



Accidental drowning

What is accidental drowning?

Drowning is the process of experiencing respiratory impairment as a result of submersion or immersion in liquid (van Beeck et al. 2005). Accidental drowning can result in premature death (WHO 2014). People can drown while swimming, taking a bath, or taking part in a variety of water sports including rock fishing.

Premature mortality refers to deaths that occur at a younger age than a selected cut-off—for this analysis, deaths among people under the age of 75 are considered premature. This is consistent with other AIHW reports on premature mortality. Although this fact sheet focuses on deaths under 75, injury and poisoning deaths at any age can be considered premature.

Who dies prematurely from accidental drowning?

In 2012, there were 174 premature deaths due to accidental drowning in Australia. Drowning was ranked 57th in the causes of premature death and 3rd in the leading causes of death for 1–14 year olds.

More males than females experience premature death from accidental drowning in Australia (83%; or 144 deaths compared with 30 deaths), and this applied across all age groups. Among males, deaths from drowning were most common among 25–29 year olds (18 deaths in 2012); for females, drowning occurred most commonly in the 0–4 age group (6 deaths) (Figure 1).

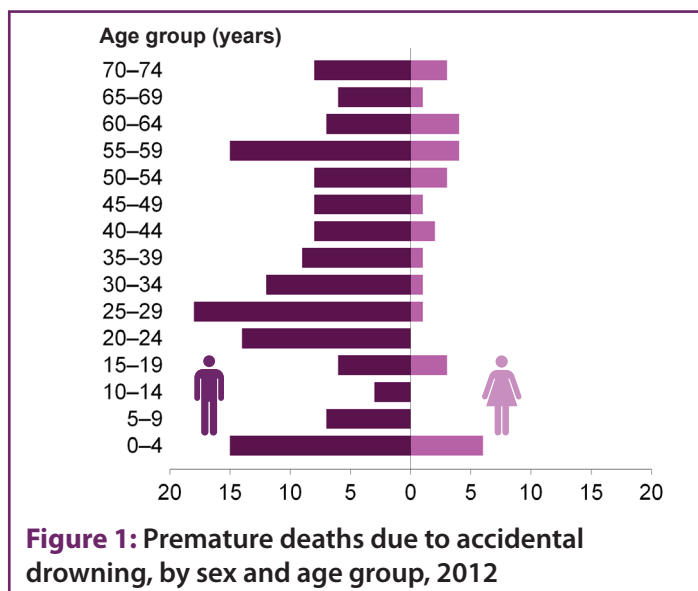


Figure 1: Premature deaths due to accidental drowning, by sex and age group, 2012

Quick facts

Accidental drowning was the **57th** leading cause of premature death in Australia in 2010–2012 and the **3rd** leading cause among children aged 1–14.

57

More than **4 in 5** premature deaths due to drowning in 2012 were among males (83%).



The premature death rate due to accidental drowning decreased by **62%** over the 3 decades from 1982 to 2012.

62%

The increase in deaths from drowning among males following the teenage years may be explained by these young adults recreating in unfamiliar aquatic locations. Risk-taking behaviour, peer influences and alcohol consumption may also be factors (Royal Life Saving Society Australia 2014).

Coastal cliffs and rocky ledges (or rock platforms) contribute to around 1 in 5 drowning deaths in Australia. Fatalities occur particularly among rock fishers. People recreating on rocky coasts are often unprepared for entering the water or swimming (Kennedy et al. 2013).

What population-level approaches target premature deaths due to accidental drowning?

The *Australian Water Safety Strategy 2012–15* developed by the Australian Water Safety Council (2012) aims to reduce drowning deaths by 50% by 2020. The strategy takes a life-course approach and outlines how the risk of drowning varies for:

- children aged 0–14: risks include pools, baths, lack of supervision, access to water, and poor swimming and water safety skills
- young people aged 15–24: risks include risk-taking, drugs and alcohol, increasing independence and exposure to inland waterways
- people aged 55 and over: risks include watercraft, exposure to rivers and oceans, physical changes, medical conditions, overestimation of skills, lack of water-safety knowledge and loss of fitness.



