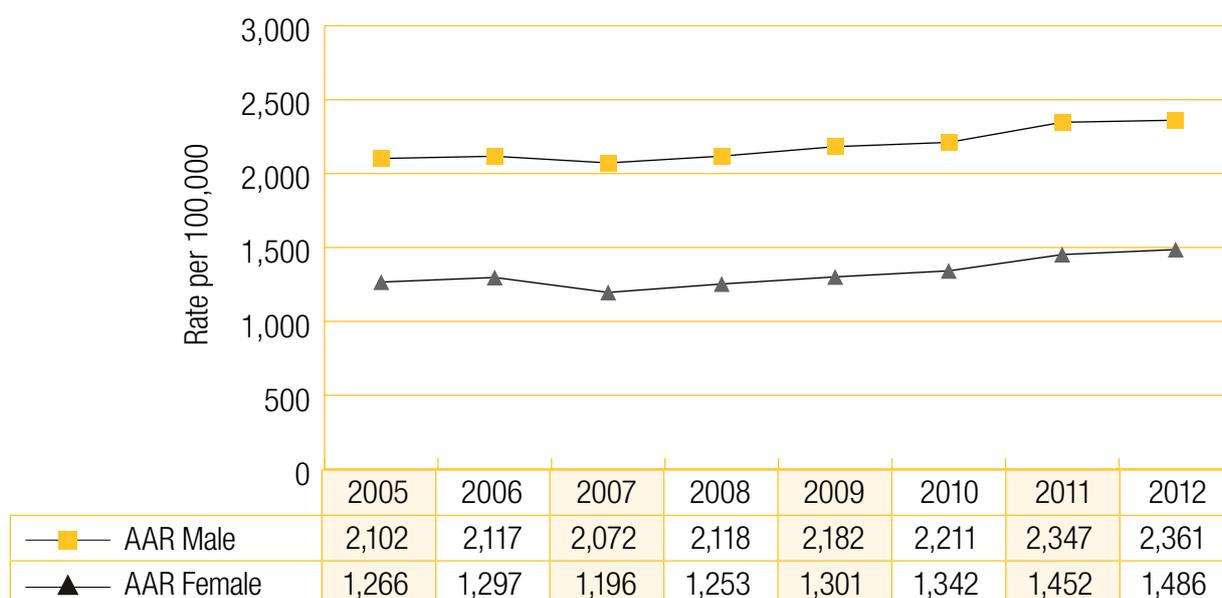


3.14 Hospitalisations from injury and poisoning

Why this measure is included

Injuries and poisoning are major causes of hospitalisation for children and young people in Australia. Injuries can have long-lasting and debilitating effects on the child or young person and on their family where a disability results.¹⁹⁷ Many physical injuries can be prevented by identifying causes and removing these, or by reducing exposure to them. Injury prevention and control was declared a National Health Priority Area in 1996, in recognition of the burden that injury places on the health system and the community.¹⁹⁸

Figure 3.18: Hospitalisations due to injury and poisoning for children and young people: age-adjusted rate (AAR) per 100,000 population 0 to 17 years, by gender, Western Australia, 2005 to 2012



Source: Data supplied by Public Health Division, WA Department of Health, custom report

Table 3.46: Hospitalisations due to injury and poisoning for children and young people: age-specific rate per 100,000 population, by gender and age group, Western Australia, 2005 to 2012

	Male			Female		
	0 to 4	5 to 12	13 to 17	0 to 4	5 to 12	13 to 17
2005	1,953	1,700	2,884	1,562	1,096	1,257
2006	2,011	1,646	2,965	1,623	1,110	1,287
2007	1,872	1,630	2,966	1,477	1,019	1,210
2008	2,009	1,672	2,932	1,629	1,045	1,231
2009	2,144	1,733	2,934	1,623	1,135	1,262
2010	2,222	1,692	3,026	1,628	1,142	1,390
2011	2,307	1,878	3,131	1,799	1,225	1,484
2012	2,311	1,933	3,088	1,768	1,213	1,653
2005 to 2012	2,115	1,737	2,992	1,645	1,125	1,349

Source: Data supplied by Public Health Division, WA Department of Health, custom report

Table 3.47: Causes of injury and poisoning-related hospitalisations for 0 to 17 year-olds: in percent, by age group, Western Australia, 2005 to 2012

