Annual Report

Deaths of children and young people Queensland 2021–22





About this report

This report has been prepared under section 29 of the *Family and Child Commission Act 2014* (FCC Act). It describes information on the deaths of children and young people in Queensland registered in the period 1 July 2021 to 30 June 2022. The Queensland Family and Child Commission (QFCC) is a statutory body of the Queensland Government. Its purpose is to influence change that improves the safety and wellbeing of Queensland's children and their families. Under the FCC Act, the QFCC has been charged by government to review and improve the systems that protect and safeguard Queensland's children.

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Queensland Family & Child Commission

31 October 2022

The Honourable Shannon Fentiman MP Attorney-General and Minister for Justice, Minister for Women and Minister for the Prevention of Domestic and Family Violence 1 William Street BRISBANE QLD 4000

Dear Attorney-General

In accordance with section 29(1) of the *Family and Child Commission Act 2014*, I provide to you the Queensland Family and Child Commission's annual report analysing the deaths of Queensland children and young people.

The report analyses the deaths of all children and young people in Queensland registered in the period 1 July 2021 to 30 June 2022, with a particular focus on external (non-natural) causes.

Yours sincerely,

Jugan

Luke Twyford Principal Commissioner Queensland Family and Child Commission



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2 Deaths from natural causes

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Acknowledgements

The Queensland Family and Child Commission (QFCC) acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Custodians across the lands, seas and skies where we walk, live and work.

We recognise Aboriginal and Torres Strait Islander people as two unique peoples, with their own rich and distinct cultures, strengths and knowledge. We celebrate the diversity of Aboriginal and Torres Strait Islander cultures across Queensland and pay our respects to Elders past, present and emerging.

The QFCC acknowledges the special rights of children which are recorded in the United Nations Convention on the Rights of the Child (UNCRC), guided by its four key principles: devotion to the best interests of the child; the right to life, survival and development; respect for the views of the child; and non-discrimination.

The QFCC thanks the government and non-government agencies and individuals who contributed data and their expertise to the report. In particular, we express appreciation to the Registry of Births, Deaths and Marriages; the Coroners Court of Queensland; Queensland Police Service; Queensland Health; Department of Children, Youth Justice and Multicultural Affairs; the Australian Bureau of Statistics (ABS); Queensland Paediatric Quality Council; Queensland Ambulance Service; Queensland Treasury; and the Royal Life Saving Society of Australia. The Victorian Department of Justice and Regulation is also acknowledged as administrator of the National Coronial Information System.

The QFCC would like to acknowledge the contribution of data from other Australian and New Zealand agencies and committees which perform similar child death review functions. This data has been compiled for an interjurisdictional overview representing further steps towards developing a nationally comparable child death review dataset. The overview is available on our website at <u>www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data</u>.

This report may cause distress for some people. If you need help or support, please contact any of these services:

Lifeline: Phone 13 11 14

Beyond Blue: Phone 1300 22 4636

Kids Helpline (for 5–25 year olds): Phone 1800 55 1800

Deaths of children and young people Queensland 2021–22

Principal Commissioner's message

Every child should be loved, safe and have their rights upheld.

The death of any child is a tragedy and each year too many Queensland children and young people's lives are prematurely cut short. In the 12-month period to 30 June 2022, the deaths of **410** children and young people aged 0–17 years were registered in Queensland. The loss of each of these children will have a long-lasting impact on their family, their friends, and our community.

The Queensland Family and Child Commission records information about the deaths of all these children in the Child Death Register. In operation since 2004, the Register currently contains over 8,000 records, capturing information about a child's demographics, cause and circumstances of death and, where known, certain characteristics or vulnerabilities. It is a critical resource allowing the QFCC to analyse trends and patterns in child mortality, including risk factors for death. We use this information to contribute to research, inform policy improvement and support community safety initiatives aimed at reducing the likelihood of child deaths.

