

# Assessment Brief

## 1. Submission and feedback dates

**Submission deadline:** Before 14:00 on Tuesday 16th April 2024.

This assignment will automatically have a 48-hour extension applied, as per the new university guidelines.

**Marks and Feedback due on:** No later than 20 working days after the late submission window date unless alternative date agreed at field level

N.B. all times are 24-hour clock, current local time (at time of submission) in the UK

## 2. Submission details

**Module title and code:** UZVSMQ-15-M – Health Protection

**Component and type:** Component A: 3000 word written assignment

**Assessment weighting:** 100% of total module mark

**Size or length of assessment:** 3000 words

### Module learning outcomes assessed by this task:

MO1 Demonstrate understanding and critical insight into principles of surveillance, applied epidemiology and the aetiology, monitoring and interpretation of patterns of communicable diseases.

MO2 Demonstrate understanding and critical insight into public and environmental health protection issues relevant to international contexts, including understanding of how inequalities impact exposure and epidemiological outcomes.

MO3 Demonstrate understanding and capability to communicate evidence-based actions necessary to manage communicable diseases and environmental impacts on health, taking into account the social and political environment in the implementation of such actions.

### **3. Completing your assessment**

#### **What am I required to do on this assessment?**

This assessment requires you to prepare and submit an assignment in two parts. Firstly, you must develop a critical evaluation of a health protection scenario and produce a management plan or case review of the issue, drawing upon current evidence and policy. Secondly, you must develop a communication strategy of health advice, which may be in the form of a press release or policy briefing. The purpose of the assignment is to assess students' understanding of the epidemiology, management and control of communicable diseases and environmental incidents, and your ability to apply this knowledge and understanding to "real world" scenarios, as required within a health protection role. It assesses investigative skills in sourcing published evidence and transferable advocacy and communication skills. A series of formative activities are embedded into the taught sessions and through online learning resources to build your confidence and skills in preparing your assignments. These include peer-to-peer group presentations and formative feedback from the module team on the coursework preparation.

#### **Instructions**

This module is assessed through a summative written assignment of no more than 3000 words that needs to be submitted via Blackboard. The assignment will be divided into two equal sections- Section A (50%) and Section B (50%).

Section A will test your understanding of infection control and outbreak management using a related case-study while section B will assess your ability to evaluate the impact of environmental hazards and how you respond to such threats using a related case-study.

## SECTION A: Measles

[50 marks]

### BACKGROUND

Measles is a highly contagious viral infectious disease that can be severe. Despite the availability of a vaccine, measles outbreaks continue to occur globally. In the United Kingdom, concerted efforts have been made to maintain high vaccination coverage, but occasional outbreaks pose public health challenges. Measles is a notifiable disease under the Health Protection (Notification) Regulations (England) 2010.

### CASE DEFINITIONS

#### ***Laboratory confirmed***

A suspected case with laboratory confirmation of acute infection.

***Epidemiologically confirmed*** (a term used for surveillance purposes to define confirmed cases in the absence of a laboratory test to confirm measles)

A clinically classical case of measles with a direct epidemiological link to a confirmed case (where onset of symptoms occurred within 7 to 21 days of exposure), or related to another epidemiologically confirmed case (for example in an outbreak setting).

#### ***Likely (probable)***

A clinically classical case of measles with epidemiological features that either increase the likelihood of the patient having been exposed and/or favour the diagnosis of measles relative to other causes of rash illness. Clinical features are outlined in Table 1 and epidemiological risk factors are summarised in 'Factors to consider...' below

#### ***Likely breakthrough***

A suspected case of measles in a patient who has had 2 doses of measles containing vaccine (usually at least 6 years after vaccination) or has confirmation of previous measles infection (IgG positive). The case will usually have mild symptoms (Table 1) and epidemiological information that suggest exposure to measles (see 'Factors to consider...' below). Please note these cases are rare.

**TABLE 1: CLINICAL FEATURES OF MEASLES**

Clinical features	Symptoms
Classical primary measles: generally very unwell and considered measles until proven otherwise	<ul style="list-style-type: none"><li>• fever &gt;39°C in the absence of antipyretics, and</li><li>• generalised maculopapular rash, and</li><li>• one or more of:<ul style="list-style-type: none"><li>○ conjunctivitis</li><li>○ cough</li><li>○ coryza</li></ul></li></ul>
Mild: generally a milder illness	<ul style="list-style-type: none"><li>• fever typically 37.5°C to 39°C</li><li>• rash may be more localised</li><li>• may not have conjunctivitis, coryza or cough</li></ul>
Rash or fever following vaccination	Rash and mild fever on day 10 or 11 post-MMR vaccination is likely to be vaccine related

**FACTORS TO CONSIDER IN THE RISK ASSESSMENT**

Factors increasing the risk of exposure:

