Chapter 1
HSC Core 1: Health Priorities in Australia

Critical Question 1 – How are priority issues for Australia's health identified?

Measuring health status

An assessment of the degree or quality of health of an individual or a specific population is referred to as their health status. This assessment is measured against an identifiable standard, such as the health status of the general population.

Role of epidemiology
The collection and analysis of the data used to make this assessment is known as Epidemiology. Epidemiology is defined as the study of the rates and patterns of illness, disease and injury amongst specific population groups. This information is gathered through hospital usage, health professionals and surveys. The identification of specific health trends is then used to establish health priorities, and to guide the decision-making, resource allocation and programs of all public and private sectors involved in health care and heath promotion in Australia. A significant limitation of Epidemiology is that it does not provide information about a person's quality of life in a holistic sense, nor does it accurately describe the socio-cultural, socio-economic and environmental determinants of health.

Measures of epidemiology
The primary statistical data used to assess the health status of the Australian population, as well as its various sub-groups, include:

- Morbidity: The rates, distribution and trends of illness, disease and injury in a given population. For example, 20% of Australians aged between 16 and 85 had a mental disorder in the previous twelve months (2007).
- Mortality: The number of deaths for a given cause in a given population, over a set time-period. For example, Cardiovascular Disease (33.8%) and Cancer (29.2%) accounted for 63% of all deaths in Australia in 2007.
- Infant Mortality: The number of deaths in the first year of life per 1000 live births. For example, the infant mortality rate was 4.2 infant deaths per 1000 live births in 2007, and is decreasing at a steady rate.
- Life Expectancy: An estimate of the number of years a person can expect to live at any particular age. For example, the life expectancy of a baby born in 2005 is 84 years if female, and 79 years if male.

Generally speaking, the health status of Australians is improving and it ranks very highly when compared with other developed nations. Death rates are decreasing for major lifestyle diseases such as cardiovascular disease, cancer, asthma and Injury. However, there are still a number of issues of concern, including:

- Increasing rates of mental health disorders and type 2 diabetes
- The prevalence of poor health behaviours, such as smoking, excessive alcohol consumption, poor dietary choices and low levels of physical activity, particularly amongst population groups who are of a low socio-economic status
- The existence of significant inequities between the health status of the general population and several sub-groups: namely people of Aboriginal and Torres Strait Islander descent, those who live in rural and remote communities and people who are classified as being low in socio-economic status
- An ageing population with greater needs, who invariably suffer increased rates of morbidity, and who will exert a significant financial burden on Australia's health care budget.

Identifying priority health issues

In order to effectively address areas of concern in the health status of all Australians, priorities must be established. These priorities then allow for the equitable allocation of resources and funding, to minimise the gaps in health status that exist between various sub-groups of the population. To determine the burden a particular health issue is on the community and the potential for its effect to be reduced, a number of factors need to be considered.

Social justice principles
Inequities exist where a significant difference in the health status of certain population groups exist, in comparison to the general population. Therefore, social justice is achieved by recognising and eliminating these health inequities. This goal is the responsibility of all sectors of the health care system in Australia. For example, increased funding for the training of nurses and doctors to work with Aboriginal and Torres Strait Islander communities.
Principals of social justice that relate to health include:

- Equity: the fair allocation of funding and resources. For example, GPs who bulk bill people with a Health Care Card
- Diversity: Australia has a diverse population and the needs of these populations need to be met. Therefore there needs to be sufficient health care services and facilities for all of the diverse groups within Australia
- Supportive environments: Australians have the right to be healthy and the environments need to support this concept. This can be achieved through cost, availability and ease of access.

Priority population groups
Epidemiology identifies population groups suffering increased rates of illness and disease. This also supports principles of social justice, as greater attention can be directed towards these groups with a view to improving their health status. Population groups that suffer health inequities include: Aboriginal and Torres Strait Islander peoples, socio-economically disadvantaged people, people who live in rural and remote areas, people born overseas, the elderly and people with disabilities.

Prevalence of condition
Rates and trends of morbidity and mortality highlight health problems of concern, and the allocation of funding and resources are directed accordingly. For example, the decrease in deaths from CVD can be attributed to effective health promotion strategies. However, increasing rates of type 2 diabetes indicate a need for a particular focus on the related determinants and risk factors.

Potential for prevention and early intervention
The majority of the disease burden in Australia can be attributed to chronic illnesses, such as cancer, CVD and type 2 diabetes. The main risk factors of these diseases are related to an individual's lifestyle and health-related behaviours (such as smoking, diet, alcohol and physical activity levels). Therefore, health problems that are largely preventable, as well as those that respond well to intervening in its early stages, deserve increased attention by those involved in health promotion.

