UNIT 3 HEALTH & HUMAN DEVELOPMENT

AREA OF STUDY 1: UNDERSTANDING HEALTH & WELLBEING

REVISION NOTES FOR YOUR SACS & EXAMS

BOUGHT TO YOU BY TSFX

WRITTEN BY A STUDENT WHO SCORED A PERFECT 50 STUDY SCORE

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OVERVIEW

Unit 3: School Assessed Coursework - 25% contribution to Study Score
Unit 4: School Assessed Coursework - 25% contribution to Study Score

Examination Details: 50% contribution to Study Score

- 15 minutes reading time - use wisely! Being to interpret stimulus material and pick out key words
- Read the entire paper first, then go back and read each question carefully
- Answer the questions you're most confident in first
- Use the mark allocations and descriptors as a guide for the amount of detail required
- If the question asks for three factors, only the first three will be assessed. If you put in extra factors, they wont be marked
- Usually the first question of a graph or table asks your about a trend or relationship
- If you run out of time, write down dot points. Never leave a question blank
- Do not rewrite a question or include an introduction, you won't get any marks
- Make sure your handwriting is legible. No grey leads!

EXAM TERMINOLOGY

- **Analyse:** Examine the components of. Look for links, trends, patterns and relationships
- **Apply:** Use the information to make links
- **Assess:** Weigh up the value of
- **Comment:** Make relevant remarks about
- **Compare:** Show similarities
- **Contrast:** Show differences
- **Define:** Give the precise meaning of
- **Demonstrate:** Show how
- **Describe:** Give a general description
- **Discuss:** Look at both sides of, give an overall account
- **Evaluate:** Judge, weigh up the pros and cons, give your opinion of
- **Explain:** Show understanding, make clear
- **Identify:** List, recognise, acknowledge
- **Illustrate:** Use examples to show
- **Justify:** Give reasons and evidence to support a statement or position
- **List:** Make points briefly
- **Outline:** Give an overview, a general summary
- **Suggest:** Put forward ideas or proposals

UNIT 3: AUSTRALIA'S HEALTH IN A GLOBALISED WORLD

AREA OF STUDY 1: UNDERSTANDING HEALTH & WELLBEING

KEY KNOWLEDGE

- concepts of health and wellbeing (including physical, social, emotional, mental and spiritual dimensions) and illness, and the dynamic and subjective nature of these concepts

- benefits of optimal health and wellbeing and its importance as a resource individually, nationally and globally

- prerequisites for health as determined by the WHO including peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice and equity

- indicators used to measure and understand health status: incidence, prevalence, morbidity, burden of disease, disability-adjusted life year (DALY), life expectancy, health-adjusted life expectancy (HALE), mortality (including maternal, infant and under 5) and self-assessed health status of Australians and the biological, sociocultural and environmental factors that contribute to variations between population groups including:

  males and females
  Indigenous and non-Indigenous
  high and low socioeconomic status
  those living within and outside of Australia's major cities

- the contribution to Australia's health status and burden of disease of smoking, alcohol, high body mass index, and dietary risks (under-consumption of vegetables, fruit and dairy foods; high intake of fat, salt and sugar; low intake of fibre and iron).

CONCEPTS OF HEALTH AND WELLBEING

CONCEPTS OF HEALTH AND WELLBEING (INCLUDING PHYSICAL, SOCIAL, EMOTIONAL, MENTAL AND SPIRITUAL DIMENSIONS) AND ILLNESS, AND THE DYNAMIC AND SUBJECTIVE NATURE OF THESE CONCEPTS

- **Health and wellbeing** relates to the state of a person's physical, mental, social, emotional and spiritual existence and how they feel about their lives in relation to the various dimensions.

- Health is also considered as a resource for everyday life, not the objective of living.

- **Illness** is the state of feeling unwell.
    - Two people with hypertension may feel differently about their condition. One person may see themselves as ill as they are diagnosed with the disease, whereas another person may consider themselves not ill as they can still perform their daily tasks efficiently.

- **Disease** is a physical or mental disturbance involving symptoms, dysfunction or tissue damage. Disease is associated with diagnosis.

- Health and wellbeing is considered **dynamic**, meaning constantly changing. Changes can be rapid and intense, but most changes occur slowly.
    - A young adult may have strong mental and physical health and wellbeing one day, having a high level of physical fitness and experiencing high levels of confidence. They may suddenly get into a car accident, which would drastically affect their life. Their physical health and wellbeing then could be impaired as they are left with an injured leg, leaving them unable to perform daily tasks effectively. This could also negatively impact their mental health and wellbeing as they get poor self-esteem and begin to feel high levels of stress.
    - Generally, health and wellbeing changes slowly overtime though. A once physically healthy, socially active teenager may have consumed too much junk food while young, which accumulates overtime, leading to an unhealthy bodyweight and poor physical fitness. This could lead to the development of cardiovascular disease in old age, which then means his hospital and GP appointments withdraw him from social activities and peer association.

- Health and wellbeing is also considered **subjective**, being influenced by personal beliefs, feelings or opinions.
    - A person with a high socioeconomic status, in a high paying job with a high income may see themselves in bad health if they take a day off work, and don't earn their set income. A person with low socioeconomic status on the other hand may see their health and wellbeing to be high if they have enough money to afford the necessities, even if they are undernourished.

- **Physical dimension of health and wellbeing** is the overall physical condition of an individual, and refers to the efficient physical functioning of the body and its systems and the physical capacity to perform daily activities or tasks.
    - Being a healthy bodyweight
    - Being physically fit
    - Strong immune system
    - Reliable body function
    - Absence of illness, disease and injury free.
    - Supported by factors such as:
        - Regular physical activity
        - Consuming a balanced diet
        - Having appropriate rest/sleep

- **Social dimension of health and wellbeing** refers to being able to interact and develop relationships with others in a meaningful way and adapt appropriately to different social situations.
    - Being an active family member
    - Maintaining meaningful relationships
    - Working effectively as part of a team
    - Learning appropriate behaviours
    - Accepting responsibility for one's actions
    - Managing conflict effectively
    - Strong communication skills

- **Mental dimension of health and wellbeing** relates to the mind or brain and the ability to think and process information, including decision making and logic.
    - Positivity form opinions
    - High levels of confidence
    - Positive self-esteem

    - Optimism
    - Low levels of stress and anxiety
    - Coping with day to day demands
    - Being able to lead an independent life

- **Emotional dimension of health and wellbeing** is the ability to recognise, understand and effectively manage emotions and use this knowledge when thinking, feeling and acting. Emotional health is the degree to which you feel emotionally secure and relaxed in everyday life.
    - Possessing feelings of accomplishment
    - Displaying resilience
    - Recognising emotions
    - Understanding emotions
    - Expressing feelings
    - Managing emotions

- **Spiritual dimension of health and wellbeing** involves a positive sense of belonging, meaning and purpose in life, and acting according to your values, beliefs and morals. Can be measured by peace and harmony experienced in day-to-day life.
    - Sense of belonging
    - Morals
    - Values
    - Having a positive meaning and purpose in life
    - Sense of happiness and fulfilment
    - Acting according to your values and beliefs

    - **Values** are things that are important to you. ie.
        - Education
        - Fitness
        - Fairness

    - **Beliefs** are things you believe in. ie.
        - God exists
        - Animals have rights
        - Immigration should be encouraged

- **Optimal health and wellbeing** refers to the highest levels of health and wellbeing an individual can realistically attain. Everyone's optimal health and wellbeing is different, influenced by different genetic potentials and environments.

- There are interrelationships between all the dimensions of health. This means all dimensions affect each other.

BENEFITS OF OPTIMAL HEALTH AND WELLBEING AND ITS IMPORTANCE AS A RESOURCE INDIVIDUALLY, NATIONALLY AND GLOBALLY

- Health and wellbeing is both a resource and an outcome.

