

STUDENT TEST BOOKLET

READING SECTION

READING PASSAGE 1

You should spend about 20 minutes on Questions 1-13, which are based on Reading Passage 1 below.

The Rise of Superbugs: A Global Health Crisis

Antimicrobial resistance (AMR) is a looming global health crisis that threatens to undermine decades of medical progress. It occurs when microorganisms such as bacteria, viruses, fungi, and parasites evolve to a point where they are no longer affected by the drugs designed to kill them. While this is a natural evolutionary process, it has been dangerously accelerated by human activity, primarily the misuse and overuse of antimicrobial medicines. The consequences are dire, leading to infections that are difficult or impossible to treat, which in turn increases the risk of severe illness, disability, and death.

The primary driver of this alarming trend is the widespread and often indiscriminate use of antibiotics. In many parts of the world, antibiotics are prescribed for viral infections like the common cold, against which they have no effect. Furthermore, in some countries, these drugs are available over the counter, leading to self-medication and incomplete treatment courses. When patients do not complete the full prescribed course of antibiotics, some of the more resilient bacteria can survive and multiply, passing on their resistant traits. This misuse is not limited to human medicine; the agricultural sector also bears significant responsibility. Antibiotics are frequently used in livestock, not just to treat infections, but also to promote growth and prevent disease in crowded and often unsanitary farming conditions. These practices contribute to the development of resistant bacteria in animals, which can then be transmitted to humans through the food chain or the environment.

The economic and social costs of AMR are staggering. Drug-resistant infections lead to longer hospital stays, the need for more expensive and often more toxic second- or third-line treatments, and increased mortality rates. The World Bank has warned that

by 2050, AMR could push up to 24 million people into extreme poverty. The impact on healthcare systems is immense, as many modern medical procedures, such as surgery, organ transplantation, and cancer chemotherapy, rely on effective antibiotics to prevent and treat the infections that can complicate them. Without effective antibiotics, we risk returning to a pre-antibiotic era where common infections and minor injuries could once again become life-threatening.

Addressing this crisis requires a multi-faceted, global effort. A crucial component is stewardship – the responsible use of antimicrobial drugs. This includes prescribing them only when necessary, ensuring that patients complete their full treatment courses, and ending the use of antibiotics for growth promotion in agriculture. Improved sanitation, hygiene, and infection prevention measures in hospitals and communities are also vital to reduce the spread of resistant organisms. Furthermore, there is an urgent need for investment in research and development of new antibiotics, as well as alternative treatments and diagnostic tools. The pipeline for new antibiotics is running dry, with few new drugs having been developed in recent decades. Public-private partnerships and innovative funding mechanisms are essential to reinvigorate this area of research.

International collaboration is key. Organizations like the World Health Organization (WHO) are leading the charge with initiatives such as the Global Action Plan on Antimicrobial Resistance. This plan calls on all countries to develop and implement national action plans to combat AMR. It emphasizes the need for a ‘One Health’ approach, recognizing that the health of humans, animals, and the environment are interconnected. By working together, we can hope to preserve the efficacy of our life-saving antimicrobial drugs for future generations and avert a global health catastrophe.

Questions 1-6

Do the following statements agree with the information given in Reading Passage 1?

In boxes 1-6 on your answer sheet, write

TRUE if the statement agrees with the information **FALSE** if the statement contradicts the information **NOT GIVEN** if there is no information on this

1. Antimicrobial resistance is a phenomenon that only affects developing countries.
2. The primary cause of accelerated antimicrobial resistance is the overuse of antibiotics.

3. It is safe to use leftover antibiotics to treat a new infection if the symptoms are similar.
4. The agricultural industry uses antibiotics solely for treating sick animals.
5. The development of new antibiotics has slowed down in recent years.
6. The WHO's Global Action Plan has been successfully implemented in all countries.

Questions 7-10

Choose the correct letter, A, B, C or D.

Write the correct letter in boxes 7-10 on your answer sheet.

1. What is the main consequence of antimicrobial resistance? A. It makes infections easier to treat. B. It reduces the cost of healthcare. C. It leads to more effective antibiotics. D. It makes infections harder to treat, increasing the risk of death.
2. According to the passage, what is a major factor contributing to AMR in agriculture? A. The use of antibiotics to promote animal growth. B. A lack of veterinarians in rural areas. C. The exclusive use of organic farming methods. D. A ban on all antibiotic use in livestock.
3. The passage suggests that without effective antibiotics, there is a risk of: A. A future with no more surgeries. B. A return to a time when common infections were often fatal. C. A decrease in the global population. D. An increase in the price of all medicines.
4. What is the 'One Health' approach mentioned in the passage? A. A focus on human health above all else. B. A strategy that combines the health of humans, animals, and the environment. C. A plan to provide free healthcare to everyone. D. A new type of antibiotic that works on all organisms.

Questions 11-13

Complete the summary below.

Choose **NO MORE THAN TWO WORDS** from the passage for each answer.

Write your answers in boxes 11-13 on your answer sheet.

Combating Antimicrobial Resistance

To fight the growing threat of AMR, a global effort is required. One of the most important strategies is **11** _____, which involves the responsible use of antimicrobial drugs. This means only prescribing them when they are truly needed and ensuring patients take their full treatment. In addition to better practices in medicine and agriculture, improved sanitation and hygiene are crucial for preventing the spread of resistant germs. There is also a pressing need for investment in the research and development of new antibiotics and **12** _____. Ultimately, **13** _____ is essential to coordinate efforts and implement effective strategies worldwide.