In 2022 I was proud to launch <u>Safer pathways through childhood</u>¹, a framework providing a roadmap for the QFCC's child death prevention activities over the next 5 years. Under the Safer pathways framework, we will use a socio-ecological model to consider the factors that contribute to some groups of children being more likely to experience health inequity and adverse outcomes than others. Over the next 5 years, our child death prevention activities are focused on generating new insights into child mortality in Queensland and working collaboratively with stakeholders to identify better ways of preventing these deaths.

A key strategy to support child death and injury prevention is to make data held in the Register available for research, public education, policy development and program design. In 2021–22, we provided data and advice to a range of stakeholders on topics such as inclined sleep surfaces for infants, vehicle reversing aid technologies, the dangers of toppling furniture, quad bikes and helium balloon kits. We also participated in numerous advisory bodies that address matters such as improvements to child mortality data, both within Queensland and nationally; birth and death registration; road safety; sudden unexpected death in infancy; and suicide prevention. We continued to actively share information with the Department of Education to support young people affected by the suicide of a peer and contributed to several initiatives to improve infant sleep environments and reduce the risk of sudden infant death.

I would like to acknowledge and thank the dedication of those who work in roles associated with child death, including those responsible for maintaining the Queensland Child Death Register. The work they undertake in gathering and analysing information about child deaths enables us to better understand and communicate factors that increase their likelihood and gives us greater opportunities to prevent them.

These activities contribute to a future in which all Queensland's children and young people, no matter where they live or who they are, have the same opportunities to lead a full life and to reach their potential.

Luke Twyford Principal Commissioner Queensland Family and Child Commission

1 www.qfcc.qld.gov.au/safer-pathways-through-childhood

Executive summary

In the 12-month period from 1 July 2021 to 30 June 2022, the deaths of **410** children and young people aged 0-17 years were registered in Queensland.²

Deaths from natural causes (diseases and morbid conditions) accounted for a large proportion of child deaths, with these most likely to occur in the first days and weeks of life. Child mortality from external causes includes deaths from injuries, either non-intentional (accidental) injuries such as transport incidents or drowning, or from intentional injuries, which includes suicide and fatal assault and neglect. Due to the relatively small numbers involved, caution should be exercised in interpreting year-to-year changes.

Child deaths in Queensland, 2021-22



* By date of death registration.

Trends in child mortality

While the last 2 years have seen a slight increase in the number of child deaths, there has been an overall decrease in child mortality rates since the Child Death Register commenced operation in 2004 (down 2.9% per year on average). The trend has been driven, to a large extent, by decreases in deaths from natural causes.

Transport-related child mortality has decreased 4.9% per year on average. However, higher numbers of transport deaths in the last 2 years have seen these rates begin to increase. In fact, the 33 transport deaths in 2021-22 is the highest transport total in the last 10 years, and mirrors increases in the road toll in Queensland and other jurisdictions.

The slowly increasing trend in the rate of youth suicide has continued. However, the 20 suicides recorded in 2021-22 was a decrease from the worryingly high numbers seen in 2018-19 (37) and 2020-21 (30). Further analysis suggests the suicide rate has increased more in young females than in young males.

Discouragingly, we have also seen increased numbers of sudden unexpected deaths in infancy (SUDI). In 2021–22 there were 44 sudden unexpected infant deaths in Queensland—the highest number of SUDIs in 8 years. These deaths continue to represent a considerable proportion of infant deaths.

² The Queensland Child Death Register is based on death registrations recorded by the Queensland Registry of Births, Deaths and Marriages. Deaths in this Annual Report are counted by date of death registration and may therefore differ from child death data based on date of death.

³ Where a cause of death could not be determined even after thorough investigation. It includes deaths from SIDS and undetermined causes.

Leading cause by age

The leading causes of death vary with age, largely in line with the risks faced by children at each stage of development.

Age category		Leading causes*			
		1	2	3	
0-27 days P		Perinatal conditions	Congenital anomalies	SIDS and undetermined causes	
Infa	28-364 days	SIDS and undetermined causes	Congenital anomalies	Perinatal conditions	
	1–4 years	Drowning	Transport	Cancers and tumours; Congenital anomalies	
	5–9 years	Cancers and tumours	Transport	Drowning; Nervous system diseases	
	10-14 years	Cancers and tumours	Suicide	Transport	
	15–17 years	Suicide	Transport	Cancers and tumours	

* In the 5-year period 2017–18 to 2021–22.