- **Individually**, health and wellbeing is a resource by:
    - Allowing them to exercise
    - Allowing them to sleep well
    - Allowing them to spend time with friends
    - Increasing life expectancy of individuals
    - Increasing self-esteem and sense of self fulfilment
    - Reduced medical costs due to illness
    - Reduced pain and suffering
    - Allowing to work productively
    - Being able to gain an education
    - Allowing individuals to run a household
    - Increasing the capacity to work towards their purpose in life
    - Allowing them to maintain positive thought patterns
    - Being able to earn an income
    - Feeling a sense of success of life

- **Nationally**, health and wellbeing is a resource:
  - **Socially** by:
    - Reducing stress and anxiety in the community
    - Increasing social participation through volunteering
    - Allowing less reliance on the health care system
    - Allowing for individuals to live longer, healthier lives meaning they can retain involvement in the community
    - Financial savings could be used to provide education, infrastructure and housing
  - **Economically** by:
    - Creating higher average incomes, leading to increased tax revenue
    - Creating health savings as less money is spent on medicare
    - Allowing for fewer people on social security such as Centrelink
    - Increasing work productivity
  - **Globally**, health and wellbeing is a resource by:
    - Reducing disease transmission between countries
    - Increasing opportunities for work, which promotes peace and security through reduced crime rates
    - Increasing tax revenue and global trade, promoting economic development
    - Allowing healthy children to pass on education and skills to future generations, promoting social development
    - Increasing tax revenue can be reinvested in sustainable resources such as energy and water, which promotes sustainability

PREREQUISITES FOR HEALTH AS DETERMINED BY THE WHO INCLUDING PEACE, SHELTER, EDUCATION, FOOD, INCOME, A STABLE ECO-SYSTEM, SUSTAINABLE RESOURCES, SOCIAL JUSTICE AND EQUITY

- **Peace** can be defined as the absence of conflict. Possible health outcomes include:
    - Improved mental health due to less stress and anxiety
    - Ability for people to move freely and be active around their community
    - Fewer deaths and injuries
    - Promotes preservation of infrastructure, which can mean governments reallocate resources to promoting health and wellbeing
    - Access to food and water
    - If governments are not spending money on armies and weapons, they can use that money for health care and resources
    - Hospitals are not filled with injured people, so more people can access healthcare for their needs
- **Shelter** describes a structure that provides protection from the outside environment. Possible health outcomes include:
    - Adequate sleep, which promotes the ability to pursue employment and education and work productively
    - Privacy, safety and security
    - Reduced stress and anxiety
    - Protection from adverse weather conditions
    - Protection from infectious diseases
- **Education** health outcomes include:
    - Empowering individuals to achieve their goals, and have choices
    - Increased ability to earn an income
    - Increased opportunities to understand health promotion behaviours, such as eating well and sleeping well, avoiding tobacco smoke, etc.
    - Literacy
    - Ability to maintain social connections
- **Food** health outcomes include:
    - Provision of energy for the body
    - Increased capacity to learn
    - Optimal immune system function

    - People aren't concerned about accessing appropriate food supplies, decreasing stress
    - Can be a opportunity for groups to converge to discuss recent events
    - Nourishment = happiness

- **Income** health outcomes include:
    - Increased ability to afford resources
    - Allows individuals to access healthcare
    - Increased opportunities for leisure pursuits
    - Increased capacity for governments to provide social services and resources, such as housing, public transport and healthcare through their tax revenue

- **A stable ecosystem** is when balance is achieved between the environment and the species that live in the environment. Health outcomes include:
    - Plants and animals used as food
    - Decreased likelihood of disaster weather events caused by human action, which can promote the preservation of infrastructure
    - Opportunities for employment through agriculture
    - Clean water and air is essential for human function
    - Predictable weather patterns contribute to effective farming
    - Human shelter can be built through natural resources
    - The environment is a source of pleasure and relaxation

- **Sustainable resources** refers to when the resources currently available meet our needs without compromising the needs of future generations. Resources required for food, energy production, water supply, housing and healthcare are materials that must be sustained. Health outcomes include:
    - Adequate heating and cooling can promote productivity at school
    - Wind and solar power is often required for education, employment, food production etc.
    - Farming and fishing industries need to be monitored as they give sources of food and manufacturing
    - Forest and natural environments providing timber and clean air respiration

- **Social justice** is equal rights for all, regardless of personal traits, such as sex, class, income, ethnicity, age etc. Health outcomes include:
    - Formal education
    - Fair pay
    - Adequate shelter
    - Social security
    - Food and water
    - Healthcare access
    - Dignity, and a sense of self-worth
    - Celebrating diversity
- **Equity** is fairness. It means there are minimum levels of income and resources that all people should have access to. Health outcomes include:
    - Education access
    - Employment access
    - Human rights
    - Resources such as healthcare
    - Reduced feelings of segregation

MEASURING HEALTH STATUS

INDICATORS USED TO MEASURE AND UNDERSTAND HEALTH STATUS: INCIDENCE, PREVALENCE, MORBIDITY, BURDEN OF DISEASE, DISABILITY-ADJUSTED LIFE YEAR (DALY), LIFE EXPECTANCY, HEALTH-ADJUSTED LIFE EXPECTANCY (HALE), MORTALITY (INCLUDING MATERNAL, INFANT AND UNDER 5) AND SELF-ASSESSED HEALTH STATUS

- **Health status** is useful to look at statistics that allow judgements to be made about individuals and populations.
- **Health indicators** are measurements used to determine health status.
- **Self-assessed health status** reflects a person's perception of his or her own health and wellbeing at a given point in time.
- Individuals either classify their heath as excellent, very good, good, fair or poor.
- **Life expectancy** is an indication of how long a person can expect to live, based on current mortality rates.
- It is the prediction of the number of years of life remaining to a person at a particular age if death rates do not change.
- **Health-adjusted life expectancy (HALE)** is a more comprehensive health indicator. It is a measure of burden of disease based on life expectancy at birth, but including an adjustment for poor health.
- It is the prediction of the number of years in full health a person can expect to live, based on current rates of ill-health.
- **Mortality** refers to number of deaths in a population at a given time. Usually expressed per 1000 or 100,000 in a 12 month period.
- Cardiovascular disease and cancer are the leading causes of mortality for Australians, in 2015.
    - **Infant mortality rates** measure the rate of deaths of infants between birth and their first birthdays, usually expressed per 1000 live births.
    - **Under-five mortality rates** are the number of deaths of children under five years of age per 1000 live births.
    - **Maternal mortality** is the death of a woman while pregnant, or within 42 days of termination of pregnancy.

- **Morbidity** refers to ill health in an individual and the levels of ill health in a population or group.
    - **Incidence** is the number of new cases of a particular disease or condition during a specific time period.
    - **Prevalence** is the number or rate of cases of a particular disease or condition that have been reported during a specified time period.

- **Burden of disease** is a measure of the impact of diseases and injuries, specifically it measures the gap between current health status and an ideal situation where everyone lives to an old age free of disease and disability. Measured in Disability Adjusted Life Year (DALY).
    - **DALY = YLD + YLL**
    - **YLL is years of life lost** due to premature death.
    - **YLD is years of life lost due to disability,** illness or injury.