READING PASSAGE 2

You should spend about 20 minutes on Questions 14-26, which are based on Reading Passage 2 below.

The Inner Workings of Resistance

A. Bacteria have evolved a sophisticated arsenal of defense mechanisms to thwart the effects of antibiotics. One of the most common strategies is enzymatic degradation, where bacteria produce enzymes that chemically modify or destroy the antibiotic molecule. For instance, beta-lactamases are a well-known class of enzymes that break down beta-lactam antibiotics, a broad category that includes penicillin and its derivatives. By neutralizing the antibiotic before it can reach its target within the bacterial cell, these enzymes render the drug ineffective.

B. Another prevalent mechanism is the alteration of the antibiotic's target site. Many antibiotics work by binding to specific proteins or enzymes in a bacterial cell, disrupting their function and leading to cell death. However, bacteria can acquire mutations in the genes that code for these target sites. These mutations change the shape of the target, preventing the antibiotic from binding effectively. This is akin to changing the lock so that the key no longer fits. This mechanism is a major contributor to resistance against several classes of antibiotics, including fluoroquinolones and macrolides.

C. Bacteria can also protect themselves by reducing the intracellular concentration of the antibiotic. This is achieved through two main approaches: decreasing the permeability of the cell membrane and actively pumping the antibiotic out of the cell. Some bacteria can modify their cell walls to make it more difficult for antibiotic molecules to enter. More dramatically, many bacteria possess efflux pumps, which are protein channels that actively transport antibiotics and other toxic substances out of

the cell. These pumps can often handle a wide range of different antibiotics, contributing to multidrug resistance.

D. A more subtle but equally effective strategy is the development of metabolic bypass pathways. If an antibiotic blocks a specific metabolic pathway that is essential for the bacterium's survival, the bacterium may evolve an alternative pathway to produce the same essential product. This allows the bacterium to circumvent the effects of the drug and continue to grow and reproduce. This type of resistance demonstrates the remarkable adaptability of bacteria.

E. The genetic basis for these resistance mechanisms is often found on mobile genetic elements, such as plasmids and transposons. These are small, circular pieces of DNA that can be readily exchanged between bacteria, even between different species. This process, known as horizontal gene transfer, allows resistance to spread rapidly through a bacterial population. A single bacterium that acquires a resistance gene can quickly share it with its neighbors, leading to a rapid increase in the prevalence of resistance.

F. In response to the growing threat of antibiotic resistance, scientists are exploring a range of innovative strategies. One promising area is the development of drugs that inhibit resistance mechanisms themselves. For example, clavulanic acid is a beta-lactamase inhibitor that is often combined with beta-lactam antibiotics. While it has little antimicrobial activity on its own, it protects the antibiotic from degradation by beta-lactamase enzymes. Other novel approaches include phage therapy, which uses viruses that infect and kill bacteria, and the development of anti-virulence drugs, which aim to disarm bacteria rather than kill them, making them less harmful to the host.

Questions 14-19

Reading Passage 2 has six paragraphs, A-F.

Choose the correct heading for each paragraph from the list of headings below.

Write the correct number, i-viii, in boxes 14-19 on your answer sheet.

List of Headings

i. A new hope in the fight against resistance ii. The role of genetics in spreading resistance iii. How bacteria destroy antibiotics iv. A change in the target v. Pumping out

the enemy vi. The challenges of developing new drugs vii. Finding a new route viii. The impact of resistance on global health

1. Paragraph A
2. Paragraph B
3. Paragraph C
4. Paragraph D
5. Paragraph E
6. Paragraph F

Questions 20-23

Choose the correct letter, A, B, C or D.

Write the correct letter in boxes 20-23 on your answer sheet.

1. Beta-lactamase enzymes are an example of: A. An antibiotic's target site. B. A metabolic bypass pathway. C. Enzymatic degradation. D. An efflux pump.
2. How do efflux pumps contribute to antibiotic resistance? A. They change the shape of the antibiotic's target. B. They transport antibiotics out of the bacterial cell. C. They break down the antibiotic molecule. D. They create alternative metabolic pathways.
3. What is horizontal gene transfer? A. The process of bacteria evolving new metabolic pathways. B. The transfer of genetic material between bacteria. C. The mutation of an antibiotic's target site. D. The development of new antibiotics.
4. What is the primary function of clavulanic acid? A. To kill bacteria directly. B. To inhibit the action of beta-lactamase enzymes. C. To act as a new type of antibiotic. D. To change the target site of antibiotics.

Questions 24-26

Complete the sentences below.

Choose **NO MORE THAN THREE WORDS** from the passage for each answer.

Write your answers in boxes 24-26 on your answer sheet.

1. Bacteria can resist antibiotics by altering the _____ of the drug.

2. The ability of bacteria to pump out a variety of antibiotics can lead to _____.

3. Phage therapy is a novel approach that uses _____ to kill bacteria.

READING PASSAGE 3

You should spend about 20 minutes on Questions 27-40, which are based on Reading Passage 3 below.