Vulnerable groups

Some children are more vulnerable to experiencing adversity—including experiences that increase risk of death than others. First Nations children and those children who are known to the child protection system (Child Safety)⁴ often experience multiple vulnerabilities and are consistently and significantly over-represented in child mortality statistics.

Aboriginal and Torres Strait Islander children were over-represented in child deaths. Seventy deaths in 2021–22 were of Aboriginal and Torres Strait Islander children. Of these, 32 died from natural causes (diseases and morbid conditions), 21 from external causes, 3 were unexplained deaths and 14 were pending a cause of death at the time of reporting.

The mortality rate for Indigenous children was 2.4 times higher than for non-Indigenous children (71.7 deaths per 100,000 Indigenous children aged 0–17 years, compared with 30.0 deaths per 100,000 non-Indigenous children (5-year average)). For external causes of death specifically, the Indigenous mortality rate was 3.0 times the non-Indigenous rate (5-year average).

Sixty-nine of the 410 children who died in 2021–22 were known to Child Safety in the 12 months prior to their deaths, an increase from 53 deaths in 2020–21. Children are considered known to Child Safety if they were the subject of an intake call or intervention in the preceding 12 months. The population of children known to the child protection system has increased over the last 5 years, although this growth does not fully account for the increase in child deaths observed in the latest year.

The mortality rate for children known to Child Safety was almost twice the Queensland child mortality rate (5-year average). Children known to Child Safety were almost 4 times more likely to die of external causes than the total child population in Queensland.

This and previous annual reports have found child mortality rates for children known to Child Safety to be consistently higher than the rates for all children, especially for deaths from external causes. This is explained, to an extent, by the significant disadvantage, abuse and neglect these children may have experienced prior to coming to the attention of the child protection system, as well as the multiple risk factors often present in their lives.

4 Department of Children, Youth Justice and Multicultural Affairs.

Child death prevention activities

During 2021–22, the QFCC responded to 21 external requests for child death data, including to support:

- Australian Competition and Consumer Commission's (ACCC) review of infant inclined products
- Australian Government Department of Infrastructure, Transport, Regional Development, Communications and the Arts' review of vehicle reversing aid technologies
- ACCC's assessment of regulatory options to prevent injury and death from toppling furniture
- Workplace Health and Safety Queensland's consultation on quad bikes and side-by-side vehicles used in the workplace
- ACCC's discussion paper on helium balloon kit safety.

The QFCC also participated as an active member of a range of advisory groups, such as:

- Australian and New Zealand Child Death Review and Prevention Group
- Consumer Product Injury Research Advisory Group
- Interim Queensland Government Suicide Prevention Network
- QPQC Infant Mortality Sub-Committee
- QPQC Steering Committee
- Queensland Government Births and Deaths Working Group
- Road Safety Research Network
- SUDI multiagency advisory meeting.

The QFCC continued to monitor and support the response to, and prevention of, suicide deaths of young people including through a crucial information sharing process with the Department of Education. This process informs student wellbeing policy development and supports suicide postvention in affected schools. The QFCC also contributed to SUDI prevention projects resulting in publications including the *Queensland Clinical Guidelines: Safer infant sleep*⁵, and *Best practice guide for the design of safe infant sleeping environments*.⁶

Safer pathways through childhood framework 2022–2027

The *Safer pathways through childhood* framework sets the direction of the QFCC's child death prevention functions over the next 5 years. The Action Plan for the coming year can be found at <u>www.qfcc.qld.gov.au/safer-pathways-through-childhood</u>.

Collaborative partnerships

This report includes chapters on categories of death and identifies trends and findings that may require deeper investigation. The QFCC values the expertise of others and would welcome opportunities to work with stakeholders undertaking related initiatives.

Data for prevention activities

The QFCC works with researchers and government agencies to raise community awareness and develop prevention programs and policies by identifying risk factors, trends and emerging safety hazards.