FACTORS CONTRIBUTING TO HEALTH STATUS

HEALTH STATUS OF AUSTRALIANS AND THE BIOLOGICAL, SOCIOCULTURAL AND ENVIRONMENTAL FACTORS THAT CONTRIBUTE TO VARIATIONS BETWEEN POPULATION GROUPS INCLUDING: MALES AND FEMALES, INDIGENOUS AND NON-INDIGENOUS, HIGH AND LOW SOCIOECONOMIC STATUS, AND THOSE LIVING WITHIN AND OUTSIDE OF AUSTRALIA'S MAJOR CITIES

- There are three categories that contribute to differences in health status between populations:
    - **Biological:** Relating to the structure of the cells, tissues and systems of the body and how adequately they function
    - **Sociocultural:** Relating to the social and cultural conditions into which people are born, grow, live, work and age
    - **Environmental:** Relating to the physical features that surround us, natural or built

Biological	Sociocultural	Environmental
Bodyweight	Socioeconomic status (income, occupation, education)	Work environment
Blood pressure	Social connections and social exclusion	Infrastructure and urban design
Blood cholesterol	Cultural influences	Climate
Glucose regulation	Access to healthcare (cultural factors)	Housing
Genetics	Early life experiences	Access to healthcare (geographical)
Birthweight	Food security	Sanitation

- **Indigenous Populations** opposed to **non indigenous Australians** have:
    - Higher rates of disability, higher rates of mortality, higher rates of infant mortality. lower life expectancy and higher burden of disease.
    - Higher rates of morbidity from:
        - Cardiovascular disease
        - Diabetes
        - Chronic kidney disease
        - Asthma
        - Psychological distress
        - Suicide
        - Dental decay
        - STIs
- Indigenous populations are more likely to have:
    - higher body mass index, high blood pressure, impaired glucose regulation, low birthweight **(biological).**
    - Low SES, high rates of unemployment, lower levels of education, social exclusion, early life experiences, lack of access to culturally appropriate healthcare, homelessness, food insecurity **(sociocultural).**
    - Poorer quality and overcrowded housing, poorer sanitation systems, poorer infrastructure, lack of access to healthcare, lack of access to recreational facilities and infrastructure **(environmental).**

- **Males** opposed to **females** are more likely to have:
    - Higher burden of disease, higher rates of premature death (mortality) and lower life expectancy.
- Leadings causes of mortality:

Males	Females
Heart disease	Heart disease
Lung cancer	Stroke
Stroke	Dementia and Alzheimers
Respiratory disease	Breast cancer

- Leading causes of morbidity:

Males	Females
Cardiovascular disease	Arthritis
Injury	Osteoporosis
Diabetes	Asthma
	Psychological distress

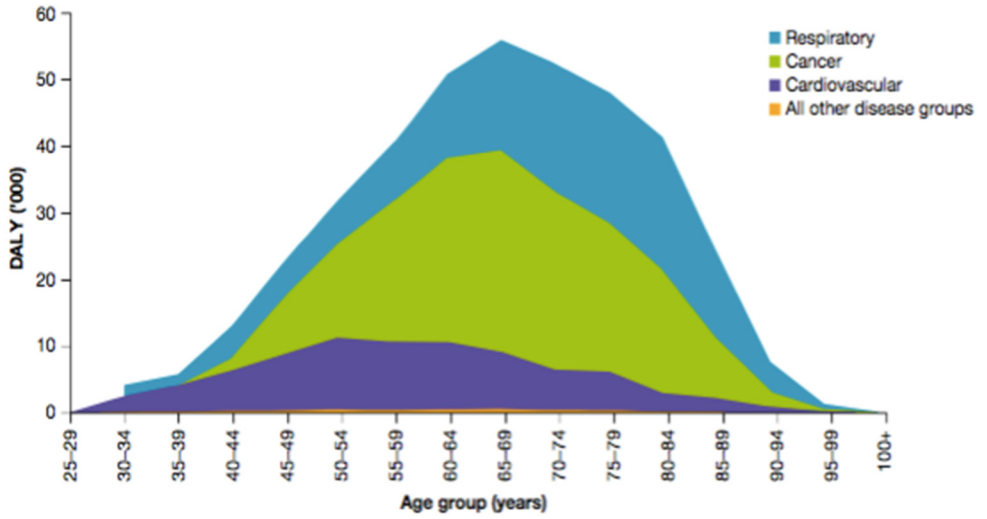
- Male populations are more likely to have:
    - High body mass, high blood pressure, impaired glucose regulation, genetics affecting their fat storage **(biological).**
    - Impacts of unemployment, higher SES, gender stereotypes and cultural influences, less likely to access healthcare **(sociocultural).**
    - Dangerous work environments, working outside with exposure to UV **(environmental).**
- **Low socioeconomic status populations** opposed to **high socioeconomic status populations** have:
    - Higher rates of disability, higher rates of mortality, lower life expectancy and higher burden of disease.

- Higher rates of morbidity from:
    - Cardiovascular disease
    - Type 2 Diabetes
    - Arthritis
    - Mental and behavioural problems
    - Asthma
    - Injuries
    - Lung cancer
- Low socioeconomic populations are more likely to have:
    - Higher body mass index, high blood pressure, low birthweight **(biological)**
    - Low levels of education and income, high rates of unemployment, social exclusion, food insecurity, poor early life experiences **(sociocultural)**
    - Poor housing environment, poor work environment, less likely to have fluoridation of water **(environmental)**
- **Rural and remote populations** opposed to **major city populations** have:
    - Lower life expectancy, higher rates of preventable diseases, higher rates of avoidable deaths, higher rates of injury, higher rates of suicide and higher burden of disease.
    - Higher rates of morbidity from:
        - Diabetes
        - Arthritis
        - Asthma
        - Dental decay
- **Rural and remote** populations are more likely to have:
    - Higher body mass index, high blood pressure, impaired glucose regulation, high blood cholesterol, low birthweight **(biological).**
    - Low socioeconomic status, high rates of unemployment, social exclusion, food insecurity, early life experiences **(sociocultural).**
    - Less access to infrastructure, less access to healthcare, climate hardship, poor work environment and safety **(environmental).**

THE CONTRIBUTION TO AUSTRALIA'S HEALTH STATUS AND BURDEN OF DISEASE OF SMOKING, ALCOHOL, HIGH BODY MASS INDEX, AND DIETARY RISKS (UNDER-CONSUMPTION OF VEGETABLES, FRUIT AND DAIRY FOODS; HIGH INTAKE OF FAT, SALT AND SUGAR; LOW INTAKE OF FIBRE AND IRON).

- **Smoking** and tobacco can cause a fault in the cells as they divide, which can lead to tumours and cancer, particularly in the lungs and mouth. They can also damage airways.
  - Smoking can cause:
    - Lung and mouth cancer
    - Sped up process of atherosclerosis, raising blood pressure which can cause cardiovascular disease
    - Low birth weight for maternal smokers' children
    - Damaged airways can lead to respiratory conditions
    - Increased risk of infection

FIGURE 3.9 Burden (DALY) attributable to tobacco use by age and disease group, 2011

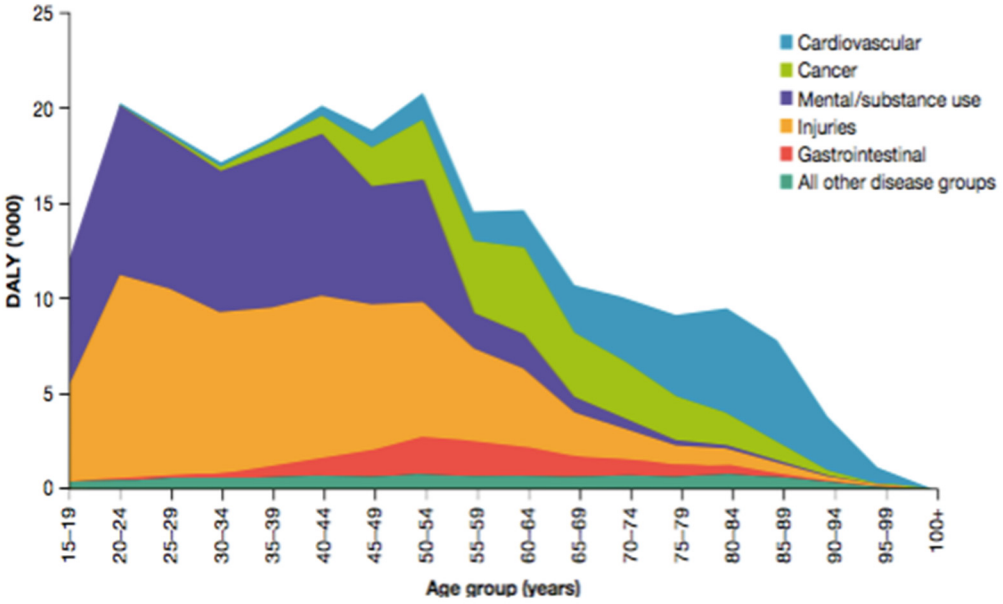


Source: AIHW 2016, *Australian burden of disease study: impact and causes of illness and death in Australia 2011*, page 173.