A World Without Cures: The Global Impact of Antibiotic Resistance

The spectre of a post-antibiotic era, where common infections could once again become deadly, is no longer a distant dystopian fantasy but a stark and imminent threat. The global impact of antimicrobial resistance (AMR) extends far beyond the confines of hospitals and clinics, permeating every aspect of modern society, from economic stability and food security to the very foundations of modern medicine. The relentless rise of drug-resistant pathogens is a silent pandemic, one that is already claiming millions of lives and threatens to unravel a century of medical progress.

In 2019, a landmark study published in *The Lancet* revealed that bacterial AMR was directly responsible for an estimated 1.27 million deaths globally, and associated with a staggering 4.95 million deaths. To put this into perspective, these figures surpass the annual death tolls from HIV/AIDS and malaria combined. Projections for the future are even more dire. A report commissioned by the UK government has warned that if left unchecked, AMR could lead to 10 million deaths annually by 2050, at a cumulative cost of \$100 trillion to the global economy. This economic burden stems not only from the direct costs of treating resistant infections, which are often prolonged and require more expensive drugs, but also from the indirect costs of lost productivity due to illness and death.

The societal implications of AMR are equally profound. Modern medicine, with its reliance on procedures such as organ transplants, caesarean sections, and chemotherapy, is critically dependent on the availability of effective antibiotics to prevent and treat infections. The rise of AMR jeopardizes the safety and feasibility of these life-saving interventions. Furthermore, AMR disproportionately affects the most vulnerable populations, including newborns, the elderly, and those with weakened immune systems. In low- and middle-income countries, where the burden of infectious diseases is already high and access to second- and third-line antibiotics is limited, the consequences of AMR are particularly devastating.

Food security is another critical area threatened by AMR. The widespread use of antibiotics in agriculture, not only to treat disease but also to promote growth, has contributed significantly to the emergence of resistant bacteria. These resistant strains can be transmitted to humans through the consumption of contaminated food, direct contact with animals, or through the environment. The potential for AMR to disrupt food production and trade could have far-reaching consequences for global food security and livelihoods.

Despite the scale of the challenge, there is hope. The global response to AMR is gaining momentum, with a growing recognition of the need for urgent and coordinated action. The World Health Organization's Global Action Plan on AMR provides a framework for countries to develop and implement national action plans. Key strategies include improving surveillance of AMR, promoting the rational use of antibiotics in both human and animal health, and enhancing infection prevention and control measures. Furthermore, there is a critical need to stimulate the development of new antibiotics, alternative therapies, and rapid diagnostic tests. This requires innovative models of funding and collaboration between governments, academia, and the pharmaceutical industry.

Ultimately, tackling AMR requires a paradigm shift in our relationship with antibiotics. We must come to view them as a precious and finite resource, to be used judiciously and preserved for future generations. Public awareness and education are crucial to changing behaviors and fostering a culture of antibiotic stewardship. The fight against AMR is a collective responsibility, one that requires the commitment of individuals, healthcare professionals, policymakers, and the global community as a whole. The future of modern medicine depends on it.

Questions 27-32

Do the following statements agree with the information given in Reading Passage 3?

In boxes 27-32 on your answer sheet, write

YES if the statement agrees with the claims of the writer **NO** if the statement contradicts the claims of the writer **NOT GIVEN** if it is impossible to say what the writer thinks about this

1. The threat of a post-antibiotic era is a concern for the distant future.
2. The number of deaths from AMR is greater than the combined total of deaths from HIV/AIDS and malaria.

3. The economic costs of AMR are primarily due to the high price of new antibiotics.
4. AMR has a more severe impact on high-income countries.
5. The use of antibiotics in agriculture is the sole cause of AMR.
6. The development of new antibiotics is a key strategy in the fight against AMR.

Questions 33-36

Choose the correct letter, A, B, C or D.

Write the correct letter in boxes 33-36 on your answer sheet.

1. According to the passage, what is the estimated annual number of deaths from AMR by 2050 if no action is taken? A. 1.27 million B. 4.95 million C. 10 million D. 100 million
2. The passage states that modern medical procedures are at risk due to: A. The high cost of surgery. B. The lack of trained medical staff. C. The dependence on effective antibiotics. D. The increasing number of organ transplants.
3. What is a major route of transmission of resistant bacteria from agriculture to humans? A. Through the air. B. Through contaminated food. C. Through insect bites. D. Through direct person-to-person contact.
4. What does the author suggest is needed to preserve antibiotics for the future? A. A global ban on all antibiotic use. B. A shift in our perception and use of antibiotics. C. The development of a single, powerful antibiotic. D. A focus on traditional medicine.

Questions 37-40

Complete the notes below.

Choose **NO MORE THAN TWO WORDS** from the passage for each answer.

Write your answers in boxes 37-40 on your answer sheet.

The Global Response to AMR

- The WHO's Global Action Plan provides a **37** _____ for countries to follow.
- Key strategies include improving surveillance and promoting the **38** _____ of antibiotics.

- There is a need for innovative funding models to stimulate the development of new antibiotics and **39** _____.
- **40** _____ is essential for changing public behavior and promoting antibiotic stewardship.

LISTENING SECTION

SECTION 1 Questions 1-10

Complete the form below.

Write **NO MORE THAN TWO WORDS AND/OR A NUMBER** for each answer.

