

3. MORTALITY FROM CARDIOVASCULAR DISEASE

Cardiovascular disease (CVD) is the leading cause of death in Asia-Pacific, although highly preventable. CVD was the cause of an estimated 9.4 million deaths in SEARO and WPRO and accounted for one-third of all deaths in 2016 in these regions (<https://www.who.int/data/gho>).

CVD covers a range of diseases related to the circulatory system, including ischaemic heart disease (IHD) and cerebrovascular disease (or stroke). Ischemic heart disease is caused by the accumulation of an atherosclerotic plaque in the inner wall of a coronary artery, restricting blood flow to the heart. Cerebrovascular diseases refer to a group of diseases that relate to problems with the blood vessels that supply the brain. Common types of cerebrovascular disease include ischemic stroke, which develops when the brain's blood supply is blocked or interrupted, and haemorrhagic stroke, which occurs when blood leaks from blood vessels onto the subarachnoid space or the surface of the brain. Together, IHD and stroke comprise 87.8% of all cardiovascular deaths in WPRO and SEARO countries and territories combined (<https://www.who.int/data/gho>).

The majority of CVD is caused by risk factors that can be controlled, treated or modified, such as high blood pressure, high blood glucose, high blood cholesterol, obesity (see indicator "Overweight or obesity" in Chapter 4), lack of physical activity, tobacco use (see indicator "Tobacco" in Chapter 4) and excessive alcohol consumption.

Mortality from cardiovascular disease varied across countries and territories with a notably high level, exceeding 440 deaths per 100 000 population in Mongolia in 2016 (Figure 3.13). This was in contrast to a group of developed countries and territories – Republic of Korea, Japan, Singapore, Australia, Macau, China, Hong Kong, China and New Zealand – where death rates were below 100 per 100 000 population. The large variation in mortality may be due to differences in the prevalence of risk factors for CVD and also access to high quality acute care (see indicator "In-hospital mortality following acute myocardial infarction and stroke" in Chapter 7) across countries and territories. The average mortality rate from CVD in lower-middle and low income Asia-Pacific countries and territories was twice the one in OECD countries (311 versus 127.8 deaths per 100 000 population). While all Asia-Pacific countries and territories had decreased mortality from CVD, the rate was unchanged in Bangladesh, Myanmar and the Philippines from 2000-16.

Success of reducing the mortality rates from CVD in OECD countries owes to a decline in smoking rates, expanded health

system's capacity to control high cholesterol and blood pressure, and greater access to effective care in the event of an acute episode such as a stroke or heart attack (OECD, 2015[13]). As an example, in Japan population-based interventions such as salt reduction campaigns and an increased use of antihypertensive drugs covered by the health insurance system were successful in controlling blood pressure, resulting in the reduction of CVD mortality (Ikeda et al., 2011[14]).

The types of CVD that are fatal differ across countries and territories in the region. In China, Cambodia, Korea DPR, the Republic of Korea, Viet Nam, Bangladesh and Myanmar mortality from stroke was greater than IHD (Figure 3.14). In all other Asia-Pacific countries and territories, the trend was similar to European and North American countries and territories and mortality from IHD was greater than for stroke (Ueshima et al., 2008[15]).

While mortality rates from CVD by age group follow a similar curve in Asia-Pacific and OECD countries, mortality is systematically higher in lower-middle and low income Asia-Pacific countries and territories across all age groups (Figure 3.15).

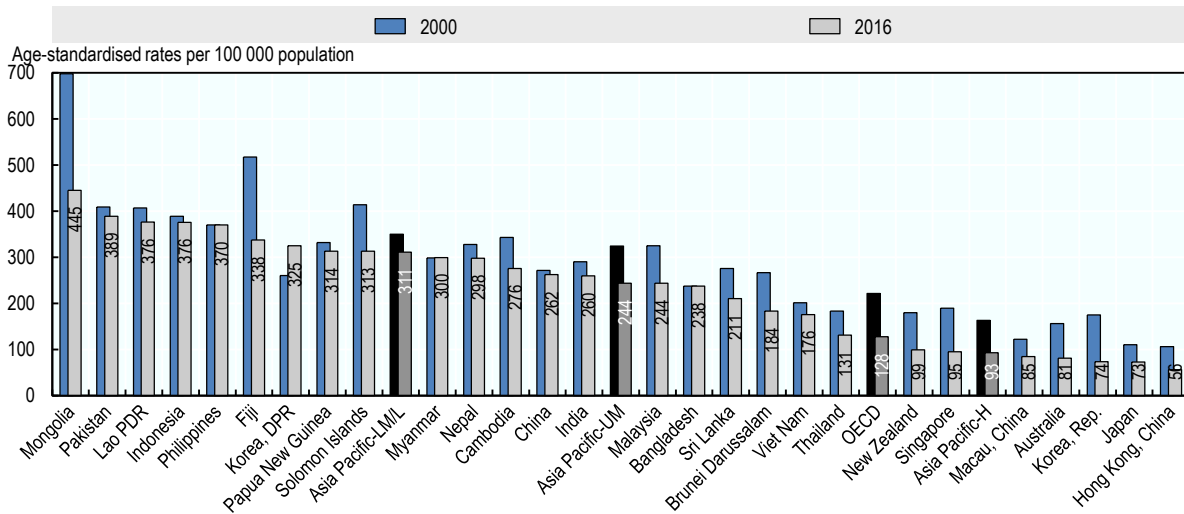
As the proportion of older people increases in Asia-Pacific (see indicator "Ageing" in Chapter 3), demand for health care will increase and the complexity and type of care that CVD patients require will change. Increases in total cholesterol and blood pressure, along with smoking, overweight/obesity and high blood glucose (see indicator "Diabetes" in Chapter 3) highlight the need for management of risk factors to prevent an epidemic of CVD. In addition to efforts to improve lifestyles, primary care needs to be strengthened and quality of acute care needs to improve through better emergency care and improved professional skills and training capacity (OECD, 2015[13]).