Alcohol consumption alters the brain and affects judgement and motor control, which can increase the risk of poor driving including speeding, road accidents and injuries.

- Alcohol contains kilojoules, which when consumed in excess can lead to weight gain and high body mass index.
- Alcohol affects mental health and can put a strain on relationships and contribute to domestic violence.
- Maternal alcohol consumption can increase the risk of low birth weight of a baby.
- Alcohol can cause:
  - Type 2 Diabetes
  - Cardiovascular disease
  - Colorectal cancer
  - Injuries
  - Liver disease
  - Depression and suicide

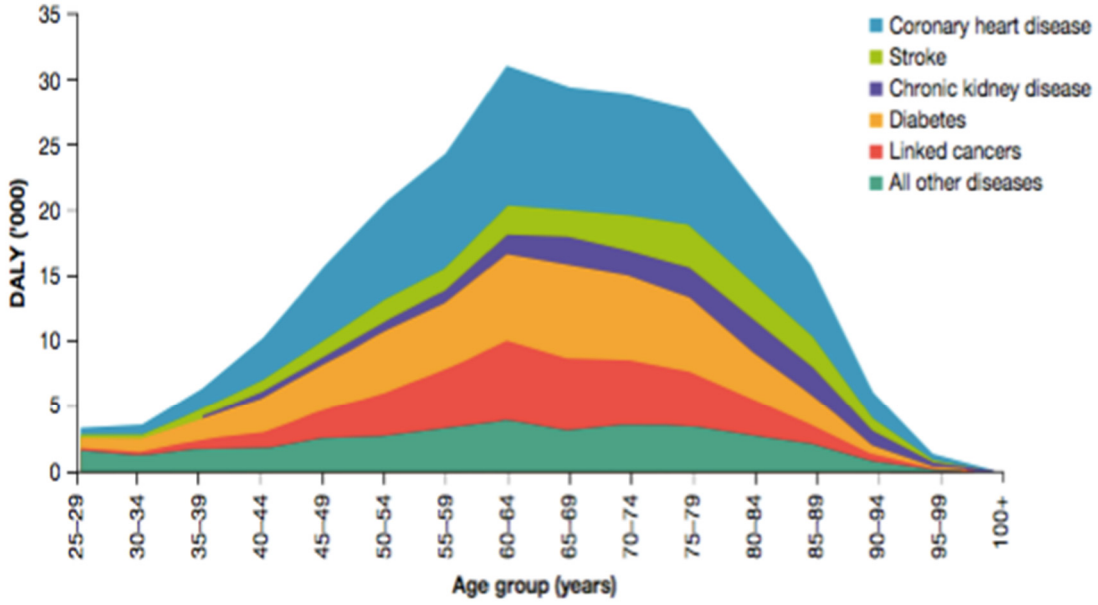
FIGURE 3.14 Burden (DALY) attributable to alcohol use by age and disease group, 2011



Source: AIHW 2016, *Australian burden of disease study: impact and causes of illness and death in Australia 2011*, page 175.

- **High body mass index (BMI)**
- **Body mass index (BMI) = weight (kg)/height^2 (m)**
  - BMI can either be classified as **underweight** (<18.5), **healthy** (18.5-24.9), **overweight** (25-29.9), or **obese** (30+).
  - High BMI can lead to:
    - Cardiovascular disease as there is a greater strain on the heart to pump blood around the body
    - Asthma development in children
    - Type 2 diabetes, as the pancreas and body cannot produce and use insulin effectively
    - Chronic kidney disease
    - Arthritis and musculoskeletal conditions as cartilage wears away
    - Mental health issues
    - Maternal health conditions

FIGURE 3.19 Burden (DALY) attributable to high body mass by age and disease group, 2011



Source: AIHW 2016, *Australian burden of disease study: impact and causes of illness and death in Australia 2011*, page 184.

- **Under consumption of vegetables and fruits** can mean the body doesn't get enough nutrients and vitamins and minerals to keep the body functioning adequately, including the immune system. Reduced immune function can increase the risk of getting infections.
    - Vegetables and fruit also contain **antioxidants**, which work to reduce the impact of **free radicals** (molecules that can damage body cells) around the body, which can decrease the risk of cancer.

- **Under consumption of dairy** can lead to underconsumption of **calcium**. Calcium is responsible for strengthening and ossifying of the bones and teeth, and not consuming enough can increase the risk of developing osteoporosis.

- **High intake of fat**, specifically saturated fat, increases the **LDL** “bad” **cholesterol** levels in the blood, which can lead to **atherosclerosis** as plaque builds up in the arteries.
    - Fats are also high in kilojoules, and when consumed in excess can lead to weight gain.

- **High intake of salt** can mean high intake of sodium. High levels of sodium can draw out excess liquid in the blood, increasing blood volume and leading to hypertension.
    - Hypertension increases the risk of heart attack or stroke.
    - Sodium can also cause calcium to be excreted in urine, which can lead to demineralisation of bones and osteoporosis.

- **High intake of sugar** means excess sugar is stored as adipose tissue (fat), which overtime can lead to weight gain and high BMI, which is a risk factor for other conditions including cardiovascular disease.
    - Sugars also provide a food source for bacteria in the mouth, which can lead to dental decay and development of dental cavities.
    - Dental cavities can also reduce self-esteem if an individual’s appearance is altered.

- **Low intake of fibre** can mean your faeces don't contain enough bulk to keep the digestive track flowing smoothly. This can increase the risk of colorectal and bowel cancer.
    - Fibre also promotes feelings of fullness and satiety, which can reduce overeating and high body mass index.

- **Low intake of iron** can cause **anaemia.** Iron forms the “haem” part of **haemoglobin**, which is the oxygen carrying component of blood. Low red blood cells content can cause anaemia. Anaemia can cause tiredness and weakness, impacting the ability to complete daily tasks and work productively.

KEY SKILLS

- explain the dynamic and subjective nature of the concepts of health and wellbeing and illness
- describe interrelationships between dimensions of health and wellbeing
- explain the individual and collective importance of health and wellbeing as a resource
- describe global benefits of the pursuit of optimal health and wellbeing
- identify the WHO's prerequisites for health and explain their links to improved health outcomes
- describe and apply indicators used to measure health status
- use data to describe and evaluate the health status of Australians
- analyse patterns in morbidity and mortality in Australia over time
- analyse health information to explain factors that contribute to variations in health status between population groups.

EXPLAIN THE DYNAMIC AND SUBJECTIVE NATURE OF THE CONCEPTS OF HEALTH AND WELLBEING AND ILLNESS

In HHD, it is best to use indefinite words such as 'may' and 'could' (could increase life expectancy), (could improve mental health and wellbeing), as we can't assume that it definitely will happen, we don't know.

Health and human development is focusing less on definitions of terms this study design, and more about "describing" or "explaining" them.