Patient Consultation Form

Patient Details	
Name:	Sarah Jones
Contact Number:	1 _____
Reason for visit:	Persistent cough and 2 _____

Symptoms	
Duration of cough:	3 _____ weeks
Other symptoms:	Fever, fatigue, and 4 _____
Previous treatments:	Over-the-counter cough syrup

Doctor's Assessment	
Diagnosis:	Suspected 5 _____
Prescribed medication:	A course of antibiotics
Dosage:	Two tablets, 6 _____ a day
Important advice:	Complete the full course, even if symptoms 7 _____
	Do not share 8 _____ with others
	Avoid 9 _____ while taking the medication
Follow-up appointment:	In 10 _____

SECTION 2 Questions 11-20

Questions 11-15

Choose the correct letter, A, B, or C.

- The speaker is a: A. Doctor B. Public health official C. University professor
- What is the main topic of the talk? A. The history of antibiotics B. The importance of vaccination C. How to prevent the spread of infections
- According to the speaker, what is the single most effective way to prevent infections? A. Taking antibiotics B. Washing your hands C. Wearing a face mask
- How long should you wash your hands for? A. 10 seconds B. 20 seconds C. 30 seconds
- The speaker advises people to get vaccinated against: A. All types of bacteria B. The common cold C. Influenza

Questions 16-20

What advice does the speaker give for each of the following situations?

Choose **FIVE** answers from the box and write the correct letter, A-G, next to questions 16-20.

Advice

A. See a doctor B. Take antibiotics C. Stay at home D. Drink plenty of fluids E. Get a blood test F. Finish the full course G. Use hand sanitizer

Situations

1. If you have a cold or flu _____
2. If you are prescribed antibiotics _____
3. If you have a serious infection _____
4. If you are unsure about your symptoms _____
5. When you are in a public place _____

SECTION 3 Questions 21-30

Choose the correct letter, A, B, or C.

1. The students are discussing a presentation on: A. The discovery of penicillin B. The use of antibiotics in farming C. The development of new antibiotics
2. What is Chloe's main concern about the use of antibiotics in agriculture? A. The cost to farmers B. The impact on animal welfare C. The development of resistant bacteria
3. According to James, why are antibiotics used in livestock? A. To make the meat taste better B. To promote growth and prevent disease C. To treat a wide range of viral infections
4. What does Dr. Williams say about the transmission of resistant bacteria from animals to humans? A. It is a very rare occurrence. B. It is a significant public health risk. C. It only happens in developing countries.
5. What solution does Chloe suggest for reducing the use of antibiotics in farming? A. Banning all antibiotic use in animals B. Improving farm hygiene and animal welfare C. Developing new vaccines for livestock
6. James believes that the responsibility for this issue lies with: A. Farmers only B. Consumers and governments C. The pharmaceutical industry
7. Dr. Williams mentions that some countries have successfully reduced antibiotic use in agriculture by: A. Implementing strict regulations B. Offering financial incentives to farmers C. Educating the public about the risks

8. What is the main point of agreement between the students? A. That antibiotics are essential for modern medicine B. That the problem of AMR is too complex to solve C. That a multi-faceted approach is needed to address the issue
9. What will the students do next? A. Write a report on their discussion B. Prepare a presentation for their class C. Conduct further research on the topic
10. The overall tone of the discussion is: A. Optimistic B. Pessimistic C. Concerned but hopeful

SECTION 4 Questions 31-40

Complete the notes below.

Write **NO MORE THAN TWO WORDS** for each answer.

The Future of Antibiotics

The Problem:

- The pipeline for new antibiotics is **31** _____.
- Developing new drugs is expensive and **32** _____.
- Many pharmaceutical companies have abandoned antibiotic **33** _____.

Potential Solutions:

- **Phage Therapy:**
 - Uses viruses that infect and kill bacteria.
 - A promising **34** _____ to traditional antibiotics.
 - Challenges include the need for specific phages for each infection and potential for **35** _____.
- **Anti-Virulence Drugs:**
 - Aim to **36** _____ bacteria rather than kill them.
 - Reduces the harm caused by the infection without promoting resistance.
 - An example is a drug that blocks the production of **37** _____.
- **New Funding Models:**

- Public-private partnerships to share the costs and risks of drug development.
- **38** _____ to reward companies for developing new antibiotics.
- Governments can play a key role in creating a more **39** _____ market.

Conclusion:

- A multi-pronged approach is needed to combat AMR.
- We must invest in research, promote responsible antibiotic use, and develop **40** _____.

WRITING SECTION

WRITING TASK 1


You should spend about 20 minutes on this task.

The chart below shows the number of antibiotic prescriptions per 1,000 inhabitants in five different European countries in 2015 and 2023.

Summarise the information by selecting and reporting the main features, and make comparisons where relevant.

Write at least 150 words.

Antibiotic Prescriptions in Europe

A bar chart showing the number of antibiotic prescriptions per 1,000 inhabitants in five European countries (Sweden, Netherlands, Germany, Spain, Greece) for the years 2015 and 2023. In 2015, the numbers are: Sweden 300, Netherlands 350, Germany 500, Spain 700, Greece 850. In 2023, the numbers are: Sweden 250, Netherlands 300, Germany 400, Spain 650, Greece 800. All countries show a decrease in prescriptions.

WRITING TASK 2

You should spend about 40 minutes on this task.