Costs to the individual and community
Whilst the direct financial cost of a particular disease may be significant, other non-direct costs can also take a heavy toll on sufferers as well as the broader community. Where the cost of such a disease is high, investments in improving the health outcomes for those affected can do much to alleviate these costs.

- Direct individual costs include the financial burden that is associated with illness and disability such as ongoing medical costs (hospital charges, medical professional fees, medications, travel etc.) and loss of employment.
- Indirect individual costs include persistent pain and loss of quality of life, possible exclusion from social activities, increased pressure on families to offer support and the emotional toll of chronic illness.
- Direct community costs include the vast funding of the Australian health care system (which is projected to markedly increase with an ageing and growing population).

Most of this supports primary health care and pharmaceuticals, and the nature of chronic illness tends to require high degrees of medical intervention to manage them.
- Indirect community costs include the premature loss of contributing and valuable members of society and the cost for employers in absenteeism, decreased productivity and re-training.

Sample Examination Questions

1. What is epidemiology?
(A) The design of health promotion initiatives
(B) Information about the health of a population
(C) A characteristic of the new public health approach
(D) A study of the socio-cultural factors influencing health
[BOS 2009]

2. Which of the following results of illness have indirect costs to the community?
(A) Absenteeism, education and screening, loss of potential earnings
(B) Absenteeism, loss of potential earnings, retraining in the workplace
(C) Loss of potential earnings, pharmaceutical prescriptions, absenteeism
(D) Loss of potential earnings, retraining in the workplace, pharmaceutical prescriptions
[BOS 2010]

3. An increase in the life expectancy of Australians is most likely to result from
(A) Lower morbidity rates.
(B) Higher morbidity rates.
(C) Lower infant mortality rates.
(D) Higher infant mortality rates.
[BOS 2010]

4. The criteria used to determine Australia's priority health issues are
(A) social justice principles, potential for prevention and morbidity rates.
(B) priority population groups, life expectancy and social justice principles.
(C) cost to individual and communities, mortality rates and social justice principles.
(D) social justice principles, priority population groups and prevalence of condition.
[BOS 2010]

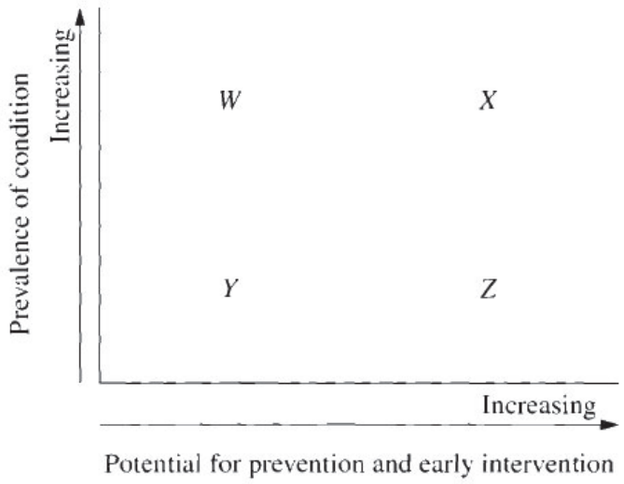
5. Which option best explains the decrease in mortality rates in Australia over the last century?

	Improved	Decreased	Access to
(A)	Medical technology	Infectious disease	Vaccinations programs
(B)	Medical technology	Infectious disease	Private health insurance
(C)	Knowledge of infectious disease	Chronic disease	Medicare
(D)	Life expectancy	Chronic disease	Medicare

[BOS 2010]

6. What is the current leading cause of death for both males and females in Australia?
(A) Cerebrovascular disease
(B) Coronary heart disease
(C) Lung cancer
(D) Diabetes
[BOS 2011]

7. Four health conditions identified as W, X, Y and Z are shown in the following graph.



Which of these conditions is most likely to be identified as a healthy priority issue?
(A) W
(B) X
(C) Y
(D) Z
[BOS 2011]

Critical Question 2 – What are the priority issues for improving Australia's health?

The state of Australia's health is continuing to improve and is very good in comparison to the rest of the world. However, areas of significant concern still exist. These priority issues are:

- Specific population groups who experience health inequities
- The high levels of preventable chronic disease, injury and mental health problems
- The potential impact of a growing and ageing population.