Explain the term "subjective health". (*2 marks*)

Health and wellbeing is influenced by someone's personal beliefs and experiences. For example, a young active person who gets injured and breaks their leg suddenly may see their health and wellbeing as poor, whereas an elderly person may consider their health and wellbeing to be good if they're able to walk.

1 mark for describing subjective health
1 mark for giving an example

Discuss the impact dynamic health can have on an individual's health and wellbeing (*2 marks*)

Health is constantly changing, meaning it's dynamic. A person who was once in good physical health and wellbeing with strong physical fitness may get in a car crash and get injured, impacting their ability to perform daily tasks effectively and negatively impacting their physical health and wellbeing.

1 mark for describing dynamic health
1 mark for giving an example

DESCRIBE INTERRELATIONSHIPS BETWEEN DIMENSIONS OF HEALTH AND WELLBEING

You must have a sound knowledge on the concepts of health and wellbeing and it's dimensions. This is not only important for AOS1, but for the whole course

When describing or explaining the dimensions of health and wellbeing, a 2 mark question requires you to explain or give a definition of the dimension, and then examples.

You may be given a case study, in which you will need to link your answer back to **specific examples** from the case study

An interrelationship is something that works both ways. If a question asks you to describe the interrelationship between social and spiritual health and wellbeing, you must describe how social affects spiritual, and then how spiritual affects social.

When answering these kind of questions:

- Make sure you show you are answering the question (address the relevant dimensions)
- Elaborate on each characteristic of the dimension you give
- Link to an aspect of the other dimension (Eg. healthy body weight, sense of belonging, high self-esteem etc.)
- Finish answering the question "…thereby improving ___ health and wellbeing"

Usually ignore the number of lines of a question, instead look at the number of marks and what the question asks you to do (describe, identify, etc)

Describe physical health and wellbeing (*2 marks*)

Physical health and wellbeing refers to the overall physical condition of an individual, and refers to the efficient functioning of the body and its systems, and the physical capacity to perform tasks and physical fitness. Physical health and wellbeing includes having a healthy bodyweight, strong immune system and the absence of illness, disease and injury.

1 mark for an explanation of physical health and wellbeing
1 mark to list a range of factors that relate to physical health and wellbeing

What is the difference between emotional and mental health and wellbeing? And how can they impact on each other? (*4 marks*)

Emotional health and wellbeing relates to the ability to positively recognise, understand and manage emotions and use this knowledge when thinking and acting, whereas mental health and wellbeing relates to the mind and the brain and the ability to think and process information. If someone has good mental health and wellbeing and can think rationally and use logic, they are more likely to be able to identify and manage any feelings they have, leading to improved emotional health. If someone is unable to recognise and deal with emotions, such as sadness (emotional health and wellbeing) overtime it can lead to development of mental illness, such as depression or stress due to lack of control. (mental health and wellbeing).

1 mark for describing emotional
1 mark for describing mental
1 mark for the impact emotional has on mental
1 mark for the impact mental has on emotional

How can mental health and wellbeing impact on social health and wellbeing? And vice versa (*2 marks*)

If someone is feeling depressed (poor mental health and wellbeing), they are less likely to want to go out and see friends, therefore decreasing their participation in social interactions and communication with others, possibly leading to poor social health and wellbeing. If people don't have a supportive network of friends (poor social health and wellbeing), they don't have anyone to talk to and this may make them feel depressed, leading to poor mental health and wellbeing.

1 mark for the impact mental has on social
1 mark for the impact social has on mental

Phil is a 17 year old student who has been diagnosed with influenza (the flu). Use this information to demonstrate the interrelationship between physical and mental health and wellbeing. (*2 marks*)

Phil having the flu means his immune system is weakened and his body is not functioning optimally (physical health and wellbeing). This can cause him to feel stressed (mental health and wellbeing). The stress can cause his self-esteem to decrease (mental health and wellbeing), which may mean he withdraws from physical activity and sporting activities, which can decrease his physical fitness (physical health and wellbeing).

1 mark for the impact physical has on mental
1 mark for the impact mental has on physical

EXPLAIN THE INDIVIDUAL AND COLLECTIVE IMPORTANCE OF HEALTH AND WELLBEING AS A RESOURCE

These questions are usually 3 marks. One mark is given for discussing optimal health and wellbeing with examples, and then linking it to the benefits to the individual, nation or globe.

When answering these kind of questions:

- Identify an aspect of optimal health and wellbeing
- Make a link between the aspect of health and wellbeing and an benefit for the individual/country
    - Low levels of stress (mental) allow individuals to focus on activities that improve their life such as studying, working or socialising
    - High self-esteem (mental) encourages people to do their best in all aspects of life, including work. This can contribute to higher performance at life, an work, and a higher income. Income is a source can can be used for healthcare, food and clothing, which all enhance quality of life.
    - Positive thought patterns (mental) reduce the risks of developing mental illness such as depression, which decreases the economic costs to the community of treating these diseases.
- Make specific links to aspects of improved quality of life and/or increased health and wellbeing

Avoid talking about individual benefits on a national level.

How is optimal health and wellbeing important for the individual? (*3 marks*)

Optimal physical health and wellbeing means that a person is free of disease. Without disease, individuals are more equipped to work and earn an income without pain. This income can then be used to provide resources such as food, shelter, clothing and adequate healthcare, which can further promote health and wellbeing by reducing levels of stress (mental health and wellbeing) and providing adequate levels of energy for socialising (physical and social health and wellbeing).

1 mark for an aspect of optimal health and wellbeing
1 mark for a link made between the aspect of health and wellbeing and a benefit for the individual
1 mark for specific links to aspects of improved quality of life and increased health and wellbeing made

Explain how a decrease in DALY overtime may act as a resource nationally (*2 marks*)

A decrease in DALY means a healthier community, which can mean less money is being spent on health care to treat ill-health. These savings can be spent on resources such as education and infrastructure.

A decrease in DALY means a healthier community, which can mean more people in the community are involved in social participation, such as volunteering.

1 mark for explaining what a decrease in DALY can lead to
1 mark for linking this to national outcomes

Explain a benefit of optimal emotional health and wellbeing for individuals (*2 marks*)

Having optimal emotional health and wellbeing could mean you understand why you feel angry. During a failure at work, you could be more likely to change your outlook on the situation and think positively at work, which could increase work productivity.

1 mark for an aspect of optimal emotional health and wellbeing
1 mark for linking this to the benefit for the individual

Discuss why achieving optimal health and wellbeing is important for countries (*4 marks*)

Having optimal health and wellbeing in a country can mean more people can perform daily tasks effectively and work productively and earn an income. This can increase their ability to contribute to taxation revenue. Increased tax revenue increases the country's ability to spend economic resources on education and infrastructure, which can further improve health and wellbeing or a country, as more students can gain knowledge, which can be passed on through generations.

4 marks for four points relating to why optimal health and wellbeing is important for countries

DESCRIBE GLOBAL BENEFITS OF THE PURSUIT OF OPTIMAL HEALTH AND WELLBEING

These questions have a very similar structure to one's that ask you to explain the individual or collective benefits of optimal health and wellbeing

Explain the global benefits of reduced rates of communicable diseases (*3 marks*)

Reduced rates of communicable diseases such as malaria mean that fewer people experience the symptoms associated with this condition and therefore fewer people will die as a result. With people in better physical health and wellbeing, they have an increased capacity to work and to be productive members of the community. This works to decrease conflict between countries as more people are able to access the resources they need for a decent standard of living, and this increases their ability to lead lives they value and promotes physical health and wellbeing.

1 mark for an example of health and wellbeing in a global context identified
1 mark for links established between the example of health and wellbeing and the benefits for individuals and communities
1 mark for benefits of optimal health and wellbeing on a global scale identified

IDENTIFY THE WHO'S PREREQUISITES FOR HEALTH AND EXPLAIN THEIR LINKS TO IMPROVED HEALTH OUTCOMES

When answering these kind of questions, note that "improved health outcomes" means improved health and wellbeing (dimensions), OR improved health status (life expectancy, etc).

