

# Part III: Non-intentional injury-related deaths, 2014–15

## Chapter 3—Transport

This chapter provides details of child deaths from injury as a result of transport incidents.

### *Key findings*

- In 2014–15, 25 children and young people died in transport incidents, a rate of 2.3 deaths per 100,000 children aged 0–17 years. This is the lowest number of transport-related fatalities since reporting commenced in 2004.

### *Child death and injury prevention activities*

#### **Data requests**

QFCC provided Queensland Child Death Register data for two requests relating to transport incidents. The data provided was used for research and public education/reporting by the Royal Children’s Hospital and the Department of Transport and Main Roads.

# Transport, 2012–2015

A copy of Table 3.1 containing data since 2004 is available online at [www.qfcc.qld.gov.au](http://www.qfcc.qld.gov.au)

Table 3.1: Summary of transport deaths of children and young people in Queensland, 2012–2015

	2012–13		2013–14		2014–15		Yearly average
	Total <i>n</i>	Rate per 100,000	Total <i>n</i>	Rate per 100,000	Total <i>n</i>	Rate per 100,000	Rate per 100,000
<b>All transport deaths</b>							
Transport	28	2.6	31	2.8	25	2.3	2.5
<b>Incident type</b>							
Motor vehicle	18	1.6	17	1.5	19	1.7	1.6
Pedestrian	6	0.5	7	0.6	4	0.4	0.5
LSVRO	3	*	4	0.4	2	*	*
Motorcycle	2	*	1	*	1	*	*
Quad bike	1	*	3	*	0	0.0	*
Watercraft	0	0.0	0	0.0	0	0.0	*
Other	1	*	3	*	1	*	*
<b>Sex</b>							
Female	12	2.3	11	2.0	11	2.0	2.1
Male	16	2.9	20	3.5	14	2.5	2.9
<b>Age category</b>							
Under 1 year	0	0.0	0	0.0	1	*	*
1–4 years	6	2.4	4	1.6	9	3.6	2.5
5–9 years	6	2.0	12	3.9	3	*	2.3
10–14 years	4	1.3	5	1.7	3	*	1.3
15–17 years	12	6.6	10	5.5	9	4.9	5.7
<b>Aboriginal and Torres Strait Islander status</b>							
Indigenous	7	8.3	5	5.8	7	8.2	7.4
Non-Indigenous	21	2.1	26	2.5	18	1.8	2.1
<b>Geographical area of incident location (ARIA+)</b>							
Remote	3	*	6	11.2	5	9.3	8.7
Regional	15	3.7	20	4.9	16	3.9	4.1
Metropolitan	10	1.6	5	0.8	3	*	0.9
<b>Socio-economic status of incident location (SEIFA)</b>							
Low to very low	15	3.4	10	2.3	11	2.5	2.7
Moderate	4	1.9	13	6.0	5	2.3	3.4
High to very high	9	2.0	8	1.8	8	1.8	1.9
<b>Known to the child protection system</b>							
Known to the child protection system	12	7.2	9	5.4	8	8.3	..

Data source: Queensland Child Death Register (2012–2015)

\* Rates have not been calculated for numbers less than four.

.. Average across the three-year period has not been calculated due to the break in series (see note 3).

1. Data presented here is current in the Queensland Child Death Register as at June 2015 and thus may differ from those presented in previously published reports.
2. Rates are based on the most up-to-date denominator data available and are calculated per 100,000 children (in the age/sex/Indigenous status/ARIA region/SEIFA region) in each year.
3. For 2013–14 and all earlier periods, the number of children known to the child protection system represents the number of children, whose deaths were registered in the reporting period, who were known to the Department of Communities in the three-year period prior to their death. For 2014–15, this was changed to the deaths of children known to the Department of Communities in the one-year period prior to their death.
4. ARIA+ and SEIFA were not able to be calculated for one incident which occurred outside of Queensland.
5. Average annual rates have been calculated using the estimated resident population data at June 2013 (the mid-point for the period).
6. LSVRO refers to deaths as a result of a low speed vehicle run-over, a subset of the 'pedestrian' category; hence, summing categories will exceed the total.
7. The 'other' category includes deaths involving bicycles, motorised go-carts, horse riding incidents, and specialised industrial vehicles.