Current and future governments must ensure that adequate attention and resources are directed towards these issues, to ensure that Australia's health status continues to improve, particularly for those who are either from, or who live in disadvantaged circumstances. Generally, most Australians live in a relative state of affluence, and this is reflected in positive levels of self-reported health status. Statistically however, there are a distinct number of sub-groups who experience significant health inequities. In general, these groups are more likely to die younger, display higher rates of risk factors for preventable disease and are less likely to engage in positive health behaviours such as the use of preventative health services. It is widely recognised that health is not the sole responsibility of an individual, and a wide range of powerful determinants influence a person's ability to control their own level of health.

These determinants can be categorised as either:

- Socio-cultural determinants (e.g. family, peers, media, religion and culture)
- Socio-economic determinants (e.g. education, employment and income)
- Environmental determinants (e.g. geographical location and access to health services and technology).

It is therefore the responsibility of all health care sectors (government, non-government organisations, businesses, community groups and individuals) to work creatively, collaboratively and with compassion to ensure the potential detrimental effects of these determinants is minimised, in the hope that health inequities are reduced.

Groups experiencing health inequities

Nature and extent of the health inequities	Sociocultural, socioeconomic and environmental determinants	Role of individuals, communities and governments in addressing health inequities
Aboriginal and Torres Strait Islander peoples		
Health status - Life expectancy – at least 17 years less than other Australians - Increased mortality for CVD, cancer, respiratory disease and diabetes - Infant Mortality rates – 3 times higher than other Australians - Increased rates of depression and anxiety - Increased rates of self-reported ill-health - Overall, there has been a decrease in mortality from all causes *Health behaviours* - Smoking rates are twice that of other Australians - Increased use of illicit drugs and alcohol misuse - Increased obesity - Diets are generally poor (high in saturated fats and refined sugars) and higher rates of physical inactivity	*Sociocultural determinants* - Ongoing effects of colonisation, such as social dislocation, loss of culture, identity and self-worth - Lower standards of living (e.g. clean water, public sanity, availability of fruit and vegetables and safe housing) - Significantly higher rates of imprisonment *Socioeconomic determinants* - More likely to be of low socio-economic status - Lower levels of educational attainment. Aboriginal and Torres Strait Islander students are less than half as likely to complete Year 12 (23%) - Higher rates of unemployment (16%) - Lower levels of disposable income - Overall, this area is showing signs of improvement, which should have a significant effect on the health of future generations *Environmental determinants* - 24% live in rural and remote areas – leads to decreased access to healthy food and medical services	*Individuals* - Empower Aboriginal and Torres Strait Islander people to increase decision making ability through education (e.g. community programs and health related websites - Incentives for health professionals to work with Aboriginal and Torres Strait Islander communities - Increased educational opportunities, such as indigenous scholarships *Communities* - Empower elders to work with communities - Ensuring full participation by all Aboriginal and Torres Strait Islander representative groups in addressing health inequities - The work of non-government organisations who focus on Aboriginal and Torres Strait Islander peoples, such as the Heart Foundation and Diabetes Australia who produce the 'Live Now and have Hope' Booklet *Governments* - Howard Government – Northern Territory Emergency Response (2007) - Rudd Government - Apology speech (2008) - This led to the development of the Close the Gap campaign. This strategy focused on such things as: • increasing community-based primary and maternal health care which is accessible and appropriate • addressing related social determinants • providing a range of preventative health care activities aimed at improving Aboriginal and Torres Strait Islander health outcomes - Increased expenditure on education and health programs

Nature and extent of the health inequities	Sociocultural, socioeconomic and environmental determinants	Role of individuals, communities and governments in addressing health inequities
Socioeconomically disadvantaged (Low SES)		
Health status - Overall, a strong link exists between low SES and poor health status - Lower life expectancy, with increased rates of premature death - Increased morbidity and presence of risk factors for CVD, diabetes, asthma and mental health problems - Higher rates of infant mortality - Increased rates of common infectious diseases *Health behaviours* - More likely to smoke and use illicit drugs - Poor dietary habits - More people of low SES are overweight or obese - Less likely to access preventative health measures, such as immunisations and dental check-ups - Less likely to address the signs and symptoms of preventative diseases	*Sociocultural determinants* - The impact of negative social and cultural forces which shape personal attitudes and behaviours which contribute to poor health-related decision making - Increased family dysfunction – leads to a lack of stability and social support - Increased social isolation *Socioeconomic determinants* - Decreased financial capacity has a direct impact on a person's ability to achieve good health, such as being unable to access specialist health services - Lower levels of education, particularly health education - Higher rates of unemployment, especially in the long-term *Environmental determinants* - Crowded and poor housing conditions - Decreased access to recreational facilities, such as sports equipment and memberships - Increased rates of passive smoking inside the home	*Individuals* - Compulsory health related education through the NSW K-10 PDHPE Syllabus - Increased parental education on issues such as diet, nutrition, physical activity and smoking through schools, community groups and mass media - Some individual responsibility exists for personal health choices such as smoking *Communities* - Involvement in local community groups, such as community vegetable gardens and walking groups - Health promotion strategies by NGOs such as the Heart Foundation and Cancer Council, aimed at addressing these health inequities *Governments* - Availability of free or low-cost health care through Medicare and the Pharmaceuticals Benefits Scheme - Local government planning that provides 'green space' and recreational facilities - Laws to promote healthy environments, such as smoke-free cars