There are generally three types of questions you could be asked regarding the prerequisites;

- Identify (just name the prerequisite)
- Outline or describe parts of a prerequisite (eg. what is meant by sustainable resources)
- Link the prerequisites to health and wellbeing, or health status (most likely a VCAA question)

How can a stable ecosystem promote three dimensions of health and wellbeing? (*6 marks*)

- Having a stable ecosystem means that organisms can be used for food and consumed for energy. Adequate levels of energy can mean individuals can perform daily tasks efficiently, which promotes physical health and wellbeing.
- Having food for energy increases the capacity for individuals to learn at school, where they can meet new people and form supportive social networks, promoting social health and wellbeing.
- Opportunities for employment in agricultural industries increases peoples chance to gain an income and support themselves, which may improve self-esteem, promoting mental health and wellbeing.

3 marks for three examples of the positives of a stable ecosystem
3 marks for linking these positives to improved health and wellbeing

Explain two ways that shelter can promote health and wellbeing (*4 marks*)

- Shelter provides protection against infectious diseases can make an individual less likely to be sick, which increases their immune system and reliable body function, increasing physical health and wellbeing.
- Shelter can promote feelings of privacy and security, as shelter reduces the chances of intrusion. This can reduce stress and promote mental health and wellbeing

2 marks for two examples of the positives of shelter
2 marks for linking these positives back to health and wellbeing

Explain how peace can promote the physical and mental dimensions of health and wellbeing (*4 marks*)

Peace is the absence of conflict, including war. Having peace can promote physical health and wellbeing, and less chance of being exposed to conflict can decrease the chance of injury, which then allows the individual to perform daily physical tasks without pain. Peace can also promote mental health and wellbeing, as less exposure to violence can reduce stress and increase the opportunities for an individual to be optimistic.

2 marks for explaining the positive impacts peace has
2 marks for linking it back to the dimensions of health and wellbeing

What is the impact of education on spiritual health and wellbeing? (*2 marks*)

Education empowers individuals to achieve goals and have choices through increased knowledge and capacity to learn. This can positively impact spiritual health and wellbeing, enabling individuals to gain a sense of fulfilment and achieve a positive purpose in life.

1 mark for explaining the impact education has
1 mark for linking it back to spiritual health and wellbeing

DESCRIBE AND APPLY INDICATORS USED TO MEASURE HEALTH STATUS

This is an important skill relevant all year in HHD. Every SAC should have graphs or tables that ask you to use data to analyse trends or relationships.

To describe the indicator is essentially to give a definition of it. Applying the indicators are essential throughout the whole course.

Discuss differences in the health status between males and females (3 marks)

Females experience a higher life expectancy and health-adjusted life expectancy than males. This means that on average, females are expected to live longer than males if current death rates don't change. It also means that females on average will live longer in full health and without reduced functioning, compared to males.

1 mark for indicating two relevant health indicators
1 mark for showing a comparison between males and females
1 mark for giving an understanding of the health indicators

Explain the difference between life expectancy and health-adjusted life expectancy (2 marks)

Life expectancy is a prediction of the number of years of life remaining if current mortality rates don't change, whereas health-adjusted life expectancy is a more comprehensive measure and takes into account the number of years spent living in poor health, and is the number of years a person can live in full health, if current ill-health rates don't change.

1 mark for explaining what life expectancy is
1 mark for explaining what health adjusted life expectancy is

Explain what is meant by burden of disease (*2 marks*)

A measure of the impact of diseases. Specifically, it measures the gap between current health status and an ideal situation where everyone lives to an old age free of disability or diseases. Measured in disability-adjusted life year (DALY).

2 marks for two points about BOD

USE DATA TO DESCRIBE AND EVALUATE THE HEALTH STATUS OF AUSTRALIANS

A trend is a general change or movement in a particular direction.

A trend could be a consistently increasing pattern over a period of time (eg. an increase in the prevalence of a particular disease over time).

A fact refers to precise information taken from a graph or table.

Facts include data. An example would be "x amount of people got diagnosed with y in 2014".

Relationships are between two factors. A relationship between two factors is where a change in one factor influences the other factor. (eg. A the socioeconomic status group changes from lowest to highest, there is a corresponding decrease in deaths per 100000 population."

Relationships generally always take into account the x and y axes

The following steps provide a systematic way of reading graphs and tables.

1. Read the **title** of the graph. The title usually gives an **indication of the kind of information presented in the graph**.

2. Read the **horizontal and vertical axes** (of a bar graph, for instance) and look at the **units**; for instance, the units might represent a percentage, year, number, rate, proportion or dollars.

3. Look at the **key** if there is one. This helps **identify various elements of the data.**

4. **Read any notes that relate to the data.** There may be additional information at the bottom of the graph **explaining various elements of the graph**.

5. **Look for trends, similarities and differences between the data**. This will enable a **better understanding of the data that the graph is actually presenting.**

6. When commenting on data, **try to avoid making general statements such as 'more'** and **instead try to use data from the graph to support your statement;** for instance, use '75 deaths per 100 000 compared to 150 deaths per 100 000', making sure to refer to the correct unit of measurement.

