

**2011 AFPHM FINAL ORAL EXAMINATION
QUESTIONS ONLY (NO ANSWER FRAMEWORK)**

PLAIN LANGUAGE

You are involved in a small working group reviewing services for people living with HIV/AIDS.

- 1. Explain to the lay members of the group the meaning of the terms incidence and prevalence and their different uses in public health.**
- 2. Explain why the prevalence of HIV infection is increasing, although the incidence of HIV infection is generally static or declining.**

ENVIRONMENTAL HEALTH (MARINA RE-DEVELOPMENT)

You are the senior public health advisor to your health department and have been asked to respond to community concerns about a recently completed marina re-development. The boat mooring capacity of the marina has been doubled and the facility also now operates as a boat painting and maintenance works for a commercial fishing trawler fleet as well as several local yacht clubs.

A prominent community action group has written to the Minister requesting that the marina's operations be immediately suspended. A local media personality chairs this group and is generating publicity claiming that the re-development has resulted in the sea water becoming smelly, members of the local swimming club suffering from nausea, diarrhoea, skin rashes and headaches and parents preventing their children from swimming in the water due to health concerns.

Explain how you would respond to this issue.

DISASTER MANAGEMENT (FLOOD DISASTER)

Beginning in December 2010, a series of floods hit Australia, beginning primarily in the state of Queensland, including its capital city, Brisbane. The floods forced the evacuation of thousands of people from towns and cities. Three-quarters of the state of Queensland was declared a disaster zone.

Consider that you are working in the Queensland Department of Health as a Public Health Physician during the 2010 floods. You are part of the team that is tasked with responding to this natural disaster.

- 1. What are the likely public health issues that will need to be addressed in the response and recovery phases?**
- 2. Briefly describe how you would contribute to the team as a Public Health Physician**

COMMUNICABLE DISEASE (GASTROENTERITIS)

You are working as the on-duty Public Health Physician in the Communicable Disease Control Branch of your state Department of Health. You are phoned by a GP who has seen three unrelated children with acute gastroenteritis over the past 24 hours who all attend the same child care centre.

One of the children has a stool specimen positive for norovirus.

In addition, the GP has also seen an adult with acute gastroenteritis, also with norovirus, who works at the hospital that is sited adjacent to the childcare centre. This adult has no relationship to any of the children, and does not have a child who attends the childcare centre. However, the childcare centre and the hospital cafeteria share a common kitchen.

Please describe what you would do in this situation.

HEALTH PROMOTION (HEALTHY ACTIVE LIVING)

You are working in the Health Promotion branch of your State/Territory health department and are required to respond to a request from a large urban Council to develop a new “healthy active living” strategy, with the stated aim being to increase physical activity levels across the community.

Describe your approach to this task, using an established health promotion framework to describe the elements in your strategy.

POLICY DEVELOPMENT (NEEDLE AND SYRINGE PROGRAMS IN RURAL AREAS)

You are a public health physician in your State/Territory Health Department. There has recently been an increase in notifications of acute hepatitis C in rural areas. An investigation has revealed that this is likely to be related to the sharing of injecting equipment.

In the metropolitan area of your jurisdiction, needle and syringe programs have been established for some time, but there are no needle and syringe programs in rural areas. You have been asked to develop a policy for the introduction of a needle and syringe program to reduce the sharing of injecting equipment in rural areas.

Please outline how you would go about developing the policy.

EVALUATION (SEXUAL HEALTH PROGRAM)

An innovative sexual health program was established at the local university two years ago. It generated some controversy at the time. It consists broadly of

- Promoting safe sex practices via awareness raising and education strategies and increasing condom availability;
- Encouraging students to present for regular sexual health checks to the student health centre whether they have STI symptoms or not; and

The student population is quite diverse, comprising both Australian resident and overseas students and including a broad range of ethnic groups.

The program steering committee, consisting of University management, senior academics and student representatives, has asked you to evaluate the program.

Outline the key elements of the plan for your proposed evaluation

AUSTRALIAN HEALTH SYSTEM (POPULATION HEALTH)

It has been argued that there should be more emphasis on a population health approach to disease prevention and health promotion in primary care.

- 1. Explain, with examples, what is meant by a population health approach in primary care.**
- 2. Outline some of the barriers to a population health approach in primary care.**
- 3. What is being done or proposed in Australia to enhance a population approach to disease prevention and health promotion in primary care?**

INDIGENOUS HEALTH (SEXUAL HEALTH)

You have recently taken a post as a Public Health Physician in an Aboriginal Community Controlled Health Service, which provides primary health care services for several remote Aboriginal communities. The Board of the Health Service has been concerned about high rates of Sexually Transmitted Infections (STIs).

At their request you have conducted a situation analysis that confirms high rates of bacterial STIs as well as of pelvic inflammatory disease and infertility. The analysis revealed a number of inadequacies in the clinical services and in community health promotion and education.

After presenting this information to the Board, you are asked to work with both the clinic staff and community to develop a comprehensive sexual health program.

- 1. How would you go about engaging with staff and the community in the process of developing the program?**
- 2. What particular sensitivities would you need to take into account?**

Note: Focus on the process of consultation and do not go into detail about technical aspects of the program.

HEALTH INEQUALITIES (CHRONIC DISEASE AND RISK FACTORS)

The table below, based on data from the 2007-2008 ABS National Health Survey (Australia's Health 2010, AIHW) shows the prevalence in the Australian population of a range of selected health measures by socioeconomic status.

Prevalence of selected health measures by SES, Australia 2007 – 08 (percent)

Characteristics	SEIFA Quintiles				
	5	4	3	2	1
Health Risk Factors					
Daily Smoking	11.1	15.1	18.8	21.1	28.6
Sedentary Exercise Level	24.9	31.0	38.1	38.8	45.4
Risky or High-Risk Alcohol consumption	12.7	12.5	13.3	13.6	10.1
Overweight or Obese	37.9	41.2	42.7	42.2	42.5
Health Condition					
Diabetes (Type 2)	2.9	3.7	4.1	4.3	6.2
Cardiovascular Disease	17.3	17.1	21.1	22.2	23.8

Notes:

- a. Data are based on persons aged 15 years and over, except smoking and alcohol consumption (18 years and over)
- b. Data are age-standardised to the 2001 Australian Population

1. Describe the key findings presented in the table
2. Using examples from the table, explain how socioeconomic status can be a determinant of health.

EPIDEMIOLOGY (HRT AND BREAST CANCER)

There has been considerable interest and research on the possible relationship between estrogen and progestin hormone replacement therapy (HRT) and the risk of breast cancer. However, results from different studies have been inconsistent.

In a population-based case-control study in the USA (537 cases with incident primary breast cancer and 492 randomly selected women without breast cancer), users of HRT had a reduced risk of breast cancer compared with non-users (OR=0.4, 95%CI 0.2-1.0).

However, in a large multi-centre clinical trial ($n > 20,000$), women randomised to receive HRT had a significant excess risk of breast cancer compared with those receiving placebo (RR=1.27, 95%CI 1.03-1.56).

- 1. How can you explain these conflicting findings?**
- 2. What other information would you want to know in order to fully evaluate the results?**

PUBLIC HEALTH EVIDENCE (WIND FARMS)

The onset of persistent tinnitus is frequently claimed to be associated with living or working in proximity to wind farms.

You have been asked to produce a report for the Minister for Health within the next month on the possible association between wind farms and tinnitus.

- 1. Describe the types of evidence that are likely to be available to you**
- 2. Describe how you would go about assessing the possible association.**