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

Preventable chronic diseases and illnesses

- Mental health problems and illnesses
- Cardiovascular disease
- Injury
- Respiratory disease
- Cancer
- Diabetes
Cardiovascular Disease (CVD)  
The nature of the problem

• CVD is a general term covering all diseases of the heart and circulatory system. There are 3 main types:
  1. Coronary heart disease (heart attack – stop of blood flow to heart or angina – chest pain when not enough oxygenated blood)
  2. Stroke (blockage of blood flow to the brain)
  3. Peripheral vascular disease (reduced blood flow, affects arteries, arterioles and capillaries of the legs and feet)
• Atherosclerosis (build up of fatty material on interior walls of arteries) is the underlying cause of most of these conditions
• Cholesterol is a fatty substance in the blood (good and bad)
• [http://www.abc.net.au/catalyst/stories/2374112.htm](http://www.abc.net.au/catalyst/stories/2374112.htm)
Figure 2.8: Atherosclerosis. The narrowing of the artery (due to fat deposits on the inside of the walls) makes it more difficult for blood to pass through the artery. A clot may form or lodge at that point.
Cardiovascular Disease (CVD) Extent of the problem (trends)

• CVD accounts for approx 35% of all deaths
• Death rates (mortality) have declined due to a reduction in the levels of risk factors eg less people smoking, more people modifying diets
• Morbidity rates also decreasing, although CVD is a leading cause of disability (eg after a stroke may lose function on one side of the body)
Cardiovascular Disease (CVD)  
Risk factors and protective factors

• **Risk factors that cannot be modified:** family history, gender (higher in men...due to them not having oestrogen which is considered a protective factor!), age (the older you get the more at risk you are)

• **Risk factors that can be modified:** smoking, high fat diet, high blood pressure, overweight/obesity, physical inactivity

• **Protective factors:** (these are usually the opposite of risk factors!) regular physical activity, low fat diet, don’t smoke or drink excessive amounts of alcohol, maintain a healthy weight.

• [https://www.youtube.com/watch?v=cRsLryQ57R4&index=43&list=PL72C382717921209A](https://www.youtube.com/watch?v=cRsLryQ57R4&index=43&list=PL72C382717921209A) (2mins)
Determinants (reminder!)

- Sociocultural – family, peers, media, religion, culture
- Socioeconomic – employment, education, income
- Environmental – geographical location, access to health services and technology
Cardiovascular Disease (CVD)
The sociocultural, socioeconomic and environmental determinants

http://www.abc.net.au/7.30/content/2007/s2225662.htm (Mix ‘n’ Match)

### Table 2.1: The sociocultural, socioeconomic and environmental determinants of cardiovascular disease

| Sociocultural determinants | • People with a family history of CVD are more at risk.  
|                           | • Asians are less prone to getting CVD due to a generally low-fat diet.  
|                           | • Aboriginal and Torres Strait Islander peoples are more at risk as they are associated with having a lower socioeconomic status and lower education levels.  
|                           | • Media exposure of the effects of smoking on health have led to a reduction in smoking rates and therefore a declining trend for CVD rates. |
| Socioeconomic determinants | • People with a low socioeconomic status or who are unemployed have higher death rates because income can limit health choices, such as purchasing fresh fruit and vegetables and using exercise facilities.  
|                           | • People with low education levels are more at risk as poor education is linked to poor health choices and less knowledge about how to access and use health services. |
| Environmental determinant | People living in rural and remote areas are more at risk, as they tend to have less access to health information, health services and technology, such as blood pressure monitoring devices. |
Cardiovascular Disease (CVD)
Groups at risk

• people with high blood pressure levels (hypertension)
• people who consume a high-fat diet (which leads to raised blood cholesterol and triglyceride levels)
• people aged over 65 years
• males
• blue-collar workers (laborers and tradespeople who may have higher levels of smoking, alcohol consumption and high-fat diets).
Major forms of cardiovascular disease
- Coronary heart disease (ischaemic heart disease)
- Stroke (cerebrovascular disease)
- Peripheral vascular disease

Risk factors
Cannot be changed
- Age
- Gender
- Heredity
Can be changed
- Smoking
- High-fat diet
- High blood pressure
- Abdominal obesity
- Overweight condition or obesity
- High blood cholesterol
- Lack of physical activity

Groups most at risk
- Cigarette smokers
- People with family history of cardiovascular disease
- People with high blood cholesterol levels
- People with high-fat diets
- People with hypertension
- People aged over 65 years
- Males
- Socioeconomically disadvantaged groups
1. Identify the three most common forms of cardiovascular disease.

2. Outline how arteriosclerosis contributes to cardiovascular disease.

3. What are the major sociocultural, socioeconomic and environmental determinants of cardiovascular disease? You may wish to present your response in a mind map.