The QFCC can provide detailed child death data to genuine researchers and organisations at no cost. Email child_death_prevention@qfcc.qld.gov.au

Resources available at <u>www.qfcc.qld.gov.au/about-us/</u> publications/child-death-reports-and-data

Annual report resources

- 18-year summary tables
- fact sheets
- Australian and New Zealand child death statistics 2020
- Appendices B to G

Safer pathways through childhood framework 2022–2027

⁵ www.childrens.health.qld.gov.au/chq/health-professionals/qpqc

Child deaths in Queensland



Notes: Counting is by date of death registration. Percentages may not add to 100 due to rounding. * rate per 1,000 births. † in the 12 months prior to death.

Key findings

Between 1 July 2021 and 30 June 2022, the deaths of 410 children and young people were registered in Queensland. The child mortality rate over the last 5 years was 33.4 deaths per 100,000 children aged 0–17 years and the infant mortality rate was 3.9 per 1,000 births.⁷ Queensland's child mortality rate is high compared with other Australian states and territories. In 2019, Queensland's child mortality rate was the second highest in Australia at 33.7 per 100,000 children aged 0–17 years, while other jurisdictions ranged between 14.2 and 54.9 per 100,000.⁸

A summary table of child deaths by cause and key characteristics can be found in **Table A.1** in **Appendix A**.

Natural causes (diseases and morbid conditions) accounted for 63% of deaths of children and young people in 2021–22, occurring at a rate of 23.1 deaths per 100,000 (5-year average).⁹

Eighty-four deaths were from external causes (which includes transport, drowning, other non-intentional injury, suicide and fatal assault and neglect). External causes accounted for 20% of child deaths in 2021–22 and occurred at a rate of 7.0 deaths per 100,000 (5-year average).

Other than natural causes, the leading causes of deaths in 2021–22 were transport incidents (33), suicide (20), deaths from other non-intentional injuries (16), followed by unexplained causes (14). Nine children died from drowning and 6 children as a result of fatal assault and neglect.

Causes of death are often not available until the outcomes of autopsy and coronial investigations are final. For this reason, some deaths are reported as 'cause pending'. Final outcomes are usually available within 1–2 years, at which point the Queensland Child Death Register is updated to reflect the official cause. Of the 410 deaths of children and young people in 2021–22, 13% (53 deaths) were recorded as 'cause pending'. The majority pending a cause are infant deaths and are often found to be from unexplained causes (based on outcomes in previous periods).

Trends in child deaths

Child deaths and mortality rates in Queensland have generally declined over time. Child mortality rates over the period 2004 to 2022 are illustrated in Figure 1.1 using 5-year rolling rates.¹⁰ Key findings include:

- the child mortality rate decreased 2.9% per year on average over the period
- the overall trend is driven by decreases in child deaths from natural causes, which constituted the majority of child deaths, and decreased by 3.2% per year on average
- deaths from external causes decreased by 3.0% per year on average
- deaths from unexplained causes decreased by 2.3% per year on average. Almost all of this group are infant deaths certified as Sudden Infant Death Syndrome (SIDS) or undetermined causes.

Five-year rolling mortality rates for external causes from 2004 to 2022 are illustrated in Figure 1.2. Across much of the period transport had been the leading external cause of child death with rates at least twice those for other external causes. However, these rates have been decreasing 4.9% per year on average. Notwithstanding the overall decrease since 2004, higher numbers of transport deaths in the last 2 years has seen the rates begin to increase again.

In contrast, the rate of suicide has slowly increased over the period (up 2.2% per year on average), such that between 2013–17 and 2017–22 the rates of suicide and transport deaths have been at similar levels.

⁷ For a summary of the population data used to calculate rates, see Appendix B—Methodology. <u>www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data</u>

⁸ QFCC (2022) Australian and New Zealand child death statistics 2019. www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

⁹ Detailed tables with data on cause of death and other demographics can be found in Appendix A.

¹⁰ Tables with data for 2004–2022 are available online at www.qfcc.qld.gov.au/safer-pathways-through-childhood

Rates of deaths from drowning, other non-intentional injury and fatal assault and neglect have decreased over the period, with average annual decreases of 3.5%, 3.4% and 2.8% respectively.