Write about the following topic:

Antibiotic resistance is a growing global health crisis. Some people believe that the responsibility for tackling this problem lies with governments and medical

professionals. Others argue that individuals and the agricultural industry have a greater role to play.

Discuss both these views and give your own opinion.

Give reasons for your answer and include any relevant examples from your own knowledge or experience.

Write at least 250 words.

SPEAKING SECTION

Part 1: Introduction and interview (4-5 minutes)

The examiner will ask you some general questions about yourself and then move on to ask you some questions about the topic of health and medicine.

- How do you usually stay healthy?
- Have you ever taken antibiotics? What for?
- What do you think is the most important health issue in your country today?
- Do you think people are more or less healthy than they were in the past? Why?
- Do you think it is important for people to have a good understanding of health issues?

Part 2: Individual long turn (3-4 minutes)

The examiner will give you a topic on a card like the one below. You will have one minute to think about what you are going to say. You can make some notes to help you if you wish. You will have to talk about the topic for 1 to 2 minutes.

Describe a time when you were ill and had to take medicine.

You should say:

- what the illness was
- what medicine you took
- how the medicine affected you

and explain how you feel about taking medicine in general.

Part 3: Two-way discussion (4-5 minutes)

The examiner will ask you some more questions related to the topic in Part 2.

- Do you think people rely too much on medicine these days?
- What are the advantages and disadvantages of modern medicine?
- Some people say that traditional medicines are more effective than modern medicines. What is your opinion?
- How can governments encourage people to live healthier lifestyles?
- What role do you think technology will play in healthcare in the future?

GRAMMAR SECTION

Questions 1-5: Error Correction

Identify the error in each sentence and rewrite it correctly.

1. The number of antibiotic-resistant bacterias are increasing at an alarming rate.
2. He was prescribed a strong antibiotic for his infection, that he took for three days.
3. Despite of the doctor's advice, she stopped taking the medicine as soon as she felt better.
4. The research on new antibiotics are progressing too slowly to keep up with the threat.
5. If I would have known about the risks, I would have been more careful with using antibiotics.

Questions 6-10: Sentence Transformation

Complete the second sentence so that it has a similar meaning to the first sentence, using the word given. Do not change the word given. You must use between three and six words, including the word given.

1. The doctor advised him to complete the full course of antibiotics. (ESSENTIAL)
The doctor said that _____ the full course of antibiotics.

2. They have been developing a new vaccine for three years. (IN) A new vaccine _____ for three years.
3. She didn't follow the instructions, so the treatment was not effective. (RESULTED)
Her failure to follow the instructions _____ ineffective.
4. "You must not share your antibiotics with anyone," the pharmacist said to us.
(WARNED) The pharmacist _____ our antibiotics with anyone.
5. It is possible that the infection will become resistant to the new drug. (COULD)
The infection _____ to the new drug.

Questions 11-15: Fill in the Blanks

Complete the sentences with the correct form of the verb in brackets, or with a suitable article or preposition.

1. By the time the new antibiotic _____ (develop), the bacteria had already become resistant.
2. The overuse of antibiotics in agriculture is _____ major cause of concern.
3. He has been suffering _____ a persistent cough for over a month.
4. If we _____ (not act) now, we will face a future without effective antibiotics.
5. The patient was admitted _____ the hospital with a severe case of pneumonia.

Questions 16-20: Word Formation

Use the word in capitals to form a word that fits in the gap in the same line.

1. The _____ of new antibiotics is a long and expensive process. (DEVELOP)
 2. It is _____ to use antibiotics for viral infections. (EFFECTIVE)
 3. The _____ of bacteria to antibiotics is a natural process. (RESIST)
 4. The doctor gave her a _____ for a course of antibiotics. (PRESCRIBE)
 5. The _____ of this new drug has not yet been fully tested. (SAFE)
-

LISTENING SCRIPTS

SECTION 1

(Sound of a clinic waiting room, then a door opening)

Doctor: Hello, Sarah, please come in and have a seat.

Sarah: Thank you, Doctor.

Doctor: So, what seems to be the problem?

Sarah: It's this persistent cough I've had. It just won't go away. And I've been feeling really run down.

Doctor: I see. Let me just get some details. Your name is Sarah Jones, is that right?

Sarah: Yes, that's right.

Doctor: And can I get a contact number?

Sarah: Of course, it's **07700 900876**. (1)

Doctor: Thank you. Now, you mentioned a persistent cough and...?

Sarah: And a sore throat. (2) It's been really bothering me, especially at night.

Doctor: I understand. And how long have you had the cough?

Sarah: For about **three weeks** now. (3) I thought it would just go away on its own, but it seems to be getting worse.

Doctor: Any other symptoms? A fever, for example?

Sarah: Yes, I've had a bit of a fever, and I've been feeling very tired. I've also had a terrible **headache**. (4)

Doctor: And have you tried any treatments so far?

Sarah: Just some over-the-counter cough syrup, but it hasn't really helped.

Doctor: Okay. Well, let's have a listen to your chest. (Sound of doctor using a stethoscope) Deep breath in... and out... and again...

(Pause)

Doctor: Hmm, it sounds like you might have a chest infection. I suspect it's a **bacterial infection**. (5) Given that it's been going on for a while, I think a course of antibiotics is the best option.

Sarah: Oh, right.

