need to consider, all of which differ between population groups. Copy out the table below into your notes. Use this table to revise and summarise some of the key concepts relating to variations in the health status of the Australian population. How many bullet points can you fill out from memory? Feel free to add as many as you would like to your table.

	Variations in health status between males and females	Variations in health status between Indigenous and non-Indigenous Australians	Variations in health status between high and low socioeconomic status (SES) groups	Variations in health status between those living within and outside of Australia's major cities
Biological factors	• • •	• • •	• • •	• • •
Sociocultural factors	• • •	• • •	• • •	• • •
Environmental factors	• • •	• • •	• • •	• • •

Review activity 2: Create a mind map

In chapter 2, you learnt about a range of factors that contribute to Australia's health status. Mind maps can be helpful revision tools to visually represent your knowledge and help you make connections between concepts. Copy out the mind map skeleton or create your own. You might like to use different coloured pens or highlighters to group content or make connections. What other bubbles could you add to your mindmap? What else have you learnt in this chapter?



CHAPTER 2 TEST

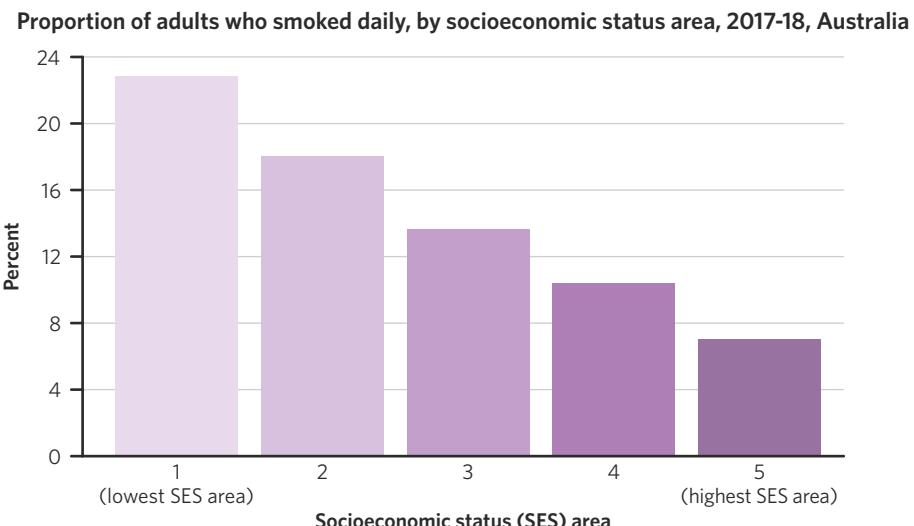
Question 1 (4 MARKS)

- Outline the difference between biological and environmental factors that can have an impact on Australia's health status. (2 MARKS)
- Identify one biological factor and describe how it can impact on Australia's health status. (2 MARKS)

Question 2 (2 MARKS)

Explain how the sociocultural factor of early life experiences can have an impact on Australia's health status.



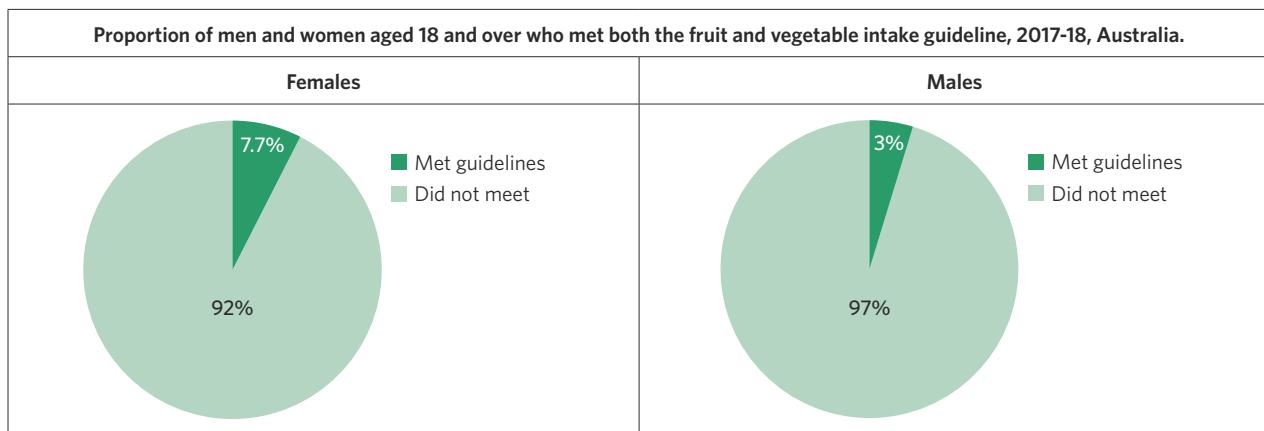
Question 3 (12 MARKS)

Source: adapted from Australian Institute of Health and Welfare, *Health across socioeconomic groups*, <<https://www.aihw.gov.au/reports/australias-health/health-across-socioeconomic-groups>>

- From the graph above, identify and describe the sociocultural factor. (2 MARKS)
Adapted from VCAA 2020 exam Q3a
- Using information from the graph, outline one relationship between low socioeconomic status (SES) and the proportion of adults who smoked daily. (2 MARKS)
- Describe the contribution of smoking to Australia's health status. (2 MARKS)
- Discuss two factors that could contribute to the differences in health status between high and low socioeconomic status (SES) groups. (6 MARKS).

Question 4 (4 MARKS)

- Identify and describe one example of a difference in health status between Indigenous and non-Indigenous Australians. (2 MARKS)
Adapted from VCAA 2019 exam Q9bi
- Identify two examples of factors that may contribute to the difference in health status between Indigenous and non-Indigenous Australians. (2 MARKS)

Question 5 (4 MARKS)

Source: adapted from Australian Institute of Health and Welfare, *The health of Australia's females and males*, <<https://www.aihw.gov.au/reports/men-women/female-health/contents/how-healthy>>

Using the information above, discuss the contribution of dietary risk factors to Australia's health status, with reference to differences in male and female health status.

Question 6

(3 MARKS)

Median age at death, by remoteness area and sex, 2018, Australia					
	Major cities	Inner regional	Outer regional	Remote	Very remote
Median age at death (years) (Males)	79	78	76	73	68
Median age at death (years) (Females)	85	84	83	80	70

Source: adapted from Australian Institute of Health and Welfare, *Rural and remote health*, <<https://www.aihw.gov.au/reports/rural-remote-australians/rural-remote-health/contents/health-status-and-outcomes>>

Using the information above, describe the difference in health status between Australians living outside major cities and those living within major cities.

Question 7

(3 MARKS)

- a Outline one difference between the health status of males compared with females. (1 MARK)
- b Explain one biological factor that could contribute to a difference in health status between males and females that you identified in **part a**. (2 MARKS)

Question 8

(4 MARKS)

- a Explain one sociocultural factor that could contribute to a difference in health status between those living outside of major cities compared to those living in major cities. (2 MARKS)
- b Explain one biological factor that could contribute to a difference in health status between Indigenous and non-Indigenous Australians. (2 MARKS)

Question 9

(4 MARKS)

Describe how both high body mass index (BMI) and excess consumption of alcohol contribute to Australia's health status.

Questions from multiple chapters**Question 10**

(5 MARKS)

One in six young Australians live in poverty, one in six Australians struggle to access life's basic resources. Research shows children and young people living at a disadvantage have access to fewer books and learning materials in their home. Access to support and resources is essential for learning and education. Education is essential for good health in life. The cycle of disadvantage affects many Australians. The effects of growing up in poverty extend beyond simply the home environment. For over 1.2 million young Australians, the cycle of disadvantage can negatively affect their school life and mean they are less likely to achieve educational outcomes, and therefore employment outcomes. These people will go on to have children and they will likely pass on their disadvantage to the next generation.

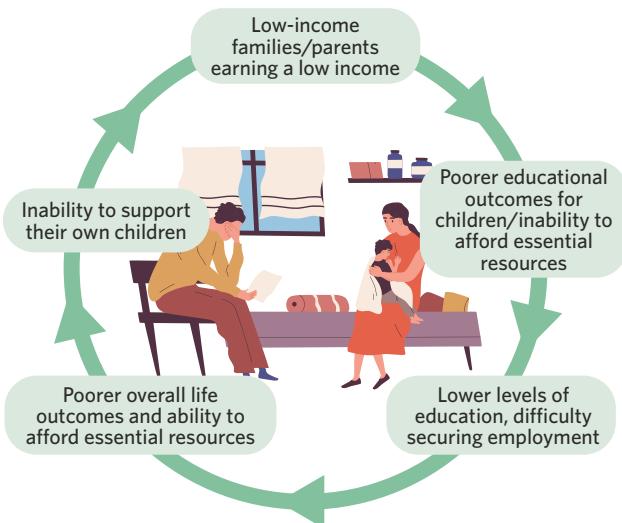


Image: GoodStudio/Shutterstock.com

Source: adapted from The Smith Family, *Poverty in Australia*, <<https://www.thesmithfamily.com.au/poverty-in-australia>>

- a Identify and describe one prerequisite for health that is evident in the information above. (2 MARKS)
- b Suggest how the prerequisite for health identified in **part a** could contribute to the difference between low and high SES groups. (3 MARKS)



UNIT 3 AOS 1 REVIEW

Complete the following 50 mark practice SAC, which tests all content from within Unit 3 AOS 1.

Question 1 (1 MARK)

Describe the health status indicator of morbidity.

Question 2 (2 MARKS)

Outline one way in which smoking contributes to Australia's health status.

Question 3 (3 MARKS)

- a Describe the prerequisite for health 'education'. (1 MARK)
- b Suggest one way in which the prerequisite for health 'education' can impact Australia's health status. (1 MARK)
- c Education is an important prerequisite for health and is also one component of socioeconomic status (SES). Identify an example of a difference in health status between those low SES and high SES Australians. (1 MARK)

Question 4 (1 MARK)

Outline the dynamic nature of health and wellbeing.

Question 5 (3 MARKS)

- a Identify one biological factor that contributes to variations in health status between population groups. (1 MARK)
- b Explain how your identified factor in **part a** could contribute to differences in burden of disease between male and female Australians. (2 MARKS)

Question 6 (6 MARKS)

Female genital mutilation (FGM) is a traditional practice in some countries which involves injury to or removal of part of or all of external female genitalia. This practice has no health benefits, is usually performed without consent, and causes harm. As such, FGM has been described as a breach of human rights due to violating a person's right to health, dignity, and freedom from torture. At the time of writing, more than 200 million females have experienced FGM across the world. FGM interferes with the natural functioning of female bodies and can lead to many negative health outcomes, such as infections and haemorrhages (excessive bleeding), both of which can lead to death.

Source: adapted from World Health Organisation, *Female genital mutilation*, <https://www.who.int/health-topics/female-genital-mutilation#tab=tab_3>

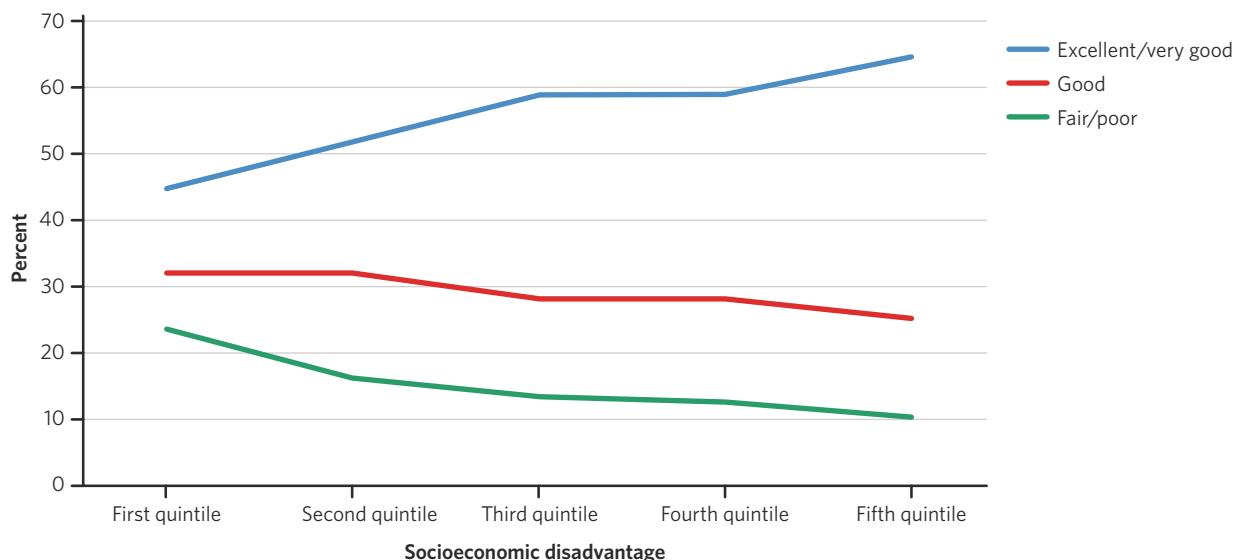
- a Explain how female genital mutilation (FGM) could negatively impact physical health and wellbeing. (2 MARKS)
- b Outline how FGM can negatively impact health status. (2 MARKS)
- c According to the World Health Organisation, social justice is a prerequisite for health. Explain why social justice must be made available to females experiencing FGM to improve health and wellbeing. (2 MARKS)

Adapted from VCAA 2020 exam Q12a

Question 7 (6 MARKS)

Socioeconomic status is a measure used to determine the social status of an individual using the factors of income, occupation, and education. Lower levels of socioeconomic status can also be called socioeconomic disadvantage, with higher levels of socioeconomic status being called socioeconomic advantage. Levels of socioeconomic disadvantage can be presented in the form of quintiles, with each quintile representing 20% of Australia's population. The first quintile reflects the greatest level of socioeconomic disadvantage, and the fifth quintile reflects the lowest level of socioeconomic disadvantage.

Self-assessed health status by socioeconomic disadvantage for Australians aged 15 years and over, in 2017-2018



Source: adapted from Australian Bureau of Statistics, *Self-assessed health status*, <<https://www.abs.gov.au/statistics/health/health-conditions-and-risks/self-assessed-health-status/2017-18#data-download>>

- a Describe self-assessed health status. (1 MARK)
- b Using data, compare the self-assessed health status of those with the greatest level of socioeconomic disadvantage to those with the lowest level of socioeconomic disadvantage. (2 MARKS)
- c Referring to a factor that contributes to differences in health status between low socioeconomic status (SES) and high SES Australians, suggest why low SES Australians are more likely to have fair or poor self-assessed health status compared to high SES Australians. (3 MARKS)

Question 8 (3 MARKS)

Using the example of an underconsumption of dairy, describe an interrelationship between the dimensions of health and wellbeing.

Adapted from VCAA 2019 exam Q3b

Question 9 (2 MARKS)

Explain a benefit of optimal health and wellbeing as a resource nationally.

Question 10 (3 MARKS)

- a Identify a difference in health status between Indigenous and non-Indigenous Australians. (1 MARK)
- b Explain how an environmental factor may contribute to the variation in health status between Indigenous and non-Indigenous Australians identified in part a. (2 MARKS)

Question 11 (2 MARKS)

Explain the prerequisite for health 'sustainable resources' and outline how it can promote health and wellbeing.

Question 12 (2 MARKS)

Micah is a year 12 student. Since term three started, she has been very anxious about the end of year exams and is scared that she will have no future if she does not get a high ATAR. Due to this, she has started isolating herself from her friends and family and has been spending all of her time studying.

Justify whether Micah is displaying optimal social health and wellbeing.

Question 13 (2 MARKS)

Describe the mental dimension of health and wellbeing.

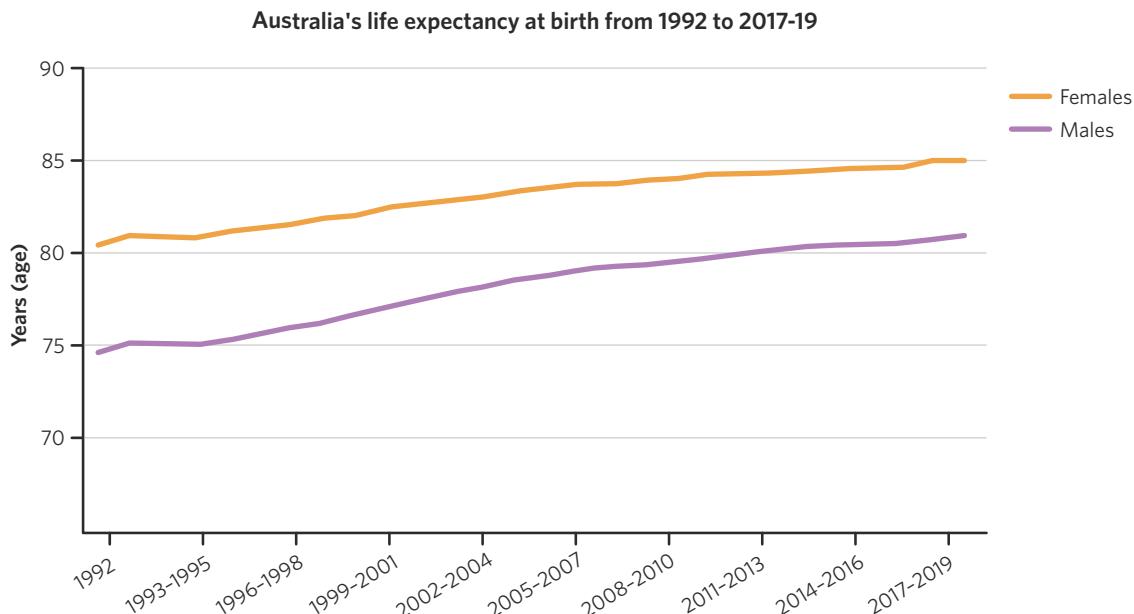


Question 14 (1 MARK)

Outline a difference in health status between Australians living outside of major cities and Australians living within major cities.

Question 15 (1 MARK)

Outline an individual benefit of optimal health and wellbeing as a resource.

Question 16 (2 MARKS)

Source: adapted from Australian Bureau of Statistics, *Life tables, 2017-2019*, <<https://www.abs.gov.au/statistics/people/population/life-tables/latest-release>>

Identify a trend which is evident in the graph.

Question 17 (10 MARKS)

Consider the following three sources relating to health behaviours of Australians and their impact on health outcomes.

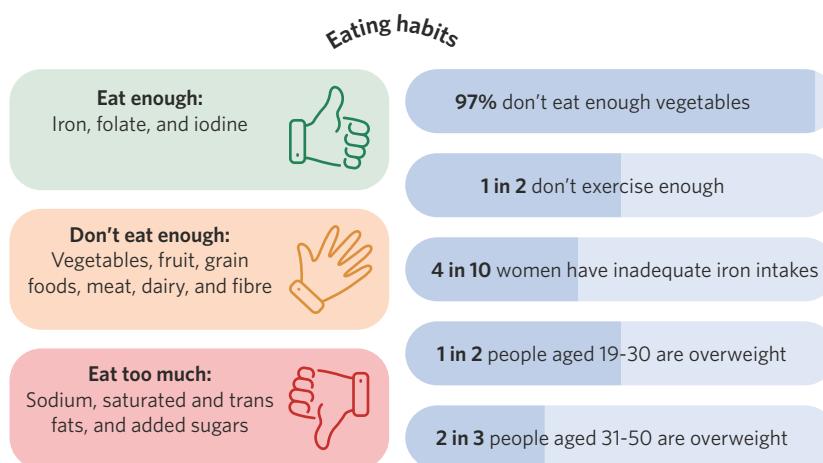
Source 1**Dietary habits of Australian adults aged 19 to 50**

Image: Blan-k/Shutterstock.com

Source: adapted from Australian Institute of Health and Welfare, *Nutrition across the life stages*, <<https://www.aihw.gov.au/getmedia/5fc6d6be-dcec-458e-af63-2e6c90589bd8/Nutrition-across-the-lifestages-in-brief-aihw-phe-227.pdf.aspx>>

Source 2

Differences in health status and health behaviours between Australians living in major cities and outer regional/remote areas

	Major cities	Outer regional/remote areas
Vegetables (serves/day)	2.7	2.6
Fruit (serves/day)	1.6	1.4
Physical activity (%)	50	40
Overweight and obesity (%)	53	61

Source: adapted from Australian Institute of Health and Welfare, *Nutrition across the life stages*, <<https://www.aihw.gov.au/getmedia/5fc6d6be-dcec-458e-af63-2e6c90589bd8/Nutrition-across-the-lifestages-in-brief-aihw-phe-227.pdf.aspx>>

Source 3

Obesity can impact health and wellbeing as well as health status. Due to obesity increasing the likelihood of other conditions arising, such as type 2 diabetes and cardiovascular disease, it is clear that obesity negatively influences physical health and wellbeing. In many countries, there is also a stigma associated with obesity. This has been found to contribute to lower self-esteem and confidence, and in some cases mental health disorders. This stigma can also lead to obese individuals experiencing discrimination or ridicule.

Source: adapted from Djalalinia, S et al., *Health impacts of obesity*, Pakistan Journal of Medical Sciences, <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4386197/>>

Use information from all three sources and your understanding to discuss:

- the contributions of high body mass index (BMI) and dietary risks on Australia's health status.
- differences in obesity between Australians in major cities and outer regional or remote areas.
- the influence of obesity on health and wellbeing, including interrelationships between the dimensions.



UNIT 3

AOS2

Promoting health and wellbeing

This area of study looks at different approaches to public health over time, with an emphasis on changes and strategies that have succeeded in improving health and wellbeing. Students examine the progression of public health in Australia since 1900, noting global changes and influences such as the Ottawa Charter for Health Promotion and the general transition of focus from the health and wellbeing of individuals to that of populations. Students investigate the Australian health system and its role in promoting health and wellbeing. They conduct a detailed study on a successful health promotion campaign or program, and inquire into priorities for health improvements in Australia.

Outcome 2

On completion of this unit the student should be able to explain changes to public health approaches, analyse improvements in population health over time and evaluate health promotion strategies.

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CHAPTER**3**

Old and new public health

3A Australia's health status**3B Old public health and the biomedical approach****3C New public health and the social model of health****3D Ottawa Charter for Health Promotion****3E Comparing the biomedical and social models of health****Key knowledge**

- improvements in Australia's health status since 1900 and reasons for these improvements, focusing on policy and practice relating to:
 - 'old' public health
 - the biomedical approach to health and improvements in medical technology
 - development of 'new' public health including the social model of health and Ottawa Charter for Health Promotion
 - the relationship between biomedical and social models of health

3A AUSTRALIA'S HEALTH STATUS

Australian citizens born at the beginning of the 20th century were only expected to live slightly longer than 50 years. Australian citizens born now are instead expected to live for around 80 years or longer. In this lesson, you will be provided with a broad overview of the improvements in Australia's health status since 1900, focusing on life expectancy, mortality rates, and the five broad categories of disease that have historically had the greatest impact on Australia's health status. This overview will inform the following lessons in this chapter, which provide examples of policy and practice that explain why Australia's health status has improved since 1900.

3A Australia's health status	3B Old public health and the biomedical approach	3C New public health and the social model of health	3D Ottawa Charter for Health Promotion	3E Comparing the biomedical and social models of health
Study design dot point				
<ul style="list-style-type: none"> improvements in Australia's health status since 1900 and reasons for these improvements, focusing on policy and practice relating to: <ul style="list-style-type: none"> 'old' public health the biomedical approach to health and improvements in medical technology development of 'new' public health including the social model of health and Ottawa Charter for Health Promotion the relationship between biomedical and social models of health 				
Key knowledge units				
Changes to Australia's health status since 1900				3.2.1.1
Life expectancy				3.2.1.1.1
Mortality rates				3.2.1.1.2
Five broad categories of disease				3.2.1.1.3



Changes to Australia's health status since 1900 3.2.1.1

OVERVIEW

Australia's health status has improved significantly since 1900. Let's now examine Australia's increased life expectancy and decreased mortality rates from 1900 to the present day in order to demonstrate that Australia's health status has improved significantly since the beginning of the 20th century.

THEORY DETAILS

There are many factors that can contribute to a change in health status over time.

Some general changes in Australia's health status since 1900 include:

- increased life expectancy.
- increased health-adjusted life expectancy (HALE).
- decreased mortality rates (including maternal, infant, and under 5 mortality rates).
- decreased morbidity rates.
- improved self-assessed health status.

In this lesson, we will focus on the health status indicators of life expectancy and mortality to illustrate how Australia's health status has changed over time, as well as mortality rates for five broad categories of disease.

Life expectancy 3.2.1.1

As demonstrated by figure 1, Australia's **life expectancy** has increased from 1900 to the present day.

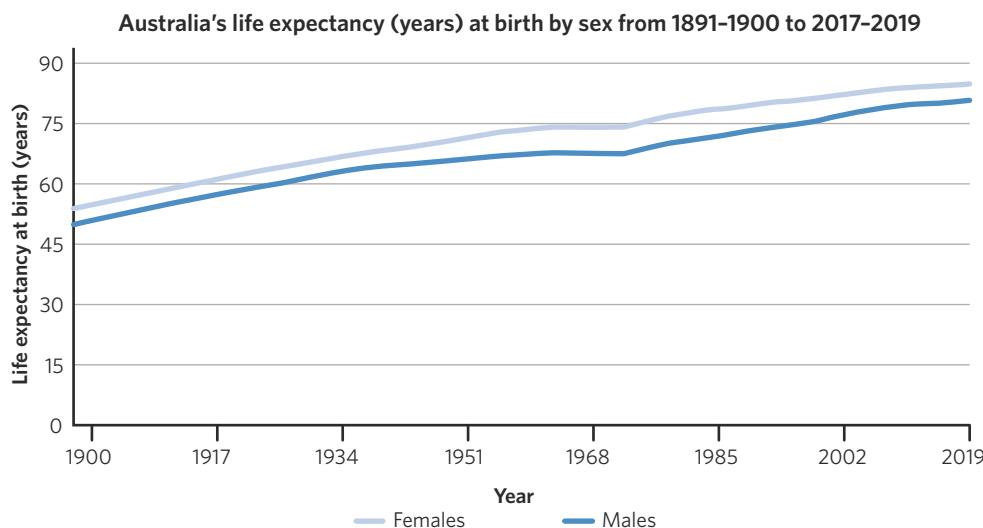


Figure 1 Australia's life expectancy has been steadily increasing since 1900 (Australian Bureau of Statistics [ABS], 2021)

Male and female life expectancy at birth was 51.1 and 54.8 years respectively when life expectancy records began in 1891–1900. Life expectancy has consistently increased from this point, as represented by figure 1. In 2019, male and female life expectancy was 80.9 and 85.0 years respectively. This increase in life expectancy has been linear, meaning that it has consistently increased and takes the form of an essentially straight and upwards line when represented on a graph. Therefore, the trend in Australia's male and female life expectancy is that it has increased from 51.1 and 54.8 years respectively in 1891–1900 to 80.9 and 85.0 years respectively in 2019. It is also important to note here that females have consistently had a longer life expectancy than males in Australia.

Mortality rates 3.2.1.2

As demonstrated by figure 2, Australia's **mortality rates** have decreased from 1900 to the present day.

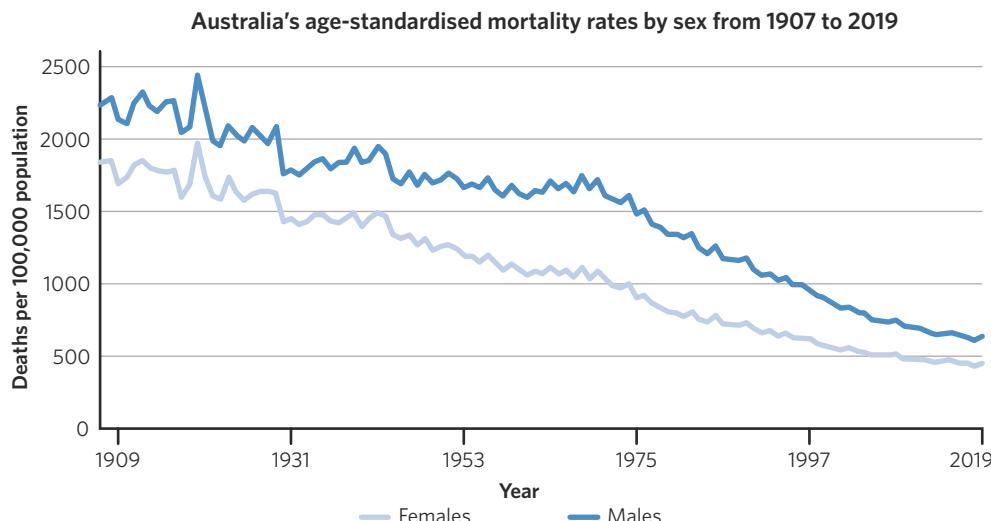


Figure 2 Australia's mortality rates have decreased since 1900 (ABS, 2021)

KEY DEFINITIONS

Life expectancy measures the number of years a person is expected to live, on the basis that current health conditions do not change

ADDITIONAL TERMS

Mortality rate refers to the number of deaths in a population in a certain period, usually expressed per 1000 or 100,000 live births in a twelve-month period



Male and female mortality rates were 2234.2 and 1844.4 per 100,000 population respectively when mortality rate records began being kept in 1907. Mortality rates have consistently decreased from this point, as represented by figure 2. In 2019, male and female mortality rates were 627.2 and 441.1 per 100,000 population respectively. Australia's mortality rates have been more dynamic than life expectancy; mortality rates have not consistently decreased every year, but have increased in brief periods before again decreasing over time. The overall trend for mortality rates in Australia is nonetheless that they have decreased from 1909 to 2019. In summary, mortality rates have decreased in Australia for men and women from 2234.2 and 1844.4 per 100,000 population respectively in 1907 to 627.2 and 441.1 per 100,000 population respectively in 2019.

Five broad categories of disease 3.2.1.1.3

There are five broad categories of disease that have had the greatest impact on Australia's health status historically. The prevalence of these diseases informs the changes in life expectancy and mortality rates in Australia over time that were previously discussed. These categories are circulatory diseases, cancers, respiratory diseases, infectious diseases, and injury and poisoning.

Circulatory diseases

Circulatory diseases are a group of diseases that directly impact the heart or blood vessels. They are also known as cardiovascular diseases. This includes heart attacks and strokes. Figure 3 presents Australia's mortality rates for circulatory diseases from 1907 to 2003. Circulatory diseases were responsible for higher mortality rates than any of the other broad categories of disease throughout the whole 20th century (Australian Institute of Health and Welfare [AIHW], 2005).

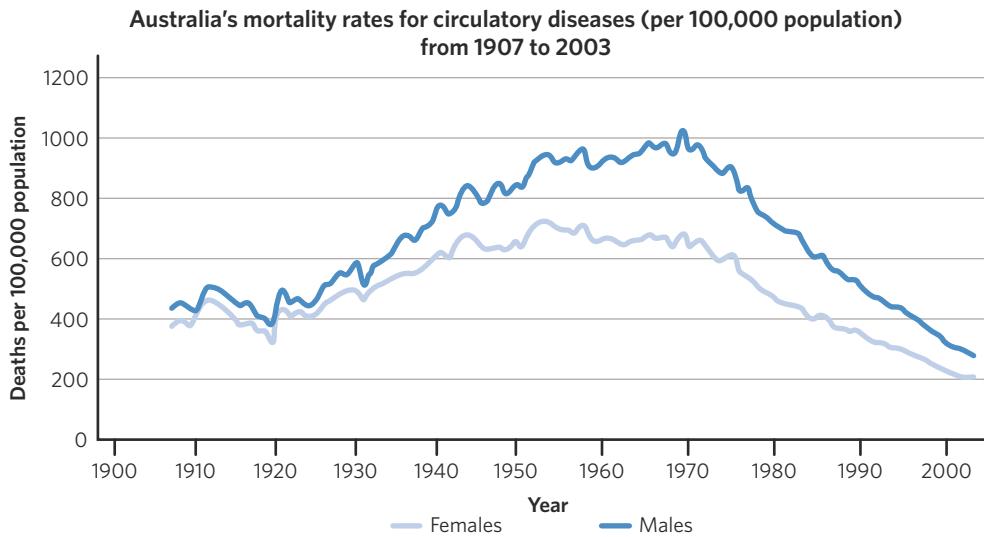


Figure 3 Australia's mortality rates for circulatory diseases have changed significantly since 1907 (AIHW, 2005)

As demonstrated by figure 3, male and female mortality rates for circulatory diseases were 437 and 379 deaths per 100,000 population respectively in 1907. Australia's mortality rates for circulatory diseases nonetheless increased until around the middle of the century. Male mortality rates for circulatory diseases reached their highest point in 1968 at 1,020 deaths per 100,000 population. By contrast, female mortality rates for circulatory diseases reached their highest point in 1952 at 718 per 100,000 population. Both male and female mortality rates for circulatory diseases decreased from these points onwards, ultimately reaching 319 and 224 deaths per 100,000 population respectively in 2000.

Respiratory diseases

Respiratory diseases are a group of diseases that damage lung function and impair breathing. Examples of respiratory diseases include pneumonia, influenza, asthma, and chronic obstructive pulmonary disease (AIHW, 2005). Figure 4 presents Australia's mortality rates for respiratory diseases from 1907-2003.

Lesson link

There are several different reasons why Australia's health status has changed so significantly over time. Major factors that have improved health status in Australia are the development of the 'old' and 'new' models of public health. You will begin learning about this in the next lesson, which is lesson 3B: *Old public health and the biomedical approach*.

ADDITIONAL TERMS

Circulatory diseases are a group of diseases that directly impact the heart or blood vessels

ADDITIONAL TERMS

Respiratory diseases are a group of diseases that damage lung function and impair breathing

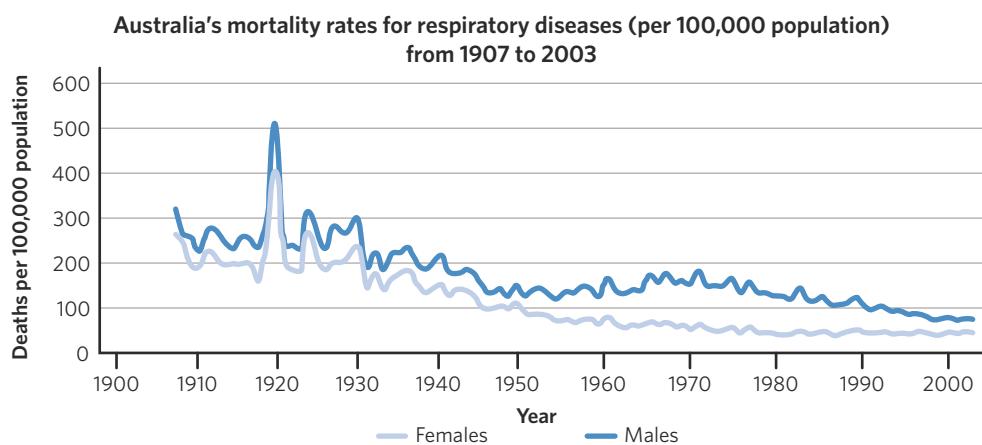


Figure 4 Mortality rates for respiratory diseases have decreased since 1907 (AIHW, 2005)

As demonstrated by figure 4, mortality rates for respiratory diseases decreased overall throughout the century, although with some brief periods of increase along the way.

For example, the acute increase in mortality rates that is evident from 1918-1919 occurred due to the Spanish Flu. The Spanish Flu was the outbreak of influenza after the first World War that was most widely reported in Spain (despite not originating there) that killed more than 50,000,000 people globally (National Museum Australia, 2021). Mortality rates for respiratory diseases were 320 and 264 per 100,000 population in 1907 for males and females respectively. This decreased to 81 and 44 deaths per 100,000 population in 2000.

Cancers

Cancer is a disease caused by an uncontrolled division of abnormal cells in a part of the body, forming a malignant growth or tumour. There are several specific types of cancer, including breast cancer, bladder cancer, and lung cancer. Figure 5 presents Australia's mortality rates for cancers from 1907 to 2003.

ADDITIONAL TERMS

Cancer is a disease caused by an uncontrolled division of abnormal cells in a part of the body, forming a malignant growth or tumour

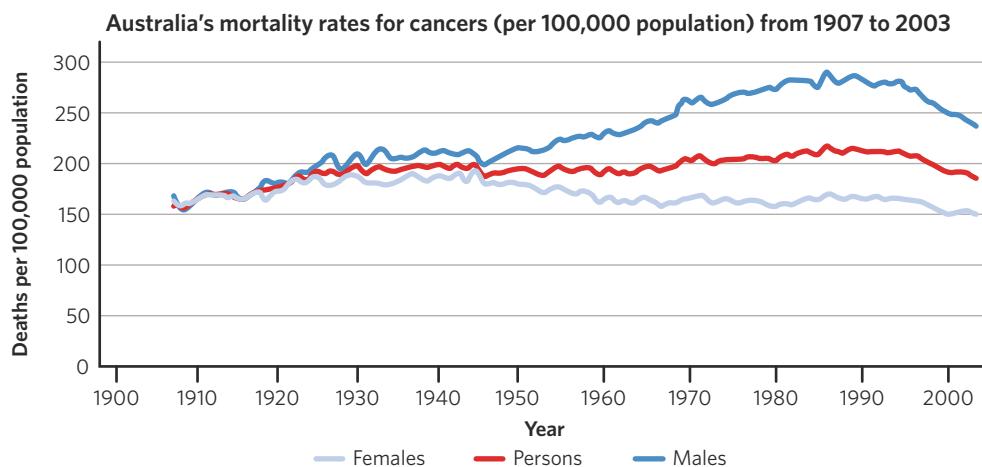


Figure 5 Australia's mortality rates for cancers have moderately increased since 1907 (AIHW, 2005)

As demonstrated by figure 5, mortality rates for cancers were approximately 155-165 deaths per 100,000 population in 1907. This was lower than both circulatory and respiratory diseases. Male and female cancer death rates began to separate in the 1920s, which illustrates the beginning of a cigarette smoking culture for males at the point when cigarettes first became commercially accessible in Australia. Male death rates for cancer peaked in 1980 at approximately 290 deaths per 100,000 population. Male mortality rates for cancers were higher at the end of the century than they were at the beginning. Despite this peak in male mortality rates for cancers caused by smoking, they decreased throughout the remainder of the century.

Female mortality rates for cancers took a different course throughout the duration of the century. Female mortality rates for cancers increased during the period of 1907-1940 from 154 to 181 deaths per 100,000 population respectively. From here, female mortality rates for cancers remained relatively constant, ultimately decreasing to 148 deaths per 100,000 population in 2000.



Injury and poisoning

Deaths caused by injury and poisoning refer to deaths that have external causes. This means that these deaths do not relate to a health complication that arises within the individual, but rather some kind of complication with the individual's relationship with the external environment. Examples of deaths caused by injury and poisoning include motor vehicle accidents, suicide, assault, poisoning, and complications that occur during medical and surgical care. Figure 6 presents Australia's mortality rates for injury and poisoning from 1907 to 2003.

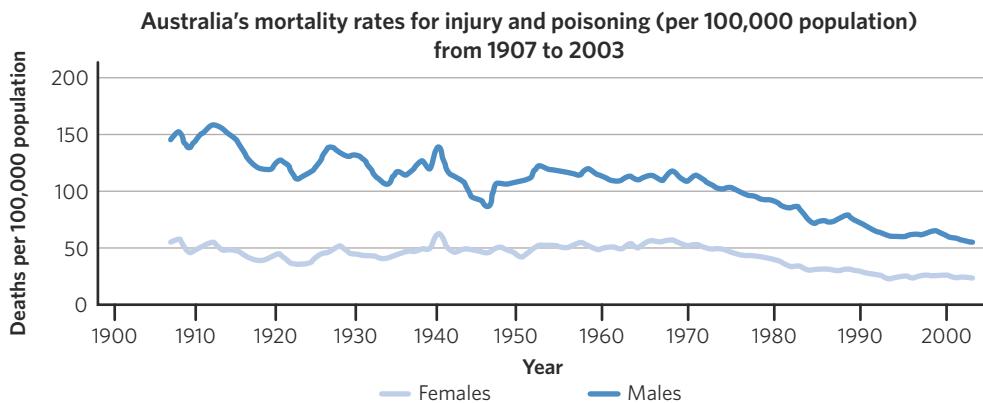


Figure 6 Australia's mortality rates for injury and poisoning have decreased since 1907 (AIHW, 2005)

As demonstrated by figure 6, mortality rates for injury and poisoning were 147 for males and 55 for females per 100,000 population in 1907. The most significant causes of death from injury and poisoning were motor vehicle accidents and suicide. For example, male suicide rates were mostly around 4 times higher than female suicide rates throughout the century. This helps to explain why male mortality rates for injury and poisoning were so much higher than female mortality rates for injury and poisoning throughout the entire duration of the century. By 2000, mortality rates for injury and poisoning had fallen to 61 for males and 55 for females per 100,000 population.

Infectious diseases

Infectious diseases are transmitted from the environment, including through air, food, water, and other infected organisms. Figure 7 presents Australia's mortality rates for infectious diseases from 1907 to 2003.

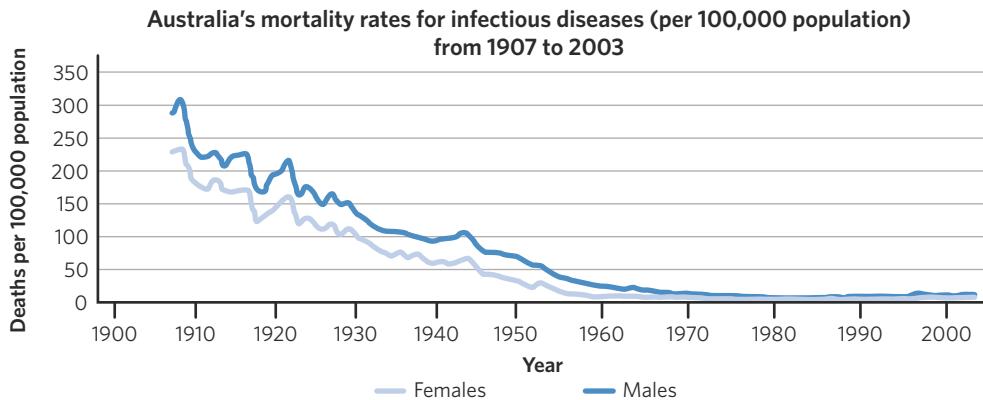


Figure 7 Australia's mortality rates for infectious diseases have significantly decreased since 1907 (AIHW, 2005)

As demonstrated by figure 7, mortality rates for infectious diseases were 283 and 230 per 100,000 population in 1907 for males and females respectively. This represented around 13% of all deaths at that time. Mortality rates for infectious diseases decreased from the beginning of the century to the 1980s. In particular, mortality rates for diarrhoea and tuberculosis decreased during this time. This resulted in around 6 and 4 deaths per 100,000 population for infectious diseases during the 1980s for males and females respectively. However, mortality rates for infectious diseases increased slightly from this point onwards, which was caused by a slight increase in mortality rates for HIV/AIDS, septicaemia, and hepatitis C during this period. In 2000, mortality rates for infectious diseases had risen slightly to 11 and 7 per 100,000 population for males and females respectively.

ADDITIONAL TERMS

Deaths caused by injury and poisoning refer to deaths that have external causes

ADDITIONAL TERMS

Infectious diseases are transmitted from the environment, including through air, food, water, and other infected organisms



Want to know more?

It's important to remember that medical technology and knowledge in 1900 wasn't the same as it is today. In the past, there was less of an understanding about certain diseases, so in certain instances, this could have resulted in fewer people being diagnosed with a particular disease. This could mean that people died as a result of a disease that they were not diagnosed with. That being said, the available data about mortality rates for the five broad categories of disease provides us with a significant insight into Australia's health status at the beginning of the 20th century and helps to demonstrate how Australia's health status has changed over time.



Useful tip

You are not expected to remember any specific data points from this lesson. Questions that ask about how Australia's health status has changed over time are likely to include data that you can use in your response. However, it is important to understand the general trends that you have been introduced to in this lesson.

ACTIVITY 1

Can you think of any other categories of disease that could have impacted Australia's health status over the 20th century? If so, which other categories of disease could have had the greatest impact on Australia's health status over time? Discuss this with other people in your class.

Theory summary

In this lesson, you learnt that Australia's health status has improved since 1900. This was illustrated through Australia's increased life expectancy and decreased mortality rates since 1900. You were also provided with data relating to mortality rates for the five broad categories of disease that have informed these changes to Australia's health status over time: circulatory diseases, cancers, respiratory diseases, infectious diseases, and injury and poisoning.

3A QUESTIONS

Theory-review questions

Question 1

Australia's health status has improved since 1900.

- A True.
- B False.

Question 2

What are the five broad categories of disease that have most directly impacted Australia's health status historically?
(Select all that apply)

- I Injury and poisoning.
- II Lung cancer.
- III Infectious diseases.
- IV Heart attacks.
- V Respiratory diseases.
- VI Cancers.
- VII Circulatory diseases.



Question 3

Which of the following best fills in the blank?

- A increased
- B decreased

Australia's life expectancy has _____ since 1900.

Question 4

Which of the following best fills in the blank?

- A increased
- B decreased

Australia's mortality rates have _____ since 1900.

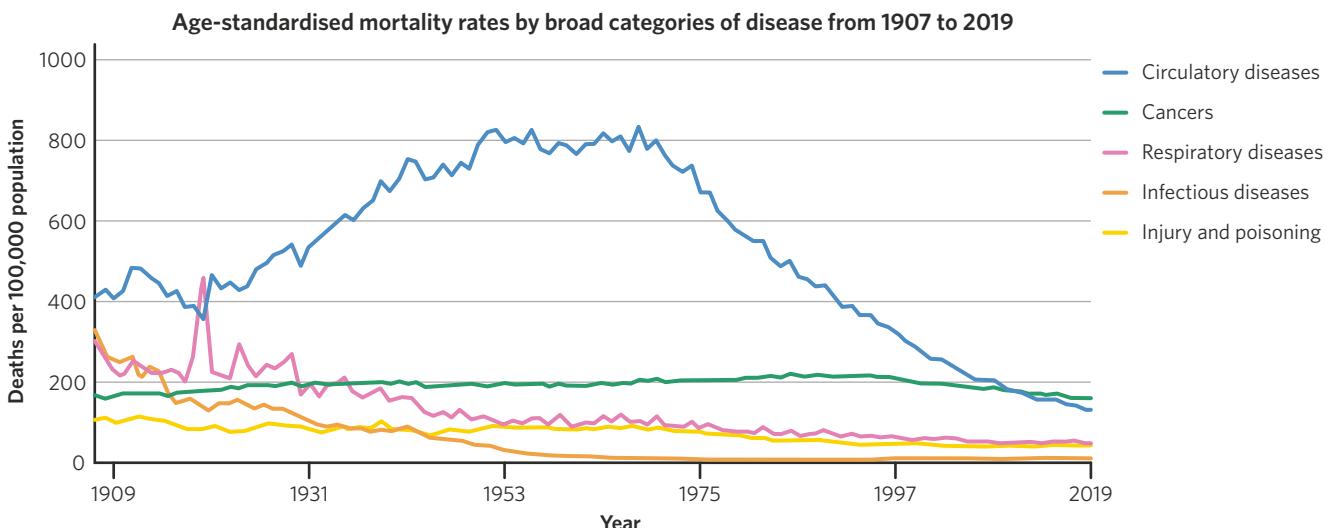
Question 5

Have females or males had a higher life expectancy since 1900?

- A Females.
- B Males.

Skills**Data analysis**

Use the following information to answer Questions 6–8.



Source: adapted from Australian Bureau of Statistics, Deaths in Australia, <<https://www.aihw.gov.au/reports/life-expectancy-death/deaths/contents/trends-in-deaths>>

Question 6

Which broad category of disease was responsible for the highest mortality rates in 1907?

- A Circulatory diseases.
- B Infectious diseases.

Question 7

Which broad category of disease was responsible for the highest mortality rates in 1975?

- A Circulatory diseases.
- B Cancers.

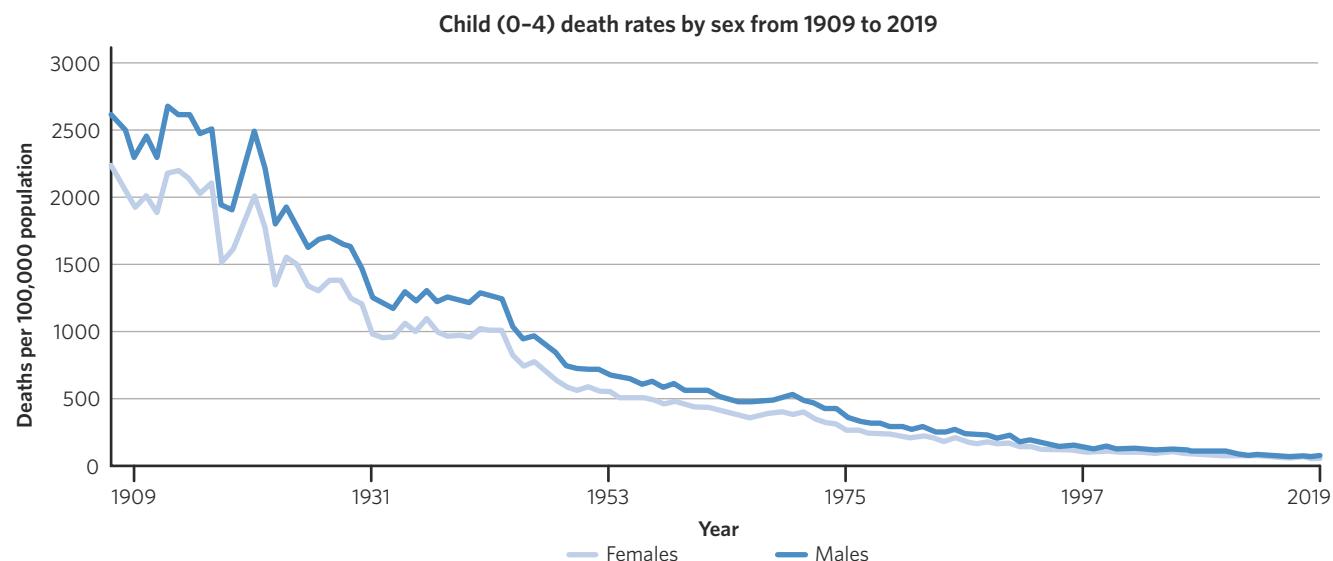
Question 8

Which broad category of disease was responsible for the highest mortality rates in 2019?

- A Respiratory diseases.
- B Cancers.

Exam-style questions**Question 9** (5 MARKS)

Consider the following figure that presents deaths for males and females across the lifespan.

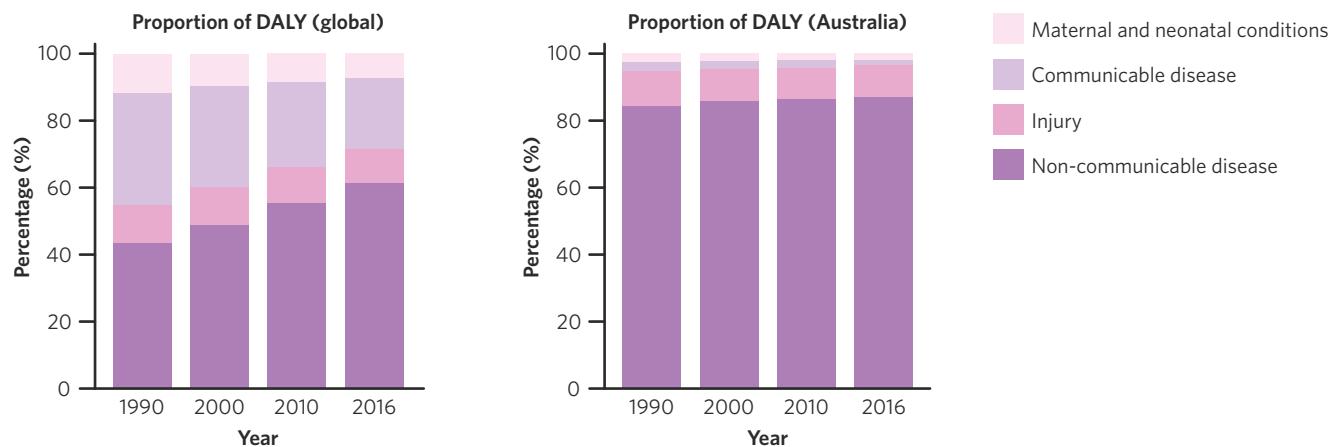


Source: adapted from Australian Bureau of Statistics, *Deaths in Australia*, <<https://www.aihw.gov.au/reports/life-expectancy-death/deaths-in-australia/contents/age-at-death>>

- a Identify the health status indicator that is being measured in this graph. (1 MARK)
- b With reference to data, describe a trend for male child death rates from 1909-1953. (2 MARKS)
- c With reference to data, describe a trend for female child death rates from 1909-2019. (2 MARKS)

Question 10 (5 MARKS)

Burden of communicable disease, injury, maternal and neonatal conditions, and non-communicable disease, globally and in Australia, 1990, 2000, 2010 and 2016



Source: Australian Institute of Health and Welfare (AIHW), *Australia's Health 2018*, 'Australia's Health' series no. 16, AUS 221, AIHW, Canberra, 2018, p. 95; GBD Collaborative Network 2017, Table S3.3.1.

- a Identify which category of disease contributed to the greatest proportion of DALY globally in 2016. (1 MARK)
- b Using data, outline the greatest contributor to DALY in the graph 'Proportion of DALY (Australia).' (2 MARKS)
- c With reference to data, describe a trend for the proportion of DALY attributed to non-communicable disease globally from 1990-2016. (2 MARKS)



Questions from multiple lessons

Question 11 (6 MARKS)

Indigenous life expectancy (years) compared to non-Indigenous life expectancy (years) by sex from 2005-2007, 2010-2012, and 2015-2017

Indigenous status	Males			Females		
	2005-2007	2010-2012	2015-2017	2005-2007	2010-2012	2015-2017
Indigenous	67.2	69.1	71.6	72.9	73.7	75.6
Non-Indigenous	78.7	79.7	80.2	82.6	83.1	83.4
Difference	11.5	10.6	8.6	9.7	9.5	7.8

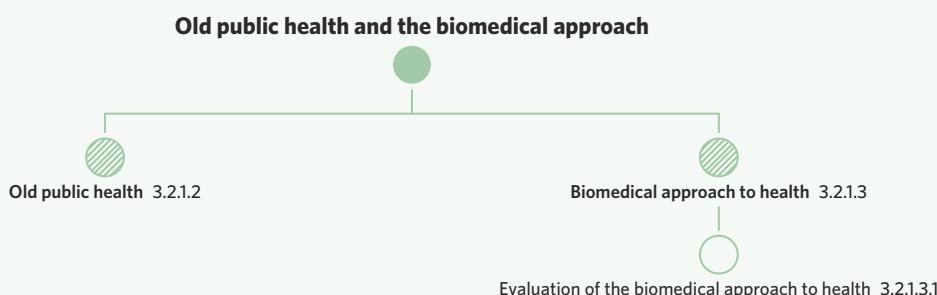
Source: adapted from Australian Bureau of Statistics, *Deaths in Australia*, <<https://www.aihw.gov.au/reports/life-expectancy-death/deaths-in-australia/contents/life-expectancy>>

- a Using data, describe the difference between Indigenous and non-Indigenous male life expectancy from 2005-2007. (2 MARKS)
- b Describe how a sociocultural factor could have contributed to the variations in health status between Indigenous and non-Indigenous Australians identified in part a. (2 MARKS)
- c Explain how variations in mortality rates for one category of disease could lead to a difference between Indigenous and non-Indigenous female life expectancy. (2 MARKS)

3B OLD PUBLIC HEALTH AND THE BIOMEDICAL APPROACH

In the previous lesson, you were introduced to how Australia's health status has changed over time. There are many different historical developments and changes to delivering healthcare that informed these changes in Australia's health status over time. In this lesson, you will learn about the 'old' public health model, which included an emphasis on the biomedical approach to health. This will also involve learning about improvements in medical technology that occurred during this period that revolutionised how healthcare was delivered.

3A Australia's health status	3B Old public health and the biomedical approach	3C New public health and the social model of health	3D Ottawa Charter for Health Promotion	3E Comparing the biomedical and social models of health
Study design dot point				
<ul style="list-style-type: none"> ● improvements in Australia's health status since 1900 and reasons for these improvements, focusing on policy and practice relating to: <ul style="list-style-type: none"> - 'old' public health - the biomedical approach to health and improvements in medical technology - development of 'new' public health including the social model of health and Ottawa Charter for Health Promotion - the relationship between biomedical and social models of health 				
Key knowledge units				
Old public health				3.2.1.2
Biomedical approach to health				3.2.1.3
Evaluation of the biomedical approach to health				3.2.1.3.1



Old public health 3.2.1.2

OVERVIEW

The development of 'old' public health changed the way that healthcare was understood and approached at the beginning of the 20th century. It involved improving the ways in which illness and disease were treated once patients developed symptoms and required medical care.

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- analyse data that show improvements in health over time and draw conclusions about reasons for improvements



THEORY DETAILS

'Old' public health refers to an approach to health that was developed at the beginning of the 20th century that involved improving the safety of the physical environment and developing public health programs to prevent communicable disease. As you learned in the previous lesson, respiratory and infectious diseases were a major public health risk at the beginning of the 20th century in Australia. **Infectious diseases**, such as diarrhoea and tuberculosis, were responsible for 13% of all mortalities in 1907 (Australian Institute of Health and Welfare [AIHW], 2005). Mortality rates for **respiratory diseases**, such as pneumonia and influenza, were particularly high too, causing 320 and 264 deaths per 100,000 population in 1907 for males and females respectively (AIHW, 2005).

Importantly, infectious and respiratory diseases are often highly contagious and can be transmitted in the physical environment. Note, for example, how diarrhoeal disease is spread through poor sanitation, which results in people being exposed to human excrement in their physical environment. Also consider how respiratory diseases, such as influenza, can be communicated to others through direct physical contact or through being exposed to contaminated surfaces. These are the fundamental kinds of health risks that motivated the development of 'old' public health. A need emerged for governments to reform the physical environment and develop medical technology to prevent the spread of illness and disease on a mass scale. Some examples of policies that were developed in Australia as part of the 'old' public health model include:

- improving the quality of housing.
- developing sewage systems to ensure that human waste is disposed of safely.
- enforcing safer working conditions to prevent injuries being sustained within the workplace context.
- ensuring that birthing practices were hygienic to reduce maternal and under 5 mortality rates.
- delivering vaccinations to a significant proportion of the population to reduce the incidence of infectious and respiratory diseases.

This last dot point deserves a closer examination due to its role in preventing mass illness and disease over the course of the 20th century in Australia. There were several mass immunisation programs that were introduced in Australia during the 20th century (Gruszin et al., 2012). Some key examples of vaccines that were developed and administered on a large scale include:

- the diphtheria vaccination that was introduced nationally for children in 1932.
- the tetanus vaccine that was introduced in 1939.
- the whooping cough (pertussis) vaccine that was introduced in 1942.
- the poliomyelitis vaccine that was introduced in 1955.
- the introduction of vaccines for measles, mumps, and rubella during the 1960s.

The impact that each of these vaccines had on reducing Australia's mortality rates for the diseases that they target is illustrated by figure 1.

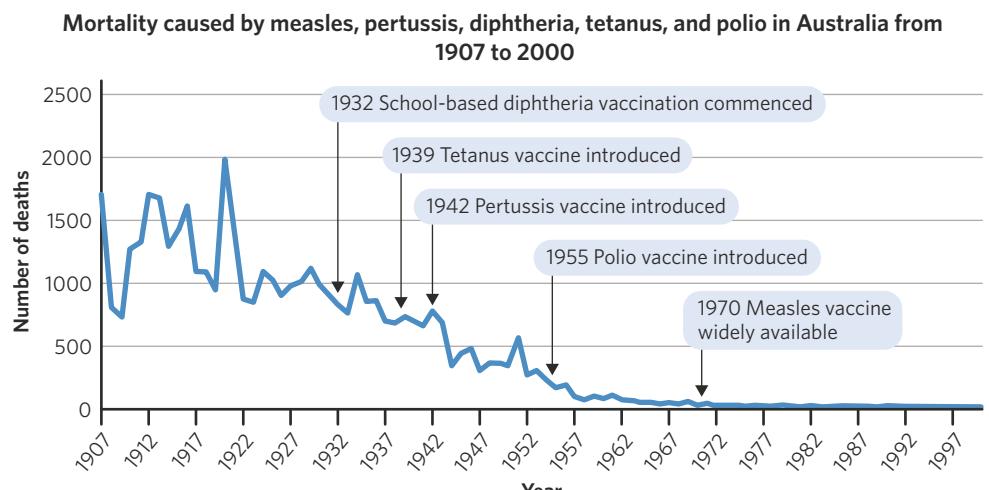


Figure 1 Over the course of the 20th century, mortality rates decreased in Australia partially due to mass immunisation programs (Gruszin et al., 2012)

KEY DEFINITIONS

'Old' public health refers to an approach to health that was developed at the beginning of the 20th century that involved improving the safety of the physical environment and developing public health programs to prevent communicable disease

ADDITIONAL TERMS

Infectious diseases are transmitted from the environment, including through air, food, water, and other infected organisms

Respiratory diseases are a group of diseases that damage lung function and impair breathing

As displayed in figure 1, the introduction of these vaccines in Australia resulted in a 99% decrease in mortality caused by vaccine-preventable diseases. As such, a conclusion can be drawn that these vaccines were effective in saving lives and reducing mortality rates. This is an especially significant development that occurred during 'old' public health when considering that Australia's population grew significantly during the same period of time. Subsequently, Australia's major cities became more densely populated, which can otherwise be a public health threat due to its consequence of increased close contact in the physical environment. Figure 1 illustrates the extent to which mortality rates from measles, pertussis, diphtheria, tetanus, and polio decreased after these vaccines were introduced in Australia.



Image: bbernard/Shutterstock.com

Figure 2 The introduction of vaccines was an important part of the 'old' public health model

Biomedical approach to health 3.2.1.3

OVERVIEW

The biomedical model of health emerged during the period of 'old' public health. It was an immensely important development that led to the discovery of many of the medical technologies that we still use to this day.

THEORY DETAILS

! Useful tip

The 'biomedical approach to health' is the terminology that is used in the study design, although it is also acceptable to use the terminology 'biomedical model of health'.

The **biomedical approach to health (also known as the biomedical model of health)** focuses on the biological causes of illness and disease in order to treat symptoms once they are displayed by a patient, as well as cure diseases. It is important to note that the biomedical approach to health is not historically-bound like the 'old' model of public health. While we have now moved transitions from the 'old' public health model to 'new' public health, which you will learn about in the next lesson, the biomedical approach to health is still used in certain contexts to this day, such as treating illness and disease with medications or surgical practices. It was developed to address some of the key concerns of the 'old' public health model, such as preventing public health crises by using medical technology to treat illness and disease. This was made possible due to improvements in medical technology that occurred as a result of the biomedical approach to health's emphasis on the biological causes of illness and disease.

Improvements in medical technology

Real world example

While you have learned about vaccines already in this lesson as part of the 'old' public health model, the development of vaccines can also be considered as part of the biomedical model of health. This is because contemporary vaccine developments represent improvements in medical technology and work to prevent the biological causes of illness and disease. Consider, for instance, the major contemporary development of COVID-19 vaccines. While different COVID-19 vaccines work in different ways, they all target the biological factors that lead to COVID-19 infection and transmission, such as by ensuring that the body fights the spike proteins of coronavirus that attach to cells and cause disease (Australian Government Department of Health, 2021).

The biomedical approach to health led to the development of many new forms of medical technology. Some key examples of medical technology that were developed in order to practice the biomedical model of health, as well as a description of each, are presented in table 1.

KEY DEFINITIONS

Biomedical approach to health (also known as the biomedical model of health) focuses on the biological causes of illness and disease in order to treat symptoms once they are displayed by a patient, as well as cure diseases

Lesson link

It is worth noting that the biomedical approach to health is not the only approach that is used today. In lesson **3C: New public health and the social model of health** you will learn about the social model of health, which is another approach that instead focuses on preventing illness and disease from occurring at all so that there is no need to treat illness and disease in the first place.



Table 1 Improvements in medical technology that were developed as part of the biomedical model of health

Example of medical development	Description
X-ray	An X-ray is a device that captures images of structures within the body using electromagnetic waves. The X-ray was discovered in 1895 at the University of Wurzburg, Bavaria (Federation University, 2020). X-rays were first tested in Australia at the Ballarat School of Mines as early as 1896. X-rays have been used widely in Australia and globally since this point. They enable images to be taken of structures that are within the body, which can help to detect broken or fractured bones, cancers, and heart and lung conditions.
Antibiotics	Antibiotics are a group of drugs that either kill or limit the growth of bacteria in the body. The first antibiotic discovered was Penicillin in 1928 and its medicinal benefits were articulated in the 1940s by a team of Oxford scientists, including Australian Howard Florey (National Museum Australia, 2021). Penicillin was used to treat a variety of conditions. For example, Penicillin works to kill Streptococcus and Staphylococcus bacteria that infect cuts. In the most extreme cases, these infections can lead to death. Penicillin can also be used to treat typhoid, strep throat, venereal disease, and pneumonia. The development of antibiotics can therefore also be considered as an improvement to medical technology that prevents many deaths to this day.
Magnetic resonance imaging (MRI)	Magnetic resonance imaging (MRI) is a neuroimaging technique that uses magnetic and radio fields to take two and three-dimensional images of the body. The MRI was added to Australia's Medicare Benefit Schedule in 1998 (Community Affairs References Committee, 2018). There were only 38 MRI machines operating in Australia at this time. MRI enables doctors to detect and respond to brain injuries, neurodegenerative diseases, or any kind of sinister growth. This ensures the early detection of disease and can ensure that a patient receives the medication or surgery that they require.

ACTIVITY 1

Table 1 presents several examples of improvements in medical technology that occurred as part of the biomedical model of health. Can you think of any other examples? Choose one other example of an improvement in medical technology and answer the following questions in your notebook:

- When was this improvement in medical technology developed and implemented?
- How can this improvement in medical technology be used to treat illness and disease?

Evaluation of the biomedical approach to health 3.2.1.3.1

Despite having contributed significantly to Australia's improved health status during the 20th century, the biomedical model of health also has several disadvantages.

Some advantages and disadvantages of the biomedical approach to health are outlined in table 2.

Table 2 Some advantages and disadvantages of the biomedical approach to health

Advantages	Disadvantages
<ul style="list-style-type: none"> • The biomedical model of health accounts for people who have already developed an illness or disease. Some illnesses and diseases cannot be prevented through health promotion or behaviour change, so the biomedical approach to health can be used to treat and sometimes cure these illnesses and diseases once they inevitably occur in the population. • The biomedical model of health can reduce pain for people living with chronic health conditions. Even in the case that an illness or disease cannot be cured, uncomfortable symptoms can often be managed through using the biomedical model of health. 	<ul style="list-style-type: none"> • The biomedical model of health can be expensive. The frequent use of medication and medical technology to treat illness and disease once it has occurred can be expensive for the individual requiring treatment. The biomedical model of health also requires medical practitioners to deliver health services, such as surgeries, which can represent a significant cost to the economy. • The biomedical model of health can encourage a waste of healthcare resources, considering that the treatment of many diseases, such as obesity and cardiovascular disease, could often have been prevented through health promotion.

cont'd

ADDITIONAL TERMS

X-ray is a device that captures images of structures within the body using electromagnetic waves

Antibiotics are a group of drugs that either kill or limit the growth of bacteria in the body

Magnetic resonance imaging (MRI) is a neuroimaging technique that uses magnetic and radio fields to take two and three-dimensional images of the body

Study design key skills dot point

- analyse the strengths and limitations of biomedical and social models of health in bringing about improvements in health status

Lesson link

You will learn more about how the government can afford to fund healthcare services, such as the expensive healthcare services of the biomedical approach to health, in lesson **4B: Australia's health system: Part 2**.

Table 2 Continued

Advantages	Disadvantages
<ul style="list-style-type: none"> Focus on the biomedical model of health can lead to the development of new medical technologies. Research and development for the treatment of a particular illness or disease can result in new medication or technology being discovered. 	<ul style="list-style-type: none"> The biomedical model of health cannot be used to treat certain diseases. This is because some diseases, such as cancers, may not be able to undergo medical treatment once they develop and progress past a certain point. The biomedical model of health may not encourage people to develop positive health behaviours. This means that people can be treated for a particular illness or disease without necessarily learning the behaviours that are required to prevent developing the same illness or disease in the future.

Theory summary

In this lesson, you learnt about the development of ‘old’ public health. This included learning about the biomedical approach to health, which resulted in the development of new medical technologies to treat and cure illness and disease in the population. You also evaluated the biomedical approach to health in this lesson and should now have an understanding of some of its advantages and disadvantages. Figure 3 presents a summary of this lesson.

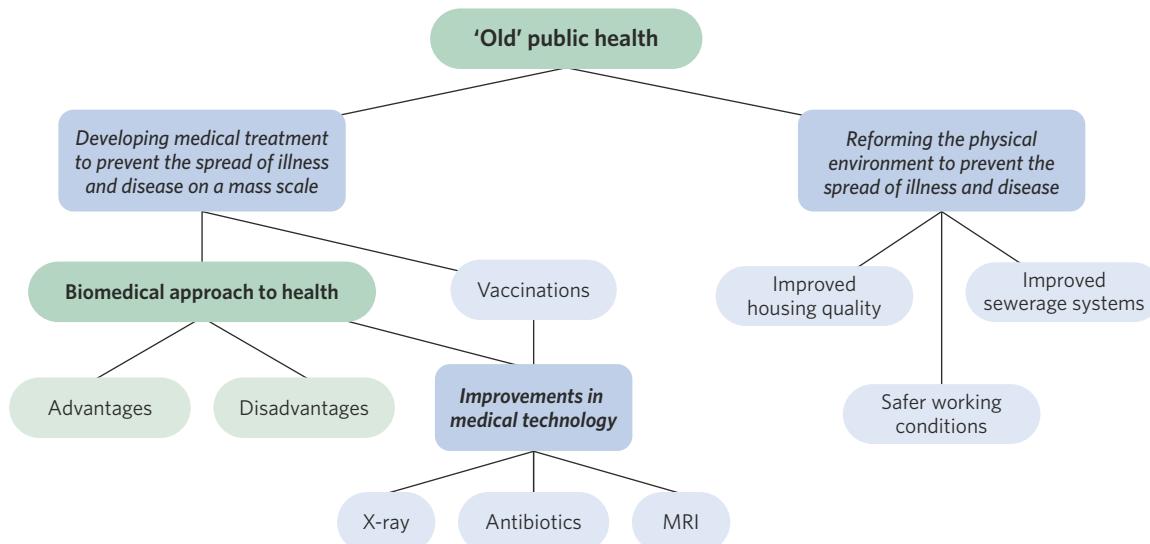


Figure 3 Summary diagram of lesson 3B

3B QUESTIONS

Theory-review questions

Question 1

The ‘old’ model of public health focuses on

- A treating illness and disease.
- B preventing illness and disease.

Question 2

What does the biomedical model of public health involve? (Select all that apply)

- I Developing medical technology to effectively treat illness and disease.
- II Developing health promotion campaigns.
- III Treating individual patients with illness or disease.
- IV Attempting to change the behaviour of whole population groups.



Question 3

A disadvantage of the biomedical model of health is that it does not prevent illness and disease from occurring in the first place.

- A** True.
- B** False.

Question 4

Which of the following best fills in the blank?

- A** The biomedical approach to health
- B** 'Old' public health

_____ refers to a historical approach to health that occurred during the early-mid 20th century.

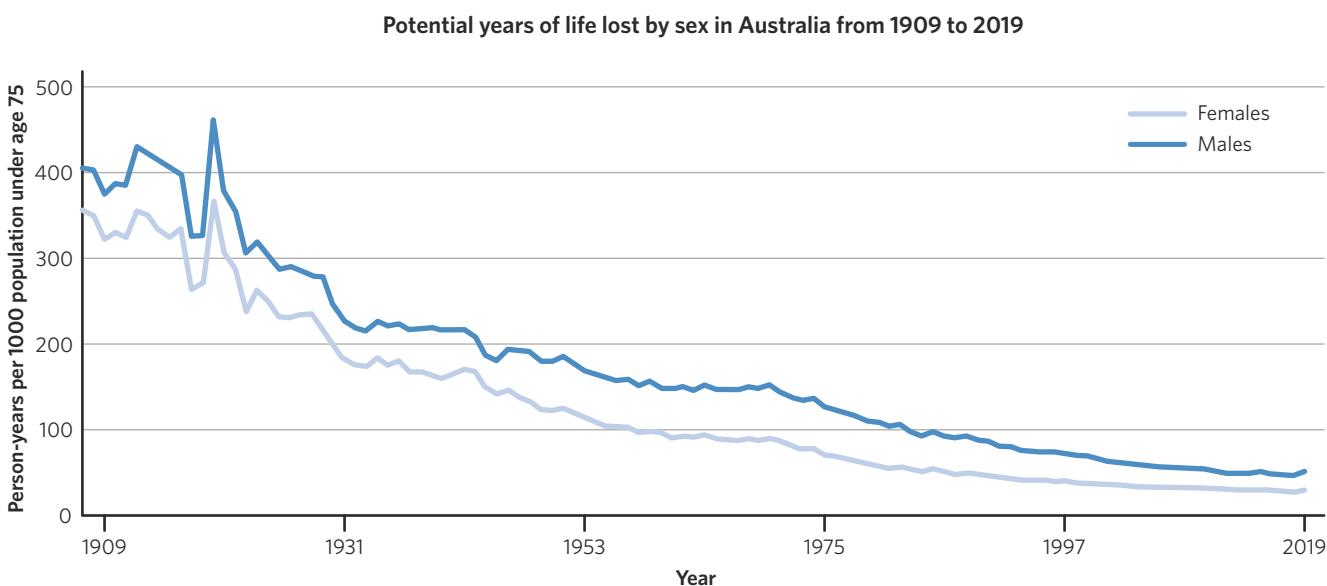
Question 5

The biomedical model of health is the only approach to healthcare that is used today.

- A** True.
- B** False.

Skills**Data analysis**

Use the following information to answer Questions 6–8.



Source: adapted from the Australian Bureau of Statistics, *Deaths in Australia*, <<https://www.aihw.gov.au/reports/life-expectancy-death/deaths-in-australia/contents/age-at-death>>

Question 6

Which population group experienced greater potential years of life lost from 1909 to 2019?

- A** Males.
- B** Females.

Question 7

From 1909 to 2019, potential years of life lost for males and females

- A** increased.
- B** decreased.

Question 8

Approximately how many potential years of life were lost per 1000 population under age 75 for females in 1909?

- A 400.
- B 320.

Exam-style questions**Question 9** (2 MARKS)

Using an example, outline **one** major characteristic of the biomedical model of health.

Adapted from VCAA 2010 exam Q7

Question 10 (2 MARKS)

Explain how the biomedical model of health could be used to reduce the incidence of infectious disease.

Adapted from VCAA 2016 exam Q8d

Question 11 (2 MARKS)

Explain how **one** change in practice that occurred during the 'old' public health model may have contributed to Australia's health status over time.

Adapted from VCAA 2018 exam Q1b

Question 12 (2 MARKS)

Outline **two** advantages of the biomedical model of health.

Question 13 (4 MARKS)

Explain how the biomedical approach to health could promote health and wellbeing.

Question 14 (4 MARKS)

Outline one advantage and one disadvantage of the biomedical model of health in addressing infectious diseases.

Adapted from VCAA 2017 exam Q3b

Questions from multiple lessons**Question 15** (4 MARKS)

Consider the following table that presents Australia's top causes of mortality in 1907 and 2000.

Cause of death	1907		2000	
	Percent deaths	Rank	Percent deaths	Rank
Circulatory diseases	20.0	1	38.6	1
Respiratory diseases	14.3	2	8.9	3
Infectious diseases	12.6	3	1.3	5
Cancer	7.8	4	28.1	2
Injury and poisoning	4.9	5	6.1	4
Other	40.3		17.1	
Total	100.0		100.0	

Source: adapted from Australian Institute of Health and Welfare, *Mortality over the twentieth century in Australia: Trends and patterns in major causes of death*, Mortality surveillance series no. 4, cat. no. PHE73, AIHW, Canberra, 2005, p.20

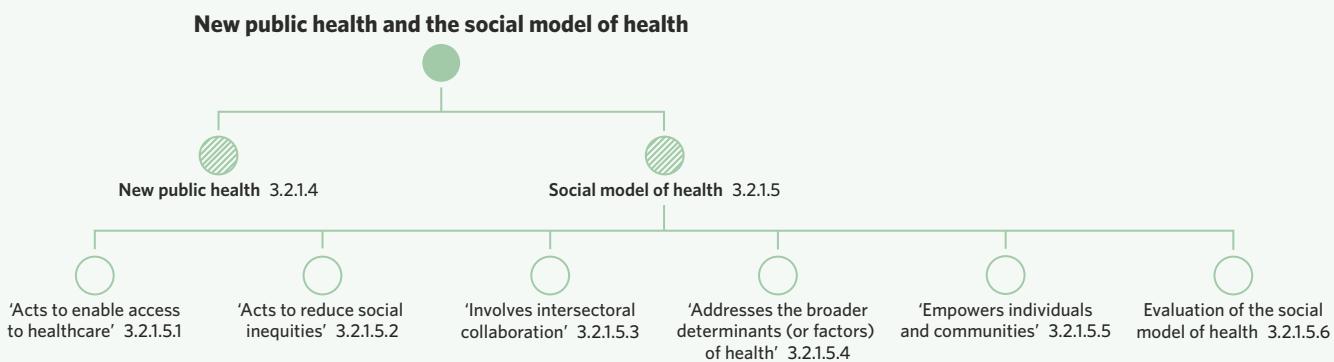
- a With reference to data, describe how a policy of the 'old' public health model could account for the decreased percentage of deaths attributable to respiratory diseases between 2000 and 1907. (2 MARKS)
- b Explain how a decreased percentage of respiratory diseases could promote health and wellbeing as a resource nationally. (2 MARKS)



3C NEW PUBLIC HEALTH AND THE SOCIAL MODEL OF HEALTH

In the previous lesson, you learnt about the 'old' public health model, which had an emphasis on the biomedical model of health. In this lesson, you will instead be examining the development of 'new' public health, which has an emphasis on the social model of health.

3A Australia's health status	3B Old public health and the biomedical approach	3C New public health and the social model of health	3D Ottawa Charter for Health Promotion	3E Comparing the biomedical and social models of health
Study design dot point				
<ul style="list-style-type: none"> improvements in Australia's health status since 1900 and reasons for these improvements, focusing on policy and practice relating to: <ul style="list-style-type: none"> 'old' public health the biomedical approach to health and improvements in medical technology development of 'new' public health including the social model of health and Ottawa Charter for Health Promotion the relationship between biomedical and social models of health 				
Key knowledge units				
New public health				3.2.1.4
Social model of health				3.2.1.5
'Acts to enable access to healthcare'				3.2.1.5.1
'Acts to reduce social inequities'				3.2.1.5.2
'Involves intersectoral collaboration'				3.2.1.5.3
'Addresses the broader determinants (or factors) of health'				3.2.1.5.4
'Empowers individuals and communities'				3.2.1.5.5
Evaluation of the social model of health				3.2.1.5.6



New public health 3.2.1.4

OVERVIEW

The contemporary development of 'new' public health significantly changed our public health approach, with the focus shifting from disease treatment to disease prevention. This model focuses on limiting people from developing health conditions in the first place.

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- analyse data that show improvements in health over time and draw conclusions about reasons for improvements

THEORY DETAILS

The development of ‘new’ public health marked a significant change from the approach of the ‘old’ public health model. **‘New’ public health** refers to a contemporary approach to public health that involves preventing diseases from occurring through promoting behavioural and lifestyle change. Broadly speaking, the ‘new’ public health model began during the 1970s.

Where the ‘old’ public health model focussed on developing new technology to detect and treat diseases once they had already occurred, the ‘new’ public health model changed its focus to preventing people from developing these conditions in the first place. This can be achieved, it suggests, through changing the behaviour of individuals and communities. This is illustrated through health promotion campaigns, such as campaigns that seek to prevent people from smoking cigarettes or drinking alcohol. For example, by stopping people from smoking cigarettes, the ‘new’ public health model can improve the health status of population groups by preventing people from developing conditions, such as lung cancer. Health promotion therefore represents a key focus of the ‘new’ model of public health. You will be learning about the Ottawa Charter for health promotion, which represents a key development that occurred during the ‘new’ model of public health, in the following lesson.

The ‘new’ public health model nonetheless still focuses on using technology to detect and treat illness and disease. However, the ‘new’ public health model shifts its attention to a system of regular health checks that aim to detect illness and disease at the earliest possible point of their development. For example, this can involve visiting a doctor regularly to monitor the risk factors of cardiovascular disease (such as blood pressure, blood sugar, and cholesterol) as well as organised screening programs for cancer (such as mammography, cervical screening tests, faecal occult blood, and periodic colonoscopy) (Tulchinsky & Varavikova, 2010). The ‘new’ public health model therefore uses the technological developments of the ‘old’ public health model with a newfound focus on frequent health checks and preventative care, rather than simply diagnosis and treatment. Therefore, elements of both models are now used in combination.

Useful tip

It is important to remember that the ‘new’ public health model doesn’t replace the ‘old’ public health model altogether, but rather that the best approach to public health is to use them both together.

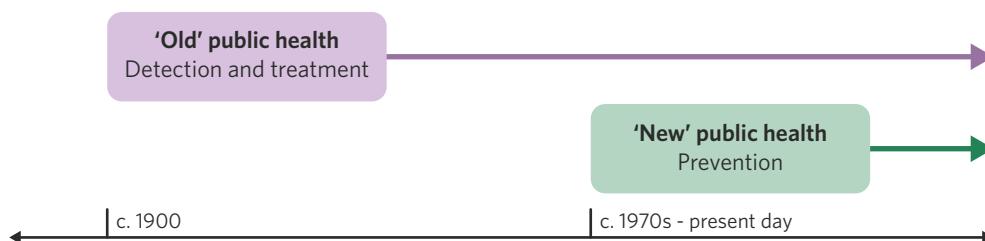


Figure 1 While ‘old’ public health focused only on the detection and treatment of conditions, ‘new’ public health also places emphasis on the prevention of these conditions

ACTIVITY 1

There are many different behaviours that we can practice in order to improve our health and wellbeing. In your notebook, brainstorm some of these behaviours and describe how they could prevent the development of a particular illness or disease. One example could be regular exercise to reduce obesity rates.

Real world example

In your daily life, you would have been exposed to many health campaigns which are part of ‘new’ public health. For example, during COVID-19, you likely saw and heard public health messaging from the Victorian government to reduce the spread of the virus. One slogan used by the government which you likely heard was ‘Staying apart keeps us together’ (State Government of Victoria, 2020).

KEY DEFINITIONS

‘New’ public health refers to a contemporary approach to public health that involves preventing diseases from occurring through promoting behavioural and lifestyle change



Social model of health 3.2.1.5

OVERVIEW

The social model of health is a specific approach to improving public health. It falls within the broader historical movement of developing ‘new’ public health, but is a separate and more prescriptive model.

THEORY DETAILS

The **social model of health** focuses on the broader factors that impact health, including lifestyle and socioeconomic factors, in order to prevent the development of diseases that are influenced by behaviour. It is a more specific approach to public health that falls under the broader historical movement of ‘new’ public health. It includes five principles that are outlined in table 1.

Useful tip

It is important that you do not confuse ‘new’ public health with the social model of health. The ‘new’ public health model refers to the broader historical movement that involved focusing on disease prevention through health promotion. The social model of health is instead a more specific approach to meeting the broader aims of the ‘new’ model of public health. This is illustrated by its set of prescriptive principles that need to be met in order for it to be followed. The Ottawa Charter for Health Promotion, which you will learn about in the next lesson, also has its own specific action areas and therefore has to be distinguished from the ‘new’ public health. It is therefore important that you focus on the specific model that is mentioned in the question when you are writing your responses.

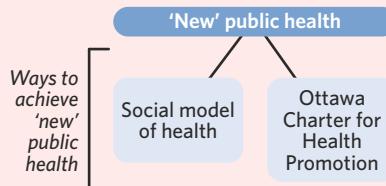


Figure 2 The social model of health is just one approach to achieving ‘new’ public health

Table 1 The principles of the social model of health

Social model of health principle	Description of principle	Example of how this principle could be implemented
'Acts to enable access to healthcare' 3.2.1.5.1	Healthcare influences health and wellbeing in particularly direct ways. Healthcare can be used to treat somebody that develops a particular illness or disease, or provide healthcare services, such as vaccinations, that can prevent the development of these illnesses or diseases in the first place. The principle ' acts to enable access to healthcare ' refers to aiming to ensure that everybody within a community can access essential healthcare services without facing any barriers. These barriers could be financial, such as the out-of-pocket expenses required to access certain healthcare services, or social, such as discrimination that occurs due to race, religion, sex, sexual orientation, gender identity, or other factors.	People who live in particularly remote areas may often feel less motivated to have a general healthcare checkup because it involves enduring a lengthy period of travel. These checkups are nonetheless incredibly important because they can ensure that a particular illness or disease is detected early, before somebody displays any symptoms. Building hospitals and the infrastructure required for general practitioners in remote areas therefore ‘acts to enable access to healthcare’ by ensuring that even those living in remote areas are able to see a doctor.
'Acts to reduce social inequities' 3.2.1.5.2	Social inequity involves some social groups having a greater access to resources that improve their health and wellbeing than other social groups. The principle ' acts to reduce social inequities ' involves ensuring that all social groups have the same level of access to the resources that improve their health and wellbeing.	Campaigns that raise awareness about the damaging psychological impact of racism, for example, can help to overcome instances of discrimination that are informed by differences in race. This ‘acts to reduce social inequities’ by helping to ensure that all people, regardless of factors, such as race, feel encouraged to seek healthcare without fear of discrimination.

cont'd

KEY DEFINITIONS

Social model of health focuses on the broader factors that impact health, including lifestyle and socioeconomic factors, in order to prevent the development of diseases that are influenced by behaviour

KEY DEFINITIONS

'Acts to enable access to healthcare' refers to aiming to ensure that everybody within a community can access essential healthcare services without facing any barriers

'Acts to reduce social inequities' involves ensuring that all social groups have the same level of access to the resources that improve their health and wellbeing

Lesson link

In lesson **4A: Australia's health system: Part 1** and lesson **4B: Australia's health system: Part 2**, you will learn about how Australia’s healthcare system meets the principle ‘acts to enable access to healthcare’ through the universal health insurance scheme Medicare.

Table 1 Continued

Social model of health principle	Description of principle	Example of how this principle could be implemented
'Involves intersectoral collaboration' 3.2.1.5.3	<p>The principle 'involves intersectoral collaboration' refers to ensuring the public and private sectors of the economy work together in order to achieve health-related goals. Because health-related goals often require a large amount of effort to be achieved, collaboration between these two sectors is often necessary. The public sector refers to the areas of an economy that are under the control of a nation's government, whereas the private sector refers to the areas of an economy controlled by corporations that operate separately to a nation's government. While a government is able to implement policies and programs that impact all of its citizens, private sectors often can contribute resources, such as funding, that will make these programs more effective. Private sectors can likewise monitor the implementation of government programs in workplaces.</p>	<p>Many governments around the world have launched campaigns that seek to improve the safety standards of the construction sector. These campaigns can nonetheless only be implemented effectively if people on the ground are available to monitor the implementation of these safety programs, rather than simply relying on the work of television advertisements and safe work promotion posters around a worksite. Ensuring that construction companies (which are part of the private sector) educate their employees about these government safety programs and employ people to monitor their implementation therefore 'involves intersectoral collaboration'.</p>
'Addresses the broader determinants (or factors) of health' 3.2.1.5.4	<p>There are many different factors that both directly and indirectly influence our health and wellbeing. For example, a factor that influences our health directly is diet, whereas a broader factor that influences the health of whole communities indirectly could include socioeconomic status. The principle 'addresses the broader determinants (or factors) of health' refers to focusing on the large-scale systems that influence the health and wellbeing of whole communities, not just individuals. Some of these broader determinants include geographical location, race, religion, sex, sexual orientation, gender identity, socioeconomic status, levels of education, etc.</p>	<p>Levels of education broadly influence health and wellbeing by acting as a platform where teachers can encourage students to practice healthy behaviours. These practices could involve washing hands and covering the mouth when coughing, which is often taught during primary school. Receiving an education does not necessarily mean that all students will practice these kinds of behaviours. It will nonetheless broadly assist students to achieve optimal health and wellbeing by making them aware of these behaviours and therefore 'addresses the broader determinants of health'. As such, ensuring that all children have access to adequate levels of education can help to improve health.</p>
'Empowers individuals and communities' 3.2.1.5.5	<p>People are more likely to practice healthy behaviours when they recognise that they have agency over their health and wellbeing. People will feel responsible for improving their own health and wellbeing when this occurs. The principle 'empowers individuals and communities' refers to inspiring individuals and communities to recognise their role in promoting their own health and wellbeing. This often involves a health promotion campaign improving the health knowledge and skills of individuals and communities to ensure that they have the capacity to start improving their health and wellbeing.</p>	<p>Community programs that provide information about the health risks associated with fast-food will demonstrate to individuals within that community that they have control over their health and wellbeing through their eating habits. This 'empowers individuals and communities' to start cooking their own healthy meals, and avoid regular consumption of fast food, in order to improve their health and wellbeing.</p>

Evaluation of the social model of health 3.2.1.5.6

The social model of health is not without its disadvantages despite marking a significant historical shift towards reducing the development of illness and disease. The advantages and disadvantages of the social model of health are outlined in table 2.

KEY DEFINITIONS

'Involves intersectoral collaboration' refers to ensuring the public and private sectors of the economy work together in order to achieve health-related goals

'Addresses the broader determinants (or factors) of health' refers to focusing on the large-scale systems that influence the health and wellbeing of whole communities, not just individuals

'Empowers individuals and communities' refers to inspiring individuals and communities to recognise their role in promoting their own health and wellbeing

ADDITIONAL TERMS

The public sector refers to the areas of an economy that are under the control of a nation's government

The private sector refers to the areas of an economy controlled by corporations that operate separately to a nation's government

Study design key skills dot point

- analyse the strengths and limitations of biomedical and social models of health in bringing about improvements in health status



Table 2 Advantages and disadvantages of the social model of health

Advantages	Disadvantages
<ul style="list-style-type: none"> The social model of health focuses on vulnerable population groups. This is demonstrated by its principle 'acts to reduce social inequities', which explicitly seeks to improve the health and wellbeing of those that are excluded from accessing resources, such as healthcare and a high average income. This focus not only helps the most vulnerable, but also often leads to the greatest improvements in the health status of a nation. The social model of health promotes good health and enables individuals to take control of their own health and wellbeing. The social model of health prevents people from developing illness and disease in the first place, which means that they are less likely to have to endure expensive and invasive medical procedures. The social model of health is less expensive than the biomedical model of health. While health promotion campaigns are expensive to run, the frequent use of medication and medical technology to only treat illness and disease once it has occurred is wasteful and has an even greater financial burden on the economy and reduces the strain on the healthcare system which can often lead to longer waiting times. 	<ul style="list-style-type: none"> The social model of health places a significant emphasis on health promotion campaigns, which may not always be successful. Ultimately, some people may think that their immediate good health means that they can ignore health promotion campaigns, which could lead to developing conditions in the future. The social model of health places a significant responsibility onto the individual to change their behaviour in order to prevent the development of illness and disease. Some diseases nonetheless cannot be prevented through behavioural changes. Factors, such as genetics, that we cannot control ourselves, can also have a significant influence on the development of illness and disease. The social model of health does not account for people who have already developed an illness or disease. Once an illness or disease is already developed, the biomedical model of health is required due to its emphasis on medical technology and its role in treating illness and disease.

Theory summary

In this lesson, you learnt about the development of 'new' public health. This included examining the social model of health, which represents a key development that occurred during the era of 'new' public health. The social model of health has five principles: 'acts to enable access to healthcare', 'acts to reduce social inequities', 'involves intersectoral collaboration', 'addresses the broader determinants (or factors) of health', and 'empowers individuals and communities'. You should aim to memorise each of these principles. You also evaluated the social model of health in this lesson and should now have an understanding of some of its advantages and disadvantages.

3C QUESTIONS

Theory-review questions

Question 1

The 'new' model of public health focuses on

- A treating illness and disease.
- B preventing illness and disease.

Question 2

What does the 'new' model of public health involve? (Select all that apply)

- I Changing behaviour to promote health and wellbeing.
- II Surgery.
- III Health promotion.
- IV Developing medications that treat illness.

Question 3

The social model of health details specific principles that meet some of the broader aims of the 'new' model of public health.

- A True.
- B False.

Question 4

Which of the following best fills in the blank?

- A 'acts to reduce social inequities'
- B 'involves intersectoral collaboration'

The social model of health focuses on vulnerable population groups that are often discriminated against and prevented from accessing the same resources required for optimal health and wellbeing as other social groups. This is demonstrated by the social model of health's principle _____.

Question 5

The social model of health is an ideal model that has no disadvantages.

- A True.
- B False.

Skills**Perfect your phrasing****Question 6**

Which of the following sentences is most correct?

- A The 'new' model of public health is a contemporary approach to healthcare that focuses on *preventing* illness and disease from occurring.
- B The 'new' model of public health is a contemporary approach to healthcare that focuses on effectively *treating* illness and disease once they have occurred.

Question 7

Which of the following sentences is most correct?

- A The social model of health focuses on *cultural* factors that impact health, such as attitudes towards religion, in order to prevent the development of illness and disease.
- B The social model of health focuses on *biological* factors that impact health, such as genetics, in order to prevent the development of illness and disease.

Question 8

Which of the following sentences is most correct?

- A Intersectoral collaboration involves the *government* and *public* sector of the economy collaborating to deliver effective health promotion campaigns.
- B Intersectoral collaboration involves the *public* and *private* sectors of the economy collaborating to deliver effective health promotion campaigns.

Exam-style questions**Question 9** (2 MARKS)

What is meant by the social model of health?

Adapted from VCAA 2018 exam Q2a

Question 10 (2 MARKS)

Analyse **one** way in which the social model of health may have contributed to improvements in Australia's health status over time.

Adapted from VCAA 2018 exam Q2b

Question 11 (2 MARKS)

Explain how the 'new' public health model could be used to reduce burden of disease.

Adapted from VCAA 2016 exam Q8d



Question 12 (2 MARKS)

Identify one principle of the social model of health and describe how it could promote physical health and wellbeing.

Question 13 (3 MARKS)

Identify one principle of the social model of health and describe how it could promote health status.

Question 14 (3 MARKS)**Aboriginal and Torres Strait Islander Sexual Health (ASH program)**

The WA (Western Australian) AIDS Council works to provide holistic and culturally appropriate services for and with Aboriginal and Torres Strait Islander communities in the metropolitan area and rural and remote areas of Western Australia.

The principles of the program we provide are:

- Holistic Health – Physical wellbeing, social, emotional and cultural wellbeing [for] the whole of the community.
- Self-determination – Aboriginal and Torres Strait Islander people involved in all aspects of health care delivery – planning and development, implementation and evaluation.
- Right for Aboriginal and Torres Strait Islander people to choose different models of health care with health programs tailored to fit the needs of the broader Aboriginal and Torres Strait Islander community groups.
- Health care services are culturally appropriate and are accessible.

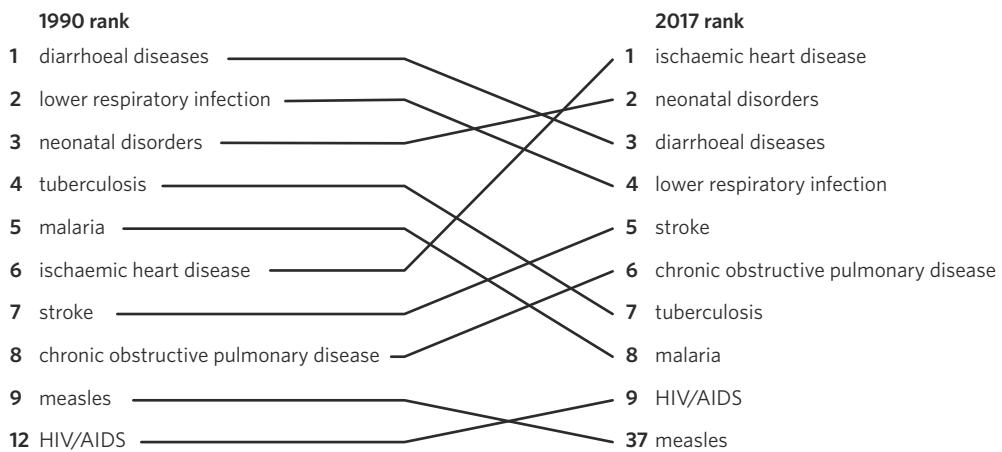
We provide tailored HIV/AIDS education and prevention knowledge and training in Aboriginal and Torres Strait Islander community organisations and non-Aboriginal organisations.

We encourage and pursue joint initiatives with Aboriginal agencies and non-Aboriginal agencies with the aim of increasing the capacity of ongoing appropriate interagency responses and commitment.

Source: adapted from Western Australia AIDS Council, ASH program, <<https://waaids.com/item/12-ash-project.html>>

Explain how the ASH program demonstrates **one** principle of the social model of health and describe how this improves the health status of Aboriginal and Torres Strait Islander peoples.

Adapted from VCAA 2020 exam Q8b

Question 15 (4 MARKS)**Ranking of diseases in low-income countries, both sexes, all ages, percent of total deaths**

Source: adapted from the Institute for Health Metrics and Evaluation (IHME), <www.healthdata.org>

Describe how the social model of health may have caused the ranking of both diarrhoeal diseases and tuberculosis to drop in percent contribution of total deaths in low-income countries from 1990 to 2017.

Questions from multiple lessons**Question 16** (3 MARKS)

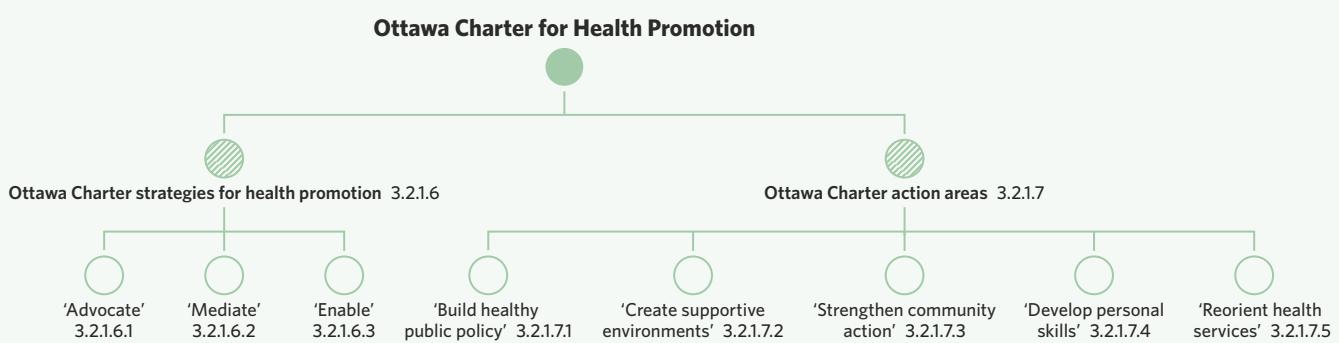
Describe how the social model of health principle 'empowers individuals and communities' could be used to reduce the impact of smoking on the health status of Australians.

3D OTTAWA CHARTER FOR HEALTH PROMOTION

In the previous lesson, you were introduced to the ‘new’ public health model. Here, you learnt about how health promotion is a key component of this contemporary approach to public health.

In this lesson, you will develop your knowledge of health promotion through learning about the Ottawa Charter for Health Promotion, including its strategies and action areas.

3A Australia's health status	3B Old public health and the biomedical approach	3C New public health and the social model of health	3D Ottawa Charter for Health Promotion	3E Comparing the biomedical and social models of health
Study design dot point				
<ul style="list-style-type: none"> improvements in Australia's health status since 1900 and reasons for these improvements, focusing on policy and practice relating to: <ul style="list-style-type: none"> ‘old’ public health the biomedical approach to health and improvements in medical technology development of ‘new’ public health including the social model of health and Ottawa Charter for Health Promotion the relationship between biomedical and social models of health 				
Key knowledge units				
Ottawa Charter strategies for health promotion				3.2.1.6
‘Advocate’				3.2.1.6.1
‘Mediate’				3.2.1.6.2
‘Enable’				3.2.1.6.3
Ottawa Charter action areas				3.2.1.7
‘Build healthy public policy’				3.2.1.7.1
‘Create supportive environments’				3.2.1.7.2
‘Strengthen community action’				3.2.1.7.3
‘Develop personal skills’				3.2.1.7.4
‘Reorient health services’				3.2.1.7.5



Ottawa Charter strategies for health promotion 3.2.1.6

OVERVIEW

Health promotion represents a key consideration of the ‘new’ public health model. The Ottawa Charter for Health Promotion outlines three broad strategies for achieving effective health promotion: ‘advocate’, ‘mediate’, and ‘enable’.

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- apply the action areas of the Ottawa Charter for Health Promotion to a range of data and case studies



THEORY DETAILS

Health promotion is a key element of the development of ‘new’ public health.

Health promotion refers to the ‘process of enabling people to increase control over and to improve their health’ (World Health Organisation [WHO] et al., 1987). Health promotion helps to motivate people to change their behaviour in order to avoid developing a particular illness or disease. The **Ottawa Charter for Health Promotion** outlines a series of strategies and action areas developed at a conference co-organised by the WHO that are required to develop effective health promotion campaigns and achieve good health for all. It was developed during the first International Conference on Health Promotion that was held in Ottawa, Canada in 1986 (Better Health Channel, 2011). The conference was co-organised by the World Health Organisation and aimed to work out strategies for fulfilling its goal to achieve good health for all by 2000. It includes three strategies that outline the broad elements that are common in effective health promotion campaigns. A description of each of these strategies, as well as an example of how they could be implemented, is provided in table 1.

Table 1 Ottawa Charter strategies

Ottawa Charter strategy	Description	Example of how it could be implemented
‘Advocate’ 3.2.1.6.1	‘Advocate’ refers to using health promotion to express the benefit of health and wellbeing on quality of life to individuals and communities.	‘Advocate’ seeks to express the benefits of healthy behaviour change on all different aspects of people’s lives. This could involve, for example, delivering health campaigns that demonstrate how exercise improves mental, spiritual, emotional, and social health and wellbeing, not only physical health and wellbeing. By demonstrating how different behaviour change can benefit multiple different elements of daily life, not only physical health, health promotion is more likely to be successful.
‘Mediate’ 3.2.1.6.2	‘Mediate’ refers to ensuring that different sectors all share the responsibility of delivering health promotion and ensuring that all conflicts between sectors are resolved. Health promotion should not be delivered by the health sector alone.	‘Mediate’ ensures that a health promotion campaign is delivered throughout multiple different facets of public life. This could involve, for example, a government health promotion campaign, such as campaigns that aim to reduce drunk driving, being delivered in schools, workplaces, on the television, and during sporting events.
‘Enable’ 3.2.1.6.3	‘Enable’ refers to using health promotion campaigns to reduce differences in health status. It involves using health promotion to enable all groups of people to achieve optimal health and wellbeing.	Delivering health promotion campaigns to vulnerable population groups, such as low socioeconomic status groups, can help to raise the health status of these groups to a level closer to other population groups, such as high socioeconomic status groups. For example, by delivering health promotion campaigns about the risks of smoking to low socioeconomic status groups, this helps to reduce instances of premature death from lung cancer in these communities, therefore raising their life expectancy to a level closer to high socioeconomic groups and demonstrating the strategy ‘enable’.

ACTIVITY 1

In 2017-2018, 55% of Australian adults did not meet physical activity guidelines (Australian Institute of Health and Welfare, 2020). This reveals that many people in Australia should be more physically active to promote their health and wellbeing. In your notebook, brainstorm how each of the Ottawa Charter strategies could be used to increase levels of physical activity in Australia.

KEY DEFINITIONS

Health promotion refers to the ‘process of enabling people to increase control over and to improve their health,’ as defined within the Ottawa Charter for Health Promotion

Ottawa Charter for Health Promotion outlines a series of strategies and action areas developed at a conference co-organised by the World Health Organisation that are required to develop effective health promotion campaigns and achieve good health for all

‘Advocate’ refers to using health promotion to express the benefit of health and wellbeing on quality of life to individuals and communities

‘Mediate’ refers to ensuring that different sectors all share the responsibility of delivering health promotion and ensuring that all conflicts between sectors are resolved

‘Enable’ refers to using health promotion campaigns to reduce differences in health status

Ottawa Charter action areas 3.2.1.7

OVERVIEW

The Ottawa Charter outlines a series of action areas that need to be followed in order to achieve effective health promotion.

THEORY DETAILS

The Ottawa Charter has five action areas: ‘build healthy public policy,’ ‘create supportive environments,’ ‘strengthen community action,’ ‘develop personal skills,’ and ‘reorient health services.’ These action areas outline more specific principles to follow in order to develop effective health promotion campaigns. A description of each of these actions areas, as well as an example of how they can be implemented in a health promotion campaign, is outlined in table 2.

Table 2 Ottawa Charter action areas

Ottawa Charter action area	Description	Example of how it could be implemented
‘Build healthy public policy’ 3.2.1.7.1	‘Build healthy public policy’ refers to removing financial or social barriers in order to implement rules and legislation that promote health and wellbeing.	There are many different financial and social barriers that prevent people from adopting behaviours that promote their health and wellbeing. It is therefore often necessary for rules to be enforced to overcome these barriers, which can be structural and systemic. ‘Build healthy public policy’ involves, for example, rules about driving under the influence of drugs or alcohol. Many different cultures place an emphasis on drinking alcohol at social functions. Without rules and legislation relating to drink driving, it would therefore be more common for people to drive home from these events intoxicated.
‘Create supportive environments’ 3.2.1.7.2	‘Create supportive environments’ refers to ensuring that the natural environment, social environment, and infrastructure is safe for the implementation of health promotion.	‘Create supportive environments’ can involve making the physical environment as safe as possible to avoid injury. This could occur through repairing roads to ensure that drivers don’t crash due to potholes. ‘Create supportive environments’ can nonetheless also apply to contexts outside of infrastructure and the physical environment. It could involve, for example, moderating online environments, such as Facebook groups, to reduce online instances of discrimination.
‘Strengthen community action’ 3.2.1.7.3	‘Strengthen community action’ refers to motivating the community to develop and implement health promotion campaigns to address the most pressing issues that they face.	Different communities will often face different barriers to achieving optimal health and wellbeing depending on various social, cultural, and environmental factors. As such, different communities will require different health promotion campaigns in order to address the most damaging community behaviours that impair health and wellbeing. ‘Strengthen community action’ could involve, for example, communities located around surf beaches developing links with different community groups to raise awareness about swimming in between the flags and responding to shark alarms. These health promotion campaigns may not be as relevant for metropolitan communities, so ‘strengthen community action’ can involve these communities developing different health promotion campaigns that address their own specific health needs.

cont'd

KEY DEFINITIONS

‘Build healthy public policy’ refers to removing financial or social barriers in order to implement rules and legislation that promote health and wellbeing

‘Create supportive environments’ refers to ensuring that the natural environment, social environment, and infrastructure is safe for the implementation of health promotion

‘Strengthen community action’ refers to motivating the community to develop and implement health promotion campaigns to address the most pressing issues that they face



Table 2 Continued

Ottawa Charter action area	Description	Example of how it could be implemented
'Develop personal skills' 3.2.1.7.4	'Develop personal skills' refers to delivering health promotion that provides people with resources that they can use to take control of and improve their own health and wellbeing.	'Develop personal skills' involves ensuring that people have the necessary skills and knowledge required to improve their own health and wellbeing. This could involve delivering health promotion campaigns that outline strategies for people to quit smoking without requiring constant support from a healthcare professional. This could take the form of television advertisements that detail basic strategies for quitting smoking, such as replacing time spent smoking cigarettes with alternative behaviours, such as exercise.
'Reorient health services' 3.2.1.7.5	'Reorient health services' refers to shifting the focus from a biomedical model of health that involves diagnosing and treating illness and disease to using health promotion to prevent the development of illness and disease altogether.	'Reorient health services' places responsibility on healthcare workers, such as doctors, to focus on the prevention of diseases by ensuring that they provide health promotion to their patients. This could involve educating patients about the health risks of smoking and drinking excessive amounts of alcohol during a general check-up.

Useful tip

It is important that you memorise all of the five Ottawa Charter action areas. However, all of the different action areas may not be relevant within an exam case study. It is therefore important that you know all of the different action areas, as well as what each involves, so that you can identify and explain which action areas are evident within a particular health promotion campaign.

Useful tip

It is important not to confuse the *strategies* with the *action areas* of the Ottawa Charter. When a question refers to strategies, you must mention 'advocate,' 'mediate,' or 'enable.' When a question refers to action areas, you must mention 'build healthy public policy,' 'create supportive environments,' 'strengthen community action,' 'develop personal skills,' or 'reorient health services.' It is also important that you use the exact wording of the Ottawa Charter strategies and action areas in your responses.

ACTIVITY 2

The National Binge Drinking Strategy was a health promotion campaign that aimed to reduce the binge drinking behaviour of young Australians. It used many of the action areas of the Ottawa Charter. It was introduced in 2008 and involved a series of interventions including (NSW Education Standards Authority, n.d.):

- reviewing the closing hours of bars and pubs
- closing the tax break for alcops (flavoured alcoholic drinks with a low alcohol concentration) to ensure that they were more expensive to purchase
- ensuring community organisations, such as sporting groups, addressed the culture of binge drinking
- launching the internet game 'Don't turn a night out into a nightmare' that aimed to motivate young people to consciously think about the risks of their drinking behaviour
- investing \$5.2 million into the Good Sports initiative of the Australian Drug Foundation to ensure that their expertise could be expanded to reach local sporting clubs.

In your notebook, describe how three action areas of the Ottawa Charter for Health Promotion are evident in The National Binge Drinking Strategy.

KEY DEFINITIONS

'Develop personal skills' refers to delivering health promotion that provides people with resources that they can use to take control of and improve their own health and wellbeing

'Reorient health services' refers to shifting the focus from a biomedical model of health that involves diagnosing and treating illness and disease to using health promotion to prevent the development of illness and disease altogether

Theory summary

In this lesson, you learnt about the Ottawa Charter for Health Promotion. In particular, you learnt about its three broad strategies and five action areas. These are summarised in figure 1.

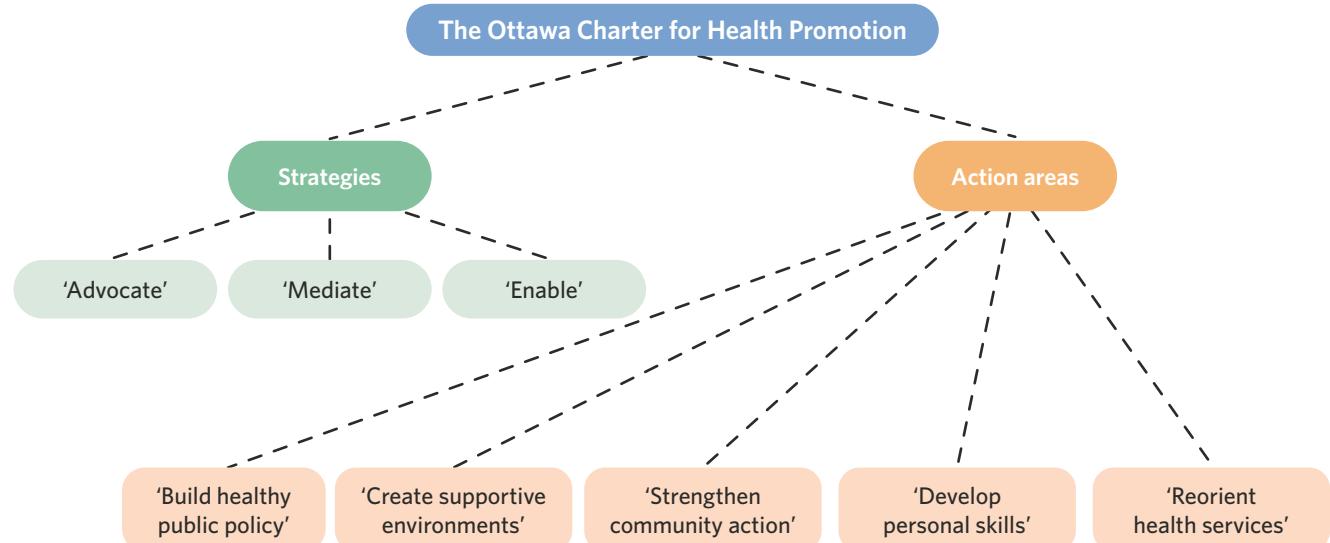


Figure 1 The strategies and action areas of the Ottawa Charter for Health Promotion

3D QUESTIONS

Theory-review questions

Question 1

The Ottawa Charter for Health Promotion relates to

- A health promotion.
- B the 'old' public health model.

Question 2

The Ottawa Charter for Health Promotion has three action areas.

- A True.
- B False.

Question 3

Which of the following options are action areas of the Ottawa Charter for Health Promotion? (Select all that apply)

- I 'Develop personal skills.'
- II 'Mediate.'
- III 'Advocate.'
- IV 'Reorient health services.'

Question 4

Which of the following best fills in the blank?

- A Ottawa Charter for Health Promotion
- B biomedical model of health

The 'new' public health model is a contemporary approach to healthcare that involves placing a greater emphasis on disease prevention. It achieves this by way of the social model of health and the _____.



Question 5

The Ottawa Charter for Health Promotion strategy 'enable' refers to using health promotion campaigns to reduce differences in health status.

- A True.
- B False.

Skills**Unpacking the case study**

Use the following information to answer Questions 6-8.

Esther noticed that lots of people at their school were bringing unhealthy snacks for their recess. Esther decided to put up posters around the school campus that detailed the negative health impacts of sugary snacks. They also put up a series of stalls that sold healthy snacks, such as carrots, cucumbers, and dips. Esther's teachers were impressed by this health promotion campaign and arranged for doctors to come and speak at a school assembly about the health benefits of a balanced diet.

Question 6

Esther's teachers using the Ottawa Charter action area 'develop personal skills' is reflected by the statement that

- A '[they] arranged for doctors to come and speak at a school assembly about the health benefits of a balanced diet.'
- B '[they] put up posters around the school campus that detailed the negative health impacts of sugary snacks.'

Question 7

Esther using the Ottawa Charter action area 'create supportive environments' is reflected by the statement that

- A 'Esther's teachers were impressed by this health promotion campaign.'
- B '[Esther] put up a series of stalls that sold healthy snacks, such as carrots, cucumbers, and dips.'

Question 8

Esther using the Ottawa Charter strategy 'advocate' is reflected by the statement that

- A 'Esther decided to put up posters around the school campus that detailed the negative health impacts of sugary snacks.'
- B '[Esther] put up a series of stalls that sold healthy snacks, such as carrots, cucumbers, and dips.'

Exam-style questions**Question 9** (2 MARKS)

Describe the Ottawa Charter for Health Promotion.

Question 10 (2 MARKS)

Using an example, describe the Ottawa Charter for Health Promotion strategy 'enable.'

Question 11 (2 MARKS)

Using an example, explain the Ottawa Charter for Health Promotion action area 'build healthy public policy.'

Question 12 (2 MARKS)

Local primary schools will receive support to participate in 'walk to school' opportunities... Monash Council has received \$10,000 from VicHealth to implement the Walk to School program... The program is designed to raise awareness of the physical, environmental and social benefits of active transport, and to encourage school children to walk to and from school more often. Aside from supporting schools, Council will use the funding to develop a Monash walking map and online portal.

Source: adapted from *Act!ve Monash*, issue 69, October 2013

Outline how the Ottawa Charter for Health Promotion action area 'create supportive environments' is reflected in the Walk to School program.

Adapted from VCAA 2014 exam Q10cii

Question 13 (4 MARKS)

Describe how **two** of the Ottawa Charter for Health Promotion action areas could be used to promote health and wellbeing.

Adapted from VCAA 2011 exam Q8b

Question 14 (4 MARKS)

Explain how **two** action areas of the Ottawa Charter for Health Promotion could be used to decrease obesity rates in Australia.

Adapted from VCAA 2017 exam Q7c

Question 15 (4 MARKS)

Use **two** action areas identified in the Ottawa Charter for Health Promotion to describe how to reduce mortality rates caused by lung cancer.

Adapted from VCAA 2012 exam Q2c

Questions from multiple lessons**Question 16** (2 MARKS)

Explain how the Ottawa Charter for Health Promotion action area 'develop personal skills' could work to achieve optimal health and wellbeing and therefore act as a resource nationally.



3E COMPARING THE BIOMEDICAL AND SOCIAL MODELS OF HEALTH

Throughout chapter 3, you have learnt about both the biomedical and social models of health. A question you may ask yourself is, which is more important: the biomedical or the social model of health? Another question you may ask is, can we rely on just one of these models of health for Australia's health system to be effective? In this lesson, you will learn about the relationship between the biomedical and social models of health.

3A Australia's health status	3B Old public health and the biomedical approach	3C New public health and the social model of health	3D Ottawa Charter for Health Promotion	3E Comparing the biomedical and social models of health
Study design dot point				
<ul style="list-style-type: none"> improvements in Australia's health status since 1900 and reasons for these improvements, focusing on policy and practice relating to: <ul style="list-style-type: none"> 'old' public health the biomedical approach to health and improvements in medical technology development of 'new' public health including the social model of health and Ottawa Charter for Health Promotion the relationship between biomedical and social models of health 				
Key knowledge unit <p>Relationship between the biomedical and social models of health 3.2.1.8</p>				

Comparing the biomedical and social models of health



Relationship between the biomedical and social models of health 3.2.1.8

Relationship between the biomedical and social models of health 3.2.1.8

OVERVIEW

Previously in chapter 3, we learnt about 'old public health', which helped improve health status during the 20th century through emphasis on the biomedical model of health. Furthermore, we learnt about 'new public health' which began in the 1970s, having its emphasis on the social model of health. Whilst there are both strengths and limitations to the biomedical and social models of health, both models are essential in improving health and wellbeing. In Australia, both the biomedical model and social model of health are practised together to bring about improvements in health status.

THEORY DETAILS

Before 1970, Australia focused on how the physical environment impacted health and wellbeing, as well as diagnosing and treating diseases. Leading up to 1970, Australia mainly relied on the use of the **biomedical model of health**, which focuses on the biological causes of illness and disease in order to treat symptoms once they are displayed by a patient, as well as cure diseases.

Study design key skills dot point

- analyse the strengths and limitations of biomedical and social models of health in bringing about improvements in health status

KEY DEFINITIONS

Biomedical approach to health (also known as the biomedical model of health) focuses on the biological causes of illness and disease in order to treat symptoms once they are displayed by a patient, as well as cure diseases

The introduction of ‘new’ public health did not replace ‘old’ public health, but rather introduced an approach to public health that involves preventing diseases before they occur. This approach introduced within ‘new’ public health was the **social model of health**, which focuses on the broader factors that impact health, including lifestyle and socioeconomic factors, in order to prevent the development of diseases that are influenced by behaviour. For the past 50 years, both the biomedical and social models have been used to bring about improvements in Australia’s health status. Table 1 and table 2 present the advantages and disadvantages of both the biomedical and social models of health. Although these disadvantages and advantages are also explored in lessons 3B and 3C, they are relevant to discuss when comparing both approaches and learning about the relationship between them.

Lesson link

In lesson **3B: Old public health and the biomedical approach**, you learnt about the biomedical model of health, as well as its associated advantages and disadvantages. Furthermore, in lesson **3C: New public health and the social model of health** you learnt about the social model of health, as well as its associated advantages and disadvantages.

Table 1 Advantages and disadvantages of the biomedical model of health

Advantages	Disadvantages
<ul style="list-style-type: none"> The biomedical model of health accounts for people who have already developed an illness or disease. Some illnesses and diseases cannot be prevented through health promotion or behaviour change, so the biomedical approach to health can be used to treat and sometimes cure these illnesses and diseases once they inevitably occur in the population. The biomedical model of health can reduce pain for people living with chronic health conditions. Even in the case that an illness or disease cannot be cured, uncomfortable symptoms can often be managed through using the biomedical model of health. Focus on the biomedical model of health can lead to the development of new medical technologies. Research and development for the treatment of a particular illness or disease can result in new medication or technology being discovered. 	<ul style="list-style-type: none"> The biomedical model of health can be expensive. The frequent use of medication and medical technology to treat illness and disease once it has occurred can be expensive for the individual requiring treatment and the public health system. The biomedical model of health also requires medical practitioners to deliver health services, such as surgeries, which can represent a significant cost to the economy. The biomedical model of health can encourage a waste of healthcare resources, considering that the treatment of many diseases, such as obesity and cardiovascular disease, could often have been prevented through health promotion. The biomedical model of health cannot be used to treat certain diseases. This is because some diseases, such as cancers, may not be able to undergo medical treatment once they develop and progress past a certain point. The biomedical model of health may not encourage people to develop positive health behaviours. This means that people can be treated for a particular illness or disease without necessarily learning the behaviours that are required to prevent developing the same illness or disease in the future.

KEY DEFINITIONS

Social model of health

focuses on the broader factors that impact health, including lifestyle and socioeconomic factors, in order to prevent the development of diseases that are influenced by behaviour



Table 2 Advantages and disadvantages of the social model of health

Advantages	Disadvantages
<ul style="list-style-type: none"> The social model of health focuses on vulnerable population groups. This is demonstrated by its principle 'acts to reduce social inequities', which explicitly seeks to improve the health and wellbeing of those that experience barriers to accessing resources, such as healthcare and a high average income. This focus not only helps the most vulnerable, but also often leads to the greatest improvements in the health status of a nation. The social model of health enables individuals to take control of their own health and wellbeing. The social model of health prevents people from developing illness and disease in the first place, which means that they are less likely to have to endure expensive and invasive medical procedures. The social model of health is less expensive than the biomedical model of health. While health promotion campaigns are expensive to run, the frequent use of medication and medical technology to treat illness and disease once it has occurred is wasteful and has an even greater financial burden on the economy. This means that the money spent to prevent conditions from occurring will benefit individuals and the economy in the future since less money will need to be spent treating conditions because they may have been avoided. 	<ul style="list-style-type: none"> The social model of health places a significant emphasis on health promotion campaigns, which may not always be successful. Ultimately, some people may think that their immediate good health means that they can ignore health promotion campaigns, which could lead to developing conditions in the future. The social model of health places a significant responsibility onto the individual to change their behaviour in order to prevent the development of illness and disease. Some diseases nonetheless cannot be prevented through behavioural changes. Factors, such as genetics, can also have a significant influence on the development of illness and disease. The social model of health does not account for people who have already developed an illness or disease. Once an illness or disease is already developed, the biomedical model of health is required due to its emphasis on medical technology and its role in treating illness and disease.

Whilst the biomedical and social models of health take different approaches from a public health perspective, they are both essential to Australia's public health system. As we learnt previously, there are various advantages and disadvantages to both the biomedical and social models of health. These advantages and disadvantages help us to better understand the relationship between the biomedical and social models of health in bringing about improvements in health status. Typically, what is viewed as a disadvantage of one model is viewed as an advantage of the other, and vice versa. In this way, the impact of the disadvantages of both models are reduced by corresponding strengths in the other. This is why both models of health are essential for maximising improvements in health status in Australia.

To further understand the relationship between the biomedical and social models of health, it is useful to compare the two models. Table 3 explains the differences between the biomedical and social models of health.

Table 3 Comparison of the biomedical and social models of health

Biomedical model of health	Social model of health
Focuses on curing, diagnosing, treating, and managing conditions.	Focuses on preventing conditions before they occur.
Has an individual focus, by improving individuals' conditions through treatment methods.	Has a population focus, by aiming to effectively prevent the incidence of conditions through health promotion.
Effective for managing and treating conditions that are not able to be prevented, but can be managed through treatment.	Effective for reducing the incidence of preventable conditions, by aiming to prevent them before they occur.

 **Real world example**
Applying the biomedical and social models of health to COVID-19

Since the World Health Organisation (WHO) declared the novel coronavirus (SARS-CoV-2) a global pandemic on the 11th March 2020, global health efforts have worked to reduce the incidence of the virus. Table 4 explores how the biomedical and social models of health have been used in an effort to reduce the spread of COVID-19.



Image: Viacheslav Lopatin/Shutterstock.com

Figure 1 There has been global efforts to stop the transmission of COVID-19

Table 4 Examples of how the biomedical and social health models of health have been used to reduce the spread of COVID-19

Biomedical model	Social model
<ul style="list-style-type: none"> Research and development of vaccines. Medical technologies, such as ventilators, used in treating severe cases. Polymerase chain reaction (PCR) tests used to detect positive cases. The use of health professionals to administer vaccines to the population. 	<ul style="list-style-type: none"> Using health promotion to educate populations on how to reduce transmission, such as social distancing, masks, vaccines, and only leaving home for essential reasons. Government interventions, such as lockdown restrictions to prevent cases. Using health promotion to educate populations on the importance of vaccines and the dangers of the virus.

Theory summary

In this lesson, we learnt about the importance of both the biomedical and social model of health in relation to improving health status. Both models have their own advantages and disadvantages, which emphasises the importance of implementing both the biomedical and social models of health in conjunction.

3E QUESTIONS

Theory-review questions

Question 1

Both the biomedical model and social models of health are essential for improvements in Australia's health status.

- A True.
B False.

Question 2

Which of the following models focuses on detecting, curing, and treating diseases?

- A The social model of health.
B The biomedical model of health.



Question 3

Which of the following models focuses on preventing conditions before they occur?

- A The social model of health.
- B The biomedical model of health.

Question 4

Which of the following approaches to reducing the incidence of lung cancer would be part of the social model of health?
(Select all that apply)

- I Screening lungs to detect cancer.
- II Warnings displayed on cigarette packaging.
- III Quit smoking campaign advertising on television.

Question 5

Which of the following models is required for the development of new medical technologies?

- A The social model of health.
- B The biomedical model of health.

Question 6

The social model of health can improve health status through treating health conditions.

- A True.
- B False.

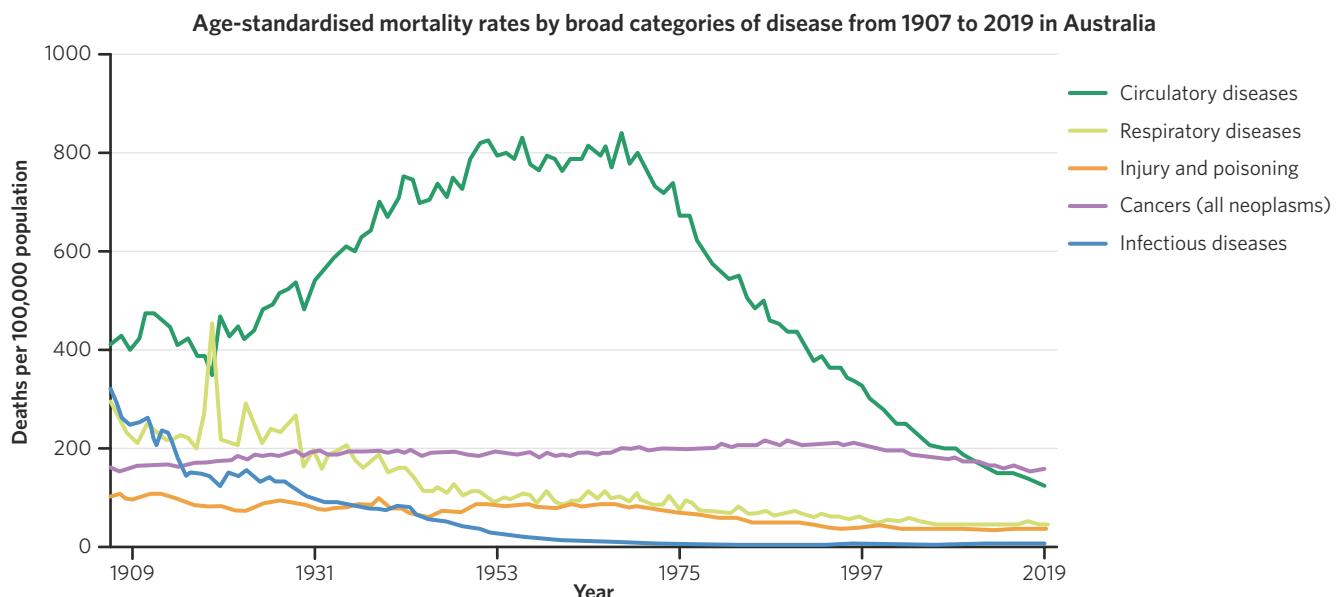
Question 7

Which of the following reasons demonstrate the importance of having both the biomedical and social models of health?
(Select all that apply)

- I Only one model can detect and treat existing conditions.
- II Some conditions can't be treated but can be prevented.
- III Only one model focuses on health promotion through behavioural change.
- IV Only one model works to achieve advancements in medicines and medical technology.

Skills**Data analysis**

Use the following information to answer Questions 8-10.



Source: adapted from Australian Bureau of Statistics, Deaths in Australia, <<https://www.aihw.gov.au/reports/life-expectancy-death/deaths/contents/trends-in-deaths>>

Question 8

The biomedical model of health could have contributed to a reduction in mortality associated with circulatory disease through

- A medications to manage and treat circulatory diseases.
- B promoting the importance of a healthy diet to prevent circulatory diseases.

Question 9

The social model of health could have contributed to a reduction in the mortality associated with circulatory disease through

- A medications to manage and treat circulatory diseases.
- B promoting the importance of a healthy diet to prevent circulatory diseases.

Question 10

The biomedical model of health could have contributed to a reduction in the mortality associated with cancers through

- A promoting behaviour change, such as the use of sunscreen, to prevent cancers before they occur.
- B using technology to detect cancers and medications, such as chemotherapy, to effectively treat them.

Exam-style questions**Question 11** (2 MARKS)

Describe two differences between the biomedical model of health and the social model of health.

Adapted from VCAA 2013 exam Section A Q6

Question 12 (4 MARKS)

Complete the following table by outlining one advantage and one disadvantage of the biomedical and social models of health.

Adapted from VCAA 2014 exam Q13

	Biomedical model of health	Social model of health
Advantage		
Disadvantage		

Question 13 (4 MARKS)

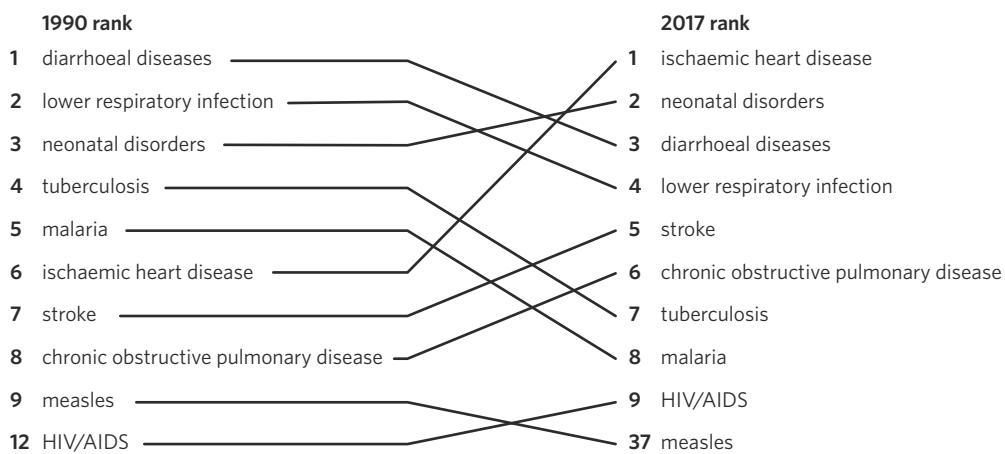
On the 11th March 2020, the World Health Organisation's (WHO) Director-General, Dr Tedros Adhanom Ghebreyesus officially declared the novel coronavirus (SARS-CoV-2) a global pandemic. He stated that countries should 'take urgent and aggressive action' to reduce the spread of COVID-19.

Source: adapted from World Health Organisation, WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March, 2020, <<https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>>

Explain how both the biomedical and social models of health could be used to reduce the incidence of COVID-19.

Adapted from VCAA 2016 exam Q8d



Question 14 (4 MARKS)**Ranking of diseases in low-income countries, both sexes, all ages, percent of total deaths**

Source: adapted from the Institute for Health Metrics and Evaluation (IHME), <www.healthdata.org>

Explain how the biomedical and social models of health may have contributed to the reduction in the percentage of total deaths attributed to malaria between 1990 and 2017.

Adapted from VCAA 2020 exam Q9c

Questions from multiple lessons**Question 15** (5 MARKS)

The rank of major causes of death between 1907 and 2000 in Australia				
	1907		2000	
Cause of death	Percent deaths	Rank	Percent deaths	Rank
circulatory diseases	20.0	1	38.6	1
respiratory diseases	14.3	2	8.9	3
infectious diseases	12.6	3	1.3	5
cancer	7.8	4	28.1	2
injury and poisoning	4.9	5	6.1	4
other	40.3		17.1	
Total	100.0		100.0	

Source: adapted from Australian Institute of Health and Welfare, *Mortality over the twentieth century in Australia: Trends and patterns in major causes of death*, Mortality surveillance series no. 4, cat. no. PHE73, AIHW, Canberra, 2005, p.20

From the table above, identify the cause of death that shows the greatest decrease between 1907 and 2000. Analyse how the biomedical and social models of health could have contributed to a reduction in death rates.

Adapted from VCAA 2018 Sample exam Q6a

CHAPTER 3 REVIEW

CHAPTER SUMMARY

This chapter was about the 'old' and 'new' public health models. As you now know, Australia's approach to health status has changed over time, which has largely resulted in improved health status.

In lesson **3A: Australia's health status**, we analysed the extent to which Australia's health status has improved since 1900. Some key changes to Australia's health status that have occurred since 1900 include:

- an increased life expectancy.
- decreased mortality rates overall, including decreased mortality rates for circulatory diseases, respiratory diseases, injury and poisoning, and infectious diseases.
- moderately increased mortality rates for some health conditions, in particular cancers.

In lesson **3B: Old public health and the biomedical approach**, we learnt about the development of 'old' public health and the biomedical approach to health. Specifically, we learnt that:

- 'old' public health was an historical approach to health that began at the start of the 20th century that focussed on preventing mass illness and disease through environmental intervention and mass immunisation.
- the biomedical approach to health emerged out of 'old' public health and more specifically focuses on biological interventions that can help to cure illness and disease once symptoms are displayed by a patient.
- the biomedical approach enables improvements in medical technology, such as vaccines, the development of the X-ray, antibiotics, and the development of Magnetic resonance imaging (MRI).

You also learnt about the advantages and disadvantages of the biomedical model of health, which are summarised in the following table.

Advantages	Disadvantages
<ul style="list-style-type: none"> • Accounts for people who have already developed an illness or disease • Reduces pain for people living with chronic health conditions • Encourages the development of new medical technologies 	<ul style="list-style-type: none"> • Can be expensive individually and nationally • Can result in a waste of healthcare resources • Not all diseases can be cured or prevented using this model • May not encourage positive health behaviours

In lesson **3C: New public health and the social model of health**, we learnt about the development of 'new' public health and the social model of health. Specifically, we learnt that:

- 'new' public health is a contemporary approach to health that seeks to prevent illness and disease through health promotion and by encouraging lifestyle changes.
- the social model of health emerges out of 'new' public health and provides a set of five principles that help to prevent illness and disease from occurring in the first place.
- these five principles of the social model of health are that it 'acts to enable access to healthcare,' 'acts to reduce social inequities,' 'involves intersectoral collaboration,' 'addresses the broader determinants (or factors) of health,' and 'empowers individuals and communities.'

You also learnt about the advantages and disadvantages of the social model of health, which are summarised in the following table.

Advantages	Disadvantages
<ul style="list-style-type: none"> • Focuses on vulnerable population groups • Enables individuals to take control of their own health and wellbeing • Prevents people from developing illness and disease in the first place • Often less expensive than the biomedical model of health 	<ul style="list-style-type: none"> • Health promotion campaigns may not always be successful • Some diseases cannot be prevented through behavioural changes • Does not account for people who have already developed an illness or disease

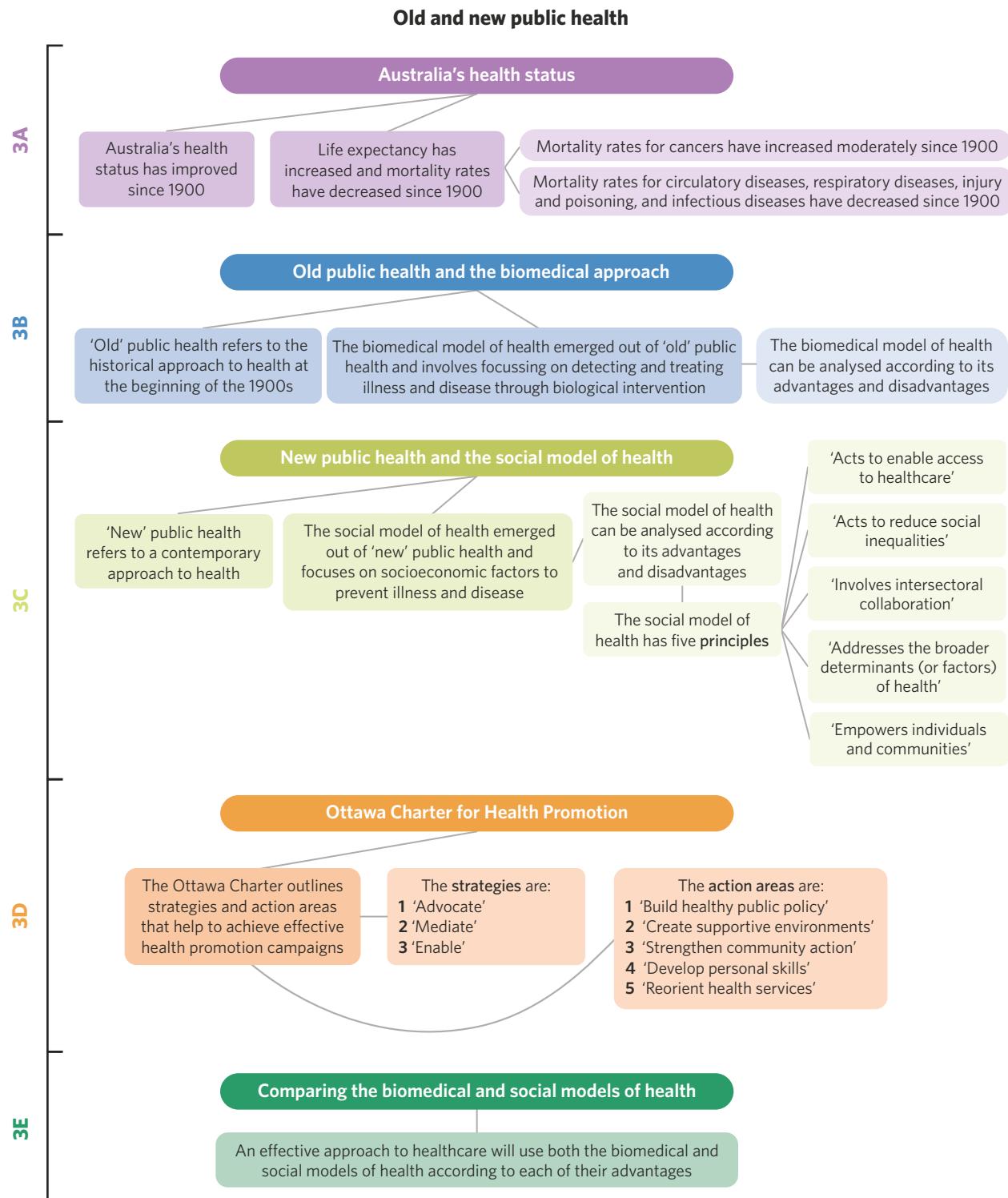
In lesson **3D: Ottawa Charter for Health Promotion**, we learnt about the Ottawa Charter for Health Promotion. Specifically, we learnt that:

- the Ottawa Charter for Health Promotion also emerged out of 'new' public health, and outlines a series of strategies and action areas required to achieve effective health promotion campaigns.
- the three strategies of the Ottawa Charter for Health Promotion are 'advocate,' 'mediate,' and 'enable.'
- the five action areas of the Ottawa Charter for Health Promotion are 'build healthy public policy,' 'create supportive environments,' 'strengthen community action,' 'develop personal skills,' and 'reorient health services.'



In lesson **3E: Comparing the biomedical and social models of health**, we compared the biomedical and social models of health. Specifically, we learnt that:

- it is necessary for the biomedical and social models of health to be used in conjunction.
- each model is used in different contexts according to what it is most effective at doing.
- the biomedical model of health is necessary in order to detect and treat conditions in individuals that have already occurred or that cannot be prevented through lifestyle changes.
- the social model of health is necessary in order to prevent illness and disease from occurring in the first place, and therefore to improve population health and reduce healthcare costs.



CHAPTER REVIEW ACTIVITIES

Review activity 1: Using the Ottawa Charter for Health Promotion

In this chapter, you learnt about the Ottawa Charter for Health Promotion, including how to apply its action areas to a range of pre-existing health promotion campaigns. But have you ever wondered how it would be used by those who are constructing health promotion campaigns themselves? Choose an illness or disease that can often be prevented through lifestyle changes. Some examples of this include obesity, lung cancer, or dental caries. Once you have chosen an appropriate illness or disease, create a health promotion campaign that you believe would encourage people to change their behaviour, decreasing the likelihood that they will develop this illness or disease. Make sure that your health promotion campaign uses the action areas of the Ottawa Charter for Health Promotion. You can copy and fill in the following table in your notes to structure your response.

<i>Illness/disease chosen:</i>	
Ottawa Charter action area	How could this action area be used by my health promotion campaign?
'Build healthy public policy'	
'Create supportive environments'	
'Strengthen community action'	
'Develop personal skills'	
'Reorient health services'	

Review activity 2: Applying the biomedical and social models of health to a contemporary public health risk

The biomedical and social models of health are both required in order to develop effective healthcare systems. But how does this look in practice? Choose an illness or disease that represents a significant public health risk. Some examples of this include COVID-19, influenza, or cardiovascular disease. Once you have chosen an illness or disease of this kind, list different ways that both the biomedical and social models of health could be used in order to prevent a public health crisis. You can copy and fill in the following table in your notes to structure your response.

<i>Illness/disease chosen:</i>	
How can the biomedical model be used?	How can the social model be used?

CHAPTER 3 TEST

Question 1 (2 MARKS)

Describe the social model of health principle 'acts to enable access to healthcare.'

Question 2 (4 MARKS)

Using examples, compare the 'old' and 'new' public health models.

Question 3 (3 MARKS)

The biomedical model of health encourages the development of new medical technologies in order to improve how we diagnose and treat illness and disease. Many of the technologies that were developed and used as a part of the biomedical model of health are still used to this day.

- a Identify an example of medical technology that was developed as part of the biomedical model of health. (1 MARK)
- b Describe how the example of medical technology that you identified in **part a** promotes health status. (2 MARKS)

Question 4 (2 MARKS)

Outline **two** disadvantages of the social model of health.



Question 5 (2 MARKS)

Describe the social model of health.

Question 6 (2 MARKS)

Consider the following information about the Department of Health's 'Save lives. Save 000 for emergencies' public awareness campaign.

'Save lives. Save 000 for emergencies' campaign

It is important to only call triple zero (000) during emergencies, in order to help paramedics save lives.

Your local GP and/or pharmacist can help assist you if you have minor injuries or health concerns.

You can also call 1300 60 60 24 to speak to a nurse for immediate expert advice, 24/7.

Source: adapted from Better Health Channel, *Save lives. Save 000 for emergencies*, <<https://www.betterhealth.vic.gov.au/save-lives-save-000-emergencies>>

Explain how this campaign demonstrates an action area of the Ottawa Charter for Health Promotion.

Question 7 (2 MARKS)

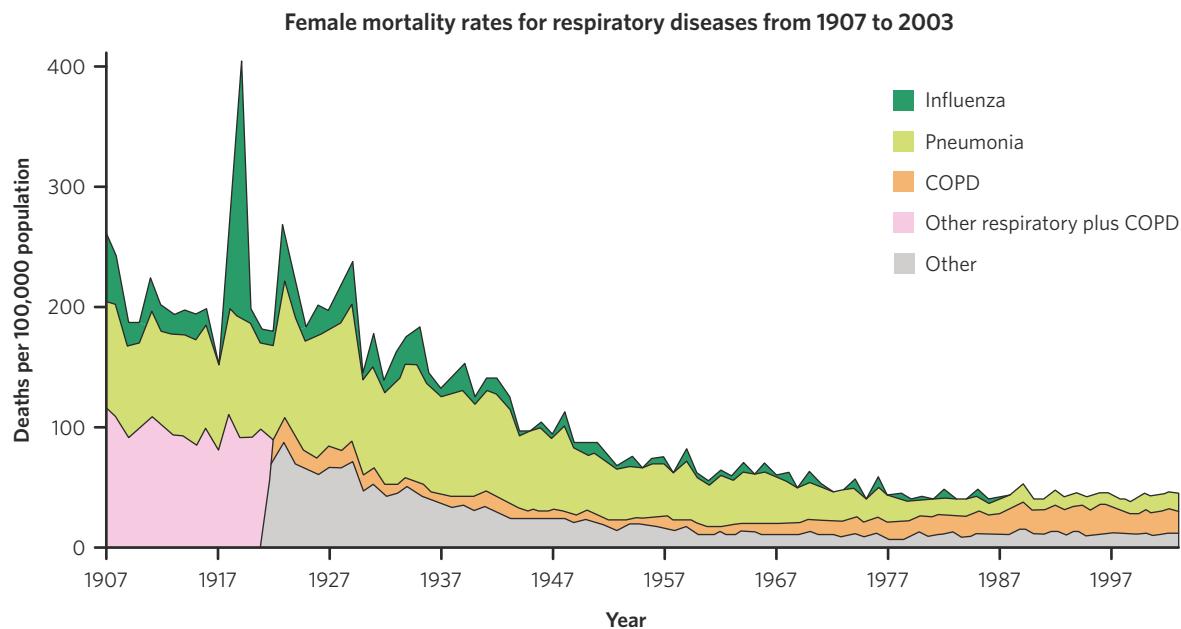
Describe how the biomedical approach to health promoted health status in Australia.

Question 8 (2 MARKS)

Describe how an Ottawa Charter for Health Promotion action area could promote health and wellbeing.

Question 9 (4 MARKS)

Describe how the biomedical and social models of health could be used together to reduce the incidence of infectious diseases.

Questions from multiple chapters**Question 10** (4 MARKS)

Source: adapted from Australian Institute of Health and Welfare, *Mortality over the twentieth century in Australia: Trends and patterns in major causes of death*, Mortality surveillance series no. 4, cat. no. PHE73, AIHW, Canberra, 2005, p.32

- a Using data, describe the trend for female mortality rates for respiratory diseases from 1907 to 2003. (2 MARKS)
- b Describe how the trend outlined in part a could promote optimal health and wellbeing as a resource nationally. (2 MARKS)

CHAPTER**4****Australia's health system****4A Australia's health system: Part 1****4B Australia's health system: Part 2****Key knowledge**

- Australia's health system, including Medicare, private health insurance, the Pharmaceutical Benefits Scheme and the National Disability Insurance Scheme, and its role in promoting health in relation to funding, sustainability, access and equity

4A AUSTRALIA'S HEALTH SYSTEM: PART 1

The beginning of COVID-19 showed us the crucial nature of a country's health system. We saw the devastating global impacts of health systems that became rapidly overwhelmed. A health system needs to be able to adapt quickly to the current needs of a population. Health systems must also be built in a way that can serve a current population, but also preserve resources for people in years and decades to come.

4A Australia's health system: Part 1

4B Australia's health system: Part 2

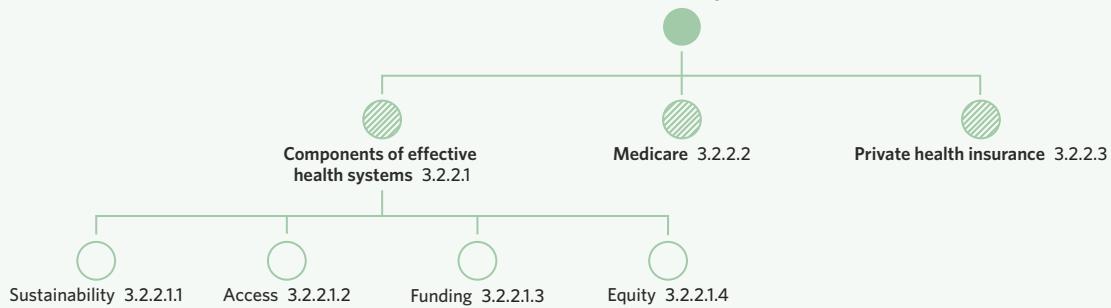
Study design dot point

- Australia's health system, including Medicare, private health insurance, the Pharmaceutical Benefits Scheme and the National Disability Insurance Scheme, and its role in promoting health in relation to funding, sustainability, access and equity

Key knowledge units

Components of effective health systems	3.2.2.1
Sustainability	3.2.2.1.1
Access	3.2.2.1.2
Funding	3.2.2.1.3
Equity	3.2.2.1.4
Medicare	3.2.2.2
Private health insurance	3.2.2.3

Australia's health system: Part 1



Components of effective health systems 3.2.2.1

OVERVIEW

Australia has a world-renowned healthcare system. There are certain components that our health system demonstrates and aims to improve to continue to provide Australians with a high quality of healthcare.

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- analyse the role of Medicare, private health insurance, the Pharmaceutical Benefits Scheme and the National Disability Insurance Scheme in promoting Australia's health

THEORY DETAILS

Sustainability 3.2.2.1.1

Sustainability refers to meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. In the context of Australia's healthcare, building a sustainable health system is about the ability to continue to effectively meet Australia's health needs, enabling the current and future populations to experience good health. Specifically, as Australia's health system provides Australians with such a high level of care, a sustainable healthcare system would ensure it can continually provide this level of care for decades to come. It is also important that continuous research and planning is conducted to ensure our healthcare system can adapt to meet the changing needs of future generations.

Access 3.2.2.1.2

Access in healthcare is about people being able to receive healthcare that they need at an appropriate time and place, without barriers, such as location, cost, and culture interfering. Australia has implemented a healthcare system that is designed to give all Australian residents access to basic and necessary healthcare. However, our system is still not perfect. Some people still face financial barriers when accessing necessary healthcare, meaning they are less likely to receive it, preventing them from achieving good health. Location is also another common barrier for people, as those who live outside of major cities in Australia may be far away from healthcare services, such as a hospital. People with certain cultural beliefs may not be able to access culturally appropriate healthcare, or could be discriminated against due to their culture, making healthcare less accessible.

Equity 3.2.2.1.3

Equity refers to being fair and just, which includes catering for different people's needs. Australia's healthcare system needs to consider the needs of millions of people. Having an equitable healthcare system is one that caters for the various requirements of *different* people, and has solutions in place for their different sets of circumstances. Equity is often misinterpreted as being the same as equality, which relates to treating people the *same*. The difference between these two terms is that equity takes different people's needs into account and provides support on the basis of those needs, whereas equality treats people exactly the same.

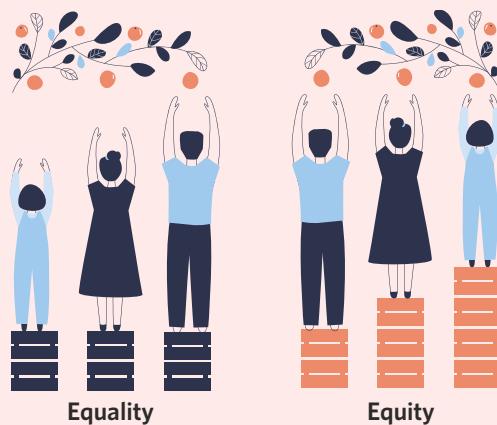
KEY DEFINITIONS

Sustainability refers to meeting the needs of the present generation without compromising the ability of future generations to meet their own needs

Access in healthcare is about people being able to receive healthcare that they need at an appropriate time and location, without barriers, such as location, cost, and culture interfering

Equity refers to being fair and just, which includes catering for different people's needs

Useful tip



Still confused about equity and equality? As mentioned, equality is described as treating everyone equally/*the same*, whereas, equity is about responding to people's various needs, which could involve providing more support to those that need it. For example, a family who has an unwell family member and experiences significant medical bills should be provided extra financial assistance compared to a family whose members are all well.

Image: Batshevs/Shutterstock.com

Figure 1 Equity is about levelling the playing field, whereas equality is about treating people the same



Funding 3.2.2.1.4

Providing such a high level of care for all Australians requires a lot of money. In 2018-19, Australia spent \$195.7 billion on health, which is \$7,772 per person (Australian Institute of Health and Welfare [AIHW], 2020). Funding a health system involves obtaining appropriate financial resources to deliver effective, convenient, and timely health services to every Australian resident. The healthcare system is funded by various sources, and the amount Australia spends on our system has so far increased every year.

Sources of funding to Australia's healthcare system 2017-18

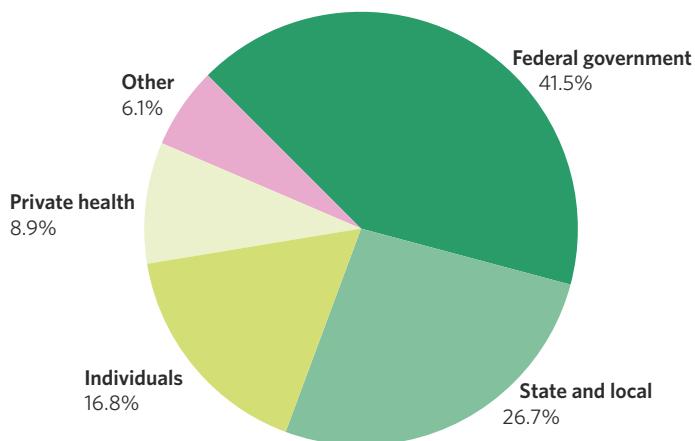


Figure 2 The proportions that various groups contributed to Australia's healthcare system (AIHW, 2020)

Memory device

To help remember the components of effective health systems, you can use the acronym SAFE:

Sustainability

Access

Funding

Equity

After all, a good healthcare system should keep us healthy and SAFE.

Medicare 3.2.2.2

OVERVIEW

Australia's healthcare system is known as one of the best in the world. A key reason why we are known to have a leading healthcare system is because every Australian citizen and permanent resident has access to necessary and essential healthcare at a subsidised cost, or for no cost at all. The Australian public access this healthcare through the **public health system** via a scheme called Medicare.

THEORY DETAILS

When required, Australians can access essential healthcare that they need at little or no cost. This is achieved through **Medicare**, Australia's universal health insurance scheme which provides all Australian residents (and some overseas visitors) access to necessary healthcare at a **subsidised** cost, or for no cost at all. Medicare is Australia's *public* health insurance system which was established by the Federal government in 1984 (National Museum Australia, 2020). Medicare is available to all permanent Australian residents, thereby ensuring that they can access healthcare services and treatments at a subsidised rate deemed essential and necessary. Medicare also enables all Australian permanent residents to access subsidised healthcare in certain countries, and allows visitors from certain countries to access Australia's public healthcare system.

Want to know more?

Medicare has a reciprocal agreement with other countries. This is where all permanent Australian residents can receive help with the cost of necessary treatment when they visit any country that is in this agreement. Visitors from these countries can also access necessary healthcare when visiting Australia via Medicare. Necessary treatments for travellers include emergency care and treatment for illnesses and injuries that require immediate treatment (before travelling home). This agreement is with 11 countries:

- Belgium
- Finland
- Italy
- Malta
- The Netherlands
- New Zealand
- Norway
- The Republic of Ireland
- Slovenia
- Sweden
- The United Kingdom

These countries offer similar healthcare services to its residents. Australia does not have agreements with countries with very different health systems, such as the United States

ADDITIONAL TERMS

Public health systems are systems that provide healthcare services and products to citizens and residents which are funded by the government

KEY DEFINITIONS

Medicare is Australia's universal health insurance scheme, which provides all Australian residents (and some overseas visitors) access to necessary healthcare at a subsidised cost, or for no cost at all

ADDITIONAL TERMS

Subsidised means a body, generally the Government, pays part of a product or service, which reduces its selling price

What does Medicare cover?

So, what does Medicare actually cover? The treatments and services Medicare covers can be categorised into *out-of-hospital* expenses and *in-hospital* expenses. Medicare cannot cover everything; however, it covers all basic healthcare services.

Out-of-hospital expenses include:

- the whole or a partial amount for consultation fees for doctors (known as general practitioners (GPs)), specialists, and other health professionals. Medicare covers the **schedule fee**, however some doctors will charge more than the schedule fee, meaning the patient must pay the remaining amount after the schedule fee.
- tests and examinations that are required to diagnose illnesses, such as x-rays and pathology tests.
- eye tests performed by an optometrist.
- majority of procedures and tests performed by GPs, such as checking a patient's blood pressure.
- selected dental procedures. Children aged between two and 17 years old can be covered through the Child Dental Benefits Schedule (CDBS). The CDBS covers up to \$1000 every two years on various services, such as x-rays, cleanings, and fillings.

In-hospital expenses include:

- treatment and accommodation is fully covered by Medicare as a **public patient** in a **public hospital**. For example, medications and tests (such as blood tests) that occur during a stay, as well as accommodation services (such as meals) are fully covered by Medicare, so the patient generally experiences no cost.
- 75% of the schedule fee for treatment costs by doctors and specialists.



Want to know more?

In 2020, the Australian government doubled the number of Medicare-funded psychology sessions from 10 to 20. This initiative is beginning as a two year plan, as the aftermath of events, such as the COVID-19 pandemic and the bushfires, have heightened mental health problems nationally. The Australian Psychological Society has long advocated for more psychology sessions to be added to the MBS. This initiative recognises the value that mental health workers add to the healthcare system and Australia's health.
(Australian Psychological Society, 2020)

What does Medicare not cover?

Medicare covers basic treatments. There are many things that people need that Medicare will not cover. This includes:

- the majority of private hospital expenses. Medicare covers 75% of the schedule fee for *treatment* costs by doctors and specialists, but will not cover any extra costs including accommodation, **theatre fees**, and medication.
- the majority of dental examinations.
- ambulance services.
- the majority of **allied health services** (unless an individual is referred by a GP or carried out in a public hospital). Allied health professionals are university qualified practitioners, such as audiologists, dieticians, counsellors, and social workers.
- health aids including hearing aids, glasses, and contact lenses.
- alternative treatments including chiropractic services, acupuncture, naturopathy, remedial massage, and osteopathy.

Components of Medicare

Understanding how Medicare works is difficult as it has lots of details and technicalities.

You will often hear the term **bulk billing** when discussing Medicare. A service provider (such as a GP) can choose to bulk bill a consultation, meaning they charge no more than the schedule fee for their service. Therefore, the patient will have no 'out-of-pocket' costs. Only services listed in the **Medicare Benefits Schedule (MBS)** can be bulk billed, meaning the government pays the amount of the schedule fee for the service provided. Some doctors advertise their practice as a place that only bulk bills, meaning patients do not have to make up any extra costs.

ADDITIONAL TERMS

Schedule fee is the amount of money that the government decides Medicare will pay for various consultations and treatments instead of the patient

Public patient refers to a person that goes to a public hospital and Medicare funds their treatment

Public hospital refers to a hospital that is government owned and operates solely off government funding (which is primarily taxpayer money)

ADDITIONAL TERMS

Theatre fees are costs for procedures performed in an operating room

Allied health services are services delivered by health professionals who specialise in preventing, diagnosing, and treating numerous conditions and illnesses

Bulk billing is when a service provider (such as a GP) does not charge the patient more than the schedule fee for their service

Medicare Benefits Schedule (MBS) is the list of medical services that the Australian Government will fully or partly pay for to provide financial assistance to Australians for their healthcare



Useful tip

You may wonder, why doesn't everyone go to a doctor that only bulk bills? Some people may choose to go to doctors that charge above the cost of the schedule fee as there can be some downfalls to places that only bulk bill. This includes extended waiting periods and not being able to choose your regular doctor if they aren't working.

Service providers often choose to charge more than the schedule fee for their service. This could be because they believe that they offer a premium experience, have years of experience, and have greater costs for running their practice. Practices that choose to charge more than a schedule fee require patients to make up the difference between the schedule fee for their service and what they charge, which is called a **patient co-payment**.

Figuring out the amount of patient co-payment

$$\text{Cost of service} - \text{Schedule fee} = \text{Patient co-payment amount}$$

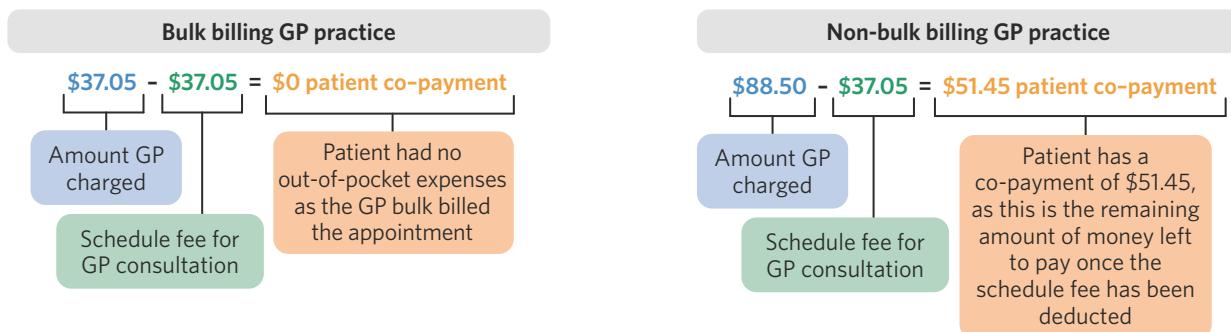


Figure 3 Examples of how bulk billing and non-bulk billing service providers work

ACTIVITY 1

Read the following scenarios and calculate the amount a patient will have to pay for these healthcare services.

- 1 Otto went to the doctor for a general checkup with his usual GP. He had his blood pressure taken and updated his doctor on how his health has been recently. His appointment totalled to \$55.20. The MBS lists a GP visit as \$37.05. How much did Otto pay?
- 2 Darcie has recently experienced flu-like symptoms and believes they need antibiotics. Darcie saw their most local bulk billing GP practice, and was bulk billed at the end of the appointment. How much did Darcie pay?
- 3 Atlanta has recently experienced back pain. Atlanta went and saw the osteopath for help. At the end of her session, the receptionist said her appointment was \$76.30. How much did Atlanta have to pay?

The Medicare Safety Net

The **Medicare Safety Net** is designed to protect individuals and families from experiencing high medical costs. For people who regularly have medical services and experience significant out-of-pocket costs, the Medicare Safety Net lowers costs for Medicare services. Once an individual or family spends over a certain amount in a calendar year, they will be charged at a significantly cheaper rate for these Medicare services for the remainder of that year. Medicare has implemented the Medicare Safety Net as it recognises that it would be financially difficult to continue to pay out-of-pocket expenses for Medicare services, such as costs that would occur for someone who constantly accesses GP consultations due to a chronic illness.

How is Medicare funded?

For Medicare to operate effectively, it is essential that the government can *afford* to fund it. There are three ways that Medicare is funded:

- The Medicare levy
- The Medicare levy surcharge
- General income taxation (**tax**)

ADDITIONAL TERMS

Patient co-payment is the remaining amount of money individuals are required to pay once the subsidised price of a product or service has been deducted from the overall cost

ADDITIONAL TERMS

Medicare Safety Net provides extra financial support to individuals and families who experience high medical costs by further reducing the costs of Medicare services once they reach the designated threshold

Tax is a compulsory financial contribution to state revenue made by citizens or residents which is used to finance government spending, including the provision of public goods and services, such as public healthcare, public schools, public infrastructure, and police services

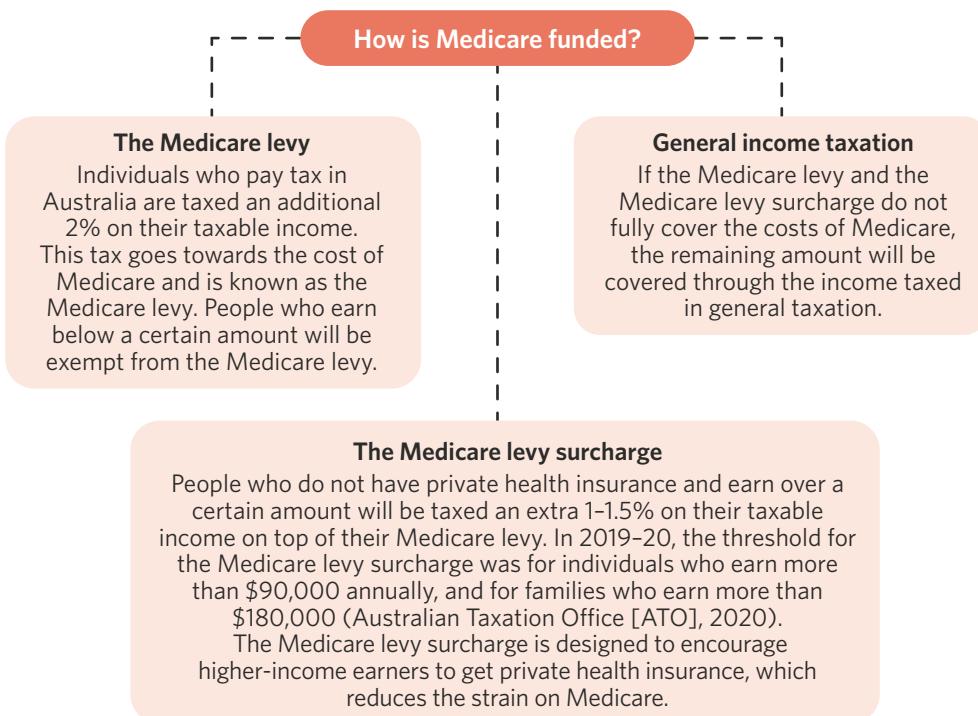


Figure 4 The three sources that fund Medicare



Want to know more?

Understanding the concept of tax can be tricky. The Australian government funds Medicare and contributes to over half the costs of the healthcare system. The government can do this as they collect tax. When you begin working, you will notice a portion of your pay will go to tax. Although this seems strange that the government can take some of your hard earned money, this tax contributes to funding really important services in Australia, including our healthcare system. Most people's income will be taxed (unless they do not earn enough to meet the taxable income threshold), and the government decides how this money will be distributed to fund Australia's public services.



People go to work and earn an income



People receive their pay



A portion of people's income goes to the government, so the government can provide essential services, such as Medicare



Image: davooda/Shutterstock.com

Figure 5 The concept of tax as it applies to funding essential services, such as Medicare

Advantages and disadvantages of Medicare

Table 1 The advantages and disadvantages of Medicare

Advantages	Disadvantages
<ul style="list-style-type: none"> Every Australian citizen and permanent resident can access Medicare Medicare provides access to basic healthcare at little or no cost (including GP consultations, treatment as a public patient at a public hospital, and a range of tests) The reciprocal agreement enables Australian citizens to access subsidised/free healthcare in selected countries Patients can choose their doctor for out-of-hospital services. 	<ul style="list-style-type: none"> Significant wait times for non-emergency treatments Patients are unable to choose doctors for in-hospital treatments Individuals will often have to pay more for various healthcare services as Medicare often doesn't cover the full amount Individuals do not have a choice of doctor for in-hospital treatment in the public system Does not cover many alternative therapies, such as physiotherapy.



How Medicare promotes health in relation to sustainability, access, funding and equity

Table 2 How Medicare demonstrates sustainability, access, funding, and equity (SAFE)

Medicare	
Sustainability	<ul style="list-style-type: none"> Medicare only covers healthcare deemed to be 'medically necessary'. There are many different healthcare services that are not covered (such as physiotherapy). Limiting the services Medicare covers enable them to keep costs under control and continue to cover services in the future. By providing subsidised medical treatment, people are more likely to access healthcare earlier, preventing the development of more serious health conditions down the track. This prevention reduces the need for more expensive treatment later on (such as in-hospital services), keeping the costs of Medicare under control and sustainable for the future.
Access	<ul style="list-style-type: none"> Medicare seeks to remove financial barriers for accessing healthcare, as it provides basic healthcare at little or no costs. All permanent Australian residents are able to access Medicare, regardless of their income, culture, and location. People can choose their doctor for out-of-hospital treatments, which may be appropriate for people due to cultural needs or personal preference. For example, a female may prefer to see a female doctor. This choice makes treatment more accessible for everyone. Medicare hospital treatments operate on a triage system. Patients who are the most in need receive treatment first. For example, someone experiencing heart failure will be prioritised over someone with a broken arm.
Funding	<ul style="list-style-type: none"> Medicare is funded through three financial sources: the Medicare levy, Medicare levy surcharge, and general income tax. You learnt in depth about these in figure 4.
Equity	<ul style="list-style-type: none"> The Medicare Safety Net assists individuals and families with significant medical costs, relieving some of their financial stress. This extra support demonstrates how the government seeks to make it fair and equitable for families experiencing high medical costs. Allowing low income earners to be exempt from the Medicare Levy provides extra financial support for those who need it.

Private health insurance 3.2.2.3

OVERVIEW

Australia cannot just rely on the public healthcare system. This is because Medicare's resources would be exhausted and people would not be able to receive healthcare when they need it. Therefore, private health insurance exists to reduce the strain on Medicare. People can have private health insurance on top of Medicare, meaning they will access healthcare through the private healthcare system.

THEORY DETAILS

Private health insurance is an optional type of health insurance which people can have in addition to Medicare, in which members pay a **premium** in return for payment towards services that are not covered by Medicare. Private health insurance is a very important aspect of Australia's health system. The more people that have private health insurance, the greater the reduction in pressure placed on Medicare, meaning Medicare can continue to meet the present and future health needs of Australians. If people have private health insurance, they are more likely to access in-hospital and out-of-hospital services through the private system, increasing the capacity of the public system to treat Australians who can't afford to have private health insurance.

Private health insurance provides people with a higher level of choice in healthcare, such as people choosing their doctor as a **private patient** in a **private hospital** or public hospital. Private health insurance can also provide individuals with **extras cover**, which is coverage for healthcare services not provided by Medicare, such as osteopathy, physiotherapy, and remedial massages. Members can choose what type of coverage they want depending on their needs, which will influence the cost of their premium. For example, someone who does not want to have children or is beyond their reproductive years does not need to have maternity coverage. People can choose to have coverage for in-hospital services only, extras only, or a combination of in-hospital services and extras coverage. As of June 2019, 11.2 million Australians (44% of the population) had some form of in-hospital cover as a private patient, and 13.6 million (53% of the population) had some form of 'general treatment' or extras cover (AIHW, 2020).

ADDITIONAL TERMS

Triage system sorts patients based on their level of need for medical attention

KEY DEFINITIONS

Private health insurance is an optional type of health insurance which people can have in addition to Medicare, in which members pay a premium in return for payment towards services that are not covered by Medicare

ADDITIONAL TERMS

Premium refers to the amount paid for an insurance policy

Private patient refers to someone who receives healthcare treatment through the private healthcare system

Private hospital refers to a hospital that is owned and funded by a group or individual separate from the government

Extras cover is insurance for out-of-hospital medical care which Medicare does not cover, such as the majority of dental services and osteopathy

Want to know more?

It is helpful to have a contextual understanding of how Medicare and private health insurance (PHI) work for in-hospital treatments for both public and private hospitals. Individuals can choose to be treated at a private or public hospital.

Table 3 The differences between being a public or private patient in a public or private hospital.

	Explanation	Payments
Private patient in a private hospital	Individuals who have private health insurance can choose to be treated at a private hospital.	Medicare will cover 75% of the schedule fee of treatment costs, and private health insurance will fully or partly cover accommodation, specialist fees, and the remaining 25% of the schedule fee for treatment.
Private patient in a public hospital	Individuals who have private health insurance can choose to be treated as a private patient at a public hospital.	Similar to private hospitals, Medicare will cover 75% of the schedule fee of treatment costs, and private health insurance will fully or partially cover the remaining costs.
Public patient in a public hospital	Generally speaking, individuals who do not have private health insurance will choose to be treated at a public hospital as a public patient.	Medicare covers all costs during the individual's hospital stay.
Private patient without PHI in a private hospital	Individuals who do not have private health insurance can also choose to be treated as a private patient at a private hospital.	Apart from the 75% of the treatment fee covered by Medicare, they will have to pay all of the extra expenses. This is likely to be very expensive and is therefore uncommon.
Public patient in a public hospital with PHI	Individuals who have PHI can still elect to be treated as a public patient at a public hospital.	Medicare covers all costs during the individual's hospital stay.

As private health insurance takes the pressure off the public health system, there are numerous incentive schemes that have been introduced by the federal government which are designed to encourage people who can afford it to get private health insurance (outlined in figure 6). The advantages and disadvantages of private health insurance generally are discussed in table 5.

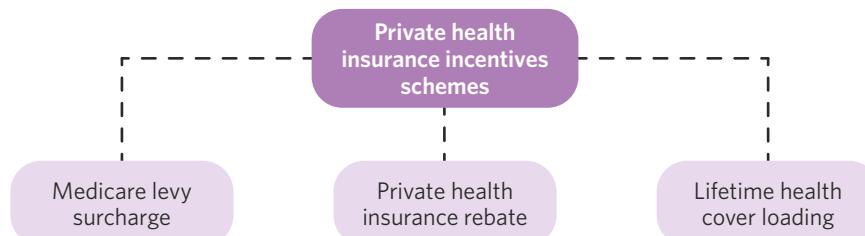


Figure 6 Private health insurance incentive schemes

Table 4 Private health insurance incentive schemes

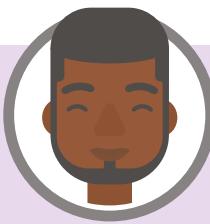
Medicare levy surcharge	The Medicare levy surcharge is a tax for people who do not have private health insurance, and earn over a certain amount. This scheme is designed to encourage people to take up private health insurance and take pressure off Medicare.
Private health insurance rebate	The private health insurance rebate is an amount that the federal government contributes towards the costs of people's private health insurance. The government refunds individuals part of the cost of their insurance premium. This rebate is dependent on how much someone earns: the more someone earns the less money they will get back. If people have an income above a certain amount, they will not be entitled to any rebate at all.
Lifetime health cover loading	The lifetime health cover loading is a scheme that encourages people to get private health insurance earlier in life. Once an individual turns 30, the cost of private health insurance will cost an extra two percent each year that the individual does not take up private health insurance. Understanding how the incentive 'lifetime health cover loading' works is tricky. Figure 7 presents an example to help you understand this incentive.



**Lelani**

Lelani is 50 years old, and has recently taken up private health insurance as she is concerned about the cost of medical bills as she gets older. Lelani will pay 40% more on her private health insurance premium than she would have if she got private health insurance when she was 30.

$$\begin{aligned} & \text{20 (the number of years past 30 years)} \times 2 \text{ (the} \\ & \text{percentage that premium increases each year)} \\ & = \mathbf{40\%} \text{ (the overall percentage increase in the amount an individual pays on their premium).} \end{aligned}$$

**Amare**

Amare is 29 years old. Amare had always intended on eventually signing up for private health insurance. He realised that to avoid paying extra on his premium, he needed to sign up before he was 30 years old. Amare signed up for private health insurance this year, and therefore avoided paying extra on his premium.

Image: Visual Generation/Shutterstock.com

Figure 7 An example of how lifetime health cover loading works

Table 5 Advantages and disadvantages of private health insurance

Advantages	Disadvantages
<ul style="list-style-type: none"> Patients are able to choose their doctor as a private patient in hospital (public or private). Reduced waiting times for non-emergency treatments. Patients can choose which hospital they want to be treated at. Patients are more likely to have a private room. It reduces pressure on the public health system. There is financial coverage for a wider range of services. 	<ul style="list-style-type: none"> Cost of premiums can be expensive. There may still be out-of-pocket costs, even with extensive coverage. Waiting periods may apply for some services. For example, individuals may need to have paid for private health insurance for a certain period of time before receiving coverage from their insurer on services. You may pay for services that you will not claim.

Table 6 How private health insurance demonstrates sustainability, access, funding, and equity (SAFE)

Private health insurance	
Sustainability	<ul style="list-style-type: none"> Private health insurance reduces the strain on the public system, specifically Medicare. The more people who access healthcare through private health insurance, the less people rely on the public healthcare system, meaning people can be treated sooner. This leads to improvements in the overall health of the population. Ultimately, the less people relying on the public health system now and in the future, the more sustainable the system will be because it will be able to continue to meet Australia's healthcare needs. The various private health insurance incentive schemes increase the number of people who take up private health insurance, which also reduces the reliance on the public healthcare system.
Access	<ul style="list-style-type: none"> Private health insurance enables people to have greater access to healthcare services not covered by medicare. Waiting times for elective surgeries are shorter for all private patients. The waiting times for elective surgeries are quicker for everyone, as people in the public health system don't have to wait as long when there are people using the private health system.
Funding	<ul style="list-style-type: none"> Private health insurance is largely funded by the premiums paid by customers.
Equity	<ul style="list-style-type: none"> The private health insurance rebate demonstrates equity as lower income earners are entitled to a greater rebate on the cost of their premium. Medicare levy surcharge is only applicable to higher-income earners who do not take out private health insurance. This demonstrates equity as it relieves lower-income earners from paying this surcharge.

Theory summary

In this lesson, you have learnt about Medicare and private health insurance. You have also learnt about the components of an effective healthcare system: sustainability, access, funding, and equity (SAFE). For both Medicare and PHI, it is important to know:

- key components of how they work
- incentive schemes for each system
- how Medicare and PHI demonstrate the components of SAFE
- the advantages and disadvantages of each system.

4A QUESTIONS

Theory-review questions

Question 1

Australia's health system demonstrates sustainability, access, funding, and equity, and therefore does not need to improve.

- A True.
B False.

Question 2

Which of the following aspects relates to sustainability? (Select all that apply)

- I Making decisions about funding less healthcare services to avoid running out of resources.
II Encouraging more people to rely on the private healthcare system.
III Encouraging all Australians to not worry about taking up private health insurance as everyone is entitled to free healthcare.

Question 3

For the Australian healthcare system to be sustainable, it relies on the public and private healthcare system working together.

- A True.
B False.

Question 4

All high income earners have private health insurance.

- A True.
B False.

Question 5

Healthcare services provided by private health insurance are better than Medicare.

- A True.
B False.

Question 6

An advantage of Medicare is that it provides healthcare for free to all Australians.

- A True.
B False.



Skills

Unpacking the case study

Use the following information to answer Questions 7 and 8.

Sofia is 37 and has recently been diagnosed with type 2 diabetes. Sofia requires various medical services, including regular tests and GP consultations. Sofia has previously never received many medical bills, and is surprised by how much the out-of-pocket expenses are costing her. Sofia has recently qualified for the Medicare Safety Net, which will prevent her from experiencing intense financial strain. Sofia has recently noticed that she is feeling more relaxed in day-to-day life.

Question 7

Sofia benefiting from the Medicare Safety Net is reflected by the statement that

- A 'is surprised about how much the out-of-pocket amounts are costing her.'
- B 'will prevent her from experiencing intense financial strain.'

Question 8

Sofia's mental health and wellbeing being positively impacted through accessing the Medicare Safety Net is reflected by the statement that

- A 'Sofia has recently noticed she is feeling more relaxed in day-to-day life.'
- B 'Sofia is 37 and has recently been diagnosed with type 2 diabetes.'

Perfect your phrasing

Question 9

Which of the following sentences is most correct?

- A A health system that is equitable gives everyone the *same support*.
- B A health system that is equitable gives people *different levels of support*.

Exam-style questions

Question 10 (1 MARK)

Describe private health insurance.

Adapted from VCAA 2019 exam Q10b

Question 11 (2 MARKS)

Describe Medicare.

Question 12 (2 MARKS)

Other than a public or private hospital, list one health service that an individual could access that is covered by Medicare and one health service that could be accessed through private health insurance.

Adapted from VCAA 2020 exam Q2a

Question 13 (2 MARKS)

Explain how private health insurance demonstrates equity.

Adapted from VCAA 2019 exam Q10b

Question 14 (4 MARKS)

Identify two advantages and two disadvantages of private health insurance.

Adapted from VCAA 2020 exam Q2b

Advantages	Disadvantages

Question 15 (4 MARKS)

Analyse how Medicare demonstrates sustainability and access.

Adapted from VCAA 2019 exam Q10b

Question 16 (6 MARKS)

Analyse how Medicare promotes health and wellbeing in Australia. Your response must include a discussion of funding, equity, and sustainability.

Adapted from VCAA 2018 sample questions Q5b

Questions from multiple lessons**Question 17** (3 MARKS)

Arisu is a 32-year-old mother of three who has recently become pregnant. Arisu and her husband, Finlay, have recently been stressed about the amount of medical bills involving the pregnancy and their other three children. Finlay has been struggling with this stress significantly, which has impacted his performance at work and his ability to see his friends. This stress has impacted both Finlay and Arisu's mental health, as well as their relationships with their friends. Arisu and Finlay recently learnt that they have qualified for the Medicare Safety Net for families, which will significantly reduce their medical bills.

With reference to the case study, analyse Medicare's contribution to optimal health and wellbeing as a resource individually.

Adapted from VCAA 2018 exam Q4

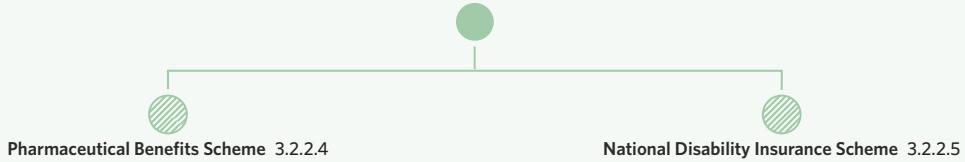


4B AUSTRALIA'S HEALTH SYSTEM: PART 2

The quality of Australia's healthcare system is largely attributed to programs implemented by the Federal Government, such as Medicare. The Australian Government also assists the population in accessing essential medicines through the Pharmaceutical Benefits Scheme. To support people with a disability, the government has introduced the National Disability Insurance Scheme.

4A Australia's health system: Part 1	4B Australia's health system: Part 2
Study design dot point	
<ul style="list-style-type: none"> Australia's health system, including Medicare, private health insurance, the Pharmaceutical Benefits Scheme and the National Disability Insurance Scheme, and its role in promoting health in relation to funding, sustainability, access and equity 	
Key knowledge units	
Pharmaceuticals Benefits Scheme	3.2.2.4
National Disability Insurance Scheme	3.2.2.5

Australia's health system: Part 2



Pharmaceutical Benefits Scheme 3.2.2.4

OVERVIEW

As we learnt in 4A, enabling Australians to access healthcare services for free or at a subsidised rate through Medicare is essential for keeping our population as healthy and productive as possible. An effective healthcare system must also enable the population to access essential medicines to prevent and treat various health conditions. The Australian Government provides Australians with access to essential prescription medicines at a reduced cost through the Pharmaceutical Benefits Scheme.

THEORY DETAILS

The **Pharmaceutical Benefits Scheme (PBS)** is a program run by the Australian government that subsidises various essential prescription medicines for Australian citizens, permanent residents, and visitors from selected countries. The PBS began in 1948 and provided a very limited selection of medicines to the population for free. The PBS has now evolved to providing thousands of medicines, which are listed on the **PBS schedule**, to Australians in a convenient, reliable, and affordable manner. Although the medicines listed are no longer free, there is a wider range available and the cost of them is significantly reduced.

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- analyse the role of Medicare, private health insurance, the Pharmaceutical Benefits Scheme and the National Disability Insurance Scheme in promoting Australia's health

KEY DEFINITIONS

Pharmaceutical Benefits Scheme (PBS) is a program run by the Australian government that subsidises various essential prescription medicines for Australian citizens, permanent residents, and visitors from selected countries

ADDITIONAL TERMS

PBS schedule is a list of all of the medicines that are provided to patients, at a price subsidised by the government

The PBS is available to all Australian citizens and permanent residents who have a valid Medicare card. The PBS is also available to visitors from countries that are part of the Medicare Reciprocal Agreement. Patients need to contribute an amount of money towards their medicines, which is referred to as a ‘patient co-payment’.

Since January 2021, the patient co-payment amount has been up to \$41.30 for medicines on the PBS schedule, or up to \$6.60 if a patient holds a **concession card** (Department of Health, 2021). The Australian government pays the remaining amount. Every year, the patient co-payment is adjusted on January 1. **Prescription medicines** can sometimes be reduced from thousands of dollars to the subsidised \$41.30. Therefore, people who require certain expensive medications will only need to pay up to \$41.30 through the PBS.



Want to know more?

From November 1 2020, new medicines called Tecentriq and Avastin were added to the PBS. These medicines help treat patients with the most common form of liver cancer. It is estimated that this listing benefits over 500 patients per year. Without the PBS subsidy, liver cancer patients would pay \$170,000 per course of treatment. Medication used to treat Parkinson’s disease (Apomine Solution for Infusion and Apomine Intermittent [apomorphine]) was also added to the PBS. Without the PBS subsidy, patients with Parkinson’s Disease could pay over \$7500 per script of medicine.

(Seven News, 2020).

PBS Safety Net

The PBS includes the **PBS Safety Net**, which is designed to financially protect individuals and families who require a large amount of medicines from the PBS. Once a patient reaches a certain threshold in a calendar year, they will receive medicines at a significantly cheaper price or for free for the rest of that calendar year. Since January 2021, the PBS Safety Net threshold was \$1497.20 for all general patients, and \$316.80 for concession cardholders. Individuals who reach the threshold begin paying the amount that concession cardholders pay for the rest of that calendar year. Once a concession cardholder reaches the safety net threshold, they will receive PBS medicines for free for the rest of the calendar year.

Figuring out the amount of a patient co-payment

*Individuals pay up to patient co-payment amounts specified by the government each year.
The Australian Government pays the rest.*

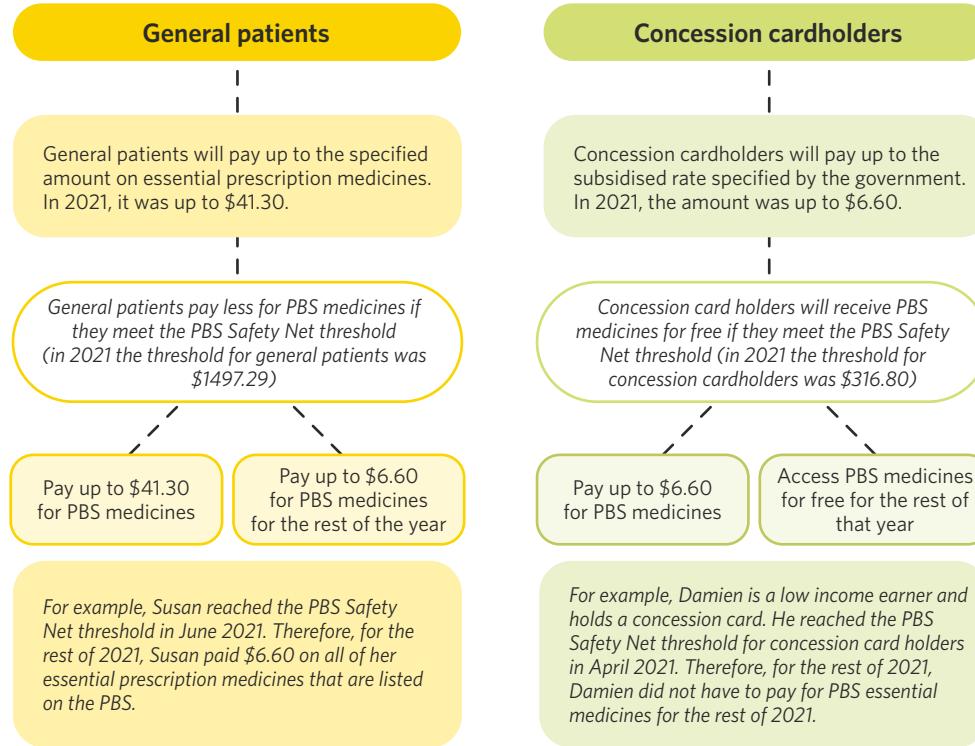


Figure 1 Patient co-payments in the PBS

ADDITIONAL TERMS

Concession card is a card issued by the government that entitles people to a range of concessions, which includes access to reduced price for PBS medicines, and can be issued to low-income earners, seniors, and pensioners

Prescription medicines are medicines that are legally required to be directed and approved by a patient’s doctor and dispensed by a pharmacist

ADDITIONAL TERMS

PBS Safety Net protects individuals and families from high costs of essential prescription medicines by significantly reducing the subsidised costs of medicines once they reach a certain threshold for the remaining calendar year



In understanding how the PBS benefits Australia's health system, we need to analyse how the PBS demonstrates sustainability, access, funding and equity.