- membership of a community known to be more susceptible, for example, traveller community, Charedi Orthodox Jewish community, anthroposophical (Steiner) communities, local community with low MMR vaccination coverage (2, 3)
- visited an area (local or international) where measles is known to be circulating, during the incubation period
- attendance at large international mass gathering events, where substantial mixing occurs between individuals potentially travelling from areas where measles is circulating; this would include, for example, events such as music festivals (19)

Factors favouring the diagnosis of primary measles infection:

- age: the likelihood of a suspected case being confirmed as measles is higher among adolescent and young adults. In infants and toddlers, measles-like clinical
- presentations due to other illnesses, such as roseola or scarlet fever, are common (see Annexe 1)
- a lack of immunity or incomplete vaccination: the diagnosis is more likely if cases are unvaccinated or partially vaccinated, and have no prior history of measles infection

Q1) Discuss the burden and public health impacts of Measles for a named country of your choice, supported by relevant evidence. You should consider any inequalities in exposure and outcomes, using specific examples as appropriate. **[10 marks]**

#### **SCENARIO 1**

You work in the health protection team based in Smithtown council. Smithtown is a large city in England. On October 18<sup>th</sup>, 2023, a local primary school in Smithtown reports an increasing number of children with symptoms consistent with measles. The symptoms include high fever, cough, runny nose, and characteristic red spots. Initial investigations suggest a potential outbreak.

Q2) Based on this information, describe what immediate public health actions need to be taken before a definitive diagnosis is known. **[5 marks]**

Q3) Using the chain of infection as a framework for your answer, articulate how a measles infection is passed from person to person and suggest ways to prevent this transmission. **[12 marks]**

#### **SCENARIO 2**

On October 23<sup>rd</sup>, 2023, the school reports that in total the parents/guardians of 7 children, aged 5 to 9 years, have reported symptoms typical of measles.

Of these 7 children, 2 have attended the local hospital where samples were taken and sent for testing. The laboratory test confirms Measles infection in both of these children. These children are not related and when asked the parents/guardians of each confirmed they had not been vaccinated for measles.

Your team confirm that this is an outbreak of measles.

Q4) Using the scenario provided discuss how the outbreak should be managed, and the key roles and responsibilities of those involved in responding to the outbreak. **[10 marks]**

**SCENARIO 3**

The headteacher of the local primary school has had numerous calls and emails from concerned parents/guardians at the school. The headteacher asks if you can write a letter to be sent to all parents/guardians containing the essential information.

Q5) Write a letter, of no more than 500 words, that can be sent to parents and guardians of children who attend the local primary school. **[8 marks]**

**Structure, coherence and references in SECTION A [5 marks]**

**END OF SECTION A**

## SECTION B: Ambient air pollution.

**[50 marks]**

### BACKGROUND

More than 80% of people living in urban areas that monitor air pollution are exposed to air quality levels that exceed the World Health Organization (WHO) limits. While all regions of the world are affected, populations in low-income cities are the most impacted. Long term exposure to air pollution has serious health effects including cardiovascular and respiratory diseases, as well as loss of life expectancy.

Q1) Discuss the short and long-term health impacts arising from ambient air pollution in a named country of your choice, supported by relevant evidence, including statistics. You should include the of sources of pollution in this context, and consider any inequalities in exposure and outcomes, using specific examples as appropriate. **[10 marks]**

### SCENARIO 1

In Sunford, a low-income, industrial city in England (population 175,000), a local group of respiratory doctors have raised their concerns about rising numbers of admissions for asthma and chronic obstructive pulmonary disease over the past 5-years with associated deaths from these diseases. This has been picked up by a local group campaigning for pollution free zones around particular neighborhoods of the city and around primary schools. The group are aware that children living near roads with heavy traffic have twice the risk of respiratory problems as those living near less congested streets and there is concern about a lack of monitoring.

Q2) Provide an evidence-based summary of effective interventions to reduce harm from ambient air pollution in the context given in the scenario, with recommendations for a local plan, taking account of relevant policies. **[20 marks]**

### SCENARIO 2

You are working in the health protection team at Sunford Council. You have been asked for an interview on the local news to discuss the risks to the public, particularly young children, and the elderly, from rising levels of air pollution and what the council propose to do about it.

Q3) Prepare an outline of the information and key points that you want to communicate to the public at this stage. Consider the social context of this scenario and consider which interventions you might choose to mention in your interview. You can expect to be asked about air quality guidelines for particulate matter, methods for monitoring air quality, and the next steps to be taken by the council. **[15 marks]**

**Structure, coherence, and references in SECTION B [5 marks]**

**END OF SECTION B**



The word limit for both Section A and Section B is 3000 words. The word limit includes the main body of the text in your portfolio (including headings), in-text citations, and any tables/figures, but excludes your reference list. See UWE's '[Academic Content Limit Policy](#)' for further details. It is your duty to accurately report your word count. Failure to do so may incur penalties.