## Transport-related fatalities: Findings, 2014–15

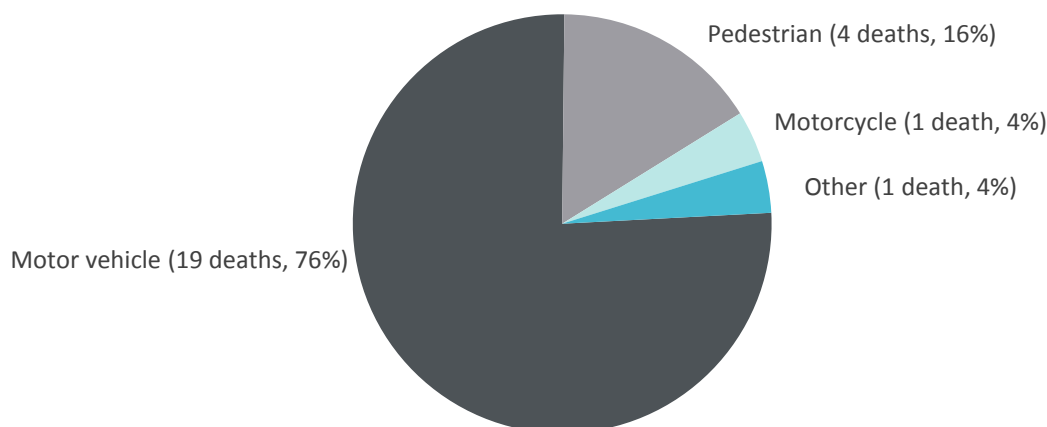
Between 1 July 2014 and 30 June 2015, 25 children and young people died as a result of transport incidents at a rate of 2.3 deaths per 100,000 children aged 0–17 years in Queensland.<sup>20</sup> This is the lowest number of transport-related fatalities since reporting commenced in 2004.<sup>21</sup>

The highest number of transport-related fatalities occurred in 2011–12 (52 deaths). Over the 11-year period, the rate of transport-related child deaths has greatly fluctuated across the reporting periods.

### Nature of transport incident

As illustrated in Figure 3.1, the majority of transport fatalities occurred in motor vehicles (76 per cent), followed by pedestrian deaths (16 per cent). This pattern is similar to that observed in previous years.

Figure 3.1: Nature of transport fatality, 2014–15



Data source: Queensland Child Death Register (2014–15)

### Sex

Males accounted for 56.0 per cent of transport deaths (14 deaths). Whilst this relationship is consistent with previous reporting periods, the rate of death for male children and young people in transport incidents is the lowest since reporting commenced in 2004 (2.5 deaths per 100,000 male children). Research has established that higher rates of death for males can, in part, be attributed to greater risk-taking behaviours displayed by young males—this includes risk-taking behaviours of male drivers.<sup>22</sup>

### Age

Children aged in the 1–4 and 15–17 year age categories experienced the greatest number of deaths as a result of transport incidents (nine deaths each, 36.0 per cent each).

The highest rate of transport deaths was for 15–17 year olds (nine deaths, 4.9 deaths per 100,000). In seven of the nine deaths, the vehicle was operated either by the young person or another driver aged under 21 years.

### Aboriginal and Torres Strait Islander status

Of the 25 transport deaths, seven were Aboriginal and Torres Strait Islander children and young people (28.0 per cent, 8.2 deaths per 100,000 Indigenous children).

<sup>20</sup> There was one additional transport-related-incident death that has not been counted here as it occurred in the context of a drowning incident.

<sup>21</sup> Tables with data for 2004 to 2015 are available online at [www.qfcc.qld.gov.au](http://www.qfcc.qld.gov.au)

<sup>22</sup> Australian Institute of Health and Welfare (2011). *Young Australians: Their health and wellbeing*. Cat no PHE 140, Australian Institute of Health and Welfare, Canberra.

## Geographical area of usual residence (ARIA+)<sup>23</sup>

Children and young people who usually resided in regional areas had the highest number of deaths as a result of transport incidents, accounting for 12 deaths (2.9 deaths per 100,000 children in regional areas, 48.0 per cent), compared to 10 from metropolitan areas and three from remote areas.

To facilitate an understanding of the areas in which transport fatalities more frequently occur, the incident locations (as provided in the Police Report of Death to a Coroner) have been calculated.