Table 1 How the PBS demonstrates sustainability, access, funding, and equity (SAFE)

PBS	
Sustainability	<ul style="list-style-type: none"> Not every medication is listed on the PBS, only the ones that are classified to have the greatest benefit and impact on the population. It would not be financially possible to have every medicine on the PBS. The amount of patient co-payments are adjusted on 1 January each year in line with the Consumer Price Index (CPI) to match inflation. Some medicines on the PBS act as treatment for conditions, while some medicines prevent conditions from developing. Both treating and preventing conditions through medication reduces the need for expensive hospital treatments and stays, keeping the costs of the health system manageable.
Access	<ul style="list-style-type: none"> By significantly reducing the cost of various essential prescription medicines, the PBS removes the key barrier of income to accessing essential medicines. The PBS is available to all Australians, regardless of characteristics including income, gender, culture.
Funding	<ul style="list-style-type: none"> The PBS is partially funded by the money that is collected through patient co-payments. The Australian Federal government pays for the PBS through taxes.
Equity	<ul style="list-style-type: none"> The PBS Safety Net assists individuals who have high costs for prescription medicines by significantly reducing or removing the cost of them once they reach the threshold. This demonstrates equity as people who spend a lot of money on prescription medicines are provided with extra financial support, preventing them from being financially disadvantaged.

National Disability Insurance Scheme 3.2.2.5

OVERVIEW

Australia's health system also provides support to people with a disability. The National Disability Insurance Scheme was introduced by the Federal Government in 2013.

THEORY DETAILS

Almost everyone experiences difficulties during their lifetime. However, people with a disability will likely face challenges every day. It is easy for **able-bodied** people to overlook and not consider everyday activities that would be difficult for people with a disability. For example, the way places such as public transport, universities, and workplaces are designed can be challenging for people with disabilities to access. Imagine you have five minutes to get to your next class which is on the third floor of a building on the other side of your school. This is difficult for someone who has a physical impairment and cannot use the stairs if your school has limited lift access. This is just one of many examples when considering challenges that people with disabilities face each day.

There are approximately 4.3 million Australians who have a disability. The **National Disability Insurance Scheme (NDIS)** is an insurance scheme that provides support and services to people with a disability, their families, and their carers. The central aim of the NDIS is to provide people who are born with or acquire a significant disability with the support they need to lead an enjoyable and ordinary life. Over the next five years, the NDIS is aiming to provide funding for support and services to around 500,000 Australians who have a permanent and significant disability. The NDIS was introduced in 2013 and is a government program which is funded and governed by the Australian Federal Government and participating state and territory governments.

ADDITIONAL TERMS

Consumer Price Index (CPI)

a measure of the average change over time in the prices paid by households for a fixed basket of goods and services

Inflation is the sustained increase in the overall price level of goods and services in the economy

ADDITIONAL TERMS

Able-bodied refers to people who do not have an illness, injury, or condition that makes it difficult to complete daily activities

KEY DEFINITIONS

National Disability Insurance Scheme (NDIS) is an insurance scheme that provides support and services to people with a disability, their families, and their carers

Eligibility requirements

To receive support from the NDIS, an individual must satisfy certain requirements.

Age and residency requirements:

- Fulfil residency requirements: be an Australian citizen, permanent resident, or a **Protected Special Category Visa** holder.
- Live in a place where the NDIS is geographically available.
- Be aged under 65 when the request to receive support was made.

Disability requirements:

- You have a condition or impairment that is likely to be lifelong/permanent; and
- Your condition significantly decreases your ability to properly participate in activities or complete tasks, unless you have
 - Help from other people; or
 - Assistive technology such as a wheelchair, walker, or cane (does not include common assistance such as glasses); or
 - You are unable to participate properly with assistive technology or equipment.
- Your impairment negatively affects your ability to participate socially and economically (such as getting a job and seeing friends); and
- You will likely need support from the NDIS for your entire life.

Once an individual is determined to be eligible for the NDIS, they will receive an individualised support plan. The steps of the plan are outlined in table 2.

Table 2 The process of making an individual's NDIS plan

Step 1: Creating an individual's plan
Once an individual is approved to receive support from the NDIS, they will work with an NDIS member to create a set of specific short-term and long-term goals for themselves and their family and carers. Goals need to be realistic and achievable for the individual, and will vary depending on an individual's disability. For example, someone may set the goals of living independently, getting a job, visiting friends more often, or staying at a relative's house for one night without their regular carer. The plan is a written document that outlines an individual's goals, and the subsequent support they will receive to achieve their goals.
Step 2: Using the plan
Once the plan is finalised, individuals begin using their plan to achieve their goals. This involves understanding what is in the plan, such as information about the person, which family and friends are sources of support, their goals, and relevant community services relevant to the individual's goals. Using the plan also requires the individual and their carers to understand how to manage their plan, such as how to effectively manage their support budget. Using the plan can also involve changing the plan if something is not working, and reviewing the individual's goals.
Step 3: Reviewing the plan
Like any set of goals, it is important to check in to determine what is working and what is not. An individual usually receives a review 12 months after their plan has begun. This review will look at what changes need to be made, such as alterations to a person's support system. Moreover, once an individual reaches their goals, their plan likely needs to change.

ACTIVITY 1

Thomas' story

Read the following scenario about Thomas and then answer the two discussion questions.

Thomas is a young man and has autism and an intellectual disability. Since becoming a participant of the NDIS, Thomas' main goal on his plan is to grow his independence. Through support and funding, Thomas has increased his independence by travelling to Melbourne, engaging in cooking classes, and utilising local community facilities, such as going to Melbourne Sports and Aquatics Centre (MSAC). Thomas' mother Leanne has also been able to experience increased independence, freedom, and choice by connecting with the support provided through the NDIS (Victorian Government, 2019).

- 1 Outline how Thomas' independence has increased since becoming a participant of the NDIS.
- 2 Discuss two ways that the NDIS has improved Thomas' health wellbeing.

ADDITIONAL TERMS

Protected Special Category

Visa holder is a temporary visa granted to New Zealand citizens if they fulfil certain conditions, and it enables them to access most social security benefits, such as the NDIS



Table 3 How the NDIS demonstrates sustainability, access, funding, and equity (SAFE)

NDIS	
Sustainability	<ul style="list-style-type: none"> The NDIS was implemented over the course of three years. This enabled the program to build up adequate funding over a sustained period of time, rather than all at once. The NDIS assists individuals to gain employment. Therefore, there are more Australians who are employed and earning taxable income. The more tax the government collects increases the financial capacity of the government to fund programs such as the NDIS and the PBS. Providing people with a disability with access to local support and healthcare services decreases the likelihood of individuals with a disability relying on the healthcare system in the future, which reduces the strain placed on the health system.
Access	<ul style="list-style-type: none"> A central aim of the NDIS is to enable participants to enjoy an ordinary life, which involves supporting individuals to access mainstream support and services. For example, by assisting individuals to access healthcare, education, housing, libraries and local sports clubs.
Funding	<ul style="list-style-type: none"> The NDIS is jointly funded by the Federal and participating state and territory governments.
Equity	<ul style="list-style-type: none"> The NDIS provides individuals and their carers with the necessary support based on someone's specific set of needs. Such assistance is individualised and addresses someone's barriers to living an ordinary life. The ability to access the NDIS is not based on someone's level of income. This means that support provided is not dependent on how much someone earns, but rather, their level of disability and subsequent support required.

Theory summary

In this lesson, you have learnt about the National Disability Insurance Scheme (NDIS) and the Pharmaceutical Benefits Scheme (PBS). For both the NDIS and PBS, it is important to know:

- key components of how they work.
- how the NDIS and the PBS demonstrate sustainability, access, funding and equity (SAFE).

4B QUESTIONS

Theory-review questions

Question 1

Medicare is the only healthcare service delivered by the government.

- A** True.
B False.

Question 2

The PBS is solely funded by the government.

- A** True.
B False.

Question 3

The PBS provides some Australians essential medicines at no cost.

- A** True.
B False.

Question 4

Which of the following are eligibility or residency requirements to access the NDIS? (Select all that apply)

- I** An individual must have any disability.
II An individual must be an Australian citizen, permanent resident, or a Special Category Visa holder.
III An individual's condition or impairment must likely be permanent.

Question 5

Which of the following relates to the sustainability of the NDIS? (Select all that apply)

- I By assisting participating individuals gain employment, there are more people earning taxable income.
- II The NDIS assists participants enjoy an ordinary life through enabling them access to various support and services.
- III The NDIS was implemented over the course of three years to accrue adequate funding over a sustained period of time.

Question 6

The NDIS demonstrates equity by providing individuals with a plan which is similar amongst all participants.

- A True.
- B False.

Question 7

The PBS complements the function of Medicare.

- A True.
- B False.

Skills**Unpacking the case study**

Use the following information to answer Questions 8-10.

Darius is 32 years old and has type 2 diabetes. One of Darius' medicines to manage his condition is metformin, which is a prescription medicine listed on the PBS. As Darius has been looking at buying a house, he was beginning to become annoyed and frustrated about the amount of money he had to spend on medication for his condition. However, he recently learnt about the PBS Safety Net. By September 2021, Darius reached the PBS Safety Net threshold for general patients, so he now pays a significantly reduced price for metformin. Darius is now experiencing less financial stress due to the cost of metformin decreasing to the safety net cost.

Question 8

Darius' emotional health and wellbeing being negatively impacted is indicated by the statement that

- A 'Darius is 32 years old and has type 2 diabetes.'
- B '... he was beginning to become annoyed and frustrated about the money he had to spend on medication for his condition.'

Question 9

Darius' mental health and wellbeing being enhanced is indicated by the statement that

- A 'Darius is now experiencing less financial stress due to the cost of metformin decreasing to the safety net price.'
- B 'Darius reached the PBS Safety Net threshold for general patients.'

Question 10

Darius relying on the PBS Safety Net reduces the amount he spends on metformin, as regularly purchasing metformin is costly despite the medicine being subsidised. Which statement best shows the PBS demonstrating equity?

- A 'Darius is now experiencing less financial stress due to the cost of metformin decreasing to the safety net price.'
- B 'he was beginning to become annoyed about the money he had to spend on medication for his condition.'

Exam-style questions**Question 11** (1 MARK)

Outline the National Disability Insurance Scheme (NDIS).

Adapted from 2019 HHD exam Q4a.

Question 12 (2 MARKS)

Describe the Pharmaceutical Benefits Scheme (PBS).



Question 13 (2 MARKS)

Outline how the NDIS demonstrates access.

Question 14 (2 MARKS)

Analyse how the PBS demonstrates sustainability.

Adapted from 2019 HHD exam Q4b.

Question 15 (4 MARKS)

Explain how the Pharmaceutical Benefits Scheme (PBS) promotes health and wellbeing in Australia. Your response must include a discussion of equity and funding.

Adapted from VCAA 2018 sample questions Q5b.

Question 16 (3 MARKS)

Alyssa works in the Australian Government Department of Health. She is involved in advising the distribution of money in Australia's healthcare system. Alyssa constantly analyses the government's spending to ensure there is enough funding presently to meet the demands of the population. However, she also looks at data regarding the projected government spending on the healthcare system in years to come.

- Outline one component of effective health systems. (1 MARK)
- Explain how your chosen component in **part a** is evident in the case study. (2 MARKS)

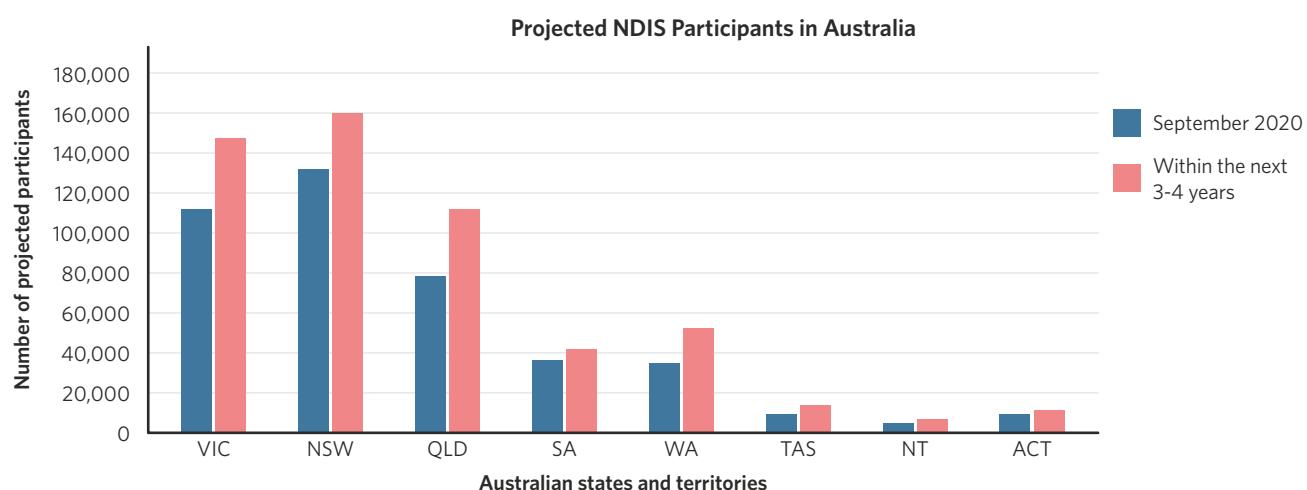
Questions from multiple lessons

Question 17 (5 MARKS)

The following two sources relate to the National Disability Insurance Scheme (NDIS).

Source 1

The following data is from the NDIS quarterly report (September 2020).

**Source 2**

The following information relates to a man who has significant disabilities.

David has an acquired brain injury which has resulted in him becoming deaf and blind. Before acquiring this disability, David's favourite hobby was metal detecting. Through the help of the NDIS, David has been able to continue his hobby by modifying the metal detector. The NDIS has also supported David in learning to read braille and begin a new hobby of pottery.

Source: adapted from Victorian Government, *David's story: now do it somehow*, <<https://www.vic.gov.au/davids-story-now-do-it-somehow>>

- Outline one trend evident in the graph (**source 1**) provided. (1 MARK)
- Analyse the NDIS' contribution to optimal health and wellbeing as a resource nationally. Refer to both **source 1** and **source 2** in your response. (4 MARKS)

Adapted from VCAA 2018 exam Q4.

CHAPTER 4 REVIEW

CHAPTER SUMMARY

This chapter was all about Australia's Health System. As you now know, there are numerous aspects of Australia's health system, and certain components to measure the effectiveness of these programs.

In lesson **4A: Australia's health system: Part 1**, we introduced four components that measure our health system's ability in promoting health. These components are:

- Sustainability
- Access
- Funding
- Equity

4A also covered two key parts of Australia's health system:

- Medicare
- Private health insurance (PHI)

You also learnt how Medicare and Private health insurance promote sustainability, access, funding, and equity (SAFE). These are summarised in the following table.

	MEDICARE	PRIVATE HEALTH INSURANCE
Sustainability	<ul style="list-style-type: none"> • Medicare only covers healthcare deemed to be 'medically necessary'. There are many different healthcare services that are not covered (such as physiotherapy). Limiting the services Medicare covers enables them to keep costs under control and continue to cover services in the future. • By providing subsidised medical treatment, people are more likely to access healthcare earlier, preventing the development of more serious health conditions down the track. This prevention reduces the need for more expensive treatment later on (such as in-hospital services), keeping the costs of Medicare under control and sustainable for the future. 	<ul style="list-style-type: none"> • Private health insurance reduces the strain on the public system. The more people who access healthcare through private health insurance, the less people relying on the public healthcare system, meaning people can be treated sooner. This leads to improvements in the population's health and wellbeing. Ultimately, the less people relying on the public health system now and in the future, the more sustainable the system will be because it will be able to continue to meet Australia's healthcare needs. • The various private health insurance incentive schemes increase the number of people who take up private health insurance, which also reduces the reliance on the public healthcare system.
Access	<ul style="list-style-type: none"> • Medicare seeks to remove financial barriers for accessing healthcare, as it provides basic healthcare at little or no costs. • All permanent Australian residents are able to access Medicare, regardless of their income, culture, and location. • People can choose their doctor for out-of-hospital treatments, which may be appropriate for people due to cultural needs or personal preference. For example, a female may prefer to see a female doctor. This choice makes treatment more accessible for everyone. • Medicare hospital treatments operate on a triage system. Patients who are the most in need receive treatment first. For example, someone experiencing heart failure will be prioritised over someone with a broken arm. 	<ul style="list-style-type: none"> • Private health insurance enables people to have greater access to healthcare services not covered by Medicare. • Waiting times for elective surgeries are shorter for all private patients. • The waiting times for elective surgeries are quicker for everyone, as people in the public health system don't have to wait as long when there are people relying on the private health system.
Funding	<ul style="list-style-type: none"> • Medicare is funded through three financial sources: the Medicare levy, Medicare levy surcharge, and general income tax. 	<ul style="list-style-type: none"> • Private health insurance is largely funded by the premiums paid by customers.
Equity	<ul style="list-style-type: none"> • The Medicare Safety Net assists individuals and families with significant medical costs, relieving some of their financial stress. This extra support demonstrates how the government seeks to make it fair and equitable for families experiencing high medical costs. • Allowing low-income earners to be exempt from the Medicare Levy provides extra financial support for those who need it. 	<ul style="list-style-type: none"> • The private health insurance rebate demonstrates equity as lower income earners are entitled to a greater rebate on the cost of their premium. • Medicare levy surcharge is only applicable to higher-income earners who do not take out private health insurance. This demonstrates equity as it relieves lower-income earners from paying this surcharge.

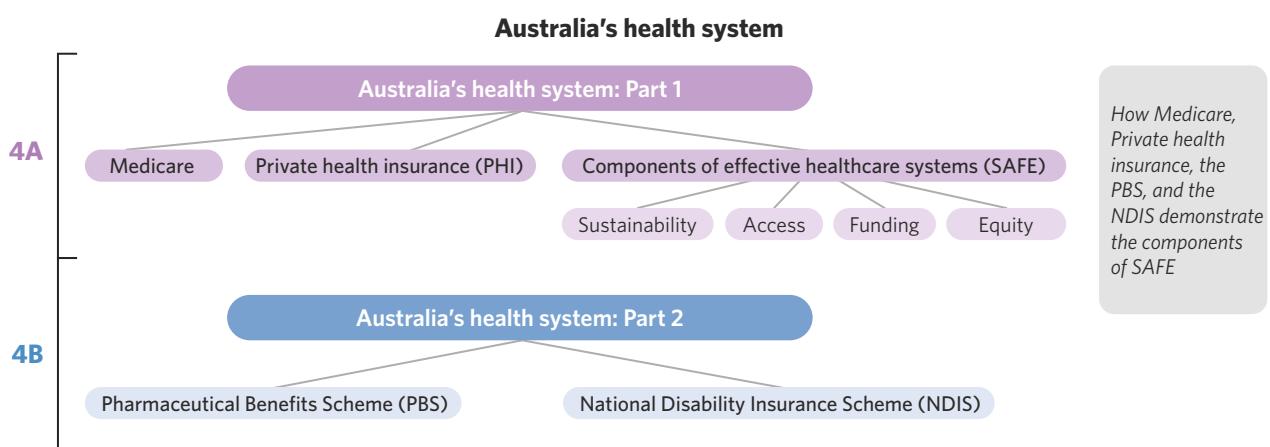


In lesson **4B: Australia's health system: Part 2**, we learnt about another two key parts of Australia's health system:

- Pharmaceutical Benefits Scheme (PBS)
- National Disability Insurance Scheme (NDIS)

You also learnt about how the PBS and the NDIS promote sustainability, access, funding, and equity (SAFE). These are summarised in the following table.

	PBS	NDIS
Sustainability	<ul style="list-style-type: none"> • Not every medication is listed on the PBS, only the ones that are classified to have the greatest benefit and impact on the population. It would not be financially possible to have every medicine on the PBS. • The amount of patient co-payments are adjusted on 1 January each year in line with the Consumer Price Index (CPI) to match inflation. • Some medicines on the PBS act as treatment for conditions, while some medicines prevent conditions from developing. Both treating and preventing conditions through medication reduces the need for expensive hospital treatments and stays, keeping the costs of the health system manageable. 	<ul style="list-style-type: none"> • The NDIS was implemented over the course of three years. This enabled the program to build up adequate funding over a sustained period of time, rather than all at once. • The NDIS assists individuals to gain employment. Therefore, there are more Australians who are employed and earning taxable income. The more tax the government collects increases the financial capacity of the government to fund programs such as the NDIS and the PBS. • Providing people with a disability with access to local support and healthcare services decreases the likelihood of individuals with a disability relying on the healthcare system in the future, which reduces the strain placed on the health system.
Access	<ul style="list-style-type: none"> • By significantly reducing the cost of various essential prescription medicines, the PBS removes the key barrier of income to accessing essential medicines. • The PBS is available to all Australians, regardless of characteristics including income, gender, culture. 	<ul style="list-style-type: none"> • A central aim of the NDIS is to enable participants to enjoy an ordinary life, which involves supporting individuals to access mainstream support and services. For example, by assisting individuals to access healthcare, education, housing, libraries and local sports clubs.
Funding	<ul style="list-style-type: none"> • The PBS is partially funded by the money that is collected through patient co-payments. • The Australian Federal government pays for the PBS through taxes. 	<ul style="list-style-type: none"> • The NDIS is jointly funded by the Federal and participating state and territory governments.
Equity	<ul style="list-style-type: none"> • The PBS Safety Net assists individuals who have high costs for prescription medicines by significantly reducing or removing the cost of them once they reach the threshold. This demonstrates equity as people who spend a lot of money on prescription medicines are provided with extra financial support, preventing them from being financially disadvantaged. 	<ul style="list-style-type: none"> • The NDIS provides individuals and their carers with the necessary support based on someone's specific set of needs. Such assistance is individualised and addresses someone's barriers to living an ordinary life. • The ability to access the NDIS is not based on someone's level of income. This means that support provided is not dependent on how much someone earns, but rather, their level of disability and subsequent support required.



CHAPTER REVIEW ACTIVITIES

Review activity 1: Match the terms from Australia's health system to its description

Match the key terms relevant to Australia's health system on the left with the correct description on the right.

Key term	Description
Equity	Extra financial support for people who have significant costs for essential medicines
PBS Safety Net	Support for individuals with a disability, as well as their carers and families
Medicare levy surcharge	Insurance scheme implemented by the government that subsidised healthcare services
National Disability Insurance Scheme	Providing products and services at a rate that meets the current needs of the population, while preserving resources for future generations
Sustainability	Treating someone based on their unique set of needs
Private health insurance	Additional type of health insurance
Medicare	Additional tax imposed on certain people without private health insurance

Review activity 2: Summary table

A large focus of chapter 4 is analysing how Australia's healthcare system demonstrates the SAFE components, and subsequently how this promotes health and wellbeing. Copy out the summary table below into your notes and fill in the blank cells to assist with your revision.

One positive impact of a key aspect of Australia's healthcare system	Which component of SAFE does this demonstrate?	Impact on dimension of health and wellbeing
Medicare removes the key barrier of income in accessing basic healthcare by subsidising these services for the Australian population.		This subsequently reduces the level of financial stress many Australian's would experience regarding the cost of healthcare services, positively influencing mental health and wellbeing.
The PBS provides extra financial support to people who spend a certain amount on essential prescription medicines through the PBS Safety Net.	This demonstrates 'equity', as providing extra support to people with high expenses from prescription medicines prevents them from becoming financially disadvantaged.	
Private health insurance reduces the strain on the public health system by decreasing the number of people who rely on Medicare.		Reducing the number of people that rely on the public health system increases both the private and public sector's ability to meet the healthcare needs of the population. Therefore, people are able to receive treatment and recover from illnesses faster, promoting physical health and wellbeing.
The NDIS is able to operate through funding from the Federal and participating state and territory governments.		By the government funding the NDIS, people with a disability, and their carers, are provided with support specific to their individual goals and ability levels. This enables participants to do activities they enjoy, such as community support, increasing a positive purpose in life which promotes spiritual health and wellbeing.



CHAPTER 4 TEST

Question 1 (1 MARK)

Describe private health insurance.

Question 2 (2 MARKS)

Describe the NDIS.

Question 3 (6 MARKS)

Explain how private health insurance promotes health and wellbeing. Your response must include a discussion of access, equity, and sustainability.

Adapted from VCAA 2018 sample questions Q5b

Question 4 (2 MARKS)

Outline **two** ways that Medicare promotes health and wellbeing.

Question 5 (4 MARKS)

List **two** advantages and two disadvantages of Medicare.

Adapted from VCAA 2020 exam Q2b

Advantages	Disadvantages

Question 6 (4 MARKS)

Sara is 28 years old and is currently working as a P.E. teacher. Sara does not have private health insurance (PHI), however, has recently been considering joining a PHI provider.

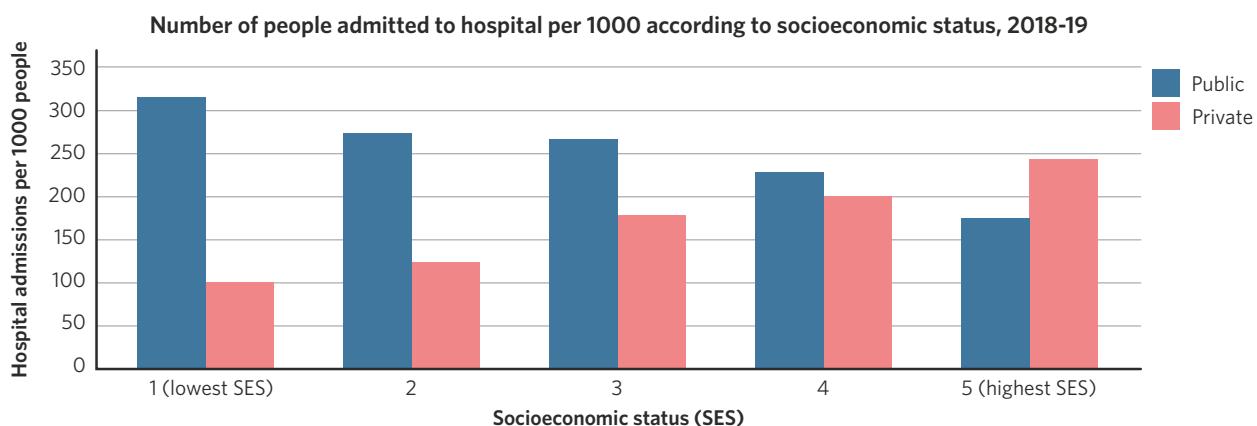
- a Outline **two** incentives which may lead Sara to taking up private health insurance. (2 MARKS)
- b Analyse how one incentive of PHI identified in part a demonstrates equity. (2 MARKS)

Question 7 (1 MARK)

Outline one component of an effective healthcare system.

Questions from multiple chapters

Question 8 (3 MARKS)



Source: adapted from the Australian Institute of Health and Welfare, *Access to Hospitals*, <<https://www.aihw.gov.au/reports-data/myhospitals/themes/hospital-access>>

- a Describe Medicare. (1 MARK)
- b Describe **one** relationship between socioeconomic status and admittance to private and public hospitals that is evident in the graph above. (2 MARKS)

Adapted from VCAA 2020 exam Q7a

CHAPTER**5**

Promoting health and wellbeing

5A Health promotion: Smoking**5B Health promotion: Road safety****5C Health promotion: Skin cancer****5D Improving Indigenous health and wellbeing****Key knowledge**

- the role of health promotion in improving population health, focusing on one of: smoking, road safety, or skin cancer, including:
 - why it was/is targeted
 - effectiveness of the health promotion in improving population health
 - how the health promotion reflects the action areas of the Ottawa Charter for Health Promotion
- initiatives introduced to bring about improvements in Indigenous health and wellbeing in Australia and how they reflect the action areas of the Ottawa Charter for Health Promotion

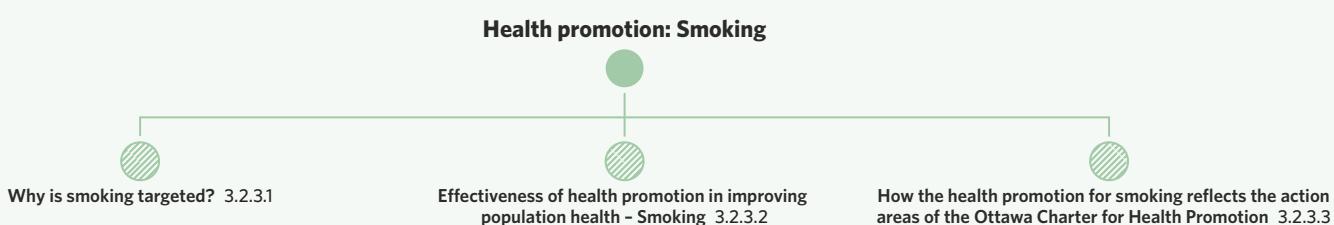
5A HEALTH PROMOTION: SMOKING

Smoking is very expensive! Did you know that the average 20-pack of cigarettes costs \$35? In 2017–18, Australian adults who were daily smokers smoked an average of 12.3 cigarettes a day (Australian Bureau of Statistics [ABS], 2018). Based on this, the average daily smoker spends over \$7800 a year on cigarettes alone. What about for the average daily smoker who smokes for most of their adult life, let's say from age 20 to 70? Their habit will cost them around \$390,000 over their lifetime! However, smoking is not simply a monetary cost to the smoker; smoking is a cost to one's health, the healthcare system, and to the entire economy. All of these costs are negative and all are preventable (they do not have to exist). In this lesson, you will learn about why smoking is an issue targeted by health promotion. Additionally, you will learn about a range of health promotion initiatives related to smoking.



Image: R Vi/Shutterstock.com

5A Health promotion: Smoking	5B Health promotion: Road safety	5C Health promotion: Skin cancer	5D Improving Indigenous health and wellbeing
Study design dot point			
<ul style="list-style-type: none"> the role of health promotion in improving population health, focusing on one of: smoking, road safety, or skin cancer, including: <ul style="list-style-type: none"> why it was/is targeted effectiveness of the health promotion in improving population health how the health promotion reflects the action areas of the Ottawa Charter for Health Promotion 			
Key knowledge units			
Why is smoking targeted?			3.2.3.1
Effectiveness of health promotion in improving population health: Smoking			3.2.3.2
How the health promotion for smoking reflects the action areas of the Ottawa Charter for Health Promotion			3.2.3.3



Why is smoking targeted? 3.2.3.1

OVERVIEW

Smoking is a major issue in Australia and affects Australians in many ways. In particular, smoking negatively impacts health and wellbeing and is therefore a target of health promotion.

THEORY DETAILS

As you have learnt previously, **health promotion** refers to the ‘process of enabling people to increase control over and to improve their health’, as defined within the Ottawa Charter for Health Promotion (World Health Organisation [WHO] et al., 1987). Health promotion helps to motivate people to change their behaviour in order to avoid developing a particular illness or disease. **Tobacco smoking** refers to the process of burning tobacco and inhaling the smoke produced. Tobacco smoking is a key target of health promotion in Australia, and there are many health promotion initiatives that have been introduced to reduce smoking rates in Australia. Let’s look at *why* smoking is a target of health promotion in Australia. We will now look at these three areas in depth:

- 1 The impact of smoking on health outcomes
- 2 The impact of smoking on the economy
- 3 The preventable nature of smoking.

KEY DEFINITIONS

Health promotion refers to the ‘process of enabling people to increase control over and to improve their health’, as defined within the Ottawa Charter for Health Promotion

ADDITIONAL TERMS

Tobacco smoking refers to the process of burning tobacco and inhaling the smoke produced

The impact of smoking on health outcomes

Smoking is targeted by health promotion because smoking has a major impact on population health and has for many years. Despite the fact that smoking rates in Australia have decreased in recent years, tobacco smoking still remains the leading preventable cause of poor health and death in Australia (Australian Institute of Health and Welfare [AIHW], 2016).

As seen in figure 1, the percentage of daily smokers has decreased over the last 20 years, and the number of people who have never smoked has increased.

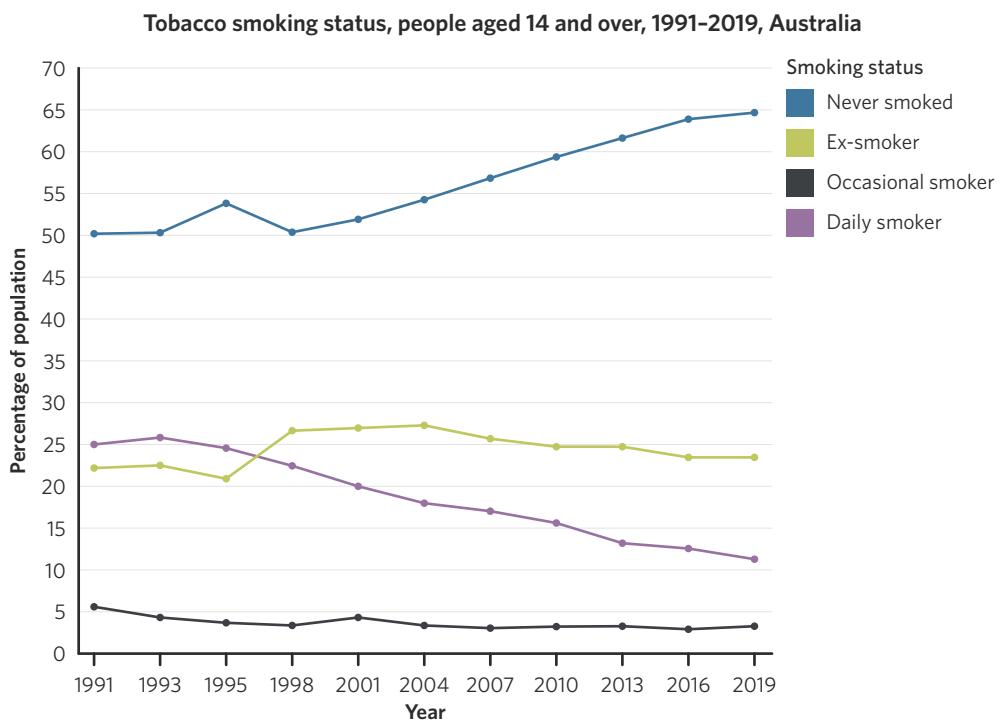


Figure 1 Smoking rates in Australia have decreased between 1991 and 2019 (AIHW, 2021)

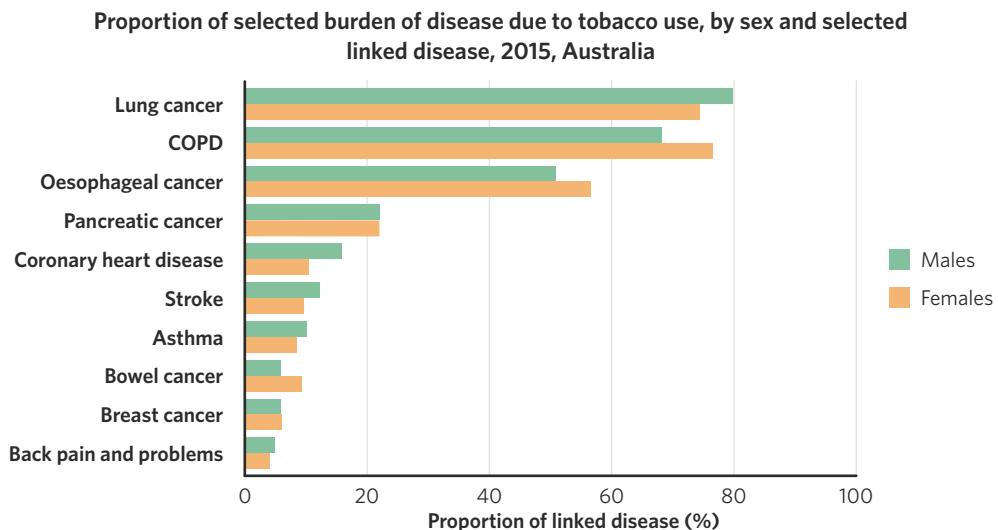


Figure 2 Burden of disease in Australia linked to tobacco use (AIHW, 2019)

As you can see in figure 1, in 2015, the number of people who smoked daily was significantly fewer than in previous years. Despite this, smoking still contributed significantly to the burden of disease in 2015. This is demonstrated in figure 2, which shows that over 70% of lung cancer cases were attributable to tobacco use for both males and females in 2015. Furthermore, figure 2 shows that tobacco use contributes to rates of other diseases, such as chronic obstructive pulmonary disease (COPD).

Despite a reduction in smoking rates over time, tobacco smoking remains a major public health issue. Therefore, smoking health promotion initiatives play a critical role in tackling this health issue in Australia. Table 1 summarises the impact of smoking on both health status and health and wellbeing.

Lesson link

In lesson 3D: *Ottawa Charter for Health Promotion*, you were introduced to health promotion and the Ottawa Charter for Health Promotion. In chapter 5, you will learn about a range of health promotion initiatives and how they reflect the Ottawa Charter for Health Promotion. Therefore, you will need a good understanding of:

- what health promotion is
- the action areas of the Ottawa Charter for Health Promotion.

If you need a refresher on this content, return to lesson 3D.

Lesson link

In lesson 2D: *Contributions to Australia's health status: Part 1*, you learnt that smoking tobacco has a significant contribution to Australian health status and burden of disease. In this lesson, you will build on this knowledge and learn how tobacco smoking impacts both health and wellbeing and health status. Return to lesson 2D if you need a refresher on the impact of smoking on the health status of Australians.



Table 1 Some examples of the impact of smoking on health outcomes

Impact on health and wellbeing	Impact on health status
<ul style="list-style-type: none"> Due to the fact that cigarette smoke may contain over 7000 toxic chemicals, inhaling this toxic smoke has a significant effect on the functioning of the body and its systems, therefore negatively impacting <i>physical health and wellbeing</i> (US Food and Drug Administration, 2019). Nicotine, which is a chemical in cigarettes, is highly addictive. Therefore, smoking cigarettes can become an addictive habit. Due to the expensive cost of cigarettes, smoking can be a source of financial stress for people, especially when addicted. This stress and anxiety associated with money that may arise from smoking addiction can negatively impact <i>mental health and wellbeing</i>. Smoking is an unhealthy habit that many people don't approve of. Therefore, smoking can be a cause of conflict between friends or family, straining people's relationships and negatively impacting <i>social health and wellbeing</i>. 	<ul style="list-style-type: none"> Smoking accelerates the process of atherosclerosis (the buildup of plaque in and on the artery walls). This increases morbidity and mortality associated with cardiovascular disease, including heart attack and stroke, as atherosclerosis is a risk factor for these conditions. Smoking increases the morbidity and mortality associated with lung cancer. When smoke is inhaled, carcinogens enter the lungs, which damage lung tissue. This lung damage increases the risk of lung cancer. Inhaling tobacco smoke can pose significant damage to people's airways, therefore increasing the prevalence of respiratory conditions, such as chronic obstructive pulmonary disease (COPD).

The impact of smoking on the economy

Smoking is a major cost to the Australian economy. In 2015–16, research from the Australian National Drug Research Institute's report *Identifying the Social Costs of Tobacco Use in Australia* showed that smoking accounted for \$136.9 billion in social costs in Australia (Whetton et. al., 2019). This cost is estimated to have quadrupled since 2004–05. So what are the costs of smoking to the economy? What makes up the \$136.9 billion? Some of the costs of smoking include:

- reduced (health-related) performance at work, regular smoking breaks, and an increase in workplace absenteeism (\$5 billion in 2015–16).
- family members caring for someone with a smoking-related disease (\$2 billion in 2015–16).
- fires, particularly domestic and residential fires, where cigarettes were identified as the source of ignition (\$80.8 million in 2015–16).
- costs of removing smoke-related litter (estimated to cost approximately \$73.3 million annually).
- overall healthcare, and hospital admissions to treat smoking-related conditions (\$6.8 billion and \$1.7 billion respectively, in 2015–16).
- loss of life, loss of quality of life, and pain and suffering from a serious illness attributable to smoking (\$117.7 billion in 2015–16).

The preventable nature of smoking

Preventable illness or disease refers to ill health that can be avoided, often through vaccination and immunisation, avoiding risk factors, and engaging with protective factors. All illness and disease associated with smoking is preventable because smoking is a deliberate choice; people can choose *not* to smoke in the same way they choose to smoke. In other words, all burden of disease associated with smoking can be avoided if people do not smoke.

In order to avoid something that is dangerous for health, one must first have the relevant knowledge to make informed decisions. Health promotion is largely focused on education. Therefore, due to the fact that the extensive impact of smoking is entirely preventable, health promotion plays a critical role in preventing ill-health related to smoking.

ADDITIONAL TERMS

Preventable illness or disease refers to ill health that can be avoided, often through vaccination and immunisation, avoiding risk factors, and engaging with protective factors



Image: Angela Compagnone/Shutterstock.com

Figure 3 Removing smoke-related litter is one of the many costs of cigarette smoking to the Australian economy.

Effectiveness of health promotion in improving population health:

Smoking 3.2.3.2

OVERVIEW

Now, let's take a look at the overall effectiveness of health promotion related to smoking in Australia. This will include examining three smoking health promotion initiatives: Australian laws and regulations, Quit Victoria, and the National Tobacco Campaign.

THEORY DETAILS

Overall, as health promotion initiatives have been introduced, smoking rates in Australia have decreased. This coincides with the shift from the 'old' to the 'new' public health model. This shift was premised on the prevention of negative health outcomes, as opposed to treating poor health only once it had occurred. Health promotion related to smoking is underpinned by the social model of health. Figure 4 shows this noteworthy association between health promotion and smoking rates in Australia since 1990.

Daily smoking in the general Australian population of people aged 18 years and older, and key tobacco control health promotion measures implemented in Australia, since 1990

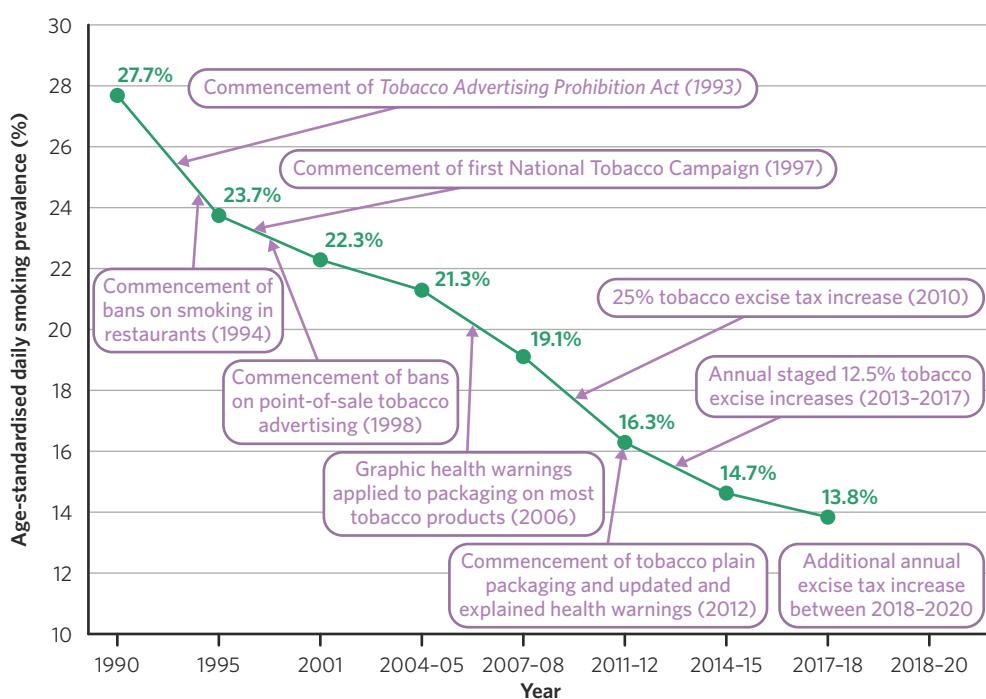


Figure 4 As health promotion initiatives have been introduced, smoking rates in Australia have decreased (Australian Government Department of Health, 2018)

Despite the fact that smoking is still the leading cause of preventable disease in Australia, its contribution to Australia's burden of disease has decreased over time (AIHW, 2021). After accounting for population growth and age, the burden of disease from smoking decreased by 24% from 2003 to 2013. This decrease was seen in all of the six leading diseases that are linked to smoking (including COPD, lung cancer, coronary heart disease, oesophageal cancer, stroke, and asthma). This is a positive trend due to health promotion efforts. By continuing to implement health promotion initiatives, this trend will hopefully continue.

What else do we know about smoking in Australia over time? Findings from the self-reported data in the *National Drug Strategy Household Survey 2016* showed that (AIHW, 2019):

- from 1991 to 2016, the rate of daily smoking halved (from 24% to 12%).
- the proportion of people who reported having never smoked increased from 49% to 62%.
- the proportion of children exposed to second-hand smoke decreased, with only 2.8% of households containing someone who smoked in 2016, compared to 31% in 1996.

However, while the burden of disease linked to current smoking has decreased, the burden linked to ex-smokers has increased, which is likely because many diseases associated with smoking can take many years to develop, such as lung cancer (AIHW, 2021). This means that, as a result of the reduction in smoking rates in recent years, we should see a decrease in lung cancer attributable to smoking in the future.



Overall, you can see that an increase in health promotion relating to smoking has likely contributed to the decrease in smoking rates over time. This is because there is a correlation between health promotion and changes in population attitudes, knowledge, and behaviour. These achievements (decreasing smoking rates and attributable burden of disease over time) are a culmination of many efforts and successes from a range of individual health promotion initiatives. However, efforts must continue to fight the public health issue of tobacco smoking in Australia.

Let's now take a look at some examples of health promotion initiatives related to smoking. In this lesson, you will learn about the following initiatives:

- Australian laws and regulations
- Quit Victoria
- National Tobacco Campaign.

You will need to understand the health promotion initiative, as well as how it brings about improvements in health outcomes. You will also be provided with the knowledge required to evaluate each initiative in its capacity to bring about improvements in population health.

Useful tip

You may be asked in an exam or SAC to evaluate how a health promotion initiative improves population health status or health and wellbeing. There are different methods that you can use in order to do this. One method is to refer to how the initiative has brought about actual improvements in population health, or if it has the potential to bring about improvements in population health in the future. Another method is to explain how the initiative reflects the action areas of the Ottawa Charter, which you will learn about later in this lesson. There are also other methods that you may use, which are summarised in figure 5.

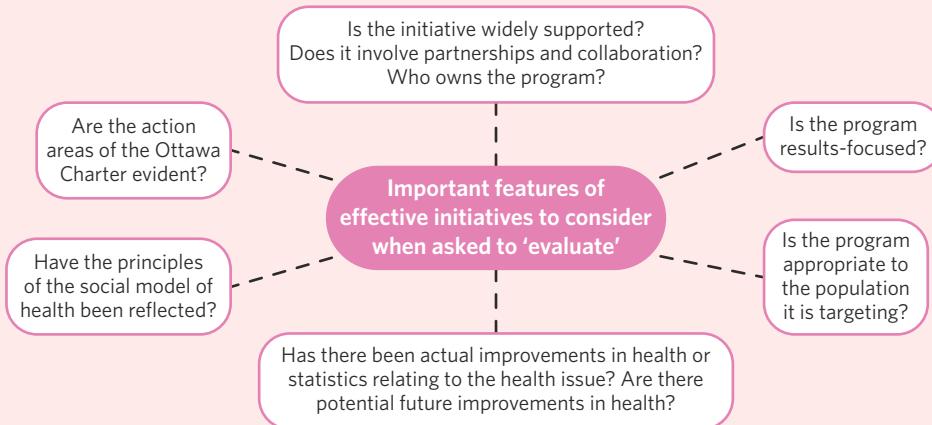


Figure 5 What to consider when you are asked to evaluate your chosen health promotion initiative

Australian laws and regulations

Smoking laws and regulations have been implemented by the Australian government to help reduce smoking rates and minimise its impact on health in the Australian community (Australian Government Department of Health, 2020). Laws and regulations enforced by the government are a form of health promotion that both help educate the public and help them make health-related decisions that positively impact their health and wellbeing. Some Australian laws and regulations related to smoking include:

- **Advertising laws:** the *Tobacco Advertising Prohibition Act 1992* bans any advertising in Australia that may encourage or persuade people to smoke or use products containing tobacco. Most states and territories in Australia also have legislation that restricts the displaying of tobacco products in retail stores, as well as restricting tobacco companies from sponsoring other brands (such as sporting gear).
- **Tobacco packaging laws:** the *Tobacco Plain Packaging Act 2011* states that all tobacco products in Australia must be in plain packaging, meaning that all tobacco packaging must be in a certain colour and cannot display logos, brand images, or any promotional text. Plain packages often feature large graphic health warnings. There are also restrictions on how brand names appear.

Study design key skills dot point

The following key skills dot point applies to the rest of the lesson:

- apply the action areas of the Ottawa Charter for Health Promotion to a range of data and case studies

- Smoke-free laws:** State and territory governments are primarily responsible for the implementation and enforcement of smoke-free laws in Australia. Smoke-free laws protect people from second-hand smoke, encourage people to quit smoking, and help to denormalise smoking in the community. In all states and territories in Australia, it is illegal to smoke in enclosed public places, including public transport (trains, trams, and buses), office buildings, shopping malls, schools, cinemas, and airports. In all states and territories, it is also illegal to smoke in a car when a minor is inside.
- Age limits:** it is illegal to sell or supply tobacco products to young people under the age of 18 in Australia.

Table 2 Some examples of how Australian laws and regulations relating to smoking improve population health

How do Australian laws and regulations relating to smoking improve health and wellbeing?	How do Australian laws and regulations relating to smoking improve health status?
<ul style="list-style-type: none"> Australian laws restrict people from smoking in a car when there is a minor inside, meaning that they are not exposed to toxic tobacco smoke. This promotes the <i>physical health and wellbeing</i> of all young people in Australia as their body and its systems can function optimally. There are numerous laws and regulations surrounding where people are legally allowed to smoke in Australia. For example, it is illegal to smoke on public transport. This improves the <i>mental health and wellbeing</i> of Australians as those who do not approve of tobacco smoking do not experience stress from unwanted exposure to secondhand smoke from cigarette smokers in public places. 	<ul style="list-style-type: none"> Tobacco plain packaging laws have resulted in the implementation of cigarette packaging that often features large, graphic health warnings. These graphic health warnings reduce the appeal of smoking, helping smokers to quit. Therefore, this reduces the risk of smoking-related illness, such as lung cancer, reducing morbidity rates in Australia. Australian laws outline that it is illegal to sell or supply tobacco products to young people under the age of 18 in Australia. This means that young people are less likely to start smoking, thereby reducing the burden of disease associated with smoking for young people, such as asthma, now and in the future.

! Useful tip

The key knowledge in lesson **5A**, **5B**, and **5C** refers to 'the role of health promotion in improving population health'. Population health can relate to either health and wellbeing or health status. However, it is important to note that, when discussing improvements in population health and wellbeing brought about by health promotion, your response needs to refer to the health and wellbeing, or health status, of a group of people (a population group), rather than simply an individual.

Real world example

Changes to cigarette packaging in Australia

First introduced in 2012, the plain packaging laws in Australia play a critical role in the fight against tobacco smoking (Cancer Council, n.d.). Less than 40 years ago, smoking was a normal part of everyday Australian life, and cigarette brands were free to advertise and promote smoking across the country, as seen in figure 6. Today, all cigarettes sold in Australia come in dark coloured boxes that are unbranded and plainly packaged, with large graphic health warnings, such as 'smoking causes lung cancer', as seen in figure 7.

The Australian Cancer Council played a major role in the introduction of the plain packaging laws; as smoking is the leading cause of preventable cancer deaths in Australia, tobacco smoking has been a focus of the Cancer Council for a long time. A team of Cancer Council researchers found evidence that there was a strong relationship between cigarette packaging and people's views towards smoking cigarettes. Their research suggested that by removing all branding on cigarette packages, the relationship between smokers and cigarettes would dramatically change and that unpleasant packaging would contribute towards a negative perception of smoking. Finally, after a lengthy campaign and parliamentary inquiry, in September 2011, Australia passed the world's first plain packaging laws. Almost 20 years after the Cancer Council first called for the introduction of plain packaging, in December 2012, Australia implemented these laws.

The health implications of introducing plain packaging were significant. Surveys conducted by the Cancer Council found a significant drop in smoking appeal amongst the Australian public. Additionally, between 2012 and 2015, a government study found that around 25% of the decline in smoking prevalence in Australia was attributable to plain packaging. Furthermore, three years after the full implementation of these laws, an estimated 100,000 fewer Australians smoked. Overall, the introduction of plain packaging was a majorly successful health promotion initiative



Images: Degimages, Galexia/Shutterstock.com

Figure 6 (left) Cigarette package from Australia in the mid-1900s



Figure 7 (right) Plain packaged cigarettes, as seen from 2012 onwards in Australia



ACTIVITY 1

Does it really work?

Graphic images of the diseases caused by smoking tobacco are mandatory on cigarette packaging in Australia. Such confronting content also appears in many television advertisements. But, such content may no longer be as impactful as it once was, and may no longer be as effective in deterring smokers from cigarettes. Search up 'Fears anti-smoking campaign effectiveness is falling, researchers develop new approach ABC News' on YouTube and watch the three minute and seventeen second video by ABC News Australia (ABC News, 2019). After watching the video, answer the following questions with your classmates.

- Why does Dr Aaron Drovandi say it is important to diversify anti-smoking advertising?
- Why do you think it is important to 'tug' on a range of 'strings' when deterring people from smoking?
- Why do you think it is important that smokers don't feel marginalised and 'bullied'?
- What could happen if people don't feel supported in quitting?



Image: Galexia/Shutterstock.com

Figure 8 Confronting message on cigarette packaging

Quit Victoria

Quit Victoria is a health promotion program of Cancer Council Australia which began in 1985 when the government identified smoking as a major health issue in Australia (Quit, 2021). Quit is primarily funded by VicHealth and the Department of Health and Human Services (Victorian government) and is also a subdivision of Cancer Council Victoria.

Additionally, the Quit program works in partnership with VicHealth, the Department of Health and Human Services (DHHS), the Heart Foundation, the Victorian Aboriginal Community-Controlled Health Organisation (VACCHO), and other government-funded and non-government organisations to reduce the health, financial, and social inequities that can arise from an addiction to smoking.

Quit has a vision of a 'tobacco-free Victoria' (Quit, 2021). They aim to achieve this by discouraging people from starting smoking and supporting current smokers to quit through the implementation of evidence-based policies and programs. There are a range of health promotion actions that Quit takes to reduce smoking in Victoria, including:

- *Quitline*: a free telephone service where individuals can speak with a trained 'Quit Specialist' who can help an individual through answering questions and providing advice and support as they try to quit smoking.
- *QuitCoach*: a free online service that provides individuals with a personalised plan for quitting smoking (QuitCoach, n. d.). QuitCoach helps individuals with the range of challenges associated with quitting smoking, and also offers individuals a range of advice relating to quitting smoking.
- *Quit Tips Hub*: Quit Tips Hub is a subdivision of the Quit website which includes useful tips, educational facts, stories, and information on quitting and staying 'quit', all in one place (Quit, 2021). Quit Hub has a huge range of health promotion information, supporting people in their journey to quitting smoking. This information and education is free and easily accessible online.
- *Quit Education Online Training*: Quit provides a range of online training for health professionals, providing them with the knowledge and skills required to help patients quit smoking, give patients the tobacco dependence treatment that suits their needs, and support patients in their quitting journey (Quit, 2021).

Table 3 Some examples of how the Quit Victoria campaign improves population health

How do Australian laws and regulations relating to smoking improve health and wellbeing?	How do Australian laws and regulations relating to smoking improve health and wellbeing?
<ul style="list-style-type: none"> • Quitline is a free support service that allows individuals across Australia to access support and advice from a trained Quit Specialist. This improves the <i>mental health and wellbeing</i> of Australians as there is reduced stress and anxiety associated with affording a support service to help them quit smoking. • Quit Tips Hub is an online platform where people can share stories of their quitting journey with others who are trying to quit smoking. This helps to create a supportive community for people who are trying to quit smoking where they can experience a sense of belonging, improving their <i>spiritual health and wellbeing</i>. 	<ul style="list-style-type: none"> • Quit Tips Hub is a free, easily accessible online platform that includes many useful tips and educational facts about smoking. This information includes facts about the dangers of smoking to one's health. This helps Australian smokers make informed decisions regarding their health and encourages them to quit smoking, therefore reducing the likelihood that they will continue to smoke. This helps reduce the incidence of smoking-related diseases, such as lung cancer, in Australia. • Quit provides free online training to health professionals, providing them with the knowledge and skills required to help their patients quit smoking. This helps decrease the number of people suffering from ill health related to smoking, such as from COPD, therefore increasing life expectancy in Australia.

National Tobacco Campaign

First launched in 1997, the National Tobacco Campaign is one of Australia's longest-running health campaigns which aims to reduce smoking rates in Australia (Australian Government Department of Health, 2020). It was launched for three main reasons, including:

- 1 tobacco use is the leading cause of preventable death and illness in Australia.
- 2 tobacco use kills thousands of Australians annually.
- 3 tobacco use leads to health, social, and economic costs in the community.

The National Tobacco Campaign aims to discourage people from starting smoking, help people stop smoking, enforce strong tobacco control policies, and change community attitudes towards smoking. The National Tobacco Campaign achieves its aims by targeting different audiences in different ways. Some of these ways include:

- anti-smoking television and social media advertisements.
- quit smoking digital apps (such as My QuitBuddy) and support services.
- resources in different languages.
- partnerships with mental health organisations.
- resource kits for prisons.
- programs for vulnerable populations, such as Aboriginal and Torres Strait Islander peoples and pregnant women.

The National Tobacco Campaign is an Australian Government initiative and works with SANE Australia (to create resources that help people with mental illness quit smoking) as well as the World Health Organisation (as the WHO has a framework convention on Tobacco Control). An example of a program currently being facilitated by the National Tobacco Campaign is *Don't Make Smokes Your Story*. This anti-smoking campaign targets Aboriginal and Torres Strait Islander peoples. It features an Aboriginal man talking about his experiences of smoking and the benefits he has experienced after quitting smoking.

Table 4 Some examples of how the National Tobacco Campaign improves population health

How do Australian laws and regulations relating to smoking improve health and wellbeing?	How do Australian laws and regulations relating to smoking improve health status?
<ul style="list-style-type: none"> • The National Tobacco Campaign works with SANE Australia to create resources to help people with mental illness quit smoking. This helps to promote <i>mental health and wellbeing</i> as these resources would help reduce stress and anxiety associated with quitting smoking, and would be tailored in a way to best help people suffering from a mental illness. • The National Tobacco Campaign produces anti-smoking television and social media advertisements. These anti-smoking advertisements educate people about the dangers of tobacco smoking, making them less likely to smoke. This promotes the functioning of the body and its systems, improving <i>physical health and wellbeing</i>. 	<ul style="list-style-type: none"> • The National Tobacco Campaign provides resource kits to prisons, helping prisoners to quit smoking. This increases the likelihood that prisoners with access to such resource kits will quit smoking. In turn, the prevalence of smoking-related illnesses, such as asthma, among Australian prisoners will likely decrease. • The National Tobacco Campaign runs specific programs for vulnerable population groups, including Aboriginal and Torres Strait Islander peoples and pregnant women. This helps decrease smoking rates amongst these population groups, therefore reducing the risk of associated burden of disease and mortality, which in turn increases the life expectancy of these groups.

How the health promotion for smoking reflects the action areas of the Ottawa Charter for Health Promotion 3.2.3.3

OVERVIEW

An effective health promotion initiative will reflect numerous action areas of the Ottawa Charter for Health Promotion.

THEORY DETAILS

After learning about three health promotion initiatives related to smoking in Australia, it is now time to analyse how these health promotion initiatives reflect the action areas of the Ottawa Charter for Health Promotion. This is explored in table 5.

Lesson link

In lesson 3D: **Ottawa Charter for Health Promotion**, you learnt about the action areas of the charter. For this chapter, you are required to apply the action areas to a range of health promotion initiatives. If you need a refresher on how to apply the action areas, return to lesson 3D.



Table 5 Applying some of the action areas of the Ottawa Charter for Health Promotion to health promotion initiatives

Australian laws and regulations	Quit Victoria	National Tobacco Campaign
'Create supportive environments' is reflected in this health promotion initiative through the enforcement of smoke-free laws. Introducing laws that prohibit people from smoking in public places means that the risk of second-hand exposure to smoke is removed, creating a supportive physical environment for those who choose not to smoke.	'Develop personal skills' is reflected in this health promotion initiative through the Quit Tip Hub. This online space provides a plethora of informative and educational resources about tobacco smoking and the health benefits of not smoking. 'Develop personal skills' is also reflected in this health promotion initiative through the Quitline service, as it is a free service that provides individuals with advice and strategies for quitting smoking, enabling them to make decisions to improve their health and wellbeing.	'Strengthen community action' is reflected in the National Tobacco Campaign as it involves numerous parties collaborating and working together to combat smoking in Australia. For example, it works with SANE Australia (to create resources that help people with mental illness quit smoking) as well as the World Health Organisation (as the WHO has a framework convention on Tobacco Control).
'Build healthy public policies' is reflected in this health promotion initiative. Laws restricting the age at which people can purchase tobacco products is an example of 'build healthy public policies' as it makes it easier for young people to avoid smoking and not develop an unhealthy habit.	'Reorient health services' is reflected in this health promotion initiative as Quit provides free online education training for healthcare professionals. This training helps health professionals develop the necessary skills to support their patients as they quit smoking. For example, this training enables healthcare professionals to help their patients seek treatment for tobacco addiction.	'Create supportive environments' is reflected in the National Tobacco Campaign as this initiative creates informative resources in multiple languages. This ensures that all people, including those from many different ethnicities and cultures, can access and understand their health promotion resources, removing the language barrier.

Theory summary

In this lesson, you have learnt about why smoking is a target of health promotion. You also have learnt about different health promotion initiatives and how they work to reduce smoking rates and improve population health. You also evaluated each of these health promotion initiatives by learning how the action areas of the Ottawa Charter for Health Promotion apply to these initiatives.

5A QUESTIONS

Theory-review questions

Question 1

Smoking is a major health issue in Australia, and therefore, smoking is unlikely to be effectively targeted by health promotion.

- A True.
- B False.

Question 2

Overall, it can be said that health promotion related to smoking has been successful in Australia over recent years.

- A True.
- B False.

Question 3

Health promotion related to smoking only focuses on educating people on the health risks associated with smoking.

- A True.
- B False.

Question 4

Which of the following are reasons as to why smoking is a target of health promotion in Australia? (Select all that apply)

- I Smoking is costly to the economy.
- II Smoking is costly to population health.
- III The widespread impacts of smoking aren't preventable.

Question 5

Which of the following are likely to be aspects of an effective health promotion initiative? (Select all that apply)

- I The initiative is accessible, both physically and financially.
- II The initiative reflects the action areas of the Ottawa Charter for Health Promotion.
- III The initiative is culturally appropriate and affordable.

Skills**Unpacking the case study**

Use the following information to answer Questions 6–8.

My QuitBuddy is an app that helps smokers to quit smoking and stay smoke-free. The app provides helpful tips and techniques to overcome cravings, progress tracking systems to monitor a user's quitting journey, and educates users through the provision of information about the damaging effect of smoking on one's health. Users can call Quitline directly from the app, view their daily progress, see how much money they have saved, read messages and stories from other people who are quitting, share their own stories, and receive daily motivational reminders. The app is free to download on any mobile device and is funded by the Australian Government.

Source: adapted from Australian Government Department of Health, *My QuitBuddy app*, <<https://www.health.gov.au/resources/apps-and-tools/my-quitbuddy-app>>

Question 6

The action area of the Ottawa Charter for Health Promotion 'develop personal skills' is best reflected by the statement that

- A 'The app is free to download on any mobile device and is funded by the Australian Government.'
- B 'The app... educates users through the provision of information about the damaging effect of smoking on one's health.'

Question 7

The action area of the Ottawa Charter for Health Promotion 'create supportive environments' is best reflected by the statement that

- A 'The app is... funded by the Australian Government.'
- B 'Users can... share their own stories, and receive daily motivational reminders.'

Question 8

This health promotion initiative is considered to be effective because it is easily accessible. My QuitBuddy's accessibility is best reflected by the statement that

- A 'The app is free to download onto any mobile device...'
- B 'My QuitBuddy is an app that helps smokers quit smoking...'

Exam-style questions**Question 9** (2 MARKS)

Smoking is a target area for health promotion. Explain **two** reasons why health promotion was used to target smoking in Australia.

Adapted from VCAA 2019 exam Q16a

Question 10 (3 MARKS)

Smoking is a target for health promotion in Australia.

Identify a health promotion initiative that targets smoking in Australia. _____

With reference to one Ottawa Charter action area, evaluate the effectiveness of your chosen health promotion initiative related to smoking in promoting health status in Australia.

Adapted from VCAA 2019 exam Q16c



Question 11 (5 MARKS)

Smoking is a target for health promotion in Australia.

Identify a health promotion initiative that targets smoking in Australia. _____

- a Describe how the implementation of this health promotion program reflects **one** action area of the Ottawa Charter for Health Promotion. (2 MARKS)

Adapted from VCAA 2019 exam Q16c

- b Evaluate this health promotion program's effectiveness in promoting health and wellbeing in Australia. (3 MARKS)

Adapted from VCAA 2019 exam Q16c

Questions from multiple lessons

Question 12 (4 MARKS)

Quit Victoria is a health promotion program of Cancer Council Australia which began in 1985 when a ministerial review identified smoking as a major health issue in Australia. Quit has a vision of a 'tobacco-free Victoria' (Quit, 2021). They aim to achieve this by discouraging people from starting smoking and supporting current smokers in quitting through the implementation of evidence-based policies and programs. There are a range of health promotion actions Quit takes to reduce smoking in Victoria. One initiative that Quit has introduced is an online training program: Quit provides a range of online training for health professionals, providing them with the knowledge and skills required to help patients quit smoking, link patients with the best tobacco dependence treatment, and to support patients in their quitting journey. Training is free for all Victoria, South Australian, and Western Australian health professionals. For all other states, a small registration fee applies.

The online training course provides health professionals with guidance on how to apply the Quit three-step advice model (Ask, Advise, Help) when talking to patients about their smoking. Upon completing the course, health professionals will be better able to:

- educate their patients on the health effects of smoking and the benefits of quitting and how smoking is addictive
- understand evidence-based smoking interventions
- deliver Quit's three-step advice model (Ask, Advise, Help)
- know how to use Quit Victoria's services and resources to address smoking with their patients.

Source: adapted from Quit Victoria, *Online training*, <<https://www.quit.org.au/resources/quit-education/quit-training>>

Describe how the implementation of Quit Victoria's online training program reflects **two** action areas of the Ottawa Charter for Health Promotion.

Question 13 (9 MARKS)

Don't Make Smokes Your Story is a health promotion initiative run as a part of the National Tobacco Campaign in Australia. Launched on the 1st of May, 2016, the *Don't Make Smokes Your Story* campaign primarily targets Aboriginal and Torres Strait Islander smokers aged 18 to 40 years and their families. The campaign involves numerous television and radio commercials, which feature real people's stories, health information related to smoking, and advice on where to access support to quit smoking. The radio commercials are available in twelve languages, including English, Torres Strait Creole, Murrinh Patha, Northern Kriol, Pitjantjatara, Walpir, Western Arrernte, Yolngu Matha, Modern Tiwi, Kimberly Kriol, Eastern and Central Arrernte, and Anindilyakwa. The campaign also provides a '*Don't Make Smokes Your Story*' toolkit which can be freely accessed online. This toolkit aims to provide any organisation that accesses their free online toolkit with the resources they need to educate community members on the health risks associated with smoking and support their community to quit smoking.

Source: adapted from Australian Government, *Don't Make Smokes Your Story*, <<https://campaigns.health.gov.au/smokes/resources/publications/fact-sheet/dont-make-smokes-your-story-toolkit>>

- a Describe how the '*Don't Make Smokes Your Story*' health promotion initiative demonstrates the social model of health principle 'empowers individuals and communities.' (2 MARKS)
- b Outline how the '*Don't Make Smokes Your Story*' health promotion initiative reflects **two** action areas of the Ottawa Charter for Health Promotion. (2 MARKS)
- c Outline how the '*Don't Make Smokes Your Story*' health promotion initiative promotes the health and wellbeing of a population group. (2 MARKS)
- d Evaluate the '*Don't Make Smokes Your Story*' health promotion initiative's effectiveness at promoting health status. (3 MARKS)

5B HEALTH PROMOTION: ROAD SAFETY

Victoria had over five million vehicles registered as of the 31st of January 2021 (Australian Bureau of Statistics [ABS], 2021). It is therefore crucial that all of these vehicles are driven safely to reduce the likelihood of increased car crashes. So, what is being done to mediate this issue of road safety? In this lesson, you will be looking at why road safety is targeted for health promotion, the effectiveness of existing road safety health promotion campaigns in improving population health, and how these campaigns reflect the action areas of the Ottawa Charter for Health Promotion.



Image: Visual Generation/Shutterstock.com

5A Health promotion: Smoking	5B Health promotion: Road safety	5C Health promotion: Skin cancer	5D Improving Indigenous health and wellbeing
Study design dot point			
<ul style="list-style-type: none"> • the role of health promotion in improving population health, focusing on one of: smoking, road safety, or skin cancer, including: <ul style="list-style-type: none"> - why it was/is targeted - effectiveness of the health promotion in improving population health - how the health promotion reflects the action areas of the Ottawa Charter for Health Promotion 			
Key knowledge units			
Why is road safety targeted?			3.2.3.4
Effectiveness of health promotion in improving population health: Road safety			3.2.3.5
How the health promotion for road safety reflects the action areas of the Ottawa Charter for Health Promotion			3.2.3.6



Why is road safety targeted? 3.2.3.4

OVERVIEW

Driving accidents result in negative health and economic outcomes and can often be prevented by drivers and passengers practising certain behaviours. Road safety is therefore frequently targeted by health promotion in Australia.

THEORY DETAILS

As you have learnt, **health promotion** refers to the ‘process of enabling people to increase control over and to improve their health’, as defined within the Ottawa Charter for Health Promotion (World Health Organisation [WHO] et al., 1987). Health promotion helps to motivate people to change their behaviour in order to avoid developing a particular illness or disease. Road safety is often selected as a key area for health promotion campaigns. You may recall when watching the television that there have been advertisements encouraging people to drive when sober and take power naps. But why are there so many different road safety health promotion campaigns?

KEY DEFINITIONS

Health promotion refers to the ‘process of enabling people to increase control over and to improve their health’, as defined within the Ottawa Charter for Health Promotion



There are three key reasons why road safety is targeted for health promotion that you will look at in this lesson:

- 1 The impact of road safety on health outcomes
- 2 The impact of road safety on the economy
- 3 The preventable nature of road driving accidents.

The impact of road safety on health outcomes

Road safety is targeted by health promotion because road driving accidents cause a significant number of mortalities. In Victoria alone, over 100 people will usually die from a road driving accident each year. Table 1 presents the number of mortalities on Victorian roads from 2016 to 2020.

Table 1 Mortalities on Victorian roads from 2016-2020 (Transport Accident Commission [TAC], 2021)

2016	2017	2018	2019	2020	5 year average
218	186	150	199	155	182

Road driving accidents therefore represent a key public health issue. Road safety health promotion initiatives emerge as an especially important consideration to counteract these high mortality rates caused by road driving accidents. Table 2 summarises the impact of road safety on both health and wellbeing and health status.

Table 2 Some examples of the impact of road safety on health outcomes

Impact on health and wellbeing	Impact on health status
<ul style="list-style-type: none"> • Road safety can decrease the number of injuries caused by road driving accidents. This promotes the functioning of the body and its systems, therefore promoting <i>physical health and wellbeing</i>. • Road safety can decrease the amount of stress experienced by car drivers about crashing their car due to other drivers practising reckless driving behaviours, such as drink driving. This promotes <i>mental health and wellbeing</i>. • Knowing that the local community has been educated about road safety through health promotion can make someone feel safer in their community as it means that it is less likely that they will be involved in a road driving accident. More specifically, when there is increased road safety and a reduction in reckless driving, new drivers, such as young Learner Drivers, will feel safer and have an increased sense of belonging on the roads as they learn to drive, promoting <i>spiritual health and wellbeing</i>. 	<ul style="list-style-type: none"> • Road safety ensures that fewer drivers experience fatal car crashes, therefore reducing mortality rates from road driving accidents. • Road safety ensures that fewer people are dying prematurely from road driving accidents, therefore increasing life expectancy. • Road safety decreases years of life lost due to disability (YLD) caused by injuries sustained from car crashes and decreases year of life lost due to premature death (YLL) due to fatal car crashes, therefore decreasing DALY and burden of disease.

The impact of road safety on the economy

Road accidents can significantly burden the economy. People who have sustained a significant injury due to being involved in a road accident are often unable to work until they have been rehabilitated completely. This is particularly important for people who work in an industry that is especially physically demanding, such as the construction industry. Complete physical rehabilitation can take weeks, months, or even years depending on the severity of the initial injury. This can mean that somebody involved in a road accident cannot return to work and contribute to the nation's Gross Domestic Product (GDP) during this period.

Additionally, road accidents can result in an increased reliance on Medicare. Ongoing doctor consultations are often required to treat chronic injuries over time, representing another significant cost of road safety on Australia's economy. Individuals involved in a road accident, such as a car crash, may experience significant emotional trauma, making it more difficult to transition back into work effectively. It is reported that 70% of people involved in a road accident return to work within seven weeks, with those remaining people taking longer still to recover (NSW State Insurance Regulatory Authority, n.d.). If a road accident results in infrastructural damage, such as damage to road barriers, this too needs to be repaired by the government, representing another significant cost of road accidents.

Lesson link

In lesson **3D: Ottawa Charter for Health Promotion**, you were introduced to health promotion and the Ottawa Charter for Health Promotion. In chapter 5, you will learn about a range of health promotion initiatives and how they reflect the Ottawa Charter for Health Promotion. Therefore, you will need a good understanding of:

- what health promotion is
- the action areas of the Ottawa Charter for Health Promotion.

If you need a refresher on this content, return to lesson 3D.

In total, the annual cost of road driving accidents on the Australian economy is estimated to be \$27 billion dollars (National Road Safety Strategy, n.d.).

In summary, road accidents damage the economy because:

- injuries from road accidents can prevent people from working (either entirely or to their full capacity), which means they cannot contribute to a country's GDP.
- injuries from road accidents increase the costs of Medicare for the federal government.
- road accidents can damage infrastructure.

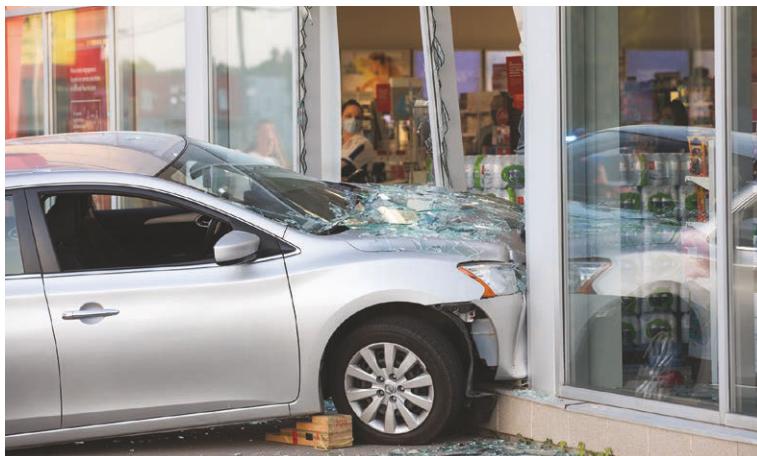


Image: Steve Jolicoeur/Shutterstock.com

Figure 1 Road accidents can damage public infrastructure, which costs money to repair

The preventable nature of road driving accidents

Injuries or deaths that occur due to road driving accidents are often preventable.

By educating people about safe driving behaviours, such as only driving when alert and sober, a significant reduction in fatalities caused by road driving accidents can be achieved. For example, from 2011 to 2015, an average of 28 drivers and riders lost their lives each year with a blood alcohol concentration (BAC) greater than 0.05g/100ml (TAC, n.d.).

Likewise, approximately 20% of fatal road accidents occur due to driver fatigue (TAC, n.d.). These deaths could also be prevented by people waiting until they are alert enough to drive. In 2018, 18 of 83 drivers and passengers who lost their lives were also not wearing a seatbelt, all of whom were male (TAC, n.d.). Road safety health promotion campaigns are therefore more likely to be effective because deaths and injuries that occur due to driving accidents can be prevented if drivers are encouraged to change their behaviour, such as by not drinking, by waiting until they are alert, or by putting on their seatbelt.

ACTIVITY 1

As discussed, there are many different ways that road driving accidents can be prevented. Road safety campaigns therefore often promote these methods for preventing car accidents, such as by encouraging people not to drink when intoxicated or drowsy. Can you think of any methods for preventing road driving accidents that have not been mentioned previously? How do you think a road safety health promotion program could use these methods to improve population health?

Effectiveness of health promotion in improving population health:

Road safety 3.2.3.5

OVERVIEW

Now, let's take a look at the overall effectiveness of health promotion related to road safety in Australia. This will include examining three road safety health promotion initiatives: the Victorian Road Safety Strategy, the TAC night driving hours campaign, and the VicRoads Road Smart program.



THEORY DETAILS

Road mortalities in Australia have been consistently shifting since records began in 1926. Figure 2 presents the total road mortalities in Australia from 1926-2019 and figure 3 presents road mortality rates in Australia from 1926-2019. Road mortalities refers to the total number of deaths that occur due to accidents on the road, whereas road mortality rates present road mortalities against every 10,000 registered vehicles or 100,000 persons. This means that the value of the rate is how many deaths occur per every 10,000 registered vehicles or in the population in relation to every 100,000 people.

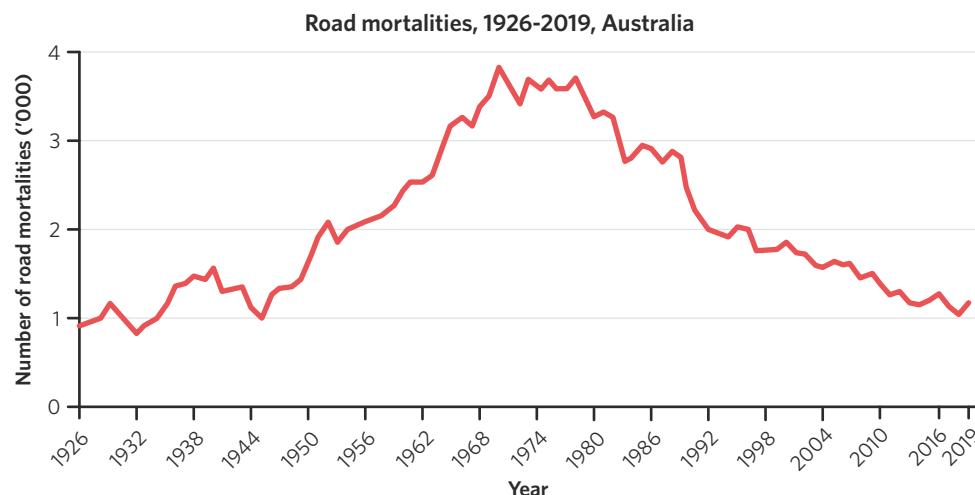


Figure 2 Road mortalities in Australia from 1926-2019 help to illustrate that fewer people are dying from car crashes now than in the past (ABS, 2012; National Road Safety Strategy, n.d.)

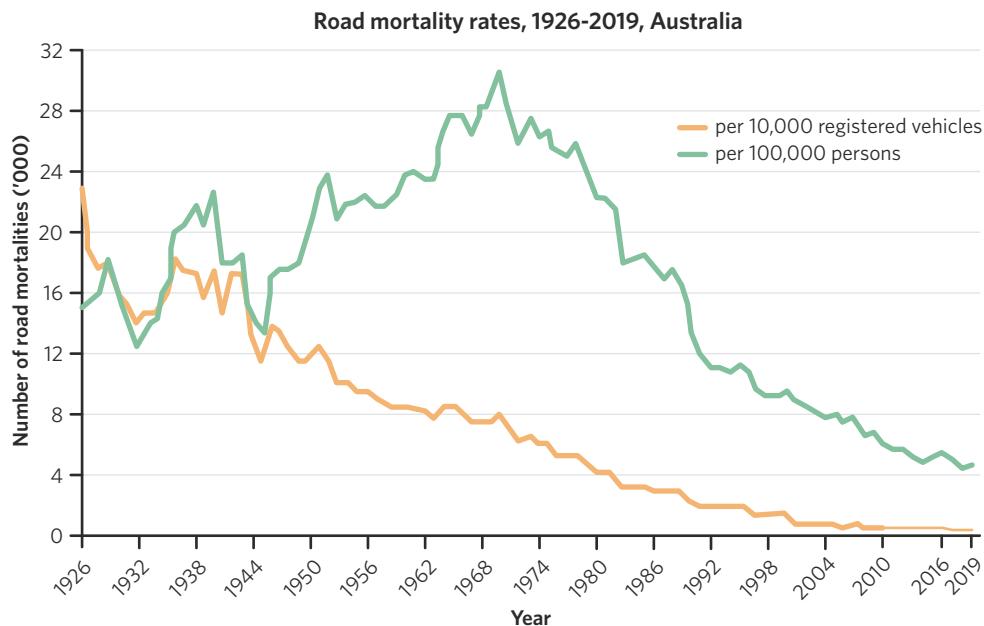


Figure 3 Road mortality rates in Australia from 1926-2019 help to illustrate how road safety standards have helped to prevent people dying from car crashes despite increased population and vehicles in Australia (ABS, 2012; Bureau of Infrastructure, Transport and Regional Economics, 2020)

There are several noteworthy trends evident in figures 2 and 3. Firstly, road mortalities, including road mortalities per 100,000 persons, increased from 1926 to around 1970. This can be attributed to the increased number of motor vehicles that were being produced and purchased during this period. For example, during the period of 1921 to 1946, the number of motor vehicles in Australia had increased from 99,270 to 522,615 (Australian Bureau of Statistics, 2001). This helps to explain why road fatalities per 10,000 registered vehicles nonetheless decreased during this same period, (as evident in figure 3): cars were being rapidly produced and purchased, so while more people in total were dying each year from road accidents, fewer people were dying relative to the total number of motor vehicles that were being registered each year. Keep in mind that cars were becoming more affordable with their mass production, so some families would often have more than one car, even if they only used one car regularly.

Another important trend is that road mortalities, including road mortalities per 100,000 persons, decreased from around 1970 onwards. This coincides with the shift from the 'old' to the 'new' public health model. This shift was premised on the prevention of negative health outcomes, as opposed to treating poor health only once it had occurred. In the context of road safety, this translates to an increased emphasis on preventing road accidents, particularly car crashes, from occurring in the first place, not only attempting to treat injuries sustained from a car crash once it had already happened. As illustrated by the previous increase in road mortalities from 1926 to around 1970, the nature of road accidents is that the injuries they cause are not always treatable. Deaths, then, will fundamentally occur. So, preventing road accidents, particularly serious car crashes, from occurring, such as through road safety health promotion programs, can be a more effective method of decreasing road mortalities.

Let's now take a look at some examples of health promotion related to road safety. In this lesson, you will learn about the following initiatives:

- Victorian Road Safety Strategy
- TAC night driving hours campaign
- VicRoads Road Smart program.

You will need to understand the health promotion initiative, as well as how it brings about improvements in health outcomes. You will also be provided with the knowledge required to evaluate each initiative in its capacity to bring about improvements in population health.

Lesson link

In lesson **3C: New public health and the social model of health**, you learnt about the development of 'new' public health, including the social model of health. Focus on health promotion, including the Ottawa Charter for Health Promotion, represents a key historical development that occurred as a result of this transition to 'new' public health. The following road safety health promotion programs, then, can be understood within this context of transitioning towards preventing injury, illness, or disease from occurring in the first place.

Useful tip

You may be asked in an exam or SAC to evaluate how a health promotion initiative improves health status or health and wellbeing. There are different methods that you can use in order to do this. One method is to refer to how the initiative has brought about actual improvements in population health, or if it has the potential to bring about improvements in population health in the future. Another method is to explain how the initiative reflects the action areas of the Ottawa Charter, which you will learn about later in this lesson. There are also other methods that you may use, which are summarised in figure 4.

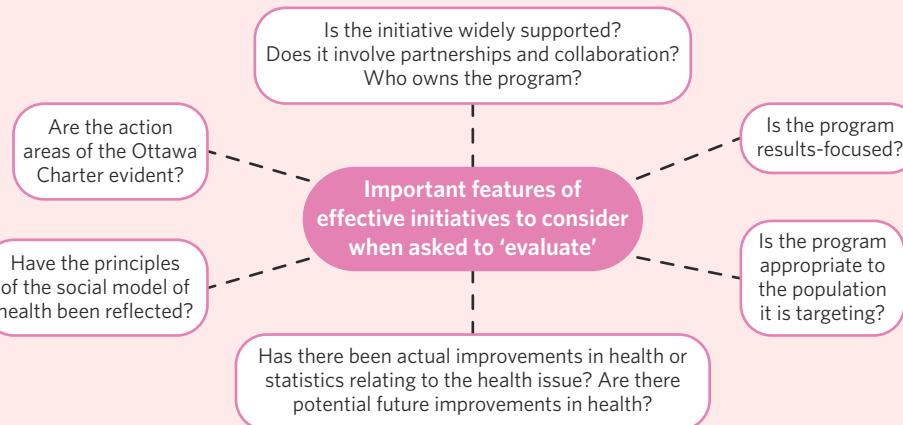


Figure 4 What to consider when you are asked to evaluate your chosen health promotion initiative

Victorian Road Safety Strategy

The Victorian Road Safety Strategy outlines a series of action plans to be implemented from 2021-2030 (TAC, n.d.). At its foundation is the target of halving road deaths occurring on Victorian roads by 2030 and then ultimately eliminating all these road deaths entirely by 2050. The strategy is delivered by the Road Safety Partners of Victoria, which includes the Department of Transport, Victoria Police, Transport Accident Commission, Department of Justice and Community Safety, and Department of Health. Some of the key aims of the Victorian Road Safety Strategy include:

- removing unsafe vehicles from Victorian roads
- improving safety on high-speed roads
- improving safety at intersections
- a greater emphasis on post-crash care.

Study design key skills dot point

The following key skills dot point applies to the rest of the lesson:

- apply the action areas of the Ottawa Charter for Health Promotion to a range of data and case studies



Table 3 outlines how the Victorian Road Safety Strategy improves population health.

Table 3 Some examples of how the Victorian Road Safety Strategy improves population health

How does the Victorian Road Safety Strategy improve health and wellbeing?	How does the Victorian Road Safety Strategy improve health status?
<ul style="list-style-type: none"> • Removing unsafe vehicles, for example those with bad, unsafe tyres, can reduce the likelihood of such cars causing car accidents, which may help reduce stress for other motorists, promoting <i>mental health and wellbeing</i>. • Placing an increased emphasis on post-crash care can involve ensuring that somebody who sustained a muscular injury sees a physiotherapist after their road driving accident. This helps to preserve fitness in the absence of optimal mobility, promoting <i>physical health and wellbeing</i>. 	<ul style="list-style-type: none"> • Removing unsafe vehicles from Victorian roads ensures that fewer road deaths occur due an existing technical issue with a car. This ensures that fewer people die prematurely, increasing life expectancy and reducing mortalities due to road driving accidents. • Placing an increased emphasis on post-crash care ensures that people who have sustained an injury from a road crash are more likely to see a doctor or physiotherapist after their road driving accident. This increases the likelihood of successful rehabilitation, therefore decreasing morbidity for injuries.

Useful tip

The key knowledge in lesson **5A**, **5B**, and **5C** refers to 'the role of health promotion in improving population health'. Population health can relate to either health and wellbeing or health status. However, it is important to note that, when discussing improvements in population health and wellbeing brought about by health promotion, your response needs to refer to the health and wellbeing, or health status, of a group of people (a population group), rather than simply an individual.

TAC night driving hours campaign

You may have read, when practising for your learner permit knowledge test, that Red P-platers (who are in their first phase of P-plates) are seven times more likely to be injured or killed when driving at nighttime when compared to fully licensed drivers (TAC, n.d.). Learner drivers are therefore required to have a minimum of 20 hours of nighttime driving out of their 120 total hours of logged driving practice in order to sit their probationary driving test. TAC launched an advertisement campaign about the importance of Red P-platers, a group most vulnerable to road driving accidents, meeting their required practice nighttime driving hours. The advertisement reproduces the statistic about Red P-Platers being seven times more likely to be injured or killed when driving at night. It targets parents, who are most likely to supervise these practice driving hours. This therefore motivates parents to encourage their children to practise caution when driving at night once they get their probationary licence and will be driving alone. Table 4 outlines how this advertisement improves population health.

Table 4 Some examples of how the TAC night driving hours campaign improves population health

How does the TAC night driving hours campaign improve health and wellbeing?	How does the TAC night driving hours campaign improve health status?
<ul style="list-style-type: none"> • Meeting the 20 hour minimum requirement for nighttime driving hours as a learner can decrease levels of anxiety about the risks of driving at night, therefore promoting <i>mental health and wellbeing</i>. • Knowing the increased risk of crashing as a Red P-plater can ensure that these drivers are especially cautious when driving at night, which decreases the likelihood of being involved in a road driving accident. This decreases the likelihood of sustaining a serious injury, which promotes <i>physical health and wellbeing</i>. 	<ul style="list-style-type: none"> • Motivating parents to encourage their children to meet or surpass the 20 hours of night driving practice hours ensures that these drivers will be better prepared for night driving once they receive their probationary driving license. This helps to decrease the number of fatal road accidents involving Red P-platers, therefore increasing life expectancy and reducing mortality due to road driving accidents. • Motivating parents to caution their children about the risks of driving at night can ensure that they will be especially careful about driving in these conditions alone once they receive their probationary license. This helps to decrease the chances of these drivers sustaining a serious injury due to a car crash that occurred at night when driving alone, therefore decreasing morbidity for injuries.

VicRoads Road Smart program

VicRoads Road Smart is a free education program for Year 10 students (VicRoads, 2017). It aims to educate new learner drivers about safe driving behaviours, as well as offer opportunities for supervised driving practice with an instructor. Some of its key features include:

- a classroom lesson about road safety with a Road Smart facilitator
- eLearning resources for students to understand how to drive
- a free in-car driving session with a qualified instructor
- a resource toolkit for teachers that is linked to the Victorian Curriculum.

Table 5 outlines how the VicRoads Road Smart program improves population health.

Table 5 Some examples of how the VicRoads Road Smart program improves population health

How does the VicRoads Road Smart program improve health and wellbeing?	How does the VicRoads Road Smart program improve health status?
<ul style="list-style-type: none"> • Having a free in-car driving session with a qualified instructor can decrease a student's anxiety about driving for the first time because they know that they will be accompanied by an expert driver. This promotes <i>mental health and wellbeing</i>. • A classroom lesson about road safety ensures that students are more likely to understand road rules when they begin driving. This decreases the likelihood of sustaining a serious injury from not knowing road rules, therefore promoting <i>physical health and wellbeing</i>. 	<ul style="list-style-type: none"> • Ensuring that students involved in the program have a free driving lesson with a qualified instructor ensures that they are taught the correct practical techniques required to drive safely. This makes it less likely that these students will make a practical error when practising driving with somebody else, therefore decreasing morbidity rates due to injuries from car accidents for learner drivers. • A classroom lesson about road safety with a Road Smart facilitator ensures that students are taught about the importance of safe driving behaviours, such as not driving over the speed limit. This makes it less likely that these students will die prematurely from a fatal car accident when they begin learning to drive, therefore increasing life expectancy.

How the health promotion for road safety reflects the action areas of the Ottawa Charter for Health Promotion 3.2.3.6

OVERVIEW

An effective health promotion campaign will reflect several of the Ottawa Charter for Health Promotion action areas.

THEORY DETAILS

After learning about a range of health promotion initiatives related to road safety in Australia, it is now time to analyse how the health promotion initiatives reflect the action areas of the Ottawa Charter for Health Promotion. Table 6 explores the three health promotion initiatives we learnt about earlier in this lesson.

Table 6 Applying some of the action areas of the Ottawa Charter for Health Promotion to health promotion initiatives

Lesson link

In lesson **3D: Ottawa Charter for Health Promotion**, you learnt about the action areas of the charter. For this chapter, you are required to apply the action areas to a range of health promotion initiatives. If you need a refresher on how to apply the action areas, return to lesson 3D.

Victorian Road Safety Strategy	TAC night driving hours advertisement	VicRoads Road Smart program
'Create supportive environments' is reflected in this health promotion program because the physical condition of the vehicles that share Victorian roads is improved by removing unsafe vehicles from Victorian roads. This makes the environment on Victorian roads safer to navigate because it decreases the likelihood of being involved in a car crash that occurred due to another car breaking down.	'Build health public policy' is reflected in this health promotion program because removing social barriers is required to ensure that laws that were introduced to improve population health are followed. Parents of young adults who are learning to drive need to understand the importance of meeting the learner driver requirement of logging 20 nighttime driving hours. This policy is more likely to be moderated faithfully by parents who have seen the advertisement and understand that Red P-Platers are seven times more likely to be seriously injured when driving at night.	'Strengthen community action' is reflected in this program because the VicRoads Road Smart program is an optional program that schools can choose to organise if they believe that their students require road safety education. The program therefore strengthens community action because it enables schools from a community with a culture of reckless driving behaviour to organise this additional program to promote road safety in their community.

cont'd



Table 6 Continued

Victorian Road Safety Strategy	TAC night driving hours advertisement	VicRoads Road Smart program
'Develop personal skills' is reflected in this health promotion program because people who have experienced a serious injury as a result of a car crash can develop the skills that are required to rehabilitate from the crash due to the Victorian Road Safety Strategy's increased emphasis on post-crash care. These skills could involve various exercises that the patient has to practice in order to recover from their injury.	'Develop personal skills' is reflected in this program because young adults learning to drive are able to develop the skill of driving at night by the advertisement encouraging parents to strictly adhere to the requirement for their children to have 20 hours nighttime driving practice on their L-Plates.	'Develop personal skills' is reflected in this program because the VicRoads Road Smart Program involved a free in-car driving session with a qualified instructor. This ensures that students from the school can develop the correct techniques required to safely drive a car.

Theory summary

In this lesson, you learnt about health promotion for road safety in Australia. This included learning about why road safety is targeted for health promotion, as well as learning about different health promotion campaigns and how effective they are at promoting both road safety and improving population health. You were also provided with an evaluation of each of these health promotion campaigns, which involved applying the action areas of the Ottawa Charter for Health Promotion.

5B QUESTIONS

Theory-review questions

Question 1

What are the key reasons for road safety being targeted for health promotion? (*Select all that apply*)

- I Injuries and fatalities caused by road accidents are often preventable.
- II Road accidents almost always result in mortalities.
- III Road safety could improve health outcomes, such as by decreasing mortality rates.

Question 2

Road safety can improve population health by reducing premature death from car crashes and therefore increase life expectancy.

- A True.
- B False.

Question 3

Road safety health promotion programs can improve mental health and wellbeing because they decrease stress related to worrying about other drivers practising reckless behaviours on the road.

- A True.
- B False.

Question 4

Road safety health promotion campaigns can be effective at improving population health by

- A stopping people from driving all the time.
- B decreasing morbidity rates occurring due to serious injuries sustained in car accidents.

Question 5

Which of the following best fills in the blank?

- A action areas of the Ottawa Charter for Health Promotion
- B biomedical model of health

Road safety health promotion programs are likely to be effective at improving population health if they reflect the _____.

Skills**Data analysis**

Use the following information to answer Questions 6–8.

Claims from people with injuries sustained in transport accidents in Victoria that resulted in their hospital admission for more than 14 days

	2018-2019	2019-2020	5 year average
Females	369	212	393
Males	534	386	555

Source: adapted from the Transport Accident Commission, *Claims Involving >14 Days Hospitalisation Rolling 12 Month*, <<https://www.tac.vic.gov.au/road-safety/statistics/tac-hospitalisation-reports/claims-involving-14-days-hospitalisation-rolling-12-month>>

Question 6

From 2018 to 2020, claims involving more than 14 days of hospitalisation for both sexes

- A increased.
- B decreased.

Question 7

Which gender group recorded higher instances of claims involving more than 14 days of hospitalisation?

- A Males.
- B Females.

Question 8

Using data, what is the trend for claims involving more than 14 days of hospitalisation for the female gender group from 2018–2020?

- A Claims involving more than 14 days of hospitalisation for the female gender group increased from 386 in 2018–2019 to 534 in 2019–2020.
- B Claims involving more than 14 days of hospitalisation for the female gender group decreased from 369 in 2018–2019 to 212 in 2019–2020.

Exam-style questions**Question 9** (2 MARKS)

Outline **two** reasons for road safety being targeted for health promotion.

Adapted from VCAA 2019 exam Q16a

Question 10 (7 MARKS)

Road safety is a target for health promotion in Australia.

Identify a health promotion initiative that targets road safety in Australia. _____

- a Explain how a road safety health promotion program is effective at improving population health and wellbeing. (2 MARKS)
- b Describe how a road safety health promotion program displays **two** action areas of the Ottawa Charter for Health Promotion. (2 MARKS)
- c Evaluate a road safety health promotion program's effectiveness at improving health status in Australia. (3 MARKS)

Adapted from VCAA 2019 exam Q16c



Questions from multiple lessons

Question 11 (9 MARKS)

A-League club Melbourne Victory's published a blog on their website about a new TAC road safety campaign. Consider the following information about the campaign.

The TAC has launched a new campaign that encourages people not to use their phones when driving. The campaign involves a television advertisement that states that 'when you're on your phone, you're driving blind.' It highlights that just a two-second glance at a mobile phone means a driver is travelling blind by showing a young man who is distracted by a message notification on his phone while driving. When the driver checks this notification, a version of himself appears from behind him and covers his eyes.

TAC surveys of 1,742 Victorians have shown that among licence holders aged 18 to 60 years, one-third said they had used mobile phones illegally while driving. The campaign addresses this issue by emphasising the lack of awareness drivers have of their surroundings every time they look at their phone.

Source: adapted from Melbourne Victory, *TAC Victoria launches new road safety campaign*, <<https://www.melbournevictory.com.au/news/tac-victoria-launches-new-road-safety-campaign>>

- a Describe how Melbourne Victory publishing the TAC's campaign demonstrates the social model of health principle 'involves intersectoral collaboration'. (2 MARKS)
- b Outline how the TAC's campaign reflects **two** action areas of the Ottawa Charter for Health Promotion. (2 MARKS)
- c Outline how the TAC's campaign promotes Victoria's health and wellbeing. (2 MARKS)
- d Evaluate the TAC campaign's effectiveness at improving Victoria's health status. (3 MARKS)

5C HEALTH PROMOTION: SKIN CANCER

Have you ever heard of Australia referred to as a 'sunburnt country'? The Australian Sun is very powerful. In fact, during summer, the Earth's orbit brings Australia closer to the Sun, compared to places like Europe during summer, increasing the intensity of the Sun's UV radiation. This increases the risk of skin cancer for Australians. Did you know that two in three Australians will be diagnosed with skin cancer by the time they turn 70 (SunSmart, n.d.)? What about the fact that Australia has one of the highest rates of skin cancer in the entire world? We can't stop the Sun from shining or the Earth from orbiting, but, what is and can be done to tackle this major health issue? In this lesson, you will learn about why skin cancer is an issue targeted by health promotion. Additionally, you will learn about a range of health promotion campaigns related to skin cancer.



Image: yaa_lena/Shutterstock.com

5A Health promotion: Smoking	5B Health promotion: Road safety	5C Health promotion: Skin cancer	5D Improving Indigenous health and wellbeing
Study design dot point			
<ul style="list-style-type: none"> the role of health promotion in improving population health, focusing on one of: smoking, road safety, or skin cancer, including: <ul style="list-style-type: none"> why it was/is targeted effectiveness of the health promotion in improving population health how the health promotion reflects the action areas of the Ottawa Charter for Health Promotion 			
Key knowledge units			
Health and wellbeing and illness			3.2.3.7
Effectiveness of health promotion in improving population health: Skin cancer			3.2.3.8
How the health promotion for skin cancer reflects the action areas of the Ottawa Charter for Health Promotion			3.2.3.9



Why is skin cancer targeted? 3.2.3.7

OVERVIEW

Skin cancer is a major issue in Australia and affects Australians in many ways. In particular, skin cancer negatively impacts health and wellbeing and is therefore a target of health promotion.

THEORY DETAILS

As you have learnt previously, **health promotion** refers to the 'process of enabling people to increase control over and to improve their health', as defined within the Ottawa Charter for Health Promotion (World Health Organisation [WHO] et al., 1987). Health promotion helps to motivate people to change their behaviour in order to avoid developing a particular illness or disease. Skin cancer is a key target of health promotion in Australia, and there are many health promotion initiatives that have been introduced to reduce skin cancer rates. Let's look at why skin cancer is a target of health promotion in Australia.

KEY DEFINITIONS

Health promotion refers to the 'process of enabling people to increase control over and to improve their health', as defined within the Ottawa Charter for Health Promotion



We will now look at these three areas in depth:

- 1 The impact of skin cancer on health outcomes
- 2 The impact of skin cancer on the economy
- 3 The preventable nature of skin cancer.

Skin cancer and its impact on health outcomes

Skin cancer is targeted by health promotion because it has a major impact on population health, and has done so for many years. Before learning about the impact of skin cancer on health outcomes, let's first take a look at what skin cancer actually is.

Skin cancer refers to a disease in which abnormal, malignant cells grow uncontrollably and destroy skin tissue. It occurs when skin cells become damaged, often through, for example, overexposure to the Sun's ultraviolet (UV) rays, or the use of tanning beds. There are three main types of skin cancer, including **melanoma**, which is the most dangerous type because it grows quickly and can spread rapidly to other organs if not detected and treated early. The other types of skin cancer are known as **non-melanoma skin cancer (NMSC)**, with the two most common forms of NMSC being basal cell carcinoma and squamous cell carcinoma. These types are less dangerous and when caught early and can often be removed entirely with little or no scarring.

Skin cancer accounts for around 80% of newly diagnosed cancers in Australia every year (Australian Institute of Health and Welfare [AIHW], 2016). Understanding what causes skin cancer is essential for both understanding health promotion related to skin cancer and ensuring that programs and policies effectively target the risk factors for skin cancer. We can't stop the Sun from shining, so human behaviour is what needs to be targeted to reduce rates of skin cancer. But who should be targeted and what behaviour needs to change? Understanding risk factors for skin cancer helps us answer these questions.

Two of the most important risk factors for skin cancer are summarised in table 1.

Table 1 Risk factors for skin cancer (AIHW, 2016)

A risk factor that can cause skin cancer	Explanation
Over-exposure to ultraviolet (UV) radiation	<ul style="list-style-type: none"> • The main cause of skin cancer is overexposure to ultraviolet (UV) radiation rays from the Sun. • UV radiation damages the DNA in skin cells, which can, in turn, produce genetic defects or mutations. The body can repair some damage to DNA and the skin, but cannot repair it all. Unrepaired damage builds up and can lead to both premature aging of the skin and an increased risk of skin cancer. • The degree of damage from UV radiation depends on the intensity of the UV rays and the length of exposure time.
Family history and genetic susceptibility	<ul style="list-style-type: none"> • People with fair complexions often lack melanin, which makes them more susceptible to skin cancer. Melanin also has a protective role in the body as it absorbs harmful UV rays and protects cells against damage from UV radiation exposure. Skin cancer is less common in people with darker complexions. However, such cases are often associated with higher morbidity and mortality because the cancer is often detected at a later stage. • Studies show that people with one or more first-degree relatives (mother, father, or siblings) who have melanoma are at a greater risk of being diagnosed with melanoma. • Studies show that people with a family history of NMSC are at a higher risk of developing NMSC than the general population. • People with a greater number of moles on their bodies are at a greater risk of skin cancer. • Males are generally more likely to develop melanoma than females. This is not genetic; instead, it is often attributed to the fact that men are more likely to work outdoors than females, and are therefore exposed to greater UV from the Sun. This is also supported in the data in figure 1.

Lesson link

In lesson 3D: *Ottawa Charter for Health Promotion*, you were introduced to health promotion and the Ottawa Charter for Health Promotion. In chapter 5, you will learn about a range of health promotion initiatives and how they reflect the Ottawa Charter for Health Promotion. Therefore, you will need a good understanding of:

- what health promotion is
- the action areas of the Ottawa Charter for Health Promotion.

If you need a refresher on this content, return to lesson 3D.

KEY DEFINITIONS

Skin cancer refers to a disease in which abnormal, malignant cells grow uncontrollably and destroy skin tissue

ADDITIONAL TERMS

Melanoma refers to a serious type of skin cancer that begins in cells called melanocytes (cells that produce melanin that gives the skin its pigmentation)

Non-melanoma skin cancer (NMSC) refers to any form of skin cancer that does not start in melanocytes cells

Ultraviolet (UV) radiation refers to a form of electromagnetic radiation that is emitted by both the Sun and artificial sources (such as tanning beds) that can cause premature aging of, and damage to, the skin

Melanin is a type of pigment that gives colour to the skin, eyes, and hair of humans

There has been a significant increase in the incidence of skin cancer in Australia over time, and in turn, an increasing impact on health outcomes in Australia. This is shown in figure 1 and figure 2.

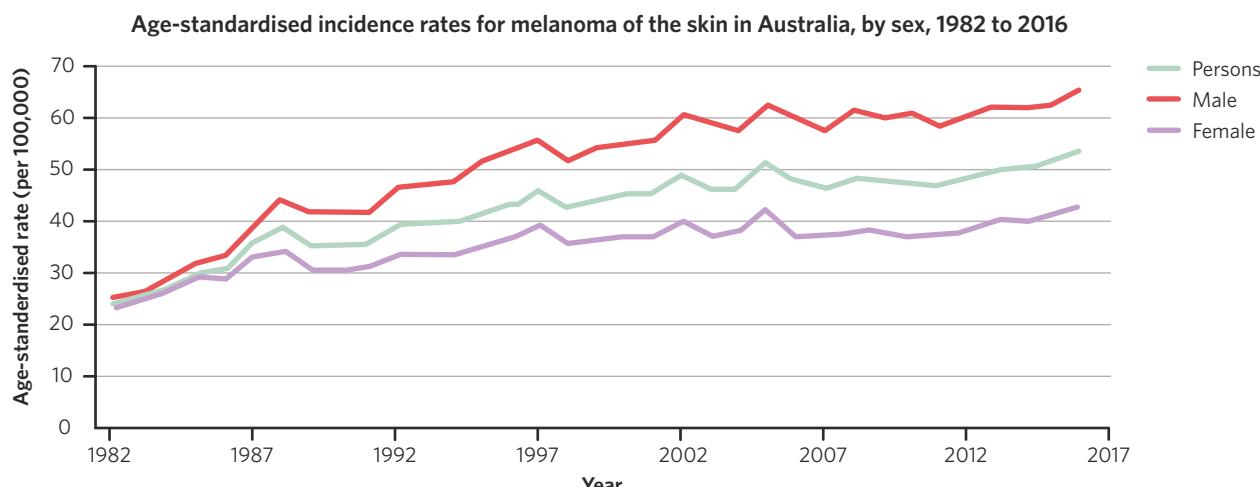


Figure 1 There has been a significant increase in the incidence of melanoma of the skin in Australia over time
(Cancer Australia, 2020)

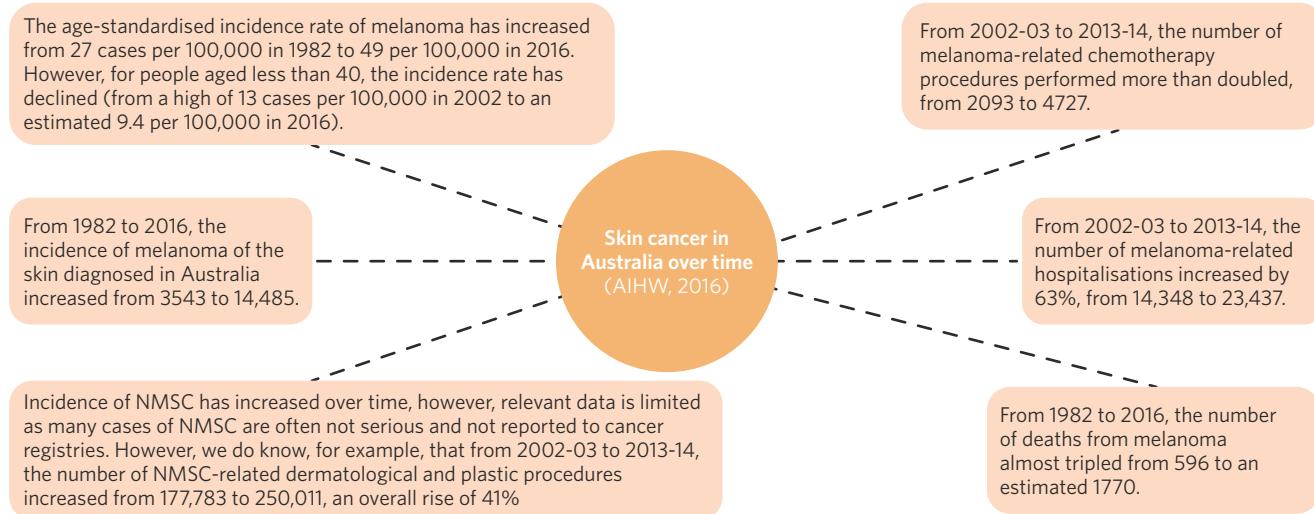


Figure 2 Key statistics related to skin cancer in Australia over time (AIHW, 2016):

As you can see from the data in figures 1 and 2, skin cancer rates are mostly increasing over time: the number of deaths is increasing, as is the number of hospitalisations. However, for Australians aged less than 40 years, the incidence rate for melanoma of the skin has declined. This is a positive trend that needs to continue and extend to all other age groups. Therefore, skin cancer-related health promotion campaigns play a critical role in tackling this health issue in Australia. Table 2 summarises the impact of skin cancer on both health status and health and wellbeing.

Table 2 Some examples of the impact of skin cancer on health outcomes

Impact on health and wellbeing	Impact on health status
<ul style="list-style-type: none"> A diagnosis of skin cancer can be a major cause of stress and anxiety for people. This is because a diagnosis of skin cancer brings worry and fear about the future as there is always a risk that cancer could become very serious, spread to other parts of the body, and also fear that the skin cancer could return once eliminated. Therefore, skin cancer harms mental health and wellbeing. A common treatment for skin cancer is skin grafting, whereby cancerous cells are removed and healthy skin from another part of the body is surgically placed onto the affected area. Skin grafts, especially on people's faces and other visible areas of their body, can alter a person's appearance and leave scars. This can cause lowered self-esteem and self-confidence, negatively impacting mental health and wellbeing. 	<ul style="list-style-type: none"> If melanoma is diagnosed too late, it can spread to other major organs in the body and increase the severity of cancer, increasing the risk of premature mortality. Accounting for around 80% of newly diagnosed cancers in Australia every year, skin cancer contributes significantly to the prevalence of cancer in Australia.



Skin cancer and its impact on the economy

Skin cancer has a major economic impact in Australia (Cancer Council, n.d.). Due to it being so common, melanoma of the skin is one of the most expensive cancers to treat. It is estimated that the cost burden of melanoma treatment in Australia has increased from approximately \$30 million per year in 2001 to \$272 million in 2017. Furthermore, in 2019, it was estimated that NMSC treatment costs were approximately \$703 million (Gordon, 2018). More specifically, a major aspect of expenditure related to skin cancer is Medicare costs. Medicare covers a huge range of costs associated with skin damage, including **biopsies**, GP and specialist visits, topical creams (via the PBS), radiotherapy, **chemotherapy**, scans, skin grafting, and more. For example, it is estimated that biopsies alone cost Medicare \$1.2 million in 2017. Additionally, in 2014, \$127.6 million in Medicare benefits were paid to treat NMSC, and \$9.4 million for melanoma (AIHW, 2016). Overall, the costs associated with diagnosis and treatment of skin cancer is a huge burden on the Australian economy, not to mention the cost to individual people suffering from such illnesses.

Skin cancer and its preventable nature

Preventable illness or disease refers to ill health that can be avoided, often through vaccination and immunisation, avoiding risk factors, and engaging with protective factors. Skin cancer is mostly a preventable disease, except in certain circumstances, such as for those with a genetic predisposition. If people protect themselves from overexposure to UV radiation, both from the Sun and from artificial sources, such as tanning beds, they reduce the risk of them developing any form of skin cancer.

In order to avoid something that is dangerous for health, one must first have the relevant knowledge to make informed decisions. Health promotion is largely focused on education. Therefore, due to the fact that the extensive impact of skin cancer is nearly entirely preventable, health promotion plays a critical role in preventing ill-health related to skin damage.

Effectiveness of health promotion in improving population health:

Skin cancer 3.2.3.8

OVERVIEW

Now, let's take a look at the overall effectiveness of health promotion related to skin cancer in Australia. This will include examining three skin cancer health promotion initiatives: SunSmart, Government laws and policies, and National Skin Cancer Action Week.

THEORY DETAILS

Health promotion related to skin cancer has become more important and more prevalent over recent years as rates of skin cancer in Australia have increased. Over the past 50 years, we have seen changes to laws and policies, extensive health promotion campaigns on television, and attempts to change Australians' attitudes towards tanning. This coincides with the shift from the 'old' to the 'new' public health model. This shift focused on the prevention of negative health outcomes associated with skin damage, as opposed to treating poor health only once it had occurred.

Even though skin cancer rates are increasing in Australia, there is extensive research to suggest that attitudes towards skin tanning (which has been a major cause of skin cancer) are changing (Cancer Council Victoria, 2014). For many young Australians, tanned skin is desirable and many people spend hours during the summer developing a skin tan. However, there is nothing healthy about a tan; it is scientifically proven that tanning is not safe and that tanned skin is actually cells in trauma that have been damaged by the Sun. Despite this, research shows that 38% of Australian adolescents liked to get a suntan in the summer of 2013-14, compared to over 60% of adolescents 10 years previous. This change in attitudes is positive and must continue, as attitudes towards sun tanning play a major role in mitigating skin cancer as a cause of morbidity and mortality in Australia. Health promotion is key in changing population attitudes towards skin cancer and tanning. Furthermore, health promotion related to skin cancer is underpinned by the social model of health: it is centred around empowering individuals to make choices to reduce their risk of excessive exposure to the Sun.

ADDITIONAL TERMS

Biopsies refer to medical procedures where a sample of tissue is taken from a patient for the purposes of examination and diagnosis, most commonly performed to detect cancer cells

Chemotherapy is a drug treatment used to kill fast-growing cells, primarily used to treat cancer



Image: elRoce/Shutterstock.com

Figure 3 Tanning beds emit UV rays, which is a major risk factor for skin cancer

ADDITIONAL TERMS

Preventable illness or disease refers to ill health that can be avoided, often through vaccination and immunisation, avoiding risk factors, and engaging with protective

Let's now take a look at some examples of health promotion initiatives related to skin cancer. In this lesson, you will learn about the following initiatives:

- SunSmart
- Government laws and policies
- National Skin Cancer Action Week.

You will need to understand the health promotion initiative, as well as how it brings about improvements in health outcomes. You will also be provided with the knowledge required to evaluate each initiative in its capacity to bring about improvements in population health.

Useful tip

You may be asked in an exam or SAC to evaluate how a health promotion initiative improves population health status or health and wellbeing. There are different methods that you can use in order to do this. One method is to refer to how the initiative has brought about actual improvements in population health, or if it has the potential to bring about improvements in population health in the future. Another method is to explain how the initiative reflects the action areas of the Ottawa Charter, which you will learn about later in this lesson. There are also other methods that you may use, which are summarised in figure 5.

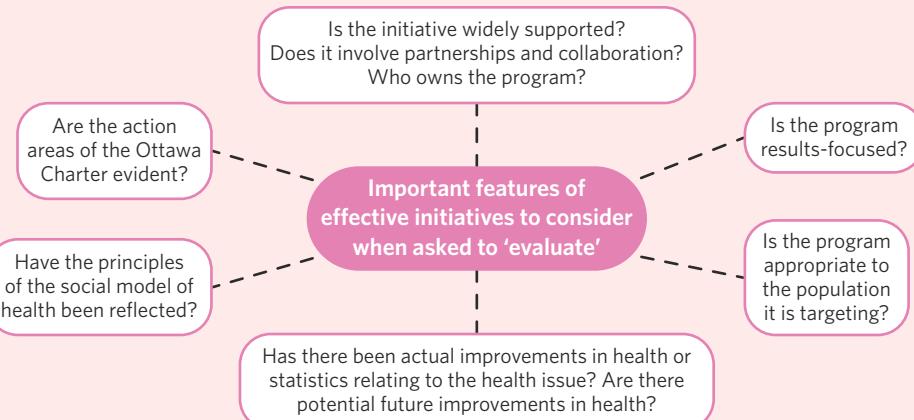


Figure 4 What to consider when you are asked to evaluate your chosen health promotion initiative

SunSmart

SunSmart is a program that provides health promotion related to skin cancer prevention and early detection (SunSmart, n.d.). SunSmart does this through a range of community programs, mass media campaigns, and advocacy in workplaces and schools. SunSmart strives to influence Australians' attitudes, knowledge, and behaviours related to Sun protection. Established in 1988, SunSmart is one of the longest-running health promotion programs related to skin cancer in the world and is currently jointly funded by Cancer Council Victoria and the Victorian Government. The SunSmart website has a range of features, including numerous health promotion publications and posters that are available in multiple languages. SunSmart runs health promotion initiatives in all states and territories in Australia, some of which include:

- *Slip! Slap! Slop! Seek! And Slide! campaign*: the well-known campaign Slip! Slap! Slop! was launched in 1980, and in 2008, the SunSmart program expanded the campaign, becoming Slip! Slap! Slop! Seek! And Slide!. This television and radio campaign has been instrumental in educating Australians on the five forms of Sun protection. It encourages Australians to slip on clothes, slop on some sunscreen, slap on a hat, seek shade, and slide on some sunglasses to protect themselves from the summer Sun.
- *SunSmart mobile app*: in 2010, the SunSmart app was launched, downloadable onto any smartphone device. This app helps put Sun protection at the forefront of people's minds by alerting users when the **UV index** is high and reminding Australians to use sun protection measures when they are at greatest risk of excess Sun exposure.

Study design key skills dot point

The following key skills dot point applies to the rest of the lesson:

- apply the action areas of the Ottawa Charter for Health Promotion to a range of data and case studies

ADDITIONAL TERMS

UV index refers to the international standard measurement of the strength of UV radiation from the sun, which is on a scale of 0 (low) to 11 and over (extreme)



- *National SunSmart Schools Program*: this program focuses on preventing the damaging effects of Sun exposure among school children. This is because damage from UV radiation accumulated during childhood and teenage years is strongly associated with an increased risk of skin cancer later in life. When schools join the SunSmart schools program, SunSmart assists them to meet their duty of care requirements in Sun protection and occupational health and safety (OHS) obligations in UV risk reduction. Along with support, SunSmart provides member schools with a range of resources to promote Sun protection in their schools. Launched in 1998, this program is today offered to all primary schools nationwide, along with a range of secondary and special schools in some states.
- *UV. It All Adds Up campaign*: in 2015, SunSmart launched this campaign to help educate the public about the dangers of cumulative UV exposure. This campaign involved a range of confronting television commercials.
- *Dermoscopy for Victorian General Practice Program*: in 2019, SunSmart launched this program which aimed to aid skin cancer detection and prevention in rural Victoria. If a General Practice (GP) meets certain requirements and becomes a successful applicant for the program, they are provided with one dermatoscope and free training for one GP to learn how to perform a **dermoscopy**. It was supported and funded by the Victorian Department of Health.

ACTIVITY 1

Type 'UV. It all adds up. SunSmart commercial' (Cancer Council Western Australia, 2015) into YouTube and watch the two videos that go for thirty-one seconds each. These are two of the TV commercials that were broadcasted nationally as part of the UV. It All Adds Up SunSmart campaign. After watching both commercials, discuss the following prompts with your classmates:

- How does this commercial make you feel? What does this commercial make you think?
- What message do you think these commercials are trying to convey? Do you think these commercials are effective? Why or why not?

Table 3 Some examples of how the SunSmart program improves population health

How does the SunSmart program improve health and wellbeing?	How does the SunSmart program improve health status?
<ul style="list-style-type: none"> The Slip! Slap! Slop! Seek! And Slide! campaign encourages people to use a range of Sun protection measures to ensure they don't get sunburnt. For example, the campaign encourages people to use sunscreen and seek shade, especially during summertime. This means Australians are less likely to get sunburnt and suffer from sun-related illnesses, such as skin cancer, improving overall <i>physical health and wellbeing</i>. The SunSmart app helps warn people when the UV index is moderate or high, alerting when they are at risk of high amounts of UV exposure and should protect themselves from the Sun. This is a supportive app that reduces stress and anxiety among people not knowing when they are at the greatest risk of UV damage, improving the overall <i>mental health and wellbeing</i> of people who use the app. 	<ul style="list-style-type: none"> The Dermoscopy for Victorian General Practice Program run by SunSmart improves the ability of GPs in rural Victoria to detect skin cancer. This would mean cases of skin cancer in rural Victorian patients are detected earlier and can be treated before becoming fatal, reducing the risk of mortality associated with skin cancer. The National SunSmart Schools Program run by SunSmart supports schools around Australia in ensuring they are meeting their duty of care requirements regarding Sun protection and providing education and resources to their students about the importance of Sun protection. This means that more Australian students are likely to be educated about the importance of Sun protection, and are therefore more likely to protect themselves from sunburn, resulting in a reduction in the prevalence of skin cancer in the future.

! Useful tip

The key knowledge in lesson **5A**, **5B**, and **5C** refers to 'the role of health promotion in improving population health'. Population health can relate to either health and wellbeing or health status. However, it is important to note that, when discussing improvements in population health and wellbeing brought about by health promotion, your response needs to refer to the health and wellbeing, or health status, of a group of people (a population group), rather than simply an individual.

ADDITIONAL TERMS

Dermatoscopy refers to a clinical examination of suspicious skin lesions using a hand-held microscope called a dermatoscope

ACTIVITY 2

SunSmart treasure hunt

Along with the range of health promotion initiatives they run, SunSmart provides numerous helpful services on their website. The website is accessible online and there are a range of free services. Let's explore the SunSmart website to help us understand the health promotion initiatives they provide to the Australian population. Type the URL sunsmart.com.au into your browser and explore the website (SunSmart, n.d.). See if you can find the features listed below on the SunSmart website. Copy out the table below into your workbook and apply your knowledge of health promotion to these features of the SunSmart program.

SunSmart feature	What is it? How is it helpful?	How could this improve population health?
UV Widget		
Sunscreen calculator		
Shade comparison check		
SunSmart app		
Real Stories		
Online education for health professionals		
At the snow information		
Posters and publications in different languages		

Government laws and policies

A range of laws and policies have been implemented by the Australian federal government and state governments to help reduce skin cancer rates in Australia. Laws and policies enforced by governments are a form of health promotion that both educate the public and help them make health-related decisions that positively impact their health and wellbeing. Some Australian laws and regulations related to skin cancer include:

- Banning of commercial solariums: due to the associated health risks, commercial **solariums** were banned in all Australian states and territories at the beginning of 2015 (except Western Australia, where a ban was introduced in January 2016, and the Northern Territory where there are no commercial solariums; Cancer Council Australia, n.d.). These laws make it illegal for any person to provide the use of a tanning bed for a fee.
- Victorian Department of Education Sun and UV Protection policy: this policy outlines a range of expectations that all Victorian schools must meet to create safe school environments and encourage behaviours that minimise the risk of skin cancer (Victorian Department of Education, 2021). For example, the policy states that the school council and principal of any school must ensure that there is adequate shade for Sun protection in planning for future buildings or school grounds, as well as the provision of adequate shade on school grounds, particularly around certain areas, such as the school canteen and outdoor lesson areas. Additionally, the policy states that schools are obliged to adopt a uniform or dress code that includes sun-protective clothing (including hats, sunglasses, and sunscreen).

ADDITIONAL TERMS

Solariums (also known as sunbeds) are machines that emit extreme levels of UV radiation with the intention of providing people with a tan (levels of UV radiation can be up to six times as strong as the midday Australian summer sun)



- Sunscreen labelling laws: there are many laws around the promotion of sunscreen in Australia (Therapeutic Goods Administration, 2021). Sunscreens sold in Australia must be labelled with an **SPF** of at least 4, to the highest rating of 50+. The Therapeutic Goods Administration (TGA) regulates the sunscreens available in Australia, and mandate that therapeutic sunscreens (products sold solely for Sun protection, opposed to as for cosmetic purposes) must be listed or registered in the Australian Register of Therapeutic Goods (ARTG) before they can be legally sold. The Australian Government also mandate that the claimed SPF of the therapeutic sunscreen must have been established through testing according to the scientific method described in the Australian Sunscreen Standard.



Image: HstrongART/Shutterstock.com

Figure 5 All sunscreens sold in Australia are required to meet a range of standards, such as being labelled with an SPF of at least 4, to the highest rating of 50+.

Table 4 Some examples of how government laws and policies can improve population health

How do government laws and policies improve health and wellbeing?	How does the SunSmart program improve health status?
<ul style="list-style-type: none"> It is a legal requirement that sunscreens available for purchase in Australia are tested according to the Australian Sunscreen Standard. This means that Australians are using high-quality sunscreen, reducing the risk of sunburn and skin damage, therefore improving overall <i>physical health and wellbeing</i>. The Victorian Department of Education Sun and UV Protection policy outlines a range of protocols and expectations that schools must meet regarding the safety of their students, such as ensuring there is a sun-safe uniform and sufficient shade on school grounds. This reduces the stress and anxiety of parents around Australia as they are assured that their children are in a safe environment and are not at risk of sunburn on school grounds, in turn improving the <i>mental health and wellbeing</i> of parents around Australia. 	<ul style="list-style-type: none"> Banning the commercial use of solariums in Australia means that tanning beds, which are dangerous for health, are not easily accessible to Australian people. Tanning beds have been proven to be a major risk factor for skin cancer. In this way, making solariums inaccessible for many Australians reduces the risk of developing skin cancer, improving overall morbidity in Australia. High-quality sunscreen plays a major role in protecting Australians from the Sun's UV radiation. The monitoring of sunscreen testing and sales in Australia means that sunscreen available for purchase is more likely to be higher quality and effective. Therefore, fewer people are likely to suffer from serious sunburn, which could reduce the incidence of melanoma in Australia.

National Skin Cancer Action Week

National Skin Cancer Action Week is a health promotion initiative run every year, typically just before summer. This campaign works to remind all Australians about the importance of Sun protection and early skin cancer detection (Cancer Council Australia, n.d.). The week is run by Cancer Council Australia in partnership with the Australasian College of Dermatologists. It aims to raise awareness about the importance of taking action against skin cancer, and help Australians understand risk factors and protect themselves from future diseases related to skin damage.

A major message communicated during this week is the importance of using Sun protection measures when the UV index is higher than 3. This week sees the return of 'Sid the Seagull' who was the 'face' of the original Slip! Slap! Slop! Campaign. Every year during this week, Sid returns to remind Australians to protect themselves from the Sun, and that even though things have changed since the 1980s, the Sun hasn't. Since his first appearance in 1980 when the original campaign was released, Sid has remained an important asset in Australia's fight against skin cancer.

ADDITIONAL TERMS

Sun Protection Factor (SPF) is a number that indicates how long the sun's UV rays would take to redden one's skin when using a sun protection product compared to the amount of time without any product

During this week, a range of television commercials are broadcasted and posters are distributed nationally, spreading this important message of Sun safety around the country. Another message that is promoted during this week is the importance of receiving regular skin checks – advertisements encourage Australians to receive regular (annual) skin checks. During this week, skin clinics are encouraged to promote skin checks and health professionals are encouraged to promote the same messages of the importance of Sun protection.

Every year, National Skin Cancer Action Week has a different focus. For example, in 2019, the campaign specifically targeted teenagers, encouraging them to be Sun smart and educating them of the risks of tanning. A major part of the 2019 campaign was social media coverage, with a big focus put on the hashtag #OwnYourTone, encouraging teenagers around the country to change their attitudes towards Sun tanning.

Table 5 Some examples of how National Skin Cancer Action Week improves population health

How does National Skin Cancer Action Week improve health and wellbeing?	How does National Skin Cancer Action Week improve health status?
<ul style="list-style-type: none"> One focus of National Skin Cancer Action Week is around changing attitudes towards tanning. This focus means that more people will be educated on the negative health impacts of tanning, reducing the likelihood people engage with this health behaviour that damages their skin - the largest organ in the body - which in turn improves <i>physical health and wellbeing</i>. The National Skin Cancer Week encourages people to get a regular skin check. This can reduce stress or anxiety amongst Australians around the development of skin cancer as they are confident their skin has been checked by a health professional, thereby promoting mental health and wellbeing. 	<ul style="list-style-type: none"> One of the messages of National Skin Cancer Action Week is the importance of Australians receiving an annual skin check. This increases the likelihood that skin cancer will be detected early, reducing the chance of skin cancer progressing and worsening. This means people are less likely to suffer from end-stage melanoma, reducing mortality associated with skin cancer. The return of Sid the Seagull in National Skin Cancer Action Week reminds all Australians to use the five measures of Sun protection. This increases the likelihood of Australians engaging with critically important Sun protection measures, thereby reducing the likelihood of being sunburnt. In turn, this reduces the incidence of skin cancer in Australia.

How the health promotion for skin cancer reflects the action areas of the Ottawa Charter for Health Promotion 3.2.3.9

OVERVIEW

An effective health promotion initiative will reflect numerous areas of the Ottawa Charter for Health Promotion.

THEORY DETAILS

After learning about three health promotion initiatives related to skin cancer in Australia, it is now time to analyse how these health promotion initiatives reflect the action areas of the Ottawa Charter for Health Promotion. This is explored in table 6.

Table 6 Applying some of the action areas of the Ottawa Charter for Health Promotion to health promotion initiatives

SunSmart	Government laws and policies	National Skin Cancer Action Week
<p>'Create supportive environments' is reflected in this health promotion initiative through the National SunSmart Schools Program. This program helps schools meet their duty of care requirements in Sun protection. This support involves, for example, ensuring that schools have the ability to provide adequate shade around their school grounds for all students and staff, creating a supportive physical environment.</p>	<p>'Build healthy public policy' is reflected through the government ban of commercial solariums. Tanning beds (which are solariums) were once very popular, but once enough research was released about how they increase the risk of skin cancer, their commercial use was banned in most states and territories. It is illegal for any person to provide the use of a tanning bed for a fee, building a healthy public policy around commercial solariums.</p>	<p>'Develop personal skills' is reflected as during this week, a range of television commercials are broadcasted and posters are distributed nationally, educating the population on a range of things associated with skin cancer. This education includes how to protect yourself from the Sun as well as where to get skin checks, overall spreading this important message of Sun safety around the country.</p>

Lesson link

In lesson **3D: Ottawa Charter for Health Promotion**, you learnt about the action areas of the charter. For this chapter, you are required to apply the action areas to a range of health promotion initiatives. If you need a refresher on how to apply the action areas, return to lesson 3D.



Table 6 Continued

SunSmart	Government laws and policies	National Skin Cancer Action Week
'Reorient health services' is reflected in this health promotion initiative through the facilitation of the Dermoscopy for Victorian General Practice Program. This program provides rural General Practices (GPs) with one dermatoscope to improve their ability to detect skin cancer early. The program also provides free training for one GP to learn how to perform a dermatoscopy, improving their ability to perform such skin cancer examinations. This demonstrates a shift towards encouraging health professionals to focus on early detection and prevention of skin cancer, rather than simply treatment once the disease has developed	'Create supportive environments' is reflected in the Victorian Department of Education Sun and UV Protection policy. Under this policy, the school council and principal of any school must ensure that there is adequate shade for sun protection in planning for future buildings or school grounds, as well as the provision of adequate shade on school grounds, particularly around certain areas, such as the school canteen and outdoor lesson areas. This creates a supportive physical environment for students and staff.	'Strengthen community action' is reflected in this health promotion initiative as skin clinics and health professionals are encouraged to promote skin checks and the importance of sun protection among the community. Additionally, this week of health promotion is run in collaboration between Cancer Council Australia and the Australasian College of Dermatologists, which means numerous parties are working together to promote sun safety.

Theory summary

In this lesson, you have learnt about why skin cancer is a target of health promotion. You also have learnt about different health promotion campaigns and how they work to reduce skin cancer rates and improve population health. You also evaluated each of these health promotion campaigns by learning how the action areas of the Ottawa Charter for Health Promotion apply to these initiatives.

5C QUESTIONS

Theory-review questions

Question 1

What are the key reasons for skin cancer being targeted for health promotion? (*Select all that apply*)

- I Cases of skin cancer caused by overexposure to UV radiation are often preventable.
- II Skin cancer almost always results in death.
- III Improved sun protection amongst the Australian population can improve health outcomes, such as by decreasing mortality attributable to skin cancer.

Question 2

A focus of health promotion related to skin cancer is about educating people about sun protection measures they can take to reduce their exposure to UV radiation. Sun protection can improve population health by reducing premature death from skin cancer, thereby increasing life expectancy.

- A True.
- B False.

Question 3

Health promotion related to skin cancer only focuses on educating people about the health risks associated with sunburn.

- A True.
- B False.

Question 4

Skin cancer-related health promotion campaigns can be effective at improving population health by

- A reducing the impact of UV radiation on the skin.
- B changing Australians' attitudes and behaviours around sun exposure and tanning, reducing people's exposure to UV radiation.

Question 5

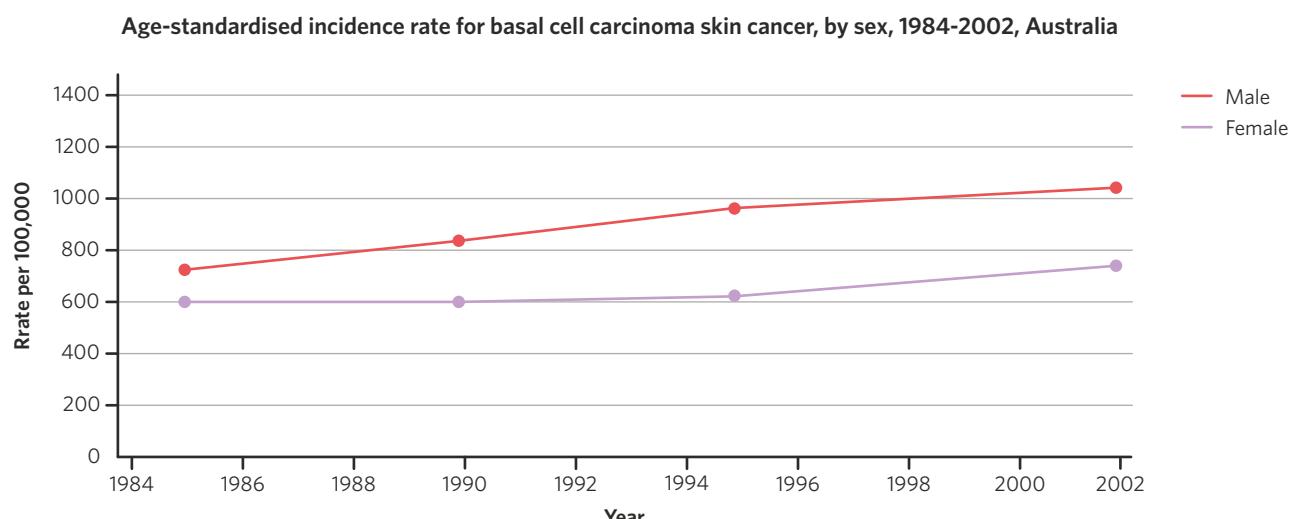
Which of the following best fills in the blank?

- A action areas of the Ottawa Charter for Health Promotion.
- B the biomedical model of health.

Skin cancer-related health promotion initiatives are likely to be effective at improving population health if they reflect the _____.

Skills**Unpacking the case study**

Use the following information to answer Questions 6-8.



Source: adapted from Australian Institute of Health and Welfare, *Skin cancer in Australia*, <<https://www.aihw.gov.au/reports/cancer/skin-cancer-in-australia/summary>>

Question 6

From 1984 to 2002, the incidence rate for basal cell carcinoma skin cancer

- A increased.
- B decreased.

Question 7

Which gender group recorded a higher incidence rate for basal cell carcinoma skin cancer?

- A Female.
- B Male.

Question 8

Which statement correctly outlines a trend evident in the graph above?

- A The incidence rate for basal cell carcinoma skin cancer increased for both males and females between 1984 and 2002.
- B The mortality rate for basal cell carcinoma skin cancer increased for both males and females between 1984 and 2002.

Exam-style questions**Question 9 (2 MARKS)**

Skin cancer is a target area for health promotion. Explain two reasons why health promotion is used to target skin cancer in Australia.

Adapted from 2019 VCAA exam Q16a



Question 10 (3 MARKS)

Skin cancer is a target for health promotion in Australia.

Identify a health promotion initiative that targets skin cancer in Australia. _____

With reference to one Ottawa Charter action area, evaluate the effectiveness of your chosen health promotion initiative related to skin cancer in promoting health status in Australia.

Adapted from VCAA 2019 exam Q16c

Question 11 (4 MARKS)**Bondi Rescue**

Bondi Rescue is an Australian Television program broadcast on Network Ten that follows the work of the professional lifeguards who patrol Bondi Beach, which is one of Australia's most famous beaches. Lifeguards know all too well the importance of sun protection and the dangers of the sun. With support from Network 10 and the production team, the lifeguards of Bondi Rescue joined Cancer Council Western Australia in the fight against skin cancer by reminding Western Australians to stay safe at the beach and protect themselves from the sun in WA.

The lifeguards, many of whom have become 'Aussie icons', well-known and widely-admired around the country, took part in a 30-second television advertisement which was aired over the summer of 2010-2011. This advertisement was coupled with two radio advertisements that supported the television advertisement. The advertisements featured the lifeguards providing viewers with tips on how to protect themselves and 'their mates', featuring the five SunSmart sun protection measures. The ads aimed to use the established profile of the Bondi Rescue lifeguards to share the 'be SunSmart' message with Western Australians, encouraging them to be sun smart on WA beaches.

Source: adapted from Cancer Council Western Australia, Bondi Rescue, <<https://www.cancerwa.asn.au/prevention/sunsmart/sunsmartmediacampaigns/bondirescue/>>

Describe how the Bondi Rescue health promotion initiative by Cancer Council reflects **two** action areas of the Ottawa Charter for Health Promotion.

Question 12 (4 MARKS)

Skin cancer is a target for health promotion in Australia.

Identify a health promotion initiative that targets skin cancer in Australia. _____

- Explain how your chosen skin cancer health promotion initiative is effective at improving population health and wellbeing. (2 MARKS)
- Describe how your chosen skin cancer health promotion initiative reflects one action area of the Ottawa Charter for Health Promotion. (2 MARKS)

Adapted from VCAA 2019 exam Q16c

Questions from multiple lessons**Question 13** (9 MARKS)**The Cancer Institute of New South Wales**

The Cancer Institute of New South Wales launched a skin cancer campaign in 2017/18 called Your Time in the Sun. The Your Time in the Sun campaign aimed to encourage young people to feel what it is like to have their 'time around the sun' (life) cut short before they achieve their life goals and dreams. The campaign focused on the consequences of overexposure to UV radiation, such as damage to DNA in skin cells, which, over a period of time, can lead to melanoma that spreads to other parts of the body. The campaign was aired in NSW through posters, cinema shorts (advertisements before movies), and television advertisements, which featured real people's stories.

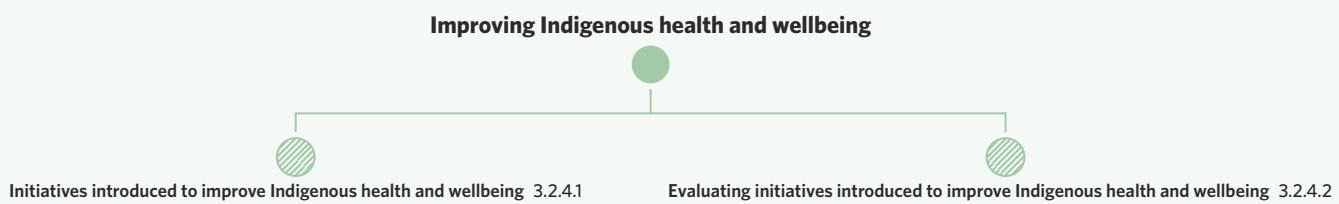
Source: adapted from Cancer Institute of New South Wales, Your Time in the Sun, <<https://www.cancer.nsw.gov.au/prevention-and-screening/preventing-cancer/campaigns/skin-cancer-campaigns/your-time-in-the-sun/>>

- Describe how the Your Time in the Sun health promotion initiative demonstrates the social model of health principle 'empowers individuals and communities.' (2 MARKS)
- Explain how the Your Time in the Sun health promotion initiative reflects two action areas of the Ottawa Charter for Health Promotion. (2 MARKS)
- Outline how the Your Time in the Sun health promotion initiative promotes the health and wellbeing of a population. (2 MARKS)
- Evaluate the Your Time in the Sun health promotion initiative's effectiveness at promoting health status. (3 MARKS)

5D IMPROVING INDIGENOUS HEALTH AND WELLBEING

As you have learnt, Indigenous Australians generally experience poorer health than non-Indigenous Australians. This is a major problem, so what is being done about it? In this lesson, you will learn about a range of initiatives that have been implemented to improve Indigenous health and wellbeing in Australia. You will also learn to evaluate the effectiveness of these initiatives.

5A Health promotion: Smoking	5B Health promotion: Road safety	5C Health promotion: Skin cancer	5D Improving Indigenous health and wellbeing
Study design dot point			
<ul style="list-style-type: none"> initiatives introduced to bring about improvements in Indigenous health and wellbeing in Australia and how they reflect the action areas of the Ottawa Charter for Health Promotion 			
Key knowledge units			
Initiatives introduced to improve Indigenous health and wellbeing			3.2.4.1
Evaluating initiatives introduced to improve Indigenous health and wellbeing			3.2.4.2



Initiatives introduced to improve Indigenous health and wellbeing 3.2.4.1

OVERVIEW

So, you have learnt about the problematic health gap that exists between Indigenous and non-Indigenous Australians, but what is being done about this? There are many initiatives that have been implemented in Australia to improve Indigenous health and wellbeing.

THEORY DETAILS

In this lesson, you will learn about a range of different initiatives that have been introduced to improve Indigenous health and wellbeing in Australia. You will also evaluate the effectiveness of these initiatives. In order to do so, it is essential to both understand the health gap that exists between Indigenous and non-Indigenous peoples in Australia, as well as *why* this health gap exists. This involves understanding who Aboriginal and Torres Strait Islander peoples are, as well as their historical and cultural contexts.

In lesson 2B, you learnt about the health status gap that exists between Indigenous and non-Indigenous Australians, as well as a range of factors (biological, sociocultural, and environmental) that influence this gap. Some key learnings from that lesson include:

- Indigenous males have a lower life expectancy (71.6) by 8.6 years in comparison to non-Indigenous males (80.2) (Australian Institute of Health and Welfare [AIHW], 2020).
- Indigenous females have a lower life expectancy (75.6) by 7.6 years in comparison to non-Indigenous females (83.4) (AIHW, 2020).
- Indigenous Australians have higher rates of mortality due to cancer in comparison to non-Indigenous Australians (AIHW, 2020).
- Indigenous Australians have higher rates of mortality associated with type 2 diabetes, cardiovascular disease, respiratory diseases, and kidney disease in comparison to non-Indigenous Australians (AIHW, 2020).



- Indigenous Australians experience an under 5 mortality rate 1.8 times higher than non-Indigenous Australians (Australian Government, 2020).
- Indigenous Australians experience a higher maternal mortality rate (20.2 per 100,000 births) in comparison to non-Indigenous Australians (5.5 per 100,000 births) (AIHW, 2020).

Before looking at initiatives introduced to bring about improvements in Indigenous health, it is important to know that this issue is yet to be resolved. However, the issue is multifaceted and requires an in-depth understanding of Australia's Indigenous peoples. To improve your understanding of who Australia's Indigenous peoples are, as well their historical and cultural contexts, read the following 'Want to know more?' box.

Want to know more?

Australia's Indigenous peoples

Who are Australia's Indigenous peoples?

Aboriginal and Torres Strait Islander peoples are the Indigenous peoples of Australia.

- Aboriginal people are the original inhabitants and descendants of mainland Australia. The term itself is derived from the Latin words 'ab' (meaning from), and 'origine' (meaning origin or beginning), meaning 'original inhabitants'. Since colonisation, the term has been used to refer to the original inhabitants of the land and their descendants (Dudgeon et al., 2015).
- Torres Strait Islander people are the original inhabitants and descendants of the 274 islands located north of Australia in the seaway between Cape York (Australia) and Papua New Guinea: the Torres Strait. The name 'Torres Strait' originates from the Spanish Explorer Luis Vaex de Torres, who sailed through the area in 1606 (Torres Strait Regional Authority, n.d.).

Aboriginal or Torres Strait Islander identity is generally accepted as a person who is a descendant of an Aboriginal and/or Torres Strait Islander inhabitant of Australia, who identifies as an Aboriginal and/or Torres Strait Islander person, and who is recognised as such by the community in which they belong/live.

Australia's Indigenous population today:

As of the 2016 Census (AIHW, 2019), when the Indigenous population of Australia was an estimated 798,365, approximately:

- 91% of Australia's Indigenous population identified as being of Aboriginal origin.
- 5% of Australia's Indigenous population identified as being of Torres Strait Islander origin.
- 4% of Australia's Indigenous population identified as being of both Aboriginal and Torres Strait Islander origin.

In 2020, Aboriginal and Torres Strait Islander peoples made up 3.3% of the Nation's total population (approximately 864,200 people). The Indigenous population of Australia is growing and is expected to reach 1.1 million by 2031 (AIHW, 2019).

Table 1 Historical context

Aboriginal peoples	Torres Strait Islander peoples
<ul style="list-style-type: none"> As supported by archeological evidence and the discovery of artefacts, Aboriginal peoples have occupied the land we know as Australia for at least 65,000 years (it is not known for exactly how long). Aboriginal peoples do not necessarily believe that their existence is only dated back 65,000 years, believing that they have lived on this land since time immemorial. When the British invaded the land that is now known as Australia in 1788, there were approximately 260 distinct language groups, and 500 dialects spoken amongst an estimated 750,000 Aboriginal people. Invasion had a major impact on the Aboriginal population: it is estimated that around 90% of the Aboriginal population prior to invasion was killed over the few hundred years that followed 1788. It is important to note that the battle for equality, justice, and Aboriginal rights is ongoing, and has been a significant part of Aboriginal history. <p>(Dudgeon et al., 2015)</p>	<ul style="list-style-type: none"> Archeological evidence suggests that Torres Strait Islanders have occupied 270 islands in straits between Australia and Papua New Guinea for approximately 2500 years. However, it is possible that evidence of earlier settlement could be found. Across the islands, there are five main cultural groups: the Eastern (Meriam), Top Western (Guda Maluigal), Near Western (Maluigal), Central (Kulkalgal), and Inner Islands (Kaiwalagal). In 1879, the Torres Strait was annexed and became a part of Queensland (therefore a part of the British colony). Torres Strait Islander history and culture is different to Aboriginal history and culture, yet cannot be completely separated as there are many similarities. Like Aboriginal peoples, Torres Strait Islander peoples also continue to suffer from the effects of colonisation. <p>(Torres Strait Regional Authority, n.d.)</p>

cont'd



Want to know more?

Australia's Indigenous peoples - continued

To read more about history relating to Aboriginal and Torres Strait Islander peoples, see the 'Want to know more?' in lesson 1D in the Edrolo Health and Human Development Unit 1/2 textbook box. This box details a timeline with some key historical dates pertaining to the history of Australia's Indigenous peoples. It may help you understand the complex history that Australia's Indigenous peoples have lived through.

Cultural context:

Both traditional Aboriginal and Torres Strait Islander languages are not simply a means of communication (AIATSIS, n.d.). Each language is associated with an area of land and has a strong spiritual significance. Language is what makes individuals unique and is what allows the passing down of cultural knowledge and heritage.

- There are many Aboriginal nations that cover mainland Australia. Within these nations there are language groups. There are around 145 Aboriginal languages spoken in Australia today, many of which are at risk of being lost.
- There are two main language groups in the Torres Strait Islands: *Miriam Mir*, which is mainly spoken on the Eastern islands and is closely related to Papuan languages, and *Kala Lagaw Ya*, which is mainly spoken on the western and central islands and is more closely related to Aboriginal languages of mainland Australia (Deadly Story, n.d.).

Values and beliefs of Australia's Indigenous peoples also vary between different people and also influence perspectives on health and wellbeing, and therefore need to be considered when implementing initiatives and programs. A few important aspects of Aboriginal and Torres Strait Islander peoples' culture and beliefs include:

- Many Aboriginal and Torres Strait Islander peoples' worldviews and beliefs are closely tied to spirituality, which also underpins many traditional Aboriginal healing practices and philosophies of care (McKendrick et al., 2013).
- Aboriginal and Torres Strait Islander people believe that their ancestors watch over them for the entirety of their life. There is a strong belief that ancestors will offer guidance when needed and answer questions in unique ways when least expected. (Deadly Story, n.d.)
- Aboriginal and Torres Strait Islander beliefs are tied heavily to the land and how one lives on it. There is a strong belief that one should and does not take more than one needs so the land continues to thrive (Deadly Story, n.d.).

Colonisation and intergenerational trauma:

The impact of colonisation still lives on today, hundreds of years later (Australians Together, 2016). 1788 may be the year that Australia was invaded, but it was only the beginning of years of violence, trauma, racism, and division for Australia's first-nation people. It is difficult to summarise the impact of colonisation on Aboriginal and Torres Strait Islander peoples: it is devastating. For Aboriginal and Torres Strait Islander peoples, colonisation partly meant:

- massacre, violence, disease, slave labour, and death.
- displacement, loss of land, unemployment, denial of wages, and difficulty attaining housing and education.
- racial discrimination, prejudice, and disrespect (including race-based legislation and imposition of a foreign legal system, laws, and policies)
- trauma and loss from the forcible separation of families, known as the Stolen Generations.
- the establishment of racist and disrespectful policies.
- an ongoing battle for systemic equality and acceptance.

A major aspect of colonisation was the deliberate fragmentation of Aboriginal and Torres Strait Islander peoples' kinship systems and families. This has had a profound impact on many generations of Aboriginal and Torres Strait Islander peoples, resulting in a major sense of loss and feelings of disconnection, isolation, grief, and despair. Due to the scale of damage caused by invasion, many of these feelings are passed down to younger generations. This is referred to as intergenerational trauma. For many Aboriginal and Torres Strait Islander families and communities, trauma from colonisation continues to be passed down from generation to generation- this has devastating effects, including on health.

There are numerous initiatives that have been introduced in Australia to bring about improvements in Indigenous health and wellbeing.

Close the Gap campaign and Closing the Gap strategy

First, you will learn about the Close the Gap campaign and the Closing the Gap strategy, followed by how these initiatives underpin the work of numerous programs around Australia, all ultimately striving to reach a common goal: achieve Indigenous health equality in Australia. The Close the Gap campaign informed the Closing the Gap strategy and are both different but closely related. Let's take a look at both initiatives.

Study design key skills dot point

The following key skills dot point applies to the rest of the lesson:

- apply the action areas of the Ottawa Charter for Health Promotion to a range of data and case studies



In 2005, Human Rights and Equal Opportunity Commission (Australian Government) released a Social Justice Report which highlighted the health disparities that exist in our country and set out a human-rights based approach to improving the health status of Aboriginal and Torres Strait Islander peoples. The Close the Gap campaign and the Closing the Gap strategy are two initiatives that were inspired by this report that have been implemented in Australia to improve Indigenous health and wellbeing.

Close the Gap campaign

The Close the Gap campaign aims to create awareness and call for government action to close the health and life expectancy gap between Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians within a generation (Australian Human Rights Commission, 2021). Launched in 2007, the Close the Gap campaign was created through the collaboration of a range of Aboriginal and Torres Strait Islander and non-Indigenous health organisations, non-governmental organisations, and human rights organisations. Close the Gap day is supported by over 200,000 Australians every year and is marked annually on the third Thursday in March. On Close the Gap day, people all over the country are encouraged to host an activity in their workplace, home, community, or school, which aims to bring people together to share information, support one another, and take meaningful action to achieve Indigenous health equality by 2030.

Closing the Gap strategy

The Closing the Gap strategy was implemented one year after the National Close the Gap day was established (Parliament of Australia, n.d.). This strategy is the government's response to a push from non-governmental parties for increased action (from the Close the Gap campaign). In 2008, the Australian government established the National Indigenous Health Equality Council and subsequently approved the National Indigenous Reform Agreement, which outlined specific *Closing the Gap* targets. The agreement outlined a holistic approach to achieving these targets. These targets included:

- to close the life expectancy gap within a generation
- to halve the gap in mortality rates for Indigenous children under five within a decade
- to ensure access to early childhood education for all Indigenous four year olds in remote communities within five years
- to halve the gap in reading, writing, and numeracy achievements for children within a decade
- to halve the gap for Indigenous students in year 12 attainment rates by 2020
- to halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade.

In July 2020, all Australian governments committed to 17 new targets after the previous Closing the Gap targets (first set in 2008) were not met. A year later, after seeing progress in only three of these target areas, the government realised more action was needed.

In August 2021, as a part of the Closing the Gap strategy, the Australian Government announced a \$1 billion implementation plan to close the health, education, justice and employment gap between Indigenous and non-Indigenous Australians by 2031 (ABC News, 2021). This new Closing the Gap implementation plan includes a \$378 million support scheme for Stolen Generations survivors from the Northern Territory, the ACT and Jervis Bay Territory. Additionally, the government committed millions of dollars for new boarding schools in remote areas of Australia, renovating and building new health clinics, and supporting and increasing alcohol and drug rehabilitation programs.

Overall, the Closing the Gap strategy underpins the Australian Government's work to improve Indigenous peoples' health and wellbeing. There are numerous programs and initiatives that have been implemented which all contribute towards Closing the Gap, many of which are supported by the Australian Government. In this lesson, we will look at the following initiatives:

- The Closing the Gap PBS Co-payment Program
- Aboriginal Quitline
- Fitzroy Stars Football Club
- 'Live Longer!' Campaign
- Deadly Choices

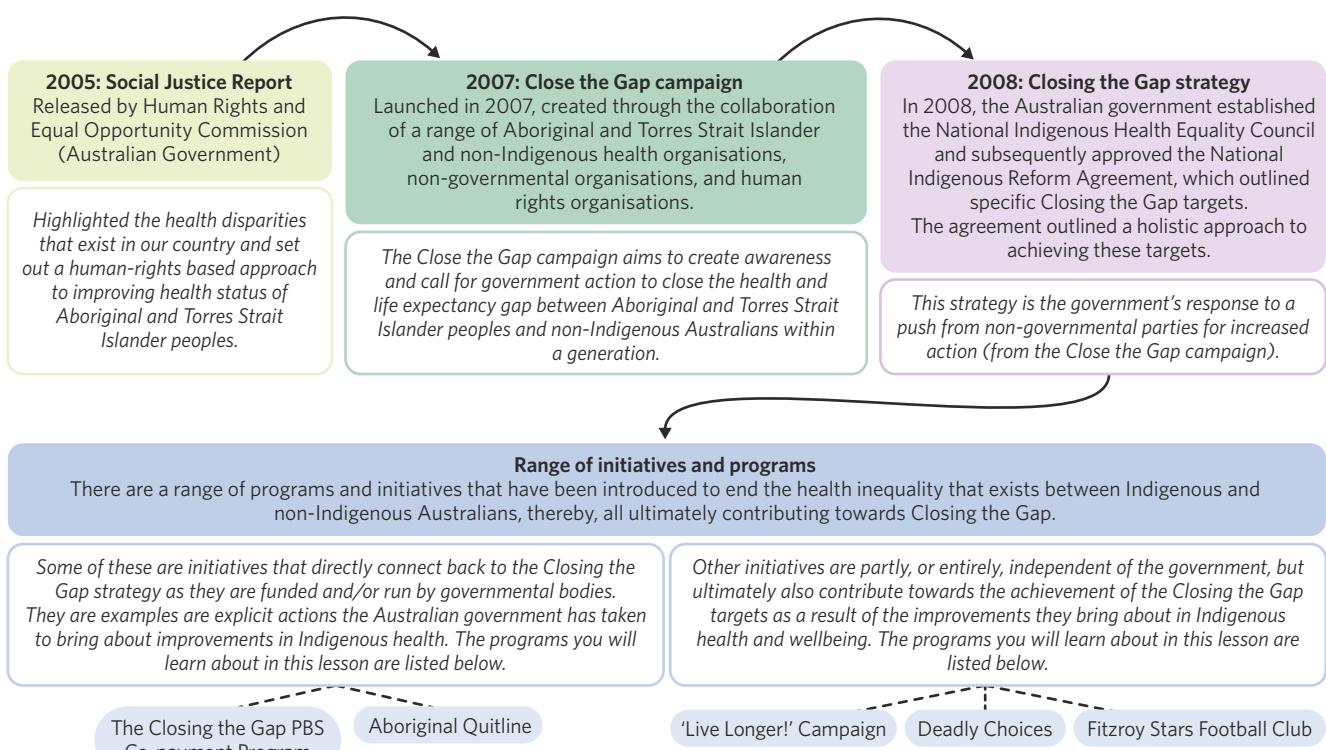


Figure 1 Explanation of the connection between the Close the Gap campaign, Closing the Gap strategy, and the range of initiatives explored in this lesson.

In this lesson, you will learn about each initiative so you are able to provide a summary of the program. You also need to be able to talk about:

- 1 how the program aims to bring about improvements in Indigenous health and wellbeing.
- 2 how the program reflects the action areas of the Ottawa Charter for Health Promotion.

An effective program will likely reflect some or all action areas of the Ottawa Charter for Health Promotion as these action areas outline a series of strategies required to develop effective health promotion campaigns and achieve good health for all. A program may be ineffective in the absence of these action areas.

Lesson link

In lesson **2B: Health variations between population groups: Part 2**, you learnt about the variations in health status between Indigenous and non-Indigenous Australians. This current lesson (5D) focuses on programs that have been implemented to reduce these health disparities. If you need a refresher on the health gap that exists between these two population groups, revisit lesson 2B.

In lesson **3D: Ottawa Charter for Health Promotion**, you learnt about the action areas of the Ottawa Charter for Health Promotion. These include:

- 'Build healthy public policy'
- 'Create supportive environments'
- 'Strengthen community action'
- 'Develop personal skills'
- 'Reorient health services'

For this lesson (5D) you need to be able to explain how a given program (which has been implemented to bring about improvements in Indigenous health and wellbeing) reflects action areas of the Ottawa Charter. Therefore, you need a good understanding of what these action areas are. If you need a refresher on the action areas, revisit lesson 3D.

Useful tip

For the purposes of the Health and Human Development exam, you do not need to remember every single program discussed in this lesson. However, you do need to have a clear understanding of one program and be able to explain it in detail, as well as explain how it reflects the action areas of the Ottawa Charter.



The Closing the Gap PBS Co-payment Program

The Closing the Gap PBS Co-payment Program was implemented in July 2020 to reduce the cost of PBS medicines for eligible Aboriginal and Torres Strait Islander people living with, or at risk of, chronic disease (Department of Health, 2021). This program is funded and delivered by the Australian Government (as is the overall PBS).

How does the Closing the Gap PBS Co-payment Program work?

When obtaining PBS medicines at their local chemist, eligible patients who would normally pay the full PBS co-payment can pay the concessional rate, and those who would normally pay the concessional rate make no payment at all.

Who is eligible?

The program is available to Aboriginal and/or Torres Strait Islander peoples of any age who present with an existing chronic disease, or at risk of chronic disease, in the opinion of a medical professional. Moreover, the Closing the Gap PBS Co-payment Program is available in very remote areas where it can be difficult to access a pharmacy or general practice with a dispensary. Through the Remote Area Aboriginal Health Services Program, clients can receive medicines from a Remote Area Aboriginal Health Service, without the need for a normal PBS prescription form, and without any charge.

Table 2 Analysis of the Closing the Gap PBS Co-payment Program

How the initiative brings about improvements in Indigenous health and wellbeing	How the initiative reflects action areas of the Ottawa Charter
<ul style="list-style-type: none"> • Providing access to essential medicines enables both the prevention and treatment of illness, promoting the physical health and wellbeing of Aboriginal and Torres Strait Islander peoples. • By removing the financial barrier involved in accessing essential medicines to treat and prevent illness, people will experience less financial stress associated with struggling to afford such medicines, promoting mental health and wellbeing. 	<ul style="list-style-type: none"> • ‘Reorient health services’ is reflected in this program as the government has adjusted the health system, specifically adjusting the PBS (which provides access to medicines) through recognising and removing the financial barrier that exists in order for Indigenous Australians to access essential medicines. • ‘Build healthy public policy’ is reflected in the Closing the Gap PBS Co-payment Program as this PBS policy was introduced by the Australian Government in 2020, making it easier for Aboriginal and Torres Strait Islander peoples all across the country to access essential medicines.

Aboriginal Quitline

Aboriginal Quitline is an initiative implemented to help Aboriginal and Torres Strait Islander peoples quit smoking cigarettes and is run by Indigenous people for Indigenous people (Quit Victoria, 2021). It is a subdivision of the Quit program of Cancer Council Australia, which is funded by Cancer Council Victoria, VicHealth, and the Victorian Department of Health and Human Services (DHHS). Additionally, the Quit program works in partnership with VicHealth, the DHHS, the Heart Foundation, the Victorian Aboriginal Community-Controlled Health Organisation (VACCHO), and other government-funded and non-governmental organisations, to reduce the health, financial, and social inequities that can arise from an addiction to smoking. Aboriginal Quitline is a free phone support service where individuals can call and speak with an Aboriginal Quitline Counsellor. In addition to the phone counselling service, Aboriginal Quitline also provides other services which include:

- *Aboriginal Quitline Facebook page* where people can come together in a virtual, accessible community, learn information, and share helpful tips and support to each other to live a smoke-free life.
- *Quit Stories Podcast* is a podcast series recorded by Aboriginal Quitline which is focused on helping people through the sharing of stories. The podcast series is hosted by one of the Aboriginal Quitline Counsellors.

Table 3 Analysis of the Aboriginal Quitline initiative

How the initiative brings about improvements in Indigenous health and wellbeing	How the initiative reflects <i>action areas</i> of the Ottawa Charter
<ul style="list-style-type: none"> Provides support to Aboriginal and Torres Strait Islander peoples in quitting smoking and reducing the risk of developing ill-health associated with smoking, such as lung cancer, therefore improving and promoting physical health and wellbeing (as well as reducing morbidity and mortality associated with smoking). Through the creation of the Aboriginal Quitline Facebook page, individuals have access to a support network of people who can hold them accountable and help them through their journey of quitting smoking, therefore improving and promoting social health and wellbeing. 	<ul style="list-style-type: none"> 'Create supportive environments' is reflected in this program as the provision of the Aboriginal Quitline Facebook Page allows people to come together, share information, and support each other to live a smoke-free life. 'Develop personal skills' is reflected in this program as, through both providing a platform for people to seek answers to questions they have regarding smoking and providing information on the community Facebook page, more people are educated about the negative health risks associated with smoking.

Fitzroy Stars Football Club

In the 1970s, the Victorian Aboriginal Health Service established a football team for Indigenous Australians as a preventative health program (Fitzroy Stars, 2021). The club was not entirely successful until 2008 when VicHealth, Oxfam, and the Aboriginal Advancement League collaborated to rebuild the club. The football club is called the Fitzroy Stars and is located in Melbourne's northern suburbs. Fitzroy Star's mission is not simply centred around playing football; it aims to provide opportunities to improve physical health (focusing on fitness, nutrition, and self-esteem), as well as providing job opportunities and creating a supportive community that come together every week. For example, the club engages health professionals on a weekly basis to run a range of sessions relating to preventative healthcare, such as the importance of quitting smoking and exercising regularly. The club provides opportunities for many women, men, and children to participate in the football club.

Table 4 Analysis of Fitzroy Stars Football Club initiative

How the initiative brings about improvements in Indigenous health and wellbeing	How the initiative reflects <i>action areas</i> of the Ottawa Charter
<ul style="list-style-type: none"> Providing individuals with a safe community for Indigenous peoples to play football in, which means that more people are exercising weekly, improving physical fitness, thereby improving physical health and wellbeing. As the club provides a safe and supportive community for Indigenous Australians to be a part of, Fitzroy Stars promotes social health and wellbeing as individuals have access to a support network and are able to form new relationships. 	<ul style="list-style-type: none"> 'Strengthen community action' is reflected in the Fitzroy Stars football club as, in 2008, VicHealth, Oxfam, and the Aboriginal Advancement League collaborated to rebuild the club. To this day, the club is running strongly, with many workers and volunteers ensuring that the club is sustained and continues to grow. 'Develop personal skills' is reflected in the program as the Fitzroy Stars' mission is not just focused on playing sport. For example, the club engages health professionals on a weekly basis to run a range of sessions relating to preventative healthcare, such as educating individuals on the importance of a healthy diet. This enables people to make informed decisions to positively influence their health and wellbeing.

Want to know more?

It is important to remember that the initiatives discussed in this lesson are real initiatives, improving the lives of real people. To see the Fitzroy Stars Football Club in action, type '*Close The Gap: The Fitzroy Stars AFL Oxfam*' into YouTube and watch the 3 minute and 31 second video of this initiative in action (OxfamAustralia, 2009).

Answer the following questions with your classmates in response to the video:

- What impact does the Fitzroy Stars have on the lives of people in Fitzroy?
- Discuss what happened when the Fitzroy Stars weren't playing for a period of time. What does this tell you?
- Can you make connections between the Fitzroy Stars Football Club and all five dimensions of the health and wellbeing of those involved? I.e.: how do the Fitzroy Stars impact spiritual health and wellbeing? Mental? And so on.



'Live Longer!' campaign

The 'Live Longer!' campaign was a national program introduced to support Aboriginal and Torres Strait Islander communities to get active, eat nutritious food, and live healthier lives. The Australian Government, through the Indigenous Chronic Disease Package, provided funding to Aboriginal and Torres Strait Islander communities to run local health promotion projects and campaigns. The 'Live Longer!' campaign also commissioned a range of activities, such as 'healthy community days'. Some examples of the different health promotion programs that are up and running for Live Longer! are *Get active - Live Longer!, Stop smoking - Live Longer!,* and *Eat good tucker - Live longer!*

One example of a program implemented from the 'Live Longer!' campaign was the 'Health, mind, and spirit' Community Health Day hosted by the Coomealla Health Aboriginal Corporation for people living in Daretton, New South Wales (Coomealla Health Aboriginal Corporation, n. d.). This day involved local peoples gathering outdoors to discover what it takes to 'get active, eat good tucker, and live longer'. On this day, through activities and stalls, people were able to learn about how to reduce the risk of chronic disease by eating well, exercising, quitting smoking, and visiting a healthcare professional. The day also involved a big barbecue where people were shown how easy and inexpensive it is to prepare a healthy meal for the family.

Table 5 Analysis of the 'Live Longer!' initiative

How the initiative brings about improvements in Indigenous health and wellbeing	How the initiative reflects <i>action areas</i> of the Ottawa Charter
<ul style="list-style-type: none"> • The 'Live Longer!' campaign commissions 'healthy community days' which often involve learning about the importance of physical exercise and empowering individuals to exercise, thereby helping maintain a healthy body weight, improving physical health and wellbeing. • The campaign funds numerous community programs, such as the 'Health, mind, and spirit' Community Health Day hosted by the Coomealla Health Aboriginal Corporation for people living in Daretton, New South Wales. These community programs promote Indigenous peoples social health and wellbeing as they are not only being educated about their health but are also provided with the opportunity to build a supportive network of friends, as well as meet new people and form new relationships. 	<ul style="list-style-type: none"> • 'Strengthen community action' is reflected in the program as the community action days (that the 'Live Longer!' campaign commissioned) are focused on bringing people together to assist each other in reaching their common health goals. These days are designed by the community, for the community, to promote action. • 'Develop personal skills' is reflected in the program as the campaign funds numerous community health days that are centred around educating people about choices they can make to benefit their health and wellbeing, such as how to cook a low-cost, healthy meal for their family.

Deadly Choices

Deadly Choices is a health promotion initiative of the Institute for Urban Indigenous Health (IUIH) which began in 2010. The health promotion campaign aims to empower Aboriginal and Torres Strait Islander peoples to make healthy decisions for themselves, their health, and their families, such as quitting smoking, eating good food, and exercising regularly. In Aboriginal slang, if something is 'deadly', it is great.; therefore, 'deadly choices' are 'good choices' to make. Deadly Choices is also focused on encouraging people to access their local Community Controlled Health Service and get a health check-up annually. Deadly Choices focuses on prevention rather than cure, aiming to normalise the idea of seeing a doctor regularly, not just when one is sick. The health promotion campaign is made up of a range of initiatives, such as community events, sport and recreation, education programs, and cooking programs.

One example of a program run under the Deadly Choices campaign is Deadly Choices Sistas, which was developed by the Wirrpanda Foundation in Western Australia (Deadly Choices, 2018). This program engages female role models to empower and enable young Aboriginal and Torres Strait Islander women (between the ages of 12 and 17) to make positive choices about their health and wellbeing. This is a mentoring program that runs in numerous secondary schools in Brisbane and is focused on a range of topics, which include building pride in Indigenous identity, building self-esteem and confidence, and enabling conversation around sexual health, alcohol and drug abuse, healthy and unhealthy relationships, and financial literacy.

Table 6 Analysis of the Deadly Choices initiative

How the initiative brings about improvements in Indigenous health and wellbeing	How the initiative reflects <i>action areas</i> of the Ottawa Charter
<ul style="list-style-type: none"> Through a range of programs and health promotion, Deadly Choices empowers individuals to make positive decisions, such as eating good food and exercising regularly, thereby helping maintain a healthy body weight, promoting physical health and wellbeing. Deadly Choices Sistas, a program run under Deadly Choices, works with vulnerable young women in high schools. The program empowers and enables young women to make positive health choices, as well as building self-esteem and self-confidence, promoting mental health and wellbeing. 	<ul style="list-style-type: none"> 'Create supportive environments' is reflected as the campaign runs programs, such as the Deadly Choices Sistas. This is a mentoring program that works with vulnerable individuals, creating a safe space for young women to learn, talk about hard topics, and engage in positive relationships with others. 'Develop personal skills' is reflected in the Deadly Choices health promotion campaign as it focuses on empowering individuals to make healthy and informed choices on, for example, what food they consume and how regularly they get health checkups, thereby educating them on the importance of avoiding negative health behaviours.



Want to know more?

One important way to close the gap that exists between Indigenous and non-Indigenous people in Australia is through understanding. Understanding, including cultural understanding, helps us realise why individuals have different perspectives on the world we live in. Understanding helps dispel negative stereotypes and personal biases about groups of people and helps people move forward together. Are you a non-Indigenous Australian? Type deadlyquestions.vic.gov.au into your browser and explore the site (Victorian Government, 2018). This website is a resource that was developed as part of the Victorian Government's commitment to self-determination and Treaty. It includes a range of questions you may feel you could never ask an Aboriginal or Torres Strait Islander person. These questions have been answered by Indigenous people themselves and are a fantastic way to start such an important conversation. You can even ask a question yourself.

Another fantastic resource you may like to explore is the ABC You Can't Ask That series. This series of episodes is focused on asking (and answering) the most 'outrageous and uncomfortable questions to uncover the truth behind what it's like for marginalised and misunderstood Australians' (ABC iView, 2016). Type 'ABC You Can't Ask That Indigenous' into your browser and watch the 21-minute episode on ABC iView (Porter et al., 2016).

Evaluating initiatives introduced to improve Indigenous health and wellbeing 3.2.4.2

OVERVIEW

You have learnt about a range of initiatives that have been introduced to bring about improvements in Aboriginal and Torres Strait Islander health and wellbeing. But are they effective? Do they actually work? You will now learn about evaluating the effectiveness of these initiatives.

THEORY DETAILS

When evaluating an initiative introduced to bring about improvements in Indigenous health and wellbeing, you need to take into account a range of considerations in order to determine its strengths and weaknesses. Before judging an initiative as ineffective or effective, it is important to consider a range of factors. These factors are summarised in figure 2 and explored in table 7.

Study design key skills dot point

- evaluate initiatives in terms of their capacity to improve Indigenous health and wellbeing

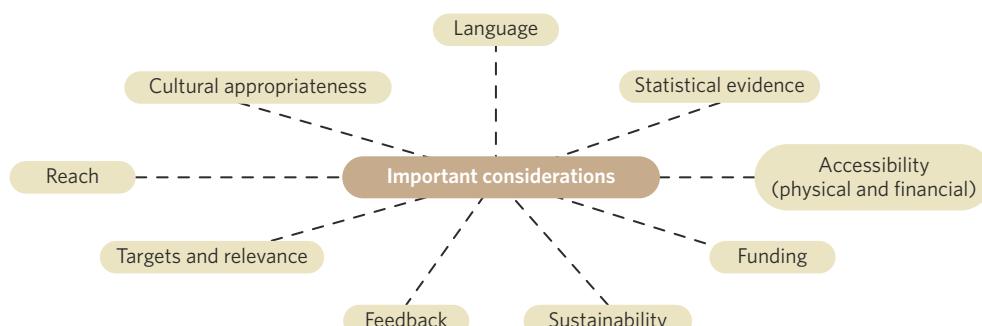


Figure 2 Important considerations when evaluating the initiatives introduced to bring about improvements in Indigenous health and wellbeing



Table 7 Exploration of important considerations when evaluating the initiatives introduced to bring about improvements in Indigenous health and wellbeing

Consideration	Explanation
Cultural appropriateness	Cultural appropriateness is important in establishing if an initiative is effective. Cultural awareness involves understanding how a person's culture and history may inform their values, beliefs, behaviours, and assumptions, including our own perspectives. Culturally appropriate initiatives will be culturally aware and designed in a way that caters to Aboriginal and Torres Strait Islander peoples' cultures, beliefs, and values. They take cultural awareness and put it in action, tailoring programs and initiatives to meet the needs of Aboriginal and Torres Strait Islander peoples.
Language	<p>There are around 145 Aboriginal languages spoken in Australia today, many of which are at risk of being lost (Deadly Story, n.d.). Language is integral to Aboriginal identity: it is more than merely a means of communication. Language is what makes individuals unique and is what allows the passing down of cultural knowledge and heritage. Language is central to keeping culture and identity strong. Speaking and learning languages is what provides a strong sense of belonging and connection.</p> <p>Therefore, it is important that initiatives that aim to work with communities who do not speak English well are aware of this and strive to remove this barrier of language. This could be in the form of ensuring that there is a staff member who is Indigenous and ensuring that their health promotion material is also available in a range of Indigenous languages. Many programs discussed in this lesson are run by Indigenous peoples, for Indigenous peoples.</p>
Statistical evidence	<p>Statistical evidence is quantitative information that is obtained through research that can demonstrate or support a point. Statistical evidence is often in the form of changes in data over time. For example, if there is data that shows changes in the prevalence of cardiovascular disease in Aboriginal and Torres Strait Islander peoples over five years, this evidence could support the effectiveness of a program that directly works to reduce the risk of Aboriginal and Torres Strait Islander peoples developing this illness.</p> <p>Often, effective initiatives will conduct their own research before the implementation of a program, and then after to determine the level of success of an initiative. Such evidence can provide direct evidence of the actual success of an initiative and the actual changes in health and wellbeing that occurred.</p> <p>However, it is always important to consider whether the data is reliable: this includes ensuring that the data is from a reliable source, has undergone rigorous analysis, and that the statistical methods that were used to collect and analyse the data are legitimate.</p>
Accessibility (physical and financial)	<p>Physical accessibility involves ensuring that individuals can access the service that is provided by a program. This is particularly important in rural communities, as often Aboriginal and Torres Strait Islander peoples will be hesitant to commute to major cities to access healthcare. Therefore, programs that travel to remote communities to provide healthcare are often effective in ensuring accessibility.</p> <p>Financial accessibility involves ensuring that those who need to access a given program can do so without facing major financial barriers or experiencing financial stress. If a program is expensive to participate in, people will be less likely to engage with the initiative, therefore compromising the success and effectiveness of the initiative.</p>
Funding	Funding involves considering where the initiative gets its financing from. Most programs require some sort of financial support to run. Programs that have little funding and the absence of government support are less likely to last long term. The provision of adequate, reliable funding and support assists a program in being able to achieve its goals.
Sustainability	Sustainability partly involves analysing whether the changes made during the program/initiative will last. It is not useful to spend money on a program that will not benefit people in the long term. A sustainable initiative often involves educating individuals and empowering them to make their own choices, rather than making choices for people. Education equips people with the ability to promote their health and wellbeing long term after a program finishes. There is a well-known saying which perfectly summarises this notion: 'give a man a fish, and you feed him for a day. Teach a man to fish, and you feed him for a lifetime'. Sustainability also involves ensuring that the program is financially sustainable and that resources required and used are sustainable.
Targets and relevance	It is important to consider what the program targets, and how relevant it is to a given population. An effective program will take into account the needs of the target group, including the specific needs relating to Aboriginal and Torres Strait Islander peoples health and wellbeing. If a program for a given population or community targets an issue that that community does not suffer from, the program is not likely to be effective.
Feedback	This involves taking into account feedback from people who have actually participated in the initiative. Positive feedback that shows participants are engaged and benefiting from the program helps us see if a program is effective. Additionally, negative feedback is not always a bad thing: constructive feedback, when taken into account and actioned, can help a program become even more effective.
Reach	Analysing a program's reach involves assessing how many people the program can support and help. Programs with a wide reach are likely to bring about greater improvements in health and wellbeing. However, programs that focus and work closely with a small group of people, such as a small support group, can completely change the lives of people in ways a program with a wide reach may not. Therefore, its effectiveness in terms of reach is dependent on the individual program and the issues it addresses.

Now that you know about the range of factors that are important to consider when evaluating the effectiveness of an initiative, let's evaluate one. The initiative we will evaluate is called the Purple Truck service. Before evaluating, let's first look at this initiative introduced to bring about improvements in Indigenous health and wellbeing.

The Purple Truck is a mobile dialysis clinic offering services to patients in remote areas with end-stage kidney disease (also referred to as kidney failure), run by Purple House (Purple house, n. d). Haemodialysis (often referred to as dialysis) is a treatment that is needed when a person's kidney stops working because they are subsequently no longer able to get rid of excess fluid and toxins from their body. Without treatment, the result is fatal. This service addresses what is an increasingly pressing issue in many Indigenous communities: the number of Indigenous Australians beginning kidney failure treatment has increased over time, from 240 in 2007 to 352 in 2017 (AIHW, 2020). For patients with kidney failure, haemodialysis is needed three times a week for five hours at a time to keep them alive. The Purple Truck is a dialysis unit on wheels, which was established in 2012 with the help of a number of partners, including Medicines Australia. As of 2018, the remote dialysis service will be funded by Medicare (covering \$590 of each treatment). The service is critically important to Aboriginal communities as it allows patients who have end-stage kidney failure to stay with their families in their communities and receive treatment. Purple house is entirely Indigenous owned and run and is funded by a range of philanthropic and self-generated funding initiatives, including funds from the Northern Territory and Commonwealth Government.

Now let's evaluate the effectiveness of the Purple Truck initiative. In order to do so, we need to consider some of the factors explored in figure 2 and table 6, as well as analyse the program's strengths and weaknesses.

Useful tip

In Health and Human Development, when judging the effectiveness of an initiative, we do not need to discuss every single consideration outlined in this lesson. Rather, you need to provide a balanced overview which considers a range of important factors. For example, in the 2019 Health and Human Development Exam, a 3 mark question (question 16c) asked students to evaluate the effectiveness of a program (that they chose to discuss) in promoting health and wellbeing in Australia. A high mark response would have shown an understanding of the features that make a program effective. High mark responses also needed to provide specific details of an aspect of the program that makes it effective/ineffective. Therefore, to evaluate initiatives, it is more important that you can have a holistic discussion about a program that is based around some key considerations, taking into account the program's strengths and weaknesses. You can be tested on this study design dot point in two ways:

- 1 You may be given some information on an initiative and asked to evaluate its effectiveness based on the information provided.
- 2 You may be asked to introduce an initiative of your choice and evaluate its effectiveness based on your knowledge.

Some important things you could include in an evaluation of this program include:

- One strength of the Purple Truck service is that it is extremely accessible, especially to people in remote Indigenous communities. The service is physically accessible as it is a dialysis clinic in a truck that drives around to remote communities. The service is also financially accessible as it is partially covered by medicare: the remote dialysis service is funded by Medicare (covering \$590 of each treatment – this was first introduced in 2018).
- Another strength of the Purple Truck service is that it is culturally appropriate. The service acknowledges how important community and family is to Aboriginal and Torres Strait Islander peoples, and therefore helps patients receive treatment for kidney failure without having to leave their communities.
- A potential weakness of the program is that the truck is small in size (and likely does not have many treatment beds/chairs) and therefore, the service may not have a wide reach if many members of a community need haemodialysis treatment.

Activity 1 gives you the opportunity to evaluate the effectiveness of this program in its entirety, considering every consideration explored in this lesson. Complete activity 1 to ensure you are comfortable with evaluating initiatives.



ACTIVITY 1**Evaluating the effectiveness of the Purple Truck initiative.**

Using the information below, as well as your own research on the Purple Truck initiative, fill in the table below analysing the service. Copy out the table into your book and fill in the evaluation column. If you need more information to complete the activity, or you want to read about the initiative further, type '*The Purple Truck The Purple House*' into your browser (Purple house, n. d.).

Consideration	Evaluation, relating to the Purple Truck initiative
Is this program culturally appropriate?	
Does this program consider language as an important factor?	
Have there been any changes in data over time that could be partly attributed to this initiative?	
Is this program accessible, both physically and financially?	
How is this program funded?	
Will this program make a difference in the long term? Is it sustainable?	
What issues does this program target? Is that relevant to the population?	
What does the feedback from the program tell us?	
What is the reach of this initiative?	

Remember, when you evaluate the effectiveness of an initiative, you do not need to discuss every single consideration. It is important to make a judgement from the information you are provided with. Using the paragraph in the theory of this lesson on the Purple Truck service, see if you can answer this exam-style question, writing your response in your book:

Evaluate the effectiveness of the Purple Truck service in bringing about improvements in Indigenous health and wellbeing. (3 MARKS)

Theory summary

In this lesson, you have learnt about a range of initiatives introduced to bring about improvements in Indigenous health and wellbeing in Australia. You have also learnt how to evaluate these initiatives.

5D QUESTIONS**Theory-review questions****Question 1**

There are a range of initiatives, programs, and campaigns that have been introduced to bring about improvements in the health and wellbeing of Indigenous peoples in Australia, all of which are funded by the Australian Government.

- A True.
- B False.

Question 2

Closing the Gap is the primary initiative that aims to improve the health and wellbeing of Australians.

- A True.
- B False.

Question 3

Evaluating initiatives is simply about looking at the changes in data over time to see if a program has been effective.

- A True.
- B False.

Question 4

Which of the following factors are important considerations to make when evaluating the effectiveness of an initiative that has been introduced to bring about improvements in Indigenous health and wellbeing? (Select all that apply)

- I Cultural appropriateness.
- II Feedback.
- III Language.

Skills**Unpacking the case study**

Use the following information to answer Questions 5-7.

'Koori community kitchen' is a small cooking program targeting Aboriginal people living in urban areas of Victoria. The program aims to empower the community and promote healthier wellbeing. The 'Koori community kitchen' acts as a meeting place for members of the Koori community and provides an opportunity to support these community members with their health and wellbeing issues. The kitchen is open to any Koori community member to meet and have a chat with other community members in a culturally friendly environment. The program runs every Thursday and is coordinated by Peninsula Health.

Source: adapted from Australian Indigenous HealthInfoNet, *Promote and practice - programs*, <<https://healthinfonet.ecu.edu.au>>

Question 5

What best describes the population group the 'Koori community kitchen' targets?

- A 'The target population of the 'Koori community kitchen' program is Aboriginal and Torres Strait Islander peoples in Australia'.
- B 'The target population of the 'Koori community kitchen' program is Aboriginal peoples of the Koori community in Victoria'.

Question 6

The aim of the 'Koori community kitchen' program is best reflected by the statement that

- A 'The 'Koori community kitchen' acts as a meeting place for members of the Koori community'.
- B 'The program aims to empower the community and promote healthier wellbeing'.

Question 7

The 'Koori community kitchen' program improves the social health and wellbeing of participants. This is best reflected by the statement that:

- A 'Koori community kitchen' is a small cooking program targeting Aboriginal people living in urban areas of Victoria'.
- B 'The kitchen is open to any Koori community member to meet and have a chat with other community members in a culturally friendly environment'.

Exam-style questions**Question 8** (1 MARK)

Outline why initiatives are implemented in Australia to improve Indigenous health and wellbeing.

Question 9 (2 MARKS)

Identify two features of effective initiatives that aim to improve Indigenous health and wellbeing.

Question 10 (2 MARKS)

Explain why it is important that an initiative that has been introduced to improve Indigenous health and wellbeing reflects the action areas of the Ottawa Charter for health promotion.

Question 11 (3 MARKS)

Outline three important factors to consider when evaluating the capacity of initiatives to improve the health and wellbeing of Aboriginal and Torres Strait Islander peoples.



Question 12 (5 MARKS)

- a Identify and describe an initiative that has been introduced to bring about improvements in Indigenous health and wellbeing in Australia. (3 MARKS)
- b Describe how the initiative you identified in **part a** reflects one action area of the Ottawa charter for health promotion. (2 MARKS)

Question 13 (6 MARKS)**Koori Beat It program**

The City of Whittlesea is located north of Melbourne, and has the fourth-highest Aboriginal population in Metropolitan Melbourne. In 2012, Plenty Valley Community Health and the City of Whittlesea (council) came together to engage with the Aboriginal community in a physical activity and lifestyle modification program. Together they implemented the Koori Beat It program – a healthy eating and lifestyle modification program which was designed by Diabetes Australia. This program was tailored to meet the needs of the Indigenous peoples of Whittlesea and was called the Koori Beat It program. Some of the achievements/outcomes of the Koori Beat It program include that it:

- focused on preventative health through increased physical activity and healthy eating.
- facilitated a 'Healthy Lifestyle' seminar once a week.
- provided physical activity sessions which ran twice a week, in a local leisure centre, which included traditional games which were played in a safe, comfortable environment where families could bring their children.
- allowed members of the community to connect, get to know each other, and strengthen relationships with others.
- resulted in participation from over 50 Aboriginal people from the community of Whittlesea which was long-lasting.
- catered for people of all ages, genders, and abilities.
- functioned as a platform for participation in other healthy lifestyle events.
- resulted in participants entering three community fun runs as a team.
- strengthened relationships between organisations, such as the council, and the local leisure centre.
- increased the Aboriginal profile in the city.
- guest speakers came in and spoke to local clinicians and Aboriginal elders.
- sessions were interactive and fun.

Source: adapted from City of Whittlesea, *Feedin' the Mob Koori Beat it Program*, <<https://www.youtube.com/watch?v=NUn64CzIqL0>>

- a Explain how the Koori Beat It program can lead to improvements in health and wellbeing outcomes for Aboriginal and Torres Strait Islander peoples in Whittlesea. (4 MARKS)
- b Outline two aspects of the Koori Beat It program that supports the effectiveness of the initiative in bringing about improvements in the health and wellbeing of Aboriginal and Torres Strait Islander peoples in Whittlesea. (2 MARKS)

Question 14 (12 MARKS)**Aboriginal and Torres Strait Islander Sexual Health (ASH program)**

The WA (Western Australian) AIDS Council works to provide holistic and culturally appropriate services for and with Aboriginal and Torres Strait Islander communities in the metropolitan area and rural and remote areas of Western Australia.

The principles of the program we provide are:

- Holistic Health – Physical wellbeing, social, emotional and cultural wellbeing [for] the whole of the community.
- Self-determination – Aboriginal and Torres Strait Islander people involved in all aspects of health care delivery – planning and development, implementation and evaluation.
- Right for Aboriginal and Torres Strait Islander people to choose different models of health care with health programs tailored to fit the needs of the broader Aboriginal and Torres Strait Islander community groups.
- Health care services are culturally appropriate and are accessible.

We provide tailored HIV/AIDS education and prevention knowledge and training in Aboriginal and Torres Strait Islander community organisations and non-Aboriginal organisations.

We encourage and pursue joint initiatives with Aboriginal agencies and non-Aboriginal agencies with the aim of increasing the capacity of ongoing appropriate interagency responses and commitment.

Source: adapted from Western Australia Aids Council, *ASH program*, <<https://waaids.com/item/12-ash-project.html>>

- a Using the information above, outline what the ASH program is as well as the health issue that the ASH program targets. (2 MARKS)
- b Outline two ways in which the ASH program can bring about improvements in health and wellbeing for the population it targets. (4 MARKS)
- Adapted from VCAA 2020 exam Q8a*
- c Describe how the ASH program reflects one action area of the Ottawa charter for health promotion. (2 MARKS)
- d Using the information above, evaluate the effectiveness of the ASH program in bringing about improvements in Aboriginal and Torres Strait Islander peoples health and wellbeing. (4 MARKS)
- Adapted from VCAA 2019 exam Q16*

Questions from multiple lessons

Question 15 (3 MARKS)

Aboriginal Road to Good Health program

The Aboriginal Road to Good Health program is run by the Australian organisation Life!, and aims to reduce the prevalence of type 2 diabetes amongst Aboriginal and Torres Strait Islander peoples through the promotion of a nutritious diet and being physically active. The Road to Good Health program is designed to support Aboriginal Health Workers and health professionals working with Aboriginal communities to promote healthy lifestyles and encourage individuals, families, and community groups to make healthy lifestyle choices. The program empowers individuals to choose healthier habits so they can not only be strong for themselves, but their families and whole communities. It also teaches you how to prevent type 2 diabetes and other problems like heart disease and high blood pressure through education.