Figure 1.1: Child deaths by major cause group (5-year rolling rate), 2004–09 to 2017–22

Notes: Rates calculated per 100,000 population aged 0-17 years, averaged over 5 years.





Notes: Rates calculated per 100,000 population aged 0–17 years, averaged over 5 years.

Demographics of child deaths

Age

Figures 1.3 to 1.5 reveal the considerable differences in child deaths by age and cause. As shown in Figure 1.3, over the last 5 years, 44% of all child deaths occurred in the first days and weeks of life (0-27 days), and a further 17% were post-neonatal infants (28–364 days).

115arc 1.3. Deaths by age (proportion), 2017 10 to 2	-021 22			
				8 % 10–14 years
44 % 0–27 days	17 % 28–364 days	14 % 15–17 years	11 % 1–4 years	6% 5-9 years

Figure 1.3: Deaths by age (proportion), 2017–18 to 2021–22

Notes: Percentages may not add to 100 due to rounding.

In Figure 1.4, rates of death are presented as per 1,000 live births for infants and per 100,000 population for older age groups. Almost all deaths in the 0–27 days age group were from natural causes, with a rate of 2.8 natural-cause deaths per 1,000 live births compared with the total mortality rate of 2.9 per 1,000. In all other age groups, however, between one-third and just over half of the mortality rates were from natural causes. For example, in the 1–4 age group the rate of natural-cause deaths was 8.5 per 100,000 while the total mortality rate was 17.4 per 100,000.

Unexplained causes made a greater contribution to the overall mortality rate for infants aged 28–364 days than in any other age group. External causes were larger contributors to overall mortality in older age groups. This was most marked for children aged 15–17 years (20.2 external-cause deaths per 100,000 and 28.6 total deaths per 100,000) and 1–4 years (7.1 external-cause deaths per 100,000 and 17.4 total deaths per 100,000).



Figure 1.4: Deaths by age and major cause group (rate), 2017–18 to 2021–22

Patterns in rates of external-cause deaths by age are indicated in Figure 1.5. Children aged 15-17 years and 1-4 years had the highest rates of death from external causes as noted above. Suicide was the leading external cause for children aged 10-14 and 15-17 years, while drowning was the leading external cause for children in the 1-4 year age category.



Figure 1.5: External-cause deaths by age (rate), 2017–18 to 2021–22

Notes: Rates for 0-27 days and 28-364 days calculated per 1,000 live births and, for age 1-17 years, per 100,000 population in each age category, averaged over 5 years.

Leading causes by age

Table 1.1 indicates the leading causes of death in each age category, based on deaths in the last 5 years. The table uses categories from the *International Classification of Diseases and Health Related Problems version 10* (ICD-10). Further detail on causes of death by age can be found in **Appendix D**.¹¹

The leading causes of death for infants 0–27 days were perinatal conditions followed by congenital anomalies. For infants 28–364 days the leading cause was SIDS and undetermined causes (as a group). Young children aged 1–4 years are more vulnerable to external causes of death. Drowning was the leading cause in this age group, followed by transport incidents (predominantly low-speed vehicle runovers).

Cancers and tumours were among the top 3 leading causes for each age category from 1-17 years. Suicide and transport incidents were leading causes of death for children aged 15-17 years and leading external causes of death for those aged 10-14 years.

Age category		Leading causes				
		1	2	3		
	0–27 days	Perinatal conditions (1.9)	Congenital anomalies (0.8)	SIDS and undetermined causes (0.1)		
Infants	28-364 days	SIDS and undetermined causes (0.3)	Congenital anomalies (0.2)	Perinatal conditions (0.2)		
	Infants	Perinatal conditions (2.1)	Congenital anomalies (1.0)	SIDS and undetermined causes (0.4)		
	1–4 years	Drowning (2.6)	Transport (2.1)	Cancers and tumours; Congenital anomalies (1.7)		
5–9 years		Cancers and tumours (1.5)	Transport (1.2)	Drowning; Nervous system diseases (0.6)		
	10–14 years	Cancers and tumours (2.1)	Suicide (1.7)	Transport (1.6)		
15–17 years		Suicide (10.8)	Transport (6.0)	Cancers and tumours (2.2)		

Table 1.1: Leading causes of death by age (rate per 1,000/100,000), 2017–18 to 2021–22

SIDS Sudden Infant Death Syndrome.