### **What do I do if I am concerned about completing this assessment?**

UWE Bristol offer a range of Assessment Support Options that you can explore through [this link](#), and both [Academic Support](#) and [Wellbeing Support](#) are available.

For further information, please see the [Academic Survival Guide](#).

### **How do I avoid an Assessment Offence on this module? <sup>2</sup>**

Use the support above if you feel unable to submit your own work for this module.

### **Academic good practice**

1. In line with UWE Bristol's [Assessment Content Limit Policy](#) (formerly the Word Count Policy), word count includes all text, including (but not limited to): the main body of text (including headings), all citations (both in and out of brackets), text boxes, tables and graphs, figures and diagrams, quotes, lists.
2. UWE Bristol's [UWE's Assessment Offences Policy](#) requires that you submit work that is entirely your own and reflects your own learning, so it is important to:
  - Ensure you reference all sources used, using the [UWE Harvard](#) and the guidance available on [UWE's Study Skills referencing pages](#).
  - Avoid copying and pasting any work into this assessment, including your own previous assessments, work from other students or internet sources
  - Develop your own style, arguments, and wording, so avoid copying sources and changing individual words but keeping, essentially, the same sentences and/or structures from other sources
  - Never give your work to others who may copy it
  - If an individual assessment, develop your own work and preparation, and do not allow anyone to make amends on your work (including proof-readers, who may highlight issues but not edit the work) and

**When submitting your work, you will be required to confirm that the work is your own,** and text-matching software and other methods are routinely used to check submissions against other submissions to the university and internet sources. Details of what constitutes plagiarism and how to avoid it can be found on UWE's Study Skills [pages about avoiding plagiarism](#).

## 4. Marks and Feedback

Your assessment will be marked according to the following marking criteria. You can use these to evaluate your own work before you submit.

### Assessment Grading

POSTGRADUATE (Level M)		<i>Indicative Qualities</i>
100 - 90%	<b>Outstanding</b>	<i>An exceptional and outstanding piece of academic work; showing advanced and critical awareness at the forefront of the discipline or professional practice. Exceptional use of appropriate texts, research and other learning materials, well beyond the taught content, displaying new insights and advanced scholarship; mastery of clarity in argument and communication. Exemplary</i>
89 - 80%	<b>Excellent</b>	<i>An excellent piece of academic work clearly demonstrating critical awareness of the discipline, current research or professional practice. Evidence of originality and advanced scholarship. Excellent analysis in most areas; use of new sources and approaches evident; balanced in analysis and argument. Clarity of argument and comprehensive knowledge.</i>
79 - 70%	<b>Very Good</b>	<i>A very good and competent piece of work, demonstrating good critical awareness and analysis of the subject. Comprehensive understanding of knowledge, with the ability to develop critiques at an advanced level. Evidence of originality; negligible errors or omissions. Notably good presentation/communication of ideas and comprehension.</i>
69 - 60%	<b>Good</b>	<i>A good piece of academic work demonstrating the ability to critical evaluate. Good knowledge and understanding of the discipline or professional practice. Some ability to develop critiques at an advanced level and some evidence of originality. Good understanding of main concepts, but could be further developed and strengthened with greater focus and more in-depth analysis. Good evidence of appropriate reading. Accurately and appropriately referenced.</i>
59 - 50%	<b>Pass</b>	<i>Meets the relevant learning outcomes but is mostly descriptive. Some basic critical awareness is present evaluation but the analysis is not very well developed and could be strengthened in originality or scope. Some evidence of appropriate reading and critical thought beyond the taught material but evaluation and critique could be strengthened. Evidence of appropriate structure but presentation and focus may need improving.</i>
49 - 40%	<b>Marginal Fail</b>	<i>Little evidence of understanding and overall not reaching the minimum pass standard due to some key omissions in presentation, argument or structure. Limited critique and evaluation and argument needs further development. Content not always relevant. Limited evidence of reading.</i>
39 - 30%	<b>Limited</b>	<i>Some evidence of effort but missing essential aspects. For example, may be lacking in evidence of understanding, focus and structure. Likely to have no analysis or discussion and material may lack of relevance. Presentation may need to be improved. Likely to show insufficient evidence of reading;</i>
29 - 20%	<b>A Limited Piece of Work</b>	<i>Some material presented but generally unsatisfactory with some irrelevant or incorrect material. Lack of discussion. Likely to show insufficient evidence of reading; Likely to be incomplete.</i>
19 - 10%	<b>A Very Limited Piece of Work</b>	<i>Significant deficiencies; Likely to have insufficient, irrelevant or incorrect material. Likely to have very poor structure and no discussion.</i>
9 - 0%	<b>Exceptionally Limited Piece of Work</b>	<i>Insufficient material presented. No evidence of sufficient preparation.  Zero is reserved for failure to attempt an answer</i>