The program includes educating individuals on:

- how different foods affect their health
- what food is good, cheap and easy
- how to best spend money on food
- how to maintain a healthy weight
- what to look for on a food label
- how to get active and stay on track
- how to choose healthy foods
- factors that help to prevent diabetes.

The program is run by Aboriginal healthcare workers and Aboriginal health services. It is also completely free and available to anyone of any age.

Source: adapted from Life! Program. *Aboriginal Road to Good Health*, <<https://www.lifeprogram.org.au/about-the-life-program/about-the-program/aboriginal-road-to-good-health>>

Identify one principle from the social model of health and explain how it is reflected in the Aboriginal Road to Good Health program.

Adapted from VCAA 2020 exam Q8b



CHAPTER 5 REVIEW

CHAPTER SUMMARY

This chapter was all about health promotion. In this chapter, you learnt about the role of health promotion in improving population health, focusing on either smoking, road safety, or skin cancer. You also learnt about initiatives that have been introduced to bring about improvements in Indigenous health and wellbeing.

In lesson **5A: Health promotion: Smoking**, you learnt about health promotion related to smoking and its role in improving population health outcomes. More specifically, you learnt about:

- why smoking is targeted
- the effectiveness of health promotion related to smoking in improving population health
- how health promotion related to smoking reflects the action areas of the Ottawa Charter for Health Promotion.

The following table presents a summary of key learnings from this lesson.

You learnt three key reasons for why smoking is targeted for health promotion:	You learnt about three examples of health promotion initiatives:	For each health promotion initiative you learnt:
<ul style="list-style-type: none"> • smoking has a significant impact on health outcomes (both population health and wellbeing and health status). • smoking is a significant cost to the economy. • smoking, and its impacts, are preventable. 	<ul style="list-style-type: none"> • Australian laws and regulations. • Quit Victoria. • National Tobacco Campaign. 	<ul style="list-style-type: none"> • about the health promotion initiative. • how the health promotion initiative could improve population health and wellbeing. • how the health promotion initiative could improve population health status. • how the initiative reflects action areas of the Ottawa Charter for Health Promotion.

In lesson **5B: Health promotion: Road safety**, you learnt about health promotion related to road safety and its role in improving population health outcomes. More specifically, you learnt about:

- why road safety is targeted
- the effectiveness of health promotion related to road safety in improving population health
- how health promotion related to road safety reflects the action areas of the Ottawa Charter for Health Promotion.

The following table presents a summary of key learnings from this lesson.

You learnt three key reasons for why road safety is targeted for health promotion:	You learnt about three examples of health promotion initiatives:	For each health promotion initiative you learnt:
<ul style="list-style-type: none"> • road safety has a significant impact on health outcomes (both population health and wellbeing and health status). • road safety is a significant cost to the economy. • road accidents are largely preventable. 	<ul style="list-style-type: none"> • Victorian Road Safety Strategy. • TAC night driving hours campaign. • VicRoads Road Smart program. 	<ul style="list-style-type: none"> • about the health promotion initiative. • how the health promotion initiative could improve population health and wellbeing. • how the health promotion initiative could improve population health status. • how the initiative reflects action areas of the Ottawa Charter for Health Promotion.

In lesson **5C: Health promotion: Skin cancer**, you learnt about health promotion related to skin cancer and its role in improving population health outcomes. More specifically, you learnt about:

- why skin cancer is targeted
- the effectiveness of health promotion related to skin cancer in improving population health
- how health promotion related to skin cancer reflects the action areas of the Ottawa Charter for Health Promotion.

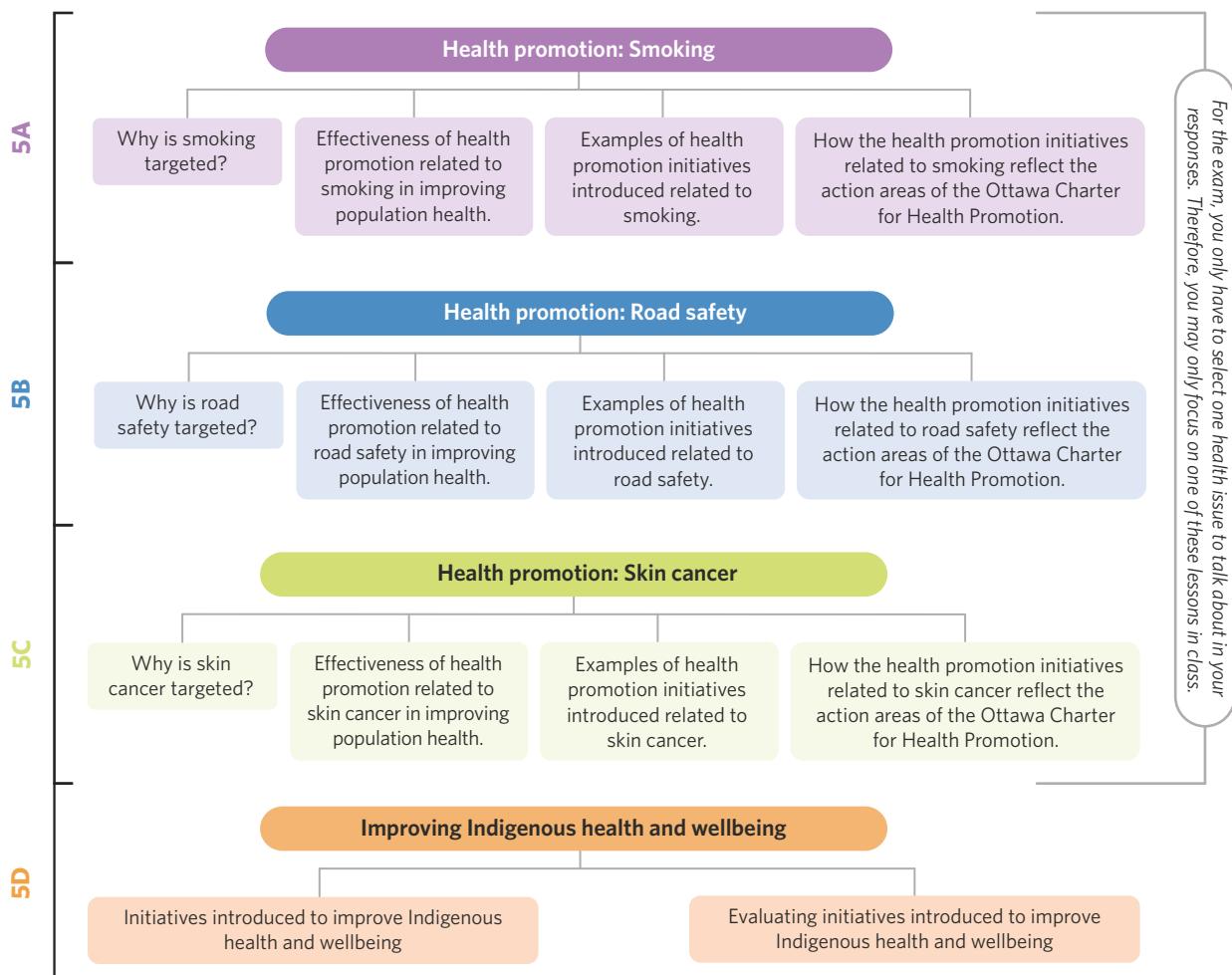
The following table presents a summary of key learnings from this lesson.

You learnt three key reasons for why skin cancer is targeted for health promotion:	You learnt about three examples of health promotion initiatives:	For each health promotion initiative you learnt:
<ul style="list-style-type: none"> • skin cancer has a significant impact on health outcomes (both population health and wellbeing and health status). • skin cancer is a significant cost to the economy. • skin cancers are preventable. 	<ul style="list-style-type: none"> • SunSmart. • Government laws and policies. • National Skin Cancer Action Week. 	<ul style="list-style-type: none"> • about the health promotion initiative. • how the health promotion initiative could improve population health and wellbeing. • how the health promotion initiative could improve population health status. • how the initiative reflects action areas of the Ottawa Charter for Health Promotion.

In lesson **5D: Improving Indigenous health and wellbeing**, you learnt about a range of health promotion initiatives that have been implemented to improve Indigenous health and wellbeing in Australia. You also learnt about how to evaluate the effectiveness of these initiatives. The following table presents a summary of key learnings from this lesson.

You learnt about the following initiatives that have been implemented to improve Indigenous health and wellbeing:	For each initiative you learnt:	In order to evaluate the effectiveness of these initiatives, you were introduced to a range of factors to consider, including:
<ul style="list-style-type: none"> • Close the Gap campaign. • Closing the Gap strategy. • The Closing the Gap PBS Co-payment Program. • Aboriginal Quitline. • Fitzroy Stars Football Club. • 'Live Longer!' Campaign. • Deadly Choices. 	<ul style="list-style-type: none"> • how the initiative brings about improvements in Indigenous health and wellbeing. • how the initiative reflects action areas of the Ottawa Charter. 	<ul style="list-style-type: none"> • the action areas of the Ottawa Charter for Health Promotion. • cultural appropriateness. • language. • statistical evidence. • accessibility (physical and financial). • funding. • sustainability. • targets and relevance. • feedback. • reach.

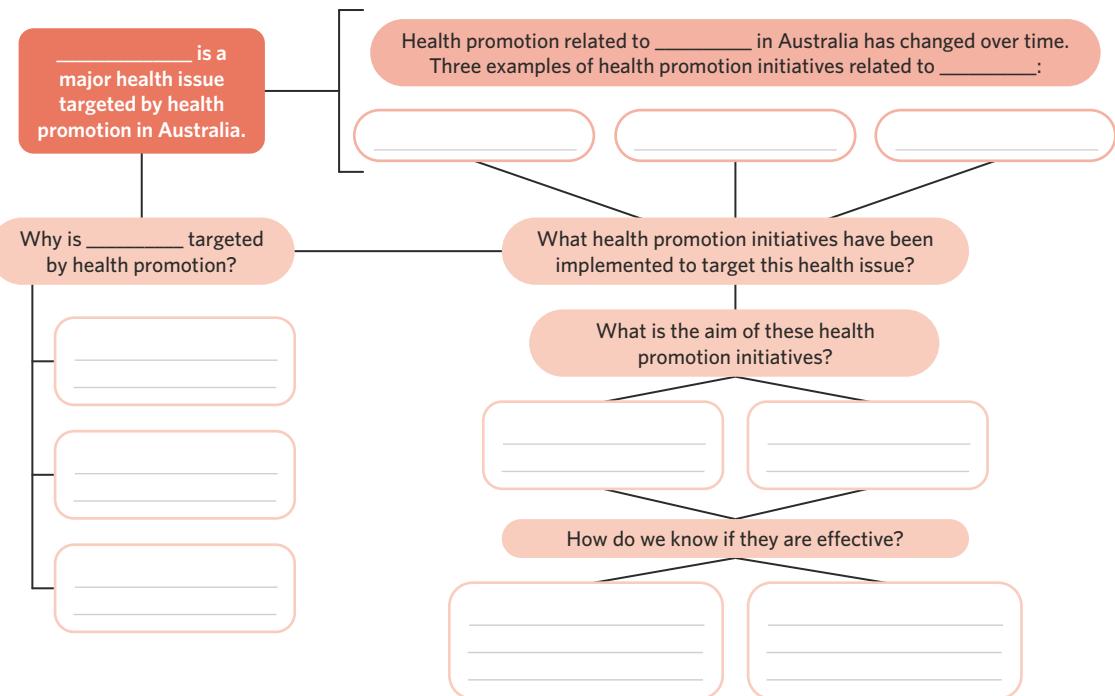
Promoting health and wellbeing



CHAPTER REVIEW ACTIVITIES

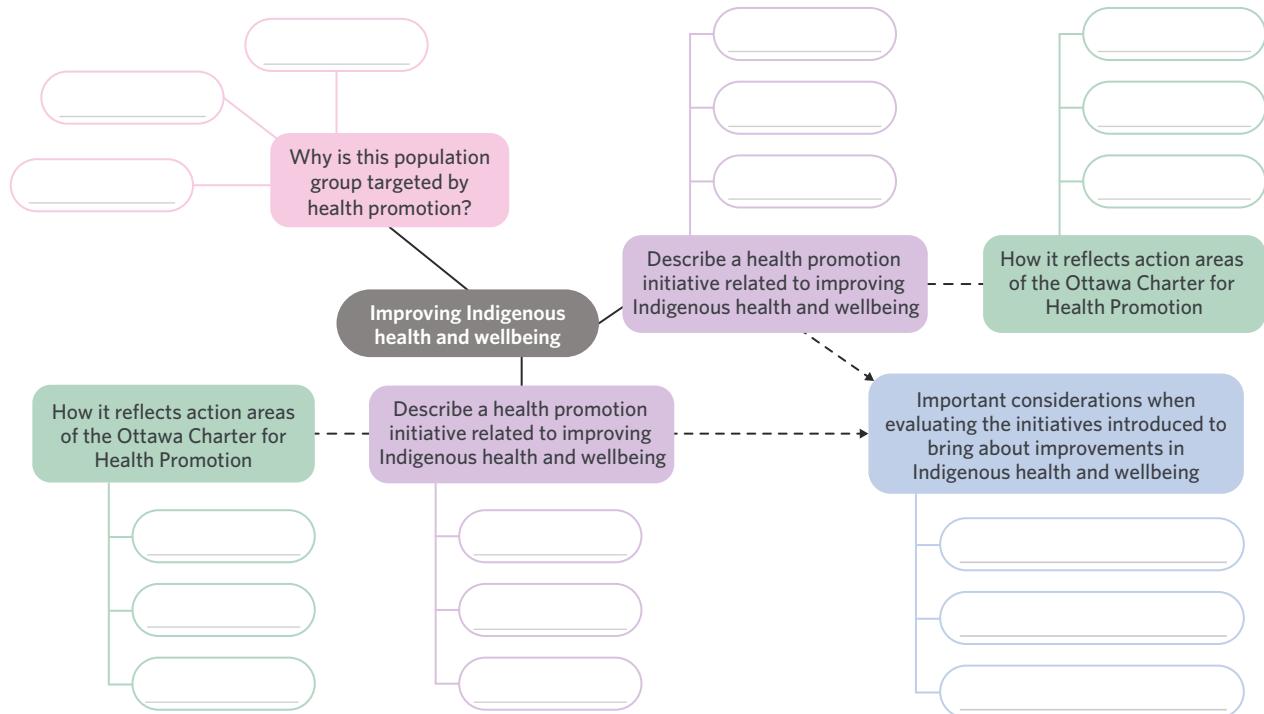
Review activity 1: Fill in the diagram

In chapter 5, you learnt a lot about health promotion. The diagram below is a framework for summarising health promotion in relation to either smoking, road safety, or skin cancer. Select the target area of health promotion you learnt about in this chapter. Then, copy the diagram into your notes and fill in the blanks.



Review activity 2: Create a mind map

In chapter 5, you learnt about a range of health promotion initiatives that have been introduced to bring about improvements in Indigenous health and wellbeing in Australia. For each health promotion initiative, you also learnt about how it reflects the action areas of the Ottawa Charter for Health Promotion. The mind map below is a framework for summarising health promotion related to improving Indigenous health and wellbeing. Copy into your notes and fill in the mind map below, or create your own. You might like to use different coloured pens or highlighters to group or connect content together. What other bubbles could you add to your mindmap? What else have you learnt in this lesson?



CHAPTER 5 TEST

Question 1 (10 MARKS)

- Explain why initiatives are implemented to improve Indigenous health and wellbeing in Australia. (2 MARKS)
- Identify and describe an initiative that has been introduced to bring about improvements in Indigenous health and wellbeing in Australia. (2 MARKS)
- Describe how the initiative you identified in **part b** reflects two action areas of the Ottawa Charter for Health Promotion. (4 MARKS)
- Identify two features of effective initiatives that aim to improve Indigenous health and wellbeing in Australia. (2 MARKS)

Question 2 (8 MARKS)

Smoking, road safety, and skin cancer are all target areas for health promotion in Australia.

Select one of these target areas for health promotion: _____

- Describe why health promotion was used to target this area in Australia. (2 MARKS)

Identify a health promotion initiative that focuses on your selected target area of health promotion. _____

- Describe how the implementation of this health promotion initiative reflects **two** action areas of the Ottawa Charter for Health Promotion. (4 MARKS)
- Outline how this health promotion initiative promotes population health and wellbeing. (2 MARKS)

Adapted from VCAA 2018 exam Q6

Question 3 (6 MARKS)

Learn Earn Legend! is a program run by Cowboys Foundation in North Queensland schools that aims to support Aboriginal and Torres Strait Islander students enrolled in years 11 and 12 as they complete their secondary education and move into further study, training and/or employment. *Learn Earn Legend!* aims to increase the employment rate and prospects of Indigenous students, as well as contribute to the commitment of the Australian Government to close the employment gap that exists between Indigenous and non-Indigenous Australians.

The program is funded by the Australian Government. It also engages an extensive network of corporate and education partners to assist Indigenous students establish their career pathways, become ready for working life, and improve the transition from school to work. Some of the industry partners of *Learn Earn Legend!* include James Cook University, Townsville City Council, Education Queensland, and TAFE Qld. With the help of a range of partners, the *Learn Earn Legend!* program offers support to students in a range of ways, some of which include:

- work experience
- school-based traineeships
- scholarships or cadetships
- entry level positions
- apprenticeships
- paid casual, part-time or full-time employment
- mentoring.

Source: adapted from Cowboys Community Foundation, *Learn Earn Legend!*, <<https://www.cowboysfoundation.org.au/programs/learn-earn-legend/>>

- Describe how the *Learn Earn Legend!* program could improve the mental health and wellbeing of Indigenous students. (2 MARKS)
- Explain how **two** action areas of the Ottawa Charter for Health Promotion are reflected in the *Learn Earn Legend!* program. (4 MARKS)

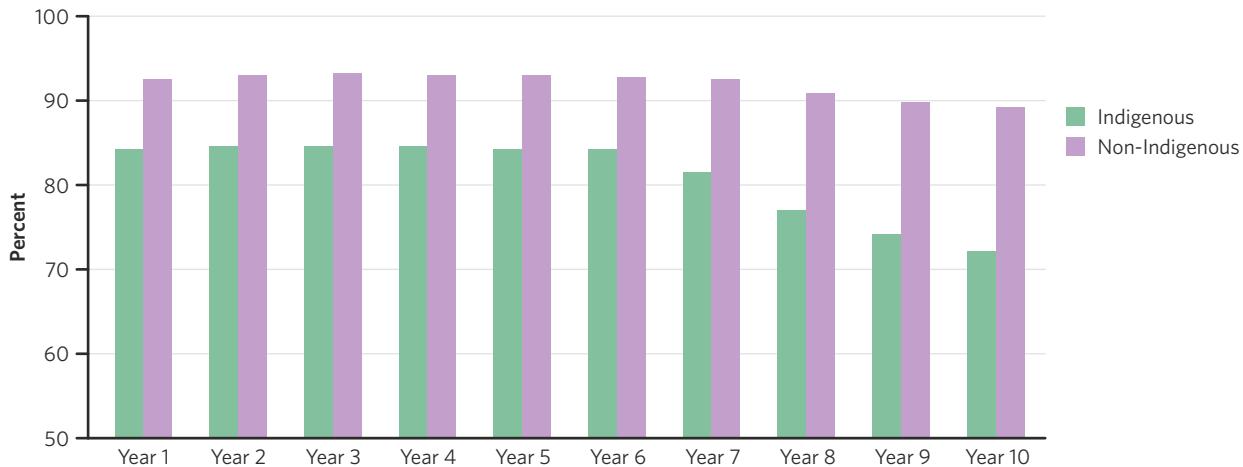
Adapted from VCAA 2019 exam Q16



Questions from multiple chapters

Question 4 (8 MARKS)

Indigenous and non-Indigenous school attendance in Australia throughout secondary school, Years 1-10, Semester 1 2019



NRL Cowboys house

NRL Cowboys House is an initiative that provides supported accommodation to young Aboriginal and Torres Strait Islander students from some of North Queensland's most remote and educationally disadvantaged communities. The program enables these students to access quality secondary education opportunities in Townsville, Queensland and aims to improve Indigenous school attendance rates.

This initiative removes the barrier of distance that often prevents young people living in remote areas from accessing education. Additionally, the house provides the stability and support that Indigenous students need to be able to fulfil their potential, while building long-lasting friendships and life skills in the process.

There is a boys and girls campus, which in total can house 105 students. Both campuses are designed carefully and are culturally respectful environments. NRL Cowboys House is a joint initiative between the National Rugby League, North Queensland Cowboys, the Queensland Government and the Australian Government, and is co-managed by Cowboys Community Foundation, the charity arm of the North Queensland Toyota Cowboys.

Source: adapted from Australian Government, *School attendance*, <<https://ctgreport.niaa.gov.au/school-attendance>>, adapted from Cowboys Community Foundation, *NRL Cowboys House*, <<https://www.cowboysfoundation.org.au/programs/house/>>

- Using data from the graph, compare school attendance rates for Australian Indigenous students with non-Indigenous students in Semester 1 2019. (2 MARKS)
- Identify **one** example of a difference in health status between Indigenous and non-Indigenous Australians. (1 MARK)
Adapted from VCAA 2019 exam Q9b
- Using the information provided, identify and describe one sociocultural factor that may contribute to the difference in health status between Indigenous and non-Indigenous Australians you identified in **part b**. (3 MARKS)
- Describe how the *NRL Cowboys House* initiative reflects one action area of the Ottawa charter for health promotion. (2 MARKS)

Adapted from VCAA 2019 exam Q16

CHAPTER**6**

Nutrition in Australia

6A Promoting healthy eating in Australia: Part 1**6B Promoting healthy eating in Australia: Part 2****6C Challenges in bringing about dietary change****Key knowledge**

- initiatives to promote healthy eating in Australia including Australian Dietary Guidelines and the work of Nutrition Australia, and the challenges in bringing about dietary change

6A PROMOTING HEALTHY EATING IN AUSTRALIA: PART 1

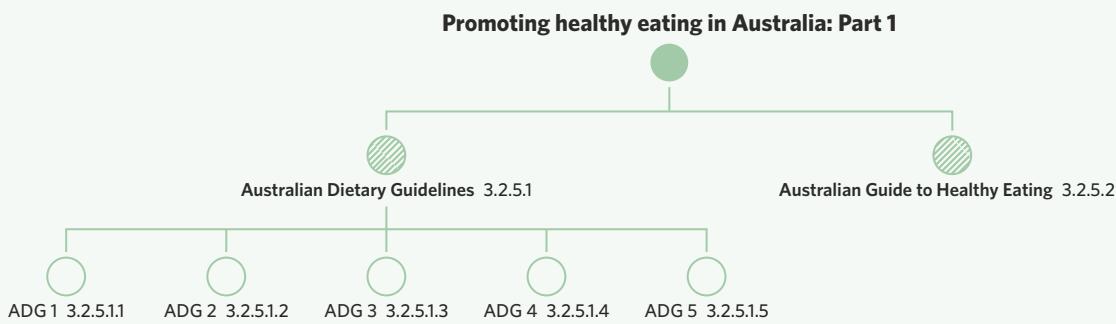
Eating healthily is not as simple as it sounds. There are many different foods to choose to eat, each containing different types and amounts of nutrients. It may seem impossible to know which foods to eat, how much of each food to eat, and how to consume a healthy and balanced diet. Fortunately, the Australian Dietary Guidelines have been developed to help Australians make healthier food choices.

In this lesson, you will learn about the Australian Dietary Guidelines, which promote healthy eating, and therefore promote health and wellbeing, in Australia. Furthermore, you will learn about the Australian Guide to Healthy Eating, which complements the Australian Dietary Guidelines.



Image: LenLis/Shutterstock.com

6A Promoting healthy eating in Australia: Part 1	6B Promoting healthy eating in Australia: Part 2	6C Challenges in bringing about dietary change
Study design dot point		
<ul style="list-style-type: none"> initiatives to promote healthy eating in Australia including Australian Dietary Guidelines and the work of Nutrition Australia, and the challenges in bringing about dietary change 		
Key knowledge units		
Australian Dietary Guidelines		3.2.5.1
ADG 1		3.2.5.1.1
ADG 2		3.2.5.1.2
ADG 3		3.2.5.1.3
ADG 4		3.2.5.1.4
ADG 5		3.2.5.1.5
Australian Guide to Healthy Eating		3.2.5.2



Australian Dietary Guidelines 3.2.5.1

OVERVIEW

In this section of the lesson, you will learn about the Australian Dietary Guidelines and how they promote healthy eating in Australia.

THEORY DETAILS

The **Australian Dietary Guidelines (ADGs)** are five dietary guidelines that provide information about the types and amounts of foods that should be consumed, and the eating patterns that should be followed, as part of a healthy and balanced diet. The latest edition of the Australian Dietary Guidelines was published in 2013 after the 2003 Australian Dietary Guidelines were reviewed and updated. Table 1 provides information about the Australian Dietary Guidelines.

KEY DEFINITIONS

Australian Dietary Guidelines (ADGs)

(ADGs) are five dietary guidelines that provide information about the types and amounts of foods that should be consumed, and the eating patterns that should be followed, as part of a healthy and balanced diet

Table 1 Information about the Australian Dietary Guidelines (National Health and Medical Research Council [NHMRC], 2015)

Why were the Australian Dietary Guidelines created?	Despite good nutrition being essential for good health and wellbeing, many Australians do not consume a healthy and balanced diet. For example, they may over-consume one nutrient, and under-consume another. They may also over-consume discretionary foods , which can contribute to weight gain, overweight, and obesity. This explains why diet-related diseases, such as cardiovascular disease and type 2 diabetes, significantly contribute to burden of disease in Australia. Furthermore, unhealthy eating behaviours have both social and economic impacts on individuals and the community, such as the cost of healthcare to manage and treat diet-related diseases.
What are the aims of the Australian Dietary Guidelines?	The Australian Dietary Guidelines were developed to promote healthy eating behaviours and advise against unhealthy eating behaviours, equipping Australians with the knowledge they need to make healthy food choices. In turn, this: <ul style="list-style-type: none"> • promotes the health and wellbeing of Australians • reduces the risk of developing diet-related conditions, such as high blood pressure, high cholesterol, and obesity • reduces the risk of developing diet-related, chronic diseases, such as type 2 diabetes and cardiovascular disease.
Who created the Australian Dietary Guidelines?	The National Health and Medical Research Council (NHMRC) is an Australian government agency that aims to improve the health and wellbeing of all Australians. NHMRC works to achieve improved health outcomes by conducting health and medical research, and providing health and dietary advice through guidelines and resources. The Australian Dietary Guidelines were developed by the NHMRC, and therefore provide dietary advice that is based on scientific evidence and expert opinion.
Who do the Australian Dietary Guidelines target?	The Australian Dietary Guidelines target the healthy Australian population. They also target individuals suffering from common health conditions, such as obesity, aiming to help them improve their diet and return to a healthy body weight. However, they are not intended to be used by people who receive special dietary advice from a doctor or nutritionist, or the elderly. Furthermore, the Australian Dietary Guidelines are intended to be used by health professionals, educators, policy makers, food manufacturers, and food industry representatives to help them promote healthy eating in Australia.

There are five Australian Dietary Guidelines, which are summarised in figure 1. These guidelines are considered to be of equal importance, which means that no guideline is more important than the other guidelines.



Image: NikWB/Shutterstock.com

Figure 1 The Australian Dietary Guidelines (NHMRC, 2015)

You will now learn about each of the five Australian Dietary Guidelines individually and in detail.

ADDITIONAL TERMS

Discretionary foods are foods that are high in saturated and trans fat, added salt, and added sugar, have minimal nutritional value, and are not essential for a healthy and balanced diet

! Useful tip

When you mention 'diet-related conditions' or 'diet-related diseases' in your response, it is important to also provide an example of a diet-related condition or disease. For example, you could mention obesity, cardiovascular disease, or type 2 diabetes.

! Useful tip

It is important to memorise the exact wording of each Australian Dietary Guideline. This is because VCAA only accepts responses that accurately state the Australian Dietary Guidelines. Furthermore, if you include the number in your response, it must be the number that correctly corresponds to the Australian Dietary Guideline. This is because VCAA does not award marks to responses that correctly state, but incorrectly number, the Australian Dietary Guideline.



ADG 1 3.2.5.1.1

ADG 1 advises Australians to ‘achieve and maintain a healthy body weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs’ (NHRMC, 2015).

ADG 1 further advises:

- ‘Children and adolescents should eat sufficient nutritious foods to grow and develop normally. They should be physically active every day and their growth should be checked regularly’.
- ‘Older people should eat nutritious foods and keep physically active to help maintain muscle strength and a healthy weight’.

According to the Australian Bureau of Statistics (ABS), many Australians have a body weight that is not classified within a healthy weight range. In particular, rates of overweight and obesity in Australia are concerningly high. For example, figure 2 reveals that, in 2017–2018, around 36% of Australians aged 18 years and older were classified as overweight, and around 31% were classified as obese.

Proportion of Australians aged 18 years and older classified as either underweight, healthy weight, overweight, or obese, 2017–2018

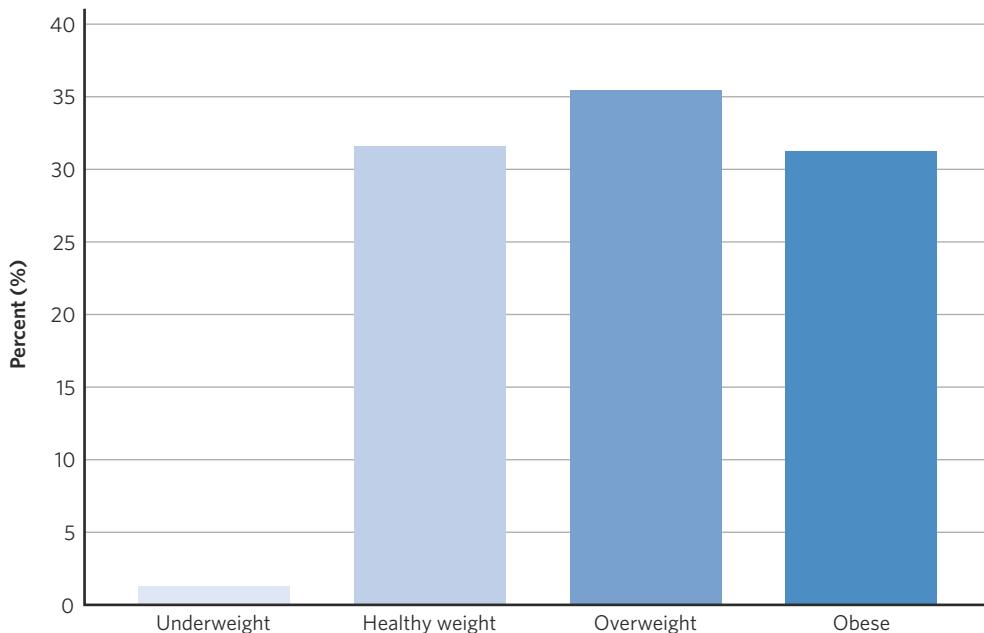


Figure 2 A large proportion of Australians have a body weight that is not classified within a healthy weight range (Australian Bureau of Statistics [ABS], 2020)

Being overweight or obese has negative consequences on a person’s health and wellbeing. For example, being overweight or obese increases the likelihood of developing diet-related diseases, such as cardiovascular disease, including heart attack and stroke, and type 2 diabetes. These conditions significantly contribute to burden of disease in Australia.

For example, in 2018, cardiovascular disease was the underlying cause of death in 26% of total deaths (Australian Institute of Health and Welfare [AIHW], 2020).

This demonstrates the importance of ADG 1, which encourages Australians to achieve and maintain a healthy body weight. This guideline addresses the primary factors that influence a person’s body weight: food and drink intake, and physical activity. It advises Australians to consume appropriate amounts of healthy foods and drinks to meet their individual energy needs, such as not over-consuming or under-consuming **kilojoules**. Furthermore, it encourages Australians to regularly engage in physical activity, which helps to prevent energy input from exceeding energy output and restrict the accumulation of excess body fat.

If Australians follow the advice of ADG 1, this would mean that more people have a body weight that is within a healthy weight range. This would reduce rates of overweight and obesity, and therefore rates of morbidity and mortality attributable to diet-related diseases.

ADDITIONAL TERMS

Kilojoules are a measure of the energy value of foods and drinks

ADG 2 3.2.5.1.2

ADG 2 advises Australians to ‘enjoy a wide variety of nutritious foods from these five groups every day’ (NHRMC, 2015).

The five food groups that ADG 2 makes reference to, as well as water, are outlined in table 2.

Table 2 The five food groups and water (NHMRC, 2015)

Food group	What does ADG 2 advise?	Why is it important to consume foods from this food group?
Vegetables, legumes, and beans	ADG 2 advises Australians to eat ‘plenty of vegetables, including different types and colours, and legumes/beans’.	Vegetables, legumes, and beans are a rich source of fibre, which is a type of complex carbohydrate that is found in foods of plant origin. Fibre promotes a healthy bowel environment and maintains colon health, which reduces the risk of colorectal cancer. Fibre also slows the emptying of the stomach, which increases feelings of fullness and reduces the risk of weight gain, overweight, and obesity. Foods from this food group may also contain essential nutrients, such as vitamin A, vitamin B9 (folate), and iron, which are important for optimal physical health and wellbeing.
Fruit	ADG 2 advises Australians to eat ‘fruit’.	In addition to vegetables and legumes/beans, fruit is also a rich source of fibre, which reduces the risk of colorectal cancer. This also reduces the risk of overweight and obesity, and therefore the risk of diet-related diseases, such as cardiovascular disease and type 2 diabetes. Foods from this food group may also contain essential nutrients, such as vitamin A, vitamin C, and vitamin B9 (folate), which are important for optimal physical health and wellbeing.
Grain (cereal) foods	ADG 2 advises Australians to eat ‘grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties, such as breads, cereals, rice, pasta, noodles, polenta, couscous, oats, quinoa and barley’.	Foods from this food group are a rich source of complex carbohydrates, including fibre. Complex carbohydrates are the body’s primary energy source, providing sustained energy to the body and a long-lasting feeling of fullness. This decreases the risk of overeating, which therefore decreases the risk of weight gain, overweight, and obesity. Foods from this food group may also contain essential nutrients, such as vitamin B1, vitamin B3, and iron, which are important for optimal physical health and wellbeing.
Lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes and beans	ADG 2 advises Australians to eat ‘lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans’.	Foods from this food group are a rich source of protein, which functions to build, maintain, repair, and replace body cells. Therefore, protein is essential for growth and development. Protein is also an essential component of muscles, skin, nails, hair, enzymes, hormones, and antibodies. Furthermore, fish, nuts, and seeds contain monounsaturated and polyunsaturated fats, which reduce the amount of LDL ('bad') cholesterol in the body and decrease the risk of cardiovascular disease. Foods from this food group may also contain essential nutrients, such as iron and vitamin B12, which are important for optimal physical health and wellbeing.
Milk, yoghurt, cheese, or alternatives	ADG 2 advises Australians to eat ‘milk, yoghurt, cheese and/or their alternatives, mostly reduced fat’. ADG 2 also advises that ‘reduced fat milks are not suitable for children under the age of 2 years’.	Foods from this food group are a rich source of calcium and phosphorus. These minerals promote the health and strength of teeth and bones, and are an essential component of these hard tissues. Therefore, regularly consuming these foods reduces the likelihood of developing both osteoporosis (a condition that is characterised by porous bones that are weak and brittle) and dental caries (tooth decay).

cont'd

 **Lesson link**

In lesson **2E: Contributions to Australia's health status: Part 2**, you learnt about the negative health consequences of under-consuming certain foods, such as vegetables, fruit, and dairy, and certain nutrients, such as fibre and iron. It is important to consume adequate amounts of foods from the five food groups everyday to prevent the occurrence of these negative health consequences.



Table 2 Continued

Food group	What does ADG 2 advise?	Why is it important to consume foods from this food group?
Water (not one of the five food groups)	ADG 2 advises Australians to 'drink plenty of water'.	Water plays an important role in numerous bodily processes, including chemical reactions involved in energy production, and cell duplication, which enables growth. Water distributes nutrients and oxygen throughout the body, acting as a transportation system that brings essential substances to cells. It also functions to regulate body temperature and prevent dehydration. Furthermore, water is a key component of cells, blood, urine, and perspiration, and can be found in fat, soft tissue, muscles, and bones. Due to its multiple functions in the human body, water is an essential nutrient for health and wellbeing. Drinking plenty of water everyday is important for replenishing water levels. This is because the body is unable to store water, and it is also expelled from the lungs, skin, urine, and faeces.

Across all ages, the average Australian does not consume adequate amounts of foods from the five food groups. This is demonstrated in table 3.

Table 3 Data relating to whether Australians consume the recommended serves of each food group, by age (AIHW, 2018)

	Age group (years)								
	2-3	4-8	9-11	12-13	14-18	19-30	31-50	51-70	71+
Vegetables	✗	✗	✗	✗	✗	✗	✗	✗	✗
Fruit	✓	✓	✗	✗	✗	✗	✗	✗	✗
Grains	✗	✓(males) ✗(females)	✓	✗	✗	✗	✗	✗	✓(females) ✗(males)
Meat	✗	✗	✗	✗	✗	✗	✗	✗	✗
Dairy	✓	✗	✗	✗	✗	✗	✗	✗	✗

This demonstrates the importance of ADG 2, which encourages Australians to consume nutritious foods from the five food groups each day. This guideline advises Australians to eat a wide variety of healthy and nutritious foods to ensure that they are consuming all essential nutrients in appropriate amounts and meeting the recommended number of serves of each food group every day.

If Australians follow the advice of ADG 2, this would mean that more people achieve adequate nutrient intake, which would reduce the risk of nutrient deficiencies. This would also reduce the prevalence of diet-related diseases associated with the underconsumption of essential nutrients, such as cardiovascular disease, colorectal cancer, and iron-deficiency anaemia.

Want to know more?

Recommended serve sizes of the five food groups

As part of ADG 2, the Australian Dietary Guidelines recommend the number of serves of each food group that Australians should consume each day based on their age and sex. Type the URL eatforhealth.gov.au/food-essentials/how-much-do-we-need-each-day into your browser and navigate to the links on the left hand side of the page to explore (NHRMC, 2015):

- the recommended number of serves for adults
- the recommended number of serves for children, adolescents, and toddlers
- examples of foods that constitute one serve of each food group
- information about what a serve is.

Furthermore, search 'Australian Dietary Guidelines explained, Medibank' on YouTube and watch the one minute and nineteen second video that summarises the information above (Medibank, 2013). In particular, this video briefly explains the recommended number of serves for adults and examples of foods that constitute one serve of each food group.

ADG 3 3.2.5.1.3

ADG 3 advises Australians to 'limit intake of foods containing saturated fat, added salt, added sugars and alcohol' (NHRMC, 2015).

ADG 3 further advises:

- 'Limit intake of foods high in saturated fat, such as many biscuits, cakes, pastries, pies, processed meats, commercial burgers, pizza, fried foods, potato chips, crisps and other savoury snacks'.
- 'Replace high fat foods which contain predominantly saturated fats, such as butter, cream, cooking margarine, coconut and palm oil with foods which contain predominantly polyunsaturated and monounsaturated fats, such as oils, spreads, nut butters/pastes and avocado'.
- 'Low fat diets are not suitable for children under the age of two years'.
- 'Limit intake of foods and drinks containing added salt'.
 - 'Read labels to choose lower sodium options among similar foods'.
 - 'Do not add salt to foods in cooking or at the table'.
- 'Limit intake of foods and drinks containing added sugars, such as confectionery, sugar-sweetened soft drinks and cordials, fruit drinks, vitamin waters, energy and sports drinks'.
- 'If you choose to drink alcohol, limit intake. For women who are pregnant, planning a pregnancy or breastfeeding, not drinking alcohol is the safest option'.

These foods that Australians are advised to avoid are discretionary foods because they are high in saturated fat, added salt, and added sugar. Discretionary foods, as well as alcohol, have minimal nutritional value, are not essential for a healthy and balanced diet, and contribute to negative health consequences, such as overweight and obesity. Therefore, the broad recommendation is to limit intake of discretionary foods.

Despite this, the average Australian acquires a large proportion of their energy intake from discretionary foods, with this being evident across all ages and both sexes. For example, figure 3 reveals that the average Australian aged between 31 and 50 years acquires around 37% and around 33% of their energy intake from discretionary foods, for males and females respectively.

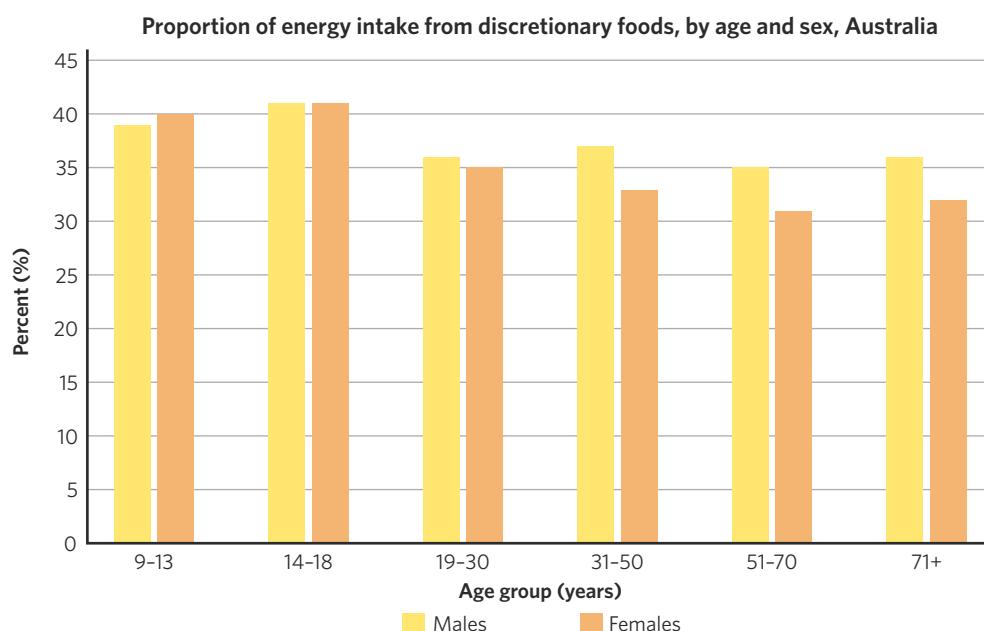


Figure 3 Despite the broad recommendation being to limit intake of discretionary foods, the average Australian acquires a large proportion of their energy intake from discretionary foods (AIHW, 2018)

This demonstrates the importance of ADG 3, which encourages Australians to limit their intake of foods containing saturated fat, added salt, and added sugar, and alcohol. This guideline indicates that the majority of a person's energy intake should be derived from healthy and nutritious foods, rather than discretionary foods that have minimal nutritional value.

Lesson link

In lesson **2E: Contributions to Australia's health status: Part 2**, you learnt about the negative health consequences of over-consuming certain nutrients, such as fat, salt, and sugar. This demonstrates the importance of limiting intake of discretionary foods that contain saturated fat, added salt, and added sugar to prevent the occurrence of these negative health consequences.

Lesson link

In lesson **6C: Challenges in bringing about dietary change**, you will learn about challenges in bringing about dietary change, such as willpower and personal preferences. These factors may prevent people from reducing their consumption of discretionary foods. For example, a person may prefer the taste of lollies that contain large amounts of added sugar, compared to vegetables. Furthermore, they may lack the willpower to reduce their consumption of lollies and increase their consumption of vegetables. This example demonstrates challenges that may prevent people from making positive dietary changes.



If Australians follow the advice of ADG 3, this would mean that less people are over-consuming discretionary foods, which would reduce burden of disease attributable to diet-related diseases, such as cardiovascular disease, and diet-related conditions, such as obesity. This is because the overconsumption of saturated fat, added salt, and added sugar contributes to the development of these diseases and conditions. Furthermore, if Australians follow the advice of ADG 3, this would mean that a greater proportion of people's energy intakes would be derived from healthy and nutritious foods, rather than discretionary foods. This would promote the achievement of adequate nutrient intake in Australia, due to an increased consumption of essential nutrients that are important for optimal physical health and wellbeing.

ADG 4 3.2.5.1.4

ADG 4 advises Australians to 'encourage, support and promote breastfeeding' (NHRMC, 2015).

Breastfeeding promotes the health of both the mother and the infant. The World Health Organisation (WHO) and UNICEF recommend that infants should be exclusively breastfed for the first six months of their lives (World Health Organisation [WHO], 2021).

Benefits of breastfeeding for infants may include:

- breast milk provides all the energy and nutrients that an infant needs in the first months of its life, and provides some energy and nutrients during the first years of its life
- breast milk contains antibodies that protect an infant against infection
- breast milk is easily digested by an infant
- promotes a healthy infant body weight
- enhances cognitive development
- reduces the risk of sudden infant death
- reduces the risk of developing allergies
- reduces the risk of developing gastrointestinal illnesses and respiratory tract infections
- reduces the risk of overweight and/or obesity later in life
- reduces the risk of developing diabetes later in life.

Benefits of breastfeeding for mothers may include:

- breast milk does not cost anything
- breast milk does not take time to purchase and prepare
- reduces the risk of developing breast cancer and ovarian cancer
- helps the mother to return to a normal body weight after pregnancy
- promotes the development of a bond between the mother and the infant.

Globally, only 41% of infants under the age of 6 months are exclusively breastfed (WHO, 2021). It is estimated that more than 820,000 children could be saved annually if all infants aged between 0 months and 23 months were breastfed. In Australia, the statistics are better, but there is still significant room for improvement. For example, approximately 61% of infants who were aged between 4 months and 47 months in 2017–2018 had been exclusively breastfed until they were at least the age of 4 months (AIHW, 2020).

This demonstrates the importance of ADG 4, which encourages Australians to support and promote breastfeeding. If Australians follow the advice of ADG 4, this would mean that more mothers are breastfeeding their babies, which would mean that more infants are receiving the nutrition they need to experience optimal health and wellbeing, both now and later in life.

However, despite the advice of ADG 4 and the recommendation of WHO and UNICEF, it is important to remember that not every person may be able to breastfeed their baby, and that is okay. There are many reasons that may prevent a baby from being breastfed. There are various baby formulas available to parents that act as excellent substitutes for breast milk, providing adequate energy and nutrients to infants.

ACTIVITY 1

Search '*The Benefits of Breastfeeding*' on YouTube and watch the four minute and twenty-seven second video that explains the importance of breastfeeding (echoledge, 2018). Then respond to the following questions:

- Should mothers of infants choose to breastfeed or use baby formulas if they are able to choose? Why?
- What does the World Health Organisation and UNICEF recommend to mothers who have just given birth?
- What are some of the benefits of breastfeeding?
- What are some health consequences for infants who are not breastfed?
- What are some of the benefits of breastfeeding for the mother?



Image: BRO.vector/Shutterstock.com

ADG 5 3.2.5.1.5

ADG 5 advises Australians to 'care for your food; prepare and store it safely' (NHRMC, 2015).

Have you ever had food poisoning? If you have ever eaten food that was contaminated with bacteria, viruses, or parasites, you may have experienced this extremely unpleasant illness. To prevent food from becoming contaminated with infectious pathogens, it is important to prepare and store food safely, including:

- using separate chopping boards for raw foods, such as raw meat and raw fish
- cooking food thoroughly
- maintaining fridge temperatures below 5°C
- adhering to use-by dates and best-before dates
- washing hands before preparing and cooking food
- keeping the kitchen space, including benches, clean and tidy
- washing kitchen utensils, such as knives.

It is estimated that, in Australia, approximately 4.1 million illnesses are caused by foodborne diseases each year (Franklin et al., 2020). ADG 5 not only applies to individuals who prepare and store their own food, but also to food manufacturers and catering companies that provide food to other people. When these larger companies fail to prepare and store food safely, this can have devastating health consequences for the people they provide food to.

Real world example

Salmonella outbreak at Angkor Bakery

In 2019, Angkor Bakery failed to comply with food safety regulations and sold contaminated food to customers (Australian Institute of Food Safety, 2019). This caused an outbreak of salmonella in South Australia, which caused 58 people to experience food poisoning, and 19 of these people were hospitalised. The owners of Angkor bakery were charged with breaching food safety regulations.

This demonstrates the importance of ADG 5, which encourages Australians to prepare and store their food safely. If Australians follow the advice of ADG 5, this would reduce the prevalence and incidence of foodborne diseases, such as salmonella, in the Australian population, which would reduce burden of disease attributable to these foodborne diseases.

ACTIVITY 2

This activity requires you to apply your knowledge of the Australian Dietary Guidelines to scenarios. Copy the following sentences onto a piece of paper and fill in the blanks with the ADG that best matches the scenario.

- 1 Lucinda has just given birth to her baby and is unsure of whether to breastfeed or use baby formula to feed her newborn child. The ADG that best matches Lucinda's situation is _____.
- 2 Patrick is overweight and never engages in physical activity. His doctor told him that he consumes more kilojoules than his body needs. The ADG that best matches Patrick's situation is _____.
- 3 Gigi owns a catering company that provides food to functions and events. Gigi makes sure that her employees wear gloves when they serve food to people at these functions and events. The ADG that best matches Gigi's situation is _____.
- 4 Samuel regularly goes to fast food restaurants, such as McDonalds, and orders his favourite meal, which is a burger, chicken nuggets, and a caramel sundae. He purchases and consumes this meal at least three times a week. The ADG that best matches Samuel's situation is _____.
- 5 Dakari tries to consume a healthy and balanced diet. For example, he tries to eat the recommended serves of the five food groups each day. The ADG that best matches Dakari's situation is _____.



Australian Guide to Healthy Eating 3.2.5.2

OVERVIEW

In this section of the lesson, you will learn about the Australian Guide to Healthy Eating and how it acts as a complementary resource to the Australian Dietary Guidelines.

THEORY DETAILS

The **Australian Guide to Healthy Eating** is a food selection model that provides a visual pie chart representation of the recommended proportions of the five food groups that should be consumed each day as part of a healthy and balanced diet. The Australian Guide to Healthy Eating was also developed by the NHMRC in 2013 as a complementary resource to the Australian Dietary Guidelines.



KEY DEFINITIONS

Australian Guide to Healthy Eating is a food selection model that provides a visual pie chart representation of the recommended proportions of the five food groups that should be consumed each day as part of a healthy and balanced diet.



Image: National Health and Medical Research Council (representing the Commonwealth of Australia)

Figure 4 The Australian Guide to Healthy Eating

The Australian Guide to Healthy Eating reflects the dietary advice provided by the Australian Dietary Guidelines. In particular, it reflects the dietary advice of ADG 1, ADG 2 and ADG 3:

- The main component of the Australian Guide to Healthy Eating is the pie chart that is central to the poster. Each section of this chart can be thought of as a ‘slice’ of this ‘pie’. Each ‘slice’ represents a different food group. The size of each slice indicates the proportion in which foods from that food group should be consumed each day as part of a healthy and balanced diet. Within each slice of the pie, there are multiple images of different foods that have been classified into their respective food groups. In this way, the Australian Guide to Healthy Eating visually offers a variety of food choices so that Australians can select foods from each food group and make healthier food choices. This reflects the key message of ADG 2, which is to ‘enjoy a wide variety of nutritious foods from these five food groups every day’.
- If you look at the bottom left-hand corner of the poster, you will see foods, such as margarine and cooking oil that should only be ‘used (in) small amounts’. These foods are sources of monounsaturated or polyunsaturated fats, which are considered to be ‘healthy’ fats. However, because fats are very energy-dense, they should only be consumed in limited quantities to reduce the risk of weight gain, overweight, and obesity. This reflects the key message of ADG 1, which is to ‘achieve and maintain a healthy body weight’.
- If you look at the bottom right-hand corner of the poster, you will see foods, such as pies, chocolate, ice-cream, chips, biscuits, and other foods. You will also see drinks, such as alcohol, sports drinks, and soft drinks. These discretionary foods and drinks are high in saturated fat, added salt, and added sugar. They have minimal nutritional value and are not essential for a healthy and balanced diet. Therefore, the Australian Guide to Healthy Eating recommends that these discretionary foods and drinks should be consumed ‘only sometimes and in small amounts’. This reflects the key message of ADG 3, which is to ‘limit intake of foods containing saturated fat, added salt, added sugars and alcohol’.

Want to know more?

The Aboriginal and Torres Strait Islander Guide to Healthy Eating

In Australia, Indigenous Australians are more likely to be overweight or obese, and experience diet-related diseases, than non-Indigenous Australians. To address this problem and promote healthy eating in Aboriginal communities, the NHMRC adapted the Australian Guide to Healthy Eating to produce a second version called the Aboriginal and Torres Strait Islander Guide to Healthy Eating.

While there are obvious similarities between the two versions of the poster, this version specifically targets Indigenous Australians, particularly those living in rural and remote communities. It aims to promote healthy eating more effectively by providing culturally-appropriate dietary advice that Aboriginal and Torres Strait Islander peoples are more likely to understand and apply to their daily food intake.

Compare the Australian Guide to Healthy Eating and the Aboriginal and Torres Strait Islander Guide to Healthy Eating. What are some similarities and differences between these food selection models?

cont'd



 Want to know more?

The Aboriginal and Torres Strait Islander Guide to Healthy Eating – continued



Image: National Health and Medical Research Council (representing the Commonwealth of Australia)

Figure 5 The Aboriginal and Torres Strait Islander Guide to Healthy Eating

To further understand the relationship between the Australian Dietary Guidelines and the Australian Guide to Healthy Eating, it is useful to explore the similarities and differences between them. Table 4 compares the Australian Dietary Guidelines and the Australian Guide to Healthy Eating.

Table 4 Comparing the Australian Dietary Guidelines and the Australian Guide to Healthy Eating

Similarities	Differences
<ul style="list-style-type: none"> Both the Australian Dietary Guidelines and the Australian Guide to Healthy Eating aim to promote healthy eating in Australia. Both the Australian Dietary Guidelines and the Australian Guide to Healthy Eating were developed by the NHMRC, which is an Australian government agency. Both the Australian Dietary Guidelines and the Australian Guide to Healthy Eating target the healthy Australian population, including individuals suffering from common health conditions, such as obesity. Both the Australian Dietary Guidelines and the Australian Guide to Healthy Eating are not intended to be used by people who receive special dietary advice from a doctor or nutritionist, or the elderly. 	<ul style="list-style-type: none"> The Australian Dietary Guidelines provide specific and detailed dietary advice, whereas the Australian Guide to Healthy Eating provides dietary advice that encapsulates the key messages of the guidelines. Therefore, the dietary advice from the Australian Guide to Healthy Eating is more simple and easy-to-understand, particularly for Australians with limited nutritional knowledge and literacy skills. Unlike the Australian Dietary Guidelines, the Australian Guide to Healthy Eating is visually engaging. It uses images and colours to provide dietary advice, and may be fun and engaging for Australians. Unlike the Australian Guide to Healthy Eating, which only provides advice about the proportions in which each food group should be consumed, the Australian Dietary Guidelines also provide advice about the recommended daily number of serves of each food group that should be consumed, addressing the importance of not overeating for a healthy diet.

Theory summary

In this lesson, you learnt about the promotion of healthy eating in Australia. Specifically, you learnt about the Australian Dietary Guidelines, which are summarised in table 5.

Table 5 Summary of the Australian Dietary Guidelines

ADG 1	Achieve and maintain a healthy body weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs.
ADG 2	Enjoy a wide variety of nutritious foods from these five groups every day.
ADG 3	Limit intake of foods containing saturated fat, added salt, added sugars and alcohol.
ADG 4	Encourage, support and promote breastfeeding.
ADG 5	Care for your food; prepare and store it safely.

You also learnt about the Australian Guide to Healthy Eating, which complements the Australian Dietary Guidelines, particularly ADG 1, ADG 2, and ADG 3.

6A QUESTIONS

Theory-review questions

Question 1

Which of the following are reasons why the Australian Dietary Guidelines were developed? (Select all that apply)

- I To increase the risk of developing diet-related conditions, such as high blood pressure, high cholesterol, and obesity.
- II To promote the health and wellbeing of Australians.
- III To reduce the risk of developing diet-related, chronic diseases, such as type 2 diabetes and cardiovascular disease.

Question 2

Currently, every Australian follows the dietary advice of every Australian Dietary Guideline.

- A True.
- B False.

Question 3

The dietary advice provided by the Australian Dietary Guidelines is targeted towards all Australians.

- A True.
- B False.



Question 4

Which of the following best fills in the blank?

- A your
- B everyone's

ADG 1 advises Australians to 'achieve and maintain a healthy body weight, be physically active and choose amounts of nutritious food and drinks to meet _____ energy needs'.

Question 5

ADG 2 advises Australians to 'enjoy a wide variety of nutritious foods from these five groups every day'. Which of the following is **not** one of the five food groups?

- A Grain (cereal) foods.
- B Fruit.
- C Water.

Question 6

Which of the following best fills in the blank?

- A increase
- B limit

ADG 3 advises Australians to '_____ intake of foods containing saturated fat, added salt, added sugars and alcohol'.

Question 7

Which of the following is one of the Australian Dietary Guidelines?

- A 'Care for your food; prepare and store it safely'.
- B 'Encourage, support, and promote the use of baby formula'.

Question 8

The Australian Guide to Healthy Eating is one of the Australian Dietary Guidelines.

- A True.
- B False.

Question 9

Which of the following Australian Dietary Guidelines are reflected in the Australian Guide to Healthy Eating?
(Select all that apply)

- I ADG 2.
- II ADG 3.
- III ADG 4.

Skills**Unpacking the case study**

Use the following information to answer Questions 10–13.

Courtney has not been consuming a healthy diet. For example, she does not like the taste of fruits and vegetables, and does not eat these foods very often. Courtney also prefers to eat takeaway meals that contain saturated fat, added salt, and added sugar, for dinner, rather than prepare and cook her own meals. On the rare occasion that Courtney does prepare and cook her own meals, she often forgets to wash her hands beforehand. Furthermore, she often consumes foods that have a high energy content and has not exercised in over three weeks.

Courtney has recently decided that she wants to eat more healthily, and decides to use the Australian Dietary Guidelines to help her make positive changes to her diet.

Question 10

Courtney has not been following the dietary advice of ADG 1, which is best reflected by the statement that

- A 'she often consumes foods that have a high energy content and has not exercised in over three weeks'.
- B 'Courtney has not been consuming a healthy diet'.

Question 11

Courtney has not been following the dietary advice of ADG 2, which is best reflected by the statement that

- A 'On the rare occasion that Courtney does prepare and cook her own meals, she often forgets to wash her hands beforehand'.
- B 'she does not like the taste of fruits and vegetables, and does not eat these foods very often'.

Question 12

Courtney has not been following the dietary advice of ADG 3, which is best reflected by the statement that

- A 'she often consumes foods that have a high energy content and has not exercised in over three weeks'.
- B 'Courtney also prefers to eat takeaway meals that contain saturated fat, added salt, and added sugar for dinner, rather than prepare and cook her own meals'.

Question 13

Courtney has not been following the dietary advice of ADG 5, which is best reflected by the statement that

- A 'On the rare occasion that Courtney does prepare and cook her own meals, she often forgets to wash her hands beforehand'.
- B 'she does not like the taste of fruits and vegetables, and does not eat these foods very often'.

Exam-style questions**Question 14** (1 MARK)

Campylobacter is a foodborne disease that is the most common type of food poisoning in Australia. On average, there are around 230,000 cases of Campylobacter each year in Australia. Furthermore, in 2014, 3200 Australians required hospitalisation due to Campylobacter. To avoid people becoming sick from this foodborne disease, it is important to avoid cross-contamination when handling, preparing, and cooking raw chicken.

Source: adapted from Queensland Health, *Foodborne disease outbreaks*, <www.health.qld.gov.au/clinical-practice/guidelines-procedures/diseases-infection/diseases/foodborne/outbreaks>

Identify the Australian Dietary Guideline that could be used to decrease the prevalence of Campylobacter in Australia.

Question 15 (2 MARKS)

Outline two reasons why the Australian Dietary Guidelines were introduced.

Adapted from VCAA 2017 exam Q6b

Question 16 (2 MARKS)

Elle is eight months pregnant and is preparing to give birth to her first child. As a new mother, she has joined a mothers group, which she attends each week. This week, the new mothers are discussing whether it is better to exclusively breastfeed or rely on baby formula to feed their newborns for the first months of their lives.

Suggest whether Elle should breastfeed or use baby formula to feed her newborn baby. Justify your answer, with reference to the Australian Dietary Guidelines.

Question 17 (3 MARKS)

- a Outline the Australian Guide to Healthy Eating. (1 MARK)
- b Explain how the Australian Guide to Healthy Eating reflects ADG 3. (2 MARKS)

Question 18 (3 MARKS)

- a Identify the Australian Dietary Guideline that is related to body weight. (1 MARK)

Adapted from VCAA 2015 exam Q6

- b Describe how this Australian Dietary Guideline could promote health status. (2 MARKS)



Question 19 (3 MARKS)

The Better Health Channel is a Victorian Government initiative that provides health and medical information to improve the health and wellbeing of Victorians. To promote healthy eating they recommend to:

- eat a wide variety of foods from each of the five major food groups daily, in recommended amounts.
- eat 'junk' foods that are usually high in saturated fat, added salt and added sugars occasionally and in small amounts.
- eat the correct number of daily serves of each food group based on your age, gender and activity levels, which are provided on the Better Health Channel website.

Source: adapted from Better Health Channel, *Healthy Eating*, <<https://www.betterhealth.vic.gov.au/health/HealthyLiving/healthy-eating>>

Compare this advice with the advice provided by the Australian Dietary Guidelines.

Adapted from VCAA 2012 exam section B Q4a

Question 20 (4 MARKS)

In 2017-2018, more than 1.2 million Australians were hospitalised with cardiovascular disease. This meant that 11% of all hospitalisations were attributable to cardiovascular disease.

Source: adapted from Australian Institute of Health and Welfare, *Cardiovascular disease*, <<https://www.aihw.gov.au/reports/heart-stroke-vascular-diseases/cardiovascular-health-compendium/contents/how-many-australians-have-cardiovascular-disease>>

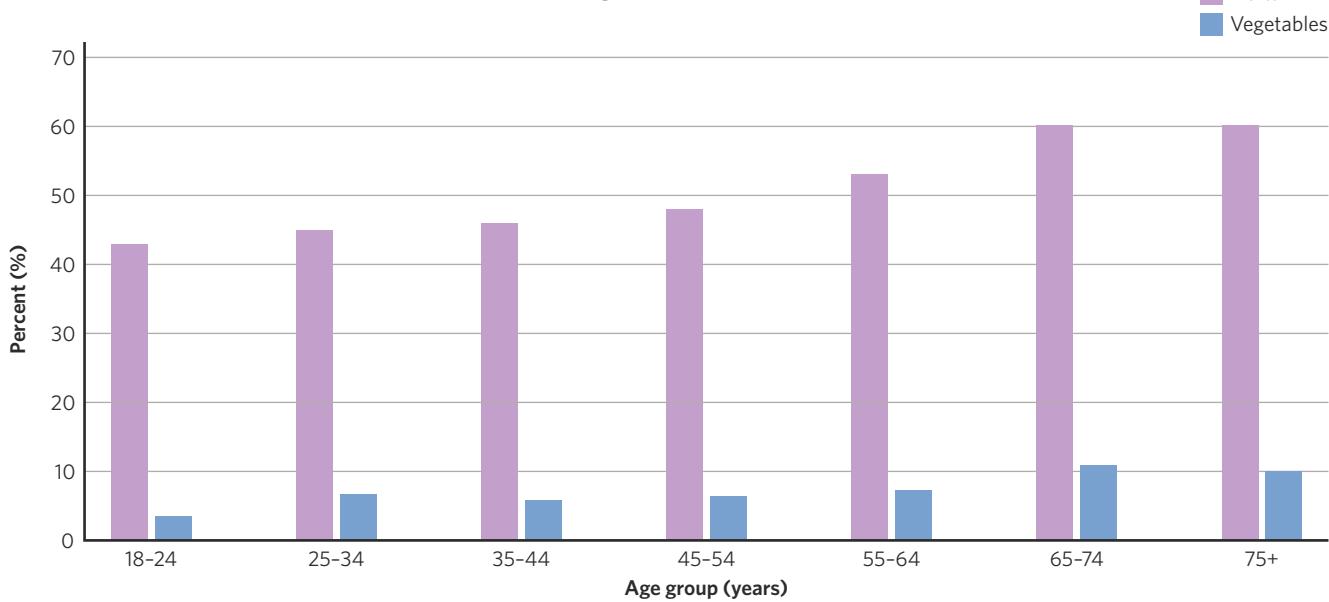
Describe two ways in which the Australian Dietary Guidelines could be used to reduce rates of cardiovascular disease in Australia.

Adapted from VCAA 2020 exam Q3c

Questions from multiple lessons

Question 21 (6 MARKS)

Proportion of Australians aged 18 years and over who consumed the recommended daily intake of fruits and vegetables in 2014-2015



Source: adapted from Australian Institute of Health and Welfare, *Australia's Health 2018*, <<https://www.aihw.gov.au/reports/australias-health/australias-health-2018/contents/indicators-of-australias-health/fruit-and-vegetable-intake>>

- a Using data from the graph, draw a comparison between the likelihood of consuming the recommended daily intake of fruits and the recommended daily intake of vegetables among Australians aged 18 years and over in 2014-2015. (2 MARKS)
- b Describe how the Australian Dietary Guidelines reflect **one** action area of the Ottawa Charter of Health Promotion. (2 MARKS)
- c Explain how the Australian Dietary Guidelines could be used to increase the consumption of fruits and vegetables in Australia. (2 MARKS)

6B PROMOTING HEALTHY EATING IN AUSTRALIA: PART 2

In 2015, approximately 7.3% of the total burden of disease in Australia was attributable to poor diet (Australian Institute of Health and Welfare [AIHW], 2020). If Australians adopt healthy eating behaviours and make positive dietary changes, this may prevent diet-related diseases from contributing to the total burden of disease. Nutrition Australia is an organisation that works to achieve this by promoting healthy eating in Australia.

In this lesson, you will learn about Nutrition Australia. You will also learn about the work of Nutrition Australia to promote healthy eating in Australia, including the Healthy Eating Pyramid.



Image: Evgeniya Mokeevat/Shutterstock.com

6A Promoting healthy eating in Australia: Part 1	6B Promoting healthy eating in Australia: Part 2	6C Challenges in bringing about dietary change
Study design dot point		
• initiatives to promote healthy eating in Australia including Australian Dietary Guidelines and the work of Nutrition Australia, and the challenges in bringing about dietary change		
Key knowledge unit		
Nutrition Australia		3.2.5.3

Promoting healthy eating in Australia: Part 2



Nutrition Australia 3.2.5.3

OVERVIEW

The work of Nutrition Australia, which is a non-government organisation that promotes healthy eating in Australia, helps Australians make healthier food choices and consume a healthy diet.

THEORY DETAILS

Despite good nutrition being essential for optimal health and wellbeing, many Australians do not consume a healthy and balanced diet. This explains why diet-related diseases significantly contribute to burden of disease in Australia. For example, some statistics include:

- In 2017-2018, around 25% of young people aged 2 to 17 years and 67% of adults aged 18 years and over were classified as overweight or obese in Australia, with unhealthy food intake being a major risk factor for overweight and obesity (AIHW, 2020).
- In 2018, cardiovascular disease, which can be caused by over-consuming saturated fat or sodium, was the underlying cause of death for 26% of total deaths (AIHW, 2020).
- In 2017-2018, almost one million Australian adults suffered from type 2 diabetes (Australian Bureau of Statistics [ABS], 2018). Being overweight or obese is a significant risk factor for developing type 2 diabetes.
- Approximately 924,000 Australians suffer from osteoporosis, which is a condition that is characterised by porous bones that are weak and brittle, and is caused by the under-consumption of calcium (AIHW, 2020).

Lesson link

In lesson **2E: Contributions to Australia's health status: Part 2**, you learnt about some of the negative health consequences of consuming an unhealthy and unbalanced diet. This is one of the reasons why it is important that government organisations, such as the NHMRC (which you learnt about in lesson **6A: Promoting healthy eating in Australia: Part 1**), and non-government organisations, such as Nutrition Australia, which you will learn about in this lesson, work to promote healthy eating in Australia.



These statistics highlight the importance of promoting healthy eating in Australia to reduce the prevalence of diet-related diseases that contribute to burden of disease in Australia. Promoting healthy eating in Australia would also reduce the significant social and economic costs associated with the treatment and management of diet-related diseases, such as the cost of healthcare services.

Nutrition Australia is a non-government, non-profit, community-based organisation that promotes healthy eating in Australia. Information about Nutrition Australia is presented in table 1.

Table 1 Information about Nutrition Australia (Nutrition Australia, n.d.)

What is Nutrition Australia?	What does Nutrition Australia aim to do?
Established in 1979, Nutrition Australia is a non-government, non-profit, community-based organisation that promotes healthy eating in Australia. Because it is a non-government organisation, Nutrition Australia is not directly established or run by the government, and is not funded solely by the government. This organisation is considered to be the primary body for community nutrition education in Australia. Nutrition Australia has a national board, as well as divisions in all states and territories.	The mission of Nutrition Australia is to 'inspire and empower healthy eating for all Australians through nutrition information, education, and consultation services' (Nutrition Australia, n.d.). Nutrition Australia aims to: <ul style="list-style-type: none"> deliver a 'healthy eating message' to all Australians enable dietary change through collaboration, partnerships, advocacy, education, and information sharing promote the health and wellbeing of the Australian community.
Who does Nutrition Australia work with?	What are the key activities of Nutrition Australia?
Nutrition Australia works with educators, the media, the food industry (including food manufacturers and food retailers), and consumers to deliver evidence-based nutrition education and community-based nutrition resources. Nutrition Australia also collaborates with federal and state government agencies and policymakers to develop food policies and dietary guidelines that promote healthy eating.	The key activities of Nutrition Australia include: <ul style="list-style-type: none"> developing community-based resources that promote good nutrition and healthy eating acting as a source of current and credible nutrition information on key health and wellbeing issues translating scientific research into practical nutrition information that can be accessed and understood by the general public.

Table 2 explores the work of Nutrition Australia. If you would like to learn more about the work of this organisation, type the URL nutritionaustralia.org into your browser to access and explore the Nutrition Australia website, including specific examples of their work.

Table 2 The work of Nutrition Australia (Nutrition Australia, n.d.)

Work of Nutrition Australia	Explanation
Programs, workshops, and seminars	<p>Nutrition Australia provides a range of community-based programs, workshops, and seminars to various audiences, including families, health professionals, the food industry, schools, workplaces, early learning centres, and aged care services. These programs, workshops, and seminars are delivered by expert nutritionists and dietitians, who provide nutrition education and resources that are targeted towards a particular audience. These programs, workshops, and seminars include:</p> <ul style="list-style-type: none"> one-on-one food preparation and cooking demonstrations webinars that provide information and training to health professionals so that they can promote healthy eating more effectively in the community seminars that provide information and resources for workplaces, such as how to consume a healthy diet as a shift worker, or how to provide healthy snack options in the workplace programs that provide nutrition information to the general public on various topics, such as how to interpret food labels or how to uphold food safety in the kitchen.

cont'd

KEY DEFINITIONS

Nutrition Australia is a non-government, non-profit, community-based organisation that promotes healthy eating in Australia

Table 2 Continued

Work of Nutrition Australia	Explanation
Healthy Eating Advisory Service	<p>The Healthy Eating Advisory Service provides nutrition information and dietary advice to organisations that operate in community settings across Victoria, including schools, workplaces, early childhood services, sport and recreation centres, and hospitals.</p> <p>It supports these organisations to provide healthier food and drink options in their menus, at their food outlets, or when catering or vending. The Healthy Eating Advisory Service is delivered by expert nutritionists and dietitians, is provided by the Victorian division of Nutrition Australia, and is funded by the Victorian Government. The work of the Healthy Eating Advisory Service includes:</p> <ul style="list-style-type: none"> providing phone advice to organisations to help them provide nutritious and cost-effective food and drink choices to the people they serve assessing and modifying menus training chefs and food service staff to produce healthy food options and implement a healthy eating policy helping organisations follow dietary guidelines and adhere to government food policies working with health professionals and the food industry to enable a healthy eating environment in various community settings.
National Nutrition Week	<p>National Nutrition Week is an annual campaign that is coordinated by Nutrition Australia and runs in October each year to coincide with World Food Day. As part of the campaign, Nutrition Australia develops resources in accordance with the chosen annual theme and shares nutrition information among the Australian community.</p> <p>In 2020, the theme for National Nutrition Week was 'Try for 5', encouraging Australians to consume the recommended five serves of vegetables each day. This theme returned in 2021, given that many Australians still do not consume enough vegetables and need to increase their vegetable intake. If you would like to learn more about the 'Try for 5' campaign, type the URL tryfor5.org.au into your browser to access and explore the National Nutrition Week campaign website.</p>
Publication of recipes and fact sheets	<p>Nutrition Australia provides numerous healthy recipes, which can be accessed for free on their website. Australians can access dinner recipes, such as Moroccan lentil and chickpea soup, breakfast recipes, such as raspberry and yoghurt muesli, snack recipes, such as basil and lemon dip, and many more. This enables them to prepare and cook their own healthy meals.</p> <p>Nutrition Australia also provides fact sheets, which can be accessed for free on their website. These resources provide evidence-based nutrition information and are informed by credible scientific research. Australians can access fact sheets related to multiple areas of interest, such as adolescent nutrition, physical activity, child nutrition, older adult nutrition, and general nutrition.</p>
The Healthy Eating Pyramid	<p>The Healthy Eating Pyramid is a food selection model that displays the types and proportions of foods that should be consumed each day as part of a healthy and balanced diet in a pyramid format. The Healthy Eating Pyramid is explored in detail in the next section of this lesson.</p>

KEY DEFINITIONS

Healthy Eating Pyramid is a food selection model that displays the types and proportions of foods that should be consumed each day as part of a healthy and balanced diet in a pyramid format

ACTIVITY 1

Healthy Lunchbox Week

Healthy Lunchbox Week is a program that aims to 'inspire Australian families to create healthy and enjoyable lunchboxes' (Nutrition Australia, 2021). This initiative of Nutrition Australia runs at the beginning of term one as children return to school. Parents, carers, and teachers are provided with helpful tips for preparing healthy lunchboxes, such as 'how to save time on prepping lunchboxes' and 'how to stop a full lunchbox from coming home'. Furthermore, during Healthy Lunchbox Week, Nutrition Australia shares images of healthy lunchboxes on their social media platforms to inspire the school community.

The following video was produced as part of the Healthy Lunchbox Week initiative. Search '*What is a Healthy Lunch Box?*' on YouTube and watch the three minute and twenty-six second video that explores what constitutes a healthy lunchbox (NAQ Nutrition, 2016). Then respond to the following questions:

- Who is the target audience of this video?
- What are some helpful tips that are provided in this video?
- How does this video reflect the work of Nutrition Australia?
- How is this video promoting healthy eating among the Australian community?



Image: LittleMii0/Shutterstock.com

The Healthy Eating Pyramid

The Healthy Eating Pyramid is a food selection model that displays the types and proportions of foods that should be consumed each day as part of a healthy and balanced diet in a pyramid format. Developed by Nutrition Australia in 2015, the Healthy Eating Pyramid promotes healthy eating in Australia by encouraging Australians to consume a variety of healthy foods from each food group every day.

The Healthy Eating Pyramid was developed in accordance with the advice of the Australian Dietary Guidelines, which were created by the National Health and Medical Research Council (NHMRC). The dietary advice provided by the Healthy Eating Pyramid is targeted towards Australians aged between 1 and 70 years, providing them with nutrition information that they can use to make healthier food choices.



(Nutrition Australia, 2015)

Figure 1 The Healthy Eating Pyramid

Lesson link

In lesson **6A: Promoting healthy eating in Australia:**

Part 1, you learnt about the Australian Dietary Guidelines, which promote healthy eating in Australia. The Healthy Eating Pyramid was developed in accordance with the advice of the Australian Dietary Guidelines.

Lesson link

In lesson **6A: Promoting healthy eating in Australia:**

Part 1, you learnt about the Australian Guide to Healthy Eating. Both the Healthy Eating Pyramid and the Australian Guide to Healthy Eating are food selection models that promote healthy eating in Australia. There are similarities and differences that exist between these food selection models.

- One similarity is that both are based on the advice of the Australian Dietary Guidelines.
- One difference is that the Healthy Eating Pyramid is in pyramid format, whereas the Australian Guide to Healthy Eating is in pie chart format.
- Can you think of any other similarities and differences between the Healthy Eating Pyramid and the Australian Guide to Healthy Eating?

Want to know more?

The evolution of the Healthy Eating Pyramid

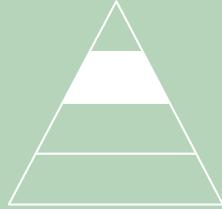
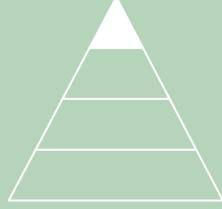
The current version of the Healthy Eating Pyramid that is presented in figure 1 was launched in 2015. However, did you know that the first edition of the Healthy Eating Pyramid was released by Nutrition Australia in 1980? All together, there have been six different versions of the Healthy Eating Pyramid that have all aimed to promote healthy eating in Australia.

The reason why Nutrition Australia changes the pyramid is to ensure that the nutrition information reflected in the food selection model is consistent with current dietary guidelines. For example, the release of the Australian Dietary Guidelines in 2013 prompted Nutrition Australia to adapt the Healthy Eating Pyramid to reflect these new guidelines.

Type the URL nutritionaustralia.org/division/national/a-brief-history-of-the-pyramid-17967 into your browser to learn about the evolution of the Healthy Eating Pyramid and view the previous versions of the pyramid that Nutrition Australia has released (Nutrition Australia, 2019).

The Healthy Eating Pyramid categorises the five food groups, as well as healthy fats, into four levels according to the proportions in which they should be consumed as part of a healthy and balanced diet. Foods that are located in the bottom layer of the pyramid should make up the largest proportion of the diet. By contrast, foods that are located in the top layer of the pyramid should make up the smallest proportion of the diet. The layers of the Healthy Eating Pyramid are explained in table 3.

Table 3 The layers of the Healthy Eating Pyramid (Nutrition Australia, 2015)

Layer of the Healthy Eating Pyramid	Explanation
Bottom layers of the Healthy Eating Pyramid 	The two layers at the bottom of the pyramid are collectively referred to as 'foundation layers'. The layer at the bottom of the pyramid contains fruit, vegetables, and legumes. Vegetables and legumes should be consumed more than fruits, as indicated by the larger section of the bottom layer being dedicated to vegetables and legumes. The next layer above the bottom layer contains grains. These 'foundation layers' contain foods of plant origin that should make up the majority of daily food intake.
Middle layer of the Healthy Eating Pyramid 	The middle layer of the pyramid that is above the two 'foundation layers' contains two food groups: <ul style="list-style-type: none"> The first food group includes milk, yoghurt, cheese, and alternatives. Alternatives refer to non-dairy options, such as soy milk and almond milk. It is recommended that reduced-fat dairy products are selected over full-fat dairy products to reduce saturated fat intake and prevent weight gain, overweight, and obesity. The second food group that is included in the middle layer includes lean meat, poultry, eggs, nuts, seeds, and legumes. It is recommended that lean cuts of meat are selected over fatty cuts of meat to reduce saturated fat intake, and prevent weight gain, overweight, and obesity.
Top layer of the Healthy Eating Pyramid 	The top layer of the pyramid involves foods containing healthy fats. It is recommended that foods containing these 'good' monounsaturated and polyunsaturated fats are selected over foods containing these 'bad' saturated and trans fats. Foods that contain monounsaturated and polyunsaturated fats, such as cooking oils, avocados, nuts and seeds, should make up the smallest proportion of the diet.

You may have noticed that the pyramid is not the only component of the Healthy Eating Pyramid and that there is additional information displayed on the poster:

- If you look at the top left-hand corner of the poster, you will see images of salt and sugar, which are accompanied by a red cross. This reflects the message of the Healthy Eating Pyramid to 'limit salt and added sugar'. By avoiding foods that contain large amounts of salt, this reduces the risk of hypertension and therefore cardiovascular disease. By avoiding foods that contain large amounts of added sugar, this reduces the risk of weight gain, overweight, and obesity. Australians can limit their salt and added sugar intake by avoiding processed foods that have a high salt or added sugar content and by not adding salt or sugar to meals while cooking at home, therefore improving their diet.
- If you look at the bottom left-hand corner of the pyramid, you will see images of various herbs and spices. This reflects the message of the Healthy Eating Pyramid to 'enjoy herbs and spices'. The addition of herbs and spices adds colour, smell, and flavour to different foods. Instead of adding salt and sugar to meals for flavour, Australians can add herbs and spices to suit their tastes, increasing their enjoyment of food in a healthy way.
- If you look at the bottom right-hand corner of the pyramid, you will see an image of a glass of water, which is accompanied by a green tick. This reflects the message of the Healthy Eating Pyramid to 'choose water' as the body's primary source of hydration. Water is essential for preventing dehydration and facilitating various bodily functions. Australians should drink plenty of water every day in preference to other liquids, such as soft drinks and alcoholic beverages, that contribute to weight gain, overweight, and obesity.

 **Want to know more?**
The strengths and limitations of the Healthy Eating Pyramid

The Healthy Eating Pyramid has both strengths and limitations in relation to its capacity to effectively promote healthy eating in Australia. You can learn about these strengths and limitations, which are explained in table 4, to further your understanding of the Healthy Eating Pyramid.

Table 4 Strengths and limitations of the Healthy Eating Pyramid

Strengths	Limitations
<ul style="list-style-type: none"> The Healthy Eating Pyramid is easy to understand. The pyramid format clearly shows the proportions in which different foods should be consumed based on the layer of the pyramid they appear in. People with limited nutritional knowledge and literacy skills, such as young children, are likely to still find this food selection model helpful in determining which foods should make up the largest proportion of their diet. The Healthy Eating Pyramid is visually appealing. By using pictures and colours to display basic nutritional information and enabling individuals to make their own food choices, this food selection model may be fun and engaging for Australians. Therefore, it may be successful in helping them make healthier food choices. Rather than focusing on nutrients, the Healthy Eating Pyramid focuses on the foods that contain these nutrients. This is helpful because many people do not have adequate knowledge about which foods contain which nutrients. Therefore, by focusing on food types rather than nutrients, more Australians can understand this food selection model and apply it to their everyday food intake. The Healthy Eating Pyramid was developed by Nutrition Australia. This means that it was informed by scientific evidence and expert opinion and provides accurate dietary advice to promote healthy eating among Australian youth. 	<ul style="list-style-type: none"> The Healthy Eating Pyramid does not take into account composite foods, such as sandwiches and pizza, only providing information on foods that can be classified into one food group. It may be difficult for Australians to 'break down' and 'sort out' the multiple components of these foods into each individual food group. This means that this food selection model is more difficult to apply to everyday food intake that often contains these composite foods. While the recommended proportions of each food group for daily consumption are clearly displayed, the Healthy Eating Pyramid does not provide information on the appropriate daily serving sizes of each food group. It fails to address the importance of not overeating for a healthy diet. The Healthy Eating Pyramid displays a wide variety of individual foods within each food group. However, these foods are not equal in nutritional value, and this food selection model does not indicate which of these foods should be consumed in preference to others. Therefore, Australians may have difficulty deciding which food is the healthiest choice within each food group. The foundation layer of the Healthy Eating Pyramid displays both fruit and vegetables. Although these foods are in separate sections, this design may mislead some Australians, as they may believe that fruits and vegetables should be consumed in equal amounts to make up the largest portion of their diet. In reality, vegetables should be consumed more than fruits as fruits contain large amounts of sugar and may contribute to weight gain when consumed in excess.

Theory summary

In this lesson, you learnt more about the promotion of healthy eating in Australia. Specifically, you learnt about Nutrition Australia and the work of Nutrition Australia, which is summarised in figure 2.

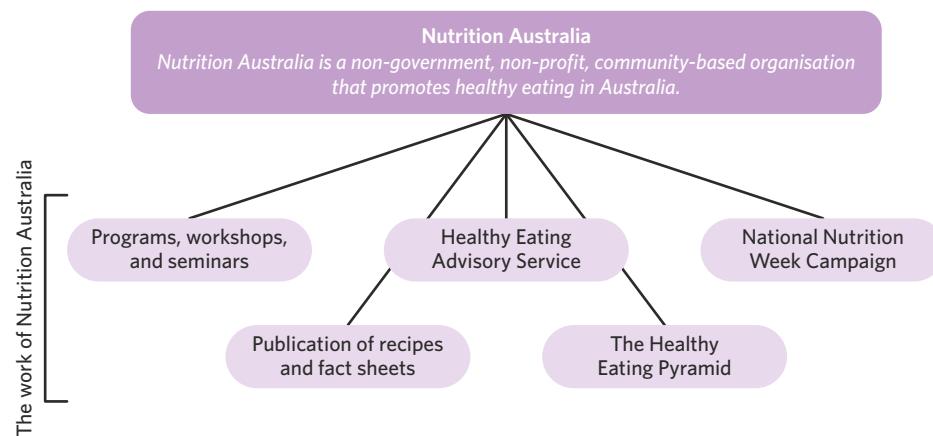


Figure 2 Summary of Nutrition Australia and their work to promote healthy eating in Australia

ADDITIONAL TERMS ↑

Composite foods are foods that contain ingredients from more than one food group

6B QUESTIONS

Theory-review questions

Question 1

Which of the following are reasons why it is important to promote healthy eating among the Australian community? (*Select all that apply*)

- I A large proportion of Australians are classified as overweight or obese.
- II Diet-related diseases, such as cardiovascular disease, barely contribute to the total burden of disease in Australia.
- III There are significant social and economic costs associated with the treatment and management of diet-related diseases, such as the cost of healthcare services.

Question 2

Which of the following best fills in the blank?

- A government
- B non-government

Nutrition Australia is a _____ non-profit, community-based organisation that promotes healthy eating in Australia.

Question 3

Which of the following is **not** an aim of Nutrition Australia?

- A To deliver a 'healthy eating message' to all Australians.
- B To promote the health and wellbeing of the Australian community.
- C To enable dietary change independently of other groups, such as government agencies, educators, consumers, and the food industry.

Question 4

Which of the following are examples of the work of Nutrition Australia? (*Select all that apply*)

- I The Healthy Eating Advisory Service.
- II Publication of recipes and fact sheets.
- III The Australian Guide to Healthy Eating.

Question 5

Which of the following audiences does Nutrition Australia provide programs, workshops, and seminars to? (*Select all that apply*)

- I Health professionals.
- II Workplaces.
- III Aged care services.

Question 6

Which of the following statements is **incorrect**?

- A The dietary advice provided by the Healthy Eating Pyramid is targeted towards Australians over the age of 18 years.
- B The Healthy Eating Pyramid was developed in accordance with the advice of the Australian Dietary Guidelines, which were created by the NHMRC.
- C The Healthy Eating Pyramid displays the types and proportions of foods that should be consumed each day as part of a healthy and balanced diet in a pyramid format.

Question 7

The Healthy Eating Pyramid has only one 'foundation layer' that contains fruit, vegetables, and legumes.

- A True.
- B False.

Question 8

Which of the following is **not** a piece of additional information that is displayed on the Healthy Eating Pyramid poster?

- A Avoid using herbs and spices when cooking.
- B Limit salt and added sugar intake.
- C Choose water as the body's primary source of hydration.

Skills**Unpacking the case study**

Use the following information to answer Questions 9–11.

Mrs Batsilas is the principal of a primary school and wants to promote healthy eating among the school community. For example, Mrs Batsilas has noticed that the school canteen sells many unhealthy food options to students and would like advice on how to modify the canteen menu to provide healthier food options to students. Mrs Batsilas also wants to include several healthy recipes in the school newsletter for parents to try at home. However, the healthy recipes she has found online require a fee to access them, and she would rather find healthy recipes online that can be accessed for free. In the staff room, Mrs Batsilas shares her ideas with her colleagues and asks if anyone has other ideas to promote healthy eating among the school community. Mr Hondrakis suggests enrolling teaching staff in a workshop that helps them communicate a 'healthy eating message' to students. Mrs Batsilas is unsure of any organisations that offer these types of programs to schools.

Question 9

Mrs Batsilas could benefit from using the Healthy Eating Advisory Service, which is best reflected by the statement that

- A 'Mrs Batsilas shares her ideas with her colleagues and asks if anyone has other ideas to promote healthy eating among the school community'.
- B 'Mrs Batsilas has noticed that the school canteen sells many unhealthy food options to students, and would like advice on how to modify the canteen menu to provide healthier food options to students'.

Question 10

Mrs Batsilas could benefit from using the programs, workshops, and seminars that are run by Nutrition Australia, which is best reflected by the statement that

- A 'the healthy recipes she has found online require a fee to access them, and she would rather find healthy recipes online that can be accessed for free'.
- B 'Mr Hondrakis suggests enrolling teaching staff in a workshop that helps them communicate a 'healthy eating message' to students'.

Question 11

Mrs Batsilas could access recipes that are provided free of charge on the Nutrition Australia website and include them in the school newsletter.

- A True.
- B False.

Exam-style questions**Question 12** (1 MARK)

Identify one example of the work of Nutrition Australia.

Question 13 (2 MARKS)

Identify and explain one way in which Nutrition Australia promotes healthy eating.

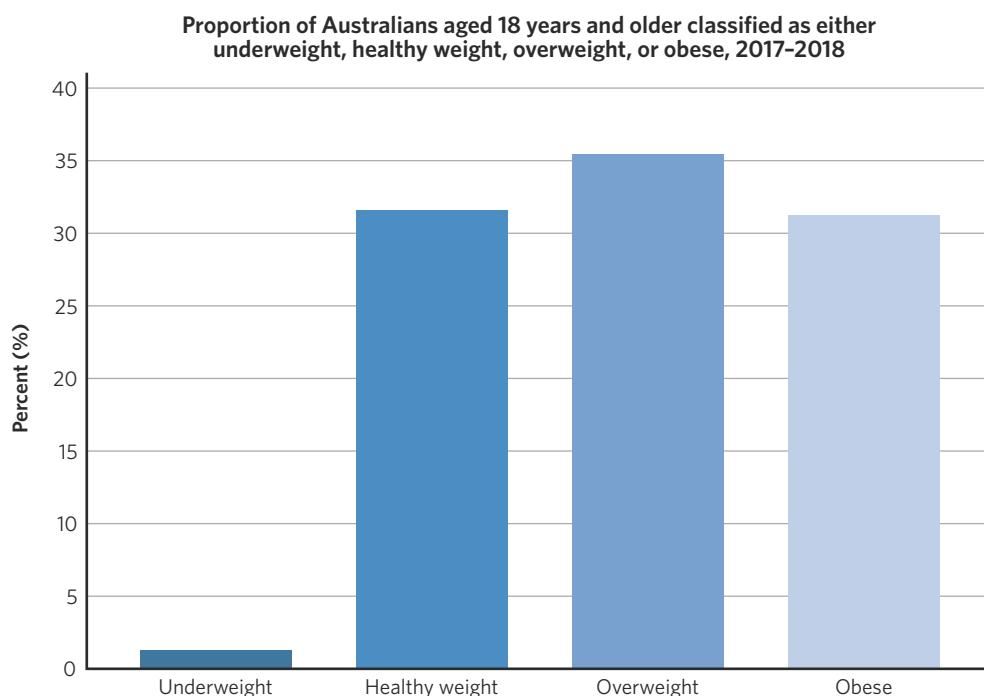
Adapted from VCAA 2019 exam Q4b

Question 14 (2 MARKS)

'Project Dinnertime' is an initiative of Nutrition Australia that provides cooking workshops to Australians. These cooking workshops involve one-on-one or group cooking classes that are delivered by accredited dietitians in Nutrition Australia's 'food skills kitchen'. 'Project Dinnertime' aims to inspire Australians to prepare and cook their own healthy meals, increase cooking ability, improve kitchen confidence, and develop menu planning and food budgeting skills. Each cooking workshop is tailored to meet the individual needs and abilities of participants.

Source: adapted from Nutrition Australia, *Project Dinnertime cooking workshops*, <<https://nutritionaustralia.org/division/act/nutrition-programs-for-clients-of-community-services-17757/>>

Describe how the 'Project Dinnertime' cooking workshops promote **two** dimensions of health and wellbeing.

Question 15 (4 MARKS)

Source: adapted from Australian Bureau of Statistics, *Overweight and obesity*, <<https://www.abs.gov.au/statistics/health/health-conditions-and-risks/overweight-and-obesity/latest-release>>

- Using data from the graph, draw a comparison between the proportion of Australians aged 18 years and older who are classified as having a healthy body weight and the proportion who are classified as being overweight or obese. (2 MARKS)
- Describe how Nutrition Australia works to reduce the proportion of Australians who are classified as overweight or obese. (2 MARKS)

Adapted from VCAA 2016 exam Q6d

Question 16 (4 MARKS)

The current version of the Healthy Eating Pyramid was developed by Nutrition Australia in 2015.

- Describe the Healthy Eating Pyramid. (2 MARKS)
- Explain how the Healthy Eating Pyramid promotes the consumption of fruits and vegetables. (2 MARKS)

Adapted from VCAA 2017 exam Q6d

Questions from multiple lessons**Question 17** (4 MARKS)

- Explain how the Healthy Eating Pyramid reflects the advice of **one** of the Australian Dietary Guidelines. (2 MARKS)

Adapted from VCAA 2016 exam Q4

- Outline one similarity and one difference between the Healthy Eating Pyramid and the Australian Guide to Healthy Eating. (2 MARKS)

6C CHALLENGES IN BRINGING ABOUT DIETARY CHANGE

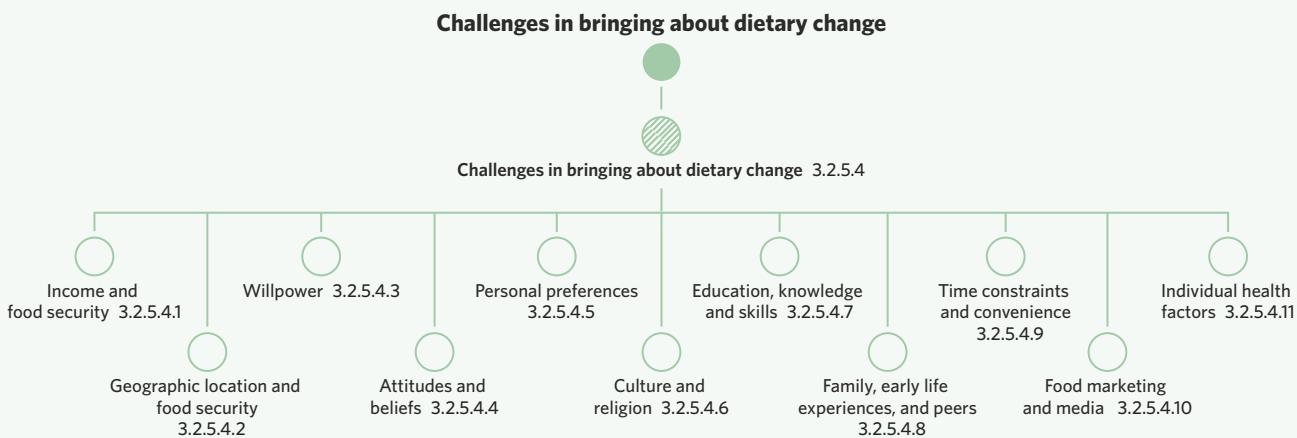
If there are numerous health promotion initiatives that have been implemented to promote healthy eating in Australia, why are so many Australians **still** suffering from diet-related conditions?

Why have rates of some diet-related conditions, such as type 2 diabetes, increased in the last decade (Australian Institute of Health and Welfare [AIHW], 2020)? Bringing about dietary change can be difficult to achieve because people's dietary choices are influenced by a range of complex factors. In this lesson, you will learn about a range of challenges in bringing about dietary change.



Image: Nadya_Art/Shutterstock.com

6A Promoting healthy eating in Australia: Part 1	6B Promoting healthy eating in Australia: Part 2	6C Challenges in bringing about dietary change																								
Study design dot point																										
<ul style="list-style-type: none"> initiatives to promote healthy eating in Australia including Australian Dietary Guidelines and the work of Nutrition Australia, and the challenges in bringing about dietary change 																										
Key knowledge units																										
<table> <tr> <td>Challenges in bringing about dietary change</td><td>3.2.5.4</td></tr> <tr> <td>Income and food security</td><td>3.2.5.4.1</td></tr> <tr> <td>Geographic location and food security</td><td>3.2.5.4.2</td></tr> <tr> <td>Willpower</td><td>3.2.5.4.3</td></tr> <tr> <td>Attitudes and beliefs</td><td>3.2.5.4.4</td></tr> <tr> <td>Personal preferences</td><td>3.2.5.4.5</td></tr> <tr> <td>Culture and religion</td><td>3.2.5.4.6</td></tr> <tr> <td>Education, knowledge, and skills</td><td>3.2.5.4.7</td></tr> <tr> <td>Family, early life experiences, and peers</td><td>3.2.5.4.8</td></tr> <tr> <td>Time constraints and convenience</td><td>3.2.5.4.9</td></tr> <tr> <td>Food marketing and media</td><td>3.2.5.4.10</td></tr> <tr> <td>Individual health factors</td><td>3.2.5.4.11</td></tr> </table>			Challenges in bringing about dietary change	3.2.5.4	Income and food security	3.2.5.4.1	Geographic location and food security	3.2.5.4.2	Willpower	3.2.5.4.3	Attitudes and beliefs	3.2.5.4.4	Personal preferences	3.2.5.4.5	Culture and religion	3.2.5.4.6	Education, knowledge, and skills	3.2.5.4.7	Family, early life experiences, and peers	3.2.5.4.8	Time constraints and convenience	3.2.5.4.9	Food marketing and media	3.2.5.4.10	Individual health factors	3.2.5.4.11
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Individual health factors	3.2.5.4.11																									



Challenges in bringing about dietary change 3.2.5.4

OVERVIEW

Despite significant investment in diet-related health promotion, such as the Australian Dietary Guidelines and Nutrition Australia, diet-related illnesses, such as cardiovascular disease and obesity, continue to rise in Australia. Therefore it is clear that bringing about dietary change is not simple: there are a range of challenges that exist within our population that make it difficult for people to make healthy food choices.

Study design key skills dot point

- draw conclusions as to why dietary improvements are difficult to achieve in Australia

THEORY DETAILS

The dietary choices that you make are influenced by a range of factors. Consuming a healthy diet is not always easy for people, and in this section, you will learn about a range of challenges in bringing about dietary change, which are presented in figure 1.

Useful tip

The discussion in this lesson is centred around people's dietary choices, and 'healthy' diets versus 'unhealthy' diets. Firstly, it is important to remember that a person's diet is influenced by many factors and their food choices cannot simply be attributed to one single factor. Secondly, it is important to remember that people make different food choices for a range of reasons.

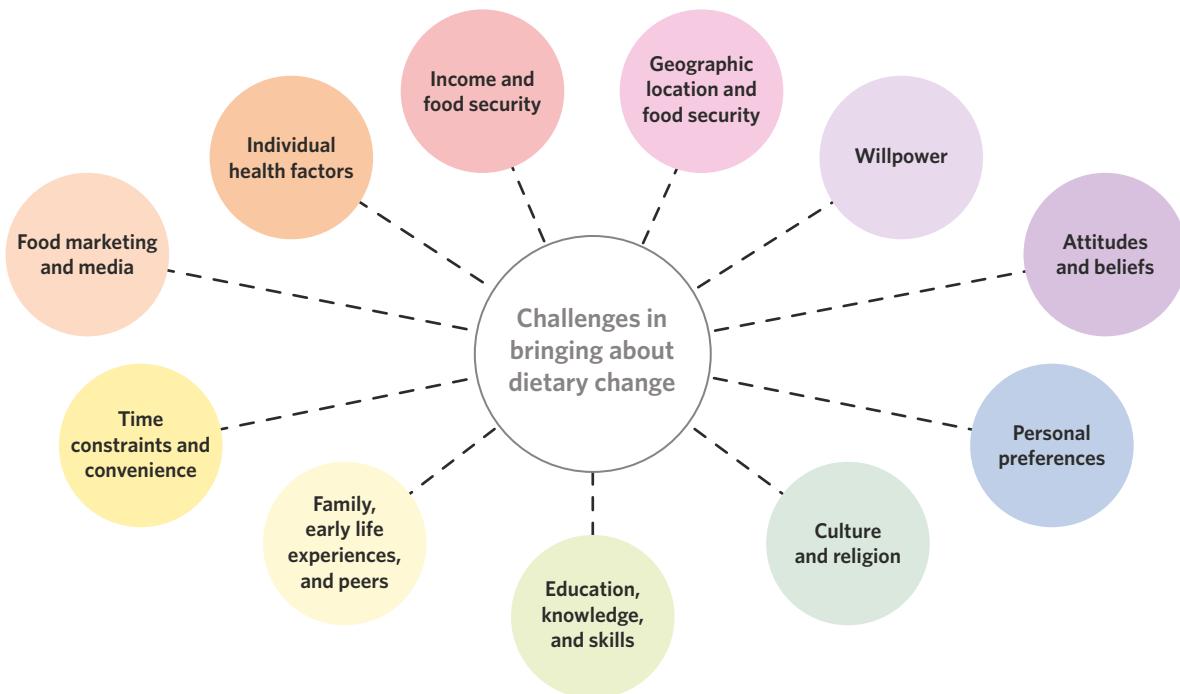


Figure 1 Challenges in bringing about dietary change

Income and food security 3.2.5.4.1

The foods people choose to purchase are often influenced by the prices of different food options. So, even if an individual or household strives to consume a healthy diet, there may be financial barriers that stand in their way of achieving this.

Fast food is often cheaper per calorie, so people can eat, for example, a whole cheeseburger meal for a similar amount of money that they could use to purchase free-range chicken breast. Food prices have a strong impact on the food choices people make, especially for low-income Australians who are more 'price sensitive' than higher-income earners. Foods recommended in the Australian Dietary Guidelines are typically more expensive than less healthy options, and the cost of healthy foods in Australia is rising (VicHealth, 2015). For low-income households, when under financial pressure, food spending is often seen as flexible compared to other essential expenditure demands which can take priority over food, such as housing, healthcare, and education costs. Therefore, lower-income households are less likely to spend extra money on healthy food options. In the same way, high-income households are more likely to spend money on fresh fruits and vegetables, whole grains, and other nutrient-dense foods than low-income households.



Image: GoodStudio /Shutterstock.com

Figure 2 Income and food security is a factor that can cause challenges in bringing about dietary change

Income affects **food security**, which is when a person has reliable access to adequate quantities of nutritious, safe, and culturally appropriate food at all times, from non-emergency sources. People who earn an adequate income are more likely to experience food security than those who do not earn an adequate income, and therefore have more freedom of choice when it comes to the diet they consume. For example, people who earn lower incomes may not have enough money to purchase the resources needed to prepare and cook healthy meals, such as kitchen utensils and a working stove. This may cause them to purchase ready-made meals or takeaway foods that often contain large amounts of saturated fat, salt, and added sugar. People who do not experience food security may find it very difficult to change their diet and avoid the consumption of ready-made or fast foods.



Want to know more?

Are healthy diets really more expensive?

In 2015-16, The Australian Prevention Partnership Centre (an organisation that focuses on systems and solutions for better health) completed a study researching 'are healthy diets really more expensive?' (The Australian Prevention Partnership Centre, 2017). What did the study find?

- Current unhealthy diets, which include alcoholic drinks, cost more than healthy diets in Australia, across households in all socioeconomic areas surveyed. This is partly because the majority of households' food budget is being spent on 'discretionary' items, such as sugary drinks, takeaway foods and alcohol.
- A healthy diet is unaffordable for low-income families, costing up to one-third of their household income.
- Expanding the **Goods and Services Tax (GST)** to apply to all foods in Australia would make healthy diets more unaffordable, potentially worsening diets and increasing the incidence and prevalence of diet-related diseases, such as cardiovascular disease.

Overall, the study has shown that it is critical that cost barriers to Australians choosing healthier diets are reduced, rather than increased

ADDITIONAL TERMS

Food security is when a person has reliable access to adequate quantities of nutritious, safe, and culturally appropriate food at all times, from non-emergency sources

Goods and Services Tax (GST) is a tax of 10% that is imposed on most goods and services that are sold and consumed in Australia



Image: GoodStudio/Shutterstock.com

Figure 3 Geographic location and food security is a factor that can cause challenges in bringing about dietary change



Image: Nils Verseemann/Shutterstock.com

Figure 4 This small Foodworks is the only supermarket in Yackandandah, which is a small country town in northeast Victoria. The nearest Woolworths is more than 25km away. Many small supermarkets like this are both expensive and have very limited options as it costs a lot of money to transport fresh food to rural supermarkets

Willpower 3.2.5.4.3

Willpower refers to the ability to resist short-term gratification or desires in the pursuit of long-term goals. Willpower plays a major role in bringing about dietary change. Willpower is closely related to self-control. Many people can find it difficult to give up their unhealthy habits as they are surrounded by temptations, such as living in close proximity to a fast-food restaurant, or being surrounded by friends who are eating unhealthy food. In today's society, many foods that are considered to be 'unhealthy' are offered at social events, such as birthday parties, social gatherings, or work functions. It is important to know that you can still have a healthy and balanced diet whilst consuming unhealthy foods (such as fast food) only sometimes and in small amounts. However, constant exposure to these foods not only challenges peoples' willpower to eat healthily, but also increases the risk of regular consumption, which can challenge people's ability to achieve long-term dietary change.

ADDITIONAL TERMS

Willpower refers to the ability to resist short-term gratification or desires in the pursuit of long-term goals



Image: Yulia M /Shutterstock.com

Figure 5 Willpower is a factor that can cause challenges in bringing about dietary change

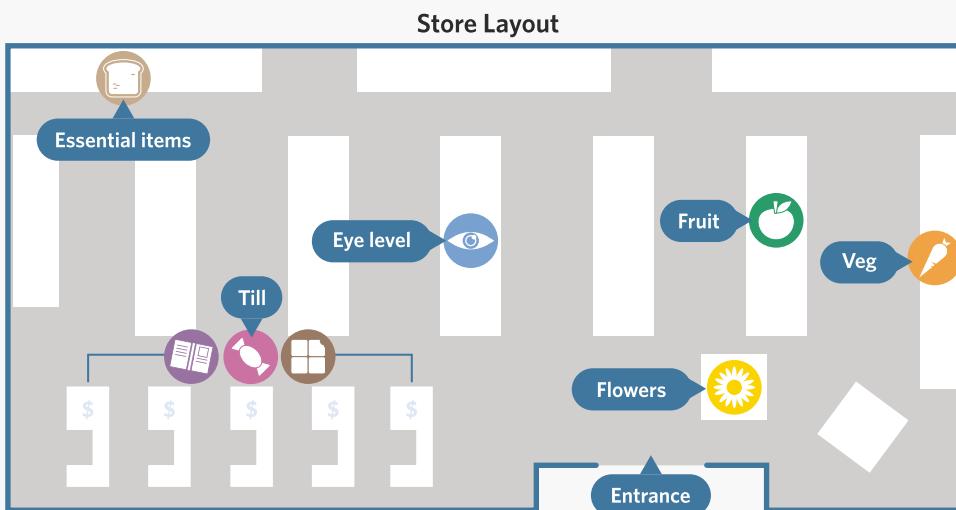
ACTIVITY 1

Supermarket shopping and its test to our willpower (Bitesize, 2021)

Food retailers employ a range of tactics to influence the way we shop. One major tactic that food retailers, such as supermarkets, use is a carefully considered store layout. Have you ever thought about how your local supermarket is laid out? Where are the fresh products compared to the confectionary? Supermarket shopping can tempt people to purchase products they did not intend to and can test their willpower when it comes to making healthy dietary choices.

Below is an example of a supermarket layout. Take a look at the layout and answer the following question:

How can supermarkets challenge people's abilities to bring about long-lasting dietary change?



Before answering the question, consider the following:

- Fruit, vegetables, and flowers are often placed near the entrance to the supermarket. Consumers associate these products with freshness giving shoppers a positive first impression.
- Some products are at eye level, some are not. Often pricey brands are placed at eye level, which are the products consumers will notice first, and therefore will be most likely to purchase. Items that are marketed to young children are often on lower shelves so that they will spot these and encourage their parents to buy them.
- Essential items are not easily accessible. How many times have you gone to the shops for simply bread, milk, or eggs? These items are often placed at the back of the store, meaning shoppers have to pass many other items on their way to these products. This increases the chance shoppers will pick up other products to purchase along the way.
- When you go to pay at the register, there are often many items surrounding the tills. Whether it's magazines, sweets, chocolates, or fridges with soft drinks; these products aim to tempt shoppers as they wait to pay.

Who would have thought that something as simple as the layout of a supermarket can influence our dietary choices?

Attitudes and beliefs 3.2.5.4.4

We all have different attitudes and hold different beliefs. These attitudes and beliefs can strongly influence the food we consume. Many people consume certain foods and avoid others based on ethical beliefs and values associated with, such as animal welfare and sustainability. For example, some people may feel strongly about:

- where their food comes from and will only consume organic, Australian-made products.
 - how their food was sourced, and feel strongly that the products they pay for are sourced ethically and people involved in the production were paid fairly.
 - the ‘food miles’ of the food they consume and only want to source local ingredients.
- Food miles is a term that refers to the distance between where a food product was first produced and the plate it lands on.

Additionally, when people believe that they are not at risk of diet-related diseases, they may believe they do not need to make changes to their diet. This may be true, but perhaps not always. Due to the fact that people have different ideas of what is ‘healthy’, not everyone may believe that they are consuming an unhealthy diet and need to make dietary changes. A perceived need or want to change one’s diet is fundamental for bringing about dietary change. When this perceived need or want is absent, it can be challenging to bring about dietary change. Therefore, personal beliefs and attitudes can challenge the ability to bring about dietary changes of whole populations, and in turn, challenge the ability to improve overall health outcomes in Australia.

ACTIVITY 2

Veganism

Do you know someone who is vegan? Are you vegan? A vegan does not eat any food derived from animals and typically does not use other animal products, such as leather bags. Veganism is becoming increasingly popular and for many is underpinned by strong ethical beliefs and attitudes. Interest in veganism has doubled over the past five years and does not seem to be slowing down (Lane, 2020). Australia is the second-highest country in terms of veganism popularity. But why is it so popular and how does it affect diet?

According to The Vegan Society, there are a range of reasons why people go vegan (The Vegan Society, 2021). These reasons include for the animals, for one’s health, and for the environment. Ultimately, people would not likely eat a vegan diet unless they had strong beliefs or attitudes. Answer the following questions with your classmates about veganism and the challenges in bringing about dietary change.

- Does veganism reflect how beliefs and attitudes can influence the food one consumes? Why or why not?
- Discuss how being a vegan could challenge bringing about dietary change.
- Use veganism as an example to describe how attitudes and beliefs can cause challenges in bringing about dietary change.

Personal preferences 3.2.5.4.5

Most people prefer certain foods over others, which is often the result of taste preferences or past experiences. Personal preferences are a significant barrier to developing healthy eating patterns for many people. Many people decide what to eat based simply on how it tastes. Many foods that are high in saturated fat, salt, and added sugar taste delicious, causing many people to prefer these foods over others. This is because these foods stimulate the taste buds and subsequently the brain’s reward system by releasing dopamine (one of the body’s ‘feel-good’ chemicals), which enhances the flavour of foods. Consuming such foods that cause us to ‘feel good’ can create a cycle of cravings for unhealthy foods, making dietary change challenging for some.

Additionally, some people simply don’t like the taste of some foods that are deemed healthy and essential for good health, such as vegetables. Such personal preferences associated with taste can make it difficult for people to avoid unhealthy foods (which are often delicious) and consume adequate amounts of healthy foods (that don’t always taste as ‘good’).



Image: tatianasun/Shutterstock.com

Figure 6 Attitudes and beliefs can cause challenges in bringing about dietary change



Image: govindamadhava108/Shutterstock.com

Figure 7 Veganism is a growing dietary trend



Image: Nadya_Art/Shutterstock.com

Figure 8 Personal preference can cause challenges in bringing about dietary change

Culture and religion 3.2.5.4.6

For centuries, **culture** and **religion** have influenced the foods people eat. For example, some cultures or religions do not condone the consumption of certain foods. Therefore, culture and religion can make bringing about dietary change difficult.

There are five major religions: Christianity, Islam, Judaism, Buddhism, and Hinduism. However, there are thousands of other religions that are practised around the world. Each religion has its own customs, traditions, and rules, and some of these relate to food consumption. For example, many people who follow Hinduism are vegetarian, because this diet reflects their respect for other life forms. Hindu people may not consume enough protein or iron because they do not eat meat. They must obtain adequate amounts of these nutrients from plant-based foods or artificial supplements so that their vegetarian diet does not act as a barrier to healthy eating. This demonstrates how religion could stand as a barrier in increasing people's iron levels to reduce the prevalence of **iron-deficiency anaemia** in a population, therefore acting as a barrier to healthy eating.

Furthermore, many religious or cultural events and celebrations involve food. For example, during the month of Ramadan, followers of Islam who observe this religious event do not eat and drink during the daytime. If someone is trying to change their diet and, for example, develop an eating pattern where they eat regular meals, a religious event, such as Ramadan, could challenge their ability to bring about such dietary changes.

Want to know more?

Did you know that research has found that one of the main differentiators of food preferences is culture: different food preferences are rooted in differing flavour principles among cuisines (Meiselman et. al., 2003)?

Overall, culture and religion are the source of many traditions and practices for people regarding food, many of which are century-old traditions. Therefore, for many people, adhering to such practices is more important than maintaining a healthy diet and therefore can stand as a challenge in bringing about dietary change.

Education, knowledge, and skills 3.2.5.4.7

Lack of education and knowledge relating to nutrition, as well as a lack of cooking skills, can mean people are more likely to consume unhealthy foods, such as fast-food. When people have low levels of food literacy, they may find it difficult to bring about dietary change as they may now know how, or have the skills, to do so. **Food literacy** is the presence of knowledge, skills, and behaviours needed to plan, manage, select, prepare, and eat a nutritious diet. Improving food literacy is critical in overcoming the challenge of limited education, knowledge and skills related to dietary change.

Cooking skills and confidence plays an important role in eating a healthy diet. A study of residents in Brisbane showed that people with low levels of education and low household income (low SES) had significantly lower confidence in their abilities to cook than those of higher SES. Furthermore, lower confidence to cook was associated with less household vegetable purchasing and therefore consumption (VicHealth, 2015). There are many skills involved in preparing a healthy meal, some of which include supermarket shopping, budgeting/managing money, safe food preparation, cooking, and tasting. When people do not have these skills, changing their diet can be difficult.

Governments often invest in educational programs to try to increase the capacity for schools to improve population health knowledge. Nutrition education programs play a major role in bringing about dietary change in Australia (VicHealth, 2015). Such programs are directly aimed at:

- increasing knowledge
- changing attitudes
- influencing behaviours associated with food
- and are typically delivered in specific settings, such as within the home, schools, or workplaces.

ADDITIONAL TERMS

Culture is a multi-layered concept that encompasses the shared characteristics and behaviours of a particular group of people, including traditions, customs, language, religion, music, art, and cuisine

Religion refers to a set of beliefs, values, practices, and doctrines that are accompanied by a belief in a higher power, often in the form of a god or gods

Iron-deficiency anaemia refers to a condition in which there is a lack of healthy red blood cells, causing an individual to feel weak or fatigued

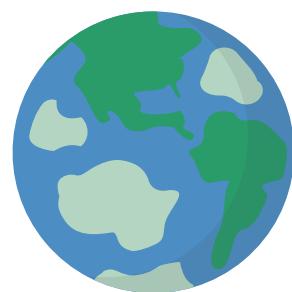


Image: Nadya_Art/Shutterstock.com

Figure 9 Culture and religion can cause challenges in bringing about dietary change

ADDITIONAL TERMS

Food literacy is the presence of knowledge, skills, and behaviours needed to plan, manage, select, prepare, and eat a nutritious diet



Image: GoodStudio/Shutterstock.com

Figure 10 Education, knowledge, and skills can cause challenges in bringing about dietary change

As you have learnt already, the National Health and Medical Research Council (NHMRC) developed and created the Australian Guide to Healthy Eating. This resource is used in schools all around Australia to educate students about how to consume adequate proportions of the five food groups each day. Along with education, governments also have control over food policies, which can make healthy eating easier for the general population. Complete activity 3 to explore how the Australian government could implement laws and regulations to help people make healthier dietary choices.

ACTIVITY 3 - CLASS DISCUSSION

Around 40 countries around the world have introduced a 'sugar tax' on drinks that contain large amounts of sugar, such as soft drinks and sports drinks (Obesity Evidence Hub, 2021). Currently, there is no 'sugar tax' in Australia that increases the price of sugary drinks.

There is significant debate about whether the Australian government should impose a tax on sugary drinks, with many health organisations calling for the introduction of a 'sugar tax' to reduce the consumption of sugary drinks, improve people's diets, and improve health outcomes in Australia.

Search '*Why Australia Needs A Sugary Drinks Tax*' on YouTube and watch the two minute and fifty-five-second video (Cancer Council Victoria, 2016). Then discuss the following questions:

- If a sugary drinks tax were to be introduced in Australia, do you think people would be more or less likely to purchase sugary drinks? Why?
- Why does the soft drink industry oppose the sugary drinks tax?
- Do you think the introduction of a sugary drinks tax in Australia will be effective in reducing sugary drink consumption among Australians? Could this make dietary change more challenging or easier?
- Do you support the introduction of a sugary drinks tax in Australia? Why or why not?



Image: yukipon/Shutterstock.com

Family, early life experiences, and peers 3.2.5.4.8

Dietary habits develop from a very early age. From infancy, a child's diet is shaped by their parents, who dictate the family's eating habits, such as where meals take place, how regularly they eat, and what types of foods they eat. If children experience early life experiences which lead to unhealthy eating habits and associations with food, it can be difficult to break these habits and change dietary behaviour. These negative early life experiences include growing up:

- in an environment where food is used as a reward or punishment.
- without positive role-models of healthy eating behaviours, such as parents.
- in an environment where children are constantly exposed to unhealthy foods and don't have access to nutrient-dense food.

One's family also plays an important role in people's ability to bring about long-lasting dietary changes. Support from families, particularly partners or parents, can influence people's ability to develop and maintain healthy eating patterns.

In the same way a family can, peers can influence people's diets. Sharing a meal with friends is very common, whether it's eating at recess and lunch in school, or going out for lunch with work colleagues. The type of food eaten when with others can be different to when a person is alone. For example, people may feel pressured to eat what other people are eating. Sometimes, peers comment on what others are eating, or comment on their own eating habits or body image, which can influence the eating habits of the people around them. These are all ways in which peer influence can make it difficult for people to bring about healthy dietary change.

Time constraints and convenience 3.2.5.4.9

For many people, time is a factor that influences their food choices. Many people believe that they do not have the time to dedicate towards preparing and cooking a healthy, homemade meal. This is particularly the case for couples or families where multiple people work full-time jobs, meaning that finding the time to cook can be perceived as unrealistic and difficult. For many, resorting to takeaway food or ready-made meals is a simple and convenient option. Therefore, time can challenge people's ability to eat healthily or change their diet.

Furthermore, the food people consume outside the home is often influenced by where they work or go to school. For example, a truck driver may have very limited options about what they eat for lunch if they only come across one fast food outlet on their drive from Sydney to Melbourne.



Image: GoodStudio /Shutterstock.com

Figure 11 Family, early life experiences, and peers can cause challenges in bringing about dietary change



Image: GoodStudio /Shutterstock.com

Figure 12 Time constraints and convenience can cause challenges in bringing about dietary change

The belief that cooking healthy meals takes a long amount of time is not necessarily true. Of course, cooking a meal takes more time than driving through McDonald's. However, many chefs and nutritionists have demonstrated that cooking healthily does not need to take large amounts of time and effort. Often, the most important thing is being prepared and having food in the house to throw together a meal. For example, Jamie Oliver (an internationally-renowned chef famous for his '15 minute meals') believes that the rise of type-2 diabetes can be stopped if people learnt how to cook fresh healthy food (International Diabetes Federation, 2012). This prompts us to discuss the role of education, knowledge, and skills in successful dietary change; if people know what a healthy meal looks like, know how to cook one, and make time to do so, they will be more likely to eat a healthier diet.

Food marketing and media 3.2.5.4.10

Commercial companies that manufacture and sell food products ultimately aim to maximise their profits. To achieve this goal, they employ **food marketing tactics**, which are strategic actions that commercial companies use to promote their food products. These food marketing tactics aim to increase awareness of their brand and draw attention to their food products so that people are more likely to purchase them. Food advertisements significantly influence people's food choices, which can make it very difficult for people to change their diet and choose healthy food options. Some food marketing tactics that commercial companies use to promote their food products and how the tactics make it difficult to bring about dietary change are summarised in table 1.

Table 1 Examples of food marketing tactics and how they make it difficult to bring about dietary change

Food marketing tactic	How does this food marketing tactic make it difficult to bring about dietary change?
Social media 	<p>Commercial food companies have infiltrated social media applications, including Facebook and Instagram, to promote their food products. They have taken advantage of the fact that people regularly use social media, and therefore are likely to see their advertisements often. Regularly seeing food advertisements, especially for unhealthy foods, can create temptation and make it difficult for people to change their diet.</p>
Influential figures 	<p>Commercial food companies often pay influential figures to promote their food products. Products that are endorsed by or associated with influential figures are more likely to be purchased and consumed by people because people who idolise and trust the influential figure form a positive perception of the brand and its food products. Research has found that the majority of celebrity endorsements of food products involve the promotion of energy-dense foods that lack nutritional value (Zhou et al., 2019). Seeing influential figures advertise foods, especially unhealthy foods, such as fast food, can make it difficult for people to not consume such foods and make healthy dietary changes.</p>
Television 	<p>Television advertisements aim to present the brand and its food products in a positive light, with exposure to these advertisements influencing people's food choices. Research has found that young people who watch 80 minutes of television each day are exposed to more than 800 television advertisements promoting unhealthy 'junk' foods each year. (Hospital And Healthcare, 2018). Television advertisements can influence people to purchase certain food products, which can make it difficult for people to avoid unhealthy foods that are promoted on television. To learn more, read the 'Want to know more?' box below titled 'If fast food commercials were honest...'.</p>
Sponsorships 	<p>Commercial food companies may provide financial support to a business or organisation in exchange for promotion of their food products as a way of gaining exposure. When, for example, sporting clubs, brands, or organisations sponsor certain food products, people may feel obliged to purchase the product. If the product is unhealthy, this can cause challenges in bringing about long-lasting dietary changes.</p>
Product packaging 	<p>Commercial food companies design their product packaging in a way that appeals to potential consumers. For example, the product packaging may be bright, colourful, engaging, and include pictures. Product packaging that is visually appealing means that people are likely to be more interested in purchasing and consuming the food product. When foods that are unhealthy are packaged in this way, people may be more likely to purchase that product, which can tempt people to choose unhealthy food options, rather than healthy food options.</p>

ADDITIONAL TERMS

Food marketing tactics are the strategic actions that commercial companies use to promote their food products.



Image: HaseHoch2/Shutterstock.com

Figure 13 Food marketing and media cause challenges in bringing about dietary change

cont'd

Table 1 Continued

Food marketing tactic	How does this food marketing tactic make it difficult to bring about dietary change?
Games and competitions 	Commercial food companies may create games and competitions that promote their food products. This food marketing tactic particularly targets youth, because young people are easily engaged by fun, interactive, and immersive games and competitions. For example, young people may be able to win prizes, collect toys, accumulate points, and enter competitions by purchasing food products. When companies create games and competitions associated with their food product, people may ignore the nutritional value of the food and focus on winning the competition or prize, which can stand in the way of people making long-lasting dietary changes. An example of this is summarised in the 'Real-world example' box below called 'McDonald's Monopoly Game'.

**Want to know more?****If fast food commercials were honest...**

Television advertisements that promote unhealthy food products may exercise deception to present their food products in a positive light. If television advertisements promoting unhealthy food products were honest, their advertisements would likely be very different.

Search '*If Fast Food Commercials Were Honest - Honest Ads (McDonald's, Burger King, Wendy's, Taco Bell)*' on YouTube and watch the three minute and forty-second video that presents a parody of a fast food advertisement (Cracked, 2015). Although this video is intended to be funny, it also has aspects of truth to it.

Consider how your perception of food products would change if food advertisements were honest.

- Do you think this would influence people's ability to make healthy food choices? For example, would you view McDonald's in the same way if their advertisements were honest?
- If someone wanted to quit their dietary habit of eating McDonald's three times a week for dinner, would honest commercials make it easier to achieve such dietary changes?

**Real world example****McDonald's Monopoly Game**

Since 1987, McDonald's has run the McDonald's Monopoly Game for around two months each year in McDonald's restaurant chains around the world.

The game, which is inspired by the traditional Monopoly board game, involves participants purchasing selected McDonald's menu items to collect tickets. These tickets may be 'instant win' tickets, which enables participants to immediately claim their prize at the counter. This prize is a McDonald's menu item that is specified on the 'instant win' ticket.

Other tickets can be collected over time. Certain ticket combinations, such as collecting one set of Monopoly properties, means that the participant wins larger prizes, such as movie tickets, retail discounts, technological devices, and cash prizes of up to \$1 million.

The McDonald's Monopoly Game has been described by political leaders as a 'grotesque marketing strategy' that is a 'danger to health' (The Guardian, 2019). This is because it uses prize incentives to motivate people, particularly youth, to purchase more unhealthy food products.



Image: Hanna Frolova/
Shutterstock.com

Figure 14 The McDonald's Monopoly Game encourages youth to purchase McDonald's food products by providing prize incentives

Individual health factors 3.2.5.4.11

The health and wellbeing of an individual can influence the food choices they make, along with their ability to change their diet or maintain a healthy diet. Food allergies, substance addiction, genetics, nutrient deficiencies, and stress are examples of factors that relate to an individual's health. These factors can affect people's food choices in different ways. In this section, we will discuss food intolerances and stress as factors related to an individual's health that can influence their ability to bring about dietary change.

Firstly, if people have food intolerances they may not be able to consume certain foods. This could compromise their ability to follow advice related to healthy eating, such as the Australian Dietary Guidelines, and consume a balanced diet. For example, approximately 5% of caucasian Australians, and 75% of non-caucasian Australians are lactose intolerant, meaning they likely avoid food products, such as milk, cheese, and yoghurt made with



Image: Studio_G/Shutterstock.com

Figure 15 Factors related to an individual's health can influence their ability to bring about dietary change

dairy (Better Health Channel, 2017). This means that these people may struggle to consume adequate amounts of dairy, and therefore may not consume enough calcium. Additionally, if these people do not know of other food sources of calcium that are not made with dairy, then they may be less likely to achieve adequate nutrient intake.

Stress also has a major impact on the foods people consume. Stress can cause changes in human behaviours that affect health behaviours. When stressed, some people eat as a form of comfort – a coping mechanism –, and others may significantly reduce their food intake. As discussed previously, some foods stimulate the brain's reward system and trigger the release of dopamine. This can cause people to eat unhealthy foods when they are feeling down, which can mean some people develop an unhealthy relationship with food. Such behaviours can impact people's abilities to make healthy dietary changes, particularly when experiencing negative emotions and stress.

ADDITIONAL TERMS

Stress is an individual's physical and psychological response to a threat or perceived threat

Theory summary

In this lesson, you have learnt about how a range of factors can act as challenges and influence people's ability to bring about dietary changes in their lives.

These challenges include:

- income and food security
- geographic location and food security
- willpower
- attitudes and beliefs
- personal preferences
- time constraints and convenience
- education, knowledge, and skills
- family, early life experiences, and peers
- culture and religion
- food marketing and media
- individual health factors.

6C QUESTIONS

Theory-review questions

Question 1

Once people decide to change their diet and eat healthily, it is easy to do so.

- A True.
B False.

Question 2

There are a range of challenges people face in bringing about dietary change, all of which are associated with the level of health literacy a person has.

- A True.
B False.

Question 3

Bringing about dietary changes can be difficult as the food one consumes is influenced by a range of factors. Which factors are involved in bringing about dietary change? (Select *all that apply*)

- I Time constraints and convenience.
II Education, knowledge, and skills.
III Individual health factors.

Question 4

Which of the following is **not** likely a factor that could influence people's ability to change their diet?

- A The level of health literacy and food literacy someone has.
- B An individual's health, such as if they experience food intolerances.
- C The speed at which fruit and vegetables grow.
- D Support one receives from family and friends.

Skills**Unpacking the case study**

Use the following information to answer Questions 5 and 6.

Raagini is 76 years old and lives alone in a country town in Victoria. Raagini has recently been diagnosed with bowel cancer. Her family is devastated by this diagnosis as Raagini has been an outgoing, independent woman and this condition will compromise her independence. As a result of her diagnosis, Raagini has had to visit the doctor, who works over 35 kilometres away in the nearest city, once a month to manage the condition and to be prescribed appropriate medication. Raagini's doctor has told her she needs to change her diet and eat more vegetables so she is consuming more fibre. Raagini lives quite far from any major supermarkets so will have to do her best to source vegetables from her local general store in the town she lives in.

Question 5

Raagini needs to change her diet. This is best indicated by the statement that

- A 'Raagini's doctor has told her she needs to change her diet and eat more vegetables...'.
- B 'Her family is devastated by this diagnosis as Raagini has been an outgoing, independent woman...'.

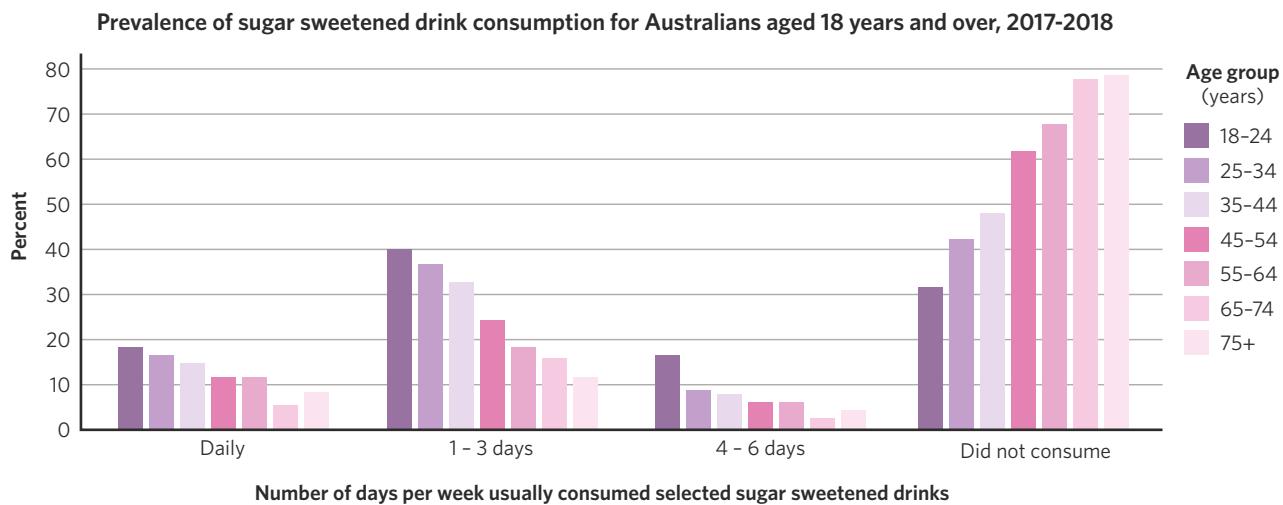
Question 6

Raagini may face some challenges in changing her diet and consuming a larger quantity of vegetables. This is best indicated by the statement that

- A 'Raagini has had to visit the doctor, who works over 35 kilometres away...'.
- B 'Raagini lives quite far from any major supermarkets so will have to do her best to source vegetables from her local general store...'.

Data analysis

Use the following information to answer Questions 7 and 8.



Source: adapted from Australian Institute of Health and Welfare, *Poor diet*, <<https://www.aihw.gov.au/reports/phe/249/poor-diet/contents/poor-diet-in-adults>>

Question 7

Who is the population of the graph?

- A Young Australians aged 17 to 18 years.
- B Australians aged 18 years and over.
- C People aged 18 years and over.

Question 8

Identify which of the following statements about the data is correct. (Select all that apply)

- I Less than 10% of Australians aged 75 years and older consumed selected sugar sweetened drinks daily in 2017-2018.
- II Approximately 38% of Australians aged 18 to 24 years consumed selected sugar sweetened drinks 1-3 days a week in 2017-2018.
- III Just under 20% of Australians aged 18 to 24 years consumed selected sugar sweetened drinks daily in 2017-2018.

Exam-style questions**Question 9** (2 MARKS)

Overall, Australian children aged 14 to 18 years:

- get 41% of their energy from discretionary foods
- get 13% of their energy from added sugars and 13% of their energy from saturated and trans fats (with the latter exceeding the 10% recommended limit)
- have an intake of sodium well above the recommended sodium intake.

Source: adapted from Australian Institute of Health and Welfare, *Nutrition across the life stages*, cat. no. PHE 227, AIHW, Canberra, 2018, p. 50

Identify and explain one challenge that Australian children aged 14 to 18 years may face that could impact their ability to make dietary changes.

Question 10 (3 MARKS)**FOOD FOR THOUGHT**

Alfred Health is an organisation that provides a range of healthcare services in Victoria through their three hospitals, and wide range of community programs. Alfred Health became a finalist in the #VHAwards Victorian public healthcare awards for their 'Food For Thought' project relating to nutrition. The project was focused on labelling their food provided in their cafes as either green, amber or red according to the product's nutritional content, empowering people to choose green; that is, choose the healthier options.



Customers continued to purchase meals at the same rate, but:



Source: adapted from Alfred Health, *Food for thought*, <<https://www.alfredhealth.org.au/images/resources/community-and-health-promo/Food-for-thought-infographic.pdf>>

Discuss one challenge people face in bringing about dietary change that the Food For Thought initiative aimed to combat.

Question 11 (4 MARKS)

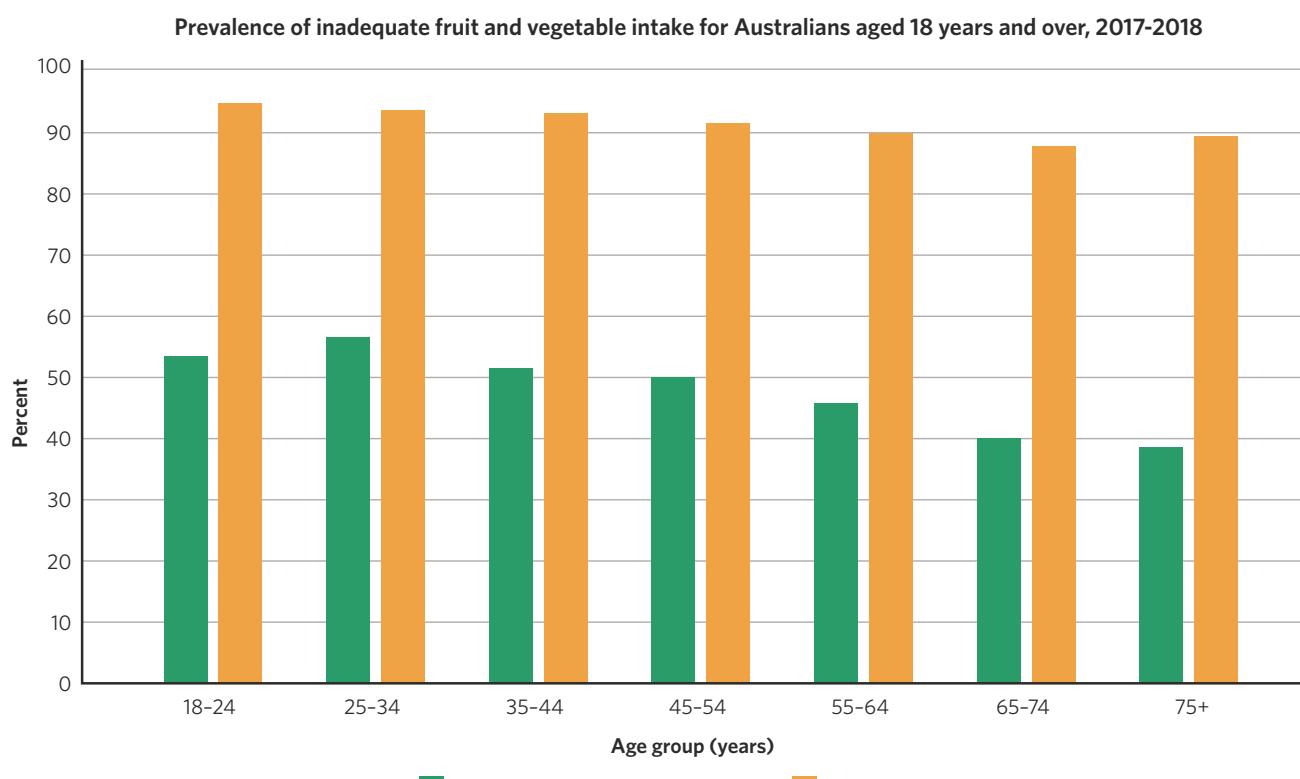
Xanthi has recently moved out of home. She finally feels like she can start to eat healthily, as what she eats is no longer being controlled by her parents. Both of Xanthi's parents have always had bad eating habits and rarely cook fresh food. For example, every Friday night, the family goes to the KFC drive through and purchases dinner. Since moving out of home, Xanthi has found it hard to cook meals for herself every day, not only because it's not what she is used to, but also because she is finding it expensive to afford an abundance of fresh food. Xanthi often thinks about how cheap KFC is when she purchases free-range chicken at the supermarket as a part of her weekly shop. Additionally, Xanthi is finding cooking every meal at home time consuming as she is studying and working to be able to pay her rent and university fees.

Discuss two challenges Xanthi is facing as she tries to change her diet.

Question 12 (4 MARKS)

Other than the challenges you discussed in question 11, explain two challenges that may impact an individual's ability to make dietary changes.

Adapted from VCAA exam 2020 Q4b

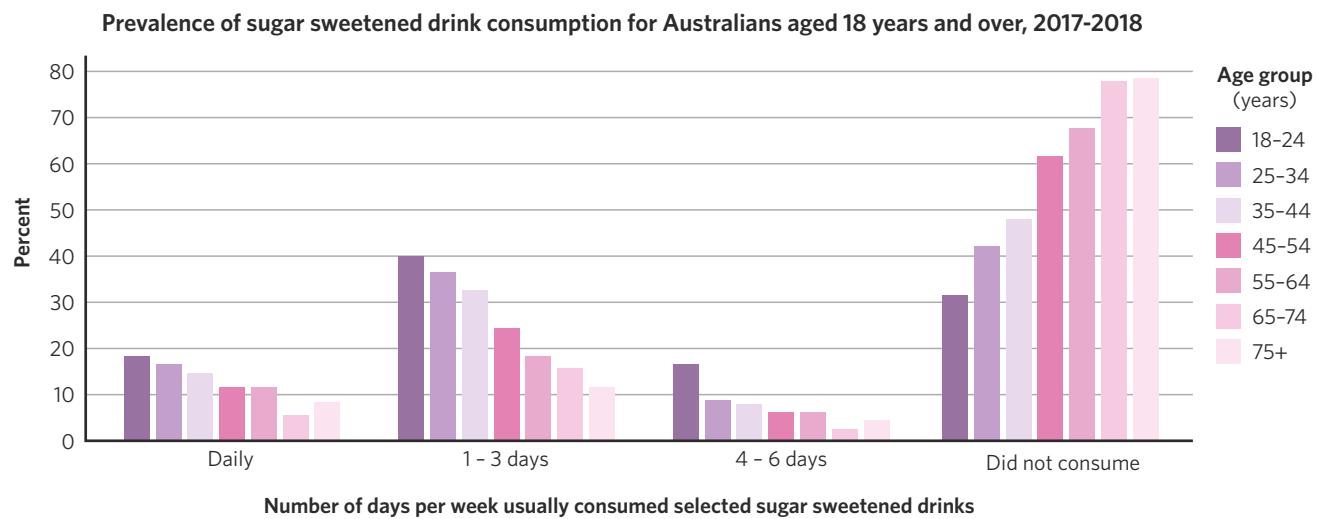
Question 13 (5 MARKS)

Source: adapted from Australian Institute of Health and Welfare, *Poor diet*, <<https://www.aihw.gov.au/reports/phe/249/poor-diet/contents/poor-diet-in-adults>>

- Using data, outline whether Australians are more likely to have an inadequate fruit intake or an inadequate vegetable intake. (2 MARKS)
- The graph indicates that across all age groups, many Australians are not consuming an adequate intake of vegetables. Discuss one challenge that people may face in increasing their consumption of vegetables. (3 MARKS)

Questions from multiple lessons

Question 14 (5 MARKS)



Source: adapted from Australian Institute of Health and Welfare, *Poor diet*, <<https://www.aihw.gov.au/reports/phe/249/poor-diet/contents/poor-diet-in-adults>>

The graph shows that just under 20% of Australians aged 18 to 24 years consumed sugar sweetened drinks daily in 2017-2018. Consuming excessive amounts of sugar sweetened drinks has negative health consequences. For people who fall into this '20%', a doctor would likely recommend that they change their diet and reduce their consumption of sugary drinks.

- a Outline what the Australian Dietary Guidelines are. (1 MARK)
- b Identify and describe which Australian Dietary Guideline best relates to the graph. (2 MARKS)
- c Identify and explain one challenge that Australians aged 18 to 24 years may face that could impact their ability to reduce their consumption of sugary drinks. (2 MARKS)

CHAPTER 6 REVIEW

CHAPTER SUMMARY

This chapter was all about nutrition in Australia. You learnt about various initiatives to promote healthy eating in Australia, as well as the challenges in bringing about dietary change.

In lesson **6A: Promoting healthy eating in Australia: Part 1**, you were introduced to two government initiatives that promote healthy eating in Australia.

Specifically, you learnt about:

- the Australian Dietary Guidelines (ADGs), which were created by the National Health and Medical Research Council (NHMRC), which is an Australian government agency
- the Australian Guide to Healthy Eating, which was also created by the NHMRC
- similarities and differences between the Australian Dietary Guidelines and the Australian Guide to Healthy Eating.

The following table summarises the five Australian Dietary Guidelines. It is important to remember the exact wording of each ADG.

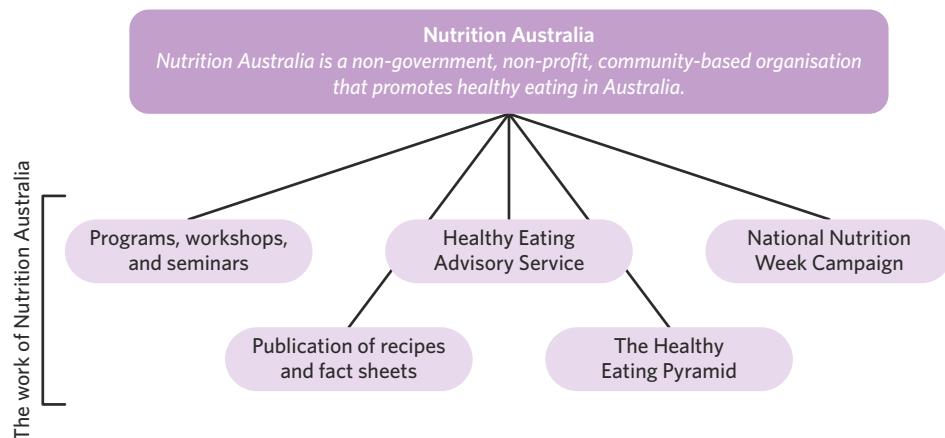
ADG 1	Achieve and maintain a healthy body weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs.
ADG 2	Enjoy a wide variety of nutritious foods from these five groups every day.
ADG 3	Limit intake of foods containing saturated fat, added salt, added sugars and alcohol.
ADG 4	Encourage, support and promote breastfeeding.
ADG 5	Care for your food; prepare and store it safely.

In lesson **6B: Promoting healthy eating in Australia: Part 2**, you learnt about Nutrition Australia, which is a non-government organisation that promotes healthy eating in Australia.

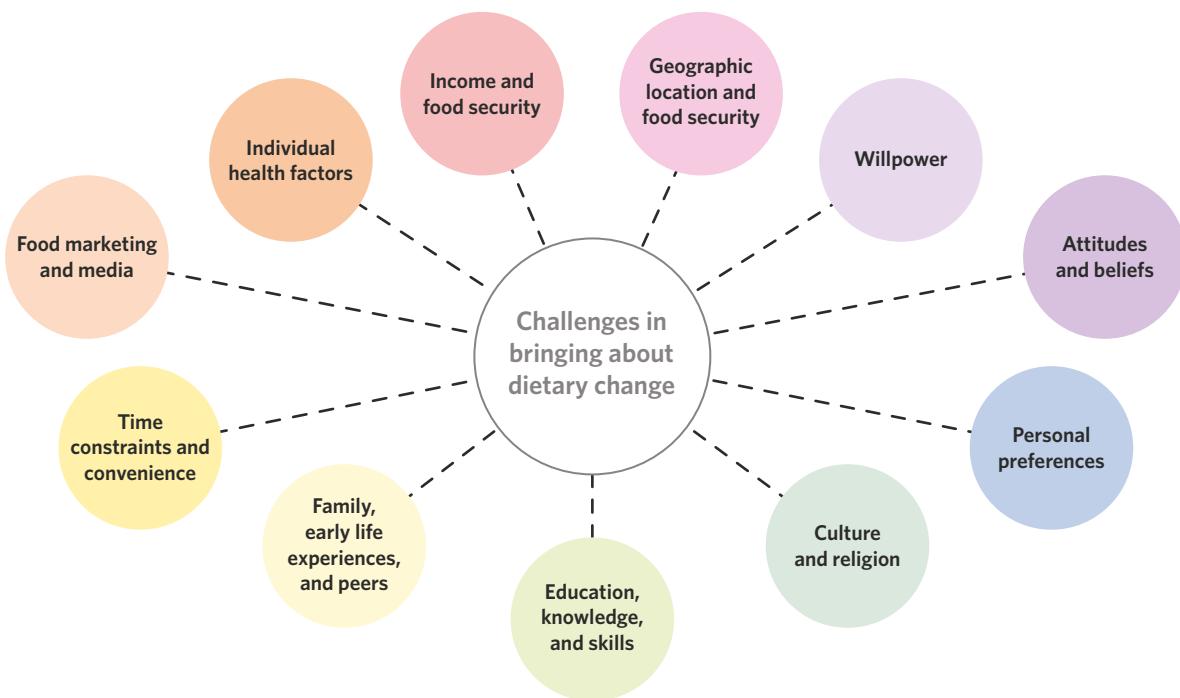
Specifically, you learnt about:

- the components of Nutrition Australia and who they work with
- the Healthy Eating Pyramid, which was developed by Nutrition Australia.

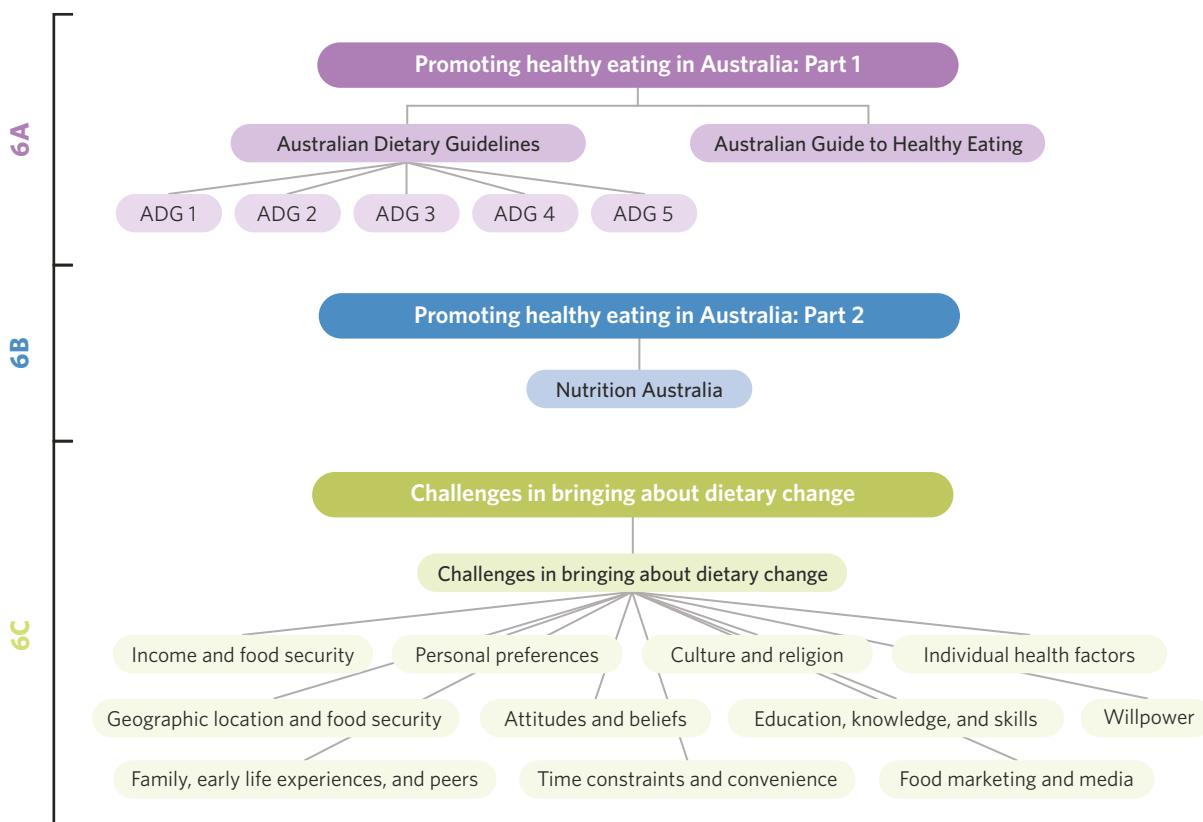
The work of Nutrition Australia is summarised in the following visual.



In lesson **6C: Challenges in bringing about dietary change**, you learnt about various reasons why Australians struggle to achieve a healthy and balanced diet. These challenges contribute to the increased prevalence of diet-related diseases, such as cardiovascular disease, type 2 diabetes, and obesity, in Australia. Challenges in bringing about dietary change are summarised in the following diagram.



Nutrition in Australia



CHAPTER REVIEW ACTIVITIES

Review activity 1: Match the term to its description

This activity focuses on linking the Australian Dietary Guidelines to their exact description. Match the Australian Dietary Guidelines on the left with the correct description on the right.

Key term	Description
ADG 1	Limit intake of foods containing saturated fat, added salt, added sugars, and alcohol.
ADG 2	Achieve and maintain a healthy body weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs.
ADG 3	Care for your food; prepare and store it safely.
ADG 4	Enjoy a wide variety of nutritious foods from these five groups every day.
ADG 5	Encourage, support and promote breastfeeding.

Review activity 2: Match the scenario to the dietary challenge

The right column of the following table describes someone struggling to achieve a healthy and balanced diet. Match each of the following challenges in bringing about dietary change to their relevant scenario.

- Geographic location and food security.
- Personal preferences.
- Time constraints and convenience.
- Willpower.
- Food marketing and media.

Challenge in bringing about dietary change	Scenario
	Adiva's favourite food is the Cadbury 'marvellous creations' chocolate. Adiva loves marvellous creations so much that she has one family block of chocolate a day. While Adiva wants to reduce how much chocolate she has to the recommended daily serving, she struggles to look past her favourite snack.
	Florence lives on a farm which is one hour away from her local supermarket. She enjoys eating fresh fruits and vegetables, however she does not purchase lots of fresh nutritious food as they go off quickly. Florence goes to the supermarket once a week as it is far away.
	Giovanni has recently landed his dream job at a top marketing agency in Melbourne. Giovanni is working intense 10 hour days, and is too busy in the morning to make breakfast. He buys lunch and dinner from fast food restaurants as this is the easiest option with his new job.
	Cameron is 42-years-old and is overweight. He is trying to choose healthier options when he is doing his supermarket shopping, however, he is always drawn to adding the bright, colourful food products that are often unhealthy to his shopping cart.
	Ginger does not like any fruits or vegetables. Every evening her parents try to sneak vegetables into her dinner, but she always notices. Her parents are worried about her not consuming any fruits and vegetables.

CHAPTER 6 TEST

Question 1 (2 MARKS)

Explain how the Australian Guide to Healthy Eating reflects ADG 2.

Question 2 (4 MARKS)

Source 1

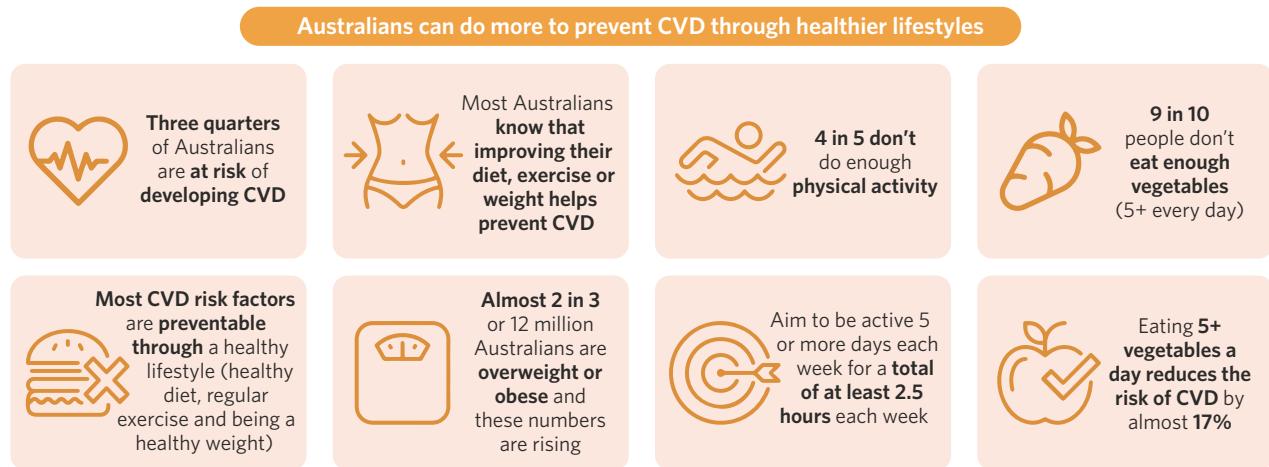


Image: hamylove/Shutterstock.com

Source: adapted from Heart Foundation, Key Statistics: Cardiovascular Disease, <<https://www.heartfoundation.org.au/activities-finding-or-opinion/key-stats-cardiovascular-disease>>

Source 2

In 2019, Australia had the sixth highest proportion of overweight or obese people aged 15 years and older among 22 OECD member countries.

Source: adapted from Australian Institute of Health and Welfare, Overweight and obesity: an interactive insight, <<https://www.aihw.gov.au/reports/overweight-obesity/overweight-and-obesity-an-interactive-insight/contents/what-is-overweight-and-obesity>>

Using the sources provided, explain how **two** challenges prevent dietary change in Australia.

Adapted from VCAA sample questions Q3

Question 3 (3 MARKS)

Describe the Australian Dietary Guidelines, and outline ADG 4 and ADG 5.

Question 4 (2 MARKS)

Nutrition Australia includes the Healthy Eating Advisory Service, which is run by experienced dietitians and nutritionists, offers a range of services to various places, including workplaces. One example of these services is employee education, including seminars, cooking classes, and one-on-one nutrition consultations. Nutrition Australia also works with workplaces in directing them to provide healthy food and drink options in the workplace.

Source: adapted from Nutrition Australia, Workplaces & organisations in Vic, <<https://nutritionaustralia.org/division/vic/workplaces-organisations-vic>>

Explain how Nutrition Australia working with Australia's workplaces may impact burden of disease in Australia.

Adapted from VCAA 2019 exam Q4a

Question 5 (4 MARKS)

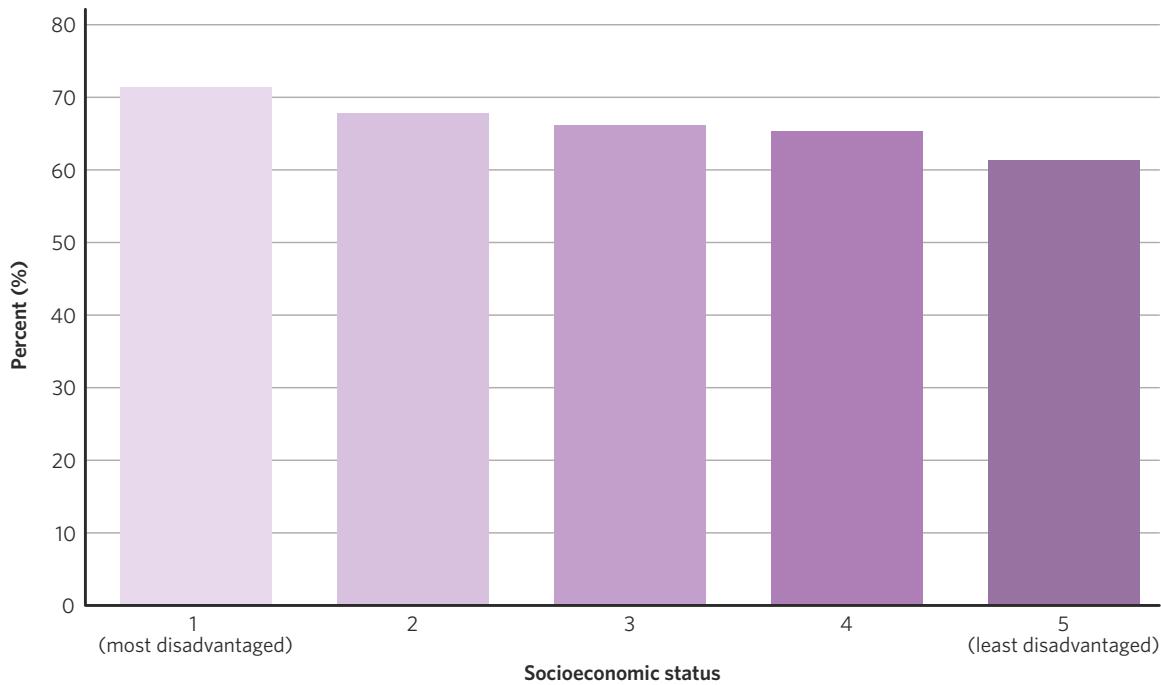
High body mass index (BMI), low levels of physical activity, and dietary risks are key risk factors of cardiovascular disease.

Explain two ways in which the Australian Dietary Guidelines could be used to decrease rates of cardiovascular disease.

Adapted from VCAA 2020 exam 3c

Question 6 (1 MARK)

Outline Nutrition Australia.

Questions from multiple chapters**Question 7** (8 MARKS)**Percentage of overweight and obese people in Australia over the age of 18 years, 2017-2018**

Source: adapted from Australian Institute of Health and Welfare, *Overweight and obesity: an interactive insight*, <<https://www.aihw.gov.au/reports/overweight-obesity/overweight-and-obesity-an-interactive-insight/contents/what-is-overweight-and-obesity>>

- a Using data from the graph, draw a comparison between the socioeconomic status subgroups in terms of the percentage of overweight and obese adults in Australia. (2 MARKS)
- b Explain how **one** sociocultural factor that could contribute to the comparison made in part a. (2 MARKS)
- c Explain how **two** Australian Dietary Guidelines could be used to promote health and wellbeing among people with a low socioeconomic status (SES). (4 MARKS)

UNIT 3 AOS 2 REVIEW

Complete the following 50 mark practice SAC, which tests all content from within Unit 3 AOS 2.

Question 1 (4 MARKS)

- Outline the Australian Guide to Healthy Eating. (1 MARK)
- Explain how the Australian Guide to Healthy Eating reflects one Australian Dietary Guideline. (2 MARKS)
- Explain one difference between the Australian Dietary Guidelines and the Australian Guide to Healthy Eating. (1 MARK)

Question 2 (10 MARKS)

- Describe Medicare. (2 MARKS)
- Describe the NDIS. (2 MARKS)
- Explain how the NDIS promotes health and wellbeing in Australia. Your response must include a discussion of access and equity. (4 MARKS)
Adapted from VCAA 2018 sample questions Q5b
- Describe how Medicare demonstrates sustainability. (2 MARKS)
Adapted from VCAA 2019 exam Q10b

Question 3 (5 MARKS)

According to the World Health Organisation (WHO), free sugars (sugars added to foods by manufacturers, chefs, cooks, or consumers, as well as sugars that are naturally present in honey, syrups, fruit juices, and fruit juice concentrates) should make up less than 10% of total energy intake. In 2015, the Director of the WHO's Department of Nutrition for Health and Development, Dr Francesco Branca, stated that the WHO has 'solid evidence that keeping the intake of free sugars to less than 10% of total energy intake reduces the risk of being overweight or obese, and tooth decay developing'.

Source: adapted from World Health Organisation, *WHO calls on countries to reduce sugars intake among adults and children*, <<https://www.who.int/news-room/detail/04-03-2015-who-calls-on-countries-to-reduce-sugars-intake-among-adults-and-children>>

- Identify how many Australian Dietary Guidelines there are. (1 MARK)
- Compare the advice from the WHO on 'free sugar consumption' with the advice provided by the Australian Guide to Healthy Eating. (2 MARKS)
Adapted from VCAA 2012 exam Section B Q4a
- Free sugars are present in many sugary drinks, such as soft drinks and fruit drinks. Identify and describe the Australian Dietary Guideline that could be used to decrease sugary drink consumption in Australia. (2 MARKS)

Question 4 (4 MARKS)

Healthier Futures Initiative: Captain Starlight

The Starlight Children's Foundation has introduced an initiative called Captain Starlight, which involves staff dressing up as the fictional character, Captain Starlight, who 'helps sick kids feel better, more confident, and puts them in a better place to deal with the pain and stress of hospital and treatment' (Starlight Children's Foundation, n. d.). The Starlight Children's Foundation also runs a program called *Healthier Futures Initiative*, whereby they bring Captain Starlight to remote Aboriginal and Torres Strait Islander communities through collaborating with healthcare professionals.

The *Healthier Futures Initiative* aims to foster a positive association with healthcare for Indigenous children by engaging with kids through fun and play. Through this initiative, Starlight aims to increase the likelihood that children are comfortable participating in the vital health checks they need. Health professionals and health care workers in these communities who worked with the private foundation, Starlight, to deliver the program reported that the initiative was very successful. Feedback included that Captain Starlight:

- was entertaining and engaging for children.
- helped provide distractions for children and their families during clinic and healthcare visits.
- allowed health professionals to be more productive by keeping children occupied and engaged during their visit.

In 2019, Captain Starlight visited 138 remote communities and every year Captain Starlight delivers over 20,000 experiences to children in remote Indigenous communities.

Source: adapted from Starlight Children's Foundation, *Healthier futures initiative*, <<https://www.starlight.org.au/about-us/what-we-do/healthier-futures-initiative>>

- a Describe how the *Healthier Futures Initiative* could improve the mental health and wellbeing of Indigenous children. (2 MARKS)
- b Explain how the *Healthier Futures Initiative* demonstrates **one** principle of the social model of health. (2 MARKS)

Question 5 (5 MARKS)

Table 1 Proportion of Australian youth aged 2 to 18 years with usual food intakes below the recommended serves (percent), by sex and food group, 2011-12

Food group	Boys	Girls
Vegetables and legumes/beans	99.6	99.7
Fruit (including dried fruit, fresh, or canned fruit and fruit juice)	53.5	54.0
Grain (cereal) foods	60.5	73.7
Lean meat and poultry, fish, eggs, nuts, and seeds and legumes/beans	92.4	98.7
Milk, yoghurt, cheese, and alternatives	80.4	79.8

Source: adapted from Australian Institute of Health and Welfare, *Australia's health 2018*, <<https://www.aihw.gov.au/reports/australias-health/australias-health-2018/contents/indicators-of-australias-health/fruit-and-vegetable-intake>>

- a Identify whether boys or girls aged 2 to 18 years were more likely to meet the recommended serves of grain foods in 2011-12. (1 MARK)
- b Using data, identify which food group was under-consumed (based on the recommended serves) by the highest proportion of the Australian youth population aged 2-18 in 2011-12. (2 MARKS)
- c This data shows that many Australians aged between 2 and 18 years do not consume the recommended serves of grain (cereal) foods. Identify and describe the Australian Dietary Guideline that could be used to increase the consumption of grain among the Australian population. (2 MARKS)

Question 6 (9 MARKS)

Smoking, road safety, and skin cancer are all target areas for health promotion in Australia. Select one of these target areas for health promotion: _____

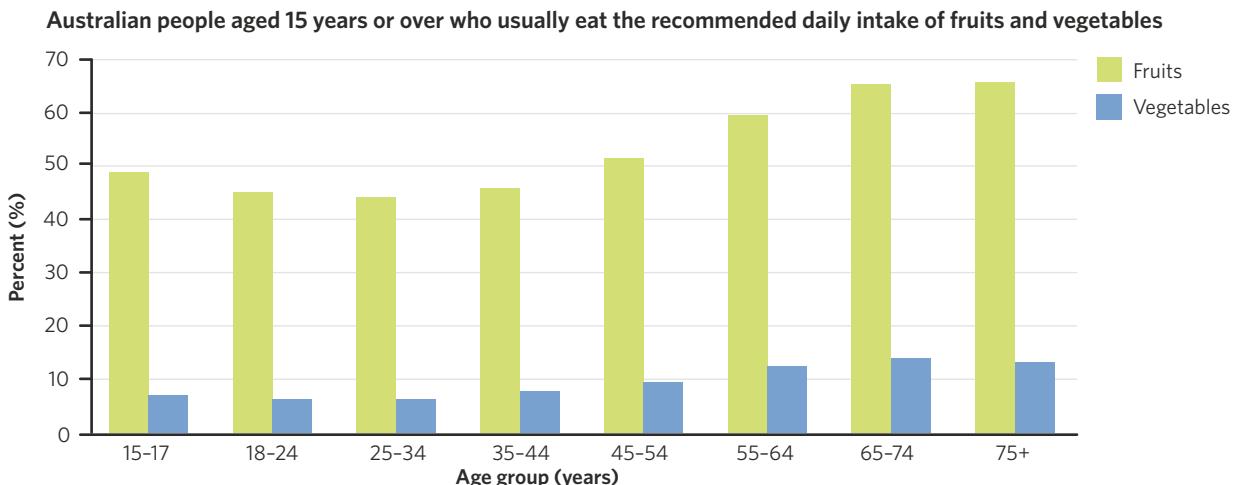
- a Outline two reasons as to why health promotion was used to target this area in Australia. (2 MARKS)

Identify a health promotion initiative that focuses on your selected target area of health promotion. _____

- b Describe how the implementation of this health promotion initiative reflects **two** action areas of the Ottawa Charter for Health Promotion. (4 MARKS)
- c Evaluate this initiative's effectiveness in bringing about improvements in population health and wellbeing. (3 MARKS)

Adapted from 2019 VCAA exam Q16c

Question 7 (5 MARKS)



Source: reproduced from Australian Institute of Health and Welfare, *Australia's welfare 2011*, <<https://doi.org/10.25816/5eba368574757>>

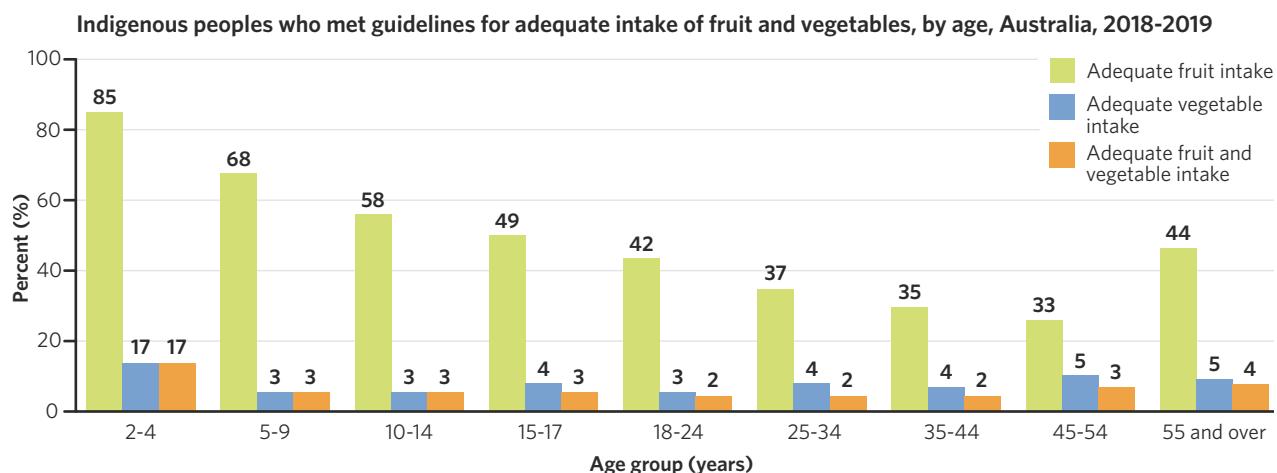
- a Identify one comparison between fruit and vegetable consumption amongst Australians aged 15 and over that is in the graph. (2 MARKS)

The graph indicates that a significant proportion of Australians do not have an adequate vegetable intake. Many also do not consume the recommended daily intake of fruit. Under-consumption of fruits and vegetables is associated with an unhealthy diet.

- b** Identify the food selection model introduced by Nutrition Australia that may help to increase the consumption of fruits and vegetables in Australia. (1 MARK)
- c** Outline how the food selection model identified in **part b** could promote health status among the Australian population. (2 MARKS)

Question 8 (8 MARKS)

Source 1



Source: adapted from Australian Institute of Health and Welfare National Indigenous Australians Agency, *Dietary behaviour*, <<https://www.indigenouspf.gov.au/measures/2-19-dietary-behaviour>>

Source 2

The following case study details a health promotion program that ran in Australia which aimed to bring about improvements in participant health outcomes. The following information details why the program was invented, what the program involved, and feedback after the program ended.

HEALInG program

HEALInG stands for Healthy Eating and Activities and Lifestyles for Indigenous Groups. The HEALInG program was an initiative that was designed to improve the health and wellbeing of Aboriginal and Torres Strait Islander people in the north coast area of New South Wales. The program was created in 2003 when Aboriginal women who were accessing another program in NSW asked for programs that involved healthy activities, such as an exercise group and healthy eating information. After the success of its pilot program in 2003, the HEALInG program was designed and prepared so that any facilitator could implement this program in their own community. This meant that the program could reach more people by taking place at the same time in many different locations. It ran multiple times until 2010.

Along with support and guidance, the Northern Rivers Area Health Service provided program facilitators with a handbook which outlined everything from an overview of the program, to costs involved in running the program, how the program was organised, and details regarding participant medical checks. The program had two main focuses: increase healthy eating and physical activity levels amongst its target group.

The HEALInG program was developed by the 'Population Health, Planning, and Performance' team from the Health Promotion Unit of Northern Rivers Area Health Service. The program was adapted from the Queensland government-run program 'Healthy Weight Program'. The HEALInG program was funded by YWCA and North Coast Health Promotion. Partners of the HEALInG program included YWCA, PAC, PCYC, and Aboriginal Medical Services.

The program ran for 10 weeks at a time for over 100 participants. The program included a one hour exercise class followed by the provision of information related to healthy eating, food preparation, and ways people could make small changes to achieve a healthier lifestyle. Program outcomes for participants included:

- increased knowledge about and practical experience with cooking healthy, budget friendly meals, and snacks
- increased nutrition literacy, including dietary guidelines, food groups, and serving sizes
- better understanding of fats, salt, and sugar
- increased knowledge on how to increase their daily physical exercise

cont'd

HEALInG program - continued

- how to read and understand food labels
- improved knowledge on food budgeting for healthy, balanced meals
- increased self-esteem and self-confidence
- increased knowledge of chronic diseases and health issues that can be positively affected by dietary change and physical exercise
- increased knowledge about behavioural risk factors for specific lifestyle diseases prevalent amongst Aboriginal communities, such as diabetes and cardiovascular disease. This resulted from sessions run by a health professional, after which every participant was given contact details for further information.

The following is feedback from participants of two HEALInG programs. These programs ran at the Child and Family Health Centre in Goonellabah, NSW and at the GurgunBulahnggelah Aboriginal Health Centre in NSW.

- 'Overall, the participants liked the program and reported that they had learned more on nutrition information and that their physical activities had increased. However, they had expressed difficulties for self and family in maintaining a healthier lifestyle due to problems in their lives, such as financial difficulties, insecure housing, unstable relationships, and other relevant personal issues' (HEALInG Program Evaluation Report, 2007).
- 'Overall, participants viewed the group in a very positive light and were waiting with anticipation for another one. As well as the health content benefits, participants felt the group was a positive social experience' (HEALInG Program evaluation report, 2007)

Source: adapted from Northern NSW Local Health District, *HEALing (Healthy Eating and Active Living Indigenous Groups)*, <<https://health-promotion.nswlhd.health.nsw.gov.au/what-we-do/program-reports/healing/>>; adapted from Alcohol and Other Drugs Knowledge Centre, *Healing program resources: Healthy eating activities Lifestyles for Indigenous groups*, <<https://aodknowledgecentre.ecu.edu.au/key-resources/publications/14900/?title=Healing%20program%20resources%3A%20Healthy%20eating%20activities%20Lifestyles%20for%20Indigenous%20groups>>

Using your knowledge and the information above, evaluate the effectiveness of the HEALInG program in bringing about dietary change and improving health outcomes for Aboriginal and Torres Strait Islander participants of the health promotion program. In your response, make reference to:

- factors to consider when evaluating a program's capacity to improve Indigenous health outcomes
- challenges in bringing about dietary change
- new public health (including the social model of health and the Ottawa Charter for Health Promotion).

UNIT

Health and human development in a global context

This unit examines health and wellbeing, and human development in a global context. Students use data to investigate health status and burden of disease in different countries, exploring factors that contribute to health inequalities between and within countries, including the physical, social and economic conditions in which people live. Students build their understanding of health in a global context through examining changes in burden of disease over time and studying the key concepts of sustainability and human development. They consider the health implications of increased

globalisation and worldwide trends relating to climate change, digital technologies, world trade and the mass movement of people. Area of Study 2 looks at global action to improve health and wellbeing and human development, focusing on the United Nations' (UN's) Sustainable Development Goals (SDGs) and the work of the World Health Organization (WHO). Students also investigate the role of non-government organisations and Australia's overseas aid program. Students evaluate the effectiveness of health initiatives and programs in a global context and reflect on their capacity to take action.

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UNIT 4

AOS1

Health and wellbeing in a global context

This area of study looks at similarities and differences in major burdens of disease in low-, middle- and high-income countries, including Australia. Students investigate a range of factors that contribute to health inequalities and study the concepts of sustainability, human development and the Human Development Index to further their understanding of health in a global context. Students consider the global reach of product marketing and inquire into the effects of particular global trends on health and wellbeing.

Outcome 1

On completion of this unit the student should be able to analyse similarities and differences in health status and burden of disease globally and the factors that contribute to differences in health and wellbeing.

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CHAPTER

7

Comparing health status and burden of disease globally

7A Classifying countries

7B Similarities and differences in health status and burden of disease globally

7C Factors affecting health status and burden of disease

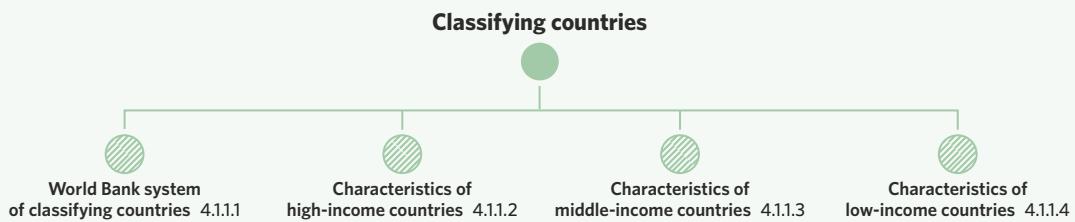
Key knowledge

- characteristics of high-, middle- and low-income countries
- similarities and differences in health status and burden of disease in low-, middle- and high-income countries, including Australia
- factors that contribute to similarities and differences in health status and burden of disease, including access to safe water; sanitation; poverty; inequality and discrimination (race, religion, sex, sexual orientation and gender identity); and global distribution and marketing of tobacco, alcohol and processed foods

7A CLASSIFYING COUNTRIES

All countries around the world have varied economic, social, and environmental conditions. How, then, are these countries with such varied backgrounds classified and compared? In this lesson, you will be looking at the World Bank system of classifying countries as either high-, middle-, or low-income. You will also learn about the different economic, social, and environmental characteristics of each.

7A Classifying countries	7B Similarities and differences in health status and burden of disease globally	7C Factors affecting health status and burden of disease
Study design dot point		
<ul style="list-style-type: none"> characteristics of high-, middle- and low-income countries 		
Key knowledge units		
World Bank system of classifying countries		4.1.1.1
Characteristics of high-income countries		4.1.1.2
Characteristics of middle-income countries		4.1.1.3
Characteristics of low-income countries		4.1.1.4



World Bank system of classifying countries 4.1.1.1

OVERVIEW

There are many different methods of classifying and comparing countries. One of these methods is the World Bank system, which classifies countries according to their yearly gross national income (GNI) per capita.

THEORY DETAILS

! Useful tip

The World Bank updates their thresholds for classifying countries every fiscal year, beginning on July 1st. The World Bank thresholds for the 2021 fiscal year (July 2020 to July 2021) have been used throughout this lesson. This means that these thresholds would have been revised when you are reviewing this lesson. However, what is most important for this lesson is that you broadly understand the values of the World Bank thresholds and can identify the classification of countries that clearly fall into each category. That being said, to see the updated World Bank thresholds for classifying countries, type the URL datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups into your browser (The World Bank Group, n.d.).

The World Bank classifies countries as either high-income, middle-income, or low-income. These thresholds are updated annually at the beginning of the World Bank's fiscal year, which begins July 1st. Countries are assigned to the different-income groupings based on the estimate of their **gross national income (GNI) per capita** of the previous year. GNI per capita refers to the income of all residents from a country divided by its population, giving an average income for a single person of that country. This is visualised in figure 1.

KEY DEFINITIONS

Gross national income (GNI) per capita refers to the income of all residents from a country divided by its population, giving an average income for a single person of that country



Image: chrupka/Shutterstock.com

Figure 1 The calculation of gross national income per capita

GNI is converted into United States dollars (USD) so that the currency is consistent across all countries and can therefore be compared reliably. For the 2021 fiscal year (i.e. from July 2020 to July 2021), the thresholds for the different income groups are as follows:

- **High-income countries:** \$12,536 or more, such as Australia and Denmark
- **Middle-income countries:** \$1,036-\$12,535, such as Indonesia and Brazil
- **Low-income countries:** \$1,035 or less, such as Uganda and Togo

(The World Bank Group, 2020)

KEY DEFINITIONS

High-income countries

are countries with a gross national income (GNI) per capita of \$12,536 USD or more as defined by the World Bank for the 2021 fiscal year

Middle-income countries

are countries with a gross national income (GNI) per capita between \$1,036-\$12,535 USD as defined by the World Bank for the 2021 fiscal year

Low-income countries

are countries with a gross national income (GNI) per capita of \$1,035 or less as defined by the World Bank for the 2021 fiscal year

! Useful tip

Remember to include 'per capita' in your responses when discussing gross national income to ensure that you are referring to an average income for a single citizen of a country. This is what is used by the World Bank for their classification system.

Want to know more?

The World Bank breaks up middle-income countries into lower-middle and upper-middle countries. For the World Bank's 2021 fiscal year, lower middle-income countries have a GNI per capita between \$1,036 and \$4,045 USD and upper middle-income countries have a GNI per capita between \$4,046 and \$12,535 USD. The World Bank also uses its *Atlas* method to convert local currencies to USD while avoiding the fluctuation of simple exchange rates. If you'd like to learn more about the *Atlas* method, or the World Bank's system of classifying countries more broadly, head to the following summaries:

- **The World Bank's system of classifying countries:** Type the URL datahelpdesk.worldbank.org/knowledgebase/articles/378834-how-does-the-world-bank-classify-countries into your browser (The World Bank Group, n.d.)
- **The World Bank Atlas method:** Type the URL datahelpdesk.worldbank.org/knowledgebase/articles/378832-what-is-the-world-bank-atlas-method into your browser (The World Bank Group, n.d.)

High \$12,536 or more
Middle \$1,036 - \$12,535
Low \$1,035 or less
Classification of country

Figure 2 The World Bank classification of countries

ACTIVITY 1

Identify the classification of at least five countries in the following world map that shows the current income allocation of countries by the World Bank (The World Bank Group, n.d.). For example, it is clear on the map that Australia is a high-income country since the key shows that high-income countries are coloured red.

To zoom in on each country and have a greater look at the map, go to the link: datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html

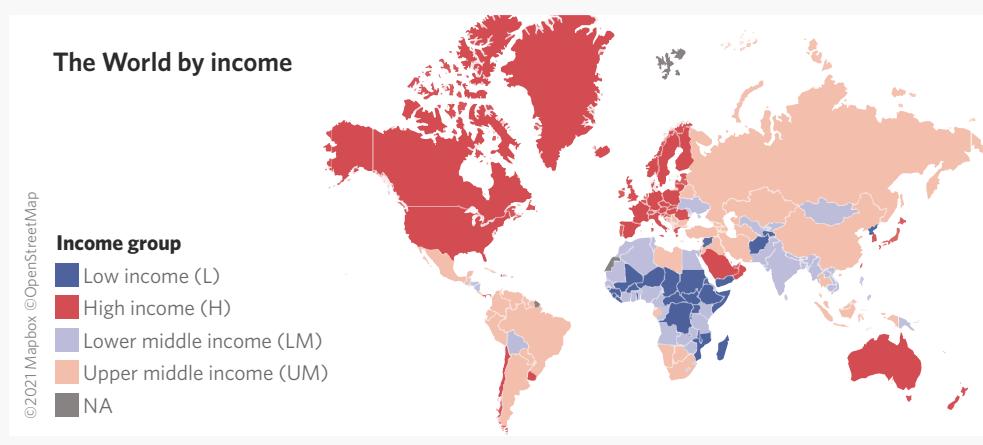


Image from WorldBank.org

Characteristics of high-income countries 4.1.1.2

OVERVIEW

Countries from different income groups can also be compared according to their different economic, social, and environmental characteristics.

THEORY DETAILS

Economic characteristics

Economic characteristics refer to financial conditions as determined by the production, distribution, and consumption of goods and services. There are a range of economic characteristics that are consistent across high-income countries, which are outlined in table 1.

Table 1 Economic characteristics of high-income countries

Characteristic	Description
High average incomes	As already mentioned, the World Bank classifies high-income countries according to a gross national income (GNI) per capita of \$12,536 USD or more. A high average income is therefore itself an economic characteristic of high-income countries.
Low levels of debt	High-income countries often have low levels of debt owed to other countries or organisations. This ensures that money can be invested into other domains, such as infrastructure, education, or employment, which will continue to ensure that citizens have access to more employment opportunities and continue to contribute to their national economy.
A wide range of trade opportunities	High-income countries often have a wide range of opportunities for global trade because they have established many trade partnerships. They also often have more goods and services to trade since they have a wide range of industries and don't just rely on agriculture for trade opportunities. This ensures that there is an opportunity for high-income countries to generate profit from exporting goods overseas. Through establishing multiple trade relationships, high-income countries are able to rely on trade as a source of income even if disruptions (such as a natural disaster, political conflict, resource shortages, etc.) with some trade partners occur.
Low levels of poverty	The World Bank defines extreme poverty as living on \$1.90 USD or less a day (The World Bank Group, 2015). Although there is always a disparity in income between citizens in all countries, with higher average incomes and opportunities for welfare support, high-income countries are able to decrease rates of poverty within their populations.
Wide range of industries	Having a wide range of industries ensures that high-income countries have multiple industries which provide them with economic resources, rather than just one or two. If one of the industries of a high-income country is damaged or can no longer operate (such as through a natural disaster or changing trade relationships with another country), then they will still be economically stable as they have other industries that they can still rely on.

Study design key skills dot point

The following key skills dot point applies to the rest of the lesson:

- describe characteristics of high-, middle- and low-income countries

KEY DEFINITIONS

Economic characteristics refer to financial conditions as determined by the production, distribution, and consumption of goods and services

KEY DEFINITIONS

Extreme poverty refers to living on \$1.90 USD or less a day as defined by the World Bank

Social characteristics

Social characteristics refer to the collective conditions and values that people maintain in their country. There are a range of different social characteristics of high-income countries. Key social characteristics of high-income countries are outlined in table 2.

Table 2 Social characteristics of high-income countries

Characteristic	Description
High levels of employment	High-income countries often have a wide range of industries and low birth rates, which ensures that there are a variety of employment opportunities available for most citizens.
High levels of education	High-income countries are often able to fund the construction and operation costs of schools, ensuring that education is available at limited costs for families and students. Also, since people living in high-income countries often have high average incomes, families are more likely to be able to afford school fees.
Social support systems	High-income countries often use their financial resources to support citizens who are struggling to find work and generate a sustainable income, such as those suffering from illness, disability, or injury, through avenues such as government and non-government initiatives.
Low birth rates	Low birth rates ensure that a country does not become overpopulated. This, in turn, makes unemployment less likely, given that there is a more manageable number of people to transition into the workforce. Low birth rates are therefore closely linked to high employment rates and therefore higher average incomes. Low birth rates also decrease pressure on the healthcare and education systems.
A developed healthcare system	A developed healthcare system ensures that people living in high-income countries are able to get medical support in the case of illness or disease. A developed healthcare system is therefore a social characteristic given that it relates to a country's values about its citizens' collective access to medical support. Having a developed healthcare system often characterises a country as high-income because it demonstrates that the country can afford to subsidise certain healthcare services, or that its citizens have the high-average incomes often required to afford access to a developed private healthcare system.
Access to technology	People living in high-income countries are more likely to be able to afford the expenses of accessing technology. These expenses include technological equipment, such as computers and smartphones, as well as the additional costs of installing broadband (high-speed) internet services. Technology such as electricity grids and power sources in high-income countries also ensure that people can have access to heating and cooling.
Developed legal and political systems	Developed legal and political systems ensure that a country is able to develop and pass legislation that can promote the future economic growth of a country, therefore representing a social characteristic of high-income countries. This also means that countries can pass laws to distribute their budgets and services to help the people within the community.
Being less likely to have a history of colonialism	Colonialism refers to a country's ownership being succeeded, often by force, by another country to become a part of its empire. A history of colonialism can have a lasting legacy on a country's political and economic systems. High-income countries are therefore less likely to have a history of colonialism, which can stunt economic growth by making it more difficult to create new trade relationships and national industries once a country becomes independent from colonisers and has to reorganise its new economy.

KEY DEFINITIONS

Social characteristics refer to the collective conditions and values that people maintain in their country

ADDITIONAL TERMS

Colonialism refers to a country's ownership being succeeded, often by force, by another country to become a part of its empire

Environmental characteristics

Environmental characteristics refer to the conditions of the physical surroundings that people inhabit. The environment one is surrounded by can reflect the income-level of the country that they live in. The varying environmental characteristics of high-income countries are outlined in table 3.

Table 3 Environmental characteristics of high-income countries

Characteristic	Description
Adequate infrastructure	High-income countries can often afford the expenses of building and repairing infrastructure, such as roads, hospitals, and schools. Infrastructure in these countries also often has to meet strict safety standards set and monitored by external bodies.
Adequate housing	With higher average incomes, people living in high-income countries can often afford and sustain safe housing.
Access to safe water	Safe drinking water often requires the expense of various technologies and processes. For example, safe drinking water requires infrastructure such as water tanks and wells to safely store water. Additionally, fluoride and chlorine are often added to safe water sources to ensure the water is clean and protects dental health. Access to safe drinking water throughout a whole country also required extensive plumbing. As such, access to safe water for all citizens is a characteristic of high-income countries that can afford all these various expenses.
Access to sanitation	High-income countries are more likely to be able to afford the expenses required to ensure that sanitation services are accessible to all of their citizens, regardless of geographic position. This includes flushing toilets, which ensure hygienic separation from human excrement and prevent infectious diseases such as cholera and dysentery.
Access to food	Access to food requires environmental conditions such as a comprehensive distribution of supermarkets across a whole country, as well as transport services that contribute to an efficient supply chain. This means that food can be quickly transported to stores where it is accessible for purchasing, marking it an environmental characteristic of high-income countries.
Agricultural productivity	Productive farming relies on various technologies in the physical environment, such as irrigation (a controlled supply of water to crops to promote growth), safe roads and bridges, and tractors to ensure efficient travel across agricultural land. A high-average income for people working within the agricultural industry is therefore often required to afford these expenses. Therefore, high-income countries both promote and benefit from agricultural productivity as an environmental characteristic.

KEY DEFINITIONS

Environmental characteristics refer to the conditions of the physical surroundings that people inhabit

! Useful tip

It is important to remember that the characteristics outlined for each classification of countries are not prescriptive. Countries in each level of classification are likely to have some or most of the characteristics outlined for countries with their classification, but there are exceptions to this and it is unlikely that countries will have all characteristics. For example, although Australia is a high-income country that has characteristics such as access to sanitation, a developed healthcare system, and a wide range of industries, it also has a history of colonisation which is often considered as a common characteristic of low-income countries.