	0 to 4	5 to 12	13 to 17	0 to 17
Transport accidents	4.1	14.2	21.2	13.7
Falls	34.3	41.2	18.1	31.0
Accidental drowning	1.1	0.2	0.1	0.4
Fires, burns and scalds	5.9	2.1	1.3	2.9
Accidental poisoning	10.3	1.1	1.2	3.8
Other unintentional injuries	32.7	31.6	35.4	33.3
Intentional self-harm	0.0	0.2	8.3	3.0
Interpersonal violence	1.5	0.7	6.7	3.1
Medical complications	9.8	8.5	6.8	8.3
External causes of undetermined intent	0.4	0.2	0.9	0.5
Total	100.0	100.0	100.0	100.0

Source: Data supplied by Public Health Division, WA Department of Health, custom report

Table 3.48: Hospitalisations due to injury and poisoning for children and young people 0 to 17 years: number, by gender and by cause, Western Australia, 2005 to 2012

	Male	Female	Total
Transport accidents	7,350	2,834	10,184
Falls	14,330	8,757	23,087
Accidental drowning	167	126	293
Fires, burns and scalds	1,322	853	2,175
Accidental poisoning	1,555	1,292	2,847
Other unintentional injuries	16,809	7,954	24,763
Intentional self-harm	486	1,734	2,220
Interpersonal violence	1,565	714	2,279
Medical complications	3,575	2,601	6,176
External causes of undetermined intent	185	199	384
Total	47,344	27,064	74,408

Source: Data supplied by Public Health Division, WA Department of Health, custom report

Table 3.49: Hospitalisations due to injury and poisoning for children and young people: number and age-adjusted rate (AAR) per 100,000 population 0 to 17 years, by Aboriginal status and by cause, Western Australia, 2005 to 2012

	Non-Aboriginal		Aboriginal	
	Number	AAR	Number	AAR
Transport accidents	9,078	230.8	1,106	457.0
Falls	21,204	539.3	1,883	764.8
Accidental drowning	275	6.8	18	7.3
Fires, burns and scalds	1,725	43.1	450	182.1
Accidental poisoning	2,542	62.7	305	123.7
Other unintentional injuries	22,231	561.7	2,532	1039.2
Intentional self-harm	2,049	51.2	171	72.9
Interpersonal violence	1,423	35.6	856	360.5
Medical complications	5,798	146.5	378	154.5
External causes	316	7.9	68	28.5
Total	66,641		7,767	

Source: Data supplied by Public Health Division, WA Department of Health, custom report

Table 3.50: Hospitalisations due to injury and poisoning for children and young people: number and age-adjusted rate (AAR) per 100,000 population 0 to 17 years, by remoteness of residence and by cause, Western Australia, 2005 to 2012

	Metropolitan		Regional		Remote	
	Number	AAR	Number	AAR	Number	AAR
Transport accidents	6,098	191.9	2,621	370.9	1,457	501.4
Falls	17,013	540.5	4,003	561.4	2,059	642.8
Accidental drowning	217	6.7	40	5.6	34	9.5
Fires, burns and scalds	1,227	38.3	532	74.7	412	120.6
Accidental poisoning	2,002	61.9	561	78.7	282	79.7
Other unintentional injuries	17,935	563.6	4,450	627.8	2,364	726.5
Intentional self-harm	1,583	48.2	436	62.5	189	71.4
Interpersonal violence	1,332	40.8	341	48.6	594	209.2
Medical complications	4,796	151.1	899	126.6	477	152.7
External causes	252	7.8	73	10.4	57	19.8
Total	52,455		13,956		7,925	

Source: Data supplied by Public Health Division, WA Department of Health, custom report

Note: There are 72 hospitalisations for which the remoteness category is unknown. These are not included in the table.

Table 3.51: Hospitalisations due to injury and poisoning for children 0 to 14 years: rate per 100,000 population 0 to 14 years, by gender and cause of injury, Australia, 2010–11

	Male	Female	All
Falls	751.7	491.0	624.8
Land transport accidents	180.7	89.0	136.0
Accidental poisoning	44.6	40.5	42.6
Burns and scalds	44.6	35.3	40.1
Assault	18.0	12.1	15.2
All injuries	1677.2	1069.0	1381.0

Source: Australian Institute of Health and Welfare 2012, *A picture of Australia's children*, Australian Institute of Health and Welfare, p. 91

What is this measure?