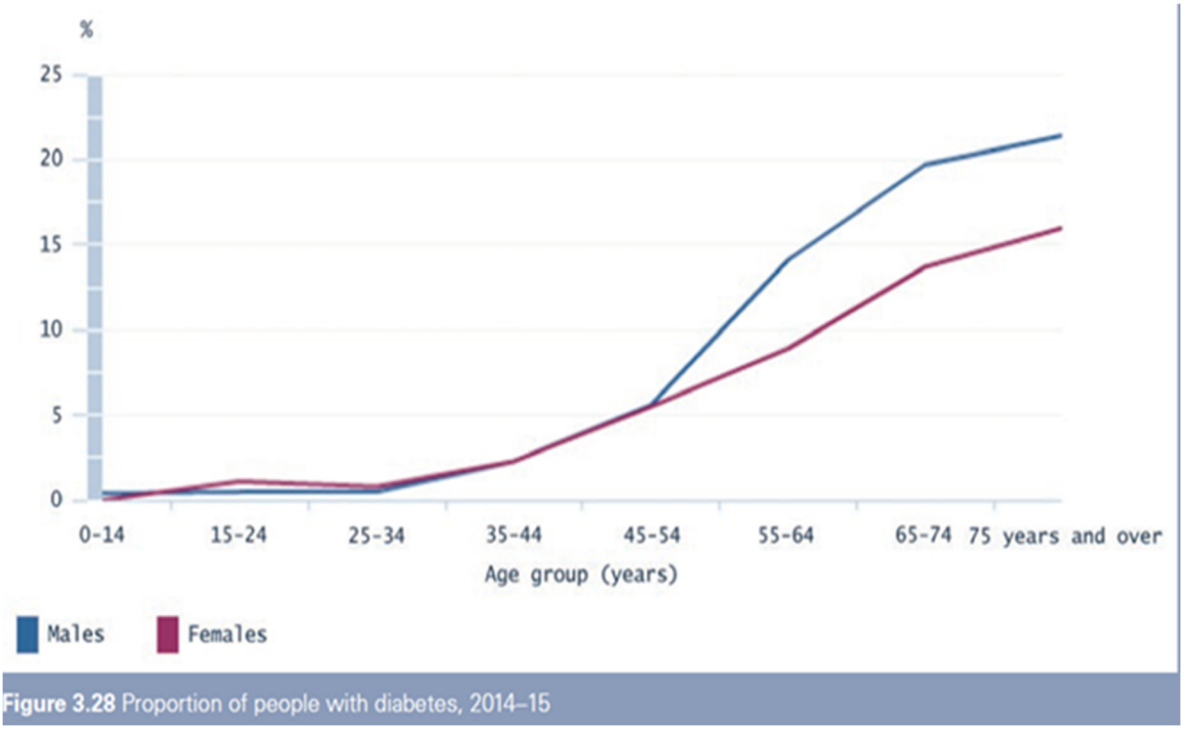


Figure 3.28 Proportion of people with diabetes, 2014–15

a. **Identify one trend evident (*1 mark*)**

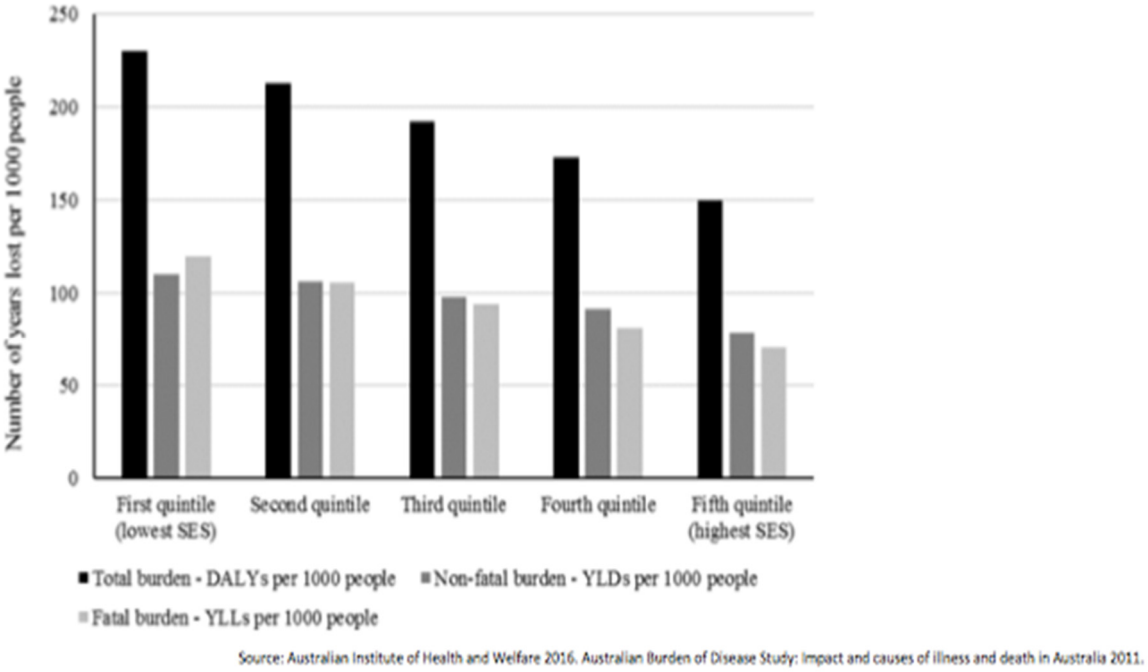
The proportion of people with diabetes in 2014-15 increased with age.

b. **Identify and explain one biological factor that can be a risk factor for type 2 diabetes (*3 marks*)**

High body mass index is a risk factor for type 2 diabetes, as having excess body weight can put a strain on the pancreas to produce insulin in amounts great enough to balance the levels of blood glucose in the body. If the body cannot balance the amount of blood glucose in the body, then it results in type 2 diabetes.

1 mark for identifying a correct biological factor
2 marks for explaining how that factor can cause type 2 diabetes

The graph below shows the rate of burden of disease (per 1000 people) according to socioeconomic status (SES). The graph displays total burden (measured in DALYs), the non-fatal burden (measured in YLDs) and the fatal burden (measured in YLLs)



Source: Australian Institute of Health and Welfare 2016. Australian Burden of Disease Study: Impact and causes of illness and death in Australia 2011.

Using data, outline the relationship shown in the graph above (*2 marks*)

As SES decreases there is an increase in total years of life lost per 1000 people. (The lowest SES group contributed around 250 DALYs per 1000 compared to the highest SES group contributing 150 DALYs per 1000.)

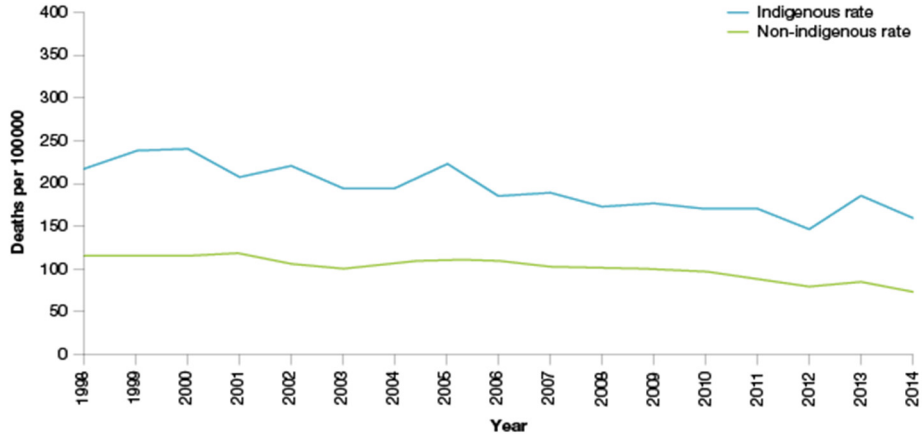
1 mark for outlining the relationship
1 mark for using data

ANALYSE PATTERNS IN MORBIDITY AND MORTALITY IN AUSTRALIA OVER TIME

This skill is to essentially analyse data and identify a trend or movement in the data. You may be asked to identify and describe a factor that contributed to the trend. These factors can either be the biological, sociocultural and environmental factors, or the alcohol, high BMI, smoking, and dietary risks

In key knowledge, you are only required to make links from the behavioural factors to health status and burden of disease, NOT health and wellbeing!

FIGURE 4.57 Child mortality rates for children aged under five, by Indigenous status, 1998 to 2014



Source: AIHW, *Australia's health 2016*, page 229.

a. <u>Analyse patterns in the graph shown (*2 marks*)</u>

The rate for Indigenous children decreased overtime from around 220 per 100 000 people in 1998 to around 160 per 100 000 in 2014. For non-Indigenous, the rate decreased gradually from around 115 per 100 000 in 1998 to around 75 per 100 000 in 2014.

1 mark for analysing the pattern in under-five mortality rates
1 mark for appropriate use of data

b. <u>Explain two possible reasons for this change in under-five mortality rates over time (*4 marks*)</u>

Education: education relating to maternal nutrition and the importance of maternal healthcare may have improved over time. Mothers undertaking healthy practices can improve the likelihood for babies to develop optimally, which decreases the under-five mortality rate.

Access to healthcare: improvements in access to and quality of healthcare can mean that conditions may be prevented more easily, including conditions of infants and children. When more fatal diseases are prevented, this may have contributed to decreased under-five mortality rates in Australia over time.

2 marks for identifying and describing the factors
2 marks for using the factors to explain the decrease in the under-five mortality rates in Australia overtime

Outline two ways in which alcohol use contributes to the burden of disease in Australia (*2 marks*)

- Alcohol affects judgement and motor control, which can lead to road accidents and increases injury rates in Australia, contributing to increased years of life lost due to time spent with disease or illness.
- Alcohol when consumed in excess can put a strain on the liver to flush alcohol out of the body. This could lead to liver disease, which contributes to increased years of life lost due to premature death.