Characteristics of middle-income countries 4.1.1.3

OVERVIEW

As with high-income countries, middle-income countries have a range of economic, social, and environmental characteristics. Generally, middle-income countries are transitioning towards achieving similar economic, social, and environmental conditions to what has already been achieved by high-income countries.

! Useful tip

When discussing the characteristics of middle-income countries, it is important to use language such as 'transitioning towards' in order to signify to your teacher or examiner that you understand how middle-income countries do not share the same characteristics as high-income countries, but rather are aiming towards their economic, social, and environmental conditions.

THEORY DETAILS

Economic characteristics

Middle-income countries are transitioning towards achieving the same economic conditions as high-income countries. As with high-income countries, average income can be used as a characteristic that classifies countries as middle-income. As discussed previously, the World Bank classifies a country as middle-income if they have a gross national income (GNI) per capita between \$1,036–12,535 USD. A moderate average income is therefore an economic characteristic of middle-income countries.

Middle-income countries may also be directing efforts towards boosting their economy, such as by increasing the range of national industries that inform their **gross domestic product (GDP)**, which refers to the complete sum of value produced by a country's goods and services over a particular period of time. While the economy of middle-income countries may be reliant on a moderate range of industries, middle-income countries are often introducing new industries so that their economy is less reliant on a select range of industries, such as tourism. This means that if an unprecedented global event, such as a pandemic, impairs the operations of a particular industry, they have other industries that could still operate effectively and ensure that their GDP is not significantly impaired.

Economic characteristics of middle-income countries include:

- moderate average incomes
- a moderate range of national industries
- transitioning towards low levels of debt
- transitioning towards greater opportunities for global trade
- transitioning towards low levels of poverty.

Social characteristics

Middle-income countries are likewise transitioning towards achieving the social characteristics of high-income countries. For example, while they may not yet have total access to education across all socio-economic groups, middle-income countries are often seeking to make education accessible to all, such as by building schools in remote areas or decreasing the cost of attending school or university. Likewise, by transitioning towards higher average incomes, more people are able to afford the costs, particularly of **tertiary education**, which refers to education that is accessed after secondary schooling. The same principle applies to employment, with middle-income countries often seeking to improve employment rates.

Social characteristics of middle-income countries include:

- transitioning towards high levels of employment
- transitioning towards high levels of education
- increasing social support systems
- transitioning towards lower birth rates
- transitioning towards a developed healthcare system
- transitioning towards greater access to technology
- transitioning towards developed legal and political systems.

ADDITIONAL TERMS

Gross domestic product (GDP) refers to the complete sum of value produced by a country's goods and services over a particular period of time

ADDITIONAL TERMS

Tertiary education refers to education that is accessed after secondary schooling

Environmental characteristics

Middle-income countries are also seeking to improve their environmental conditions to meet that which has already been achieved by high-income countries. This could include, for example, increasing national expenditure on road-works to improve the quality of roads for drivers across the country, particularly in more remote areas.

Environmental characteristics of middle-income countries include:

- transitioning towards adequate infrastructure
- transitioning towards complete access to clean water for all citizens
- transitioning towards complete access to sanitation for all citizens
- transitioning towards greater access to food for all citizens
- transitioning towards an increase in agricultural productivity.

Characteristics of low-income countries 4.1.1.4

OVERVIEW

Low-income countries likewise have a range of economic, social, and environmental characteristics. The economic, social, and environmental conditions of low-income countries are often the opposite to those of high-income countries.

THEORY DETAILS

Economic characteristics

As has been discussed with high- and middle-income countries, average incomes are a key economic characteristic. Low-income countries, as the title indeed suggests, have low average incomes, defined by the World Bank as a gross national income (GNI) per capita of \$1,035 USD or less.

Economic characteristics of low-income countries include:

- low average incomes
- high levels of debt
- few opportunities for global trade
- high levels of poverty
- a narrow range of national industries.

Social characteristics

Low-income countries are often faced with challenging social conditions. For example, low-income countries may not have complete access to technology, given the expense of purchasing technological equipment and setting up broadband (high-speed) internet services. This has many implications for other social conditions, such as making it more difficult for low-income countries to access education and healthcare services. People living in more remote areas of low-income countries may have to travel significant distances to reach hospitals or seek medical help, and if someone falls ill or suffers a serious injury, this may prevent them from getting medical support altogether.

This emphasises the need to ensure that technology, such as computers and phones with a broadband internet connection, reach remote areas of low-income countries so that people living in these areas can access medical advice without the burden of travel distance.

Social characteristics of low-income countries include:

- inadequate access to technology
- inadequate access to education
- inadequate access to employment
- inadequate social support systems
- high birth rates
- an underdeveloped healthcare system
- underdeveloped legal and political systems
- being more likely to have a history of colonialism.



Real world example

Another social characteristic of low-income countries is a history of colonialism. A history of colonialism is often considered a social characteristic of low-income countries given that it dictates how the country and its institutions are run. Since colonised countries did or do not have independence over their industries and trade relationships with other countries, their progress toward independence is often met with the challenge of rebuilding their social and economic systems. Haiti, for example, was originally colonised by Spain after it was discovered by Christopher Columbus in 1492, and then was eventually succeeded by the French in 1665 (Britannica, 2020). During the colonial rulings of Haiti, slavery was the dominant institution, with slaves being imported from Africa where they were made to work in fields, as household servants, or on sugar mills. As a result, the exploitation of Haitian slave labour was used to strengthen France's economy.

The Haitian revolution took place from 1791 to 1804 between Haitian slaves and the armies of the French and British colonists, with Haiti declaring independence in 1804 (Britannica, 2020). However, France would not recognise Haiti's independence until a payment of 150 million francs was met as a compensation for their lost revenues through Haitian slave labour (Daut, 2020). This was reduced to 60 million francs in 1838, but Haiti was required to take out a series of loans from French banks throughout the process of repaying these debts, which were not repaid until 1947 (Daut, 2020). This economic burden meant that Haiti was unable to use its revenue to develop new industries, education systems, and healthcare infrastructure. In 2019, Haiti recorded a gross national income (GNI) per capita of \$1,330 USD, meeting the threshold for a lower middle-income country (The World Bank Group, n.d.). However, it is clear to see from the case study of Haiti's independence how the social conditions of colonialism have a legacy, regardless of any eventual independence, long into the future.

Environmental characteristics

Low-income countries are likewise often faced with challenging environmental conditions. For example, low-income countries often do not have access to safe drinking water for all of their citizens. The infrastructure required to access safe drinking water, such as wells and piped water, may be too expensive for low-income countries to distribute across the whole country. This can leave some communities without this infrastructure, either being unable to access clean surface water or having to travel significant distances to reach a clean water source.

Environmental characteristics of low-income countries include:

- inadequate access to safe drinking water
- inadequate infrastructure
- inadequate access to sanitation
- inadequate access to food
- inadequate agricultural productivity.

Theory summary

In this lesson, you have learnt about the world bank system of classifying countries as either low-, middle-, or high-income. The thresholds for the 2021 fiscal year are as follows:

- High-income countries: \$12,536 USD or more.
- Middle-income countries: \$1,036-\$12,535 USD.
- Low-income countries: \$1,035 USD or less.

You have also learnt about the economic, social, and environmental characteristics of high-, middle-, and low-income countries. These characteristics are summarised in table 4. Table 4 presents many characteristics, but they represent the same characteristics, just achieved to different extents across each income classification.

Table 4 Characteristics of high-, middle-, and low-income countries

	Economic characteristics	Social characteristics	Environmental characteristics
High-income countries	<ul style="list-style-type: none"> • high average incomes • low levels of debt • a wide range of trade opportunities • low levels of poverty • a wide range of industries 	<ul style="list-style-type: none"> • high levels of employment • high levels of education • social support systems • low birth rates • a developed healthcare system • access to technology • developed legal and political systems • being less likely to have a history of colonialism 	<ul style="list-style-type: none"> • adequate infrastructure • adequate housing • access to safe drinking water • access to sanitation • access to food • agricultural productivity
Middle-income countries	<ul style="list-style-type: none"> • moderate average incomes • transitioning towards low levels of debt • transitioning towards greater opportunities for global trade • transitioning towards low levels of poverty • a moderate range of national industries 	<ul style="list-style-type: none"> • transitioning towards high levels of employment • transitioning towards high levels of education • increasing social support systems • transitioning towards lower birth rates • transitioning towards a developed healthcare system • transitioning towards greater access to technology • transitioning towards developed legal and political systems 	<ul style="list-style-type: none"> • transitioning towards adequate infrastructure • transitioning towards complete access to clean water for all citizens • transitioning towards complete access to sanitation for all citizens • transitioning towards greater access to food for all citizens • transitioning towards an increase in agricultural productivity
Low-income countries	<ul style="list-style-type: none"> • low average incomes • high levels of debt • few opportunities for global trade • high levels of poverty • a narrow range of national industries 	<ul style="list-style-type: none"> • inadequate access to employment • inadequate access to education • inadequate social support systems • high birth rates • an underdeveloped healthcare system • inadequate access to technology • underdeveloped legal and political systems • being more likely to have a history of colonialism 	<ul style="list-style-type: none"> • inadequate infrastructure • inadequate access to safe drinking water • inadequate access to sanitation • inadequate access to food • inadequate agricultural productivity

7A QUESTIONS

Theory-review questions

Question 1

The World Bank uses gross national income (GNI) per capita to classify countries as either high-, middle-, or low-income. What does GNI per capita measure?

- A The average annual income per person in a country's population.
- B The total sum of a population's income.

Question 2

Which of the following are economic characteristics of high-income countries? (Select all that apply)

- I Opportunities for global trade.
- II Developed legal systems.
- III High average incomes.

Question 3

Environmental characteristics of middle-income countries include transitioning towards gaining greater access to safe water and developing adequate infrastructure.

- A True.
- B False.

Question 4

Which of the following best fills in the blank?

- A low-income countries
- B high-income countries

Social characteristics of _____ include low levels of employment and education.

Question 5

What kind of characteristics are commonly used to distinguish between high-, low-, and middle-income countries? (Select all that apply)

- I Economic.
- II Social.
- III Environmental.

Skills**Unpacking the case study**

Use the following information to answer Questions 6 and 7.

Tracy and Joseph have recently returned from a holiday around the world. During their trip, they visited low-, middle-, and high-income countries. Upon returning home, Tracy reflected on their trip and concluded that the high-income countries that they visited could be classified by gross national income (GNI) per capita. By contrast, Joseph believed that high-income countries could also be classified by other characteristics, such as high levels of education and adequate housing.

Question 6

Tracy identifying an economic characteristic of high-income countries is reflected by the statement that

- A 'high-income countries could also be classified by other characteristics, such as high levels of education'.
- B 'the high-income countries that they visited could be classified by gross national income (GNI) per capita'.

Question 7

Joseph identifying a social characteristic of high-income countries is reflected by the statement that

- A 'high-income countries could also be classified by other characteristics, such as high levels of education'.
- B 'high-income countries could also be classified by other characteristics, such as ... adequate housing'.

Question 8

Joseph identifying an environmental characteristic of high-income countries is reflected by the statement that

- A 'high-income countries could also be classified by other characteristics, such as high levels of education'.
- B 'high-income countries could also be classified by other characteristics, such as ... adequate housing'.

Exam-style questions

Question 9 (2 MARKS)

Outline **two** characteristics of a high-income country.

Adapted from VCAA 2020 exam Q9a

Question 10 (2 MARKS)

Identify **one** environmental characteristic and explain how it could be used to classify a country as high-income.

Question 11 (4 MARKS)

Describe **two** characteristics of a middle-income country.

Question 12 (4 MARKS)

Identify **two** economic characteristics and describe how they would be different for high-income and low-income countries.

Question 13 (4 MARKS)

Country	Most recent year	Most recent value (GNI per capita in USD)
Cameroon	2019	1,500
Canada	2019	46,370
Cayman Islands	2017	47,320
Central African Republic	2019	520

Source: adapted from The World Bank, *GNI per capita, Atlas method (current US\$)*, <<https://data.worldbank.org/indicator/NY.GNP.PCAP.CD?view=chart>>

- a Identify one country that would be considered a low-income country and use data from the table to justify your response.

(2 MARKS)

Adapted from VCAA 2020 exam Q10a

- b Identify one high-income country from the table and describe one social characteristic that it might display. (2 MARKS)

Question 14 (4 MARKS)

Describe how **two** social characteristics of high-income countries can promote spiritual health and wellbeing.

Question 15 (4 MARKS)

Identify **two** environmental characteristics and describe how they can improve the health status of people living in high-income countries.

Questions from multiple lessons

Question 16 (2 MARKS)

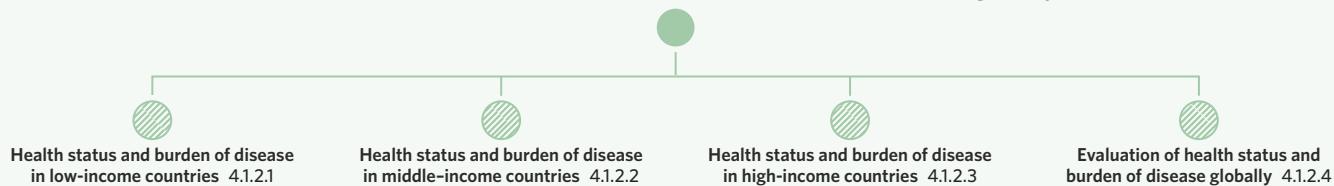
Identify one prerequisite for health and describe how it could be used as an environmental characteristic of high-income countries.

7B SIMILARITIES AND DIFFERENCES IN HEALTH STATUS AND BURDEN OF DISEASE GLOBALLY

In this lesson, you will be looking at the similarities and differences in health status and burden of disease in low-, middle-, and high-income countries, including Australia. This involves having a look at global health status and burden of disease, and pointing out where similarities and differences occur across the different income thresholds. In the next lesson, you will analyse the factors that contribute to these similarities and differences.

7A Classifying countries	7B Similarities and differences in health status and burden of disease globally	7C Factors affecting health status and burden of disease
Study design dot point		
• similarities and differences in health status and burden of disease in low-, middle- and high-income countries, including Australia		
Key knowledge units		
Health status and burden of disease in low-income countries Health status and burden of disease in middle-income countries Health status and burden of disease in high-income countries Evaluation of health status and burden of disease globally		
4.1.2.1 4.1.2.2 4.1.2.3 4.1.2.4		

Similarities and differences in health status and burden of disease globally



Health status and burden of disease in low-income countries 4.1.2.1

OVERVIEW

Generally speaking, low-income countries have amongst the poorest health status and highest burden of disease globally. To illustrate this, we will be examining Togo's life expectancy, maternal mortality rates, health-adjusted life expectancy (HALE), and burden of disease from HIV. Bear in mind, however, that these are not the only health status indicators that are used to analyse similarities and differences between countries.

THEORY DETAILS

There are many different health status indicators that illustrate that low-income countries have the poorest health status in the world. This includes **life expectancy**, which measures the number of years a person is expected to live, on the basis that current health conditions do not change. Low-income countries typically have a life expectancy of around 60 years, although there is, of course, variations between different low-income countries.

To illustrate how low-income countries have low life expectancy, table 1 presents Togo's life expectancy from 2000-2019. Togo is a low-income country, located in West Africa, which recorded a gross national income (GNI) per capita of \$690 USD in 2019 (The World Bank Group, n. d.).

KEY DEFINITIONS

Life expectancy measures the number of years a person is expected to live, on the basis that current health conditions do not change

Table 1 Togo's life expectancy (World Health Organisation [WHO], 2021)

	Life expectancy at birth (years)			Life expectancy at 60 (years)		
	Both sexes	Male	Female	Both sexes	Male	Female
2019	64.27	61.52	67.23	17.03	15.44	18.65
2015	61.92	59.24	64.83	16.49	14.79	18.27
2010	59.33	57.04	61.83	15.93	14.15	17.82
2000	55.95	53.9	58.13	15.68	14.05	17.35

Observe how, in 2019, Togo's life expectancy at birth for both sexes was 64.27 years, yet is 17.03 years at age 60. This means that people who live to the age of 60 in Togo are expected to live for 17.03 more years, to the age of 77.03. The difference between life expectancy at birth and life expectancy at age 60 demonstrates that many citizens of Togo die before the age of 60. For life expectancy to be 77.03 at age 60 and yet 64.27 at birth, a difference of more than 10 years, many citizens of Togo must be dying significantly earlier than 60 years of age. There are many different factors that would be causing people from Togo, and low-income countries more broadly, to be dying significantly earlier than 60. Among these factors are high infant-, under-5, and maternal mortality rates.

This figure could be informed, at least in part, by Togo's **maternal mortality rate**, which refers to the number of deaths of pregnant women before birth, during birth, or within the first six weeks after birth, per 100,000 live births. Table 2 presents Togo's maternal mortality rates from 2017, which were 396 per 100,000 live births. This demonstrates that a significant number of mothers, typically younger than 60, are dying before birth, during birth, or within six weeks after birth. This, in turn, lowers life expectancy at birth. Table 2 also presents Togo's total number of maternal deaths, which was 1000 in 2017.

Table 2 Togo's maternal mortality ratio (WHO, 2021)

Maternal mortality ratio (per 100,000 live births)	
2017	396 [270-557]

As you will recall, **health-adjusted life expectancy (HALE)** is a measure of burden of disease based on life expectancy at birth, but including an adjustment for time spent in poor health. It is the number of years in full health that a person can expect to live, based on current rates of ill health and mortality. This figure is achieved by subtracting the number of years a person is expected to live in poor health from their total life expectancy. Togo recorded a HALE of 56.19 for both sexes at birth in 2019. Given that life expectancy was 64.27 during this period, this means that people living in Togo experience approximately 10 years living in poor health for an average life-span. This could be partially due to difficulties accessing healthcare systems and medications that can treat illness in disease, or at least their symptoms, leading to greater periods of time spent in poor health.

Table 3 Togo's health-adjusted life expectancy (HALE) (WHO, 2021)

	Healthy life expectancy (HALE) at birth (years)			Healthy life expectancy (HALE) at 60 (years)		
	Both sexes	Male	Female	Both sexes	Male	Female
2019	56.19	54.7	57.8	12.78	11.77	13.8
2015	54.21	52.77	55.8	12.38	11.3	13.51
2010	51.96	50.82	53.24	11.95	10.81	13.16
2000	48.93	47.96	49.98	11.73	10.72	12.75

AIDS refers to acquired immunodeficiency syndrome and is the most advanced stage of the HIV infection, which damages and weakens the body's immune system. AIDS can increase a country's **burden of disease**, which is a measurement of the impact of disease and injuries, specifically measuring the gap between the current health status and an ideal situation where everyone lives to an old age, free of disease and disability. Burden of disease is specifically measured by the unit disability-adjusted life years (DALYs).

Lesson link

The factors that contribute to low-income countries having low life expectancy, and poor health status more broadly, will be covered in the following lesson **7C: Factors affecting health status and burden of disease**. These factors include the impact of low-average incomes on accessing safe water, sanitation, poverty, cultural attitudes towards inequality and discrimination, and international laws pertaining to the global distribution and marketing of tobacco, alcohol, and processed foods.

KEY DEFINITIONS

Maternal mortality rate refers to the number of deaths of pregnant women before birth, during birth, or within the first six weeks after birth, per 100,000 live births

Health-adjusted life expectancy (HALE) is a measure of burden of disease based on life expectancy at birth, but including an adjustment for time spent in poor health. It is the number of years in full health that a person can expect to live, based on current rates of ill health and mortality

Burden of disease is a measurement of the impact of disease and injuries, specifically measuring the gap between the current health status and an ideal situation where everyone lives to an old age, free of disease and disability. Burden of disease is specifically measured by the unit disability-adjusted life years (DALYs)

ADDITIONAL TERMS

AIDS refers to acquired immunodeficiency syndrome and is the most advanced stage of the HIV infection, which damages and weakens the body's immune system

The progression of HIV to AIDS can cause premature death (YLL), and the side effects of living with HIV through active antiretroviral therapy, such as liver problems (Cedars-Sinai, 2021), can increase the amount of time spent living with disease or disability (YLD).

This, therefore, increases DALYs and burden of disease. Table 4 shows new HIV infections per 1000 uninfected population in Togo. From 2000 to 2019, new HIV infections (per 1000 uninfected population) has decreased from 2.48 to 0.59. While this marks an incredibly positive step towards limiting the transmission of HIV, this is generally still higher than in most middle- and high-income countries.

Table 4 New HIV infections in Togo (WHO, 2021)

	New HIV infections (per 1000 uninfected population)		
	Both sexes	Male	Female
2019	0.59	0.51	0.66
2015	0.79	0.69	0.89
2010	1.19	1.05	1.33
2005	1.68	1.49	1.86
2000	2.48	2.18	2.78

ACTIVITY 1

Discuss with your class which health status indicator is reflected by new HIV infections (per 1000 uninfected population).

Other factors that could be used to analyse similarities and differences between countries in relation burden of disease include (Australian Institute and Health and Welfare, 2021):

- cancer
- cardiovascular diseases
- musculoskeletal conditions
- mental and substance use disorders
- injuries.

Health status and burden of disease in middle-income countries 4.1.2.2

OVERVIEW

Generally speaking, middle-income countries have improved health status when compared to low-income countries.

THEORY DETAILS

Unlike Togo, Brazil is a middle-income country in South America which recorded a GNI per capita of \$9,130 USD in 2019 (The World Bank Group, n. d.). As demonstrated in table 5, Brazil recorded a life expectancy at birth of 75.9 years for both sexes in 2019. This represents a significant increase from low-income countries, such as Togo, which as you will recall, recorded a life expectancy at birth of 64.27 years for both sexes. Likewise, Brazil has an increased life expectancy at 60 of 21.9 years for both sexes. A similarity between Brazil and Togo is that they both nonetheless experienced an increase in life expectancy at birth and 60 years during the period of 2000-2019.

Table 5 Brazil's life expectancy (WHO, 2021)

	Life expectancy at birth (years)			Life expectancy at 60 (years)		
	Both sexes	Male	Female	Both sexes	Male	Female
2019	75.9	72.45	79.39	21.9	20.09	23.51
2015	75.13	71.67	78.64	21.42	19.65	23
2010	74.09	70.57	77.68	20.81	19.02	22.42
2000	71.47	67.9	75.18	19.7	17.96	21.31

Perhaps the most striking difference in health status between Togo and Brazil is maternal mortality rates. As indicated in table 6, Brazil recorded a maternal mortality ratio of 60 per 100,000 live births in 2017, compared to Togo's maternal mortality ratio of 396 per 100,000 live births across the same period. This indicates that there is a significant improvement in the quality of and access to healthcare in middle-income countries, which enables pregnancy check-ups and live births to take place with the support of trained healthcare professionals and with the assistance of medical infrastructure and technology. Table 6 also presents the total number of maternal deaths in Brazil, which was 1700 in 2017.

Table 6 Brazil's maternal mortality ratio (WHO, 2021)

Maternal mortality ratio (per 100,000 live births)	
2017	60 [58-61]

Brazil's health-adjusted life expectancy (HALE) also demonstrates that middle-income countries typically have a higher HALE than low-income countries. As shown in table 7, Brazil recorded a HALE of 65.4 years for both sexes in 2019, which is significantly higher than Togo's HALE of 56.9 years for both sexes across the same period.

Table 7 Brazil's health-adjusted life expectancy (HALE) (WHO, 2021)

	Healthy life expectancy (HALE) at birth (years)			Healthy life expectancy (HALE) at 60 (years)		
	Both sexes	Male	Female	Both sexes	Male	Female
2019	65.4	63.44	67.37	16.35	15.18	17.39
2015	64.7	62.76	66.65	15.94	14.83	16.92
2010	63.95	61.99	65.95	15.61	14.45	16.65
2000	61.66	59.6	63.82	14.76	13.64	15.8

Brazil also demonstrates how middle-income countries have lower rates of new HIV infections than low-income countries. Table 8 details Brazil's new HIV infections (per 1000 uninfected population), recording 0.23 for both sexes in 2019. This is significantly lower than Togo's 0.59 new HIV infections per 1000 uninfected population in 2019 for both sexes. As discussed, HIV and its progression towards AIDS can significantly increase a nation's burden of disease. This occurs through both premature death (YLL) and time spent living in poor health due to HIV and the side effects of its treatments (YLD), thereby increasing DALYs. By middle-income countries lowering the transmission of HIV, they are therefore also able to decrease their burden of disease.

Table 8 New HIV infections in Brazil (WHO, 2021)

	New HIV infections (per 1000 uninfected population)		
	Both sexes	Male	Female
2019	0.23	0.34	0.13
2015	0.25	0.36	0.14
2010	0.21	0.27	0.15
2005	0.25	0.3	0.21
2000	0.29	0.35	0.24

Health status and burden of disease in high-income countries 4.1.2.3

OVERVIEW

Generally speaking, high-income countries have improved health status and burden of disease when compared to both middle- and low-income countries.

THEORY DETAILS

As you learnt in the previous lesson, Australia is a high-income country, recording a GNI per capita of \$55,100 USD in 2019 (The World Bank Group, n. d.). Australia's health status and burden of disease is significantly improved when compared to middle- and low-income countries. For example, table 9 shows that Australia recorded a life expectancy at birth of 83.04 for both sexes in 2019. As you will recall, this is significantly higher than Brazil's life expectancy at birth of 75.9 years for both sexes in 2019. In addition, Australia's life expectancy at age 60 was 25.62 years for both sexes in 2019, demonstrating that if you reach the age of 60 in Australia, your life expectancy increases to 85.62.

Table 9 Australia's life expectancy (WHO, 2021)

	Life expectancy at birth (years)			Life expectancy at 60 (years)		
	Both sexes	Male	Female	Both sexes	Male	Female
2019	83.04	81.25	84.84	25.62	24.37	26.83
2015	82.28	80.41	84.17	25.01	23.72	26.27
2010	81.9	79.84	83.99	24.74	23.29	26.13
2000	79.69	77.13	82.24	23.11	21.22	24.85

Australia's maternal mortality rates are lower than most middle- and low-income countries. Table 10 shows that Australia recorded a maternal mortality ratio of six per 100,000 live births in 2017. This is lower than middle-income countries such as Brazil which, as discussed, recorded a maternal mortality rate of 60 per 100,000 live births during the same period. The lower maternal mortality rates seen in Australia are a product of multiple different factors, such as greater access to healthcare services for Australian citizens than those in low- and middle-income countries. Table 10 also presents the total number of maternal deaths in Australia, which was 20 in 2017.

Table 10 Australia's maternal mortality ratio (WHO, 2021)

Maternal mortality ratio (per 100,000 live births)	
2017	6 [5-8]

Australia's health-adjusted life expectancy (HALE) is also significantly higher than middle- and low-income countries. Table 11 shows that Australia's HALE at birth for both sexes was 70.93 in 2019. This is significantly higher than Brazil's HALE of 65.4 years for both sexes across the same period, demonstrating that people living in high-income countries not only have a longer life expectancy but spend more of that time living in good health.

Table 11 Australia's health-adjusted life expectancy (HALE) (WHO, 2021)

	Healthy life expectancy (HALE) at birth (years)			Healthy life expectancy (HALE) at 60 (years)		
	Both sexes	Male	Female	Both sexes	Male	Female
2019	70.93	70.15	71.73	18.98	18.25	19.71
2015	70.56	69.74	71.4	18.63	17.88	19.38
2010	70.17	69.16	71.19	18.39	17.48	19.27
2000	68.57	67.16	69.97	17.31	16.09	18.45

Lesson link

Head to lesson **1C: Measuring health status** for a more comprehensive overview of Australia's health status. In this lesson, the emphasis is on comparing Australia's health status with other countries.

Australia likewise records lower rates of HIV infections than most middle- and low-income countries. This therefore represents a difference in Australia's burden of disease given that lower rates of HIV infections will decrease burden of disease compared to other middle- and low-income countries. As detailed in table 12, Australia recorded 0.03 new HIV infections per 1000 uninfected population in 2019. This is lower than middle-income countries such as Brazil, which, as you will recall, recorded 0.23 new HIV infections per 1000 uninfected population for both sexes in 2019. This also demonstrates how Australia has a lower burden of disease for HIV than most middle- and low-income countries.

Table 12 New HIV infections in Australia (WHO, 2021)

	New HIV infections (per 1000 uninfected population)		
	Both sexes	Male	Female
2019	0.03	0.06	<0.01
2015	0.04	0.07	0.01
2010	0.05	0.08	0.01
2005	0.04	0.07	<0.01
2000	0.03	0.06	<0.01

Evaluation of health status and burden of disease globally 4.1.2.4

OVERVIEW

Having looked at the health status and burden of disease conditions within a low-, middle-, and high-income country, it is now time to evaluate the similarities and differences between each.

THEORY DETAILS

As the data from Togo, Brazil, and Australia have demonstrated, health status generally improves as you move from low- to high-income countries. Table 13 summarises the selected health status indicators of the countries that you examined in this lesson.

Table 13 Selected health status indicators of Togo, Brazil, and Australia (WHO, 2021)

	Life expectancy at birth for both sexes (2019)	Maternal mortality ratio per 100,000 live births (2017)	Health-adjusted life expectancy (2019)	New HIV infections per 1000 uninfected population (2019)
Togo (low-income)	64.27	396	56.19	0.59
Brazil (middle-income)	75.9	60	65.4	0.23
Australia (high-income)	83.04	6	70.93	0.03

All that being said, variations exist even within each income threshold of the World Bank system of classifying countries. This occurs most prominently within the middle-income threshold, which includes countries all along a continuum. At each end, you have countries transitioning towards the social, economic, and environmental conditions of high-income countries, and those that are falling into the same social, economic, and environmental conditions of low-income countries. As a result, health status and burden of disease are not the same for all middle-income countries, and this also applies to low- and high-income countries to a lesser extent.

Health status and burden of disease therefore cannot substitute gross national income per capita as a way of defining countries. That is to say, if a country has a life expectancy of 65, you cannot definitively state that the country is low-income, but rather predict that this may be the case. You are not expected to know the income threshold of a country by looking at its health status (this is not possible), but rather evaluate data from different countries and identify similarities and differences between each.

Study design key skills dot point

- evaluate data to analyse similarities and differences between countries in relation to health status and burden of disease

Theory summary

In this lesson, you learnt about the similarities and differences in health status and burden of disease in low-, middle- and high-income countries, including Australia. The data from this lesson provided an overview of the general similarities and differences in health status and burden of disease between low-, middle-, and high-income countries, but bear in mind that the extent to which different countries are similar or different will vary depending on the countries that are selected.

7B QUESTIONS

Theory-review questions

Question 1

Which of the following measurements are commonly used to analyse similarities and differences between low-, middle-, and high-income countries? (Select all that apply)

- I Health status.
- II The Ottawa Charter.
- III Burden of disease.

Question 2

Generally speaking, health status improves when transitioning from low-income countries to high-income countries.

- A True.
- B False.

Question 3

A high incidence of HIV in low-income countries often increases burden of disease by increasing the population's time spent living with disease (YLD) and premature deaths from its transition to AIDS (YLL), therefore increasing DALY.

- A True.
- B False.

Question 4

Which of the following best fills in the blank?

- A decreases
- B increases

By decreasing maternal mortality rates in high-income countries, life expectancy at birth typically _____ in turn.

Question 5

Which of the following health status indicators can be used to analyse similarities and differences between low-, middle-, and high-income countries? (Select all that apply)

- I Gross National Income (GNI) per capita.
- II Life expectancy.
- III Maternal mortality rates.
- IV Health-adjusted life expectancy.

Skills

Data analysis

Use the following information to answer Questions 6-8.

Consider the following table of Afghanistan's under-5 mortality rates from 2015-2019.

Under-five mortality rate (probability of dying by age 5 per 1000 live births)			
	Both sexes	Males	Females
2019	60.27 [47.44-74.62]	63.83 [50.04-79.16]	56.57 [44.54-70.18]
2018	62.54 [50.64-75.41]	66.08 [53.41-79.76]	58.84 [47.51-71.09]
2017	64.94 [53.74-76.83]	68.49 [56.62-81.18]	61.25 [50.5-72.52]
2016	67.57 [57.07-78.65]	71.11 [60.02-83.01]	63.87 [53.76-74.39]
2015	70.44 [60.72-80.86]	74 [63.67-85.14]	66.73 [57.29-76.62]

Source: adapted from the World Health Organisation, *The Global Health Observatory*

Question 6

From 2015 to 2019, Afghanistan's under-5 mortality rate for both sexes

- A increases.
- B decreases.

Question 7

Which sex recorded higher under-5 mortality rates in Afghanistan from 2015 to 2019?

- A Males.
- B Females.

Question 8

Using data, what is the trend for under-5 mortality rates for both sexes in Afghanistan overall from 2015 to 2019?

- A Under-5 mortality rates for both sexes in Afghanistan increased from approximately 60.27 deaths per 1000 live births in 2015 to approximately 70.44 deaths per 1000 live births in 2019.
- B Under-5 mortality rates for both sexes in Afghanistan decreased from approximately 70.44 deaths per 1000 live births in 2015 to approximately 60.27 deaths per 1000 live births in 2019.

Exam-style questions

Question 9 (2 MARKS)

Country	Health-adjusted life expectancy (HALE) at birth for both sexes (2019)
Afghanistan	53.59
Austria	70.94

Source: adapted from the World Health Organisation, *The Global Health Observatory*

With reference to data, compare health-adjusted life expectancy (HALE) at birth for both sexes in Afghanistan and Austria.

Question 10 (3 MARKS)

The following table shows the maternal mortality ratio (per 100,000 live births) of Belgium and Chad from 2010-2017.

	Belgium	Chad
2017	5 [4-7]	1140 [847-1590]
2016	5 [4-7]	1140 [860-1570]
2015	5 [4-7]	1160 [880-1570]
2014	6 [4-7]	1170 [903-1560]
2013	6 [5-7]	1170 [910-1540]
2012	6 [4-7]	1190 [930-1550]
2011	6 [5-8]	1210 [957-1560]
2010	6 [5-8]	1240 [985-1590]

Source: adapted from the World Health Organisation, *The Global Health Observatory*

- a Identify which country recorded the highest maternal mortality ratio in 2017. (1 MARK)
- b With reference to data, describe the trend seen in Belgium's maternal mortality ratio from 2010 to 2017. (2 MARKS)

Question 11 (4 MARKS)

Country	Number of reported deaths from malaria (2017)
South Sudan	3,483
The Democratic Republic of the Congo	27,458

Source: adapted from the World Health Organisation, *The Global Health Observatory*

- a Describe how the Democratic Republic of the Congo's mortality rates from Malaria could impair their health status. (2 MARKS)
- b With reference to data, compare the number of reported deaths from malaria in South Sudan and the Democratic Republic of the Congo in 2017. (2 MARKS)

Question 12 (5 MARKS)

The following table shows indicators of health status for a range of countries.

Country	Life expectancy at birth (years), both sexes	Healthy life expectancy at birth (years)	Under-5 mortality rate (per 1000 live births)	Tuberculosis incidence (per 100,000 population)
Australia	82.8	71.9	3.8	6.4
Sierra Leone	50.1	44.4	120.4	310.0
Denmark	80.6	71.2	3.5	7.1
Vietnam	76.0	66.6	21.7	140.0
Spain	82.8	72.4	4.1	12.0

Source: World Health Organisation, *World Health Statistics 2016: Monitoring Health for the SDGs*, Geneva, 2016, pp. 104, 105, 108-111

Adapted from VCAA 2017 exam Q1b

- a Identify which country has the highest incidence of tuberculosis. (1 MARK)
- b With reference to data, compare the under-5 mortality rates of Denmark and Spain. (2 MARKS)
- c With reference to data, compare the health status of Australia to Vietnam. (2 MARKS)

Questions from multiple lessons

Question 13 (5 MARKS)

With reference to its principles, discuss how low-income countries could improve their health status by implementing the social model of health?

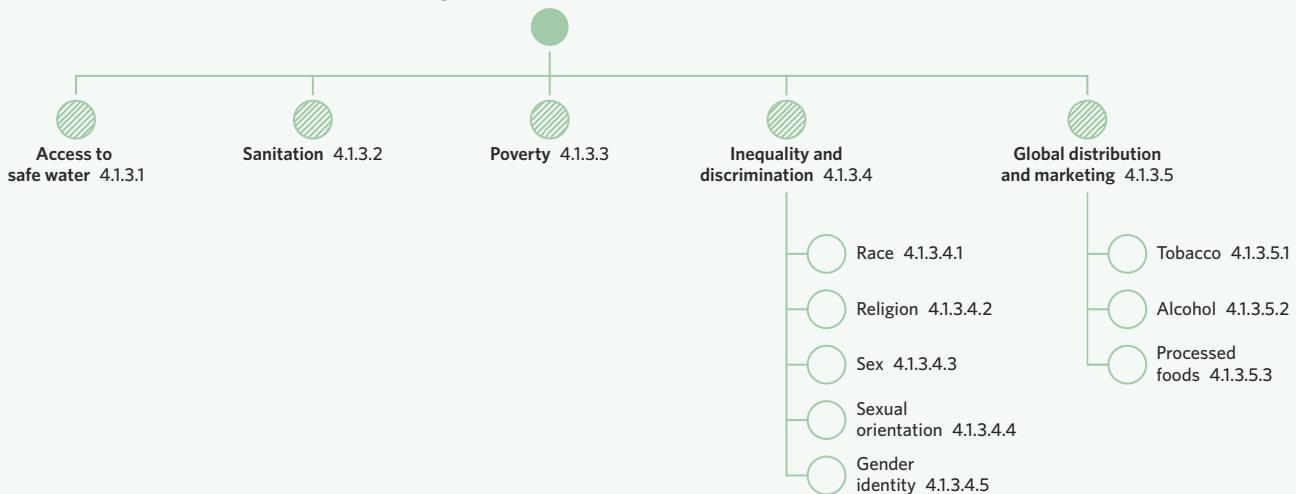
Adapted from VCAA sample questions Q6b

7C FACTORS AFFECTING HEALTH STATUS AND BURDEN OF DISEASE

In the previous lesson, you looked at the differences in health status and burden of disease between low-, middle-, and high-income countries. There are a number of factors that can inform these differences. In this lesson, you will be looking at these factors and developing an understanding of how they can contribute to these similarities and differences in health status and burden of disease.

7A Classifying countries	7B Similarities and differences in health status and burden of disease globally	7C Factors affecting health status and burden of disease																										
Study design dot point																												
<ul style="list-style-type: none"> • factors that contribute to similarities and differences in health status and burden of disease, including access to safe water; sanitation; poverty; inequality and discrimination (race, religion, sex, sexual orientation and gender identity); and global distribution and marketing of tobacco, alcohol and processed foods 																												
Key knowledge units																												
<table> <tbody> <tr> <td>Access to safe water</td> <td>4.1.3.1</td> </tr> <tr> <td>Sanitation</td> <td>4.1.3.2</td> </tr> <tr> <td>Poverty</td> <td>4.1.3.3</td> </tr> <tr> <td>Inequality and discrimination</td> <td>4.1.3.4</td> </tr> <tr> <td>Race</td> <td>4.1.3.4.1</td> </tr> <tr> <td>Religion</td> <td>4.1.3.4.2</td> </tr> <tr> <td>Sex</td> <td>4.1.3.4.3</td> </tr> <tr> <td>Sexual orientation</td> <td>4.1.3.4.4</td> </tr> <tr> <td>Gender identity</td> <td>4.1.3.4.5</td> </tr> <tr> <td>Global distribution and marketing</td> <td>4.1.3.5</td> </tr> <tr> <td>Tobacco</td> <td>4.1.3.5.1</td> </tr> <tr> <td>Alcohol</td> <td>4.1.3.5.2</td> </tr> <tr> <td>Processed foods</td> <td>4.1.3.5.3</td> </tr> </tbody> </table>			Access to safe water	4.1.3.1	Sanitation	4.1.3.2	Poverty	4.1.3.3	Inequality and discrimination	4.1.3.4	Race	4.1.3.4.1	Religion	4.1.3.4.2	Sex	4.1.3.4.3	Sexual orientation	4.1.3.4.4	Gender identity	4.1.3.4.5	Global distribution and marketing	4.1.3.5	Tobacco	4.1.3.5.1	Alcohol	4.1.3.5.2	Processed foods	4.1.3.5.3
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Alcohol	4.1.3.5.2																											
Processed foods	4.1.3.5.3																											

Factors affecting health status and burden of disease



Access to safe water 4.1.3.1

OVERVIEW

Different countries have different levels of access to safe water. This causes significant differences in health status and burden of disease.

THEORY DETAILS

Safe water refers to water that is free from contaminants such as germs. Safe water sources often require infrastructure such as tanks and wells to safely store water. Without this infrastructure, water is unable to flow and can become stagnant and contaminated. Drinking this water can transmit diseases such as diarrhoea, cholera, dysentery, typhoid, and polio (World Health Organisation [WHO], 2019). In fact, it is estimated that contaminated drinking water leads to 485,000 diarrhoeal deaths each year (WHO, 2019). The impact of accessing safe water on health status and burden of disease is summarised in table 1.

Table 1 The impact of accessing safe water on health status and burden of disease

How does access to safe water impact health status?	How does access to safe water impact burden of disease?
Access to safe water decreases mortality rates associated with diarrhoeal disease, cholera, dysentery, typhoid, and polio. This, in turn, ensures that less people are dying prematurely from these diseases, increasing life expectancy.	Access to safe water decreases burden of disease. It ensures that fewer years of life are lost due to premature death from diarrhoeal disease (YLL) and that fewer years of life are lost due to disability associated with polio (YLD). This, in turn, decreases disability-adjusted life years (DALY).

It is also important to consider how access to safe water can impact health and wellbeing. Some of these impacts are summarised in table 2.

Table 2 The impact of accessing safe water on health and wellbeing

How does access to safe water impact health and wellbeing?
<ul style="list-style-type: none"> Access to safe water decreases the likelihood of developing conditions such as dysentery. This, in turn, improves the functioning of the body and its systems, therefore promoting physical health and wellbeing. Access to safe water reduces the amount of time required to find and travel to safe water sources. This, in turn, decreases the stress of having to organise when to gather safe water, therefore promoting mental health and wellbeing.

Sanitation 4.1.3.2

OVERVIEW

Sanitation products and services can significantly improve a country's health status and burden of disease. Different levels of access to sanitation services, then, can cause differences in health status and burden of disease between countries.

THEORY DETAILS

Sanitation refers to behaviours, facilities, and services that prevent disease and illness caused by contact with or mistreatment and wrong disposal of human waste and sewage. This includes, for example, flushing toilets that safely dispose of human excrement to sewerage systems. Sewerage systems then treat this water to remove pollutants and turn it into recycled water. This ensures that human waste and other pollutants do not remain out in the open where people are more likely to be exposed to them. Poor sanitation can lead to the transmission of diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid, and polio (WHO, 2019). Poor sanitation is believed to cause 432,000 deaths each year (WHO, 2019). The impact of sanitation on health status and burden of disease is summarised in table 3.

Study design key skills dot points

The following key skills dot points apply to the whole lesson:

- analyse factors that contribute to health status and burden of disease in different countries and discuss their impact on health and wellbeing
- compare health data and other information to analyse reasons for health inequalities within and between nations

KEY DEFINITIONS

Safe water (also known as clean water) refers to water that is free from contaminants such as germs

KEY DEFINITIONS

Sanitation refers to behaviours, facilities, and services that prevent disease and illness caused by contact with or mistreatment and wrong disposal of human waste and sewage

Table 3 The impact of sanitation on health status and burden of disease

How does sanitation impact health status?	How does sanitation impact burden of disease?
Sanitation decreases mortality rates from cholera, diarrhoea, dysentery, hepatitis A, typhoid, and polio. This, in turn, ensures that less people are dying prematurely from these diseases, increasing life expectancy.	Sanitation decreases burden of disease. It ensures that fewer people are dying prematurely from diarrhoeal disease (YLL) and decreases YLD associated with people living with polio. This, in turn, decreases DALY.

It is also important to consider how access to sanitation can impact health and wellbeing. Some of these impacts are summarised in table 4.

Table 4 The impact of sanitation on health and wellbeing

How does access to sanitation impact health and wellbeing?
<ul style="list-style-type: none"> Access to sanitation decreases the likelihood of exposure to sewage, minimising the chances of developing cholera. This, in turn, improves the functioning of the body and its systems, therefore promoting physical health and wellbeing. Access to sanitation decreases the likelihood of absences during school caused by conditions such as polio. This, in turn, allows students to feel as though they are working towards achieving a greater purpose in life by accessing education, such as becoming qualified to work in their occupation of choice, therefore promoting spiritual health and wellbeing.

Poverty 4.1.3.3

OVERVIEW

Living in poverty has a significant impact on health status and burden of disease.

THEORY DETAILS

Broadly speaking, poverty refers to financial deprivation. **Extreme poverty**, for example, refers to living on \$1.90 USD or less a day (The World Bank Group, 2015). When living in these conditions, it is incredibly difficult to access the resources required to live a long and healthy life. Nutritious food, for example, may not be affordable. Access to healthcare services in the case of injury and disease may likewise not be affordable. As a result, poverty can have countless impacts on health status and burden of disease. Some of these impacts are summarised in table 5.

Table 5 The impact of poverty on health status and burden of disease

How does poverty impact health status?	How does poverty impact burden of disease?
<ul style="list-style-type: none"> Poverty can result in being unable to afford nutritious food. This, in turn, increases mortality rates from malnutrition. By increasing the amount of people dying prematurely from malnutrition, poverty likewise reduces life expectancy. Poverty can result in being unable to afford healthcare. This, in turn, decreases the amount of people who are able to receive vaccinations for infectious diseases such as pneumonia. This increases the transmission of pneumonia, leading to an increase in new cases, thereby increasing its incidence within a population group. 	<ul style="list-style-type: none"> Poverty can result in being unable to afford nutritious food, which leads to more people dying prematurely from malnutrition (YLL) and experiencing symptoms of weakness and fatigue from hunger pains (YLD). This, in turn, increases DALY and burden of disease. Poverty can result in people being unable to afford healthcare services, which means that certain conditions may not be detected at an early stage, leading to more people dying prematurely from cancer (YLL) and enduring the symptoms of conditions such as hypertension (YLD). This, in turn, increases DALY.

It is also important to consider how poverty can impact health and wellbeing. Some of these impacts are summarised in table 6.

Table 6 The impact of poverty on health and wellbeing

How does poverty impact health and wellbeing?
<ul style="list-style-type: none"> Poverty can result in being unable to afford nutritious foods and developing conditions such as malnutrition. This, in turn, impairs the functioning of the body and its systems, therefore impairing physical health and wellbeing. Poverty can create financial stress related to being unable to afford resources such as food and housing. This, in turn, impairs mental health and wellbeing.

Lesson link

In lesson **9B: Key features of SDG 3**, you will learn about how the UN developed 13 targets that address the aims of SDG 3 ‘Good health and wellbeing’. One of these targets involves ending neglected tropical diseases. Inadequate sanitation is a key risk factor for several neglected tropical diseases, including intestinal worms, schistosomiasis, and trachoma (WHO, 2019). This demonstrates the importance of improving sanitation standards globally to achieve the targets of SDG 3.

KEY DEFINITIONS

Extreme poverty refers to living on \$1.90 USD or less a day as defined by the World Bank

Inequality and discrimination 4.1.3.4

OVERVIEW

Both inequality and discrimination can occur due to components of our personal identity. This can have a significant impact on health status and burden of disease.

THEORY DETAILS

It is important to remember that inequality and discrimination are separate concepts.

Inequality refers to an uneven distribution of resources or differing circumstances, whereas **discrimination** refers to the unjust treatment of people due to their membership within a certain social category. For example, women may experience inequality due to not receiving the same wage as men. In this case, the inequality occurs because the resource of money isn't distributed evenly. By contrast, discrimination in the workplace could involve name-calling or exclusion from certain work events. This may occur even if the woman is receiving the same income as her male colleagues.

Inequality and discrimination can cause similarities and differences in health status and burden of disease between countries. Some of these impacts are summarised in table 7.

Table 7 The impact of inequality and discrimination on health status and burden of disease

How does inequality and discrimination impact health status?	How does inequality and discrimination impact burden of disease?
<ul style="list-style-type: none"> Groups that experience discrimination in schools, such as name-calling or exclusion, may experience mental health problems, such as anxiety and depression. This, in turn, can result in experiences of significant and prolonged distress, therefore increasing morbidity. Groups that experience discrimination in the workplace or other sectors may feel discouraged to continue working and making an income. This can result in these groups not being able to afford healthcare, such as doctor's appointments. This can prevent the early detection and treatment of potentially life threatening illnesses, therefore increasing mortality rates for conditions such as hypertension. 	<ul style="list-style-type: none"> Inequality can involve an unequal distribution of wealth, with a particular population group receiving less money for their job than somebody else in their position. This can result in an inability to afford nutritious foods, resulting in premature death (YLL) and an increased amount of time spent fatigued or in poor health from related conditions such as malnutrition (YLD). This, in turn, increases DALY. Groups that experience significant and prolonged inequality and discrimination may seek refuge in another country where their opportunities for employment and education will improve. Given that these groups experienced prolonged discrimination, which can prevent employment, they may have been deprived of a standard average income for their country. This can result in premature death due to cheaper but unsafe means of travelling, such as by drowning at sea (YLL), and ill-health from inadequate hygiene and resulting gastrointestinal illness (YLD). This, in turn, increases burden of disease.

Inequality and discrimination can negatively impact many facets of people's lives. It is therefore also important to consider how inequality and discrimination can impact health and wellbeing, which is summarised in table 8.

Table 8 The impact of inequality and discrimination on health and wellbeing

How does inequality and discrimination impact health and wellbeing?
<ul style="list-style-type: none"> Experiencing discrimination in schools or workplaces can cause significant personal distress, meaning that people may not attend school or work as regularly. This impacts their capacity to develop and maintain relationships, impacting social health and wellbeing. Inequality related to the distribution of wealth can make it more challenging to afford resources such as nutritious food. This can lead to the development of conditions such as malnutrition. This, in turn, impairs the functioning of the body and its systems and impairs physical health and wellbeing.

Some groups of people are more likely to experience inequality and discrimination than others. Both inequality and discrimination can occur due to race, religion, sex, sexual orientation, or gender identity. A description about how inequality and discrimination can occur for each of these groups is provided in table 9.

KEY DEFINITIONS

Inequality refers to an uneven distribution of resources or differing circumstances

Discrimination refers to the unjust treatment of people due to their membership within a certain social category

Table 9 The different groups that experience inequality and discrimination

Group	Description
Race 4.1.3.4.1	Inequality and discrimination often occur due to racial differences within a population group. It is common for racial minority groups, for example, to experience inequality and discrimination.
Religion 4.1.3.4.2	Inequality and discrimination can be experienced by people of a particular religious orientation within a population group. It is common for religious minority groups, for example, to experience inequality and discrimination.
Sex 4.1.3.4.3	Inequality and discrimination can be targeted towards people of a particular sex. Sex refers to the biological categorisation of humans based on their reproductive organs, generally assigned at birth but that can also be changed later in life. Inequality and discrimination can often be targeted towards women.
Sexual orientation 4.1.3.4.4	Sexual orientation refers to the preference for a romantic or sexual partner of a particular gender identity or sex. The acronym LGBTQIA+ is often used to summarise sexual orientations that do not involve being romantically or sexually attracted to people of the opposite sex. This includes lesbian, gay, bisexual, transgender, queer/questioning, intersex, or asexual. People who identify as these sexual orientations often experience inequality and discrimination.
Gender identity 4.1.3.4.5	Gender identity refers to an individual's own understanding of their gender as masculine, feminine, or other. Often, people who do not conform to the gender identities of male and female will experience inequality and discrimination.

KEY DEFINITIONS

Sex refers to the biological categorisation of humans based on their reproductive organs, generally assigned at birth but that can also be changed later in life

Sexual orientation refers to the preference for a romantic or sexual partner of a particular gender identity or sex. The acronym LGBTQIA+ is often used to summarise sexual orientations that do not involve being romantically or sexually attracted to people of the opposite sex. This includes lesbian, gay, bisexual, transgender, queer/questioning, intersex, or asexual. People who identify as these sexual orientations often experience inequality and discrimination.

Gender identity refers to an individual's own understanding of their gender as masculine, feminine, or other

 **Want to know more?**
Gender equality

Gender equality is when people, regardless of their gender identity, have equal rights and opportunities in society. Gender inequality impacts people of all ages in all societies globally, and is not just an issue that women face. There are many different gender identities, some of which include male, female, transgender, gender-neutral, pangender, and non-binary. Gender equality is about viewing all individuals, no matter their gender identity, as equals.

When individuals do not conform to stereotypes associated with the gender identities 'male' and 'female,' they are often ridiculed, bullied, and excluded from society (Palmer et al., 2020). There is no doubt that changes over time have been significant in regards to achieving gender equality. However, progress still needs to be made to eliminate all discrimination based on gender.

ACTIVITY 1

For each of these groups (race, religion, sex, sexual orientation, and gender identity) look up examples to understand in greater depth how inequality and discrimination can occur for each. Understanding how inequality and discrimination occur marks an important step in preventing it from happening altogether. For exam-style questions, you do not need to provide any examples of case studies in your responses, but rather identify within each group who is likely to experience inequality and discrimination. For sex, this could involve stating that women are more likely to experience inequality and discrimination than men.

Global distribution and marketing 4.1.3.5

OVERVIEW

The global distribution and marketing of tobacco, alcohol, and processed foods vary between different countries. This causes similarities and differences in health status and burden of disease.

THEORY DETAILS

As with inequality and discrimination, the concepts of global distribution and marketing refer to different processes. **Global distribution** refers to the process of providing goods and services to people living all across the world, whereas **global marketing** refers to the process of advertising goods and services across the world with the intention of increasing sales. In this sense, both global distribution and global marketing work together towards the same goal of increasing the sale of a particular product: global distribution by ensuring that these products are accessible to the population and global marketing by advertising these products so that people will want to buy them. The global distribution and marketing of tobacco, alcohol, and processed foods can lead to similarities and differences in health status and burden of disease.

Tobacco 4.1.3.5.1

The global distribution and marketing of tobacco can significantly impair health status and burden of disease. The global distribution of tobacco involves tobacco manufacturing companies selling and transporting their tobacco products to different countries across the world, or throughout the country that they are based within. This results in tobacco products being accessible across the world.

By contrast, the global marketing of tobacco products refers to advertising tobacco products with the intention of increasing sales. Many countries have banned or restricted tobacco advertising, but some do not. For example, as of 2018, Japan and Indonesia did not have a ban on advertising tobacco on national television and radio, whereas Australia and Brazil did (WHO, 2021). Similarities in health status and burden of disease will therefore occur between these countries that market tobacco. This is summarised in table 10.

Table 10 The impact of the global distribution and marketing of tobacco on health status and burden of disease

How does the global distribution and marketing of tobacco impact health status?	How does the global distribution and marketing of tobacco impact burden of disease?
The increased global distribution and marketing of tobacco can increase mortality rates for smoking-related conditions, such as lung cancer. With more people dying prematurely from conditions such as lung cancer, life expectancy is likely to decrease in turn.	The increased global distribution and marketing of tobacco increases burden of disease. More people will be dying prematurely from smoking-related conditions (e.g. cardiovascular disease, chronic obstructive pulmonary, lung cancer, etc.) (YLL), or living in poor health due to the side effects of smoking (e.g. shortness of breath) (YLD), therefore increasing DALY.

It is also important to consider how the global distribution and marketing of tobacco can impact health and wellbeing. Some of these impacts are summarised in table 11.

Table 11 The impact of the global distribution and marketing of tobacco on health and wellbeing

How does the global distribution and marketing of tobacco impact health and wellbeing?
<ul style="list-style-type: none"> The increased global distribution and marketing of tobacco can make it more likely for people to develop conditions such as lung cancer. This impairs the functioning of the body and its systems, therefore impairing physical health and wellbeing. The increased global distribution and marketing of tobacco makes it more likely for people to become addicted to smoking and feel as though they need cigarettes to manage their emotions effectively. This, in turn, can reduce their resilience, impairing emotional health and wellbeing.

KEY DEFINITIONS

Global distribution refers to the process of providing goods and services to people living all across the world

Global marketing refers to the process of advertising goods and services across the world with the intention of increasing sales

Lesson link

In lesson **2D: Contributions to Australia's health status:**

Part 1, you learnt about how tobacco smoking contributes to Australia's health status and burden of disease. These impacts can be applied now not only to Australia, but countries that experience greater distribution and marketing of tobacco products.

Alcohol 4.1.3.5.2

The global distribution and marketing of alcohol also has significant impacts on health status and burden of disease. You may notice when watching sporting events on the television that alcohol companies often sponsor sporting teams and events. In fact, 17 out of 18 men's AFL clubs accept money from alcohol companies to advertise their products (VicHealth, 2021). This unsurprisingly causes an association between social events, such as watching football, and drinking alcohol. As of 2016, Australia did not have health warning labels on alcohol advertising as implemented for tobacco products (WHO, 2021). When alcohol advertising practices are coupled with a global distribution of alcohol that ensures that alcohol is easily accessible for purchase, this can increase drinking behaviour. The impact of the global distribution and marketing of alcohol on health status and burden of disease is summarised in table 12.

Table 12 The impact of the global distribution and marketing of alcohol on health status and burden of disease

How does the global distribution and marketing of alcohol impact health status?	How does the global distribution and marketing of alcohol impact burden of disease?
The increased global distribution and marketing of alcohol can increase mortality rates for alcohol-related conditions, such as strokes. With more people dying prematurely from conditions such as strokes, life expectancy is likely to decrease in turn.	The increased global distribution and marketing of alcohol increases burden of disease. Given that alcohol is often energy-dense, drinking can lead to premature death from weight-related conditions, such as cardiovascular disease (YLL), and an increased amount of time spent living in poor health due to obesity (YLD). This therefore increases DALY for countries that market alcohol products and distribute them throughout the country so that they are easily accessible to all.

It is also important to consider how the global distribution and marketing of alcohol can impact health and wellbeing. Some of these impacts are summarised in table 13.

Table 13 The impact of the global distribution and marketing of alcohol on health and wellbeing

How does the global distribution and marketing of alcohol impact health and wellbeing?
<ul style="list-style-type: none"> The increased global distribution and marketing of alcohol can make it more likely for people to develop conditions such as obesity, given that alcohol is often energy-dense. This impairs the functioning of the body and its systems, therefore impairing physical health and wellbeing. The increased global distribution and marketing of alcohol can increase health-related stress, for example about the increased likelihood of having a stroke from frequent alcohol use. This, in turn, impairs mental health and wellbeing.

Processed foods 4.1.3.5.3

The global distribution and marketing of processed foods can also cause similarities and differences in health status and burden of disease between different countries. Again, unlike tobacco in Australia, many countries do not have restrictions on the marketing of processed foods. When watching television or YouTube, you are likely to see advertisements for fast-food chains or processed foods such as chips or chocolate. These advertisements unsurprisingly often do not warn about the health impacts of consuming their products, so many people are likely to purchase them without conscious awareness of how it will affect their health.

Likewise, the global distribution of processed foods often ensures that these products are widely available in supermarkets and convenience stores around the world. The dual impact of frequent marketing of processed foods and their accessibility for purchase means that many people consume high amounts of these products. While processed foods are now being marketed and distributed globally, this is a particularly pressing issue within high-income countries and some middle-income countries, whose population is more likely to be able to afford processed foods on a frequent basis. This can cause similarities in health status and burden of disease for countries that have frequent advertisements for processed foods and that distribute them throughout the country to ensure that they are available to purchase for all, as can often occur in high-income countries. This is summarised in table 14.

Lesson link

In lesson **2D: Contributions to Australia's health status:**

Part 1, you learnt about how alcohol contributes to Australia's health status and burden of disease. These impacts can be applied not only to Australia, but countries that experience greater distribution and marketing of alcohol.

Table 14 The impact of the global distribution and marketing of processed foods on health status and burden of disease

How does the global distribution and marketing of processed foods impact health status?	How does the global distribution and marketing of processed foods impact burden of disease?
The increased global distribution and marketing of processed foods is likely to decrease life expectancy due to people dying prematurely from obesity, or obesity-related conditions such as cardiovascular disease.	The increased global distribution and marketing of processed foods increases burden of disease. Consuming processed foods regularly can lead to premature death from obesity (YLL) and time spent living in poor health, such as heart and chest pains from cardiovascular disease (YLD). This therefore increases DALYs.

It is also important to consider how the global distribution and marketing of processed foods can impact health and wellbeing. Some of these impacts are summarised in table 15.

Table 15 The impact of the global distribution and marketing of processed foods on health and wellbeing

How does the global distribution and marketing of processed foods impact health and wellbeing?
<ul style="list-style-type: none"> The increased global distribution and marketing of processed foods increases the likelihood of developing conditions such as obesity. This, in turn, impairs the functioning of the body and its systems, therefore impairing physical health and wellbeing. The increased global distribution and marketing of processed foods can cause health-related stress about developing conditions such as cardiovascular disease. This, in turn, impairs mental health and wellbeing.

Double burden of disease

The global distribution and marketing of processed foods and tobacco has recently given rise to the concept of double burden of disease. **Double burden of disease** refers to the coexistence of communicable diseases associated with poverty and non-communicable diseases associated with wealth. For example, the coexistence of cholera (a communicable disease associated with poverty) and obesity (a non-communicable disease associated with wealth). This is most common in low-income countries that still have high levels of poverty and inadequate healthcare systems leading to conditions such as tuberculosis and malnutrition. These countries often also experience increases in non-communicable diseases associated with wealth, such as lung cancer, obesity, and diabetes, due to an increased global distribution and marketing of tobacco, alcohol, and processed foods.

Double burden of disease is prevalent in low-income countries due to:

- Less regulation on the marketing of processed foods and tobacco. Due to increased laws and regulations in high-income countries (such as plain-packaging laws), companies have invested in marketing in low-income countries where advertising laws are less restricted.
- Lower levels of health literacy in low-income countries, leading to individuals sometimes being unaware of the dangers of smoking cigarettes or eating highly processed, energy-dense foods. This also occurs with alcohol consumption.

Double burden of disease has led to healthcare facilities in low-income countries being unable to treat the increased amount of people requiring treatment. Due to a lack of funding, less medical equipment, and less medical staff, low-income countries have always been overwhelmed due to communicable diseases such as tuberculosis. However, this has been heightened due to now having to deal with non-communicable diseases which have occurred due to the global distribution and marketing of processed foods and tobacco.

ADDITIONAL TERMS

Double burden of disease refers to the coexistence of communicable diseases associated with poverty and non-communicable diseases associated with wealth

ACTIVITY 2

Do you think you would buy less processed foods if they were advertised less frequently? If so, why do you think this would be the case? Discuss with other people in your class how the marketing of processed foods influences your purchasing behaviour.

Useful tip

You will be provided with health data in questions to determine how these factors contribute to similarities and differences in health status and burden of disease between countries. For example, in terms of health status, if one country has a high life expectancy and another country a low life expectancy, then you could suggest that the country with high life expectancy is likely to have greater access to sanitation and how this would explain their improved health status.

Theory summary

In this lesson, you have learnt about factors that contribute to similarities and differences in health status and burden of disease. More specifically, you have learnt about how access to safe water, sanitation, poverty, inequality and discrimination (for race, religion, sex, sexual orientation, and gender identity), and the global distribution and marketing (of tobacco, alcohol, and processed foods) impacts health status and burden of disease.

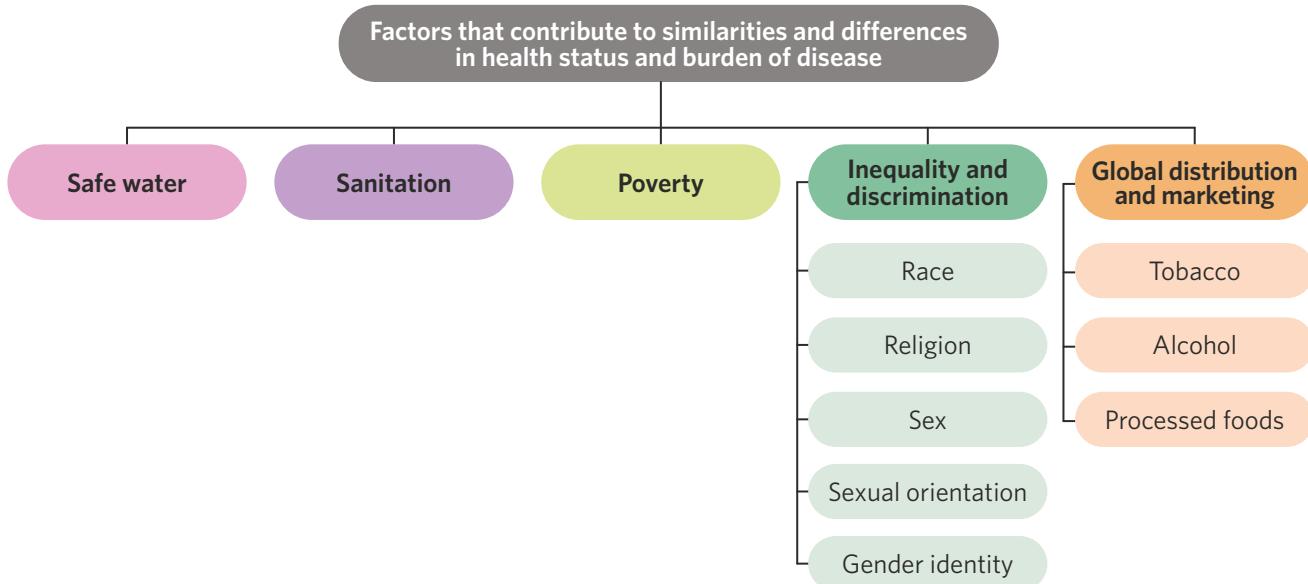


Figure 1 An overview of the factors that influence health status and burden of disease

7C QUESTIONS

Theory-review questions

Question 1

Factors relating to our environment, such as access to safe water, have a greater impact on health status and burden of disease than more personal factors, such as our sex or religion.

- A True.
- B False.

Question 2

Which of the following factors contribute to similarities and differences in health status and burden of disease? (Select all that apply)

- I Access to safe water.
- II Sanitation.
- III Intelligence.
- IV Poverty.
- V Height.

Question 3

The global distribution of processed foods relates to advertising fast-food companies, whereas the global marketing of processed foods relates to making fast-food more readily accessible.

- A True.
- B False.

Question 4

Inequality based on sex can involve denying somebody employment on the basis of knowing that somebody identifies as a gender separate to that which has been assigned at birth?

- A True.
- B False.

Question 5

Access to sanitation services, such as flushing toilets, improve health status and burden of disease.

- A True.
- B False.

Question 6

Which of the following options can cause people to experience inequality and discrimination? (*Select all that apply*)

- I Race.
- II Religion.
- III Sex.
- IV Being wealthy.
- V Gender identity.

Skills

Perfect your phrasing

Question 7

Which of the following sentences is most correct?

- A Inequality refers to an uneven distribution of resources or differing circumstances.
- B Inequality refers to the unjust treatment of people due to their membership within a certain social category.

Question 8

Which of the following sentences is most correct?

- A Global marketing refers to the process of advertising goods and services across the world with the intention of increasing sales.
- B Global marketing refers to the process of providing goods and services to people living all across the world.

Question 9

Which of the following sentences is most correct?

- A Gender identity refers to an individual's *biologically determined* gender at birth.
- B Gender identity refers to an individual's *own understanding* of their gender as masculine, feminine, or somewhere in between.

Exam-style questions**Question 10** (2 MARKS)

Describe what is meant by 'global distribution and marketing'.

Adapted from VCAA 2017 exam Q15a

Question 11 (2 MARKS)

The increasing prevalence of overweight and obese people is of global concern.

In relation to this increase, explain **one** challenge faced by high-income countries that is less of a challenge for low-income countries.

Adapted from VCAA 2014 exam Q6bii

Question 12 (4 MARKS)

Ban on tobacco advertising: National TV and radio

Location	2018	2016	2014	2012	2010	2008	2007
Canada	Yes						
Central African Republic	No						

Source: adapted from the World Health Organisation Global Health Observatory, *Ban on advertising on national television and radio (Tobacco control: Enforce bans)*, <<https://www.who.int/data/gho/data/indicators/indicator-details/GHO/gho-tobacco-control-enforce-bans-el-nat-tv-radio>>

- a Identity the difference in relation to bans on tobacco advertising in 2018 between Canada and the Central African Republic. (2 MARKS)
- b Describe a likely difference in health status between Canada and the Central African Republic. (2 MARKS)

Question 13 (4 MARKS)

Explain how sanitation services improve health status in high-income countries.

Adapted from VCAA 2019 exam Q12c

Question 14 (4 MARKS)

Describe how discrimination based on race could have an impact on health status and health and wellbeing.

Adapted from VCAA 2020 exam Q10c

Question 15 (6 MARKS)

- a Explain the term 'inequality'. (2 MARKS)

Adapted from VCAA 2018 exam Q9a

- b Explain how inequality might contribute to differences in health status and burden of disease. (4 MARKS)

Adapted from VCAA 2018 exam Q9b

Questions from multiple lessons

Question 16 (2 MARKS)

Identify **one** Ottawa charter action area and describe how it could limit the global marketing of tobacco.

CHAPTER 7 REVIEW

CHAPTER SUMMARY

This chapter was about comparing health status and burden of disease globally. You learnt about the World Bank system of classifying countries, the differences in health status and burden of disease between countries, and the factors that cause these similarities and differences.

In lesson **7A: Classifying countries**, you were introduced to the World Bank System of classifying countries. More specifically, you learnt that:

- the World Bank classifies countries according to their gross national income (GNI) per capita.
- GNI per capita is recorded in USD.
- countries can be classified either as high-, middle-, or low-income.
- for the 2021 fiscal year (i.e. from July 2020 to July 2021), high-income countries record a GNI per capita of \$12,536 USD or more, middle-income countries between \$1,036–12,535 USD, and low-income countries of \$1,035 USD or less.

You also learnt about the economic, social, and environmental characteristics of high-, middle-, and low-income countries. These are summarised in the following table.

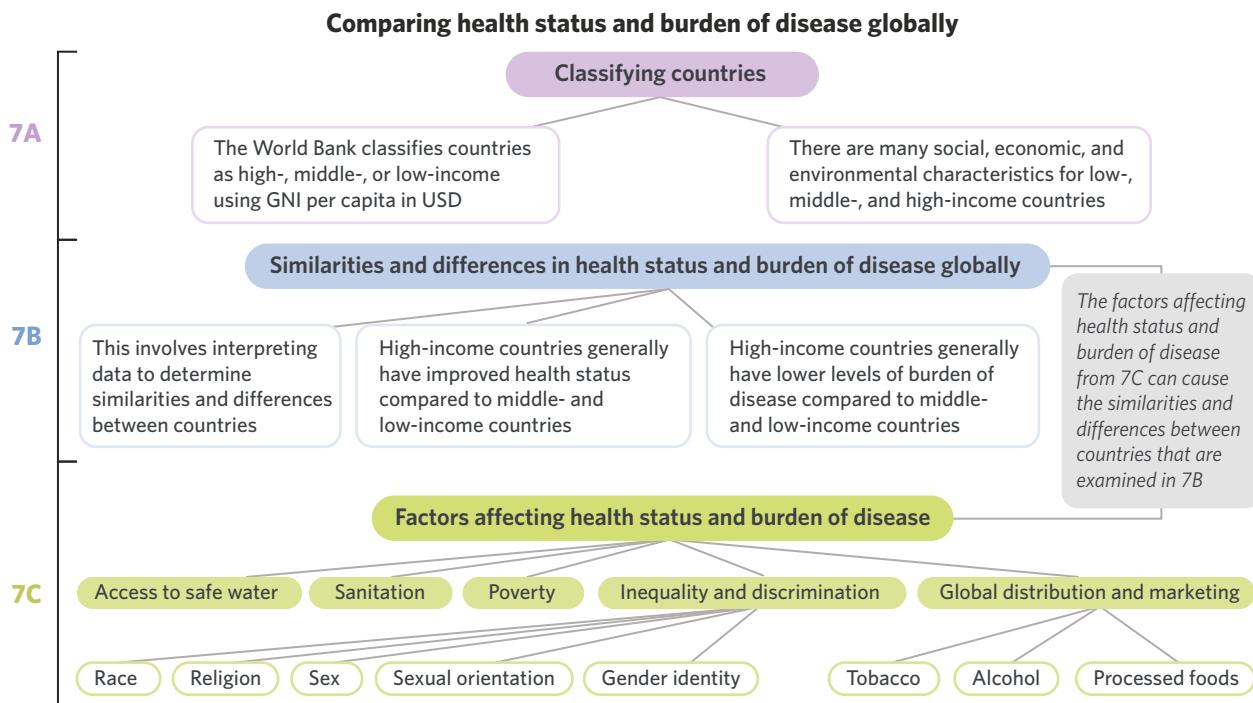
	Economic characteristics	Social characteristics	Environmental characteristics
High-income countries	<ul style="list-style-type: none"> • high average incomes • low levels of debt • a wide range of trade opportunities • low levels of poverty • a wide range of industries 	<ul style="list-style-type: none"> • high levels of employment • high levels of education • social support systems • low birth rates • a developed healthcare system • access to technology • developed legal and political systems • being less likely to have a history of colonialism 	<ul style="list-style-type: none"> • adequate infrastructure • adequate housing • access to safe drinking water • access to sanitation • access to food • agricultural productivity
Middle-income countries	<ul style="list-style-type: none"> • moderate average incomes • transitioning towards low levels of debt • transitioning towards greater opportunities for global trade • transitioning towards low levels of poverty • a moderate range of national industries 	<ul style="list-style-type: none"> • transitioning towards high levels of employment • transitioning towards high levels of education • increasing social support systems • transitioning towards lower birth rates • transitioning towards a developed healthcare system • transitioning towards greater access to technology • transitioning towards developed legal and political systems 	<ul style="list-style-type: none"> • transitioning towards adequate infrastructure • transitioning towards complete access to clean water for all citizens • transitioning towards complete access to sanitation for all citizens • transitioning towards greater access to food for all citizens • transitioning towards an increase in agricultural productivity
Low-income countries	<ul style="list-style-type: none"> • low average incomes • high levels of debt • few opportunities for global trade • high levels of poverty • a narrow range of national industries 	<ul style="list-style-type: none"> • inadequate access to employment • inadequate access to education • inadequate social support systems • high birth rates • an underdeveloped healthcare system • inadequate access to technology • underdeveloped legal and political systems • being more likely to have a history of colonialism 	<ul style="list-style-type: none"> • inadequate infrastructure • inadequate access to safe drinking water • inadequate access to sanitation • inadequate access to food • inadequate agricultural productivity

In lesson **7B: Similarities and differences in health status and burden of disease globally**, you compared health status and burden of disease between countries. More specifically, you learnt that:

- high-income countries generally have improved health status when compared to middle- and low-income countries.
- high-income countries generally have lower levels of burden of disease when compared to middle- and low-income countries.
- data is ultimately required in order to determine similarities and differences in health status and burden of disease between countries.
- a general similarity that often occurs between high-, middle-, and low-income countries is that a health status indicator, such as life expectancy, will increase for all countries across the same period of time.
- a general difference that often occurs between high-, middle-, and low-income countries is that a health status indicator, such as maternal mortality rates, will decrease when transitioning from low-income to high-income countries.

In lesson **7C: Factors affecting health status and burden of disease**, you learnt about what informs these similarities and differences in health status and burden of disease between countries. These factors include:

- access to safe water
- sanitation
- poverty
- inequality and discrimination (occurring due to race, religion, sex, sexual orientation, and gender identity)
- and global distribution and marketing (of tobacco, alcohol, and processed foods).



CHAPTER REVIEW ACTIVITIES

Review activity 1: Comparing life expectancy at birth data between countries

Type the URL [who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-birth-\(years\)](http://who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-birth-(years)) into your browser (World Health Organisation [WHO], 2021). This will take you to the World Health Organisation's life expectancy data for different countries. Select two different countries from this page to compare. What are the similarities between their life expectancy at birth data? What are the differences? You can copy the following table into your notebook in order to structure your response, and try to include as many points as you can.

What are the similarities in terms of life expectancy at birth between your chosen countries?	What are the differences in terms of life expectancy at birth between your chosen countries?
<ul style="list-style-type: none"> _____ _____ _____ 	<ul style="list-style-type: none"> _____ _____ _____

Review activity 2: Analysing gross national income (GNI) per capita data

Type the URL data.worldbank.org/indicator/NY.GNP.PCAP.CD into your browser (World Bank Group, n.d.). This will take you to the World Bank's GNI per capita data in USD. Select one country from this data bank. What is its GNI per capita? Would the World Bank classify this country as being low-, middle-, or high-income? What economic, social, and environmental characteristics is this country likely to demonstrate? You can copy the following table into your notebook in order to structure your response.

Country chosen:	
GNI per capita (USD):	
World Bank income-level classification:	
Characteristics that this country would likely demonstrate:	Economic: Social: Environmental:

CHAPTER 7 TEST

Question 1 (2 MARKS)

Country	Maternal mortality ratio (per 100,000 live births) in 2017
Afghanistan	638
Bosnia and Herzegovina	10

Source: Adapted from the World Health Organisation Global Health Observatory, *Maternal mortality ratio (per 100 000 live births)*, <[https://www.who.int/data/gho/data/indicators/indicator-details/GHO/maternal-mortality-ratio-\(per-100-000-live-births\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/maternal-mortality-ratio-(per-100-000-live-births))>

With reference to the data, compare maternal mortality rates in Afghanistan with Bosnia and Herzegovina.

Question 2 (4 MARKS)

Describe **two** environmental characteristics of a low-income country.

Question 3 (2 MARKS)

Country	Life expectancy at age 60 for both sexes in 2019
Algeria	22.04
Botswana	16.25

Source: Adapted from the World Health Organisation Global Health Observatory, *Life expectancy at birth (years)*, <[https://www.who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-birth-\(years\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-birth-(years))>

With reference to data, compare life expectancy at age 60 for both sexes in Algeria and Botswana.

Question 4 (2 MARKS)

Identify **one** social characteristic and describe how it could be used to classify a country as high-income.

Question 5 (2 MARKS)

Describe how the global marketing of alcohol can impair health status in low-income countries.

Question 6 (4 MARKS)

Explain how access to safe water improves health status in high-income countries.

Question 7 (2 MARKS)

Explain how a wide range of industries is an economic characteristic of high-income countries.

Question 8 (2 MARKS)

Explain how not being able to access sanitation may influence health status in low-income countries.

Adapted from VCAA 2011 exam Q4a

Question 9 (2 MARKS)

Explain how global marketing could contribute to an increased incidence of lung cancer.

Adapted from VCAA 2016 exam Q14a

Question 10 (5 MARKS)

- a Explain the term 'poverty'. (1 MARK)

Adapted from VCAA 2018 exam Q9a

- b Explain how poverty might impact health status and burden of disease. (4 MARKS)

Adapted from VCAA 2018 exam Q9b

Questions from multiple chapters**Question 11** (3 MARKS)

Describe how access to safe water could promote health and wellbeing as a resource globally.

CHAPTER**8**

Sustainability and human development

8A Sustainability**8B Human development****8C Health and wellbeing and global trends****Key knowledge**

- the concept and dimensions of sustainability (environmental, social, economic) and its role in the promotion of health and wellbeing
- the concept of human development, including advantages and limitations of the Human Development Index
- implications for health and wellbeing of global trends including:
 - climate change (rising sea levels, changing weather patterns and more extreme weather events)
 - conflict and mass migration
 - increased world trade and tourism
 - digital technologies that enable increased knowledge sharing

8A SUSTAINABILITY

Currently, there is concern that fishing is occurring too rapidly and that this is causing the fish population to significantly decline. This unsustainable practice is called overfishing and may lead to many ongoing problems. For example, it does not ensure that future generations will be able to meet their own needs of having fish available as a food source, as the current generation is fishing excessively to meet (or even surpass) their own needs. This example of unsustainable practice highlights the need for sustainability, where the needs of the current generation are met (such as having adequate access to fish as a food source), without compromising the ability of future generations to also meet their own needs. In this lesson, you will learn about the concept of sustainability and its three dimensions of economic, social, and environmental sustainability. You will also learn about the role of sustainability in the promotion of health and wellbeing.



Image: Mari C/Shutterstock.com

8A Sustainability	8B Human development	8C Health and wellbeing and global trends
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Study design dot point

- the concept and dimensions of sustainability (environmental, social, economic) and its role in the promotion of health and wellbeing

Key knowledge units

The concept of sustainability	4.1.4.1
Economic sustainability	4.1.4.2
Social sustainability	4.1.4.3
Environmental sustainability	4.1.4.4



The concept of sustainability 4.1.4.1

OVERVIEW

You have most likely heard about sustainability in relation to the environment. Environmental sustainability is one form of sustainability that we will look at in this lesson, as well as economic and social sustainability. But what does sustainability mean in a general context? We will explore this concept first.

THEORY DETAILS

Sustainability involves meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. This definition of sustainability was created by the United Nations in 1987 (United Nations, 2021) and has since informed the pursuit of sustainability by countries globally.

The concept of sustainability has two focuses: the present and the future. Therefore, for something to be sustainable, it has to simultaneously focus on providing for the current generation, while also ensuring that these resources currently being provided do not limit future generations in also using those resources. For example, rice must be produced in a certain volume to meet the current market demands. To achieve sustainability, this production must not lead to future generations being unable to produce the volume of rice that they need. If current rice production limits the ability for future generations to produce their needed amount of rice, the practice is unsustainable. Similarly, if current rice production is restricted to the extent that the current generation cannot produce a large enough volume of rice to meet the current demand, the practice is also unsustainable.

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- explain sustainability (environmental, social, economic) and its importance in the promotion of health and wellbeing in a global context

KEY DEFINITIONS

Sustainability involves meeting the needs of the present generation without compromising the ability of future generations to meet their own needs

Useful tip

When describing sustainability, it is important to use very similar wording to the definition. This is due to the importance of including the words 'without compromising', as sustainability focuses on the present generations taking considerate actions to help provide a foundation that future generations can use to meet their own needs. This is different to explaining that sustainability involves meeting the needs of present and future generations, as this is impossible, the present generation cannot meet the needs of future generations, making this incorrect. Therefore, it is important to word your explanations of sustainability carefully.



Image: GoodStudio/Shutterstock.com

Figure 1 Being sustainable can involve a 'tug-of-war' in which there is difficulty balancing the needs of the current generation with the needs of future generations

There are three different dimensions of sustainability that you will learn in this lesson: economic sustainability, social sustainability, and environmental sustainability. These dimensions of sustainability are all interrelated, with one dimension of sustainability having the ability to affect the other two dimensions of sustainability. Sustainability can be thought of as an ongoing cycle, which is visually represented in figure 2.

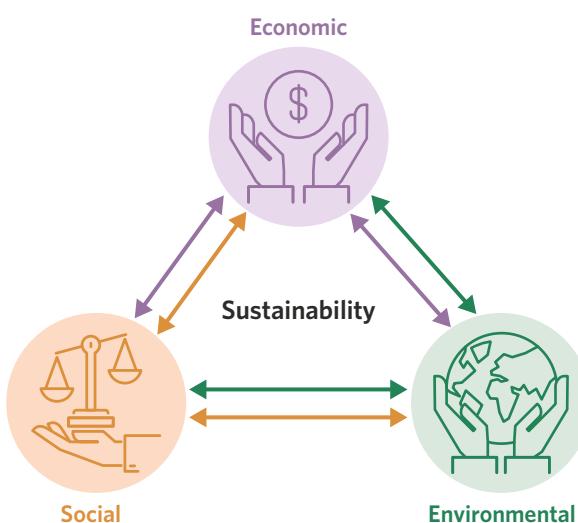


Image: PureSolution/Shutterstock.com

Figure 2 Sustainability is an ongoing cycle which is made up of economic, social, and environmental sustainability

Sustainability can contribute to health and wellbeing globally. In such a way, sustainable practices do not only ensure that the needs of one country's population are met, but also that the needs of other countries are met, specifically low-income countries. This may lead to the promotion of health and wellbeing. We will focus on how this can occur when looking at each dimension of sustainability.

Lesson link

In lesson **1A: Health and wellbeing**, you learnt about the interrelationships between the health and wellbeing dimensions. There are also interrelationships between the dimensions of sustainability, which means a change to one dimension has the ability to positively or negatively affect the other two dimensions in some way. If you need a refresher on interrelationships, return to this lesson.

Useful tip

When referring to the concept of sustainability in responses, it is important to include both words 'present' and 'future' to emphasise the dual focus of sustainability, in which actions are taken to meet the needs of the present generation without compromising the ability of future generations to meet their own needs.

Economic sustainability 4.1.4.2

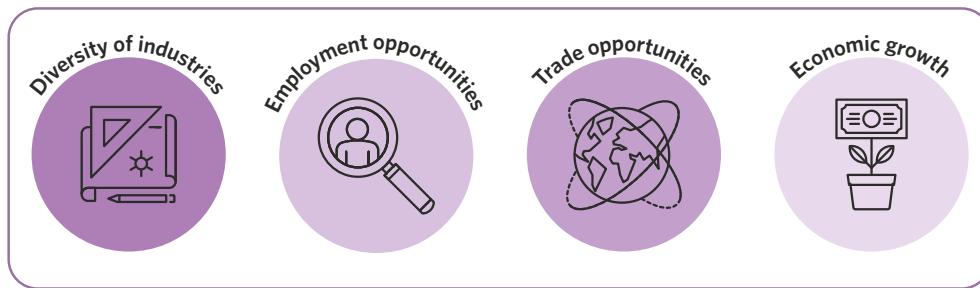
OVERVIEW

How do we ensure that people earn a sufficient income that covers their living expenses? Can this lead to future generations having too much debt to pay off? These questions relate to the concept of economic sustainability.

THEORY DETAILS

Economic sustainability refers to the responsible management and use of financial resources, ensuring that individuals currently have adequate access to earn an income and meet financial obligations without compromising this ability for future individuals. There are multiple aspects which make up economic sustainability, though all involve the responsible use of financial resources in some way. Therefore, to be economically sustainable, it is important to find a balance between providing individuals with incomes which are high enough for them to meet their daily expenses, but not too high to the extent that future generations are unable to meet their financial obligations. For example, if the government provides individuals with loans which cannot be paid off by the current generation, the country may experience large amounts of debt which future generations will be left to pay off, reducing economic sustainability.

There are four main considerations that make up economic sustainability, which are outlined in figure 3. These considerations are elements that all contribute to the achievement of economic sustainability.



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Figure 3 The considerations of economic sustainability

Table 1 Explanation of the considerations of economic sustainability

Consideration	Explanation
Diversity of industries	<p>Having a wide and diverse range of industries ensures that each country receives their national income from multiple sources. A diverse range of industries protects a country financially as they still have multiple industries to earn an income through if there is a disaster in another industry.</p> <p>For example, if a flood damages a large number of food crops, the country may not receive money from this industry. This can lead to damaging effects, such as a country being unable to financially support their citizens. In contrast, if the country has a diverse range of industries to rely on, this won't have as damaging of an effect than if they had a narrow range of industries. A narrow range of industries is common in low-income countries, with many heavily relying on the agriculture industry as their main source of national income. This leaves these countries vulnerable to economic strife if the agricultural industry collapses due to natural disasters.</p>
Meaningful employment opportunities	<p>There are many components that contribute to adequate employment opportunities. This includes ensuring that:</p> <ul style="list-style-type: none"> • there are enough jobs available. • the jobs available meet the needs of individuals looking for jobs (e.g. make fair qualification requests and provide adequate hours). • the job provides fair compensation. This includes ensuring that salaries continue to rise in line with inflation and living costs in the future, meaning it provides individuals with an income needed to afford necessary resources. • the job is perceived to be meaningful by the individual, meaning that the individual feels as if it serves a purpose, is stable, safe, and does not harm their own health and wellbeing or the health and wellbeing of others.

cont'd

KEY DEFINITIONS

Economic sustainability refers to the responsible management and use of financial resources, ensuring that individuals currently have adequate access to earn an income and meet financial obligations without compromising this ability for future individuals

ADDITIONAL TERMS

Inflation refers to the ongoing increasing price of goods and services in an economy over time which results in the decreasing value of money

Table 1 Continued

Consideration	Explanation
Trade opportunities	<p>Having adequate trade opportunities allows countries to have access to the global market. This means they can have access to goods and services provided by other countries, while also providing goods and services to other countries in exchange for financial compensation.</p> <p>Greater levels of trade can increase a country's Gross National Income (GNI) per capita. GNI per capita measures the income a country earns in a year, divided by its population. The money earned through trade opportunities can then be invested in infrastructure and social protection services, contributing to lower levels of poverty.</p>
Economic growth	<p>Economic growth refers to growth in a country's Real Gross Domestic Product (GDP) per capita. Real GDP per capita measures the value of all goods and services produced in a nation's economy (adjusted for inflation), divided by its population.</p> <p>For economic growth to be sustainable, it is important that growth in real GDP is not too high or too low. If inflation (the ongoing increased costs of goods and services and subsequent decrease in value of money) is greater than real GDP growth, the country and its residents may not be able to meet financial obligations, as their costs will exceed the financial resources they have available. As in, if the cost of living (due to inflation) is greater than the monetary value of a country's goods and services (as measured by Real GDP), there will be a lack of balance. If this occurs and the cost of living is too high and cannot be afforded by the citizens of a country, there may be detrimental economic impacts, such as forcing more individuals into poverty or unemployment, or forcing a country to incur more debt which future generations will be forced to pay off.</p>

Table 2 The impact of economic sustainability considerations on health and wellbeing

Consideration	Impact on health and wellbeing
Diversity of industries	If an industry is disrupted, individuals working within that industry may have reduced incomes for a certain period of time or even lose their jobs. The disruption may also reduce the amount of jobs available to future generations, particularly if it is one of the few industries which is profitable in the country. However, if there are a diverse range of industries, these individuals may have a range of other employment opportunities to turn to with additional training so that they have alternate sources of income. These options provided by the many other industries may lead to reduced levels of stress and anxiety due to ensuring individuals have adequate incomes and provide individuals with a sense of optimism, promoting <i>mental health and wellbeing</i> .
Meaningful employment opportunities	Having meaningful employment opportunities ensures that a job provides fair compensation to an individual based on the amount of work they do, their experience, and their qualifications. If an individual does receive fair compensation, this can promote <i>spiritual health and wellbeing</i> due to the individual feeling like they are valued, have a purpose in life, and have a place in the world. By current generations implementing legislation for meaningful employment opportunities, such as a minimum wage which provides individuals with a decent standard of living, future generations are in a better position to continue this pattern.
Trade opportunities	Having fair trade opportunities and strong trade partnerships with other countries contributes to greater average incomes for current generations, as well as establishing solid trade partnerships and systems which future generations can build upon. Greater average incomes can also make living expenses, such as the cost of heating and cooling, more affordable, allowing individuals to be exposed to adequate temperature levels. This may improve the quality of sleep and support rest to support the body and its functioning, promoting <i>physical health and wellbeing</i> .
Economic growth	Having sustainable economic growth ensures that current and future generations have the ability to earn a living wage, which means that individuals can afford living expenses now and into the future. This promotes <i>mental health and wellbeing</i> , as this will contribute to lower levels of stress and anxiety over affording resources, such as food and rent, freeing up cognitive resources to process other sources of information.

! Useful tip

The dimensions of health and wellbeing outlined in table 2 are just some of the examples of how the consideration can impact health and wellbeing. It is important to be aware that all considerations can link to health and wellbeing dimensions in many more ways than the one example given for each, with most of the considerations being likely to relate all dimensions of health and wellbeing. As you move through this lesson, take some time to think of other ways the dimensions of health and wellbeing are related to the considerations of sustainability.

ADDITIONAL TERMS

Gross National Income (GNI)

per capita refers to the income of all residents from a country divided by its population, giving an average income for a single person of that country

Real Gross Domestic Product (GDP)

(GDP) is an inflation adjusted measure of the dollar value of all goods and services produced by a country in a given year

Lesson link

You first learnt about GNI in lesson **7A: Classifying countries**. GNI is used to classify countries as either high-income, middle-income, or low-income countries. Return to this lesson if you need a refresher on the concept of GNI.

Promotion of health and wellbeing globally

Economic sustainability can promote health and wellbeing globally. For example, trade opportunities involve partnerships between two or more countries, which can lead to positive impacts for all countries involved if the trade agreement is fair and appropriate. This can promote *physical health and wellbeing*, as all countries involved may benefit financially from the trade agreements, and gain additional finances they can use for infrastructure, such as healthcare systems. This may reduce waiting times for individuals, meaning health conditions can be quickly and effectively diagnosed, managed, and treated, leading to minimal illnesses and injuries. These developments in infrastructure not only help current generations, but also provide future generations with greater systems, such as healthcare and education systems, to inherit and build upon.

Useful tip

When outlining the impact of sustainability on health and wellbeing, you will most likely be asked about how a dimension of sustainability promotes health and wellbeing. In this case, you will have to look at positive aspects of the considerations of sustainability, such as how having an effective level of economic growth positively impacts health and wellbeing.

Social sustainability 4.1.4.3

OVERVIEW

How can we help all individuals to meet their own needs regardless of their individual differences? To what extent can we provide social support without using up too many resources which future generations may need? These questions relate to the dimension of social sustainability.

THEORY DETAILS

Ensuring all individuals, regardless of individual differences, such as age, gender, income, and occupation have access to the resources they need and are treated in a fair and just way is related to social sustainability. **Social sustainability** involves creating an equitable society that meets the needs of all citizens at the present without compromising the ability to meet these needs for future generations. Creating an equitable society involves taking actions, such as changing policies and legislation to address social issues, such as healthcare, education, and working conditions. This ensures that all individuals are provided with the same opportunities to reach their full potential and have the freedom to make their own decisions.

Therefore, actions that work towards social sustainability often involve providing assistance to groups within society that are the most disadvantaged. It also involves providing ‘safety nets’ to support individuals who experience hardship. This additional support to prevent vulnerable people from falling further into poverty is prominent among high-income countries but is less common in low- and middle-income countries.

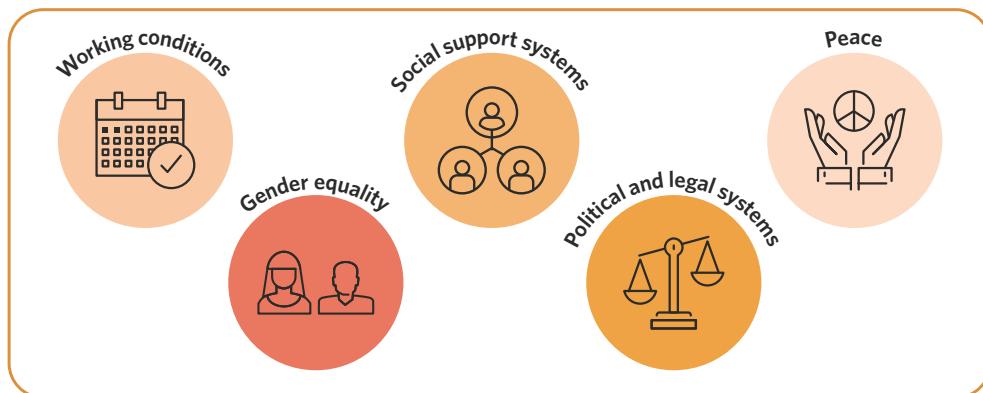


Image: PureSolution/Shutterstock.com

Figure 4 The considerations of social sustainability

Lesson link

In lesson **7C: Factors affecting health status and burden of disease**, you learnt that low-income countries have greater levels of poverty. The considerations of economic sustainability relate closely to levels of poverty, with inadequate employment opportunities, a narrow range of industries, inadequate economic growth, and inadequate trade opportunities having the ability to contribute to greater levels of poverty. In contrast, high-income countries are likely to have greater levels of economic growth and greater employment opportunities, contributing to reduced levels of poverty.

KEY DEFINITIONS

Social sustainability involves creating an equitable society that meets the needs of all citizens at the present without compromising the ability to meet these needs for future generations

Lesson link

In lesson **1D: Prerequisites for health**, you learnt about the concept of equity as a prerequisite. If you need a refresher on this concept, return to lesson 1D.

Table 3 Explanation of the considerations of social sustainability

Consideration	Explanation
Social support systems	Social support systems provide support to the most vulnerable in society, such as those experiencing financial hardship or homelessness. Support can be provided financially, or through tangible resources, such as providing food and shelter. An example of a social support system in Australia is public housing, with some vulnerable Australians living in housing provided by the government. Providing social support not only helps those in need of support, but also society more generally, as it helps individuals contribute to society and lead productive lives.
Gender equality	The achievement of gender equality means that all genders are able to be involved in all aspects of society, are treated equally, and have the same opportunities. The achievement of gender equality typically focuses on female empowerment due to females usually having less opportunities compared to males, particularly in low-income countries. For example, in some low-income countries, females may not have access to an education. In all countries, females are more likely to experience discrimination and are less likely to hold leadership roles. Achieving gender equality can therefore allow for all individuals to contribute to society and reach their full potential.
Working conditions	Having safe and decent working conditions relates to individuals feeling physically and psychologically safe in their workplaces, as well as receiving fair compensation for their work. This relates to Occupational Health and Safety (OH&S) measures, which are a large focus of unions and other bodies in high-income countries such as Australia. In low-income countries, there is less focus on creating safe working environments, with many individuals working in hazardous environments that may cause injury, as well as working for minimal pay. Could you imagine working for only \$2 a day? Would this cause you stress? When working conditions are safe and decent, individuals are happier, more productive, less stressed, and are able to afford living expenses.
Political and legal systems	<p>It is more likely that there are strong and established political and legal systems in high-income countries than in low- and middle-income countries. These systems typically have a strong focus on human rights and can provide many benefits for a country. One typical example of a strong political system is a functioning democracy, where all citizens have a say on their political leaders and can influence the actions the governments take, helping to ensure that they receive the resources they need. Furthermore, a functioning democracy allows individuals to positively or negatively influence future generations by voting for parties who may or may not promote sustainability. If governments commit to responsible government spending, future generations may not be left with large amounts of debt.</p> <p>Strong legal systems ensure individuals and organisations can be represented and help to contribute to a level of social justice. High-income countries often have well-developed legal systems, which can reduce levels of corruption (although, corruption still exists in all countries) by holding individuals, organisations, and institutions to a greater level of accountability than in low-income countries.</p>
Peace	High levels of peace allow societies to progress and be productive, as they feel safe and protected in their daily life and can therefore freely move through their environment. Greater levels of peace not only allow current generations to go to work or school, have lower levels of stress, and engage in social interactions safely, but also means that individuals and societies can be productive. Productivity supports the current generation by providing society with additional resources, and can also contribute to levels of economic growth and innovation. This can benefit future generations by placing them in better economic, environmental, and social positions. Peace can often be threatened by conflict, political instability, or war, meaning that individuals may instead feel fear each day, and are limited in their ability to be productive.

Table 4 The impact of social sustainability considerations on health and wellbeing

Consideration	Impact on health and wellbeing
Social support systems	<p>One form of social support system involves providing monetary support to individuals in need so that they can afford basic necessities, such as food and rent. This support contributes to food security, allowing individuals to have access to nutritious, safe, and culturally appropriate food at all times, from non-emergency sources. Providing individuals with nutritious food promotes <i>physical health and wellbeing</i>, as nutrient-dense foods provide vitamins and minerals that support the body and its functioning and reduces the likelihood of developing conditions, such as colorectal cancer. This access to food security can enhance energy levels and therefore enhance productivity, leading to a greater ability to gain and maintain meaningful employment. This can increase the likelihood for these individuals to provide their children with access to nutritious food as they will have the financial means to do so, also promoting <i>physical health and wellbeing</i> for future generations.</p>
Gender equality	<p>By achieving gender equality, all genders have equal access to opportunities. These greater opportunities are therefore set for current generations, and are also more likely to be adopted for future generations, as long as actions are taken to maintain gender equality. For example, in low income-countries, gender equality may enable females to have the same education and employment opportunities as males, promoting <i>social health and wellbeing</i> as females are able to form new relationships with others, such as their colleagues or classmates, and build a strong support network.</p>

ADDITIONAL TERMS

Food security is when a person has reliable access to adequate quantities of nutritious, safe, and culturally appropriate food at all times, from non-emergency sources

cont'd

Table 4 Continued

Consideration	Impact on health and wellbeing
Working conditions	Safe and decent working conditions can involve ensuring there are no physical hazards in work environments, such as ensuring there is adequate scaffolding for construction workers who are building infrastructure. By implementing these conditions as legislation that all workplaces need to follow, it protects current workers and provides future generations with existing legislation that they can continue to enforce, also protecting the safety of future workers. This can promote <i>physical health and wellbeing</i> , as lower levels of injury due to safe working environments support the body and its functioning.
Political and legal systems	Having strong political and legal systems allows individuals to have a say on who governs their country and the direction of their country, while also ensuring that there are established systems to hold individuals accountable when they break the law. These systems protect future and current generations by minimising the likelihood of corruption in the future. This promotes <i>spiritual health and wellbeing</i> by providing individuals with a sense of hope and purpose, as they are able to influence the direction of their country and trust that there is a level of social justice within their society.
Peace	Experiencing peace allows individuals to feel safe in their communities and physical environment. This allows them to interact with and form and maintain meaningful relationships with others, promoting social health and wellbeing. Systems have to be in place to maintain peace, such as having a stable political system. If established for current generations, this stable political system is more likely to be maintained for future generations, promoting <i>social health and wellbeing</i> for future generations as well.

Promotion of health and wellbeing globally

Social sustainability can also promote health and wellbeing globally. For example, due to globalisation (the interconnectedness of countries), many countries collaborate and support countries in need. This has involved high-income countries with established political and legal systems working with low-income countries to implement or bolster these systems, increasing the likelihood of these countries having a strong, well-functioning democracy. By helping low-income countries have a strong democracy, this enhances the level of social justice in low-income countries, such as protecting the rights of minorities who may otherwise experience discrimination or harassment. This can promote *mental health and wellbeing*, as strong political and legal systems lead to reduced levels of stress and anxiety, as individuals are less stressed about being involved in corruption or not having their human rights upheld. Furthermore, with more countries in the world having strong political systems, they are more likely to work together on global issues, reducing conflict and enhancing levels of peace, further promoting *mental health and wellbeing*.

Environmental sustainability 4.1.4.4

OVERVIEW

Do you recycle? Have you ever considered your own carbon footprint? Are there any other actions you have taken to reduce your impact on the environment, such as reducing your meat intake, or catching public transport to school instead of being driven? If the answer to any of these questions is yes, it is likely that you have thought about environmental sustainability in the past.

THEORY DETAILS

It is important to protect nature and minimise the amount of environmental harm humans create to ensure that there is a liveable environment for future generations. This refers to the dimension of **environmental sustainability**, which involves ensuring the natural environment is used in a way that serves the current generation whilst also preserving natural resources for future generations. For example, this may involve making decisions and implementing practices that minimise resource degradation and depletion. There are multiple considerations of environmental sustainability. Some of these are outlined in figure 5 and explained in table 5.

Lesson link

The term food security is explained in greater depth in lesson **2A: Health variations between population groups**: **Part 1**. Return to this lesson for a greater understanding of food security.

Additionally, peace is referred to as a prerequisite for health in lesson **1D: Prerequisites for health**. Return to this lesson for a refresher on the concept of peace.

KEY DEFINITIONS

Environmental sustainability involves ensuring the natural environment is used in a way that serves the current generation whilst also preserving natural resources for future generations

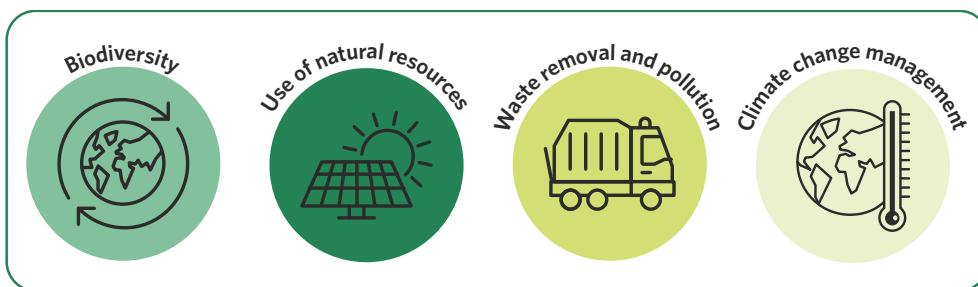


Image: PureSolution/Shutterstock.com

Figure 5 The considerations of environmental sustainability

Table 5 Explanation of the considerations of environmental sustainability

Consideration	Explanation
Biodiversity	Biodiversity refers to the broad range of life forms in the environment, such as the different species of plants, animals, and bacteria. It is important that there is a wide range of life forms in the environment, as all life forms coexist and rely on each other; the greater the biodiversity the better. Maintaining biodiversity ensures that the natural balance in the environment exists now and into the future, which supports the availability of essential resources such as food, water, and air.
Use of natural resources	Many natural resources are non-renewable, which means that they may be unable to or take an extremely long time to replenish naturally. An example of a non-renewable resource is coal, which is the most commonly used source of energy, such as electricity. Due to it being a non-renewable resource, concerns are growing about how energy will be generated when coal reserves run out. Due to this concern, actions are being taken across the world to replace non-renewable resources with renewable resources where possible, such as solar and wind energy. Renewable resources can be replenished in a short amount of time and can therefore be made available to use for more people in current and future generations. There are many other considerations about the use of natural resources which need to also be considered. For example, due to droughts and other issues, soil has been damaged in some parts of the world, making it harder to use land to grow food for crops. This isn't only a concern for current generations, but also for future generations, as they will also need this land to grow food crops, providing a source of income and food. Therefore, land needs to be protected and cared for so that it will be available for use by future generations. Trees are another natural resource that need to be protected and used sustainably. For example, if too many trees are cut down to make paper, there may not be enough for current or future generations to ensure that enough oxygen is in the atmosphere.
Waste removal and pollution	Having adequate waste removal and minimising pollution ensures that the natural environment is free from human waste and rubbish. This is important to ensure that plants, animals, and bacteria in the environment can grow and survive now and into the future, as human rubbish often has the ability to pollute and damage the environment and cause harm. Additionally, where possible, actions should be taken to minimise waste, such as recycling and preventing an overproduction of products. This means that there will be less waste in the environment to manage and safely dispose of, minimising the likelihood to pollute and damage the environment.
Climate change management	Climate change refers to changes in global weather patterns and may also be used to refer specifically to the rapid climate change post-1900 which has occurred largely due to human activity, such as a rise in global temperature. Climate change management involves implementing policies and legislation to reduce the increasing rate of climate change. For example, this may involve implementing a carbon tax, where companies using large amounts of carbon (a greenhouse gas which contributes to rising temperatures) have to pay extra for their impact on the environment. This aims to reduce the amount of carbon companies use, reducing the negative impacts that current and future generations may experience if climate change is not combatted through appropriate management. The effectiveness of the carbon tax depends on its implementation and policy, with it being effective in some circumstances and ineffective in others.

ADDITIONAL TERMS

Biodiversity refers to the broad range of life forms in the environment

KEY DEFINITIONS

Climate change refers to changes in global weather patterns; may also be used to refer specifically to the rapid climate change post-1900 which has occurred largely due to human activity

Table 6 The impact of environmental sustainability considerations on health and wellbeing

Consideration	Impact on health and wellbeing
Biodiversity	Trees require exposure to certain types of bacteria from other life forms, such as insects. Ensuring biodiversity can therefore promote <i>physical health and wellbeing</i> , as trees are required to produce the air that humans breathe. Oxygen is necessary to ensure the effective functioning of the body and its systems, such as to ensure that cells in the body can function and support energy levels and immune functioning. As such, by ensuring trees are exposed to bacteria, they will continue to grow and help provide oxygen for current and future generations.
Use of natural resources	Coal is a non-renewable fossil fuel which is commonly used to produce electricity. To minimise reliance on coal, many countries are using alternate, renewable forms of electricity, such as solar electricity. By providing access to solar electricity, which is a natural, renewable resource, individuals in current and future generations will continue to have access to electricity which is necessary for basic necessities, such as for cooking on stoves, regardless of whether non-renewable resources, such as coal, run out. This can support the functioning of the body through the provision of adequate nutritional and energy intake, promoting <i>physical health and wellbeing</i> .
Waste removal and pollution	Reducing pollution, particularly near open waters, reduces the rate at which damage to coral reefs occurs. This is important as many species of fish rely on coral to survive. Due to fish being a food source for humans, this protection of coral reefs promotes <i>mental health and wellbeing</i> , as individuals are less likely to feel stressed about food insecurity. By protecting the fish and their environment, fish will be available as a food source for the current and future generations, reducing anxiety levels now and into the future.
Climate change management	Climate change management, such as the implementation of a carbon tax, can slow down rising global temperatures and subsequently protect current and future generations. Increasing temperatures can result in the melting of glaciers and subsequent rising sea levels, which may lead to the displacement and forced migration of communities in low-lying sea areas. Preventing forced migration promotes <i>social health and wellbeing</i> , as individuals are able to maintain their social network and the relationships they have formed within their community.

Useful tip

When outlining how the dimensions of sustainability impact health and wellbeing, it is important to be specific and draw clear links. This can be achieved by referring to a specific consideration of a dimension of sustainability and explaining how this impacts the health and wellbeing of current and future generations.

Promotion of health and wellbeing globally

Global health and wellbeing can also be promoted by environmental sustainability. Because we all share the same earth, actions that impact the environment of one country can have detrimental impacts on other countries. For example, high-income countries who can afford renewable resources, such as solar energy, may choose to rely on this as their primary source of energy. This can ensure that low-income countries also have access to the natural resources they may need by minimising the depletion of non-renewable resources, such as coal. Furthermore, high-income countries could work with low-income countries to develop and implement renewable energy sources, such as wind or solar energy, ensuring that current and future generations in all parts of the world will have access to a reliable energy source. By allowing current and future generations across all countries to have access to renewable energy, they can more easily access daily activities and resources, such as food, school, work, and healthcare facilities, such as the doctors. Without transport due to an absence of available energy sources, individuals will have to walk long distances which may cause fatigue and potential injuries, limiting the body and its functioning and negatively impacting *physical health and wellbeing*.

Theory summary

In this lesson, you have learnt about sustainability, which involves meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. You learnt about the three dimensions of sustainability and their considerations, which are outlined in table 7. You also learnt about how sustainability can promote health and wellbeing globally.

Table 7 The dimensions of sustainability and their considerations

Dimension	Description	Considerations
Economic sustainability	Involves the responsible management and use of financial resources, ensuring that individuals currently have adequate access to earn an income and meet financial obligations without compromising this ability for future individuals.	<ul style="list-style-type: none"> • Diversity of industries • Meaningful employment opportunities • Trade opportunities • Economic growth
Social sustainability	Involves creating an equitable society that meets the needs of all citizens at the present without compromising the ability to meet these needs for future generations.	<ul style="list-style-type: none"> • Social support systems • Gender equality • Working conditions • Political and legal systems • Peace
Environmental sustainability	Involves ensuring the natural environment is used in a way that serves the current generation whilst also preserving natural resources for future generations.	<ul style="list-style-type: none"> • Biodiversity • Use of natural resources • Waste removal and pollution • Climate change management

ACTIVITY 1 - CLASS DISCUSSION

How are the dimensions of sustainability interrelated?

Read the following scenario before discussing the questions with your classmates.

Reducing levels of pollution can be achieved by adding in additional bins in busy areas. This is due to areas with a high level of foot traffic often leading to greater levels of rubbish, as well as bins in these areas often overflowing. Pollution can be reduced even further when electronic 'smart' bins are used which automatically compress rubbish stored in the bin, reducing the likelihood of the bins overflowing. In Melbourne, they reduced the number of bins in the city by using smart bins which compress rubbish and are able to store up to five times the amount of rubbish as normal bins (Smartsensor Technologies, 2016). These bins are connected to a network which alerts council workers when they need to be emptied (Smartsensor Technologies, 2016).

Although it costs money to implement electronic bins, it is estimated to reduce overall costs in the long term. This is due to the government having to spend less money on employing people to empty rubbish bins, as the smart bins can be emptied less frequently. This money can also be spent elsewhere.

- Using information from the case study, how can reducing levels of pollution promote health and wellbeing?
- Using information from the case study, how can reducing levels of pollution promote health and wellbeing globally?
- Referring to the scenario, explain how environmental and economic sustainability are interrelated.
- How may the implementation of electronic bins promote social sustainability?

8A QUESTIONS

Theory-review questions

Question 1

Sustainability

- A has a greater focus on being able to meet the needs of future generations.
- B has a greater focus on being able to meet the needs of current generations.
- C focuses equally on meeting the needs of current and future generations.

Question 2

Meeting the dimensions of sustainability can promote health and wellbeing

- A only in the country which is implementing sustainable practices.
- B in other countries, specifically low-income countries, if the practice also supports other countries or can affect the relationships between countries.

Question 3

There are multiple considerations of economic sustainability, such as diversity of industries and economic growth. These considerations achieve economic sustainability by ensuring the natural environment is used in a way that serves the current generation, as well as future generations.

- A True.
- B False.

Question 4

Which of the following best fills in the blank?

- A equitable
- B equal

Social sustainability involves creating an _____ society that meets the needs of all citizens at the present without compromising the ability to meet these needs for future generations.

Question 5

Environmental sustainability includes considerations such as, biodiversity, waste removal and pollution, and the use of natural resources. Which of the following explain how achieving environmental sustainability can promote health and wellbeing?

- A Promoting mental health and wellbeing by reducing levels of stress due to resources, such as food and water being readily available, supporting the functioning of the body.
- B Promoting spiritual health and wellbeing by reducing levels of stress due to all genders having access to equal opportunities, increasing their sense of purpose.

Skills**Unpacking the case study**

Use the following information to answer Questions 6–9.

Petrol is formed by rocks and sediment putting pressure on buried fossils over a long period of time. This then leads to petrol reserves, with the petrol being extracted and used for transport, such as to fuel cars.

Petrol reserves are becoming increasingly smaller over time, with concerns that they will run out in the near future. Additionally, the use of petrol has many negative environmental and health impacts. For example, due to many cars using petrol in the United Kingdom (UK), the air is polluted above the level that the World Health Organisation suggests to be healthy. This unsafe air quality not only negatively affects the environment, but has been suggested to contribute to a 'public health emergency' due to contributing to more than 40,000 premature deaths in the UK annually. In an attempt to mitigate these negative health and environmental impacts of petrol, some politicians have suggested that vehicles that use petrol should incur an additional tax. This has led to concern that some individuals will not be able to afford petrol.

Source: adapted from Damian Carrington, The Guardian, *Raise car fuel prices to fight air pollution, says rightwing thinktank*, <www.theguardian.com/environment/2019/aug/12/raise-car-fuel-prices-to-fight-air-pollution-says-rightwing-thinktank>

Question 6

Concerns about the environmental sustainability of petrol extraction is reflected by the statement that

- A 'This has led to concern that some individuals will not be able to afford petrol'.
- B 'Petrol reserves are becoming increasingly smaller over time, with concerns that they will run out in the near future'.

Question 7

Concerns about the economic sustainability of petrol use can be reflected by the statement that

- A 'This has led to concern that some individuals will not be able to afford petrol'.
- B 'Additionally, the use of petrol has many negative environmental and health impacts.'

Question 8

The dimensions of sustainability can be interrelated. This is reflected by the statement that

- A 'In an attempt to mitigate these negative health and environmental impacts of petrol, some politicians have suggested that vehicles that use petrol should incur an additional tax'.
- B 'For example, due to many cars using petrol in the United Kingdom (UK), the air is polluted above the level that the World Health Organisation suggests to be healthy'.

Question 9

The dimensions of sustainability can impact health and wellbeing. The fact that the unsafe air due to petrol use has contributed 'to more than 40,000 premature deaths in the UK annually' suggests that petrol use has a negative impact on physical health and wellbeing due to limiting the effective functioning of the body.

- A True.
- B False.

Perfect your phrasing**Question 10**

Which of the following sentences is most correct?

- A Sustainability involves meeting the needs of the present generation *and* the needs of future generations.
- B Sustainability involves meeting the needs of the present generation *without compromising* the ability of future generations to meet their own needs.

Exam-style questions**Question 11** (1 MARK)

Describe sustainability.

Question 12 (2 MARKS)

Outline how economic sustainability can promote health and wellbeing.

Question 13 (2 MARKS)

Suggest how an example of environmental sustainability could promote health and wellbeing globally.

Question 14 (3 MARKS)

Explain the dimension of social sustainability, with reference to a consideration of social sustainability.

Question 15 (5 MARKS)

Brexit recently occurred, which involved the United Kingdom (UK) leaving the European Union (EU). The UK's exit from the EU has had many effects, with one being that new trade deals have been established. Most countries of the EU have free trade agreements, in which they can exchange goods and services between countries without taxes. Free trade therefore provides many benefits as it can increase the amount of a trade a country can engage in, but it can also lead to reduced jobs in a country if it is cheaper to import rather than produce goods. In such a way, it has been important for the UK to create new trade deals with the EU to strike the balance between creating strong trade partnerships with other countries while protecting its citizens.

- a Identify a dimension of sustainability which is present in the case study. (1 MARK)
- b Referring to the case study, explain how the dimension of sustainability provided in **part a** can promote health and wellbeing. (2 MARKS)
- c Outline how your chosen dimension of sustainability can promote health status. (2 MARKS)

Questions from multiple lessons

Question 16 (2 MARKS)

Economic growth ensures that current and future generations can afford living expenses, therefore being a consideration of economic sustainability.

Explain how economic growth relates to optimal health and wellbeing as a resource nationally.

Question 17 (3 MARKS)

- a Identify a factor which contributes to similarities and differences in health status and burden of disease globally. (1 MARK)
- b Using the factor identified in **part a**, explain how this factor is related to a dimension of sustainability. (2 MARKS)

8B HUMAN DEVELOPMENT

How do we measure if people are fulfilled? Does the ability of individuals to reach their full potential impact their health? How can we measure this? Human development is a concept which involves creating environments in which all individuals can live to their full potential, live their life according to their needs, and lead a productive life. In this lesson, you will learn about the concept of human development and how it is measured by the human development index (HDI). You will also learn about the advantages and disadvantages of the HDI.



Image: Marta Sher/Shutterstock.com

8A Sustainability

8B Human development

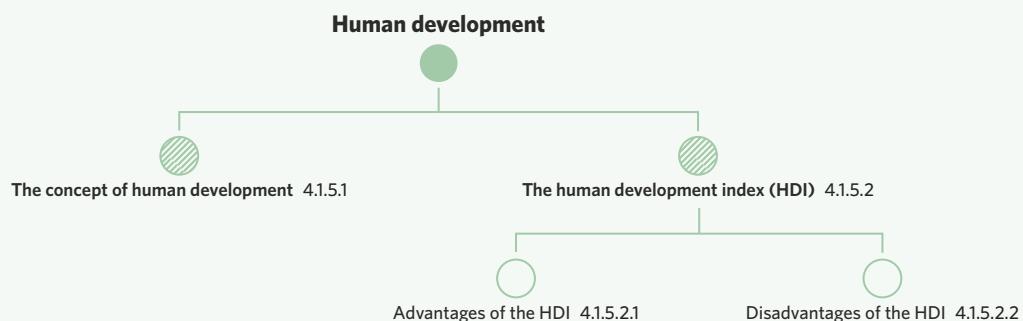
8C Health and wellbeing and global trends

Study design dot point

- the concept of human development, including advantages and limitations of the Human Development Index

Key knowledge units

The concept of human development	4.1.5.1
The human development index (HDI)	4.1.5.2
Advantages of the HDI	4.1.5.2.1
Disadvantages of the HDI	4.1.5.2.2



The concept of human development 4.1.5.1

OVERVIEW

How can we measure an individual's ability to reach optimal health and wellbeing and their full potential in a holistic way, rather than just looking at health status outcomes or Gross National Income (GNI)? How do we instead measure the level of freedom and participation in the community of individuals? This leads us to the concept of human development.

THEORY DETAILS

Human development involves creating an environment that empowers individuals to develop to their full potential and lead a long, healthy, and productive life by expanding their choices, their capabilities, and their freedom. It also involves having access to a decent standard of living and resources, such as education, reducing the cycle of poverty, and enhancing the ability to participate in the community, and live according to needs and interests (adapted from the United Nations [UN] Development Programme [UNDP], 1990).

KEY DEFINITIONS

Human development involves creating an environment that empowers individuals to develop to their full potential and lead a long, healthy, and productive life by expanding their choices, their capabilities, and their freedom. It also involves having access to a decent standard of living and resources, such as education, reducing the cycle of poverty, and enhancing the ability to participate in the community and live according to needs and interests

As you can see, the definition of human development is long and complex. Let's break the definition down into the following components:

- development to full potential
- leading a long, healthy, and productive life
- expansion of choices
- expansion of capabilities
- access to a decent standard of living
- access to resources, such as education and healthcare
- breaking the cycle of poverty
- ability to participate in the community
- access to freedom
- ability to live according to individual needs and interests.

It is helpful to remember at least a few of these components to use in your responses for exam-style questions.

Poverty is often defined as a cycle, as families experiencing poverty are often unable to provide their children with the resources required to move out of poverty, such as a quality education to gain meaningful employment. As such, poverty can continue on for generations within a family. Breaking the cycle of poverty therefore involves providing individuals with the resources they need, such as education and financial assistance, to break out of the cycle.

Lesson link

In the *Guide to responding to health terms in questions* at the start of this book, you learnt about the concept of human development, how it is measured, and what VCE Health and Human Development human development questions look like. For a refresher on this, you can turn back to this guide.

Useful tip

Like the concepts of health and wellbeing and health status, human development is a broad concept which is typically linked to all HHD concepts in the VCE exam. Therefore, it is important that you have a strong understanding of human development, can remember the components, and feel comfortable applying the components to case studies and other HHD concepts. When revising for SACs or the exam, it may be helpful to brainstorm how human development can be applied to other HHD concepts.

Useful tip

When responding to questions about human development, it is important to refer to at least one component of human development in your response. This depends on the number of marks a question has, with it possibly necessary to refer to more than one component of human development for questions with more marks.

For example, if a question asks you to discuss how a reproductive healthcare service which provides access to contraception and education on family planning can promote human development, you could refer to the components of *access to resources*, such as education and healthcare, as well as *leading a long, healthy, and productive life*. You would have to expand on your response by creating specific links with the case study on how this occurs, such as mentioning that access to contraception allows females to lead a long, healthy, and productive life as they can avoid sexually transmitted infections (STIs) and unwanted pregnancies, allowing them to live free of diseases and lead a productive life through working and getting an education.

So how can human development realistically be promoted? How can we improve human development for individuals or on a global scale? Many actions taken to improve human development arise from government initiatives. They can also arise from actions taken by non-government organisations. These actions may involve introducing legislation and health campaigns, or providing greater healthcare and social support services, therefore promoting human development. Human development is promoted by the provision of greater healthcare and social support services creating an environment which empowers individuals to have the ability to make decisions to improve their health and experience freedom (UN Development Programme, 1990). For example, by having access to healthcare providers that empower individuals with information on nutrition and exercise options in the local community, individuals are better able to make decisions which improve their health. These decisions may involve having a greater, more nutrient-dense diet, or joining a local sporting team to maintain a healthy body weight.

The example of improving healthcare and support services highlights the fact that human development does not improve the health and quality of life of individuals by making decisions for them, but instead provides individuals with the ability to make those decisions for themselves. This is due to the focus on individual access to freedom and expansion of choices. Furthermore, human development highlights the importance of allowing individuals to participate in the politics of their country by having political freedom, the ability to vote, and being provided human rights (UN Development Programme, 1990).

A new initiative in a rural community of Ghana provides school books and stationery to students. This enables children who would usually miss school due to not being able to afford these resources an *access to education*.

Providing these children with *access to the resource of education* enhances their capabilities, such as learning how to read and write. This can enhance access to a decent standard of living as these children may have access to more occupations with greater incomes due to receiving an occupation.

Access to a decent standard of living may contribute to breaking the cycle of poverty and allow individuals to live a long, healthy, and productive life.

Figure 1 An example of the promotion of human development

As presented in figure 1, you are usually able to link multiple components of human development to illustrate how an initiative (in the above case, the provision of textbooks and stationery to students in Ghana) can promote human development.

Lesson link

The promotion of human development is particularly vital in low-income countries. This is due to individuals in low-income countries having access to less resources (such as education and healthcare), having less social support services, having greater levels of poverty, having underdeveloped legal and political systems, and having inadequate access to sanitation, food, and drinking water. You learnt about these characteristics (and many others) of low-income countries in lesson

7A: Classifying countries

Return to this lesson if you need a refresher on the characteristics of low-, middle-, and high-income countries as these characteristics may help you to create links to human development in case studies.

ACTIVITY 1

Watch a video on human development

Search up 'What is Human Development?' on YouTube and watch the entire two minute and forty second video (UNDP Kosovo, 2014) before answering the following questions.

- 1 What does the concept of human development refer to?
- 2 The video talks about how the focus of human development is not on how much money people get, but how the money is invested in people. What can this money be used for? You can look at the examples the video provides and also think of your own.
- 3 What are some of the barriers to human development outlined in the video?

The human development index (HDI) 4.1.5.2

OVERVIEW

How do we measure a country's human development? Human development is officially measured by a tool devised by the UN called the Human Development Index (HDI). The HDI provides each country with a single statistic which can be used to compare human development across countries.

THEORY DETAILS

Human Development Index (HDI) refers to a tool developed by the United Nations (UN) to measure and rank the social and economic development of a country. More specifically, it is the tool used to measure the level of human development within a country. It is presented as a single statistic that takes into account three dimensions and four indicators of human development (UNDP, 2011). The dimensions are the overarching concepts which contribute to human development, while the indicators numerically measure these dimensions so that a HDI statistic can be calculated. Using this resulting statistic, HDIs are used to compare human development across countries. The three dimensions and four indicators of the HDI are outlined in figure 2 and explained in table 1.

Study design key skills dot point

- explain the Human Development Index and evaluate its usefulness in measuring human development of countries

KEY DEFINITIONS

Human Development Index (HDI)

(HDI) refers to a tool developed by the United Nations to measure and rank the social and economic development of a country. It is presented as a single statistic that takes into account three dimensions and four indicators of human development

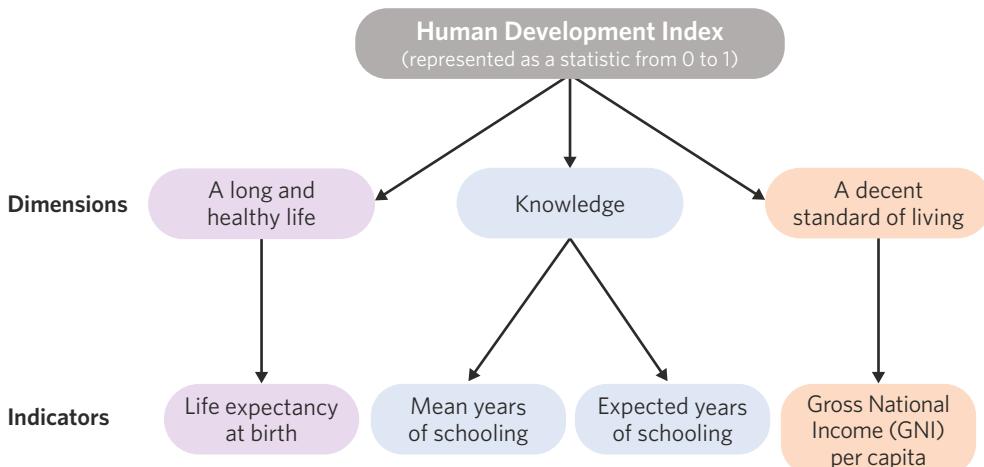


Figure 2 The dimensions and indicators of the HDI

Table 1 Explanation of the indicators of the HDI

Dimension	Indicators	Description
A long and healthy life	Life expectancy at birth	Life expectancy at birth measures the number of years a person is expected to live at their time of birth, on the basis that current health conditions do not change
Knowledge	Mean years of schooling	Mean years of schooling refers to the average number of years of schooling achieved by individuals in a country, measured at 25 years of age and above
	Expected years of schooling	Expected years of schooling refers to the expected number of years individuals can expect to spend at school, measured at the school entrance age for a child
A decent standard of living	Gross National Income per capita	Gross National Income (GNI) per capita refers to the income of all residents from a country divided by its population, giving an average income for a single person of that country

! Useful tip

Although the HDI indicators of mean years of schooling and expected years of schooling seem very similar, they are different due to being measured at different times.

- Mean years of schooling is measured *after* individuals are assumed to have completed their schooling, which is at the age of 25 or above. It therefore helps us to understand how educated the adult population in a certain country is.
- In contrast, expected years of years of schooling is measured *before* individuals start their schooling, at school entrance age. For example, expected years of schooling may be measured in Australia just before a student starts their first day of prep. It therefore helps us to understand how educated the children in the population of a certain country are likely to be.

The four indicators are taken into account in the measurement of the single HDI statistic. The HDI statistic will range from 0 to 1, and is represented as a decimal (e.g., 0.2 or 0.9). The closer the country is to 1, the greater level of human development they have. Countries can be classified as having a low, medium, high or very high HDI. The values for these classifications are outlined in table 2. The HDI allows for comparisons to be drawn between countries and for the progress of a country to be monitored over time.

Lesson link

You first learnt about GNI in lesson **7A: Classifying countries**. Return to this lesson if you need a refresher on the concept.

KEY DEFINITIONS

Life expectancy at birth measures the number of years a person is expected to live at their time of birth, on the basis that current health conditions do not change

Mean years of schooling refers to the average number of years of schooling achieved by individuals in a country, measured at 25 years of age and above

Expected years of schooling refers to the expected number of years individuals can expect to spend at school, measured at the school entrance age for a child

Gross National Income (GNI) per capita refers to the income of all residents from a country divided by its population, giving an average income for a single person of that country

Memory device

You can remember the dimensions and indicators of the HDI by remembering AKA L-MEG.

Dimensions:

A long and healthy life

Knowledge

A decent standard of living

Indicators:

Life expectancy at birth

Mean years of schooling

Expected years of schooling

Gross National Income (GNI)
Economic Product per capita

Table 2 HDI classifications with examples (World Bank, n. d.; UNDP, 2020)

HDI Classification	HDI value (in 2019)	Example countries (as measured in 2019)
Low human development	Less than 0.550	<ul style="list-style-type: none"> Mozambique - 0.456 Rwanda - 0.543
Medium human development	0.550-0.699	<ul style="list-style-type: none"> Cambodia - 0.594 India - 0.654 Iraq - 0.674
High human development	0.700-0.799	<ul style="list-style-type: none"> Maldives - 0.740 China - 0.761 Peru - 0.777
Very high human development	0.800 and above	<ul style="list-style-type: none"> Bahamas - 0.814 Australia - 0.944 Iceland - 0.949

! Useful tip

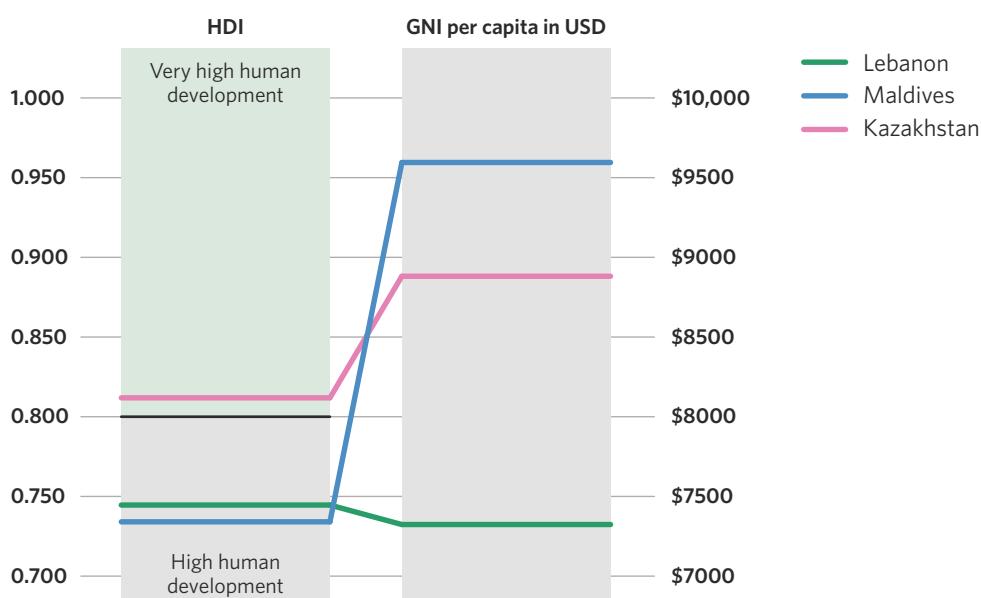
It is unlikely that you will be asked to recall the exact values of each HDI classification; however, it is good to be aware of the classification values for your understanding of the HDI.

Want to know more?

The Human Development Report (HDR) is released each year by the Human Development Report Office, which is part of the United Nations Development Programme (UNDP). The HDR is released each year and was first launched in 1990. Each report addresses progress made in regards to human development and reports the HDI of all countries.

To view the 2020 HDR, type the link hdr.undp.org/sites/default/files/hdr2020.pdf into your browser (UNDP, 2020).

Due to HDI taking more than just a country's GNI per capita into account, two countries can have similar GNI per capita but be in different HDI classification groups. This is presented in figure 3.

**Figure 3** A comparison of HDI and GNI across different countries in 2019 (World Bank, n. d.; UNDP HDR, 2020)

As shown in figure 3, some countries can have the same classification according to the World Bank, with Lebanon, the Maldives, and Kazakhstan all being classified as middle-income countries according to their GNI (GNI per capita between \$1,036 and \$12,535 USD), but have different HDI classifications. For example, Kazakhstan has a very high HDI, while Lebanon and the Maldives have a high HDI. Furthermore, it is also clear how the country with the highest GNI per capita (the Maldives in this case), does not always have the highest HDI. This is due to the HDI taking indicators other than GNI into account, such as mean years of schooling.

The HDI as a measurement tool has many advantages and disadvantages. These are outlined in table 3.

Table 3 The advantages and disadvantages of the Human Development Index (HDI)

Advantages of the HDI 4.1.5.2.1	Disadvantages of the HDI 4.1.5.2.2
<ul style="list-style-type: none"> The use of a single statistic provides an easy measure which can be used to easily compare the human development of different countries. It is more comprehensive than other indicators used to classify countries, such as, GNI, as it focuses on more than just economic development by also focusing on social development. The simple statistic is classified from 0 to 1, making it easy to track patterns in changes in human development in a country over time. 	<ul style="list-style-type: none"> The statistic is based on averages in a country and therefore may not account for inequalities that exist within a country. Data collected from some countries, particularly low-income countries, is not always reliable and is sometimes not available. Other data, which may reflect the true level of human development, is excluded. This includes data about things, such as access to social security and gender equality, which can be linked to enhancing choices and capabilities.

As mentioned, the HDI is calculated based on averages in a country, therefore not considering the wealth inequalities, or ‘wealth gap’, that can exist within a country. For instance, within the one country, a proportion of the population may be of very high socioeconomic status (SES) and can easily afford to send their children to school. This means that these children have a high mean years of schooling. In the same country, a proportion of the population may be of very low socioeconomic status (SES), may not be able to afford to send their children to school, and may need their children to work to earn an income to support the family. This means that these children may have a much lower mean years of schooling. When there is such variety in a population group and an average is obtained (such as mean years of schooling), the obtained statistic may not accurately represent the actual situation of the country. Refer to the want to know more box which outlines how the HDI could be more comprehensive.

Want to know more?

To be more comprehensive, the measure of the HDI could be improved by referring to other pieces of data, such as the median of mean years of schooling in a country, as it serves as a better measure of central location for skewed data sets. For example, if a country had a skewed data distribution of mean years of schooling in a country, the median would identify the middle point in the data set, which although not a perfect measure of variability within a country, reflects the inequalities more so than the mean which is currently used by the HDI.

ACTIVITY 2

Watch a video on the Human Development Index

Search up ‘How do we measure poverty? World Vision Australia’ on YouTube and watch the entire three minute and ten second video (WorldVision Aus, 2015) before answering the following questions.

- 1 In 2015, what was Australia ranked in the world according to its HDI?
- 2 What measures are included as part of the Human Development Index (HDI)?
- 3 How does Australia compare with Bangladesh and Papua New Guinea in terms of HDI?
- 4 Discuss with a classmate whether you think Australia has a responsibility to help neighbouring countries who have a lower HDI. Why or why not?

 **Lesson link**

The United Nations closely links the concept of Human Development to the dimensions of sustainability. This involves the belief that the three dimensions of the Human Development Index (a long and healthy life, knowledge, and a decent standard of living) interact with the three dimensions of sustainability (economic, social, and environmental) to promote human development by creating an environment which empowers individuals and enhances their capabilities (UNDP, 2011).

For example, the dimension of economic sustainability includes having a diverse range of industries. This ensures that a country has multiple industries to rely on, meaning that if one industry collapses, the impact on its GNI won't be as detrimental, as the country can still generate income from other industries. As such, having a diverse range of industries relates to a decent standard of living, as it can lead to a decent GNI per capita. This ensures individuals can afford the cost of living and the government can provide their citizens with the resources they need. Can you think of any other ways in which human development and sustainability link? Return to lesson **8A: Sustainability** to help you brainstorm ways in which these concepts are related.

Theory summary

In this lesson, you learnt about the concept of human development, which involves the following components:

- development to full potential
- leading a long, healthy, and productive life
- expansion of choices
- expansion of capabilities
- access to a decent standard of living
- access to resources, such as education and healthcare
- breaking the cycle of poverty
- ability to participate in the community
- access to freedom
- ability to live according to individual needs.

You also learnt about the Human Development Index, as well as its advantages and disadvantages. The HDI has three dimensions and four indicators. These are:

- life expectancy at birth (which measures a long and healthy life)
- mean years of schooling (which measures knowledge)
- expected years of schooling (which measures knowledge)
- Gross National Income (GNI) per capita (which measures a decent standard of living).

8B QUESTIONS

Theory-review questions

Question 1

Human development focuses on

- A only the health status indicators reported within a country.
- B multiple components, all of which help to create an environment where individuals develop to their full potential and lead a long and healthy life.

Question 2

Human development is promoted in countries by (Select all that apply)

- I governments.
- II non-government organisations.
- III children.

Question 3

Human development is represented by

- A a country's Human Development Index (HDI).
- B a country's Gross National Income (GNI) per capita only.

Question 4

One country can have a lower Gross National Index (GNI) per capita than another country, but still have a greater Human Development Index (HDI).

- A True.
- B False.

Question 5

An advantage of the Human Development Index (HDI) is that it is more comprehensive than other indicators used to classify countries, such as GNI. Disadvantages of the HDI include that (Select all that apply)

- I it does not refer to inequalities within a country due to being an average.
- II the data collected is not always reliable, particularly from low-income countries.
- III it can easily compare human development across countries due to being a single statistic.

Skills

Perfect your phrasing

Question 6

Which of the following sentences is most correct?

- A Human development involves creating a population who can develop to their full potential and lead a long, healthy, and productive life.
- B Human development involves creating an environment that empowers individuals to develop to their full potential and lead a long, healthy, and productive life.

Question 7

Which of the following sentences is most correct?

- A The Human Development Index is a tool which ranks the social and economic development of a country, presented as a single statistic which encompasses three dimensions and four indicators.
- B The Human Development Index is a tool which ranks the social and economic development of a country, presented as four statistics which encompass three dimensions and four indicators.

Data analysis

Use the following information to answer Questions 8 and 9.

Country	HDI (2019)	GNI per capita (2019)
Norway	0.957	\$82,500
India	0.645	\$2,120
Burundi	0.433	\$280

Sources: adapted from United Nations Development Programme, *Human Development Report 2020*, <<http://hdr.undp.org/sites/default/files/hdr2020.pdf>>; adapted from World Bank, *GNI per capita, Atlas method (current US\$)*, <<https://data.worldbank.org/indicator/NY.GNP.PCAP.CD?view=chart>>

Question 8

Which country has the lowest HDI?

- A Norway.
- B Burundi.
- C India.

Question 9

Identify which of the following statements about the data is correct. (Select all that apply)

- I In the data provided, the country with the lowest GNI had the greatest HDI.
- II In the data provided, the higher a country's GNI, the greater their HDI.

Exam-style questions**Question 10** (1 MARK)

Outline one advantage of the Human Development Index (HDI).

Question 11 (1 MARK)

Outline one disadvantage of the Human Development Index (HDI).

Question 12 (2 MARKS)

List two dimensions of the Human Development Index (HDI).

Question 13 (2 MARKS)

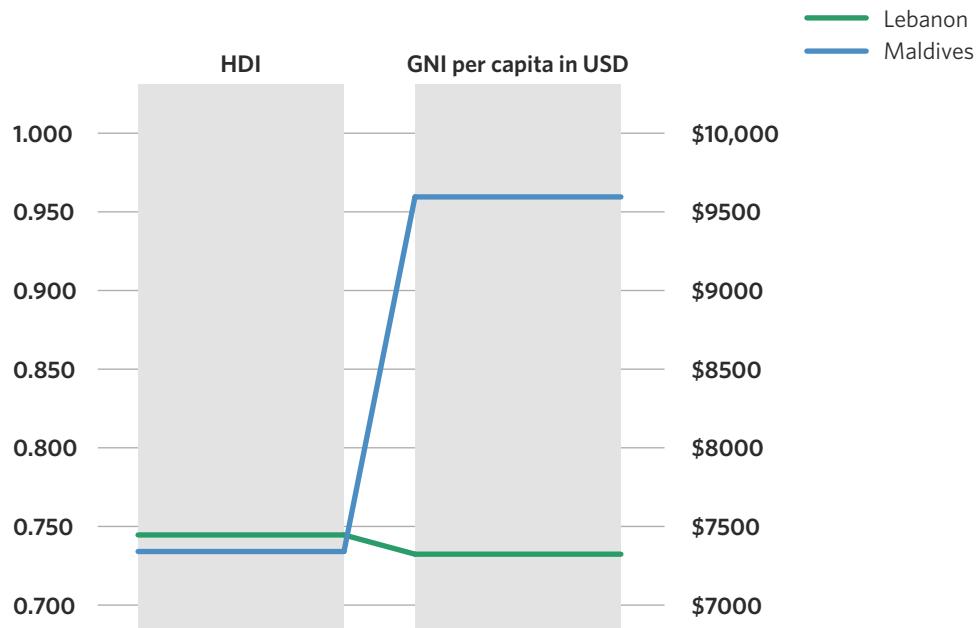
Due to a government initiative, Cynthia has recently had access to an empowerment course. As part of the course, Cynthia attends one session a week with other high school students and learns about how to create a resume, how to pay taxes, how to save for a house, and other life skills.

Explain how human development may have been promoted in the case study.

Question 14 (2 MARKS)

Describe the Human Development Index (HDI).

Adapted from VCAA 2018 exam Q7bi

Question 15 (4 MARKS)

Sources: adapted from United Nations Development Programme, *Human Development Report 2020*, <<http://hdr.undp.org/sites/default/files/hdr2020.pdf>>; adapted from World Bank, *GNI per capita, Atlas method (current US\$)*, <<https://data.worldbank.org/Indicator/NY.GNP.PCAP.CD?view=chart>>

- Using data, identify which country has a greater GNI per capita. (2 MARKS)
- Explain how Lebanon and the Maldives can have a similar Human Development Index (HDI), even though they have a different income (GNI per capita). (2 MARKS)

Adapted from VCAA 2016 exam Q15ai

Question 16 (4 MARKS)

Yellow fever is a disease prevalent in Africa and South America. In 2013, yellow fever led to around 50,000 deaths in Africa. Yellow fever is transmitted by mosquitoes, but is preventable by getting vaccinations. To tackle yellow fever, the World Health Organisation (WHO) and other global bodies have created the global strategy to Eliminate Yellow Fever Epidemics (EYE). This strategy has many aims, including to end yellow fever epidemics by 2026. To reach this aim, they have the objective to prevent at risk populations by providing affordable vaccines in collaboration with health programmes and governments.

Source: adapted from the World Health Organisation, *Eliminate yellow fever epidemics (EYE) strategy 2017-2026*, <<https://www.who.int/initiatives/eye-strategy>>

- a Identify and justify a dimension of the Human Development Index (HDI) which is presented within the case study. (2 MARKS)
- b Describe how the EYE strategy could promote human development. (2 MARKS)

Questions from multiple lessons**Question 17** (4 MARKS)

According to the United Nations Development Programme's Human Development Report, in 2019, Australia had a Human Development Index (HDI) of 0.944, while Pakistan had a HDI of 0.557. The World Bank has reported that Australia had a Gross National Income (GNI) per capita of \$55,100 while Pakistan had a GNI per capita of \$1,410 in 2019.

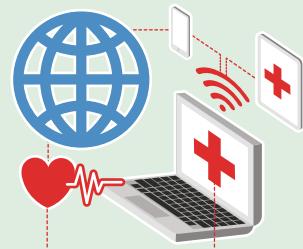
Sources: adapted from United Nations Development Programme, *Human Development Report 2020*, <<http://hdr.undp.org/sites/default/files/hdr2020.pdf>>; adapted from World Bank, *GNI per capita, Atlas method (current US\$)*, <<https://data.worldbank.org/indicator/NY.GNP.PCAP.CD?view=chart>>

- a Use two indicators of the Human Development Index (HDI) to explain potential differences in HDI between Australia and Pakistan. (2 MARKS)
- b Outline what Australia and Pakistan would be classified as according to the World Bank. (2 MARKS)

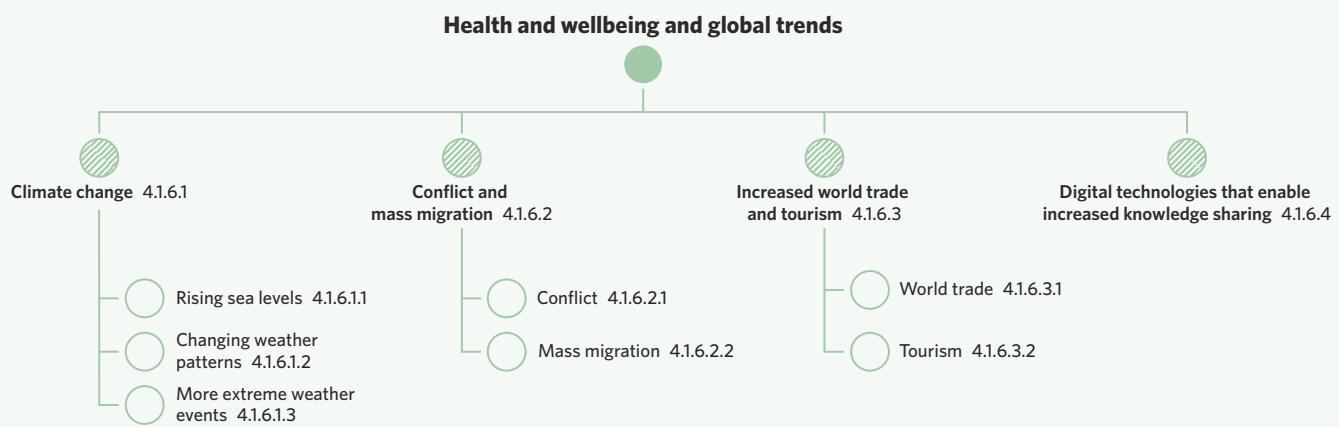
Adapted from VCAA 2019 exam Q6a

8C HEALTH AND WELLBEING AND GLOBAL TRENDS

Has the rise of digital technologies affected health? Are we more educated because we can access large amounts of information online at a rapid pace? How has this affected health and wellbeing? The ability to share knowledge due to advancements in digital technology is a global trend. In this lesson, you will learn about how this global trend has affected health and wellbeing. You will also learn about how the global trends of climate change, conflict and mass migration, and increased world trade and tourism have had implications on health and wellbeing.



8A Sustainability	8B Human development	8C Health and wellbeing and global trends
Study design dot point		
<ul style="list-style-type: none"> implications for health and wellbeing of global trends including: <ul style="list-style-type: none"> - climate change (rising sea levels, changing weather patterns and more extreme weather events) - conflict and mass migration - increased world trade and tourism - digital technologies that enable increased knowledge sharing 		
Key knowledge units		
Climate change		4.1.6.1
Rising sea levels		4.1.6.1.1
Changing weather patterns		4.1.6.1.2
More extreme weather events		4.1.6.1.3
Conflict and mass migration		4.1.6.2
Conflict		4.1.6.2.1
Mass migration		4.1.6.2.2
Increased world trade and tourism		4.1.6.3
World trade		4.1.6.3.1
Tourism		4.1.6.3.2
Digital technologies that enable increased knowledge sharing		4.1.6.4



Climate change 4.1.6.1

OVERVIEW

Climate change is an ongoing issue which all individuals in every part of the world have been exposed to. As climate change continues to progress, the impact of the global trend of climate change on health and wellbeing will continue to grow.

THEORY DETAILS

Global trends have the ability to affect all countries in the world at similar points of time, or have the potential to do so in the future. Similarly, even if not all countries are directly affected by a trend, a trend can be global if it requires assistance and interventions from countries across the world.

Human behaviour has accelerated climate change, leading to it becoming a global trend. **Climate change** refers to changes in global weather patterns, which may also be used to refer specifically to the rapid climate change post-1900 which has occurred largely due to human activity. The contribution of human activity refers to anthropogenic (due to human activity) climate change, which has led to changes in global weather patterns, such as an increase in average global temperature. The increase in global temperature is due to an increased level of carbon dioxide in the atmosphere. Greater carbon dioxide in the atmosphere is due to humans using and burning **fossil fuels**. The burning of these fossil fuels releases gases into the atmosphere which traps heat within the Earth's atmosphere, increasing the Earth's average surface temperature. There are many effects of climate change, but we will be focusing on three effects which include rising sea levels, changing weather patterns, and more extreme weather events. These are identified in figure 1. We will discuss each of these effects and how they impact health and wellbeing.

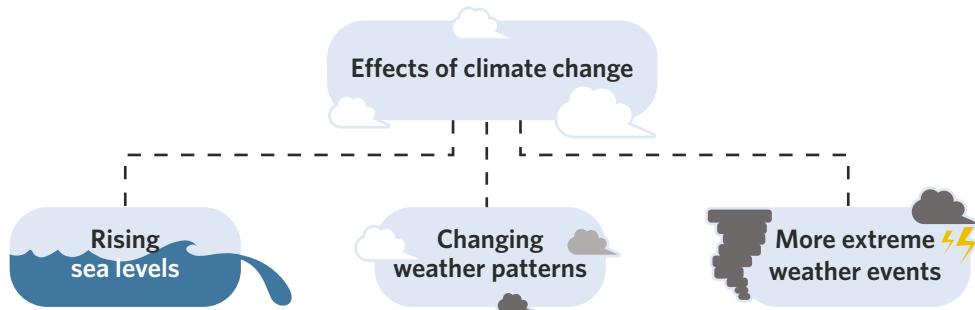


Figure 1 The effects of climate change

Climate change is a product of the accumulation of actions from people all across the world and has impacts on all individuals globally. As such, the rise of climate change is a global trend.



Want to know more?

Scientific explanations of climate change

There is no doubt that the Earth's climate was bound to fluctuate over its 4.5-billion year history - it is natural for the climate to change. However, the rapid warming of the earth that has been seen over recent years cannot be explained by Earth's natural cycles of warming and cooling. The temperature changes that are being recorded would typically occur over thousands of years, not decades. According to the World-Wide Fund for Nature (WWF), global temperatures are now at their highest since records began (WWF, 2018). In fact, 17 of the 18 warmest years on record have taken place since 2001.

The speed at which temperatures are increasing is linked with the presence of carbon dioxide in the atmosphere, which has increased dramatically since the industrial revolution (1760-1840). Carbon dioxide traps heat in the atmosphere as well as contributes to air pollution. When we talk about climate change now, we are talking about anthropogenic climate change, meaning climate change caused by human activity. The way in which humans live and behave has dramatically changed since the industrial revolution. Some examples of the change in human behaviour includes burning fossil fuels (like coal and gas) on huge scales to produce energy, clearing huge forests to increase land for people to live on, and farming livestock to an excessive scale.

To learn more about climate change, search up '*Explaining the greenhouse effect – Sustainability*' on YouTube and watch the one minute and forty-four second video (ACCIONA, 2016).

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- analyse the implications for health and wellbeing of particular global trends

KEY DEFINITIONS

Climate change refers to changes in global weather patterns; may also be used to refer specifically to the rapid climate change post-1900 which has occurred largely due to human activity

ADDITIONAL TERMS

Global trend refers to an increasing pattern of the existence of an event or phenomenon which occurs or has the ability to occur globally

Fossil fuels are natural fuels which have been formed over time due to pressure being placed on remains of living organisms, such as coal and gas



Image: SkyPics Studio/Shutterstock.com

Figure 2 Climate change damages the earth in many ways

Rising sea levels 4.1.6.1.1

Since 1880, the average global temperature has increased by more than 1 degree celsius (NASA Earth Observatory, n.d.). This rising surface temperature of the earth has caused sea levels to rise. The rising sea levels are due to ice, such as ice caps, melting at a rapid rate as an effect of the rising global temperature. The rapid melting of ice occurs at a faster rate than it naturally accumulates, leading to the sea levels rising. Additionally, sea levels rise due to thermal expansion: as the temperature of the ocean increases, sea levels also rise.

This is because water particles expand as they warm (therefore, warmer oceans have a greater volume than colder oceans). Sea levels have risen by 0.19 metres since the beginning of the 20th century (Department of Agriculture, Water, and the Environment, n.d.).

Rising sea levels can have many negative effects. These effects include but are not limited to:

- land erosion, which can lead to the destruction of natural landscapes, such as beaches, as well as buildings, such as houses.
- contamination of freshwater reserves and damage to food crops and livestock through salt water intrusion, which can lead to a reduction in the availability of safe drinking water and food.
- reduction of land available to live on, particularly in low-lying villages and coastal areas. This can force individuals living in these areas to migrate, or to live in densely populated areas.
- less habitat availability for animals, such as polar bears, increasing the risk of different species becoming endangered or extinct.

An example of how rising sea levels can impact health and wellbeing is outlined in table 1.



Want to know more?

Climate change has led to many negative effects, some of which we outline in this lesson. Another negative effect is ocean acidification. This involves sea water rapidly becoming more acidic due to increased levels of carbon dioxide in the atmosphere. In the past 200 years alone, sea water has become 30% more acidic (Smithsonian, n. d.). The increased ocean acidity damages ocean ecosystems and fisheries, threatening not only many species of marine life, but also food security for millions of people. Many people in the world rely on fish to make an income and as a food source, making this particularly scary.

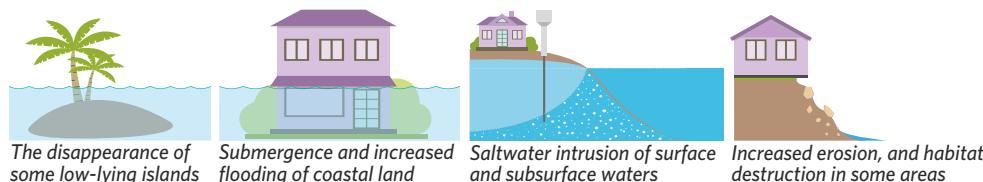


Image: m.malinika/Shutterstock.com

Figure 3 Some of the effects of rising sea levels

Changing weather patterns 4.1.6.1.2

Climate change has led to changing weather patterns. Across the world, the average surface temperature of the Earth has steadily increased. As explained, the average global temperature has increased by more than one degree celsius since 1880 (NASA Earth Observatory, n. d.).

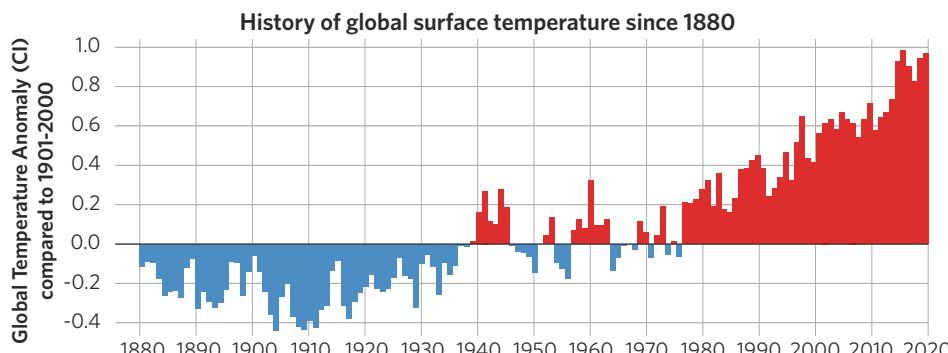


Figure 4 This graph outlines the global temperature anomaly, which refers to the amount of variation in temperature (either increasing or decreasing) compared to the long term average (the average between 1901-2000). All the red bars in the graph refer to an increased global temperature anomaly, demonstrating the increase in surface temperature over time (National Oceanic and Atmospheric Administration, 2021)

Due to increased global temperature, prolonged periods of heat have occurred more frequently. This can lead to many negative effects, such as:

- drying out soil, which may limit the amount of food crops that can be grown, limiting the amount of food available.
- negative health effects, such as individuals experiencing heat stroke more often.

Rainfall has also become heavier and more intense as the temperature rises (CSIRO, 2018). This change in rainfall can lead to a greater frequency and severity of flash flooding (a local flood which suddenly occurs due to heavy rainfall), which can damage infrastructure, such as houses and roads. An example of how changing weather patterns can impact health and wellbeing is outlined in table 1.

More extreme weather events 4.1.6.1.3

Rising global temperatures have contributed to the increased frequency and severity of extreme weather events and some natural disasters. These extreme weather events include flooding, drought, cyclones, and extreme heat. Extreme weather events can have many negative implications, some of which include:

- increased risk of related injuries and deaths.
- damage to natural landscape and man-made infrastructure.
- contamination of natural water reserves.

Examples of how more extreme weather events, rising sea levels, and changing weather patterns can impact health and wellbeing are outlined in table 1.

Table 1 Impact of climate change on health and wellbeing

Climate change effect	Impact on health and wellbeing
Rising sea levels	Rising sea levels can lead to the destruction of people's homes, jobs, or livelihoods (e.g. if food crops are destroyed, people can lose their capacity to earn an income). This may lead to individuals having a lower sense of hope for the future and reduce their sense of purpose which often comes from working, negatively impacting <i>spiritual health and wellbeing</i> .
Changing weather patterns	Increased heavy rainfall can lead to more frequent flash flooding. This can create stress and anxiety amongst individuals about their property becoming damaged, negatively impacting <i>mental health and wellbeing</i> .
More extreme weather events	Climate change has led to extreme heat and droughts in some parts of the world. This extreme weather event can negatively impact <i>physical health and wellbeing</i> by reducing the functioning of the body and its systems due to heat stroke from extremely hot weather conditions.

! Useful tip

As you may notice, some of the global trends outlined are related to other global trends. For example, rising sea levels due to the global trend of climate change can contribute to individuals having to leave their homes, relating to the global trend of mass migration. As such, you may be asked to outline links between trends.

Conflict and mass migration 4.1.6.2

OVERVIEW

Conflicts can occur within a country or between multiple countries. Regardless of whether conflict occurs within a country or between multiple countries, conflict often has global impacts because other countries often provide aid to countries experiencing conflict or attempt to cease the conflict. Similarly, mass migration has effects globally, with other countries being called upon to provide refuge for people who may have fled their home.

THEORY DETAILS

Conflict 4.1.6.2.1

Conflict refers to a violent or non-violent clash either within a country or between two or more countries. Although the number of deaths due to war have declined since 1946, the number of conflicts globally are currently rising (United Nations [UN], 2020).

KEY DEFINITIONS

Conflict refers to a violent or non-violent clash either within a country or between two or more countries

In fact, in 2016, countries across the world had the highest levels of conflict experienced in the previous 30 years (UN, 2020). As such, it is clear that conflict is, unfortunately, a rising global trend.

Conflict can have many negative impacts, such as:

- increasing the number of deaths and injuries.
- creating fear, stress, and anxiety.
- reducing levels of peace.
- forcing individuals to leave their home country, which can lead to mass migration.
- severing interpersonal relationships with members of the community due to individuals being forced to flee conflict zones.
- damaging homes and other forms of infrastructure, such as schools and hospitals.

Conflict also often requires assistance from other countries to provide resources for those who may be injured or displaced, which often occurs through the provision of emergency aid. Countries across the world can also engage in conversations with the country or countries in conflict to attempt to end the conflict. Overall, it is clear that conflict has the ability to negatively impact health and wellbeing. Some examples of how conflict can affect health and wellbeing are identified in table 2.

Lesson link

Many global trends, such as climate change and conflict can lead to countries providing aid to other countries in need. In lesson **10A: Different types of aid**, you will learn about the three types of aid and how they may be of use in relation to these global trends.

Want to know more?

The number of conflicts globally has increased partially due to the global trend of climate change (UN, 2020). This is due to climate change leading to less resources being available, which can lead to conflict. If you would like to read more about this connection, type the URL un.org/press/en/2020/sc14260.doc.htm into your browser (UN, 2020).

Mass migration 4.1.6.2.2

As mentioned, conflict can often cause individuals to flee their home either to another country or to another region within their country. This can therefore lead to **mass migration**, which refers to the relocation of a large number of individuals from one geographical location to another. Mass migration can also occur due to other reasons, such as:

- lack of employment opportunities and financial hardship.
- climate change, which may lead to increased frequency of droughts or other extreme weather events, as well as rising sea levels which can cause low lying coastal communities to migrate.
- destruction of homes and infrastructure, which may occur due to natural disasters.
- political instability.
- the abuse of human rights.
- lack of access to resources, such as safe drinking water and nutritious foods.

Due to many different factors, such as the effects of climate change and global increases in conflict, mass migration has also become a growing global trend. These causes have led to increases in **forced displacement**, where large groups of individuals have to leave their home, often seeking a life free of persecution, where they can feel safe and lead productive lives. Forced displacement often leads to individuals becoming **refugees** or **asylum seekers**, with these individuals accounting for almost a quarter of individuals who migrated between 2010 and 2017 (UN, 2019). The number of refugees and asylum seekers has greatly increased in recent decades, increasing by 13 million between 2010 and 2017 (UN, 2019).

Mass migration has numerous impacts, not only on the migrants themselves, but also on other countries around the world who provide support for these migrants, such as offering them refuge. Individuals who have experienced migration often miss their family and friends from their home country, and may find it hard to assimilate into their new country. This can subsequently have many ongoing negative effects, such as increased risk of anxiety and post-traumatic stress disorder (PTSD), particularly if they experienced forced displacement. Some examples of how mass migration can affect health and wellbeing are identified in table 2.

KEY DEFINITIONS

Mass migration refers to the relocation of a large number of individuals from one geographical location to another

ADDITIONAL TERMS

Forced displacement involves large groups of individuals having to leave their home, often seeking a life free of persecution where they can feel safe and lead productive lives

Refugee refers to an individual who has fled their home country due to war, violence, conflict, or persecution and been granted refuge and protection by another country

Asylum seeker refers to an individual who has fled their home country, possibly due to violence or a fear of persecution, and is seeking refuge and protection in another country

Table 2 Impact of conflict and mass migration on health and wellbeing

Impact on health and wellbeing	
Conflict	<ul style="list-style-type: none"> Living in a conflict zone can disrupt an individual's ability to live their life, and can sometimes force them to seek shelter or even flee. This can limit how often they see or communicate with their friends, family, and community members, making it more difficult to maintain positive relationships with others and form new relationships, negatively impacting <i>social health and wellbeing</i>. Conflict can often involve violence and the use of weapons which can lead to innocent civilians sustaining severe injuries, negatively impacting <i>physical health and wellbeing</i> by impacting the functioning of the body and its systems.
Mass migration	<ul style="list-style-type: none"> Those who experience mass migration may struggle to settle into life in their new country, such as finding it hard to secure a job or build connections with those in their community. This can negatively impact <i>spiritual health and wellbeing</i> as they may not feel like they belong in their new community and may lack a sense of purpose. Individuals who experience forced displacement may have to temporarily stay in refugee camps due to mass migration leading to an excess of refugees in particular regions. Refugee camps often have poor living conditions and can be isolating, negatively impacting <i>emotional health and wellbeing</i> as individuals may be fearful of when they will be able to leave the refugee camp and have a reduced ability to display resilience.

Useful tip

Although the global trends of conflict and mass migration can be related, such as mass migration potentially occurring during times of conflict, it is important that you can distinguish between them. This is because VCAA sometimes separates these concepts in questions.

For example, question 12c in the 2020 exam asked students to '*Explain the implications of mass migration... for health and wellbeing*'.

Lesson link

The global trends of climate change, conflict, and mass migration can often lead to individuals having their prerequisites for health stripped from them, such as peace and shelter. Return to lesson **1D: Prerequisites for health** to refresh your memory on the prerequisites for health.



Image: Tatiana Stulbo /Shutterstock.com

Figure 5 During mass migration and conflict prerequisites for health, such as peace and shelter can be in jeopardy.

Increased world trade and tourism 4.1.6.3

OVERVIEW

In recent decades, it has become easier than ever before to travel to different parts of the world. Similarly, it is likely that you find it easy to find products you want in all different parts of the world and have them shipped to your house. This is due to greater interconnectedness around the world. The increased interconnectedness between countries has allowed for world trade and tourism to increase over time.

THEORY DETAILS

As a result of **globalisation**, the world is more connected than ever before. Globalisation has increased the rate of trade globally, as technology and transport enable the easy exchange of goods and services between countries. **World trade** involves the exchange of goods and services between countries in exchange for financial compensation. Not only does globalisation enable the easy transport of goods and services, but individuals are also able to travel between countries more easily. This is due to developments in transport as well as strengthening of relationships between countries, increasing tourism levels globally. **Tourism** refers to individuals travelling to locations for personal interest or business reasons.

Useful tip

You have likely seen that COVID-19 has had many negative impacts on the tourism industry, with the number of tourists worldwide decreasing for the first time in history due to borders being shut and lockdowns occurring. There have also been negative effects on the global trend of world trade. Although this is true, when asked about the global trends of world trade and tourism, it is important to talk about the increasing trend that was occurring before COVID-19 occurred. The exception to this would be if a case study or question specifically mentioned the change in trend due to COVID-19.

KEY DEFINITIONS

World trade involves the exchange of goods and services between countries in exchange for financial compensation

Tourism refers to individuals travelling to locations for personal interest or business reasons

ADDITIONAL TERMS

Globalisation refers to the process of countries across the world becoming increasingly interconnected due to transport and technological communication developments

World trade 4.1.6.3.1

World trade involves countries having access to goods and services provided by other countries, while also providing goods and services to other countries in exchange for financial compensation. World trade has increased over time due to the effects of globalisation and the existence of increasingly positive relationships between countries over time. For example, global trade has increased 27 times between 1950 and 2008 (World Economic Forum, 2015).

Increased world trade allows countries to generate greater incomes due to being able to sell products and services to other countries. This can increase the number of meaningful employment opportunities available and give the government more financial resources, which, in turn, can be used for infrastructure development, such as safe roads and more healthcare facilities.

Greater levels of world trade can also have negative effects. For example, as a result of greater interconnectedness within the world, high-income countries can obtain their products from low-income countries with poor working conditions. This can lead to the exploitation of workers in low-income countries, as a result of working:

- for very low pay.
- for extremely long hours with no breaks, leading to fatigue and other negative effects.
- in dangerous environments which can pose danger to the workers, such as in factories that are unstable and may collapse or can expose workers to toxic fumes.

Child labour is also common in low-income countries. This exploitation of vulnerable children can occur as children can be encouraged to work to support their families, and therefore may work in environments which are dangerous and can negatively impact their development. There are many implications of world trade on health and wellbeing, with some examples outlined in table 3.

Real world example

You may be familiar with the Fairtrade logo on products, such as chocolate. Fairtrade Australia and New Zealand (2021) aims to combat the negative environmental and workplace effects that have occurred due to the global trend of world trade. This involves supporting small-scale farmers across the world to receive fair compensation for the products in exchange for meeting environmental and workplace conditions to gain their certification as a Fairtrade company (Fairtrade Australia and New Zealand, 2021). Next time you go shopping, look out for the Fairtrade logo. By buying products with this logo instead of alternatives without, your purchasing power may help to curb the negative effects of world trade.



Image: chrisdorney/Shutterstock.com

Figure 6 Fairtrade logo on Cadbury chocolate

Tourism 4.1.6.3.2

As a result of transportation developments, such as the increasing accessibility of air travel, tourism has increased over time. As such, tourism has become a global trend, with the number of tourist arrivals (number of tourists arriving in a country in a year) in 2018 being more than a billion greater than the number of tourist arrivals in 1950 (Our World in Data, n.d.).

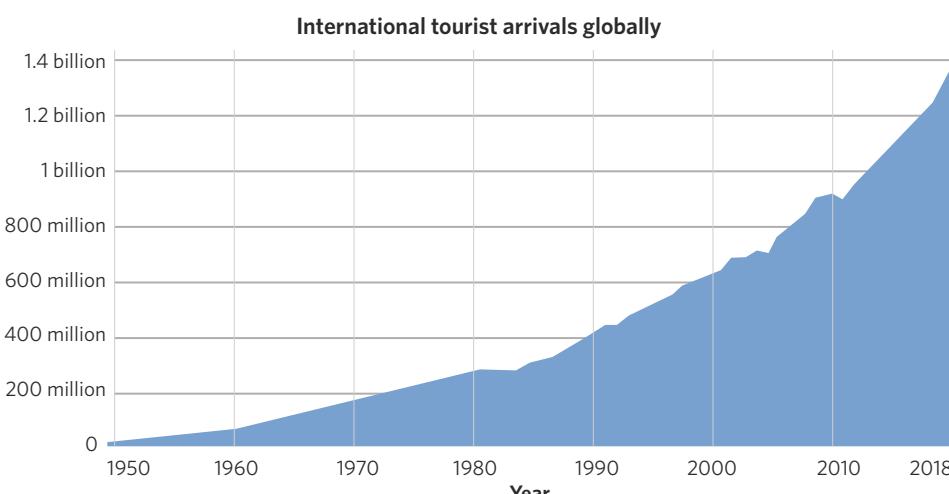


Figure 7 The number of tourists across the world has increased over time (Our World in Data, 2017)

Greater levels of tourism can lead to many benefits globally. These benefits include:

- more meaningful employment opportunities, leading to greater average incomes e.g. local businesses surrounding tourist attractions will earn more and be able to hire more staff.
- greater understanding between different cultures, potentially reducing levels of prejudice and discrimination, and minimising existing stereotypes.
- the preservation of important cultural sites which are valued by local communities, as well as tourists visiting the sites.

Tourism has the greatest benefits for low-income countries, who often have a narrower range of industries and therefore rely on tourism for their economy more than high-income countries. The tourism industry can even constitute the main source of income for a country in some instances. For example, Vanuatu is a middle-income country. In Vanuatu, the tourism industry makes up almost 50% of Vanuatu's total Gross Domestic Product (GDP) (Knoema, n.d.). Tourism benefits include those already outlined, but also include greater infrastructure being built to provide resources for the tourists travelling to different attractions. This can also benefit the local population as they may have greater roads, healthcare facilities, and so on.

Although providing many benefits, the global trend of tourism also has some negative effects. These negative effects are often environmental, with tourist attractions often becoming polluted and becoming damaged by large numbers of visitors, such as footprints wearing away at natural landscapes. For example, at the Great Barrier Reef there has been damage to the coral reef due to many tourists visiting the site each year. These large numbers of tourists have led to parts of the coral reef becoming polluted and contributed to its decline. These damages are particularly harmful when the tourist attraction has spiritual or religious meaning to the local population. Similarly, pollution due to tourism can lead to water sources becoming contaminated and wildlife dying from toxins in the polluted water, which may reduce the amount of food and fresh water available for the local population.

Finally, tourist attractions in low-income countries can negatively impact health status. For example, greater movement of people between countries can enhance the ability for communicable diseases to spread globally, contributing to a greater prevalence of these conditions. Furthermore, tourist attractions in low-income countries often lack regulations, which can increase the risk of morbidity due to injuries and mortality from activities, such as boat rides and hiking. Tourism has many implications on health and wellbeing, with some examples outlined in table 3.

Table 3 Impact of world trade and tourism on health and wellbeing

Impact on health and wellbeing	
World trade	<ul style="list-style-type: none"> • Greater world trade opportunities make it more likely for people within a community to find meaningful employment. This can allow more individuals to earn a decent income, which allows them to financially access resources they need. This promotes <i>mental health and wellbeing</i> by reducing stress caused by being unable to afford resources, such as food and healthcare. • Greater levels of world trade has increased the number of people in low-income countries working in poor conditions. This can negatively affect <i>physical health and wellbeing</i> due to these workers often having to work for long periods of time with no breaks, increasing levels of fatigue and the likelihood of injuries occurring.
Tourism	<ul style="list-style-type: none"> • Increased levels of tourism can allow individuals to gain exposure to more cultures, potentially reducing prejudices and stereotypes they may hold towards other cultures. This can promote <i>social health and wellbeing</i> by facilitating the formation of new relationships with, and greater levels of empathy for, individuals from other cultures. • Increased levels of tourism can lead to tourist locations becoming polluted which can lead to many ongoing impacts. For example, an increased number of tourists at a beach can increase the amount of rubbish and pollution, which can contaminate the water and lead to the death of fish and sealife. This can negatively impact <i>physical health and wellbeing</i> as it can lead to a reduced availability of food for the local town, reducing their ability to meet their nutritional intake and support the functioning of the body and its systems.

ACTIVITY 1

The impact of tourism on Venice

Search up 'Is tourism killing Venice? BBC News' on YouTube and watch the entire two minute and fifty-seven second video (BBC News, 2018). After you watch the video, discuss with the person next to you how the high levels of tourism may negatively affect the health and wellbeing of the local residents in Venice.



Image: Rimma Z/Shutterstock.com

Digital technologies that enable increased knowledge sharing 4.1.6.4

OVERVIEW

How do you access healthcare resources? Has this changed in response to COVID-19? Have you had any health appointments online?

THEORY DETAILS

The rise of technological developments in recent decades has changed where individuals can access information, and how they can access healthcare resources. More than half of the world's population has access to the internet, demonstrating that billions of people can share and gain access to knowledge shared online (The World Bank, 2021). The continual improvement of technology has led to the global trend of people being able to easily communicate across the world, individuals seeking health information online, and health data being stored online. As such, technology has enabled information to be shared in an easier and more efficient way.

This has led to many individuals worldwide accessing healthcare online, rather than face-to-face. This has many benefits, but can also come with some downsides. These are outlined in table 4.

Table 4 The benefits and limitations of increased digital knowledge sharing

Benefits of increased digital knowledge sharing	Limitations of increased digital knowledge sharing
<ul style="list-style-type: none"> Easier access to health information for individuals who may be geographically isolated. This means that individuals who would otherwise have to spend a large amount of time travelling to medical clinics (and may therefore avoid medical assistance) can access healthcare from home, such as via the phone or via video call. This can reduce the number of health conditions which go undiagnosed. Furthermore, regular contact with health professionals can increase an individual's level of health literacy. Can reduce the financial burden of seeking medical advice, as many online health services are free or are much cheaper compared to seeking face-to-face care. This may also increase the number of individuals who seek medical care, or maintain medical care. For example, many apps help individuals maintain health promotion behaviours, such as quitting smoking. May reduce the strain on healthcare systems, as individuals can check online or digital health resources, such as Nurse On Call (an Australian government supported hotline) to seek clarification as to whether they need to go to a general practitioner or hospital for face-to-face care. 	<ul style="list-style-type: none"> Individuals are more likely to access information or advice which may be illegitimate or ill-advised. This can lead to individuals attempting to self-diagnose a medical condition they believe they have rather than seeking professional advice. Individuals can also gain health advice from individuals who are not qualified, such as taking advice from an online blog written by an unqualified person on whether to access vaccinations. This is particularly harmful as some of the information found online stems from conspiracy theories and corrupt studies. Health data can be hacked or distributed in an illegal manner. For example, the data tracked by My Health Record, an Australian Government service, could be hacked and distributed, compromising the confidentiality and privacy of individuals and their health records. Individuals may rely too heavily on online health resources, with some conditions only being able to be diagnosed in person. This may mean that conditions go undetected, causing preventable hospitalisations and even deaths.

Advancements in technology have also impacted health and wellbeing. For example, due to technology, e-health records (such as My Health Record in Australia) allow individuals to track their health online, and for health professionals to easily access their records if the individual has permitted this. Therefore, health professionals are able to access health records in an easier and faster manner, which may be crucial in some scenarios, such as when emergency healthcare is needed.

The trend of technology advancements has also allowed governments and other bodies to alert their citizens of events, such as natural disasters. For example, individuals living in areas of Australia which are at risk of being damaged by bushfires are often notified by text if they need to evacuate their area. This can reduce the number of human lives lost in times of disaster, with this technology also being utilised in other events, such as tsunamis and earthquakes across the world.

The global trend of technological development that enables increased knowledge sharing has had both positive and negative implications on health and wellbeing. Some examples of how the trend impacts health and wellbeing are outlined in table 5.

Table 5 Impact of increased access to digital technologies that enable knowledge sharing on health and wellbeing

Example	Impact on health and wellbeing
Emergency texts in natural disasters 	Sharing knowledge via text messages in times of disaster can reduce devastation in the wake of a disaster. These texts are often sent by government bodies, such as the Department of Health. This can promote <i>physical health and wellbeing</i> as sending text messages for individuals to evacuate in time of a disaster, such as a bush fire, can reduce the experience of illness, injury, and death which could be caused if individuals did not evacuate, promoting the functioning of the body and its systems.
Global communication opportunities 	Increased access to digital technologies allows all individuals across the world to maintain communication. Therefore individuals can form and maintain relationships with others who they are geographically separated from, promoting <i>social health and wellbeing</i> .
Online health records 	Online health records, such as the My Health Record, can make it easier to access and leak the health information of others. This can negatively impact <i>mental health and wellbeing</i> as individuals who have their health records leaked may be stressed and anxious about people they know becoming aware of medical conditions and/or treatments they have accessed that they may want to keep private.
Easier access of health information and services  <small>Image: Muqamba/Shutterstock.com</small>	Online health resources, such as apps and telehealth services may provide resources to individuals who would otherwise not be able to access healthcare due to financial or geographical barriers. This can enhance levels of health literacy by empowering individuals to have a greater understanding of their health, promoting <i>physical health and wellbeing</i> by supporting the functioning of the body and its systems as individuals will be more aware of the actions they need to take to have a strong immune system and maintain a healthy body weight.
Accessing illegitimate health advice 	Increased information sharing makes it harder for the general public to spot what health information is legitimate and what is illegitimate. As such, illegitimate sources can provide individuals with unsupported health information. For example, conspiracy theorists can have a platform in which they can spread dangerous health messages, such as unsupported anti-vaccination messages. This can lead to individuals being less likely to access helpful vaccines, negatively impacting <i>physical health and wellbeing</i> by increasing the experience of certain diseases and straining the immune system which may be preventable by vaccination.

Want to know more?

As healthcare becomes increasingly digitised, particularly in the wake of COVID-19, you have likely accessed some online health resources and services. Some common digital health resources include the:

- My QuitBuddy app - used to help individuals quit smoking
- My Health record - an Australian Government service individuals can use to store their health records online
- Headspace app - used to help individuals meditate and maintain mental health.

Can you think of any other digital health resources?

ADDITIONAL TERMS

Telehealth refers to the provision of health services and resources via telecommunications technology, such as the internet

ACTIVITY 2

Telehealth during COVID-19

COVID-19 forced the healthcare industry to adapt by providing services in a new socially distanced environment. This has led to healthcare being provided using technology, such as over the internet, which is called telehealth.

Search up '*What is telehealth and why might you want to use it? ABC News'* on YouTube and watch the entire two minute and five second video (ABC News (Australia), 2020). After watching the video, discuss the following questions with your classmates.

- During COVID-19, how may telehealth have impacted health status?
- How may the move to telehealth impact the provision of healthcare into the future? Will most people return to face-to-face healthcare services after COVID or keep using telehealth?
- How can telehealth improve health in the long-term for individuals outside of major cities?

Theory summary

In this lesson, you have learnt about global trends and the implication of these trends on health and wellbeing. These global trends include:

- climate change, specifically learning about the effects of rising sea levels, changing weather patterns, and more extreme weather events
- conflict and mass migration
- increased world trade and tourism
- digital technologies that enable increased knowledge sharing.

8C QUESTIONS

Theory-review questions

Question 1

There are many global trends, with each of these impacting health and wellbeing in negative ways only.

- A True.
- B False.

Question 2

One global trend is climate change, which leads to many effects, such as rising sea levels, more extreme weather events, and changing weather patterns. All of these effects

- A mainly have negative health and wellbeing implications.
- B mainly have positive health and wellbeing implications.

Question 3

Conflict and mass migration are

- A global trends that always occur at separate times.
- B global trends that always occur at the same time, with the two trends being related.
- C global trends that sometimes occur at the same time, with the two trends being related but also able to occur one at a time.

Question 4

Greater levels of world trade and tourism have become a global trend partially due to

- A climate change.
- B globalisation.

Question 5

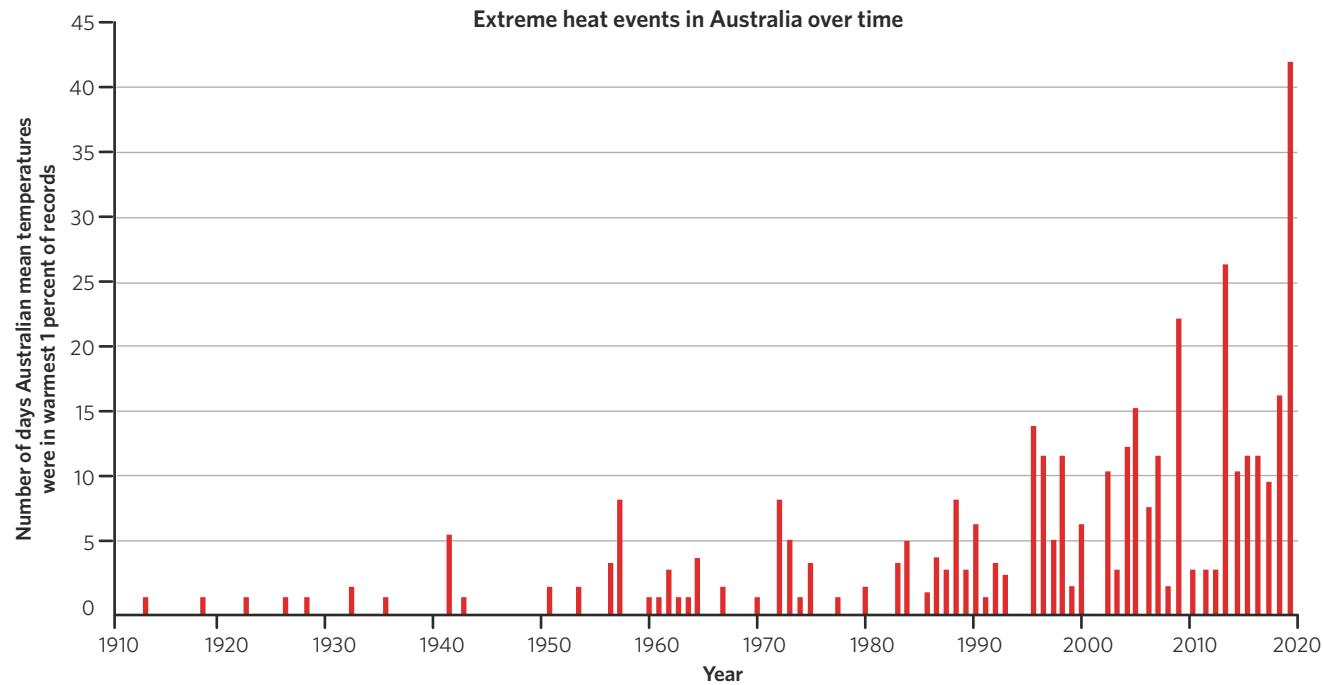
A major outcome of the global trend of digital technologies is increased knowledge sharing, which has mostly positive implications for health and wellbeing.

- A** True.
- B** False.

Skills**Data analysis**

Use the following information to answer Questions 6 and 7.

One of the effects of climate change is an increased frequency of extreme weather events, such as extreme heat. The following graph outlines the changes in extreme heat events in Australia over time.



Source: adapted from Bureau of Meteorology, *State of the Climate 2020*, <<http://www.bom.gov.au/state-of-the-climate/australias-changing-climate.shtml>>

Question 6

Which year had the greatest frequency of extreme heat events?

- A** 1970.
- B** 2010.
- C** 2020.

Question 7

The overall trend of the graph indicates

- A** a decrease in the number of extreme heat events over time.
- B** an increase in the number of extreme heat events over time.
- C** no change in the number of extreme heat events over time.

Perfect your phrasing**Question 8**

Which of the following sentences is most correct?

- A** Mass migration refers to the relocation of *any number* of individuals from one geographical location to another.
- B** Mass migration refers to the relocation of *a large number* of individuals from one geographical location to another.

Question 9

Which of the following sentences is most correct?

- A Trends are only global if they affect all countries in the world at the same time.
- B Trends are global if they have the ability to affect all countries in the world at some time in the near future.

Exam-style questions**Question 10** (1 MARK)

When conflict occurs, there can be many negative effects. One of these effects involves infrastructure, such as houses, schools, and hospitals being damaged.

Suggest how this could affect health and wellbeing.

Question 11 (1 MARK)

Weather patterns have changed in response to climate change, including rainfall becoming heavier and more frequent, which has led to an increased frequency of flash flooding.

Suggest how this could affect health and wellbeing.

Question 12 (2 MARKS)

Explain an implication of mass migration on health and wellbeing.

Question 13 (2 MARKS)

Explain how rising sea levels can impact health and wellbeing.

Question 14 (4 MARKS)

Asher lives in a small town in New South Wales which has been exposed to many droughts in the past few decades. Asher's grandparents and parents keep saying how the number of droughts in their town has increased dramatically since when they were younger. Many of the individuals in his town are farmers who rely on fresh produce to make a living. For this reason, each time it seems like a drought is near, Asher and others in his town become fearful. Asher's mum Samara used to remain calm and positive when droughts occurred, but after losing their crops due to drought for the third time, she has been unable to remain positive and has told her husband that she can't be a farmer anymore and wants to move to a larger town and find alternate work.

- a Identify the effect of climate change evident in the case study. (1 MARK)
- b Referring to information in the case study, outline the implication of the effect of climate change you identified in **part a** on health and wellbeing. (3 MARKS).

Question 15 (6 MARKS)

Digital technologies are increasingly being used globally to share health knowledge. The Australian Government has introduced the My Health Record, which is an online system which contains digital health records, such as blood test results, health summaries, and organ donor registrations.

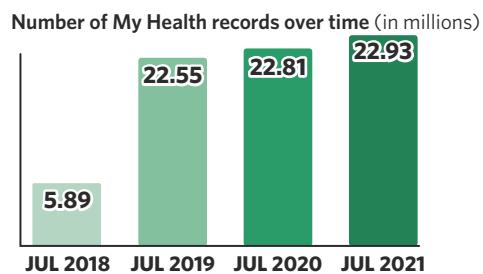
As of March 2021:



More than 15 million people had their immunisation Register uploaded (more than a 50% increase since March 2020)



2.72 billion documents have been uploaded to My Health Record



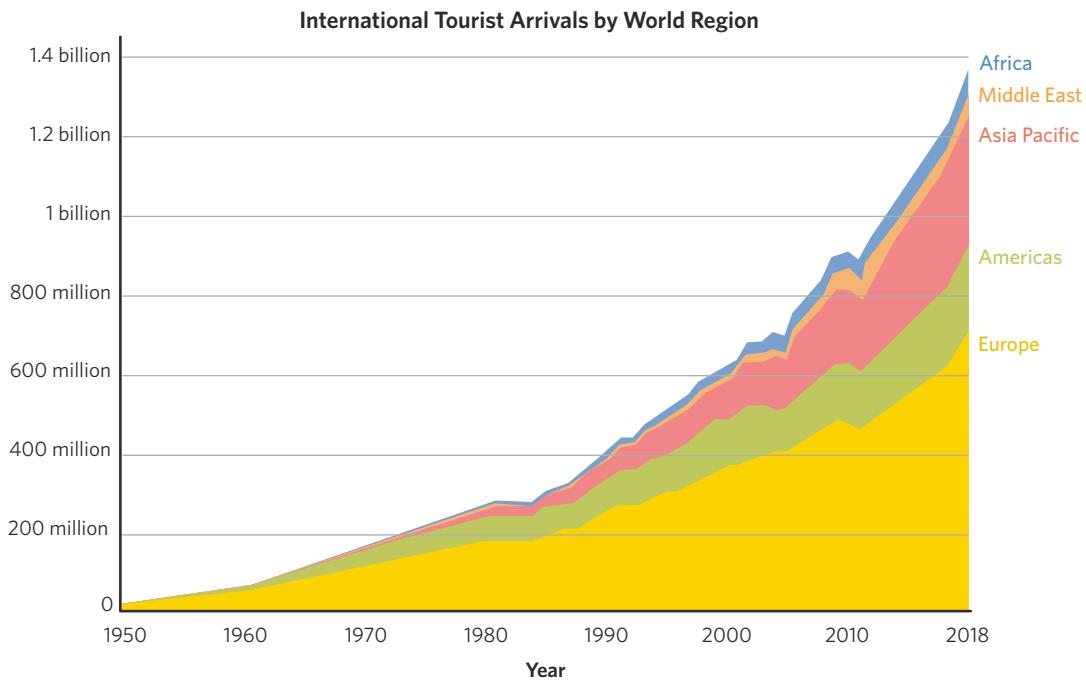
Since July 2020, there have been an additional 120,000 records added

- a Analyse implications of using digital technologies, such as My Health Record, for knowledge sharing on health and wellbeing. (4 MARKS)
- b Identify a trend which is evident in the graph. (2 MARKS)

Adapted from VCAA 2019 exam Q14

Question 16 (6 MARKS)

It has been estimated that there were around 25 million tourist arrivals in 1950. The number of tourist arrivals grew significantly over time, with around 1.4 billion tourist arrivals in 2018.