Reducing alcohol-related drowning deaths in men aged 18–34 is also a particular focus of the strategy. Alcohol not only increases the risk of drowning, but also reduces the ability of an individual to respond to associated hazards.

It is recommended that older people undergo a medical check before participating in aquatic activity and that individuals are mindful of the role of medications and underlying medical concerns that may affect the risk of drowning (Royal Life Saving Society Australia 2014).

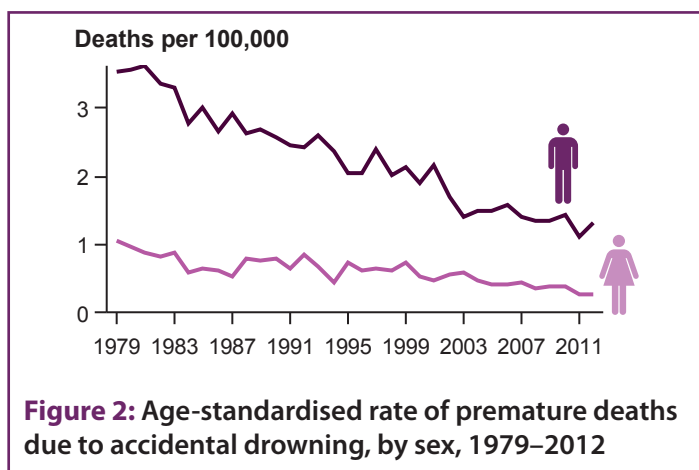
Installing barriers, such as fencing for swimming pools and using doorway barriers to control access to water hazards, can help reduce the risk of drowning (WHO 2014). Legislation in all states and territories in Australia enforces action to prevent drowning through the requirement that all swimming pools, including in the yards of private homes, are fenced.

Premature deaths due to accidental drowning are classified as 'potentially avoidable in the context of the present health system' according to nationally agreed definitions (AIHW 2015). The definition includes deaths from conditions that are potentially preventable through individualised care and/or treatable through existing primary or hospital care.

How have premature death rates due to accidental drowning changed over time?

Trends in drowning deaths should be interpreted with caution due to changes in data sources and coding practices, revision status of data, and complexities relating to data about deaths of intending asylum seekers. For more information, see AIHW: Harrison & Henley 2015.

Premature deaths due to accidental drowning have fluctuated but have shown a general decline between 1979 and 2012 (Figure 2).



Between 1992 and 2012, the age-standardised premature death rate due to accidental drowning halved (from 1.6 deaths per 100,000 population to 0.8 per 100,000; or from 280 to 174 deaths). Males experienced a more substantial decrease in this period.

What has influenced trends in premature deaths due to accidental drowning?

The development of 'dangerous surf warnings', led by the Bureau of Meteorology, has helped to inform beachgoers, including rock fishers, of the prevailing risks along the coast. The promotion of safe angling techniques and the wearing of lifejackets has also been important in reducing rock fishing-related drowning (Surf Life Saving Australia 2014).

The importance of wearing life jackets when recreating on water, and of swimming in patrolled areas of beaches, have been heavily publicised on television, particularly during peak seasons such as summer (Royal Life Saving Society Australia 2014).

Pool fencing, enforced by legislation in Australia, may have also contributed to improvements in the premature death rate from drowning—however this requires compliance from pool owners (Thompson & Rivara 2000).

Flood disasters may also contribute to premature death rates from drowning.

Asylum seekers attempting to reach Australia by boat, who die by drowning within Australian territorial waters, are registered as deaths in Australia and generally included in drowning statistics. These deaths may contribute to marked increases in the number of drowning deaths for a given year, particularly at the state level (AIHW: Harrison & Henley 2015). However there are complexities with data for the drowning deaths of intending asylum seekers and it is not clear whether all deaths of this nature are included in the national mortality data used for this report. For more information see AIHW: Harrison & Henley 2015.

Where can I find out more?

Premature mortality in Australia (including references):
<<http://www.aihw.gov.au/deaths/premature-mortality/>>.

AIHW GRIM books:
<<http://www.aihw.gov.au/deaths/grim-books/>>.

AIHW web pages and publications:
<<http://www.aihw.gov.au/injury/>>

Research Centre for Injury Studies website:
<<http://www.nisu.flinders.edu.au/>>.

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