



Land transport accidents

What are land transport accidents?

Land transport accidents refer to fatal accidents involving occupants of vehicles such as cars, heavy vehicles, trucks and trains; pedestrians; cyclists; and motorcyclists.

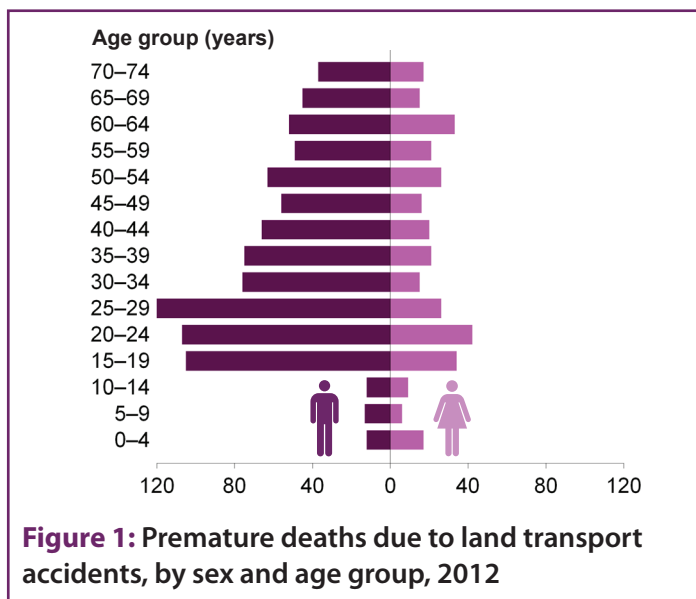
Premature mortality refers to deaths that occur at a younger age than a selected cut-off—for this analysis, deaths among people aged under the age of 75 are considered premature. This is consistent with other AIHW reports on premature mortality. Although this fact sheet focuses on deaths under 75, injury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

Who dies prematurely from land transport accidents?

In 2012, there were 1,206 premature deaths due to land transport accidents, of which about three-quarters (74%) were male (Figure 1).

Land transport accidents rank highly in the causes of death for younger age groups—including as the leading cause of death for 1–14 year olds.

For males who died prematurely from land transport accident deaths, the greatest number of deaths was among those aged 15–29 (332 deaths). For females, premature deaths due to land transport accidents were most common among those aged 20–24 (42 deaths).



Quick facts

Land transport accidents were the **9th** leading cause of premature death in Australia in 2010–2012.

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Nearly **3 in 4** premature deaths due to land transport accidents in 2012 were among males (74%).



The premature death rate due to land transport accidents decreased by **75%** over the 3 decades from 1982 to 2012.



Land transport accidents were the biggest killer of 15–24 year old males and the 3rd biggest killer of 25–44 year old males. Among 30–34 year olds, 84% of deaths were among males.

What population-level approaches target premature deaths due to land transport accidents?

Many land transport accidents are preventable and historical decreases in mortality from this cause provide evidence that a range of interventions can make a significant positive impact.

Interventions for improving road safety are currently delivered by Australian, state and territory governments under the *National Road Safety Strategy 2011–2020*, which was developed with the primary aim of reducing deaths due to land transport accidents by at least 30% by 2020.

The strategy is based on the OECD-endorsed ‘Safe System’ principles which acknowledge that road users will make mistakes and that the system will therefore need to be forgiving. This requires a focus on roads, speeds, vehicles and road user behaviour (ATC 2011).

The *National Road Safety Action Plan 2015–17* was developed following a comprehensive review of the National Road Safety Strategy in 2014. Specific actions under the plan include prioritising investments in infrastructure; assessing road safety risk on roads carrying the highest traffic volume; and encouraging safer road use through actions such as applying lower speed limits to areas with high pedestrian and cyclist usage (Transport and Infrastructure Council 2014).



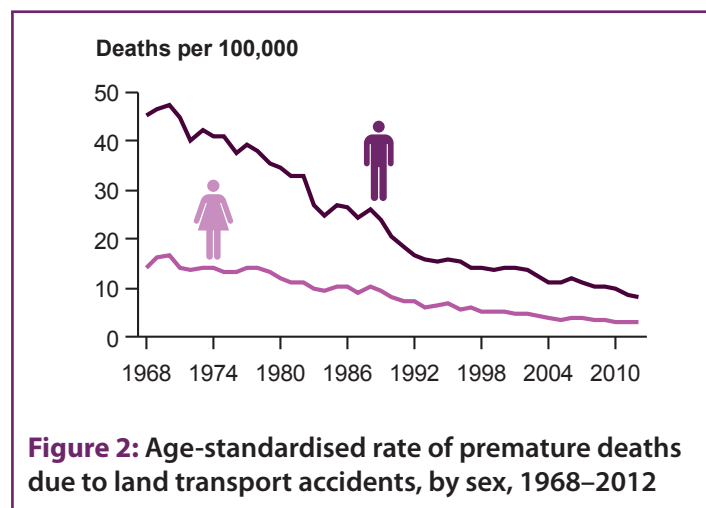
Premature deaths from land transport accidents feature prominently among causes of death for children. Child safety on farms has been a particular target for reducing land transport deaths. A checklist for child safety on farms includes not allowing children aged under 16 to ride quad bikes; supervising and ensuring appropriate training for two-wheeled motorcycles; always using seatbelts; and never allowing children to ride on the back of utilities (Australian Centre for Agricultural Health and Safety 2014).

Premature deaths due to land transport accidents 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 land transport accidents changed over time?

Trends in injury deaths should be interpreted with caution due to changes in data sources and coding practices, and revision status of data. For more information, see AIHW: Harrison & Henley 2015.

The age-standardised rate of premature deaths due to land transport accidents decreased by 81% between 1968 and 2012 (from 30 deaths per 100,000 population in 1968 to 5.6 per 100,000 in 2012). Over this period, the gap (or rate difference) between males and females narrowed from 31 per 100,000 in 1968 to 5.3 per 100,000 in 2012 (Figure 2).



What has influenced trends in premature deaths due to land transport accidents?

Australia has achieved significant and lasting road safety gains from road improvements, safer vehicles, lower speed limits, graduated licensing and a range of successful programs which target the behaviour of individuals—such as drink driving, seatbelt use and speeding (ATC 2011).

A review of road safety measures in Australia found that seat belt wearing, random breath testing and speed cameras explain almost all of the variation in mortality rates since the late 1960s (BITRE 2010).

Trends in Australian road deaths are characterised by short periods of rapid decrease followed by longer periods of consolidating progress and incremental improvement (ATC 2011).

Some particular road safety interventions have been significant enough to fundamentally change the road safety landscape and mortality trends. These include the introduction of seatbelt laws, which were applicable across Australia by 1 January 1972, and random breath testing, which was first introduced in Victoria in 1976 and by remaining jurisdictions by 1988 (ATC 2011; Milne 1985; ABS 2001). Laws to strengthen drink driving measures and tougher sanctions have also been introduced in Australia in recent years.

Reductions in the default speed limits in urban areas and school zones were progressively implemented across Australia from 1997, contributing to a reduction in road accident deaths of around 20% (Woolley 2005). Lower default speed limits help to protect not only those in vehicles but also vulnerable road users, for example pedestrians and pedal cyclists.

States and territories have strengthened licensing systems (including increased supervised driving requirements) and implemented peer passenger and night driving restrictions; mobile phone bans; zero blood alcohol concentration limits; and restricted access to high-powered vehicles (ATC 2011).

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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