Twenty-one of the 25 transport fatalities (84.0 per cent) occurred in regional and remote areas of Queensland. This may be due to a combination of factors including poorer road conditions and fatigue due to driving long distances.<sup>24</sup>

## Socio-economic status of usual residence (SEIFA)<sup>25</sup>

Regional analyses of death rates according to socio-economic status of the area of residence indicate that the rate of transport-related child deaths was 3.7 deaths per 100,000 from moderate socio-economic areas (eight deaths) and 2.0 deaths per 100,000 (nine deaths) from low to very low socio-economic areas. Children from high to very high socio-economic areas had a rate of 1.8 deaths per 100,000 (eight deaths).<sup>26</sup>

## Children known to the child protection system

Of the 25 children who died in transport incidents, eight were known to the child protection system.

## Transport-related characteristics

### Motor vehicle incidents

Table 3.2 below illustrates the role of the child or young person in motor vehicle fatalities in Queensland in 2014–15. In 16 of the 19 fatalities, the child or young person was a passenger in the motor vehicle and for the remaining three the young person was the driver.

Table 3.2: Motor vehicle incidents by role, age category and sex, 2014–15

Age category	Female <i>n</i>	Male <i>n</i>	Total <i>n</i>	Rate per 100,000
<b>Drivers</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>*</b>
15–17 years	0	3	3	*
<b>Passengers</b>	<b>9</b>	<b>7</b>	<b>16</b>	<b>1.4</b>
Under 1 year	0	1	1	*
1–4 years	2	2	4	1.6
5–9 years	1	1	2	*
10–14 years	1	2	3	*
15–17 years	5	1	6	3.3
<b>Total</b>	<b>9</b>	<b>10</b>	<b>19</b>	<b>1.7</b>
<b>Rate per 100,000</b>	<b>1.7</b>	<b>1.8</b>	<b>1.7</b>	

Data source: Queensland Child Death Register (2014–15)

\* Rates have not been calculated for numbers less than four.

1. Rates are calculated per 100,000 children and young people in each age category.

2. Rates for subtotals and totals are calculated per 100,000 children aged 0–17 years in Queensland.

<sup>23</sup> Note that these figures are of the usual residence and will not match those presented in Table 3.1, which present data based on the incident location.

<sup>24</sup> Australasian College of Road Safety (2012). *Rural and Remote Road Safety: Fact Sheet*.

<sup>25</sup> Note that these figures are of the usual residence and will not match those presented in Table 3.1, which present data based on the incident location.

<sup>26</sup> One child could not be classified as their usual place of residence was outside Queensland. See Appendix 1.3 for details.

## Pedestrians

Four children and young people died as pedestrians in 2014–15 (see Table 3.3).

‘Low speed vehicle run-over’ is a term used to describe an incident where a pedestrian is injured or killed by a slow-moving vehicle in a non-traffic area or whilst entering or exiting a traffic area. Most of these incidents involve younger children 1–4 years of age. Drivers tend to be family members, with vehicles reversing at the time of impact. In 2014–15, two deaths occurred due to low speed vehicle run-overs. In one instance, the vehicle was reversing at the time, whilst the other vehicle was moving forwards. The number of low speed vehicle run-overs has remained relatively stable across the last decade, with between two and four deaths reported each year since 2005–06. In 2004–05, there were seven deaths from low speed vehicle run-overs.

**Table 3.3: Pedestrian incidents by type, age category and sex, 2014–15**

Age category	Female <i>n</i>	Male <i>n</i>	Total <i>n</i>
<b>Low speed vehicle run-over</b>			
1–4 years	0	2	2
<b>Total</b>	<b>0</b>	<b>2</b>	<b>2</b>
<b>Bystander</b>			
1–4 years	1	0	1
<b>Total</b>	<b>1</b>	<b>0</b>	<b>1</b>
<b>Other</b>			
1–4 years	0	1	1
<b>Total</b>	<b>0</b>	<b>1</b>	<b>1</b>

Data source: Queensland Child Death Register (2014–15)

## Motorcycles and quad bikes

One child (male) died in a motorcycle incident in 2014–15. The fatality occurred off-road with the child solely operating the motorcycle.

No children or young people died in quad bike incidents during the reporting period. In August 2015, the Queensland Deputy State Coroner handed down findings for an inquest into nine quad bike deaths, including those of four children and young people.<sup>27</sup> The Deputy State Coroner made 15 recommendations, one of which specifically related to the appropriate usage of quad bikes by children and young people. Recommendation 5 states:

*Noting that children between 6–16 are permitted to operate ‘youth sized’ quad bikes and side by side vehicles, according to the manufacturer’s age recommendation for a particular vehicle, it is recommended that the Queensland government introduce legislation to:*