Nature and extent of the health inequities	Sociocultural, socioeconomic and environmental determinants	Role of individuals, communities and governments in addressing health inequities
People living in rural and remote communities		
Health status - Overall, people living in rural and remote regions in Australia, suffer higher rate of mortality and morbidity - Major concerns are excessively high rates of CVD, cancer, diabetes and mental health problems - Much higher rates of injury, due to occupational hazards and major motor vehicle accidents - Increased rates of self-harm and suicide - More people are overweight and obese - Increased mental health concerns, especially depression *Health behaviours* - Physically inactive - Higher levels of smoking - More people drink alcohol at hazardous levels - Poor diet - Inherent occupational hazards - Less likely to utilise primary health care services due to lack of access	*Sociocultural determinants* - Cultural forces, such as the poor attitudes of men towards personal health care, which impact upon the likelihood that an individual will seek help and use preventative health measures. Also due to a stoical attitude (e.g. 'it'll be right') - Increased relationship breakdown - High rates of social isolation, further compounded by geographical isolation *Socioeconomic determinants* - High rates of unemployment. Due to less job opportunities - Low levels of education - lack of financial stability due to the seasonal nature of farming, which increases stress and anxiety - Decline in public infrastructure, such as hospitals, schools, living and working conditions *Environmental determinants* - Geographical isolation negatively affects upon the level of health care available, and also a person's ability to access this health care - Increased environmental disasters, such as droughts and floods - Increased hazards in the workplace due to the nature of agricultural work - Long distances required to travel	*Individuals* - Participation in community support groups, especially in times of trouble - Access support networks and health information, made available through improved internet access in remote areas *Communities* - Royal Flying Doctor Service - Strategies focused on rural and remote health inequities by NGOs such as Beyond Blue - Community Support groups such as Men's Shed *Governments* - Patient Assisted Travel Scheme, to assist with limited access - Health promotion campaigns (e.g. Road safety commercials) - RTA Aboriginal Action Plan - Government commitment to improving the availability and quality of health care in rural and remote areas - Incentives to encourage GP's to work in rural and remote regions

Nature and extent of the health inequities	Sociocultural, socioeconomic and environmental determinants	Role of individuals, communities and governments in addressing health inequities
People born overseas		
Health status - Upon initially entering Australia, migrants must have good health. However, over time health inequities tend to increase - Refugees tend to more likely to suffer from significant health problems, due to their difficult living conditions prior to coming to Australia - Increased mental health problems - Refugees may suffer from Post Traumatic Stress Disorder - Certain countries of origin have an increased risk of specific diseases (e.g. Pacific Island and Asian origin suffer increased rates of diabetes) - In some cases, they have better a health status, such as skin cancer rates *Health behaviours* - Less likely to use primary health care - Varied rates of poor health behaviours are evident across different countries of origin (e.g. More people from southern and eastern Europe are overweight and obese)	*Sociocultural determinants* - Feelings of loneliness and isolation leading to depression - Non-English Speaking Background (NESB). People with poor English are faced with language barriers - Cultural differences - More at risk of crime, exploitation and racism - Lack of social support *Socioeconomic determinants* - Higher rates of unemployment - Smaller skill-sets result in lower average incomes *Environmental determinants* - Lack of access to appropriate health services in certain locations - Country of origin can be a positive or negative impact upon the health of migrants (e.g. Healthy diets of people from Asia, as opposed to the higher rates of tuberculosis of people from India and China)	*Individuals* - Connect with community support networks, where health promotion information can be accessed - Access health support services, such as translators and interpreters *Communities* - NGO websites and brochures offer information in other languages - Culturally sensitive health services are made available to local communities, such as female GPs for Muslim women - Volunteer organisations, such as Amnesty International that work amongst refugees *Governments* - Federal government ensures translation services are readily available and widely advertised in all health care centres and government departments - Health services meet the demographic and cultural needs of the serviced area