Source: adapted from Our World in Data, *Tourism*, <<https://ourworldindata.org/tourism>>

- a Using data, identify which world region had the most international tourist arrivals in 2018. (2 MARKS)
- b Outline a positive and negative implication of the global trend of tourism on health and wellbeing. (4 MARKS)

Questions from multiple lessons

Question 17 (5 MARKS)

Globalisation has resulted in the global demand for products and services becoming extremely high. This has placed a lot of pressure on global supply chains. The fragile nature of the global supply chain was demonstrated in March 2021 when an Ever Green container ship became stuck in the Suez Canal. The Suez Canal is a channel of water which is used to transport foods between Asia and Europe.

The ship was stuck for six days, halting the supply chain for almost a week. This had many effects. For example, countries in Europe were at the time experiencing many COVID-19 infections and were running out of personal protective equipment (PPE) for healthcare workers. The PPE was due to arrive from stock produced in Asia. This reduced availability of protective gear meant that healthcare workers were putting themselves and others in danger when treating patients with COVID-19.

Source: adapted from The New York Times, *In Suez Canal, stuck ship is a warning about excessive globalization*, <<https://www.nytimes.com/2021/03/26/business/ship-suez-canal.html>>

- a Referring to the case study, describe how world trade can impact health and wellbeing globally. (3 MARKS)
- b Outline the dimension of sustainability that the case study refers to, justifying your response. (2 MARKS)

CHAPTER 8 REVIEW

CHAPTER SUMMARY

In this chapter, you learnt about the concepts of sustainability, human development, and the implications of global trends on health and wellbeing. As such, your learning maintained a global focus on health and wellbeing and human development.

In lesson **8A: Sustainability**, you learnt about the concept of sustainability, which involves meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. You also learnt about the three dimensions of sustainability and their considerations, which are presented in the following table. You also learnt about how sustainability can promote health and wellbeing globally.

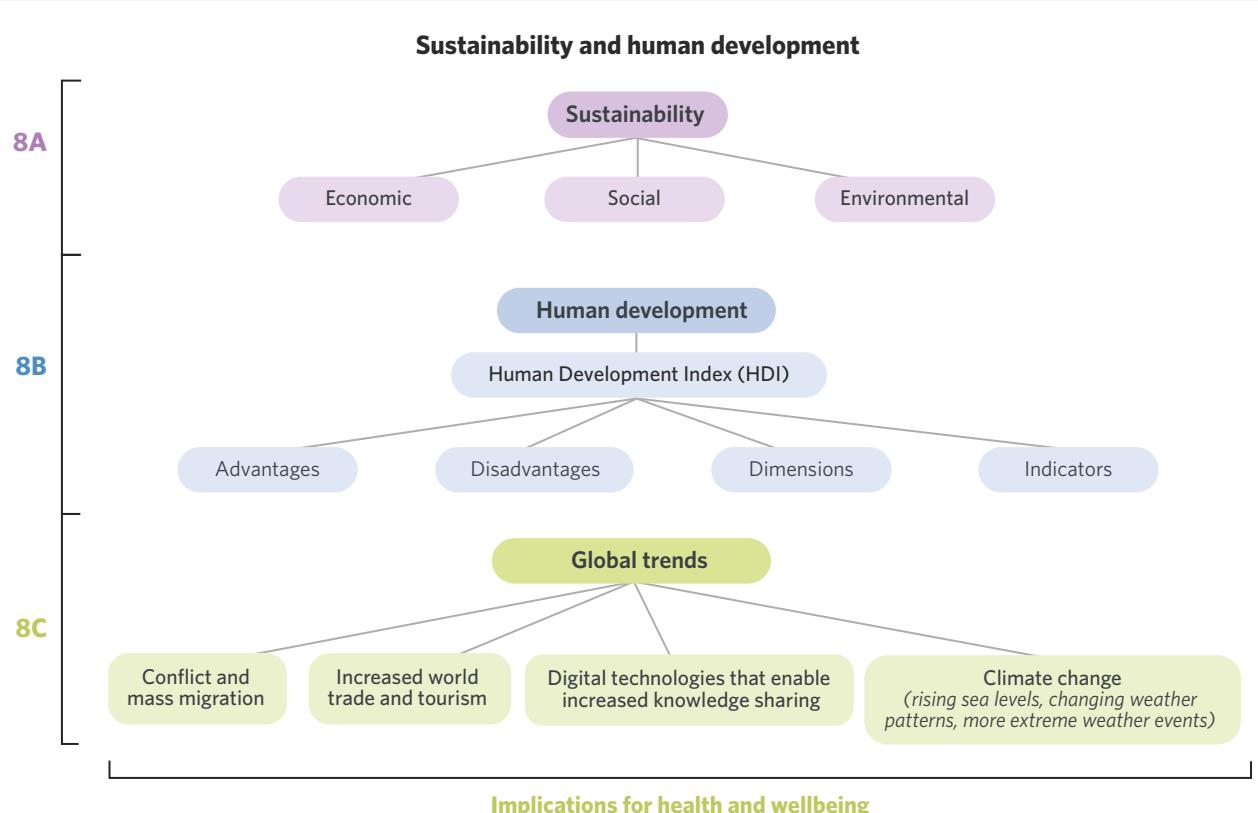
Dimension of sustainability	Considerations
Economic sustainability	<ul style="list-style-type: none"> • Diversity of industries • Meaningful employment opportunities • Trade opportunities • Economic growth
Social sustainability	<ul style="list-style-type: none"> • Social support systems • Gender equality • Working conditions • Strong political and legal systems • Peace
Environmental sustainability	<ul style="list-style-type: none"> • Biodiversity • Use of natural resources • Waste removal and pollution • Climate change management

In lesson **8B: Human development**, you learnt about the concept of human development. This included learning the many components which make up human development. You also learnt about the Human Development Index (HDI), as well as its advantages and limitations. The dimensions of the HDI and their respective indicators are outlined in the following table.

Dimension of the HDI	Indicators of the HDI
A long and healthy life	Life expectancy at birth
Knowledge	Mean years of schooling
	Expected years of schooling
A decent standard of living	Gross National Income per capita

In lesson **8C: Health and wellbeing and global trends**, you learnt about the implication of global trends on health and wellbeing. The global trends you learnt about are:

- climate change, including rising sea levels, changing weather patterns, and more extreme weather events
- conflict and mass migration
- increased world trade and tourism
- digital technologies that enable increased knowledge sharing.



CHAPTER REVIEW ACTIVITIES

Review activity 1: Key terms bank

For the following key terms from the chapter, write an explanation of the concept in your own notes. Where possible, include an example.

- Sustainability
- Economic sustainability
- Social sustainability
- Environmental sustainability
- Human development
- Human development index (HDI)
- Life expectancy at birth
- Mean years of schooling
- Expected years of schooling
- Gross National Income (GNI) per capita
- Climate change
- Conflict
- Mass migration
- World trade
- Tourism

Review activity 2: Label the scenario

Fill in the blanks with the following terms.

- environmental sustainability
- economic sustainability
- Human Development Index (HDI)
- world trade

Sefu has recently started a university course majoring in international relations. One of his subjects involved learning about the Paris Climate Agreement, which was created by the United Nations to tackle the global trend of climate change. One of the aims of this agreement is to reduce greenhouse gas emissions across the world. This in turn will hopefully preserve natural resources for current and future generations, relating to _____.

One of his other subjects involved learning about relationships between countries. He learnt about Britain's exit from the European Union (Brexit), and how this influenced _____ agreements, such as adding fees to the exchange of goods and services between Britain and countries in the European Union. Britain hopes that these changes enhance its economic growth, therefore promoting _____. In this class, Sefu also learnt that Britain has a high Gross National Income (GNI) per capita, contributing to its high _____.

Review activity 3: Analysing Human Development Index (HDI) data

Type the URL hdr.undp.org/en/content/latest-human-development-index-ranking into your browser (United Nations Development Programme, n.d.) Select two countries and answer the questions in the following table. It is best to choose countries from different HDI classifications. You can copy the following table onto a piece of paper in order to structure your response.

	Country 1:	Country 2:
HDI value (in 2019)		
HDI classification		
GNI per capita (USD)		
Life expectancy at birth (years)		
Expected years of schooling (years)		
Mean years of schooling (years)		
How may the country's HDI value influence human development for citizens of the country?		

CHAPTER 8 TEST

Question 1 (2 MARKS)

Outline how social sustainability can promote health and wellbeing.

Question 2 (2 MARKS)

Explain how one country can have a greater Human Development Index (HDI) than another, even if they have a lower Gross National Income (GNI) per capita.

Adapted from VCAA 2016 exam Q15a

Question 3 (5 MARKS)

More extreme weather events are leading to more frequent food shortages in low-income countries. This has led to many individuals, especially children, suffering from fatigue and malnutrition. Similarly, rising global temperature has led to greater land degradation, with soil for food crops being drier and struggling to grow crops.

To counter this, World Vision Australia has restored degraded land for more than 500,000 farm households in Africa, promoting food security. They also distributed four million fruit and tree seedlings in Rwanda to increase the availability of natural resources, and taught locals how to plant them. Additionally, World Vision Australia taught over 3,000 households in Mali techniques, such as tree planting and tree maintenance to counter damage to the environment occurring due to more extreme weather events.

Source: adapted from World Vision, *Going further than ever - Annual report 2020*, <https://www.worldvision.com.au/docs/default-source/annual-reports/wv-annual-reports/annual-report-2020.pdf?sfvrsn=d4bbb23c_2>

- a Identify the global trend referred to in the case study. (1 MARK)
- b Using information from the case study, describe how this initiative promotes environmental sustainability. (2 MARKS)
- c Using information from the case study, explain how human development and health are interrelated. (2 MARKS)

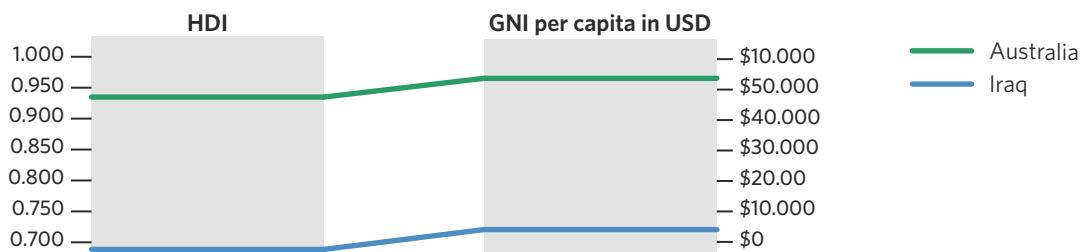
Adapted from VCAA 2016 exam Q10d

Question 4 (2 MARKS)

Describe the concept of human development.

Question 5 (2 MARKS)

Explain an implication of conflict on health and wellbeing.

Question 6 (4 MARKS)

Sources: adapted from United Nations Development Programme, *Human Development Report 2020*, <<http://hdr.undp.org/sites/default/files/hdr2020.pdf>>; adapted from World Bank, GNI per capita, Atlas method (current US\$) <<https://data.worldbank.org/indicator/NY.GNP.PCAP.CD?view=chart>>

- Identify which country has a greater Human Development Index (HDI). (1 MARK)
- Apart from Gross National Income (GNI) per capita, explain why Australia may have a greater HDI than Iraq. (2 MARKS)
- Outline an advantage of the HDI. (1 MARK)

Question 7 (4 MARKS)

The Australian Government uses a wide range of platforms to deliver emergency warnings in times of natural disaster. These natural disasters are usually detected by agencies, such as the Bureau of Meteorology, before warnings are sent via services, such as social media (e.g. Facebook and Twitter), text messages, radio signals, television announcements, and so on. These warning systems were particularly helpful during the 2019/2020 Australian bushfire season. During this time, more than 4 million emergency bushfire alert text messages were sent.

Source: adapted from Royal Commission into Natural Disaster Arrangements, *Chapter 13: Emergency information and warnings*, <<https://naturaldisaster.royalcommission.gov.au/publications/html-report/chapter-13>>

- Explain how the global trend of digital technologies that enable increased knowledge sharing, such as the emergency bushfire text alerts, may have promoted health and wellbeing. (2 MARKS)
- Outline how the emergency texts may have promoted health status. (2 MARKS)

Question 8 (2 MARKS)

Suggest how economic sustainability could promote human development.

Question 9 (1 MARK)

Describe environmental sustainability.

Questions from multiple chapters**Question 10** (4 MARKS)

The World Health Organisation (WHO) recognises the many links between increasing world trade and health. WHO acknowledges that increasing world trade has many positive health impacts, such as:

- providing individuals across the world with adequate medical products and health-related services
- providing individuals in low-income countries with greater access to resources, such as nutritious food due to greater meaningful employment opportunities

WHO also acknowledges that increasing world trade has many negative health impacts, such as:

- having a greater likelihood of communicable diseases spreading across global borders
- increasing the number of non-communicable diseases in low-income countries, such as occurs due to the global marketing of processed foods and tobacco.

Source: adapted from World Health Organisation, *Trade and health: Towards building a national strategy*, <<https://www.who.int/phi/documents/trade-and-health/en/>>

- Describe how world trade can negatively influence health status. (2 MARKS)
- Using the information provided, analyse how the global trend of world trade contributes to optimal health and wellbeing as a resource nationally. (2 MARKS)

Adapted from VCAA 2018 exam Q4

UNIT 4 AOS 1 REVIEW

Complete the following 50 mark practice SAC, which tests all content from within Unit 4 AOS 1.

Question 1 (2 MARKS)

Outline one advantage and one limitation of the Human Development Index (HDI) as a measure of human development.

Question 2 (3 MARKS)

Country	Most recent year	Most recent value (GNI per capita in USD)
Uganda	2019	780
Ukraine	2019	3,370
United Arab Emirates	2019	43,470

Source: adapted from The World Bank, *GNI per capita, Atlas method (current US\$)*, <<https://data.worldbank.org/indicator/NY.GNP.PCAP.CD?view=chart>>

- a Using data from the table, outline how Ukraine would be classified according to the World Bank system. (2 MARKS)
- b Identify one environmental characteristic of middle-income countries. (1 MARK)

Question 3 (1 MARK)

Describe sustainability.

Question 4 (4 MARKS)

Increased world tourism and trade is a global trend. However, COVID-19 had a profound impact on the tourism industry, leading to decreased tourism around the world. Many tourism companies have had to stop trading over lockdowns, with many companies having to close down indefinitely. To support the tourism industry the Victorian Government introduced the Regional Travel Voucher Scheme. This scheme allowed Victorians who received a voucher to be reimbursed \$200 by the government when they spent at least \$400 on accommodation, experiences, tours, or attractions in regional Victoria. The government aimed to stimulate the regional Victorian tourism economy through this initiative.

Source: adapted from State Government of Victoria, Regional Travel Voucher Scheme, <<https://www.vic.gov.au/regional-travel-voucher-scheme#program-overview>>

- a Suggest how the Regional Travel Voucher Scheme could promote health and wellbeing. (2 MARKS)
- b Explain how the Regional Travel Voucher Scheme could promote human development. (2 MARKS)

Question 5 (4 MARKS)

	GNI per capita (USD) in 2019	Life expectancy at birth (both sexes) in 2019
Germany	48,600	81.72
Liberia	580	64.08

Sources: adapted from The World Bank, *GNI per capita, Atlas method (current US\$)*, <<https://data.worldbank.org/indicator/NY.GNP.PCAP.CD>>; the World Health Organisation Global Health Observatory, *Life expectancy at birth (years)*, <[https://www.who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-birth-\(years\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-birth-(years))>

- a Referring to the World Bank system, identify the difference between Germany and Liberia's income classification. (2 MARKS)
- b Compare Germany and Liberia's health status. (2 MARKS)

Question 6 (6 MARKS)

- a Describe social sustainability. (1 MARK)
- b Outline how social sustainability can promote health and wellbeing. (2 MARKS)
- c Referring to inequality and discrimination, explain how the achievement of social sustainability could promote human development. (3 MARKS)

Question 7 (4 MARKS)

Identify and describe two social characteristics of low-income countries.

Question 8 (2 MARKS)

Explain adequate infrastructure as an environmental characteristic of high-income countries.

Question 9 (2 MARKS)

Describe how the global marketing of tobacco can impair health status in low-income countries.

Question 10 (5 MARKS)

Consider the following information regarding the health status of Australia and Zimbabwe.

Indicators of health status for Australia and Zimbabwe

	Female life expectancy at birth (2019)	Male life expectancy at birth (2019)	Maternal mortality rate (per 100,000 live births; 2017)	New cases of tuberculosis (per 100,000 population; 2018)
Australia	84	81	6	6.6
Zimbabwe	63	57	458	210

Source: adapted from the World Health Organisation Global Health Observatory, *Indicators*, <<https://www.who.int/data/gho/data/indicators>>

- a Using data from the table, compare female life expectancy at birth between Australia and Zimbabwe. (2 MARKS)
- b Using data from the table, compare the maternal mortality rate between Australia and Zimbabwe. (2 MARKS)
- c Name the health status indicator which refers to new cases of tuberculosis. (1 MARK)

Question 11 (5 MARKS)

'Chad recorded a gross national income (GNI) per capita of \$700 USD in 2019.'

Source: adapted from The World Bank Group, *GNI per capita, Atlas method (current US\$)*, <<https://data.worldbank.org/indicator/NY.GNP.PCAP.CD>>

- a Identify the country classification that Chad represents according to the World Bank system of classifying countries. (1 MARK)
- b Describe how a lack of sanitation is likely to impair Chad's health status. (2 MARKS)
- c Describe how poverty is likely to impair Chad's health status. (2 MARKS)

Question 12 (2 MARKS)

Describe how a diverse range of industries, a consideration of economic sustainability, could promote health and wellbeing.

Question 13 (10 MARKS)

Consider the following three sources relating to global trends and other concepts.

Source 1

Climate change has many negative implications. This includes rising sea levels due to melting ice glaciers as a result of rising global temperatures. Rising sea levels can erode land, leading to the destruction of beaches and coastal infrastructure such as houses, schools, and workplaces, particularly damaging to low-lying, coastal communities. It is estimated that by 2100, more than 20 million American residents will lose their house due to rising sea levels, either due to land erosion or permanent flooding. Furthermore, rising sea levels can also contaminate freshwater reserves, limiting safe water available for drinking, cooking and agriculture.

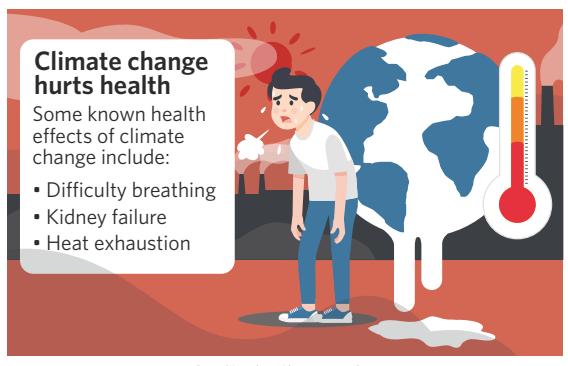


Image: grmarc, pizzastereo, GoodStudio/Shutterstock.com

Sources: adapted from Center for Climate Change and Health, *Sea Level Rise, Climate Change and Health*, <<https://climatehealthconnect.org/wp-content/uploads/2016/09/SeaLevelRise.pdf>>; infographic reproduced from WHO, *Climate change and human health infographics, Climate change hurts health*, Copyright (2021). <<https://www.who.int/globalchange/climate/infographics/en/>>

Source 2

	Percentage of population using at least basic drinking-water services in 2016	Number of diarrhoea deaths from inadequate water in 2016	Water attributed under 5 mortality rate ('000) in 2004
Ethiopia	Approximately 40%	25,805	87,322
Sweden	Approximately 100%	0	0

Sources: adapted from World Health Organisation (WHO) Global Health Observatory, *Indicators - Population using at least basic drinking-water services (%)*, <[https://www.who.int/data/gho/data/indicators/indicator-details/GHO/population-using-at-least-basic-drinking-water-services-\(%\)>](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/population-using-at-least-basic-drinking-water-services-(%)>); WHO Global Health Observatory, *Indicators - Number of diarrhoea deaths from inadequate water*, <[https://www.who.int/data/gho/data/indicators/indicator-details/GHO/number-of-diarrhoea-deaths-from-inadequate-water>Indicators - Water, sanitation and hygiene attributable deaths \('000\) in children under 5 years, <\[https://www.who.int/data/gho/data/indicators/indicator-details/GHO/water-sanitation-and-hygiene-attributable-deaths-\\(000\\)-in-children-under-5-years>\]\(https://www.who.int/data/gho/data/indicators/indicator-details/GHO/water-sanitation-and-hygiene-attributable-deaths-\(000\)-in-children-under-5-years>\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/number-of-diarrhoea-deaths-from-inadequate-water>)

Source 3

Climate change influences how humans have to live their lives. Not only does it limit access to decent health outcomes, but it also restricts the choices individuals can make about their health. This can be due to the effects of climate change such as rising sea levels and extreme weather events forcing individuals to migrate, among other restrictions on freedom and decision making.

Appropriate climate change management can reduce some of these negative effects of climate change and prevent them from worsening in the future. The Australian Government has multiple policies and initiatives to manage climate change. This includes bushfire management, such as the use of planned burns and monitoring fire on public land to minimise the likelihood of bushfires and lessen their severity. This initiative intends to minimise damage to land and buildings, reducing the amount of individuals who are forced out of their home towns due to frequent bushfires. Other initiatives implemented by the Australian Government include increasing coastal protection measures and building more resilient and structurally-sound housing to minimise damages that can occur from extreme weather events and rising sea levels.

Sources: adapted from Parliament of Australia, *Chapter 1 - Introduction, Completed Inquiries 2008-10*, <[https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Former_Committees/agric/completed_inquiries/2008-10/bushfires/report/c01>Climate Change Impacts and Risk Management - A guide for Business and Government, <<https://www.environment.gov.au/system/files/resources/21c04298-db93-47a6-a6b0-eaaaae9ef8e4/files/risk-management.pdf>>](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Former_Committees/agric/completed_inquiries/2008-10/bushfires/report/c01>)

Use information from all three sources and your understanding to analyse:

- the implications of the global trend of climate change on health and wellbeing.
- how the global trend of climate change relates to access to safe water and how this contributes to differences in health status.
- how climate change management can promote human development.

Adapted from VCAA 2020 exam Q11

UNIT 4

AOS2

Health and the Sustainable Development Goals

This area of study looks at action for promoting health globally. It looks at the rationale, objectives and interdependencies of the UN's SDGs, focusing on their promotion of health and wellbeing and human development. Students investigate the priorities and work of the WHO and evaluate Australia's aid program and the role of non-government organisations, selecting one aid program for detailed research and analysis. They reflect on meaningful and achievable individual actions that could contribute to the work of national and international organisations that promote health and wellbeing.

Outcome 2

On completion of this unit the student should be able to analyse relationships between the SDGs and their role in the promotion of health and human development, and evaluate the effectiveness of global aid programs.

Reproduced from VCAA VCE Health and Human Development Study Design 2018-2023



CHAPTER

9

International organisations that promote health and wellbeing

9A Overview of the Sustainable Development Goals (SDGs)

9B Key features of SDG 3

9C The relationship between SDG 3 and other SDGs

9D The priorities and work of the WHO

Key knowledge

- rationale and objectives of the UN's SDGs
- key features of SDG 3 'Ensure healthy lives and promote wellbeing for all at all ages'
- relationships between SDG 3 and SDGs 1, 2, 4, 5, 6 and 13 that illustrate collaboration between the health sector and other sectors in working towards health-related goals
- priorities and work of the WHO

9A OVERVIEW OF THE SUSTAINABLE DEVELOPMENT GOALS (SDGs)

Can you imagine a world free from issues such as extreme poverty, climate change, and inequality? The United Nations established 17 Sustainable Development Goals (SDGs) to tackle our world's most pressing issues and pull countries together from across the globe to work in collaboration to improve the lives of all. These global goals were established for everyone in every country to experience basic human rights, freedoms, and opportunities to live a fulfilling life. In this lesson, you will learn what the SDGs are and how they can work together to bring about improvements in health and wellbeing on a global scale. You will also learn about the rationale and objectives of the SDGs.



Image: Joowwww/Shutterstock.com

9A Overview of the Sustainable Development Goals (SDGs)	9B Key features of SDG 3	9C The relationship between SDG 3 and other SDGs	9D The priorities and work of the WHO
Study design dot point			
<ul style="list-style-type: none"> • rationale and objectives of the UN's SDGs 			
Key knowledge units			
Sustainable Development Goals (SDGs)			4.2.1.1
Rationale of the SDGs			4.2.1.2
Objectives of the SDGs			4.2.1.3

Overview of the Sustainable Development Goals (SDGs)



Sustainable Development Goals (SDGs) 4.2.1.1

OVERVIEW

The Sustainable Development Goals (SDGs) were developed by the United Nations (UN) to combat numerous global challenges our world is facing today, such as poverty, inequality, and climate change. The aim is for all countries to work together in a global partnership to achieve all 17 SDGs.

THEORY DETAILS

The 17 **Sustainable Development Goals (SDGs)** were established by the United Nations and aim to address many urgent challenges our world is facing by asking countries from across the globe to work together to improve health and wellbeing for all. They were officially adopted by member states at the **United Nations (UN)** Sustainable Development Summit at the UN Headquarters in New York in 2015. The SDGs officially came into effect on January first in 2016. Between the 17 SDGs, also commonly referred to as the Global Goals, there are 169 targets that help guide global progress which are all to be achieved by 2030.

The SDGs address the most pressing global issues that impact millions of people in our world. They are ambitious as they aim to leave no one behind, specifically through striving to end poverty everywhere. Overall, the SDGs work to improve global health and wellbeing and human development. The SDGs ultimately ask the efforts of all people and countries to work together to build a more productive and prosperous planet in a sustainable way.

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- describe the objectives of the UN'S SDGs and justify their importance

KEY DEFINITIONS

Sustainable Development Goals (SDGs) are a set of 17 goals, established by the United Nations, which aim to address many urgent challenges our world is facing by asking countries from across the globe to work together to improve health and wellbeing for all

ADDITIONAL TERMS

The United Nations (UN) is an intergovernmental organisation that aims to maintain international peace and security, promote social progress, improve standards of living, and promote human rights



Want to know more?

The United Nations

As the UN established the SDGs, it is helpful to understand more about them.

In 1945, after World War II, countries across the globe were in despair and people wanted peace. In order to regain world peace and security, leaders from 51 countries gathered in San Francisco to sign a Charter, which created a new organisation called the United Nations.

Over 70 years later, the UN is still maintaining international peace and security and is currently made up of 193 Member States. To this day, the mission and work of the UN are guided by the principles contained in its founding charter. The SDGs are one example of the work of the UN.

The UN provides a platform for its members to communicate, collaborate, and express their views through different committees, forums and meetings. Through enabling such communication between countries from across the world, the organisation has become a key way for governments to work together to solve problems facing humanity.



Image: Drop of Light/Shutterstock.com

Figure 1 The 2017 UN Security Council Summit, an example of a UN summit involving numerous member state representatives

It is important to understand what **sustainable development** means when we talk about the SDGs. The SDGs aim to benefit both current and future generations and are an urgent call to shift the world onto a more sustainable path. Between the 17 SDGs, many aspects of sustainable development are covered, such as economic, environmental, and social sustainable development. In Health and Human Development, we only study 7 of the SDGs. You will learn SDG 3 ‘Good health and wellbeing’ in the most detail. You can see in figure 2 the 7 goals we study.



Image: Deni Nandar Sukanwar/Shutterstock.com

Figure 2 The circled SDGs are the seven SDGs studied in VCE Health and Human Development

Rationale of the SDGs 4.2.1.2

OVERVIEW

There are three main reasons why the SDGs were developed and exist.

THEORY DETAILS

The following dot points detail the **rationale** behind the SDGs. Rationale refers to the set of reasons or the logical basis for a course of action or belief. As part of the rationale, there are three main reasons why the SDGs were developed. These reasons are:

- To continue the work of the **Millennium Development Goals (MDGs)** which ended in 2015. As such, a new set of goals and targets were required to continue progress on solving global issues. The MDGs made a lot of positive change, but millions of people were still living in extreme poverty and more work needed to be done once the MDGs came to an end in 2015. The SDGs will guide global action for the coming years until they are set to finish in 2030.
- By 2015, new global challenges had emerged, such as climate change, the growing gap between the rich and the poor, the increasing rate of conflict and terrorism. Therefore, the world needed a new set of goals that specifically targeted these problems.
- Despite the MDGs making significant improvements in global health and wellbeing, by 2015 there were still many inequalities that existed across the world. The uneven progress across countries meant there were still millions of people experiencing hardship in our world. This meant that more work needed to be done to create a greater, more sustainable future for all.

ADDITIONAL TERMS

Sustainable development

involves development, specifically referring to social, economic, and environmental development, that meets the needs of current generations without compromising the needs of future generations

ADDITIONAL TERMS

Rationale refers to a set of reasons or a logical basis for a course of action or belief

Millennium development goals (MDGs) refers to a set of eight goals that were introduced in 2000 by the United Nations to kickstart a global effort to tackle extreme poverty and its many consequences, such as hunger, disease, gender inequality, and the inability to access education

Want to know more?

The Millennium Development Goals (MDGs)

You might be wondering what the Millennium Development Goals (MDGs) were. Understanding the MDGs will aid in your overall understanding of the SDGs.

Established in 2000, the MDGs consisted of eight main goals which 189 UN member states agreed to try to achieve by 2015. The MDGs came from the United Nations Millennium Declaration, signed by all member states, which aimed to combat poverty, hunger, disease, education and environmental issues, and discrimination against women.

Some of the key achievements of the MDGs (United Nations Development Programme, n. d.) are that:

- more than 1 billion people were lifted out of extreme poverty since 1990.
- child mortality dropped by more than half since 1990.
- more children than ever are gaining a primary education.
- HIV/AIDS infections fell by almost 40% since 2000.



Figure 3 The eight Millennium Development Goals

Want to know more?

The five areas of action!

The SDGs can be categorised into five areas of importance for humanity and the planet. These areas are referred to as the 5Ps. Understanding the 5Ps will help you understand the SDGs and the overall areas they target. The 5Ps highlight to us how the SDGs are an interconnected framework. The success of one goal is dependent on the success and progress of others.

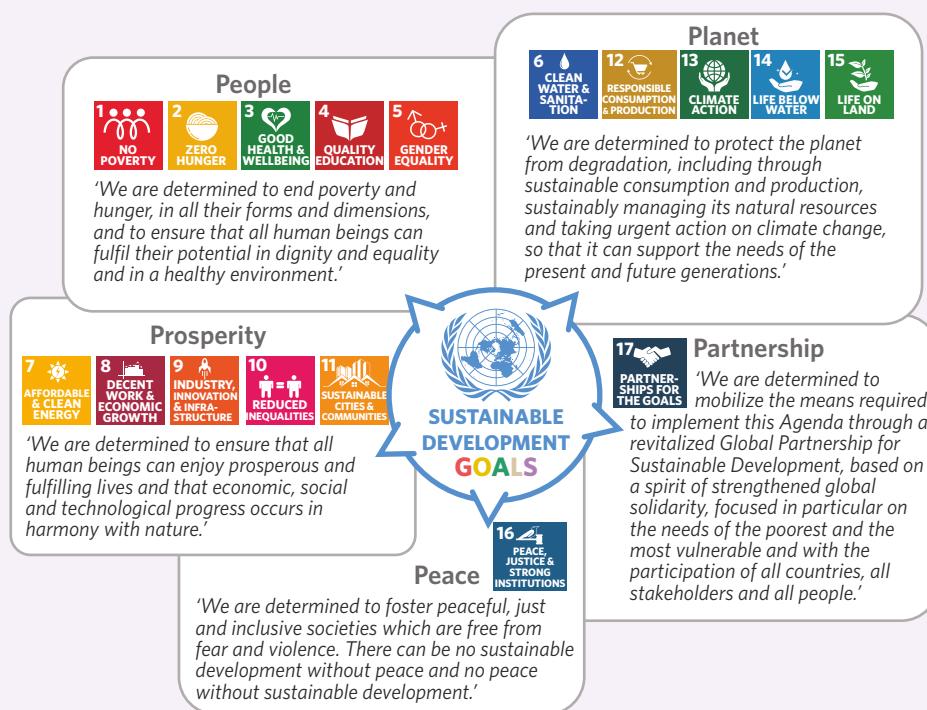


Image: Deni Nandar Sukanwar, Joowwww/Shutterstock.com

Figure 4 The five areas of action relating to the Sustainable Development Goals (United Nations Foundation, 2019)

Want to read more? Check out this **United Nations Foundation** blog where it discusses how the 5P's can help us measure the progress of the SDGs by typing the URL unfoundation.org/blog/post/the-sustainable-development-goals-in-2019-people-planet-prosperity-in-focus into your browser.

Objectives of the SDGs 4.2.1.3

OVERVIEW

The 17 Sustainable Development Goals (SDGs) work together to achieve three common objectives. These objectives summarise the overall aim of the SDGs. The three objectives are to end extreme poverty, fight inequality and injustice, and address climate change.

THEORY DETAILS

The 17 SDGs cover many different global issues. You will learn more about each SDG later in this chapter. The **objectives** of the SDGs summarise the overall aim of the goals, which include:

- end extreme poverty.
- fight inequality and injustice.
- address climate change.

One objective is to end extreme poverty. This objective recognises that ending extreme poverty is integral to ensuring people can afford resources, such as healthcare, to improve their health and wellbeing, as well as improve levels of human development. Numerous SDGs will contribute to the achievement of this objective.

Another objective of the SDGs is to fight inequality and injustice. Inequalities and injustices based on age, income, gender, sexual orientation, race, class, ethnicity, religion, and disability continue to exist in societies all across the world. Inequalities and injustices not only damage people's sense of self-worth and confidence, but also stand as a roadblock to ending poverty as well as social and economic development. Many of the SDGs will contribute to the achievement of this objective.

The last objective is to address climate change. Weather patterns are changing, sea levels are continuing to rise, and natural disasters such as wildfires are becoming more extreme, affecting everyone globally. Such changes impact the livelihoods of people on every continent, from every country, threatening the future of both humans and our planet. This objective recognises that climate change is an extremely pressing issue, therefore, numerous SDGs contribute towards this objective.

Overall, these three objectives reinforce the notion that the SDGs are interconnected and do not stand alone, working together to achieve three common objectives. The SDGs are summarised in figure 5.

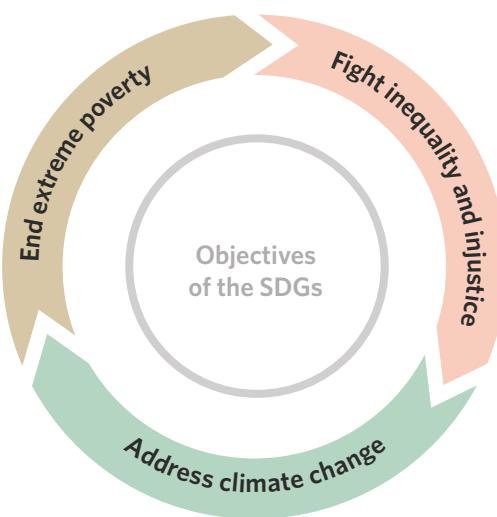


Figure 5 The objectives of the SDGs

! Useful tip

Sometimes you might get confused between the rationale and the objectives. How can you remember which is which? It might help to remember that the *rationale* is the *reasoning* and the *objectives* are the *aims*! Always remember that there are *three* key components to both the rationale and the objectives.

ADDITIONAL TERMS

Objective refers to something aimed at or sought; a target

Lesson link

If you are struggling to understand the concept of poverty, return to lesson **7C: Factors affecting health status and burden of disease**, where poverty is discussed in depth.

Lesson link

If you are struggling to understand the concept of inequality and injustice, go back to lesson **7C: Factors affecting health status and burden of disease**, where inequality and discrimination are discussed in depth.

Lesson link

If you are struggling to understand the concept of climate change, go back to lesson **8C: Health and wellbeing and global trends**, where climate change is explored in depth.

 **Want to know more?**
So how do we know if we will actually achieve the SDGs?

There are numerous ways the progress of the SDGs is tracked. Every year, there is a report published called the 'SDG Progress Report'. This report provides an overview of the different efforts to date, highlighting areas of progress as well as areas where more action needs to be taken. The reports are prepared by the United Nations Department of Economic and Social Affairs, with input from numerous international and regional organisations (United Nations, 2020). To view the '2020 SDG Progress Report' type the URL unstats.un.org/sdgs/report/2020/The-Sustainable-Development-Goals-Report-2020.pdf into your browser (United Nations, 2020).

Alongside the SDG Progress Reports, there is a fantastic resource called 'SDG Tracker'. SDG Tracker is an online interactive database where viewers can view and explore data on the 17 SDGs progress at a country level. SDG Tracker is a collaborative effort between researchers at Oxford University and the Global Change Data Lab. The data is sourced from official sources such as the UN, World Bank and the World Health Organisation. To view 'SDG tracker' type the URL sdg-tracker.org into your browser (SDG Tracker, 2018).

 **Want to know more?**
Sustainability and the SDGs

In the 2020 VCE Health and Human Development exam there was a question for the first time linking sustainability to the SDGs:

Question 6c

Explain how social sustainability underpins the objective 'end extreme poverty'. (2 MARKS)

The three dimensions of sustainability are linked to the SDGs. This involves focusing on how the SDGs can demonstrate the dimensions of sustainability. The links between the dimensions of sustainability and the SDGs are outlined in table 1. This is just three examples of links you can make. There are many more! See how many links you can make between each dimension of sustainability and the SDGs.

Table 1 The links between the dimensions of sustainability and the SDGs

	Environmental Sustainability	Social Sustainability	Economic Sustainability
Description of the dimension of sustainability	Environmental sustainability refers to ensuring the natural environment is used in a way that serves the current generation while also preserving natural resources for future generations, such as making decisions and implementing practices that minimise resource degradation and depletion.	Social sustainability involves creating an equitable society that meets the needs of all citizens at the present without compromising the ability to meet these needs for future generations.	Economic sustainability refers to the responsible management and use of financial resources, ensuring that individuals currently have adequate access to earn an income and meet financial obligations without compromising this ability for future individuals.
Linking the dimension of sustainability to an objective of the SDGs	Environmental sustainability can be linked to the objective of 'address climate change'. In order to address climate change and reduce its impacts, resources must be used in a way that preserves the environment, and practices must be implemented to minimise degradation, such as governments investing in solar and wind energy.	Social sustainability can be linked to the objective 'fight inequality and injustice' as everyone, both now and into the future, must have equal access to education, job opportunities and the chance to earn an income. For example, to 'fight inequality and injustice' it is essential females have equal access to education as males. If educated, females are less likely to marry young and are more likely to lead healthy, productive lives, allowing them to make decisions and build better futures for themselves and their families (UNICEF, n.d.).	Economic sustainability can be linked to the objective 'end extreme poverty' through looking at job opportunities. In order for extreme poverty to be ended, individuals must be able to gain stable employment, allowing them to earn an income. Earning an income enables individuals to access basic resources such as food and shelter.

 **Lesson link**

The 17 SDGs are aligned with the three dimensions of sustainability: economic, social, and environmental. It is helpful to understand how the SDGs are underpinned by the three dimensions.

In lesson **8A: Sustainability**, the concept of sustainability was introduced and you learnt about the three different dimensions.

Progress from the SDGs needs to be long-lasting and benefit generations for years to come. Review lesson 8A if you need a refresher on the dimensions of sustainability.

Theory summary

In this lesson, you have learnt about the Sustainable Development Goals (SDGs). You have learnt about what the SDGs are, and about the rationale and the objectives of the SDGs.



Figure 6 Summary of the rationale and objectives of the SDGs

9A QUESTIONS

Theory-review questions

Question 1

The Sustainable Development Goals (SDGs) were developed to combat numerous global challenges our world is facing today.

- A True.
- B False.

Question 2

Global challenges relating to climate change are the only challenges the SDGs aim to combat.

- A True.
- B False.

Question 3

Many countries work together to achieve the SDGs.

- A True.
- B False.

Question 4

The rationale of the SDGs refers to the reasons the SDGs were developed.

- A True.
- B False.

Question 5

As the MDGs were finished in 2015, the SDGs were established partly to focus on new global challenges.

- A True.
- B False.

Question 6

The SDGs have clear goals and aims.

- A True.
- B False.

Question 7

Which of the following best fills in the blank?

- A aim
- B objective

End extreme poverty is an _____ of the SDGs.

Skills

Perfect your phrasing

Question 8

Which of the following sentences is most correct?

- A The Sustainable Development Goals are a set of 17 goals that *only address one challenge* our world is facing from countries across the globe.
- B The Sustainable Development Goals are a set of 17 goals that *address numerous challenges* our people are facing from countries across the globe.

Question 9

Which of the following sentences is most correct?

- A The rationale of the SDGs involves three key points, which includes *promoting* the work of the MDGs.
- B The rationale of the SDGs involves three key points, which includes *to continue* the work of the MDGs.

Question 10

Which of the following sentences is most correct?

- A The objectives of the SDGs are essentially the overall aim of the 17 goals, and they include three key points: *end all hunger, fight inequality and injustice and address climate change*.
- B The objectives of the SDGs are essentially the overall aim of the 17 goals, and they include three key points: *end extreme poverty, fight inequality and injustice and address climate change*.

Exam-style questions**Question 11** (1 MARK)

Identify one reason why the SDGs were developed.

Question 12 (2 MARKS)

Explain what the SDG objective ‘fight inequality and injustice’ refers to.

Question 13 (2 MARKS)

Outline the difference between the rationale of the SDGs and the objectives of the SDGs.

Question 14 (2 MARKS)

In 2015, The United Nations established 17 Sustainable Development Goals. ‘Address climate change’ is one of the three objectives of the SDGs.

Identify one other objective and explain why it is important.

Adapted from VCAA 2020 exam Q6C

Question 15 (2 MARKS)

Describe what the SDGs are and outline their overall aim.

Question 16 (4 MARKS)

Explain what rationale of the SDGs refers to and outline the three key components of the rationale.

Questions from multiple lessons**Question 17** (3 MARKS)

The SDGs are underpinned by the three dimensions of sustainability, which are, social, environmental, and economic.

- a Outline the meaning of sustainability. (1 MARK)
- b Explain how environmental sustainability underpins the achievement of the objective 'address climate change'. (2 MARKS)

Adapted from VCAA 2020 exam Q6C

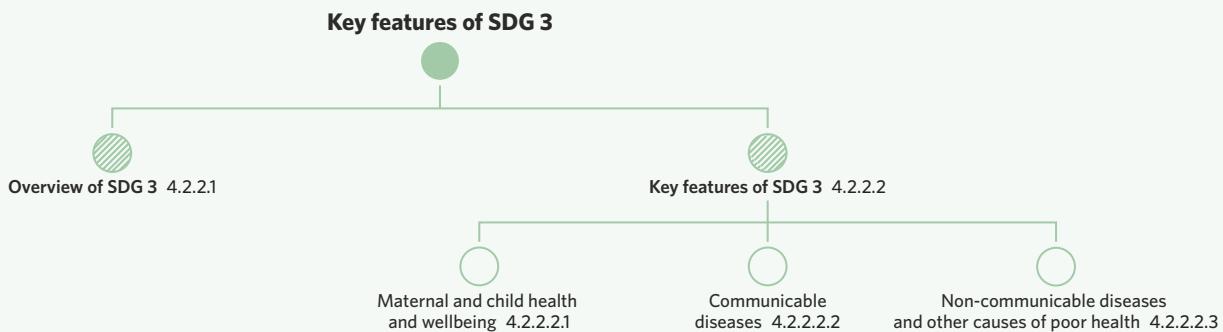
9B KEY FEATURES OF SDG 3

You might think about your own health and wellbeing, but did you know that the United Nations thinks about the health and wellbeing of the entire world? In this lesson, you will learn all about the UN's third sustainable development goal 'Good health and wellbeing'. This lesson will explain SDG 3 and discuss the key targets it aims to achieve. You will also learn about the three key features of SDG 3 and what they involve.



Image: Deni Nandar Sukanwar/Shutterstock.com

9A Overview of the Sustainable Development Goals (SDGs)	9B Key features of SDG 3	9C The relationship between SDG 3 and other SDGs	9D The priorities and work of the WHO
Study design dot point			
<ul style="list-style-type: none"> key features of SDG 3 'Ensure healthy lives and promote wellbeing for all at all ages' 			
Key knowledge units			
Overview of SDG 3			4.2.2.1
Key features of SDG 3			4.2.2.2
Maternal and child health and wellbeing			4.2.2.2.1
Communicable diseases			4.2.2.2.2
Non-communicable diseases and other causes of poor health			4.2.2.2.3



Overview of SDG 3 4.2.2.1

OVERVIEW

SDG 3 is based on achieving good levels of health and wellbeing for everyone. This goal is made up of 3 key features: maternal and child health and wellbeing, communicable diseases, and non-communicable diseases and other causes of poor health.

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- describe key features of SDG 3 and analyse its relationships with other SDGs in collaborative approaches to improving health and wellbeing, and human development globally

THEORY DETAILS

SDG 3 is the third Sustainable Development Goal created by the United Nations and is referred to as ‘Good health and wellbeing; ensure healthy lives and promote wellbeing for all at all ages’ (United Nations, n.d.). This SDG aims to promote physical and mental health and wellbeing. It also aims to extend life expectancy through focusing on the major causes of mortality and morbidity in high-, middle-, and low-income countries.

For this lesson, mortality and morbidity are important concepts:

- **Mortality** refers to the number of deaths in a population.
- **Morbidity** refers to ill health in an individual and the levels of ill health in a given population group.

To ensure progress within this SDG is achieved, the UN has developed 13 targets that centre around health and wellbeing and address the aims of SDG 3.

The key targets of SDG 3 are to:

- Reduce the global maternal mortality ratio to less than 70 per 100,000 live births.
- End preventable deaths of newborns and children under five, reducing neonatal mortality to 12 per 1000 live births and under five mortality to 25 per 1000 live births.
- End the epidemic of AIDS, tuberculosis, malaria, and neglected tropical diseases, and combat hepatitis, waterborne diseases, and other communicable diseases.
- Reduce by one third premature mortality from non-communicable diseases through prevention and treatment, and promote mental health and wellbeing.
- Strengthen the prevention and treatment of substance abuse, including drugs and alcohol.
- Halve the global deaths and injuries from road traffic accidents.
- Ensure universal access to sexual and reproductive healthcare services.
- Achieve universal health coverage, including access to affordable essential medicines and vaccines.
- Reduce deaths and illnesses from hazardous chemicals and air, water and soil pollution, and contamination.
- Strengthen the implementation of the WHO Framework Convention on Tobacco Control in all countries, as appropriate.
- Support research and development of vaccines and medicines for communicable and non-communicable diseases and provide access to affordable essential medicines and vaccines.
- Increase investment in healthcare services and qualified healthcare staff, especially in low-income countries and small-island developing states.

(United Nations, n. d.)

An important concept mentioned within these targets is universal health coverage.

Universal health coverage involves developing and improving health systems so that all people around the world can access quality and affordable healthcare when they need it. It also involves ensuring that all countries have strong, resilient, people-centred health systems based on primary care, health promotion, and disease prevention. An aspect of universal health coverage includes providing **essential medicines**, which are medicines that satisfy the priority healthcare needs of the population. Achieving universal health coverage is a crucial part of SDG 3. Not only is it a key target itself, but it also will assist in achieving many of the other key targets of SDG 3.

The example shown in figure 1 shows that through achieving universal health coverage, women can have access to services that will ensure healthy and safe childbirth experiences, including access to antenatal and neonatal care. Through antenatal and neonatal care, mothers will have access to qualified and skilled health workers that can monitor, educate, and provide medical assistance, to the mother and baby. This will help to reduce maternal mortality and end preventable deaths of newborns and children under five, which are other key SDG 3 targets.

KEY DEFINITIONS

SDG 3 is titled ‘Good health and wellbeing’. SDG 3 aims to promote physical and mental health and wellbeing, and extend life expectancy by addressing the major causes of morbidity and mortality in high-, middle-, and low-income countries

Mortality refers to the number of deaths in a population

Morbidity refers to ill health in an individual and the levels of ill health in a given population group

! Useful tip

The shortened title of SDG 3 is ‘Good health and wellbeing.’ The extended title is ‘Good health and wellbeing; ensure healthy lives and promote wellbeing for all at all ages.’ According to VCAA, it is acceptable to use the shortened title when simply referring to an SDG. However, if you are asked to explain an SDG, it may be more appropriate to use the extended title in your answer.

KEY DEFINITIONS

Universal health coverage involves developing and improving health systems so that all people around the world can access quality and affordable healthcare when they need it

ADDITIONAL TERMS

Essential medicines are medicines that satisfy the priority healthcare needs of the population



Image: RaiDztor/Shutterstock.com

Anna is a young woman and is going through her first pregnancy. She is lucky that she has access to health services so she can receive antenatal care throughout her pregnancy experience. Anna and her doctors are confident she will have a safe birth and a healthy baby.

Figure 1 An example of how the SDG 3 key target 'achieving universal health coverage' helps achieve other SDG 3 key targets

💡 Useful tip

There is no need to perfectly memorise all of the 13 targets, but rather, it is important that you have a general idea about what they all include. It is, however, helpful to have a deep understanding of a few of the targets in order to use them as examples when writing your answers.

For example, if a question asks:

- 'How does SDG 3 work to improve physical health and wellbeing?'

You could use a target in your answer, such as:

- 'SDG 3 aims to *achieve universal health coverage, including access to affordable essential medicines and vaccines*, which helps individuals to remain free from illness and disease, therefore promoting physical health and wellbeing.'



Want to know more?

The United Nations divides the 13 key targets of SDG 3 into outcome-based targets and action-based targets.

- Outcome-based targets refer to a specific aim the UN wants to achieve in SDG 3. For example, 'reduce the global maternal mortality ratio to less than 70 per 100,000 live births'.
- Action-based targets refer to how the UN will work to achieve the aims of SDG 3. For example, 'strengthen the prevention and treatment of substance abuse, including drugs and alcohol'. Action targets can also be referred to as means of implementation.

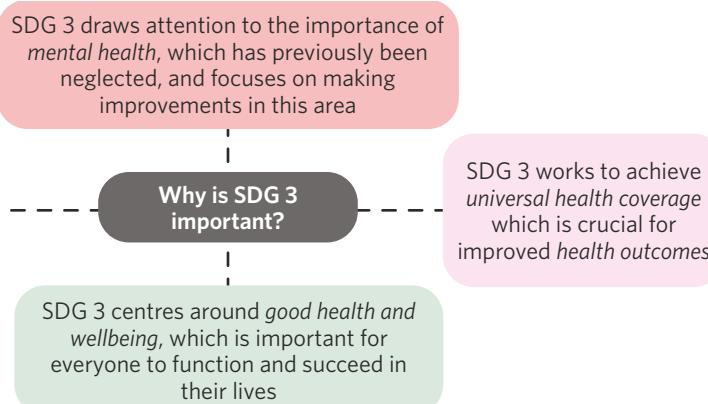


Figure 2 Reasons why SDG 3 is important

ACTIVITY 1 - CLASS DISCUSSION

Can you think of other reasons why SDG 3 is important?

The examples that we discuss in this lesson are just a few examples of why SDG 3 is important.

Brainstorm and discuss amongst your class other reasons that show the importance of SDG 3.

Key features of SDG 3 4.2.2.2

To combine and summarise the 13 targets, SDG 3 consists of 3 key features:

- maternal and child health and wellbeing
- communicable diseases
- non-communicable diseases and other causes of poor health

The key features of SDG 3 reflect the 13 targets set out by the United Nations.

Maternal and child health and wellbeing 4.2.2.2.1

A key feature of SDG 3 is maternal and child health and wellbeing. Maternal and child health and wellbeing is all about improving the lives of mothers and children. This feature can be separated into two components: reduce maternal mortality and end preventable newborn and child deaths.



Figure 3 Key feature: maternal and child health and wellbeing

Table 1 Key components of maternal and child health and wellbeing

Component of key feature	What is it?	How can we make progress in this area?
Reduce maternal mortality	Reducing maternal mortality is a key component of 'maternal and child health and wellbeing.' It is focused on maternal health and wellbeing and is concerned with making efforts to reduce maternal mortality. Maternal mortality refers to mothers who die due to complications related to pregnancy and childbirth.	<ul style="list-style-type: none"> • Increasing the number of women who have access to sexual and reproductive health and wellbeing services. • Ensuring more births are assisted by skilled health professionals. • Reducing the number of young girls becoming pregnant. • Having greater access to family planning services. • Increasing the number of mothers who have access to antenatal care.
End preventable newborn and child deaths	This component of 'maternal and child health and wellbeing' is concerned with newborns and children under the age of five. It aims to improve health and wellbeing and make efforts to end preventable deaths of newborns and young children. It focuses on neonatal and under five mortality. Neonatal mortality refers to deaths of newborns within the first 28 days of life. Under five mortality refers to deaths of children under five years of age.	<ul style="list-style-type: none"> • Having greater access to family planning services. • Ensuring more children are vaccinated and have access to other health services, such as antibiotics. • Increasing the number of mothers who have access to neonatal care.

Memory device

A helpful way for you to recall the features is to create a link with the number **3**. You can remember that SDG **3** has **3** key features and **13** targets!

KEY DEFINITIONS

Maternal mortality refers to mothers who die due to complications related to pregnancy and childbirth

Neonatal mortality refers to deaths of newborns within the first 28 days of life

Under five mortality refers to deaths of children under five years of age

Want to know more?

What are some causes of maternal mortality?

- Haemorrhage (excessive bleeding)
- Sepsis (an infection that affects the whole body)
- Obstructed labour
- Unsafe abortion
- Hypertensive disease (a heart disease caused by high blood pressure)
- Malnutrition

Figure 4 Causes of maternal mortality



Want to know more?

The majority of infant deaths tend to occur in the neonatal period, which refers to the first 28 days after birth. Children that reach five years of age are significantly more likely to survive into adulthood. The term **neonatal** is used to describe newborns or concepts relating to newborns. For example, neonatal mortality refers to deaths of newborns. The term **antenatal** is used to describe concepts relating to before birth or during pregnancy. For example, antenatal care refers to support and health care during and after pregnancy.

ADDITIONAL TERMS

Neonatal is a term used to describe newborns or concepts relating to newborns

Antenatal is a term used to describe concepts relating to before birth or during pregnancy

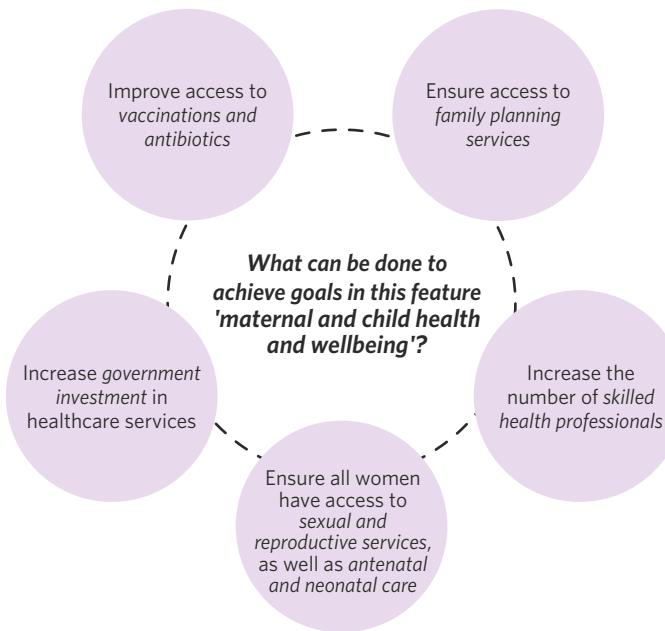


Figure 5 Ways to achieve key feature 'maternal and child health and wellbeing'

Communicable diseases 4.2.2.2

Another key feature of SDG 3 is known as communicable diseases and aims to end the epidemics of communicable diseases. **Communicable diseases** refer to infectious diseases that are transmitted from the environment, including through air, food, water, and other infected organisms. In this lesson, we will discuss six communicable diseases that SDG 3 aims to reduce. These are neglected tropical diseases, waterborne diseases, malaria, AIDS, tuberculosis, and hepatitis.

KEY DEFINITIONS

Communicable diseases are infectious diseases that are transmitted from the environment, including through air, food, water, and other infected organisms

Memory device

A way to help remember the difference between communicable and non-communicable diseases is to look at the beginning of each term:

- **Communicable** diseases, '**comm**', can be **communicated** in the environment
- **Non-communicable** disease, '**non-comm**' meaning they are **not communicating** in the environment



Communicating
communicable disease



Not communicating
non-communicable disease

Image: Nina Puankova/Shutterstock.com

Figure 6 The difference between communicable and non-communicable diseases

Memory device

To help remember the 5 communicable diseases that come under this key feature, use the acronym **NW-MATH**.

Neglected tropical diseases

Waterborne diseases

Malaria

AIDS

Tuberculosis

Hepatitis

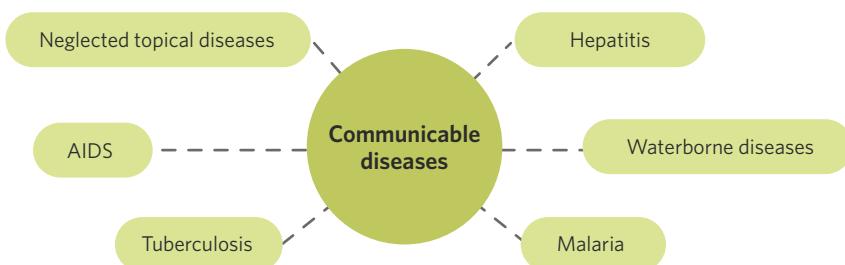


Figure 7 Key feature: communicable diseases

A key target of SDG 3 is to end the epidemic of AIDS, tuberculosis, malaria, and neglected tropical diseases, and combat hepatitis, waterborne diseases, and other communicable diseases. The term **epidemic** refers to a widespread occurrence of an infectious disease within a certain community at a certain time.

Table 2 Key components of communicable diseases

Disease	What is it?	How can we make progress in this area?
Neglected tropical diseases	<ul style="list-style-type: none"> Neglected tropical diseases is a term used to describe a group of various diseases. They mainly occur within tropical and subtropical environments. 	<ul style="list-style-type: none"> Using safe and effective drugs to prevent and treat infection. Vector control, which can involve removing any animal or insect sources that carry and/or transmit the disease. Ensuring clean water and adequate sanitation.
Malaria	<ul style="list-style-type: none"> Malaria is a communicable disease that is transmitted via infected mosquitoes. It destroys the body's red blood cells. Malaria can disrupt the body's blood supply to internal organs and cause death, if left untreated. 	<ul style="list-style-type: none"> Improving diagnosis by making it more efficient and effective. Using preventative treatment, such as insecticide nets.
AIDS	<ul style="list-style-type: none"> AIDS refers to acquired immunodeficiency syndrome. AIDS is the most advanced stage of the HIV infection. HIV refers to human immunodeficiency virus and is a virus that attacks the immune system. AIDS damages and weakens the body's immune system. 	<ul style="list-style-type: none"> Access to antiretroviral drugs (ART). Development and research into a vaccine.
Tuberculosis	<ul style="list-style-type: none"> Tuberculosis is a highly contagious bacterial disease. When left untreated, tuberculosis destroys lung tissue which can cause death. 	<ul style="list-style-type: none"> Access to vaccinations. Earlier detection and diagnosis. More effective treatment.
Hepatitis	<ul style="list-style-type: none"> Hepatitis is caused by a viral infection. Hepatitis results in inflammation of the liver. 	<ul style="list-style-type: none"> Large scale vaccinations. Ensuring clean water and adequate sanitation.
Waterborne diseases	<ul style="list-style-type: none"> Waterborne diseases refer to diseases caused by microorganisms in contaminated or untreated water. Examples of waterborne diseases include cholera and typhoid. 	<ul style="list-style-type: none"> Ensuring clean water and adequate sanitation.

ADDITIONAL TERMS

Epidemic refers to a widespread occurrence of an infectious disease within a certain community at a certain time

Neglected tropical diseases are a group of diseases that often occur in tropical and subtropical diseases

Malaria is a communicable disease that is transmitted via infected mosquitoes and destroys the body's red blood cells

AIDS refers to acquired immunodeficiency syndrome and is the most advanced stage of the HIV infection, which damages and weakens the body's immune system

Tuberculosis is a highly contagious bacterial disease that affects the lungs

Hepatitis is caused by a viral infection and results in inflammation of the liver

Waterborne diseases refer to diseases caused by microorganisms in contaminated or untreated water



Want to know more?

To help prevent malaria, insecticide treated nets, also known as mosquito nets, have been used throughout Sub-Saharan Africa. These nets use insecticides to keep mosquitoes and other insects away from people and decrease the likelihood of being infected with malaria.

Type the URL [cdc.gov/malaria/malaria_worldwide/reduction/itn.html](https://www.cdc.gov/malaria/malaria_worldwide/reduction/itn.html) (Centers for Disease Control and Prevention, 2019) into your browser to read more about insecticide treated nets.

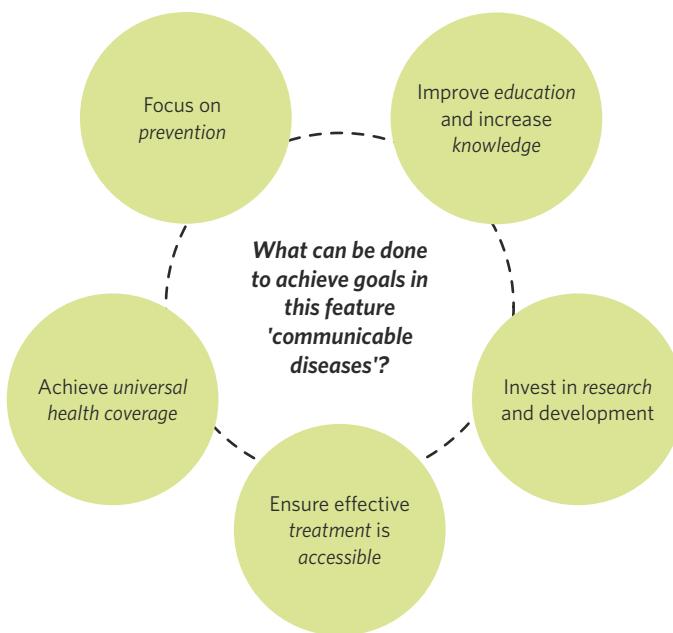


Figure 8 Ways to achieve key feature 'communicable diseases'

Non-communicable diseases and other causes of poor health 4.2.2.2.3

Another key feature of SDG 3 focuses on non-communicable diseases and aims to reduce their incidence and the impact they have in people's everyday lives. **Non-communicable diseases** are often long-lasting conditions that can arise from a combination of lifestyle, behavioural, genetic, and environmental factors. These types of diseases cannot be spread throughout the environment and therefore are not contagious. This key feature also focuses on other causes of poor health such as substance abuse, pollution, and road traffic accidents.

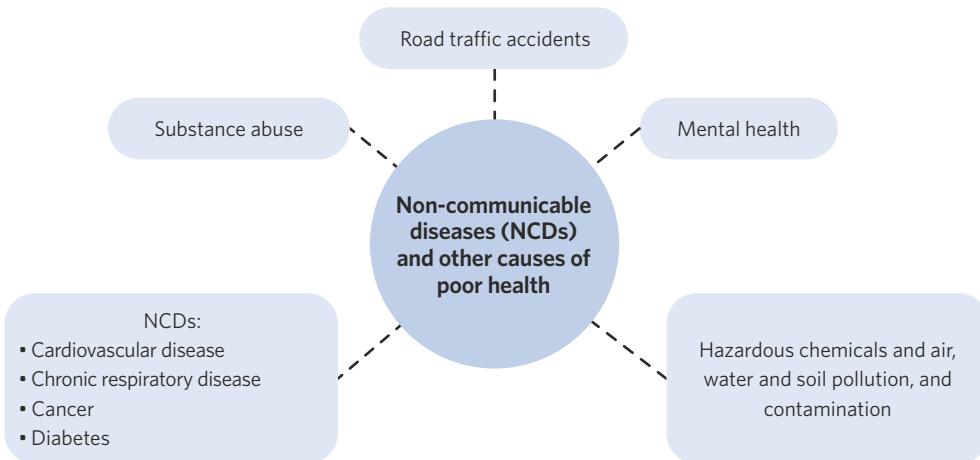


Figure 9 Key feature: non-communicable diseases and other causes of poor health

Table 3 Key components of non-communicable diseases and other causes of poor health

Component of key feature	What is it?	How can we make progress in this area?
Substance abuse	Substance abuse refers to excessive or unsafe use of alcohol or drugs that may result in damage and harm to health and wellbeing. A key target of SDG 3 aims to strengthen the prevention and treatment of substance abuse, including drugs and alcohol.	<ul style="list-style-type: none"> Increased and improved education about the harms of unsafe use of drugs and alcohol. Increased investment in prevention and treatment services for drug and alcohol abuse Stronger policies implemented in regards to using drugs and alcohol. <p style="text-align: right;">cont'd</p>

KEY DEFINITIONS

Non-communicable diseases are often long-lasting conditions that can arise from a combination of lifestyle, behavioural, genetic, and environmental factors

ADDITIONAL TERMS

Substance abuse is a term used to describe excessive or unsafe use of alcohol or drugs that may result in damages to health and wellbeing

Table 3 Continued

Component of key feature	What is it?	How can we make progress in this area?	ADDITIONAL TERMS
Mental health	SDG 3 makes an effort to highlight the importance of mental health and aims to make improvements in this area. Poor mental health can lead to mental illness. Mental illness is an overarching term used to describe diagnosable conditions that affect mood, thinking, and behaviour and is a large contributor to burden of disease as it can severely impact people's everyday functioning.	<ul style="list-style-type: none"> Ensuring effective leadership that supports mental health and wellbeing. This may involve creating anti-discrimination laws to help protect suffering individuals. Increasing education in the population about mental illness and how to promote good mental health. Investing more into the provision of mental health services. Providing mental health services that are accessible for all individuals. 	Mental illness is an overarching term used to describe diagnosable conditions that affect mood, thinking, and behaviour
Road traffic accidents	A key target of SDG 3 is to halve the number of global deaths and injuries from road traffic accidents.	<ul style="list-style-type: none"> Ensuring high quality road infrastructure. Ensuring all vehicles on the road are safe. Effective emergency services. Increased and improved education about road safety. Law enforcement to ensure people are driving safely and taking protective measures, such as wearing seatbelts. 	Hazardous chemicals are substances that can cause harm to health and safety when used in an unsafe manner. Pollution refers to the existence of contaminated or harmful substances in the natural environment
Hazardous chemicals and air, water and soil pollution, and contamination	A key target of SDG 3 is to reduce deaths and illnesses from hazardous chemicals and air, water and soil pollution, and contamination. Hazardous chemicals refer to substances that can cause harm to health and safety when used in an unsafe manner. Pollution refers to the existence of contaminated or harmful substances in the natural environment.	<ul style="list-style-type: none"> Decreasing the use of fossil fuels. Reducing vehicle emissions. Ensuring access to safe water and adequate sanitation. 	Cardiovascular disease affects the heart and blood vessels within the body and interferes with the circulation of blood throughout the body
NCDs The specific types of non-communicable diseases that SDG 3 addresses are cardiovascular disease, cancer, diabetes, and chronic respiratory disease.	<ul style="list-style-type: none"> Cardiovascular disease affects the heart and blood vessels within the body and interferes with the circulation of blood throughout the body. Cancer is a disease caused by an uncontrolled division of abnormal cells in a part of the body, forming a malignant growth or tumour. Chronic respiratory disease affects the lungs and obstructs airflow, making it difficult to breathe. Diabetes occurs when the body cannot maintain healthy levels of glucose within the blood. 	<ul style="list-style-type: none"> Reducing risk factors for NCDs. Strengthening health systems. Addressing and prioritising prevention of NCDs. Investing in research and development. Raising awareness and educating more people about how lifestyle choices can lead to certain NCDs. 	Cancer is a disease caused by an uncontrolled division of abnormal cells in a part of the body, forming a malignant growth or tumour
			Chronic respiratory disease affects the lungs and obstructs airflow, making it difficult to breathe
			Diabetes is a disease that occurs when the body cannot maintain healthy levels of glucose within the blood



Want to know more?



Image: Mochipet/Shutterstock.com

Lifestyle factors can increase people's risk of developing particular non-communicable diseases. Obesity is a risk factor for cardiovascular disease, diabetes, and other non-communicable diseases. In 1975, an Australian advertisement featuring the character 'Norm' began to address how lifestyle choices can contribute to obesity and non-communicable diseases. This was known as the 'Life. Be in it.' campaign. Search up 'Life. Be in it. (Norm - Obesity)' (CheeseCafe, 2008) on YouTube and watch the entire one minute video.

Figure 10 The 'Life. Be in it.' campaign was advertised through television

**Real world example**

Image: Vitalii Petrenko/Shutterstock.com

FundaMentalSDG is an example of a currently available mental health service. It is an organisation that works toward promoting and improving mental health through the SDGs, particularly SDG 3 as this goal addresses mental health and wellbeing. FundaMentalSDG provides information about the SDGs as well as information on mental health and mental illness.

Type the URL fundamentalsdg.org (#FundamentalSDG, 2014) into your browser to read more about the FundaMentalSDG organisation.

Figure 11 Strengthening mental health is an important part of FundMentalSDG

**Want to know more?**

Image: Valenty/Shutterstock.com

Figure 12 There are dangers associated with unsafe alcohol consumption

Alcohol is widely consumed by many individuals in many settings across the world. Despite alcohol being such a common drink in modern society, many people are unaware of the potential health concerns it poses. According to the WHO, alcohol is responsible for 3 million deaths every year and is a cause for over 200 different diseases (World Health Organisation, 2018.). The website 'Rethinking Drinking' invites people to question their thoughts and behaviours towards drinking alcohol. It also provides information about alcohol and what it can do to the brain and body.

Type the URL rethinkingdrinking.niaaa.nih.gov (National Institute On Alcohol Abuse and Alcoholism, n. d.) into your browser if you would like to read about how you can 'rethink your drink.'

**Lesson link**

In lesson **2D: Contributions to Australia's Health Status Part 1**, you learnt about the impact of alcohol and smoking on Australia's health status and burden of disease.

In this lesson, the key feature of non-communicable diseases and other causes of poor health also discusses the damaging effects of drugs and alcohol.

**Useful tip**

To help remember and understand the key feature non-communicable diseases and other causes of poor health, note that it can be divided into five sections:

- mental health
- road traffic accidents
- substance abuse
- hazardous chemicals and air, water and soil pollution, and contamination
- NCDs: cancer, diabetes, cardiovascular disease, and respiratory disease.

ACTIVITY 2

Search up '*The growing burden of chronic disease - Health Divide Pt 1 7.30*' (ABC News In depth, 2019) on YouTube and watch the entire nine minute and thirty two second video from ABC News about non-communicable diseases.

Discuss with your class your thoughts and feelings about the video. Use the questions below to get you thinking.

- Do you think non-communicable diseases are more dangerous than communicable diseases? Why?
- Who do you think is at the most risk from non-communicable diseases?
- On an individual level, what do you think can be done to reduce the incidence of non-communicable diseases?
- On a global level, what do you think can be done to reduce the incidence of non-communicable diseases?

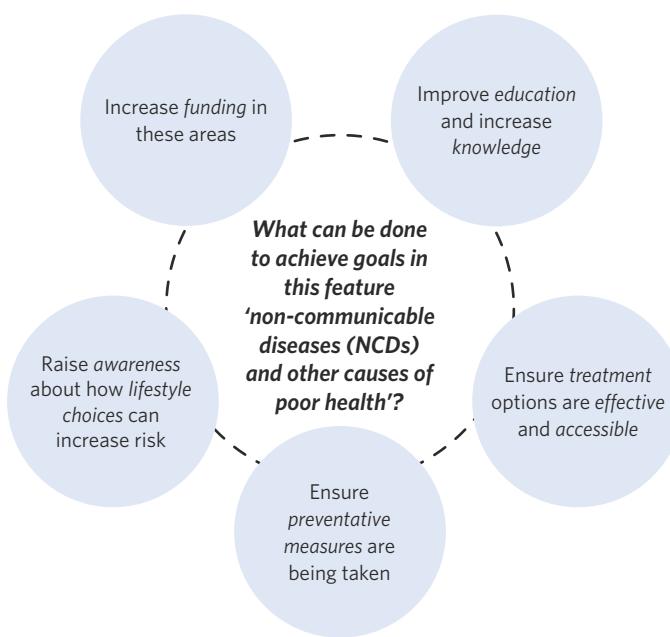


Figure 13 Ways to achieve key feature 'non-communicable diseases and other causes of poor health'

Theory summary

In this lesson, you learnt all about SDG 3: 'Good health and wellbeing'. We looked at a broad overview of SDG 3 and what it aims to achieve through its 13 targets. Particularly, we focused on the 3 key features of SDG 3. In learning about these features we discussed what they each comprise of and how they can be achieved. Figure 14 provides a brief overview of this lesson.

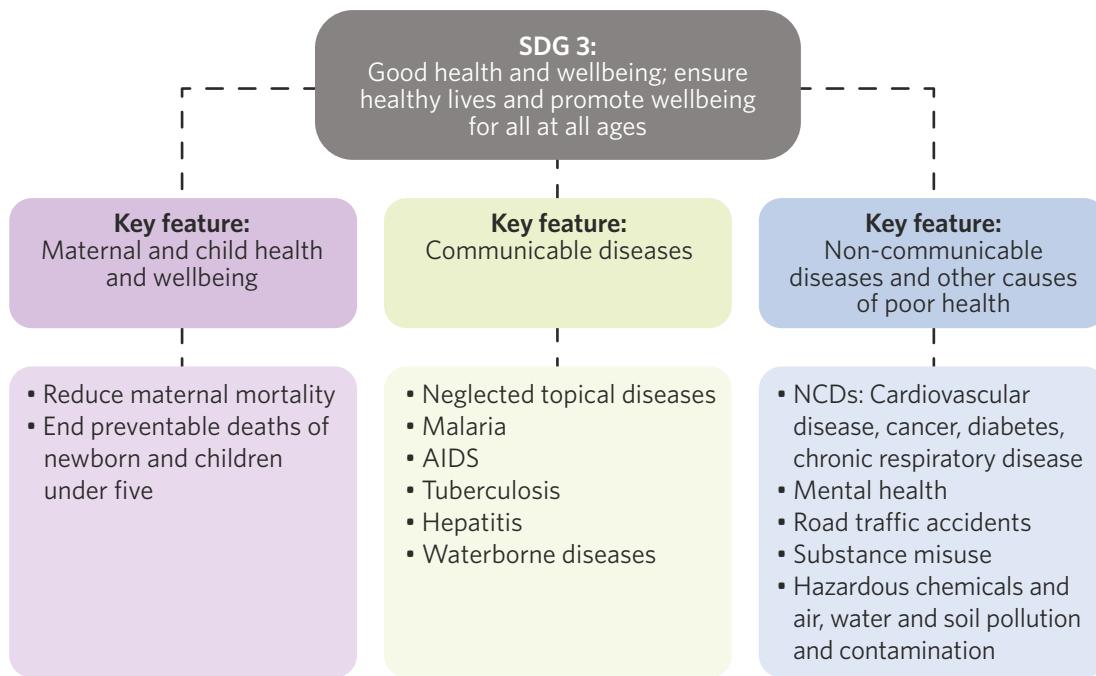


Figure 14 Overview of lesson 9B

9B QUESTIONS

Theory-review questions

Question 1

SDG 3 focuses on good health and wellbeing.

- A True.
- B False.

Question 2

Which of the following best fills in the blank?

- A physical, mental
- B mental, emotional

SDG 3 aims to promote _____ and _____ health and wellbeing.

Question 3

The 13 key targets are used to outline the specific aims of SDG 3.

- A True.
- B False.

Question 4

Maternal and child health and wellbeing is a key target of SDG 3.

- A True.
- B False.

Question 5

Which of the following relate to maternal and child health and wellbeing? (Select all that apply)

- I Maternal mortality.
- II Under five mortality.
- III Neonatal mortality.

Question 6

Which of the following best fills in the blank?

- A parasitic diseases, not
- B infectious diseases, transmitted

Communicable diseases can refer to _____ that are _____ from the environment.

Question 7

As a communicable disease, malaria can be transmitted through the environment.

- A True.
- B False.

Question 8

'Non-communicable diseases and other causes of poor health' is a key feature of SDG 3.

- A True.
- B False.

Question 9

A person can develop a non-communicable disease due to their lifestyle choices.

- A True.
- B False.

Skills

Perfect your phrasing

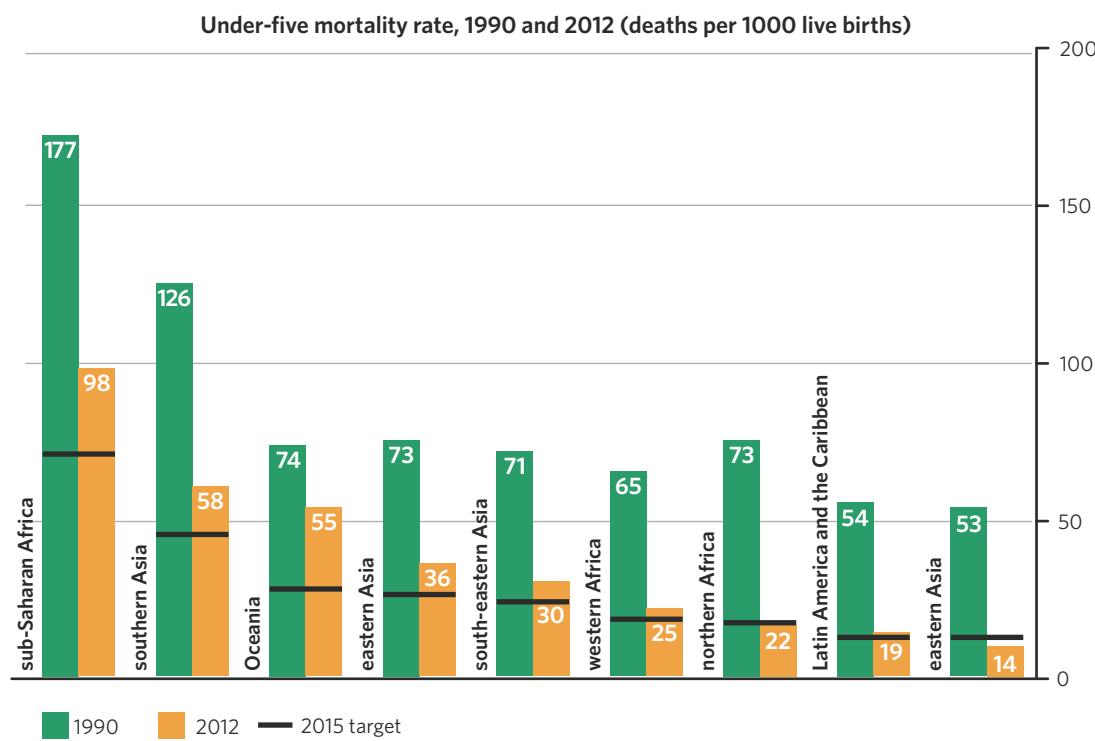
Question 10

Which of the following sentences is most correct?

- A SDG 3 refers to 'good health and wellbeing; ensure healthy lives and promote wellbeing for all at all ages.'
- B SDG 3 refers to 'good health and wellbeing; promote health and wellbeing for all at all ages.'

Data analysis

Use the following information to answer Questions 11-13.



Source: The Millennium Development Goals Report 2014, United Nations, New York, 2014, p. 24; 2014 United Nations; reprinted permission from the United Nations

Question 11

Which key feature of SDG 3 is represented in the graph?

- A Communicable diseases.
- B Maternal and child health and wellbeing.
- C Non-communicable diseases and other causes of poor health.

Question 12

Identify which of the following statements about the data are correct? (Select all that apply)

- I Between 1990 and 2012, there was a general decrease in under five mortality rate.
- II In sub-Saharan Africa in 1990 there were 177 deaths per 1000 live births, which was reduced to 98 deaths per 1000 live births in 2012.
- III The 2015 target has been achieved for south-eastern Asia.

Question 13

What measures will be most effective to make improvements in the key feature represented in the graph? (Select all that apply)

- I Increase access to neonatal care.
- II Access to family planning services.
- III Focus on prevention through vector control.

Exam-style questions**Question 14** (1 MARK)

What is meant by the term 'communicable diseases'?

Question 15 (1 MARK)

Describe universal health coverage.

Question 16 (2 MARKS)

Describe SDG 3.

Question 17 (2 MARKS)

List two targets of SDG 3.

Question 18 (2 MARKS)

Provide an example of how SDG 3 aims to reduce deaths from non-communicable diseases.

Question 19 (3 MARKS)

Identify and explain a key feature of SDG 3. Provide one example of how this feature is being addressed by health professionals.

Question 20 (4 MARKS)

Explain two reasons why the achievement of SDG 3 is important for global health outcomes.

Question 21 (4 MARKS)

Explain two ways in which ending the epidemics of communicable diseases will promote human development.

Questions from multiple lessons**Question 22** (2 MARKS)

Outline a way in which SDG 3 promotes sustainability.

Question 23 (4 MARKS)

Provide two reasons why achieving SDG 3 may be more difficult in low-income countries compared to high-income countries.

9C THE RELATIONSHIP BETWEEN SDG 3 AND OTHER SDGs

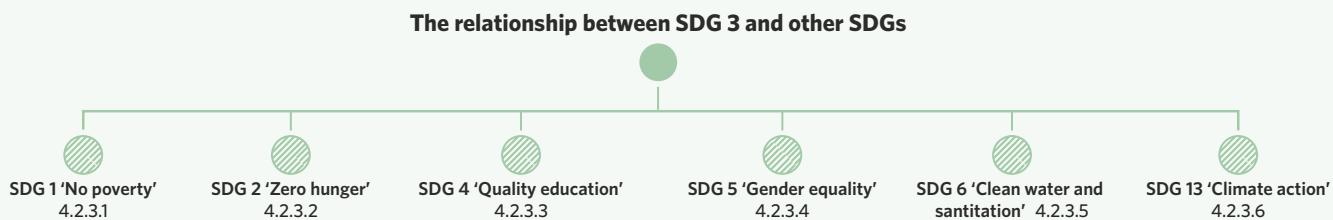
Have you ever done a jigsaw puzzle? Jigsaw puzzles are made up of many different pieces that come together to create one big picture. Without every single piece, the puzzle can't be complete. This is just like the SDGs: in order to achieve a more sustainable future, all SDGs need to be achieved.

There are not only 17 SDGs, but also many targets of each SDG. These goals and targets are all working to end extreme poverty, fight inequalities and injustices, and address climate change. In this lesson, you will dive into exploring some of the pieces of the UN's global puzzle. You will learn about six other SDGs, their targets, and their connection to SDG 3 'Good health and wellbeing', as well as how this illustrates collaboration between the health sector and other sectors in working towards health-related goals. You will also explore the role the SDGs have in the promotion of health and wellbeing and human development globally.



Image: Arcady/Shutterstock.com

9A Overview of the Sustainable Development Goals (SDGs)	9B Key features of SDG 3	9C The relationship between SDG 3 and other SDGs	9D The priorities and work of the WHO												
Study design dot point															
<ul style="list-style-type: none"> relationships between SDG 3 and SDGs 1, 2, 4, 5, 6 and 13 that illustrate collaboration between the health sector and other sectors in working towards health-related goals 															
Key knowledge units															
<table> <tbody> <tr> <td>SDG 1 'No poverty'</td> <td>4.2.3.1</td> </tr> <tr> <td>SDG 2 'Zero hunger'</td> <td>4.2.3.2</td> </tr> <tr> <td>SDG 4 'Quality education'</td> <td>4.2.3.3</td> </tr> <tr> <td>SDG 5 'Gender equality'</td> <td>4.2.3.4</td> </tr> <tr> <td>SDG 6 'Clean water and sanitation'</td> <td>4.2.3.5</td> </tr> <tr> <td>SDG 13 'Climate action'</td> <td>4.2.3.6</td> </tr> </tbody> </table>				SDG 1 'No poverty'	4.2.3.1	SDG 2 'Zero hunger'	4.2.3.2	SDG 4 'Quality education'	4.2.3.3	SDG 5 'Gender equality'	4.2.3.4	SDG 6 'Clean water and sanitation'	4.2.3.5	SDG 13 'Climate action'	4.2.3.6
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SDG 1 'No poverty' 4.2.3.1

OVERVIEW

SDG 1 'No poverty' aims to end extreme poverty in all its forms by 2030. Poverty has a negative impact on health and wellbeing and human development globally, and if not addressed, poverty will continue to impact millions of people across the globe.



Image: Deni Nandar Sukanwar/Shutterstock.com

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- describe key features of SDG 3 and analyse its relationships with other SDGs in collaborative approaches to improving health and wellbeing, and human development globally

THEORY DETAILS

SDG 1 is titled 'No poverty'. SDG 1 aims to end poverty in all its forms everywhere by 2030, ensuring all people across the globe can enjoy a basic standard of living and access essential resources such as food, shelter and healthcare.

Currently measured as people living on less than US \$1.90 a day, extreme poverty affects more than 700 million people around the world (United Nations [UN], n. d.). In other words, over 10% of the world's population is struggling to afford basic needs such as food and healthcare. Poverty can also impact people's ability to find and retain employment, and their ability to educate themselves and their children.

Goal 1 not only aims to eradicate extreme poverty, but also to implement strong social protection systems to protect the poor and vulnerable, and also ensure all people, everywhere, have access to basic resources, services, and opportunities.

Useful tip

Every SDG has key targets. There are 169 key targets that cover a vast range of sustainable development issues. Under each goal there are numerous targets that specifically relate to that goal. Overall, the key targets show us what each SDG aims to do and helps us to break down the global goals.

SDG 1 involves numerous key targets which includes to:

- eradicate extreme poverty for all people everywhere.
- reduce by at least half the proportion of men, women and children living in poverty.
- implement social protection systems and measures for all.
- ensure that all men and women, in particular the poor and vulnerable, have equal rights and equal access to basic resources, services, and ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services.
- build the resilience of those in vulnerable situations and reduce their exposure to climate-related extreme events and other economic, social, and environmental disasters.
- ensure significant mobilisation of resources in order to provide adequate and predictable means for low-income countries to implement programmes and policies to end poverty in all its dimensions.
- create policy frameworks, at national, regional, and international levels, to support accelerated investment in poverty eradication actions.

(UN, 2015)

Want to know more?

COVID-19's impact on global poverty

The COVID-19 pandemic has had a major impact on the entire world. The number of people living in extreme poverty globally declined from 36 percent in 1990 to ten percent in 2015. However, the COVID-19 pandemic threatens to majorly setback this progress as a result of pushing millions of people into unemployment.

According to new research published by the UN University World Institute for Development Economics Research, the global pandemic could increase global poverty prevalence by as much as half a billion people, which would be the first time global poverty rates have increased in 30 years. Low- and middle-income countries are at the greatest risk of the impacts of the pandemic; not only will it be detrimental to their health and wellbeing, but also to society and the economy. This is just one example of why it is so important that global poverty is tackled through collaboration from all countries.

(UNU WIDER, 2020)



Image: woocat/Shutterstock.com

Figure 1 COVID-19 is a communicable virus

KEY DEFINITIONS

SDG 1 is titled 'No poverty'. SDG 1 aims to end poverty in all its forms everywhere by 2030, ensuring all people across the globe can enjoy a basic standard of living and access essential resources such as food, shelter, and healthcare

The relationship between SDG 3 and SDG 1

The SDGs are an interconnected framework. The achievement of SDG 3 is closely linked to the achievement of other SDGs. Throughout this lesson, you will explore how the actions and achievements of goals 1, 2, 4, 5, 6 and 13 assist in contributing to goal 3. While the focus of SDG 3 is good health and wellbeing, there is a distinct relationship between most of the SDGs and health and wellbeing, not just SDG 3. This is sometimes referred to as the interrelationships between the SDGs.

There are some clear links between SDG 1 ‘No poverty’ and SDG 3 ‘Good health and wellbeing’. To achieve good health and wellbeing globally, poverty needs to be eradicated. This is because people living in poverty may suffer from hunger and struggle to access essential resources such as food, shelter, safe water and basic healthcare services.

The easiest way to understand the relationships between the SDGs is through looking at the key targets. Below are three examples of how the achievement of SDG 1 ‘No poverty’ assists in contributing to SDG 3 ‘Good health and wellbeing’. Note that some key targets are italicised in each figure.

Useful tip

The relationships between the SDGs

It is common to be asked about the relationship between SDGs and SDG 3. For example, the following question was asked in the 2018 Health and Human Development Exam.

Question 7c.ii

Explain how actions taken to achieve SDG 4 ‘Quality education’, could assist in achieving SDG 3. (3 MARKS)

These sorts of questions are often multiple marks and you are required to show clear links between the achievements of SDGs and SDG 3. High quality responses will connect a specific component of the SDG in question with a specific feature of SDG 3 rather than talk about the concepts broadly. How could you do this? By linking to the features of SDG 3 or the key targets of SDG 3.

There are many different ways you could be asked about the relationship between SDGs. If you have a good understanding of each SDG and some of the targets of each goal, you will easily be able to make different connections. These are some of the ways the relationship between the SDGs could be discussed:

- You could be asked how the achievement of an SDG could assist in achieving SDG 3 (seen in example above).
- You could be asked how the achievement of SDG 3 could assist in achieving another SDG (this is the opposite direction to the example above, but using the same technique of linking a specific target or feature).
- You could be asked generally about the relationship between an SDG and SDG 3. In order to answer this question you would need to display a good understanding of the issues each goal addresses and the targets they aim to achieve.

The SDGs are complex and address major global issues. It is best if you have a thorough understanding of the SDGs as a whole, and have a good knowledge of their specific targets. The examples in this lesson step you through understanding how achievements in SDG 1, 2, 4, 5, 6 and 13 can assist in achieving SDG 3.

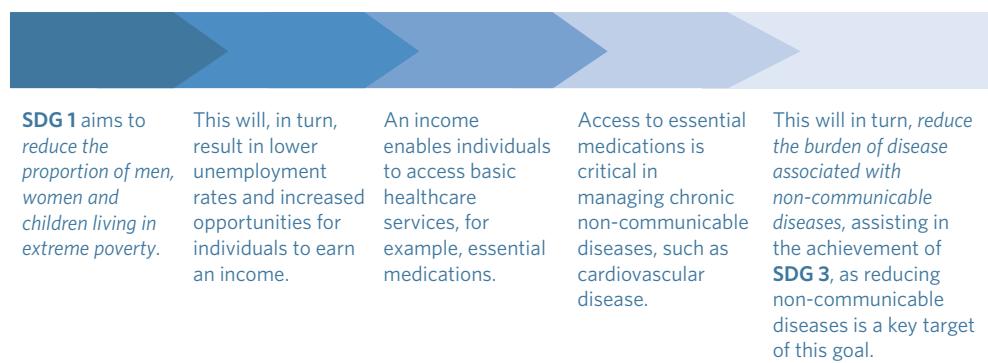


Figure 2 An example of how the achievement of SDG 1 assists in contributing to SDG 3



SDG 1 aims to ensure that all men and women, in particular the poor and vulnerable, have equal rights and equal access to basic services, such as healthcare.	It is essential that pregnant women have the ability to access healthcare before, during, and after their pregnancy.	Access to healthcare during pregnancy and labour is critical in reducing both maternal mortality rates and preventable illness associated with pregnancy, such as gestational diabetes.	This will not only improve physical health and wellbeing of pregnant women across the globe, but also reduce maternal mortality rates – assisting in the achievement of SDG 3 as a key target of this goal is to reduce global maternal mortality to less than 70 per 100,000 live births.
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Figure 3 An example of how the achievement of SDG 1 assists in contributing to SDG 3



SDG 1 aims to ensure all countries, particularly low-income countries, are able to implement programmes and policies to end poverty in all its dimensions.	With a strong economy, governments are able to implement social protection programmes. The Australian Medicare system is an example of a social protection programme working to enable access to healthcare for all.	Enabling access to such resources, in this case healthcare, has widespread impact on the health and wellbeing of citizens.	Such social protection programmes not only allow individuals to access services such as sexual and reproductive healthcare, but also contribute to the achievement of universal health cover, both key targets of SDG 3 .
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Figure 4 An example of how the achievement of SDG 1 assists in contributing to SDG 3

It is important that you are able to give examples to illustrate collaboration between the health sector and other sectors working towards the success of different health-related goals. Figure 4 illustrates collaboration between the government sector and the healthcare sector. This example illustrates that employment has a major role in achieving the health outcome of ensuring that all people, everywhere have access to healthcare. Without contribution from the government sector, in this case, the implementation of social protection programmes, employment and an income becomes difficult to obtain for some people, inhibiting their ability to afford healthcare services.

Useful tip

You might be wondering what the study design dot point means by 'illustrate collaboration between the health sector and other sectors in working towards health-related goals'. Basically, the SDGs and their targets cannot be achieved by governments alone; collaboration between different sectors in society is critical. How do you understand this? One way is to think of the different sectors involved in the achievement of the SDGs. For example, when you think of how the achievement of SDG 1 assists in contributing to SDG 3, you can think of the sectors involved. **Sectors** are specific parts of society that work towards a similar goal. Some examples of different sectors include the health sector, as well as the education, agriculture, environmental protection, and water and sanitation sectors. Can you think of any other sectors?

Throughout this lesson, for some examples of how the achievement of one SDG assists in contributing to the achievement of SDG 3, there is elaboration highlighting the intersectoral collaboration involved.

ADDITIONAL TERMS

Sectors are specific parts of society that are made up of similar elements. Examples include the education sector and the health sector

Want to know more?

Social protection programmes

Social protection programmes are mentioned numerous times throughout the SDG key targets in different ways. It is important to understand what these programmes and policies actually are in order to effectively draw links between different SDGs and SDG 3.

So what is social protection? *Social protection* is any form of protection, whether it's through policies, initiatives, or programmes, that is designed to reduce poverty and vulnerability, enabling access to essential services, providing security in the face of vulnerability, and increasing access to safe stable employment.

What are some examples of social protection programmes?

Some examples of social protection programmes in Australia include:

- JobKeeper payment scheme, a government subsidy for businesses significantly affected by the COVID-19 pandemic.
- National Disability Insurance Scheme (NDIS).
- means-tested income support, for example, pensions for war veterans and their dependents.
- public housing and transport.

cont'd



Want to know more?

Social protection programmes - continued

Medicare was discussed in figure 4 as an example of a social protection programme. As learnt in previous lessons, Medicare provides social protection by providing free public hospital accommodation and essential treatment for Australian citizens, residents, and some overseas visitors.



Useful tip

Relationship between SDGs and SDG 3

After reading the examples above, you might be thinking that there are hundreds of links you could make. That is true! As you have learnt, the SDGs are interconnected and are like a puzzle that includes hundreds of different pieces. There are lots of connections you can make.

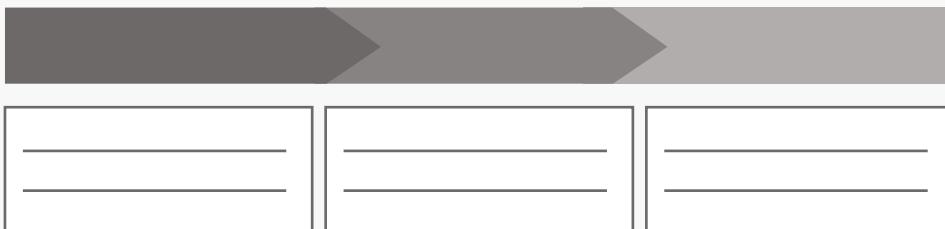
This is not black and white; it's all about *how* you discuss the relationships. The examples given link specific targets of each SDG, however you can make other links too. See Activity 1 to give it a go yourself.

ACTIVITY 1

Copy the flow-chart onto some paper to see if you can make your own connections between SDG 1 and SDG 3. Feel free to add more boxes to give yourself more space. You might like to highlight or underline any key targets of SDGs as you mention them.

SDG 1 'No poverty'

How does the achievement of SDG 1 assist in contributing to SDG 3 'Good health and wellbeing'?



The role of SDG 1 in the promotion of health and wellbeing globally

Despite the fact that SDG 3 focuses on improving health and wellbeing, all of the SDGs studied can be linked to the dimensions of health and wellbeing. You will learn about the role each SDG has in the promotion of health and wellbeing globally, focusing on the five dimensions of health and wellbeing.



Useful tip

You will notice in this lesson that you will learn about how each SDG contributes to the achievement of SDG 3, and how each SDG contributes to improving health and wellbeing globally. So, what is the difference between answering questions where you are required to make a connection between an SDG and SDG 3 'Good health and wellbeing' compared to when you are required to make a connection between an SDG and health and wellbeing globally?

When you are required to make links between different SDGs and SDG 3, you are specifically aiming to talk about how the achievement of one SDG contributes to the achievement of SDG 3, focusing on SDG 3's key features or targets. Examples of how to do this are demonstrated in the flow charts throughout the lesson.

In contrast, when linking to health and wellbeing globally, you are focusing on the five dimensions of health and wellbeing and are specifically aiming to talk about how the achievement of the SDG in question promotes health and wellbeing globally. For example, you might pick a key target of the SDG and explain how achieving this target promotes improvements in a specific dimension of health and wellbeing.

Poverty has a major impact on the health and wellbeing of those experiencing it. Through the achievements of SDG 1, health and wellbeing will be improved all across the globe in many different ways:

- Addressing poverty can lead to increased employment opportunities. As a result, more people will feel a sense of purpose and sense of belonging within the workplace and a community, improving spiritual health and wellbeing.
- With employment comes an increase in income, which will result in more people being able to access education, afford essential medicines, and access healthcare, improving physical health and wellbeing by promoting the functioning of the body and its systems. Through receiving an education, a person's or community's health literacy will improve, such as knowing how to prevent or reduce the spread of communicable diseases such as cholera.
- Additionally, an income also allows individuals to afford adequate shelter which reduces the spread of communicable diseases (by ensuring an individual has space to handle and prepare food safely and can isolate and reduce contact with others when unwell), and therefore improves physical health and wellbeing, and reduces the associated burden of disease. Similarly, access to numerous social protection programmes will reduce stress and anxiety associated with poverty, improving mental health and wellbeing.

Real world example

American Rescue Plan, USA COVID-19 trillion-dollar stimulus package

In early 2021, President Joe Biden announced the American Rescue Plan (ARP), a \$1.9 trillion package to support the USA in its recovery from the damage of the COVID-19 pandemic. Aid was provided to both individuals and businesses, aiming to reduce the impact the pandemic had on individual's lives, businesses and the economy. The amount received by each household was based on employment status, income, where they live, and if they had children or dependants (The White House, 2021).

According to an analysis by Columbia University's Center on Poverty and Social Policy, due to the scale of the ARP stimulus package, if successful, poverty in the USA would be reduced by one third, lifting nearly 13 million Americans out of poverty (Long et al., 2021).

The role of SDG 1 in the promotion of human development globally

Through achieving or working towards the targets of SDG 1, human development will be improved all across the globe in many different ways. With fewer people experiencing extreme poverty, people will have greater incomes allowing them to afford basic resources such as food, shelter and water, which will allow them to experience a better standard of living. Alongside this, greater incomes will also allow people to afford to send their children to school to receive an education. Education enables children to participate in a community whilst also enhancing their knowledge.

Useful tip

How to make links between SDGs and human development

As outlined above, there are many links between the SDGs and human development. In VCE Health and Human Development you need to be able to explain how the achievement of different SDGs promotes human development.

A helpful way to create these links is to think about the key targets of the SDG in question. In your answer, you can address key targets and link the achievement of this target to a key aspect of human development, such as access to knowledge or decent standard of living.

SDG 2 'Zero hunger' 4.2.3.2

OVERVIEW

SDG 2 'Zero hunger' aims to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture. Extreme hunger and malnutrition both adversely impact millions of people across the globe.

THEORY DETAILS

SDG 2 is titled 'Zero hunger'. SDG 2 aims to end all hunger, achieve food security and improved nutrition, and promote sustainable agriculture, ensuring all people, especially children and the poor and vulnerable, have sufficient access to nutritious foods.

Extreme hunger and **malnutrition** are both significant barriers that stand in the way of achieving sustainable development and improving health and wellbeing for millions of people across the globe.

SDG 2 involves numerous key targets which includes to:

- end hunger and ensure all people, in particular the poor and people in vulnerable situations, such as infants, have access to safe, nutritious, and sufficient food all year round.
- end all forms of malnutrition.
- double the agricultural productivity and incomes of small-scale food producers, and ensure equal access to land and resources.
- ensure sustainable food production systems and resilient agricultural practices that increase productivity and production, maintain ecosystems, and adapt to climate change and extreme weather are implemented.
- maintain the genetic diversity of seeds, plants, and animals and ensure access for all.
- increase investment in agriculture infrastructure, research, and technology, particularly in the least developed countries.
- correct and prevent trade restrictions that disadvantage farmers, particularly in low- and middle-income countries.
- adopt measures to ensure the proper functioning of global food commodity markets and ensure access to market information.

(UN, 2015)



Image: Deni Nandar Sukanwar/Shutterstock.com

KEY DEFINITIONS

SDG 2 is titled 'Zero hunger'. SDG 2 aims to end all hunger, achieve food security and improved nutrition, and promote sustainable agriculture, ensuring all people, especially children and the poor and vulnerable, have sufficient access to nutritious foods

ADDITIONAL TERMS

Hunger is a feeling of discomfort or weakness caused by a lack of food, coupled with the desire to eat

Malnutrition refers to a lack of proper nutrition, caused by not having enough to eat, not eating enough of the right things, or being unable to use the food that one does eat

Real world example

World Food Programme and response to COVID-19

The World Food Programme (WFP) is the food-assistance branch of the United Nations which has existed for more than 50 years. WFP delivers food assistance in emergencies and works with communities across the globe to improve nutrition, educate individuals and build resilience in the face of hardship. WFP provides critical support to around 87 million vulnerable people across the world every year (UN, n. d.).

Responding to emergencies is key to the work of the WFP. WFP worked to minimise the impacts of the pandemic on world hunger as they recognised that COVID-19 would have a major impact on people globally, especially the poor and vulnerable. Some of WFP's work during the pandemic consisted of working to strengthen social protection regimes which addressed poverty, food insecurity, and malnutrition, sustaining and supporting food production chains, trade and distribution, as well as providing alternatives to school feeding (meals which students receive in school) which had been suspended during the pandemic.

(World Food Programme [WFP], 2021)



Image: Richard Juilliart /Shutterstock.com

Figure 5 Refugees waiting for food aid from WFP at Kutupalong refugee camp in Bangladesh, April 16, 2018

The relationship between SDG 3 and SDG 2

To achieve good health and wellbeing globally, individuals require sufficient access to nutritious foods and must live in absence of severe hunger and malnutrition. Food must be produced in a way that is sustainable and can continue to be provided for future generations.

Below are three examples of how the achievement of SDG 2 ‘Zero hunger’ assists in contributing to SDG 3 ‘Good health and wellbeing’. Note that some key targets are italicised in each figure.



SDG 2 aims to double the agricultural productivity and incomes of small-scale food producers.	This increase in agricultural productivity will increase the income of many small scale farmers, who often live in rural communities.	An increase in income will increase the ability for these people to afford to send their children to school to receive an education.	Through receiving an education, individuals will learn more about sexual and reproductive health, enabling them to know and where to access relevant healthcare services. This contributes towards the achievement of SDG 3 as a key target of this goal is to ensure universal access to sexual and reproductive healthcare services.
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Figure 6 An example of how the achievement of SDG 2 assists in contributing to SDG 3

Figure 6 illustrates collaboration between the agriculture sector and the healthcare sector. This illustrates how, with increased agricultural productivity, there comes an increase in income for many people. An increased income enables individuals to afford services provided by the healthcare sector, improving health outcomes. When the agricultural sector provides individuals with the ability to earn an income, the money they spend on healthcare can be used by the healthcare sector to improve their services.



SDG 2 aims to end all forms of malnutrition.	This will mean that all children are well nourished and have sufficient access to food. In the absence of malnutrition, children will develop stronger immune systems.	Stronger immune systems means that children are significantly less likely to die from communicable diseases such as malaria and tuberculosis.	Reduced deaths from communicable diseases in children will reduce the under-five mortality rate, assisting in the achievement of SDG 3 .
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Figure 7 Another example of how the achievement of SDG 2 assists in contributing to SDG 3



SDG 2 aims to end hunger and ensure all people have access to safe, nutritious and sufficient food.	When sufficiently nourished and when consuming adequate nutritious food, pregnant women are less likely to suffer from pregnancy related illnesses such as anemia. Additionally, babies that are breastfed are more likely to survive their first year if their mother is well nourished.	As a result, pregnant women are less likely to die during pregnancy from preventable illnesses and are better able to feed their babies nourishing food.	This contributes to the reduction in maternal mortality rates as well as the reduction in preventable deaths of newborns, contributing to the achievement of SDG 3 .
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Figure 8 An example of how the achievement of SDG 2 assists in contributing to SDG 3

The role of SDG 2 in the promotion of health and wellbeing globally

Through the achievements of SDG 2, health and wellbeing will be improved across the globe in many different ways, including reducing levels of malnutrition and hunger.

One of the major aims of SDG 2 is to ensure that all people everywhere have adequate access to nutritious foods, ending all forms of hunger and malnutrition.

- Enabling access to sufficient food will inevitably improve the health and wellbeing of millions of people across the globe as malnutrition and hunger have a direct negative

impact on physical health and wellbeing. Adequate consumption of nutritious food, for example, fruits and vegetables, is vital to both the development of a strong immune system and the functioning of the body's systems, enabling individuals to fight disease.

- Hunger and malnutrition can be barriers that stop children from attending school because of associated illness, such as anemia, and **lethargy**. When children are no longer suffering from malnutrition, they will have more energy to learn, and increase their knowledge and skills, including learning about how to engage in positive and effective communication and maintain meaningful relationships with others, improving their social health and wellbeing.
- If an individual does not have access to food and cannot provide it to their family and they do not know how they will get their next meal, they are likely to experience significant stress and anxiety. This stress and anxiety has a negative impact on their mental health and wellbeing. So, with access to adequate and reliable food for all people, associated stress and anxiety will be reduced, improving mental health and wellbeing.

There are many links between the achievement of SDG 2 and improvements in health and wellbeing. Complete activity 2 to see what you know in terms of the role SDG 2 plays in the promotion of health and wellbeing.

ACTIVITY 2

Do you understand the role SDG 2 'Zero hunger' plays in the promotion of health and wellbeing globally? What connections can you make between SDG 2 and the dimensions of health and wellbeing?

Copy the table out onto some paper and see what connections you can make. It might help to start with some key targets of SDG 2, what is SDG 2 *actually* going to achieve? How do these achievements contribute to improving health and wellbeing? To help you get started, the fist box has been done for you based on the theory discussed above.

Dimension	SDG 2 and health and wellbeing				
	Physical health and wellbeing	Mental health and wellbeing	Emotional health and wellbeing	Social health and wellbeing	Spiritual health and wellbeing
One aspect of SDG 2 that promotes improvement in each dimension	Adequate access to and consumption of nutritious foods -> helps develop a strong immune system -> allows to fight communicable diseases such as colds and flus -> improvement in physical health and wellbeing				
A second aspect of SDG 2 that promotes improvement in each dimension					

The role of SDG 2 in the promotion of human development globally

Though many of the achievements of SDG 2 human development will improve for millions of people in numerous ways. When hunger and malnutrition are not present, attending school will become easier for millions of children across the globe. When children are well-nourished they can attend school with energy, eager to concentrate and learn, which will allow them to develop to their full potential. Through going to school, these children will have enhanced knowledge and increased capabilities, promoting human development.

In a similar way, well-nourished adults will have adequate energy to work productively to earn an income, enabling them to afford a decent standard of living. Through this ability to attend work, these individuals are also participating effectively in a community.

ADDITIONAL TERMS

Lethargy refers to a lack of energy and enthusiasm

SDG 4 'Quality education' 4.2.3.3

OVERVIEW

SDG 4 'Quality education' aims to ensure inclusive and quality education for all and promote lifelong learning by 2030. Education is key to escaping poverty and improving the lives of all individuals across the world.

THEORY DETAILS

SDG 4 is titled 'Quality education'. SDG 4 aims to ensure that all people everywhere have access to inclusive and quality education at all levels, from pre-primary through to tertiary education and vocational training. Over the past 10 years, significant progress has been made towards increasing access to education and school enrolment rates at all levels, including primary through to post-secondary education. Improvements have particularly been seen in rates of females receiving an education (UN, 2018). Despite this, approximately 258 million children and youth were out of school in 2018 (UN, 2018). Education is one of the most important keys to dismantling some of the biggest challenges our world faces today, such as eradicating poverty and tackling climate change.

Goal 4 recognises the importance of ensuring all people have access to education at all levels. Additionally, this goal aims to increase the number of youth and adults who have relevant skills for employment, improve global literacy and numeracy skills, build inclusive and safe learning environments for all, and increase the number of qualified teachers globally, especially in low-income countries.

SDG 4 involves numerous key targets which includes to:

- ensure that all girls and boys complete free, equitable and quality primary and secondary education.
- ensure that all girls and boys have access to quality early childhood development, care, and pre-primary education so they are ready for primary education.
- ensure all men and women have access to affordable and quality technical, vocational and tertiary education.
- increase the number of youth and adults who have relevant skills for employment.
- eliminate all gender disparities in education and vocational training, and ensure equal access for the vulnerable, including persons with disabilities, indigenous peoples, and children.
- ensure all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy skills.
- ensure all learners acquire the knowledge and skills needed to promote sustainable development.
- build and upgrade education facilities that are child, disability, and gender sensitive and provide safe, inclusive, and effective learning environments for all.
- expand the number of scholarships available to low- and middle-income countries for essential skills training.
- increase the number of qualified teachers, especially in low-income countries.

(UN, 2015)



Image: Deni Nandar Sukanwar/Shutterstock.com

KEY DEFINITIONS

SDG 4 is titled 'Quality education'. SDG 4 aims to ensure that all people have access to inclusive and quality education at all levels, from pre-primary through to tertiary education and vocational training

Real world example

One Girl - Teachers of Tomorrow

Teachers of Tomorrow is a program, run by a Melbourne based non-for-profit organisation One Girl, which focuses on providing formal training for volunteer teachers who are unqualified in Sierra Leone, West Africa. The programme aims to improve the ability of teachers to provide high-quality education to their students, in gender-inclusive spaces. Working with the government in Sierra Leone, One Girl supports teachers to complete their formal higher teacher qualification through providing scholarships to attend teachers' college. Teachers of Tomorrow ultimately aims to:

- increase the number of qualified teachers in Sierra Leone
- increase the number of female teachers and role models for girls
- increase girls' enrollment and retention in schools,
- and reduce sexual and gender-based violence in schools, particularly against young women.

(One Girl, 2020).



Image: Burak Berberoglu /Shutterstock.com

Figure 9 Young girl in school in Freetown, Sierra Leone, 2016

The relationship between SDG 3 and SDG 4

Education plays a huge role in the health and wellbeing of individuals, and communities globally. At a basic level, through attending school, children will develop health literacy and learn health-promoting behaviours, such as the importance of safe hygiene practices and safe sexual practices. Below are three examples of how the achievement of SDG 4 ‘Quality education’ assists in contributing to SDG 3 ‘Good health and wellbeing’. Note that some key targets are italicised in each figure.



SDG 4 aims to ensure that all children complete primary and secondary education.

Education improves health literacy, such as learning about the importance of using condoms during sexual intercourse. Such health education is often supported by government resources or campaigns provided to schools.

Learning about ways to reduce the spread of communicable diseases, such as malaria and HIV is a key target of **SDG 3**.

Figure 10 An example of how the achievement of SDG 4 assists in contributing to SDG 3

Figure 10 illustrates collaboration between the education sector and the government sector. This example illustrates how the education sector contributes to improving access to health knowledge and is often supported by government resources or campaigns, as it is in the best interest of the government that their population is receiving certain messages about healthcare and have a good level of health literacy.



SDG 4 aims to increase the number of youth and adults who have relevant skills for employment.

An increase in skilled citizens strengthens the productivity of a community's or country's workforce whilst increasing individual's incomes as a result of employment.

A stronger workforce of higher earners allows for increased tax revenue for governments, enabling them to afford the implementation of certain health promoting services.

With an educated workforce and increased tax revenue, governments can increase their investment in healthcare services and qualified healthcare staff, especially in low-income countries and small-island developing states, a key target of **SDG 3**.

Figure 11 An example of how the achievement of SDG 4 assists in contributing to SDG 3



SDG 4 aims to ensure all youth and a substantial proportion of adults, both men and women, have adequate literacy and numeracy skills.

When individuals are able to read, they can learn about important health topics, such as the benefits of immunizing their children.

Educated parents are more likely to make an informed decision as to whether they immunise their children, and can understand how to access such services, increasing the likelihood they immunise their children, contributing to the reduction in under-5 mortality rates, a key target of **SDG 3**.

Figure 12 An example of how the achievement of SDG 4 assists in contributing to SDG 3

The role of SDG 4 in the promotion of health and wellbeing globally

Through the achievements of SDG 4, health and wellbeing will be improved across the globe in many different ways. One of the major aims of SDG 4 is to eliminate all disparities in education and vocational training, and ensure equal access for the vulnerable, including people with disabilities, indigenous people, and children, whilst also ensuring that education facilities provide safe, inclusive, and effective learning environments for all.

- Education plays a critical role in fostering tolerance between people of diverse backgrounds, helping people build meaningful relationships, contributing to the creation of more peaceful and inclusive societies, which promotes social health and wellbeing. Additionally, maintaining peace and acceptance within societies builds self-esteem and a sense of self-confidence amongst individuals, and is critical in ensuring good mental health and wellbeing for all.
- Children who attend school will feel a sense of belonging and feel connected to their community, whilst finding meaning and purpose in life, all enhancing spiritual health and wellbeing.

- At school, students will develop health literacy and learn health-promoting behaviours, such as the importance of safe hygiene practices and ways to prevent the spread of HIV/AIDS. This knowledge will help reduce the incidence of communicable diseases and improve physical health and wellbeing.

There are many links between the achievement of SDG 4 and good health and wellbeing globally. Complete the class discussion questions to see what other connections you can make.

ACTIVITY 3 - CLASS DISCUSSION

How important is your education to your health and wellbeing?

In what other ways does the achievement of SDG 4 contribute to good health and wellbeing globally?

Without an education, what would you not know regarding your health?

Do you think health education should be mandatory in all school curriculums? Why or why not?

The role of SDG 4 in the promotion of human development globally

Through achieving or working towards the targets of SDG 4, human development will improve for millions of people in numerous ways. When children have the opportunity to attend school, they have the opportunity to enhance their knowledge and capabilities and are able to develop to their full potential, therefore improving human development.

One of the major focuses of SDG 4 is ensuring all youth and a substantial proportion of adults, have adequate literacy and numeracy skills.

Adequate numeracy and literacy skills can increase an individual's employment opportunities. Educated adults have increased employment opportunities and are more likely to earn an income, allowing them to afford basic resources such as food and healthcare, and also enabling them to afford a decent standard of living. Increased literacy and numeracy skills also enhance the capabilities of an individual, all contributing to the improvement of human development globally.

SDG 5 'Gender equality' 4.2.3.4

OVERVIEW

SDG 5 'Gender equality' aims to end discrimination and violence against women and girls by addressing the barriers that stand in the way of achieving gender equality. Gender equality is a fundamental human right yet does not exist in many countries across the globe. Achieving gender equality is critical to tackling some of the world's most pressing issues.

THEORY DETAILS

SDG 5 is titled 'Gender equality'. SDG 5 aims to end discrimination and violence against women and girls, and focuses on the achievement of gender equality and the empowerment of women and girls. Gender equality is a basic human right. It is also essential in being able to achieve a sustainable future. It has been proven that empowering women and girls enhances economic growth and development, which is especially important in countries with higher unemployment rates and weaker economies. Inequalities faced by women can begin at birth and follow them through to adulthood. Today, women are still underrepresented in political leadership, have lower education rates, own less land, and are paid less right across the globe (UN, 2020) compared to men. In some countries, women do not have rights and are definitely not treated equally to men. Have a read of the real-world example to hear about women's rights in Saudi Arabia.



Image: Deni Nandar Sukanwar/Shutterstock.com

KEY DEFINITIONS

SDG 5 is titled 'Gender equality'. SDG 5 aims to end discrimination and violence against women and girls, aiming to achieve gender equality and empower women and girls

 **Real world example**
Saudi Arabia: women's rights

Saudi Arabia is a country in western Asia. Women in Saudi Arabia have extremely different rights to men; some would say they have no rights at all. Human Rights Watch, an international non-governmental organisation that conducts research, completed a study in 2019 on why women fled Saudi Arabia.

According to Human Rights Watch, women in Saudi Arabia face systemic discrimination and are exposed to domestic violence under the male guardianship system, leading to some women undertaking the dangerous act of attempting to flee the country. What does the 'male guardianship system' mean?

- It encompasses a range of both formal and informal laws that stand in the way of women being able to make decisions and live their life on their own terms.
- Every woman has a male guardian who has the power to make decisions on her behalf (this includes allowing her to access healthcare, allowing her to travel, marry, work, or own property).
- The Saudi state essentially treats women as minors.

Women's rights activists have repeatedly called on the government of Saudi Arabia to abolish the system, but this has never eventuated. This system still stands today and remains the most significant barrier to accessing women's rights in the country.

To read more about the treatment of women in Saudi Arabia and to view the 2016 report which consisted of numerous interviews with Saudi women, type the URL hrw.org/report/2016/07/16/boxed/women-and-saudi-arabias-male-guardianship-system#7773 into your browser.

(Human Rights Watch, 2019)

Goal 5 not only aims to achieve gender equality, but also aims to end all forms of violence against women and girls. This involves adopting policies and legislation that support gender equality and empowerment of all women, and ensuring women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life.

SDG 5 involves numerous key targets which include to:

- end all forms of discrimination against women and girls everywhere.
- end all forms of violence against women and girls, including human trafficking and sexual exploitation.
- eliminate harmful practices, such as child, early, and forced marriage and female genital mutilation.
- recognise and value unpaid domestic work through provision of public services, infrastructure, and social protection policies and the promotion of shared responsibility within the household.
- ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life.
- ensure universal access to sexual and reproductive health and reproductive rights.
- make changes to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources.
- enhance the use of enabling technology (i.e. technology that *enables* people to gather information and communicate) to promote the empowerment of women.
- adopt policies and legislation that support gender equality and the empowerment of all women.

(UN, 2015)


Lesson link

SDG 5 'Gender equality' is about achieving gender equality, and has a major focus on discrimination against females. As you learnt in lesson **7C: Factors affecting health status and burden of disease**, there are many different gender identities beyond female and male. Gender equality considers all genders, although the UN's SDG 5 primarily focuses on equality for women and girls.



Real world example

Iceland: the global leader in gender equality

In countries all across the world, some men and women work the same jobs and do the same work, but men are paid more than women. This is called unequal pay, and it is illegal in Australia. In 2018, Iceland led the world through their implementation of the Equal Wage Management Standard, a first of its kind policy mandating that companies with 25 or more employees must prove that they are paying men and women equally for jobs of equal value (Wagner, 2021). If companies fail to show that they pay equally, they do not receive a 'certificate', which can lead to them incurring daily fines until they prove their equal pay.

As of 2020, Iceland is ranked number one in the world on The Global Gender Gap Index, closely followed by Norway, Finland, and Sweden (World Economic Forum, 2020). In comparison, Australia is ranked number 44 on the index, indicating major efforts are needed to reduce gender inequality.



Image: Truba7113/Shutterstock.com

Figure 13 Iceland's Prime Minister, Katrín Jakobsdóttir, first elected in 2017, who led during the implementation of the Equal Wage Management Standard

The relationship between SDG 3 and SDG 5

There are some clear links between SDG 5 'Gender equality', and SDG 3 'Good health and wellbeing'. To achieve good health and wellbeing for all people globally, all people must have equal access to essential resources, all people must have equal opportunities for education, employment, and income, and all forms of violence and discrimination on the basis of gender must be eliminated. Gender inequality stands as a barrier to achieving good health and wellbeing for many people around the world. Below are three examples of how the achievement of SDG 5 'Gender equality' assists in contributing to SDG 3 'Good health and wellbeing'. Note that some key targets are italicised in each figure.



SDG 5 involves adopting policies and legislations that support gender equality and empowerment of all women.	This involves, at a governmental level, recognising the equal value of women in society, introducing laws to mandate gender equality, and promoting equal participation within the community. Additionally, governments can support health care services available to vulnerable women, such as domestic violence hotlines in Australia.	As a result of this support in the form of policies and services, as well as by reducing all forms of discrimination against women and girls, and by ending all forms of violence against women, women's sense of self-worth within society will inevitably increase all across the globe.	An increase in sense of self-worth promotes improvements in mental health and wellbeing, a key target of SDG 3 .
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Figure 14 An example of how the achievement of SDG 5 assists in contributing to SDG 3

Figure 14 illustrates collaboration between the government sector and the healthcare sector. This example illustrates that to improve mental health and wellbeing of all, the government must work along with the healthcare sector to remove barriers in the way of achieving this, gender inequality being one barrier.



SDG 5 aims to ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.	This involves ensuring that women have equal access to employment as men and receive equal pay for jobs of the same/equal value.	With more women working and earning a higher income through paid employment opportunities, governments will have a stronger workforce and greater economic activity.	This will result in an increase in government tax revenue and economic growth, supporting the ability of governments to invest in social protection systems such as providing universal health coverage, contributing to the achievement of SDG 3 .
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Figure 15 An example of how the achievement of SDG 5 assists in contributing to SDG 3



SDG 5 aims to ensure universal access to sexual and reproductive health and reproductive rights.

That means that all women and girls will have increased access to sexual and reproductive healthcare services.

Access to such services will increase women's health literacy, giving them the ability to know how and when to access healthcare, as well as assist them with family planning.

This will result in reduced *maternal and infant mortality* rates as a result of increased access to healthcare, assisting in the achievement of **SDG 3**.

Figure 16 An example of how the achievement of SDG 5 assists in contributing to SDG 3

The role of SDG 5 in the promotion of health and wellbeing globally

Achieving gender equality plays an integral role in enabling individuals all across the globe to achieve good health and wellbeing. Through the achievements of SDG 5, health and wellbeing will be improved for many different reasons.

- One of the major aims of SDG 5 is to end all forms of violence against women and girls, including human trafficking and sexual exploitation. This will firstly improve the physical health and wellbeing of women across the globe by decreasing rates of injury, but moreover, ending all forms of violence against women will improve individual's sense of self-worth and self-esteem, promoting mental health and wellbeing.
- Another key aim of SDG 5 is to end all forms of discrimination against women and girls everywhere, along with eliminating harmful practices, such as child, early and forced marriage, and **female genital mutilation** (WHO, 2020). Gender discrimination is a major barrier that stands in the way of girls attending school and receiving an education. When this discrimination is removed and girls are able to attend school all around the world, there is reduced incidence of child marriages, which means women can marry later in life, and are less likely to have children at a young age. This improves physical health and wellbeing as these women are less likely to experience the risks associated with being pregnant at such a young age, supporting the body and its functioning.
- Elimination of harmful practices, such as genital mutilation and child marriage, greatly improves health and wellbeing. Through receiving an education and not being forced into child marriages, women will be able to form meaningful and satisfying relationships with others, improving social health and wellbeing. They will also have lower levels of stress and anxiety, promoting mental health and wellbeing.

The role of SDG 5 in the promotion of human development globally

Through achieving or working towards the targets of SDG 5, human development will improve for millions of people globally. Through increasing the number of women in paid employment, women are able to earn an adequate income to afford a decent standard of living. Many of the targets of SDG 5 come back to respecting women and ensuring equal opportunities for all, regardless of gender. When women are respected members of their community, they are able to freely participate in their community and have an increased ability to make decisions about their lives, improving human development.

One of the major focuses of SDG 5 is breaking down barriers that stand in the way of girls being able to attend school and receive an equal education to boys; i.e. barriers such as sexual violence and child marriage. When girls have the same opportunities to attend school as boys do, their knowledge will be enhanced along with their capabilities, allowing them to develop to their full potential, promoting human development.

ADDITIONAL TERMS

Female genital mutilation refers to the process of partially or totally removing or injuring external female genitalia for non-medical reasons

SDG 6 'Clean water and sanitation' 4.2.3.5

OVERVIEW

SDG 6 'Clean water and sanitation' aims to ensure that all people across the globe have access to safe, clean water and adequate sanitation. Many of us take for granted the ability to turn on our taps and drink a glass of safe, clean water. For millions of people around the world, it is not so simple.

THEORY DETAILS

SDG 6 is titled 'Clean water and sanitation'. SDG 6 aims to ensure that all people across the globe have access to safe, clean drinking water, as well as adequate **sanitation**, often in the form of toilets. According to the United Nations (UN, 2020), around 2.2 billion people around the world lack access to safely managed drinking water. Access to clean and safe water is integral to ensuring good health and wellbeing for all people, and is integral to achieving sustainable development.

Goal 6 recognises the role that access to clean water and sanitation plays in individuals' lives as well as more broadly the role it plays in global food production, agricultural productivity, and overall sustainable development. Goal 6 aims to not only achieve universal access to safe water and sanitation, but also aims to improve water quality by reducing pollution, eliminating dumping and minimizing the release of hazardous chemicals and materials, implementing water management systems, and protecting water-related ecosystems.

SDG 6 involves numerous key targets which includes to:

- achieve universal and equitable access to safe and affordable drinking water for all.
- achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.
- improve water quality by reducing pollution, eliminating dumping and minimizing the release of hazardous chemicals and materials.
- increase water-use efficiency across all sectors.
- implement integrated water resources management at all levels.
- protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.
- expand international cooperation and capacity-building support to low-income and middle-income countries in water- and sanitation-related activities and programmes.
- support the participation of local communities in improving water and sanitation management.

(UN, 2015)



Image: Deni Nandar Sukanwar/Shutterstock.com

KEY DEFINITIONS

SDG 6 is titled 'Clean water and sanitation'. SDG 6 aims to ensure that all people across the globe have access to safe, clean water, and adequate sanitation

ADDITIONAL TERMS

Sanitation refers to behaviours, facilities, and services that prevent disease and illness caused by contact with or mistreatment and wrong disposal of human waste and sewage

Real world example

Water For Good: an organisation making a difference

Water For Good (WFG) is an organisation that works to tackle water scarcity in the Central African Republic (CAR). WFG has one goal: to give lasting access to clean water for every single person in the Central African Republic.

Today, more than 880,000 Central Africans are drinking water every day from wells built by WFG. WFG has hundreds of local staff who are trained to implement and maintain the wells.

So much more has come from WFG than simply clean water, such as hundreds of jobs. All the local staff build relationships with communities and work with them to start projects that will empower the community long term. WFG has seen first-hand that when people have power over their access to safe, clean water, they begin to realise the power they have over other aspects of their lives. As a result of the work of WFG, people are staying healthy, people have a reliable income, and people feel a sense of purpose and are making a difference in their community.

(Water For Good, 2019)



Image: SAK Design/Shutterstock.com

Figure 17 Access to clean water is critical in being able to achieve good health and wellbeing and human development globally

The relationship between SDG 3 and SDG 6

There are some clear links between SDG 6 ‘Clean water and sanitation’, and SDG 3 ‘Good health and wellbeing’. Access to safe water is integral in maintaining the health and wellbeing of individuals and communities globally. At a basic level, safe water is essential in reducing the spread of water-borne diseases, such as cholera, but there are many other connections between these two goals. Below are three examples of how the achievement of SDG 6 ‘Clean water and sanitation’ assists in contributing to SDG 3 ‘Good health and wellbeing’. Note that some key targets are italicised in each figure.



SDG 6 aims to support the participation of local communities in improving water and sanitation management.	This could involve improving education surrounding the risks of open defecation and water contamination through, for example, health promotion from the healthcare sector. It could also involve improving quality of water source infrastructure and hygiene facilities such as public toilets.	These together will reduce the risk of contaminated water, improving water quality, and reducing the spread of communicable diseases, such as diarrhea, through water.	Reduction in waterborne diseases and improvement in water quality will help reduce preventable illness in young children, <i>contributing to the reduction in infant and under 5 mortality rates</i> , contributing to the achievement of SDG 3 .
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Figure 18 An example of how the achievement of SDG 6 assists in contributing to SDG 3

Figure 19 illustrates collaboration between the water and sanitation sector and the healthcare sector. This example demonstrates the critical role access to sanitation plays in the reduction of communicable diseases. The healthcare sector (through the provision of health promotion and risk reduction, for example) and the water and sanitation sector (which could involve the provision of public toilets, for example) work together to reduce open defecation and spread of communicable disease, contributing to the achievement of SDG 3.



SDG 6 aims to achieve access to adequate and equitable sanitation and hygiene for all and end open defecation.	This involves ensuring that women and girls have access to sanitation and hygiene facilities, especially at schools.	Improved access to such facilities at schools will improve school attendance and mitigate the need for girls to miss school during time of menstruation as a result of lack of facilities.	This may increase female education rates and allow girls to develop health literacy, such as knowledge about sexual and reproductive health, how and when to access healthcare and so on, <i>reducing risk of maternal mortality</i> , contributing to the achievement of SDG 3 .
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Figure 19 An example of how the achievement of SDG 6 assists in contributing to SDG 3



SDG 6 aims to achieve universal and equitable access to safe and affordable drinking water for all.	Universal access to safe drinking water means water-borne diseases are less likely to spread.	Therefore, individuals are less likely to suffer from ill-health related to waterborne diseases, such as cholera and typhoid.	This contributes to the achievement of SDG 3 as a key target of SDG 3 is to combat waterborne diseases and other communicable diseases.
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Figure 20 An example of how the achievement of SDG 6 assists in contributing to SDG 3

The role of SDG 6 in the promotion of health and wellbeing globally

Through the achievements of SDG 6, health and wellbeing will be improved for many reasons.

- One of the major aims of SDG 6 is to ensure all people everywhere have access to safe water and sanitation. This will lead to a reduction in contaminated water sources and subsequently, a reduction in the spread of communicable diseases such as cholera and typhoid. This is especially important amongst children, as at a young age children are particularly vulnerable to such diseases. Reduction in the spread of communicable diseases will improve the functioning of the body and its systems, improving physical health and wellbeing.

- Another major focus of SDG 6 is to enable easy access to safe water sources. Lack of access to safe drinking water and sanitation particularly affects women and children as they do most of the water collecting if drinking water is not easily accessible. Collecting and carrying water not only takes time but is also a heavy burden physically. It is not rare for women and children to spend up to six hours a day walking, carrying, and collecting water (Office of the United Nations High Commissioner for Human Rights, 2010). This is time that could be spent in school or doing productive activities such as earning, looking after young children or running a household. Carrying heavy buckets of water is detrimental to physical health as it may lead to injuries and fatigue, especially for older women. Therefore, addressing SDG 6 will improve physical health and wellbeing for many women across the globe.
- Children who do not have to spend time collecting water can spend more time in school, maintaining meaningful relationships with others, building friendships, which promotes social health and wellbeing.

The role of SDG 6 in the promotion of human development globally

Through achieving or working towards the targets of SDG 6, human development will improve for millions of people globally. When individuals have access to clean, uncontaminated drinking water, fewer children will become sick from contaminated water, enabling them to continue to attend school where they can enhance their knowledge and capabilities and develop to their full potential.

SDG 6 also aims to improve water quality by reducing pollution, eliminating dumping and minimising the release of hazardous chemicals and materials. With access to clean water and sanitation services, more adults will experience improved health and stronger immune systems, which will allow them to work more productively. When able to attend work and work productively, individuals will earn a greater income allowing them to afford a decent standard of living, which will improve human development.

SDG 13 'Climate action' 4.2.3.6

OVERVIEW

SDG 13 'Climate action' aims to take urgent action to tackle climate change and its impacts. Climate change is worsened by human activity and is threatening the way humans live both now and into the future, as well as threatening the health of our planet.

THEORY DETAILS

SDG 13 is titled 'Climate action'. SDG 13 aims to ensure that action is taken urgently to combat climate change and its many impacts. As you have learnt previously, the impacts of climate change manifest in many different ways; for example, weather events, such as tropical storms and floods, are more extreme. The impacts of climate change spreads far and wide across the globe and have a major impact on the health and wellbeing of individuals. SDG 13 acknowledges how serious an issue climate change is, and the role that combating it has in achieving a sustainable future.



Image: Deni Nandar Sukanwar/Shutterstock.com

KEY DEFINITIONS

SDG 13 is titled 'Climate action'. SDG 13 aims to take urgent action to tackle climate change and its impacts

Lesson link

Want to learn more about climate change? Review lesson **8C: Health and wellbeing and global trends** where climate change is explained for a refresher on the concept. In order to understand SDG 13 it is important to have a good understanding of what climate change is.

! Useful tip

Remember SDG 13 is titled 'Climate action' not Climate change. Though the goal is about climate change, it is not the name. Referring to SDG 13 as 'climate change' is a common mistake students make.

SDG 13 involves numerous key targets which include to:

- strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
- integrate climate change measures into national policies, strategies, and planning.
- improve education, awareness-raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning.
- implement the commitment undertaken by high-income country partners to the United Nations Framework Convention on Climate Change, committing to take action to reduce climate change and provide support to low- and middle-income countries to implement strategies to reduce climate change.

- promote mechanisms for raising capacity for effective climate change-related planning and management in low-income countries.

(UN, 2015)



Real world example

Climate change in action: melting glaciers in Peru

Peru is a country located in South America. Peru is home to 71% of the world's tropical glaciers, many of which are concentrated in the Cordillera Blanca mountain region (Hinsdale, 2018). Peru's glaciers have lost 40% of their surface area since 1970, and are continuing to melt at a concerning rate today. It is natural for glaciers to melt, but usually, they usually accumulate at the same rate, maintaining their size.

Why are Peru's glaciers melting so quickly? Rising global temperatures.

20,000 years ago, during what is referred to as the Last Glacial Maximum (LGM; Jackson, 2021), glaciers and ice sheets covered around 30% of Earth's surface - that is a lot! Since the LGM, global temperatures have risen between five and seven degrees celsius which has led to mass glacial retreat. The alarming rate of melting glaciers in Peru are direct evidence of changing climatic conditions, due to both anthropogenic (due to human behaviour) climate change and natural climate change.

Why does this matter? Peru's glaciers are a critical source of water for the entire population (Hinsdale, 2018). Glaciers, when melting at a natural rate, slowly release water into lakes and rivers which provide drinking water, water for agriculture, hydroelectricity, and industry. Melting glaciers will initially increase water supply, but then, in the long term, will greatly reduce as the resource is not renewable. This will adversely affect one sixth of the 32.5 million Peruvians. People will suffer from water shortages which will be detrimental to Peru as over 2 million people do not currently have access to drinking water (Water, 2021). Additionally, 70% of Peru's energy is hydroelectricity. This will greatly suffer as water becomes less available in the future - it is estimated that reduced glacial melt will cost Peru's energy sector over 740 million USD annually (Rasul, 2019).



Image: caioacuesta/Shutterstock.com

Figure 21 Pastoruri Glacier, Peru. Located in the southern part of the Cordillera Blanca region, located 4000m above sea level. The lake below is a glacial lake, formed through accumulated melted water

The relationship between SDG 3 and SDG 13

There are some clear links between SDG 13 'Climate action', and SDG 3 'Good health and wellbeing'. Climate change impacts people's livelihoods in many ways and in order to achieve good health and wellbeing, it must be addressed. Below are three examples of how the achievement of SDG 13 'Climate action' assists in contributing to SDG 3 'Good health and wellbeing'. Note that some key targets are italicised in each figure.



SDG 13 aims to address climate change and reduce its impacts.

This involves reducing the impact that natural disasters, which are worsening due to climate change, have on communities.

Through reducing the impacts of, for example, floods, future generations will be less likely to suffer from contaminated water sources.

Reduction of contaminated water reduces the risk of spread of communicable and waterborne diseases, contributing to the achievement of **SDG 3**.

Figure 22 An example of how the achievement of SDG 13 assists in contributing to SDG 3

Figure 22 illustrates collaboration between the environmental protection sector and the healthcare sector. This example illustrates how when the environmental protection sector and the health sector work together, health and wellbeing can be improved.



SDG 13 aims to strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

By supporting and building resilience of countries to reduce risk of damage from climate-related hazards, people will be less likely to die from the impacts of disasters, such as oil spills or leaks of hazardous chemicals due to destroyed infrastructure or erosion from damaging floods.

Reducing the potential risk of climate-related disasters will subsequently reduce deaths and illnesses from hazardous chemicals and air, water and soil pollution, and contamination, a key target of **SDG 3**.

Figure 23 An example of how the achievement of SDG 13 assists in contributing to SDG 3



Figure 24 An example of how the achievement of SDG 13 assists in contributing to SDG 3

The role of SDG 13 in promoting health and wellbeing globally

Through the achievements of SDG 13, health and wellbeing will be improved in many different ways.

- Tackling climate change will contribute to a reduction in the speed at which global temperatures are rising, which will reduce the impact of climate change on weather events such as wildfires, droughts, and floods. Reducing the severity of such natural disasters will reduce associated injury and improve food security, therefore improving physical health and wellbeing.
- Another focus of SDG 13 is on planning and implementing strategies to reverse the effects of climate change. This goal is a call for action, mandating that governments begin to actively address the severity of climate change. Due to the fact they are seeing action take place, stress levels of people most affected by climate change, those concerned about climate change, and those most at risk of the impacts of climate change will likely be reduced which will promote mental health and wellbeing.

The role of SDG 13 in promoting human development globally

Through achieving or working towards the targets of SDG 13, human development will improve for millions of people globally. With a reduced risk of severe disasters and weather events, people living in low-lying coastal areas are able to continue to work and earn an income, worry-free, allowing them to afford a decent standard of living, improving human development. SDG 13 requires climate action from countries all across the globe. Governments can involve local community members in the planning and management of the impacts of climate change. This will allow individuals to be able to participate effectively in the life of the community and also contribute to decisions being made affecting themselves and their community, improving human development.

One of the major focuses of SDG 13 is ensuring the agricultural industry can remain strong, resisting the significant effects of climate change. This will ensure many people, especially farmers, continue to lead productive lives. Additionally, earning an income to afford to send children to school improves human development globally as more people around the world will have increased access to knowledge and ability to develop to their full potential as a result of their education.

Theory summary

In this lesson, you learnt about SDG 1, SDG 2, SDG 4, SDG 5, SDG 6 and SDG 13. You learnt what each of these SDGs are about, why they are important, and the key targets they aim to address. You also learnt about how each of these SDGs contribute to the achievement of SDG 3 and how this illustrates collaboration between different sectors working to achieve health-related outcomes. Additionally, you have learnt about the relationship between these SDGs and health and wellbeing and human development.

9C QUESTIONS

Theory-review questions

Question 1

SDG 1, 2, 4, 5, 6 and 13 are interconnected and can all be connected to SDG 3 and improvements in health and wellbeing globally.

- A True.
- B False.

Question 2

SDG 1, 2, 4, 5, 6 and 13 all have the same key targets as they aim to achieve a more sustainable future and are working towards common goals.

- A True.
- B False.

Question 3

The SDGs all focus on tackling gender and income inequality.

- A True.
- B False.

Question 4

Quality education and climate change are two major issues that are addressed in some of the SDGs.

- A True.
- B False.

Question 5

SDG 6 focuses on making sure that all people have access to safe water and sanitation, which thereby helps to achieve SDG 3.

- A True.
- B False.

Question 6

SDG 13 aims to tackle climate change. It is the only SDG whose achievement cannot be linked to the promotion of health and wellbeing.

- A True.
- B False.

Question 7

Different sections of society, referred to as different sectors, work in isolation to achieve different SDGs. For example, the education sector solely focuses on achieving SDG 4 'Quality education', whilst at the same time, the environmental protection sector solely focuses on achieving SDG 13 'Climate action'.

- A True.
- B False.

Question 8

SDG 1 aims to end poverty in all its forms everywhere. SDG 1 is the only SDG which can be linked to human development as human development is automatically improved once poverty is removed.

- A True.
- B False.

Skills

Perfect your phrasing

Question 9

Which of the following sentences is most correct?

- A SDG 5 refers to 'gender equality; end discrimination and violence against women and girls, *aiming to achieve gender equality and empower women and girls*'.
- B SDG 5 refers to 'gender equality; end discrimination and violence against women and girls, *hoping to improve gender equality and empower all people*'.

Unpacking the case study

Use the following information to answer Questions 10 and 11.

New Zealand commits to carbon neutrality by 2050.

In late 2019, the New Zealand government approved a bill to reduce all greenhouse gas emissions to zero by 2050 (except biogenic methane which is emitted by plant and animal sources). In order to achieve this goal, New Zealand must, for example, find a way to produce all electricity without burning fossil fuels, possibly through using reusable resources such as solar energy. Many different industries will be impacted by this bill, particularly the agricultural industry. There are many methods the agricultural industry will have to adopt to reduce contribution to greenhouse gas emissions, such as organic farming, reducing synthetic chemical use, no-till agriculture, conservation tillage, and rotational grazing.

(Wamsley, 2019)



Image: Robert Goudappel/Shutterstock.com

Question 10

The case study above best relates to SDG 13 'Climate action'. Which part of the case study best demonstrates the government sector working towards addressing climate change and its impacts.

- A 'Many different industries will be impacted by this bill, particularly the agricultural industry.'
- B 'In late 2019, the New Zealand government approved a bill to reduce all greenhouse gas emissions to zero by 2050.'

Question 11

The case study above is an example of

- A New Zealand's government and *health sectors* working together to address climate change, which is an example of collaboration between different sectors to achieve a common goal.
- B New Zealand's government and *agricultural sectors* working together to address climate change, which is an example of collaboration between different sectors to achieve a common goal.

Exam-style questions**Question 12** (2 MARKS)

Outline what SDG 1 is and explain why it is important.

Question 13 (3 MARKS)

With reference to a dimension of health and wellbeing, explain why SDG 13 'Climate action' is important.

Question 14 (3 MARKS)

Image: Andrey_Popov/Shutterstock.com

- a Identify the SDG represented in the image above. (1 MARK)
- b Explain the importance of addressing the SDG identified above. (2 MARKS)

Question 15 (7 MARKS)

- a Identify what SDG 4 is and explain what it aims to achieve. (2 MARKS)
- b Outline two reasons why the achievement of SDG 4 is important. (2 MARKS)
- c Describe one way in which the achievement of SDG 4 'Quality education' contributes to the achievement of SDG 3. (3 MARKS)

Question 16 (10 MARKS)

Sani lives in a rural village in Uganda with her three younger siblings, widowed mother, and elderly grandparents. She was 12 when her father passed away from cholera and ever since, a lot has fallen on Sani's shoulders to look after her family. Sani's dad used to work in a local mine to earn money to afford for Sani and her siblings to attend school. Since he passed away, both Sani and her mother have been trying to earn enough money between them to afford basic resources. Now, at the age of 17, Sani has been forced to leave school to work at the local cocoa plantation to earn money to allow her siblings to attend school. Sani's mother cannot work full time as there are some essential tasks that needed to be completed daily to support the family. Sani's family do not live near a water well, therefore her mother walks for two hours a day collecting fresh drinking water. Sani's family is big, so her mother can only carry enough water for one day. Sometimes when her mother can't go, Sani's younger brothers miss school to collect water. Sani is grateful her younger siblings are boys as she is glad they do not have to face the same struggles she does every month on her period: there is not always enough water at the end of the day for Sani to clean herself or her sanitary cloth. This causes her a lot of stress and embarrassment every month.

- a Outline the aim of SDG 6. (1 MARKS)
- b Using the information provided concerning Sani and her situation, identify a key target of SDG 6 and explain why achieving SDG 6 is important in improving health and wellbeing. (2 MARKS)
- c Explain how addressing lack of access to clean water and sanitation could improve Sani's mother's human development. (2 MARKS)
- d With reference to the information provided, explain how addressing SDG 6, specifically lack of access to clean water, can improve an individual's health and wellbeing and discuss how addressing this issue can also contribute towards the achievement of an SDG of your choice, with reference to a key target. (5 MARKS)

Questions from multiple lessons**Question 17** (3 MARKS)

Suggest a reason why low-income countries may find it more challenging to achieve SDG 6 'Clean water and sanitation' compared to high-income countries.

Adapted from VCAA 2019 exam Q5

9D THE PRIORITIES AND WORK OF THE WHO

What is the World Health Organisation (WHO)? How can they possibly ensure that a billion more people have access to universal health coverage, are protected from health emergencies, and have better health and wellbeing?

The World Health Organisation is an international organisation that aims to achieve better health for everyone, everywhere. In this lesson, you will learn about the World Health Organisation, its priorities, and the work they do to promote health and wellbeing.

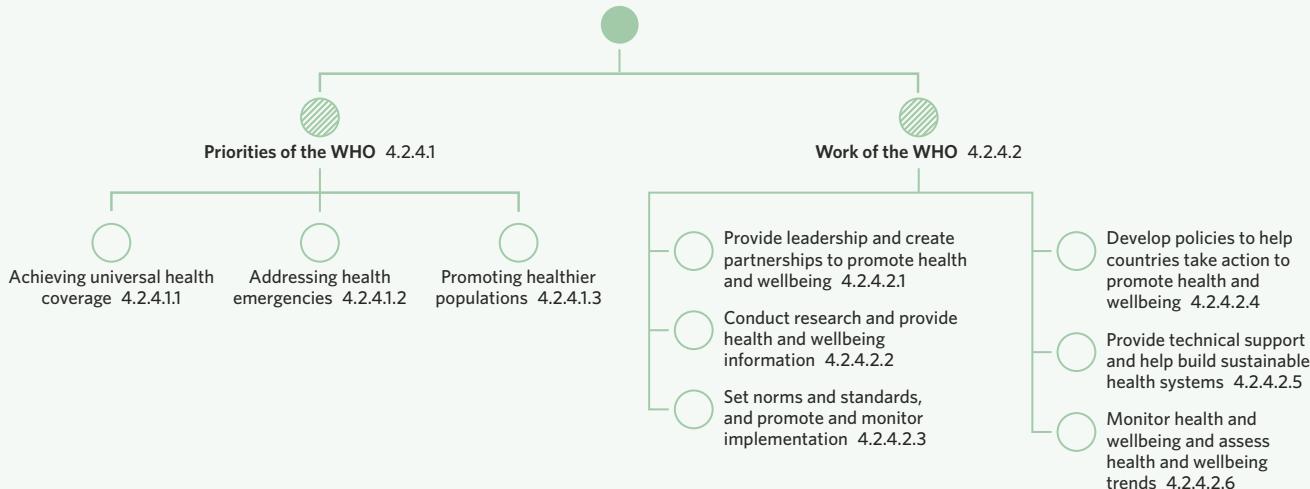


World Health Organisation

Image: S_E/Shutterstock.com

9A Overview of the Sustainable Development Goals (SDGs)	9B Key features of SDG 3	9C The relationship between SDG 3 and other SDGs	9D The priorities and work of the WHO																						
Study design dot point																									
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<table> <tr> <td>Priorities of the WHO</td> <td>4.2.4.1</td> </tr> <tr> <td>Achieving universal health coverage</td> <td>4.2.4.1.1</td> </tr> <tr> <td>Addressing health emergencies</td> <td>4.2.4.1.2</td> </tr> <tr> <td>Promoting healthier populations</td> <td>4.2.4.1.3</td> </tr> <tr> <td>Work of the WHO</td> <td>4.2.4.2</td> </tr> <tr> <td>Provide leadership and create partnerships to promote health and wellbeing</td> <td>4.2.4.2.1</td> </tr> <tr> <td>Conduct research and provide health and wellbeing information</td> <td>4.2.4.2.2</td> </tr> <tr> <td>Set norms and standards, and promote and monitor their implementation</td> <td>4.2.4.2.3</td> </tr> <tr> <td>Develop policies to help countries take action to promote health and wellbeing</td> <td>4.2.4.2.4</td> </tr> <tr> <td>Provide technical support and help build sustainable health systems</td> <td>4.2.4.2.5</td> </tr> <tr> <td>Monitor health and wellbeing and assess health and wellbeing trends</td> <td>4.2.4.2.6</td> </tr> </table>				Priorities of the WHO	4.2.4.1	Achieving universal health coverage	4.2.4.1.1	Addressing health emergencies	4.2.4.1.2	Promoting healthier populations	4.2.4.1.3	Work of the WHO	4.2.4.2	Provide leadership and create partnerships to promote health and wellbeing	4.2.4.2.1	Conduct research and provide health and wellbeing information	4.2.4.2.2	Set norms and standards, and promote and monitor their implementation	4.2.4.2.3	Develop policies to help countries take action to promote health and wellbeing	4.2.4.2.4	Provide technical support and help build sustainable health systems	4.2.4.2.5	Monitor health and wellbeing and assess health and wellbeing trends	4.2.4.2.6
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The priorities and work of the WHO



Priorities of the WHO 4.2.4.1

OVERVIEW

To achieve its mission, the WHO has developed three strategic priorities: achieving universal health coverage, addressing health emergencies, and promoting healthier populations. These ambitious priorities are based on what is needed to achieve SDG 3, and are designed to promote health and wellbeing globally.

THEORY DETAILS

The World Health Organisation (WHO) is an international organisation that is a branch of the United Nations. Since being established in 1948, the WHO has worked to achieve better health for everyone, everywhere, by providing leadership and coordinating global efforts to improve health and wellbeing. The WHO collaborates with governments and agencies in 194 countries, which are referred to as member states, to respond to various global health issues and to bring about positive health outcomes for all people.

In 2018, delegates from all WHO member states gathered in Geneva, Switzerland for the 71st World Health Assembly. During this annual meeting, attendees discuss specific health agendas, review and approve health budgets, and create global health policies. At this World Health Assembly, the Thirteenth General Programme of Work 2019-23 was created and adopted by the WHO. This programme established the mission, strategic priorities and goals of the WHO for the next five years.

The mission of the WHO is to promote health, keep the world safe, and protect the vulnerable. To achieve its mission, the WHO focuses on three strategic priorities which are related to the achievement of SDG 3 ‘Good health and wellbeing; ensure healthy lives and promote wellbeing for all at all ages’. By addressing these priorities, the WHO will also make progress towards achieving the key targets of SDG 3.

The WHO’s strategic priorities are:

- achieving universal health coverage
- addressing health emergencies
- promoting healthier populations.

Each strategic priority has a corresponding goal that the WHO is aiming to achieve by 2023. These goals are very ambitious because they each aim to improve the health and wellbeing of a billion people. Therefore, these three goals that accompany the three priorities of the WHO are referred to as the ‘triple billion’ goals.

The ‘triple billion’ goals are:

- one billion more people benefitting from universal health coverage
- one billion more people better protected from health emergencies
- one billion more people enjoying better health and wellbeing.



Figure 1 An overview of the mission, priorities, and goals of the WHO

It is important to understand that the strategic priorities of the WHO are interconnected. Addressing one priority will contribute to progress in the other priorities. In turn, this contributes to the achievement of the WHO’s mission. For example, if the WHO focuses on ‘achieving universal health coverage,’ this means that more people would have access to safe and effective vaccines and medicines. If more people are vaccinated against infectious diseases, this increases the capacity of the world to avoid disease epidemics, contributing to successfully ‘addressing health emergencies.’ If people are protected from disease outbreaks, this also addresses ‘promoting healthier populations’, as the prevalence of communicable diseases is reduced and people can enjoy good health and wellbeing free from illness.

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- explain the priorities and the work of the WHO and discuss how the WHO priorities are reflected in different scenarios

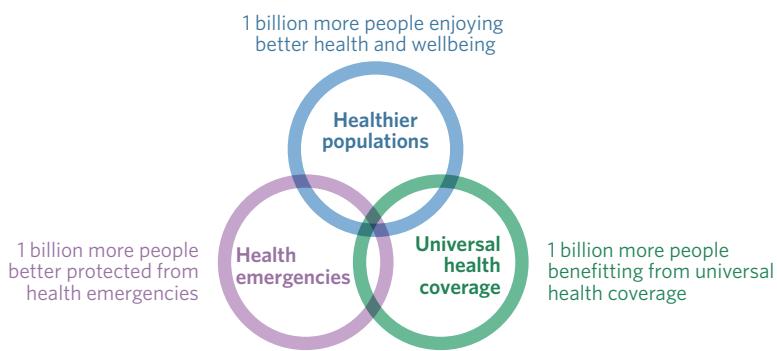


Figure 2 The strategic priorities and goals of the WHO are interconnected

Achieving universal health coverage 4.2.4.1.1

The majority of Australians will never have to choose between paying for their sick family member's medicine or having enough money to afford food. Most Australians have also never been refused health services or doctors visits when we are unwell. Unfortunately, this is the shocking reality for millions of people around the world. In many countries, there are inadequate health services relative to the needs of the population. Many people are unable to access quality and affordable healthcare when they become ill, while many others are forced into poverty due to the high cost of health services.

Achieving **universal health coverage** relates to developing and improving health systems so that all people around the world can access quality and affordable healthcare when they need it. Universal health coverage protects people from facing financial hardship due to expensive healthcare by making it affordable. This means that people are not limited in their ability to access health services due to cost.

The WHO works to address their priority of 'achieving universal health coverage' and achieve their goal of 'one billion more people benefitting from universal health coverage'. They believe that the enjoyment of optimal health and wellbeing is a fundamental human right, aiming to ensure that all people can access the health services they need, regardless of race, religion, political beliefs, economic status or social condition. They also aim to protect people from experiencing financial hardship by working to reduce the cost of health services.

The WHO addresses this priority by focusing on seven key aspects:

Table 1 The key aspects of 'achieving universal health coverage'

Key aspect	Explanation
Service, access, and quality	<ul style="list-style-type: none"> The WHO works to increase health coverage across more of the population. The WHO works to ensure that health services are of sufficient quality so that all people can access effective healthcare when they need it to prevent, diagnose and treat illness. The WHO works to promote equity of access by reducing the economic, geographical, and cultural barriers that prevent people from accessing essential health services.
Health workforce	<ul style="list-style-type: none"> The WHO recognises that healthcare workers must be properly trained in order to achieve universal health coverage. The WHO supports the education and training of health workers and volunteers so that they are equipped with the knowledge and skills to provide healthcare to those who need it.
Access to medicines, vaccines, and health products	<ul style="list-style-type: none"> The WHO works to increase access to safe and effective medicines, vaccines, and health products. The WHO financially supports countries to provide quality and affordable medicines, vaccines, and health products to the population.
Governance and finance	<ul style="list-style-type: none"> The WHO aims to increase the capacity of governments to provide adequate health services to the population by helping them develop health policies, organise and fund the health system, implement health budgets, and monitor expenditure.

cont'd

KEY DEFINITIONS

Universal health coverage

involves developing and improving health systems so that all people around the world can access quality and affordable healthcare when they need it

Lesson link

Universal health coverage was mentioned in lesson **9B: Key features of SDG 3**. Achieving universal health coverage is one of the key targets of SDG 3 'Good health and wellbeing'. By addressing the priority of 'achieving universal health coverage,' this contributes to the achievement of SDG 3.

Table 1 Continued

Key aspect	Explanation
Health information systems	<ul style="list-style-type: none"> The WHO works to assist countries in developing comprehensive and efficient health information systems that monitor population health status. This enables countries to track morbidity and mortality rates and identify and direct attention towards areas of concern.
Advocacy	<ul style="list-style-type: none"> The WHO works to provide leadership by actively promoting universal health coverage. The WHO aims to advocate for investment in all aspects of the health system and health insurance schemes that make healthcare more affordable.
Country support	<ul style="list-style-type: none"> The WHO aims to support countries at all levels to implement health policies, develop health services, and strengthen the health system. The WHO works to create partnerships with countries to improve the health and wellbeing of the population.

Useful tip

It is useful to remember several key aspects of each priority. This will make it easier for you to identify which priority is being referred to when answering questions that apply the priorities to different scenarios.

Addressing health emergencies 4.2.4.1.2

Health emergencies threaten all countries in every corner of the world. For example, diseases can spread rapidly, quickly becoming out of control when outbreaks are not identified and effectively managed. All of us have been affected by the COVID-19 health emergency that greatly disrupted the way we live and presented overwhelming global challenges. The significant negative impact of health emergencies on health and wellbeing means that global action must be taken to prevent, and effectively respond to them.

Health emergencies such as epidemics, pandemics, conflict, and natural disasters must be prepared for and appropriately managed to reduce their impact on our health and wellbeing. By implementing measures that prevent health emergencies and increasing our capacity to respond quickly and effectively to them, the negative effects of these global crises can be reduced.

The WHO works to address their priority of ‘addressing health emergencies’ and achieve their goal of ‘one billion more people better protected from health emergencies’.

They address this priority by focusing on two key aspects:

Table 2 The key aspects of ‘addressing health emergencies’

Key aspect	Explanation
Preparing for and preventing health emergencies	<ul style="list-style-type: none"> The WHO aims to prepare for health emergencies by implementing early detection, information sharing, and quick response to health emergencies. This includes phone alerts in the event of natural disasters or immediate action to contain disease spread in the event of an outbreak. The WHO works to implement national health emergency programs in all countries. They work to support countries in being adequately prepared for health emergencies, and aim to implement resilient health systems that do not collapse during health emergencies. They work to ensure countries can effectively respond to and recover from health emergencies should they occur. The WHO developed the International Health Regulations in 2005. These regulations recommend actions that countries should take to control the spread of disease across borders such as airport control and quarantine. The WHO aims to support countries to implement these regulations, and also encourages other preventative measures such as the promotion of safe sex practices and vaccination programs. The WHO conducts research, development, and innovation so that health emergencies can be effectively detected, prevented, and responded to.
Responding to health emergencies	<ul style="list-style-type: none"> The WHO works to ensure that all people affected by health emergencies have immediate access to essential health services, including emergency aid and supplies, disease prevention, health promotion and mental health services. The WHO aims to target the most vulnerable people who are most impacted by health emergencies. Vulnerable groups include those living in areas of conflict, women, children, migrants, and those living in poverty. The WHO works to support countries to effectively respond to health emergencies and ensures that appropriate action is taken in the event of a health emergency.



Real world example

The WHO's response to COVID-19

In response to the COVID-19 global pandemic, the World Health Organisation took action to combat the outbreak of the virus. Their efforts to deal with the international health crisis reflect their priorities of 'achieving universal health coverage' and 'addressing health emergencies.' This highlights the interconnectedness of the WHO's priorities, and how there can be examples of multiple priorities within a scenario. Here are some examples of the strategic priorities evident within the WHO's COVID-19 response.

The WHO provided diagnostic supplies, biomedical equipment, and protective personnel equipment to over 150 countries. This reflects 'addressing health emergencies' by ensuring that people have immediate access to healthcare during health emergencies.

The WHO created the COVID-19 Technology Access Pool, which is a resource that enables information sharing of research knowledge and provides intellectual property related to COVID-19. This reflects 'addressing health emergencies' by making health-related information more accessible, therefore strengthening the ability to keep the world safe from the pandemic.



Image: FGC/Shutterstock.com

Figure 3 A sufficient trained health workforce is needed to combat COVID-19

The WHO published the Strategic Preparedness and Response Plan. This document outlines the public health measures that should be implemented by countries to manage the spread of the virus. This reflects 'addressing health emergencies' by promoting the implementation of an international health emergency plan that guides leaders to appropriately prepare for and respond to the COVID-19 pandemic.

The WHO established treatment centres so that people can receive treatment for COVID-19. This reflects 'achieving universal health coverage' by providing people with access to essential health services so that they can recover from the virus.

The WHO accelerated research and development of COVID-19 therapeutics and vaccines, supporting trials in over 100 countries. This reflects 'achieving universal health coverage' by increasing access to safe and effective medicines, meaning that people are provided with the healthcare they need when infected with COVID-19.

Type the URL who.int/emergencies/diseases/novel-coronavirus-2019/strategies-and-plans into your browser to learn more about the WHO's COVID-19 response.

(WHO, n.d.)

Promoting healthier populations 4.2.4.1.3

Who wouldn't want to experience improved health and wellbeing? Healthier populations can be more productive and experience a healthy and fulfilling life free from illness. Efforts to promote healthier populations and achieve better health outcomes for all benefits everyone. For example, when people are healthy enough to go to work and earn an income, this not only enables them to achieve a decent standard of living, but also contributes to the economy.

The WHO works to address their priority of 'promoting healthier populations' and achieve their goal of 'one billion more people enjoying better health and wellbeing.' The priority focuses on achieving the key targets of SDG 3, making people healthier, and reducing morbidity and mortality from communicable and non-communicable diseases.



Lesson link

The key targets of SDG 3 were introduced in **9B:**

Key features of SDG 3. The priority 'promoting healthier populations' focuses on achieving these targets.

The WHO address this priority by focusing on five key aspects:

Table 3 The key aspects of 'promoting healthier populations'

Key aspect	Explanation
Improving human capital across the lifespan	<ul style="list-style-type: none"> Human capital refers to the skills, education and experiences that people possess that are beneficial to the community. The WHO aims to improve human capital so that people are equipped with adequate health knowledge, and can lead healthy lives. The WHO aims to provide interventions and integrated services so that people can access health services across the lifespan and can thrive at any age. The WHO focuses on critical stages of development such as family planning, pregnancy, childbirth, childhood, and adolescence where long-term improvements in health and wellbeing can be achieved. The WHO aims to target young people and attempts to reduce the likelihood of non-communicable diseases, sexually transmitted diseases, and mental health disorders later in life.
Accelerating action on preventing non-communicable diseases and promoting mental health	<ul style="list-style-type: none"> The WHO works to reduce morbidity and mortality from non-communicable diseases by focusing on risk factors and prevention. The main risk factors are tobacco use, alcohol misuse, unhealthy diet and lack of exercise. The WHO supports countries to implement preventative measures and equitable access to effective treatment to reduce the prevalence of non-communicable diseases. The WHO promotes mental health and works to increase access to treatment and care for mental health disorders. The WHO works to prevent road traffic injuries and violence from occurring through cost-effective interventions and campaigns.
Accelerating elimination and eradication of high-impact communicable diseases	<ul style="list-style-type: none"> The WHO aims to prevent, control and eradicate communicable diseases such as malaria, AIDS and tuberculosis through cost-effective and high impact interventions. The WHO supports countries in their elimination efforts of communicable diseases and strengthens their capacity to control disease outbreaks.
Tackling antimicrobial resistance	<ul style="list-style-type: none"> Antimicrobial resistance relates to antibiotics and other antimicrobial medicines becoming increasingly ineffective in treating infections, due to microorganisms such as bacteria, viruses, fungi and parasites changing over time, consequently resisting the effects of medications. The WHO works to coordinate the global effort against antimicrobial resistance, and conducts research and development into new and innovative antimicrobial medicines. The WHO aims to raise awareness of the importance of finding long-term solutions to antimicrobial resistance. They work to promote the correct use of antimicrobial medicines.
Addressing health effects of climate change in small island developing member states and other vulnerable member states	<ul style="list-style-type: none"> The WHO aims to address the health effects of climate change, focusing on nations that are most vulnerable to the increasing climate and pollution-related problems. They particularly aim to protect the most marginalised people who are disproportionately affected by climate change, such as women and children. Women are more likely to live in poverty and be denied basic human rights, such as the ability to acquire land or move as freely, than men. This means that additional support is needed to help them and their children cope with the effects of climate change, such as rising sea levels. The WHO works to implement health systems in vulnerable states so that climate-related diseases can be managed. The WHO aims to raise awareness of the importance of combating climate change, promotes transitioning to more sustainable fuels, and supports scientific evidence being translated into effective climate policies.

ADDITIONAL TERMS

Antimicrobial resistance relates to antibiotics and other antimicrobial medicines becoming increasingly ineffective in treating infections, due to microorganisms such as bacteria, viruses, fungi and parasites changing over time, consequently resisting the effects of medications



Want to know more?

What is antimicrobial resistance?

Antimicrobial resistance occurs when microorganisms such as bacteria, viruses, fungi and parasites change over time to resist the effects of medications. This causes antibiotics and other antimicrobial medicines to become increasingly ineffective in treating infections. This is a cause of major concern, with the WHO declaring antimicrobial resistance to be one of the top ten public health threats facing humanity. Antimicrobial resistance threatens our ability to treat common conditions. For example, it may mean that caesarean sections, hip replacements, cancer chemotherapy, and organ transplants can no longer be conducted safely, because antibiotics and other antimicrobial medicines that prevent and treat infections arising from surgery cannot be administered. This increases the risk of disease spread, illness and death.

The cost of antimicrobial resistance to the economy and the health system is significant. It is expected that by 2050, the additional annual health expenditure due to antimicrobial resistance will be around 1.5 trillion dollars.

Antimicrobial resistance occurs naturally over time due to genetic changes. However, many factors that contribute to the rise of antimicrobial resistance are preventable, such as the misuse and overuse of antibiotics and other antimicrobial medicines, lack of access to clean water, sanitation and hygiene and poor disease prevention and control in healthcare facilities and farms.

This emergence and spread of drug-resistant microorganisms that have developed new resistance mechanisms must be combatted. We need new and innovative antimicrobial medicines to effectively treat drug-resistant infections. More importantly, change must occur in how we use antibiotics so that there is a long-term solution. Without change, new medicines will eventually become ineffective as the microorganisms change, and antimicrobial resistance will remain a major health problem.

Antimicrobial resistance requires multisectoral action and significant investment in medical research and development to find long-term solutions. WHO addresses their priority of *promoting healthier populations* by coordinating the global effort against antimicrobial resistance and developing new and innovative medicines (WHO, n.d.).

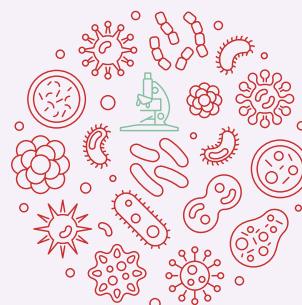


Image: Venomous Vector /Shutterstock.com

Figure 4 The emergence and spread of drug-resistant microorganisms is one of the greatest public health threats facing humanity

ACTIVITY 1

Suggest which priority best relates to the following scenarios. Justify your answer.

- 1 Following a polio outbreak in Papua New Guinea in 2018, the WHO supported the national government in managing the outbreak response. Emergency Operations Centres were opened in 22 provinces of the country and a disease surveillance system was established to identify and monitor vaccine-preventable diseases. The WHO further assisted Papua New Guinea to avoid future outbreaks, with the country launching an integrated vaccination campaign in 2019. The campaign vaccinated 1.28 million children against polio and 1.17 million children against measles-rubella (WHO, 2019).
- 2 To coordinate the global effort to maintain the efficacy of HIV medicines, The WHO developed an HIV drug resistance prevention and assessment strategy that advises countries on how to combat the emergence and transmission of drug-resistant HIV. WHO recommends that countries implement the Global HIV Drug Resistance Action Plan, which is interrelated with the Global Action Plan on Antimicrobial Resistance. The WHO's 2019 HIV drug resistance report revealed significant progress in regards to the surveillance of HIV drug resistance (WHO, 2020).
- 3 In 2018, The WHO supported the Kenyan government to increase access to health services for millions of people. The WHO provided technical assistance related to health financing, contributed to the reform of the national hospital insurance fund, and supported the establishment of a digital health platform in Kenya. A universal health coverage programme was launched in four counties, with 1.6 million more hospital visits recorded in the first year of the campaign. With the help of the WHO, Kenya has also recruited 7700 more community health volunteers, trained over 700 health workers, and built 200 community health units (WHO, 2020).

Work of the WHO 4.2.4.2

OVERVIEW

The WHO works to promote health and wellbeing on a global scale. They address their priorities and aim to achieve their mission and ‘triple billion’ goals by working in partnership with the United Nations, Member states, and top health experts to improve health outcomes for everyone, everywhere.

THEORY DETAILS

The WHO has over 7000 people working in 150 country offices, six regional offices and their head office in Geneva, Switzerland. This reflects the large scale and wide reach of this international organisation that promotes global health and wellbeing.

By providing leadership and creating partnerships between governments, agencies, and partners, the WHO coordinates global efforts to improve health and wellbeing. The WHO works closely with countries and supports them in implementing good health policies and building sustainable health systems. The WHO also monitors health and wellbeing trends, conducts research, and provides norms and standards that should be implemented by governments to promote health. These main functions form the basis of their work in directing and coordinating international health.

There are six examples of the work of the WHO that you must remember. These examples are listed in figure 5.

1	2	3	4	5	6
Provide leadership and create partnerships to promote health and wellbeing	Conduct research and provide health and wellbeing information	Set norms and standards, and promote and monitor their implementation	Develop policies to help countries take action to promote health and wellbeing	Provide technical support and help build sustainable health systems	Monitor health and wellbeing and assess health and wellbeing

Figure 5 Six examples of the work of the WHO

Provide leadership and create partnerships to promote health and wellbeing 4.2.4.2.1

Have you ever been in a group project at school where no one is working together? Without the WHO providing leadership and creating partnerships to promote health and wellbeing, global health efforts would be less effective and would resemble a group project without collaboration or coordination.

There are many global health topics and health issues that must be addressed through collaboration between various parties. The WHO leads global health efforts and ensures that everyone is working together to achieve improved health outcomes. By creating partnerships between the United Nations, member states, top health experts, organisations, agencies, research institutions, and the private sector, these parties are able to work collaboratively and effectively to promote global health and wellbeing under the WHO's leadership.

When more people are working together, improved health outcomes can be achieved more quickly. For example, effective vaccines can be produced for infectious diseases more quickly, or relief efforts in times of disaster can be coordinated more efficiently.

Conduct research and provide health and wellbeing information 4.2.4.2.2

Working collaboratively with academia and research institutions, the WHO conducts research to ensure that the most relevant and current health and wellbeing information is available. Their research enables them to report accurate health and wellbeing information to their partners. This knowledge can then be used to develop health policies, inform decisions that promote health, and advise on how to appropriately prevent, diagnose, manage, and treat communicable and non-communicable diseases.

The WHO would not be able to publish guidelines such as the **Essential Medicines List** or recommend treatment options for common diseases without conducting significant research and development. It is through their research that the WHO have adequate relevant knowledge and expertise to coordinate global health efforts.

Set norms and standards, and promote and monitor their implementation 4.2.4.2.3

It is important to have global health standards across all countries. For example, every country should have the same standards for air and water quality, regardless of whether they are high-income, middle-income or low-income countries. Furthermore, health research must be carried out in a standardised way across countries. This allows for the effective comparison of national health data and information.

The WHO develops and sets norms and standards, and promotes and monitors their implementation. Working collaboratively with governments, the WHO supports countries to meet health standards and use common indicators, methodology, and terminology when conducting health research. They promote the implementation of health standards relating to air and water quality, and the efficacy and safety of medicines in all countries.

Memory device

To help remember all six examples of the work of the WHO, you can think of the mnemonic, **Some People Can Do More Pushups**:

Some – Set norms and standards, and promote and monitor their implementation

People – Provide leadership and create partnerships to promote health and wellbeing

Can – Conduct research and provide health and wellbeing information

Do – Develop policies to help countries take action to promote health and wellbeing

More – Monitor health and wellbeing and assess health and wellbeing trends

Pushups – Provide technical support and help build sustainable health systems.



Image: everything bagel/Shutterstock.com

Figure 6 Some People Can Do More Pushups

ADDITIONAL TERMS

Essential Medicines List is a guide published by the WHO that recommends the medications that a health system needs to function effectively



Real world example

The WHO's Essential Medicines List

It is important that our health system can provide us with essential medicines when we need them. The medicines available to us must be of high quality, safe, cost-effective, and relevant to public health needs. Furthermore, new medicines must be developed when new diseases emerge and resistance patterns change, and these must be supplied to us by our health system.

The Essential Medicines List was first published by the WHO in 1977 as a guide to the medications that a health system needs to function effectively. The list has become a global standard and is used by countries to assist them in developing their own local list of essential medicines. It reflects the work of the WHO as they 'set norms and standards and promote and monitor their implementation.'

The current edition of the Essential Medicines List identifies 460 medicines that together can provide safe and effective treatment for the majority of communicable and non-communicable diseases. The WHO updates the list every two years to remain relevant to the changing health needs of the population and to reflect new therapeutic options.

(WHO, n.d.)



Image: IgorMass/Shutterstock.com

Figure 7 Essential medicines are used to treat a range of communicable and non-communicable diseases

Develop policies to help countries take action to promote health and wellbeing 4.2.4.2.4

Health policies relate to decisions, plans, and actions that are implemented by governments to promote health and wellbeing and increase universal health coverage. The WHO develops health policies, and then supports countries to introduce these policies into their health system. They help governments to adapt health policies to meet their local context so that they can effectively bring about improved health outcomes.

An example of a health policy developed and negotiated by the WHO is the Framework Convention on Tobacco Control. The global treaty protects current and future generations from the devastating impacts of tobacco use, and was adopted by 181 countries.

ACTIVITY 2

What is the WHO Framework Convention on Tobacco Control?

Search 'WHO FCTC 15 Years : Working towards a tobacco-free world' on YouTube and watch the video (WHO FCTC Secretariat, 2020). Then respond to the following questions:

- How many countries adopted the Global Framework Convention on Tobacco Control?
- What are three examples of policies that were implemented to reduce tobacco use? How do these policies promote health and wellbeing?
- How does the Global Framework Convention on Tobacco Control reflect the work of the WHO?

Provide technical support and help build sustainable health systems 4.2.4.2.5

According to the WHO (2013), a health system refers to 'all the activities whose primary purpose is to promote, restore, and/or maintain health.' A health system 'delivers quality services to all people, when and where they need them.'

Sustainable health systems must be able to deliver quality healthcare that meets the needs of the population, even in times of crisis. It is common for unsustainable health systems to collapse during times of natural disaster or conflict, which are when they are most needed.

The WHO provides technical support to assist countries in building sustainable health systems that meet the needs of the population. They strengthen the capacity of governments to exercise effective health systems governance, manage health finance, and implement health strategies. National health systems are strengthened so that they can withstand times of significant pressure and demand, such as times of disaster.

Monitor health and wellbeing and assess health and wellbeing trends 4.2.4.2.6

The WHO monitors health and wellbeing and assesses its trends in the global population. By tracking health data relating to disease prevalence and incidence, the WHO is made aware of the relevant health issues that are of concern and that must be addressed. Therefore, funds and resources can be directed towards where they are needed most.

The WHO also monitors who is becoming sick and how they are falling ill, enabling them to target vulnerable populations and protect them from further morbidity.

Want to know more?

The Global Health Observatory

The Global Health Observatory was developed by WHO and reflects their work of monitoring health and wellbeing and assessing health and wellbeing trends. It provides data on numerous health topics. From road safety statistics to global rates of immunisation, you can spend hours exploring the website and its many different themes (WHO, n.d.). Type the URL who.int/data/gho into your browser to explore the Global Health Observatory.

Theory summary

In this lesson, you learnt about the World Health Organisation and its role in promoting global health and wellbeing as an international organisation. You learnt about how their three strategic priorities and corresponding ‘triple billion’ goals help them to achieve better health for everyone, everywhere. You also learnt about the six examples of the work of the WHO. These main functions of the WHO help them to achieve their mission to promote health, keep the world safe, and serve the vulnerable.



Figure 8 An overview of the mission, priorities, goals and work of the WHO

9D QUESTIONS

Theory-review questions

Question 1

The WHO has a clearly defined mission which it aims to achieve through strategic priorities and goals.

- A True.
- B False.

Question 2

What is the mission of the WHO?

- A Protect the world from disease epidemics.
- B Promote health, keep the world safe, and serve the vulnerable.

Question 3

The WHO has strategic priorities that are addressed by the 'triple billion' goals.

- A True.
- B False.

Question 4

Universal health coverage relates to improving and developing health systems so that people can access healthcare if they can afford it.

- A True.
- B False.

Question 5

Which of the following are actions which address the strategic priority of 'achieving universal health coverage?' (*Select all that apply*)

- I Ensuring that there is a sufficient trained health workforce.
- II Increasing access to vaccines, medicines and health products.
- III Implementing early detection and warning systems for natural disasters.

Question 6

Which of the following are actions which address the strategic priority of 'addressing health emergencies'? (*Select all that apply*)

- I Administering vaccines to prevent disease epidemics.
- II Advocating for increased access to affordable healthcare services.
- III Providing information about how to prevent the spread of COVID-19.

Question 7

Which of the following is an action which addresses the strategic priority of 'promoting healthier populations'?

- A Providing emergency supplies such as tents and blankets to victims of natural disasters.
- B Implementing laws that restrict tobacco use in public areas.
- C Advocating for policies that reduce the cost of healthcare.

Question 8

Which of the following is not an example of the work of the WHO?

- A Developing policies to promote health and wellbeing.
- B Creating partnerships to promote health and wellbeing.
- C Forcing governments to adopt WHO health policies that promote health and wellbeing.

Question 9

The WHO's priorities are completely independent, and achieving one does not affect the achievement of the others.

- A True.
- B False.

Question 10

By addressing their priorities and through their six examples of work, the WHO works to achieve its mission and 'triple billion' goals.

- A True.
- B False.

Skills**Unpacking the case study**

Use the following information to answer Questions 11-13.

Meningitis is a major global public health issue, with 5 million cases each year attributable to this disease. Furthermore, new strains emerge, and spread rapidly between countries and across the world. At the 73rd World Health Assembly, a resolution calling for urgent action on meningitis prevention and control through the implementation of a bold, comprehensive global roadmap was endorsed by Member states. The roadmap outlines actions that must be taken to bring about the accelerated and durable reduction in meningitis cases and deaths by 2030. It focuses on shifting from epidemic preparedness and response to the prevention and elimination of epidemics, promoting improved control of infectious diseases. The roadmap advocates for widespread immunisation programmes, greater focus on strengthening primary healthcare services, and increasing access to disability support. This will help to save lives and reduce suffering in all regions of the world.

Source: adapted from World Health Organisation, *World Health Assembly endorses the 1st ever resolution on meningitis prevention and control*, <<https://www.who.int/news-room/detail/13-01-2021-world-health-assembly-endorses-the-1st-ever-resolution-on-menengitis-prevention-and-control>>

Question 11

The priority 'achieving universal health coverage' is reflected by the statement that

- A 'This will help to save lives and reduce suffering in all regions of the world'.
- B 'The roadmap advocates for widespread immunisation programmes, greater focus on strengthening primary healthcare services, and increasing access to disability support'.

Question 12

The priority 'addressing health emergencies' is reflected by the statement that

- A 'New strains emerge, and spread rapidly between countries and across the world'.
- B 'It focuses on shifting from epidemic preparedness and response to the prevention and elimination of epidemics, promoting improved control of infectious diseases'.

Question 13

The priority 'promoting healthier populations' is reflected by the statement that

- A 'The roadmap outlines actions that must be taken to bring about the accelerated and durable reduction in meningitis cases and deaths by 2030'.
- B 'Meningitis is a major global public health issue, with 5 million cases each year attributable to this disease'.

Exam-style questions**Question 14** (1 MARK)

Describe the WHO priority 'promoting healthier populations.'

Question 15 (1 MARK)

At the WHO 73rd World Health Assembly, health leaders, Member states and the wider community were urged to strengthen preparedness for health emergencies. They were called upon to ensure all countries have adequate resources to effectively detect and respond to infectious diseases such as COVID-19.

Source: adapted from World Health Organisation, *73rd World Health Assembly set to strengthen preparedness for health emergencies*, <<https://www.who.int/news-room/item/10-11-2020-73rd-world-health-assembly-set-to-strengthen-preparedness-for-health-emergencies#>>

Identify the WHO priority reflected in the information above.

Question 16 (2 MARKS)

Outline how achieving universal health coverage can promote human development.

Adapted from VCAA 2017 exam Q11bii

Question 17 (2 MARKS)

The work of the WHO involves ‘providing technical support and helping build sustainable health systems.’ Outline how this contributes to good health and wellbeing.

Question 18 (2 MARKS)

The WHO Mortality Database is a compilation of mortality data that is provided by member states and compiled each year by the WHO. The data is then released to allow researchers to access it. The Mortality Data dashboard gives a snapshot of the mortality profile by country, year, age, sex and cause of death from 1980 to 2019.

Source: adapted from World Health Organisation, *WHO Mortality Database*, <<https://www.who.int/data/data-collection-tools/who-mortality-database>>

Explain how the work of the WHO reflected in the information above improves health status.

Adapted from VCAA 2018 exam Q10a

Question 19 (3 MARKS)

For World No Tobacco Day 2021, the WHO is launching an international campaign called “Commit to Quit.” This campaign aims to create healthy environments that support 100 million people as they try to stop smoking. It will work to increase access to tobacco cessation services, advocate for health policy that restricts tobacco industry tactics, create an interconnected community of quitters, and facilitate successful quit attempts through the implementation of “quit & win” initiatives for tobacco users.

Source: adapted from World Health Organisation, *WHO launches year-long campaign to help 100 million people quit tobacco*, <<https://www.who.int/news-room/item/08-12-2020-who-launches-year-long-campaign-to-help-100-million-people-quit-tobacco>>

Identify and explain one WHO priority reflected in the information above. Use an example from the information above to justify your response.

Adapted from VCAA 2020 exam Q13a

Question 20 (4 MARKS)

Read the following information about tuberculosis (TB).

- TB is an airborne disease caused by bacteria that typically affects the lungs.
- Although TB is preventable and curable, it is one of the leading global causes of death, with an estimated 1.4 million people dying from TB in 2019 worldwide.
- Over 95% of cases and deaths are in low-income countries.
- Symptoms include cough, chest pains, weakness, weight loss, fever and night sweats.
- TB can be treated with antimicrobial drugs that are provided in conjunction with information and support by a trained health worker.
- Early detection of TB through the use of rapid molecular diagnostic tests is recommended by the World Health Organisation.

Source: adapted from World Health Organisation, *Tuberculosis*, <<https://www.who.int/news-room/fact-sheets/detail/tuberculosis>>

Identify two WHO priorities and outline how each could be used to combat the global tuberculosis epidemic.

Adapted from VCAA 2017 exam Q1

Questions from multiple lessons**Question 21** (4 MARKS)

In collaboration with member states and partners, the WHO works to improve mental health, both at the individual and societal level. The WHO aims to promote mental wellbeing, prevent mental disorders and implement mental health policy and legislation.

The WHO also works to improve access to quality mental health care that is considerate of human rights, and sensitive to the complexity of mental health. For example, the WHO Special Initiative for Mental Health was launched in 2019. It aims to increase access to mental health care to 100 million more people living in twelve countries that have insufficient mental health services. So far, the WHO has extended mental health care in over 100 countries.

Source: adapted from World Health Organisation, *Mental health*, <https://www.who.int/health-topics/mental-health#tab=tab_3>

- a Identify a WHO priority reflected in the information above. Using an example from the information above, justify your response. (2 MARKS)
- b Describe how the work of the WHO reflected in the information above contributes to achieving SDG 3 'Good health and wellbeing'. (2 MARKS)

CHAPTER 9 REVIEW

CHAPTER SUMMARY

This chapter was all about international organisations that promote health and wellbeing. You learnt about the United Nations' Sustainable Development Goals, as well as the World Health Organisation.

In **9A: Overview of the Sustainable Development Goals (SDGs)**, you were introduced to the United Nations' Sustainable Development Goals (SDGs). In particular, you learnt about:

- what the SDGs are
- the rationale behind the SDGs
- the objectives of the SDGs.

The rationale of the SDGs summarise the reasons behind the creation of the SDGs and the objectives of the SDGs summarise the overall aim of the goals.

Rationale	Objectives
To continue the work of the MDGs.	End extreme poverty.
To tackle newly emerged global challenges.	Fight inequalities and injustices.
To address the uneven progress of the MDGs.	Address climate change.

In **9B: Key features of SDG 3**, you learnt about SDG 3 'Good health and wellbeing'. You looked broadly at SDG 3 as well as its specific key targets and key features. In particular, you learnt about:

- maternal and child health and wellbeing
- communicable diseases
- non-communicable diseases and other causes of poor health.

In **9C: The relationship between SDG 3 and other SDGs**, you learnt about SDG 1, 2, 4, 5, 6, and 13. In particular, you learnt about:

- what each SDG is and why they are important
- how the achievements of each SDG contribute to the achievement of SDG 3
- each SDG's role in the promotion of health and wellbeing globally
- each SDG's role in the promotion of human development globally.

In **9D: The priorities and work of the WHO**, you learnt about the World Health Organisation (WHO) and the role they play in ensuring good health and wellbeing for all. In particular, you learnt about:

- the three priorities of the WHO
- the work of the WHO.



CHAPTER REVIEW ACTIVITIES

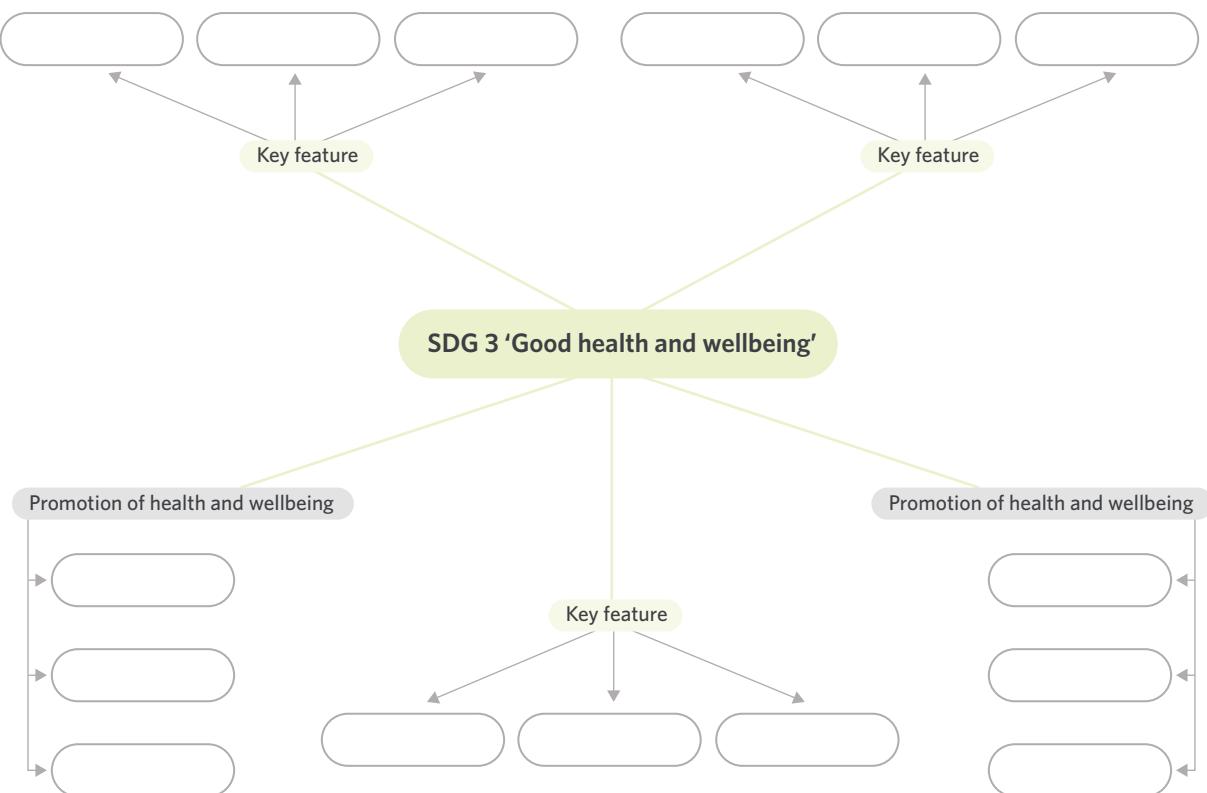
Review activity 1: Summary table

You have learnt a lot about the SDGs. There are many different concepts to understand, which can be challenging. Copy out the table below. Use this table to revise and summarise some of the key concepts you are required to understand relating to the SDGs, SDG 3, health and wellbeing, and human development.