Doctor: I'm going to prescribe you a seven-day course. You'll need to take two tablets, **twice a day**. (6) It's very important that you complete the full course, even if you start to feel better. Do you understand?

Sarah: Yes, I do.

Doctor: If you stop early, the infection might come back, and it could be more resistant to treatment in the future. So, you must finish the whole pack. Even if your symptoms **improve**. (7)

Sarah: I will. Thank you.

Doctor: Also, please do not share these **antibiotics** (8) with anyone else. They have been prescribed specifically for you. And it's best to avoid **alcohol** (9) while you're taking them, as it can reduce their effectiveness.

Sarah: Okay, I understand.

Doctor: I'd like to see you again for a follow-up appointment to make sure the infection has cleared up. How about in **one week**? (10)

Sarah: That sounds fine. Thank you, Doctor.

Doctor: You're welcome. The receptionist will give you the prescription. Just take it to any pharmacy.

SECTION 2

(Introductory music, then fades)

Presenter: Good morning, and welcome to 'Health Matters'. Today, we have a special guest, a public health official, who is here to talk to us about a very important topic: how to prevent the spread of infections. Welcome to the show.

Speaker: Thank you for having me. In our modern world, we are constantly exposed to germs that can cause illness. While modern medicine has given us powerful tools like antibiotics, prevention is always better than cure. Today, I want to share some simple yet effective strategies to protect yourself and others from infections.

The single most effective way to prevent the spread of germs is something we can all do: wash our hands. It sounds simple, but it's incredibly powerful. You should wash your hands frequently with soap and water for at least 20 seconds. That's about the time it takes to sing 'Happy Birthday' twice. If soap and water aren't available, use an alcohol-based hand sanitizer.

Another key strategy is vaccination. Vaccines work by training your immune system to recognize and fight off specific viruses and bacteria. It's important to stay up-to-date with your vaccinations, including the annual flu shot. Influenza, or the flu, is a serious respiratory illness that can lead to hospitalization and even death, so getting vaccinated is the best way to protect yourself.

Now, let's talk about antibiotics. These are life-saving drugs, but they are not always the answer. Antibiotics only work against bacterial infections, not viruses like the common cold or flu. Taking antibiotics when you don't need them can contribute to antibiotic resistance, which is a huge global problem. So, if you have a cold or flu, don't ask your doctor for antibiotics. Instead, rest and drink plenty of fluids.

If you are prescribed antibiotics for a bacterial infection, it is crucial that you take them exactly as directed and finish the full course, even if you start to feel better. This ensures that all the harmful bacteria are killed off.

Finally, if you are sick, especially with a contagious illness, it's important to stay at home to avoid spreading the infection to others. If you have a serious infection or if your symptoms are severe or persistent, you should always see a doctor for proper diagnosis and treatment. And when you are out in a public place, especially during flu season, using a hand sanitizer can be a good extra precaution.

By following these simple steps, we can all play a part in preventing the spread of infections and keeping our communities healthy.

(Outro music fades in)

SECTION 3

(Sound of a university seminar room)

Dr. Williams: Okay, so for your next presentation, you've chosen to focus on the use of antibiotics in farming. An excellent and very relevant topic. Chloe, James, what are your initial thoughts?

Chloe: Well, Dr. Williams, my main concern is the link between antibiotic use in agriculture and the rise of antibiotic-resistant bacteria. I've been reading about how the widespread use of these drugs in livestock can create superbugs that can then be transmitted to humans.

James: I agree, it's a serious issue. But we also need to understand why farmers use antibiotics in the first place. It's not just for treating sick animals. They are often used to promote growth and prevent disease in crowded farming conditions. It's an economic issue for farmers as well.

Dr. Williams: That's a very good point, James. It's a complex problem with multiple stakeholders. The transmission of resistant bacteria from animals to humans is indeed a significant public health risk. It can happen through the food chain, through direct contact with animals, or through the environment, for example, via contaminated water.

Chloe: So what can be done about it? I was thinking that a key solution must be to improve farm hygiene and animal welfare. If animals are healthier and live in better conditions, they won't need as many antibiotics. It seems like a more sustainable long-term solution than just banning antibiotic use altogether.

James: I think that's part of the answer, but it's not just up to the farmers. Consumers have a role to play by choosing meat and dairy products from farms that use antibiotics responsibly. And governments need to implement stricter regulations and support farmers in making the transition to more sustainable practices.

Dr. Williams: You're both right. A multi-faceted approach is essential. Some countries in Europe, for example, have successfully reduced antibiotic use in agriculture by implementing strict regulations and monitoring systems. They've shown that it is possible to produce food safely and economically without relying so heavily on these precious medicines.

Chloe: So, it's not an impossible problem to solve.

Dr. Williams: Not at all. It requires a concerted effort from everyone involved – farmers, veterinarians, policymakers, the food industry, and consumers. The key is to

recognize that the health of humans, animals, and the environment are all interconnected. That's the core principle of the 'One Health' approach.

James: That makes sense. So for our presentation, we should probably structure it around the causes, the consequences, and then the potential solutions, looking at the roles of different groups.

Dr. Williams: Exactly. That sounds like an excellent plan. I suggest you now go and conduct some further research on the specific strategies and policies that have been implemented in different countries. That will give your presentation a strong evidence base.

Chloe: Great. Thanks, Dr. Williams.

James: Yes, thank you.