This measure examines the incidence and causes of hospitalisations due to injury and poisoning among children and young people aged 0 to 17 years. Data for WA was provided by the Epidemiology Branch of the WA Department of Health and shows the number of periods of care in hospital for each cause of injury between 2005 and 2012. Each of these periods is termed a 'hospital separation', that is, a person discharged from hospital and returning for treatment of the same injury is counted as two separations. Also included are age-adjusted rates (AARs) of hospitalisation due to injury for 0 to 17 year-olds. The information has been prepared to show differences between individual age groups, by gender, Aboriginal status and remoteness.

National data on hospitalised injury rates for children and young people aged 0 to 14 in 2010–11 has been sourced from the Australian Institute of Health and Welfare publication *A picture of Australia's children 2012*.¹⁹⁹ National trend data for rates of hospitalised injury for 0 to 14 year-olds between 1999–2000 and 2010–11 was taken from *Trends in hospitalised injury, Australia, 1999–2000*.²⁰⁰



Commentary

In 2012, males aged 0 to 17 years experienced a hospitalisation rate of 2,361 per 100,000 whereas females aged 0 to 17 years experienced a hospitalisation rate of 1,486 per 100,000 (Figure 3.18).

Between 2005 and 2012, rates of hospitalisation due to injury increased for both males and females. For males, the rate was 2,102 separations per 100,000 in 2005 increasing to 2,361 separations in 2012. For females, the rate was 1,266 increasing to 1,486 in 2012 (Figure 3.18). An increase was recorded across all individual age groups for both genders. For instance, the rates of injury in male children 0 to four years increased from 1,953 in 2005 to 2,311 in 2012 (Table 3.46).

The leading single cause of injury for children and young people is falls (31%), followed by transport accidents (13.7%), accounting for nearly half of injury hospitalisations. One-third of hospitalisations for injury are accounted for by other unintentional injuries.²⁰¹

Specifically by age group:

- For children aged four years or less, the most prevalent cause of hospitalisation is falls (34.3%), followed by accidental poisoning (10.3%).
- For those aged five to 12 years, falls are again the leading cause accounting for four in 10 injuries (41.2%), followed by transport accidents (14.2%).
- For young people aged between 13 and 17, transport accidents are the most prevalent cause of injury (21.2%), followed by falls (18.1%) and intentional self-harm (8.3%).

The rates of hospitalisation show that males are significantly more likely than females to be hospitalised for an injury. On age-adjusted rates, males have a rate of 2,361 hospitalisations per 100,000, while females have a rate of 1,486 per 100,000. The exception to this is in the category 'intentional self-harm'. Females represent over three quarters of hospitalisations in this category (Table 3.48).

Aboriginal children and young people are considerably more likely to be hospitalised for injury than non-Aboriginal children and young people. Based on age-adjusted rates, between 2005 and 2012, Aboriginal children and young people were hospitalised at nearly twice the rate for transport accidents; over four times the rate for fires, burns and scalds; double the rate for unintentional poisoning; and over ten times the rate for interpersonal violence (Table 3.49).

In terms of remoteness, children and young people in regional and remote areas have higher rates of hospitalisation for injury than children and young people in the metropolitan area. Particular areas of concern for both regional and remote children are transport accidents (2.6 times more likely in remote areas); fires, burns and scalds (3.1 times more likely in remote areas); and intentional self-harm (1.5 times more likely in remote areas).

Additionally, interpersonal violence is 5.1 times more likely as a cause for hospitalisation for children and young people in remote areas compared with their regional and metropolitan counterparts (Table 3.50).

Direct comparison of the WA data with national data published by the AIHW is not possible, as the AIHW report covers children and young people aged 0 to 14 years, and the datasets use slightly different classifications of 'injury'²⁰². The following however gives an indication of how WA children and young people are faring compared with children Australia-wide.

In Australia, injury rates for children and young people 0 to 14 years have decreased between 1999–2000 and 2010–11.²⁰³ A decrease is evident for both genders and across individual age groups. For example, for male children aged 0 to four years, the rate was 1,768 cases per 100,000 in 1999–2000 and this decreased to 1,579 cases in 2010–11.²⁰⁴

In terms of gender, Australian male children were considerably more likely than female children to be hospitalised for injury in 2010–11 (1,677 per 100,000 compared with 1,069 per 100,000).