What is the name of this goal?	What does this SDG tackle?	Why is it important?	How does the achievements of this SDG contribute to the achievements of SDG 3?	What is this SDG's role in the promotion of health and wellbeing globally?	What is this SDG's role in the promotion of human development globally?
SDG 1					
SDG 2					
SDG 4					
SDG 5					
SDG 6					
SDG 13					

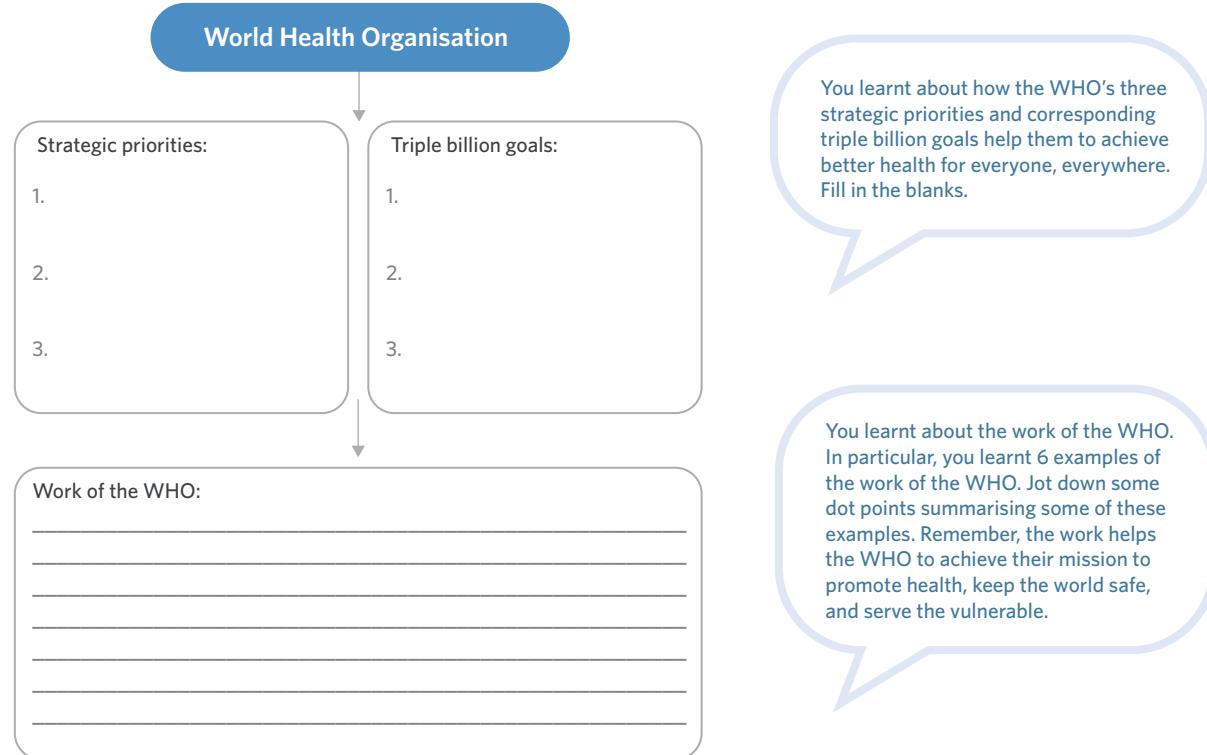
Review activity 2: Create a mind map

A large focus of this chapter is SDG 3 'Good health and wellbeing'. For SDG 3 there are many things you need to know. Mind maps can be helpful revision tools to visually represent your knowledge. Copy out the mind map skeleton below or create your own. You might like to use different coloured pens or highlighters to group content or make connections.



Review activity 3: Flow chart

Copy out the flow chart and fill in the blanks, summarising the key concepts relating to what you learnt about the World Health Organisation. Do you remember the 3 strategic priorities and the triple billion goals? Can you remember some examples of the work of the WHO?



CHAPTER 9 TEST

Question 1 (4 MARKS)

Describe what the rationale and the objectives of the United Nations' Sustainable Development Goals are.

Question 2 (4 MARKS)

One of the WHO priorities is to achieve universal health coverage.

- a Outline what achieving universal health coverage means and explain what it involves. (2 MARKS)
- b Identify the other two WHO priorities. (2 MARKS)

Question 3 (4 MARKS)

In February 2021, for the first time since the last 2016 outbreak, Ebola virus broke out in the Republic of Guinea. The WHO is assisting the Guinean government in their response to the health emergency. The WHO is assisting the government in setting up testing and treatment structures, along with assistance in obtaining medical supplies, vaccines, therapeutics, and diagnostic capacities to quickly contain the outbreak.

Source: adapted from World Health Organisation, *Ebola, N'Zerekore, Guinea 2021*, <<https://www.who.int/emergencies/situations/ebola-2021-nzerekore-guinea>>.

- a Identify one WHO priority reflected in the information above. Using an example from the information, justify your response. (2 MARKS)
- b Describe how the work of the WHO reflected in the information above contributes to achieving SDG 3 'Good health and wellbeing'. (2 MARKS)

Question 4 (2 MARKS)

In 2015, The United Nations established 17 Sustainable Development Goals. 'Fight inequalities and injustice' is one of the three objectives of the SDGs. Explain why this objective is important.

Adapted from VCAA 2020 exam Q6C

Question 5 (3 MARKS)

SDG 3 is titled 'Good health and wellbeing'.

- Identify one key feature of SDG 3. (1 MARK)
- Explain the key feature identified in part a and outline one example of how health professionals address this key feature. (2 MARKS)

Question 6 (2 MARKS)

Achieving universal health coverage is a priority of the WHO. Outline how achieving universal health coverage can improve health and wellbeing globally.

Adapted from VCAA 2017 exam Q11bii

Question 7 (4 MARKS)

In mid 2018, the WHO Director-General announced a global call for action to eliminate cervical cancer, a disease that is a preventable and treatable disease, as long as it is detected early enough. Despite the fact that it is so manageable, cervical cancer is the fourth most common form of cancer among women, with more than 300,000 women dying from it worldwide in 2018.

In August 2020 the World Health Assembly adopted the 'Global Strategy for cervical cancer elimination'. Achieving that goal rests on the achievement of three key targets. Each country should meet the following targets by 2030 to aim to eliminate cervical cancer in the next century:

- Vaccination: '90% of girls fully vaccinated with the HPV vaccine by the age of 15'.
- Screening: '70% of women screened using a high-performance test by the age of 35, and again by the age of 45'.
- Treatment: '90% of women with pre-cancer treated and 90% of women with invasive cancer managed'.

Source: adapted from World Health Organisation, *Cervical Cancer*, <https://www.who.int/health-topics/cervical-cancer#tab=tab_2>.

- Identify one WHO priority reflected in the information above. Use an example from the information above to justify your response. (2 MARKS)
Adapted from VCAA 2020 exam Q13a
- Identify an example of the work of the WHO that is reflected in the information above and explain how this contributes to the promotion of health and wellbeing globally. (2 MARKS)

Question 8 (4 MARKS)

- Identify what SDG 6 is and explain what it aims to achieve. (2 MARKS)
- Outline two reasons why the achievement of SDG 6 is important. (2 MARKS)

Question 9 (3 MARKS)

Describe one way in which the achievement of SDG 1 'No poverty' contributes to the achievement of SDG 3 'Good health and wellbeing'.

Question 10 (3 MARKS)

Addressing health emergencies is one of the priorities of the WHO.

- Outline what is meant by addressing health emergencies. (1 MARK)
- Using one example, explain how addressing health emergencies can promote human development. (2 MARKS)

Adapted from VCAA 2017 exam Q11b

Questions from multiple chapters**Question 11** (5 MARKS)

The United Nations' SDGs are underpinned by the three dimensions of sustainability, which are social, environmental, and economic.

- a Explain what is meant by 'sustainability'. (1 MARK)

Adapted from VCAA 2018 exam Q12d

- b Using an example, describe the social dimension of sustainability. (2 MARKS)

- c Explain how social sustainability underpins the achievement of the objective 'fight inequality and injustice'. (2 MARKS)

Adapted from VCAA 2020 exam Q6c

CHAPTER**10****Effective aid programs and Australia's aid****10A Different types of aid****10B Australia's aid program****10C The role of non-government organisations****10D Effective aid programs that address the SDGs****10E Taking social action****Key knowledge**

- the purpose and characteristics of different types of aid including emergency, bilateral and multilateral
- features of Australia's aid program including its priority areas and the types of partnerships involved
- the role of non-government organisations in promoting health and wellbeing, and human development
- features of effective aid programs that address the SDGs, and examples of effective implementation, with details of one such program including:
 - its purpose and the SDG/s addressed,
 - details of implementation and the partnerships involved,
 - contribution to promoting health and wellbeing, and human development
- ways in which individuals can engage with communities and/or national and international organisations to take social action that promotes health and wellbeing

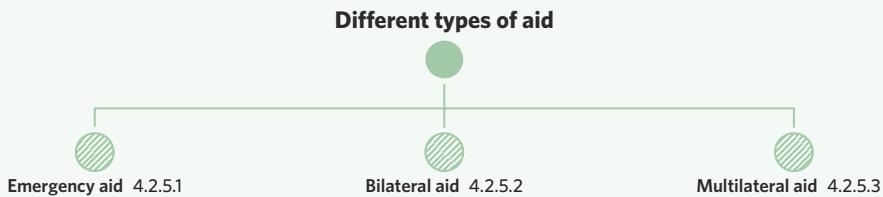
10A DIFFERENT TYPES OF AID

What happens when a natural disaster occurs? How do affected individuals get the support they need to meet their immediate needs, as well as recover over time from any damage? The provision of aid can occur in many ways, but there are three main types of aid. In this lesson, you will learn about these types of aid, specifically learning about the purpose and characteristics of each.



Image: BRO.vector/Shutterstock.com

10A Different types of aid	10B Australia's aid programs	10C The role of non-government organisations	10D Effective aid programs that address the SDGs	10E Taking social action
Study design dot point				
<ul style="list-style-type: none"> the purpose and characteristics of different types of aid including emergency, bilateral and multilateral 				
Key knowledge units				
Emergency aid				4.2.5.1
Bilateral aid				4.2.5.2
Multilateral aid				4.2.5.3



Emergency aid 4.2.5.1

OVERVIEW

Following the occurrence of natural disasters and other emergencies, it is important that people who have been affected quickly receive emergency aid that meets their immediate needs.

THEORY DETAILS

Emergency aid is one of the types of aid covered by **Official Development Assistance (ODA)**, which refers to aid provided by governments to promote the economic development and welfare of low-income and middle-income countries. This aid is typically provided by high-income countries, and can be provided in three ways:

- emergency aid/humanitarian aid or assistance
- bilateral aid
- multilateral aid.

In this lesson, you will learn about the three types of aid provided as part of ODA by high-income countries, such as Australia. For each type of aid, you will learn about its purpose and characteristics. Although each type of aid operates in different ways and has different purposes, all types of aid aim to help those in need, mainly by improving health outcomes, health and wellbeing, and human development.

Study design key skills dot point

The following key skills dot point applies to the whole lesson:

- describe and justify different types of aid

ADDITIONAL TERMS

Official Development Assistance (ODA) refers to aid provided by governments to promote the economic development and welfare of low-income and middle-income countries

! Useful tip

Although ODA is typically provided to low- and middle-income countries, it can also at times be provided to high-income countries when they require emergency aid in the face of an emergency or crisis.

Emergency aid refers to short-term aid provided after an emergency or crisis. The term emergency aid is used interchangeably with humanitarian aid or humanitarian assistance. Emergency aid is provided after a country experiences an emergency or crisis.

! Useful tip

It is important to remember that emergency aid is also known as humanitarian aid or humanitarian assistance as these terms have been used interchangeably by VCAA in past Health and Human Development exams.

There are many types of emergencies and crises which can be addressed by emergency aid. These include a/an:

- earthquake
- tsunami
- flood
- bushfire
- drought
- conflict and war
- health emergencies, such as the **AIDs epidemic**.



Images: Seahorse Vector, Irina Danyliuk/Shutterstock.com

Figure 2 Some examples of emergencies and crises where emergency aid may be provided

In the face of these emergencies and crises, there is likely to be low levels of health and wellbeing among the affected population. This is due to individuals likely suffering from the loss of community members; being injured, sick, or stressed; and having their physical environment, such as their house, damaged and in need of repair. To meet the immediate needs of these individuals and ensure that more damage does not occur, it is vital that emergency aid is implemented rapidly after the emergency occurs.

The purpose of emergency aid is to reduce the prevalence of injury, disease, and death that occurs due to the emergency or crisis, promote health and wellbeing, and address the needs of those affected by the emergency, such as the need for temporary shelter.

Emergency aid can be provided by multiple different groups. This includes, but is not limited to, governments and non-government organisations. Therefore, in the face of an emergency, multiple countries may work together to provide a country with the emergency aid they need. There are many ways in which emergency aid can be provided. These are outlined in table 1.

KEY DEFINITIONS

Emergency aid (also known as humanitarian aid and humanitarian assistance) refers to short-term aid provided after an emergency or crisis



Figure 1 Emergency aid is the first type of aid that we will learn about in this lesson

ADDITIONAL TERMS

AIDs refers to acquired immunodeficiency syndrome and is the most advanced stage of the HIV infection, which damages and weakens the body's immune system

Epidemic refers to a widespread occurrence of an infectious disease within a certain community at a certain time

Table 1 Ways in which emergency aid can be provided

Provisions of emergency aid	Explanation
Food	<ul style="list-style-type: none"> Emergencies, such as floods and bushfires, may prevent access to food sources as crops may be destroyed. Providing food to those in the community immediately after the disaster has occurred ensures that they don't go hungry.
Shelter	<ul style="list-style-type: none"> Natural disasters, such as tsunamis and earthquakes, may damage properties and homes, leaving people without a place to sleep. Providing short-term accommodation helps people until they can rebuild their homes or find somewhere else to live. Individuals often have to flee in the face of war and conflict to escape violence, with short-term shelter often established for those who flee from their homes.
Water	<ul style="list-style-type: none"> Natural disasters, such as floods and tsunamis, can lead to contamination of water supplies, leading to an inability to access safe and clean water to drink, cook with, and use for bathing. Providing clean and safe water addresses this problem.
Medical care and supplies	<ul style="list-style-type: none"> Some natural disasters, such as earthquakes, as well as other health emergencies, such as the AIDS epidemic, are likely to cause injuries or diseases that require care. This can overwhelm the health system and lead to hospitals and healthcare providers running out of supplies, such as hospital beds, medications, and bandages. These medical resources can be provided by emergency aid.
Healthcare workers and medical personnel	<ul style="list-style-type: none"> In some health emergencies and natural disasters, the healthcare system can be overwhelmed to the point that there are not enough healthcare workers to help those in need of medical assistance. In these times, healthcare workers and medical personnel from other countries and non-government organisations may provide short-term assistance.
Clothing and hygiene resources	<ul style="list-style-type: none"> During natural disasters, such as floods and bushfires, people may lose all their belongings. During these times, emergency aid can provide people with clothes and hygiene resources, such as soap.

Overall, the *characteristics* of emergency aid include that the aid:

- is provided for a short period of time and is not designed to provide ongoing and sustainable solutions.
- is provided rapidly after an emergency or crisis.
- often involves the provision of basic necessities, such as food, water, shelter, medicines, and medical assistance by healthcare workers.
- is implemented after an emergency or crisis, such as a health crisis or natural disaster.

Real world example

In August 2020, the capital city of Lebanon Beirut experienced a devastating explosion after a warehouse fire led to a fuel tank exploding. At least 200 lives were lost and more than 6,000 people experienced injuries (Department of Foreign Affairs and Trade [DFAT], n.d.). Shockwaves from the explosion resulted in major damages to infrastructure, with much of the infrastructure within a 5km radius of the explosion destroyed. More than 300,000 people were left homeless.

In response to the explosion, the Australian government provided \$5 million in immediate humanitarian assistance (DFAT, n.d.). \$2 million of this funding was provided to the World Food Programme to supply food to those affected by the explosion. Australia also sent an aircraft full of humanitarian supplies, such as medical equipment, to Beirut. This emergency aid helped to somewhat reduce the devastating impact of the explosion.



Image: JossK/Shutterstock.com

Figure 3 Infrastructure damage from the Beirut explosion meant that many individuals were left without a place to live

Lesson link

In lesson **7A: Classifying countries**, you learnt about high-, middle-, and low-income countries. Although all countries may require emergency aid in the face of a disaster, emergency aid is particularly necessary for low-income countries. This is because low-income countries are likely to have high levels of debt and high levels of poverty on account of their citizens' low average incomes. This means that their governments are unlikely to have the financial resources to provide adequate assistance to these countries' citizens in the wake of an emergency or crisis. As such, it is important for other countries, mainly high-income countries, to help citizens in low-income countries during these times of need.

Bilateral aid 4.2.5.2

OVERVIEW

Bicycle. Billionaire. Bilateral. What do all these words have in common? The prefix ‘bi’ translates to two. Understanding this can help us to remember that bilateral aid involves two countries, one country that provides aid and one country that receives aid.

THEORY DETAILS

When emergencies are not occurring, is there no need for aid to be provided? The answer to this question is no. Some countries, mainly low-income countries, have ongoing needs, even when they are not currently experiencing an emergency. These countries can receive bilateral or multilateral aid to address these ongoing needs. This section will focus on bilateral aid.

Bilateral aid refers to the government of one country directly providing aid to the government of another country. As such, it involves a relationship between two countries: the country receiving aid and the country providing aid. Typically, the country receiving aid is a low-income country, while the country providing aid is a high-income country.

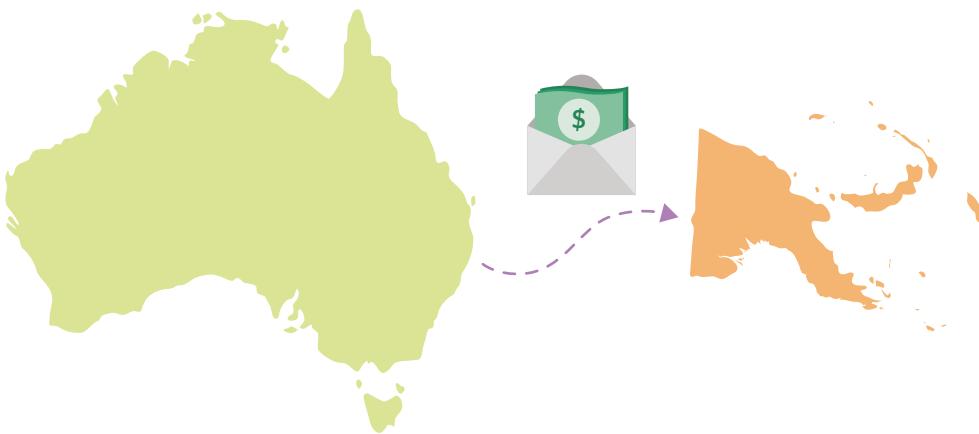


Image: octopusaga/Shutterstock.com

Figure 5 Australia provides bilateral aid to Papua New Guinea

! Useful tip

It can be difficult to understand the difference between emergency aid and bilateral aid, particularly when emergency aid is being provided by one country and received by another. Although this may seem like bilateral aid, because the aid provided in an emergency is short-term and involves providing basic necessities, it is emergency aid, rather than bilateral aid. As such, when distinguishing between emergency aid and bilateral aid, focus on the duration of time that aid is being provided for. Emergency aid is only provided for a *short* period of time, while bilateral aid is provided for a *longer* period of time.

There are many ways in which bilateral aid can be provided. Some examples include providing medical resources to immunise a small village in need, working with the government of the receiving country to improve education programs, training local healthcare workers, and providing finances and gathering materials to improve infrastructure, such as roads.

The *purpose* of bilateral aid is therefore to improve health status outcomes and health and wellbeing, and meet the needs of individuals in an ongoing and sustainable way. Bilateral aid also aims to enhance the economic growth of the receiving country so that they are equipped to function without aid in the future.

Overall, the *characteristics* of bilateral aid include that the aid:

- is provided for a longer period of time (compared to emergency aid).
- aims to be sustainable in the long term by empowering the country with the skills and knowledge they need to carry out behaviours so that they can function without aid in the future.
- involves resources other than basic necessities being provided, such as financial support and advice to improve infrastructure and education.

KEY DEFINITIONS

Bilateral aid refers to the government of one country directly providing aid to the government of another country



Figure 4 Bilateral aid is another type of aid that we will learn about in this lesson

**Want to know more?**

Will countries receiving bilateral aid continue to receive bilateral aid in the future? Although there may be a need for ongoing support due to new challenges arising in the future, bilateral aid is not intended to be provided for a single issue forever. This is because bilateral aid aims to provide assistance and education to a low-income country, which equips the country with the ability to meet the need without assistance from other countries in the future. For example, if a country is receiving bilateral aid to establish a quality healthcare system, the aim is to educate groups and individuals in the recipient country so that they can manage and continue to develop a quality healthcare system in the future without support from another country.

**Real world example****Australia's bilateral aid relationship with Papua New Guinea**

Australia has an ongoing relationship with its closest neighbouring country, Papua New Guinea (PNG).

The relationship has been strengthened by Australia being PNG's largest development supporter, providing bilateral aid in many different ways over the years.

The three focuses of the bilateral aid is to promote effective governance, enable economic growth, and enhance human development (DFAT, 2019).

Australia's bilateral aid allocation for PNG between 2021–2022 is estimated at \$480 million (DFAT, n.d.).

One example of bilateral aid provided by Australia is the Papua New Guinea-Australia Transport Sector Support Program (TSSP), which is a twenty-year program to develop PNG's transport sector (DFAT, 2019).

This program involves Australia assisting PNG to deliver road maintenance and direct funding to roadworks.

In 2018 alone, TSSP involved a cost of approximately \$57.5 million (DFAT, 2019).



Image: travfoto/Shutterstock.com

Figure 6 The provision of safe roads through the TSSP in PNG may help to reduce road accidents

ACTIVITY 1

As a class, discuss how the Papua New Guinea-Australia Transport Sector Support Program (TSSP) may:

- improve health status outcomes in PNG.
- impact the health and wellbeing of PNG citizens.
- influence human development in PNG.

Multilateral aid 4.2.5.3**OVERVIEW**

Multi is defined as many more than one. As such, we can understand multilateral aid to involve international organisations that are funded and supported by multiple (two or more) countries and organisations.

THEORY DETAILS

Multilateral aid is provided through an international organisation, such as the United Nations, which is supported by the governments of multiple countries and other organisations to address global issues and large scale projects. International organisations which typically provide multilateral aid include the United Nations (UN) and the World Health Organisation (WHO), who provide the aid to a country or cause, with the international organisation being supported by countries and organisations. Although multilateral aid is supported by multiple (more than two) countries and other organisations, it is provided by an international organisation, which acts on behalf of all the member countries and organisations.

KEY DEFINITIONS

Multilateral aid is provided through an international organisation, such as the United Nations, which is supported by the governments of multiple countries and other organisations to address global issues and large scale projects



Figure 7 Multilateral aid is the last type of aid that we will learn about in this lesson

But how does multilateral aid actually work? Many countries, particularly high-income countries that have the capacity to help other countries, are often members of international organisations, such as the WHO, UN, and World Bank. To be members of these international organisations, countries often pay a recurring amount of money, which the international organisation uses to tackle big issues. In other words, the international organisations can use the money they have collected from the member countries to address issues, such as poverty, in low-income countries. Typical multilateral aid therefore involves international organisations providing aid to global issues, with the international organisation having the ability to provide aid because they are financially supported by their member countries. In some circumstances, countries and other organisations, such as banks, may provide one-off support to the international organisation to assist in a particular global issue or large-scale project that they are passionate about.



Figure 8 How multilateral aid is provided

Multilateral aid can either be provided directly by the international organisation to the recipient country, or can be provided first to charities or other organisations, which then provide the aid to the recipient country. For example, in the past, the WHO has provided financial resources to the World Food Programme, which provides food assistance to those in need. This financial assistance was able to be provided by the WHO due to the recurring money that member countries supplied to the WHO.

Useful tip

To remember the difference between multilateral and bilateral aid, focus on the number of stakeholders involved. During bilateral aid, aid is provided by one country to a recipient country, therefore involving two countries. During multilateral aid, aid is provided by an international organisation that is supported by two or more countries and other organisations, to a recipient country, therefore involving *more than* two stakeholders.

Beyond the number of stakeholders, you also need to remember how each type of aid is provided. Bilateral aid is provided by the government of one country directly to the government of another country. Multilateral aid is instead provided by an international organisation that the governments of multiple countries support. However, multilateral aid does *not* involve a recipient country receiving aid directly from the governments of multiple independent countries at one time as this does not go through an international organisation. This instead would involve a country receiving bilateral aid from multiple countries at the one time.

The purpose of multilateral aid is therefore to address global issues and large scale projects, such as global warming, war, and food security, and to prevent disease and death. These global issues include addressing malaria prevention and emergency relief. Due to multilateral aid involving the collaboration between multiple countries and organisations, this type of aid more effectively addresses large-scale issues compared to bilateral aid.

Overall, the characteristics of multilateral aid include that the aid:

- addresses large-scale issues, such as global poverty.
- is provided for a longer period of time (compared to emergency aid).
- is provided in a sustainable way.
- involves collaboration between many countries (two or more) and organisations and is provided by an international organisation.

Lesson link

In lesson **10C: The role of non-government organisations**, you will learn about the role of non-government organisations (NGOs) in promoting health and wellbeing and human development. It is important to know that aid can also be provided by NGOs. This aid often works alongside emergency, bilateral, and multilateral aid.


Real world example
Multilateral aid provided by Gavi, the Vaccine Alliance

Gavi, the Vaccine Alliance is an international organisation which aims to reduce preventable deaths, particularly among children, by providing low-income countries with access to vaccines.

Gavi has been providing aid for more than 15 years, with the 2016–2020 strategy being Gavi's fourth phase of aid (Gavi, 2021). Gavi provides multilateral aid as it is funded by many countries, as well as organisations, such as the WHO, the World Bank, UNICEF, and the Bill and Melinda Gates Foundation. Australia is one of the countries that works with Gavi and pledged \$250 million for the 2016–2020 Gavi strategy.

Gavi works with countries all around the world.

Some of the objectives of the 2016–2020 strategy included to increase the number of immunisations and ensure that the provision of immunisations was equitable to enable countries to access vaccines, and to provide vaccines to children in low-income countries (Gavi, 2021). Through these actions and others, Gavi hopes to reduce the under-five mortality rate and enhance life expectancy in the countries it provides aid to.



Image: Roger Brown Photography/Shutterstock.com

Figure 9 GAVI was created in 2000 to increase access to vaccines

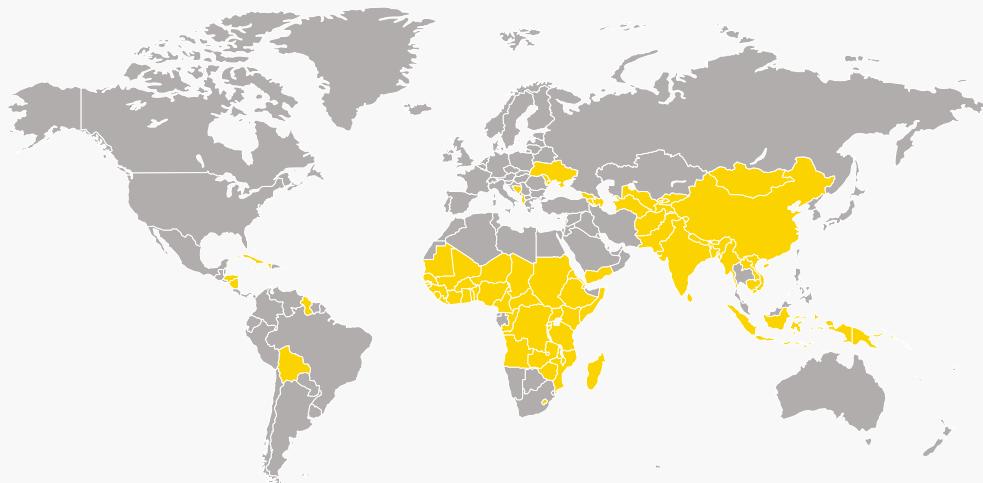
ACTIVITY 2


Image: Andrei Minsk/Shutterstock.com

The graph illustrates the countries that Gavi provides aid to. Type the URL gavi.org/programmes-impact/country-hub and look at the supported countries (Gavi, 2021). Choose one country and go to the 'Read more' section. For your chosen country look at the:

- infant and under-five mortality rate.
- gross national income per capita.
- % of districts achieving > 80% DPT3 (immunisation) coverage in 2018.
- total disbursements between 2000–2019 in US \$.

Using this information, consider the following:

- How may vaccines provided by Gavi impact infant and under-five mortality rates in the country?
 - You can Google if the infant and under-five mortality rates have decreased since Gavi started providing aid to the country and suggest how Gavi contributed to this change in health status.
- The World Bank classification of the country.
- The amount of aid the country has received by Gavi.
 - You can Google the ideal '% of districts achieving > 80% DPT3 (immunisation) coverage' and discover if the country is close to reaching this ideal.
- In which ways might Gavi have impacted human development and health and wellbeing in the country.

Theory summary

In this lesson, you learnt about the three different types of aid: emergency aid, bilateral aid, and multilateral aid. For each type of aid, you learnt about the purpose and characteristics of each type of aid. The three types of aid, and their purpose and characteristics, are outlined in table 2.

Table 2 Summary of the types of aid that you learnt about in this lesson

Emergency aid (also known as humanitarian aid and humanitarian assistance)	
Description	Short-term aid provided after an emergency or crisis
Purpose	To reduce the prevalence of injuries, diseases, and deaths occurring from the emergency, promote health and wellbeing, and address the needs of those affected by the emergency
Characteristics	<ul style="list-style-type: none"> • Provided for a short period of time • Provided rapidly after an emergency • Involves the provision of basic necessities • Implemented after an emergency or crisis
Bilateral aid	
Description	The government of one country directly providing aid to the government of another country
Purpose	To improve health status outcomes and health and wellbeing and meet the needs of individuals in an ongoing and sustainable way
Characteristics	<ul style="list-style-type: none"> • Provided for a longer period of time • Aims to be sustainable in the long term • Provides resources other than basic necessities, such as financial assistance
Multilateral aid	
Description	The aid provided through an international organisation, such as the United Nations, which is supported by the governments of multiple countries and other organisations to address global issues and large scale projects
Purpose	To address global issues and large scale projects, such as global warming, war, and food security, and prevent disease and deaths
Characteristics	<ul style="list-style-type: none"> • Addresses large-scale issues • Provided for a longer period of time • Provided in a sustainable way • Involves collaboration through many countries and organisations and is provided by an international organisation

10A QUESTIONS

Theory-review questions

Question 1

Although different types of aid have different characteristics and different purposes, they all have the same overarching aim to help those in need.

- A True.
B False.

Question 2

Which of the following are circumstances in which emergency aid may be provided? (Select all that apply)

- I Natural disasters, such as earthquakes.
II War.
III Health emergencies.

Question 3

Emergency aid is provided (Select all that apply)

- I for a short period of time.
- II immediately after a crisis.
- III for a long period of time.

Question 4

Which of the following best fills in the blank?

- A three
- B two

Bilateral aid involves _____ countries.

Question 5

Who provides multilateral aid?

- A An international organisation which has many members, such as countries and organisations.
- B Multiple independent countries at the same time.

Question 6

Which countries are more likely to provide aid?

- A Low-income countries.
- B High-income countries.

Skills**Data analysis**

Use the following information to answer Questions 7–9.

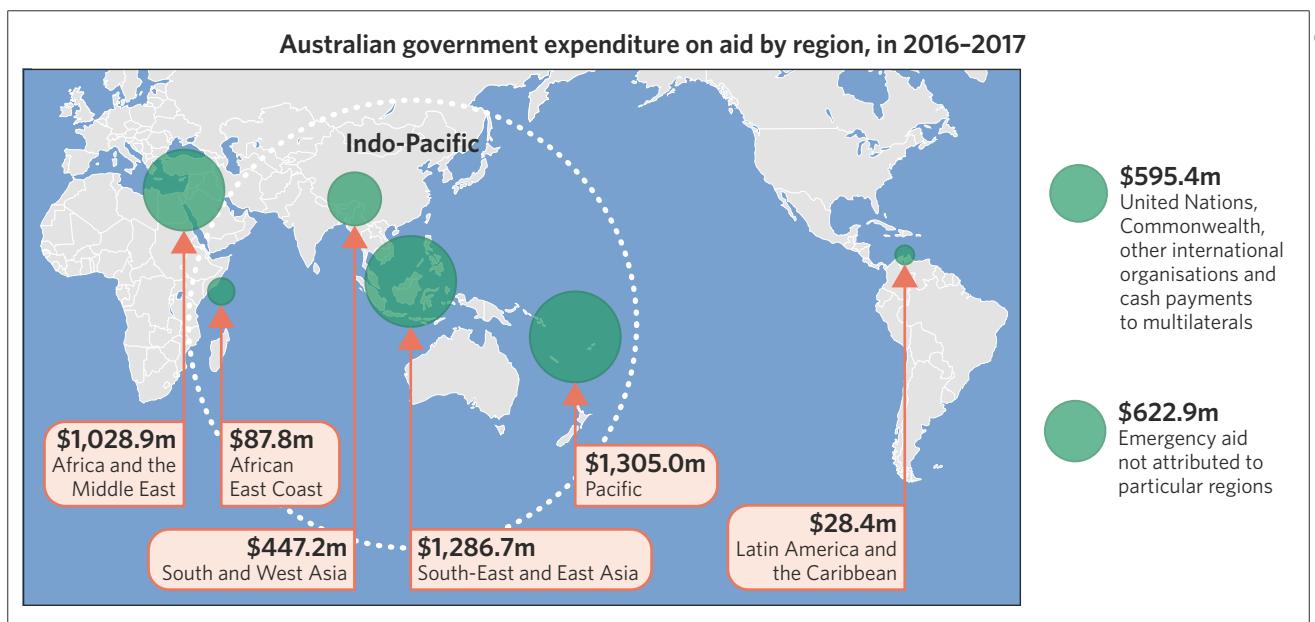


Image: Andrei Minsk/Shutterstock.com

Question 7

How much financial assistance through bilateral aid did the African East Coast receive from the Australian government?

- A \$87.8 million.
- B \$622.9 million.
- C \$1,028.9 million.

Question 8

Which region received the greatest amount of bilateral aid from the Australian government in 2016–2017?

- A Latin America and the Caribbean.
- B The Pacific.
- C Africa and the Middle East.

Question 9

Identify which of the following statements about the data is correct. (*Select all that apply*)

- I The Australian Government provided a greater amount of financial assistance for emergency aid than multilateral aid.
- II The Australian Government provided more financial bilateral aid to South and West Asia than South-East and East Asia.
- III The Australian Government did not provide any multilateral aid.

Exam-style questions**Question 10** (1 MARK)

Describe emergency aid.

Question 11 (2 MARKS)

Compare bilateral and multilateral aid.

Question 12 (3 MARKS)

Gavi, the Vaccine Alliance, is an international organisation that aims to reduce preventable deaths, particularly among children, by providing low-income countries with access to vaccines.

Number of children immunised by Gavi
(in millions)

2018: 66m	2019	2020 target: 300m
198m		

Source: adapted from Gavi, 2016–2020 Mission indicators, <<https://www.gavi.org/our-impact/measuring-our-performance/2016-2020-indicators/mission>>

- a Identify the type of aid that is evident in the case study. (1 MARK)
- b Suggest how the work of Gavi may influence the health status of recipient countries. (2 MARKS)

Question 13 (4 MARKS)

The Australian government provides ongoing assistance to Indonesia, with more than \$250 million allocated to Indonesia in 2021–2022. Focuses of Australian aid for Indonesia include strengthening education systems to ensure all Indonesia children have access to quality education, strengthening the social protection systems, and enhancing food security.

The Australian government has also provided additional assistance to Indonesia when they have experienced times of disaster. For example, after the Indian Ocean tsunami in December 2004, the Australian government provided an initial \$60 million to help Indonesia in the first week after the tsunami. This assistance included providing medical equipment to assist in saving the lives of those who were seriously injured.

Source: adapted from the Department of Foreign Affairs and Trade, *Development partnership in Indonesia*, <<https://www.dfat.gov.au/geo/indonesia/development-assistance/development-assistance-in-indonesia>>

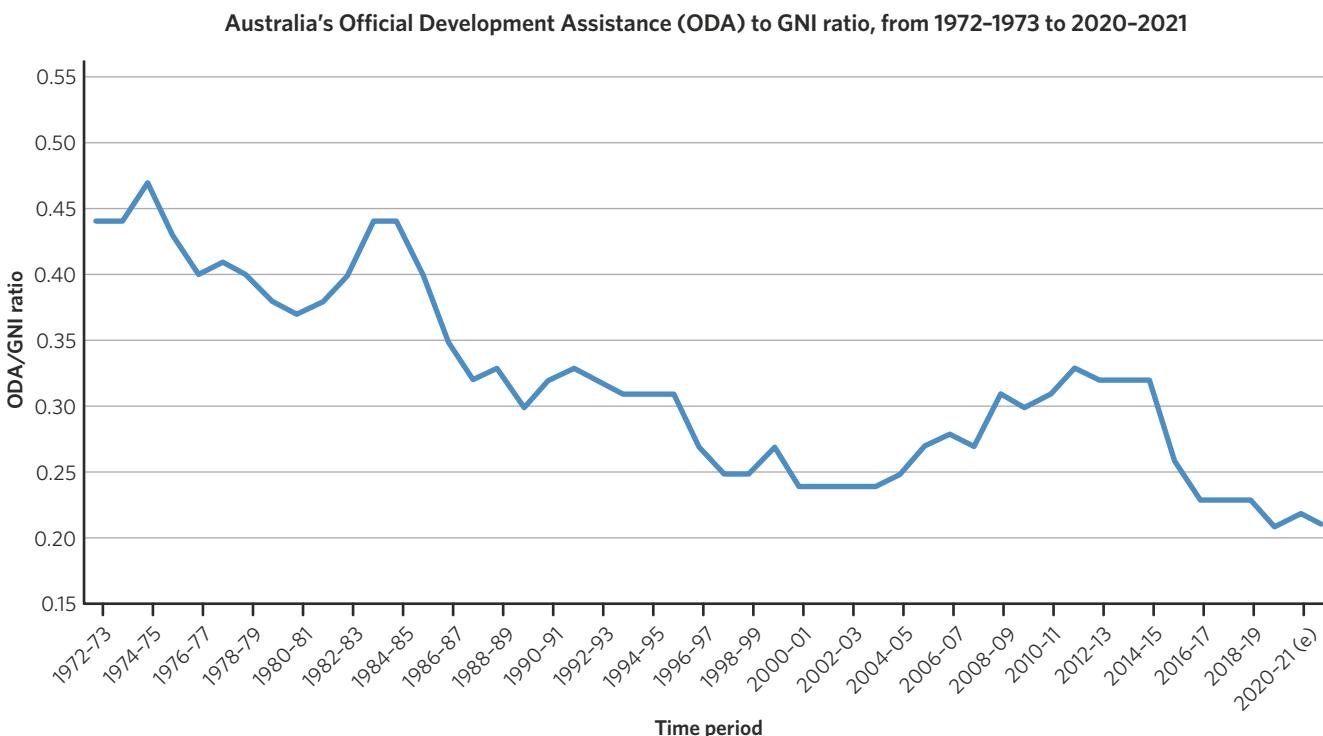
Complete the table by identifying two different types of aid that the Australian government provides to Indonesia and justifying how these types of aid are evident in the case study.

Type of aid	Evidence in the case study

Adapted from VCAA 2019 exam Section B Q6d

Question 14 (4 MARKS)

Australia's Official Development Assistance (ODA) to gross national income (GNI) ratio is a measure of government expenditure on aid, with a greater ratio indicating a greater level of spending on ODA as a proportion of overall government spending.



Source: adapted from the Parliament of Australia, *Australia's foreign aid budget 2020–21*, <https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/BudgetReview202021/AustraliasForeignAidBudget>

- a Identify a trend evident in the graph. (2 MARKS)
- b Identify a type of aid and explain how it could promote the health and wellbeing of the country receiving Official Development Assistance from Australia. (2 MARKS)

Adapted from VCAA 2010 exam Part A Q10b

Question 15 (4 MARKS)

- a Outline the purpose of multilateral aid. (1 MARK)
- b Outline a characteristic of multilateral aid. (1 MARK)
- c Suggest how the provision of multilateral aid could promote human development in the country receiving aid. (2 MARKS)

Questions from multiple lessons**Question 16** (6 MARKS)

Australia provides numerous aid programs to Kiribati, a small country in the Pacific. One of these programs is the Kiribati Education Improvement Program, which Australia has pledged \$91 million to between 2011 and 2022. The aim of this program is to ensure that all girls and boys in Kiribati have access to a quality education. The program focuses on improving literacy and numeracy skills among Kiribati children, as well as educating the children on hygiene practices, particularly during COVID-19.

Source: adapted from the Department of Foreign Affairs and Trade, *Australia's aid program to Kiribati*, <<https://www.dfat.gov.au/geo/kiribati/development-assistance/development-assistance-in-kiribati/#health>>

- a Identify the type of aid evident in the case study. (1 MARK)
- b Outline a characteristic of the type of aid identified in part a and explain how it is present in the case study. (2 MARKS)
- c Explain how the aid provided by the Australian government to Kiribati could contribute to the achievement of an SDG other than SDG 3. (3 MARKS)

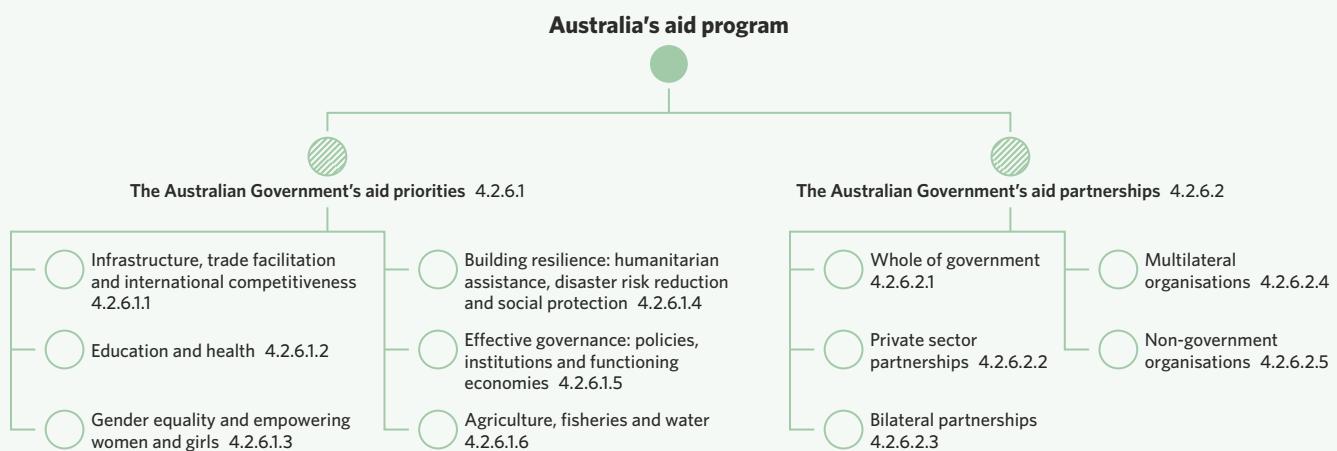
10B AUSTRALIA'S AID PROGRAM

Do you ever think about Australia's impact around the world? As a high-income country with quality education and healthcare, Australia has the ability to help other nations improve their development for better living. In this lesson, you will unpack Australia's aid program and discover its importance for promoting human development and optimal health and wellbeing in many countries around the world.



Images: Alivepix, palpitation/Shutterstock.com

10A Different types of aid	10B Australia's aid program	10C The role of non-government organisations	10D Effective aid programs that address the SDGs	10E Taking social action
Study design dot point				
<ul style="list-style-type: none"> • features of Australia's aid program including its priority areas and the types of partnerships involved 				
Key knowledge units				
The Australian Government's aid priorities				4.2.6.1
Infrastructure, trade facilitation and international competitiveness				4.2.6.11
Education and health				4.2.6.1.2
Gender equality and empowering women and girls				4.2.6.1.3
Building resilience: humanitarian assistance, disaster risk-reduction and social protection				4.2.6.1.4
Effective governance: policies, institutions and functioning economies				4.2.6.1.5
Agriculture, fisheries and water				4.2.6.1.6
The Australian Government's aid partnerships				4.2.6.2
Whole of government				4.2.6.2.1
Private sector partnerships				4.2.6.2.2
Bilateral partnerships				4.2.6.2.3
Multilateral organisations				4.2.6.2.4
Non-government organisations				4.2.6.2.5



ACTIVITY 1 - CLASS DISCUSSION

Before you dive into the details about Australia's aid program, discuss examples you may already know about the aid that Australia does provide to other countries. Discuss some ideas you have about the aid Australia could provide to other countries.

The Australian Government's aid priorities 4.2.6.1

OVERVIEW

Australia's aid program consists of projects occurring in low- and middle-income countries that are supported by the Australian Government. Australia's aid contributes to breaking the poverty cycle, improving health and wellbeing, and promoting human development.

THEORY DETAILS

The Australian Government provides aid to many countries around the world. However, the government focuses on working within the Indo-Pacific region, as countries in this region are Australia's neighbours. The **Department of Foreign Affairs and Trade (DFAT)** is part of the Australian Government and is involved in supporting Australia's security and economy by promoting international aid interests. One way DFAT does this is by providing aid internationally with mutual benefits. On the DFAT's website homepage, they state that their role is to 'promote and protect Australia's international interests to support our security and prosperity' (DFAT, n.d.). Australia's aid program is formed from two development objectives:

- strengthening private sector development
- enabling human development.

These objectives stem from the main purpose of Australia's aid program: to promote Australia's national interests by contributing to sustainable economic growth and poverty reduction.

The Australian government's aid program consists of six main priority areas which guide DFAT in managing the aid that the Australian government provides. These priorities are the main focus for DFAT in providing aid, as they lead to greater health and wellbeing as well as promote human development. These priorities are shown in figure 1 and we will now discuss them in detail.

Useful tip

A common examination question is to ask students to link the priority areas of Australia's aid program to health outcomes. In this lesson, tables are provided with a few examples of how each priority area links to the health outcomes: health and wellbeing and health status, as well as human development. However, these tables don't include every example as there are plenty more links to be made.

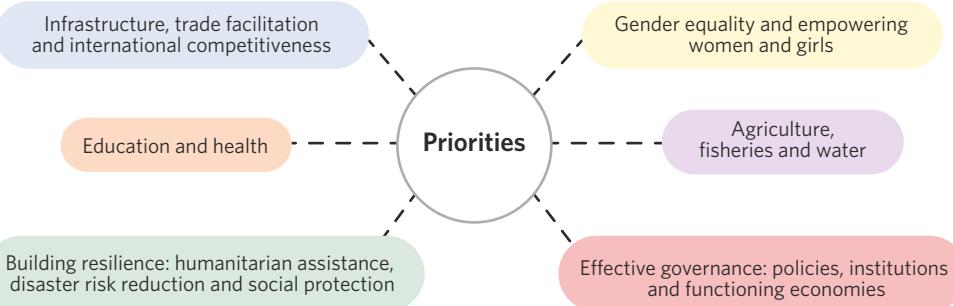


Figure 1 Australia's aid program's priorities

Infrastructure, trade facilitation and international competitiveness 4.2.6.1.1

Infrastructure, trade facilitation and international competitiveness is one priority of Australia's aid priorities because these three areas all contribute to the promotion of optimal health and wellbeing and human development. A large problem that inhibits sustainable economic growth and trade opportunities is inadequate **infrastructure**. Often, people think of infrastructure as buildings and towers. However, infrastructure also includes systems and protocols that give structure to organisations and society and allow them to function. For example, infrastructure can include:

- communication networks
- sewerage
- water systems
- transportation institutions and systems.

ADDITIONAL TERMS

Department of Foreign Affairs and Trade (DFAT) is part of the Australian Government and is involved in supporting Australia's security and economy by promoting international aid interests

ADDITIONAL TERMS

Infrastructure includes all physical compositions and systematic protocols that allow organisations or societies to function

Infrastructure is an important focus for Australia's aid program as it has high importance in a happy and healthy functioning society.

Trade facilitation is about ensuring that trade between countries can occur efficiently and effectively. It helps reduce the cost burdens and improve the efficiency of moving goods and services across international borders. This is done by simplifying the international trade procedures, such as border regulations, documentation requirements, and license formalities. Australia's aid program focuses on trade facilitation as it improves countries' profits, therefore assisting in breaking the poverty cycle.

Similarly, international competitiveness boosts long term-income expansion. Countries compete with each other to put their goods and services in the international market whilst still maintaining adequate profit to ensure adequate incomes and country development. This competitiveness improves the quality of the international market and therefore assists in helping many nations gain resources and beneficial procedures. By focusing on improving international competitiveness, Australia's aid program can expand countries' economies for greater standards of living.

Ultimately, by Australia's aid program targeting this priority, human development and health and wellbeing are enhanced for the Indo-Pacific region. Some examples of the priority in action are shown in table 1, and some examples of this priority's impact on health outcomes and human development are outlined in table 2.

Table 1 Some examples of Australia's aid program working in line with the priority of 'Infrastructure, trade facilitation and international competitiveness'

Australia's aid priority	Examples of Australia's aid program in line with the priority
Infrastructure, trade facilitation and international competitiveness	<ul style="list-style-type: none"> Training local people to develop their expertise in global <i>trade</i> and its policies and practices. Funding economists and other experts to work in low- and middle-income countries to identify barriers to <i>international trade</i> and hence create solutions. Providing grants and loans for funding on <i>infrastructure</i> development, such as roads, schools, and hospitals. Developing economic programs encouraging local governments to invest in water and sanitation <i>infrastructure</i>. Promoting <i>international competitiveness</i> and agreements between high-income and middle- and low-income countries.

Table 2 Some examples linking the priority of 'Infrastructure, trade facilitation and international competitiveness' to health outcomes and human development

Health and wellbeing	Health status	Human development
Increased international competitiveness can lead to employment opportunities, therefore allowing people to gain an income and hence have reduced stress and anxiety about money, ultimately improving mental health and wellbeing.	By having developed trade, countries can gain larger profit to be spent on vaccinations for children. This in turn, can lead to a reduced under-5 mortality rate, therefore improving health status.	Having quality infrastructure, such as water and sewerage and adequate transport networks provides individuals with some of the resources required for a decent standard of living and enhances the ability to participate in the community, therefore promoting human development.

Education and health 4.2.6.1.2

Having quality education and health assists individuals, communities, and nations to develop a decent standard of living and achieve an optimal level of health and wellbeing. By prioritising aid for education, Australia's aid program can focus on providing quality skills and knowledge to create opportunities for low- and middle-income countries.

Some key examples of how education creates opportunities for countries include:

- educated women are more likely to send their own children to school, hence aiding them in gaining employment and escaping poverty by helping to break the poverty cycle.
- educated girls are more likely to have more choices in their life, including when they want to have a family. They are also more likely to marry later in life and have fewer children which reduces the likelihood of maternal mortality, which is more likely in young females. Ultimately, this reduces maternal mortality and infant mortality rates.
- education for those with a disability can promote reduction in the disadvantages they bear and empower this group to lead productive lives and participate in their communities.

ADDITIONAL TERMS

Trade facilitation is about ensuring that trade between countries can occur efficiently and effectively

By prioritising aid for health, Australia's focus on providing aid to healthcare systems is accelerated, therefore increasing access to healthcare services, promoting healthier and more fulfilling lives. A good quality healthcare system can offer countries many benefits incorporating safe, effective, and people-centred care. By having better quality of care, people can attend work to gain an income and contribute to their countries' economy, ultimately aiding in reducing poverty worldwide.

Table 3 Some examples of Australia's aid program working in line with the priority 'Education and health'

Australia's aid priority	Examples of Australia's aid program in line with the priority
Education and health	<ul style="list-style-type: none"> Contributing funds to develop better schools and assisting children to access education. Investing in providing high-quality education and skill development, consequently aiding people to acquire employment and hence lift them out of poverty. Supporting training for teachers, improving curriculum and learning programs. Providing training for midwifery, resulting in better prenatal, neonatal and maternal care. Accommodating countries in our region with support to respond to health emergencies on their own.

Table 4 Some examples linking the priority of 'Education and health' to health outcomes and human development

Health and wellbeing	Health status	Human development
Improved health care can ensure people get treatment and minimise illnesses and injuries so that their body functions efficiently and has the capacity to perform daily tasks, therefore improving physical health and wellbeing.	Increased quality of education can lead to knowledge about safe pregnancies and decrease the risk of death whilst giving birth, hence reducing maternal mortality rate, therefore improving health status.	Education holds high importance in breaking the poverty cycle as it provides skills and knowledge to enable people to acquire occupations and have access to a decent standard of living, therefore promoting human development.

Want to know more?

Between 5.7 and 8.4 million deaths are attributed to poor-quality health care each year in low- and middle-income countries, which represents up to 15% of overall deaths in these countries (World Health Organisation, 2020).

Gender equality and empowering women and girls 4.2.6.1.3

Girls and women in many low- and middle-income countries lack opportunities in relation to education, employment, and leadership in comparison to men and boys. Therefore, **gender equality** and empowering women and girls is essential for positive outcomes in human development and health and wellbeing, and this is why it is a priority of Australia's aid.

Table 5 Some examples of Australia's aid program working in line with the priority 'Gender equality and empowering women and girls'

Australia's aid priority	Examples of Australia's aid program in line with the priority
Gender equality and empowering women and girls	<ul style="list-style-type: none"> Advocating for and providing funding for increased incomes for women; for example, the introduction of the Gender Equality Fund. Introducing programs to eliminate violence against women and provide them with support, such as counselling for victims of violence. Funding improved care for pregnant women for safer birth outcomes, which also provides knowledge about safe pregnancy. Providing training to women to provide the skills and knowledge about leading in parliament to combat their lack of political representation. Providing safe spaces and conditions for work for women to strengthen equality in the workforce.

ADDITIONAL TERMS

Gender equality is when all genders have the same fair opportunities and rights

Table 6 Some examples linking the priority of 'Gender equality and empowering women and girls' to health outcomes and human development

Health and wellbeing	Health status	Human development
Being granted equal education opportunities allows girls to go to school and develop meaningful and satisfying relationships with their peers, therefore improving social health and wellbeing.	Having equal views of all genders may lead to reduced violence against certain genders, such as women, which reduces the risk of death from injuries and ultimately decreases mortality, therefore improving health status.	By providing equal opportunities for all, nations can encourage higher average incomes as people of all genders are more likely to access an education and therefore engage in the workforce. This contributes to breaking the poverty cycle, which enhances capabilities and improves people's standard of living, therefore promoting human development.

Building resilience: humanitarian assistance, disaster risk-reduction and social protection 4.2.6.1.4

As crises in the Indo-Pacific region are often unpredictable, Australia focuses on providing humanitarian assistance for urgent relief. **Emergency aid** refers to short-term aid provided after an emergency or crisis. DFAT prides itself in responding quickly and effectively in times of need to the region when setbacks occur. Some examples of setbacks are:

- natural disasters
- famine
- conflict
- epidemics.

Humanitarian crises negatively impact the development towards reduced poverty and increased stability. Therefore, when a country cannot respond to a disaster on their own, Australia provides emergency relief to help save lives and alleviate suffering. Australia aims to reduce the risk of disasters by working with governments to develop tools and systems for better quality risk management organisation.

DFAT has recently advanced to providing social protection to the Indo-Pacific region (DFAT, n.d.). This protection includes programs and initiatives that tackle instability, vulnerability, and inequality to promote human development and health and wellbeing. By having greater resilience strategies, nations can respond to humanitarian emergencies productively and are therefore more likely to encourage economic growth.

Table 7 Some examples of Australia's aid program working in line with the priority 'Building resilience: humanitarian assistance, disaster risk-reduction and social protection'

Australia's aid priority	Examples of Australia's aid program in line with the priority
Building resilience: humanitarian assistance, disaster risk-reduction and social protection	<ul style="list-style-type: none"> • Providing immediate life-saving assistance, including medical kits, food, safe water, and shelter. • Sending funds to programs, such as the UN's World Food Programme, to address the needs of food security around the world. • Aiding countries to build resilience and strategies to reduce the risk of the impacts of disasters in the future. • Responding to continuing humanitarian crises, for example conflict displacing people, by providing resources, such as food and temporary shelter. • Supplying funds to non-government organisations (NGOs) to assist them in providing urgent care in response to humanitarian disasters.

KEY DEFINITIONS

Emergency aid (also known as humanitarian aid and humanitarian assistance) refers to short-term aid provided after an emergency or crisis

Table 8 Some examples linking the priority of 'Building resilience: humanitarian assistance, disaster risk-reduction and social protection' to health outcomes and human development

Health and wellbeing	Health status	Human development
Providing urgent relief to countries in crisis, such as experiencing an earthquake, by providing resources, such as medical kits and food can ensure that individuals who may be experiencing injury are treated, therefore helping to promote physical health and wellbeing.	By developing effective risk management programs, the risk of premature death caused by the next disaster is reduced and hence leads to decreased years of life lost (YLL), contributing to lower burden of disease as measured by lower disability-adjusted life years (DALYs), therefore improving health status.	Having resilience after experiencing a crisis can aid people in the private sector from falling into poverty as they want to continue with rebuilding their business, which improves their access to a decent standard of living, therefore promoting human development.

Want to know more?

Do you want to be involved in Australia's aid program? Do you want to help give humanitarian assistance to many individuals, communities, and nations around the world? Search up redcross.org.au in your browser to gain more information about the international assistance they provide and how you can participate (Australian Red Cross, 2021).



Image: Robb1037/Shutterstock.com

Figure 2 The Australian Red Cross is a non-government organisation that helps provide humanitarian aid

Effective governance: policies, institutions and functioning economies 4.2.6.1.5

Governance has the ability to influence many areas of society. Strong governance positively affects a country's government to create and execute effective policies and systems. This can improve the economy, promote private sector development, provide stability and peace, encourage gender equality, and reduce the level of poverty for a country. Australia invests in encouraging or assisting with strong governance as this has a direct impact on promoting health outcomes and human development. DFAT provides advice to governments in the Indo-Pacific region about strategies to put in place to have a stable and productive government. These systems can assist governments to be effective in the areas of health, law enforcement and justice, finance, education, and trade. Therefore, helping to achieve an equitable and sustainable state of governance, and improving health outcomes and human development.

Table 9 Some examples of Australia's aid program working in line with the priority 'Effective governance: policies, institutions and functioning economies'

Australia's aid priority	Examples of Australia's aid program in line with the priority
Effective governance: policies, institutions and functioning economies	<ul style="list-style-type: none"> Advising other governments in areas needing improvement, such as health, finance, and the legal systems. Training the public with administration skills, such as teamwork, time management, and communicative skills. Working with governments to develop fairer and inclusive tax policies. Promoting peace-building programs and supporting anti-corruption initiatives to improve safety for all people. Providing ideas for governance systems to improve the economy and encourage gender equality.

Table 10 Some examples linking the priority of 'Effective governance: policies, institutions and functioning economies' to health outcomes and human development

Health and wellbeing	Health status	Human development
A productive government may develop policies around gender equality, enabling all individuals to feel equal in their community and helping them have a sense of belonging, improving their spiritual health and wellbeing.	Effective governance can promote peace in society and decrease the risk of riots which reduces morbidity levels due to injury, therefore improving health status.	By having a high-quality education system, children can learn skills and knowledge to increase their choices and enhance their capabilities when it comes to acquiring a job, therefore promoting human development.

ADDITIONAL TERMS

Governance refers to the systems and structures which organisations are controlled and operated by to maintain accountability, inclusiveness, ethics, and passivity

Agriculture, fisheries and water 4.2.6.1.6

Australia's aid also focuses on assisting the Indo-Pacific region with their agriculture, fisheries, and water management. For many people in low- and middle-income countries, agriculture and fishing is a primary source of employment. These industries provide opportunities for economic growth and lift people out of poverty as these goods and services are exported in exchange for income. In many rural areas, a common role for women is water collection. This often involves women having to travel long distances to collect water for their family, preventing them from going to school or working. Therefore, by improving water management systems, gender equality can also be improved.

As the world's population and in particular the populations of countries in the Indo-Pacific region increases, the demand for food security and safe water also rises. Moreover, the land used for agriculture, water and energy resources, and fishery processes will be put under pressure. However, if managed carefully and effectively, this increased demand on these industries may aid reduction in poverty and boost economic growth as there will be a significant demand in jobs and exportation to provide food to other countries.

Despite this hope, overfishing and water scarcity have already proven problematic to the sustainability of food security and safe water sources for future generations. Effective strategies and procedures are important for the long-term benefits of these industries; for example, employment opportunities and healthier communities.

Australia focuses its aid for this priority with a view to help with:

- strengthening markets
- innovating for productivity
- sustainable resource use
- promoting effective policy, governance, and reform.

This priority has high importance in promoting sustainable human development and other health outcomes.

Table 11 Some examples of Australia's aid program working in line with the priority 'Agriculture, fisheries and water'

Australia's aid priority	Examples of Australia's aid program in line with the priority
Agriculture, fisheries and water	<ul style="list-style-type: none"> • Providing funds to assist in developing systems for safe and clean water, such as deeper wells or stronger dams. • Linking local farmers to global markets by working with businesses, governments, and communities to promote global trade and the economy. • Helping to maintain the diversity of crops to improve agricultural growth to protect against crop failure. • Promoting better water management for safer and more sustainable fishing practices. • Investing in research for greater productivity and efficient distribution of farming and fisheries.

Table 12 Some examples linking the priority of 'Agriculture, fisheries and water' to health outcomes and human development

Health and wellbeing	Health status	Human development
By having sustainable farming strategies, crops can continue to produce, therefore enabling food production and decreasing the risk of malnutrition. This in turn means people's bodies can function effectively, increasing physical health and wellbeing.	Safe and clean water decreases the risk of developing waterborne diseases, particularly in newborns, such as cholera, which reduces infant mortality rate, thereby improving health status.	Increased occupation opportunities in the agricultural area can increase an individual's choices and capabilities as they can gain an income which will increase their access to resources for a decent standard of living, thereby promoting human development.

ACTIVITY 2

Treasure hunt: Australia's aid programs

Search up dfat.gov.au/development/where-we-deliver-australias-development-program into your browser and explore some of Australia's aid (DFAT, n.d.). Notice how much of Australia's aid is in the Indo-Pacific region, as conflict and crises in these countries will directly impact our nation. Moreover, DFAT aims to improve human development in this region for safety and security for Australia's economy and society, ultimately benefiting the countries we provide aid to as well as our nation. The aid we provide to the Indo-Pacific region acts as a mutual, positive relationship.

Answer the following questions:

- 1 Which region has the longest list of countries Australia helps?
- 2 Which region has the shortest list of countries Australia helps?
- 3 Select one country of your choice and click its hyperlink to answer the following questions.
 - a How much did Australia provide in money to this country between 2021–2022?
 - b What were the main focuses of aid in this country?
 - c What are some of the aid achievements listed for this country?

The Australian Government's aid partnerships 4.2.6.2

OVERVIEW

To deliver Australia's aid, the Australian Government, particularly DFAT, works together with a wide range of groups, departments, and communities. By having many quality partnerships, the Australian government can provide better aid internationally and protect Australia's national interests.

THEORY DETAILS

As mentioned, the Australian Government has formed a variety of aid partnerships in order to effectively deliver its aid program. We will now look at these partnerships in depth.

These partnerships can take a variety of forms, including:

- the whole of government
- the private sector partnerships
- bilateral partnerships
- multilateral organisations
- non-government organisations.

Useful tip

In the context of this topic, it's important to remember that a 'partnership' does not necessarily refer to just 'two' bodies or organisations working together, but rather the Australian Government and another body/organisation (which may itself be comprised of several sub-bodies, as in the case of multilateral organisations).

Whole of government 4.2.6.2.1

Many government organisations, including DFAT, work together to supply **Official Development Assistance (ODA)** to many countries within the Indo-Pacific region and other countries around the world. As a type of partnership, the 'whole of government' refers to two or more sections of the Australian government working together to provide aid internationally.

Examples of partnerships with the whole government include:

- The Australian Federal Police (AFP) works with DFAT to develop, establish, and monitor the peace, stability, and security in countries mainly from the Indo-Pacific region.
- The Australian government's DFAT also works with The Australian Centre for International Agriculture Research to improve the agricultural sector by enhancing the productivity and profitability of this district.

ADDITIONAL TERMS

Official Development Assistance (ODA) refers to the aid provided by the government to promote the economic development and welfare of low- and middle-income countries



Want to know more?

Australia's Official Development Assistance (ODA) will remain at \$4 billion in 2020–21, down \$44 million from last year and in line with the government's freeze on aid funding expected to remain in place until 2022–23 (Parliament of Australia, 2020).

Private sector partnerships 4.2.6.2.2

The Australian government, in particular DFAT, works with many individuals and businesses from the private sector as they contribute to Australia's aid program by offering knowledge, resources, and ideas. The **private sector** refers to the areas of an economy controlled by corporations that operate separately to a nation's government.

An example of a private sector partnership includes DFAT using their existing partnerships with many private sector companies to support economic relief and stability in the wake of COVID-19.

KEY DEFINITIONS

Private sector refers to the areas of an economy controlled by corporations that operate separately to a nation's government

Bilateral partnerships 4.2.6.2.3

Australia's aid program has great impact over the world as DFAT works with other donors to learn from and influence one another's resources and experiences. **Bilateral partnerships** involve the government of a country working with and collaborating with the government of another country, in this circumstance to provide aid to a country, issue, or cause. These strong and effective bilateral partnerships assist Australia to reach its aid program objectives.

Examples of bilateral partnerships include:

- The Australian Government and the Republic of Singapore's government are working together to promote sustainable economic growth and reduce poverty in the Indo-Pacific region. This partnership enables both countries to provide efficient and effective developmental and technical assistive programs (DFAT, n.d.).
- Australia has partnered with New Zealand to consolidate development assistance strategies to countries within the Pacific region. This Partnership for Development Cooperation is working towards reaching the Sustainable Development Goals for the Pacific zone (DFAT, n.d.).

ADDITIONAL TERMS

Bilateral partnerships involve the government of a country working with and collaborating with the government of another country, in this circumstance to provide aid to a country, issue, or cause



Lesson link

In lesson **10A: Different types of aid**, you learnt about both bilateral and multilateral aid. The characteristics and purpose of these types of aid assist Australia in delivering aid internationally. Working with one other country improves Australia's aid program, therefore bilateral partnerships can ensure the aid provided can reach wider. Furthermore, working with multilateral organisations can refine Australia's aid program to address global issues on a larger scale.

Multilateral organisations 4.2.6.2.4

Partnerships with multilateral organisations, such as the World Health Organisation and United Nations, facilitate the Australian government in extending the aid they provide. By working together in these partnerships with multilateral organisations, resources and leverage can be combined to allow Australia to tackle greater projects and provide aid on a greater scale.

Examples of partnerships with multilateral organisations include:

- The Global Green Growth Institute is supported by funding from the Australian government, DFAT, which assists in the institute's aim of achieving the SDGs.
- One of the United Nations biggest developmental organisations, the United Nations Development Programme (UNDP), is supported by DFAT. This multilateral partnership has been focusing on preparing and recovering from the COVID-19 pandemic.

Non-government organisations 4.2.6.2.5

In order to achieve the objectives of Australia's aid programs, DFAT works with non-government organisations (NGOs) for optimum impact. Partnering with these organisations can assist DFAT in building strong connections to communities, hence allowing them to provide better quality aid.

Examples of partnerships with non-government organisations include:

- DFAT works with CARE Australia to eliminate global poverty by focusing on supporting women in their communities, particularly by promoting education for these women to lead to a better quality of life and be lifted out of poverty.
- Oxfam Australia partners with DFAT to promote social justice and works to lower poverty. This is done by providing training to volunteering health workers, building clean water supply systems and campaigning for exploitation of children to be eradicated.

Useful tip

It is important to understand the difference between bilateral partnerships and bilateral aid as well as multilateral partnerships and multilateral aid. These include:

- *Bilateral* involves two countries.
 - Bilateral partnerships involve the government of a country working with and collaborating with the government of another country.
 - Bilateral aid refers to the government of one country directly providing aid to the government of another country.
- *Multilateral* involves an international organisation, which is supported by the governments of multiple countries and other organisations.
 - Multilateral organisations, such as the World Health Organisation, facilitate the Australian government in extending the aid they provide.
 - Multilateral aid is provided through an international organisation, such as the United Nations, which is supported by the governments of multiple countries and other organisations to address global issues and large scale projects.

As such, although bilateral partnerships and multilateral organisations are involved in the Australian Government's aid partnerships, it is important to not confuse these terms with bilateral and multilateral aid.

Want to know more?

Australia's government partners with the Papua New Guinea government to promote health and wellbeing and human development. These two countries work together to accelerate towards the Sustainable Development Goals.

Some examples of what this partnership aims to achieve are:

- improving health outcomes by providing vaccination assistance, skilled birthing staff, and access to treatment for HIV/AIDS.
- progressing towards quality primary, secondary, and tertiary education levels.
- promoting Papua New Guinea's safety and justice by reducing corruption, improving law policing, and securing fair justice systems. The Australian government has committed to elevating the human development of Papua New Guinea by working in this partnership.

The Australian government has committed to elevating the human development of Papua New Guinea by working in this partnership.

Theory summary

In this lesson, you examined Australia's aid programs, including its six priority areas that focus DFAT's international aid. The Australian aid program aims to promote human development and optimal health and wellbeing, ultimately improving quality of life around the world. Additionally, by partnering with other organisations, companies, and governments, this aid can be more effective and powerful. By learning about Australia's aid program, you have gained knowledge that may assist you in helping to reduce poverty and promoting sustainable economic growth worldwide.

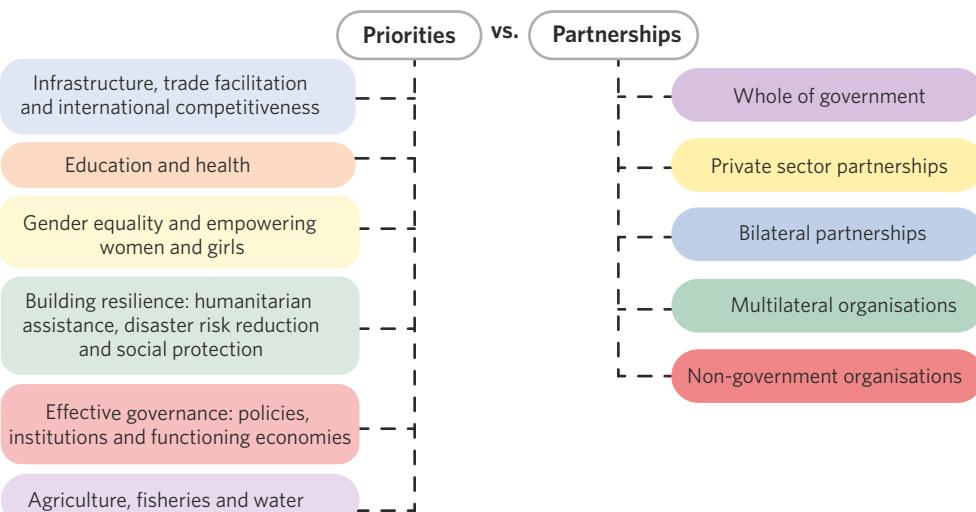


Figure 3 The priorities and partnerships of Australia's aid program

10B QUESTIONS

Theory-review questions

Question 1

Which of the following is an action taken by the Australian Government to provide aid? (Select all that apply)

- I The Australian Government provides funds to international aid organisations.
- II The Australian Government works with local businesses who offer knowledge, resources, and ideas.
- III The Australian Government funds non-government organisations to assist them in carrying out their work around the world.

Question 2

Australia focuses its aid program on the Indo-Pacific region. Due to Australia focusing its aid program on the Indo-Pacific region, this region is the only area that benefits.

- A True.
- B False.

Question 3

The Department of Foreign Affairs and Trade (DFAT) is working towards increasing female representation in middle- and low-income countries legislation and parliament. This addresses Australia's aid priority of

- A Gender equality and empowering women and girls.
- B Building resilience: humanitarian assistance, disaster risk-reduction and social protection.

Question 4

Partnerships are essential for providing an effective aid program.

- A True.
- B False.

Question 5

Infrastructure is an important resource for countries as it benefits nations in many ways. Which of the following is an example of infrastructure? (Select all that apply)

- I Sewerage.
- II Hospitals.
- III Forests.

Question 6

Overfishing and misuse of land are both threats to the long-term sustainability of food security. Aid that assists in managing these things would fall under the priority of

- A Education and health.
- B Agriculture, fisheries and water.

Question 7

Farmers, small to medium businesses, as well as large local businesses, such as firms and multinational corporations, are all part of the private sector. Australia's aid programs often work with bodies in the private sector to enhance their delivery of aid.

- A True.
- B False.

Skills

Perfect your phrasing

Question 8

Which of the following sentences is most correct?

- A One of Australia's aid priorities is 'Building resilience: humanitarian assistance, disaster-risk reduction and social protection'.
- B One of Australia's aid priorities is 'Building resilience: humanitarian assistance, disaster-risk management and social protection'.

Question 9

Which of the following sentences is most correct?

- A One of Australia's aid priorities is 'Infrastructure, trade facilitation and international competitiveness'.
- B One of Australia's aid priorities is 'Infrastructure, trade facilitation and international cooperation'.

Unpacking the case study

Use the following information to answer Questions 10 and 11.

In their trip to Papua New Guinea, Li and his volunteer group decided they wanted to help the local community they were staying with. The group provided books and study resources for local schools to use. Li spoke to many community members about the importance of having safe pregnancies, including not having lots of babies in a short period of time. He did this by approaching groups already in the community. The community may have felt more comfortable being spoken to by Li as he was a regular guy with no specific qualification. Although Li and his group felt like they couldn't make a large impact as they were only working with local businesses instead of governments, they also knew that these small actions in the community would assist in helping other nearby communities to improve their human development.

Question 10

Li's efforts to target the priority area 'Gender equality and empowering women and girls' is best reflected by the statement that

- A 'Li spoke to many community members about the importance of having safe pregnancies'.
- B 'The group provided books and study resources for local schools to use'.

Question 11

Li's partnership with the private sector is best reflected by the statement that

- A 'They were only working with local businesses instead of governments'.
- B 'Helping other nearby communities to improve their human development'.

Exam-style questions

Question 12 (1 MARK)

The Australian Department of Foreign Affairs and Trade (DFAT) works with low-income countries' governments to develop equitable tax policies.

Identify the aid priority that is reflected in the statement provided.

Adapted from VCAA 2015 exam Q13b

Question 13 (1 MARK)

Outline Australia's aid program's main purpose.

Question 14 (3 MARKS)

Discuss why Australia works with multilateral organisations to provide aid.

Question 15 (4 MARKS)

Using examples, explain how Australia works with non-government organisations (NGOs) to provide aid globally.

Question 16 (4 MARKS)

Discuss why partnering with the whole government and having bilateral partnerships is important for Australia when providing aid.

Question 17 (6 MARKS)

Aid-for-Trade is an initiative led by the World Trade Organisation (WTO) that helps low- and middle-income countries trade. Many developing countries struggle with trade, infrastructure, and resource obstacles, therefore decreasing their ability to engage in international trade.

The initiative encourages not only the low- and middle-income countries but donor nations also to acknowledge the importance of trade in human development. Particularly, the Aid-for-Trade initiative seeks to assemble and deploy resources that assist international trade for lower income countries, thereby aiding to reduce poverty through trade.

Many low- and middle-income countries have low trade opportunities, due resource constraints, such as:

- poor infrastructure, including storage buildings, transportation institutions, and communication systems
- limited access to finance and distribution channels in the private sector, and a low level of skilled workforce
- poor regulations and negotiating trade-related agreements between private sector institutions.

Australia is an important contributor of the Aid-for-Trade initiative and has been since 2005. Australia actively participates in the monitoring meeting, the Global Aid-for-Trade Review, which occurs every two years to ensure the aid provided is efficient and effective.

Source: adapted from The Department of Foreign Affairs and Trade, *Australia's aid for trade*, <<https://www.dfat.gov.au/aid/topics/development-issues/aid-for-trade>>

- a Identify one priority area evident in the case study. (1 MARK)
- b Explain how the priority area in **part a** is reflected in the initiative. (2 MARKS)
- c Describe how the initiative promotes human development. (3 MARKS)

Question 18 (7 MARKS)

- a Provide one priority area of Australia's aid program. (1 MARK)
- b Describe how Australia addresses the priority area provided in **part a**. (2 MARKS)
- c Discuss how the priority area provided in **part a** improves health and wellbeing and human development. (4 MARKS)

Questions from multiple lessons**Question 19** (4 MARKS)

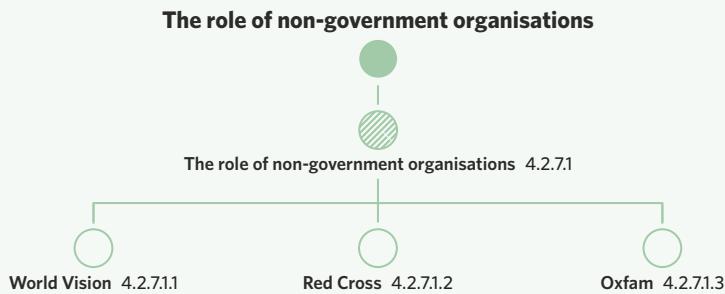
Describe how Australia addresses a priority area that promotes environmental sustainability.

10C THE ROLE OF NON-GOVERNMENT ORGANISATIONS

Today, we face many international challenges. Famine, child exploitation, inequality, and climate change are just a few. However, you can be part of the progress towards a safer, happier, and healthier global society. As you learnt in the previous lesson, the Australian Government has many different partnerships to improve the effectiveness and efficiency of the aid Australia provides.

One particular type of partnership that has high importance is those with non-government organisations. In this lesson, you will discover the role of non-government organisations in providing aid and promoting health and wellbeing and human development worldwide. Through non-government organisations, you too can help by just simply donating a few coins or even blood to support their mission of bettering the quality of life for all people worldwide.

10A Different types of aid	10B Australia's aid programs	10C The role of non-government organisations	10D Effective aid programs that address the SDGs	10E Taking social action
Study design dot point				
<ul style="list-style-type: none"> the role of non-government organisations in promoting health and wellbeing, and human development 				
Key knowledge units				
The role of non-government organisations				4.2.7.1
World Vision				4.2.7.1.1
Red Cross				4.2.7.1.2
Oxfam				4.2.7.1.3



The role of non-government organisations 4.2.7.1

OVERVIEW

Non-government organisations (NGOs) function independently from the government, as the name suggests, and can help to provide aid around the world. They aim to improve society worldwide, not only through physically providing resources, but also empowering communities to value and account for their needs, such as education, justice, and nutrition.

Study design key skills dot point

- explain and evaluate the role of non-government organisations in promoting health and wellbeing, and human development globally

THEORY DETAILS

Globally, many non-government organisations (NGOs) assist those in need by delivering emergency relief, addressing health issues, training personnel, and providing resources, such as building materials. **Non-government organisations (NGOs)** are organisations that are developed, implemented, and funded by people or communities outside the government. These organisations receive donations from the public to fund their initiatives and programs.

The main role of NGOs is to provide aid and assistance towards change for a more equal and equitable world. **Non-government organisation (NGO) aid** refers to aid provided by a non-government organisation, meaning it is given independently from the government, and often is community-focused and delivers expertise in poverty reduction. NGOs can make informed decisions about the aid they provide as they have expertise and knowledge about poverty reduction, as well as the injustices that cause inequality. Successful NGOs can deliver high-quality aid as they work with trained professionals, while also having large volunteer numbers to ensure the aid they provide is constant and effective. NGOs work with communities to engage them in the development of adequate resources, infrastructure, and systems. For example, helping communities construct sanitation facilities and transportation infrastructure. Therefore, NGOs aim to provide inclusive, relevant, and effective aid for people across the globe.

There are hundreds of NGOs participating in providing aid worldwide. In this lesson you will learn about three NGOs:

- World Vision
- Red Cross
- Oxfam.

Useful tip

Often, SAC or exam questions in VCE Health and Human Development about NGOs provide a case study or information about an NGO program within the question stimulus itself. In these questions, students are usually asked to discuss the NGO provided and link it to different concepts, such as health and wellbeing and human development. However, it is also recommended that students learn about one to two NGOs that they can discuss in answers to questions that do not explicitly provide a case study or information with an NGO program, but instead require students to draw upon their own knowledge. Therefore, in this lesson we discuss three different NGOs which students can choose between to learn.



Want to know more?

Despite an NGO implying no government involvement, some NGOs may receive funding from the Australian government through the Department of Foreign Affairs and Trade's aid program. These NGOs may sometimes work in partnership with the government or multilateral organisations to deliver large scale and more long term projects. However, these NGOs do not rely solely on this support from the government and still function independently from the government.

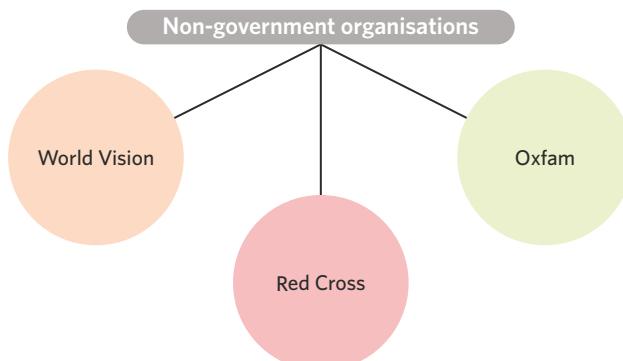


Figure 1 Non-government organisations include World Vision, Red Cross, and Oxfam

KEY DEFINITIONS

Non-government organisations (NGOs) are organisations that are developed, implemented, and funded by people or communities outside the government

Non-government organisation (NGO) aid refers to aid provided by a non-government organisation, meaning it is given independently from the government, and often is community-focused and delivers expertise in poverty reduction

World Vision 4.2.7.1.1

World Vision is a Christian non-government organisation that aims to eliminate global poverty and its causes, as well as fight injustice. Their goal is to help children around the world grow up healthily and safely (World Vision, n.d.). This NGO works towards enabling communities to overcome poverty and speak up for their rights to influence change.

A few examples of how World Vision achieves its aim are:

- empowering communities with skills, knowledge, and resources to encourage them to be self-reliant in lifting themselves out of poverty.
- working with people of all cultures and genders to develop goals towards social justice by emphasising personal growth.

World Vision is funded through a range of initiatives, such as child sponsorship, the 40 Hour Famine, emergency relief appeals, and general donations, as well as funding from the Australian government.

Table 1 Some examples of how World Vision works to improve health outcomes and human development

Examples of the work of World Vision	Linking the example to health outcomes and human development
Supports children through programs related to education about nutrition, building materials, and training for teenagers in carpentry, agriculture, and mechanics.	These programs can decrease the risk of children becoming malnourished and therefore being well enough to attend school, increasing their ability to form meaningful and satisfying relationships with their peers, therefore improving their <i>social health and wellbeing</i> .
Building wells and clean water systems in low- and middle-income countries for safe water consumption.	Safe water reduces the risk of developing waterborne diseases, such as cholera, hence preventing morbidity, and improving <i>health status</i> globally.
Promoting education and increasing the skills and knowledge of young females so they can learn to read, write, or sew and make craft goods so they can earn an income.	By helping women to earn an income, these women can increase their access to a decent standard of living and lift themselves out of poverty, which helps to break the poverty cycle and therefore promotes <i>human development</i> .

Want to know more?

The 40 Hour Famine is World Vision's annual initiative that is used to raise charitable funds (World Vision Australia n.d.). It is when a participant gives up something for 40 hours, such as their television, food, or even their phone, and collects donations from their peers for doing so. The 40 Hour Famine's aim is for Australians to connect with those most vulnerable groups and empathise with the communities in low- and middle-income countries as they struggle with malnutrition and lack basic necessities for a decent standard of living. The 40 Hour Famine raises funds to be spent on helping these communities and particularly their children.

Red Cross 4.2.7.1.2

The Australian Red Cross is a non-government organisation that aims to improve the lives of vulnerable people through resource and service delivery. Furthermore, the Australian Red Cross focuses on the promotion of humanitarian laws and values globally (Australian Red Cross, n.d.). The Australian Red Cross operates under the Red Cross and Red Crescent Movement, which guides volunteers, staff, and members through fundamental principles. These include:

- humanity
- impartiality
- neutrality
- independence
- voluntary service
- unity
- universality.



Image: DCStockPhotography/Shutterstock.com

Figure 2 World Vision is a non-government organisation which aims to eliminate global poverty and fight injustice



Image: Robb1037/Shutterstock.com

Figure 3 The Australian Red Cross aims to improve the lives of vulnerable individuals through resource and service delivery

The Australian Red Cross helps communities prepare for and cope with disasters and crises, such as building flood walls to protect against flooding. This NGO also protects individuals and families affected by war and conflict. Ultimately, the Australian Red Cross promotes health and wellbeing as well as human development of people worldwide.

Table 2 Some examples of how the Australian Red Cross works to improve health outcomes and human development

Examples of how the Australian Red Cross works	Linking the example to health outcomes and human development
Developing strategies, such as the RediPlan, to prepare for disasters, as well as encouraging community resilience for when disaster strikes.	By being prepared, individuals are less likely to be stressed and anxious if a disaster occurs, therefore improving their <i>mental health and wellbeing</i> .
Supporting basic health initiatives, such as establishing hospitals and medical centres, as well as training volunteers with first aid and basic medical skills.	Helping to establish hospitals may lead to more people being treated by trained volunteers potentially from fatal injuries, such as bullet wounds, therefore decreasing mortality rates and improving <i>health status</i> across the globe.
Teaching vulnerable populations about the importance of clean drinking water and sanitation facilities. In addition, promoting hygiene practices, such as hand washing hygiene.	Learning these skills and knowledge can empower individuals to live hygienically, therefore decreasing their risk of developing disease, leading them to live long, healthy lives, improving <i>human development</i> .

ACTIVITY 1

Search up redcross.org.au/news-and-media/news/connected-women in your browser, watch the video 'The power of connected women' and read the page about the Australian Red Cross' program in Darwin titled 'Connected Women' (Australian Red Cross, n.d.).

Answer the following questions:

- 1 What is the purpose of the 'Connected Women' program?
- 2 How does the 'Connected Women' program improve social health and wellbeing?
- 3 What are some examples of activities you can see the women participating in?
- 4 Describe how being involved in the 'Connected Women' program may improve human development.

Oxfam 4.2.7.1.3

Oxfam Australia is a non-government organisation that aims to promote social justice and fight poverty worldwide. Oxfam envisions a just and sustainable world where everyone is valued and treated equally (Oxfam Australia, n.d.). By empowering people to create a future that is secure and free from the injustices of poverty, Oxfam contributes to the promotion of human development worldwide. Oxfam has developed fundraising initiatives and public campaigns to encourage and empower the Australian community to be involved in the fight against injustice and poverty. Australians can help Oxfam by going to their events, such as participating in their fun run, donating money for those in need, or getting involved in their education programs. Oxfam partners with other organisations and communities who also share their view that all lives are equal and therefore no one should live in poverty. Some areas that Oxfam focuses on to tackle poverty together include:

- campaigning for change
- having a rights-based approach
- responding to emergencies
- having enough food for all
- supporting women's rights
- ensuring fair share of goods and services
- introducing finance for development.

Oxfam Australia is involved in several activities and initiatives to lift people out of poverty and help provide aid to thousands of people across the globe.



Image: Ms Jane Campbell/Shutterstock.com

Figure 4 Oxfam Australia aims to promote social justice and fight poverty

Table 3 Some examples of how Oxfam Australia works to improve health outcomes and human development

Examples of how Oxfam Australia works	Linking the example to health outcomes and human development
Ensuring children get fair pay for their work and making certain that there is no exploitation of children in low- and middle-income countries.	Looking out for these children can lead to them having a strong sense of belonging to their community and a sense of purpose in their workplace, hence improving their <i>spiritual health and wellbeing</i> .
Training volunteer health workers and providing mobile health clinics that are able to travel to remote communities.	By reaching remote communities, these health clinics can help treat potentially fatal diseases, such as pneumonia in infants, therefore assisting in reducing the infant mortality rate and ultimately promoting <i>health status</i> worldwide.
Building community kindergartens to promote the necessity of early education.	Early education can ensure children have expanded choices and capabilities as they have skills and access to knowledge to make decisions that affect their lives, such as participating in the community. This thereby improves <i>human development</i> .

Theory summary

The many hundred non-government organisations in the world are important in promoting health and wellbeing and human development of people in low- and middle-income countries. Despite each NGO having different purposes and aims, they all have similar goals in working towards a healthier and safer environment worldwide. The three NGOs discussed in this lesson all have important roles in reducing poverty and working towards a more just world, as well as providing aid for those in need. You should be able to discuss some of these NGOs and how they promote health and wellbeing and human development.

Table 4 Summary of the three NGOs explored in this lesson

World Vision	The Australian Red Cross	Oxfam Australia
World Vision helps make the world a better place by focusing on the children of the world. World Vision does this by empowering children with education, hygiene skills, and basic human rights.	The Australian Red Cross is part of the world's largest humanitarian organisations, the Red Cross and Red Crescent Movement. Their aim is to improve all people's lives and build resilience through aid, as well as encouraging people to help each other for a better and more sustainable society.	The purpose of Oxfam Australia is to fight poverty and injustice around the world. Oxfam helps fight poverty by getting volunteers to provide aid, whilst also raising funds to supply resources to support the most vulnerable.

10C QUESTIONS

Theory-review questions

Question 1

Which of the following best describes non-government organisations (NGOs)? (*Select all that apply*)

- I Non-profitable organisations that function within the country's government.
- II Organisations that work with the government to provide aid from profitable funds.
- III Non-profitable organisations that function independently from the government.

Question 2

Non-government organisations only provide aid to the country they are developed in.

- A True.
- B False.

Question 3

Which of the following are examples of non-government organisations? (Select all that apply)

- I World Vision.
- II Medicare.
- III Local police forces.

Question 4

The Australian Red Cross' main role is to teach people about the importance of the cross symbol.

- A True.
- B False.

Question 5

Non-government organisations often supply countries in need with humanitarian assistance.

- A True.
- B False.

Question 6

World Vision empowers children with education, hygiene care, and human rights knowledge.

- A True.
- B False.

Question 7

Non-government organisations may sometimes partner with the government to extend the reach of the aid they can provide.

- A True.
- B False.

Question 8

Successful non-government organisations improve the health and wellbeing, and human development of the communities they work with.

- A True.
- B False.

Skills**Unpacking the case study**

Use the following information to answer questions 9-11.

The Tabitha Foundation Australia is a non-government organisation that primarily bases their work in Cambodia, as they assist their partner organisation, Tabitha Foundation Cambodia. The Tabitha Foundation reaches out to communities in Cambodia that suffer from poor health and wellbeing and poor human development. The organisation helps communities to address their own needs in holistic and sustainable ways, ensuring that they take control of their own future. Some examples of how the Tabitha Foundation Australia achieve this goal include:

- providing employment for locals through the Cottage Industry Project and enabling women to earn a steady income by making and selling their hand-made crafts and goods
- reducing the risk of malaria through provision of mosquito nets
- developing infrastructure as volunteers build elevated houses to prevent infections from soil and dirt
- providing sustainable assets through the creation of wells and dams for safe water consumption.

Source: adapted from The Tabitha Foundation Australia, *How Tabitha Helps*, <<https://tabithaustralia.org.au/how-tabitha-helps/>>

Question 9

Actions taken by the Tabitha Foundation can improve mental health and wellbeing of the Cambodian community by decreasing financial stress. This is best reflected by the statement that

- A 'Reducing the risk of malaria through provision of mosquito nets'.
- B 'Enabling women to earn a steady income by making and selling their hand-made crafts and goods'.

Question 10

The Cambodian community's ability to develop to their full potential and lead long, healthy, and productive lives and improve their human development, is best reflected by the statement that

- A 'Providing sustainable assets through the creation of wells and dams for safe water consumption'.
- B 'Tabitha Foundation reaches out to communities in Cambodia'.

Question 11

Actions taken by the Tabitha Foundation that works with communities to decrease their risk of premature death is best reflected by the statement that

- A 'Reducing the risk of malaria through provision of mosquito nets'.
- B 'Enabling women to earn a steady income by making and selling their hand-made crafts and goods'.

Exam-style questions**Question 12** (2 MARKS)

Describe why aid provided by non-government organisations is important.

Question 13 (2 MARKS)

Describe the role of one non-government organisation.

Question 14 (2 MARKS)

Many communities in low- and middle-income countries lack the resilience to rebuild after disaster strikes. Describe a non-government organisation that may provide aid to low-income countries.

Question 15 (4 MARKS)

Explain two examples of how Australian individuals can engage with non-government organisations to improve health and wellbeing globally.

Question 16 (4 MARKS)

World Vision works with individuals and communities to acquire an understanding of their economic problems and therefore recognise and produce practical solutions. These can include:

- training locals in agricultural practices and resource management that are natural, to increase crop yield and profit
- organising groups to improve individuals marketing skills to help grow their small businesses
- providing children and young adults with training and employment support/opportunities
- supporting women in their occupations
- encouraging people to dive into entrepreneurship
- facilitating community groups in saving their money
- improving access to markets, both local and international
- and providing loans to individuals so they can create or expand their businesses.

Source: adapted from World Vision, *How World Vision helps people earn more*, <<https://www.worldvision.com.au/global-issues/work-we-do/poverty/how-world-vision-helps-people-earn-more#0ulrpOL74LuuQcrt.99>>

Using the information provided, select actions that World Vision undertakes and outline how they would improve health and wellbeing and human development.

Question 17 (4 MARKS)

CARE Australia is a non-government organisation that aims to eliminate global poverty with a focus on working with women to support sustainable change for the community. This includes supporting economic development through money-making activities for impoverished families, and particularly those operated by women; encouraging healthcare initiatives, such as tuberculosis control and treatment, malaria reduction, prenatal and neonatal care, and hygiene promotion; encouraging food security through health and nutrition projects to improve access to nutritious foods and raise awareness about balanced diets; and increasing access to health services, family planning, and immunisations for mothers and children. There are many more examples of actions and activities that CARE Australia are involved in that work towards bettering the lives of the vulnerable populations. CARE Australia predominantly works with low- and middle-income countries, therefore assisting in improving the health and wellbeing and human development for all people across the globe.

Source: adapted from CARE Australia, *CARE Australia*, <<https://www.care.org.au/>>

Using examples from the case study, explain how CARE Australia promotes human development.

Question 18 (5 MARKS)

- a Identify a non-government organisation that provides aid. (1 MARK)
- b Explain how the organisation identified in **part a** promotes health and wellbeing. (2 MARKS)
- c Explain how the organisation identified in **part a** promotes human development. (2 MARKS)

Questions from multiple lessons**Question 19** (2 MARKS)

Describe how a non-government organisations' aid can achieve a Sustainable Development Goal (SDG).

10D EFFECTIVE AID PROGRAMS THAT ADDRESS THE SDGS

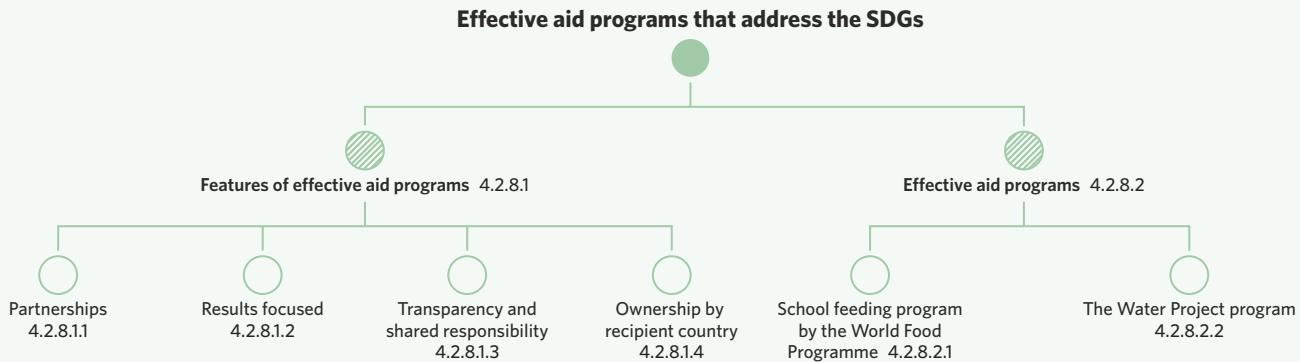
Picture this: an aid program is implemented which aims to improve the quality of education in a low-income country. This aid program has been set up as a five year program which intends to improve education by upskilling teachers. However, after a couple of years, there does not seem to be any improvement in education. There is still a high school dropout rate and the grades of students are not increasing. So, why is the program not achieving its aims? What is making the program ineffective?

This scenario demonstrates the importance of evaluating aid programs to discover whether they are effective or not. In this lesson, you will learn about the features of effective aid programs. You will also learn about two effective aid programs that address the SDGs.



Images: Gribodov/Shutterstock.com

10A Different types of aid	10B Australia's aid program	10C The role of non-government organisations	10D Effective aid programs that address the SDGs	10E Taking social action
Study design dot point				
<ul style="list-style-type: none"> features of effective aid programs that address the SDGs, and examples of effective implementation, with details of one such program including: <ul style="list-style-type: none"> its purpose and the SDG/s addressed, details of implementation and the partnerships involved, contribution to promoting health and wellbeing, and human development 				
Key knowledge units				
Features of effective aid programs				4.2.8.1
Partnerships				4.2.8.1.1
Results focused				4.2.8.1.2
Transparency and shared responsibility				4.2.8.1.3
Ownership by recipient country				4.2.8.1.4
Effective aid programs				4.2.8.2
School feeding program by the World Food Programme				4.2.8.2.1
The Water Project program				4.2.8.2.2



Features of effective aid programs 4.2.8.1

OVERVIEW

Aid programs are formed with the positive intention to help those in need. However, how do we ensure that aid programs are actually meeting their intentions and having a positive impact? This is where it is important to evaluate the effectiveness of aid programs.

THEORY DETAILS

Programs need to be evaluated to assess whether they are effective and meet their aims. There are many ways in which aid programs can be evaluated. In this lesson, we will focus on four features of effective aid programs. These features are:

- partnerships
- focus on results
- transparency and shared responsibility
- ownership by recipient country.

Table 1 Descriptions of the features of effective aid programs

Feature	Description
Partnerships 4.2.8.1.1	 <p>To be effective, aid programs need to have strong partnerships built between all stakeholders. To be strong, these partnerships must be built upon trust and respect and must involve all stakeholders working towards a common goal. This can include partnerships between:</p> <ul style="list-style-type: none"> • the government of the country providing aid and the government of the country receiving aid • international organisations providing aid and the government of the country receiving aid • the local community with their government and the body providing aid • other stakeholders that may assist in providing aid, such as external organisations.
Focus on results 4.2.8.1.2	 <p>A focus on results involves a continuous evaluation as to whether a program is effective in meeting the outcomes it set out to achieve, and therefore as to whether it is fulfilling its purpose.</p> <p>For example, if an aid program intends to halve the number of deaths due to malnutrition in a country but only reduces the number of deaths by 10%, the aid program may not be considered to have met its outcomes. The desired outcome will differ for different programs, with some potentially wanting to see improved health status outcomes, and others wanting to promote health and wellbeing or human development. As such, each aid program needs to set out its specific targets before the program is implemented. This allows for evaluation against its aims to assess whether it is effective in achieving results.</p> <p>After considering whether the aid program has actually done what it set out to do, it is also important to consider how the program will continue to run and if it can deliver the same results in the future. In order to ensure an aid program runs sustainably, local community members and the government of the recipient country should be both empowered and equipped with the skills and knowledge to continue the progress of the aid program without the assistance from an external partner (such as another country or a non-for-profit organisation).</p>
Transparency and shared responsibility 4.2.8.1.3	 <p>Transparency (related to aid programs) involves ensuring all necessary information is provided in an open manner to stakeholders involved in the program. It is important that all stakeholders involved with an aid program are transparent so that everyone is on the same page, making it easier to work towards the one goal and avoid distrust and confusion. This can involve being transparent about, for example, the amount of money being provided to a community by an aid program, or the time estimation of a program's aims being achieved.</p> <p>Shared responsibility involves all stakeholders keeping each other accountable to ensure that the goals of the aid program are being met. This, therefore, involves constantly checking that all stakeholders are meeting their targets and are carrying out the tasks they have committed to. This is important as it makes sure that the responsibility of the aid program does not fall on and overwhelm one sole stakeholder, but instead involves collaboration between all stakeholders.</p>

cont'd

ADDITIONAL TERMS

Stakeholder refers to an individual, group, or organisation that has an interest in something or is involved in something

KEY DEFINITIONS

Transparency (related to aid programs) involves ensuring all necessary information is provided in an open manner to stakeholders involved in the program

Table 1 Continued

Feature	Description
Ownership by recipient country 4.2.8.1.4 	<p>Ownership (related to aid programs) refers to the country receiving aid being involved in all components of the implementation of the aid program. To have ownership, the government of the recipient country has to be involved in all decisions, such as how the program will be implemented. It is important to involve the government of the recipient country in these decisions as they will likely have the greatest awareness of the needs of their citizens, which may guide the targets of the aid program and increase the likelihood of it being effective. Ownership can also come from the members of a local community. For this to happen, the aid program usually has to consult and work with the government of the recipient country who provides information about local communities and helps to implement the aid program in these communities.</p> <p>It is also important to understand the cultural and political needs of the recipient country or community to ensure that the aid program is culturally appropriate and can therefore be effective. Furthermore, to ensure that the program can continue to run in the future without assistance, the recipient country needs to take steps to understand the implementation process. This can involve helping to empower local community members so that they have the skills and knowledge to continue to implement the program independently.</p>

KEY DEFINITIONS

Ownership (related to aid programs) refers to the country receiving aid being involved in all components of the implementation of the aid program

Want to know more?

As you may be able to tell, the features of effective aid programs are related. For example, a focus on results involves analysing whether the government of the recipient country is empowered to continue the progress of the aid program without assistance in the future. This relates to the feature of ownership by the recipient country, as the recipient country has to be involved in the implementation of the aid program and understand how it is implemented, and feel motivated to continue working towards the outcomes of the aid program in the future.



Figure 1 The features of effective aid programs can influence each other

Useful tip

Although we have focused on four features of effective aid programs in this lesson, it is important to know that there are also other ways in which you can evaluate aid programs. This can include analysing whether the aid program is appropriate, affordable and equitable. However, in past exams VCAA has most commonly accepted the four features of effective aid programs as a way to evaluate aid programs.

Effective aid programs 4.2.8.2

OVERVIEW

Now that we have learnt about the features of effective aid programs, it is time for us to analyse the effectiveness of aid programs that address SDGs. We will look at two aid programs: the *World Food Programme's (WFP) school feeding program* and *The Water Project*.

THEORY DETAILS

In VCE Health and Human Development, you are required to learn about **one** effective aid program. In this lesson, we will provide you with information relating to two examples of effective aid programs. For the aid program you focus on, you need to learn about the:

- program's purpose and the SDG/s addressed
- details of implementation and the partnerships involved
- program's contribution to promoting health and wellbeing, and human development.

Study design key skills dot point

- analyse and evaluate the effectiveness of aid programs in promoting health and wellbeing, and human development

School feeding program by the World Food Programme 4.2.8.2.1

The World Food Programme's (WFP) school feeding program was created more than six decades ago (WFP, 2021). It involves providing students with meals while in school. The aim of the overall program is to ensure that children around the world do not go hungry and are therefore better able to concentrate in class and function in their day-to-day life, as well as encouraging students to attend school. In 2020, the WFP either directly provided, or assisted governments to provide, more than 50 million school children across 65 countries with nutritious meals (WFP, 2021).

Purpose

The main purpose of the program is to ensure that all school children have access to meals so that they are better able to concentrate at school and can function in their day-to-day life (WFP, 2021). Some of their other purposes include:

- encourage children, and their families to support their children, to attend school
- ensure children have access to nutritious food to support their development
- increase school enrolment and attendance and reduce school dropout (WFP, 2015).

For families in low-income countries, it can be extremely difficult to ensure access to nutritious food. In low-income households, providing children with meals to take to school represents approximately 10% of the income of these households (WFP, 2021). As such, it is often difficult for families to afford to send their children to school with meals, which may lead to them going to school hungry, or not going to school at all. Poverty can also encourage families to pull their children out of school so that the children can work and earn an income instead. Therefore, as the program motivates families to send their children to school, the program can have many benefits beyond simply feeding students.

Details of implementation

The process of providing school children with meals is quite complicated. The WFP provides school children with access to nutritious food either directly, or by supporting governments to do so. These two mechanisms are outlined in figure 2.

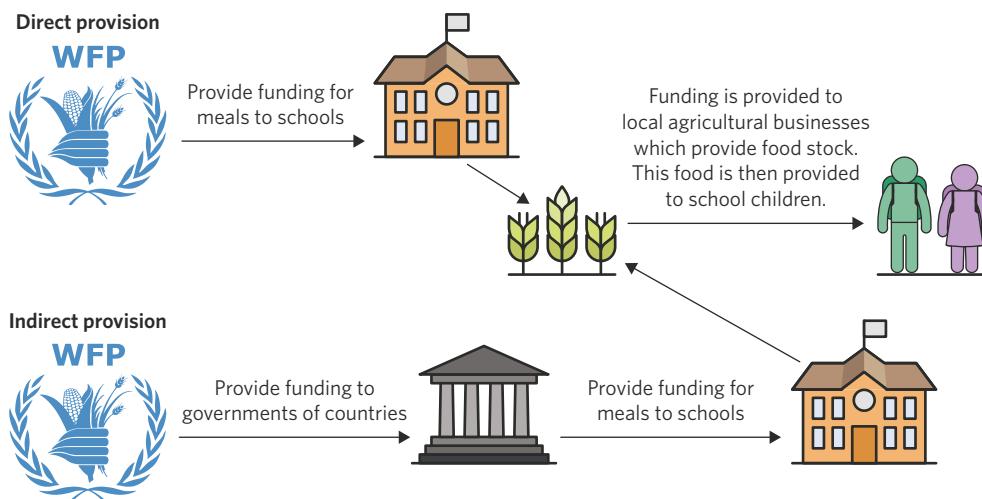


Image: Turks/Shutterstock.com

Figure 2 The two ways in which the WFP's school feeding program can provide school children with food (WFP, 2021)

To adequately meet nutritional needs of the school children, the WFP also works with governments and schools to design appropriate menus. This involves addressing:

- nutrient requirements, depending on the age of the school children, and other relevant characteristics
- culturally appropriate food
- existing dietary guidelines for the school children in the relevant countries
- the availability of food produced by local agricultural businesses, such as farms
- the cost of the food
- storage and preparation challenges.

(WFP, 2018).

Lesson link

In this lesson, we will learn about and evaluate two aid programs that address the SDGs. To do this thoroughly, it is important that you have an understanding of the SDGs and what they involve. As such, you may need to return to **9B: Key features of SDG 3 and 9C: The relationship between SDG 3 and other SDGs** for a refresher.

The WFP also aims to work with local agricultural businesses to provide food. Not only is this to ensure that the food provided is fresh and accessible, but also that to ensure that it provides economic benefits to locals in the community, such as increasing the income earned by farmers so that they can afford basic necessities.

The meals can be prepared at the schools, or at community facilities and distributed to schools. As well as providing meals, the program can also include providing children with snacks. An additional component of the program is take-home rations. This involves families receiving food or funding that they can use to purchase food for their family. This helps to motivate families to send their children to school and reduces school dropouts.

Partnerships involved

Due to working with many partners, the WFP has a large amount of financial assistance to implement the *WFP's school feeding program*. In 2019, the WFP had \$740 million US dollars (more than a billion Australian dollars) to spend that year for the *WFP's school feeding program* (WFP, 2021). To effectively implement the program, WFP has partnerships with:

- other international organisations, such as the United Nations Educational, Scientific, and Cultural Organization (UNESCO).
- institutions in the regions receiving aid as part of the program, such as the African Union.
- the governments of the countries receiving the aid as part of the *WFP's school feeding program* (WFP, 2021). In fact, the WFP aims to assist the governments of programs to take ownership of the *WFP's school feeding program* in their country so that they can run the program in the future independently.
- the agricultural sector in regions where the program is implemented, with the program locally sourcing food. This ensures that children have access to fresh food and also supports the local agricultural sector.
- high-income countries to support the program, such as the United States, Canada, and Australia.



Figure 3 The top five donors for the WFP's school feeding program in 2015 (WFP, 2015)

Want to know more?

The overarching aim of the *WFP's school feeding program* is to establish a sustainable national *school feeding program*, so the governments of low-income countries can continue to run unassisted. As such, the aim is for the governments of these countries to take ownership of the *WFP's school feeding programs* and establish systems and policies to ensure that they can continue to function without assistance from the WFP. As of 2020, the WFP has already worked with governments in more than 65 countries to start this process (WFP, 2021).

SDGs addressed

Now that we understand the purpose, details of implementation, and partnerships involved with the *WFP's school feeding program*, we can look at how the program addresses SDGs. This is outlined in table 2.

Table 2 The SDGs addressed by WFP's school feeding program

SDG addressed	How the <i>WFP's school feeding program</i> addresses the SDG
SDG 2 'Zero hunger'  <small>Image: Deni Nandar Sukanwar/Shutterstock.com</small>	<p><i>SDG 2 'Zero hunger'</i> is clearly addressed as the program provides children who go to school with meals. The meals provided by the program also consider nutrition and attempt to address nutritional deficiencies, further addressing this SDG. This contributes towards the achievement of the following targets of SDG 2:</p> <ul style="list-style-type: none"> • end hunger and ensure all people have access to safe, nutritious, and sufficient food all year round. • end all forms of malnutrition. <p>As the program also works with local agricultural providers to supply the food for school meals, contribution towards the achievement of the following targets of SDG 2 are also made:</p> <ul style="list-style-type: none"> • double the agricultural productivity and incomes of small-scale food producers. • increase investment in agriculture infrastructure, research, and technology, particularly in the least developed countries.
SDG 4 'Quality education'  <small>Image: Deni Nandar Sukanwar/Shutterstock.com</small>	<p>As the program encourages children to attend school, it increases the ability of children to concentrate on school work, and reduces school dropout rates, therefore the program addresses <i>SDG 4 'Quality education'</i>. This involves contributing towards the achievement of the following targets of SDG 4:</p> <ul style="list-style-type: none"> • ensure that all girls and boys complete free, equitable and quality primary and secondary education. • eliminate all gender disparities in education and vocational training, and ensure equal access for the vulnerable, including children.
SDG 5 'Gender equality'  <small>Image: Deni Nandar Sukanwar/Shutterstock.com</small>	<p>In many low-income countries, families are more likely to send boys to school compared to females. This is because of a number of reasons, including the held belief by some that it is more beneficial for boys to get an education, as well as the expectation that girls complete household chores rather than studying or working. The <i>WFP's school feeding program</i> could challenge this tradition and instead motivate families to also send their girls to school as they can access meals at school, as well as bring home take-home rations for their families. The program therefore works to achieve <i>SDG 5 'Gender equality'</i>. By having girls in school, they are less likely to have children young, less likely to be forced into child marriage, and have greater employment opportunities, including leadership opportunities in adulthood. As such, the program contributes towards the achievement of the following targets of SDG 5:</p> <ul style="list-style-type: none"> • end all forms of discrimination against women and girls everywhere. • eliminate harmful practices, such as child, early, and forced marriage and female genital mutilation. • ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life.

! Useful tip

You could also link the *WFP's school feeding program* to other SDGs. Consider how the aid program addresses the following SDGs:

- SDG 1 'No poverty'
- SDG 3 'Good health and wellbeing'.

Promotion of health and wellbeing

The WFP's school feeding program promotes health and wellbeing. Table 3 outlines the contributions to promoting health and wellbeing.

Table 3 The WFP's school feeding program's contribution to promoting health and wellbeing

Dimension of health and wellbeing	How the program promotes health and wellbeing
Physical health and wellbeing  <small>Image: Studio_G/Shutterstock.com</small>	<ul style="list-style-type: none"> By providing children with access to nutritious foods, the functioning of the body and its systems and the immune system is supported, reducing the likelihood of experiencing conditions, such as malnutrition and communicable diseases. By supporting the agricultural sector through, for example, sourcing food from local farmers, locals will have greater incomes which can enhance their ability to afford necessities, such as bedding. Adequate bedding enables the body to rest and recover, reducing the likelihood of injuries and illnesses occurring.
Social health and wellbeing  <small>Image: Ridkous Mykhail/Shutterstock.com</small>	<ul style="list-style-type: none"> Due to encouraging children to attend school, they are more likely to form strong bonds with other children at school and develop their communication skills.
Mental health and wellbeing  <small>Image: Sudowoodo/Shutterstock.com</small>	<ul style="list-style-type: none"> Due to the program providing take-home rations for the families of students, parents may experience less stress and anxiety about providing food for their family. As the program encourages children to attend school, children are more likely to learn basic numeracy and literacy, improving their ability to use logic and make informed decisions, and feel confident in their ability to succeed in life.
Spiritual health and wellbeing  <small>Image: Editable line icons/Shutterstock.com</small>	<ul style="list-style-type: none"> As the program encourages children to attend school, children may have a greater sense of hope about the future and have a greater sense of purpose in life as the skills and knowledge they gain at school will likely enhance their likelihood to find employment as an adult.

Promotion of human development

The WFP's school feeding program also promotes human development. The program promotes human development by:

- providing access to nutrient-dense food. This enables children to concentrate at school which may enhance their educational outcomes, *expanding their capabilities* and enhancing their likelihood to *access a decent standard of living* as it may provide them with greater employment opportunities in adulthood. This increases the likelihood that these children will live *productive lives*.
- providing take-home rations for the families of students. This may reduce overall malnutrition levels in the local community, increasing the likelihood of these family members *leading a long and healthy life*. Reduced levels of malnutrition will also enhance energy levels and decrease experiences of illness, enhancing the ability of these individuals to *participate in the community*, such as the ability to engage in team sports or volunteering.
- providing local farmers with greater incomes, enhancing their ability to *access a decent standard of living*. This may enable the farmers to *break the cycle of poverty*.

ADDITIONAL TERMS

Malnutrition refers to a lack of proper nutrition, caused by not having enough to eat, not eating enough of the right things, or being unable to use the food that one does eat

Communicable diseases are infectious diseases that are transmitted from the environment, including through air, food, water, and other infected organisms

ACTIVITY 1

The WFP's *school feeding program* promotes health and wellbeing and human development in ways other than the examples discussed in this lesson. Discuss with someone in your class other ways that you think the program may contribute to the promotion of health and wellbeing and human development.

Evaluation of the program

It is now time for us to evaluate the program using the features of effective aid programs you learnt about earlier in this lesson. Table 4 outlines some ways in which we could evaluate the program using these features.

Table 4 Evaluation of the WFP's school feeding program using the features of effective aid programs

Feature of effective aid program	How the <i>WFP's school feeding program</i> addresses the feature
Partnerships 	<p>The <i>WFP's school feeding program</i> works with many partners to implement their program. These partnerships can be assumed to be strong due to the widespread effective implementation of the program, which relies on coordination between the WFP, the government of the recipient country, local schools, and local agricultural businesses. These established relationships between different sectors of the recipient country can enhance the likelihood that the program will continue to be effectively implemented in the long-term without assistance from the WFP.</p>
Focus on results 	<p>The WFP continuously collects data to analyse the effectiveness of the program in meeting its targets. The main results that the WFP focuses on are:</p> <ul style="list-style-type: none"> the number of school children that received nutritious meals in the past year. improvements in school enrolment. the number of countries they are working with to build capacity to carry out the program on their own. <p>This information is made available on the WFP's website. Additional results, such as the return on investments (which is a ratio that compares profit with cost) are outlined in the WFP's annual report on the school feeding program. As the WFP measures multiple outcomes to analyse the results of the program and makes these results widely available, it is clear that the program has a focus on results.</p>
Transparency and shared responsibility 	<p>To achieve transparency, measures of the progress of the <i>WFP's school feeding program</i> is released annually to not only the stakeholders involved, but also to the general public. Each year a report is released on the WFP's website that outlines an overview of the program's progress, including:</p> <ul style="list-style-type: none"> data about the program's coverage in the past year data about the costs of the program outcomes of the program partnerships involved. <p>(WFP, 2021).</p> <p>When initially implemented, the responsibility of the <i>WFP's school feeding program</i> is shared between stakeholders, namely the WFP and the government of the recipient country. This involves continually checking the process towards meeting targets. However, as the program becomes more established within the country and the processes are in place for it to continue running independently, responsibility shifts away from the WFP and the governments of the recipient country take over.</p>
Ownership by recipient country 	<p>The <i>WFP's school feeding program</i> involves the recipient country in all steps of the program. This not only involves working with the government of recipient countries, but also involves providing food to school children from local agricultural businesses and food producers, as well as consulting the dietary guidelines of each country when designing the meals provided to school children. Furthermore, the program has the aim for the governments of these countries to take ownership of their own national <i>school feeding program</i> and establish systems and policies to ensure that they can continue to function without assistance from the WFP.</p>

ACTIVITY 2

The WFP's school feeding program in Rwanda

Search up 'WFP home grown school feeding programme' on YouTube and watch the entire seven minute and sixteen second video (UN Sustainable Development Group UNDCO, 2019). After you watch the video, discuss the following questions with other members of your class.

- Do you believe that the program has been effective in Rwanda? How so?
- What SDGs did the program seem to address in the video?
- How did the program promote the health and wellbeing and human development of the local farmers?
- What else did you learn from the video about the WFP's school feeding program?

The Water Project program 4.2.8.2.2

The Water Project is a not-for-profit organisation founded in 2006 which runs *The Water Project (TWP) program* (The Water Project [TWP], 2021). *TWP program* works towards enhancing the potential of individuals in sub-Saharan Africa by providing them with reliable access to clean water and **sanitation** (TWP, 2021).

Purpose

Around the world, one in nine people do not have access to clean water (TWP, 2021). In the sub-Saharan African communities that *TWP program* provides aid to, all nine out of nine people lack access to clean water (TWP, 2021). *TWP program* aims to provide these communities with access to clean water so that these individuals have greater health outcomes and can live to their full potential. Greater health outcomes can be achieved as access to clean water enables:

- improved sanitation practices.
- less experience of illnesses and conditions, such as **waterborne diseases**, including cholera.
- flow-on benefits, such as greater education and occupation outcomes occurring. This is because having access to clean water can lead to individuals not having to trek to collect safe water and instead spending this time in school or at work.

Details of implementation

There are many steps *TWP program* takes to provide communities in sub-saharan Africa with clean water. This includes:

- building water wells, allowing communities to access water below the ground.
 - building sand dams to hold clean water and make it more accessible.
 - building water spring protections, which helps to ensure that water supplies stay clean and hygienic and are easy for people to access.
 - restoring damaged existing water structures, such as wells.
 - providing rainwater catchment tanks.
 - regularly providing check-ups and maintenance on these facilities.
- (TWP, 2021).

TWP program also provides sanitation and hygiene training to community members.

These training sessions aim to empower individuals to engage in safer hygiene practices to prevent the spread of bacteria and diseases occurring. The sessions cover hygiene issues, provide people with information about how diseases are transmitted, and give people useful tips, such as how to thoroughly wash your hands (TWP, n.d.). These sessions are often run by members of *TWP program*, but can also be run by individuals in the community, such as teachers, as *TWP program* provides communities with access to lesson plans and learning resources helping them run these sessions.

ADDITIONAL TERMS

Sanitation refers to behaviours, facilities, and services that prevent disease and illness caused by contact with or mistreatment and wrong disposal of human waste and sewage

Waterborne diseases refer to diseases caused by microorganisms in contaminated or untreated water



Image: Multigon/Shutterstock.com

Figure 4 Water wells enable individuals to access clean water and prevents them from having to trek for long periods of time to find water

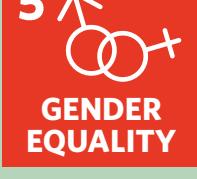
Partnerships involved

To ensure it is effective, *TWP program* has many partnerships. These partnerships include the partnerships developed with the governments of recipient countries in sub-Saharan Africa, as well as members and organisations in the local communities provided with aid. For example, *TWP program* provided the Kikumi Boys Secondary School, a public school in a Kenyan community, with rainwater tanks, handwashing stations, and sanitation and hygiene training for the school staff and students (TWP, 2021). To do so, it relied on donations from organisations and individuals, and worked with the local community, therefore demonstrating strong partnerships. Working with the community not only involved training the school staff and students, but also engaging the school parents in the project by having them assist in collecting materials for the rainwater tank construction (TWP, 2021).

SDGs addressed

Now that we understand the purpose, details of implementation, and partnerships involved with *TWP program*, we can look at how the program addresses SDGs. This is outlined in table 5.

Table 5 The SDGs addressed by *The Water Project program*

SDG addressed	How <i>The Water Project program</i> addresses the SDG
SDG 6 'Clean water and sanitation'  <small>Image: Deni Nandar Sukanwar/Shutterstock.com</small>	<p><i>SDG 6 'Clean water and sanitation'</i> aims to ensure that all people have access to safe, clean water and adequate sanitation, which directly aligns with the purpose of <i>TWP program</i>. The program contributes towards the achievement of the following targets of SDG 6:</p> <ul style="list-style-type: none"> achieve universal and equitable access to safe and affordable drinking water for all. improve water quality by reducing pollution, eliminating dumping and minimising the release of hazardous chemicals and materials. support the participation of local communities in improving water and sanitation management.
SDG 3 'Good health and wellbeing'  <small>Image: Deni Nandar Sukanwar/Shutterstock.com</small>	<p><i>SDG 3 'Good health and wellbeing'</i> is addressed by the program as access to clean water has many health and wellbeing benefits. These include reducing the illnesses and deaths due to unsafe water, such as waterborne diseases. Waterborne diseases, such as diarrhoea, are a common cause of preventable deaths among infants and children. This can be reduced by access to clean water. The <i>TWP program</i> contributes towards the achievement of the following targets of SDG 3:</p> <ul style="list-style-type: none"> end the epidemic of AIDS, tuberculosis, malaria, and neglected tropical diseases, and combat hepatitis, waterborne diseases, and other communicable diseases. reduce deaths and illnesses from hazardous chemicals and air, water and soil pollution, and contamination. end preventable deaths of newborns and children under five, reducing neonatal mortality to 12 per 1000 live births and under five mortality to 25 per 1000 live births.
SDG 5 'Gender equality'  <small>Image: Deni Nandar Sukanwar/Shutterstock.com</small>	<p>Girls under the age of 15 are twice as likely as boys to be the family member responsible for collecting water for the household (TWP, 2021). This can often involve going on long treks to get clean water, which can lead to these girls being less likely to attend school and consequently having less opportunities for their future. Due to this, <i>TWP program</i> providing clean water to communities may mean that girls do not need to fetch water for their families, providing them with additional freedom to attend school or work. As such, <i>TWP program</i> addresses <i>SDG 5 'Gender equality'</i>.</p> <p>By enabling girls to attend school, they are less likely to have children while extremely young and are less likely to be forced into marriage. The <i>TWP program</i> therefore contributes towards the achievement of the following targets of SDG 5:</p> <ul style="list-style-type: none"> end all forms of discrimination against women and girls everywhere. eliminate harmful practices, such as child, early, and forced marriage and female genital mutilation.

Useful tip

You could also link the WFP's school feeding program to other SDGs. Consider how the aid program addresses the following SDGs:

- SDG 1 'No poverty'
- SDG 4 'Quality education'.

Promotion of health and wellbeing

TWP promotes health and wellbeing. Table 6 outlines the contributions to promoting health and wellbeing.

Table 6 *The Water Project* program's contribution to promoting health and wellbeing

Dimension of health and wellbeing	How the program promotes health and wellbeing
Physical health and wellbeing  <small>Image: Studio_G/Shutterstock.com</small>	<ul style="list-style-type: none"> • The provision of sanitation and hygiene training for local communities will help to enhance the health literacy of communities as this knowledge will potentially be passed onto future generations. This knowledge empowers individuals to make informed health decisions, such as engaging in thorough hand washing, which can reduce the spread of illnesses and diseases, particularly communicable diseases. • The provision of clean water will reduce rates of illness and diarrhoea, helping to boost energy levels and prevent fatigue. • The provision of clean water will reduce illnesses and deaths by preventing waterborne diseases from spreading, such as cholera.
Social health and wellbeing  <small>Image: Ridkous Mykhail/Shutterstock.com</small>	<ul style="list-style-type: none"> • The provision of clean water will prevent individuals, particularly girls, from having to trek for hours to collect clean water. This time can instead be spent attending school or work, allowing them to build strong communication skills and form new relationships with others.
Spiritual health and wellbeing  <small>Image: Editable line icons/Shutterstock.com</small>	<ul style="list-style-type: none"> • As a result of reducing the need for individuals to spend large amounts of time fetching clean water, these individuals can instead spend this time attending school or work or engaging in community activities, enhancing their sense of connection to others and providing them with a sense of purpose in life.

Promotion of human development

The Water Project program also contributes to promoting human development. The program contributes to this promotion by:

- providing access to clean water. Access to clean water boosts levels of hydration and reduces the likelihood of fatigue, meaning that community members are enabled to *lead a long, healthy and productive life* and may have a greater ability to *participate in the community*.
- enabling more children, particularly young girls, to attend school instead of having to spend long amounts of time looking for clean water. This *expands the choices and capabilities* of these children as access to an education may increase their likelihood of gaining meaningful employment in adulthood. This may, in turn, provide them with *access to a decent standard of living* as their employment will provide them with an income that they can use to access necessities, such as food, and *break the cycle of poverty*.
- providing hygiene and sanitation training. This provides community members with access to information that may improve their health and reduce poor health outcomes, such as death due to unsanitary practices, therefore *leading to a long and healthy life*.

ACTIVITY 3

The Water Project program provides aid to many different communities. Search up thewaterproject.org/our-water-projects in your browser and answer the following questions (TWP, 2021).

- How many people is TWP program impacting today?
- How many water points are TWP program monitoring today? Considering the features of effective aid programs, how may monitoring the water points provide benefits for the program?
- Browse the directory of water projects and select a project. For your selected project, consider the following:
 - What is the project status?
 - What is the impact of the project?
 - Considering the 'Community profile' and 'What we built' sections, how may the project have promoted health and wellbeing and human development?

Evaluation of the program

We now need to evaluate TWP program using the features of effective aid programs.

Some of the ways in which the program can be evaluated are outlined in table 7.

Table 7 Evaluation of The Water Project program using the features of effective aid programs

Feature of effective aid program	How The Water Project program addresses the feature
Partnerships 	TWP program has numerous partnerships, which can be considered strong and effective. These include partnerships with foundations and individuals across the world who financially support the program, as well as local community members who assist in collecting materials to implement the program, such as materials for rainwater tanks. TWP program also works with community members by providing them with hygiene and sanitation programs that they can teach to others. Finally, partnerships with the governments of recipient countries are formed to ensure that the program can be continued independently without assistance in the future.
Focus on results 	TWP program emphasises their focus on results by using a live tracking system on their website. This tracking system not only highlights the number of individuals impacted by the program each day, but also provides status updates about the percentage of projects which are functional in each region. In the annual reports, TWP program delves even further into a focus on results by publishing statistics, such as the estimation that every dollar invested in the program leads to \$12 in economic returns (TWP, 2021). The program also uses countless other measures to analyse its results, with its constant measurement and publication of results highlighting their focus on results.
Transparency and shared responsibility 	TWP program has a significant focus on transparency. To be transparent, they implement numerous mechanisms including: <ul style="list-style-type: none"> • live statistics on their website of the number of people they help. • a summary of their annual expenses on their website. • copies of their annual financial statements, including income tax recipients and auditing reports. • an annual report which outlines their progress and work in depth. As such, it is clear that TWP program provides open information not only to their stakeholders, but to the general public. When initially implemented, most of the responsibility for the program's success falls on TWP program as they provide the resources and training. However, TWP program works with local community members so that they can ensure that the facilities are maintained and repaired, therefore sharing responsibility with these communities. Furthermore, responsibility is shared over time with the governments of the recipient countries as TWP program informs them on how to carry out projects to enhance access to clean water without assistance from TWP program.
Ownership by recipient country 	TWP program works with the governments of recipient countries to implement the program. This includes working with the government to find out which communities need the most help to access clean water. It also involves consulting the government on how the program will provide training to local community members. This training can involve how to maintain and repair water facilities, as well as how to maintain strong hygiene and sanitation practices, so that they can continue to carry out this healthy behaviour independently in the future. This training is then often taught to other people in the community, demonstrating ownership by the recipient country.



Want to know more?

If you want to see *The Water Project* program in action, search up 'How we work, the water project' on YouTube and watch the entire three minute and nineteen second video (The Water Project, 2015).



Want to know more?

If you prefer, you can choose a different aid program to the two we cover in this lesson. Your teacher may choose a program they want you to focus on, or you may be able to choose your own. If you are able to choose your own, other aid programs you could look at include:

- WaterAid
- Oxfam's program to end violence against women in Papua New Guinea
- World Vision's child sponsorship program.

Theory summary

In this lesson, you have learnt about the features of effective aid programs. These four features are:

- partnerships
- focus on results
- transparency and shared responsibility
- ownership by recipient country.

You also learnt about effective aid programs. In this lesson, we focused on the WFP's *school feeding program* and *The Water Project program*. For each aid program we looked at the:

- program's purpose and the SDG/s addressed,
- details of implementation and the partnerships involved,
- program's contribution to promoting health and wellbeing, and human development.

10D QUESTIONS

Theory-review questions

Question 1

The only way to evaluate the effectiveness of an aid program is to look at the four features of effective aid programs, which include: partnerships, focus on results, transparency and shared responsibility, and ownership by the recipient country.

- A True.
- B False.

Question 2

Which of the following are involved in transparent aid programs? (Select all that apply)

- I Ensuring all necessary information is shared with all stakeholders.
- II Ensuring all stakeholders are on the same page about the deadlines involved in carrying out the project to avoid confusion.
- III Ensuring that all stakeholders equally share responsibility for the effectiveness of the program.

Question 3

The feature of effective aid programs 'partnerships' involves

- A programs being effective if they have at least one partnership.
- B programs being effective if they have strong partnerships, regardless of how many partnerships there are.

Question 4

Why do aid programs need to have a focus on results to be effective? (Select all that apply)

- I To ensure that the aid program meets the outcomes it set out to.
- II To ensure that the aid program is meeting its purpose.
- III To ensure that the leaders of the aid program are smart.

Question 5

The features of effective aid programs

- A can be related.
- B are always completely independent of each other.

Skills**Data analysis**

Use the following information to answer Questions 6 and 7.

314

NEW WATER PROJECTS

1344

COMMUNITIES/SCHOOLS ACTIVELY SUPPORTED

87

NEW SPRINGS PROTECTIONS

31

NEW SAND DAMS



5016

MONITORING/REPAIR VISITS

470,400

VERIFIED INDIVIDUALS WITH CLEAN WATER

87

NEW WELLS

109

RAINWATER HARVESTING PROJECTS

Image: Multigon/Shutterstock.com

Source: adapted from The Water Project, 2018 annual report and finances, <<https://thewaterproject.org/2018-annual-report>>

Question 6

How many new wells did The Water Project provide?

- A 314.
- B 87.
- C 31.

Question 7

Identify which of the following statements about the data is correct. (Select all that apply)

- I There were 1344 verified individuals with clean water.
- II There were 109 rainwater harvesting projects.
- III There were 5016 monitoring/repair visits.

Unpacking the case study

Use the following information to answer Questions 8 and 9.

The World Food Programme's school feeding program has shown great success in Mali, a country in West Africa. One of the members of Karabar primary school's management committee buys fresh meat from the local butcher to feed children as part of the program. The local butcher and other local food merchants have thrived since the program was implemented due to their incomes increasing. As well as helping out the local food merchants, the program has also enhanced the hopes of school children. One of the children at Karabar primary school has started attending the school since the program was implemented, and says that she is excited for her future where she hopes to become a doctor to help people feel better.

Source: adapted from the World Food Programme, *WFP school meals in Mali are a boost for children and the local economy*, <<https://www.wfp.org/stories/education-day-wfp-school-meals-mali-are-boost-children-and-local-economy>>

Question 8

The program's contribution to promoting spiritual health and wellbeing is reflected by the statement that

- A** 'One of the members of Karabar primary school's management committee buys fresh meat from the local butcher to feed children as part of the program.'
- B** 'One of the children at Karabar primary school has started attending the school since the program was implemented, and says that she is excited for her future where she hopes to become a doctor....'

Question 9

The feature of effective aid programs of 'partnerships' is reflected by the statement that

- A** '...fresh meat from the local butcher to feed children as part of the program. The local butcher and other local food merchants have thrived since the program was implemented.'
- B** 'One of the children at Karabar primary school has started attending the school since the program was implemented, and says that she is excited for her future where she hopes to become a doctor to help people feel better.'

Exam-style questions**Question 10** (2 MARKS)

In Latin America and the Caribbean, the WFP's school feeding program has been shown to be immensely successful. In the region, almost 80 million school children receive meals at school. These meals are primarily provided by the national governments, who have implemented national policies to provide school meals continuously in response to the WFP's school feeding program.

Source: adapted from the World Food Programme, *State of school feeding worldwide 2020*, <https://docs.wfp.org/api/documents/WFP-0000123923/download/?_ga=2.78062420.196035858.1628462547-1061034126.1627344896>

Identify **one** feature of effective aid programs that is evident in this program and describe how this feature could contribute to the program's success.

Adapted from VCAA 2018 exam Q8d

Question 11 (4 MARKS)

Students at DEC Kitonki Primary School in Sierra Leone used to have to find water at the start and end of the school day. To do this, the students had to travel long distances to find water, which often led to fatigue and was not always successful. Furthermore, students often travelled on roads to look for the water which sometimes led to injuries. The Water Project (TWP) rehabilitated a broken water well at the school, providing students with access to clean water and preventing them from having to search for water each day at school. TWP also provided hygiene and sanitation training sessions for three days, and trained local community members on how to maintain the water well and report to TWP when it is broken.

Source: adapted from The Water Project, *DEC Kitonki Primary School*, <<https://thewaterproject.org/community/projects/sierra-leone/well-rehabilitation-wash-project-21521>>

- a** Explain how this program contributes to promoting health and wellbeing. (2 MARKS)
- b** Explain how this program contributes to promoting human development. (2 MARKS)

Question 12 (6 MARKS)

Oxfam Australia's program to end violence against women in Papua New Guinea aims addresses the issue of domestic violence. One in three women across the world have experienced physical or sexual violence. These experiences can often be ongoing, and can leave women with a lot of trauma. The Oxfam program aims to help these survivors of domestic violence. They do this by providing women with resources, such as counselling, food, water, and emergency shelter so that they can escape the violence. They also run sessions with men and boys in Papua New Guinea on how to create a safe environment for women and children in an attempt to end violence against women.

To implement this program, Oxfam works with 11 partner organisations in Papua New Guinea. These organisations provide crisis support for the women with children, advocate for the implementation of laws that help to protect women and children, and help to provide sessions to boys and men.

Source: adapted from Oxfam Australia, *What we do – End violence against women and girls*, <<https://www.oxfam.org.au/what-we-do/gender-equality/end-violence-against-women/>>

- a** Identify **one** sustainable development goal (SDG) that the aid program addresses, and explain how it is addressed. (2 MARKS)

- b** Explain how this program contributes to promoting human development. (2 MARKS)
- c** Explain how the aid program addresses **one** feature of effective aid programs. (2 MARKS)

Question 13 (8 MARKS)

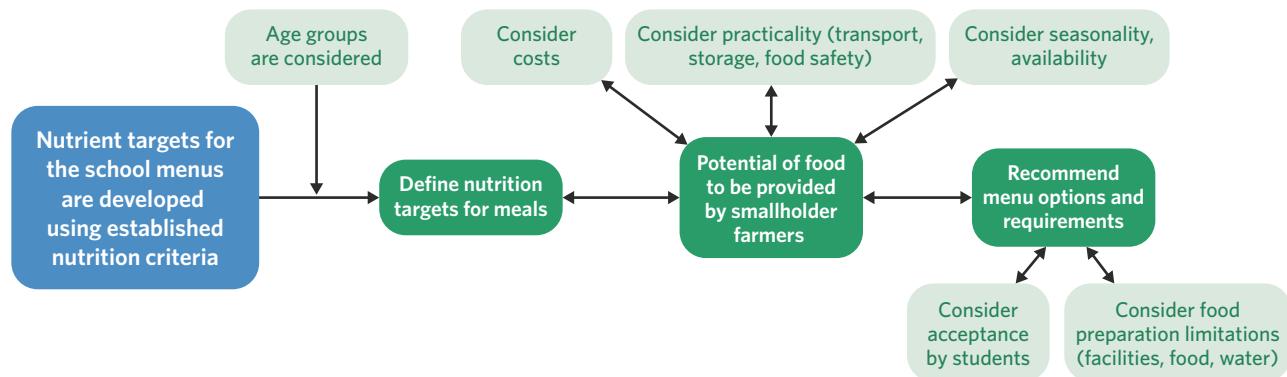
Identify an aid program which addresses one or more of the SDGs _____.

- a** Outline the purpose of the aid program. (1 MARK)
- b** Describe the implementation of the aid program. (2 MARKS)
- c** Explain how the aid program addresses **one** sustainable development goal (SDG). (2 MARKS)
- d** Describe how the chosen aid program contributes to the promotion of health and wellbeing. (2 MARKS)
- e** Identify one partnership involved in the aid program. (1 MARK)

Questions from multiple lessons

Question 14 (4 MARKS)

The World Food Programme's (WFP) school feeding program works with schools to develop nutritionally adequate school meal menus based on nutrition requirements and guidelines. To do so, there are numerous considerations which go into developing these menus, some of which are outlined in the figure below.



To ensure that the food is culturally appropriate for the children in each country, the WFP makes sure to consult the governments of recipient countries, and ensure that the food they provide meets each country's published national nutrition guidelines.

Source: adapted from the World Food Programme, *Home-grown school feeding resource framework – Technical document*, <https://docs.wfp.org/api/documents/WFP-0000074274/download/?_ga=2.115871813.2778150351627877250-1061034126.1627344896>

- a** Identify a challenge in bringing about dietary change and explain how the aid program addressed this challenge. (2 MARKS)
- b** Explain how the aid program addresses **one** feature of effective aid programs. (2 MARKS)

Adapted from VCAA 2020 exam Q4b

Question 15 (5 MARKS)

The World Food Programme's (WFP) school feeding program works with governments over long periods of time to address the large-scale issues of hunger and poor education. This involves working with governments of recipient countries to transition away from the school feeding program provided by the WFP to develop a nationally owned and funded program to continue on the progress.

This has enhanced the number of countries that have implemented policies and legislations relating to school feeding programs, increasing from 20% of recipient countries to 75% between 2013 and 2020. Due to this, the number of children receiving meals at school in low-income countries grew by 36% in this time period.

Due to encouraging children to go to school and receive a quality education, estimates have suggested that for every \$1 USD invested in the school feeding program, there is a \$9 USD return.

Source: adapted from the World Food Programme, *State of school feeding worldwide 2020*, <https://docs.wfp.org/api/documents/WFP-0000123923/download/?_ga=2.278062420.196035858.1628462547-1061034126.1627344896>

- a** Identify the type of aid that is evident in the case study. (1 MARK)
- b** Justify how the aid program could promote economic sustainability. (2 MARKS)
- c** With reference to **one** feature of effective aid programs, evaluate the effectiveness of the aid program. (2 MARKS)

10E TAKING SOCIAL ACTION

Have you ever fought for something you believe in? Or maybe noticed a flaw in society, such as discrimination, and did not know how to create change? This is where social action comes into place. Social action is used to drive a positive change in society. In this lesson, you will learn more about different forms of social action you can take to elicit a positive change in your community. You will also explore some non-government organisations that foster movement towards positive change.



Image: GoodStudio/Shutterstock.com

10A Different types of aid	10B Australia's aid programs	10C The role of non-government organisations	10D Effective aid programs that address the SDGs	10E Taking social action
Study design dot point				
<ul style="list-style-type: none"> ways in which individuals can engage with communities and/or national and international organisations to take social action that promotes health and wellbeing 				4.2.9.1
Key knowledge unit Ways in which an individual can take social action				

Taking social action



Ways in which an individual can take social action 4.2.9.1

Ways in which an individual can take social action 4.2.9.1

OVERVIEW

In 1900, women in Australia did not have the right to vote. In 2010, Australia's first female prime minister was elected. This is just one example of the significant progress our society has made over the last century by taking social action. However, despite such progress, there are still major problems that need addressing, such as inequality, injustice, climate change, famine, and poverty. Social action works towards creating a positive change in areas of need.

THEORY DETAILS

Social action refers to action geared towards positive change which is powered by the coming together of individuals and communities, inspiring and driving change in the interest of their community or group. This movement is essential for us to progress as a society, allowing us to grow and work towards a brighter future. Social action is often thought of as large community-based movements, such as organised protests and rallies. However, social action can be as small as an individual signing an online petition and utilising their **purchasing power**. Some aspects of social action, such as donations, have the capacity to make a direct change to these issues. Other aspects, such as protests, may more indirectly advocate for change. Ultimately, social action aims to drive growth and improve quality of life. It is important to note, however, that social action may not always result in positive change; sometimes it may cause further harm and be unsuccessful in meeting its aims.

Study design key skills dot point

- describe and justify ways of taking social action to promote health and wellbeing

KEY DEFINITIONS

Social action refers to action geared towards positive change which is powered by the coming together of individuals and communities, inspiring and driving change in the interest of their community or group

ADDITIONAL TERMS

Purchasing power refers to the financial capacity to purchase or invest in goods and services

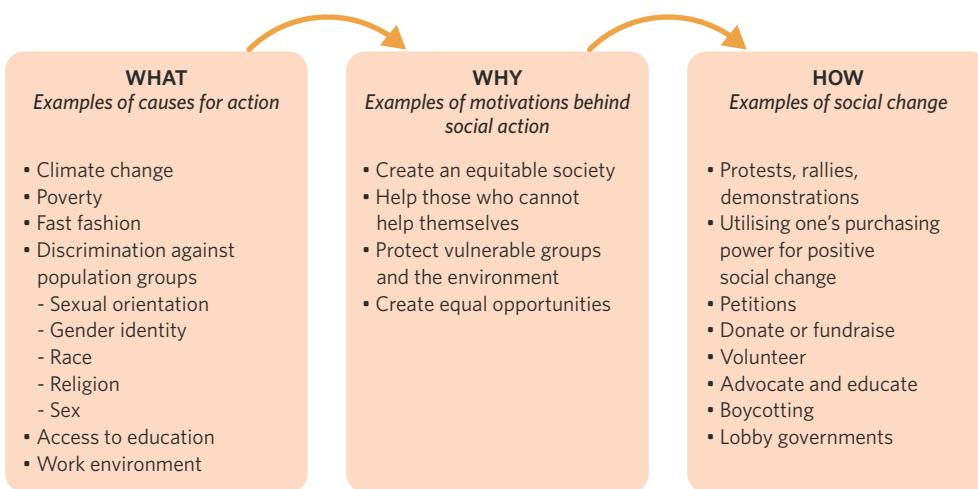


Figure 1 What, why, and how social action can be taken

Real world example

SDGs in Action app

An important aspect of social action is to educate people about current world issues and advocate an action that needs to be taken to address these concerns. The Sustainable Development Goals (SDGs) in Action app aims to do just this by connecting the public to the 'world's to-do list' to end poverty, reduce inequalities, and tackle climate change. The SDG in Action app can be downloaded onto any mobile device and instantly provides people with information regarding progress, aims, and plans to achieve the SDGs.

The app includes:

- information regarding each SDG
- news articles with links to SDGs
- events and actions near you
- opportunities in your local area to support specific causes you're interested in
- actions you can take to help reach an SDG
- the ability to create a personal profile in which you can choose goals that are important to you and also list social actions you wish to take.

(GSMA LTD, 2017)



Image: Artvictory, Irina Strelnikova/Shutterstock.com

Figure 2 SDGs in Action app

Taking social action can have a positive effect on all dimensions of health and wellbeing and is often taken in an attempt to promote health and wellbeing. In table 1, each example of social action is explained and linked to health and wellbeing.

Table 1 Overview of aspects of social action and their links to health and wellbeing

Type of social action	About	Example	How this example influences health and wellbeing
Protests, rallies, and demonstrations	Protests, rallies, and demonstrations are usually organised public gatherings where the people involved express and contend the injustice present in their society. The aim is to increase awareness and drive governments to take action.	Participating in 'School Strike 4 Climate Australia'.	Students that participate in protests for climate change may experience higher levels of optimism for the future as they are more hopeful that people of authority will implement change to eradicate the effects of climate change, therefore improving mental health and wellbeing. Furthermore, if positive social action is taken in response to climate-related protests, the negative effects of climate change on all dimensions of health and wellbeing may be reduced.
Purchasing power	Purchasing power is the financial capacity to purchase goods and services. Choosing to purchase goods from organisations that will positively impact target issues, such as climate change and unfair trade, is an example of using your purchasing power to bring about social change.	Choosing to shop at small, ethical businesses.	If more people invest in small businesses, large businesses associated with unfair trade and fast fashion will lose money. Therefore, they may choose to improve the working conditions of their employees to match their competitors, reducing the risk of injury and illness, therefore improving physical health and wellbeing.

cont'd

Table 1 Continued

Type of social action	About	Example	How this example influences health and wellbeing
Petitions and campaigns	Petitions and campaigns are appeals to governments or people of authority, usually supported by mass signatures, in an attempt to cause positive change.	Signing a GetUp! petition.	GetUp! is a non-government organisation that provides information and action you can take to initiate change. The website provides petitions that can be signed to rally support for a specific cause, such as safer level crossings. This provides a sense of hope for the future as urban living might become safer, reducing anxiety associated with level crossing-related injury and therefore promoting mental health and wellbeing.
Donate and fundraise	Donating and fundraising are direct forms of social action that support and fund the work of non-government organisations. Funds can also provide essential resources to those in need.	Sponsoring a child through World Vision.	Sponsoring a child gives individuals the opportunity to break the poverty cycle and provides access to essential resources, such as education. This equips children with the vocational, numeracy, and literacy skills required to attain meaningful employment in the future, reducing levels of stress and anxiety associated with financial burden. This promotes mental health and wellbeing.
Volunteer	The donation of time to non-government organisations allows them to continue their work and expand to more people in need. Volunteering also provides a sense of fulfilment and purpose.	Volunteering at the Asylum Seeker Resource Centre (ASRC).	Volunteering at ASRC may include teaching English to non-English-speaking asylum seekers. This increases their capacity to interact with others and improve their communication and social skills with other English speaking people. They are also able to create more meaningful relationships, promoting social health and wellbeing.
Advocate and educate	Education and advocacy are essential for people to take social action against global issues, such as sexual assault or mental illness. Being educated not only creates awareness of people and issues around you, but equips you with the skills to make a significant difference.	The Me Too movement (a movement on social media which aimed to create awareness and promote change in regards to the pervasiveness of sexual assault and sex-related crimes).	Many people utilise social media to educate and advocate issues, such as sexual assault, through the 'Me Too movement'. With the use of hashtags, sharing stories and posts, the Me Too movement was able to increase awareness of how common sex-related crimes are, and in some cases, even hold perpetrators accountable. Through such education and advocacy, people are more likely to feel supported and understood, reducing levels of stress and anxiety, therefore improving mental health and wellbeing.
Boycotting	Boycotting is the withdrawal from a certain behaviour (participation, purchasing goods etc.) to coerce change. Behaviours may include purchasing goods and services or participating in an activity deemed morally wrong.	The Montgomery Bus Boycott (1955-1956)	The Montgomery Bus Boycott protested against segregated seating in America. The refusal to ride city buses had a positive impact on emotional health and wellbeing as it allowed individuals to express their emotions effectively by taking action, rather than internalising these emotions. The boycott ended 381 days later as segregated seating was deemed unconstitutional. Subsequently, African Americans experienced a greater sense of belonging in their community as segregation on buses was no longer required, promoting spiritual health and wellbeing. (The Martin Luther King, Jr. Research and Education Institute, n.d.)

ADDITIONAL TERMS ↑

Boycotting is the withdrawal from a certain behaviour (participation, purchasing goods etc.) to coerce change

Organisations to take social action to promote health and wellbeing

As shown in some of the examples in table 1, individuals may engage with their communities, or national and international organisations to take social action. Communities are groups at the local level, involving surrounding schools, clubs, and social circles. Engaging with communities at an individual level may look like organising a trivia night at school to raise funds for a specific cause. On the other hand, individuals can also work with national organisations to take social action, which may involve volunteering at Red Cross Australia. Social action at a national level refers to an entire country, with action contributing towards a larger scale organisation. Finally, individuals may even get involved with international organisations to take social action, such as World Vision. This refers to individual contribution towards global organisations to instigate change. Some more examples of each of the three types of organisation are shown in figures 4, 5, and 6.



Image: Panuwach/Shutterstock.com

Figure 3 Hierarchy of organisations for social action



Figure 4 Examples of community organisations and initiatives that promote social action



Figure 5 Examples of national organisations that promote social action

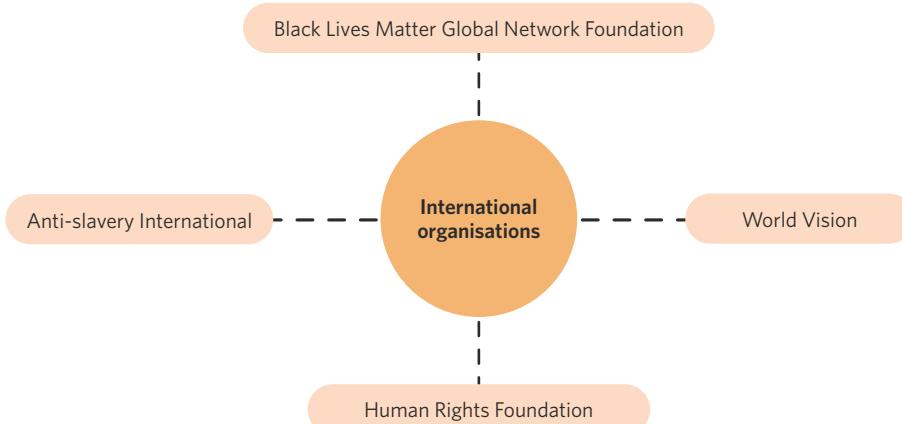


Figure 6 Examples of international organisations that promote social action



Real world example

Zero Co

One example of a national organisation that individuals can engage with to take social action, specifically using their purchasing power, is Zero Co. Zero Co is an Australian-based company, located in Byron Bay. The company was founded in 2019 and aims to tackle climate change and protect the environment. Their mission is to address plastic waste at both ends of the supply chain by stopping the production of new single-use plastic and cleaning up the plastic found in our ocean. This is done by converting plastic waste from the ocean, beach, and landfills in Australia into reusable bottles for home-cleaning products, therefore reducing the production of plastic bottles and decreasing plastic waste in the environment.

So far Zero Co has removed over 500,000 plastic water bottles from our environment.

Search up 'Zero Co: Oceans 21 | Clean your house. Clean the ocean.' on YouTube and watch the entire one minute and one second video.
(Zero Co Australia, 2019)



Image: ina9/Shutterstock.com

Figure 7 Zero Co aims to protect the environment

Theory summary

In this lesson, you have learnt about different forms of social action that can be taken by individuals to bring about positive change, alongside the causes and motives for contributing to these various movements. You have also learnt about different non-government organisations that advocate social action for specific causes and how change created by social action can promote health and wellbeing.

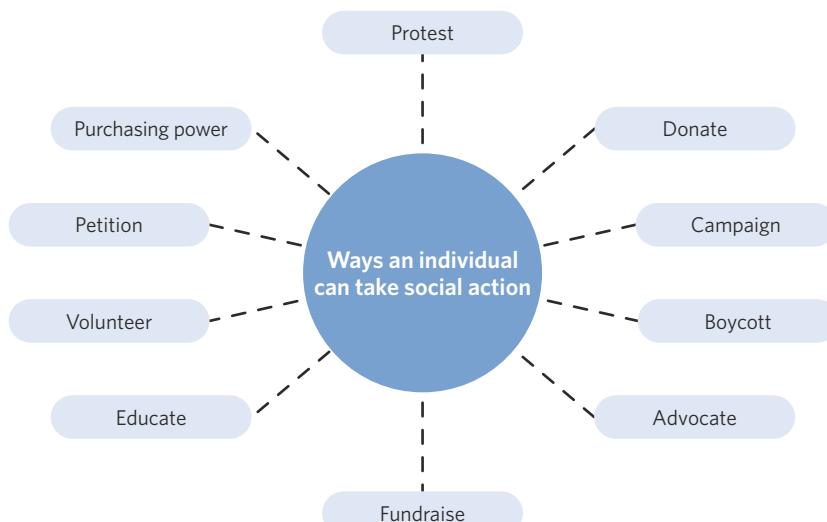


Figure 8 Ways an individual can take social action

10E QUESTIONS

Theory-review questions

Question 1

Which of the following best fills in the blank?

- A positive
- B negative

Social action often attempts to have a _____ effect on global issues, such as climate change.

Question 2

Social action can only take the form of large protests.

- A True.
- B False.

Question 3

Which of the following are aspects of social action? (Select all that apply)

- I Purchasing power.
- II Petitions.
- III Protests.

Question 4

One way individuals can take social action is through advocating for change in relation to current world issues.

- A True.
- B False.

Question 5

Boycotting refers only to choosing to purchase goods from organisations that will positively impact target issues, such as climate change and unfair trade.

- A True.
- B False.

Skills**Unpacking the case study**

Use the following information to answer questions 6-9.

On social media, Lexie has recently started to learn more about the causes of climate change and the impacts it is having on the environment. She has decided she needs to take action herself to prevent further irreparable damage to the environment. First off, she chooses to share posts surrounding climate change causes and impacts on her social media platforms, such as Facebook and Instagram, to increase awareness for her friends and family. However, Lexie does not feel as though this is enough and decides to participate in the 'School Strike 4 Climate' alongside thousands of other students as a call to action to prevent the ramifications of climate change. Next, she decides to stop purchasing clothes from fast fashion industries and instead shop at small, ethical businesses to reduce her carbon footprint. Finally, she organises a fundraiser at school, raising money for climate change action by selling homemade goods with her classmates. Lexie takes all these forms of action because she believes they will address the causes and impacts that climate change has on her world.

Question 6

Lexie takes social action by educating and advocating for climate change. This is reflected by the statement that

- A 'She organises a fundraiser at school, raising money for climate change action by selling homemade goods with her classmates'.
- B '...she chooses to share posts surrounding climate change causes and impacts on her social media platforms, such as Facebook and Instagram'.

Question 7

Lexie is demonstrating her purchasing power by deciding to 'stop purchasing clothes from fast fashion industries and instead shop at ethical small, ethical businesses to reduce her carbon footprint'.

- A True.
- B False.

Question 8

Lexie participates in a non-government organised protest, which is reflected by the statement that

- A 'Lexie...decides to participate in the 'School Strike 4 Climate' alongside thousands of other students, as a call to action to prevent the ramifications climate change is causing'.
- B 'She decides to stop purchasing clothes from fast fashion industries and instead shop at ethical, small businesses to reduce her carbon footprint'.

Question 9

Lexie takes social action for climate change by fundraising. This is reflected by the statement that

- A 'to share posts surrounding climate change causes and impacts on her social media platforms, such as Facebook and Instagram'.
- B 'she organises a fundraiser at school, raising money for climate change action by selling homemade goods with her classmates'.

Exam-style questions**Question 10** (2 MARKS)

Identify two examples of social action.

Question 11 (2 MARKS)

St Vincent de Paul Society is a non-government organisation that aims to advocate for and assist people living in poverty. Their mission is to tackle the causes of poverty and inequality by individualising support for each person and their situations. They provide various opportunities to get involved in their work including volunteering, fundraising, and becoming a member or staff member.

Source: adapted from St Vincent de Paul, *Get Involved* <<https://www.vinnies.org.au/>>

Using the information provided, provide an example of social action and justify how it can address poverty.

Question 12 (3 MARKS)

Describe volunteering as a form of social action and how it can promote health and wellbeing.

Question 13 (3 MARKS)

Mental illness can affect anybody at any point in their life. This health problem affects mood, behaviour, thought patterns, and relationships. Mental illness can fluctuate throughout a person's life, or be an ongoing issue that needs addressing and treatment. Mental illnesses include anxiety, depression, and eating disorders.

Using the information provided, outline and justify one example of social action that could be taken to address mental illness.

Adapted from VCAA 2019 exam Q11b

Question 14 (3 MARKS)

School Strike 4 Climate Australia is a non-government organisation that unites students from all across Australia to strike from school to demand action to fight against climate change. Their mission includes:

- No new coal, oil and gas projects, including the Adani mine
- 100% renewable energy generation and exports by 2030
- Fund a transition and job creation for all fossil-fuel workers and communities

Source: adapted from School Strike 4 Climate, *Who we are*, <<https://www.schoolstrike4climate.com/>>

Using the information provided, identify and justify a form of social action that could be taken to address climate change.

Question 15 (4 MARKS)

Describe two examples of how individuals can take social action to promote physical and social health and wellbeing.

Adapted from VCAA sample questions Q7a

Question 16 (4 MARKS)

Black Lives Matter Global Network Foundation was founded in 2013 and was created to eradicate violence against black communities and put an end to white supremacy. The foundation is based off the following qualities:

- we are expansive
- we affirm all lives
- we are working
- we affirm our humanity.

'The call for black lives to matter is a rallying cry for ALL black lives striving for liberation'.

Source: adapted from Black Lives Matter, *About*, <<https://blacklivesmatter.com/>>

Using the information provided, describe and justify two examples of social action that could be taken to address discrimination based on race.

Adapted from VCAA 2018 exam Q11b

Questions from multiple lessons**Question 17** (3 MARKS)

Nutrition Australia aims to promote and inspire healthy eating for Australians. The non-government organisation does this through providing education and information, alongside consultation services. The organisation aims to induce change by providing:

- programs
- fact sheets
- advocacy
- recipes
- news and events.

People can support Nutrition Australia by:

- becoming a member
- making a donation
- volunteering.

Source: adapted from Nutrition Australia, *Get involved*, <<https://nutritionaustralia.org/get-involved/>>

Using the information provided, identify an example of social action that can be taken to address the underconsumption of fruit and vegetables and how this would promote health and wellbeing.

CHAPTER 10 REVIEW

CHAPTER SUMMARY

In this chapter, you learnt about aid programs and different types of social action. More specifically, you learnt about the different types of aid, the priorities and partnerships involved in Australia's aid program, the role of non-government organisations, and effective aid programs.

In lesson **10A: Different types of aid**, you learnt about emergency, bilateral, and multilateral aid. You learnt about the purpose and characteristics of each of these three types of aid. The following table outlines some of the characteristics of each type of aid.

Emergency aid (also known as humanitarian aid and humanitarian assistance)	Bilateral aid	Multilateral aid
<ul style="list-style-type: none"> Provided for a short period of time Provided rapidly after an emergency Involves the provision of basic necessities Implemented after an emergency or crisis 	<ul style="list-style-type: none"> Provided from one government to another Provided for a longer period of time than emergency aid Aims to be sustainable in the long-term Provides resources other than basic necessities, such as financial assistance 	<ul style="list-style-type: none"> Addresses large-scale issues Provided for a longer period of time than emergency aid Provided in a sustainable way Involves collaboration through many countries and organisations and is provided by an international organisation

In lesson **10B: Australia's aid program**, you learnt about the features of Australia's aid program and the types of partnerships involved. You learnt that the priorities of Australia's aid program include:

- Infrastructure, trade facilitation, and international competitiveness
- Education and health
- Gender equality and empowering women and girls
- Building resilience: humanitarian assistance, disaster risk-reduction, and social protection
- Effective governance: policies, institutions, and functioning economies
- Agriculture, fisheries, and water.

You also learnt that the types of partnerships involved in the Australian government's aid program include:

- The whole of government
- Private sector partnerships
- Bilateral partnerships
- Multilateral organisations
- Non-government organisations.

In lesson **10C: The role of non-government organisations**, you learnt about the role of non-government organisations (NGOs) in promoting health and wellbeing and human development. You learnt about three NGOs in this lesson:

- World Vision
- Red Cross
- Oxfam.

In lesson **10D: Effective aid programs that address the SDGs**, you learnt about the features of effective aid programs that address the SDGs. These features include:

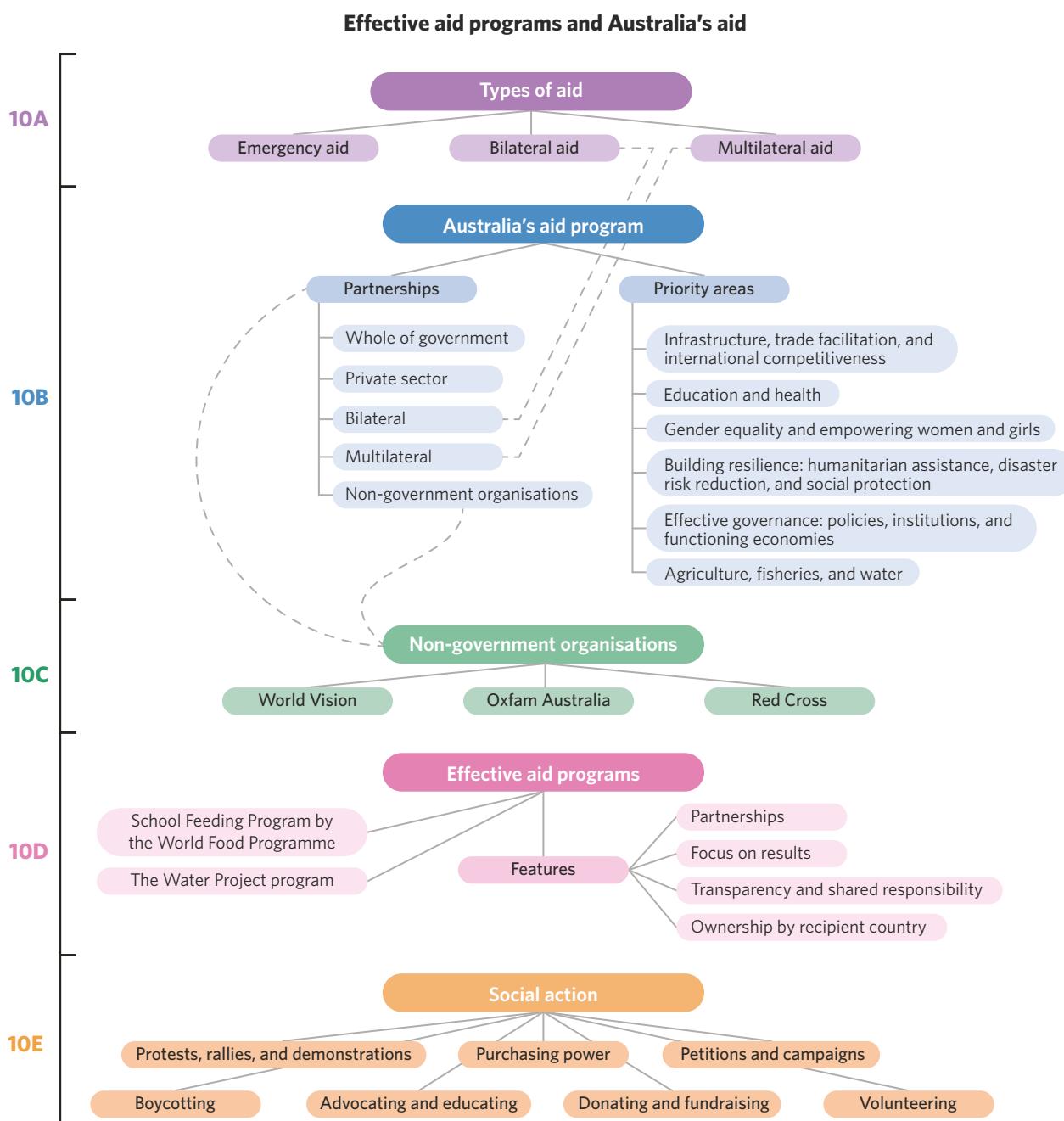
- Partnerships
- Focus on results
- Transparency and shared responsibility
- Ownership by recipient country.

You also learnt about examples of effective aid programs that address the SDGs. Although the lesson outlines both the school feeding program by the World Food Programme and The Water Project program, you most likely only focused on one of these programs. For your chosen program, you learnt about the program's:

- Purpose
- Details of implementation
- Partnerships
- SDGs addressed
- Contribution to the promotion of health and wellbeing
- Contribution to the promotion of human development
- Evaluation.

In lesson **10E: Taking social action**, you learnt about the ways in which individuals can engage with communities, national organisations, and international organisations to take social action that promotes health and wellbeing. You learnt about different types of social action including:

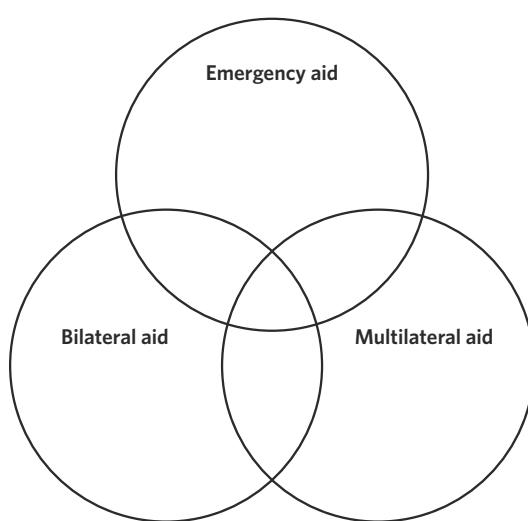
- Protests, rallies, and demonstrations
- Purchasing power
- Petitions and campaigns
- Donating and fundraising
- Volunteering
- Advocating and educating
- Boycotting.



CHAPTER REVIEW ACTIVITIES

Review activity 1: Venn diagram

The three types of aid have different characteristics and purposes. Copy out and use the venn diagram provided to list the similarities and differences in characteristics and purpose between the three types of aid.



Review activity 2: Label the scenario

Fill in the blanks with the following terms.

- Oxfam Australia
- Transparency
- Effective governance: policies, institutions and functioning economies
- Bilateral aid

Omar works for Australia's Department of Foreign Affairs and Trade (DFAT). DFAT is part of the Australian Government and is involved in supporting Australia's security and economy by promoting international aid interests. At DFAT, they provide multiple types of aid to other countries. This includes aid provided from Australia's government directly to the government of a recipient country, which is _____. To deliver aid, the Australian government has many different partnerships. This includes bilateral partnerships and private sector partnerships. Another type of partnership involves working with non-government organisations, such as _____.

Omar is currently working on a task that involves ensuring that a neighbouring country has a stable democracy. In this task, Omar is helping the government of this country prepare for their next election and helping them ensure economic growth. This work relates to the Australian Government's aid priority of _____. To meet this aim of developing a stable democracy, Omar has been communicating with organisations that run aid programs. He has been tasked with evaluating their effectiveness, which includes looking at whether necessary information is provided in an open manner to all stakeholders. This refers to _____.

CHAPTER 10 TEST

Question 1 (2 MARKS)

Identify and describe **one** example of social action.

Question 2 (5 MARKS)

The Water for Women program is a five-year Australian government program that aims to improve health, general equality, and health and wellbeing in the Asia Pacific. To meet these aims, the program focuses on enhancing access to safe water and enhancing levels of sanitation and hygiene. This includes actions, such as:

- working with healthcare professionals in recipient countries to improve hygiene and sanitation services at hospitals, such as improving infection prevention and control measures.
- working with the government of recipient countries to implement scalable projects to enhance access to clean water in communities.
- ensuring women have a voice in decision making about water and hygiene, such as being leaders in hospital and water systems.

Source: adapted from WaterAid, *Water for women*, <<https://www.wateraid.org/au/water-for-women>>

- a Identify the type of aid that is evident in the program. (1 MARK)
- b Outline the purpose of the type of aid identified in **part a**. (1 MARK)
- c Identify one Australian Government aid priority which is evident in the case study. (1 MARK)

Adapted from VCAA 2018 exam Q12a

- d Explain how the priority area identified in **part c** is reflected in the program. (2 MARKS)

Question 3 (1 MARK)

The Australian government, such as the Department of Foreign Affairs and Trade, works with many profit-driven businesses as part of the Australian aid program.

Identify the type of Australian aid partnership that is reflected in the statement provided.

Question 4 (4 MARKS)

Who Gives a Crap is a social enterprise which aims to provide more individuals in low-income countries with access to a toilet. This is because more than two billion people across the world do not have access to a toilet, which can lead to poor health outcomes due to poor sanitation. In fact, more than 300,000 children across the world die under the age of five due to diarrhoeal diseases each year.

To address this issue, Who Gives a Crap sells toilet paper, with 50% of profits being provided to low-income countries to help build toilets and address poor sanitation.

Source: adapted from Who Gives a Crap, *About us*, <<https://au.whogivesacrap.org/pages/about-us>>

- a Using the information provided, outline a form of social action that could be used to address poor sanitation in low-income countries. (2 MARKS)
- b Explain how Who Gives a Crap could promote health and wellbeing for individuals in low-income countries. (2 MARKS)

Question 5 (4 MARKS)

The Water Project (TWP) program provides clean water to communities in low-income countries by providing many resources, such as water wells and dams. They also provide hygiene and sanitation training so that individuals know the importance of washing their hands frequently, especially after using the bathroom facilities. In 2018, they provided almost 500,000 people with access to clean water and actively supported 1300 communities and schools.

Source: adapted from The Water Project, *The "annual" report 2018*, <<https://thewaterproject.org/2018-annual-report>>

- a Outline **one** sustainable development goal (SDG) that The Water Project program addresses. (2 MARKS)
- b Use information from the case study to identify **one** feature of an effective aid program that is evident in The Water Project program. (2 MARKS)

Question 6 (4 MARKS)

Oxfam Australia is a non-government organisation which aims to promote social justice and fight poverty. Some of the work of Oxfam Australia includes:

- responding to emergency disasters with humanitarian assistance
- training volunteer health workers to ensure a high level of healthcare is provided in low-income countries
- building community kindergartens so that young children have access to early education which empowers and educates them for brighter futures.

Source: adapted from Oxfam Australia, *Tackling poverty together*, <<https://www.oxfam.org.au/what-we-do/about-us/tackling-poverty-together-2/>>

- a Using information from the case study, explain the benefits of the Australian government working with non-government organisations (NGOs) to provide aid to low-income countries. (2 MARKS)
Adapted from VCAA 2017 exam Q13b
- b Suggest how the work of Oxfam Australia could promote human development in low-income countries. (2 MARKS)

Question 7 (5 MARKS)**United Nations High Commissioner for Refugees aid provided to Afghanistan**

The United Nations High Commissioner for Refugees (UNHCR) is run by the United Nations, a multilateral organisation with 193 member states. The UNHCR coordinates global action to protect refugees.

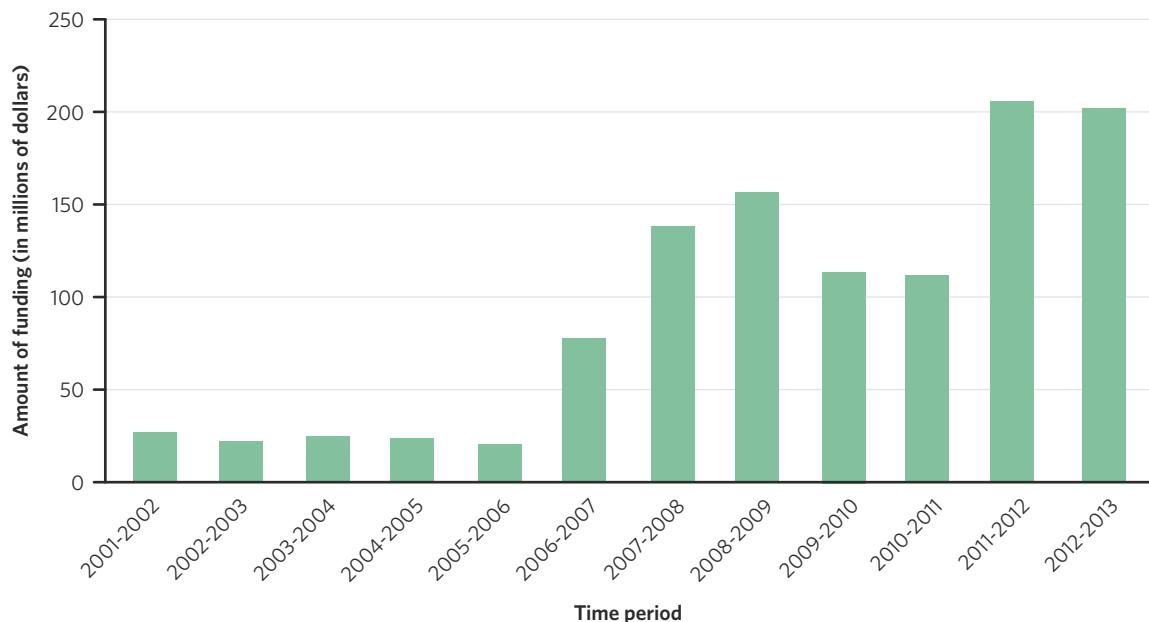
When the Taliban took power of Afghanistan in August 2021, millions of Afghans were displaced within their own country. This involved Afghans being forced to move away from their homes within Afghanistan. The UNHCR worked with its partners to assist these Afghans, through, for example, monitoring their protection and providing them with resources, such as shelter and food.

cont'd

Australian Government aid provided to Afghanistan

The Australian Government provides funding to the UNHCR, as well as to Afghanistan directly. Australia has financially supported Afghanistan over the past twenty years.

Australian Government funding provided to Afghanistan (Parliament of Australia, 2012)



Sources: adapted from Parliament of Australia, *Australia at war in Afghanistan: Revised facts and figures*, <https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BN/2012-2013/AfghanistanFacts>; adapted from United Nations High Commissioner for Refugees, *Afghanistan emergency*, <<https://www.unhcr.org/en-au/afghanistan-emergency.html>>

- a Identify a type of aid provided by the United Nations High Commissioner for Refugees (UNHCR) and use information from the case study to justify your response. (2 MARKS)
- b Outline a trend in the graph. (2 MARKS)
- c Identify the priority of Australia's aid program outlined in the case study. (1 MARK)

Questions from multiple chapters

Question 8 (6 MARKS)

The Water Project (TWP) program provides sanitation and hygiene training sessions to individuals in recipient countries, as well as providing them with access to clean water. To develop these sessions, TWP works with the governments of recipient countries, as well as communities and other private organisations, such as local businesses, to provide the resources and ensure that the sessions are culturally appropriate. The training sessions cover many topics, such as the negative health outcomes that can occur due to drinking unsafe water. It also includes training on handwashing hygiene tips, and how to report damages to water facilities to TWP.

Source: adapted from The Water Project, *The Water Project: Lessons to challenge and inform*, <<https://thewaterproject.org/resources/download/TheWaterProject-TeachingGuide-MSHS.pdf>>

- a Describe how the work of The Water Project (TWP) program could promote human development in recipient countries. (2 MARKS)
- b Explain how TWP program addresses **two** principles of the social model of health. (4 MARKS)

Adapted from VCAA 2020 exam Q8b

UNIT 4 AOS 2 REVIEW

Complete the following 50 mark practice SAC, which tests all content from within Unit 4 AOS 2.

Question 1 (4 MARKS)

The 12th of December is recognised by a range of organisations, including the World Health Organisation and the United Nations, as International Universal Health Coverage Day. On the 12th of December in 2012, the United Nations held a General Assembly that focused on the need for universal health coverage. Therefore, in 2017, the United Nations stated that the date December 12 would be officially recognised as International Universal Health Coverage Day. This day is all about raising awareness of the need for universal health coverage.

Source: adapted from United Nations, *International Universal Health Coverage Day*, <<https://www.un.org/en/observances/universal-health-coverage-day>>

- Identify the priority of the World Health Organisation reflected in the information provided. (1 MARK)
- Describe the priority identified in **part a**. (1 MARK)
- Explain one way the World Health Organisation works to achieve the priority identified in **part a**. (2 MARKS)

Question 2 (1 MARK)

Outline one reason for the development of the United Nations Sustainable Development Goals (SDGs).

Question 3 (1 MARK)

Outline a partnership involved in Australia's aid program.

Question 4 (5 MARKS)

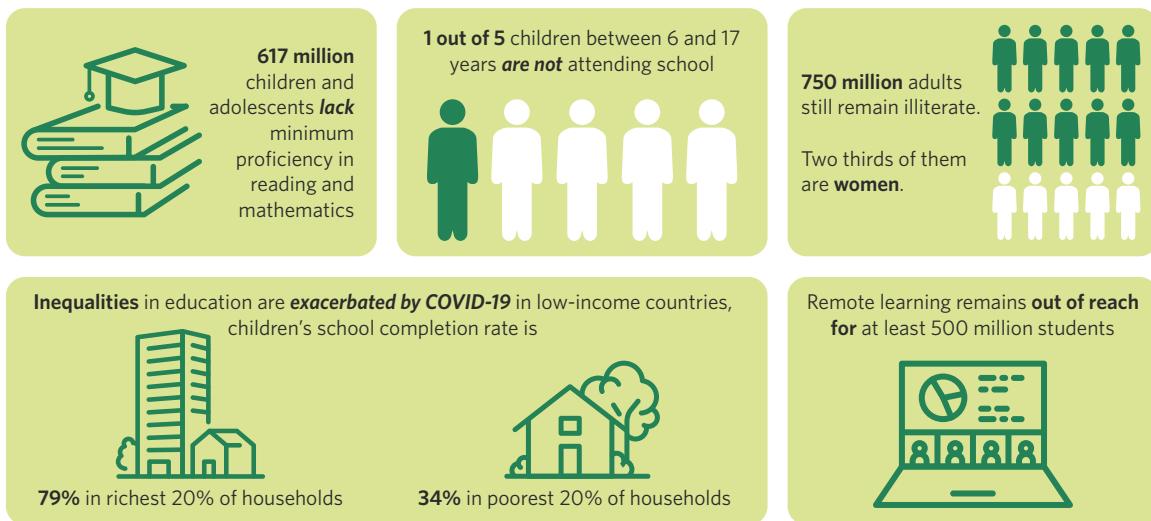


Image: Cube29/Shutterstock.com

Source: adapted from the United Nations, *Why the SDGs matter*, <<https://www.un.org/sustainabledevelopment/why-the-sdgs-matter/>>

- Identify the SDG evident in the information provided. (1 MARK)
- Describe how the SDG identified in **part a** promotes health and wellbeing. (2 MARKS)
- Explain how the SDG identified in **part a** can assist achieving in SDG 3. (2 MARKS)

Question 5 (1 MARK)

Identify one objective of the SDGs.

Question 6 (4 MARKS)

The Water Project (TWP) is a not-for-profit organisation founded in 2006 which runs *The Water Project program*. *TWP program* works towards enhancing the potential of individuals in sub-Saharan Africa by providing them with reliable access to clean water and sanitation.

TWP program aims to provide sub-Saharan African communities with access to clean water so that they have greater health outcomes and can live to their full potential. Additionally, to help achieve these health outcomes, *TWP program* uses a live tracking system on their website. This tracking system not only highlights the number of individuals impacted by the program each day, but also provides status updates about the percentage of projects which are functional in each region.

There are many steps *TWP program* takes to provide communities in sub-Saharan Africa with clean water. This includes:

- building water wells, allowing communities to access water below the ground.
- building sand dams to hold clean water and make it more accessible.
- building water spring protections, which helps to ensure that water supplies stay clean and hygienic and are easy for people to access.
- restoring damaged existing water structures, such as wells.
- providing rainwater catchment tanks.
- regularly providing check-ups and maintenance on these facilities.

TWP program also provides sanitation and hygiene training to community members. These training sessions aim to empower individuals to engage in safer hygiene practices to prevent the spread of bacteria and diseases occurring. Additionally, *TWP program* works with local community members so that they can ensure that the facilities are maintained and repaired.

TWP program works with the governments of recipient countries in sub-Saharan Africa, as well as members and organisations in the local communities provided with aid.

Source: adapted from The Water Project, *The Water Project*, <<https://thewaterproject.org/>>

With reference to **two** features of effective aid programs, evaluate the effectiveness of The Water Project (TWP) program.

Question 7 (6 MARKS)

- a Describe a key feature of SDG 3 'Good health and wellbeing'. (2 MARKS)
- b Discuss how the achievement of SDG 3 'Good health and wellbeing' promotes human development and health and wellbeing. (4 MARKS)

Question 8 (2 MARKS)

- a Outline what is meant by non-government organisation (NGO) aid. (1 MARK)
- b Identify an example of an NGO that provides NGO aid. (1 MARK)

Question 9 (3 MARKS)

Australia and Fiji share a strong relationship in which Australia helps provide aid to Fiji. In 2016, the Australian and Fijian leaders signed the 'Fiji-Australia Vuvale Partnership'. The word 'vuvale' means 'family' in Fijian, which reflects the strength and sense of community between Australia and Fiji. Australia helps Fiji through three pillars: health security, stability, and economic security.

Source: adapted from the Australian Government Department of Foreign Affairs and Trade, *Development assistance in Fiji*, <<https://www.dfat.gov.au/geo/fiji/development-assistance/development-assistance-in-fiji>>

- a Identify the type of aid evident in the information provided. (1 MARK)
- b Explain how the type of aid identified in **part a** can promote human development. (2 MARKS)

Question 10 (2 MARKS)

Using an example, outline what is meant by social action.

Question 11 (5 MARKS)**Girls Emerge Uganda**

Girls Emerge is a program provided through the Australian organisation One Girl. The *Girls Emerge* program partners with Action For Rural Women's Empowerment (ARUWE) Uganda and aims to help young women in Uganda develop technical and life skills, such as learning specific trades to help increase job opportunities.

Source: adapted from One Girl, *Girls Emerge*, <<https://www.onegirl.org.au/girls-emerge>>

- Identify the priority area of Australia's aid program reflected in the information provided. (1 MARK)
- Describe how Australia's aid program addresses the priority area identified in **part a**. (2 MARKS)
- Discuss how the priority area identified in **part a** promotes health and wellbeing. (2 MARKS)

Question 12 (5 MARKS)

Identify an aid program which addresses one or more of the SDGs _____.

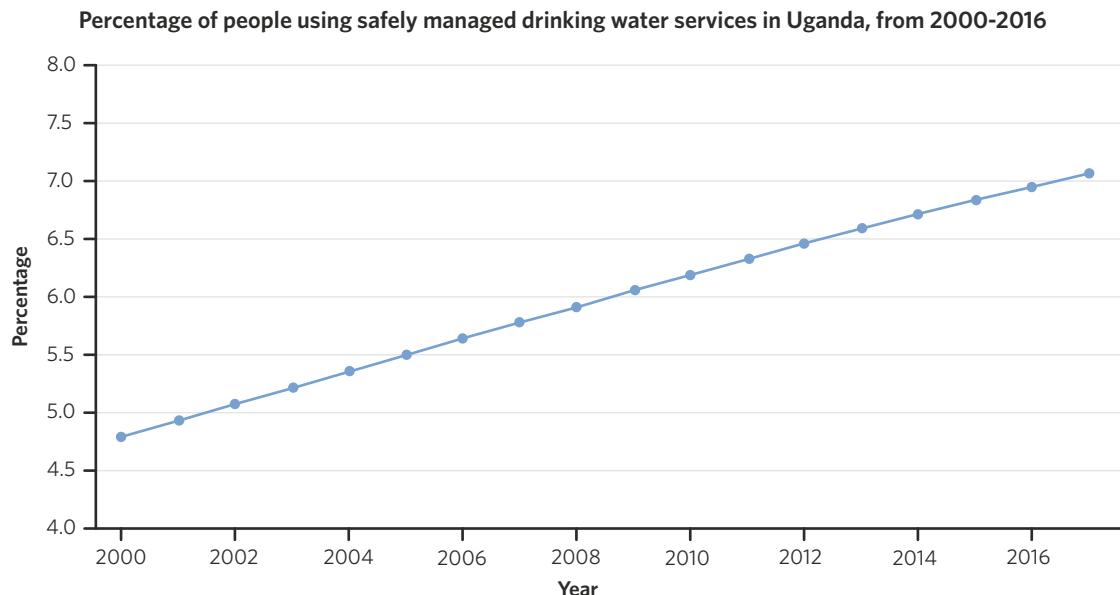
- Outline the purpose of the aid program. (1 MARK)
- Explain how the aid program addresses an SDG. (2 MARKS)
- Describe how the aid program promotes human development. (2 MARKS)

Question 13 (1 MARK)

Suggest one reason why Australia provides aid to low-income countries.

Question 14 (10 MARKS)

Consider the following sources relating to clean water and sanitation.

Source 1

Source: adapted from the World Bank, *People using safely managed drinking water services (% of population) - Uganda*, <<https://data.worldbank.org/indicator/SH.H2O.SMDW.ZS?locations=UG>>

Source 2**Water programs in Ghana**

Zabzugu is in one of the poorest regions in Ghana, and 85.3 percent of the people live in poverty. Only 38.3% of the people in Zabzugu have access to drinking water. Therefore, water programs were introduced in a range of communities in Zabzugu. The aim of this was to provide sustainable access to clean drinking water to communities in Zabzugu to reduce the prevalence of diseases in the community caused by drinking unsafe water. The program specifically involves building water wells in these communities, and was supported by the We Are Water Foundation and World Vision.

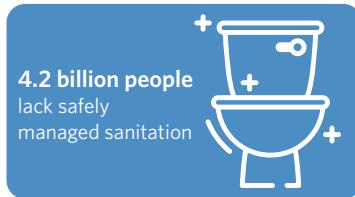
Source: adapted from We Are Water Foundation, *Projects*, <https://www.wearewater.org/en/construction-of-wells-in-zabzugu-ghana-phase-2_278251>

Source 3

Billions still lack water and sanitation services



2.2 billion people
lack safely managed
drinking water



4.2 billion people
lack safely
managed sanitation



Two in five
healthcare facilities
worldwide have **no**
soap and water or
alcohol-based
hand rub

Image: limeart/Shutterstock.com

Source: adapted from the United Nations, *Why the SDGs matter*, <<https://www.un.org/sustainabledevelopment/why-the-sdgs-matter/>>

Using the information provided and your understanding of clean water and sanitation, analyse how addressing SDG 6 'Clean water and sanitation':

- promotes health and wellbeing
- promotes human development
- assists in achieving SDG 3 'Good health and wellbeing'.

ANSWERS



1A Health and wellbeing

Theory-review questions

- 1** B. False. Optimal health and wellbeing is not only characterised by having positive physical health and wellbeing, such as eating healthy and regularly exercising. Optimal health and wellbeing is also characterised by having positive social, emotional, mental and spiritual health and wellbeing.
- 2** I; II; III. A sense of belonging, regular exercise, and having a fulfilling career are all aspects that can contribute to optimal health and wellbeing.
- 3** I; III. Having a healthy body weight and a strong immune system can contribute positively to an individual's physical health and wellbeing.
- 4** II. Having the ability to effectively communicate with others can contribute positively to an individual's social health and wellbeing, while having a sense of belonging refers to spiritual health and wellbeing and a strong immune system refers to physical health and wellbeing.
- 5** I; II. Having low levels of stress and anxiety and a high level of self-esteem can contribute positively to an individual's mental health and wellbeing, adequate energy levels instead refers to physical health and wellbeing.
- 6** A. True. Demonstrating high levels of resilience is a key aspect of optimal emotional health and wellbeing.
- 7** A. A strong sense of belonging within a community would be expected to have a **positive** effect on one's spiritual health and wellbeing. Spiritual health and wellbeing refers to someone having a strong sense of purpose, with a sense of belonging directly contributing to this.
- 8** B. High levels of stress and anxiety would be expected to have a **negative** effect on one's mental health and wellbeing. Stress and anxiety can make it more difficult to think and process information, negatively impacting mental health and wellbeing.
- 9** A. True. A negative impact on one's physical health and wellbeing can directly affect their social health and wellbeing, as the dimensions of health and wellbeing are interrelated.
- 10** A. True. An individual's health and wellbeing is said to be dynamic as it is constantly changing subject to the factors in an individual's life.

Skills

Unpacking the case study

11 B **12** A **13** A **14** A

Perfect your phrasing

15 A

Exam-style questions

- 16** [Spiritual health and wellbeing refers the ideas, beliefs, values and ethics that an individual possesses, contributing to a sense of meaning and purpose.¹] [One component of spiritual health and wellbeing is believing in a higher power, such as an organised religious group.²]
- I have described spiritual health and wellbeing.¹
- I have stated one component of spiritual health and wellbeing.²
- 17** [Emotional health and wellbeing is the ability to express, control, and manage feelings in a positive way and display resilience.¹] [Emotional health and wellbeing is related to an individual's ability to display resilience.²]

I have explained emotional health and wellbeing.¹

I have stated one component of emotional health and wellbeing.²

- 18** [The subjective nature of health and wellbeing refers to how health and wellbeing is understood differently depending on an individual's own unique and personal opinions and experiences,¹] [whereas the dynamic nature of health and wellbeing refers to how health and wellbeing is constantly changing.²]

I have explained the subjective nature of health and wellbeing.¹

I have explained the dynamic nature of health and wellbeing.²

I have used comparison words, such as 'whereas'.

- 19** [Arlo could still experience optimal social health and wellbeing as he can still attend swimming training with his friends and socialise with them.¹] [Therefore, because Arlo can still train with his friends, he is likely to maintain a supportive network of friends at swimming by seeing them regularly.²]

I have explained one example of how Arlo could experience optimal social health and wellbeing.¹

I have explained how this example demonstrates optimal social health and wellbeing.²

I have referred to the character's name in my response (Arlo), and to the scenario.

- 20** [Mimi's physical health and wellbeing is likely to be negatively impacted by her back injury, as she is unable to complete her usual physical daily tasks.¹] [For example, Mimi's back inhibits her from completing physical activities at work, such as carrying boxes of food and standing up for long periods of time at the cash register, hindering her physical health and wellbeing.²]

I have explained how Mimi's physical health and wellbeing has been impacted by her current situation.¹

I have provided an example to illustrate how Mimi's physical health and wellbeing has been impacted.²

I have referred to the character's name in my response (Mimi), and to the scenario.