Definition and comparability

See indicator "Mortality from all causes" in Chapter 3 for definition, source and methodology underlying mortality rates.

CVD mortality rates for Hong Kong, China and Macau, China are not age-standardised.

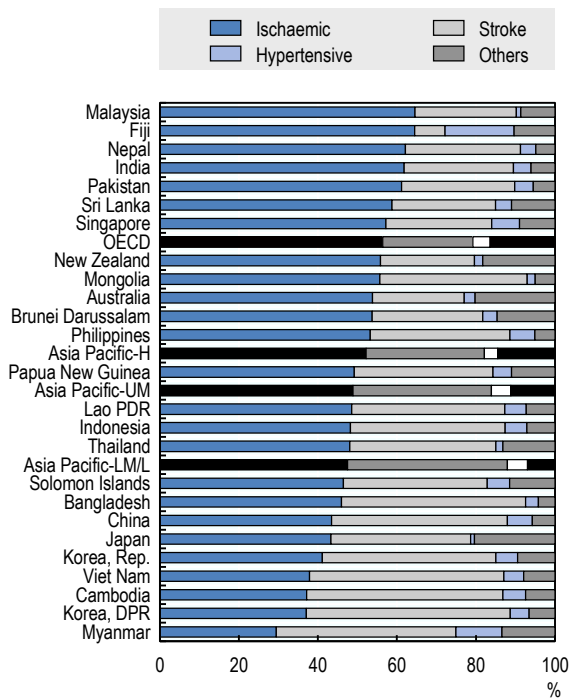
Figure 3.13. Cardiovascular disease, estimated mortality rates, 2000 and 2016



Source: WHO Global Burden of Disease, 2018; Department of Health, Hong Kong, China, 2018; Macau statistical yearbook, 2017.

StatLink <https://stat.link/4df8ms>

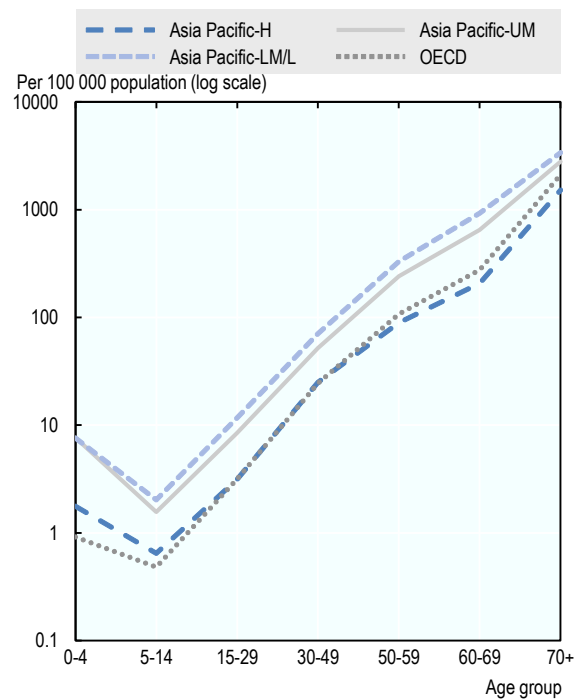
Figure 3.14. Proportions of cardiovascular disease deaths, 2016



Source: WHO Global Burden of Disease, 2018.

StatLink <https://stat.link/xfcg8b>

Figure 3.15. Cardiovascular diseases, age-specific mortality rates, 2016



Source: WHO Global Burden of Disease, 2018.

StatLink <https://stat.link/240tmi>



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