Nature and extent of the health inequities	Sociocultural, socioeconomic and environmental determinants	Role of individuals, communities and governments in addressing health inequities
Elderly		
Health status - Australia has a growing and ageing population (13% are aged over 65 years) - In general, elderly people have an increased reliance on medical services - Chronic conditions such cancer, CVD and diabetes are most prevalent in people aged over 65 years - Higher rates of injuries, due to falls and accidents - Increased rates of arthritis and osteoporosis, leading to decreased mobility and independence - Increased mental health problems, such as dementia, depression and anxiety, partly due to the increased grief and loss associated with an ageing family and peer group *Health behaviours* - Generally, they have more lifestyle restrictions, and also an inability to fully utilise medical services, both curative and preventative - Less physically active - Increased social isolation	*Sociocultural determinants* - Increased social isolation, leading to loneliness and depression - As family members and peers become unwell and pass away, elderly people must manage the emotions and grief associated with this *Socioeconomic determinants* - Decreased financial capacity - Increased financial pressures, such as the need to sell the family home and move into care *Environmental determinants* - Decreased access to medical services, due to mobility concerns e.g. they may no longer drive or be able to use public transport - A home can present a serious risk of injury, e.g. trip hazards such as stairs. The home must be modified to decrease the risk of this and maintain a level of independence	*Individuals* - The elderly have a responsibility to ensure they age as healthily as possible - Increased workforce is required to serve the needs of the elderly population, e.g. home care - Carers are required to assist with basic needs, which has a wide-ranging impact on them as well - Elderly people have a responsibility to ensure they are prepared financially and practically for the specific needs of ageing - To be advocates for an elderly person. This can be informal, such as through family and neighbours. It can also be formal, through the Aged Care Assurance Team (ACAT) *Communities* - Community organisations assist in serving the elderly, which mostly rely on volunteers, e.g. Meals on Wheels and Salvation Army - Increased private nursing homes to ease the public burden, e.g. Anglicare Australia - The work of NGOs such as the Heart Foundation and Beyond Blue *Governments* - Increased funding and provision will be needed for hospitals, medical specialists, home-care services and nursing hostels/homes - Housing plans that aim to serve the needs of people over the age of 55 years

Nature and extent of the health inequities	Sociocultural, socioeconomic and environmental determinants	Role of individuals, communities and governments in addressing health inequities
People with disabilities		
Health status - May relate to any form of physical (arthritis), intellectual (Down syndrome), psychiatric (obsessive compulsive disorder) or sensory impairment (hearing or vision) - Level of care can range from basic physical aids, such as easy-to-use taps in the home, through to total care and dependency - There is an increasing number of people living with some level of core activity limitation *Health behaviours* - Decreased capacity for self-care. Needs vary due to the wide range and degree of disabilities. However, any restriction of normal everyday living also extends to a person's ability to maintain a healthy lifestyle. For example, a decreased capacity for physical activity	*Sociocultural determinants* - A lack of social support due to negative stigmas can lead to social isolation - Higher levels of dependency on all support people *Socioeconomic determinants* - Rely heavily on government support, to assist with basic living needs - Schooling and education can be affected, which impacts into adulthood - High rates of unemployment *Environmental determinants* - Physical access needs to be inclusive, and promote independence for people with physical disabilities, e.g. ramps and taxi services	*Individuals* - Advocacy is required, to ensure the basic needs of a person with a disability are met - Carers play an important role in this, and also need to be supported - An individual DOCS case worker plays an important role in ensuring specific needs are met *Communities* - NGOs provide social activities and care, e.g. Life Without Barriers - Companies and businesses are encouraged to provide modified employment opportunities for people with disabilities *Governments* - Special education and training programs, which provide suitable employment opportunities, e.g. Disability Employment Network - Special medical services - Community-based services allow people to live in their home with support rather than in an institution

High levels of preventable chronic disease, injury and mental health problems

Cardiovascular Disease

Nature

- Cardiovascular Disease (CVD) refers to all diseases of the heart and blood vessels
- Caused by a build-up of fatty tissue inside the blood vessels (i.e. atherosclerosis) and the hardening of the blood vessels (i.e. arteriosclerosis) – both of these affect the blood supply to the organs of the body
- 3 types of CVD include:
    - Coronary Heart Disease (CHD): blockages in the vessels of the heart (i.e. heart attack)
    - Cerebrovascular Disease: blockages in the vessels of the brain (i.e. stroke)
    - Peripheral Vascular Disease (PVD): blockages in the vessels in the limbs, often the legs/feet