- 21** [Illness is a self-perceived negative state of health and wellbeing in which an individual believes that they are experiencing something which makes them unwell.¹] [Illness is subjective as it is dependent on how a person feels about the disease, and is influenced by a variety of factors such as an individual's previous experiences of disease, age, and current level of health and wellbeing.²] [Illness is considered to be dynamic as many diseases can fluctuate in severity and timing.³]

I have described illness.¹

I have outlined how illness can be subjective.²

I have outlined how illness can be dynamic.³

- 22** [By getting a job at her local cafe, Susan has made meaningful relationships with colleagues, enhancing her social health and wellbeing. This, in turn, has also enhanced her spiritual health and wellbeing by

feeling a sense of belonging to her workplace environment.¹ [By feeling a sense of belonging to her workplace environment, Susan is more likely to feel comfortable talking about problems in the workplace to help resolve conflicts, which again promotes her social health and wellbeing.²] [Since Susan is not stressed about getting her colleagues to cover her shifts, this promotes her mental health and wellbeing. This, in turn, may mean that Susan has more time to focus on other work, assisting her to display resilience for issues arising outside of her job, promoting her emotional health and wellbeing.³] [This means that Susan is also more likely to feel optimistic about her everyday life due to heightened emotional health and wellbeing, again promoting her mental health and wellbeing as she will find it easier to use logic and process information.⁴]

- I have explained how one dimension of health and wellbeing affects a second dimension of health and wellbeing for Susan.¹
- I have linked the second dimension of health and wellbeing back to the first dimension, thereby demonstrating an interrelationship.²
- I have explained how a third dimension of health and wellbeing affects a fourth dimension of health and wellbeing for Susan.³
- I have linked the fourth dimension of health and wellbeing back to the third dimension, thereby demonstrating another interrelationship for Susan.⁴
- I have referred to the character's name in my response (Susan), and to the scenario.

- 23** [Physical health and wellbeing refers to the functioning of the body and its systems, including the capacity to perform daily tasks and activities.¹] [An example of impaired physical health and wellbeing could include having a cold, in which the immune system would be impaired.²] [By contrast, spiritual health and wellbeing refers to the ideas, beliefs, values and ethics that an individual possesses, contributing to a sense of meaning and purpose.³] [An example of impaired spiritual health and wellbeing could include losing faith in a higher power due to experiencing an adversity, such as the death of a family member.⁴]
- I have described physical health and wellbeing.¹
 - I have provided an example of impaired physical health and wellbeing.²
 - I have described spiritual health and wellbeing.³
 - I have provided an example of impaired spiritual health and wellbeing.⁴
 - I have used comparison words such as, 'by contrast'.

1B Health and wellbeing as a resource

Theory-review questions

- 1** B. False. According to the World Health Organisation, optimal health and wellbeing as the objective of life is difficult to attain, particularly due to the dynamic nature of health and wellbeing. As such, optimal health and wellbeing should instead be a resource.
- 2** B. These benefits mainly occur due to optimal **physical** health and wellbeing. Optimal physical health and wellbeing involves effective functioning of the body and its systems, such as minimal experience of illness and disease. This refers to the benefits outlined in the question, while spiritual

health and wellbeing involves a sense of purpose in life, therefore being unrelated to the benefits outlined, especially lower healthcare costs.

- 3** I; III. Many national benefits of optimal health and wellbeing as a resource are economic or social, such as greater national income and community participation. Although environmental benefits of optimal health and wellbeing may occur, this is less likely than social and economic benefits.
- 4** A. True. Globalisation has resulted in the world becoming more connected, contributing to many of the global benefits of optimal health and wellbeing as a resource, such as increased trade opportunities.

Skills

Data analysis

5 C 6 B 7 B

Exam-style questions

- 8** [Optimal health and wellbeing is a resource as it provides many benefits, such as providing a greater ease in meeting daily needs, functioning independently, and coping with everyday challenges.¹]

- I have suggested why optimal health and wellbeing is a resource.¹

- 9** [One benefit of optimal health and wellbeing as a resource individually is that there is a greater ability to participate in sporting, recreational, and leisure activities.¹] [This is due to the individual having optimal physical health and wellbeing, such as having a strong immune system and strong communication skills, enabling them to engage in sporting activities such as team sports.²]

- I have identified one benefit of optimal health and wellbeing as a resource individually.¹

- I have described this benefit of optimal health and wellbeing as a resource individually.²

Other acceptable answers include:

- other benefits of optimal health and wellbeing as a resource individually, so long as they are adequately explained.

- 10** [One benefit of optimal health and wellbeing as a resource globally is increased trade opportunities.¹] [This is due to individuals having greater levels of productivity, leading to greater availability of products and services to exchange with other countries for financial compensation.²]

- I have identified one benefit of optimal health and wellbeing as a resource globally.¹

- I have described this benefit of optimal health and wellbeing as a resource globally.²

Other acceptable answers include:

- other benefits of optimal health and wellbeing as a resource globally, so long as they are adequately explained.

- 11** [The provision of resources to countries in Africa suffering from EVD outbreaks could act as a global benefit of optimal health and wellbeing as a resource globally by reducing the spread of communicable diseases across countries.¹] [This is due to the resources intending to promote hygiene practices and prevent future outbreaks, leading to a lower likelihood for EVD to spread across borders. This could lead to negative health outcomes in these countries, therefore promoting optimal health and wellbeing.²]

- I have identified how the provision of resources to countries in Africa could act as a global benefit of optimal health and wellbeing as a resource globally.¹
- I have explained this benefit with reference to the case study.²
- 12 a** [The case study most clearly demonstrates benefits of optimal health and wellbeing as a resource individually.¹]
- I have identified that benefits of optimal health and wellbeing as a resource is most clearly demonstrated at an individual level in the case study.¹
- b** [A benefit of optimal health and wellbeing at an individual level is greater participation in sporting, recreational, and leisure activities.¹] [This is due to Lorna having improvements in her mental health, such as lower levels of anxiety, enabling her to engage in activities she enjoys due to lower levels of stress and greater levels of self-esteem.²]
- I have outlined one benefit of optimal health and wellbeing as a resource relating to the level identified in part a.¹
- I have used information from the case study to outline this benefit in more depth.²
- I have referred to the character's name in my response (Lorna), and to the scenario.
- 13** [One benefit of optimal health and wellbeing as a resource nationally is less reliance on social support systems.¹] [This is due to individuals being more likely to be able to work and attend school due to having optimal health and wellbeing, increasing their likelihood to gain meaningful employment and reducing reliance on social support systems, such as welfare support.²] [Another benefit of optimal health and wellbeing as a resource nationally is less burden on the healthcare system.³] [This is due to optimal health and wellbeing involving minimal experiences of illness and disease, reducing the burden on healthcare systems, leading to the government being able to reduce their spending on healthcare services. The government can then spend this money elsewhere, such as infrastructure developments.⁴]
- I have identified one benefit of optimal health and wellbeing as a resource nationally.¹
- I have explained this benefit of optimal health and wellbeing as a resource nationally.²
- I have identified another benefit of optimal health and wellbeing as a resource nationally.³
- I have explained this benefit of optimal health and wellbeing as a resource nationally.⁴

Other acceptable answers include:

- other benefits of optimal health and wellbeing as a resource nationally, so long as they are adequately explained.

Questions from multiple lessons

- 14 a** [The dynamic nature of health and wellbeing refers to how health and wellbeing is constantly changing.¹]
- I have explained the dynamic nature of health and wellbeing.¹
- b** [It would be difficult for optimal health and wellbeing to be the objective of life because optimal health and wellbeing can be difficult

to achieve and maintain. Due to the objective being difficult to achieve, constantly striving for it can lead to feelings of failure and discontent.¹] [The difficulty to achieve and maintain optimal health and wellbeing is due to the dynamic nature of health and wellbeing, in which certain dimensions of health and wellbeing may momentarily not be optimal in response to changes in the environment.²]

- I have suggested why it would be difficult for optimal health and wellbeing to be the objective of life, with reference to it being difficult to achieve and maintain.¹
- I have referred to the dynamic nature of health and wellbeing to support this response.²

1C Measuring health status

Theory-review questions

- 1 A. True. Under 5 mortality, self-assessed health status, and incidence are all examples of health status indicators.
- 2 B. False. The descriptions of incidence and prevalence have been swapped, making this statement false. Even if swapped back to be correct, the descriptions of incidence and prevalence would be strengthened by referring to diseases in addition to conditions.
- 3 I; III. Morbidity is a non-fatal measurement of the levels of ill health in a population, such as the experience of a disease or disability. By contrast, II is incorrect as death due to a chronic disease reflects mortality rather than morbidity.
- 4 B. False. There are in fact three different types of mortality, but these types are specific to different age groups, such as infant and maternal mortality, rather than specific diseases or conditions. The number of deaths due to all diseases and conditions are captured within their relevant age group mortality.
- 5 B. Burden of disease is a health status indicator which measures the gap between the current health status and an ideal situation where everyone is free of disease and disability and lives to an old age. Although burden of disease is measured by the unit of disability-adjusted life year (DALY), which measures the healthy years of life lost, healthy years of life lost is not the correct response to fill in the blank part of this statement as it is not what everyone is trying to be free from. Instead, disease and disability is what everyone is trying to be free from.
- 6 A. To measure the number of years Australians could expect to live in poor health, the HALE can be subtracted from the number of years outlined by the measure of life expectancy.
- 7 B. False. Self-assessed health status can only be measured by the individual it concerns themselves, as it refers to their own perception of their health status at a given time.

Skills

Perfect your phrasing

- 8 B 9 A 10 B

Exam-style questions

- 11** [Health-adjusted life expectancy is a measure of burden of disease based on life expectancy at birth, but including an adjustment for time spent in poor health. It is the number of years in full health that a person can expect to live, based on current rates of ill health and mortality.¹]
- I have described the health status indicator of health-adjusted life expectancy (HALE).¹

- 12** [Incidence refers to the number of new cases of a particular disease or condition which arise in a population in a certain period in time.¹]

I have described incidence.¹

- 13** [Prevalence refers to the number of cases of a particular disease or condition which are present in the population at a given point in time.¹]

I have described prevalence.¹

- 14** [Maternal mortality rate refers to the number of deaths of pregnant women before birth, during birth, or within the first six weeks after birth, per 100,000 live births.¹][On the other hand, under 5 mortality rate is the number of deaths of children under five years of age per 1000 live births.²]

I have explained maternal mortality.¹

I have explained under 5 mortality.²

I have used comparison words such as, 'on the other hand'.

- 15** [Morbidity refers to the level of ill health that an individual experiences or that is present in a given population group.¹][By contrast, mortality refers to the number of deaths within a population.²]

I have explained morbidity.¹

I have explained mortality.²

I have used comparison words such as, 'by contrast'.

- 16** **a** [The health status indicator which is reflected in the graph is mortality.¹]

I have identified mortality as the health status indicator reflected in the graph.¹

- b** [In the graph referring to deaths in Australia between 1910 and 2000, deaths have increased over time,¹][with there being approximately 50,000 deaths in 1910 which significantly increased to approximately 130,000 deaths in 2000.²]

I have outlined the general direction of the trend.¹

I have referred to at least two points of data in the graph to illustrate the direction of the trend.²

I have provided the context of the graph.

I have included the correct units of measurement (deaths), ensuring to check the axis titles.

I have used a qualifier such as 'approximately' when referring to data.

- 17** **a** [The greatest contributor to burden of disease in the group is endocrine disorders.¹]

I have identified endocrine disorders as the greatest contributor to burden of disease in the graph.¹

- b** [Burden of disease is a measurement of the impact of disease and injuries which measures the gap between the current health status and an ideal situation where everyone lives to an old age, free of disease and disability.¹][Burden of disease is measured by the unit of disability-adjusted life year (DALY), in which one disability-adjusted

life year (DALY) equals one year of healthy life lost due to the experience of a disability or disease (YLD) or one year of healthy life lost due to premature death (YLL).²]

I have described burden of disease.¹

I have described how burden of disease is measured, referring to disability-adjusted life years, years of life lost due to premature death, and years of life lost due to disability.²

Questions from multiple lessons

- 18** **a** [Self-assessed health status refers to an individual's overall perception of their own health status at a given point in time.¹]

I have outlined self-assessed health status.¹

- b** [Due to measuring an individual's own individual perspective of their health status, self-assessed health status reflects on the subjective nature of illness as it is influenced by unique opinions and judgements.¹][This is due to illness referring to a self-perceived negative state of health and wellbeing, in which an individual believes they are unwell. For example, if an individual is experiencing a cold, this data would be captured by the health status indicator of self-assessed health status as it measures their perception of their health status at a particular time.²]

I have examined how self-assessed health status reflects the subjective nature of illness by explaining how self-assessed health status is influenced by individual opinions.¹

I have outlined how illness is a self-perceived negative state which can be measured by the health status indicator of self-assessed health status.²

1D Prerequisites for health

Theory-review questions

- 1** B. False. While the WHO's prerequisites for health are essential for an individual to achieve optimal health and wellbeing, there are other factors that contribute to someone's health, such as access to high-quality healthcare.

- 2** A. True. If a community is socially just, it will be free from discrimination. Discrimination is often the basis of conflict and violence, meaning a socially just community will often be a peaceful one.

- 3** A. True. If people have access to an income they are more likely to be able to access an education. Higher levels of education are associated with a higher income. Therefore, there is a cycle between receiving an education and an income.

- 4** B. False. Although social justice and equity are related, these concepts are different. Social justice relates to the equal treatment of people, whereas equity relates to the fair treatment of people based on their needs.

- 5** I; II; III. Having an adequate income enables people to access essential resources for survival, which can decrease stress and anxiety levels due to knowing they can access these things. An adequate income also allows people to do things that they enjoy, as they do not have to spend their days searching for employment or ways to retrieve essential resources.

- 6** B. False. For shelter to promote optimal health and wellbeing, it should be durable, have heating and cooling, clean water supply and sanitation, cooking facilities, and avoid overcrowding.

- 7** B. False. Using resources sustainably is also important for current generations to ensure we do not deplete resources we rely on in our lifetime,

or negatively impact our environment. For example, the over reliance on fossil fuels directly reduces our quality of air.

8 I; III. A stable ecosystem keeps water sources clean, which is essential for human survival. This stability can be compromised by human activities, such as pollution to water sources. An unstable ecosystem is when the interaction between living and non-living things in an area are unbalanced.

9 A. True. For a population to improve health outcomes, they must have access to all nine prerequisites to health, as these are essential conditions to achieving optimal health and wellbeing.

Skills

Perfect your phrasing

10 B **11** B

Exam-style questions

12 [Peace is a state of harmony that involves freedom from civil disturbance and conflict.¹]

I have described peace.¹

13 a [Shelter is a permanent structure that provides protection from the outside environment.¹]

I have described shelter.¹

b [Adequate shelter is an environment which enables someone to get an appropriate amount of sleep.¹] [Having enough sleep is essential for a strong immune system, promoting physical health and wellbeing.²]

I have described one impact of shelter.¹

I have linked this impact to a health outcome.²

Other acceptable answers include:

- students can link the impact of shelter to various health status indicators or dimensions of health and wellbeing.

14 [Food is a WHO prerequisite.¹] [Access to nutritious food is particularly important for pregnant women, as it increases the chance of babies being born a healthy weight.²] [Babies being born a healthy weight improves the functioning of their body systems, promoting their physical health and wellbeing.³]

I have identified one WHO prerequisite.¹

I have explained one impact of food.²

I have linked this impact of food to one dimension of health and wellbeing.³

Other acceptable answers include:

- other WHO prerequisites, so long as they are adequately explained.

15 a [Countries that demonstrate and promote social justice reduce the likelihood of deaths from conflict and violence due to discrimination, reducing global mortality rates from conflict.¹]

I have selected one of either peace or social justice and explained how it improves health status globally.¹

b [Peace is essential for Tibetan people as it would enable them to travel freely around and out of Tibet without the threat of the Chinese military.¹] [Being able to move freely without threat would enable

Tibetan people to access essential services, such as healthcare, and therefore receive treatment for illnesses, improving their physical health and wellbeing.²] [Social justice would enable Tibetan people to express their religious beliefs without being treated as second-class citizens.³] [Being able to freely express religious beliefs strengthens an individual's belief in their religion and a higher power, improving the spiritual health and wellbeing of Tibetan people.⁴]

I have explained the impact of peace or social justice for Tibetan people.¹

I have explained how this impact could improve one dimension of health and wellbeing for Tibetan people.²

I have explained the impact of social justice or peace for Tibetan people.³

I have explained how this impact could improve another dimension of health and wellbeing for Tibetan people.⁴

Questions from multiple lessons

16 a [Income is money that is earned by an individual through providing labour, producing a good or service, or money received from investments, which enables them to access various resources.¹] [A stable ecosystem is when there is balance between living and non-living components of an ecosystem.²]

I have described income.¹

I have described a stable ecosystem.²

b [Income enables individuals to access basic resources, such as food, water, education, and shelter.¹] [Being able to access basic resources is essential for survival, meaning income is critically important for an individual.²] [When people have an adequate income, they are more likely to spend money on activities that they enjoy, such as travel.³] [Travelling between countries contributes to the tourism industry and many countries' economies, meaning income is financially important at a global level.⁴]

I have selected income and explained one of its impacts.¹

I have linked this impact to explain the importance of income individually.²

I have explained another impact of income.³

I have linked this impact to explain the importance of income globally.⁴

Chapter 1 test

1 [Mental health and wellbeing is the current state of wellbeing of the mind, involving the ability to think and process information.¹] [Mental health and wellbeing includes having low levels of stress and anxiety.²]

I have described mental health and wellbeing.¹

I have described a component of mental and wellbeing.²

2 [Health and wellbeing is subjective, as an individual's perceived health and wellbeing is influenced by their own unique opinions and judgements.¹] [For example, a professional runner may perceive having optimal physical health and wellbeing as dependent on how long and fast they can run, whereas an elderly person could perceive this based

on their ability to complete everyday activities, such as walking down the street.^{2]}

I have outlined why health and wellbeing is subjective.¹

I have provided an example that illustrates how health and wellbeing is subjective.²

- 3 a [Under 5 mortality rate is the number of deaths of children under five years of age per 1000 live births.¹]

I have described under 5 mortality rate.¹

- b [In the graph comparing under 5 mortality rates (U5MR) between Australia and Nigeria between 1970 and 2019, U5MR in Australia and Nigeria decreased over time.¹ [For example, in 1970 there was approximately 25 deaths per 1000 live births among children under 5 in Australia, and approximately 280 deaths per 1000 live births in Nigeria. These under 5 mortality rates decreased over time, with approximately 5 deaths per 1000 live births in Australia, compared to about 120 deaths per 1000 live births in Nigeria in 2019.²]

I have outlined the general direction of the trend.¹

I have referred to at least two points of data in the graph to illustrate the direction of the trend.²

I provided the context of the graph.

I have included the correct units of measurement (deaths per 1000 live births), ensuring to check the axis titles.

I have used qualifiers such as 'approximately' when referring to data.

- c [Adequate shelter for children and families in Nigeria would involve access to safe sanitation facilities for all, such as clean toilets, which would reduce the transmission of communicable diseases, such as diarrhoea.¹ [The reduced transmission of communicable diseases would decrease the number of deaths among children from diarrhoea, decreasing under 5 mortality rates.²]

I have explained the impact of the WHO prerequisite, shelter, in Nigeria.¹

I have linked this impact to decreasing under 5 mortality rates in Nigeria.²

- 4 [Prevalence refers to the number of cases of a particular disease or condition that are present in the population at a given point in time,¹ whereas incidence refers to the number of new cases of a particular disease or condition that arise in the population in a certain period of time.²]

I have outlined the meaning of prevalence.¹

I have outlined the meaning of incidence.²

I have used comparison words, such as 'whereas'.

- 5 a [As Claude has had a big change in her life by having a baby, she is experiencing high levels of stress, which may negatively affect her mental health and wellbeing.¹ [Having high levels of stress could impact Claude's quality and amount of sleep, in which a lack of sleep could impact her brain functioning and ability to use logic, which also negatively impacts her mental health and wellbeing.²]

I have explained how Claude's current situation impacts her mental health and wellbeing, with reference to a component of mental health and wellbeing.¹

I have further explained how Claude's current situation could impact her mental health and wellbeing, with reference to another component of mental health and wellbeing.²

- b [Newly becoming a mother involves a lot of new responsibilities and tasks for Claude, which she has not done before. This could lead to Claude having lower levels of self-confidence and optimism about being a mum.¹ [Lower levels of self-confidence and optimism may prevent Claude from seeing her friends and strengthening her support network due to feeling less confident, which may negatively impact her social health and wellbeing.² [Furthermore, as having a baby is a new and big change for Claude's life, she may be experiencing high levels of anxiety about being a mother.³ [High levels of anxiety could impact Claude's ability to return to work, which could result in her taking another month off. Not working could therefore negatively impact her spiritual health and wellbeing, as working at Miam may contribute to Claude's sense of purpose in life.⁴]

I have explained how one component of mental health and wellbeing could impact Claude.¹

I have explained how this component of mental health or wellbeing could impact a component of Claude's social health and wellbeing.²

I have explained how one component of mental health and wellbeing could impact Claude.³

I have explained how this component of mental health or wellbeing could impact a component of Claude's spiritual health and wellbeing.⁴

I have referred to the character's name in my response (Claude), and to the scenario.

I have used different components of mental health and wellbeing in this response from part a.

- 6 [One benefit of optimal health and wellbeing globally is that there is a reduced spread of communicable diseases.¹ [Optimal health and wellbeing among populations means there is less illness and disease experienced, due to practices such as strong hygiene, which reduces the spread across countries of communicable diseases, such as the various strains of influenza.²]

I have identified one benefit of optimal health and wellbeing as a resource globally.¹

I have outlined this benefit of optimal health and wellbeing as a resource globally.²

Other acceptable answers include:

- other benefits of optimal health and wellbeing as a resource globally, so long as they are adequately explained.

- 7 a [Prerequisites which are not sufficient in Yemen are peace,¹ [and food.²]

I have listed one WHO prerequisite that is not sufficient in Yemen.¹

I have listed another WHO prerequisite that is not sufficient in Yemen.²

Other acceptable answers include:

- other WHO prerequisites for health that, according to the case study, are not sufficient in Yemen.

- b [Peace in Yemen would enable essential societal systems, such as hospitals, to be rebuilt without the threat of being bombed.¹] [Being able to access hospitals and treatment freely would reduce the likelihood of death from preventable causes, such as injuries, reducing mortality rates from injuries among Yemeni people.²] [Furthermore, satisfying the WHO prerequisite of food in Yemen would ensure the population experiences food security, meaning 80 percent of the Yemeni population would no longer experience an insufficient supply of food.³] [Experiencing food security is essential to the optimal functioning of the body and its systems, promoting physical health and wellbeing among Yemeni people.⁴]

I have explained the impact of one of my chosen WHO prerequisites for people in Yemen.¹

I have explained how this impact would improve health outcomes for people living in Yemen.²

I have explained the impact of my other chosen WHO prerequisite for people living in Yemen.³

I have explained how this impact would improve health outcomes for people living in Yemen.⁴

I have referred to the scenario.

2A Health variations between population groups: Part 1

Theory-review questions

- 1 B. False. Whilst there are some biological, sociocultural, and environmental factors that we have control over, there are some that are unable to be controlled, such as birth weight or climate.
- 2 III. Whilst we are unable to control biological factors such as genetics or low birth weight, we are mainly able to control body weight through eating a nutritious diet and exercising regularly.
- 3 I. Socioeconomic status is a sociocultural factor which is a measure used to determine the social status of an individual using the factors of income, occupation, and education. The other two factors listed are environmental factors.
- 4 I; II; IV. Socioeconomic status is a measure used to determine the social status of an individual using the factors of income, occupation and education.
- 5 A. Low income can prevent individuals from accessing resources such as nutritious food and adequate housing. As individuals with low incomes may not have the financial ability to afford nutritious food or access to adequate housing.
- 6 I; II. Both housing and the working environment are environmental factors, whilst social exclusion is a sociocultural factor.
- 7 A. Having an outside work environment can expose individuals to higher levels of UV and increase the risk of skin cancer. Working in an outside environment, especially in Australia, can expose individuals to higher levels of UV and thus increase the risk of skin cancer.
- 8 B. Having food security can ensure that an individual can have access to a safe, consistent source of nutritious food, thereby strengthening their immune system. Food security ensures that individuals are able to have safe consistent access to nutritious food, which can thereby strengthen their immune system.
- 9 C. Glucose regulation, unemployment, and work environment are biological, sociocultural, and environmental factors respectively.

Skills

Data analysis

10 B 11 II; III

Unpacking the case study

12 A 13 II; III

Exam-style questions

- 14 [One environmental factor that can impact Australia's health status is the work environment.¹] Individuals who work in an outside work environment are exposed to high levels of UV, which can increase the risk of skin cancer and thus increase the prevalence of skin cancer in Australia.²

I have identified an environmental factor that can have an impact on Australia's health status.¹

I have described how my chosen environmental factor can impact Australia's health status, with reference to an indicator.²

- 15 [Social isolation occurs when individuals are unable to be in regular contact with others, which can often occur from geographical location, language barriers, or disability.¹] Regular interaction with others is

important to maintain good social and mental health and wellbeing. Thus, when people lack interaction with others, they are at increased risk of developing mental health conditions, which can increase the prevalence of conditions such as depression.²]

I have explained social isolation as a sociocultural factor.¹

I have explained how social isolation can impact Australia's health status, with reference to an indicator.²

- 16 a [The sociocultural factor shown in the graph is socioeconomic status, which is a measure used to determine the social status of an individual using the factors of income, occupation and education.¹]

I have identified and outlined socioeconomic status as a sociocultural factor.¹

- b [Socioeconomic status (SES) is a measure used to determine the social status of an individual using the factors of income, occupation, and education. Those who have a low SES are likely to have a lower level of education and less likely to be educated on eating a nutritious diet.¹] As a result, low SES individuals are more likely to eat a diet of cheaper processed foods that are energy dense, increasing the risk of becoming overweight or obese, thereby leading to a greater prevalence of obesity among low SES individuals.²

I have outlined SES and one example between having a low socioeconomic status and risk factors for obesity.¹

I have linked my example to how having a low socioeconomic status can increase the prevalence of obesity.²

- 17 [One sociocultural factor that can impact health status is unemployment.¹] When people are unemployed for long periods of time, they can often experience higher levels of stress and anxiety, especially if they are the provider of the family. Higher levels of stress and anxiety from being unemployed can increase the risk of mental health conditions, which can in turn increase the prevalence of depression in Australia.² [Moreover, a biological factor that can impact health status is high blood pressure (hypertension).³] When individuals have hypertension, this can increase their risk of cardiovascular disease, in turn increasing the incidence of cardiovascular disease in Australia.⁴]

I have identified one sociocultural factor.¹

I explained how my chosen sociocultural factor can impact Australia's health status, with reference to an indicator.²

I have identified one biological factor.³

I have explained how my chosen biological factor can impact Australia's health status, with reference to an indicator.⁴

Questions from multiple lessons

- 18 [Food security refers to being able to consistently access nutritious, safe, and culturally appropriate food at all times, from non-emergency source.¹] One of the WHO's prerequisites for health that food security relates to is food, as adequate food intake is an essential requirement for living a healthy and productive life.²

I have described food security.¹

I have explained how food security relates to one of the WHO's prerequisites for health.²

2B Health variations between population groups: Part 2

Theory-review questions

- 1 A. True. *Biological, sociocultural, and environmental factors all play a part in contributing to the differences we see between population groups, such as males and females, and Indigenous and non-Indigenous Australians.*
- 2 A. True. *Indigenous Australians experience a lower life expectancy than non-Indigenous Australians. Indigenous males experience a lower life expectancy of 8.6 years compared to non-Indigenous Australians, while Indigenous females experience a lower life expectancy of 7.8 years compared to non-Indigenous Australians.*
- 3 B. False. *Females experience a higher life expectancy than males in Australia, with males having a life expectancy of 80.7 years in comparison to females with a life expectancy of 84.9 years.*
- 4 A. **Males** are more likely to work in jobs that require physical labour and operation of heavy machinery, which can place them at a higher risk of injury in comparison to females. *This is due to the fact that males are more likely to work in trade or farming occupations in comparison to females.*
- 5 B. **Females** are more likely to access health services when they need them, in turn reducing the risk of conditions being left unnoticed. *This is due to the traditional stereotype of males being strong and independent, they are less likely to seek healthcare, putting them at an increased risk of conditions going undiagnosed.*
- 6 A. True. *Indigenous Australians are less likely to access western medical services in comparison to non-Indigenous Australians. This is often due to Indigenous Australians often preferring to seek medical services from people in their own culture that is in line with their own practices and beliefs.*
- 7 A. **Indigenous Australians** have higher rates of smoking and alcohol consumption during pregnancy, in turn contributing to them facing higher rates of low birth weight and infant mortality. *As smoking and alcohol consumption can increase the risk of low birth weight and infant mortality.*
- 8 I; II; III. *Indigenous Australians have a higher prevalence in type 2 diabetes, cardiovascular disease and respiratory conditions in comparison to non-Indigenous Australians.*
- 9 III; IV. *Males have a higher prevalence of injury and suicide in comparison to females. Contrastly, females have a higher prevalence of arthritis and osteoporosis in comparison to males.*

Skills

Data analysis

10 B 11 A 12 I; III

Exam-style questions

- 13 [One difference in health status between Indigenous and non-Indigenous Australians is that non-Indigenous Australians have a higher life expectancy in comparison to Indigenous Australians.¹]

I have identified one difference in health status between Indigenous and non-Indigenous Australians, with reference to a health status indicator.¹

I have referred to both Indigenous and non-Indigenous Australians in my example.

- 14 [One difference in health status between males and females is that females have a higher life expectancy in comparison to males.¹]
[Additionally, another difference is that males have a higher prevalence of cardiovascular disease compared to females.²]

I have provided one example of a difference in health status between males and females, with reference to a health status indicator.¹

I have provided another example of a difference in health status between males and females, with reference to a health status indicator.²

I have referred to both males and females in my examples.

- 15 [One difference in health status between Indigenous and non-Indigenous Australians is that Indigenous Australians have higher maternal mortality rates in comparison to non-Indigenous Australians.¹]
[Moreover, another difference is that Indigenous Australians have higher mortality rates associated with type 2 diabetes in comparison to non-Indigenous Australians.²]

I have outlined one difference in health status between Indigenous and non-Indigenous Australians, with reference to an indicator.¹

I have outlined another difference in health status between Indigenous and non-Indigenous Australians, with reference to an indicator.²

I have referred to both Indigenous and non-Indigenous Australians in my examples.

- 16 a [One sociocultural factor that could contribute to the higher under 5 mortality experienced by Indigenous Australians compared to non-Indigenous Australians is early life experiences.¹]

I have identified one sociocultural factor that could contribute to the difference in under 5 mortality rates between children of Indigenous and non-Indigenous mothers.¹

- b [An early life experience is that Indigenous mothers have higher rates of smoking and alcohol consumption during pregnancy in comparison to non-Indigenous mothers.¹][Maternal smoking and alcohol consumption can expose babies to toxins, increasing the risk of under 5 mortality, in turn contributing to Indigenous Australians experiencing a higher under 5 mortality rate than non-Indigenous Australians.²]

I have explained one sociocultural factor that could contribute to the difference in maternal mortality rates between Indigenous and non-Indigenous Australians.¹

I have explained how my chosen sociocultural factor contributes to the difference in under 5 mortality rates between Indigenous and non-Indigenous Australians.²

- 17 a [One biological factor that could contribute to males having a higher prevalence of type 2 diabetes than females is blood pressure.¹]

I have identified one biological factor that could contribute to the difference in the prevalence of type 2 diabetes between males and females.¹

- b** [Males tend to have higher blood pressure in comparison to females and are therefore more at risk of hypertension.¹] [As hypertension is a risk factor for type 2 diabetes, this can contribute to males having a higher prevalence of type 2 diabetes in comparison to females.²] [Males are less likely to access medical services in comparison to females.³] [As a result, this can leave males at an increased risk of conditions, such as, obesity going unnoticed and therefore untreated. As obesity is a risk factor for type 2 diabetes, this can contribute to males having a higher prevalence of type 2 diabetes in comparison to females.⁴]

I have explained one biological factor that could contribute to the difference in the prevalence of type 2 diabetes between males and females.¹

I have explained how my chosen biological factor could contribute to the difference in the prevalence of type 2 diabetes between males and females.²

I have explained one sociocultural factor that could contribute to the difference in the prevalence of type 2 diabetes between males and females.³

I have explained how my chosen sociocultural factor could contribute to the difference in the prevalence of type 2 diabetes between males and females.⁴

Questions from multiple lessons

- 18** [By ensuring that Indigenous Australians have access to culturally appropriate healthcare they are more likely to access health services when needed, reducing the risk of conditions becoming undetected or untreated, in turn promoting optimal health and wellbeing.¹] [If the Indigenous population of Australia has higher optimal health and wellbeing, they can live productive lives and work, which in turn promotes economic growth and acts as a resource nationally.²]

I have explained how improving access to culturally appropriate healthcare for Indigenous Australians can promote optimal health and wellbeing.¹

I have explained how promoting optimal health and wellbeing can act as a resource nationally.²

2C Health variations between population groups: Part 3

Theory-review questions

- 1** B. False. *Biological factors are not considered to be the only factors accounting for differences in health status. Biological, sociocultural, and environmental factors all equally play a part in contributing to the differences we see between population groups.*
- 2** A. True. *Individuals from high SES groups have higher life expectancy in comparison to those from low SES groups. This can be due to high SES individuals having greater incomes and education levels, meaning they are more likely to access resources to live a healthy life.*
- 3** B. False. *Individuals living outside of major cities experience lower life expectancy, in comparison to those living within major cities.*
- 4** A. **Individuals living outside of major cities** are more likely to experience food insecurity, as they are more likely to have lower average incomes, and nutritious food is more expensive in the areas they reside. *This is due to individuals living outside of major cities having lower average incomes and nutritious food is often relatively expensive in rural areas.*
- 5** A. **Individuals in low SES groups** are less likely to access health services when they need them, as they are more likely to have limited health literacy, and therefore may not know the importance of regular health checkups. *This is due to individuals in low SES groups often having lower levels of health literacy meaning they are less likely to access medical services when needed, in turn increasing the risk of conditions going untreated.*
- 6** A. Mothers from **low SES groups** are more likely to smoke and consume alcohol during pregnancy, contributing to higher rates of low birth weight and under 5 mortality. *As a result, this can explain why individuals in low SES groups face higher rates of low birth weight and under 5 mortality, in comparison to those in high SES groups.*
- 7** A. True. *Individuals in low SES groups generally have lower health status demonstrated by most health status indicators in comparison to individuals in high SES groups.*

Skills

Data analysis

8 B

9 II; III

10 B

Exam-style questions

- 11** [One difference in health status between individuals in low SES groups and individuals high SES groups is that individuals in low SES groups experience a higher prevalence of type 2 diabetes, in comparison to individuals in high SES groups.¹]

I have identified one difference in health status between individuals in low SES groups and individuals in high SES groups, with reference to a health status indicator.¹

I have referred to both individuals in low SES groups and individuals in high SES groups.

- 12** [Individuals living outside of major cities experience a lower life expectancy in comparison to those living within major cities.¹] [Moreover, individuals living outside of major cities experience a higher prevalence of cardiovascular disease, in comparison to those living within major cities.²]

I have provided one example of a difference in health status between individuals living outside of major cities and individuals living within major cities, with reference to a health status indicator.¹

I have provided another example of a difference in health status between individuals living outside of major cities and individuals living within major cities, with reference to a health status indicator.²

I have referred to both individuals living outside of major cities and individuals living within major cities in my examples.

- 13** [One biological factor that can contribute to a difference in health status between individuals living outside of major cities and individuals living within major cities is body weight.¹] [Individuals living outside of major cities have higher rates of obesity compared to those living within major cities. As a result, this can contribute to individuals living outside of major cities experiencing a higher prevalence of cardiovascular disease.²]

I have explained one biological factor that could contribute to a difference in health status between individuals living outside of major cities and individuals living within major cities.¹

I have explained how my chosen biological factor could contribute to this difference, with reference to a health status indicator.²

I have referred to both individuals living outside of major cities and individuals living within major cities in my examples.

- 14 a** [One sociocultural factor that could contribute to individuals in low SES groups having a higher prevalence of type 2 diabetes compared to individuals in high SES groups is food security.¹]

I have identified one sociocultural factor that could contribute to the difference in the prevalence of type 2 diabetes between individuals in low SES groups and individuals in high SES groups.¹

b [Individuals in low SES groups are more likely to experience food insecurity compared to those in high SES groups.¹] [This is due to individuals in low SES groups often having lower average incomes, restricting their ability to afford nutritious food. This can lead to individuals in low SES groups over consuming processed foods, increasing the risk of obesity which is a risk factor for type 2 diabetes. As a result, individuals in low SES groups experience a higher prevalence of type 2 diabetes in comparison to individuals in high SES groups.²]

I have explained one sociocultural factor that could contribute to the difference in the prevalence of type 2 diabetes between individuals in low SES groups and individuals in high SES groups.¹

I have explained how my chosen sociocultural factor contributes to this difference.²

I have referred to both individuals in low SES groups and individuals in high SES groups.

Other acceptable answers include:

- you could have chosen a different sociocultural factor that contributes to the difference in the prevalence of type 2 diabetes between individuals in low SES groups and individuals in high SES groups. However, you must adequately explain how your chosen sociocultural factor contributes to this difference.

- 15 a** [One environmental factor that could contribute to individuals living outside of major cities experiencing a higher prevalence of injury compared to individuals living within major cities is work environment.¹]

I have identified one environmental factor that could contribute to the difference in the prevalence of injury between individuals living outside of major cities and individuals living within major cities.¹

b [Individuals living outside of major cities are more likely to work in occupations that require the operation of heavy machinery, such as farming and mining.¹] [Consequently, this can put individuals living outside of major cities at a higher risk of becoming injured at work. As a result, this can explain why individuals living outside of major cities experience a higher prevalence of injury in comparison to individuals living within major cities.²]

I have explained one environmental factor that could contribute to the difference in the prevalence of injury between individuals living outside of major cities and individuals living within major cities.¹

I have explained how my chosen environmental factor contributes to this difference.²

I have referred to both individuals living outside of major cities and individuals living within major cities.

Other acceptable answers include:

- you could have chosen a different environmental factor that contributes to the difference in the prevalence of injury between individuals living outside of major cities and individuals living within major cities. However, you must adequately explain how your chosen environmental factor contributes to this difference.

Questions from multiple lessons

- 16** [Shelter refers to a place that can protect people from exposure to bad weather and danger, and is a prerequisite for health.¹] [As those in the lowest SES groups, such as homeless people, do not have access to adequate shelter this can put them at more risk of being exposed to danger or harsh weather. By enabling these individuals to have access to shelter, this can provide a safe environment for them to reside and reduce the risk of exposure to danger, in turn improving life expectancy outcomes.²]

I have described shelter as a prerequisite for health.¹

I have explained how access to shelter can improve the health status of the lowest socioeconomic groups.²

2D Contributions to Australia's health status: Part 1

Theory-review questions

- A. True. Smoking, alcohol and a high body mass index (BMI) are all preventable risk factors and have the potential to contribute to Australia's burden of disease.
- A. True. Despite the reduction in smoking rates in Australia, tobacco smoking still remains the leading preventable cause of poor health and death in Australia.
- A. True. Alcohol is considered to be energy dense, thus prolonged consumption of alcohol can increase the risk of becoming overweight or obese.
- A. True. The consumption of alcohol can have an effect on individuals' behaviour and increase risk-taking behaviour which can in turn increase the risk of alcohol-related injuries.
- A. True. Excess body weight can cause increased levels of fatty acids and inflammation, leading to insulin resistance, which in turn can lead to type 2 diabetes.
- I; II. A high body mass index (BMI) increases the risk of type 2 diabetes as excess body weight can lead to insulin resistance and subsequently type 2 diabetes. Moreover, a high BMI is also a risk factor for cardiovascular disease as excess body mass can lead to hypertension and speed up the process of atherosclerosis, thus increasing the risk of cardiovascular disease.
- I; II; III. Overconsumption of alcohol can increase the risk of obesity as alcohol is energy dense. Additionally, obesity also increases the risk of cardiovascular disease. Moreover, excess alcohol consumption can cause liver scarring and liver cells to die increasing the risk of liver disease.

- 8** B. Binge drinking is more likely to contribute to alcohol-related injuries, whereas long-term alcohol consumption is more likely to contribute to long-term chronic health conditions.

Skills

Data analysis

9 B **10** C **11** A

Exam-style questions

- 12** Burden of disease is a measurement of the impact of disease and injuries which measures the gap between the current health status and an ideal situation where everyone lives to an old age, free of disease and disability.¹ [Burden of disease is measured by the unit of disability-adjusted life year (DALY), in which one DALY equals one year of healthy life lost due to the experience of a disability or disease (YLD) or one year of healthy life lost due to premature death (YLL).²]

I have described burden of disease as a health status indicator.¹

I have described how burden of disease is measured, referring to disability-adjusted life years, years of life lost due to premature death, and years of life lost due to disability.²

- 13** A high body mass index (BMI) can cause insulin resistance, therefore increasing the risk of type 2 diabetes.¹ [As a result, this can increase the incidence of type 2 diabetes in Australia.²]

I have described how a high BMI acts as a risk factor for a health condition.¹

I have explained how my chosen condition impacts Australia's health status, with reference to a health status indicator.²

- 14** Smoking increases blood pressure in the body which causes chemicals speed up the process of atherosclerosis and increase the risk of cardiovascular disease.¹ [As a result, higher rates of cardiovascular disease contribute to premature death and contribute to a significant amount of years of healthy life lost due to premature death (YLL), negatively impacting burden of disease.²] Furthermore, smoking tobacco can damage airways from the smoke, increasing the risk of respiratory conditions such as chronic obstructive pulmonary disease (COPD).³ [As a result, higher rates of COPD contribute to years of life lost due to premature death (YLL) and contribute to a significant amount of disability-adjusted life years (DALY).⁴]

I have described how smoking acts as a risk factor for a health condition.¹

I have explained how my chosen condition impacts Australia's burden of disease.²

I have described how smoking acts as a risk factor for another health condition.³

I have explained how my chosen condition impacts Australia's burden of disease.⁴

I have linked my example to burden of disease in Australia with reference to the health status indicator YLL or YLD, and its corresponding influence on DALY.

- 15** Alcohol is high in kilojoules, meaning it is energy dense; thus excess consumption can increase the risk of weight gain and obesity.¹ [Obesity

is a risk factor for chronic conditions such as type 2 diabetes, which can contribute significantly to the prevalence of type 2 diabetes in Australia.² [Furthermore, as alcohol is filtered through the liver, excess consumption can cause liver tissue to scar and increase the risk of liver diseases.³] [Higher rates of sclerosis of the liver can contribute to increased incidence of sclerosis of the liver in Australia.⁴]

I have described how alcohol acts as a risk factor for a health condition.¹

I have explained how my chosen condition impacts Australia's health status, with reference to a health status indicator.²

I have described how alcohol acts as a risk factor for another health condition.³

I have explained how my chosen condition impacts Australia's health status, with reference to a health status indicator.⁴

- 16** A high body mass index (BMI) can cause insulin resistance, thus increasing the risk of type 2 diabetes.¹ [Type 2 diabetes contributes significantly to disability-adjusted life years (DALY) in Australia as the condition heightens healthy years of life lost due to disease (YLD).²] [Moreover, a high BMI are at increased risk of hypertension, which speeds up the process of atherosclerosis, thus increasing the risk of cardiovascular disease.³] [Higher rates of cardiovascular disease can increase Australia's disability-adjusted life years (DALY) as it can lead to fatal conditions such as a stroke, leading to healthy years of life lost due to premature death (YLL).⁴]

I have described how a high BMI acts as a risk factor for a health condition.¹

I have explained how my chosen condition impacts Australia's burden of disease.²

I have described how a high BMI acts as a risk factor for another health condition.³

I have explained how my chosen condition impacts Australia's burden of disease.⁴

I have linked my example to burden of disease in Australia with reference to the health status indicator YLL or YLD, and its corresponding influence on DALY.

Questions from multiple lessons

- 17** The Aboriginal Connection Program could provide resources such as counselling to Indigenous Australians with alcohol problems to reduce alcohol use.¹ [As alcohol is energy dense and thus is a risk factor for obesity, this could reduce the prevalence of obesity amongst Indigenous Australians.²] [Moreover, the Aboriginal Connection Program could provide resources such as telephone assistance to Indigenous Australians with alcohol problems to offer them advice on responsible drinking.³] [This in turn could lead to more responsible drinking, reducing the risk of alcohol-related injuries and thus reducing years of healthy life lost due to the experience of a disability or disease (YLD) attributed to alcohol related injury.⁴]

I have described one way the Aboriginal Connection Program improves the health status of Indigenous Australians.¹

I have explained how the Aboriginal Connection Program can improve the health status of Indigenous Australians.²

- I have described one way the Aboriginal Connection Program improves the burden of disease of Indigenous Australians.³
- I have explained how the Aboriginal Connection Program can improve the burden of disease of Indigenous Australians.⁴
- I have linked my example to burden of disease in Australia with reference to the health status indicator YLL or YLD, and its corresponding influence on DALY.

2E Contributions to Australia's health status: Part 2

Theory-review questions

- 1 A. True. As diets can be controlled and managed through eating behaviours, dietary risks are considered to be preventable risk factors.
- 2 A. True. As fruits and vegetables are a rich source of fibre, they act as a protective factor for colorectal cancer as fibre adds bulk to faeces and helps to keep the digestive tract clean.
- 3 II; III. Calcium is found in dairy foods and helps to maintain bone density, thus the under-consumption of dairy foods is a risk factor for osteoporosis. Furthermore, calcium also promotes the maintenance of healthy teeth, thus the under-consumption of dairy foods is a risk factor for dental caries.
- 4 I; III. Fibre provides the feeling of fullness and also helps to keep the digestive tract clean. Thus, a low intake of fibre is a risk factor for colorectal cancer and high body mass index (BMI).
- 5 I; II. When high levels of salt are consumed, calcium is excreted through urine. Because calcium is essential for maintaining bone density, a high intake of salt can increase the risk of osteoporosis. Furthermore, a high intake of salt can cause water to be pulled into the blood vessels and increase the risk of hypertension.
- 6 B. False. Fats are an essential part to a nutritious diet as they provide the body with a primary source of energy. However, fats should be consumed in moderation and not overconsumed.
- 7 A. True. A low intake of iron can increase the risk of iron-deficiency anaemia, a condition where there is a lack of healthy blood cells, categorised by an individual feeling weak or fatigued.

Skills

Data analysis

8 B 9 C 10 B

Exam-style questions

- 11 [One major food source that contains calcium is cow's milk.¹] [Another food source that contains calcium is yoghurt.²]

- I have listed one major food source that contains calcium.¹
- I have listed another major food source that contains calcium.²

Other acceptable answers include:

- cheese
- cream
- any other acceptable source of dairy.

- 12 [One major food source that contains iron is red meat.¹] [Furthermore, another food source that contains iron is legumes.²]

- I have listed one major food source that contains iron.¹

- I have listed another major food source that contains iron.²

Other acceptable answers include:

- spinach
- nuts
- brown rice
- any other acceptable source of iron.

- 13 [When sugar is consumed in excess and the energy provided by sugar goes unused, it increases the risk of weight gain and a high body mass index (BMI).¹] [As a high body mass index is a risk factor for cardiovascular disease, this could contribute to a higher prevalence of cardiovascular disease in Australia.²]

- I have described how a high intake of sugar acts as a risk factor for a health condition.¹

- I have explained how my chosen condition impacts Australia's health status, with reference to a health status indicator.²

- 14 [When salt is consumed in excess it can cause calcium to be excreted through urine, leading to a lack of calcium, which is a key protective factor for osteoporosis.¹] [As a result, a high intake of salt can increase years of life lost due to disease (YLD) and DALY attributable to osteoporosis.²]

- I have described how a high intake of salt acts as a risk factor for a health condition.¹

- I have explained how my chosen condition impacts Australia's burden of disease.²

- I have linked my example to burden of disease in Australia, with reference to the health status indicator YLL or YLD, and its corresponding influence on DALY.

- 15 [Calcium is found in dairy foods and promotes the maintenance of teeth, ensuring that they stay strong. Thus, an under-consumption of dairy foods can lead to a lack of calcium needed to protect against dental caries.¹] [As a result, an under-consumption of dairy foods can increase the incidence of dental caries in Australia.²]

- I have described how an under-consumption of dairy foods acts as a risk factor for a health condition.¹

- I have explained how my chosen condition impacts Australia's health status, with reference to a health status indicator.²

- 16 [By consuming the two serves of fruit per day as recommended by The Australian Dietary Guidelines, individuals would ensure they are consuming adequate amounts of fibre.¹] [As fibre adds bulk to faeces and helps to keep the digestive tract clean, it can act as a key protective factor for colorectal cancer.²] [Thus, consuming the recommended serves of fruit could reduce the years of life lost due to premature death (YLL) and DALY attributed to colorectal cancer.³]

- I have described how consuming the amount of fruit recommended by The Australian Dietary Guidelines could act as a protective factor for a health condition.¹

- I have explained how consuming the amount of fruit recommended by The Australian Dietary Guidelines acts as a protective factor for a health condition.²

- I explained how my chosen health condition impacts Australia's burden of disease.³
- I have linked my example to burden of disease in Australia with reference to the health status indicator YLL or YLD, and its corresponding influence on DALY.

Questions from multiple lessons

- 17 Fibre is essential for a nutritious diet as it provides the feeling of fullness and reduces the likelihood of overconsuming energy dense foods. A diet low in fibre increases the risk of an individual becoming obese, negatively impacting physical health and wellbeing.¹ Increasing the risk of becoming obese can negatively affect an individual's self-esteem, thus negatively impacting mental health and wellbeing.² If an individual has a poor sense of self-esteem, they are less likely to enjoy their day-to-day activities and feel a sense of purpose, negatively affecting spiritual health and wellbeing.³ A lack of a sense of purpose for an individual can mean that the individual is less likely to engage with their community, thus negatively impacting social health and wellbeing.⁴

- I have explained how a low dietary intake of fibre affects one dimension of health and wellbeing.¹
- I have linked the second dimension of health and wellbeing back to the first dimension, thereby demonstrating an interrelationship.²
- I have linked the third dimension of health and wellbeing back to the second dimension, thereby demonstrating an interrelationship.³
- I have linked the fourth dimension of health and wellbeing back to the third dimension, thereby demonstrating an interrelationship.⁴

Chapter 2 test

- 1 a Biological factors that can have an impact on Australia's health status are factors that relate to influences on health that stem from the body, including its systems and functioning, as well as the systems that function within it.¹ Whereas, environmental factors that can have an impact on Australia's health status are factors which refer to the physical conditions in the environment that individuals work, live, and play.²

- I have outlined the meaning of biological factors that can have an impact on Australia's health status.¹
- I have outlined the meaning of environmental factors that can have an impact on Australia's health status.²
- I have used comparison words, such as 'whereas'.

- b One biological factor that can impact Australia's health status is birth weight.¹ Babies that are born at a low birth weight are more likely to be susceptible to conditions at infancy and later on in their life, such as type 2 diabetes, high blood pressure (hypertension), and cardiovascular disease, therefore increasing morbidity of such conditions in Australia.²

- I have identified a biological factor that can have an impact on Australia's health status.¹

- I have described how my chosen biological factor can impact Australia's health status, with reference to a health status indicator.²

Other acceptable answers include:

- other biological factors that can impact Australia's health status, such as genetics, body weight, blood pressure, blood cholesterol, and glucose regulation.

- 2 Early life experiences refer to how an individual is brought up.¹ A child's health can be impacted by the decisions her mother makes when pregnant: poor nutrition during pregnancy, along with excessive maternal smoking and alcohol consumption can increase the risk of birth complications such as low birth weight, poor immune systems, and maternal mortality, therefore negatively impacting the health status of Australians.²

- I have explained early life experiences as a sociocultural factor.¹
- I have explained how early life experiences can impact Australia's health status, with reference to a health status indicator.²

- 3 a The sociocultural factor evident in the graph is socioeconomic status (SES).¹ Socioeconomic status is a measure used to determine the social status of an individual using the factors of income, occupation, and education.²

- I have identified socioeconomic status (SES) as a sociocultural factor.¹
- I have described the meaning of socioeconomic status (SES).²

- b As shown in the graph, there is a clear relationship between SES and the proportion of Australian adults who smoked daily, with those of a lower SES having a higher proportion of daily smokers.¹ More specifically, in 2017-18 in Australia, approximately 7% of those in the highest SES area smoked daily, compared to a much higher, approximately 23% of those in the lowest SES area.²

- I have outlined the relationship between SES and daily smoking adults in Australia.¹
- I have used data from the graph to support my response, referring to at least 2 points of data to reflect the relationship I identified.²
- I have provided the context of the graph.
- I have included the correct units of measurement, ensuring to check the axis titles.
- I have used a qualifier, such as 'approximately' when referring to data.

- c Cigarette smoke contains many chemicals, many of which are considered to be toxins and harmful to the body. Many of the toxic chemicals found in cigarette smoke are considered to be carcinogenic, meaning they have the potential to cause cancer upon consumption.¹ Therefore, smoking increases the prevalence of cancers in Australia, particularly lung cancer, along with morbidity and mortality associated with cancer.²

- I have described why smoking is a risk factor for health.¹



I have described how smoking contributes to Australia's health status, with reference to a health status indicator.²

- d [Food security is a sociocultural factor that could contribute to a difference in health status between high and low socioeconomic status (SES) groups. Food security is the ability to have consistent access to sufficient food needed to maintain good health.¹] [People of lower SES groups are more likely than people of high SES to suffer from food insecurity as they may find it more difficult to afford nutritious food, or may be uneducated about the importance of consuming a nutritious diet and may be more likely to consume unhealthy foods.²] Therefore, people in lower SES groups are more likely than those in higher SES groups to suffer from morbidity and mortality associated with conditions caused by food insecurity, such as diabetes and cardiovascular disease, thereby contributing to differences in health status between those of low and high SES groups.³] Furthermore, another factor that could contribute to a difference in health status between high and low socioeconomic status (SES) groups is geographical location - an environmental factor.⁴] Geographical location as a factor is about where someone lives; individuals in low SES groups are more likely to live further away from metropolitan cities than individuals in high SES groups. There are a greater number of fast food outlets and fewer restaurants offering fresh food in outer suburbs.⁵] Therefore, this means that those low SES groups have a higher risk of food consuming unhealthy foods than those of high SES because of their geographical location, thus contributing to the higher prevalence of obesity in low SES groups, in comparison to high SES groups.⁶]

I have discussed one factor that could contribute to a difference in health status between high and low socioeconomic status (SES) groups.¹

I have discussed the general difference in population groups in relation to my chosen factor.²

I have discussed how my chosen factor could contribute to a difference in health status between these population groups, with reference to a health status indicator.³

I have discussed another factor that could contribute to a difference in health status between high and low socioeconomic status (SES) groups.⁴

I have discussed the general difference in population groups in relation to my second chosen factor.⁵

I have discussed how my second chosen factor could contribute to a difference in health status between these population groups, with reference to a health status indicator.⁶

I have referred to both individuals in low SES groups and individuals in high SES groups.

I have used comparison words, such as 'in comparison to'.

- 4 a [One difference in the health status of Indigenous and non-Indigenous Australians is that Indigenous Australians have higher maternal mortality rates in comparison to non-Indigenous Australians.¹] [Maternal mortality rate refers to the number of deaths of pregnant women before birth, during birth, or within the first six weeks after birth, per 100,000 live births.²]



I have identified one example of a difference in health status between Indigenous and non-Indigenous Australians, with reference to an indicator.¹

I have described my example of a health status indicator.²

I have referred to both Indigenous and non-Indigenous Australians in my response.

I have used comparison words, such as 'in comparison to'.

- b [Bodyweight,¹] and housing are examples of two factors that may contribute to the difference in health status between Indigenous and non-Indigenous Australians.²]

I have identified one example of a factor that may contribute to the difference in health status between Indigenous and non-Indigenous Australians.¹

I have identified another example of a factor that may contribute to the difference in health status between Indigenous and non-Indigenous Australians.²

I have referred to both Indigenous and non-Indigenous Australians in my response.

- 5 [Dietary risks are risks associated with one's over or under consumption of certain foods and nutrients. Underconsumption of fruit and vegetables are examples of dietary risks.¹] Underconsumption of fruits and vegetables increases the risk of overweight and obesity in adults, along with type 2 diabetes and cardiovascular disease, therefore impacting morbidity in Australia associated with inadequate nutrient consumption.²] For example, it is known that males experience a higher level of burden of disease (as measured by DALY) in comparison to females.³] As seen in the data, a higher proportion of males do not consume an adequate fruit and vegetable intake, with 97% of males adults in 2017-18 in Australia not meeting the adequate intake, compared with a lower 92% of female adults. This could contribute to a higher level of burden of disease experienced by males as they are at a higher risk of developing a diet-related illness.⁴]

I have described the meaning of dietary risks.¹

I have explained how dietary risks contribute to Australia's health status, with reference to a health status indicator.²

I have discussed the difference between male and female health status, with reference to a health status indicator.³

I have used information from the table to support my response.⁴

I have referred to both males and females in my response.

I have used comparison words, such as 'in comparison to'.

- 6 [Overall, those living within major cities have better health status than those living outside major cities.¹] People living outside of Australia's major cities have a lower life expectancy in comparison to those living within Australia's major cities.²] This is reflected in the table, as, in 2018 in Australia, both males and females living in major cities had a higher median age of death (79 and 85 respectively), compared with those living in very remote areas (68 and 70 respectively). This thereby reflects the difference in life expectancy amongst both population groups.³]

I have outlined the general difference in health status between Australians living outside major cities and those living within major cities.¹

I have described the difference in health status between both groups, with reference to a health status indicator.²

I have used information from the table to support my response.³

I have referred to both individuals living outside of major cities and individuals living within major cities in my examples.

I have used a comparison word, such as 'compared with'.

- 7 a [One difference between the health status of males compared with females is that males have higher prevalence of cardiovascular disease than females.¹]

I have outlined one difference between the health status of males compared with females, with reference to a health status indicator.¹

I have referred to both males and females in my response.

I have used comparison words, such as 'compared with'.

- b [One biological factor that can contribute to males having a higher prevalence of cardiovascular disease than females is genetics, which refers to the unique, heritable makeup of each individual's cells.¹ [Males are more likely to store fat around their abdomens than females which can place a higher strain on their organs, thereby increasing the risk of morbidity due to cardiovascular disease for males compared with females.²]

I have explained one biological factor that could contribute to a difference in health status between males and females.¹

I have explained how my chosen biological factor could contribute to this difference, with reference to a health status indicator.²

I have referred to both males and females in my response.

I have used a comparison word, such as 'compared with'.

- 8 a [One sociocultural factor that can contribute to a difference in health status between individuals living outside of major cities and individuals living within major cities is social isolation, which occurs when individuals are not in regular contact with others and thereby often experience feelings of stress and loneliness.¹ [Individuals living outside of major cities are more likely to experience social isolation which can mean that such individuals are at a higher risk of developing mental illness, such as depression, in comparison to those living within major cities. Therefore, this can contribute to increased morbidity of mental illnesses amongst those living outside major cities compared to those living within major cities.²]

I have outlined one sociocultural factor that could contribute to a difference in health status between individuals living outside of major cities and individuals living within major cities.¹

I have explained how my chosen sociocultural factor could contribute to this difference, with reference to a health status indicator.²

I have referred to both individuals living outside of major cities and individuals living within major cities in my examples.

I have used a comparison word, such as 'in comparison to'.

- b [One biological factor that could contribute to a difference in health status between Indigenous and non-Indigenous Australians is impaired glucose regulation.¹ [Indigenous Australians experience higher rates of impaired glucose regulation in comparison to non-Indigenous Australians. This can contribute to Indigenous Australians having a higher prevalence of morbidity associated with diabetes and cardiovascular disease than non-Indigenous Australians, as impaired glucose regulation is a risk factor for these conditions.²]

I have outlined one biological factor that could contribute to a difference in health status between Indigenous and non-Indigenous Australians.¹

I have explained how my chosen biological factor could contribute to this difference, with reference to a health status indicator.²

I have referred to both Indigenous and non-Indigenous Australians in my response.

I have used a comparison word, such as 'in comparison to'.

- 9 [Individuals with a high body mass index (BMI) are at increased risk of hypertension, as a high BMI can place extra strain on the heart.¹ [Hypertension increases the risk of cardiovascular disease, thereby higher BMI increases the morbidity associated with heart disease.² [Alcohol is a poison which is processed and filtered by the liver. When consumed excessively, the liver can be overrun, presenting as a risk factor for health.³ [Excess alcohol consumption can cause liver scarring and liver cells to die, which can prohibit the liver's ability to function and filter toxins. Therefore, excessive alcohol use over time can increase the risk of liver-related diseases, such as liver cirrhosis, contributing to Australia's morbidity.⁴]

I have outlined how high BMI contributes to Australia's health status.¹

I have further described how high BMI contributes to Australia's health status, with reference to a health status indicator.²

I have outlined how excessive alcohol consumption contributes to Australia's health status.³

I have further described how excessive alcohol consumption contributes to Australia's health status, with reference to a health status indicator.⁴

Questions from multiple chapters

- 10 a [Education as a prerequisite for health is evident in the case study above, and involves individuals gaining essential knowledge and skills essential to maintain good health, through environments such as school and university.¹ [Education can involve improving one's health literacy, enabling people to make healthy choices, such as accessing healthcare services, eating well, and avoiding risky behaviours, such as tobacco smoking.²]

I have identified prerequisite for health evident in the case study.¹

I have described my chosen prerequisite for health.²

Note: You may have also identified and described other prerequisites for health. However, education was the most suited prerequisite for health to this case study. However, you also could have discussed income or potentially other prerequisites for health. You would receive marks if your chosen prerequisite for health was reasonably evident in the information, so long as you adequately described it as a prerequisite for health. Sometimes with Health and Human Development, it is about choosing the 'best fit' answer.

- b** [Education involves health literacy which is about being able to obtain, read, and understand health information.¹] [Individuals in low SES groups have lower levels of education compared to individuals of high SES groups, who have higher levels of education.²] [Therefore, low SES groups may have more difficulty understanding health information than high SES groups, and be at risk of more diseases therefore contributing to higher levels of morbidity.³]

I have explained the prerequisite for health identified in part a.¹

I have discussed the general difference in population groups in relation to the prerequisite for health.²

I have discussed how the prerequisite could contribute to a difference in health status between these population groups, with reference to a health status indicator.³

I have suggested one way in which 'education' can impact Australia's health status, with reference to a health status indicator.¹

Other acceptable answers include:

- other ways in which 'education' can impact Australia's health status, so long as they are appropriately explained.

- c** [People in low socioeconomic status (SES) groups experience higher infant mortality rates than people in high SES groups.¹]

I have identified a difference in health status between low socioeconomic status (SES) and high SES Australians, with reference to a health status indicator.¹

I have referred to both low SES and high SES individuals in my response.

Other acceptable answers include:

- other differences in health status between low SES and high SES Australians.

- 4** [Health and wellbeing is dynamic as it is constantly changing over time in response to an individual's environment.¹]

I have outlined the dynamic nature of health and wellbeing.¹

- 5 a** [Hormone production is a biological factor that contributes to variations in health status between population groups.¹]

I have identified a biological factor that contributes to variations in health status between population groups.¹

Other acceptable answers include:

- other biological factors that contribute to variations in health status between population groups.

- b** [Hormone production is different between males and females, for example, estrogen production, a hormone vital for bone density, slows down in females when they reach menopause, whereas this estrogen production change does not occur in males.¹] [The reduced estrogen production in females could increase the likelihood of osteoporosis, therefore contributing to years of life lost due to disability (YLD) and leading to a greater burden of disease among females compared to males, as measured by disability-adjusted life years (DALY).²]

I have explained how the biological factor identified in part a could contribute to the difference in burden of disease between female and male Australians.¹

I have elaborated on how the factor could contribute to the difference in burden of disease between female and male Australians, with reference to the health status indicator of YLL or YLD, and its corresponding influence on DALY.²

I have referred to both males and females in my response.

- 6 a** [Female genital mutilation (FGM) could negatively impact physical health and wellbeing as it causes harm to the body.¹] [This is due to the practice involving injury to the external female genitalia, which can have other effects such as causing infection, limiting the body and its systems' ability to function effectively, therefore negatively impacting physical health and wellbeing.²]

Unit 3 AOS1 review

- 1** [Morbidity refers to ill health in an individual and the levels of ill health in a given population group.¹]

I have described the health status indicator of morbidity.¹

- 2** [Cigarettes contain many carcinogenic toxins which are harmful to the body and can increase the likelihood of cancer occurring when smoked.¹] [As such, smoking cigarettes can negatively affect health status by contributing to a greater prevalence of cancers, such as lung cancer, in Australia.²]

I have outlined one way in which smoking can have negative health outcomes.¹

I have outlined how smoking can contribute to Australia's health status, with reference to a health status indicator.²

Other acceptable answers include:

- other ways in which smoking contributes to Australia's health status, so long as they are appropriately explained.

- 3 a** [Education involves individuals gaining knowledge and skills, such as building health literacy.¹]

I have described the prerequisite for health 'education'.¹

- b** [Due to leading to greater levels of health literacy, education can lead to individuals engaging in health promotion campaigns that motivate people to exercise more frequently, therefore reducing morbidity associated with obesity, such as lethargy associated with type 2 diabetes.¹]

- I have explained how female genital mutilation (FGM) could negatively impact physical health and wellbeing.¹
- I have elaborated this explanation, with reference to a component of physical health and wellbeing.²
- I have referred to the case study by mentioning an example of how FGM can cause harm to the body.

b [FGM can negatively impact health status as it causes harm to the body which can lead to negative effects such as causing infection and haemorrhages.¹] [These effects can be fatal, with haemorrhages potentially increasing mortality rates due to causing death from the excessive bleeding.²]

- I have outlined how FGM could impact health outcomes.¹
- I have outlined how FGM can negatively impact health status, with reference to a health status indicator.²
- I have referred to the case study by mentioning how FGM can cause harm to the body.

Other acceptable answers include:

- other ways in which FGM can negatively impact health status, so long as they appropriately link to a health status indicator.
- c [Social justice must be made available for females experiencing female genital mutilation (FGM) to ensure that they are not refused access to services, such as healthcare, to deal with the negative health effects of FGM, such as infection.¹] [Social justice will therefore ensure that the harms to the body of FGM are prevented in the future, or that they undergo adequate treatment to prevent the onset of conditions which can lead to death, promoting physical health and wellbeing.²]

- I have explained why social justice must be made available for females experiencing female genital mutilation (FGM).¹
- I have explained how social justice could improve health and wellbeing for those experiencing FGM, with reference to a health and wellbeing dimension.²

Other acceptable answers include:

- other ways in which social justice could improve health and wellbeing, so long as they are adequately explained.

7 a [Self-assessed health status refers to an individual's overall perception of their own health status at a given point in time.¹]

- I have described the health status indicator of self-assessed health status.¹
- b [In the graph referring to self-assessed health status by socioeconomic disadvantage, Australians aged 15 years and over with the greatest level of socioeconomic disadvantage (first quintile) were more likely to assess their health as fair or poor than those with the lowest level of socioeconomic disadvantage (fifth quintile).¹] [This was demonstrated by approximately 25% of those with the greatest level of socioeconomic disadvantage indicating that they had fair or poor health status, which was significantly higher than the approximate 10% of Australians with the lowest level of socioeconomic disadvantage indicating that they had fair or poor health status.²]

I have compared the self-assessed health status of those with the greatest level of socioeconomic disadvantage (first quintile) to those with the lowest level of socioeconomic disadvantage (fifth quintile).¹

I have used data from the graph to support my comparison of the two groups.²

I have provided the context of the graph.

I have included the correct units of measurement (percentage), ensuring to check the axis titles.

I have used a qualifier, such as 'approximately', when referring to data.

I have referred to both low SES and high SES groups in my response.

c [One factor that contributes to differences in health status between low socioeconomic status (SES) and high SES Australians is food security.¹] [Those with low SES have lower levels of food security than high SES Australians, which can lead to low SES Australians not always being able to access nutritious food and instead relying on energy-dense food such as fast food. This can contribute to poor health by leading to conditions such as obesity and type 2 diabetes.²] [Due to having lower levels of food security, as well as numerous other factors, low SES Australians are more likely to have poor or fair self-assessed health status compared to high SES Australians as their inability to access nutritious foods can contribute to conditions which negatively impact their perception of their own health status.³]

I have identified a factor that contributes to differences in health status between low socioeconomic status (SES) and high SES Australians.¹

I have explained how this factor could impact health outcomes for low SES and high SES Australians.²

I have suggested how this difference in health could contribute to low SES Australians being more likely to have fair or poor self-assessed health status compared to high SES Australians.³

I have referred to both low SES and high SES groups in my response.

Other acceptable answers include:

- other factors that contribute to differences in health status between low and high SES Australians, so long as they are adequately explained and linked to self-assessed health status.

8 [Dairy products are high in calcium, which is required to maintain strong bones. As such, an inadequate intake of dairy can increase the likelihood of osteoporosis due to an inadequate amount of calcium.¹] [This condition demonstrates a negative impact on physical health and wellbeing, as it can lead to further injury. The occurrence of osteoporosis can negatively impact mental health and wellbeing, as it may lead to stress about the individual's ability to pay for the treatments and medications required to manage osteoporosis, as well as the stress of how the condition may affect day-to-day life.²] [The onset of stress can negatively affect physical health and wellbeing as chronic stress can lead to a weakening of the immune system, which can limit the effective functioning of the body and its systems as it may lead to greater susceptibility to illnesses such as the flu.³]

I have explained underconsumption of dairy as a contributor to Australia's health status.¹

I have explained how one dimension of health and wellbeing affects a second dimension of health and wellbeing.²

I have linked the second dimension of health and wellbeing back to the first dimension, thereby demonstrating an interrelationship.³

Other acceptable answers include:

- other dimensions of health and wellbeing, so long as they clearly outline an interrelationship and are related to an underconsumption of dairy.

9 [A benefit of optimal health and wellbeing as a resource nationally is greater levels of volunteering.¹] This is due to optimal health and wellbeing involving effective functioning of the body and its systems and a sense of purpose and connection to the community, which heightens the ability for individuals to volunteer, as well as their motivation to help individuals experiencing disadvantage as they may have more hope and self-confidence about their ability to make a difference.²

I have identified a benefit of optimal health and wellbeing as a resource nationally.¹

I have explained this benefit of optimal health and wellbeing as a resource nationally.²

Other acceptable answers include:

- other benefits of optimal health and wellbeing as a resource nationally, so long as they are adequately explained.

10 a [As a population group, Indigenous Australians have a lower life expectancy than non-Indigenous Australians.¹]

I have identified a difference in health status between Indigenous and non-Indigenous Australians.¹

I have referred to both Indigenous and non-Indigenous Australians in my response.

Other acceptable answers include:

- other differences in health status between Indigenous and non-Indigenous Australians.

b [The environmental factor of access to healthcare may contribute to Indigenous Australians having a lower life expectancy than non-Indigenous Australians.¹] This is due to Indigenous Australians being more likely than non-Indigenous Australians to live in remote areas within their relevant population groups. This may lead to Indigenous Australians accessing healthcare services less than non-Indigenous Australians and therefore having more diseases go undetected and untreated, leading to greater preventable deaths than non-Indigenous Australians and contributing to a lower life expectancy among Indigenous Australians.²

I have identified an environmental factor that may contribute to the variation in health status of Indigenous and non-Indigenous Australians identified in part a.¹

I have explained how this environmental factor may contribute to the variation in health status of Indigenous and non-Indigenous Australians identified in part a.²

I have referred to both Indigenous and non-Indigenous Australians in my response.

11 [Sustainable resources can promote physical health and wellbeing as it can enable current and future generations to access resources necessary for survival, such as food and water.¹] This can promote physical health and wellbeing by ensuring individuals have access to nutrients needed for adequate energy levels.²

I have explained how 'sustainable resources' can promote health and wellbeing.¹

I have elaborated on this explanation, with reference to a component of a health and wellbeing dimension.²

Other acceptable answers include:

- other dimensions of health and wellbeing, so long as they clearly relate to 'sustainable resources'.

12 [Micah is not displaying optimal social health and wellbeing as she has been isolating herself from her friends and family and spent all her time studying.¹] This means that Micah is restricting her ability to have a strong support network and maintain positive relationships with others as she herself is withdrawing from her support system and relationships.²

I have identified that Micah is not displaying optimal social health and wellbeing.¹

I have justified why Micah is not displaying optimal social health and wellbeing.²

I have referred to the character's name in my response (Micah), and to the scenario.

13 [Mental health and wellbeing involves the current state of wellbeing of the mind, involving the ability to think and process information.¹] [One component of mental health and wellbeing is the ability to independently form opinions.²]

I have described mental health and wellbeing.¹

I have stated one component of mental health and wellbeing.²

14 [Australians living outside of major cities experience a greater prevalence of mental health conditions than Australians living within major cities.¹]

I have identified a difference in health status between Australians living outside of major cities and Australians living in major cities.¹

I have referred to both Australians living within and outside of major cities in my response.

Other acceptable answers include:

- other differences in health status between Australians living outside of major cities and Australians living in major cities.

15 [One individual benefit of optimal health and wellbeing as a resource is lower healthcare costs for individuals.¹]

I have outlined one individual benefit of optimal health and wellbeing as a resource.¹

Other acceptable answers include:

- other individual benefits of optimal health and wellbeing as a resource.

- 16** [In the graph referring to Australia's life expectancy at birth from 1992 to 2017-19, female life expectancy has increased over time,¹ with there being a female life expectancy at birth of approximately 81 years in 1992 which increased to a life expectancy at birth of around 85 years in 2017-19.²]

I have outlined the general direction of the trend.¹

I have referred to at least two points of data in the graph to illustrate the direction of the trend.²

I have provided the context of the graph.

I have included the correct units of measurement (years), ensuring to check the axis titles.

I have used a qualifier, such as 'approximately', when referring to data.

Other acceptable answers include:

- the trend of male life expectancy increasing over time, as long as it was appropriately identified, with reference to accurate data points.

- 17** Students needed to display that they had a thorough understanding of the question by demonstrating:

- an effectively structured response
- that the stimulus materials had been understood, connected, and synthesised
- that the students own understanding had been used to formulate the response
- that all the stimulus materials are referenced in the response.

In relation to the analysis of the contribution of high body mass index (BMI) and dietary risks on Australia's health status, discussion of the following could be awarded:

- Explanation of high BMI and dietary risks, including Australian adults not eating enough vegetables, fruits, grains, and fibre, eating too much sodium and saturated and trans fats, and not exercising enough.
- Identifying that half of Australians aged 19 to 30 are overweight and two in three Australians aged 31 to 50 are overweight.
- Suggesting how high BMI and dietary risks could contribute to Australia's health status, including explanations of an increased risk of cardiovascular disease, obesity and type 2 diabetes, and how these conditions impact health status. This required referring to health status indicators, such as lower life expectancy due to greater deaths from cardiovascular diseases, such as strokes.
- Reference to the relevant sources provided (source 1 would be particularly relevant).

In relation to the analysis of the differences in obesity between Australians in major cities and outer regional or remote areas, discussion of the following could have been awarded:

- Australians in outer regional/remote areas were significantly more likely to be overweight or obese than Australians in major cities, with 61% of Australians in outer regional/remote areas being classified as overweight or obese, which was significantly lower in major cities, with only 54% of Australians in major cities being classified as overweight or obese.
- This difference in obesity potentially occurs due to Australians in outer regional/remote areas consuming fewer servings of vegetables and fruit and having less physical activity than Australians in major cities.

- The understanding that other factors may have contributed to these differences in obesity levels, such as access to healthcare.
- Reference to the relevant sources provided (source 2 would be particularly relevant).

In relation to the analysis of obesity on health and wellbeing, including interrelationships between the dimensions, discussion of the following could have been awarded:

- The influence of obesity on the dimensions of health and wellbeing.
- Interrelationships between these dimensions. For example, poor mental health and wellbeing, such as low-self esteem, may contribute to unhealthy dietary patterns, such as consuming excessive amounts of energy-dense food, such as take out, leading to an unhealthy body weight and negatively influencing physical health and wellbeing. The experience of obesity involves a lack of regular exercise and a negative influence on physical health and wellbeing, which could negatively impact mental health and wellbeing by leading to greater levels of stress and anxiety about an individual's likelihood to experience conditions due to obesity, such as cardiovascular disease.
- Reference to the relevant sources provided (source 3 would be particularly relevant).

3A Australia's health status

Theory-review questions

- 1 A. True. Overall, Australia's health status has improved since 1900, regardless of death rates for some categories of diseases increasing during that period.
- 2 I; III; V; VI; VII. Lung cancer is not a broad category of disease, but rather is a part of the broad category of disease 'cancers,' and heart attacks are likewise not a broad category of disease, but rather a part of the broad category of disease 'circulatory diseases.'
- 3 A. Australia's life expectancy has increased since 1900. Life expectancy has consistently increased each year since 1900.
- 4 B. Australia's mortality rates have decreased since 1900. Mortality rates have decreased overall since 1900, experiencing brief periods of increased mortality rates along the way.
- 5 A. Females have consistently had a higher life expectancy than males in Australia since records began.

Skills

Data analysis

6 A 7 A 8 B

Exam-style questions

- 9 a [The health status indicator that is being measured in this graph is under 5 mortality rates.¹]
- I have identified under 5 mortality rate as the health status indicator that is being measured in the graph.¹
-
- b [Male child death rates have decreased from 1909 to 1953.¹]
[Male child death rates decreased from approximately 2,600 to 750 deaths per 100,000 population from 1909 to 1953.²]
- I have outlined the general direction of the trend.¹
-
- I have referred to at least two points of data in the graph to illustrate the direction of the trend.²
-
- I have provided the context of the graph.
-
- I have included the correct units of measurement (deaths per 100,000 population), ensuring to check the axis titles.
-
- c [Female child death rates decreased from 1909 to 2019.¹][Female child death rates were approximately 2,200 per 100,000 population in 1909, which decreased to approximately 70 per 100,000 population in 2019.²]
- I have outlined the general direction of the trend.¹
-
- I have referred to at least two points of data in the graph to illustrate the direction of the trend.²
-
- I have provided the context of the graph.
-
- I have included the correct units of measurement (deaths per 100,000 population), ensuring to check the axis titles.
-
- 10 a [Non-communicable disease contributed to the greatest proportion of DALY globally in 2016.¹]
- I have identified non-communicable disease as contributing to the greatest proportion of DALY globally in 2016.¹
-

- b [Non-communicable disease contributed to the greatest proportion of DALY in Australia from 1990 to 2016.¹][Non-communicable disease contributed to approximately 85% of Australia's DALY in 1990 and approximately 90% of Australia's DALY in 2016, which is significantly greater than the other contributors to DALY.²]

- I have outlined the greatest contributor to DALY in the graph 'Proportion of DALY (Australia)'.¹
-
- I have used data to support my statement.²
-
- I have provided the context of the graph.
-
- I have included the correct units of measurement (percentage contribution to proportion of DALY), ensuring to check the axis titles.
-

- c [The proportion of DALY attributed to non-communicable disease globally increased from 1990-2016.¹][The proportion of DALY attributed to non-communicable disease globally was approximately 40% in 1990, which increased to approximately 60% 2016.²]

- I have outlined the general direction of the trend.¹
-
- I have referred to at least two points of data in the graph to illustrate the direction of the trend.²
-
- I have provided the context of the graph.
-
- I have included the correct units of measurement (percentage contribution to proportion of DALY), ensuring to check the axis titles.
-

Questions from multiple lessons

- 11 a [Indigenous male life expectancy was lower than non-Indigenous male life expectancy from 2005-2007.¹][Indigenous male life expectancy was 67.2 years from 2005-2007, whereas non-Indigenous life expectancy was 78.7 years from 2005-2007.²]

- I have described how Indigenous male life expectancy was lower than non-Indigenous life expectancy from 2005-2007.¹
-
- I have used data to justify that Indigenous male life expectancy was lower than non-Indigenous life expectancy from 2005-2007.²
-
- I have used the correct unit of measurement in my response (years).
-

- b [A sociocultural factor that could have contributed to Indigenous male life expectancy being lower than non-Indigenous male life expectancy is food security.¹][Indigenous Australians are more likely to experience food insecurity than non-Indigenous Australians, which can result in Indigenous Australians dying prematurely from conditions, such as malnutrition, therefore contributing to lower life expectancy for Indigenous males.²]

- I have identified a sociocultural factor that could have contributed to Indigenous male life expectancy being lower than non-Indigenous male life expectancy.¹
-
- I have described how this sociocultural factor could have contributed to Indigenous male life expectancy being lower than non-Indigenous male life expectancy.²
-

Other acceptable answers include:

- other sociocultural factors that lead to variations in health status between Indigenous and non-Indigenous Australians, so long as it was adequately used to describe how Indigenous male life expectancy was lower than non-Indigenous male life expectancy.
- [One category of disease is circulatory disease.¹] Female Indigenous Australians may experience higher mortality rates for circulatory diseases, such as strokes, than non-Indigenous Australians, increasing instances of premature death and decreasing female Indigenous life expectancy when compared to female non-Indigenous life expectancy.²]

I have identified one category of disease.¹

I have explained how variations in mortality rates for my chosen category of disease could lead to a difference between Indigenous and non-Indigenous female life expectancy.²

3B Old public health and the biomedical approach

Theory-review questions

- 1 A. The 'old' public health model involved an emphasis on improving the ways in which illness and disease were treated once they had already occurred, as opposed to trying to change population behaviour to prevent illness and disease from occurring at all.
- 2 I; III. The biomedical model of health does involve developing medical technology and can be practised by focussing on treating illness and disease at an individual level.
- 3 A. True. The biomedical model of health does not attempt to change the behaviour of population groups through health promotion campaigns, so it does not help to prevent illness and disease from occurring in the first place.
- 4 B. 'Old' public health refers to a historical approach to health that occurred during the early-mid 20th century and attempted to develop medical technology to treat illness and disease. The 'old' public health model refers to a historical timeframe, whereas the biomedical approach to health is a practice that is still used to this day.
- 5 B. False. The biomedical approach is just one approach to healthcare, which has limitations addressed by other approaches, such as the social model of health.

Skills

Data analysis

- 6 A 7 B 8 B

Exam-style questions

- 9 [One major characteristic of the biomedical model of health is using medical technology to treat illness and disease.¹] For example, this could involve using antibiotics, such as penicillin, to treat pneumonia.²]

I have outlined one major characteristic of the biomedical model of health.¹

I have used an example to outline my chosen characteristic of the biomedical model of health.²

Other acceptable answers include:

- other characteristics of the biomedical model of health, such as that it focuses on the biological causes of illness and disease, as long as an appropriate example of this characteristic was provided.

- 10 [The biomedical model of health could be used to reduce the incidence of infectious disease through vaccination programs.¹] This would involve delivering vaccines to a population group to ensure that they do not contract an infectious disease, such as measles, and transmit it to others, reducing the incidence of this infectious disease by preventing new cases of infectious diseases occurring.²]

I have identified how the biomedical model of health could be used to reduce the incidence of infectious disease.¹

I have provided an example in my response to explain how the biomedical model of health could be used to reduce the incidence of infectious disease.²

- 11 [Australia implemented mass vaccination programs during the period of 'old' public health.¹] This ensured that less people contracted diseases, such as tetanus, and died prematurely, which helped to increase Australia's life expectancy over time.²]

I have identified one practice that occurred during the 'old' public health model.¹

I have explained how my chosen practice may have contributed to Australia's health status over time, with reference to a health status indicator.²

- 12 [One advantage of the biomedical model of health is that it can reduce pain for people living with chronic health conditions through medication or surgical practices.¹] Another advantage of the biomedical model of health is that it can result in new medication or technology being discovered in order to treat the biological causes and symptoms of illness and disease.²]

I have outlined one advantage of the biomedical model of health.¹

I have outlined another advantage of the biomedical model of health.²

Other acceptable responses include:

- other advantages of the biomedical model of health, such as how it accounts for people who have already developed an illness or disease.

- 13 [The biomedical approach to health can be practised by treating an individual's illness or disease once they display symptoms through medications.¹] This can help to restore the functioning of the body and its systems and enhance energy levels for the individual experiencing illness or disease, therefore promoting physical health and wellbeing.²]
[The biomedical approach to health can be practised by using medical technologies, such as an MRI, to detect illness or disease in order to treat it effectively.³] This can reduce an individual's levels of stress or anxiety caused by being uncertain about if they have a serious illness or disease, therefore promoting mental health and wellbeing.⁴]

I have identified an example of how the biomedical approach to health can be practised.¹

I have explained how my chosen example of the biomedical approach to health could promote one health and wellbeing dimension, with reference to a component of this health and wellbeing dimension.²

I have identified another example of how the biomedical approach to health can be practised.³

I have explained how my chosen example of the biomedical approach to health could promote another health and wellbeing dimension, with reference to a component of this health and wellbeing dimension.⁴

- 14** [One advantage of the biomedical model of health in addressing infectious diseases is that it can address the biological causes of infectious diseases.¹] [For example, by using vaccines to immunise a population group from a particular infectious disease, the transmission of infectious diseases will be reduced significantly.²] One disadvantage of the biomedical model of health in addressing infectious diseases is that it does not address the environmental causes of infectious diseases.³] [For example, it does not help to prevent infectious diseases through promoting behaviour changes, such as people covering their mouths when they sneeze and staying at home when ill.⁴]

I have outlined one advantage of the biomedical model of health in addressing infectious diseases.¹

I have provided an example to illustrate my chosen advantage of the biomedical model of health in addressing infectious diseases.²

I have outlined one disadvantage of the biomedical model of health in addressing infectious diseases.³

I have provided an example to illustrate my chosen disadvantage of the biomedical model of health in addressing infectious diseases.⁴

Questions from multiple lessons

- 15 a** [The 'old' public health model involved improving the quality of housing.¹] [This reduces the likelihood of families living in crowded housing and spreading respiratory diseases, such as influenza, which could account for the percentage of deaths attributable to respiratory diseases decreasing from 14.3% in 1907 to 8.9% in 2000.²]

I have identified a policy of the 'old' public health model.¹

I have described how my chosen policy of the 'old' public health model could account for the decreased percentage of deaths attributable to respiratory diseases between 2000 and 1907, with reference to data.²

I have included the correct units of measurement (percent), ensuring to check the table titles.

- b** [A decreased percentage of respiratory diseases ensures that fewer people within a country fall ill from diseases, such as influenza, and take time away from work.¹] [This promotes physical health and wellbeing because their body can effectively function free of diseases to carry out daily tasks, acting as a resource nationally by ensuring that more people within a country are fit to work and contribute to the nation's economy.²]

I have identified a national benefit of a decreased percentage of respiratory diseases.¹

I have explained how this national benefit could promote health and wellbeing as a resource nationally, with reference to a health and wellbeing dimension.²

3C New public health and the social model of health

Theory-review questions

- 1 B. A key focus of the 'new' model of public health is that it attempts to prevent illness and disease from occurring in the first place by encouraging people to moderate their lifestyle and behaviours.
- 2 I; III. The 'new' model of public health focuses on health promotion campaigns that seek to change people's behaviours to promote optimal health and wellbeing, whereas the 'old' model of public health focuses on detecting and treating illness and disease through methods, such as surgery and medication.
- 3 A. True. The social model of health is more prescriptive than the 'new' model of health, as demonstrated by its five specific principles. The social model of health is nonetheless part of the broader historical movement of the 'new' model of public health.
- 4 A. This is demonstrated by the social model of health's principle '**acts to reduce social inequities**'. A key advantage of the social model of health is that it addresses the needs of vulnerable population groups, which is demonstrated explicitly by its principle 'acts to reduce social inequities'.
- 5 B. False. The social model of health is just one approach to improving public health that has disadvantages addressed by other methods, such as the biomedical approach.

Skills

Perfect your phrasing

6 A 7 A 8 B

Exam-style questions

- 9** [The social model of health focuses on the broader factors that impact health status, including lifestyle and socioeconomic factors, in order to prevent the development of diseases that are influenced by behaviour.¹] [The social model of health is a key development of the 'new' model of public health and could involve, for example, encouraging people to take control of their own health by practising healthy behaviours that help to prevent illness or disease.²]

I have described what is meant by the social model of health.¹

I have provided an example of the social model of health.²

- 10** [The social model of health 'empowers individuals and communities' to take control of their own health by moderating their lifestyle, which could involve educating communities about the risks of smoking cigarettes and therefore encouraging people not to smoke.¹] [By decreasing the number of people who smoke cigarettes, the social model of health may have reduced mortality rates from lung cancer and contributed to an increase in Australia's life expectancy over time.²]

I have provided an example of how the social model of health may have been implemented.¹

I have linked my example with improvements in Australia's health status over time, with reference to a health status indicator.²

- 11** [The 'new' model of public health involves encouraging people to have regular health checks with their doctors in order to detect illness and disease at an early point in its development.¹] [This makes the early detection of coronary heart disease (CHD) in patients more likely, decreasing years of life lost due to disability or disease (YLD) from enduring the symptoms of CHD, such as chest pains or shortness of breath, and decreasing years of life lost due to premature death (YLL) from heart attacks, therefore reducing DALY and burden of disease.²]

I have provided an example of the 'new' public health model.¹

I have explained how my chosen example of the 'new' public health model could be used to reduce burden of disease, with reference to the indicator YLL or YLD, and its corresponding influence on DALY.²

- 12** [One principle of the social model of health is that it 'empowers individuals and communities'.¹] [This principle could be used to educate people about the risks of overconsuming food that is energy-dense, which would help to decrease obesity rates and promote the functioning of the body and its systems, therefore promoting physical health and wellbeing.²]

I have identified one principle of the social model of health.¹

I have described how my chosen principle of the social model of health could promote physical health and wellbeing.²

Other acceptable answers include:

- a different principle of the social model of health, so long as you described how it could promote physical health and wellbeing.

- 13** [One principle of the social model of health is that it 'acts to enable access to healthcare'.¹] [This could involve building hospitals in remote areas to decrease the amount of travel time required for people living in these areas to access emergency care.²] [This could ensure that more people who have suffered from a serious injury can get emergency care, decreasing premature death from injury and increasing life expectancy in turn.³]

I have identified one principle of the social model of health.¹

I have provided an example of my chosen principle of the social model of health.²

I have described how this example of my chosen principle of the social model of health could promote health status, with reference to a health status indicator.³

Other acceptable answers include:

- a different principle of the social model of health and/or a health status indicator.

- 14** [The ASH program demonstrates the principle of the social model of health that 'acts to reduce social inequities'.¹] [This is evident in that the ASH program provides its services in rural and remote areas of Western Australia in order to ensure that these areas that can be more distanced from healthcare and education receive the same level of support as people living in metropolitan areas.²] [By educating Aboriginal and Torres Strait Islander people in rural Western Australia about prevention knowledge for HIV/AIDS, these communities are less likely to practice behaviours that could lead to developing HIV/AIDS and dying prematurely, therefore increasing life expectancy.³]

I have identified one principle of the social model of health that is evident in the ASH program.¹

I have explained how the ASH program demonstrates my chosen principle of the social model of health.²

I have explained how my chosen principle of the social model of health assists the ASH program to improve the health status of Aboriginal and Torres Strait Islander peoples, with reference to a health status indicator.³

Other acceptable answers include:

- a different principle of the social model of health and/or a different health status indicator, so long as they were relevant to the ASH program.

- 15** [The social model of health may have caused the ranking of diarrhoeal diseases to drop in percent contribution of total deaths in low-income countries from 1st in 1990 to 3rd in 2017 through health campaigns that encourage people to practice good hygiene, such as by washing hands thoroughly after going to the bathroom, therefore 'empowering individuals and communities'.¹] [This helps to prevent diarrhoeal diseases being transmitted through infected faecal matter, therefore decreasing the number of people dying prematurely from diarrhoeal diseases in low-income countries.²] [The social model of health may have caused the ranking of tuberculosis to drop in percent contribution of total deaths in low-income countries from 4th in 1990 to 7th in 2017 by low-income countries building hospitals in remote regions, which 'acts to enable access to healthcare'.³] [This ensures that people living in remote areas within low-income countries can receive antibiotic treatment for tuberculosis, therefore decreasing the number of people dying prematurely from tuberculosis in low-income countries.⁴]

I have provided an example of the social model of health, referring to a principle of the social model of health.¹

I have described how my chosen example of the social model of health may have caused the ranking of diarrhoeal disease to drop in percent contribution of total deaths in low-income countries from 1st in 1990 to 3rd in 2017.²

I have provided another example of the social model of health, referring to a principle of the social model of health.³

I have described how my chosen example of the social model of health may have caused the ranking of tuberculosis to drop in percent contribution of total deaths in low-income countries from 4th in 1990 to 7th in 2017.⁴

Questions from multiple lessons

- 16** [The social model of health principle 'empowers individuals and communities' refers to inspiring individuals and communities to recognise their role in promoting their own health and wellbeing.¹] [For example, this could involve having community information sessions about how smoking cigarettes damages health, motivating people within the community to quit smoking in order to take control of their health and wellbeing.²] [This would help to decrease the number of people who die prematurely from lung cancer as a result of smoking cigarettes, therefore increasing life expectancy in Australia.³]

I have described the social model of health principle 'empowers individuals and communities'.¹

I have provided an example of the social model of health principle 'empowers individuals and communities'.²

I have described how my chosen example could reduce the impact of smoking on the health status of Australians, with reference to a health status indicator.³

Other acceptable answers include:

- different health status indicators, so long as they relate to the impact of smoking on the health status of Australians.

3D Ottawa Charter for Health Promotion

Theory-review questions

- 1 A. The Ottawa Charter for Health Promotion relates to health promotion and is part of the 'new' public health model.
- 2 B. False. The Ottawa Charter for Health Promotion has three strategies and five action areas.
- 3 I; IV. 'Develop personal skills' and 'reorient health services' are action areas of the Ottawa Charter for Health Promotion, whereas 'mediate' and 'advocate' are strategies.
- 4 A. It achieves this by way of the social model of health and the **Ottawa Charter for Health Promotion**. The two main components of the 'new' public health model are the social model of health and the Ottawa Charter for Health Promotion.
- 5 A. True. The strategy 'enable' seeks to use health promotion to reduce differences in health status between different population groups.

Skills

Unpacking the case study

- 6 A 7 B 8 A

Exam-style questions

- 9 [The Ottawa Charter for Health Promotion outlines a series of strategies and action areas required to develop effective health promotion campaigns.¹] [It is part of the 'new' public health model and aims to change the behaviour of individuals and communities to achieve good health for all.²]

I have described the Ottawa Charter for Health Promotion.¹

I have described the Ottawa Charter for Health Promotion in further detail by providing another point of information.²

- 10 [The Ottawa Charter for Health Promotion strategy 'enable' refers to using health promotion campaigns to reduce differences in health status.¹] [This could involve providing community service information sessions to vulnerable population groups, such as those living outside of major cities, in order to elevate their health status to an equal level as those living within major cities.²]

I have described the Ottawa Charter for Health Promotion strategy 'enable'.¹

I have provided an example of how the Ottawa Charter for Health Promotion strategy 'enable' could be implemented.²

- 11 [The Ottawa Charter for Health Promotion action area 'build healthy public policy' refers to removing financial or social barriers in order to implement rules and legislation that promote health and wellbeing.¹] [For example, this could involve schools implementing a policy that requires their student to engage in recreational sport to ensure that they exercise regularly.²]

I have explained what is meant by the Ottawa Charter for Health Promotion action area 'build healthy public policy'.¹

I have provided an example of how the Ottawa Charter for Health Promotion action area 'build healthy public policy' could be implemented.²

- 12 [The Ottawa Charter for Health Promotion action area 'create supportive environments' refers to ensuring that the natural environment, social environment, and infrastructure is safe for the implementation of health promotion.¹] [The Walk to School program ensures that the Monash Council uses its funding to develop a Monash walking map, which makes navigating the physical environment safer when walking to school, therefore reflecting the action area 'create supportive environments'.²]

I have described the Ottawa Charter for Health Promotion action area 'create supportive environments'.¹

I have outlined how the Ottawa Charter for Health Promotion action area 'create supportive environments' is reflected in the Walk to School program.²

- 13 [One action area of the Ottawa Charter for Health Promotion is 'reorient health services'.¹] [By reorienting the health services by doctors focusing on the prevention of diseases to ensure that they provide health promotion to their patients, such as by encouraging patients to practice healthy eating, the functioning of the body and its systems is enhanced, therefore promoting physical health and wellbeing.²] [Another action area of the Ottawa Charter for Health Promotion is 'strengthen community action'.³] ['Strengthen community action' can involve a community-based institution, such as the local religious institution or community centre, providing social support, which can make people feel more connected to their local community and promote spiritual health and wellbeing.⁴]

I have identified an action area of the Ottawa Charter for Health Promotion.¹

I have described how my chosen action area could be used to promote health and wellbeing, with reference to a health and wellbeing dimension.²

I have identified another action area of the Ottawa Charter for Health Promotion.³

I have described how my chosen action area could be used to promote health and wellbeing, with reference to a health and wellbeing dimension.⁴

Other acceptable answers include:

- other Ottawa Charter for Health Promotion action areas, so long as they were linked to promoting health and wellbeing.

- 14 [One action area of the Ottawa Charter for Health Promotion is 'develop personal skills'.¹] [This could be used to educate people about how to cook their own healthy meals, as opposed to buying meals that are more convenient but energy-dense, such as fast-food, therefore reducing

obesity rates in Australia.^{2]} Another action area of the Ottawa Charter for Health Promotion is 'create supportive environments'.^{3]} This could be used to limit the amount of fast-food chains in a particular town and therefore ensure that the physical environment doesn't encourage the consumption of food that is energy-dense, therefore reducing obesity rates in Australia.^{4]}

I have identified an action area of the Ottawa Charter for Health Promotion.¹

I have explained how my chosen action area could be used to decrease obesity rates in Australia.²

I have identified another action area of the Ottawa Charter for Health Promotion.³

I have explained how my chosen action area could be used to decrease obesity rates in Australia.⁴

Other acceptable answers include:

- other Ottawa Charter for Health Promotion action areas, so long as they were linked to decreasing obesity rates in Australia.

15 [One action area identified in the Ottawa Charter for Health Promotion is 'reorient health services'.^{1]}] This could be used by encouraging doctors to deliver health promotion messages to their patients about the risks of smoking cigarettes, therefore helping to reduce the amount of people who smoke cigarettes and reducing mortality rates caused by lung cancer.^{2]} [Another action area identified in the Ottawa Charter for Health Promotion is 'develop personal skills'.^{3]}] This could be used to deliver health promotion campaigns that provide regular smokers with strategies that they can implement to stop smoking, such as engaging in regular exercise as an alternative way of decreasing levels of stress, therefore helping to reduce the amount of people who smoke cigarettes and reducing mortality rates caused by lung cancer.^{4]}

I have identified a action area identified in the Ottawa Charter for Health Promotion.¹

I have described how my chosen action area could be used to reduce mortality rates caused by lung cancer.²

I have identified another action area identified in the Ottawa Charter for Health Promotion.³

I have described how my chosen action area could be used to reduce mortality rates caused by lung cancer.⁴

Other acceptable answers include:

- other action areas identified in the Ottawa Charter for Health Promotion, as long as they were used to describe how to reduce mortality rates caused by lung cancer.

Questions from multiple lessons

16 [The Ottawa Charter for Health Promotion action area 'develop personal skills' refers to delivering health promotion that provides people with resources that they can use to improve their own health and wellbeing.¹] [For example, this action area could be used to educate people about how to practice good hygiene, such as washing hands regularly, which would help to ensure that people do not spread colds and flus. This would reduce absenteeism from work, enhancing a country's national income and acting as a resource nationally.²]

I have described the Ottawa Charter for Health Promotion action area 'develop personal skills'.¹

I have described how the Ottawa Charter for Health Promotion action area 'develop personal skills' could act as a benefit of optimal health and wellbeing as a resource nationally.²

3E Comparing the biomedical and social models of health

Theory-review questions

- A. True. Both the biomedical and social models of health should be used in conjunction to achieve improvements in health status, as both models offset the disadvantages of each other.
- B. The biomedical model of health focuses on using health technology and professionals to effectively detect, treat, and cure existing conditions.
- A. The social model of health aims to prevent conditions before they occur by focusing on the broader factors that impact health status, such as lifestyle behaviours.
- II; III. Both displaying warnings on cigarette packaging and quit smoking advertising campaigns are examples of the social model of health, as they aim to bring about behavioural change to improve health status.
- B. The biomedical model of health is responsible for the development of and advancements in medical technologies.
- B. False. Unlike the biomedical model, the social model of health does not improve health status through treating existing conditions but instead achieves improvements by focusing on preventing conditions before they occur.
- I; II; III; IV. All options are correct. Both the biomedical and social models of health should be used in conjunction, as they both are important to achieve improvements in health status.

Skills

Data analysis

8 A

9 B

10 B

Exam-style questions

11 [One difference between the biomedical and social models of health is that the biomedical model of health focuses on treating existing conditions, whilst the social model of health aims to prevent conditions before they occur.¹] [Another difference is that the biomedical model allows for research and advancement of medical technologies, whereas the social model does not address improvements in medical technologies.²]

I have described one difference between the biomedical model of health and the social model of health.¹

I have described another difference between the biomedical model of health and the social model of health.²

12 Advantages:

[The biomedical model of health can lead to the development of new medical technologies.¹]

[The social model of health prevents people from developing illness and disease in the first place, which can reduce strain on the healthcare system.²]

Disadvantages:

[The biomedical model of health cannot be used to treat certain diseases. This is because some diseases, such as cancers, may not be medically treated at a certain point in their development.³]
 [The social model of health places a significant emphasis on health promotion campaigns, which may not always be successful in preventing all conditions.⁴]

I have outlined one advantage of the biomedical model of health.¹

I have outlined another advantage of the social model of health.²

I have outlined one disadvantage of the biomedical model of health.³

I have outlined another disadvantage of the social model of health.⁴

13 [The biomedical model of health could be used to reduce the incidence of COVID-19 through vaccination programs.¹] [This would involve delivering vaccines to the population to reduce their risk of contracting COVID-19 and transmitting it to others, thus reducing the incidence of COVID-19.²]
 [Furthermore, the social model of health could be used to reduce the incidence of COVID-19 through promoting behavioural changes that help to reduce the spread of the virus.³] [For example, campaigns to educate the public about the importance of social distancing, wearing masks, and only leaving the house for essential activities would help to prevent the transmission of COVID-19 in the community, thus reducing the incidence of COVID-19.⁴]

I have identified how the biomedical model of health could be used to reduce the incidence of COVID-19.¹

I have provided an example in my response to explain how the biomedical model of health could be used to reduce the incidence of COVID-19.²

I have identified how the social model of health could be used to reduce the incidence of COVID-19.³

I have provided an example in my response to explain how the social model of health could be used to reduce the incidence of COVID-19.⁴

14 [The biomedical model of health could be used to reduce the mortality associated with malaria through medical advancements.¹] [This may involve medications used to treat those who already have malaria, reducing the impact of the disease and allowing for recovery.²]
 [Furthermore, the social model of health could be used to reduce the mortality associated with malaria through educating populations who are at most risk on prevention methods.³] [This could involve educating those that live in parts of the world with high mosquito populations on the importance of mosquito nets, aiming to prevent cases of malaria and thus helping to reduce the associated mortality.⁴]

I have identified how the biomedical model of health could be used to reduce deaths associated with malaria.¹

I have provided an example in my response to explain how the biomedical model of health could be used to reduce deaths associated with malaria.²

I have identified how the social model of health could be used to reduce deaths associated with malaria.³

I have provided an example in my response to explain how the social model of health could be used to reduce deaths associated with malaria.⁴

Questions from multiple lessons

15 [The cause of death that showed the greatest decrease between 1907 and 2000 was infectious diseases, with the percentage of mortality associated with infectious diseases decreasing from 12.6% to 1.3% between 1907 and 2000.¹] [The biomedical model of health could be used to reduce the mortality associated with infectious disease through vaccination programs.²] [This would involve health professionals delivering vaccines to the Australian population to prevent people from contracting infectious diseases, such as influenza, and transmitting them to others, helping to reduce associated mortality.³] [Moreover, the social model of health could be used to reduce the mortality associated with infectious disease through policies that promote the importance of vaccines.⁴] [This could include the Australian government's 'No Jab, No Play' initiative that ensures all children must be fully vaccinated for infectious diseases, such as tuberculosis, in order to be enrolled in childcare or kindergarten.⁵]

I have identified 'infectious diseases' as the cause of death that showed the greatest decrease between 1907 and 2000.¹

I have identified how the biomedical model of health could have reduced the mortality associated with infectious diseases.²

I have provided an example in my response to analyse how the biomedical model of health could have reduced the mortality associated with infectious diseases.³

I have identified how the social model of health could have reduced the mortality associated with infectious diseases.⁴

I have provided an example in my response to analyse how the social model of health could have reduced the mortality associated with infectious diseases.⁵

Chapter 3 test

1 [The social model of health principle 'acts to enable access to healthcare' refers to aiming to ensure that everybody within a community can access essential healthcare services without facing any barriers.¹] [For example, this could involve building hospitals in remote communities to ensure that people living in these communities do not have to travel long distances in order to receive emergency healthcare.²]

I have described the social model of health principle 'acts to enable access to healthcare.'¹

I have provided another point of information by describing an example of the social model of health principle 'acts to enable access to healthcare.'²

2 ['Old' public health refers to an approach to health that was developed at the beginning of the 20th century. This approach involved improving the safety of the physical environment and developing public health programs to prevent communicable disease.¹] [For example, this involved practices, such as improving the quality of housing.²] [By contrast, 'new' public health refers to a contemporary approach to public health that involves preventing diseases from occurring through promoting

behavioural and lifestyle change.³ [For example, this involves practices, such as health promotion, that encourage people to change their behaviour to prevent developing conditions that are often influenced by lifestyle choices, such as obesity.⁴]

I have described the 'old' public health model.¹

I have provided an example of an 'old' public health model practice.²

I have described the 'new' public health model.³

I have provided an example of a 'new' public health model practice.⁴

I have used comparison words, such as 'by contrast.'

3 a [An example of medical technology that was developed as part of the biomedical model of health is antibiotics.¹]

I have identified an example of medical technology that was developed as part of the biomedical model of health.¹

Other acceptable answers include:

- X-ray
- magnetic resonance imaging
- another example of medical technology that was developed as part of the biomedical model of health.

b [Antibiotics are a group of drugs that either kill or limit the growth of bacteria in the body.¹ [This can help to decrease mortality rates caused by people dying from open wounds that become infected by bacteria.²]

I have described the example of medical technology that I identified in **part a**.¹

I have described how the example of medical technology that I identified in **part a** promotes health status, with reference to a health status indicator.²

Other acceptable answers include:

- another health status indicator, so long as it is adequately linked to the example of medical technology that you identified in **part a**.

4 [One disadvantage of the social model of health is that it places a significant emphasis on health promotion campaigns, which people may ignore.¹ [Another disadvantage of the social model of health is that it isn't effective for diseases that cannot be prevented through behavioural changes.²]

I have outlined one disadvantage of the social model of health.¹

I have outlined another disadvantage of the social model of health.²

Other acceptable answers include:

- other disadvantages of the social model of health, such as that it does not account for people who have already developed an illness or disease.

5 [The social model of health focuses on the broader factors that impact health, including lifestyle and socioeconomic factors, in order to prevent the development of diseases that are influenced by behaviour.¹ [For example, the social model of health 'acts to enable access to healthcare' by aiming to ensure that everybody within a community can access essential healthcare services without facing any barriers.²]

I have described the social model of health.¹

I have provided another point of information by describing an example of the social model of health.²

6 [The Department of Health's 'Save Lives. Save 000 for emergencies' campaign demonstrates the Ottawa Charter for Health Promotion action area 'develop personal skills'.¹ [This is because the campaign provides people with information about which health services are most appropriate in different situations, such as seeing a local GP for minor injuries, which helps people to take control of and improve their own health and wellbeing.²]

I have identified an Ottawa Charter for Health Promotion action area that is evident in this campaign.¹

I have explained how this campaign demonstrates my chosen Ottawa Charter for Health Promotion action area.²

Other acceptable answers include:

- other Ottawa Charter for Health Promotion action areas, so long as they were relevant to the scenario.

7 [The biomedical approach to health involved developing medical technologies, such as vaccines.¹ [This helped to prevent the transmission of diseases, such as influenza, which decreased mortality rates in Australia.²]

I have identified an example of the biomedical approach to health.¹

I have described how my chosen example of the biomedical approach to health promoted health status in Australia, with reference to a health status indicator.²

8 [The Ottawa Charter for Health Promotion action area 'strengthen community action' involves motivating the community to develop and implement health promotion campaigns to address the most pressing issues that they face.¹ [This can promote spiritual health and wellbeing because it can make people develop a sense of hope that the health issues that are most harmful to the community will be addressed in the future.²]

I have described an Ottawa Charter for Health Promotion action area.¹

I have described how my chosen Ottawa Charter for Health Promotion action area could promote health and wellbeing, with reference to a health and wellbeing dimension.²

Other acceptable answers include:

- how other Ottawa Charter for Health Promotion action areas promote different dimensions of health and wellbeing, so long as the link between the action area and dimension is clear.

9 [The biomedical model of health could be used to reduce the incidence of infectious diseases by developing new medical technology that would prevent the transmission of these diseases.¹ [For example, this could involve developing new vaccines for infectious diseases, such as the flu.²]

[The social model of health could be used to reduce the incidence of infectious diseases through health promotion.³] [For example, this could involve developing health promotion programs that encourage people to practice behaviours that help to limit the transmission of infectious diseases, such as staying at home when feeling sick and covering the face when sneezing or coughing.⁴]

- I have described how the biomedical model of health could be used to reduce the incidence of infectious diseases.¹
-
- I have provided an example of how the biomedical model of health could be used to reduce the incidence of infectious diseases.²
-
- I have described how the social model of health could be used to reduce the incidence of infectious diseases.³
-
- I have provided an example of how the social model of health could be used to reduce the incidence of infectious diseases.⁴

Questions from multiple chapters

10 a [Female mortality for respiratory diseases have decreased from 1907 to 2003.¹] [Female mortality rates for respiratory diseases were approximately 260 per 100,000 population in 1907, which decreased to approximately 50 per 100,000 in 2003.²]

- I have outlined the general direction of the trend.¹
-
- I have referred to at least two points of data in the graph to illustrate the direction of the trend.²
-
- I have provided the context of the graph.
-
- I have included the correct units of measurement (deaths per 100,000 population), ensuring to check the axis titles.
-
- I have used a qualifier, such as 'approximately', when referring to the data.

b [Female mortality for respiratory diseases has decreased from 1907 to 2003 meaning that more women have the energy levels required to continue going to work, which promotes physical health and wellbeing.¹] [This acts a resource nationally by ensuring that these women can continue to work and therefore contribute to the national economy.²]

- I have provided an example of how the trend outlined in **part a** could promote optimal health and wellbeing, with reference to a health and wellbeing dimension.¹
-
- I have described how my chosen example of optimal health and wellbeing could act as a resource nationally.²

4A Australia's health system: Part 1

Theory-review questions

- 1 B. False. Although Australia's health system is very high quality, there is always room for improvement to achieving better funding, sustainability, equity, and accessibility.
- 2 I; II. The more people who are able to take up private health insurance, the more sustainable Australia's healthcare system is, as it avoids the public healthcare system becoming overwhelmed.
- 3 A. True. The private and public sector must work together to reduce the strain on the public healthcare system, increasing its capacity to meet the current and future needs of the Australian population in a timely and effective manner.
- 4 B. False. Some Australians who can afford to have private health insurance choose not to. They will therefore be subject to extra taxes, such as the Medicare levy surcharge.
- 5 B. False. Despite PHI having benefits including shorter waiting times and more flexibility in terms of choosing doctors than Medicare, this does not mean that it is better. An individual will weigh up the benefits and limitations of each and decide whether it is better for them to mostly rely on the public or private healthcare system.
- 6 B. False. Medicare provides subsidised healthcare, which enables Australians to access its services at little to no cost.

Skills

Unpacking the case study

7 B 8 A

Perfect your phrasing

9 B

Exam-style questions

- 10 Private health insurance is an optional type of health insurance which people can have in addition to Medicare, in which members pay a premium in return for payment towards services that are not covered by Medicare.¹

I have described private health insurance.¹

- 11 Medicare is Australia's universal health insurance scheme, which provides all Australian residents (and some overseas visitors) access to necessary healthcare at a subsidised cost, or for no cost at all.¹ [Medicare includes a reciprocal agreement with 11 other countries, where Australian residents can access subsidised healthcare in certain countries, and visitors from certain countries can access Australia's public healthcare system.²]

I have described Medicare.¹

I have described one key characteristic of Medicare.²

- 12 One service that is covered by Medicare is eye tests performed by an optometrist.¹ [One service that can be covered by private health insurance is allied health, such as physiotherapy.²]

I have listed one health service that is covered by Medicare.¹

I have listed one health service can be accessed by private health insurance.²

- 13 Private health insurance (PHI) demonstrates equity through its incentive, the Medicare levy surcharge, as it only applies to people who can afford the expenses of PHI.¹ [This means people who have lower incomes do not have to pay this surcharge, providing extra support by not putting lower income earners in a place of financial disadvantage, demonstrating equity.²]

I have identified one way that private health insurance demonstrates equity.¹

I have explained how this element of private health insurance demonstrates equity.²

14 Advantages:

[Individuals can choose their doctor in a public or private hospital (as a private patient).¹]

[Reduces the pressure on the public healthcare system.²]

Disadvantages:

[Private health insurance premiums can be costly.³]

[People can still have out-of-pocket costs as private health insurance does not always cover the full amount of services.⁴]

I have identified one advantage of private health insurance.¹

I have identified another advantage of private health insurance.²

I have identified one disadvantage of private health insurance.³

I have identified another disadvantage of private health insurance.⁴

- 15 Medicare only lists healthcare services that are deemed 'medically necessary' on the Medicare benefits schedule (MBS), rather than listing and subsidising every healthcare service.¹ [By only subsidising a selection of necessary healthcare services, Medicare's costs can remain manageable. Keeping costs low enables Medicare to continue to operate for years to come, which demonstrates sustainability.²] [Moreover, Medicare provides a range of healthcare services to all Australians at a low or no cost.³] [Making healthcare services affordable removes the key barrier of income for many Australians in accessing healthcare services, demonstrating access.⁴]

I have explained one aspect of Medicare.¹

I have analysed how this aspect of Medicare demonstrates sustainability.²

I have explained another aspect of Medicare.³

I have analysed how this aspect of Medicare demonstrates access.⁴

I have included connecting words, such as 'moreover'.

- 16 To provide a high quality of healthcare, Medicare must be adequately funded. Medicare's funding comes from Australians' taxable income via the Medicare levy, the Medicare levy surcharge, and general income tax.¹ [By ensuring that Medicare has adequate funding through tax, Australians are able to access healthcare at a subsidised rate, meaning they are more likely to receive treatment for illnesses, improving Australia's physical health and wellbeing by supporting the body and its functioning.²] [Medicare includes the 'Medicare Safety Net', which further reduces the costs of healthcare services significantly for individuals and families which have higher than average medical bills. Providing extra financial support to people who need it demonstrates equity.³]

By significantly reducing medical bills once individuals and families reach a certain threshold, people with higher than average medical bills will have reduced financial stress as the safety net protects them from excessive medical bills, promoting Australia's mental health and wellbeing.⁴ By only listing certain 'medically necessary' healthcare services on the Medicare benefits schedule (MBS), Medicare demonstrates sustainability as it keeps the costs of Medicare under control, enabling Medicare to provide high quality healthcare in the future.⁵ This means that Australia's present and future population can access basic healthcare as they need it, meaning they can receive treatment for illnesses that would inhibit them from participating with friends and building a social network, promoting Australia's social health and wellbeing.⁶

- I have described how Medicare demonstrates funding.¹
- I have analysed how the funding of Medicare promotes one dimension of health and wellbeing in Australia.²
- I have described how Medicare demonstrates equity.³
- I have analysed how the funding of Medicare promotes one dimension of health and wellbeing in Australia.⁴
- I have described how Medicare demonstrates sustainability.⁵
- I have analysed how the funding of Medicare promotes one dimension of health and wellbeing in Australia.⁶

Questions from multiple lessons

17 By reaching the threshold for the Medicare Safety Net, Arisu and Finlay will experience significantly lower medical bills for the rest of the calendar year, meaning they will have less of a financial strain.¹ Relieving some of the financial strain by having the Medicare Safety Net will likely enable Arisu and Finlay to be able to spend quality time with their friends with reduced amounts of financial stress. This assists Finlay and Arisu to individually achieve optimal health and wellbeing, without being held back by the strain of their financial stress.² Moreover, the Medicare Safety Net will enable Finlay to experience less stress about increasing Medical bills, meaning he can perform better at work with less stress, contributing to his positive purpose in life professionally.³

- I have provided one relevant example of the impact of the Medicare Safety Net from the case study.¹
- I have analysed how this example contributes to optimal health and wellbeing as a resource individually.²
- I have linked my response to promoting one dimension of health and wellbeing.³

4B Australia's health system: Part 2

Theory-review questions

- 1 B. False. The Australian Government is also responsible for and contributes to the funding of the NDIS and the PBS.
- 2 B. False. The PBS is also funded by the money received from patient co-payments.
- 3 A. True. Once concession cardholders reach the safety net threshold, they will receive essential prescription medicines for free for the rest of that calendar year.
- 4 II; III. There are certain requirements regarding an individual's disability to be eligible for the NDIS, such as requiring help from other people, and using certain assistive technology such as a wheelchair.

- 5 I; III. Assisting individuals in enjoying an ordinary life through using central support and services relates to access, not sustainability.
- 6 B. False. Individuals work with the NDIS to create their own unique set of goals, and an individualised plan is formed based on their specific goals.
- 7 A. True. Essential medicines play a crucial role in preventing and treating a condition which is diagnosed in healthcare services.

Skills

Unpacking the case study

8 B 9 A 10 A

Exam-style questions

11 [The NDIS is an insurance scheme that provides support and services to people with a disability, their families, and their carers.¹]

- I have described the NDIS.¹

12 [The PBS is a program run by the Australian government that subsidises various essential prescription medication for Australian citizens and permanent residents, and visitors from selected countries.¹] [The PBS includes the PBS Safety Net, which significantly reduces or eliminates the cost of essential prescription medicines for individuals who reach a certain threshold.²]

- I have described the PBS.¹

- I have described one characteristic of the PBS.²

13 [The NDIS is designed to enable participants to enjoy an ordinary life. To achieve this, the NDIS supports individuals in accessing mainstream support and services.¹] [For example, the NDIS can provide funding and support to help someone receive a schooling education by organising appropriate transport to and from the school.²]

- I have outlined how the NDIS demonstrates access.¹

- I have provided an example to illustrate how the NDIS demonstrates access.²

14 [The PBS only subsidises a selected range of essential prescription medicines, meaning, not every medicine is listed on the PBS.¹] [By limiting the medicines on the PBS to the ones with the widest impact, this keeps the costs of the PBS manageable. Limiting the costs of the PBS, while also maximising its impact, ensures it can continue to operate to meet the needs of future populations, demonstrating sustainability.²]

- I have explained one aspect of the PBS.¹

- I have analysed how this aspect of the PBS demonstrates sustainability.²

15 [The PBS includes the PBS Safety Net, which reduces or removes the cost of essential medicines for individuals once they reach the threshold. This demonstrates equity by providing extra financial support to people who have significant costs on prescription medicines.¹] [The PBS Safety Net decreases the likelihood of people becoming financially disadvantaged due to money spent on prescription medicines, reducing the number of people experiencing financial stress, promoting the mental health and wellbeing of Australians.²] [The PBS is partially funded through the money received from patient co-payments.³] [By requiring individuals to pay the partial amount for the medicine, rather than providing medicines

for free, this ensures that the PBS can continue to operate in the future, as well as increasing the number of medicines subsidised by the PBS. Ensuring the PBS can continue to operate with a wide impact means many Australians can access subsidised essential medicines, enabling them to prevent and treat illness, promoting the physical health and wellbeing of all Australians.^{4]}

I have described how the PBS demonstrates equity.¹

I have analysed how equity within the PBS promotes one dimension of health and wellbeing in Australia.²

I have described how the PBS demonstrates funding.³

I have analysed how the funding of the PBS promotes another dimension of health and wellbeing.⁴

- 16 a [One component of effective health systems is sustainability, which refers to meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.^{1]}]

I have outlined one component of effective health systems.¹

Note: ensure that you choose a component that enables you to effectively answer part b.

- b [As Alyssa is involved in advising the distribution of money in Australia's healthcare system, such as by analysing the government's current spending and assessing projected government spending, this demonstrates sustainability.^{1]} This is because evaluating the government's current spending can ensure the present generations needs are being met, and looking at future projected spending can assess whether the government will have adequate financial resources to meet the needs of future generations, demonstrating sustainability.²]

I have provided an example from the case study relevant to my chosen component in part a.¹

I have explained how my example demonstrates my chosen component in part a.²

I have referred to the character's name in my response (Alyssa), and to the scenario.

Questions from multiple lessons

- 17 a [One trend from source 1 is that over time the number of NDIS participants will increase between September 2020 and the following 3-4 years in all Australian states and territories.¹]

I have outlined one trend from the graph.¹

- b [The NDIS helps hundreds of thousands of individuals with a disability in Australia, and as source 1 shows, is continuing to increase the number of people it helps in the coming years.¹ As the NDIS is increasingly assisting individuals to live an ordinary life, such as through employment, this contributes to optimal health and wellbeing as a resource nationally by increasing the number of people earning an income, which reduces the number of people that need to rely on social security benefits.² The NDIS enables participants to continue activities they enjoy through funding and support, such as David from source 2, who is able to continue metal detecting and undertake pottery.³ As the NDIS supports participants to continue hobbies that they enjoy, this increases the

number of Australians undertaking activities that bring a positive sense of purpose to their lives, enhancing Australia's spiritual health and wellbeing.^{4]}

I have provided one example of the impact of the NDIS from one of the sources.¹

I have analysed how this example contributes to optimal health and wellbeing as a resource nationally.²

I have provided one example of the impact of the NDIS from one of the sources.³

I have analysed how this example promotes one dimension of health and wellbeing in Australia.⁴

I have referred to both of the sources provided in my response.

Chapter 4 test

- 1 [Private health insurance is an optional type of health insurance which people can have in addition to Medicare, in which members pay a premium in return for payment towards services that are not covered by Medicare.¹]

I have described private health insurance.¹

- 2 [The NDIS is an insurance scheme that provides support and services to people with a disability, their families, and their carers.¹ The NDIS works with participants and their carers to create individual goals, and provide relevant support they need to achieve those goals.²]

I have described the NDIS.¹

I have described one characteristic of the NDIS.²

- 3 [Private health insurance (PHI) enables members to have access to a greater range of healthcare services that are not covered by Medicare.¹ Depending on their membership, many members of PHI can access covered healthcare services such as osteopathy, which is particularly beneficial for people who enjoy playing sports. Access to services such as osteopathy would enable members to continue activities such as team sport, enabling them to increase their social network of friends in their sports team, promoting social health and wellbeing.²]

[PHI demonstrates equity as it relieves lower income earners from paying the Medicare levy surcharge.³ By relieving lower income earners from paying this incentive scheme, it will likely reduce their levels of financial stress, positively influencing their mental health and wellbeing.⁴ Moreover, PHI demonstrates sustainability as it incentivises people who can afford it to join, which subsequently reduces the strain on the public health system, meaning more people can be effectively treated at a faster rate across both the public and private health systems.⁵ By increasing the capacity of both the public and private healthcare systems, individuals receive treatment for illnesses at a faster rate. This subsequently means people can recover from illness quicker, promoting physical health and wellbeing.⁶]

I have described how private health insurance (PHI) demonstrates access.¹

I have analysed how the access of PHI promotes one dimension of health and wellbeing.²

I have described how PHI demonstrates equity.³

I have analysed how the equity of PHI promotes one dimension of health and wellbeing.⁴

I have described how PHI demonstrates sustainability.⁵

I have analysed how the sustainability of PHI promotes one dimension of health and wellbeing.⁶

I have used connecting words, such as 'moreover'.

- 4** [By providing basic healthcare services at a subsidised cost, Medicare makes necessary healthcare accessible for Australians, enabling them to receive diagnosis, prevention and treatment for health conditions, which promotes physical health and wellbeing.¹] [Moreover, as Medicare financially protects individuals and families with high medical bills through the 'Medicare Safety Net', people are likely to have reduced stress levels about high expenses for medical services, promoting mental health and wellbeing.²]

I have outlined one way that Medicare promotes one dimension of health and wellbeing.¹

I have outlined another way that Medicare promotes a second dimension of health and wellbeing.²

5 Advantages:

[Medicare enables patients to choose their doctor for out-of-hospital services.¹]

[Medicare's reciprocal agreement enables Australian citizens to access subsidised/free healthcare in selected countries.²]

Disadvantages:

[There can be significant wait times for treatments for non-emergency treatments.³]

[Medicare does not cover many alternative therapies, such as physiotherapy.⁴]

I have listed one advantage of Medicare.¹

I have listed another advantage of Medicare.²

I have listed one disadvantage of Medicare.³

I have listed another disadvantage of Medicare.⁴

- 6 a** [One incentive that may persuade Sara in taking up private health insurance (PHI) is lifetime health cover loading, which increases the cost of PHI by two per cent each year once an individual turns 30. As Sara is 28, she may consider taking up PHI in the next two years to avoid this.¹] [Another incentive is the Medicare levy surcharge, which is an additional tax of 1-1.5 percent on individuals taxable incomes who do not have PHI. Assuming Sara qualifies to pay this surcharge, she may join PHI to avoid this extra tax.²]

I have outlined one incentive of PHI.¹

I have outlined another incentive of PHI.²

I have referred to the character's name in my response (Sara), and to the scenario.

- b** [One private health insurance incentive scheme is the Medicare levy surcharge, which is an additional tax of 1-1.5 per cent on individuals taxable incomes who do not have PHI and earn a certain amount.¹] [The Medicare levy surcharge demonstrates equity as it precludes low-income earners from paying this additional tax, thus preventing low-income individuals from further financial disadvantage.²]

I have explained one private health insurance incentive scheme from part a.¹

I have analysed how this incentive scheme demonstrates equity.²

- 7** [One component of effective healthcare systems is sustainability, which relates to healthcare systems being able to meet the health needs of the current generation, without depleting resources and their capacity to serve future generations.¹]

I have outlined one component of an effective healthcare system.¹

Questions from multiple chapters

- 8 a** [Medicare is Australia's universal health insurance scheme, which provides all Australian residents (and some overseas visitors) access to necessary healthcare at a subsidised cost, or for no cost at all.¹]

I have described Medicare.¹

- b** [People with a lower socioeconomic status are more likely to be admitted to a public hospital, compared to people with a higher socioeconomic status being more likely to be admitted to a private hospital.¹] [This is evident in the graph as approximately 325 people per 1000 with a level 1 socioeconomic status were admitted to a public hospital in 2018-19, compared to 170 people per 1000 with a level 5 socioeconomic status.²] [Moreover, approximately 100 people per 1000 with a level 1 socioeconomic status were admitted to a private hospital, compared to 240 people per 1000 with a level 5 socioeconomic status.³]

I have described one relationship between socioeconomic status and public and private hospitals.¹

I have used data from the graph to support this relationship.²

I have used data from the graph to further illustrate this relationship.³

5A Health promotion: Smoking

Theory-review questions

- 1 B. False. *Smoking is indeed a major health issue in Australia. However, this is exactly why smoking is likely to be effectively targeted by health promotion.*
- 2 A. True. *Health promotion relating to smoking has been successful in Australia as smoking rates have decreased over time, and therefore the burden of disease associated with smoking has also decreased.*
- 3 B. False. *Health promotion is not only focused on educating people on the health risks associated with smoking. For example, an important aspect of health promotion relating to smoking is creating a supportive environment in which individuals can combat the challenges associated with quitting smoking.*
- 4 I; II. *Smoking is both costly to the economy and population health, however, it is not true that the impacts of smoking aren't preventable.*
- 5 I; II; III. *These are all examples of aspects of an effective health promotion initiative.*

Skills

6 B 7 B 8 A

Exam-style questions

- 9 [One reason why smoking is targeted by health promotion is that smoking has a significant impact on population health outcomes and is the leading cause of preventable illness in Australia.¹] [Another reason why smoking is targeted by health promotion is that smoking is extremely costly to the economy, including healthcare costs and workplace costs.²]

I have explained one reason why smoking is targeted by health promotion.¹

I have explained another reason why smoking is targeted by health promotion.²

- 10 The National Tobacco Campaign is a health promotion initiative related to smoking in Australia.

Note: you are not awarded a mark for identifying a health promotion initiative.

[The National Tobacco Campaign provides resources and information in different languages about quitting smoking.¹] [This reflects the Ottawa Charter action area of 'create supportive environments', as the language barrier to accessing information is removed, supporting people of all backgrounds.²] [This means that all people, everywhere, regardless of what language they speak and understand, can access information about the health risks associated with smoking, which reduces the likelihood that people will smoke. In turn, this reduces the prevalence of smoking-related illness, such as lung cancer, in Australia.³]

I have provided an example of what is involved in my chosen smoking-related health promotion initiative.¹

I have explained how this example reflects an Ottawa Charter for Health Promotion action area.²

I have explained how my chosen smoking-related health promotion initiative is effective at promoting health status in Australia, with reference to a health status indicator.³

Other acceptable answers include:

- other action areas of the Ottawa Charter for Health Promotion, so long as you adequately explained how this reflects the initiative's effectiveness in promoting health status in Australia.

- 11 Australian laws and regulations are an example of a health promotion initiative that targets smoking in Australia.

Note: you are not awarded a mark for identifying a health promotion initiative.

- a [Australian laws and regulations relating to smoking have prohibited people from smoking in public places.¹] [This reflects the action area 'create supportive environments' because, as a result of the implementation and enforcement of such laws, the risk of exposure to second-hand smoke in the environment is removed, creating a supportive physical environment for those who choose not to smoke.²]

I have provided an example of what is involved in my chosen health promotion initiative that targets smoking in Australia.¹

I have explained how this example reflects an Ottawa Charter for Health Promotion action area.²

- b [The Australian laws and regulations health promotion initiative has included the implementation and enforcement of laws restricting the age at which people can purchase tobacco products.¹] [These laws are an example of 'healthy public policies' as they make it easier for young people to avoid smoking and avoid developing an unhealthy and addictive habit.²] [This is effective in promoting Australia's physical health and wellbeing, because if young Australians are less likely to begin smoking, this promotes the functioning of the body and its systems.³]

I have provided an example of what is involved in my chosen health promotion initiative.¹

I have explained how this example reflects an Ottawa Charter for Health Promotion action area, or another element of effective health promotion initiatives.²

I have explained how my chosen initiative is effective at promoting health and wellbeing in Australia, with reference to a health and wellbeing dimension.³

Other acceptable answers include:

- you may have used another method to evaluate your chosen smoking-related health promotion program, such as linking an example of the work of the program to real or potential improvements in health outcomes, so long as you also mentioned how this example would promote health and wellbeing in Australia, with reference to a health and wellbeing dimension. You may have evaluated the program as ineffective, so long as you have justified your response.

Questions from multiple lessons

- 12 [Quit Victoria's online training program provides online education training for healthcare professionals, helping them develop skills required to educate their patients on the negative health consequences of smoking and the benefits of quitting.¹] [This reflects the action area 'reorient health services' as there is a shift from the biomedical to social model of health and health professionals are encouraged to advocate for health preventative behaviours, such as quitting smoking, rather than simply treating associated illness.²]

[Another aspect of Quit Victoria's online training program is the collaboration between individual healthcare professionals and Quit Victoria – a government-funded initiative.³] This reflects the action area 'strengthen community action' as, by providing a free training program to individual healthcare professionals around the country, Quit Victoria is calling health professionals to advocate for quitting smoking and to work together to take action against the public health issue of smoking.⁴]

- I have provided an example of what is involved in Quit Victoria's online training program.¹
- I have explained how this example reflects an Ottawa Charter for Health Promotion action area.²
- I have provided another example of what is involved in Quit Victoria's online training program.³
- I have explained how this example reflects an Ottawa Charter for Health Promotion action area.⁴

Other acceptable answers include:

- other action areas of the Ottawa Charter for Health Promotion, so long as you supported your response with evidence from the case study.

- 13 a [The social model of health principle 'empowers individuals and communities' relates to inspiring individuals and communities to recognise their role in promoting their own health and wellbeing.¹] [The *Don't Make Smokes Your Story* health promotion initiative demonstrates this principle because it involves the creation and publication of numerous television and radio advertisements that feature real people's stories. These real-life stories are relatable, and help empower and inspire people to quit themselves.²]

- I have described the social model of health principle 'empowers individuals and communities'.¹
- I have described how the *Don't Make Smokes Your Story* health promotion initiative demonstrates this principle.²

- b [The *Don't Make Smokes Your Story* health promotion initiative reflects 'strengthen community action' because it inspires and motivates people from different communities to quit smoking. This is because the health promotion information and advertisements are available in over twelve languages, including a range of Indigenous languages.¹] [The *Don't Make Smokes Your Story* health promotion initiative also reflects 'develop personal skills' because it provides a '*Don't Make Smokes Your Story* toolkit' which can be freely accessed online. This toolkit intends to provide organisations with the resources they need to educate individuals in their communities about the risks associated with smoking.²]

- I have outlined how the *Don't Make Smokes Your Story* health promotion initiative reflects an action area of the Ottawa Charter for Health Promotion.¹
- I have outlined how the *Don't Make Smokes Your Story* health promotion initiative reflects another action area of the Ottawa Charter for Health Promotion.²

- c [The *Don't Make Smokes Your Story* health promotion initiative involves the widespread provision of advice to Indigenous Australians on where to access help and support to quit smoking.¹] [This means more Indigenous peoples are likely to successfully quit smoking, which promotes the physical health and wellbeing of Indigenous children,

due to a reduction in exposure to second-hand smoke, promoting the functioning of the body and its systems.²]

- I have provided an example of what is involved in the *Don't Make Smokes Your Story* health promotion initiative.¹
- I have linked this example to the promotion of a population group's (Indigenous Australians) health and wellbeing, with reference to a health and wellbeing dimension.²

Other acceptable answers include:

- another dimension of health and wellbeing, so long as this dimension was relevant to the work of the initiative.

- d [The *Don't Make Smokes Your Story* health promotion initiative provides health information related to smoking in over 12 languages.¹] [This reflects the Ottawa Charter for Health Promotion action area 'develop personal skills' by educating many people, despite what language they speak, about the health risks associated with smoking.²] [This ensures that the program is effective at promoting health status as many people are equipped with the skills and knowledge to make positive and informed health decisions to avoid developing smoking-related illnesses, such as lung cancer, reducing overall morbidity associated with smoking in Australia.³]

- I have provided an example of what is involved in the *Don't Make Smokes Your Story* health promotion initiative.¹
- I have explained how this example reflects an Ottawa Charter for Health Promotion action area, or another element of effective health promotion initiatives.²
- I have evaluated whether the *Don't Make Smokes Your Story* health promotion initiative is effective at promoting health status.³

Other acceptable answers include:

- you may have used another method to evaluate the effectiveness of the *Don't Make Smokes Your Story* health promotion initiative, such as linking an example of the work of the program to real or potential improvements in health outcomes, so long as you also mentioned how this example would promote health status in Australia, with reference to a health status indicator. You may also have evaluated the program as ineffective, so long as you justified your response.

5B Health promotion: Road safety

Theory-review questions

- 1 I; III. The key reasons for road safety being targeted for health promotion are that injury or death resulting from road accidents can be prevented, such as by the driver wearing their seatbelt, and that road safety can improve health outcomes. Although road accidents can result in mortalities, this is not always the case.
- 2 A. True. A person is unable to live to their projected life expectancy when their life is cut short due to a car crash, so car crashes can lower the life expectancy of a population group.
- 3 A. True. The fate of a driver can often be determined by the behaviour of other drivers on the road, so health promotion programs can promote mental health and wellbeing because drivers may feel less worried knowing that other drivers see these road safety health promotion campaigns.

- 4** B. It is inevitable that people will continue to drive cars, so road safety health promotion can improve population health by moderating the behaviour of these existing drivers.
- 5** A. The Ottawa Charter for Health Promotion outlines a series of action areas required to deliver ideal health promotion, so meeting these action areas ensures that road safety health promotion programs are likely to be effective at improving population health.

Skills

Data analysis

6 B **7** A **8** B

Exam-style questions

- 9** [One reason for road safety being targeted for health promotion is that it has a significant impact on health outcomes, such as leading to mortalities due to road driving accidents.¹] Another reason for road safety being targeted for health promotion is that many driving accidents are preventable.²

I have outlined one reason for road safety being targeted for health promotion.¹

I have outlined another reason for road safety being targeted for health promotion.²

- 10** The Victorian Road Safety Strategy is a health promotion initiative related to road safety in Australia.

Note: you are not awarded a mark for identifying a health promotion initiative.

- a** [The Victorian Road Safety Strategy seeks to remove unsafe vehicles from Victorian roads.¹] This can promote the mental health and wellbeing of Victorian drivers as, by removing unsafe vehicles off roads quickly, people's stress associated with crashing into these unsafe vehicles on the road decreases.²

I have provided an example of what is involved in my chosen road safety health promotion initiative.¹

I have linked this example to the promotion of population health and wellbeing, with reference to a health and wellbeing dimension.²

Other acceptable answers include:

- another road safety health promotion program, so long as you explained how it is effective at improving population health and wellbeing, with reference to health and wellbeing dimensions.

- b** [The Victorian Road Safety Strategy uses 'create supportive environments' by removing unsafe vehicles from Victorian roads, which improves the environment of Victorian roads by making it less likely for another car to break down due to a fault in its physical condition.¹] The Victorian Road Safety Strategy also uses 'develop personal skills' by emphasising the need for drivers involved in a car crash to seek post-crash care, which makes it more likely for a patient to see a doctor or physical and be equipped with personal skills, such as exercises, that they can use for their rehabilitation.²

I have described how my chosen road safety health promotion program displays an action area of the Ottawa Charter for Health Promotion.¹

I have described how my chosen road safety health promotion program displays another action area of the Ottawa Charter for Health Promotion.²

- [The Victorian Road Safety Strategy emphasises post-crash care which involves supporting individuals who have experienced a car crash to develop the skills required to recover from their accident.¹] [This meets the Ottawa Charter for Health Promotion action area 'develop personal skills' as individuals are supported in developing their skills to rehabilitate themselves after a road accident.²] [This ensures that the Victorian Road Safety Strategy is effective in decreasing the impact of road accidents on people's health long-term, therefore reducing morbidity associated with road accidents in Victoria, and therefore Australia.³]

I have provided an example of what is involved in my chosen road safety health promotion program.¹

I have explained how this example reflects an Ottawa Charter for Health Promotion action area, or another element of effective health promotion initiatives.²

I have explained how my chosen road safety health promotion program is effective at improving health status in Australia, with reference to a health status indicator.³

Other acceptable answers include:

- you may have used another method to evaluate your chosen road safety health promotion program, such as linking an example of the work of the program to real or potential improvements in health outcomes, so long as you also mentioned how this example would improve health status in Australia, with reference to a health status indicator. You may also have evaluated the program as ineffective, so long as you justified your response.

Questions from multiple lessons

- 11 a** [The social model of health principle 'involves intersectoral collaboration' refers to ensuring the public and private sectors of the economy work together in order to achieve health-related goals.¹] [Melbourne Victory publishing the TAC's campaign demonstrates the social model of health principle 'involves intersectoral collaboration' because it involves Melbourne Victory, a private, non-government organisation, using their platform as a sporting club to ensure that government-owned organisation TAC's campaign reaches a larger audience.²]

I have described social model of health principle 'involves intersectoral collaboration'.¹

I have described how Melbourne Victory publishing the TAC's campaign demonstrates this principle.²

- [The TAC's campaign reflects 'strengthen community action' because it motivates different community groups, such as the supporters of Melbourne Victory, not to use their phone while driving, therefore addressing a legitimate health risk faced within the community that can lead to driving fatalities.¹] [The TAC's campaign also reflects 'create supportive environments' because it decreases the likelihood of drivers being unaware of their surroundings while driving, therefore making the physical environment of Victorian roads safer for other drivers to use.²]

I have outlined how the TAC's campaign reflects an action area of the Ottawa Charter for Health Promotion.¹

- I have outlined how the TAC's campaign reflects another action area of the Ottawa Charter for Health Promotion.²
- c [The TAC's campaign makes it less likely for drivers to sustain an injury caused by a driver using their phone and being unaware of their physical surroundings.¹] [This promotes the physical health and wellbeing of Victorians as there is reduced experiences of injury.²]
- I have provided an example of what is involved in the TAC's campaign.¹
- I have linked this example to the promotion of Victoria's health and wellbeing, with reference to a health and wellbeing dimension.²
- Other acceptable answers include:
- another dimension of health and wellbeing, so long as this dimension was relevant to the work of the program.
- d [The TAC campaign informs Victorian drivers that a two-second glance at a mobile phone means that a driver is travelling blind and could cause a car crash.¹] [This meets the Ottawa Charter for Health Promotion action area 'develop personal skills' by educating viewers of the risk associated with looking at their phone whilst driving through comparing it to covering your eyes and literally driving blind – something that is easy to understand for all viewers.²] [This ensures that the program is effective at improving Victoria's health status by increasing people's knowledge of the risks associated with looking at your phone whilst driving, which ultimately decreasing the likelihood of drivers dying prematurely from a car crash caused by a driver using their phone, which increase life expectancy.³]
- I have provided an example of what is involved in the TAC campaign.¹
- I have explained how this example reflects an Ottawa Charter for Health Promotion action area, or another element of effective health promotion initiatives.²
- I have explained how the TAC campaign is effective at improving health status in Victoria, with reference to health status indicator.³

Other acceptable answers include:

- you may have used another method to evaluate the TAC campaign's effectiveness at promoting Victoria's health status, such as linking an example of the work of the program to real or potential improvements in health outcomes, so long as you also mentioned how this example would improve health status in Victoria, with reference to a health status indicator. You may also have evaluated the program as ineffective, so long as you justified your response.

5C Health promotion: Skin cancer

Theory-review questions

- 1 I; III. The key reasons for skin cancer being targeted for health promotion are that illness and death caused by skin cancer is preventable, as people can reduce their exposure to UV radiation (particularly from the sun) by engaging with a range of sun protection measures and behaviours, and getting skin checks regularly.

- 2 A. True. Sun protection can improve population health by reducing premature death from skin cancer. This reduction in deaths caused by skin cancer, therefore, increases life expectancy.
- 3 B. False. Health promotion is not only focused on educating people on the health risks associated with sunburn. For example, an important aspect of health promotion related to skin cancer is educating people about the range of sun protection measures they can take to reduce their risk of skin cancer.
- 4 B. Changing Australian people's attitudes and behaviours around sun exposure and tanning play a major role in health promotion campaigns related to skin cancer and are instrumental in improving population health. We cannot do anything about the harmful effects of UV radiation on the skin, but we can reduce exposure and protect our skin from exposure.
- 5 A. Skin cancer-related health promotion initiatives are likely to be effective at improving population health if they reflect the **action areas of the Ottawa Charter for Health Promotion**. The Ottawa Charter for Health Promotion outlines a series of action areas required to deliver effective health promotion, so meeting these action areas ensures that health promotion initiatives related to skin cancer are likely to be effective at improving population health outcomes.

Skills

Unpacking the case study

- 6 A 7 B 8 A

Exam-style questions

- 9 [One reason why skin cancer is targeted by health promotion is that skin cancer has a significant impact on population health outcomes and accounts for a high proportion of newly diagnosed cancers in Australia every day.¹] [Another reason why skin cancer is targeted by health promotion is that skin cancer is extremely costly to the economy, including healthcare costs.²]

- I have explained one reason why skin cancer is targeted by health promotion.¹

- I have explained another reason why skin cancer is targeted by health promotion.²

- 10 The SunSmart campaign is a health promotion initiative related to skin cancer in Australia.

Note: you do not get a mark for identifying a health promotion initiative.

[The SunSmart campaign provides publications, posters, and information in different languages about sun protection and skin cancer.¹] [This reflects the Ottawa Charter action area, 'create supportive environments', as the language barrier to accessing information is removed, supporting people of all backgrounds.²] [This means that all people, everywhere, regardless of what language they speak and understand, can access information about the health risks associated with overexposure to UV radiation from the sun, which increases the likelihood that they will engage in sun-smart behaviours. In turn, this reduces the prevalence of skin cancer in Australia.³]

- I have provided an example of what is involved in my chosen skin cancer-related health promotion initiative.¹

- I have explained how this example reflects an Ottawa Charter action area.²

- I have explained how my chosen skin cancer-related health promotion initiative is effective at promoting health status in Australia, with reference to a health status indicator.³

Other acceptable answers include:

- other action areas of the Ottawa Charter for Health Promotion, so long as you adequately explained how this reflects the initiative's effectiveness in promoting health status in Australia.

11 [The Bondi Rescue health promotion by Cancer Council features the Bondi Rescue lifeguards, who are well-liked personalities, utilising them to encourage and motivate Australians to implement sun protection measures to reduce their risk of skin cancer.¹] [This reflects the action area 'strengthen community action' as the lifeguards have come together with Cancer Council to encourage Australian people to take action and protect themselves from the sun. The support of the Cancer Council from the lifeguards is also indicative of community action to combat skin cancer as a health issue Australia is facing.²] [The Bondi Rescue health promotion by Cancer Council reminds viewers of the five methods of sun protection.³] [This reflects the action area 'develop personal skills' as the health promotion educates individuals about the range of ways they can protect themselves and their 'mates' from the sun.⁴]

I have provided an example of what is involved in the Bondi Rescue health promotion by Cancer Council.¹

I have explained how this example reflects an Ottawa Charter for Health Promotion action area.²

I have provided another example of what is involved in the Bondi Rescue health promotion by Cancer Council.³

I have explained how this example reflects an Ottawa Charter for Health Promotion action area.⁴

Other acceptable answers include:

- other action areas of the Ottawa Charter for Health Promotion, so long as you supported your response with evidence from the case study.

12 Some government laws and regulations are an example of a health promotion initiative related to skin cancer in Australia.

Note: you are not awarded any marks for identifying a health promotion initiative that targets skin cancer in Australia.

a [Government laws and policies related to skin cancer involve the Victorian Department of Education Sun and UV Protection Policy, which ensures that all member schools provide adequate spaces for students and staff to seek shade outdoors.¹] [This reduces the risk of people in schools, both students and staff, suffer from sunburn, improving physical health and wellbeing.²]

I have provided an example of what is involved in my chosen skin cancer health promotion initiative.¹

I have linked this example to the promotion of population health and wellbeing, with reference to a health and wellbeing dimension.²

b [Government laws and regulations relating to skin cancer have prohibited the commercial use of solariums, such as tanning beds.¹] [This reflects the action area 'build healthy public policy' because the implementation of laws that restrict commercial use of tanning beds is a public policy. It is a healthy public policy because tanning beds are very dangerous for health as they are a risk factor for skin cancer.²]

I have provided an example of what is involved in my chosen health promotion initiative that targets skin cancer in Australia.¹

I have explained how this example reflects an Ottawa Charter action area.²

Questions from multiple lessons

13 a [The social model of health principle 'empowers individuals and communities' relates to inspiring individuals and communities to recognise their role in promoting their own health and wellbeing.¹] [The Your Time in the Sun health promotion initiative demonstrates this principle because it involves the creation and publication of numerous television and radio advertisements that feature real people's stories. These real-life stories are relatable, and help empower and inspire people to stop ignoring the impact of the sun to one's health.²]

I have described the social model of health principle 'empowers individuals and communities'.¹

I have described how the Your Time in the Sun health promotion initiative demonstrates this principle.²

b [The Your Time in the Sun health promotion initiative reflects 'develop personal skills' because it focuses on educating young people about the consequences of overexposure to UV radiation. This education develops young people's skills and helps them make positive health decisions to protect themselves from sun damage.¹] [The Your Time in the Sun health promotion initiative also reflects 'create supportive environments' through the sharing of personal stories. Through sharing such stories, people don't feel alone and feel supported and inspired to protect themselves from the sun. The sharing of personal stories encourages young people to feel what it is like to have their 'time around the sun' (life) cut short before they achieve their life goals and dreams. This hard-hitting, confronting message is empowering for young Australians.²]

I have explained how the Your Time in the Sun health promotion initiative reflects an action area of the Ottawa Charter for Health Promotion.¹

I have explained how the Your Time in the Sun health promotion initiative reflects another action area of the Ottawa Charter for Health Promotion.²

c [The Your Time in the Sun health promotion initiative broadcasted advertisements across all of NSW (television, cinemas, posters) that focus on the negative health consequences of overexposure to UV radiation, such as damage to DNA in skin cells.¹] [This means that people in NSW are educated about the negative impacts of excessive sun exposure and are more likely to protect themselves from UV radiation, reducing the risk people will suffer injuries from sun damage, such as serious sunburn, improving overall physical health and wellbeing in NSW.²]

I have provided an example of what is involved in the Your Time in the Sun health promotion initiative.¹

I have linked this example to the promotion of population health and wellbeing, with reference to a health and wellbeing dimension.²

Other acceptable answers include:

- another dimension of health and wellbeing, so long as this dimension was relevant to the work of the initiative.

- d** [The Your Time in the Sun health promotion initiative provides health information related to skin cancer that focuses on young people and the impact that excessive sun exposure will have on them later in life.¹] [This reflects the Ottawa Charter action area 'develop personal skills' as young people may be educated about the negative health impacts of overexposure to UV radiation.²] [This ensures that the program is effective at promoting health status as people are equipped with the knowledge and skills they need to make sun-safe decisions, reducing morbidity associated with skin cancer in Australia.³]

I have provided an example of what is involved in the Your Time in the Sun health promotion initiative.¹

I have explained how this example reflects an Ottawa Charter for Health Promotion action area, or another element of effective health promotion initiatives.²

I have explained how the Your Time in the Sun health promotion initiative is effective at promoting health status in Australia, with reference to a health status indicator.³

Other acceptable answers include:

- you may have used another method to evaluate the effectiveness of the Your Time in the Sun health promotion initiative, such as linking an example of the work of the program to real or potential improvements in health outcomes, so long as you also mentioned how this example would promote health status in Australia, with reference to a health status indicator. You may also have evaluated the program as ineffective, so long as you justified your response.

5D Improving Indigenous health and wellbeing

Theory-review questions

- 1** B. False. *Although it is true that there are a range of initiatives, programs, and campaigns that have been introduced to bring about improvements in the health and wellbeing of Indigenous peoples in Australia, not all of these are funded by the Australian Government – some are, some are only supported by them, and some are completely independent of the government.*
- 2** B. False. *Closing the Gap is one initiative that has been introduced to bring about improvements in the health and wellbeing of Indigenous Australians, not focused on all Australians.*
- 3** B. False. *It is important to consider changes in data over time when evaluating the effectiveness of a program, however, this is not the only consideration that must be made. Other considerations include cultural appropriateness, accessibility and funding.*
- 4** I; II; III. *Cultural appropriateness, feedback, and language are all factors that are important to consider when evaluating the effectiveness of an initiative that has been introduced to bring about improvements in Indigenous health and wellbeing.*

Skills

Unpacking the case study

5 B

6 B

7 B

Exam-style questions

- 8** [There are a range of initiatives and programs that have been implemented in Australia to improve Indigenous health and wellbeing because there is health inequality that exists between Indigenous and non-Indigenous peoples in Australia, where generally speaking, Indigenous Australians experience worse health than non-Indigenous Australians.¹]

I have outlined why initiatives are implemented in Australia to improve Indigenous health and wellbeing.¹

- 9** [An effective initiative that has been implemented to improve Indigenous health and wellbeing will likely be both accessible (financially and physically),¹ as well as culturally appropriate.²]

I have identified one feature of an effective initiative that has been implemented to improve Indigenous health and wellbeing.¹

I have identified another feature of an effective initiative that has been implemented to improve Indigenous health and wellbeing.²

Other acceptable answers include:

- you may have also identified other features of an effective initiative, such as sustainability, positive feedback, or other features.

- 10** [The action areas outline a series of strategies and action areas required to develop effective health promotion campaigns and achieve good health for all.¹] [It is important that an initiative reflects the action areas of the Ottawa Charter for health promotion because, in order to be effective, a program needs to address these action areas which specify important and actionable ways to promote health and wellbeing.²]

I have outlined what the action areas of the Ottawa Charter are.¹

I have explained why it is important that an initiative reflects the action areas of the Ottawa Charter for health promotion.²

- 11** [When evaluating the capacity of initiatives to improve the health and wellbeing of Aboriginal and Torres Strait Islander peoples, it is important to consider feedback from participants,¹ how the program is funded,² and whether there is any statistical evidence/data to support the effectiveness of the program in bringing about improvements in health and wellbeing.³]

I have outlined one factor that is important to consider when evaluating the capacity of initiatives to improve the health and wellbeing of Aboriginal and Torres Strait Islander peoples.¹

I have outlined another factor that is important to consider when evaluating the capacity of initiatives to improve the health and wellbeing of Aboriginal and Torres Strait Islander peoples.²

I have outlined a third factor that is important to consider when evaluating the capacity of initiatives to improve the health and wellbeing of Aboriginal and Torres Strait Islander peoples.³

Other acceptable answers include:

- you may have also identified other factors that are important to consider when evaluating the capacity of initiatives to improve the health and wellbeing of Aboriginal and Torres Strait Islander peoples, such as language, cultural appropriateness, relevance, or other considerations.

- 12 a** [Fitzroy Stars Football Club is an example of an initiative that has been introduced to bring about improvements in Indigenous health and wellbeing in Australia.¹] [The Fitzroy Stars Football Club is located in Melbourne, and was established by the Victorian Aboriginal Health Service for Indigenous Australians as a preventative health program.²] [This football team provides locals with the opportunity to engage in regular physical activity, strengthen their connections with others in the community, feel connected and supported, and to learn more about health and wellbeing.³]

I have identified an initiative that has been introduced to bring about improvements in Indigenous health and wellbeing in Australia.¹

I have described this initiative that has been introduced to bring about improvements in Indigenous health and wellbeing in Australia.²

I have further described this initiative that has been introduced to bring about improvements in Indigenous health and wellbeing in Australia, ensuring to demonstrate a clear connection to bringing about improvements in Indigenous health and wellbeing.³

- b** ['Develop personal skills' is an action area that is reflected in the Fitzroy Stars Football Club initiative.¹] [This is because the Fitzroy Stars mission is not just focused on playing sport. For example, the club engages health professionals on a weekly basis to run a range of sessions relating to preventative healthcare, such as educating individuals on the importance of a healthy diet. This enables people to make informed decisions (a personal skill) to positively influence their health and wellbeing.²]

I have identified one action area that the initiative I identified in part a reflects.¹

I have described how the initiative reflects my chosen action area.²

Other acceptable answers include:

- you may have also talked about another action area of the Ottawa Charter, so long as you described how your chosen action area is reflected in the initiative.

- 13 a** [The Koori Beat It program could improve health and wellbeing for Indigenous peoples in Whittlesea as it facilitated a 'Healthy Lifestyle' seminar once a week.¹] [This seminar would involve educating individuals on how they can make choices to improve their health and wellbeing, therefore equipping people with the skills to, for example, make healthy food choices, thereby improving physical health and wellbeing.²] [Additionally, the Koori Beat It program could improve health and wellbeing for Indigenous peoples in Whittlesea as the program allowed members of the community to connect, get to know each other, and strengthen relationships with others.³] [This creation of a supportive community allowed individuals to develop meaningful relationships with others, thereby promoting the social health and wellbeing of people involved.⁴]

I have identified one feature of the Koori Beat It program that could bring about improvements in health and wellbeing for the population it targets.¹

I have explained how this feature could bring about improvements in health and wellbeing, with reference to a health and wellbeing dimension.²

I have identified another feature of the Koori Beat It program that could bring about improvements in health and wellbeing for the population it targets.³

I have explained how this feature could bring about improvements in health and wellbeing, with reference to a health and wellbeing dimension.⁴

Other acceptable answers include:

- you may have also talked about other achievements/outcomes of the Koori Beat It program, so long as you linked them to a health and wellbeing dimension.

- b** [The Koori Beat It program was effective in bringing about improvements in the health and wellbeing of Aboriginal and Torres Strait Islander peoples in Whittlesea as it was accessible – the program was run in a local leisure centre and comfortable environment where families could bring their children, removing barriers of access, therefore improving social health and wellbeing of participants through the creation of a supportive and accessible community.¹] [Additionally, the program was effective as over 50 people participated in the program over an extended period of time, showing that many people were benefiting from the program and were committed.²]

I have outlined one aspect of the Koori Beat It program that supports the effectiveness of the initiative in bringing about improvements in the health and wellbeing of Aboriginal and Torres Strait Islander peoples in Whittlesea.¹

I have outlined another aspect of the Koori Beat It program that supports the effectiveness of the initiative in bringing about improvements in the health and wellbeing of Aboriginal and Torres Strait Islander peoples in Whittlesea.²

Other acceptable answers include:

- you may have also talked about other ways in which the Koori Beat It program was effective in bringing about improvements in the health and wellbeing of Aboriginal and Torres Strait Islander peoples in Whittlesea.

- 14 a** [As seen in the information above, the ASH program is run by the Western Australian AIDS Council, and is a sexual health program that works to provide holistic and culturally appropriate health care services for Aboriginal and Torres Strait Islander communities.¹] [The health issue that the program targets is the issue of HIV/AIDS spread in Aboriginal and Torres Strait Islander communities.²]

I have used the information from the case study to outline the purpose of the program.¹

I have outlined the health issue the program targets.²

- b** [The ASH program could improve health and wellbeing for Aboriginal and Torres Strait Islander peoples as they ensure the healthcare services are culturally appropriate.¹] [This means that Aboriginal and Torres Strait Islander peoples accessing the program will feel respected and supported when accessing healthcare and therefore will be more likely to visit a doctor and receive treatment for illness, improving their physical health and wellbeing.²] [Additionally, the ASH program could improve health and wellbeing for Aboriginal and Torres Strait Islander peoples as it is accessible.³] [this accessibility would mean that people can easily access the program's services and experience reduced levels of stress and anxiety associated with accessing a difficult program, thereby promoting mental health and wellbeing.⁴]

- I have identified one feature of the ASH program that could bring about improvements in health and wellbeing for the population it targets.¹
-
- I have explained how this could bring about improvements in health and wellbeing, with reference to a health and wellbeing dimension.²
-
- I have identified another feature of the ASH program that could bring about improvements in health and wellbeing for the population it targets.³
-
- I have explained how this could bring about improvements in health and wellbeing, with reference to a health and wellbeing dimension.⁴
-

Other acceptable answers include:

- you may have also talked about other features or principles of the ASH program, so long as you linked them to a health and wellbeing dimension.

- c [‘Strengthen community action’ is an action area reflected in the ASH program.¹] [This is because the ASH program encourages and pursues joint initiatives with Aboriginal agencies and non-Aboriginal agencies with the aim of increasing the capacity of ongoing appropriate interagency responses and commitment.²]

- I have identified one action area that the ASH initiative reflects.¹
-
- I have described how the initiative reflects my chosen action area.²
-

Other acceptable answers include:

- other action areas of the Ottawa Charter for Health Promotion, so long as your chosen action area was evident in the information provided in the case study.

- d [The ASH program is an effective initiative introduced to bring about improvements in Aboriginal and Torres Strait Islander peoples health and wellbeing for a range of reasons, firstly because it has focused on ensuring that their program is culturally appropriate.¹] [This is shown as two of the principles of the program are ‘Holistic Health’, recognising the specific way Indigenous Australians view health and wellbeing, and ensuring that the ‘health care services are culturally appropriate’.²] [Furthermore, the program is effective as it encourages and pursues joint initiatives with Aboriginal agencies and non-Aboriginal agencies with the aim of increasing the capacity of ongoing appropriate interagency responses and commitment.³] [This highlights how the program is not only engaging the wider community to increase their capacity to improve health and wellbeing but is also striving to make a long-lasting, sustainable impact.⁴]

- I have outlined one reason that the initiative is/is not effective.¹
-
- I have used information from the case study to explain this reason, referring to a specific aspect of the program.²
-
- I have outlined another reason that the initiative is/is not effective.³
-
- I have used information from the case study to explain this reason, referring to a specific aspect of the program.⁴
-

Note: There are many criteria that you could refer to when evaluating the effectiveness of a program, but in order to respond to this question well, you need to demonstrate that you have an understanding of the features that make a program effective. Whether you evaluated the ASH program as effective or not, you needed to support your response with information from the case study. If you did not use information from the case study to justify your response, or your evaluation was unrealistic/unjustified, you would not receive full marks. A high mark response to a question like this would provide enough detail about why the particular aspect of the program assisted in making it effective/ineffective.

Questions from multiple lessons

- 15 [The Aboriginal Road to Good Health program reflects the social model of health principle of ‘empowers individuals and communities’.¹] [The principle ‘empowers individuals and communities’ refers to inspiring individuals and communities to recognise their role in promoting their own health and wellbeing.²] [This program is focused on education, which is the key to empowerment. The program empowers individuals to choose healthier habits so they can not only be strong for themselves, but for their families and whole communities through educating individuals on everything from how to spend food money, to what to look for on a food label.³]

- I have identified one social model of health principle reflected in the Aboriginal Road to Good Health program.¹
-
- I have explained the principle I identified.²
-
- I have explained how the principle is reflected in the case study.³
-

Chapter 5 test

- 1 a [Initiatives are implemented to specifically improve Indigenous health and wellbeing because there is health inequality that exists between Indigenous and non-Indigenous peoples in Australia.¹] [For example, Indigenous Australians have a lower life expectancy than non-Indigenous Australians, outlining how, generally speaking, Indigenous Australians experience poorer health outcomes than non-Indigenous Australians.²]

- I have outlined why initiatives are implemented to improve Indigenous health and wellbeing in Australia.¹
-
- I have further explained why initiatives are implemented to improve Indigenous health and wellbeing in Australia.²
-

- b [Aboriginal Quitline is an example of an initiative that has been introduced to bring about improvements in Indigenous health and wellbeing in Australia.¹] [It is a subdivision of the Quit program of Cancer Council Australia and is a free phone support service where Indigenous people can call and speak with an Aboriginal Quitline Counsellor who provides them with advice and support to help them quit smoking.²]

- I have identified an initiative that has been introduced to bring about improvements in Indigenous health and wellbeing in Australia.¹
-
- I have described this initiative that has been introduced to bring about improvements in Indigenous health and wellbeing in Australia.²
-

Other acceptable answers include:

- Close the Gap campaign
- 'Live Longer!' Campaign
- Deadly Choices
- other initiatives that have been introduced to bring about improvements in Indigenous health and wellbeing in Australia.

- c ['Develop personal skills' is an action area that is reflected in the Aboriginal Quitline.¹][This is because the phone support service provides a platform for Indigenous people to seek answers to questions they have regarding smoking, more Indigenous people are educated about the negative health risks associated with smoking, thereby the service helps to develop the skills of the population it targets.²][Furthermore, 'create supportive environments' is reflected in the Aboriginal Quitline.³][Through the provision of the Aboriginal Quitline Facebook Page, Aboriginal Australians can virtually come together, share information, and support each other to live a smoke-free life on a safe and monitored online platform.⁴]

I have identified one Ottawa Charter action area that the initiative I identified in **part b** reflects.¹

I have described how the initiative reflects my chosen action area.²

I have identified another Ottawa Charter action area that the initiative I identified in **part b** reflects.³

I have described how the initiative reflects my chosen action area.⁴

Other acceptable answers include:

- other action areas of the Ottawa Charter, so long as you described how your chosen action areas are reflected in the initiative you identified in **part b**.

- d [An effective initiative that has been implemented to improve Indigenous health and wellbeing in Australia will likely be culturally appropriate,¹][and available in a wide range of languages, including Indigenous languages.²]

I have identified one feature of an effective initiative that has been implemented to improve Indigenous health and wellbeing in Australia.¹

I have identified another feature of an effective initiative that has been implemented to improve Indigenous health and wellbeing in Australia.²

Other acceptable answers include:

- sustainability
- accessibility
- other features of an effective initiative that has been implemented to improve Indigenous health and wellbeing in Australia.

2 Smoking

Note: You would not receive a mark for identifying a target of health promotion. If you did not learn about smoking, looking at the exemplar responses and checklist items below may still be helpful. Despite what target of health promotion you learnt about, responses require similar structures to receive full marks. Along with reading the exemplar responses and checklist items below, you can return to the exam-style questions section of the lesson that corresponds to the content you learnt.

- a [Smoking is targeted by health promotion in Australia because it has a major impact on population health as it is the leading cause of preventable illness in Australia.¹][Additionally, smoking is very costly to the Australian economy as it results in many costs, such as healthcare and workplace costs.²]

I have outlined one reason why smoking is targeted by health promotion in Australia.¹

I have outlined another reason why smoking is targeted by health promotion in Australia.²

- b The National Tobacco Campaign.

Note: you are not awarded a mark for identifying a health promotion initiative.

[The National Tobacco Campaign provides informative resources in multiple languages.¹][This reflects 'create supportive environments' because providing information in a range of languages ensures that all people, including those from other ethnicities and cultures, can access and understand their health promotion resources, removing the language barrier.²][The National Tobacco Campaign works with SANE Australia (to create resources that help people with mental illness quit smoking) and the World Health Organisation (as the WHO has a framework convention on Tobacco Control).³][This reflects 'strengthen community action' as it demonstrates that the National Tobacco Campaign involves numerous parties collaborating and working together to combat smoking in Australia.⁴]

I have provided an example of what is involved in my chosen health promotion initiative that targets smoking in Australia.¹

I have explained how this example reflects an Ottawa Charter action area.²

I have provided another example of what is involved in my chosen health promotion initiative that targets smoking in Australia.³

I have explained how this example reflects another Ottawa Charter action area.⁴

Other acceptable answers include:

- you may have talked about another health promotion initiative that has been introduced, or linked your initiative to other action areas of the Ottawa Charter for Health Promotion.

- c [The National Tobacco Campaign produces anti-smoking television and social media advertisements.¹][These anti-smoking advertisements educate people about the dangers of tobacco smoking, making them less likely to smoke. Abstaining from smoking promotes the functioning of the body and its systems, improving physical health and wellbeing among the Australian population.²]

I have provided an example of what is involved in the health promotion initiative I selected.¹

I have outlined how this example promotes population health and wellbeing, with reference to a health and wellbeing dimension.²

Other acceptable answers include:

- you may have linked your initiative to another dimension of health and wellbeing, so long as this health and wellbeing dimension is relevant to the work of the initiative.

3 a [The 'Learn Earn Legend!' program supports Indigenous students in completing secondary school and moving to employment or further studies through engaging a wide range of corporate and education partners to run programs and provide advice and opportunities to assist students to establish a career path.¹] [Providing Indigenous students with support and advice reduces stress and anxiety among these students about their future is reduced, improving mental health and wellbeng.²]

I have identified one feature of the 'Learn Earn Legend!' program.¹

I have explained how this feature of the program promotes the mental health of Indigenous students.²

b [The 'Learn Earn Legend!' program works with students to support them in establishing a career path and becoming ready for life after school through offering a range of opportunities, such as school-based traineeships and work experience.¹] [This reflects the action area 'develop personal skills' as the program provides students with opportunities to learn and equips them with skills to enter the workforce after finishing school.²] [The 'Learn Earn Legend!' initiative runs provides students with a range of opportunities (such as apprenticeships and paid employment) through the help of a range of corporate and education partners, such as Townsville City Council, Education Queensland, and TAFE Qld.³] [This reflects the action area 'strengthen community action' as a range of corporate and education partners come together to work to reduce the employment gap between Indigenous and non-Indigenous Australians through providing a range of opportunities to Indigenous students.⁴]

I have provided an example of what is involved in the 'Learn Earn Legend!' program.¹

I have explained how this example reflects an Ottawa Charter action area.²

I have provided another example of what is involved in the 'Learn Earn Legend!' program.³

I have explained how this example reflects another Ottawa Charter action area.⁴

Other acceptable answers include:

- other action areas of the Ottawa Charter for Health Promotion.

Questions from multiple chapters

4 a [In Semester 1 in 2019, Indigenous Australian students had lower rates of secondary school attendance compared with non-Indigenous Australian students.¹] [For example, of students who were in year 10, there were approximately 73% of Indigenous students attending school, compared to approximately 87% of non-Indigenous Australian students.²]

I have compared school attendance rates for Australian Indigenous students with non-Indigenous students.¹

I have used data from the graph to support my response.²

I have provided the context of the data.

I have included the correct units of measurement (percent), ensuring to check the axis titles.

I have used a qualifier such as 'approximately' when referring to data.

I have used comparison words, such as 'compared with'.

b [Indigenous Australians have higher rates of mortality associated with type 2 diabetes than non-Indigenous Australians.¹]

I have identified one difference in health status between Indigenous and non-Indigenous Australians, with reference to a health status indicator.¹

I have referred to both Indigenous and non-Indigenous Australians in my example.

Other acceptable answers include:

- other differences in health status between Indigenous and non-Indigenous Australians.

c [Socioeconomic status (SES) is a sociocultural factor that could contribute to Indigenous Australians having higher rates of mortality associated with type 2 diabetes than non-Indigenous Australians.¹] [Indigenous Australians have, overall, lower SES than non-Indigenous Australians, as shown in the graph above.²] [Lower levels of education may mean that Indigenous Australians have lower levels of health literacy, meaning they are more likely to make poor dietary choices, such as over-consuming foods that contain large amounts of sugar. This may increase mortality attributable to type 2 diabetes amongst Indigenous Australians compared to non-Indigenous Australians.³]

I have identified one sociocultural factor that could contribute to the difference in health status between Indigenous and non-Indigenous Australians that I identified in part b.¹

I have explained my chosen sociocultural factor that could contribute to the difference in health status between Indigenous and non-Indigenous Australians that I identified in part b, using the information provided.²

I have explained how my chosen sociocultural factor contributes to the difference in health status between Indigenous and non-Indigenous Australians that I identified in part b.³

Other acceptable answers include:

- other sociocultural factors, however due to the fact that this question requires you to use information from the infographic, socioeconomic status (SES) is the strongest sociocultural factor to discuss in your response, as SES involves education, and the graph is focused on education.

d [The 'NRL Cowboys House' initiative features two campuses, one for boys and one for girls, which are both designed carefully and are culturally respectful environments.¹] [This reflects the action area 'create supportive environments' because the houses themselves are culturally respectful and have been thoughtfully designed, creating a supportive physical environment for Indigenous students who are living away from home.²]

I have provided an example of what is involved in the 'NRL Cowboys House' initiative.¹

I have explained how this example reflects an Ottawa Charter for Health Promotion action area.²

Other acceptable answers include:

- other Ottawa Charter action areas that are evident in the 'NRL Cowboys House' initiative.

6A Promoting healthy eating in Australia: Part 1

Theory-review questions

- 1 II; III. The Australian Dietary Guidelines were developed to decrease, rather than increase, the risk of developing diet-related conditions, such as high blood pressure, high cholesterol, and obesity. This promotes the health and wellbeing of Australians.
- 2 B. False. Currently, not every Australian follows the dietary advice of every Australian Dietary Guideline. In fact, many Australians consume unhealthy and unbalanced diets. This is why much of the burden of disease in Australia is attributable to unhealthy eating.
- 3 B. False. The Australian Dietary Guidelines do not target the entire Australian population. For example, people who receive special dietary advice from a doctor or nutritionist, and the elderly, are not supposed to follow the dietary advice provided by the Australian Dietary Guidelines.
- 4 A. ADG 1 advises Australians to 'achieve and maintain a healthy body weight, be physically active and choose amounts of nutritious food and drinks to meet **your** energy needs'. Each person has different energy needs, based on factors, such as their age, sex, activity levels, and metabolism. Therefore, a person should consume amounts of nutritious foods and drinks to meet their own individual energy needs.
- 5 C. Although ADG 2 advises Australians to 'drink plenty of water', water is not one of the five food groups.
- 6 B. ADG 3 advises Australians to 'limit intake of foods containing saturated fat, added salt, added sugars and alcohol'. Discretionary foods that contain saturated fat, added salt, and added sugars have minimal nutritional value and contribute to negative health consequences, such as overweight and obesity. Therefore, ADG 3 recommends that Australians limit their intake of these unhealthy foods.
- 7 A. The first option is ADG 5. While at first glance, it may appear that the second option is ADG 4, ADG 4 actually advises Australians to 'encourage, support, and promote breastfeeding', rather than the use of baby formula.
- 8 B. False. The Australian Guide to Healthy Eating reflects the key messages of the Australian Dietary Guidelines. It is not one of the Australian Dietary Guidelines, rather a complementary resource to the Australian Dietary Guidelines.
- 9 I; II. The key messages of ADG 2 and ADG 3 are reflected in the Australian Guide to Healthy Eating. By contrast, the key message of ADG 4 is not reflected in the Australian Guide to Healthy Eating.

Skills

Unpacking the case study

10 A 11 B 12 B 13 A

Exam-style questions

- 14 [ADG 5, which advises Australians to 'care for your food; prepare and store it safely', could be used to decrease the prevalence of Campylobacter in Australia.]

I have identified ADG 5 'care for your food; prepare and store it safely' as the Australian Dietary Guideline that could be used to decrease the prevalence of Campylobacter in Australia.

- 15 [The Australian Dietary Guidelines were introduced to promote health and wellbeing of Australians by helping them consume a healthy and balanced diet.] Furthermore, the Australian Dietary Guidelines were

introduced to reduce the risk of Australians developing diet-related diseases, such as cardiovascular disease and type 2 diabetes.^{2]}

I have outlined one reason why the Australian Dietary Guidelines were introduced.¹

I have outlined another reason why the Australian Dietary Guidelines were introduced.²

- 16 [Elle should breastfeed her newborn baby, rather than use baby formula.] This is because the Australian Dietary Guidelines advise this through ADG 4, which encourages Australians, including Elle, to 'encourage, support and promote breastfeeding' because breastfeeding provides all the energy and nutrients a newborn baby needs in the first months of its life.^{2]}

I have suggested that Elle should breastfeed her newborn baby, rather than use baby formula.¹

I have justified my answer, with reference to ADG 4 'encourage, support and promote breastfeeding'.²

I have referred to the character's name in my response (Elle), and to the scenario.

- 17 a [The Australian Guide to Healthy Eating is a food selection model that provides a visual pie chart representation of the recommended proportions of the five food groups that should be consumed each day as part of a healthy and balanced diet.]

I have outlined the Australian Guide to Healthy Eating.¹

b [The Australian Guide to Healthy Eating recommends that discretionary foods and drinks that are high in saturated fat, added salt and added sugar should be consumed 'only sometimes and in small amounts'.] This reflects the key message of ADG 3, which is to 'limit intake of foods containing saturated fat, added salt, added sugars and alcohol'.^{2]}

I have explained the advice of the Australian Guide to Healthy Eating that relates to discretionary food and drink intake.¹

I have compared this advice to the advice provided by ADG 3 to explain how the Australian Guide to Healthy Eating reflects ADG 3.²

- 18 a [ADG 1 'achieve and maintain a healthy body weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs'.]

I have identified ADG 1 'achieve and maintain a healthy body weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs' as the Australian Dietary Guideline that is related to body weight.¹

b [If Australians follow the advice of ADG 1, this would mean that more people are consuming appropriate amounts of nutritious foods and drinks to meet their individual energy needs, and are being physically active.] This would mean that more Australians have a body weight that is within a healthy weight range, reducing the prevalence of overweight and obesity in Australia.^{2]}

I have described what is meant by ADG 1.¹

I have described how ADG 1 could promote health status, with reference to a health status indicator.²

19 [The Better Health Channel recommends that Australians eat 'junk' foods that are usually high in saturated fat, added salt, and added sugars occasionally and in small amounts, which is similar to the advice of ADG 3 that advises Australians to 'limit intake of foods containing saturated fat, added salt, added sugars and alcohol'.¹] [The Better Health Channel also recommends that Australians eat a wide variety of foods from each of the five major food groups daily, in recommended amounts, which is similar to the advice of ADG 2 that advises Australians to 'enjoy a wide variety of nutritious foods from the five groups every day'.²] [Furthermore, both the Better Health Channel and the Australian Dietary Guidelines provide the recommended number of daily serves of each food group that should be consumed based on individual factors, such as a person's age and gender, on their respective websites.³]

- I have provided one point of comparison between the advice provided by the Better Health Channel and the advice provided by the Australian Dietary Guidelines.¹

- I have provided another point of comparison between the advice provided by the Better Health Channel and the advice provided by the Australian Dietary Guidelines.²

- I have provided a third point of comparison between the advice provided by the Better Health Channel and the advice provided by the Australian Dietary Guidelines.³

- I have used comparison words, such as 'similar to'.

Other acceptable answers include:

- other points of comparison between the advice provided by the Better Health Channel and the advice provided by the Australian Dietary Guidelines.

20 [ADG 1 advises Australians to 'achieve and maintain a healthy body weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs'.¹] [If Australians consume appropriate amounts of nutritious foods and drinks to meet their individual energy needs, rather than overeating unhealthy foods, this would reduce the prevalence of obesity, which is a risk factor for cardiovascular disease. Therefore, if Australians follow the advice of ADG 1, this would reduce rates of cardiovascular disease in Australia.²] [Furthermore, ADG 3 advises Australians to 'limit intake of foods containing saturated fat, added salt, added sugars and alcohol'.³] [Excess consumption of saturated fat may increase levels of LDL cholesterol in the bloodstream, which increases the risk of cardiovascular disease. Therefore, if Australians follow the advice of ADG 3, this would reduce the consumption of discretionary foods, reducing rates of cardiovascular disease in Australia.⁴]

- I have described one Australian Dietary Guideline.¹

- I have described how this Australian Dietary Guideline could be used to reduce rates of cardiovascular disease in Australia.²

- I have described another Australian Dietary Guideline.³

- I have described how this Australian Dietary Guideline could be used to reduce rates of cardiovascular disease in Australia.⁴

Other acceptable answers include:

- ADG 2 'enjoy a wide variety of nutritious foods from these five groups every day', so long as it is adequately linked to decreased rates of cardiovascular disease.

Note: To be awarded full marks, it is important to correctly state the name of each Australian Dietary Guideline. This means that you

must state each Australian Dietary Guideline nearly word-for-word in your response, so that it is clear which guideline you are referring to. Furthermore, if you include the number in your response, it must be the number that correctly corresponds to the Australian Dietary Guideline.

Questions from multiple lessons

21 a [In 2014–2015, Australians aged 18 years and over were more likely to consume the recommended daily intake of fruits than they were to consume the recommended daily intake of vegetables.¹] [For example, in 2014–2015, approximately 43 percent of Australians aged 18 to 24 years consumed the recommended daily intake of fruits, while approximately 4 percent consumed the recommended daily intake of vegetables.²]

- I have drawn a comparison between the likelihood of consuming the recommended daily intake of fruits and the recommended daily intake of vegetables.¹

- I have used data from the graph to support my comparison.²

- I have provided the context of the graph.

- I have included the correct units of measurement (percent), ensuring to check the axis titles.

- I have used a qualifier, such as 'approximately', when referring to data.

- I have used a comparison word in my response, such as 'than'.

b [The Australian Dietary Guidelines reflect the Ottawa Charter action area 'develop personal skills'.¹] [This is because the Australian Dietary Guidelines provide dietary advice to Australians so that they develop the knowledge and skills they need to make healthier dietary choices and improve their health and wellbeing.²]

- I have identified **one** action area of the Ottawa Charter of Health Promotion that is reflected in the Australian Dietary Guidelines.¹

- I have described how this action area is reflected in the Australian Dietary Guidelines.²

Other acceptable answers include:

- other action areas of the Ottawa Charter for Health Promotion, so long as they are adequately linked to the Australian Dietary Guidelines.

c [One of the Australian Dietary Guidelines, ADG 2, advises Australians to 'enjoy a wide variety of nutritious foods from these five groups every day'. The Australian Dietary Guidelines also provide the recommended number of daily serves of each food group, including fruits and vegetables.¹] [Australians could use this information to ensure they are consuming the recommended number of daily serves of fruits and vegetables, which would increase the consumption of fruits and vegetables in Australia.²]

- I have explained the advice of the Australian Dietary Guidelines that relates to fruit and vegetable intake.¹

- I have explained how this advice could be used to increase the consumption of fruits and vegetables in Australia.²

6B Promoting healthy eating in Australia: Part 2

Theory-review questions

- 1 I; III. Option II is incorrect. Diet-related diseases significantly, not barely, contribute to the total burden of disease in Australia. In fact, it is estimated that, in 2015, around 7.3% of the total burden of disease in Australia was attributable to poor diet (AIHW, 2020).
- 2 B. Nutrition Australia is a **non-government**, non-profit, community-based organisation that promotes healthy eating in Australia. *Nutrition Australia is a non-government organisation, which means that it is not directly established or run by the government, and is not funded solely by the government.*
- 3 C. *Nutrition Australia aims to deliver a 'healthy eating message' and promote health and wellbeing in Australia. However, rather than enabling dietary change independently, Nutrition Australia is community-based and aims to form partnerships and collaborate with others to promote healthy eating in Australia.*
- 4 I; II. *The Australian Guide to Healthy Eating is not an example of the work of Nutrition Australia. Rather, it is an example of the work of the National Health and Medical Research Council (an Australian government agency). The Healthy Eating Pyramid is the food selection model that was developed by Nutrition Australia, rather than the Australian Guide to Healthy Eating.*
- 5 I; II; III. *Nutrition Australia provides programs, workshops, and seminars to targeted audiences, including, but not limited to, health professionals, workplaces, and aged care services.*
- 6 A. *The dietary advice provided by the Healthy Eating Pyramid is targeted towards Australians aged between 1 and 70 years, rather than Australians over the age of 18 years.*
- 7 B. False. *The Healthy Eating Pyramid has two 'foundation layers', which are the two bottom layers of the pyramid. These 'foundation layers' contain foods of plant origin, including vegetables, legumes, fruit, and grains, and should make up the majority of daily food intake.*
- 8 A. *The Healthy Eating Pyramid encourages Australians to enjoy, rather than avoid, herbs and spices. This is because the addition of herbs and spices is a healthier way of adding flavour to different foods, rather than adding salt and sugar.*

Skills

Unpacking the case study

9 B 10 B 11 A

Exam-style questions

- 12 [The National Nutrition Week campaign is an example of the work of Nutrition Australia.¹]

I have identified one example of the work of Nutrition Australia.¹

Other acceptable answers include:

- the Healthy Eating Advisory Service
- the Healthy Eating Pyramid
- publication of recipes and fact sheets
- other examples of the work of Nutrition Australia.

- 13 [The Healthy Eating Advisory Service is one way in which Nutrition Australia promotes healthy eating.¹] [This service provides information and advice to organisations that operate in community settings, helping

them provide healthier food and drink options in their menus, at their food outlets, or when catering or vending, which promotes healthy eating.²]

I have identified one way in which Nutrition Australia promotes healthy eating.¹

I have explained this way in which Nutrition Australia promotes healthy eating.²

Other acceptable answers include:

- National Nutrition Week campaign
- the Healthy Eating Pyramid
- publication of recipes and fact sheets
- other ways in which Nutrition Australia promotes healthy eating, so long as they are adequately explained.

- 14 [The 'Project Dinnertime' cooking workshops increase participants' cooking skills so that they can prepare and cook their own healthy meals, rather than relying on takeaway foods that often contain large amounts of saturated fat, salt, and added sugar. This reduces their risk of developing diet-related conditions, such as obesity, promoting physical health and wellbeing.¹] [The 'Project Dinnertime' cooking workshops also help Australians feel more confident in their cooking abilities, increasing self-confidence and self-esteem, which promotes mental health and wellbeing.²]

I have described how the 'Project Dinnertime' cooking workshops promote a dimension of health and wellbeing, with reference to a component of this health and wellbeing dimension.¹

I have described how the 'Project Dinnertime' cooking workshops promote another dimension of health and wellbeing, with reference to a component of this health and wellbeing dimension.²

I have referred to the case study in my response.

- 15 a [In 2017-2018, a greater proportion of Australians aged 18 years and older were classified as being overweight or obese than having a healthy body weight.¹] [For example, in 2017-2018, approximately 67 percent of Australians aged 18 years and older were classified as overweight or obese, in comparison to approximately 32 percent being classified as having a healthy body weight.²]

I have drawn a comparison between the proportion of Australians aged 18 years and older who are classified as having a healthy body weight and the proportion who are classified as being overweight or obese.¹

I have used data from the graph to support my comparison.²

I have provided the context of the graph.

I have included the correct units of measurement (percent), ensuring to check the axis titles.

I have used a qualifier, such as 'approximately', when referring to data.

I have used a comparison word in my response, such as 'than'.

- b [Nutrition Australia provides numerous healthy recipes on their website that Australians can access free of charge to prepare and cook their own healthy meals.¹] [If Australians prepare and cook healthy meals at home using the recipes provided by Nutrition

Australia, rather than purchasing and consuming ready-made meals that generally contain large amounts of saturated fat, salt, and added sugar, this may reduce the proportion of Australians who are classified as overweight or obese.²

- I have described one example of the work of Nutrition Australia.¹
- I have described how this example of the work of Nutrition Australia reduces the proportion of Australians who are classified as overweight or obese.²

- 16 a** [The Healthy Eating Pyramid is a food selection model that displays the types and proportions of foods that should be consumed each day as part of a healthy and balanced diet in a pyramid format.¹] [The Healthy Eating Pyramid was developed in accordance with the advice of the Australian Dietary Guidelines, which were created by the NHMRC.²]

- I have described the Healthy Eating Pyramid.¹
- I have described the Healthy Eating Pyramid in further detail by providing another point of information.²
- b** [The Healthy Eating Pyramid categorises the five food groups, as well as healthy fats, into four levels according to the proportions in which they should be consumed as part of a healthy and balanced diet.¹] [Australians could use the Healthy Eating Pyramid to understand that fruits, vegetables, and legumes, which are located in the foundation layer at the bottom of the pyramid, should make up the largest proportion of their diet, promoting adequate fruit and vegetable intake among Australians.²]
- I have explained an aspect of the Healthy Eating Pyramid that relates to the consumption of fruits and vegetables.¹
- I have explained how this aspect of the Healthy Eating Pyramid promotes the consumption of fruits and vegetables.²

Questions from multiple lessons

- 17 a** [The Healthy Eating Pyramid displays images of salt and sugar, which are accompanied by a red cross, reflecting the advice of the Healthy Eating Pyramid to 'limit salt and added sugar'.¹] [This reflects the dietary advice of ADG 3, which advises Australians to 'limit intake of foods containing saturated fat, added salt, added sugars and alcohol'.²]

- I have explained one piece of advice of the Healthy Eating Pyramid.¹
- I have explained how this advice reflects the advice of one Australian Dietary Guideline.²

Other acceptable answers include:

- other Australian Dietary Guidelines that are reflected in the Healthy Eating Pyramid, so long as the link between them is adequately explained.
- b** [Both the Healthy Eating Pyramid and the Australian Guide to Healthy Eating are food selection models that visually display the types and proportions of foods that should be consumed each day as part of a healthy and balanced diet.¹] [However, they display this information in different formats. The Healthy Eating Pyramid presents

this information in pyramid format, whereas the Australian Guide to Healthy Eating presents this information in pie chart format.²]

- I have outlined one similarity between the Healthy Eating Pyramid and the Australian Guide to Healthy Eating.¹
- I have outlined one difference between the Healthy Eating Pyramid and the Australian Guide to Healthy Eating.²
- I have used comparison words, such as 'whereas'.

Other acceptable answers include:

- other similarities and differences between the Healthy Eating Pyramid and the Australian Guide to Healthy Eating.

6C Challenges in bringing about dietary change

Theory-review questions

- 1 B. False. *For many people, changing their diet is not easy, as there are a range of factors that influence the food we consume.*
- 2 B. False. *It is true that there are a range of challenges people face in bringing about dietary change, however, not all of these factors are associated with a person's level of health literacy. For example, family and peer influence is not directly related to health literacy.*
- 3 I; II; III. *All of these factors can make it difficult for people to change their diet.*
- 4 C. *The speed at which fruits and vegetables grow is not likely a factor that influences people's ability to change their diets, as most people do not grow their own fruits and vegetables (or solely survive off their own grown food).*

Skills

Unpacking the case study

- 5 A** **6 B**

Data analysis

- 7 B** **8 I; II; III**

Exam-style questions

- 9** [Family and early life experiences is a challenge that Australian children aged 14 to 18 years may face that could impact their ability to make dietary changes.¹] [Some young people may have grown up in an environment where food is used as a reward or a punishment. This can lead to unhealthy eating habits and an unhealthy association with food, which can be difficult habits to break if young people want to change their diets, such as reducing their consumption of discretionary foods.²]

- I have identified one challenge that Australian children aged 14-18 may face that could impact their ability to make dietary changes.¹
- I have explained how this could challenge people's ability to make dietary changes.²

Other acceptable answers include:

- education, knowledge, and skills
- peers
- other challenges in bringing about dietary change among children aged 14 to 18 years, so long as they were adequately explained.

10 [The Food For Thought initiative by Alfred Health likely aimed to combat education as a challenge people face in changing their diets.¹] [This is because if people are wanting to change their diet and avoid unhealthy foods, they must be educated about the nutritional value of food they are consuming, and if they are not, it can be hard to bring about such a dietary change.²] [The Food For Thought initiative aimed to combat this challenge by educating consumers about the nutritional value of their food products. They did this by labelling the food provided in their cafes as either green, amber or red according to the product's nutritional content, making it easier for individuals of all health literacy levels to make healthier food choices.³]

I have identified one challenge that people can face in bringing about dietary change that is evident in the information.¹

I have explained this challenge in bringing about dietary change.²

I have discussed how the Food For Thought initiative aimed to combat this challenge.³

Other acceptable answers include:

- other challenges, so long as they were evident in the case study.

