

## 4.6 Coronary heart disease

Coronary heart disease (CHD) occurs when there is a blockage in the blood vessels that supply blood to the heart muscle. There are 2 major clinical forms of CHD: *heart attack*—an acute life-threatening event where the blood vessel is completely blocked, requiring prompt treatment; and *angina*—a chronic condition where there is a temporary deficiency in the blood supply. Although angina is less severe than a heart attack, people with the condition are at increased risk of heart attack or sudden cardiac death (see Glossary).

CHD kills more people in Australia than any other disease. However, it is largely preventable, as many of its risk factors are modifiable, including: tobacco smoking, high blood pressure, high blood cholesterol, physical inactivity, poor nutrition and obesity (see Chapter 5 'Biomedical risk factors' and 'Behavioural risk factors').

### How common is coronary heart disease?

- In 2011–12, an estimated 585,900 Australians had CHD, with the condition being more common in men (3.3%) than women (2.0%) and among those aged 70 and over (15% compared with 2.2% for those aged 25–69) (ABS 2013).
- In 2011, an estimated 69,900 people aged 25 and over had a heart attack. There has been a 20% fall in heart attack rates over the last 5 years (age-standardised rate of 427 per 100,000 people in 2011 compared with 534 in 2007) (see Chapter 9 'Indicators of Australia's health' for more information).

### Deaths

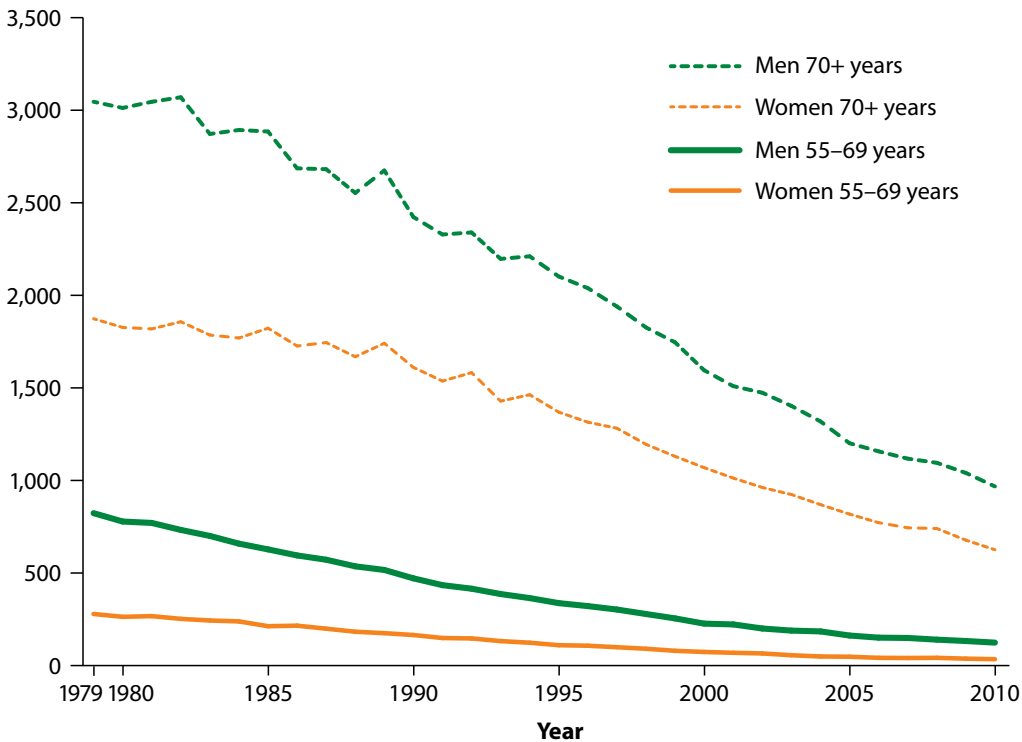
- In 2011, there were 21,500 deaths with CHD recorded as the underlying cause of death. CHD contributed to 15% of all deaths in Australia and almost 1 in 2 cardiovascular disease deaths.
- CHD death rates have fallen by 73% over the last 3 decades; however, the rate of decline has varied over time and across age groups. For some age groups, CHD death rates continue to fall at accelerated rates (such as for those aged 70 and over), while for others, such as the 55–69 age group, there has been a levelling-off or plateauing over the last 5 years (Figure 4.9).

### Health care

- In 2011–12 there were 153,700 hospitalisations for CHD (an age-standardised rate of 615 per 100,000 population), a 28% decline from 1993–94 when the age-standardised rate was 859 per 100,000.
- The downward trend in CHD hospitalisations was similar for men and women (27% and 31%, respectively), although men are hospitalised at much higher rates than women.

**Figure 4.9**

**Deaths per 100,000 population**



*Notes*

1. Rates have been age-standardised to the 2001 Australian population.
2. Deaths registered in 2008 and earlier are based on the final version of cause of death data; deaths registered in 2009 and 2010 are based on the revised and preliminary versions, respectively, and are subject to further revision by the ABS. Data for 2010 have not been adjusted for the additional deaths arising from outstanding registrations of deaths in Queensland in 2010.

Source: AIHW forthcoming.

**Trends in coronary heart disease death rates among people aged 55 and over, 1979–2010**

**Prevention**

Significant reductions in CHD deaths can be attributed to improvements in medical and surgical treatment. These include better emergency care and early identification of risk, the increasing use of antithrombotic and blood pressure- and blood cholesterol-lowering drugs, and cardiac procedures that restore blood flow to the heart by removing or bypassing blockages. Reductions in risk factors, such as tobacco smoking, high blood cholesterol and high blood pressure, have also contributed to these declines.

## Variations among population groups

- The burden of CHD is greater in Aboriginal and Torres Strait Islander people than in other Australians—rates of heart attack events in adults aged 25 and over were 2.6 times as high in 2011.
- CHD death rates are also higher for Indigenous adults compared with other Australian adults (2.0 and 1.6 times as high for men and women, respectively, in 2009–2010).
- CHD death rates were 1.4 times as high for adults living in the lowest socioeconomic status (SES) groups compared with the highest SES groups in 2007.

## What is missing from the picture?

There are no reliable national and jurisdictional data on the number of new cases of CHD each year. Consequently, proxy measures have been developed that combine hospital and mortality data to estimate new cases of heart attack (including unstable angina, also known as 'acute coronary syndrome').

More data on the care pathways of patients with CHD as they move through the health system, and on the medicines prescribed in the various settings, could lead to better identification of any gaps in health care, and to potentially better care overall.

## Where do I go for more information?

The following reports are available for free download on the AIHW website:

[Cardiovascular disease: Australian facts 2011](#) and [Health care expenditure on cardiovascular diseases 2008–09](#).

Two forthcoming AIHW reports of interest are *Cardiovascular, diabetes and kidney disease: Australian facts 2014* and *Coronary heart disease mortality trends in age groups and populations*.

## References

ABS (Australian Bureau of Statistics) 2013. Australian Health Survey: updated results, 2011–2012. ABS cat. no. 4364.0.55.003. Canberra: ABS.

AIHW, forthcoming. Coronary heart disease mortality trends in age groups and populations. Canberra: AIHW.