



Australasian Faculty of Public Health Medicine (AFPHM)

Oral Examination

2021–23 Sample Questions

Question 1: Using evidence in program design

The table below provides long-term follow-up data from a trial of the only licensed dengue vaccine available. Trial participants were aged 9 years and older, and lived in countries with endemic dengue.

Participants' past exposure to dengue before vaccination	Vaccine efficacy against symptomatic dengue, at 2 years after the first dose of vaccine, with 95% confidence interval	Hazard ratio for severe dengue compared to unvaccinated control with same serostatus, at 5 years after the first dose of vaccine, with 95% confidence interval
Seropositive	76% (64 to 84)	0.16 (0.07 to 0.37)
Seronegative	39% (-1 to 63)	2.44 (0.47 to 12.56)

- (a) Describe and interpret the data in the table above. (50%)
- (b) With reference to the data, summarise the factors that should be considered when planning the roll out of a dengue vaccine program in a country with endemic dengue. (50%)

Notes:

Part a) requires a description and interpretation of the table in a logical way. Definitions of relevant terms would be appropriate in addition to interpretation of statistical significance.

Part b) is asking for an assessment of how this evidence might influence vaccine program planning as well as a broad discussion of such planning considerations. Consider whether this is valid and sufficient evidence as well as how and in what areas of the vaccination program decisions might be influenced by the data.

Question 2: Legionella

You are a public health physician working in a regional public health unit. Yesterday, a 78-year-old male was notified with a positive *Legionella pneumophila* urinary antigen test. He was admitted to intensive care with severe pneumonia 2 days ago. He and his wife have been staying in a large resort, having arrived in the area from interstate 10 days ago. During this time, they attended a birthday party.

Today, a 76-year-old female was notified with a positive *Legionella pneumophila* urinary antigen test. She was admitted to hospital with pneumonia yesterday. She is a local resident.

Initial questioning reveals the two cases are cousins.

Discuss how you would investigate and manage this situation.

Notes:

This is a standard outbreak response question that would fit well into a standard outbreak framework. Consider though any nuances relevant to Legionella as your answer progresses through the framework.

Question 3: Silicosis

You are a public health physician who works in the environmental health branch of the health department in your jurisdiction. The Health Minister has met with a group of respiratory physicians who are concerned about the increasing incidence of silicosis among stonemasons. The respiratory physicians have also notified the work health and safety (WHS) regulator.

You have been asked to lead the public health response to these concerns.

Describe the approach you will take to manage this situation.

Notes:

This is an environmental health risk question. Stepping through the enHealth health risk assessment framework would be appropriate followed by some discussion of risk management and risk communication.

Question 4: Research with First Nations people

You are a public health physician working in a university research centre.

You want to conduct a study on the barriers to accessing primary care services for the prevention of cardiovascular disease in the First Nations population in your region.

Describe your approach to developing this research project.

Notes:

This question is seeking demonstration of respectful and ethical engagement with First Nations researchers as collaborators and their communities, and demonstration of understanding of the process and considerations needed when developing a research project.

Question 5: Falls prevention

You are a public health physician working in a large metropolitan public health unit.

Local hospital data shows a 20% readmission rate for adults aged over 64 years due to falls within 6 months of discharge. You have been requested to develop a health promotion program to prevent falls among older adults post-discharge from hospital.

Describe how you would undertake this task.

Notes:

After a consideration of existing evidence and programs / activities / resources, the Ottawa Charter or other standard health promotion framework would work well for this question. Ensure you populate the framework with relevant and feasible examples.