- (a) prohibit children under the age of 16 from operating adult sized quad bikes and side by side vehicles;*
- (b) prohibit children between the ages of 6 and 16 from operating a youth sized quad bike or side by side vehicle, that is not specified to be appropriate according to the manufacturer’s age recommendation for that particular vehicle;*
- (c) prohibit children under the age of 7 from being carried as passengers on adult-sized side by side vehicles, as well as any child of whatever age if they are unable to sit with their back against the seat, feet flat on the floor and floor rests, and hands on handholds; and*
- (d) prohibit children under the age of 16 from being carried as passengers on adult-sized sit-astride quad bikes.*
- (e) It is suggested that the Specialty Vehicle Institute of America’s age based model legislation be considered as a starting point for the legislative regime.*
- (f) It is recommended that the Queensland government support the introduction of the legislation with an ongoing public awareness campaign about the dangers of parents and guardians allowing children to ride adult sized vehicles and ‘youth sized’ vehicles that are inappropriate for the age of the relevant child.*

<sup>27</sup> Queensland Courts (2015). Office of the State Coroner Findings of Inquest: *Inquest into nine (9) deaths caused by Quad Bike accidents*.

## Other transport

One child (aged 5–9 years) died while riding a mobility scooter.

## Multiple fatalities

Ten children and young people died in seven motor vehicle incidents that involved multiple fatalities in 2014–15 (including incidents where adults also died). Of these, one incident involved the death of three children and one adult, one incident involved the death of two children and one adult and five incidents involved the death of one child and at least one adult.

## Highway fatalities

Of the 19 children and young people who died in motor vehicle incidents, eight died on highways (speed limit greater than or equal to 100 kilometres per hour). There were six fatalities on rural roadways and three on residential streets (speed limit up to 60 kilometres per hour). There was one death each for major roads (speed limit between 60 and 100 kilometres per hour) and off-road incidents.

## Charges and criminal proceedings

Of the 25 transport fatalities in 2014–15, driving-related charges were laid for two incidents (8.0 per cent) (based on information available at the time of reporting). These charges included dangerous operation of a motor vehicle causing death while engaged in a race or speed trial, careless driving and driving under the influence of drugs. In some incidents, a criminal offence may have taken place; however, the driver of the vehicle also died and therefore charges were unable to be laid.

## Off-road fatalities

The deaths of children and young people that occur in an off-road environment are not included in the official road toll. There were five deaths of children and young people in off-road transport environments in 2014–15. Three were pedestrian incidents, one a motorcycle incident and one involved a passenger on the outside of a vehicle.

## Risk factors

Table 3.4 (over page) outlines the types of risk factors and the frequency of risk factors present for every transport fatality in 2014–15. The most prevalent risk factors for children and young people transport-related fatalities were:

- excessive speed
- drug and/or alcohol use
- having a driver or operator who was aged 21 years or younger
- peer passengers
- limited driver ability.

The highest number of transport fatalities were equally represented across the 1–4 and 15–17-year age groups. The most prevalent risk factors for both youth and adult driver behaviours were:

- excessive speed
- drug and/or alcohol use
- driving in wet conditions.



## Queensland Ambulance Service data

Injury data can be used to gain a more comprehensive understanding of the risks posed to children by vehicles and machinery. The Queensland Ambulance Service (QAS) has provided data on the number of ambulance responses to transport incidents involving children. Table 3.5 outlines the 4692 QAS responses for transport incidents, including both fatal and non-fatal injuries, between 1 July 2014 and 30 June 2015. As evident in previous reporting periods, the majority of incidents involved motor vehicles, followed by motorcycle incidents. The highest number of incidents involved young people aged 15–17 years.

**Table 3.5: Queensland Ambulance Service responses to transport incidents, 2014–15**

Type of incident	Under 1 year <i>n</i>	1–4 years <i>n</i>	5–9 years <i>n</i>	10–14 years <i>n</i>	15–17 years <i>n</i>	Total <i>n</i>
Motor vehicle (including car, utility, bus, truck)	147	454	609	546	981	2737
Motorcycle	3	19	114	288	222	646
Bicycle	1	21	143	308	182	655
Pedestrian	5	52	98	157	96	408
Quad bike/ATV	0	4	18	33	27	82
Other	1	1	3	11	18	34
Unknown method of transport	0	17	25	43	45	130
<b>Total</b>	<b>157</b>	<b>568</b>	<b>1010</b>	<b>1386</b>	<b>1571</b>	<b>4692</b>

Data Source: Queensland Ambulance Service (2014–15)

1. Excludes data for eight children and young people whose age at the time of the incident was not known.