Falls were the leading cause of injury for both genders and across all age groups. Land transport accidents were the next most prevalent cause overall, with the incidence increasing with age group (Table 3.51).

Significantly, the Australian data shows that female children represented 82 per cent of hospitalisations for self-harm in 2010–11.²⁰⁵

In Australia, the injury separation rate for Aboriginal children and young people aged 14 years and less was 1.5 times higher than the rate for non-Aboriginal children and young people in 2010–11.²⁰⁶ The difference was most pronounced in assault. The separation rate for Aboriginal male children for assault was five times higher than for other males, while for female children the rate was 11 times higher than for other females.²⁰⁷

Children and young people living in remote and very remote areas of Australia were around twice as likely as children and young people in major cities to be hospitalised with injury.²⁰⁸

Strategies

The Western Australian Health Promotion Strategic Framework 2012–2016

The framework sets out WA's strategic directions for health and priorities for the prevention of chronic disease and injury. The goal of the framework is to lower the incidence of avoidable chronic disease and injury by facilitating improvements in health behaviours and environments.

The framework focuses on the main lifestyle and injury risk factors including eating for better health, a more active WA, maintaining a healthy weight, making smoking history, reducing harmful alcohol use and creating safer communities.

The 'creating safer communities' factor recognises that injuries have the potential to be anticipated, and could therefore be avoided. It lists priority areas for WA Health including reducing road crashes and road trauma, preventing falls in older people, protecting children from injury, improving water safety and reducing interpersonal violence.

To make progress on these priorities the WA Department of Health has a policy team addressing injury prevention and supports local NGOs such as the Injury Control Council WA, Royal Life Saving WA, Kidsafe WA, Council on the Ageing and Farmsafe to provide injury prevention programs within the community.

Further information is available at www.public.health.wa.gov.au/cproot/4462/2/wa_health_promotion_strategic_framework.pdf

National Injury Prevention and Safety Promotion Plan: 2004–2014

This plan provides a strategic framework for injury prevention and safety promotion. It includes specific sections on children and youth and young adults. The plan identifies key objectives and actions to achieve a positive safety culture in Australia and create safe environments. The plan is available at www.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-strateg-injury-index.htm

Want to know more?

Data on injury

The Epidemiology Branch of the WA Department of Health provides population statistics including data on injury. An overview is available at www.public.health.wa.gov.au/3/1496/1/injury.pm

Research, reports and articles

The Australian Institute of Health and Welfare conducts extensive analysis of statistics on hospitalisation for injury in Australia. Reports are available at www.aihw.gov.au/injury/publications/

The Research Centre for Injury Studies at Flinders University in South Australia develops, coordinates, interprets and distributes relevant information, research and analysis to inform discussion and support policy making on injury control and prevention. Further information is available at www.nisu.flinders.edu.au/

Other information

Kidsafe WA is a non-government organisation dedicated to the prevention of unintentional childhood injuries, providing information about current news and events, fact sheets, resources and program information to help keep kids safe. Further information is available at www.kidsafewa.com.au/

The Injury Control Council Western Australia (ICCWA) is a non-government organisation involved in injury prevention and community safety promotion in WA. The mission of ICCWA is to reduce the incidence, severity and effect of injuries through the promotion of safe and healthy communities. Further information is available at www.iccwa.org.au

Royal Life Saving WA provides water safety education in WA and delivers targeted and effective health promotion, injury prevention and research programs. Further information is available at www.lifesavingwa.com.au

Surf Life Saving WA provides targeted ocean safety programs. Further information is available at www.workplacelifesavers.com.au/community-programs

The Department of Fire and Emergency Services provides safety education programs for schools, children and families. Further information is available at www.dfes.wa.gov.au/educationandheritage/fehcn/Pages/default.aspx

The Department of Transport has developed training packages for primary and secondary school students on marine safety. Further information is available at www.transport.wa.gov.au/imate/courses-and-programs.asp

Farmsafe WA Alliance targets injury prevention and safety on farms. Further information is available at <http://farmsafewa.org/projects-services/the-safety-of-young-people-in-agriculture.aspx>

The WA Police Constable Care program addresses topics including road safety, drugs, bullying and staying healthy as part of its touring shows. Further information is available at www.constablecare.org.au/

