

## CHAPTER 5

# Other non-intentional injury-related deaths

This chapter provides details of child deaths from other non-intentional injury.

## KEY FINDINGS

- In 2015 – 16, 9 children and young people died in non-intentional injury-related incidents, other than a drowning or transport incident, at a rate of 0.8 deaths per 100 000 children aged 0–17 years.
- Three of the deaths were caused by accidental threats to breathing, 3 were caused by exposure to smoke, fire and flames, 2 were caused by exposure to inanimate mechanical forces and the remaining death was caused by non-intentional poisoning by noxious substances.
- The highest number of deaths occurred in the 1–4 year age group, with 5 deaths.
- Thirty-two children died in 20 house or dwelling fires in Queensland over the 12-year period 2004 – 15. A further 10 adults also lost their lives in these incidents. Young children are at particular risk in house fires with 16 of the deaths being of children aged 1–4 years.
- The *Fire and Emergency Services (Domestic Smoke Alarms) Amendment Act 2016* will come into effect in January 2017, and will make smoke alarms mandatory in all bedrooms.

## OTHER NON-INTENTIONAL INJURY-RELATED DEATHS 2013 – 16

An expanded version of Table 5.1 containing data since 2004 is available online at [www.qfcc.qld.gov.au](http://www.qfcc.qld.gov.au).

**Table 5.1: Summary of other non-intentional injury-related deaths of children in Queensland 2013 – 16**

	2013 – 14		2014 – 15		2015 – 16		Yearly average
	Total n	Rate per 100 000	Total n	Rate per 100 000	Total n	Rate per 100 000	Rate per 100 000
<b>All other non-intentional injury deaths</b>							
Other non-intentional injury	11	1.0	8	0.7	9	0.8	0.8
<b>Incident type</b>							
Exposure to animate mechanical force	1	*	0	0.0	0	0.0	*
Exposure to forces of nature	1	*	0	0.0	0	0.0	*
Exposure to inanimate mechanical forces	2	*	0	0.0	2	*	0.1
Exposure to smoke, fire and flames	1	*	1	*	3	*	0.1
Falls	1	*	2	*	0	0.0	*
Non-intentional poisoning by noxious substances	1	*	1	*	1	*	*
Threats to breathing	4	0.4	4	0.4	3	*	0.3
<b>Sex</b>							
Female	5	0.9	4	0.7	0	0.0	0.6
Male	6	1.1	4	0.7	9	1.6	1.1
<b>Age category</b>							
Under 1 year	1	*	2	*	1	*	2.1
1–4 years	7	2.8	3	*	5	2.0	2.0
5–9 years	2	*	1	*	0	0.0	*
10–14 years	1	*	0	0.0	1	*	*
15–17 years	0	0.0	2	*	2	*	0.7
<b>Aboriginal and Torres Strait Islander status</b>							
Indigenous	4	4.7	2	*	0	0.0	2.3
Non-Indigenous	7	0.7	6	0.6	9	0.9	0.7
<b>Geographical area of usual residence (ARIA+)</b>							
Remote	2	*	0	0.0	0	0.0	*
Regional	5	1.2	4	1.0	3	*	1.0
Metropolitan	4	0.6	4	0.6	5	0.8	0.7
<b>Socio-economic status of usual residence (SEIFA)</b>							
Low to very low	5	1.1	5	1.1	4	0.9	1.0
Moderate	3	*	1	*	1	*	0.8
High to very high	3	*	2	*	3	*	0.6
<b>Known to the child protection system</b>							
Known to the child protection system	5	3.0	3	*	4	4.7	..

Data source: Queensland Child Death Register (2013 – 16)

\* 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 August 2016 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 sex/age/Indigenous status/ARIA+ region/SEIFA region) in Queensland each year. Rates for the 2013 – 14 period use the ERP data as at June 2013 and rates for the 2014 – 15 and 2015 – 16 periods use the ERP data as at June 2014.
3. For 2013 – 14, 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 DCCSDS within the three-year period prior to their death. From 2014 – 15 on, this relates to the deaths of children known to the DCCSDS within the one-year period prior to their death. The denominator for calculating rates is the number of children aged 0–17 who were known to the DCCSDS, through either being subject to a child concern report, notification, investigation and assessment, ongoing intervention, orders or placement, in the one-year period prior to the reporting period.
4. ARIA+ and SEIFA exclude the deaths of children whose usual place of residence was outside Queensland.
5. Yearly average rates have been calculated using the ERP data as at June 2014.

## OTHER NON-INTENTIONAL INJURY-RELATED DEATHS: FINDINGS 2015 – 16

The child deaths discussed in this chapter are those unintentional deaths that fall outside the scope of the more common non-intentional injury deaths covered earlier in this report (that is, transport incidents and drowning).<sup>24</sup>

During 2015 – 16, the deaths of 9 children and young people from non-intentional injury were registered in Queensland, at a rate of 0.8 deaths per 100 000 children aged 0–17 years. The number of deaths from non-intentional injury registered since reporting commenced in 2004, ranges from 4 to 21 per year, with an average of 13.6 per year.<sup>25</sup>

### Types of non-intentional injury-related deaths

Of the 9 deaths from non-intentional injury, 3 were from exposure to fire smoke and flames, 3 were from threats to breathing, and 2 were caused by exposure to inanimate mechanical forces. The other 1 death was from non-intentional poisoning by noxious substances.

