4.7 Stroke

SNAPSHOT

Stroke occurs when an artery supplying blood to the brain either suddenly becomes blocked (ischaemic stroke) or begins to bleed (haemorrhagic stroke) (see Glossary).

This may result in part of the brain dying, leading to sudden impairment that can affect a range of functions. Stroke often causes paralysis of parts of the body normally controlled by the area of the brain affected by the stroke, or speech problems and other symptoms such as difficulties with swallowing, vision and thinking.

In many but not all cases stroke is preventable because many of its risk factors are modifiable, such as high blood pressure, physical inactivity, abdominal obesity and tobacco smoking (O'Donnell et al. 2010) (see Chapter 5 'Biomedical risk factors' and 'Behavioural risk factors').

SNAPSHOT

How common is stroke?

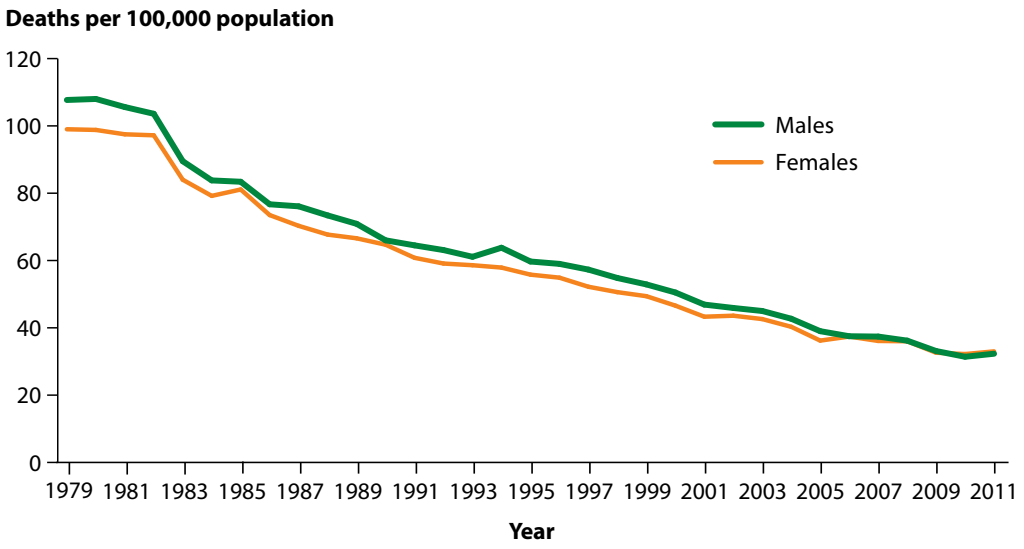
- In 2009, an estimated 375,800 Australians (205,800 males and 170,000 females) had had a stroke at some time in their lives. Most (70%) were aged 65 or over.
- The rate of stroke events has fallen by 25% over the last decade (from an age-standardised rate of 186 to 140 per 100,000 population between 1997 and 2009). But the total number of Australians experiencing a stroke rose by 6% over the same period, reflecting the ageing of the population.
- In 2009, over one-third (35%) of Australians who experienced a stroke had a resulting disability; this was an improvement from 1998 when the rate was 45%.

Deaths

- In 2011, there were 8,800 deaths with stroke recorded as the underlying cause of death, accounting for 6% of all deaths in Australia (1 in 5 cardiovascular disease deaths; see Glossary and Chapter 3 'Multiple causes of death in Australia' for 'cause of death' definitions).
- Over the last 3 decades, stroke death rates have fallen by almost 70% (from an age-standardised rate of 103 to 33 deaths per 100,000 population between 1979 and 2011) (Figure 4.10).
- Death rates were similar for males and females (age-standardised rate of 33 compared with 32 deaths per 100,000 population respectively); but more females than males die from stroke (5,400 stroke deaths for females in 2011 compared with 3,500 deaths for males). This largely reflects that there are more older women than men.

SNAPSHOT

Figure 4.10



Notes

1. Rates have been age standardised to the 2001 Australian population.
2. The rates included in this report may differ from previous AIHW reports due to revised ABS Estimated Resident Populations (1991 to 2011).
3. Deaths registered in 2009 and earlier are based on the final version of cause of death data; deaths registered in 2010 and 2011 are based on 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 National Mortality Database.

Trends in stroke death rates, 1979 to 2011

Australian Institute of Health and Welfare 2014 *Australia's health 2014*. Australia's health series no. 14. Cat. no. AUS 178. Canberra: AIHW.

SNAPSHOT

Health care

- In 2011–12, there were 36,800 hospitalisations for acute care of stroke and 27,400 hospitalisations for rehabilitation care for stroke. The average length of stay in acute hospital care for stroke was 9 days, and in rehabilitation care 14 days.
- Over the last decade, hospitalisation rates for stroke fell by 17% (from an age-standardised rate of 174 to 145 per 100,000 population between 1998–99 and 2011–12).
- Stroke units significantly improve health outcomes of stroke patients. Between 2007 and 2011, the number of stroke units in public hospitals increased from 54 to 74 and the proportion of patients receiving stroke unit care increased from 50% to 60%.
- In 2009, informal carers played an important role in care of stroke survivors. Of the estimated 75,000 primary carers who provided assistance to people with stroke and resulting disability, more than half spent 40 hours or more per week in their caring role.

Variations among population groups

- Aboriginal and Torres Strait Islander people were 1.7 times as likely to have had a stroke as non-Indigenous Australians. Further, hospitalisation rates for stroke among Indigenous Australians were twice as high as for other Australians and stroke death rates 1.5 times as high as for non-Indigenous Australians.
- People living in remote areas of Australia and in the lowest socioeconomic status (SES) groups also have a higher burden of stroke compared with people living in *Major cities* and in the highest SES groups.

What is missing from the picture?

Currently, there are no comprehensive national data on the incidence of stroke (new cases) or treatment and care responses such as the time elapsed between the onset of stroke symptoms and emergency response, and the presentation to hospital. Nor are there national data on the uptake of best practice clinical guidelines or on medications given in acute care or at discharge.

Where do I go for more information

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

Cardiovascular disease: Australian facts 2011, *Stroke and its management in Australia: an update* and *Health care expenditure on cardiovascular diseases 2008–09*.

More information will also be available in the forthcoming AIHW report, *Cardiovascular, diabetes and kidney disease: Australian facts 2014*.

Reference

O'Donnell MJ, Xavier D, Liu L, Zhang H, Chin SL, Rao-Melacini P et al. 2010. Risk factors for ischaemic and intracerebral haemorrhagic stroke in 22 countries (the INTERSTROKE study): a case-control study. Lancet 376:112–23.

Australian Institute of Health and Welfare 2014 *Australia's health 2014*. Australia's health series no. 14. Cat. no. AUS 178. Canberra: AIHW.