SECTION 4

(Sound of a university lecture hall)

Lecturer: Good morning, everyone. In our last lecture, we discussed the mechanisms of antibiotic resistance. Today, I want to look to the future and explore the challenges and potential solutions in the ongoing battle against superbugs. The stark reality is that the pipeline for new antibiotics is **drying up**. (31) Developing new drugs is an incredibly expensive and **risky** (32) process, and as a result, many large pharmaceutical companies have abandoned antibiotic **research**. (33)

So, where do we go from here? Well, scientists are exploring a number of innovative approaches. One of the most fascinating is phage therapy. Phages are viruses that specifically infect and kill bacteria. They are a natural predator of bacteria and could be a powerful **alternative** (34) to traditional antibiotics. However, there are challenges. Each phage is highly specific, meaning you need to find the right one for each infection. There is also the potential for bacteria to develop **resistance** (35) to phages, just as they do to antibiotics.

Another promising strategy is the development of anti-virulence drugs. Instead of killing the bacteria, these drugs aim to **disarm** (36) them. They work by blocking the production of toxins and other harmful molecules that bacteria use to cause disease. This approach reduces the harm caused by the infection and, in theory, should exert less selective pressure on bacteria to develop resistance. For example, a drug that

blocks the production of bacterial **toxins** (37) would make the infection less severe, allowing the host's immune system to clear it more easily.

Of course, we still need new antibiotics. To reinvigorate the development pipeline, we need new funding models. Public-private partnerships are being explored to share the costs and risks of drug development. Another idea is to offer **incentives**, (38) such as large financial rewards, to companies that successfully develop new antibiotics. Governments have a crucial role to play in creating a more **sustainable** (39) market for these life-saving drugs.

In conclusion, there is no single magic bullet to solve the problem of antibiotic resistance. A multi-pronged approach is essential. We must continue to invest in research, promote the responsible use of existing antibiotics, and develop **novel therapies**. (40) The future of medicine depends on our ability to stay one step ahead of the ever-evolving world of bacteria. Thank you.

ANSWER KEY

READING

1. FALSE
2. TRUE
3. FALSE
4. FALSE
5. TRUE
6. NOT GIVEN
7. D
8. A
9. B
10. B
11. stewardship
12. alternative treatments
13. International collaboration

14. iii
15. iv
16. v
17. vii
18. ii
19. i
20. C
21. B
22. B
23. B
24. target site
25. multidrug resistance
26. viruses
27. NO
28. YES
29. NO
30. NO
31. NO
32. YES
33. C
34. C
35. B
36. B
37. framework
38. rational use
39. alternative therapies
40. Public awareness

LISTENING

1. 07700 900876
2. sore throat
3. three weeks
4. headache
5. bacterial infection
6. twice a day
7. improve
8. antibiotics
9. alcohol
10. one week
11. B
12. C
13. B
14. B
15. C
16. C
17. F
18. A
19. A
20. G
21. B
22. C
23. B
24. B
25. B
26. B
27. A

- 28. C
- 29. C
- 30. C
- 31. drying up
- 32. risky
- 33. research
- 34. alternative
- 35. resistance
- 36. disarm
- 37. toxins
- 38. incentives
- 39. sustainable
- 40. novel therapies

GRAMMAR

- 1. The number of antibiotic-resistant **bacteria is** increasing at an alarming rate.
- 2. He was prescribed a strong antibiotic for his infection, **which** he took for three days.
- 3. **Despite** the doctor's advice, she stopped taking the medicine as soon as she felt better.
- 4. The research on new antibiotics **is** progressing too slowly to keep up with the threat.
- 5. If I **had known** about the risks, I would have been more careful with using antibiotics.
- 6. it was **essential to complete**
- 7. has been **in development**
- 8. **resulted in the treatment being**
- 9. **warned us not to share**
- 10. **could become resistant**
- 11. was developed

- 12. a
 - 13. from
 - 14. do not act
 - 15. to
 - 16. DEVELOPMENT
 - 17. INEFFECTIVE
 - 18. RESISTANCE
 - 19. PRESCRIPTION
 - 20. SAFETY
-

TUTOR GUIDE

Writing Task 1: Model Answer

The bar chart illustrates the number of antibiotic prescriptions per 1,000 people in five European countries for the years 2015 and 2023.

Overall, there was a discernible downward trend in the prescription rates across all five nations over the eight-year period. Greece consistently had the highest number of prescriptions in both years, while Sweden had the lowest.

In 2015, Greece recorded the highest rate with 850 prescriptions per 1,000 inhabitants, followed by Spain at 700. Germany's rate was considerably lower at 500, while the Netherlands and Sweden had the lowest figures, at 350 and 300 respectively.

By 2023, the prescription rates in all five countries had decreased. Greece, while still having the highest rate, saw a reduction to 800 prescriptions. Spain's rate fell to 650, and Germany's dropped to 400. The most significant decreases were seen in the countries with the lowest initial rates: the Netherlands' rate fell to 300, and Sweden's to 250. This indicates a positive trend towards more controlled use of antibiotics in these European nations.

Writing Task 2: Model Essay (Band 9)

The escalating crisis of antibiotic resistance presents one of the most formidable challenges to global health in the 21st century. While there is a broad consensus on the gravity of the issue, the allocation of responsibility for tackling it remains a subject of debate. Some contend that governments and medical professionals are primarily accountable, whereas others assert that individuals and the agricultural sector must bear the greater burden. This essay will argue that while all parties have a crucial role, the ultimate responsibility lies with governments to orchestrate a coordinated, multi-sectoral response.