### Sex

During 2015 – 16, all 9 deaths from non-intentional injury were of male children.

Over the last three reporting periods, the average annual mortality rate from non-intentional injury for males was 1.8 times the rate for females (1.1 deaths per 100 000 male children aged 0–17 years, compared to 0.6 deaths per 100 000 female children).

### Age

Of the 9 deaths from non-intentional injury during 2015 – 16, 1 was of a child under 1 year, 5 were of children aged 1–4 years, 1 was of a child aged 10–14 years and 2 were of children aged 15–17 years.

Over the 12 years since reporting commenced, infants (children aged under 1 year) have the highest mortality rate from non-intentional injury compared to all other age groups, an indication of the particular vulnerability of this age group.

### Aboriginal and Torres Strait Islander status

There were no deaths of Aboriginal and Torres Strait Islander children from non-intentional injury during 2015 – 16.

Over the last three reporting periods, the average annual mortality rate from non-intentional injury for Indigenous children was 3.3 times the rate for non-Indigenous children (2.3 deaths per 100 000 Indigenous children aged 0–17 years, compared to 0.7 deaths per 100 000 non-Indigenous children).

### Geographical area of usual residence (ARIA+)

Of the 9 deaths from non-intentional injury during 2015 – 16, none were of children who resided in remote areas of Queensland, 3 were of children from regional areas and 5 were of children from metropolitan areas.

### Socio-economic status of usual residence (SEIFA)

Of the 9 deaths from non-intentional injury during 2015 – 16, 4 were of children who resided in low to very low SES areas of Queensland, 1 was of a child from a moderate SES area and 3 were of children from high to very high SES areas.

### Children known to the child protection system

Of the 9 deaths from non-intentional injury during 2015 – 16, 4 were of children known to the Queensland child protection system within the year before their death.

<sup>24</sup> See the online supplementary materials for a comprehensive outline of categories of death constituting 'other non-intentional injury-related deaths'.

<sup>25</sup> Tables with data for 2004 – 16 are available online at [www.qfcc.qld.gov.au](http://www.qfcc.qld.gov.au)

## Deaths of children in house fires

In a 2016 submission to the Legal Affairs and Community Safety Committee consideration of *Smoke Alarms Inquiries—Fire and Emergency Services (Domestic Smoke Alarms) Amendment Bill 2016*, the QFCC provided information in relation to the deaths of 32 children in 20 separate house fires in the 12-year period 2004 – 15. Information in the Queensland Child Death Register included the following:

- 32 children died in 20 house or dwelling fires in Queensland over the 12-year period. A further 10 adults also lost their lives in these incidents.
- The single worst incident was in 2011 when 8 children and 3 adults died in a house fire.
- Young children are at particular risk in house fires:
  - » Half of the deaths (16) were of children aged 1–4 years
  - » 7 children were aged 5–9 years
  - » 5 children were aged 10–14 years
  - » 4 children were aged 15–17 years
  - » No deaths occurred of infants under one year.
- Other children and adults managed to escape the fires, with some suffering serious injuries.
- Smoke inhalation was the most common cause of death, indicated for 22 of the 32 deaths.

Coronial investigations are not always able to conclusively determine all related facts due to the confusion and trauma experienced by survivors and witnesses in terrifying circumstances, and the substantial destruction caused by the fire. Known or likely causes of the house fires which resulted in child deaths included heating or lighting equipment, candles, electrical faults and cooking oil. More than one quarter of the fires appeared to be accidentally started by children playing with lighters.

In relation to the use and operation of smoke alarms in the 20 house fire incidents in the period 2004 – 15:

- In 9 house fires there were no smoke alarms or no operational smoke alarms (18 child deaths), while in 8 house fires smoke alarms were in place and believed to be operational (11 child deaths). No information was available for 3 incidents (3 child deaths).
- The greatest loss of life occurred in night-time house fires, with 11 lives lost in one fire and another 11 lost in 3 other fires (4 each in two house fires and three in another).
- Importantly, in 3 night-time house fires the smoke alarms woke the occupants allowing some occupants time to escape. In a fourth day-time house fire the smoke alarm also provided the first alert of the fire.
- In one coronial investigation there was evidence the ionisation type smoke alarms did not activate.

The *Fire and Emergency Services (Domestic Smoke Alarms) Amendment Act 2016* was passed with amendment in August 2016 and will come into effect in January 2017. The requirements, to be phased in over ten years, will make smoke alarms mandatory in all bedrooms. Smoke alarms will need to be interconnected, and either hardwired or fitted with a 10-year battery.