2 marks for outlining two ways in which alcohol contributes to Australia's burden of disease

Explain how under-consumption of vegetables may impact the ability to achieve continued improvements in life expectancy in Australia (*2 marks*)

Underconsumption of vegetables can mean individuals don't receive enough antioxidants, which work to prevent the impact of free radicals in the body. This can increase the prevalence of cancer in Australian individuals, which could make improvements in life expectancy hard to achieve

1 mark for explaining what under-consumption of vegetables does
1 mark for linking back to life expectancy

Explain how alcohol consumption may contribute to obesity (*2 marks*)

Alcohol is energy dense, hence adds kilojoules to individual's normal diets. If this additional energy is not utilised, it is likely to contribute to weight gain by converting to fat. For this reason, excessive and long term consumption of alcohol contributes contributes to higher rates of obesity.

1 mark for explaining what alcohol can do
1 mark for linking back to obesity

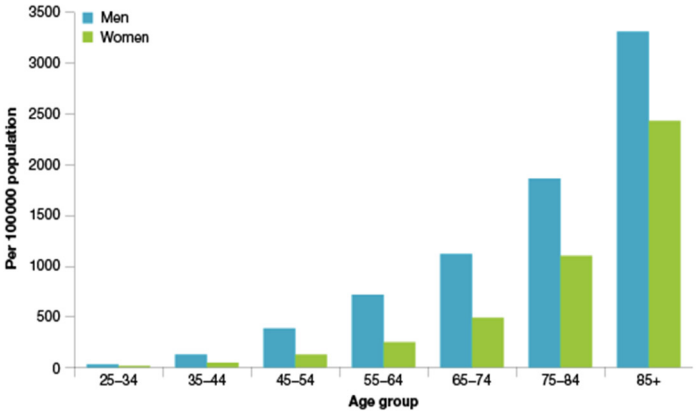
ANALYSE HEALTH INFORMATION TO EXPLAIN FACTORS THAT CONTRIBUTE TO VARIATIONS IN HEALTH STATUS BETWEEN POPULATION GROUPS.

Do not discuss behavioural factors when explaining differences in health status between population groups!

Generally, always mention the category (eg. biological) and factor (eg. body weight)

1. State/identify the factor and compare both population groups
2. Explain how the factor can account for differences/variations in health status

FIGURE 4.59 Rates of heart attacks among people aged 25 years and over, 2013



Source: AIHW, *Australia's health 2016*, page 388.

a. <u>Analyse patterns in the graph shown and compare the differences between males and females (*2 marks*)</u>

Males had higher rates of heart attacks than females for each age group. For example, the rate of heart attack for males in the 35–44 age group was around 100 per 100 000 population compared to around 30 per 100 000 for females. In the 65–74 age group, the rate for males was around 1100 per 100 000 compared to around 500 per 100 000 for females in the same age group.

1 mark for an overall statement relating to the difference in rates of heart attack between males and females is made.
1 mark for data is used to support the initial statement.

b. Explain one biological factor and one sociocultural factor that could explain reasons for these differences (4 marks)

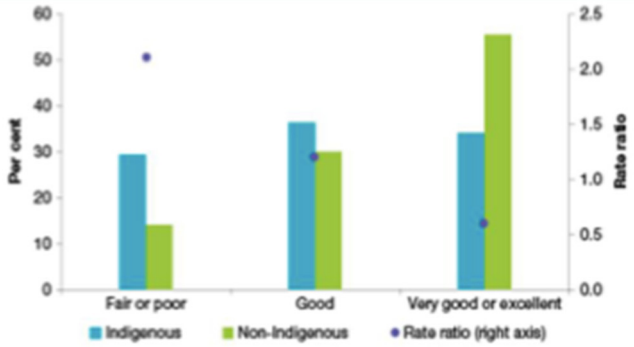
Biological — males are more likely to store fat around the abdomen compared to females. Fat stored around the abdomen increases the risk of heart attack and may contribute to the difference in the rate of heart attacks experienced between males and females.

Sociocultural — gender stereotypes and peer pressure play a role in health outcomes for males compared to females. Males are often portrayed as having to be strong, and this contributes to males being less likely to access healthcare. As a result, risk factors for heart attack such as hypertension may go untreated, and this can increase the rate of heart attacks for males compared to females.

2 marks for identifying and describing a biological and sociocultural factor that relates to males

2 marks for linking the factors the differences in heart attack rates between males and females

FIGURE 4.62 Self-assessed health status among people aged 15 and over, by Indigenous status, 2012–13



Source: AIHW 2015, *The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples 2015*, page 83.

a. Outline the difference in the proportion of indigenous and non-Indigenous Australians who assess their health status as fair or poor (*1 Mark*)

More indigenous Australians assess their health status as fair or poor (30%) than non-indigenous Australians (15%)

1 mark for outlining the difference

b. Identify one factor (biological or sociocultural or environmental) and explain how it contributes to the difference outlined (*2 marks*)

Indigenous Australians are more likely to have lower socioeconomic status (sociocultural) and have a lower income than non-indigenous Australians. Having a lower income can cause stress and lower self-esteem, which can cause mental health problems such as depression. This may explain why more indigenous Australians rate their health as fair or poor than non-indigenous Australians.

1 mark for identifying a factor
1 mark for explaining how it contributes to indigenous Australians having a lower self assessed health status

Those from low socioeconomic groups experience a significantly higher under-five mortality rate (U5MR) than those in high socioeconomic groups.

Identify one sociocultural factor and one environmental factor and explain how each contributes to a higher U5MR among low socioeconomic groups when compared to high socioeconomic groups (*6 marks*)

- Sociocultural factor: People with low socioeconomic status are less likely to access healthcare than people with high socioeconomic status, due to not having enough income to afford treatments and medicines. This can mean if an infant or child gets an infection, their parents cannot afford to send them to a doctor, which can lead to death if a serious infection is left untreated, contributing to higher rates of under 5 mortality among low socioeconomic status groups.

- Environmental factor: People with low socioeconomic status are more likely to live in an unsafe housing environment than people with high socioeconomic status, due to not having enough income to afford adequate and safe electricity facilities. This can lead to children being exposed to hazardous wiring, which can cause injury to the child if they make contact with it, and could ultimately lead to death of the child. This increases the rates of under 5 mortality among low socioeconomic groups when compared to high socioeconomic groups.

2 marks for identifying appropriate sociocultural and environmental factors
2 marks for explaining the effects these factors have
2 marks for linking the effects to the differences in u5mr for low SES groups compared to high SES groups

Identify a sociocultural factor and explain how it may contribute to the difference in maternal mortality rates between Indigenous and non-Indigenous Australians (*6 marks*)

Indigenous Australians are more likely to have lower levels of education than non-indigenous Australians. This can mean they don't know the benefits of accessing healthcare, which can make them less likely to access healthcare when pregnant. This could mean any conditions of the pregnant mother go undiagnosed, which could explain why Indigenous Australians have a higher maternal mortality rate when compared to non-Indigenous Australians

1 mark for identifying a sociocultural factor
1 mark for explaining the impact it has
1 mark for linking this back to maternal mortality rates

Identify one biological and one sociocultural factor and explain how each may contribute to males having a higher rate of DALY when compared to females (*4 marks*)

- **Biological (Genetics):** Men tend to have higher levels of testosterone when compared to women. As a result, they are more likely to partake in risky behaviours such as violence or drink driving. This could increase the rates of injury for men and the potential for them to become disabled as a result, and could contribute to men having a higher proportion of years of life lost due to time spent with a disability and DALY, when compared to women
- **Sociocultural (Cultural Factors)**: There is a greater social expectation around men to be more masculine when compared to women. This could include men being less likely to seek medical attention when needed, which could lead to conditions such as cancer or diabetes going undiagnosed, which could lead to premature death if left too late. This could contribute to men having a higher rate of years of life lost due to premature death and DALY, when compared to women.

2 marks for correctly identifying a relevant biological and sociocultural factor
2 marks for linking each to the difference in the rate of DALY