On one hand, the role of governments and healthcare providers is undeniably central. Governments possess the legislative and regulatory power to enforce policies that curb the misuse of antibiotics. This includes implementing stringent controls on the prescription and sale of these drugs, banning their use for growth promotion in livestock, and funding public awareness campaigns. Medical professionals, as the gatekeepers of antibiotic access, have an ethical obligation to prescribe these vital medicines judiciously, adhering to evidence-based guidelines and educating their patients on the importance of correct usage. Without their expertise and commitment, any effort to control antibiotic consumption at a national level would be futile.

On the other hand, the cumulative impact of individual and industrial behaviour cannot be understated. The agricultural industry, through the widespread prophylactic use of antibiotics in livestock, has created vast reservoirs of resistant bacteria that can spread to humans. A fundamental shift towards more sustainable farming practices, prioritising animal welfare and hygiene, is therefore imperative. Similarly, individuals have a personal responsibility to use antibiotics correctly, not demanding them for viral infections and always completing the prescribed course. Public ignorance and complacency are significant drivers of the crisis, and a change in societal attitudes is essential.

In my view, while individual and industrial actions are vital components of the solution, the primary responsibility must rest with governments. The scale and complexity of antibiotic resistance demand a level of coordination and authority that only national governments can provide. They are uniquely positioned to create the legislative framework, economic incentives, and international partnerships necessary to drive change across all sectors. For instance, a government can simultaneously regulate antibiotic use in farming, fund research into new diagnostics, and launch a

nationwide educational campaign. This integrated approach is far more potent than the fragmented efforts of individuals or industries acting alone.

In conclusion, tackling antibiotic resistance requires a collective effort from all levels of society. However, it is governments that must lead and orchestrate this effort. By wielding their legislative power and resources, they can create a system that encourages responsible behaviour from medical professionals, the agricultural industry, and the public, ultimately safeguarding the future of these life-saving medicines.

Speaking Part 2: Sample Response

I'd like to talk about a time a couple of years ago when I had a really nasty bout of bronchitis. It started as a simple cold, but after a week, instead of getting better, my cough became much worse, and I was having trouble breathing. I felt absolutely dreadful, so I made an appointment to see my doctor.

After examining me, the doctor confirmed it was a bacterial chest infection and gave me a prescription for a course of antibiotics. I believe the specific medicine was amoxicillin, which is a fairly common antibiotic. I was instructed to take one capsule three times a day for seven days.

I started taking the medicine straight away, and I have to say, the effect was quite remarkable. Within about 48 hours, I started to feel a significant improvement. My fever went down, my cough became less severe, and I gradually started to get my energy back. It was a huge relief after feeling so ill for over a week. I made sure to complete the entire seven-day course, just as the doctor had told me, even though I was feeling much better after just a few days.

In general, I have a great deal of respect for modern medicine and the role of antibiotics. I think they are incredible, life-saving drugs when used correctly. However, I'm also very aware of the dangers of overusing them and the problem of antibiotic resistance. So, while I'm grateful for them when I genuinely need them, I'm also cautious. I would never take them for a simple cold or a viral infection, and I believe it's crucial to follow medical advice precisely to ensure they remain effective for future generations. It's a bit of a double-edged sword, really – a powerful tool that we need to use with great care and responsibility.

Key Vocabulary List

1. **Antimicrobial Resistance (AMR):** The ability of a microorganism (like bacteria, viruses, and some parasites) to stop an antimicrobial (such as antibiotics, antivirals and antimalarials) from working against it.
2. **Superbug:** A strain of bacteria that has become resistant to several different antibiotics.
3. **Indiscriminate (use):** Using something without careful thought or judgment.
4. **Resilient:** Able to withstand or recover quickly from difficult conditions.
5. **Staggering:** Deeply shocking; astonishing.
6. **Mortality Rate:** The number of deaths in a given area or period, or from a particular cause.
7. **Stewardship:** The responsible overseeing and protection of something considered worth caring for and preserving.
8. **Reinvigorate:** Give new energy or strength to.
9. **Catastrophe:** An event causing great and often sudden damage or suffering; a disaster.
10. **Enzymatic Degradation:** The breakdown of a substance by enzymes.
11. **Efflux Pumps:** Protein structures in bacteria that actively transport antibiotics out of the cell.
12. **Horizontal Gene Transfer:** The movement of genetic material between organisms other than by the vertical transmission of DNA from parent to offspring.
13. **Phage Therapy:** The therapeutic use of bacteriophages (viruses that infect bacteria) to treat pathogenic bacterial infections.
14. **Anti-virulence Drugs:** Drugs that disarm bacteria by targeting the factors that cause disease, rather than killing the bacteria directly.
15. **Spectre:** Something widely feared as a possible unpleasant or dangerous occurrence.
16. **Imminent:** About to happen.
17. **Jeopardize:** Put (someone or something) into a situation in which there is a danger of loss, harm, or failure.

18. **Judiciously:** With good judgment or sense.
19. **Prophylactic:** Intended to prevent disease.
20. **Paradigm Shift:** A fundamental change in approach or underlying assumptions.