11 [Xanthi is struggling to change her diet as it has been influenced by her family and early life experiences.¹] [Both of Xanthi's parents modelled bad eating habits, rarely cooked fresh food and regularly visited fast-food restaurants. Xanthi is struggling to break this habit, as she is not used to cooking for herself all the time.²] [Furthermore, another challenge Xanthi is facing as she tries to change her diet is income and food security.³] [Xanthi is finding it difficult to afford healthy, fresh food to cook with that is more expensive than fast food.⁴]

I have identified one challenge that Xanthi is facing as she tries to change her diet.¹

I have explained this challenge on Xanthi's ability to make dietary changes.²

I have identified another challenge that Xanthi is facing as she tries to change her diet.³

I have explained this challenge on Xanthi's ability to make dietary changes.⁴

I have referred to the character's name in my response (Xanthi), and to the scenario.

Other acceptable answers include:

- time constraints and convenience
- other challenges, so long as they were evident in the case study.

12 [Food marketing and media can impact an individual's ability to make dietary changes.¹] [For example, through advertisements that are broadcast on television, commercial companies that manufacture and sell food products encourage people to purchase certain food products, which can make it difficult for people to avoid unhealthy foods. This challenges their ability to change their diet and eat healthily.²] [Education, knowledge, and skills can also impact an individual's ability to make dietary changes.³] [When people have low levels of health literacy and don't know how to prepare a healthy meal, they may find it difficult to bring about dietary change as they may now know how, or have the skills, to do so.⁴]

I have identified one challenge that may impact an individual's ability to make dietary changes.¹

I have explained this challenge on people's ability to make dietary changes.²

I have identified another challenge that may impact an individual's ability to make dietary changes.³

I have explained this challenge on people's ability to make dietary changes.⁴

Other acceptable answers include:

- culture and religion
- personal preferences
- other challenges, so long as they are adequately explained and were not discussed in your response to question 11.

13 a [Australians are more likely to consume inadequate amounts of vegetables than they are fruits, across all age groups.¹] [In 2017-2018, approximately 97% of Australians aged 18 to 24 years had an inadequate vegetable intake compared to approximately 54% who had an inadequate fruit intake.²]

I have outlined that Australians are more likely to have an inadequate vegetable intake.¹

I have used data from the graph to support my response.²

I have provided the context of the graph.

I have included the correct units of measurement (percentage), ensuring to check the axis titles.

I have used qualifiers, such as 'approximately', when referring to data.

b [Geographic location and food security is a challenge that people may face in increasing their consumption of vegetables.¹] [This is because the foods people consume are strongly influenced by where they live, and people living in remote geographic areas may not have easy access to a supermarket that always stocks fresh vegetables.²] [Therefore, people who live in such remote areas may be limited in their ability to change their diet and consume the recommended quantity of vegetables, thereby struggling to meet the recommended daily intake of vegetables.³]

I have identified one challenge people may face in increasing their consumption of vegetables.¹

I have explained this is challenge.²

I have discussed how this challenge could impact people's ability to increase their consumption of vegetables.³

Other acceptable answers include:

- time constraints and convenience
- culture and religion
- personal preferences
- other challenges, so long as you adequately discussed your chosen ones and related it to both ability to change diet and consume adequate amounts of vegetables.

Questions from multiple lessons

- 14 a** [The Australian Dietary Guidelines (ADGs) are five dietary guidelines that provide information about the types and amounts of foods that should be consumed, and the eating patterns that should be followed, as part of a healthy and balanced diet.¹]

I have outlined what the Australian Dietary Guidelines are.¹

- b** [Australian Dietary Guideline (ADG) 3, which advises Australians to 'limit intake of foods containing saturated fat, added salt, added sugars and alcohol' best relates to the graph.¹] [This guideline indicates that the majority of a person's energy intake should be derived from healthy and nutritious foods, rather than discretionary foods that have minimal nutritional value, such as sugar sweetened drinks.²]

I have identified ADG 3 as the Australian Dietary Guideline that best relates to the graph.¹

I have described ADG 3.²

- c** [Food marketing and media could challenge the ability of Australians aged 18 to 24 years to reduce their consumption of sugary drinks.¹] [This is because young people are strongly influenced by influential figures, and commercial companies who manufacture and sell food products, such as soft drinks, may pay influential figures to promote their food products. This increases the likelihood of young people purchasing these drinks promoted by people who they admire and idolise, thereby making it difficult for people to reduce their sugary drink intake.²]

I have identified one challenge that Australians aged 18 to 24 years may face that could impact their ability to reduce their consumption of sugary drinks.¹

I have explained how this could challenge people's ability to reduce their consumption of sugary drinks.²

Chapter 6 test

- 1** [The Australian Guide to Healthy Eating visually represents the five food groups in a 'pie', and each slice depicts the proportion in which foods from that food group should be consumed each day as part of a healthy and balanced diet.¹] [This relates to the advice provided in ADG 2 which is centred on the five food groups, advising to 'enjoy a wide variety of nutritious foods from these five groups every day'.²]

I have explained the advice of the Australian Guide to Healthy Eating that relates to eating a wide variety of nutritious foods from the five food groups.¹

I have compared this advice to the advice provided by ADG 2 to explain how the Australian Guide to Healthy Eating reflects ADG 2.²

- 2** [One challenge in bringing about dietary changes in Australia is time constraints and convenience, whereby many people believe they do not have enough time to cook a healthy meal, and instead resort to takeaway food, which generally contains higher amounts of saturated fat, added salt, and added sugar.¹] [This relates to source 1, which displays that 'most Australians know that improving their diet...helps prevent CVD'. However, a challenge, such as time constraints and convenience, prevents them from making healthier food choices, such

as cooking nutritious homemade meals. This contributes to '2 in 3 Australians...are overweight or obese'.²] [Another challenge is personal preferences, which relates to people preferring some foods over others based on taste. Often, foods that are high in saturated fat, salt, and added sugar taste better and are preferred by people than healthier alternatives.³] [As these foods are perceived to taste delicious by many people, personal preference is a challenge in bringing about dietary change, contributing to the fact that Australia has the 'sixth highest proportion of overweight or obese people aged 15 years and older among 22 OECD member countries', according to source 2.⁴]

I have identified and explained one challenge in bringing about dietary change in Australia.¹

I have further explained how this challenge prevents dietary change in Australia, and linked it to a source provided.²

I have identified and explained another challenge in bringing about dietary change in Australia.³

I have further explained how this challenge prevents dietary change in Australia, and linked it to the other source provided.⁴

Other acceptable answers include:

- willpower
- attitudes and beliefs
- education, knowledge, and skills
- food marketing and media
- other challenges in bringing about dietary change.

Note: It is important to refer to both sources in your response to be awarded full marks.

- 3** [The Australian Dietary Guidelines are five dietary guidelines that provide information about the types and amounts of foods that should be consumed, and the eating patterns that should be followed, as part of a healthy and balanced diet.¹] [ADG 4 advises Australians to 'encourage, support and promote breastfeeding'.²] [ADG 5 advises Australians to 'care for your food; prepare and store it safely'.³]

I have described the Australian Dietary Guidelines.¹

I have outlined ADG 4.²

I have outlined ADG 5.³

- 4** [By providing employees with learning opportunities on how to build a healthy and balanced diet, such as by building skills through cooking classes, more employees are likely to prepare and cook healthy meals regularly.¹] [Healthier food intake among Australian employees reduces the number of years of life lost due to disability (YLD) attributable to these diet-related conditions, such as cardiovascular disease, positively impacting burden of disease in Australia.²]

I have explained how Nutrition Australia may impact Australian workplaces.¹

I have explained how this impacts burden of disease, with reference to DALY, YLL, or YLD.²

- 5** [ADG 1 advises Australians to 'achieve and maintain a healthy body weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs'.¹] [A healthy BMI, a healthy and balanced diet, and physical activity all reduce the risk of cardiovascular disease, meaning ADG 1 works towards decreasing rates

of cardiovascular disease.²] [ADG 3 advises Australians to 'limit intake of foods containing saturated fat, added salt, added sugars and alcohol'.³] [Overconsumption of these foods increases the risk of a high BMI, which can lead to cardiovascular disease. Therefore, the advice to limit intake of these foods works towards decreasing rates of cardiovascular disease.⁴]

I have explained one ADG.¹

I have linked this ADG to decreasing rates of cardiovascular disease.²

I have explained another ADG.³

I have linked this ADG to decreasing rates of cardiovascular disease.⁴

Other acceptable answers include:

- ADG 2 'enjoy a wide variety of nutritious foods from these five groups every day', so long as it is adequately linked to decreased rates of cardiovascular disease.

6 Nutrition Australia is a non-government, non-profit, community-based organisation that promotes healthy eating in Australia.¹

I have outlined Nutrition Australia.¹

Questions from multiple chapters

7 a In the graph comparing the percentage of overweight and obese people over the age of 18 years across various socioeconomic status (SES) groups in Australia in 2017-2018, people with a lower SES were more likely to be overweight or obese compared to people in a higher SES.¹] For example, approximately 72% of people with the lowest SES (area 1) were overweight or obese, compared to a lower percentage of approximately 62% of people being overweight or obese in the highest SES (area 5).²

I have drawn a comparison between two socioeconomic status subgroups.¹

I have used data from the graph to support my comparison.²

I have provided the context of the graph.

I have included the correct units of measurement (percentage), ensuring to check the axis titles.

I have used qualifiers, such as 'approximately', when referring to data.

b One sociocultural factor is food security, which is when a person has reliable access to adequate quantities of nutritious, safe, and culturally appropriate food at all times, from non-emergency sources.¹] People in low SES groups are more likely to experience food insecurity and may resort to inexpensive and unhealthy options, such as fast food. This contributes to the fact that a higher percentage of people in low SES groups are overweight or obese compared to people in a high SES group.²

I have identified and explained one sociocultural factor.¹

I have explained how this sociocultural factor contributes to the comparison made in part a.²

Other acceptable answers include:

- income
- education
- other sociocultural factors, so long as you adequately explain how it contributes to the comparison made in part a.

c [ADG 1 advises Australians to 'achieve and maintain a healthy body weight, be physically active and choose amounts of nutritious food and drinks to meet your energy needs'.¹] [People with a low socioeconomic (SES) status could work towards achieving a healthy body weight through physical activity and a nutritious diet as directed in ADG 1, which could increase confidence and self-esteem, promoting mental health and wellbeing.²] [ADG 2 advises Australians to 'enjoy a wide variety of nutritious foods from these five groups every day'.³] [People with a low SES could use this ADG to understand what to include in a healthy and balanced diet, such as foods from the five food groups, which helps ensure adequate energy levels, promoting physical health and wellbeing.⁴]

I have explained an ADG.¹

I have explained how this ADG could promote health and wellbeing among people with a low SES, with reference to a health and wellbeing dimension.²

I have explained another ADG.³

I have explained how this ADG could promote health and wellbeing among people with a low SES, with reference to a health and wellbeing dimension.⁴

Other acceptable answers include:

- other Australian Dietary Guidelines, so long as they are adequately linked to promoting a health and wellbeing dimension among people with a low SES.

Unit 3 AOS 2 Review

1 a The Australian Guide to Healthy Eating is a food selection model that provides a visual pie chart representation of the recommended proportions of the five food groups that should be consumed each day as part of a healthy and balanced diet.¹

I have outlined the Australian Guide to Healthy Eating.¹

b [In the bottom left-hand corner of the Australian Guide to Healthy Eating you will see discretionary foods, such as pies, chocolate, ice-cream, chips, biscuits, and other foods. You will also see drinks, such as alcohol, sports drinks, and soft drinks. These foods and drinks are high in saturated fat, added salt, and added sugar and advice from the guide suggests that they should be consumed 'only sometimes and in small amounts'.¹] [This reflects the key message of ADG 3, which is to 'limit intake of foods containing saturated fat, added salt, added sugars and alcohol'.²]

I have explained one aspect of the advice of the Australian Guide to Healthy Eating.¹

I have compared this advice to the advice provided by an ADG to explain how the Australian Guide to Healthy Eating reflects my chosen ADG.²

Other acceptable answers include:

- other Australian Dietary Guidelines, so long as you have adequately explained how they are reflected in the Australian Guide to Healthy Eating.
- [The Australian Dietary Guidelines provide specific and detailed dietary advice in the form of written phrases, whereas the Australian Guide to Healthy Eating provides dietary advice that encapsulates the key messages of the Australian Dietary Guidelines through the use of a visual model that includes images.]

I have explained one difference between the Australian Dietary Guidelines and the Australian Guide to Healthy Eating.¹

I have used comparison words, such as 'whereas'.

- 2 a [Medicare is Australia's universal health insurance scheme,¹] [which provides all Australian residents (and some overseas visitors) access to necessary healthcare at a subsidised cost, or for no cost at all.²]

I have outlined what Medicare is.¹

I have described Medicare.²

- b [The NDIS is an insurance scheme that provides support and services to people with a disability, their families, and their carers.¹] [If an individual is determined to be eligible for the NDIS, they will receive an individualised support plan which helps them receive the services and support they need to manage their disability.²]

I have described the NDIS.¹

I have described one characteristic of the NDIS.²

- c [The NDIS aims to enable participants to enjoy an ordinary life, which involves supporting individuals to access mainstream support and services, such as healthcare, education, housing, libraries, and local sports clubs.¹] [This access means that people do not feel excluded from mainstream services, and feel a sense of purpose and belonging within their community, therefore promoting spiritual health and wellbeing.²] [The NDIS provides individuals and their carers with the necessary support based on someone's specific set of needs. Such assistance is individualised and addresses someone's barriers to living an ordinary life, which demonstrates equity.³] [This equity provided by the NDIS ensures that people can access the services they need, reducing stress and anxiety associated with services not meeting patients needs, therefore promoting mental health and wellbeing of Australians.⁴]

I have described how the NDIS demonstrates access.¹

I have analysed how access within the NDIS promotes one dimension of health and wellbeing in Australia.²

I have described how the NDIS demonstrates equity.³

I have analysed how the equity of the NDIS promotes another dimension of health and wellbeing.⁴

- d [Medicare only covers healthcare deemed to be 'medically necessary', which means that there are many different healthcare services that are not covered by Medicare, such as physiotherapy.¹] [By limiting the number of unnecessary services covered by Medicare, Medicare can keep costs under control and continue to

cover essential health services for the whole population now and into the future, thereby demonstrating sustainability.²]

I have outlined one aspect of Medicare.¹

I have described how this demonstrates sustainability.²

- 3 a [There are five Australian Dietary Guidelines¹]

I have identified that there are five Australian Dietary Guidelines.¹

- b [The WHO recommends that free sugars (which are sugars that are often added to food) should make up less than 10% of total energy intake.¹] [This is similar to, however not as specific, as the advice provided by the Australian Guide to Healthy Eating, which states that foods containing added sugar should be eaten 'only sometimes and in small amounts'.²]

I have explained the advice on 'free sugar consumption' that is provided by the WHO.¹

I have compared this advice to the advice provided by the Australian Guide to Healthy Eating.²

I have used comparison words, such as 'similar'.

- c [ADG 3, which recommends people 'limit intake of foods containing saturated fat, added salt, added sugars and alcohol', could be used to decrease sugary drink consumption in Australia.¹] [This guideline indicates that the majority of a person's energy intake should be derived from healthy and nutritious foods, rather than discretionary foods that have minimal nutritional value and contribute to weight gain, overweight, and obesity.²]

I have identified ADG 3 'limit intake of foods containing saturated fat, added salt, added sugars and alcohol' as the ADG that could be used to decrease sugary drink consumption in Australia.¹

I have described ADG 3 and its advice related to sugary drinks.²

Note: You may have discussed another ADG. However, in this case, ADG 3 was the best option for this response as it is the ADG that is most closely related to limiting the consumption of sugary drinks. However, if you adequately justify your response that refers to a different ADG, you may receive marks, so long as it was related to reducing added sugar intake.

- 4 a [The Healthier Futures initiative works with Indigenous children living in rural communities to foster a positive association with healthcare by engaging children through fun and play, such as through visits from Captain Starlight.¹] [This may help children feel comfortable with visiting healthcare professionals, reducing stress and anxiety among children when they access health services, thereby improving the mental health and wellbeing of these children.²]

I have identified one feature of the Healthier Futures initiative.¹

I have explained how this feature of the initiative promotes the mental health and wellbeing of Indigenous children, with reference to a component of mental health and wellbeing.²

- b [The Healthier Futures Initiative demonstrates the principle of

the social model of health 'involves intersectoral collaboration'.¹ [This is because the Starlight foundation is a private foundation and they work with healthcare professionals in remote Indigenous communities, many of whom would work in the public healthcare sector. Thereby this demonstrates collaboration between public and private sectors.²]

- I have identified one principle of the social model of health that is evident in the Healthier Futures Initiative.¹
- I have explained how the Healthier Futures Initiative demonstrates my chosen principle of the social model of health.²

5 a [Boys aged 2 to 18 years were more likely to meet the recommended serves of grain foods in 2011-12.¹]

- I have identified that boys were more likely to meet the recommended serves of grain foods in 2011-12.¹
- b [For both Australian boys and girls aged 2 to 18 years, 'vegetables and legumes/beans' was the food group that was under-consumed by the highest proportion of individuals in 2011-2012.¹] [For example, 99.6% and 99.7% of boys and girls respectively were not consuming the daily recommended serves of vegetables and legumes/beans, compared to 53.5% and 54% of boys and girls respectively not consuming the daily recommended serves of fruit.²]
- I have identified 'vegetables and legumes/beans' as the food group that the highest proportion of Australian youth under-consumed in 2011-12.¹

- I have used data from the table to support my response.²
- I have provided the context of the data.
- I have included the correct units of measurement (percent), ensuring to check the table headings.

c [ADG 2, which advises Australians to 'enjoy a wide variety of nutritious foods from these five groups every day', could be used to increase grain consumption among the Australian population.¹] [ADG 2 mentions five food groups, which include grain (cereal) foods.²]

- I have identified ADG 2 'enjoy a wide variety of nutritious foods from these five groups every day' as the Australian Dietary Guideline that could be used to increase grain foods consumption amongst the Australian population.¹
- I have described ADG 2.²

6 Skin cancer

Note: You would not receive a mark for identifying a target of health promotion. If you did not learn about skin cancer, looking at the exemplar responses and checklist items below may still be helpful. Despite what target of health promotion you learnt about, responses require similar structures to receive full marks. Along with reading the exemplar responses and checklist items below, you can return to the exam-style questions section of the lesson in chapter 5 that corresponds to the content you learnt.

a [Skin cancer is targeted by health promotion in Australia because it has a major impact on population health outcomes and accounts for a high proportion of newly diagnosed cancers in Australia every day.¹] [Additionally, skin cancer is targeted by health promotion in

Australia because skin cancer is extremely costly to the economy, including healthcare costs.²]

- I have outlined one reason why skin cancer is targeted by health promotion.¹
- I have outlined another reason why skin cancer is targeted by health promotion.²

b SunSmart

Note: You are not awarded a mark for identifying a health promotion initiative.

[The SunSmart health promotion initiative run a schools program in which they support schools to meet their duty of care requirements related to sun protection, which involves, for example, ensuring that schools have the ability to provide adequate shade around their school grounds for all students and staff.¹] [This reflects the Ottawa Charter action area 'create supportive environments' as a safe and supportive physical environment is created by ensuring that there is adequate shade in school grounds.²] [Additionally, the SunSmart health promotion initiative implements the Dermoscopy for Victorian General Practice Program, which provides rural GP clinics with one dermatoscope to improve their ability to detect skin cancer early, as well as training for one doctor teaching them how to perform such skin checks.³] [This reflects the Ottawa Charter action area 'reorient health services' as this demonstrates a shift towards encouraging health professionals to focus on early detection and prevention of skin cancer, rather than simply treatment once the disease has developed.⁴]

- I have provided an example of what is involved in my chosen health promotion initiative related to skin cancer.¹
- I have explained how this example reflects an Ottawa Charter action area.²
- I have provided another example of what is involved in my chosen health promotion initiative related to skin cancer.³
- I have explained how this example reflects an Ottawa Charter action area.⁴

c [The SunSmart health promotion initiative provides the SunSmart app which helps warn users when the UV index is moderate or high - alerting people when they are at risk of high amounts of UV exposure and should protect themselves from the sun.¹] [This reflects the action area of the Ottawa Charter, 'develop personal skills', as it helps educate users about when they are at greatest risk of sunburn and sun damage, which means people are equipped with the skills and knowledge required to protect themselves from sunburn.²] [This ensures that the SunSmart initiative is effective in promoting health and wellbeing in Australia, because it reduces the risk of injury or illness associated with sunburn, promoting physical health and wellbeing.³]

- I have provided an example of what is involved in my chosen health promotion initiative.¹
- I have explained how this example reflects an Ottawa Charter action area, or another element of effective health promotion initiatives.²

- I have explained how the health promotion initiative is effective at promoting health and wellbeing in Australia, with reference to a health and wellbeing dimension.³

Other acceptable answers include:

- you may have used another method to evaluate the effectiveness of your chosen health promotion initiative, such as linking an example of the work of the program to real or potential improvements in health outcomes, so long as you also mentioned how this example would promote population health and wellbeing in Australia, with reference to a health and wellbeing dimension. You may also have evaluated the program as ineffective, so long as you justified your response.

- 7 a [Australian people aged 15 years or over are more likely to eat the recommended daily intake of fruit than the recommended daily intake of vegetables.] [For example, approximately 58% of people aged 55 to 64 years consumed the recommended daily intake of fruit, compared to approximately 10% in the same age group who consumed the recommended daily intake of vegetables.]²

- I have outlined one comparison between fruit and vegetable consumption amongst Australians that is evident in the graph.¹

- I have used data from the graph to support my response.²

- I have provided the context of the graph.

- I have included the correct units of measurement (percent), ensuring to check the axis titles.

- I have used a qualifier, such as 'approximately' when referring to data.

- b [The Healthy Eating Pyramid is the food selection model that was introduced by Nutrition Australia that may help to increase the consumption of fruits and vegetables in Australia.]¹

- I have identified the Healthy Eating Pyramid as the food selection model that was introduced by Nutrition Australia that may help to increase the consumption of fruits and vegetables in Australia.¹

- c [The Healthy Eating Pyramid is a food selection model that displays the types and proportions of foods that should be consumed each day as part of a healthy and balanced diet in a pyramid format.] [By consuming foods in the foundation layers of the pyramid (which includes vegetables) more than foods in the top layers of the pyramid, Australians can use this food selection model to help them consume appropriate proportions of the different food groups and achieve adequate nutrient intake. This may reduce the likelihood of experiencing nutrient deficiencies, such as iron-deficiency anaemia, reducing morbidity in Australia.]²

- I have explained an aspect of the Healthy Eating Pyramid.¹

- I have outlined how this aspect of the Healthy Eating Pyramid promotes health status among the Australian population, with reference to a health status indicator.²

- 8 Students needed to display that they had a thorough understanding of the question by demonstrating:

- an effectively structured response.

- that the stimulus materials had been understood, connected, and synthesised.
- that the student's own understanding had been used to formulate the response.
- that all of the stimulus materials are referenced in the response.

Overall, students responses should:

- clearly state the extent to which the HEALInG program was effective. This question asked students to 'evaluate the effectiveness of the HEALInG program...' therefore students must explicitly evaluate its effectiveness.
- discuss both effectiveness in bringing about dietary change and improving health outcomes for participants.
- discuss 'health outcomes' in terms of health and wellbeing and health status, mentioning specific dimensions and health status indicators.
- use the data presented in the graph to support discussion on dietary change and diet-related health outcomes for Indigenous peoples in Australia.

In relation to *factors to consider when evaluating a program's capacity to improve Indigenous health outcomes*, discussion of the following would be awarded:

- Students needed to discuss a range of factors that are important to consider when evaluating a program as effective or not.
- Discussion of funding, reach, accessibility, cultural appropriateness, feedback, and relevance to the target population would all have been awarded, especially if students used evidence from source 2.
- Some examples of evidence students could have used relating to factors to consider when evaluating the HEALInG program's effectiveness include:
 - feedback: students could have discussed the positive feedback from 2 HEALInG programs.
 - reach: students could have discussed how, by enabling the program to be easily facilitated and run by different people in different communities, the capacity of the program to improve health outcomes and bring about dietary change increases as more people can engage with the program.
 - funding: the program was adapted from a government-run program, and is well funded and has numerous partners.
 - targets and relevance: the program targeted both healthy eating and exercise for Aboriginal and Torres Strait Islander peoples. This is relevant as many Indigenous peoples do not consume adequate amounts of fruits and vegetables, as shown in source 1.
- Students needed to link their discussion of the effectiveness of the program in improving both health and wellbeing and health status. For example, students could discuss the positive feedback presented in source 2, and discuss how the information highlighted that the program did not only improve physical health and wellbeing, but also social health and wellbeing by providing people with a supportive network of friends through an overall 'positive social experience'.
- Overall, students could discuss many things relating to factors to consider when evaluating a program's effectiveness, as long as they used their knowledge of factors to consider and applied it to the HEALInG program.

In relation to *challenges in bringing about dietary change*, discussion of the following would be awarded:

- Students needed to discuss a range of challenges people face

in changing their diet and eating healthy, but in context of the population group this program targets.

- Discussion of the following would have been appropriate: income and food security, geographical location and food security, personal preferences, culture, education, food marketing and media, family, and early life experiences. Most appropriate would have been discussion of how education, knowledge and skills impacts people's abilities to bring about dietary change. This is because students could have supported this with a discussion using information from source 2 about program outcomes for participants.
- For example, students could have discussed how the program increased nutrition literacy, improved knowledge of unhealthy foods, and taught participants how to read food labels.
- Students could also discuss the feedback from the program in source 2. This feedback suggests that there were a range of factors that still impacted participants' ability to maintain a healthy lifestyle.
- Overall, students needed to discuss the range of factors that can challenge people's abilities to change their diet and how these challenges can stand in the way of improving health outcomes.

In relation to *new public health*, discussion of the following would be awarded:

- Students needed to discuss both the social model of health and the Ottawa Charter for Health Promotion.
- Discussion of how the HEALInG program reflects different action areas of the Ottawa Charter for Health Promotion would be appropriate. Students should support their chosen action areas with evidence from the case study.
- Discussion of how the HEALInG program reflects different principles of the social model of health would be appropriate. Students should support their chosen principles with evidence from the case study.
- Overall, students needed to discuss how the program was reflective of new public health, with reference to both the social model of health and the Ottawa Charter for Health Promotion. They may have used this as a way to evaluate the effectiveness of the HEALInG program. Students also needed to discuss the data presented in source 1 and its relevance to the program.

7A Classifying countries

Theory-review questions

- 1** A. Gross national income (GNI) per capita is the total sum of a population's income divided by the population of the country, giving an average annual income for each citizen.
- 2** I; III. Opportunities for global trade and high average incomes are both economic characteristics of high-income countries given that they assist high-income countries, and their citizens, to be financially secure. By contrast, developed legal systems are a social characteristic given that they relate to the condition of justice within society.
- 3** A. True. Greater access to safe water and developing adequate infrastructure are environmental characteristics given that they relate to the physical surroundings of a country's inhabitants. Middle-income countries can be classified by efforts to transition towards complete access to safe water and adequate infrastructure, while high-income countries have achieved these conditions.
- 4** A. Social characteristics of low-income countries include low levels of employment and education. Low-income countries often have low levels of employment and education, whereas high-income countries have high levels of these social characteristics.
- 5** I; II; III. Economic, social, and environmental factors are used to further distinguish the difference between high-, middle-, and low-income countries beyond using only gross national income (GNI) per capita.

Skills

Unpacking the case study

6 B **7** A **8** B

Exam-style questions

- 9** [One characteristic of a high-income country is high average incomes, defined by the World Bank as a gross national income (GNI) per capita of \$12,536 USD or more in 2019.¹] [Another characteristic of a high-income country is access to safe water, meaning that all of a country's citizens, regardless of their geographic position or socio-economic status, are able to access safe drinking water.²]

I have outlined a characteristic of a high-income country.¹

I have outlined another characteristic of a high-income country.²

Other acceptable answers include:

- any other economic, social, or environmental characteristics, so long as they are related to high-income countries.

- 10** [One environmental characteristic is access to safe water.¹] [A high-income country could be classified by a high level of access to safe water for all of its citizens, regardless of income or geographic location.²]

I have identified an environmental characteristic.¹

I have explained how this environmental characteristic could be used to classify a country as high-income.²

Other acceptable answers include:

- any other environmental characteristic, so long as it is related to high-income countries.

- 11** [One characteristic of a middle-income country is that they are transitioning towards high levels of education.¹] [While they may not yet have total access to education across all socio-economic groups, middle-income countries are often seeking to make education accessible to all, such as by building schools in remote areas.²] [Another characteristic of a middle-income country is that they are transitioning towards having a wide range of industries.³] [While their economy may be reliant on a moderate range of industries, middle-income countries are often introducing new industries so that their economy is less reliant on a select range of industries, such as tourism.⁴]

I have identified a characteristic of a middle-income country.¹

I have described my chosen characteristic of a middle-income country.²

I have identified another characteristic of a middle-income country.³

I have described my chosen characteristic of a middle-income country.⁴

Other acceptable answers include:

- any other economic, social, or environmental characteristics, so long as they are related to middle-income countries.

- 12** [One economic characteristic is average income.¹] [High-income countries have a high average income, for the 2021 fiscal year defined by the World Bank as a gross national income (GNI) per capita of \$12,536 USD or more in 2019, whereas low-income countries have lower average incomes of \$1,035 USD or less.²] [Another economic characteristic is global trade.³] [High-income countries have opportunities for global trade due to their diverse range of industries, often trading with a number of other countries, whereas low-income countries often do not have these opportunities and have trade relationships with fewer countries due to having less industries to trade goods from.⁴]

I have identified an economic characteristic.¹

I have described how this economic characteristic would be different for high-income and low-income countries.²

I have identified another economic characteristic.³

I have described how this economic characteristic would be different for high-income and low-income countries.⁴

I have used a distinguishing word, such as 'whereas'.

Other acceptable answers include:

- any other economic characteristic, so long as you show how it would be different for high-income and low-income countries had been appropriately described.

- 13** a [Central African Republic,¹] [since it has a gross national income (GNI) per capita of 520 USD, which meets the World Bank low-income threshold of \$1,035 USD or less.²]

I have identified that the Central African Republic would be considered a low-income country.¹

I have used data from the table to justify my response, with reference to how a gross national income (GNI) per capita of \$520 USD meets the \$1,035 USD or less World Bank threshold.²

- b** [Canada is a high-income country.¹] [It would be likely that Canada has high levels of education for all of its citizens, regardless of location of residence within the country.²]

I have identified a high-income country.¹

I have described one social characteristic that this high-income country would display.²

Other acceptable answers include:

- other social characteristics of high-income countries could have been used, as long as they were described for Canada (the most recent gross national income per capita data for the Cayman Islands was collected by the World Bank in 2017, not 2019).

- 14** [One social characteristic of high-income countries is access to technology.¹] [This enables people from high-income countries to donate to charities using online websites, developing a sense of hope that they can improve the social conditions of other communities and promoting their spiritual health and wellbeing.²] [Another characteristic of high-income countries is high levels of employment.³] [This enables people from high-income countries to have a sense of purpose for their work, promoting their spiritual health and wellbeing.⁴]

I have identified a characteristic of high-income countries.¹

I have described how this characteristic can promote spiritual health and wellbeing.²

I have identified another characteristic of high-income countries.³

I have described how this characteristic can promote spiritual health and wellbeing.⁴

- 15** [One environmental characteristic is the quality of infrastructure.¹] [By having adequate infrastructure, such as high-quality roads, people living in high-income countries are less likely to die prematurely from a road accident, increasing life expectancy.²] [Another environmental characteristic is levels of food security.³] [By having high levels of food security, people living in high-income countries are less likely to experience ill health caused by malnutrition, decreasing morbidity rates.⁴]

I have identified an environmental characteristic.¹

I have described how this indicator can improve the health status of people living in high-income countries, with reference to an indicator.²

I have identified another environmental characteristic.³

I have described how this indicator can improve the health status of people living in high-income countries, with reference to a health status indicator.⁴

Other acceptable answers include:

- other health status indicators could have been selected, as long as they were appropriately linked to an environmental characteristic of high-income countries.

Questions from multiple lessons

- 16** [One prerequisite for health is shelter.¹] [Having access to shelter, such as safe housing, ensures that the physical environment that people inhabit protects them from injury, therefore representing an environmental characteristic of high-income countries.²]

I have identified a prerequisite for health.¹

I have described how this prerequisite for health could be used as an environmental characteristic of high-income countries.²

7B Similarities and differences in health status and burden of disease globally

Theory-review questions

- I; III. *The Ottawa Charter is used for health promotion, not to analyse similarities and differences between low-, middle-, and high-income countries.*
- A. True. *It is most likely that health status will improve when transitioning from low-income countries to high-income countries, although variations in health status exist between countries within each GNI threshold.*
- A. True. *HIV contributes to both YLL and YLD, therefore increasing DALY and burden of disease.*
- B. By decreasing maternal mortality rates in high-income countries, life expectancy at birth typically **increases** in turn. *Decreasing maternal mortality rates ensures that fewer mothers are dying prematurely, which increases life expectancy at birth, but would have less of an impact on life expectancy at 60 since most mothers give birth before the age of 60.*
- II; III; IV. *Gross National Income (GNI) per capita is not a health status indicator, but rather a financial measurement of the average income of a single person within a population group.*

Skills

Data analysis

6 B

7 A

8 B

Exam-style questions

- 9** [Afghanistan recorded a health-adjusted life expectancy (HALE) at birth for both sexes of 53.99 years in 2019,¹] [whereas Austria recorded a greater HALE at birth for both sexes of 70.94 years for both sexes in 2019.²]

I have identified that Afghanistan recorded a health-adjusted life expectancy (HALE) at birth for both sexes of 53.99 years in 2019.¹

I have identified that Austria recorded a health-adjusted life expectancy (HALE) at birth for both sexes of 70.94 years for both sexes in 2019.²

I have used comparison words such as, 'whereas'.

I have included the correct units of measurement (years).

- 10 a** [Chad recorded the highest maternal mortality rates in 2017.¹]

I have identified that Chad recorded the highest maternal mortality rates in 2017.¹

b [Belgium's maternal mortality ratio decreased¹] [from 6 per 100,000 live births in 2010 to 5 per 100,000 live births in 2017.²]

I have outlined the general direction of the trend.¹

I have referred to at least two points of data in the graph to illustrate the direction of the trend.²

I have provided the context of the graph.

I have included the correct units of measurement (per 100,000 live births).

- 11 a** [The Democratic Republic of the Congo's mortality rates from malaria result in more people dying prematurely.¹] Therefore, this means that life expectancy will decrease in turn.²

I have described how the Democratic Republic of the Congo's mortality rates from Malaria result in premature death.¹

I have linked premature death to the Democratic Republic of the Congo's impaired health status, with reference to a health status indicator.²

Other acceptable answers include:

- other health status indicators may have been used, as long as they were linked to mortality rates of malaria in the Democratic Republic of the Congo.

- b** [South Sudan recorded 3,483 deaths from malaria in 2017,¹] whereas the Democratic Republic of the Congo recorded 27,458 deaths from malaria in 2017.²

I have identified that South Sudan recorded 3,483 deaths from malaria in 2017.¹

I have identified that the Democratic Republic of the Congo recorded 27,458 deaths from malaria in 2017.²

I have used comparison words such as, 'whereas'.

- 12 a** [Sierra Leone recorded the highest incidence of Tuberculosis.¹]

I have identified that Sierra Leone recorded the highest incidence of Tuberculosis.¹

- b** [Denmark recorded an under-5 mortality rate of 3.5 per 1000 live births,¹] whereas Spain recorded a higher under-5 mortality rate of 4.1 per 1000 live births.²

I have identified that Denmark recorded an under-5 mortality rate of 3.5 per 1000 live births.¹

I have identified that Spain recorded an under-5 mortality rate of 4.1 per 1000 live births.²

I have used comparison words such as, 'whereas'.

I have included the correct units of measurement (per 1000 live births).

- c** [Australia has an improved health status compared to Vietnam.¹] For example, Australia recorded a life expectancy at birth of 82.8 years for both sexes, whereas Vietnam recorded a life expectancy at birth of 76.0 years for both sexes.²

I have identified that Australia has an improved health status compared to Vietnam.¹

I have referred to health status data, with reference to a health status indicator.²

I have used comparison words such as, 'whereas'.

I have included the correct units of measurement.

Other acceptable answers include:

- other health status indicators may have been selected, including HALE, under-5 mortality rates, and Tuberculosis incidence.

Questions from multiple lessons

- 13** [The social model of health focuses on preventing poor health from occurring in the first place, marking a primary emphasis of the 'new' public health model.¹] One principle of the social model of health is that it acts to enable access to healthcare.² This could involve ensuring that people living in low-income countries have access to pneumonia vaccines, ensuring that fewer people die prematurely from pneumonia which would increase life expectancy.³ Another principle of the social model of health is that it acts to reduce social inequities.⁴ This could involve ensuring that children living in low socio-economic areas of low-income countries can go to school and learn about how to access safe water, which would decrease the incidence of cholera.⁵

I have described the social model of health.¹

I have identified one principle of the social model of health.²

I have linked my chosen principle of the social model of health to improving health status in low-income countries, with reference to a health status indicator.³

I have identified a second principle of the social model of health.⁴

I have linked my chosen principle of the social model of health to improving health status in low-income countries, with reference to a health status indicator.⁵

Other acceptable answers include:

- other principles of the social model of health, as long as it is linked to improving health status in low-income countries.

7C Factors affecting health status and burden of disease

Theory-review questions

- B. False. Both factors that relate to our environment and more personal factors can impact health status and burden of disease significantly. The extent to which these factors impact health status and burden of disease depends entirely on the context that is being examined.
- I; II; IV. Intelligence and height are factors that do not contribute to similarities and differences in health status and burden of disease as these factors do not directly cause illness or disease.
- B. False. It is important to approach marketing as a process of advertising and distribution as increasing access to a particular product, such as processed foods.
- B. False. Inequality based on sex instead involves denying somebody opportunities based on their biological assignment into the categories of male, female, or other, such as denying someone employment by virtue of their being a woman. Inequality based on gender identity could instead involve denying somebody opportunities on the basis of knowing that they identify as a gender separate to that which has been assigned to them at birth.
- A. True. Access to sanitation services improves health status and burden of disease by preventing people from developing bacterial diseases such as cholera, or spreading viruses.
- I; II; III; V. Being wealthy generally improves someone's social reception and does not cause them to experience inequality and discrimination.

Skills

Perfect your phrasing

7 A

8 A

9 B

Exam-style questions

- 10** [Global distribution refers to the process of providing goods and services to people living all across the world.¹] [Marketing refers to the process of advertising goods and services with the intention of increasing sales.²]

I have described what is meant by global distribution.¹

I have described what is meant by marketing.²

- 11** [One challenge faced by high-income countries is the marketing of processed foods.¹] [High-income countries typically experience a greater amount of marketing for processed foods than low-income countries, which increases overweight and obesity because these processed foods are energy-dense.²]

I have identified that the marketing of processed foods is a challenge faced by high-income countries in relation to the increase in overweight and obesity.¹

I have explained how the increased marketing of processed foods in high-income countries compared to low-income countries increased overweight and obesity.²

- 12 a** [Canada had a ban on tobacco advertising on national TV and radio in 2018,¹] [whereas the Central African Republic had no ban on tobacco advertising on national TV and radio in 2018.²]

I have identified that Canada had a ban on tobacco advertising on national TV and radio in 2018.¹

I have identified that the Central African Republic had no ban on tobacco advertising on national TV and radio in 2018.²

I have used comparison words such as, 'whereas'.

- b** [Canada is likely to have low mortality rates for lung cancer,¹] [whereas the Central African Republic is likely to have high mortality rates for lung cancer due to lack of a ban on tobacco advertising.²]

I have identified an example of Canada's improved health status due to its ban on tobacco advertising on national tv and radio in 2018, with reference to a health status indicator.¹

I have identified an example of the Central African Republic's impaired health status due to its ban on tobacco advertising on national tv and radio in 2018, with reference to the same indicator as Canada.²

I have used comparison words such as, 'whereas'.

- 13** [By providing sanitation services such as flush toilets, people living in high-income countries are better able to avoid faecal matter.¹] [This decreases mortality rates for cholera in high-income countries.²] [By providing sanitation services such as public access to hand sanitiser, people are less likely to transmit respiratory viruses to other people.³] [This decreases the number of people from high-income countries dying prematurely from influenza, therefore increasing life expectancy.⁴]

I have provided one example of sanitation.¹

I have explained how my chosen example of sanitation improves health status in high-income countries, with reference to a health status indicator.²

I have provided another example of sanitation.³

I have explained how my chosen example of sanitation improves health status in high-income countries, with reference to a health status indicator.⁴

- 14** [Discrimination based on race may involve racial minorities within a country seeking asylum in another country seen to be more tolerant.¹] [Inadequate sanitation standards when seeking asylum in a new country, for example when travelling by sea, can result in higher mortality rates for dysentery.²] [Discrimination based on race may also involve racial minorities being more likely to experience unemployment.³] [This can cause significant financial stress, negatively impacting mental health and wellbeing.⁴]

I have described an impact of discrimination based on race.¹

I have linked my chosen example to health status, with reference to a health status indicator.²

I have described another impact of discrimination based on race.³

I have linked my chosen example to health and wellbeing, with reference to a health and wellbeing dimension.⁴

- 15 a** [Inequality refers to an uneven distribution of resources or differing circumstances.¹] [Inequality could involve, for example, an uneven distribution of wealth across different population groups within a country.²]

I have explained the term inequality.¹

I have provided an example of inequality.²

- b** [Inequality for sex can involve more men becoming employed than women.¹] [This can mean that men are more likely to make a sufficient income to afford nutritious foods, decreasing male mortality rates from malnutrition when compared to women.²] [Inequality for religion can involve religious minorities having to seek refuge in other countries.³] [This can mean that religious minorities seeking asylum can experience years of life lost due to premature death (YLL) due to unsafe means of travelling, such as by drowning at sea, and years of life lost due to disability (YLD) due to ill-health from inadequate hygiene and resulting gastrointestinal illness, therefore increasing their DALY and burden of disease.⁴]

I have provided an example of inequality.¹

I have explained how my chosen example of inequality might contribute to differences in health status, with reference to a health status indicator.²

I have provided another example of inequality.³

I have explained how my chosen example of inequality might contribute to differences in burden of disease, with reference to the indicator YLL or YLD, and its corresponding influence on DALY.⁴

Other acceptable answers include:

- you may have used other examples of inequality in your response, such as that which occurs due to race, religion, sexual orientation, or gender identity.

Questions from multiple lessons

- 16** [One action area of the Ottawa charter is to build healthy public policy.¹] [This action area could involve implementing policies that limit the global marketing of tobacco, such as enforcing global bans on tobacco advertising on television. These policies would ensure that tobacco companies are more limited in their ability to advertise their products, such as cigarettes.²]

I have identified an action area of the Ottawa charter.¹

I have linked my chosen action area to limiting the global marketing of tobacco.²

Other acceptable answers include:

- any one of the other Ottawa charter action areas, including to create supportive environments, strengthen community action, develop personal skills, or reorient health services, may have been chosen, as long as it was linked to limiting the global marketing of tobacco.

Chapter 7 test

- 1** [In 2017, Afghanistan recorded a maternal mortality rate of 638 per 100,000 live births,¹] [whereas Bosnia and Herzegovina recorded a lower maternal mortality rate of 10 per 100,000 during the same period.²]

I have identified that Afghanistan recorded a maternal mortality rate of 638 per 100,000 live births in 2017.¹

I have identified that Bosnia and Herzegovina recorded a maternal mortality rate of 10 per 100,000 live births in 2017.²

I have used comparison words, such as 'whereas' and 'lower'.

I have included the correct units of measurement (per 100,000 live births).

- 2** [One environmental characteristic of a low-income country is inadequate infrastructure.¹] [This can involve not having infrastructure, such as housing, that meets high standards of structural security for all of a low-income country's citizens.²] [Another environmental characteristic of a low-income country is inadequate access to safe drinking water.³] [Some communities within low-income countries may not have access to wells and piped water, which can result in the population being unable to access clean surface water.⁴]

I have identified one environmental characteristic of a low-income country.¹

I have described my chosen environmental characteristic of a low-income country.²

I have identified another environmental characteristic of a low-income country.³

I have described my chosen environmental characteristic of a low-income country.⁴

Other acceptable answers include:

- you may have discussed other environmental characteristics of low-income countries, so long as you described them appropriately.

- 3** [In 2019, Algeria recorded a life expectancy at age 60 of 22.04 years,¹] [whereas Botswana recorded a lower life expectancy at age 60 of 16.25 years during the same period.²]

I have identified that Algeria recorded a life expectancy at age 60 of 22.04 years in 2019.¹

I have identified that Botswana recorded a life expectancy at age 60 of 16.25 years in 2019.²

I have used comparison words, such as 'whereas' and 'lower'.

I have included the correct units of measurement (years).

- 4** [One social characteristic is high levels of employment.¹] [Having high levels of employment means that a country's population is more likely to have job security and continue earning an income, which increases the likelihood of a country having a high gross national income (GNI) per capita and therefore being a high-income country.²]

I have identified one social characteristic.¹

I have described how my chosen social characteristic could be used to classify a country as high-income.²

Other acceptable answers include:

- you may have discussed another social characteristic, such as high levels of education or access to technology, so long as you described how it could be used to classify a country as high-income.

- 5** [The global marketing of alcohol can involve an increased number of alcohol advertisements in low-income countries with the intention of increasing the sale of alcoholic drinks.¹] [This can result in more people in low-income countries drinking higher quantities of alcohol, which can increase mortality rates from strokes due to the fact that alcohol can raise blood pressure levels.²]

I have described the impact of the global marketing of alcohol on low-income countries.¹

I have described how the global marketing of alcohol can impair health status in low-income countries, with reference to a health status indicator.²

- 6** [Access to safe water involves being able to obtain water that is safe to drink and free from contaminants, such as germs.¹] [Access to safe water in high-income countries reduces the likelihood of drinking contaminated water and dying prematurely from waterborne disease, such as cholera, therefore increasing life expectancy in high-income countries.²]

I have explained what is involved in accessing safe water.¹

I have explained how access to water improves health status in high-income countries, with reference to a health status indicator.²

- 7** [High-income countries often have a wide range of industries, which involves having multiple different industries, such as tourism, agriculture, and construction, that all contribute to a country's economy.¹] [This ensures that high-income countries have other industries to contribute to their economic growth in the case that a major national industry has to suspend its operations (as can occur during a natural disaster), making it more likely that people within a high-income country are employed and earning a constant income.²]

I have explained the term a wide range of industries.¹

I have explained how a wide range of industries is an economic characteristic of high-income countries.²

- 8 [Sanitation refers to behaviours, facilities, and services that prevent disease and illness caused by contact with or mistreatment and wrong disposal of human waste and sewage.¹] [Not being able to access sanitation services, such as flush toilets, in low-income countries can result in individuals being exposed to human waste and dying prematurely from communicable diseases, such as cholera, therefore decreasing life expectancy.²]

I have explained what is meant by sanitation.¹

I have explained how not being able to access sanitation services may influence health status in low-income countries, with reference to a health status indicator.²

- 9 [The global marketing of tobacco can involve the advertising and promotion of tobacco products, such as cigarettes, with the intention of increasing sales across the world.¹] [This can mean that more people are influenced to start smoking cigarettes and may consequently develop lung cancer, therefore increasing the incidence of lung cancer globally.²]

I have identified that the global marketing of tobacco can increase the sale of tobacco products across the world.¹

I have explained how the increased sale of tobacco products could contribute to an increased incidence of lung cancer.²

- 10 a [Poverty refers to financial deprivation, as indicated by the World Bank's definition of extreme poverty as living on \$1.90 USD or less a day, which results in being unable to afford essential material resources, such as food and healthcare.¹]

I have explained the term poverty.¹

- b [Poverty involves families being unable to afford the expenses of essential and nutritious food.¹] [This can mean that more children under the age of five die from malnutrition, increasing under-5 mortality rates.²] [Poverty can also involve being unable to afford the expenses of essential and frequent healthcare visits.³] [This can result in the late detection of certain conditions, resulting in years of life lost due to premature death (YLL) from conditions such as cancer and years of life lost due to disability (YLD) from conditions such as hypertension, therefore increasing DALY and burden of disease.⁴]

I have provided an example of poverty.¹

I have explained how my chosen example of poverty might impact health status, with reference to a health status indicator.²

I have provided another example of poverty.³

I have explained how my chosen example of poverty might impact burden of disease, with reference to the indicator YLL or YLD, and its corresponding influence on DALY.⁴

Other acceptable answers include:

- you may have chosen different examples of the consequences of poverty, so long as you linked these examples to their impact on health status and burden of disease.

Questions from multiple chapters

- 11 [Safe water refers to water that is free from contaminants, such as germs.¹] [Access to safe water therefore reduces the likelihood of spreading communicable diseases through drinking contaminated water and developing cholera, therefore promoting the functioning of the body and its systems and physical health and wellbeing.²]

[This therefore reduces the likelihood of the global spreading of cholera across countries, thereby promoting physical health and wellbeing and acting as a resource globally.³]

I have described safe water.¹

I have described a positive impact of accessing safe water on health and wellbeing, with reference to a health and wellbeing dimension.²

I have described how access to safe water could promote health and wellbeing as a resource globally, with reference to a health and wellbeing dimension.³

Other acceptable answers include:

- you may have described another positive impact of accessing safe water or how access to safe water promotes another health and wellbeing dimension, so long as you linked this to how it can promote health and wellbeing globally.

8A Sustainability

Theory-review questions

- 1 C. Sustainability does not place a greater focus on meeting the needs of current or future generations, but instead focuses on both by trying to balance meeting the needs of current generations without compromising the ability for future generations to meet their own needs.
- 2 B. Meeting the dimensions of sustainability can not only help the country which is implementing it, but also other countries due to the interconnectedness between countries.
- 3 B. False. Ensuring the natural environment is used in a way which meets the needs of current and future generations refers to environmental, rather than economic sustainability.
- 4 A. Social sustainability involves creating an **equitable** society that meets the needs of all citizens at the present without compromising the ability to meet these needs for future generations. *Social sustainability focuses on creating an equitable, rather than equal society. This involves ensuring individuals receive what they need (equity), rather than all individuals receiving exactly the same resources (equality).*
- 5 A. Achieving environmental sustainability supports the availability of natural resources, such as food and water, which can promote physical health and wellbeing. Achieving gender equality can promote spiritual health and wellbeing, but this refers to social, rather than environmental sustainability.

Skills

Unpacking the case study

6 B 7 A 8 A 9 A

Perfect your phrasing

10 B

Exam-style questions

- 11 [Sustainability involves meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.¹]
 - I have described sustainability.¹
 - I have used the words 'present' and 'future' to demonstrate that I am talking about sustainability.
- 12 [Economic sustainability, such as meaningful employment opportunities can promote health and wellbeing.¹] [This can occur by meaningful employment opportunities providing adequate compensation which covers living expenses, such as access to safe living conditions, promoting physical health and wellbeing by providing an area in an individual can rest their body and be free from injury.²]
 - I have identified a consideration of economic sustainability to demonstrate how economic sustainability can promote health and wellbeing.¹
 - I have outlined how this consideration of economic sustainability can promote health and wellbeing, with reference to a health and wellbeing dimension.²
- 13 [Adequate waste removal and low levels of pollution is an example of environmental sustainability as it ensures that the natural environment is free from human waste and rubbish, supporting the existence of plants, animals, and humans. This includes minimising pollution, as

pollution may damage the environment and put animals at danger, such as by rubbish providing a choking hazard.¹] [Minimising pollution can promote global physical health and wellbeing by reducing harm to fish which exist in open oceans, which many countries rely on to provide food, thereby providing adequate and nutritious food supporting the body and its functioning by supporting adequate energy levels.²]

I have explained one consideration of environmental sustainability.¹

I have suggested how my chosen consideration of environmental sustainability could promote health and wellbeing globally, with reference to a health and wellbeing dimension.²

Other acceptable answers include:

- other considerations of environmental sustainability, as long as they are accurately described.

- 14 [Social sustainability involves creating an equitable society that meets the needs of all citizens at the present without compromising the ability to meet these needs for future generations.¹] [For example, one consideration of social sustainability is social support systems.²] [Social support systems provide vulnerable individuals with support, such as providing food and shelter, which helps the individuals meet their own needs and contribute to society.³]

I have explained social sustainability.¹

I have identified a consideration of social sustainability.²

I have explained my chosen consideration of social sustainability.³

Other acceptable answers include:

- other considerations of social sustainability, as long as they are accurately described.

- 15 a [Economic sustainability is present in the case study.¹]

I have identified that economic sustainability is present in the case study.¹

b [To meet the economic sustainability consideration of trade opportunities, the UK has had to create strong trade deals with the EU to ensure that individuals in the UK have access to incomes from the exchange of goods and services.¹] [This demonstrates how trade opportunities can promote physical health and wellbeing, as access to an income from trading opportunities allows individuals to afford living expenses, such as nutritional food. This enables adequate nutritional intake, promoting physical health and wellbeing by supporting the immune system.²]

I have used information from the case study to refer to a consideration of my chosen dimension of sustainability outlined in part a.¹

I have explained how my chosen dimension of sustainability can promote health and wellbeing, with reference to a health and wellbeing dimension.²

I have referred to the case study in my response.

Other acceptable answers include:

- other considerations of economic sustainability, as long as they related to the case study.

- c [Economic sustainability can improve health status as trade opportunities can contribute to increased incomes which can lead to food security, increasing nutritional intake.¹] This can therefore reduce the incidence of obesity as energy-dense processed foods which are cheaper are not relied on, therefore promoting health status.²]

- I have identified a consideration of economic sustainability to demonstrate how economic sustainability can promote health status.¹
-
- I have elaborated on how this consideration of economic sustainability can promote health status, with reference to a health status indicator.²

Questions from multiple lessons

- 16 [Economic growth can provide individuals in current and future generations with greater incomes, leading to a greater amount of tax collected by the government.¹] The government can then invest the money from taxes in improving infrastructure, such as roads and transport. This can promote optimal physical health and wellbeing as safer roads can lead to less injuries on a national level, supporting the body and its functioning.²]

- I have explained how economic growth can act as a resource nationally.¹
-
- I have explained how economic resource as a resource nationally contributes to optimal health and wellbeing, with reference to a health and wellbeing dimension.²

- 17 a [One factor which contributes to similarities and differences in health status and burden of disease is access to safe water.¹]

- I have identified a factor which contributes to similarities and differences in health status and burden of disease.¹
-
- b [Access to safe water is related to environmental sustainability.¹ Due to being a natural resource, water needs to be used at a sustainable rate so that the current generation has access to safe water without compromising the ability of future generations to also have access.²]
- I have outlined a relationship between the factor identified in part a and a dimension of sustainability.¹
-
- I have explained how the factor identified in part a and a dimension of sustainability is related.²

Other acceptable answers include:

- other factors that contribute to differences in health status and burden of disease and other dimensions of sustainability, as long as the chosen factor is consistent across part a and part b, and the relationship between the factor and dimension of sustainability is clear.

8B Human Development

Theory-review questions

- 1 B. Human development takes a broader focus than health status indicators, as it perceives individuals can develop to their full potential, including attaining a high level of health, by creating an environment in which individuals can flourish and make decisions which lead to long, healthy, and productive lives.

- 2 I; II. Initiatives and actions can be implemented by both governments and non-government organisations, such as introducing legislation to keep more children at school for longer. However, children do not have the power to make these large structural changes to promote human development, and are dependent on their caregivers and therefore unable to promote human development themselves.

- 3 A. Although GNI is one component of the measurement of human development, human development is represented by the HDI.
- 4 A. True. Due to GNI being only one of the four indicators of HDI, a country could have a higher GNI than a second country, but the second country could have a higher HDI overall due to being higher in the other indicators, such as life expectancy at birth.

- 5 I; II. The HDI being able to compare human development across countries due to being a single statistic is an advantage, not a disadvantage of the HDI.

Skills

Perfect your phrasing

- 6 B 7 A

Data analysis

- 8 B 9 II

Exam-style questions

- 10 [One advantage of the Human Development Index (HDI) is that it can easily compare the human development of countries due to being a single statistic.¹]

- I have outlined one advantage of the Human Development Index (HDI).¹

- 11 [One disadvantage of the Human Development Index (HDI) is that due to being calculated on averages, it does not account for disparities within a country.¹]

- I have outlined one disadvantage of the Human Development Index (HDI).¹

- 12 [One dimension of the Human Development Index (HDI) is knowledge.¹] A second dimension of the Human Development Index (HDI) is a decent standard of living.²

- I have listed one dimension of the Human Development Index (HDI).¹

- I have listed another dimension of the Human Development Index (HDI).²

Other acceptable answers include:

- a long and healthy life.

- 13 [Human development may have been promoted due to the empowerment course increasing Cynthia's access to knowledge, such as how to create a resume and how to save for a house.¹] This increased access to knowledge may have expanded Cynthia's capabilities to earn a decent standard of living due to being better equipped to apply for and succeed in gaining meaningful employment.²

- I have explained how the empowerment course may have promoted human development.¹

I have elaborated on how the empowerment course may have promoted human development, with reference to a human development component.²

I have referred to the character's name in my response (Cynthia), and to the scenario.

- 14** [The Human Development Index (HDI) is a tool developed by the United Nations to rank countries on their social and economic development.¹] [It is presented as a single statistic which takes into account three dimensions (a long and healthy life, knowledge, and a decent standard of living) and four indicators (life expectancy at birth, GNI per capita, mean years of schooling, and expected years of schooling).²]

I have described the Human Development Index (HDI).¹

I have elaborated on the Human Development Index (HDI), referring to it having three dimensions and four indicators.²

- 15 a** [The Maldives has a greater GNI per capita than Lebanon]¹ [as the Maldives has a GNI per capita of around \$9,600 USD, while Lebanon has a GNI per capita of around \$7,400 USD].²

I have identified that the Maldives has a greater GNI per capita than Lebanon.¹

I have referred to data from the graph to justify my response.²

b [Lebanon and the Maldives have a similar Human Development Index (HDI), but vary on their GNI per capita. This is due to the HDI taking more than just GNI per capita into account.¹] [For example, even though the Maldives has a greater GNI per capita than Lebanon, Lebanon may have a greater life expectancy at birth than the Maldives, leading to both countries having a similar HDI].²

I have explained how Lebanon and the Maldives can vary on their GNI per capita but a similar Human Development Index (HDI) by explaining that the HDI takes more than just GNI into account.¹

I have elaborated on my explanation, with reference to an indicator of the Human Development Index (HDI).²

- 16 a** [A long and healthy life,¹] [as it aims to end the yellow fever epidemics by 2026 which will lead to less deaths due to yellow fever occurring].²

I have identified a dimension of the Human Development Index (HDI) which is contained within the case study.¹

I have referred to the case study to justify how this HDI dimension is presented in the case study.²

- b** [The EYE strategy could promote human development by empowering individuals to develop to their full potential and lead a long, healthy, and productive life through the provision of affordable vaccines.¹] [This is due to the EYE strategy providing affordable vaccines for individuals stricken with yellow fever, such as in Africa. By providing these vaccines, individuals have greater access to resources, such as health and will have a greater ability to participate in the community, such as go to school, work, or recreational activities, due to being less likely to contract yellow fever, promoting human development].²

I have described how the EYE strategy could promote human development.¹

I have elaborated on how the EYE strategy could promote human development, with reference to a human development component.²

Questions from multiple lessons

- 17 a** [Australia and Pakistan have a different GNI per capita, with Australia's GNI being \$55,100 while Pakistan's was \$1,410 in 2019.¹] [Furthermore, it is likely that Australia has a greater life expectancy than Pakistan, with this indicator also contributing to Australia having a greater Human Development Index (HDI) than Pakistan].²

I have referred to one indicator of the Human Development Index (HDI) to explain the difference between Australia and Pakistan.¹

I have referred to another indicator of the Human Development Index (HDI) to explain the difference between Australia and Pakistan.²

Other acceptable answers include:

- expected years of schooling
- mean years of schooling.

- b** [Due to having a GNI per capita above \$12,536 USD, Australia would be classified by the World Bank as a high-income country,¹] [whereas Pakistan would be classified as a middle-income country due to having a GNI per capita within the threshold of \$1,036 and \$12,535].²

I have outlined that Australia would be classified as a high-income country.¹

I have outlined that Pakistan would be classified as a middle-income country.²

Note: You do not need to provide the exact figures of each HDI classification in your response to achieve full marks. However, you do need to have a general understanding of the figures for each classification to know which classification these countries fit under and correctly answer this question.

8C Health and wellbeing and global trends

Theory-review questions

- 1 B. False. Although global trends can impact health and wellbeing in negative ways, they can also impact health and wellbeing in positive ways. For example, the global trend of digital technologies that enable increased knowledge sharing can promote health and wellbeing by alerting individuals of natural disasters, preventing injuries and therefore promoting physical health and wellbeing.
- 2 A. There are very little and most likely no positive health and wellbeing implications of climate change effects, with all effects likely to increase stress and fear and negatively impact physical health.
- 3 C. Conflict and mass migration can occur at the same time, such as conflict in a country leading to mass migration occurring, but they can also occur at separate times. For example, mass migration may occur due to climate change and not lead to conflict.

- 4** B. Globalisation refers to the interconnectedness between the world, which has given rise to the global trends of world trade and tourism as there are more communication and transport channels to share goods and services between countries and it is easier for tourists to travel between countries.
- 5** A. True. Increases in technological development has led to greater ease in sharing information and knowledge, making it easier to gain access to health information from digital sources.

Skills

Data analysis

6 C **7** B

Perfect your phrasing

8 B **9** B

Exam-style questions

- 10** [Loss of infrastructure due to conflict can negatively affect spiritual health and wellbeing as individuals cannot carry out their everyday tasks that give them a sense of purpose, such as going to school, and may lose hope about the infrastructure being rebuilt, such as their houses.¹]

I have suggested how infrastructure damage due to conflict could affect health and wellbeing, with reference to a health and wellbeing dimension.¹

Other acceptable answers include:

- other dimensions of health and wellbeing, so long as you have adequately linked your chosen dimension to infrastructure loss due to conflict.

- 11** [Increased frequency of flash flooding due to the changing weather pattern of heavier and more frequent rainfall can negatively affect mental health and wellbeing as individuals may have greater stress levels about property becoming damaged by floods.¹]

I have suggested how increased frequency of flash flooding due to heavier and more intense rainfall could affect health and wellbeing, with reference to a health and wellbeing dimension.¹

Other acceptable answers include:

- other dimensions of health and wellbeing, so long as you have adequately linked your chosen dimension to increased frequency of flash flooding due to more intense rainfall.

- 12** [Mass migration can lead to large groups of individuals leaving their home and moving to a new country or region which they may struggle to settle in to, such as struggling to find a job or make connections with others.¹] [This can negatively impact spiritual health and wellbeing as individuals may feel as if they don't have a sense of belonging and may lose a sense of purpose due to struggling to find meaningful employment.²]

I have explained how mass migration can impact health and wellbeing.¹

I have elaborated on how mass migration can impact health and wellbeing, referring to a health and wellbeing dimension.²

Other acceptable answers include:

- other dimensions of health and wellbeing, so long as you have adequately linked your chosen dimension to mass migration.

- 13** [Rising sea levels can contaminate fresh water reserves and damage food crops, negatively impacting physical health and wellbeing.¹] [Physical health and wellbeing can be negatively impacted because damage to water reserves and food crops due to rising sea levels can restrict access to adequate nutritional intake required for the functioning of the body and its systems, such as the immune system.²]

I have explained how rising sea levels can impact health and wellbeing.¹

I have elaborated on how rising sea levels can impact health and wellbeing, with reference to a health and wellbeing dimension.²

Other acceptable answers include:

- other dimensions of health and wellbeing, so long as adequately linked to rising sea levels.

- 14** **a** [The effect of climate change evident in the case study is droughts, which is an example of more extreme weather events due to climate change.¹]

I have identified that the effect of climate change evident in the case study is droughts, which is an example of more extreme weather events.¹

b [Frequently experiencing the extreme weather event of droughts can negatively impact emotional health and wellbeing.¹] [This is due to the frequent experience of droughts leading to levels of fear among the local population that droughts will continue to occur and never stop, reducing the ability to feel secure in their environment in day-to-day life.²] [This is demonstrated in the case study as Asher's mum Samara is now unable to remain calm and positive and has instead lost resilience and wants to move to a larger town.³]

I have outlined an implication of the effect of climate change identified in **part a** on health and wellbeing.¹

I have elaborated on this implication, with reference to a health and wellbeing dimension.²

I have referred to information in the case study to support my response.³

I have referred to the characters' names in my response (Asher and Samara), and to the scenario.

- 15** **a** [Online health records, such as My Health Record can allow health services to access an individuals' health history in a timely manner. This may promote physical health and wellbeing as timely access to health records can increase the speed at which emergency procedures, such as life-saving surgeries can be carried out.¹] [This can increase the chance that the individual lives and their experience of illness is less severe, supporting the functioning of the body and its systems.²] [However, digital technologies for knowledge sharing can also lead to individuals gaining health advice from illegitimate sources, such as Google and online blogs.³] [This can negatively impact mental health and wellbeing as it may heighten stress and anxiety about one's health as they may use Google to inaccurately self diagnose themselves, or the advice they gain from illegitimate blogs may hinder their ability to make well informed and logical health choices.⁴]

I have analysed an implication of using digital technologies, such as My Health Record, for knowledge sharing on health and wellbeing.¹

- I have elaborated on this implication, with reference to a health and wellbeing dimension.²
- I have analysed another implication of using digital technologies, such as My Health Record, for knowledge sharing on health and wellbeing.³
- I have elaborated on this implication, with reference to a health and wellbeing dimension.⁴
- b [In the graph referring to number of My Health Records over time, the number of records have increased over time.¹] [with there being 5.89 million My Health records in July 2018 which significantly increased to 22.93 million My Health records in March 2021.²]
- I have outlined the general direction of the trend.¹
- I have referred to at least two points of data in the graph to illustrate the direction of the trend.²
- I have provided the context of the graph.
- I have included the correct units of measurement (millions of records), ensuring to check the axis titles.
- 16 a [Europe has had the most international tourist arrivals in 2018.¹] [For example, in 2018 international arrivals to Europe made up approximately 700 million of the total 1.4 billion tourist arrivals across the world.²]
- I have identified that Europe has had the most international tourist arrivals.¹
- I have referred to data in the graph to support my response.²
- I have used a qualifier, such as 'approximately' when referring to data.
- b [Greater levels of tourism can increase meaningful employment opportunities, making it easier for individuals near a given tourist attraction to afford basic resources.¹] [A higher income can promote physical health and wellbeing by increasing access to nutritious foods required for the body and its functioning due to meeting nutritional needs.²] [Greater levels of tourism can also damage tourist sites due to a large number of people accessing the sites.³] [Tourist attraction sites often hold spiritual or religious meaning for the local population, such as temples. Potential damage to the religious places of worship due to tourism can reduce the local population's ability to reflect on their place in the world and reduce sense of hope and purpose of they cannot visit the temple or if it becomes damaged, negatively impacting spiritual health and wellbeing.⁴]
- I have outlined a positive implication of tourism on health and wellbeing.¹
- I have elaborated on this implication, with reference to a health and wellbeing dimension.²
- I have outlined a negative implication of tourism on health and wellbeing.³
- I have elaborated on this implication, with reference to a health and wellbeing dimension.⁴

Other acceptable answers include:

- other dimensions of health and wellbeing, so long as adequately linked to tourism.

Questions from multiple lessons

- 17 a [When world trade is negatively impacted, as seen by the halt in global supply chains due to the Ever Green ship getting stuck in the Suez Canal, it can lead to countries across the world going without necessary resources, negatively impacting health and wellbeing globally.¹] [This can negatively impact physical health and wellbeing, with these resources often being required for medical procedures which are required to support the body and its functioning.²] [This was seen in the case study as the immune system of the healthcare workers in Europe may have been compromised due to not receiving PPE, potentially enhancing the levels of COVID-19 contracted by healthcare workers.³]
- I have described how world trade can impact health and wellbeing globally.¹
- I have elaborated on this impact, with reference to a health and wellbeing dimension.²
- I have referred to information in the case study to support my response.³
- b [The case study refers to economic sustainability.¹] [This is due to trade opportunities being a consideration of economic sustainability, with the case study demonstrating how the exchange of goods and services between countries can help current and future generations meet their needs. Disruptions, such as that of the Suez Canal, may have potentially led to a loss of income for the countries who provided the goods and services that were stuck on the Ever Green and other surrounding container ships.²]
- I have outlined economic sustainability as the dimension of sustainability referred to in the case study.¹
- I have justified my response by referring to the case study.²

Chapter 8 test

- 1 [Social sustainability, such as political and legal systems, can promote health and wellbeing. This can occur by strong political and legal systems allowing citizens of a country to have a say in the leadership party through democratic processes.¹] [This can promote spiritual health and wellbeing as it can provide individuals with a sense of purpose due to contributing to the representation of their country which can introduce laws for the current and future generations, and enhance levels of hope about the state of affairs in the country.²]
- I have outlined a consideration of social sustainability to demonstrate how it can promote health and wellbeing.¹
- I have outlined how this consideration of social sustainability can promote health and wellbeing, with reference to a health and wellbeing dimension.²
- 2 [Gross National Income (GNI) per capita is only one indicator of the Human Development Index (HDI), meaning that a country could have a higher GNI per capita compared to another country but have lower scores for the other three indicators.¹] [This could lead to the country with the lower GNI per capita having a greater HDI overall, due to the scores in the other three indicators, such as life expectancy at birth, outweighing the greater GNI per capita of the other country.²]

I have explained how a country could have a greater Human Development Index (HDI) than another country even if it had a lower Gross National Income (GNI) per capita than the other country.¹

I have elaborated my explanation, with reference to greater scores on the other three HDI indicators.²

3 a [The global trend referred to in the case study is climate change.¹]

I have identified climate change as the global trend referred to in the case study.¹

b [The initiative provides citizens in Africa with resources to counter the effects of climate change, such as teaching people how to plant and maintain trees, promoting environmental sustainability.¹ This promotes environmental sustainability by using natural resources in a way that protects them for the current generation, enabling them to access food and other resources, and also protecting the land for future generations so that they can also grow crops necessary for survival.²]

I have used information from the case study to describe how the initiative promotes environmental sustainability.¹

I have referred to a consideration of environmental sustainability to elaborate on this description, using the words 'current' and 'future' generations to demonstrate that I am talking about environmental sustainability.²

Other acceptable answers include:

- other considerations of environmental sustainability, so long as they are appropriately linked to the case study.

c [By being taught how to plant fruit seedlings, citizens in Rwanda are experiencing an expansion of capabilities and have greater access to resources, such as food, promoting human development. Having access to food will promote health, due to reducing the prevalence of fatigue and malnutrition in children that occur due to the food shortages from more extreme weather events.¹ A reduced prevalence of malnutrition will also promote human development as the children will be able to participate in the community, such as by playing games with other children.²]

I have explained how human development affects health, with reference to a human development component and health status indicator.¹

I have explained how health affects human development, with reference to a human development component and health status indicator.²

I have used information from the case study in my response.

Note: To demonstrate an interrelationship, a clear link between health and human development needs to have been made, and then a second link back to the first part of your answer also needs to have been made. This could have been done by referring to human development, then health, and then back to human development, as shown in the exemplar response. It also could have been done by first referring to health, then human development, and then linking back to health.

Other acceptable answers include:

- other components of human development or health status indicators, so long as they were appropriately linked to the case study.

4 [Human development involves creating an environment which empowers individuals to develop to their full potential and lead a long, healthy, and productive life by expanding their choices, capabilities, and freedom.¹ It also involves having access to a decent standard of living and resources, such as education, reducing the cycle of poverty, and enhancing the ability to participate in the community and live according to their own needs.²]

I have described human development.¹

I have described human development in further detail by referring to the components of human development.²

5 [Living in areas of conflict can lead to individuals having to flee from their home country or seek shelter at home, minimising the amount of contact they can have with family and friends.¹ This can negatively impact social health and wellbeing as these individuals may find it hard to form and maintain positive relationships with others.²]

I have outlined how conflict can impact health and wellbeing.¹

I have elaborated on how conflict can impact health and wellbeing, referring to a health and wellbeing dimension.²

Other acceptable answers include:

- other dimensions of health and wellbeing, so long as you have adequately linked your chosen dimension to conflict.

6 a [Australia has a greater Human Development Index (HDI) than Iraq.¹]

I have identified that Australia has a greater Human Development Index (HDI) than Iraq.¹

b [Australia may have a greater HDI than Iraq due to having greater scores for the HDI indicators.¹ For example, Australia may have a greater mean years of schooling than Iraq, contributing to an overall greater HDI than Iraq.²]

I have explained why Australia may have a greater HDI than Iraq.¹

I have elaborated on my explanation, with reference to greater scores on the other three HDI indicators.²

c [An advantage of the HDI is that it is a single statistic that can be used to easily compare human development across different countries.¹]

I have outlined an advantage of the HDI.¹

Other acceptable answers include:

- other advantages of the HDI, so long as they were adequately outlined.

7 a [Digital technologies that enable knowledge sharing, such as emergency bushfire texts, promote physical health and wellbeing by providing individuals with information in a timely manner.¹ This can promote physical health and wellbeing by reducing the number of injuries and deaths due to the bushfire as the texts can warn individuals to escape or to seek shelter, therefore promoting the functioning of the body and its systems.²]

I have explained how digital technologies that enable increased knowledge sharing, such as the emergency bushfire text alerts, may have promoted health and wellbeing.¹

- I have elaborated on this explanation, with reference to a health and wellbeing dimension.²

Other acceptable answers include:

- other dimensions of health and wellbeing, so long as you have adequately linked your chosen dimension to digital technologies that enable knowledge sharing.

- b [The emergency bushfire texts may have promoted health status by potentially allowing individuals to escape the bushfire.¹]
[The texts therefore may have reduced morbidity and mortality levels from the bushfire, by preventing injuries, many of which could be life-threatening.²]

- I have outlined how the emergency bushfire texts may have promoted health status.¹

- I have elaborated on this explanation, with reference to a health status indicator.²

Other acceptable answers include:

- other components of human development or health status indicators, so long as they were appropriately linked to the case study.

- 8 [Economic sustainability ensures that current and future generations have access to financial resources to earn an income and meet financial obligations. For example, having a diverse range of industries ensures that each country receives their national income from multiple sources so that if an industry collapses, they can still rely on an income from other industries.¹][Having a diverse range of industries provides government with the financial resources to invest in their citizens, such as providing healthcare and education resources. This promotes human development by providing citizens with access to resources, such as education and healthcare, expanding their choices by providing a wider range of future employment opportunities.²]

- I have explained economic sustainability, with reference to a consideration.¹

- I have explained how the consideration of economic sustainability could promote human development, with reference to a human development component.²

Other acceptable answers include:

- other considerations of economic sustainability, so long as they were appropriately linked to human development.

- 9 [Environmental sustainability involves ensuring the natural environment is used in a way that meets the needs of the current generation whilst also preserving natural resources for future generations.¹]

- I have described environmental sustainability.¹

- I have used the words 'present' and 'future' to demonstrate that I am talking about sustainability.

[This can increase morbidity levels, with more individuals being exposed to and potentially experiencing the communicable disease, therefore experiencing ill health.²]

- I have described how world trade can negatively influence health status.¹

- I have elaborated my description, with reference to a health status indicator.²

Other acceptable answers include:

- other health status indicators, so long as they were appropriately linked to the global trend of world trade.

- b [World trade can contribute to optimal health and wellbeing as a resource nationally by providing more meaningful employment opportunities, therefore enhancing the amount of money a government can collect from taxation.¹][This can support optimal spiritual health and wellbeing as the government can use the money provided from taxes to fund education, enabling children to have greater opportunities for employment and increasing their sense of hope and purpose, which contributes to society in the future due to more children being available for the workforce.²]

- I have analysed how world trade contributes to optimal health and wellbeing as a resource nationally.¹

- I have elaborated on my analysis, with reference to a health and wellbeing dimension.²

- I have referred to the case study in my response.

Unit 4 AOS1 review

- 1 [One advantage of the Human Development Index (HDI) is that it is more comprehensive measure of human development compared to measures such as Gross National Income (GNI), as it also takes into account non-financial characteristics such as mean years of schooling.¹][One limitation of the HDI is that it does not reflect inequalities of wealth and other outcomes within a country as all measures are calculated and expressed as averages.²]

- I have outlined one advantage of the Human Development Index (HDI).¹

- I have outlined one limitation of the Human Development Index (HDI).²

- 2 a [Ukraine would be classified a middle-income country.¹][This is due to Ukraine having a gross national income (GNI) per capita of \$3,370 USD, which is between the World Bank middle-income threshold of \$1,036 to \$12,535.²]

- I have outlined that Ukraine would be classified as a middle-income country.¹

- I have used data from the table to justify my response, with reference to how a gross national income (GNI) per capita of \$3,370 USD is between the World Bank middle-income threshold of \$1,036 to \$12,535.²

- b [One environmental characteristic of middle-income countries is transitioning towards complete access to sanitation for all citizens.¹]

Questions from multiple chapters

- 10 a [World trade can negatively affect health status as the exchange of goods and services across global borders can facilitate a fast spread of communicable diseases, such as the viral particles of influenza being spread via packages being exchanged between countries.¹]

I have identified one environmental characteristic of middle-income countries.¹

Other acceptable answers include:

- other environmental characteristics of middle-income countries may have been selected.

3 [Sustainability involves meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.¹]

I have described sustainability.¹

I have used the words 'present' and 'future' to demonstrate that I am talking about sustainability.

4 a [Increased tourism due to the Regional Travel Voucher Scheme can improve the economy in regional Victoria, in turn promoting mental health and wellbeing.¹] [This is due to the improved economy leading to more job availabilities and higher incomes for regional residents which can lead to less stress about financial resources, promoting mental health and wellbeing.²]

I have suggested how the travel scheme could promote health and wellbeing.¹

I have elaborated on how this could promote health and wellbeing, with reference to a health and wellbeing dimension.²

b [The Regional Travel Voucher Scheme will stimulate the economy in Regional Victoria which can promote human development by increasing the standard of living, allowing individuals to develop to their full potential.¹] [This is due to stimulation in the economy being likely to provide job opportunities which can increase the standard of living as individuals have greater incomes enabling access to resources such as nutritious foods, allowing them to lead a long and productive life and have greater capabilities to have a high level of health.²]

I have suggested how the travel scheme could promote human development.¹

I have elaborated on how the travel scheme could promote human development, with reference to human development component.²

5 a [Germany would be classified as a high-income country,¹] [whereas Liberia would be classified as a low-income country.²]

I have identified that Germany would be classified as a high-income country.¹

I have identified that Liberia would be classified as a low-income country.²

I have used comparison words, such as 'whereas'.

b [Germany's has an improved health status compared to Liberia.¹] [For example, Germany's life expectancy at birth for both sexes was 81.72 years in 2019, whereas Liberia's was 64.08 years.²]

I have identified that Germany has a higher health status compared to Liberia.¹

I have used life expectancy at birth data to justify my response.²

I have used comparison words in my response, such as 'whereas'.

I have included the correct units of measurement (years).

6 a [Social sustainability involves creating an equitable society that meets the needs of all citizens at the present without compromising the ability to meet these needs for future generations.¹]

I have described social sustainability.¹

b [Social sustainability, such as social support systems, can promote health and wellbeing.¹] [This can occur through the provision of social support systems, such as emergency housing, promoting mental health and wellbeing as individuals will have reduced stress and anxiety associated with their ability to access a safe place to live.²]

I have identified a consideration of social sustainability to outline how social sustainability can promote health and wellbeing.¹

I have elaborated on how this consideration of social sustainability can promote health and wellbeing, with reference to a health and wellbeing dimension.²

c [Inequality and discrimination can occur due to differences among individuals, such as gender, which can lead to unjust treatment and unequal access to resources.¹] [The achievement of social sustainability involves meeting the consideration of gender equality, in which all individuals are treated equally and have the same access to resources and opportunities, regardless of their gender, which would most likely reduce gender discrimination and inequality.²] [This could promote human development by increasing the level of community participation and individual choices and decision making abilities of females, particularly in low-income countries, encouraging all females to lead a long, productive and creative life and reach their full potential.³]

I have described inequality and discrimination.¹

I have explained how the achievement of social sustainability is related to reducing inequality and discrimination, with reference to a consideration of social sustainability.²

I have explained how the achievement of my chosen consideration of social sustainability can promote human development.³

7 [One social characteristic of low-income countries is inadequate access to employment.¹] [Low-income countries often have high population rates and a narrow range of industries, which can result in a lack of job opportunities for the different range of skills available within the population.²] [Another social characteristic of low-income countries is inadequate access to education.³] [Educational resources, such as access to schools, are not always financially accessible in low-income countries, which can result in children who lack access to education having less opportunities for meaningful employment as an adult.⁴]

I have identified one social characteristic of low-income countries.¹

I have described this selected social characteristic of low-income countries.²

I have identified another social characteristic of low-income countries.³

I have described this selected social characteristic of low-income countries.⁴

Other acceptable answers include:

- other social characteristics of low-income countries may have been selected, so long as they were described accurately.

8 [Adequate infrastructure refers to having sufficient infrastructure, such as roads, hospitals, and schools, for the needs of a population that are of a high standard of safety.¹] [High-income countries can often afford the expenses of building and repairing these forms of infrastructure to ensure they can be accessed by the whole population.²]

I have explained adequate infrastructure.¹

I have explained adequate infrastructure as an environmental characteristic of high-income countries.²

9 [Low-income countries often have fewer restrictions on marketing tobacco products, such as cigarettes.¹] [This can result in more of the population smoking cigarettes and dying prematurely from lung cancer, therefore decreasing life expectancy and impairing the health status of low-income countries.²]

I have identified that low-income countries often have fewer restrictions on marketing tobacco products.¹

I have described how the increased marketing of tobacco in low-income countries can impair health status, with reference to a health status indicator.²

Other acceptable answers include:

- other ways in which the global marketing of tobacco can impair health status in low-income countries, so long as they were described accurately.

10 **a** [Female life expectancy is significantly higher in Australia, with a life expectancy at birth in 2019 of 84.1 years.¹] [By contrast, female life expectancy at birth in Zimbabwe is significantly lower, being 63 years in 2019.²]

I have used data to outline female life expectancy at birth in Australia.¹

I have used data to outline female life expectancy at birth in Zimbabwe.²

I have used comparison words in my response such as, 'by contrast'.

I have included the correct units of measurement (years).

b [The maternal mortality rate is significantly lower in Australia, being 6 per 100,000 live births in 2017.¹] [By contrast, the maternal mortality rate in Zimbabwe is significantly higher, being 458 per 100,000 live births in 2017.²]

I have used data to outline the maternal mortality rate in Australia.¹

I have used data to outline the maternal mortality rate in Zimbabwe.²

I have used comparison words in my response such as, 'by contrast'.

I have included the correct units of measurement.

c [The health status indicator which refers to new cases of tuberculosis is incidence.¹]

I have named incidence as the health status indicator which refers to new cases of tuberculosis.¹

11 **a** [Chad is a low-income country.¹]

I have identified that Chad is a low-income country.¹

b [Low-income countries like Chad often have poorer sanitation standards than high-income countries.¹] [This can increase mortality rates from diarrhoeal disease, therefore impairing health status in low-income countries.²]

I have identified that low-income countries like Chad often have poorer sanitation standards than high-income countries.¹

I have described how a lack of sanitation in Chad is likely to impair its health status, with reference to a health status indicator.²

Other acceptable answers include:

- other health status indicators may have been selected, as long as they related to the impact of a lack of sanitation in Chad.

c [Low-income countries like Chad often have more people living in extreme poverty than high-income countries, which is defined by the World Bank as living on less than \$1.90 a day.¹] [This can result in fewer people being able to afford nutritious food, which can result in more people dying prematurely from malnutrition, therefore decreasing life expectancy and impairing health status in low-income countries.²]

I have identified that low-income countries often experience greater levels of poverty than high-income countries.¹

I have described how increased poverty in Chad is likely to impair health status, with reference to a health status indicator.²

Other acceptable answers include:

- other health status indicators may have been selected, as long as they related to the impact of poverty in Chad.

12 [Diversity of industries involves there being a wide range of industries that a country can rely on to provide national income, meaning that if one industry experiences hardship there are other industries to rely on to generate income.¹] [Having a diverse range of industries can therefore ensure a stable national income, which means the government has finances to provide resources for citizens, such as infrastructure like safe roads, in turn reducing road accidents and injuries and promoting physical health and wellbeing.²]

I have explained diversity of industries as a consideration of economic sustainability.¹

I have suggested how diversity of industries could promote health and wellbeing, with reference to a health and wellbeing dimension.²

- 13 Students needed to display that they had a thorough understanding of the question by demonstrating:

- an effectively structured response
- that the stimulus materials had been understood, connected, and synthesised
- that the students own understanding had been used to formulate the response
- that all of the stimulus materials are referenced in the response.

In relation to the analysis of the implications of the global trend of climate change on health and wellbeing, discussion of the following would be awarded:

- Explanation of the global trend of climate change leading to impacts such as rising sea levels, changing weather patterns, and more extreme weather events.
- Description of how these implications of climate change affects health and wellbeing, with reference to specific dimensions of health and wellbeing and reference to the sources provided (source 1 would be particularly relevant to include here).

In relation to the analysis of climate change relating to access to safe water, and how this contributed to health status, discussion of the following would be awarded:

- Explanation of how climate change related to access to safe water, such as explaining that climate change can lead to rising sea levels which can damage water reserves used for drinking, reducing access to safe water.
- The impact of the effect of reduced access to safe water on health status, with specific reference to health status indicators. For example, that less access to safe water could lead to individuals having to drink unsafe water which can lead to diarrhoea among children, contributing to heightened under-5 mortality rates.
- Reference to relevant sources provided (source 2 would be particularly relevant in explaining how a lack of access to safe water can impact health status).

In relation to how climate change management can promote human development, discussion of the following would be awarded:

- Explanation of climate change management and how it can promote human development (source 3 would be particularly relevant here).
- Referring to the initiatives of the Australian Government to demonstrate how climate change management can promote human development.
- Referring to specific components of human development that would be promoted by climate change management. For example, climate change management could lead to a long and productive life due to empowering individuals to make their own choices and decisions. For example, having the freedom to choose where to live due to not being forced to migrate due to the Australian Government's implementation of coastal protection measures and resilient housing which are designed to last through extreme weather events and rising sea levels.

9A Overview of the Sustainable Development Goals (SDGs)

Theory-review questions

- 1 A. True. *The SDGs were designed to address the most significant challenges facing our world, such as climate change and extreme poverty.*
- 2 B. False. *The Sustainable Development Goals not only aim to combat climate change, but also other global challenges such as poverty, inequality and injustice, access to clean water and sanitation.*
- 3 A. True. *To achieve the SDGs, many countries are required to work together to strive towards creating a better world.*
- 4 A. True. *The rationale of the SDGs summarises the reasoning behind the SDGs and why they were established in 2015.*
- 5 A. True. *Once the MDGs came to an end in 2015, a new set of goals were needed. On top of this, a new set of goals were needed to meet new arisen global challenges.*
- 6 A. True. *The objectives of the Sustainable Development Goals refer to the aims and targets of the goals.*
- 7 B. End extreme poverty is an **objective** of the SDGs. *The SDGs are ambitious as they aim to leave no one behind, specifically through striving to end poverty everywhere.*

Skills

Perfect your phrasing

8 B 9 B 10 B

Exam-style questions

- 11 [One reason why the SDGs were developed was to continue to work from the Millennium Development Goals which came to an end in 2015, meaning a new set of goals was needed.¹]

I have identified one reason the SDGs were developed.¹

Other acceptable answers include:

- tackling newly emerging global challenges such as climate change
- addressing inequalities and injustices that continue to exist globally.

- 12 [Fight inequality and injustice is an objective of the SDGs which recognises the inequality and injustice that exists in societies today, such as those that exist between different genders, classes, religions and ethnicities.¹] Furthermore, this objective acknowledges that inequalities and injustices not only damages people's self-worth and self-efficacy, but also stands as a roadblock to the reduction of poverty as well as social and economic development.²]

I have explained what the objective 'fight inequality and injustice' refers to.¹

I have shown a further understanding of the objective by providing a specific example of what this objective considers.²

I have used a connecting word, such as 'furthermore'.

- 13 [The rationale of the SDGs refers to the reasoning or logic behind the establishment of the goals,¹] whereas the objectives refer to the aims or targets of the SDGs.²]

I have outlined what the rationale of the SDGs refers to.¹

I have outlined what the objectives of the SDGs refer to.²

I have used a comparison word such as 'whereas'.

- 14 [Another objective of the SDGs is to 'end extreme poverty'.¹] This objective is important because millions of people around the world live in extreme poverty and ending poverty is integral to ensuring people can afford essential resources to improve their health and wellbeing, such as adequate food and water.²]

I have identified another objective of the SDGs.¹

I have explained why it is important.²

Note: Your response should relate to either 'end extreme poverty' or 'fight inequalities and injustice'. You will not receive marks if you explain the importance of 'address climate change'.

- 15 [Established in 2015 by the UN, the Sustainable Development Goals are a set of 17 goals that were developed to combat numerous global challenges our world is facing today, such as poverty and climate change.¹] The overall aim of the SDGs is to address climate change, fight inequalities and injustice and end extreme poverty.²]

I have explained what the SDGs are.¹

I have outlined the overall aim of the SDGs.²

- 16 [The rationale of the SDGs refers to the reasoning and logic behind the creation of the 17 goals.¹] The rationale includes continuing to work on the Millennium Development Goals (MDGs), which ended in 2015 and did make positive changes but millions of people were still living in extreme poverty and more work needed to be done.²] Another reason was to tackle newly-emerged global challenges such as climate change.³ Finally, another reason behind the SDGs includes addressing the fact that progress from the MDGs was uneven across different countries meaning millions of people had been left behind, more work needed to be done to create a greater, more sustainable future for all.⁴]

I have explained what the rational refers to.¹

I have explained one reason behind the creation of the SDGs.²

I have explained another reason behind the creation of the SDGs.³

I have explained a third reason behind the creation of the SDGs.⁴

Questions from multiple lessons

- 17 a [Sustainability refers to meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.¹]

I have outlined what sustainability means.¹

- b [Environmental sustainability ensures the natural environment is used in a way that serves the current generation whilst also preserving its resources for future generations, such as governments investing in sustainable energy production such as solar and wind energy.¹] This means that we would live in a manner that preserves the planet, which is important to address climate change.²]

I have explained one key aspect of environmental sustainability and included an example at the end.¹

I have explained how this would contribute to the achievement of the SDG objective to 'address climate change'.²

9B Key features of SDG 3

Theory-review questions

- 1 A. True. *SDG 3 focuses on good health and wellbeing.*
- 2 A. SDG 3 aims to promote **physical** and **mental** health and wellbeing. *SDG 3 does not exclusively focus on promoting physical health and wellbeing, but also mental health and wellbeing through its feature of reducing non-communicable diseases, while emotional health and wellbeing is not specifically addressed by SDG 3.*
- 3 A. True. *The 13 key targets are used to outline the specific goals of SDG 3.*
- 4 B. False. *Maternal and child health and wellbeing is not a key target of SDG 3, rather, it is a key feature of SDG 3.*
- 5 I; II; III. *Maternal mortality, under five mortality, and neonatal mortality are all concepts that relate to maternal and child health and wellbeing.*
- 6 B. Communicable diseases refer to **infectious diseases** that are **transmitted** from the environment. *Communicable diseases are infectious diseases which means that they can be spread throughout the environment, unlike non-communicable diseases which cannot be transmitted in the environment.*
- 7 A. True. *As a communicable disease, malaria can be transmitted through the environment.*
- 8 A. True. *'Non-communicable diseases and other causes of poor health' is a key feature of SDG 3.*
- 9 A. True. *A person can develop a non-communicable disease due to their lifestyle choices.*

Skills

Perfect your phrasing

10 A

Data analysis

11 B

12 I; II

13 I; II

Exam-style questions

14 [Communicable diseases refer to infectious diseases that are transmitted through the environment, such as tuberculosis.]¹

I have explained the meaning of communicable diseases.¹

15 [Universal health coverage involves developing and improving healthcare services and strengthening the health system so that all people can access quality and affordable healthcare when they need it, without financial hardship.]¹

I have described universal health coverage.¹

16 [SDG 3 is referred to as good health and wellbeing; ensure healthy lives and promote wellbeing for all at all ages.]¹ [SDG 3 aims to promote physical health and wellbeing as well as mental health and wellbeing. It aims to extend life expectancy through focusing on the major causes of mortality and morbidity in high-, middle-, and low-income countries.]²

I have stated the extended title of SDG 3.¹

I have described in further detail what SDG 3 involves.²

17 [Reduce global maternal mortality.]¹ [End preventable deaths of newborns and children under five, reducing neonatal mortality.]²

I have identified one key target of SDG 3.¹

I have identified another key target of SDG 3.²

18 [SDG 3 aims to reduce deaths from non-communicable diseases by strengthening the prevention and treatment of substance abuse, including drugs and alcohol.]¹ [For example, the focus on prevention will help to reduce the number of individuals unsafely using drugs and alcohol, resulting in lower rates of diseases and illness related to substance abuse, such as liver disease, therefore reducing total deaths.]²

I have provided an example of how SDG 3 addresses non-communicable diseases.¹

I have explained my example with reference to how it reduces deaths from non-communicable diseases.²

I have used a key target of SDG 3 for my example.

19 [A key feature of SDG 3 is non-communicable diseases and other causes of poor health.]¹ [Non-communicable diseases are often long lasting conditions that can arise from a combination of lifestyle, behavioural, genetic, and environmental factors. They cannot be spread throughout the environment. Other causes of poor health include substance abuse and road traffic accidents.]² [Health professionals address non-communicable diseases by focusing on preventative measures, such as educating individuals about how they can eat a healthy diet to avoid obesity and therefore reduce their risk of cardiovascular disease.]³

I have identified a key feature of SDG 3.¹

I have explained my chosen key feature of SDG 3.²

I have provided an example of how health professionals can help make progress in this feature.³

20 [Achieving SDG 3 is important for global health outcomes because it aims to achieve universal health coverage.]¹ [This will allow all individuals to access essential health services and receive necessary treatment for health concerns, therefore reducing global morbidity levels and improving health outcomes on a global scale.]² [SDG 3 is also important for global health outcomes as it aims to reduce deaths from non-communicable diseases.]³ [This means that global mortality will decrease, therefore improving global health outcomes.]⁴

I have identified a reason why achieving SDG 3 is important for global health outcomes.¹

I have explained why this is and linked it to a global health outcome.²

I have identified another reason why achieving SDG 3 is important for global health outcomes.³

I have explained why this is important and linked it to a global health outcome.⁴

I have used the word 'globally' to show that I am talking about global health outcomes.

21 Ending the epidemic of communicable diseases will promote human development by reducing the number of preventable deaths from diseases such as AIDS.¹ This means more individuals will be able to lead long and healthy lives, therefore promoting human development.² Additionally, ending the epidemic of communicable diseases will promote human development by reducing the number of children suffering from diseases such as malaria.³ This means children will have better health and be able to attend school more regularly, which gives them access to knowledge and the ability to reach their full potential, therefore promoting human development.⁴

I have identified a reason why ending the epidemic of communicable diseases will promote human development.¹

I have explained how this reason promotes human development.²

I have identified another reason why ending the epidemic of communicable diseases will promote human development.³

I have explained how this reason promotes human development.⁴

Questions from multiple lessons

22 SDG 3 promotes sustainability by aiming to achieve universal health coverage.¹ This promotes sustainability as it focuses on making healthcare affordable and accessible for everyone, which means it will be available for all in the future.²

I have identified a concept that makes SDG 3 sustainable.¹

I have explained how this concept makes SDG 3 sustainable.²

I have used the word 'future' to show that I am talking about sustainability.

23 SDG 3 may be more difficult to achieve in low-income countries compared to high-income countries because low income countries have less developed health systems compared to high-income countries.¹ This means it will be more challenging to implement goals such as achieving universal health coverage because health systems in low-income countries will struggle significantly more due to a lack of funding, structure, and services in their health system compared to high-income countries.² Another reason why SDG 3 may be more difficult to achieve in low-income countries compared to high-income countries is that low-income countries do not have the same access to safe water and sanitation that high-income countries do.³ This means ending the epidemics of communicable diseases will be much harder in low-income countries compared to high-income countries because clean water, hygiene, and sanitation are crucial in reducing the spread of communicable diseases, such as hepatitis.⁴

I have identified a difference in characteristics of low-income countries compared to high income countries.¹

I have explained how this difference makes it more difficult to achieve SDG 3 in low-income countries compared to high-income countries.²

I have identified another difference in characteristics of low-income countries compared to high income countries.³

I have explained how this difference makes it more difficult to achieve SDG 3 in low-income countries compared to high-income countries.⁴

I have used comparison words such as, 'compared'.

9C The relationship between SDG 3 and other SDGs

Theory-review questions

1 A. True. All of the SDGs are interconnected and work together to achieve a more sustainable future and tackle the world's most pressing issues. SDG 1, 2, 4, 5, 6, and 13 can all be connected to improving health and wellbeing globally.

2 B. False. It is true that the SDGs all aim to achieve a more sustainable future and are working towards common goals, however the SDGs do not all have the same targets. Each SDG aims to tackle a different global issue and subsequently have a range of different targets.

3 B. False. Some of the SDGs focus on tackling gender and income inequality, however not all of the SDGs. There are many other global issues the SDGs address, such as climate change and lack of access to safe drinking water.

4 A. True. Quality education and climate change are two major issues that are addressed in some of the SDGs; two of many issues including poverty, hunger, and gender inequality.

5 A. True. SDG 6 aims to ensure that all people have access to clean water and sanitation. Just like the rest of the SDGs studied, the achievement of SDG 6 helps achieve SDG 3.

6 B. False. Climate change has a major impact on health and wellbeing globally, therefore SDG 13 can be linked to the promotion of health and wellbeing. SDG 13, along with SDG 1, 2, 4, 5, and 6 can all be linked to improving health and wellbeing globally.

7 B. False. The achievement of the SDGs is dependent on different sectors working in collaboration to achieve health related goals.

8 B. False. It is true that SDG 1 aims to end poverty in all its forms everywhere, however it is not true that it is the only SDG that can be linked to human development. SDG 1, 2, 4, 5, 6, and 13 can all be linked to the promotion of human development as there are many different things that impact an individual's human development.

Skills

Perfect your phrasing

9 A

Unpacking the case study

10 B **11** B

Exam-style questions

12 SDG 1 is titled 'No poverty' and aims to end all forms of poverty everywhere.¹ SDG 1 is important because millions of people around the world live in extreme poverty and cannot afford essential resources such as basic healthcare, nutritious foods, and adequate shelter.²

I have outlined what SDG 1 is.¹

I have provided one reason as to why SDG 1 is important.²

13 [SDG 13 aims to address climate change and reduce its impacts, reducing the severity of natural disasters such as wildfires and floods.¹] [Such natural disasters can cause loss of homes, land, and property, causing stress and anxiety.²] [Therefore, addressing SDG 13 is important because of the negative impact climate related disasters can have on mental health and wellbeing across the globe.³]

I have outlined what SDG 13 aims to address, highlighting an issue related to climate change.¹

I have elaborated, giving a reason why it is important to address the climate related issue.²

I have explained how this issue impacts health and wellbeing, with reference to a dimension.³

14 a [SDG 5 'Gender equality'.¹]

I have identified SDG 5.¹

b [It is important to address SDG 5 'Gender equality' because gender inequality is an issue that impacts millions of people around the world and stands in the way of achieving a sustainable, fair future.¹] [SDG 5 is important because it aims to end all forms of violence against women and girls, including human trafficking and sexual exploitation as well as eliminating all harmful practices, such as child, early, and forced marriage and female genital mutilation.²]

I have given one reason why SDG 5 is important.¹

I have further elaborated on why SDG 5 is important, with reference to some of SDG 5's targets to support my answer.²

15 a [SDG 4 is titled 'Quality education'.¹] [SDG 4 aims to ensure that all people everywhere have access to inclusive and high-quality education from primary through to tertiary education, regardless of their age, gender, race, or ability.²]

I have identified what SDG 4 is.¹

I have explained what SDG 4 aims to achieve.²

b [Achieving SDG 4 will mean that all children everywhere have access to high-quality education, which is important in enabling individuals to have employment opportunities and to earn an income.¹] [Additionally, achieving SDG 4 will mean that all disparities in education are eliminated, ensuring equal access for the vulnerable, including persons with disabilities, indigenous peoples, and children. This is important because any barriers that stand in the way of individuals receiving an education will be removed, enabling access for everyone.²]

I have one key aim of SDG 4 and explained why its achievement is important.¹

I have identified another key aim of SDG 4 and explained why its achievement is important.²

c [SDG 4 'Quality education' highlights the importance of all people globally having access to high-quality education from primary school through to tertiary education, enabling them to attain essential skills needed for employment.¹] [When all people, regardless of their gender or socioeconomic status, have access to education, they are likely to have greater health literacy, including the importance of safe

sex practices and hygiene.²] [This reduces the risk of the spread of HIV/AIDS, reducing the spread of communicable diseases, assisting in the achievement of SDG 3 'Good health and wellbeing'.³]

I have identified a key target of SDG 4.¹

I have further elaborated on this key target.²

I have explained how this contributes towards the achievement of SDG 3 by mentioning a specific target of SDG 3.³

16 a [SDG 6 is titled 'Clean water and sanitation', and aims to ensure that all people across the globe have access to safe, clean water and adequate sanitation.¹]

I have explained the aim of SDG 6.¹

b [Achieving SDG 6 is important because, like Sani, many girls around the world do not have access to clean water and sanitation facilities during their menstruation, meaning they struggle to manage their hygiene.¹] [This must be addressed as, because of Sani's insufficient access to water and sanitation, not only is her physical health and wellbeing impacted through lack of hygiene, but her mental health and wellbeing is also negatively impacted as a result of the subsequent stress and embarrassment.²]

I have identified a key issue that SDG 6 addresses.¹

I have explained why it is important that this issue is addressed by explaining the impact this has on Sani, with reference to a dimension of health and wellbeing.²

I have referred to the character's name (Sani), and to the scenario.

Other acceptable answers include:

- you may have also mentioned how Sani's mother or younger brothers have to walk far distances to collect water.

c [If lack of access to clean water and sanitation was addressed for Sani and her family, Sani's mother would not have to walk for two hours a day to collect water for her family.¹] [This would mean that Sani's mother has more time to herself, to possibly work a job to earn an income to afford a decent standard of living, allowing her to enhance her capabilities and work at her full potential, improving her human development.²]

I have identified how addressing lack of access to clean water and sanitation could impact Sani's mother.¹

I have explained how addressing this issue could improve her mother's human development.²

I have referred to the character's name (Sani's mother), and to the scenario.

Other acceptable answers include:

- other ways in which Sani's mother was impacted, so long as your issue is identified as resulting from a lack of access to clean water and sanitation.

d [By ensuring everyone has access to clean, safe drinking water and sanitation, health and wellbeing can be significantly improved through the reduction of the spread of communicable diseases.¹]

[This means that individuals such as Sani who do not have adequate access to clean drinking water and sanitation facilities are less likely to suffer from ill-health related to waterborne diseases such as cholera, improving physical health and wellbeing.²] Addressing SDG 6 'Clean water and sanitation', specifically access to clean water, can also contribute towards the achievement of SDG 4 'Quality education'. A key target of SDG 4 is to remove any barriers vulnerable individuals face in accessing education.³] [When individuals have easy access to safe drinking water, the need to walk far distances is removed, meaning children like Sani's brothers do not face the need to miss school to collect drinking water.⁴] This contributes towards the achievement of SDG 4 as the barrier that stands in the way of Sani's bothers missing school is removed as they no longer are needed to miss school to walk long distances to collect clean drinking water as one of the key targets of SDG 4 is to remove any barriers vulnerable individuals face in accessing education.⁵]

- I have identified one way that health and wellbeing can be improved by addressing lack of access to sanitation.¹
- I have elaborated on my example through explaining how health and wellbeing is improved, with reference to a dimension of health and wellbeing.²
- I have introduced an SDG of my choice and a key target associated with that SDG.³
- I have linked the SDG of my choice and associated key target to access to clean water.⁴
- I have clearly explained this link, identifying how addressing access to clean water helps achieve the key target identified.⁵
- I have referred to the character's name in my response (Sani), and to the scenario

Questions from multiple lessons

- 17 [Low-income countries may find it more challenging to achieve SDG 6 'Clean water and sanitation' because of lack of access to safe water, an environmental characteristic of low-income countries.¹] [Low-income countries have a reduced access to safe water compared to high-income countries that can regularly and easily access safe water.²] Therefore, low-income countries face a greater challenge than high-income countries in achieving universal and equitable access to safe and affordable drinking water for their whole population, a key target of SDG 6.³]

- I have suggested one reason why low income countries may struggle to achieve SDG 6, focusing on a characteristic of low-income countries.¹
- I have compared this with a characteristic of high-income countries.²
- I have linked my chosen reason to the achievement of SDG 6, specifically mentioning a key component of SDG 6.³

9D The priorities and work of the WHO

Theory-review questions

- 1 A. True. *The priorities and the work of the WHO are important for the achievement of the WHO's mission.*
- 2 B. *Although protecting the world from disease epidemics is an important aspect of the WHO's mission, the mission encompasses three aspects, and is not only focused on preventing health emergencies.*
- 3 A. True. *The WHO has three strategic priorities that are each accompanied by a goal to be achieved by 2030. The ambitious goals are referred to as the 'triple billion' goals because each goal aims to improve the health and wellbeing of one billion people.*
- 4 B. False. *Universal health coverage relates to developing and improving developing and improving health systems so that all people can access quality and affordable healthcare when they need it, regardless of their income. It does not involve limiting healthcare services only to those who can afford it.*
- 5 I; II. *Ensuring that there is a sufficient trained health workforce and increasing access to vaccines, medicines and health products are actions that relate to 'achieving universal health coverage.' Implementing early detection and warning systems for natural disasters is an action that works to achieve 'addressing health emergencies.'*
- 6 I; III. *Advocating for increased access to healthcare services is an action that more closely relates to the priority of 'achieving universal health coverage.' It does not directly address health emergencies.*
- 7 B. *By implementing policies that restrict tobacco use in public areas, this reduces tobacco use, and reduces morbidity and mortality from tobacco-related diseases. This works to achieve 'promoting healthier populations.'*
- 8 C. *The WHO does not force governments to adopt WHO health policies. They instead support countries to implement health policies that promote health and wellbeing. They help countries adapt policies to meet their local context.*
- 9 B. False. *The strategic priorities of the WHO are interconnected. Addressing one priority will contribute to progress in the other priorities.*
- 10 A. True. *The WHO addresses their three priorities through their six examples of work. This helps them to achieve their mission and 'triple billion' goals.*

Skills

Unpacking the case study

- 11 B 12 B 13 A

Exam-style questions

- 14 [‘Promoting healthier populations’ relates to efforts towards making people healthier, aiming to enable populations to lead a productive life free from illness. It also includes making progress towards achieving the key targets of SDG 3 through actions such as tackling antimicrobial resistance and improving human capital across the lifespan.¹]
- I have described the priority ‘promoting healthier populations’, with reference to at least one key aspect of the priority.¹
- 15 [Addressing health emergencies.¹]
- I have identified ‘addressing health emergencies’ as the priority reflected in the information.¹
- 16 [Achieving universal health coverage means that all people can access

quality and affordable medicines when they need them without facing financial hardship to treat diseases, such as antiretrovirals to treat HIV.¹] [If all people are able to access the medicines they need when they are sick, regardless of their income, this means that people can recover from illness more quickly and can lead productive and creative lives. If people are healthy enough to work, they can develop to their full professional potential, earn an income, and enjoy a decent standard of living, free from ill health.²]

I have outlined one key aspect of 'achieving universal health coverage'.¹

I have provided an example of how achieving universal health coverage can promote human development.²

- 17 [By providing technical support and helping build sustainable health systems, the WHO works to ensure that all countries have the capacity to deliver quality healthcare that meets the needs of the population, even in times of crisis.¹] [If people are able to access healthcare when they are sick, this means that they can be treated for ill health and recover, meaning they experience minimal illness and injury, promoting physical health and wellbeing.²]

I have explained what is meant by providing technical support and helping build sustainable health systems.¹

I have outlined how this work contributes to good health and wellbeing, with reference to a health and wellbeing dimension.²

- 18 [The WHO conducts and coordinates research and provides health and wellbeing information through the WHO mortality database. This enables health experts to determine what the main causes of death are and whether certain diseases are disproportionately affecting certain groups.¹] [This means that resources can be directed towards where they are most needed to support treatment, research and development and prevention efforts. This means that more people will be protected from dying from these diseases, such as cardiovascular disease, increasing life expectancy.²]

I have explained how the work of the WHO is reflected in the information, with reference to a specific example of work.¹

I have explained how this work contributes to improved health status, with reference to a health status indicator.²

Other acceptable answers include:

- monitor health and wellbeing and assess health and wellbeing trends.

- 19 ['Promoting healthier populations' is a WHO priority reflected in the information above.¹] [This priority involves accelerating action on preventing non-communicable diseases such as cancer and respiratory diseases such as chronic obstructive pulmonary disease.²] [By supporting at least 100 million people to give up tobacco and creating healthier environments that are conducive to quitting, this means that more people will stop smoking and will be less likely to suffer from these non-communicable diseases, which promotes healthier populations.³]

I have identified 'promoting healthier populations' as the WHO priority reflected in the information.¹

I have explained a key aspect of 'promoting healthier populations'.²

I have provided an example from the information that demonstrates this key aspect of 'promoting healthier populations' to justify my choice.³

Other acceptable answers include:

- achieving universal health coverage.

Note: If you identify 'achieving universal health coverage' as the priority reflected in the information, you must justify your response. For example, you could mention how the program works to increase access to tobacco cessation services.

- 20 [The WHO priority, 'promoting healthier populations', could be used to combat the tuberculosis epidemic.¹] [By accelerating the elimination and eradication of tuberculosis (TB), which is a high-impact communicable disease, this would mean that TB mortality rates would decrease. This would mean that people could enjoy better health and wellbeing, particularly those living in low-income countries who are most affected by TB.²] [The priority, 'achieving universal health coverage' could also be used to combat the TB epidemic.³] [By ensuring that there is a sufficient trained health workforce available to deliver antimicrobial drugs to people suffering from TB, this would mean that all people can access the medication and healthcare they need to recover from TB.⁴]

I have identified a WHO priority that could be used to combat the tuberculosis epidemic.¹

I have outlined how this priority could be used to combat the tuberculosis epidemic, with reference to at least one key aspect of the priority.²

I have identified another WHO priority that could be used to combat the tuberculosis epidemic.³

I have outlined how this priority could be used to combat the tuberculosis epidemic, with reference to at least one key aspect of the priority.⁴

In my response, I have referred to the information provided on TB.

Questions from multiple lessons

- 21 a [The WHO priority, 'achieving universal health coverage' is reflected in the WHO Special Intervention for Mental Health.¹] [By increasing access to quality and affordable mental health care in twelve countries, this means that more people will be able to access the health services they need to manage and treat mental health conditions, increasing universal health coverage.²]

I have identified a WHO priority that is reflected in the information.¹

I have used an example from the information to justify how the WHO addresses this priority.²

- b [The WHO creates partnerships with member states and develops mental health policy and legislation to improve the mental health of both individuals and society as a whole.¹] [This contributes to the achievement of SDG 3, as people are able to experience improved mental health and wellbeing and the prevalence of mental health disorders will decrease.²]

I have described how the work of the WHO is evident in the information.¹

I have explained how this work contributes to achieving the key targets of SDG 3 'Good health and wellbeing'.²

Chapter 9 test

- 1** [The rationale of the SDGs refers to the reasoning or logic behind the establishment of the goals,¹ which includes to continue the work of the MDGs, address uneven progress from the MDGs, and tackle newly emerging global challenges.² [The objectives of the SDGs refer to the aims or targets of the SDGs,³ and include ending extreme poverty, fight inequality and injustice, and address climate change.⁴]

I have outlined what the rationale of the SDGs refers to.¹

I have described the rationale of the SDGs.²

I have outlined what the objectives of the SDGs are.³

I have described what the objectives of the SDGs include.⁴

- 2 a** [Achieving universal health coverage means ensuring that all people can access quality and affordable healthcare when they need it without facing financial hardship.¹ [Universal health coverage involves developing and improving health systems so that all people around the world can access quality and affordable healthcare when they need it, such as ensuring all individuals can access and afford essential medicines.²]

I have outlined what is meant by achieving universal health coverage.¹

Using an example, I have elaborated further, explaining what achieving universal health coverage involves.²

- b** [The other two WHO priorities are 'addressing health emergencies' and 'promoting healthier populations'.¹]

I have identified the other two WHO priorities.¹

Note: You should not have identified 'achieving universal health coverage' in your response to **part b** as it was discussed in **part a**. You were asked to identify the other WHO priorities.

- 3 a** [The WHO priority 'addressing health emergencies'¹] is reflected in the information about Ebola in Guinea, as the WHO is supporting the Guinean government in responding via setting up testing centres, medical supplies, and vaccines to quickly contain the outbreak, thus, addressing this health emergency in Guinea.²]

I have identified a WHO priority that is reflected in the information.¹

I have provided an example from the information to justify my choice.²

- b** [The WHO creates partnerships with member states to promote health and wellbeing.¹ [This example of the outbreak of Ebola in Guinea reflects this work as the WHO is supporting the Guinean government in their response to the virus outbreak through supporting the implementation of healthcare services such as vaccines and treatments, helping to achieve SDG 3's key target of reducing the spread of communicable diseases, in this case, Ebola.²]

I have described how the work of the WHO is evident in the information.¹

I have explained how this work contributes to the achievement of SDG 3, with reference to a key target.²

- 4** [This objective is important because millions of people around the world face discrimination, inequalities, and injustices.¹ [Inequalities and injustices not only damage people's sense of self-worth and confidence but also stand as a roadblock to ending poverty as well as social and economic development and therefore it is important to be addressed.²]

I have outlined broadly why this objective is important.¹

I have further elaborated, explaining why inequality and injustice is a major global issue.²

- 5 a** [Maternal and child health and wellbeing is a key feature of SDG 3.¹]

I have identified one key feature of SDG 3.¹

Other acceptable answers could include:

- you may have also identified one of the other two key features of SDG 3: non-communicable diseases and other causes of poor health, and maternal and child health and wellbeing.

- b** [This key feature is about improving the lives of mothers and children around the world and focuses on reducing maternal mortality and ending preventable newborn and child deaths.¹ [Health professionals address maternal and child health and wellbeing through ensuring that more births are assisted by skilled health professionals, thereby reducing the risk of complications during childbirth.²]

I have explained my chosen key feature of SDG 3.¹

I have provided an example of how health professionals can help make progress in this feature.²

- 6** [Achieving universal health coverage means that all people can access quality and affordable healthcare when they need it without facing financial hardship.¹ [If all people, regardless of their income, are able to access healthcare services, more people will receive medical treatment for illness, and more people will be able to afford essential medicines, reducing illness and disease, improving physical health and wellbeing globally.²]

I have outlined what is meant by universal health coverage.¹

I have provided an example of how achieving universal health coverage can improve health and wellbeing, with reference to a health and wellbeing dimension.²

- 7 a** ['Promoting healthier populations' is a WHO priority reflected in the information above.¹ [Through coordinating a global call for action to eliminate cervical cancer, mandating that countries must improve rates of vaccination, screening, and treatments, the WHO is encouraging countries to work to reduce the incidence of cervical cancer in the population. This contributes to a healthier population and reduces rates of morbidity and mortality from cervical cancer.²]

I have identified a WHO priority that is reflected in the information.¹

I have provided an example from the information to justify my choice.²

Other acceptable answers include:

- you may have chosen to address the WHO priority 'achieving universal health coverage', so long as you have justified your response. For example, you could mention how the WHO is encouraging an increase in HPV vaccination rates and screening.

- b** [The WHO develops policies to help countries take action to promote health and wellbeing. This work is evident in the information above as in 2020 the 'Global Strategy for cervical cancer elimination' was adopted at the World Health Assembly, a policy that helps countries take action against cervical cancer, encouraging all countries to reach and maintain an incidence rate of below four per 100,000 women.¹] [Through the implementation of this policy, the WHO is helping countries take action to reduce the incidence of cervical cancer. With less people suffering from this illness, there will be improvements in physical health and wellbeing globally.²]

I have identified one example of the work of the WHO that is evident in the information above.¹

I have explained how this work contributes to improving health and wellbeing globally, with reference to a health and wellbeing dimension.²

- 8 a** [SDG 6 is titled 'Clean water and sanitation'.¹] [SDG 6 aims to ensure that all people across the globe have access to safe, clean drinking water, as well as adequate sanitation, often in the form of toilets.²]

I have identified what SDG 6 is.¹

I have explained what SDG 6 aims to achieve.²

- b** [It is important that SDG 6 is achieved because millions of people around the globe do not have access to either safe drinking water or sanitation facilities, which increases the spread of communicable diseases.¹] [Additionally, it is important SDG 6 is achieved because access to clean water plays a large role in global food production and agricultural productivity, a major source of income for millions of people around the world.²]

I have identified one reason why the achievement of SDG 6 is important.¹

I have identified another reason why the achievement of SDG 6 is important.²

- 9** [SDG 1 'No poverty' aims to ensure that all men and women, in particular the poor and vulnerable, have equal access to basic resources and services, such as healthcare.¹] [When all people can access basic resources and services such as healthcare, and such access is not stopped by the barrier of lack of income or poverty, more people will be able to obtain treatment for non-communicable diseases, such as medicine to treat cardiovascular disease.²] [This contributes towards the achievement of SDG 3 'Good health and wellbeing' as a key target of SDG 3 is to reduce by one third premature mortality from non-communicable diseases through prevention and treatment.³]

I have identified a key target of SDG 1.¹

I have further elaborated on this key target.²

I have explained how this contributes towards the achievement of SDG 3, with reference to a specific target of SDG 3.³

- 10 a** [Addressing health emergencies means preparing and appropriately managing health emergencies, such as epidemics and natural disasters, as well as implementing measures that promote prevention but also improve the ability of countries and people to quickly respond to health emergencies.¹]

I have outlined the meaning of 'addressing health emergencies'.¹

- b** [Addressing health emergencies means that the impact of health emergencies, such as pandemics and natural disasters, is reduced through appropriate planning and implementation of policies.¹] [Through the reduction of the impact of health emergencies, fewer people's lives around the world are impacted from disasters, allowing them to enjoy a decent standard of living and reach their full potential, promoting human development.²]

I have provided an example of what addressing health emergencies involves.¹

I have explained how achieving this example promotes human development can promote human development.²

Questions from multiple chapters

- 11 a** [Sustainability involves meeting the needs of the present generation without compromising the ability of future generations to meet their own needs.¹]

I have explained the meaning of sustainability.¹

- b** [The social dimension of sustainability involves creating an equitable society that meets the needs of all citizens at the present without compromising the ability to meet these needs for future generations.¹] [An example of social sustainability is achieving gender equality.²]

I have explained the social dimension of sustainability.¹

I have identified an example of social sustainability to support my explanation.²

- c** [Social sustainability ensures that all people, both now and into the future, can live in an equitable society that is free of discrimination and inequality based on social categories such as race, class, gender, religion, sexual identity, or ability.¹] [This means that everyone would live in a society that is free from any inequality, which is important to address the SDG objective 'fight inequality and injustice'.²]

I have explained the social dimension of sustainability and provided an example.¹

I have explained how this would contribute to the achievement of the SDG objective to 'fight inequality and injustice'.²

10A Different types of aid

Theory-review questions

- 1** A. True. *Each type of aid has a specific purpose and characteristics. Regardless of this, it is true that all three types of aid have the overarching purpose of helping those in need and improving their health and welfare.*
- 2** I; II; III. *Emergency aid is delivered in the face of a crisis or disaster, with natural disasters, war, and health emergencies all being examples where emergency aid may be provided.*
- 3** I; II. *Characteristics of emergency aid include that it is provided for a short period of time and is provided immediately after a crisis. Aid that is provided for a longer period of time is bilateral or multilateral.*
- 4** B. Bilateral aid involves **two** countries. *Bilateral aid involves two countries, the government of the country providing aid and the government of the country receiving aid.*
- 5** A. *Although multilateral aid is supported by multiple countries and other organisations, it is provided by an international organisation, which acts on behalf of all the member countries and organisations. It is not provided by multiple countries acting independently at the same time. Instead, this would involve a country receiving bilateral aid from multiple sources.*
- 6** B. *High-income countries are more likely to provide aid than low-income countries. This is because high-income countries are more likely to have the financial resources to provide aid to other countries or issues.*

Skills

Data analysis

7 A **8** B **9** I

Exam-style questions

- 10** [Emergency aid refers to short-term aid provided after an emergency or crisis, such as in the face of a natural disaster.¹]
- I have described emergency aid.¹
- 11** [Bilateral aid involves the government of one country directly providing aid to the government of another country,¹ whereas multilateral aid is provided through an international organisation, such as the United Nations, which is supported by the governments of multiple countries and other organisations to address global issues and large scale projects.²]
- I have described bilateral aid.¹
- I have described multilateral aid.²
- I have used comparison words, such as 'whereas'.
- 12** **a** [The type of aid evident in the case study is multilateral aid.¹]
- I have identified multilateral aid as the type of aid that is evident in the case study.¹
- b** [The work of Gavi may improve health status in recipient countries as the vaccines provided to low-income countries reduce preventable deaths occurring.¹ This may improve health status by increasing life expectancy in recipient countries.²]
- I have outlined the work of Gavi.¹

I have suggested how the work of Gavi may improve health status in recipient countries, with reference to a health status indicator.²

Other acceptable answers include:

- other health status indicators, as long as they were relevant to the case study.

13 **Type of aid**

[Bilateral aid.¹]

[Emergency aid.³]

Evidence in case study

[Bilateral aid is evident in the case study as Australia, a high-income country, has provided Indonesia with ongoing aid which addresses long-term goals, such as strengthening education systems and involves providing resources other than basic necessities.²]

[Emergency aid is evident in the case study as Australia provided Indonesia with aid in the form of basic necessities, such as medical equipment, immediately after the natural disaster of a tsunami occurred.⁴]

I have identified bilateral aid as being evident in the case study.¹

I have justified how bilateral aid is evident in the case study.²

I have identified emergency aid as being evident in the case study.³

I have justified how emergency aid is evident in the case study.⁴

- 14** **a** [In the graph referring to Australia's Official Development Assistance (ODA) to GNI ratio, the ODA spending as a proportion of government spending has decreased over time.¹ For example, the ODA to GNI ratio in 1972–1973 was approximately 0.44, and significantly decreased over time to the ODA to GNI ratio in 2020–2021 of approximately 0.22.²]

I have outlined the general direction of the trend.¹

I have referred to at least two points of data in the graph to illustrate the direction of the trend.²

I have provided the context of the graph.

I have included the correct units of measurement (ODA to GNI ratio), ensuring to check the axis titles.

I have used a qualifier, such as 'approximately' when referring to data.

- b** [One type of aid provided by ODA spending of the Australian government is emergency aid.¹ Emergency aid could provide necessities, such as medical equipment to treat injuries from the emergency and prevent them from progressing. This may promote the effective functioning of the body and its systems by helping injured individuals to recover, promoting the physical health and wellbeing of a recipient country.²]

I have identified a type of aid.¹

I have explained how this type of aid could promote the health and wellbeing of the recipient country, with reference to a health and wellbeing dimension.²

Other acceptable answers include:

- other types of aid and other ways in which these types of aid could promote the health and wellbeing of a recipient country.

- 15 a** [The purpose of multilateral aid is to address global issues and large scale projects, such as global warming, war, and food security, and prevent disease and deaths.¹]

I have outlined the purpose of multilateral aid.¹

- b** [A characteristic of multilateral aid is that it addresses large-scale issues, such as global poverty.¹]

I have outlined a characteristic of multilateral aid.¹

Other acceptable answers include:

- other characteristics of multilateral aid.

- c** [Multilateral aid involves aid provided through international organisations, such as addressing global issues. For example, this may involve an international organisation, such as the United Nations aiming to provide a quality education for children in a low-income earning country by providing resources to do so over a 10-year period.¹ As such, multilateral aid can involve providing quality education for all children, which could promote human development by expanding the capabilities and choices of children, such as providing them with more opportunities for meaningful employment in adulthood.²]

I have outlined an example of multilateral aid.¹

I have suggested how this example of multilateral aid could promote human development in the country receiving aid, with reference to a human development component.²

Other acceptable answers include:

- other ways in which multilateral aid could promote human development.

Questions from multiple lessons

- 16 a** [Bilateral aid is the type of aid evident in the case study.¹]

I have identified bilateral aid as the type of aid evident in the case study.¹

- b** [One characteristic of bilateral aid is that it provides resources other than basic necessities, such as financial assistance.¹ This was evident in the case study as Australia provided Kiribati with \$91 million for the Kiribati Education Improvement Program, which aims to ensure all Kiribati children have access to a quality education.²]

I have outlined a characteristic of the type of aid identified in part a.¹

I have explained how this characteristic is present in the case study.²

I have referred to the case study in my response.

- c** [The aid provided by the Australian government to Kiribati could contribute to the achievement of SDG 4 'Quality education'.¹ A target of SDG 4 is that all girls and boys complete free, equitable, and quality primary and secondary education.² This target could be met by the Kiribati Education Improvement Program provided by the Australian government, because this program aims to ensure all girls and boys in Kiribati have access to a quality education, such as by improving literacy and numeracy skills.³]

I have identified an SDG that the aid provided by the Australian government could help to achieve.¹

I have outlined a target of the SDG I chose.²

I have explained how the aid provided by the Australian government could help to meet this target of my chosen SDG.³

Other acceptable answers include:

- other SDGs and other SDG targets, as long as they were relevant to the case study.

10B Australia's aid program

Theory-review questions

- 1** I; II; III. All three options are correct: I is multilateral aid; II is working with the private sector to provide aid; and III is partnering with non-government organisations to give aid.
- 2** B. False. Australia provides aid to the Indo-Pacific region to benefit Australia's national interests while also improving health and wellbeing and human development for countries in the Indo-Pacific region.
- 3** A. Working to increase female representation addresses 'gender equality and empowering women and girls' and hence leads to beneficial health outcomes.
- 4** A. True. Partnerships improve the efficiency and effectiveness of the aid provided, for example, both partnering with the whole government and having bilateral partnerships have high importance in Australia providing aid worldwide.
- 5** I; II. Sewerage and hospitals are physical or organisational structures that are needed for the operation of society, however a forest is not recognised as infrastructure.
- 6** B. The priority area 'agriculture, fisheries and water' focuses on better agricultural and fishing productivity to allow for sustainable sources of food.
- 7** A. True. The private sector helps Australia's aid program reach wider and provide better quality aid.

Skills

Perfect your phrasing

- 8** A **9** A

Unpacking the case study

- 10** A **11** A

Exam-style questions

- 12** [Effective governance: policies, institutions and functioning economies' is the aid priority that is reflected in the statement.¹]

I have identified the priority reflected in the statement provided.¹

- 13** [Australia's aid program's main purpose is to promote our national interests, by contributing to sustainable economic growth and poverty reduction.¹]

I have outlined Australian aid program's purpose.¹

14 [Australia partners with multilateral organisations, such as the United Nations or World Health Organisation (WHO), to extend the reach of the aid Australia wishes to provide.¹] [Additionally, through working with multilateral organisations, resources and services can be combined which may lead to better quality aid that can be provided to more people than what can be provided by Australia alone, and lead to greater human development worldwide.²] [For example, Australia provides funding to the WHO to tackle typhoid in Zimbabwe with a new vaccine campaign.³]

I have discussed why Australia partners with multilateral organisations.¹

I have further discussed why Australia partners with multilateral organisations.²

I have given an example to support my reasoning.³

15 [The Australian Department of Foreign Affairs and Trade (DFAT) works with World Vision Australia to eliminate global poverty and its causes. DFAT contributes to this by investing in the actions that World Vision Australia provides.¹] [For example, to achieve their goal of breaking the poverty cycle, World Vision Australia promotes education by providing knowledge and skills to young women in other countries so they can read and write, or sew and create crafts so that they can earn an income to support themselves and their families.²] [DFAT also partners with Oxfam Australia to promote social justice and fight poverty. DFAT provides manpower and funding for Oxfam to thrive.³] [For example, with the help from DFAT, Oxfam trains health volunteers and provides mobile health clinics to ensure communities worldwide have quality health care.⁴]

I have provided an example of one of Australia's partnerships with a non-government organisation to provide aid.¹

I have explained how Australia works with the non-government organisation I identified to provide aid globally.²

I have provided another example of one of Australia's partnerships with a non-government organisation to provide aid.³

I have explained how Australia works with the non-government organisation I identified to provide aid globally.⁴

16 [The Australian Department of Foreign Affairs and Trade (DFAT) partners with the whole of the government to support economic and welfare development worldwide.¹] [This partnership aims to improve agricultural profit, for example, by working with the Australian Centre for International Agriculture Research to increase productivity and hence profitability.²] [Bilateral partnerships hold high importance in supporting Australia's aid program as they too can extend the reach of the assistance Australia can provide to many low- and middle-income countries globally.³] [For example, Australia works with New Zealand to combine resources and experience, ultimately enhancing the aid they provide to the Pacific region.⁴]

I have discussed the partnership with the whole government in Australia's aid program.¹

I have provided an example to support why the whole of government partnership is important.²

I have discussed bilateral partnerships involved in Australia's aid program.³

I have provided an example to support why the bilateral partnership is important.⁴

17 a ['Infrastructure, trade facilitation and international competitiveness' is a priority area evident in the case study.¹]

I have identified a priority area evident in the case study.¹

Other acceptable answers include:

- other relevant priority areas of Australia's aid program, such as 'effective governance: policies, institutions, and functioning economies'.

b ['Infrastructure, trade facilitation and international competitiveness' is evident in the Aid-for-Trade Initiative. Effective trade increases international competition and therefore improves innovation, design and the application of new technologies to benefit many individuals and communities worldwide, as well as providing employment and an income.¹] [The priority area 'infrastructure, trade facilitation and international competitiveness' is reflected in the initiative through 'mobilising resources to address the trade-related constraints' in low- and middle-income countries.²]

I have described the priority area identified in part a.¹

I have referred to the case study to demonstrate how the priority area is reflected in the initiative.²

c [The Aid for Trade Initiative mobilises resources to improve trade in low- and middle-income countries. By improving these countries' trade, employment opportunities will arise,¹ [therefore people have enhanced choices of employment and can lead productive lives.²] [Improved trade can also increase countries' economic profits which can then fund better hospitals and health care. This means people can be treated to lead long, healthy lives and have the ability to participate in the community.³]

I have used an example from the case study.¹

I have described how the initiative improves human development.²

I have described another way the initiative improves human development.³

18 a [A priority area of Australia's aid program is 'education and health'.¹]

I have provided a priority area of Australia's aid program.¹

Other acceptable answers include:

- other priority areas of Australia's aid program, such as 'agriculture, fisheries and water'.

b ['Education and health'. The Australian Department of Foreign Affairs and Trade (DFAT) contributes funds to schools in low-income countries to assist children in accessing better quality education.¹] [DFAT also trains teachers and develops curriculum and learning programs in low- and middle-income countries for better quality education.²]

I have described how Australia addresses the priority area given in part a.¹

I have provided an additional description of how Australia addresses the priority area given in part a.²

Other acceptable answers include:

- other priority areas of Australia's aid program, such as 'infrastructure, trade facilitation and international competitiveness', and how Australia addresses this priority area, as long as the description aligns with the priority area outlined in **part a**.
- [To address the priority area of 'education and health', by increasing schools' resources to gain better quality education, can lead to better knowledge and skills for employment opportunities. Therefore, people can gain an income and hence not be financially stressed, ultimately improving their mental health and wellbeing.¹] [Similarly, this income can lead to people being able to afford adequate food, ensuring they are not malnourished and ultimately establishing efficient functioning of body systems, thereby increasing physical health and wellbeing.²] [Focusing on improving health, by providing medical training to locals, can lead to people being able to live to their full potential to lead productive and creative lives, as they have easy access to medical help.³] [Furthermore, having access to medical help, for example mobile health vans in regional areas, can ensure people are receiving care so they have the ability to participate in the life of their community.⁴]

- I have discussed one way that the priority area in **part a** improves one health and wellbeing dimension.¹
-
- I have discussed another way that the priority area in **part a** improves another health and wellbeing dimension.²
-
- I have discussed one way that the priority area in **part a** improves one element of human development.³
-
- I have discussed another way that the priority area in **part a** improves another element of human development.⁴

Questions from multiple lessons

- 19 [Australia's aid program working in line with the priority area 'agriculture, fisheries and water' promotes sustainable development.¹] [DFAT helps to maintain the diversity of crops to protect against crop failure and hence improve agricultural growth.²] [This is done by minimising the amount of environmental harm humans can create, such as tobacco farming, as this leads to damaging the land preventing further use of the soil for crops in the future.³] [Therefore, providing aid to countries that promotes agricultural growth for the current generation to meet their own needs, without also compromising the ability of future generations to meet their needs in relation to crop production, ultimately promotes environmental sustainability.⁴]

-
- I have stated the name of a priority area that contributes to sustainability.¹
-
- I have described Australia's work for this priority area.²
-
- I have provided an example of the priority area.³
-
- I have linked Australia's work in this priority area to promote environmental sustainability.⁴

10C The role of non-government organisations

Theory-review questions

- 1 III. Non-government organisations, as stated in their name, work separately from the government and are voluntary corporations.

- 2 B. False. Non-government organisations mainly provide aid internationally to low- and middle-income countries; however, may also provide assistance within their own country.
- 3 I. World Vision is a non-government organisation that aims to eliminate poverty and fight injustice worldwide, whereas Medicare is the universal health insurance scheme for Australia, and the local police forces work under the Australian Government to keep communities safe.
- 4 B. False. The main role of the Australian Red Cross is to improve the lives of the vulnerable by working towards giving them a better quality of life.
- 5 A. True. Humanitarian assistance is one way that non-government organisations work towards a healthier and safer environment for the global population, as short-term aid is necessary to help communities recover from disasters or crises.
- 6 A. True. The main target for World Vision's aid is children as they are the future of the population; therefore, helping to improve their lives may lead to better quality of life for future generations.
- 7 A. True. By partnering with the government, non-government organisations can increase the effectiveness of the aid they provide.
- 8 A. True. The main goal of non-government organisations (NGOs) is to improve the health and wellbeing, and human development of all people across the globe.

Skills

Unpacking the case study

9 B 10 A 11 A

Exam-style questions

- 12 [Non-government organisations (NGOs) have high expertise and knowledge about poverty reduction and work with trained professionals to provide a powerful change towards development.¹] [These factors contribute to NGOs delivering enhanced aid as they have greater understanding about the type and depth of aid communities require, therefore NGOs are important in providing informed and engaged aid.²]

- I have described aid provided by non-government organisations.¹
-
- I have described why this is important.²

- 13 [World Vision Australia is a non-government organisation that¹ aims to eliminate poverty and injustice and remove the causes of these inequalities. World Vision works towards improving the lives of all people, for a safer and happier world.²]

- I have identified a non-government organisation.¹
-
- I have described the role of this non-government organisation.²

Other acceptable answers include:

- the role of other non-government organisations.

- 14 [A non-government organisation, such as the Australian Red Cross, may provide aid to low-income countries.¹] [The Australian Red Cross improves the lives of low-income communities through resource and service delivery and provides aid focusing on the promotion of humanitarian laws and values.²]

- I have identified a non-government organisation that provides aid to low-income countries.¹
-
- I have described the non-government organisation.²

Other acceptable answers include:

- other non-government organisations that provide aid to low-income countries, so long as they are adequately described.

- 15** [Australians may donate money to a non-government organisation, such as the Australian Red Cross, which will go towards initiatives like teaching the vulnerable about the importance of clean drinking water and sanitation facilities.¹] The skills and knowledge about hygiene and clean water will help maintain efficient functioning of body systems as the population are less likely to attract a disease, or example cholera, due to unsafe water consumption, therefore improving physical health and wellbeing globally.²] Another example of an action Australians may engage in is becoming a volunteer for a non-government organisation, such as the Australian Red Cross. This may involve working towards building female toilets at schools with appropriate sanitary resources.³] As a result, girls in these schools are more likely to want to attend school which can lead to them developing meaningful and satisfying relationships, ultimately improving social health and wellbeing globally.⁴]

I have explained one example of how Australian individuals can engage with non-government organisations.¹

I have explained how this example improves health and wellbeing in a global context, with reference to a health and wellbeing dimension.²

I have explained another example of how Australian individuals can engage with non-government organisations.³

I have explained how this example improves health and wellbeing in a global context, with reference to a health and wellbeing dimension.⁴

- 16** [World Vision supports people in training locals in agricultural practices and resource management that are natural, to increase crop yield; therefore, these people can gain higher profits from their crops and ultimately increase their income.¹] A higher income may lead to decreased financial stress, therefore improving mental health and wellbeing.²] World Vision also provides children and young adults with training and employment opportunities,³] which may increase their ability to gain an income. This can generate a more decent standard of living and reduce the cycle of poverty, therefore improving human development.⁴]

I have selected an action World Vision takes that can improve health and wellbeing.¹

I have outlined how the action improves health and wellbeing, with reference to a health and wellbeing dimension.²

I have selected a different action that World Vision takes that can improve human development.³

I have outlined how the action improves human development, with reference to a human development component.⁴

- 17** [CARE Australia supports families in need by supplying them with 'money-making activities' which can lead to mothers gaining an income.¹] In turn, this income can increase their family's access to resources for a decent standard of living and enables them to live according to their needs, hence improving human development.²] CARE Australia also increases communities' 'access to health services' which may decrease the likelihood of premature death from treatable disease, such as the influenza virus.³] Therefore, people are more likely to develop to their full potential and lead long, healthy and productive lives, ultimately improving human development.⁴]

I have used an example from the case study that works towards improving human development.¹

I have elaborated on how the NGO example could promote human development, with reference to a human development component.²

I have used another example from the case study that works towards improving human development.³

I have elaborated on how the NGO example could promote human development, with reference to a human development component.⁴

- 18 a** [Oxfam Australia is a non-government organisation.¹]

I have identified a non-government organisation that provides aid.¹

b [Oxfam Australia ensures children get fair pay for their work and attempts to ensure that there is no exploitation of children in low- and middle-income countries.¹] Looking out for these children can lead to them having a strong sense of belonging to their community and a sense of purpose in their workplace, hence improving their spiritual health and wellbeing.²]

I have given an example of how the organisation identified in **part a** works.¹

I have explained how this example promotes health and wellbeing, with reference to a health and wellbeing dimension.²

c [Oxfam Australia works with communities to build kindergartens to promote the necessity of early education.¹] Early education can ensure children have expanded choices and capabilities as they have skills and access to knowledge to make decisions that affect their lives, such as participating in the community. Therefore, this improves human development.²]

I have given an example of how the organisation identified in **part a** works.¹

I have explained how this example promotes human development, with reference to a human development component.²

Questions from multiple lessons

- 19** [Oxfam Australia supports women's rights and therefore is empowering women in low-income countries to become leaders and gain equal participation in political practices.¹] Hence, they are able to help achieve the Sustainable Development Goal 5 'Gender Equality' by adopting policies and legislation to support gender equality and the empowerment of women.²]

I have identified a non-government organisation and described an example of the aid it provides.¹

I have described how the aid achieves a Sustainable Development Goal (SDG), with reference to a key target of this SDG.²

10D Effective aid programs that address the SDGs

Theory-review questions

- 1** B. False. Although the four features of effective aid programs can be used to evaluate the effectiveness of aid programs, they are not the only way to evaluate aid programs. The ability to promote health and wellbeing and human development, as well as other measures, can also be used to evaluate the effectiveness of aid programs.
- 2** I; II. Ensuring all information is shared with all stakeholders and that they are all on the same page with deadlines are involved in transparent programs. However, ensuring that all stakeholders equally share responsibility is not involved in transparent programs as it does not relate to sharing information openly.
- 3** B. To meet the feature of partnerships aid programs need to have strong partnerships which are built on trust and respect. If an aid program had one partnership but it was a weak relationship with lots of conflict between the stakeholders and a refusal to cooperate, the feature of partnerships would not be met.
- 4** I; II. Aid programs need to have a focus on results to analyse whether the steps they are taking are actually making a difference and meeting the outcomes and purpose that has been set out. However, it is not an intelligence test that analyses whether people implementing the program understand data.
- 5** A. The features of effective aid programs can be related and overlap. For example, a focus on results involves considering how the government of the recipient country can eventually run the program independently without assistance. This therefore links to the feature of ownership by the recipient country.

Skills

Data analysis

6 B **7** II; III

Unpacking the case study

8 B **9** A

Exam-style questions

- 10** ['Ownership by the recipient countries' in Latin America and the Caribbean (LAC) is a feature of effective aid programs evident in the school feeding program as the countries are involved in implementing the program.¹] This is evident as the governments of the recipient countries in LAC have implemented national policies to ensure that the WFP's school feeding program is implemented in an ongoing manner, therefore being successful as it addresses its purpose of ensuring that school children have access to meals.²

I have identified one feature of effective aid programs that is evident in the case study.¹

I have described how this feature could contribute to the program's success.²

I have referred to the case study in my response.

- 11** a [The Water Project program promotes mental health and wellbeing by providing the children at the DEC Kitonki Primary School with access to clean water via a water well.¹] This promotes mental health and wellbeing as it reduces stress and anxiety levels in children about finding water each day and the possibility that this search could lead to danger, such as injuries.²

I have explained how the aid program contributes to promoting health and wellbeing, with reference to a dimension of health and wellbeing.¹

I have elaborated on this description, with reference to a component of the health and wellbeing dimension.²

Other acceptable answers include:

- other health and wellbeing dimensions that the aid program promotes, so long as adequately explained.

- b** [The Water Project program promotes human development by providing students at the DEC Kitonki Primary School with access to clean and accessible water by repairing the water well.¹] [This promotes human development by enhancing hydration which contributes to greater levels of energy. Children can therefore lead a long, healthy, and productive life and may be better able to participate in school, enhancing their capabilities.²]

I have identified information from the case study to explain how the aid program promotes human development.¹

I have explained how the aid program promotes human development, with reference to a human development component.²

I have referred to the case study in my response.

Other acceptable answers include:

- other ways in which the aid program could promote human development, so long as adequately explained.

- 12** a [By aiming to end violence against women in Papua New Guinea, Oxfam Australia's program addresses SDG 5 'Gender equality'.¹] [This is because the program not only helps women escape from violent situations, but also provides sessions for boys and men about providing safe environments for women, addressing the target to end all forms of violence against women and girls, including human trafficking and sexual exploitation.²]

I have identified one sustainable development goal (SDG) that the aid program addresses.¹

I have explained how the aid program addresses this SDG.²

Other acceptable answers include:

- other SDGs, so long as they were adequately explained.

- b** [The Oxfam Australia program to end violence against women in Papua New Guinea promotes human development by helping women to escape violent situations.¹] [This promotes human development by providing these women with access to freedom away from violence, and expanding their choices so that they can choose how to lead a new life away from violence.²]

I have identified information from the case study to explain how the aid program promotes human development.¹

I have explained how the aid program promotes human development, with reference to a human development component.²

I have referred to the case study in my response.

Other acceptable answers include:

- other ways in which the aid program could promote human development, so long as adequately explained.
- c [Oxfam Australia's program to end violence against women in Papua New Guinea addresses the feature of effective aid programs of 'partnerships'.¹] This was seen in the case study as Oxfam Australia works with 11 organisations to help implement their program, indicating that these organisations are working towards the same goal as Oxfam Australia to end violence against women.²

I have identified a feature of effective aid programs that was addressed by the aid program.¹

I have explained how the aid program addressed this feature of effective aid programs.²

I have referred to the case study in my response.

- 13 The World Food Programme's school feeding program is an aid program which addresses the SDGs.

Other acceptable answers include:

- other aid programs that address the SDGs, such as The Water Project.

Note: you are not awarded a mark for identifying an aid program which addresses the SDGs.

- a [The purpose of WFP's school feeding program is to ensure that all school children have access to meals so that they are better able to concentrate and function in their everyday life.¹]

I have outlined the purpose of my chosen aid program.¹

- b [To implement the school feeding program, the WFP provides funding to schools or to the government of the recipient country which is then passed on to local food merchants who provide food for school children.¹] Additionally, the program provides children with snacks and take-home rations to their families.²

I have described a detail of implementation of my chosen aid program.¹

I have elaborated on my description and provided an additional detail relating to the implementation of my chosen aid program.²

- c [By focusing on providing school children meals, the school feeding program addresses SDG 2 'Zero hunger'.¹] This is because the program focuses on ensuring that the school children have access to nutritious meals, addressing the target to end hunger and ensure all people have access to safe, nutritious, and sufficient food all year round.²

I have identified one sustainable development goal (SDG) that my chosen aid program addresses.¹

I have explained how my chosen aid program addresses this SDG.²

Other acceptable answers include:

- other SDGs that your chosen aid program addresses, so long as adequately explained.

- d [The school feeding program promotes physical health and wellbeing by providing children with access to nutritious foods.¹] This promotes physical health and wellbeing as access to nutritious and sufficient food reduces the likelihood of conditions, such as malnutrition

occurring and supports immune system functioning, enhancing the likelihood that individuals can physically function optimally.²

I have described how my chosen aid program promotes health and wellbeing, with reference to a dimension of health and wellbeing.¹

I have elaborated on this description, with reference to a component of the health and wellbeing dimension.²

Other acceptable answers include:

- other health and wellbeing dimensions that your chosen aid program promotes, so long as adequately explained.

- e [One partnership of the school feeding program is the agricultural sector in the regions receiving aid, as the program provides them with financial compensation in return for food for the school meals.¹]

I have identified one partnership of my chosen aid program.¹

Other acceptable answers include:

- other partnerships of your chosen aid program.

Questions from multiple lessons

- 14 a [Culture is a challenge in bringing about dietary change that the WFP's school feeding program addressed.¹] The school feeding program addressed this by considering what food is culturally appropriate and would be accepted by students by the ingredients and preparation methods aligning with food practices that are appropriate for the cultural group being assisted.²

I have identified a challenge in bringing about dietary change that the aid program addressed.¹

I have explained how the aid program addressed this challenge.²

Other acceptable answers include:

- geographical location and food security
- income and food security
- other challenges in bringing about dietary change, so long as they were addressed by the aid program.

- b [The WFP's school feeding program addresses the feature of effective aid programs of 'partnerships'.¹] This was seen in the case study as the WFP consulted the governments of recipient countries, and their respective national nutrition guidelines to ensure that the implementation of the program was effective and appropriate.²

I have identified a feature of effective aid programs that was addressed by the aid program.¹

I have explained how the aid program addressed this feature of effective aid programs.²

Other acceptable answers include:

- ownership by recipient country, so long as adequately explained.

- 15 a [The type of aid evident in the case study is multilateral aid.¹]

I have identified multilateral aid as the type of aid evident in the case study.¹

- b [The school feeding program could promote economic sustainability as the aid program's return in funding enhances the likelihood that

individuals can earn an income in the future by providing them with an education, without compromising the ability for individuals to currently access financial resources.¹² This can be achieved as encouraging children to go to school enhances their likelihood of attaining meaningful employment in adulthood due to their qualifications, allowing them to earn an income and contribute to the economic growth of their country.²

I have explained how the aid program could promote economic sustainability.¹

I have justified my response by referring to a consideration of economic sustainability.²

- c [Overall, the school feeding program is effective due to its focus on results.¹² This is evident as the school feeding program has tracked the number of governments that have implemented legislations for the program to be run nationally after assistance from the WFP. For example, the number of children receiving meals at school in low-income countries growing by 36% between 2013 and 2020 due to this action.²]

I have referred to a feature of effective aid programs to evaluate the effectiveness of the aid program.¹

I have evaluated the effectiveness of the program by explaining how the aid program addressed this feature of effective aid programs.²

Other acceptable answers include:

- ownership by recipient country and partnerships, so long as adequately explained.

10E Taking social action

Theory-review questions

- 1 A. Social action often attempts to have a **positive** effect on global issues, such as climate change. *Social actions often surround actions that can be taken to eradicate injustice and inequalities, ultimately working towards a better future.*
- 2 B. False. *Social action can be taken in many different forms. Protests are the typical image of social action; however, action could be as small as signing petitions.*
- 3 I; II; III. *Utilising purchasing power, signing petitions, and participating in protests are forms of social actions that strive for change.*
- 4 A. True. *Advocating change for world issues, such as climate change, is a form of social action as it spreads awareness and has the capacity to prompt others to create change.*
- 5 B. False. *Although boycotting does include restricting yourself from purchasing goods that support corrupt businesses, it also includes striking from participation and specific behaviours, such as not going to work when fighting for better work conditions.*

Skills

Unpacking the case study

6 B 7 A 8 A 9 B

Exam-style questions

- 10 [Two examples of social action are petitions¹ and protests.²]

I have identified one example of social action.¹

I have identified another example of social action.²

Other acceptable answers include:

- donating
- campaigning
- volunteering
- other examples of social action.

- 11 [An example of social action an individual can take to address poverty is donating to non-government organisations, such as St Vincent de Paul Society.¹ The donation would be put towards providing resources to those in need, such as education and food, therefore increasing people's capacity to break the poverty cycle and reducing rates of poverty.²]

I have identified an aspect of social action evident in the St Vincent de Paul program.¹

I have justified how this aspect of social action could address poverty.²

Other acceptable answers include:

- fundraising
- campaigning
- volunteering
- other examples of social action that could address poverty.

Note: Your response must link to poverty, not the impacts of poverty. For example, it would not be enough to discuss how providing shelter could help those in poverty, as this does not directly address poverty itself.

- 12 [Volunteering, as a form of social action, involves individuals giving up their time to support an organisation or cause that they are passionate about.¹ Volunteers could help out at a soup kitchen, providing hot meals to people that cannot provide for themselves. A warm and nutritious meal can strengthen the immune system, preventing people from getting sick, therefore promoting physical health and wellbeing.²]

I have described an aspect of social action.¹

I have explained how volunteering can promote health and wellbeing, with reference to a health and wellbeing dimension.²

- 13 [An individual could take social action by educating and advocating for mental health through the use of social media platforms, such as Twitter, to share information surrounding mental health.¹ This may include providing information about help centres, alongside spreading awareness and educating followers.² Therefore, people are more aware of mental illness in society and understand how to manage and support those in need.³]

I have identified a form of social action.¹

I have outlined how this form of action can be used.²

I have justified how this form of social action will address mental illness.³

Other acceptable answers include:

- donating
- campaigning
- volunteering

- other forms of social action that could be taken to address mental illness.
- 14** [An individual could participate in the non-government organised School Strike 4 Climate, protesting for action against climate change.¹] [Protesting involves a mass gathering to express the disapproval of a certain cause, aiming to rally support and capture the attention of major stakeholders.²] [The School Strike 4 Climate aims to obtain the attention of the Government, driving them to implement change towards reducing the impacts of climate change, such as increasing the contribution of renewable energy.³]
- I have identified a form of social action evident in the information provided.¹
- I have explained the form of social action I identified.²
- I have justified how this aspect of social action could address climate change.³
- Other acceptable answers include:
- signing petitions
 - utilising purchasing power
 - campaigning
 - other forms of social action that could be taken to address climate change.
- 15** [An individual could advocate against unfair trade by signing petitions that promote safety and quality of work environments.¹] [This would result in a decline of work-related injury and illness due to improvements to workplace conditions, therefore strengthening physical health and wellbeing.²] [Individuals also could take social action by volunteering as a disability support worker.³] [This would promote communication and social skills for individuals living with a disability due to regular interactions and comfort in relationships with volunteers, promoting social health and wellbeing.⁴]
- I have identified an aspect of social action.¹
- I have described how this aspect of social action could promote physical health and wellbeing.²
- I have identified another aspect of social action.³
- I have described how this aspect of social action could promote social health and wellbeing.⁴
- Other acceptable answers include:
- protesting
 - boycotting
 - donating
 - other forms of social action that could be taken to promote physical and social health and wellbeing.
- 16** [An individual could partake in an organised protest, such as the Black Lives Matter protests, that advocate for the rights of African Americans, as referenced in the case study.¹] [This emphasises the injustice to those that are unaware, alongside appealing to governing parties to implement systemic change.²] [Individuals can also advocate for equal rights on social media platforms, such as Facebook and Instagram.³] [By sharing information, such as methods to contribute to the movement and stories of discrimination, more people are made aware of the injustice, therefore rallying greater support to induce change and address the discrimination.⁴]
- I have described an aspect of social action evident in the information provided.¹
- I have justified how this aspect of social action could address discrimination.²
- I have described another aspect of social action evident in the information provided.³
- I have described how this aspect of social action could address discrimination using the information required.⁴
- Other acceptable answers include:
- campaigning
 - boycotting
 - volunteering
 - other forms of social action that could be taken to address discrimination.
- Questions from multiple lessons**
- 17** [To address underconsumption of fruit and vegetables, individuals could utilise social media to educate and advocate the recommended serving of fruit and vegetables per day.¹] [Individuals can share information surrounding the implications of under consuming fruit and vegetables and highlight the benefits this food group has on health and wellbeing.²] [If people are more educated on this, they are more likely to consume the recommended servings of fruit and vegetables per day. This will lead to a higher intake of antioxidants and therefore reduce the impact of free radicals on the body, reducing the prevalence of illness associated with cancer and improving physical health and wellbeing.³]
- I have identified an example of social action evident in the information provided.¹
- I have explained how this aspect of social action is used to address underconsumption of fruit and vegetables.²
- I have explained how this social change will promote health and wellbeing, with reference to a dimension.³
- Other acceptable answers include:
- donating
 - volunteering
 - campaigning
 - other forms of social action that could be taken to address underconsumption of fruit and vegetables.
- ## Chapter 10 test
- 1** [Protests are one example of social action.¹] [Protests are public gatherings where people aim to raise awareness about an issue or injustice in society so that action can be taken, such as action by the government.²]
- I have identified one example of social action.¹
- I have described my chosen example of social action.²
- Other acceptable answers include:
- donating
 - purchasing power
 - volunteering
 - other examples of social action.

2 a [The type of aid in the program is bilateral aid.¹]

- I have identified bilateral aid as the type of aid evident in the program.¹

b [The purpose of bilateral aid is to improve health status and health and wellbeing and meet the needs of individuals in the recipient country in an ongoing and sustainable way.¹]

- I have outlined the purpose of the type of aid identified in part a.¹

c [One Australian Government aid priority which is evident in the case study is 'agriculture, fisheries and water'.¹]

- I have identified one Australian government aid priority which is evident in the case study.¹

Other acceptable answers include:

- other Australian Government aid priorities evident in the case study, such as gender equality and empowering women and girls.

d [The Australian Government aid program priority 'agriculture, fisheries and water' is evident in the case study. The priority involves ensuring that water and energy reserves, agriculture, and fishery processes are protected and conserved for current and future generations, and provides resources which are safe to use and contributes to economic growth.¹] [The priority area is therefore reflected in the Water for Women program as it involves implementing projects to enhance access to clean water in communities.²]

- I have explained the priority area identified in part c.¹

- I have referred to the case study to demonstrate how the priority area is reflected in the program.²

3 [Private sector partnerships is the type of Australian aid partnership reflected in the statement.¹]

a [Using purchasing power is a form of social action which could be used to address poor sanitation in low-income countries.¹]

- [For example, individuals can purchase toilet paper from Who Gives a Crap, where 50% of the profits is used to improve sanitation in low-income countries, such as by building toilets.²]

- I have identified a type of social action which could be used to address poor sanitation in low-income countries.¹

- I have used information from the case study to outline how my chosen type of social action could address poor sanitation in low-income countries.²

- I have referred to the case study in my response.

b [Who Gives a Crap could improve health and wellbeing by improving sanitation in low-income countries through providing toilets.¹]

[By providing toilets, Who Gives a Crap could promote physical health and wellbeing by minimising the experience of diseases due to poor sanitation, such as diarrhoeal diseases, supporting effective

functioning of the body and its systems.²]

- I have explained how Who Gives a Crap could promote health and wellbeing in low-income countries by referring to their work.¹

- I have explained how the work of Who Gives a Crap could promote health and wellbeing, with reference to a health and wellbeing dimension.²

- I have referred to the case study in my response.

5 a [The Water Project (TWP) program addresses SDG 6 'Clean water and sanitation'.¹] [This is because TWP program provide communities with facilities, such as water wells, as well as hygiene and sanitation training, which addresses the SDG 6 key target to achieve universal and equitable access to safe and affordable drinking water for all.²]

- I have identified one sustainable development goal (SDG) that the aid program addresses.¹

- I have outlined how the aid program addresses this SDG.²

Other acceptable answers include:

- other SDGs that the aid program addresses, so long as adequately explained.

b [The Water Project program addresses the feature of effective aid programs of 'focus on results'.¹] [This is evident as The Water Project program regularly evaluates the effectiveness of its program by continuously collecting information about its impact, such as measuring that they provided almost 500,000 people with access to clean water in 2018.²]

- I have identified a feature of effective aid programs that was addressed by The Water Project program.¹

- I have used information from the case study to explain how The Water Project program addresses this feature of effective aid programs.²

Other acceptable answers include:

- other features of effective aid programs that are evident in The Water Project program, so long as adequately explained.

6 a [Through the Australian Government working with non-government organisations (NGOs), they can ensure that the needs of the most vulnerable communities are met and increase the likelihood of the objectives of Australia's aid program being met as NGOs are usually able to work more closely with communities.¹] [For example, by working with the NGO Oxfam Australia, the Australian Government can fight poverty in low-income countries, through, for example, providing vulnerable communities with kindergartens to provide children with a greater and more fulfilling future, which can break the cycle of poverty.²]

- I have explained the benefits of the Australian government working with non-government organisations.¹

- I have used information from the case study to support my explanation.²

b [The work of Oxfam Australia could promote human development in low-income countries by promoting social justice and fighting

poverty, such as by building community kindergartens.¹ This could promote human development by providing the children in these communities with access to an early education which could expand their choices for meaningful employment as an adult and help to break the poverty cycle.²

- I have used information from the case study to suggest how Oxfam Australia could promote human development.¹
- I have suggested how Oxfam Australia could promote human development, with reference to a human development component.²
- I have referred to the case study in my response.

Other acceptable answers include:

- other ways in which Oxfam Australia could promote human development, so long as adequately explained.

- 7 a** [A type of aid provided by the United Nations High Commissioner for Refugees (UNHCR) is multilateral aid.¹ This is evident as the UNHCR is run by the United Nations, an international organisation with 193 member states and addresses the large-scale issue of protecting refugees.²]

- I have identified a type of aid provided by the United Nations High Commissioner for Refugees (UNHCR).¹
- I have used information from the case study to justify my response.²

Other acceptable answers include:

- emergency aid, as long as using appropriate information from the case study, such as providing necessary resources, such as shelter and food, in the face of disaster.

Note: although bilateral aid was demonstrated by the Australian Government's direct aid to Afghanistan, only emergency and multilateral aid would be accepted as correct responses. This is because the question specifically asked you to identify a type of aid provided by the United Nations High Commissioner for Refugees (UNHCR), as shown in the case study.

- b** [In the graph referring to Australian Government funding provided to Afghanistan, the amount of funding provided has increased over time (between 2001-2002 and 2012-2013).¹ [For example, in 2001-2002 approximately \$27 million was provided to Afghanistan, which significantly increased to approximately \$200 million being provided in 2012-2013.²]

- I have outlined the general direction of the trend.¹
- I have referred to at least two points of data in the graph to illustrate the direction of the trend.²
- I have provided the context of the graph.
- I have included the correct units of measurement (dollars), ensuring to check the axis titles.
- I have used a qualifier, such as 'approximately' when referring to data.

- c** [The priority of Australia's aid program outlined in the case study is 'building resilience: humanitarian assistance, disaster risk-reduction, and social protection'.¹]

- I have identified the priority of Australia's aid program outlined in the case study.¹

Questions from multiple chapters

- 8 a** [The work of The Water Project (TWP) program could promote human development in recipient countries by working to provide access to clean water and sanitation, such as through sanitation and hygiene community training sessions.¹ This could promote human development by providing community members with access to knowledge and skills that they could use to implement safe hygiene practices, leading to a long, healthy, and productive life where they are able to participate in the community in a safe way which minimises their likelihood of experiencing poor negative health, such as suffering from ill health caused by waterborne diseases.²]

- I have used information from the case study to suggest how TWP program could promote human development.¹
- I have explained how TWP program could promote human development, with reference to a human development component.²

- I have referred to the case study in my response.

Other acceptable answers include:

- other ways in which TWP program could promote human development, so long as adequately explained.

- b** [The Water Project (TWP) program addresses the principle of the social model of health to 'involve intersectoral collaboration'.¹ This is evident as TWP program involves working with multiple stakeholders in public and private sectors to work towards the goal of improving access to clean water and sanitation in recipient countries. This includes collaboration between the government of recipient countries (public sector) and organisations, such as private business, to provide resources (private sector).² [TWP program also addresses the principle of the social model of health which 'empowers individuals and communities'.³] This is evident as TWP provides community training sessions on sanitation and hygiene to empower individuals to recognise their role in and have the knowledge and skills to promote their health, such as empowering individuals to minimise the risk of spreading communicable diseases through good sanitation and hygiene practices, reducing the spread of waterborne diseases.⁴]

- I have identified one principle of the social model of health that is evident in TWP program.¹

- I have explained how the TWP program addresses my chosen principle of the social model of health.²

- I have identified another principle of the social model of health that is evident in TWP program.³

- I have explained how the TWP program addresses my chosen principle of the social model of health.⁴

- I have referred to the case study in my response.

Other acceptable answers include:

- other principles of the social model of health, so long as they were adequately linked to TWP program.

Unit 4 AOS 2 Review

- 1 a** [The World Health Organisation priority reflected in the information provided is 'achieving universal health coverage'.¹]

I have identified the priority of the World Health Organisation reflected in the information provided as achieving universal health coverage.¹

- b** [The priority 'achieving universal health coverage' relates to developing and improving health systems so that all people around the world can access quality and affordable healthcare when they need it.¹]

I have described the priority identified in part a.¹

- c** [Work of the World Health Organisation involves developing policies to help countries take action to promote health and wellbeing, which involves helping countries develop and maintain health policies.¹ [Through having such policies, it can help countries to provide adequate health services that are accessible to all, therefore helping contribute to the priority 'achieving universal health coverage'.²]

I have explained one example of the work of the World Health Organisation.¹

I have explained how this work achieves the priority identified in part a.²

- 2** [One reason for the development of the United Nations Sustainable Development Goals is that the previous global goals, the Millennium Development Goals, had ended and the United Nations needed to set new global goals.¹]

I have outlined one reason for the development of the United Nations Sustainable Development Goals (SDGs).¹

Other acceptable answers include:

- new global challenges had emerged, such as climate change.
- despite the MDGs making significant improvements in global health and wellbeing, by 2015 there were still many inequalities that existed across the world.

- 3** [Australia's aid program partners with the whole of the government, as the Department of Foreign Affairs and Trade (DFAT) works with all areas of the government, such as the Federal Police, to provide aid.¹]

I have outlined a partnership involved in Australia's aid program.¹

- 4 a** [The SDG evident in the information provided is SDG 4 'Quality education'.¹]

I have identified the SDG evident in the information provided as SDG 4 'Quality Education'.¹

- b** [SDG 4 'Quality Education' aims to ensure that all girls and boys complete free, equitable, and quality primary and secondary education.¹ [This promotes social health and wellbeing, as more girls and boys can go to school and make friends, therefore promoting positive and productive relationships.²]

I have described what is involved in the SDG identified in part a, with reference to a key target of the SDG.¹

I have described how this promotes health and wellbeing, with reference to a health and wellbeing dimension.²

Other acceptable answers include:

- other key targets of SDG 4 'Quality Education' that promote other dimensions of health and wellbeing, so long as adequately linked.

- c** [SDG 4 'Quality education' aims to ensure all youth, and a substantial proportion of adults, both men and women, achieve literacy and numeracy skills.¹ [This can help increase health literacy, which can lead to more people understanding how to prevent non-communicable diseases, such as cardiovascular disease. Therefore, this helps to address the key target of SDG 3 'Good health and wellbeing' that aims to reduce premature mortality from non-communicable diseases, through prevention and treatment.²]

I have explained a key target of the SDG identified in part a.¹

I have explained how achieving this target can assist in achieving a target of SDG 3.²

- 5** [An objective of the SDGs is to end extreme poverty.¹]

I have identified an objective of the SDGs.¹

Other acceptable answers:

- address climate change
- fight inequality and injustice.

- 6** [TWP program is effective as it reflects the feature of effective aid programs 'ownership by recipient countries'.¹ [This is evident as the program trains community members in the recipient country to be able to maintain facilities provided by the program without direct assistance from the country providing aid.² [Additionally, TWP program is effective as it reflects the feature of effective aid programs 'results-focused'.³ [This is evident as the program provides a live tracking system on their website which highlights the number of individuals impacted by the program each day and provides status updates about the percentage of projects which are functional in each region, summarising the results from the program.⁴]

I have identified a feature of effective aid programs that was addressed by TWP.¹

I have explained how TWP addressed this feature of effective aid programs.²

I have identified a feature of effective aid programs that was addressed by TWP.³

I have explained how TWP addressed this feature of effective aid programs.⁴

- 7 a** [A key feature of SDG 3 'Good health and wellbeing' is focusing on ending epidemics of communicable diseases.¹ [Communicable diseases refer to infectious diseases that are transmitted from the environment, including through air, food, water, and other infectious organisms. SDG 3 aims to end the epidemics of communicable diseases, such as AIDS and malaria.²]

I have identified a key feature of SDG 3 'Good health and wellbeing'.¹

I have described this key feature.²

- b** [SDG 3 'Good health and wellbeing' aims to achieve universal health coverage, including access to affordable essential medicines and vaccines for all.¹] This helps more people live long healthy lives as they can access healthcare to prevent and treat disease, which also helps people to reach their full potential as they are not suffering from illness, therefore promoting human development.²] SDG 3 'Good health and wellbeing' also aims to halve the global deaths and injuries from road traffic accidents.³] This can promote physical health and wellbeing, as less people will experience injury and more people will have a well-functioning body.⁴]

- I have discussed a target of SDG 3 'Good health and wellbeing'.¹
- I have discussed how the achievement of this target promotes human development, with reference to a human development component.²
- I have discussed another target of SDG 3 'Good health and wellbeing'.³
- I have discussed how the achievement of this target promotes health and wellbeing, with reference to a health and wellbeing dimension.⁴

- 8 a** [Non-government organisation aid refers to aid that is provided by non-government organisations, meaning the assistance and aid given to countries is not provided through the government, but rather from organisations independent from the government.¹]

- I have outlined what is meant by non-government organisation (NGO) aid.¹

- b** [An example of NGO that provides NGO aid is World Vision.¹]

- I have identified an example of an NGO that provides NGO aid.¹

Other acceptable answers include:

- Oxfam
- Red Cross
- other non-government organisations that provide aid.

- 9 a** [The type of aid evident in the information provided is bilateral aid.¹]

- I have identified the type of aid evident in the information provided as bilateral aid.¹

- b** [Bilateral aid involves the government of one country, often a high-income country, directly providing aid to the government of another country, often a low-income country. Bilateral aid often focuses on providing long-term improvements.¹] This can involve helping communities in low-income countries develop systems to improve their access to safe water, such as building water wells. This can help improve access to resources required for a decent standard of living (safe water) and help people lead a long healthy life, as people are less likely to suffer from waterborne diseases, therefore promoting human development.²]

- I have explained what the type of aid identified in part a involves.¹

- I have explained how this promotes human development, with reference to a human development component.²

- 10** [Social action refers to action geared towards positive change which is powered by the coming together of individuals and communities, inspiring and driving change in the interest of their community or group.¹] For example, people may take social action by signing a petition or a campaign to appeal to governments to make positive change, such as establishing a new law.²]

- I have outlined what is meant by social action.¹

- I have used an example of social action in my answer.²

- 11 a** [The priority of Australia's aid program reflected in the information provided is 'gender equality and empowering women and girls'.¹]

- I have identified the priority of Australia's aid program reflected in the information provided as 'gender equality and empowering women and girls'.¹

- b** ['Gender equality and empowering women and girls' involves enhancing the voice of women in leadership, promoting economic empowerment and education for women, and ending violence and discrimination against women.¹] Australia's aid program addresses this priority area through funding work to promote gender equality, such as establishing the Gender Equality Fund.²]

- I have described what is involved in the priority area identified in part a.¹

- I have described how Australia's aid program addresses this.²

- c** [Gender equality and empowering women and girls involves ending violence and discrimination against women.¹] This can promote physical health and wellbeing as women will experience less violence, and therefore these women will be free from injury and will also be more likely to have a well functioning body and systems.²]

- I have described what is involved in the priority area identified in part a.¹

- I have described how this promotes health and wellbeing, with reference to a health and wellbeing dimension.²

- 12** The World Food Programme's school feeding program is an aid program that addresses the SDGs.

Other acceptable answers include:

- other aid programs that address the SDGs, such as The Water Project.

Note: you are not awarded a mark for identifying an aid program that addresses the SDGs.

- a** [The purpose of WFP's school feeding program is to ensure that all school children have access to meals so that they are better able to concentrate and function in their everyday life.¹]

- I have outlined the purpose of my chosen aid program.¹

- b** [By focusing on providing school children meals and providing children with take-home rations, WFP's school feeding program addresses SDG 5 'Gender equality'.¹] This is because the program may encourage families to send not only boys but also girls to school, as young girls may not be required to cook and provide food for the family during the day, since the program provides food for all children regardless of their gender. Therefore, this addresses the key target of SDG 5 'end all forms of discrimination against all women and girls everywhere', as girls can attend school.²]

I have identified one SDG that my chosen aid program addresses.¹

I have explained how my chosen aid program addresses this SDG.²

Other acceptable answers include:

- other SDGs that your chosen aid program addresses, so long as adequately explained.
- [The WFP's school feeding program provides children with access to nutrient-dense food.¹] [This enables children to concentrate at school which may enhance their educational outcomes, expanding their capabilities and increasing their likelihood of accessing a decent standard of living as it may provide them with greater employment opportunities in adulthood, therefore promoting human development.²]

I have described what the aid program involves.¹

I have described how this promotes human development, with reference to a human development component.²

- 13 [One reason Australia provides aid to low-income countries is to promote Australia's own national interests, such as contributing to economic growth.¹]

I have suggested one reason why Australia provides aid to low-income countries.¹

- 14 Students needed to display that they had a thorough understanding of the question by demonstrating:

- an effectively structured response.
- that the stimulus materials had been understood, connected, and synthesised.
- that the student's own understanding had been used to formulate the response.
- that all of the stimulus materials are referenced in the response.

In relation to analysing how addressing SDG 6 'Clean water and sanitation' *promotes health and wellbeing* discussion of the following would be awarded:

- Discussion of how SDG 6 'Clean water and sanitation' promotes multiple dimensions of health and wellbeing, with reference to both key targets of SDG 6 and components of health and wellbeing dimensions.
- Discussion of all sources would be relevant here. For example, students could discuss that the increase in access to safe drinking water in Uganda, reflected in source 1, promotes health and wellbeing for people in Uganda.
- An example link students could make:
 - Source 1 shows that people in Uganda have had an increased access to safe drinking water over time, with 5% of the population having access to safe drinking water in 2002 increasing to over 7% of the population having access to safe drinking water in 2016. Therefore, this helps to achieve the key target of SDG 6 'Clean water and sanitation' to achieve universal and equitable access to safe and affordable drinking water. This may have promoted the physical health and wellbeing of people in Uganda, as safe drinking water is vital for the body, therefore promoting the functioning of the body and its systems. Students could also link

this to other dimensions of health and wellbeing, such as reduced stress and anxiety about having to find safe drinking water which therefore promotes mental health and wellbeing.

In relation to analysing how addressing SDG 6 'Clean water and sanitation' *promotes human development*:

- Discussion of how SDG 6 'Clean water and sanitation' promotes human development, with reference to both key targets of SDG 6 and key components of human development.
- Discussion of all sources would be relevant here. For example, students could discuss how the water program reflected in source 2 promotes human development for communities in Ghana.
- An example link students could make:
 - Source 2 describes water programs in communities in Zabzugu, Ghana, that aim to provide sustainable access to clean drinking water and build water wells in these communities. Therefore, this helps to achieve the key target of SDG 6 'Clean water and sanitation' to achieve universal and equitable access to safe and affordable drinking water. It also helps to achieve other key targets of SDG 6, such as to increase the efficient use of water and ensure sustainable access to clean water. Therefore, this helps promote human development by helping people live long healthy lives and have access to resources for a decent standard of living. Students could also link to other key components of human development, such as suggesting that building water wells may provide people in Zabzugu communities with access to knowledge about water systems and sustainable clean drinking water.

In relation to analysing how addressing SDG 6 'Clean water and sanitation' *can assist in achieving SDG 3 'Good health and wellbeing'*:

- Discussion of how SDG 6 'Clean water and sanitation' can assist in achieving SDG 3 'Good health and wellbeing' with reference to both key targets of SDG 6 and key targets of SDG 3.
- Discussion of all sources would be relevant here. For example, students could discuss how improving the lack of access to clean water and sanitation in healthcare facilities, reflected in source 3, may help achieve areas of SDG 3 'Good health and wellbeing', such as ending epidemics of communicable diseases, including waterborne diseases.
- An example link students could make:
 - Source 3 shows that 2.2 billion people in 2017 lacked safely managed drinking water. This reflects the SDG 6 key target to achieve universal and equitable access to safe and affordable drinking water. If this key target is addressed, and more people have access to safe water, it will assist in achieving SDG 3 by helping to achieve the key target of SDG 3 to end the epidemics of communicable diseases, such as waterborne diseases.

GLOSSARY

A

Access in healthcare is about people being able to receive healthcare that they need at an appropriate time and location, without barriers, such as location, cost, and culture interfering p. 169

Australian Dietary Guidelines (ADGs) are five dietary guidelines that provide information about the types and amounts of foods that should be consumed, and the eating patterns that should be followed, as part of a healthy and balanced diet p. 246

Australian Guide to Healthy Eating is a food selection model that provides a visual pie chart representation of the recommended proportions of the five food groups that should be consumed each day as part of a healthy and balanced diet p. 254

B

Bilateral aid refers to the government of one country directly providing aid to the government of another country p. 445

Biological factors are influences on health that stem from the body, including its systems and functioning, as well as the systems that function within it p. 64

Biomedical approach to health (also known as the biomedical model of health) focuses on the biological causes of illness and disease in order to treat symptoms once they are displayed by a patient, as well as cure diseases p. 137, 156

Body mass index is a measure used to classify someone's weight and is calculated by dividing an individual's weight, in kilograms, by their height, in metres squared p. 101

Burden of disease is a measurement of the impact of disease and injuries, specifically measuring the gap between the current health status and an ideal situation where everyone lives to an old age, free of disease and disability. Burden of disease is specifically measured by the unit disability-adjusted life years (DALYs) p. 34, 98, 308

C

Climate change refers to changes in global weather patterns; may also be used to refer specifically to the rapid climate change post-1900 which has occurred largely due to human activity p. 339, 356

Communicable diseases are infectious diseases that are transmitted from the environment, including through air, food, water, and other infected organisms p. 390

Conflict refers to a violent or non-violent clash either within a country or between two or more countries p. 358

D

Disability-adjusted life year (DALY) is a measure of burden of disease in which one disability-adjusted life year (DALY) equals one healthy year of life lost due to the experience of a disability or disease (YLD) or premature death (YLL) p. 34, 98

Discrimination refers to the unjust treatment of people due to their membership within a certain social category p. 319

Dynamic refers to something that is constantly changing over time p. 6

E

Economic characteristics refer to financial conditions as determined by the production, distribution, and consumption of goods and services p. 298

Economic sustainability refers to the responsible management and use of financial resources, ensuring that individuals currently have adequate access to earn an income and meet financial obligations without compromising this ability for future individuals p. 334

Ecosystem is a community of living and nonliving things that exist and interact within their specific environment p. 50

Education is the process of gaining knowledge and building skills, typically in environments such as school and university p. 46

Emergency aid (also known as humanitarian aid and humanitarian assistance) refers to short-term aid provided after an emergency or crisis p. 443, 457

Emotional health and wellbeing is the ability to express, control and manage feelings in a positive way and display resilience p. 10

Environmental characteristics refer to the conditions of the physical surroundings that people inhabit p. 300

Environmental factors refer to the physical conditions in the environment that individuals work, live and play p. 71

Environmental sustainability involves ensuring the natural environment is used in a way that serves the current generation whilst also preserving natural resources for future generations p. 338

Equity refers to being fair and just, which includes catering for different people's needs p. 53, 169

Expected years of schooling refers to the expected number of years individuals can expect to spend at school, measured at the school entrance age for a child p. 348

Extreme poverty refers to living on \$1.90 USD or less a day as defined by the World Bank p. 298, 318

G

Gender identity refers to an individual's own understanding of their gender as masculine, feminine, or other p. 320

Global distribution refers to the process of providing goods and services to people living all across the world p. 321

Global marketing refers to the process of advertising goods and services across the world with the intention of increasing sales p. 321

Gross national income (GNI) per capita refers to the income of all residents from a country divided by its population, giving an average income for a single person of that country p. 296, 348

H

Health and wellbeing relates to an individual's physical, mental, emotional, social, and spiritual states, where an individual can experience balance and an overall level of satisfaction, enabling them to effectively function p. 5

Health promotion refers to the 'process of enabling people to increase control over and to improve their health,' as defined within the Ottawa Charter for Health Promotion p. 150, 192, 203, 213

Health status refers to an individual or population's overall health, taking into account a range of measures, such as life expectancy and experiences of illness, disability and disease p. 29

Health-adjusted life expectancy (HALE) is a measure of burden of disease based on life expectancy at birth, but including an adjustment for time spent in poor health. It is the number of years in full health that a person can expect to live, based on current rates of ill health and mortality p. 37, 308

Healthy Eating Pyramid is a food selection model that displays the types and proportions of foods that should be consumed each day as part of a healthy and balanced diet in a pyramid format p. 263

High-income countries are countries with a gross national income (GNI) per capita of \$12,536 USD or more as defined by the World Bank for the 2021 fiscal year p. 297

Human development involves creating an environment that empowers individuals to develop to their full potential and lead a long, healthy, and productive life by expanding their choices, their capabilities, and their freedom. It also involves having access to a decent standard of living and resources, such as education, reducing the cycle of poverty, and enhancing the ability to participate in the community and live according to needs and interests p. 345

Human Development Index (HDI) refers to a tool developed by the United Nations to measure and rank the social and economic development of a country. It is presented as a single statistic that takes into account three dimensions and four indicators of human development p. 347

I

Illness is a self-perceived negative state of health and wellbeing, in which an individual believes that they are experiencing something which makes them unwell p. 5

Incidence refers to the number of new cases of a particular disease or condition that arise in a population in a certain period of time p. 29

Income is money that is earned by an individual through providing labour, producing a good or service, or money received from investments, which enables them to access various resources p. 48

Inequality refers to an uneven distribution of resources or differing circumstances p. 319

Infant mortality rate refers to the number of deaths of infants between birth and their first birthday per 1000 live births p. 31

L

Life expectancy measures the number of years a person is expected to live, on the basis that current health conditions do not change p. 37, 127, 307

Life expectancy at birth measures the number of years a person is expected to live at their time of birth, on the basis that current health conditions do not change p. 348

Low-income countries are countries with a gross national income (GNI) per capita of \$1,035 or less as defined by the World Bank for the 2021 fiscal year p. 297

M

Mass migration refers to the relocation of a large number of individuals from one geographical location to another p. 359

Maternal mortality refers to mothers who die due to complications related to pregnancy and childbirth p. 389

Maternal mortality rate refers to the number of deaths of pregnant women before birth, during birth, or within the first six weeks after birth, per 100,000 live births p. 31, 308

Mean years of schooling refers to the average number of years of schooling achieved by individuals in a country, measured at 25 years of age and above p. 348

Medicare is Australia's universal health insurance scheme, which provides all Australian residents (and some overseas visitors) access to necessary healthcare at a subsidised cost, or for no cost at all p. 170

Mental health and wellbeing is the current state of wellbeing of the mind, involving the ability to think and process information p. 9

Middle-income countries are countries with a gross national income (GNI) per capita between \$1,036-12,535 USD as defined by the World Bank for the 2021 fiscal year p. 297

Morbidity refers to ill health in an individual and the levels of ill health in a given population group p. 30, 387

Mortality refers to the number of deaths in a population p. 31, 387

Multilateral aid is provided through an international organisation, such as the United Nations, which is supported by the governments of multiple countries and other organisations to address global issues and large scale projects p. 446

N

National Disability Insurance Scheme (NDIS) is an insurance scheme that provides support and services to people with a disability, their families, and their carers p. 182

Neonatal mortality refers to deaths of newborns within the first 28 days of life p. 389

'New' public health refers to a contemporary approach to public health that involves preventing diseases from occurring through promoting behavioural and lifestyle change p. 143

Non-communicable diseases are often long-lasting conditions that can arise from a combination of lifestyle, behavioural, genetic, and environmental factors p. 392

Non-government organisation (NGO) aid refers to aid provided by a non-government organisation, meaning it is given independently from the government, and often is community-focused and delivers expertise in poverty reduction p. 467

Non-government organisations (NGOs) are organisations that are developed, implemented, and funded by people or communities outside the government p. 467

Nutrition Australia is a non-government, non-profit, community-based organisation that promotes healthy eating in Australia p. 262

O

'Old' public health refers to an approach to health that was developed at the beginning of the 20th century that involved improving the safety of the physical environment and developing public health programs to prevent communicable disease p. 136

Optimal health and wellbeing involves an individual experiencing the highest possible level of health and wellbeing when taking their unique experiences, characteristics and lifestyle into account p. 5, 19

Ottawa Charter for Health Promotion outlines a series of strategies and action areas developed at a conference co-organised by the World Health Organisation that are required to develop effective health promotion campaigns and achieve good health for all p. 150

(Ottawa Charter for Health Promotion action area) 'Build healthy public policy' refers to removing financial or social barriers in order to implement rules and legislation that promote health and wellbeing p. 151

(Ottawa Charter for Health Promotion action area)

'Create supportive environments' refers to ensuring that the natural environment, social environment, and infrastructure is safe for the implementation of health promotion p. 151

(Ottawa Charter for Health Promotion action area) 'Develop personal skills' refers to delivering health promotion that provides people with resources that they can use to take control of and improve their own health and wellbeing p. 152

(Ottawa Charter for Health Promotion action area)

'Reorient health services' refers to shifting the focus from a biomedical model of health that involves diagnosing and treating illness and disease to using health promotion to prevent the development of illness and disease altogether p. 152

(Ottawa Charter for Health Promotion action area)

'Strengthen community action' refers to motivating the community to develop and implement health promotion campaigns to address the most pressing issues that they face p. 151

(Ottawa Charter for Health Promotion strategy)

'Advocate' refers to using health promotion to express the benefit of health and wellbeing on quality of life to individuals and communities p. 150

(Ottawa Charter for Health Promotion strategy)

'Enable' refers to using health promotion campaigns to reduce differences in health status p. 150

(Ottawa Charter for Health Promotion strategy)

'Mediate' refers to ensuring that different sectors all share the responsibility of delivering health promotion and ensuring that all conflicts between sectors are resolved p. 150

Ownership (related to aid programs) refers to the country receiving aid being involved in all components of the implementation of the aid program p. 476

P

Peace is a state of harmony that involves freedom from civil disturbance and conflict p. 43

Pharmaceutical Benefits Scheme (PBS) is a program run by the Australian government that subsidises various essential prescription medications for Australian citizens, permanent residents, and visitors from selected countries p. 180

Physical health and wellbeing is the functioning of the body and its systems, including the body's capacity to perform daily tasks and activities p. 7

Prevalence refers to the number of cases of a particular disease or condition that are present in a population at a given point in time p. 29

Private health insurance is an optional type of health insurance which people can have in addition to Medicare, in which members pay a premium in return for payment towards services that are not covered by Medicare p. 174

Private sector refers to the areas of an economy controlled by corporations that operate separately to a nation's government p. 461

S

Safe water (also known as clean water) refers to water that is free from contaminants such as germs p. 317

Sanitation refers to behaviours, facilities, and services that prevent disease and illness caused by contact with or mistreatment and wrong disposal of human waste and sewage p. 317

SDG 1 is titled 'No poverty'. SDG 1 aims to end poverty in all its forms everywhere by 2030, ensuring all people across the globe can enjoy a basic standard of living and access essential resources such as food, shelter, and healthcare p. 400

SDG 13 is titled 'Climate action'. SDG 13 aims to take urgent action to tackle climate change and its impacts p. 416

SDG 2 is titled 'Zero hunger'. SDG 2 aims to end all hunger, achieve food security and improved nutrition, and promote sustainable agriculture, ensuring all people, especially children and the poor and vulnerable, have sufficient access to nutritious foods p. 405

SDG 3 is titled 'Good health and wellbeing'. SDG 3 aims to promote physical and mental health and wellbeing, and extend life expectancy by addressing the major causes of morbidity and mortality in high-, middle-, and low-income countries p. 387

SDG 4 is titled 'Quality education'. SDG 4 aims to ensure that all people have access to inclusive and quality education at all levels, from pre-primary through to tertiary education and vocational training p. 408

SDG 5 is titled 'Gender equality'. SDG 5 aims to end discrimination and violence against women and girls, aiming to achieve gender equality and empower women and girls p. 410

SDG 6 is titled 'Clean water and sanitation'. SDG 6 aims to ensure that all people across the globe have access to safe, clean water, and adequate sanitation p. 414

Self-assessed health status measures an individual's overall perception of their own health status at a given point in time p. 39

Sex refers to the biological categorisation of humans based on their reproductive organs, generally assigned at birth but that can also be changed later in life p. 320

Sexual orientation refers to the preference for a romantic or sexual partner of a particular gender identity or sex p. 320

Shelter is a permanent structure that provides protection from the outside environment p. 45

Skin cancer refers to a disease in which abnormal, malignant cells grow uncontrollably and destroy skin tissue p. 214

Social action refers to action geared towards positive change which is powered by the coming together of individuals and communities, inspiring and driving change in the interest of their community or group p. 490

Social characteristics refer to the collective conditions and values that people maintain in their country p. 299

Social health and wellbeing is the ability to form meaningful and satisfying relationships with others, as well as the ability to appropriately manage and adapt to social situations p. 11

Social justice involves everyone having equal opportunities and rights, being free from discrimination, and being afforded fundamental human rights p. 53

Social model of health focuses on the broader factors that impact health, including lifestyle and socioeconomic factors, in order to prevent the development of diseases that are influenced by behaviour p. 144, 157

(Social model of health principle) 'Acts to enable access to healthcare' refers to aiming to ensure that everybody within a community can access essential healthcare services without facing any barriers p. 144

(Social model of health principle) 'Acts to reduce social inequities' involves ensuring that all social groups have the same level of access to the resources that improve their health and wellbeing p. 144

(Social model of health principle) 'Addresses the broader determinants (or factors) of health' refers to focusing on the large-scale systems that influence the health and wellbeing of whole communities, not just individuals p. 145

(Social model of health principle) 'Empowers individuals and communities' refers to inspiring individuals and communities to recognise their role in promoting their own health and wellbeing p. 145

(Social model of health principle) 'Involves intersectoral collaboration' refers to ensuring the public and private sectors of the economy work together in order to achieve health-related goals p. 145

Social sustainability involves creating an equitable society that meets the needs of all citizens at the present without compromising the ability to meet these needs for future generations p. 336

Sociocultural factors are the social and cultural conditions that people experience throughout their lifetime p. 68

Socioeconomic status (SES) is a measure used to determine the social status of an individual using the factors of income, occupation, and education p. 68, 87

Spiritual health and wellbeing includes the ideas, beliefs, values and ethics that an individual possesses, contributing to a sense of meaning, purpose, and belonging p. 12

Subjective refers to something which is influenced by unique and individual opinions and judgements p. 6

Sustainability involves meeting the needs of the present generation without compromising the ability of future generations to meet their own needs p. 51, 169, 332

Sustainable Development Goals (SDGs) are a set of 17 goals, established by the United Nations, which aim to address many urgent challenges our world is facing by asking countries from across the globe to work together to improve health and wellbeing for all p. 378

T

Tourism refers to individuals travelling to locations for personal interest or business reasons p. 360

Transparency (related to aid programs) involves ensuring all necessary information is provided in an open manner to stakeholders involved in the program p. 475

U

Under 5 mortality rate refers to the number of deaths of children under five years of age per 1000 live births p. 31

Under five mortality refers to deaths of children under five years of age p. 389

Universal health coverage involves developing and improving health systems so that all people around the world can access quality and affordable healthcare when they need it p. 387, 424

W

World trade involves the exchange of goods and services between countries in exchange for financial compensation p. 360

Y

Years of life lost due to disability (YLD) refers to the non-fatal contribution to the burden of disease measurement of disability-adjusted life year (DALY) p. 34

Years of life lost due to premature death (YLL) refers to the fatal contribution to the burden of disease measurement of disability-adjusted life year (DALY) p. 34

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