Notes: The International Statistical Classification of Diseases and Related Health Problems, tenth revision (ICD-10) chapter classifications for diseases and morbid conditions (rather than the broader categories of death reported elsewhere) is used in this table and may therefore differ from other cause of death comparisons within the report. Rates are averaged over 5 years and calculated per 1,000 births for infants under 1 year and per 100,000 in age categories 1–17 years.

Sex

Males comprised 56% of child deaths, with a rate of 37.0 deaths per 100,000 male children aged 0-17 years (5-year average). In comparison, females made up 43% of child deaths, with a rate of 29.9 deaths per 100,000 female children. A small proportion of deaths were of children of indeterminate sex.

Males were over-represented across most categories of death, particularly in deaths from transport incidents and other non-intentional injuries. Males and females were more equally represented in child deaths from fatal assault and neglect and unexplained causes.



Figure 1.6: Deaths by sex and cause of death (rate), 2017–18 to 2021–22

Regional and remote areas

The child mortality rate from all causes was highest in remote and very remote and outer regional areas of Queensland, with rates of 43.0 and 43.2 per 100,000 children aged 0–17 years, compared with 33.7 in inner regional areas and 29.4 in major cities (5-year average).^{12,13}

Figure 1.7 illustrates that rates of deaths from external and unexplained causes, taken together, increase with increasing remoteness from population centres and services. In particular, the differences in transport death rates between major cities and other areas were found to be statistically significant.



Figure 1.7: ARIA+ of usual place of residence by selected causes of death (rate), 2017–18 to 2021–22

Notes: Rates calculated per 100,000 population aged 0–17 years in each ARIA+ category, averaged over 5 years. Excludes the deaths of children whose usual place of residence was outside Queensland.

12 Analysis based on the Accessibility/Remoteness Index of Australia Plus (ARIA+) for the child's place of usual residence. ARIA+ is a measure of remoteness that ranks locations based on their distance by road to a centre that provides services. <u>www.qgso.qld.gov.au/about-statistics/statistical-standards-classifications/</u> accessibility-remoteness-index-australia

13 Rates exclude deaths of children whose usual residence was outside Queensland. See the 18-year data tables available on the report home page for detailed data www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

Socio-economic disadvantage

The child mortality rate from all causes was highest in areas with the greatest levels of socio-economic disadvantage.¹⁴ The rate of child deaths in quintile 1 areas (most disadvantaged areas) was 47.4 per 100,000 children aged 0–17 years, compared with 31.6 in quintile 3 areas and 20.2 in quintile 5 areas (least disadvantaged) areas (5-year average).¹⁵

Figure 1.8 illustrates that rates of death from external and unexplained causes, taken together, increase with increasing socio-economic disadvantage. The differences in rates of death between areas of greatest and least disadvantage were statistically significant for transport, drowning and unexplained causes (although the raw numbers for quintile 5 were low).



Figure 1.8: SEIFA quintile of usual place of residence by selected causes of death (rate), 2017–18 to 2021–22

Notes: Rates calculated per 100,000 population aged 0–17 years in each SEIFA quintile, averaged over 5 years. Excludes the deaths of children whose usual place of residence was outside Queensland.

Aboriginal and Torres Strait Islander children

The deaths of 70 Aboriginal and Torres Strait Islander children were registered in 2021–22, of which 32 were from natural causes, 21 from external causes and 3 from unexplained causes. A further 14 deaths were pending a cause at the time of reporting.

Aboriginal and Torres Strait Islander children are over-represented in child deaths. The mortality rate for Indigenous children was 71.7 deaths per 100,000 Indigenous children aged 0–17 years, compared with 30.0 deaths per 100,000 non-Indigenous children (5-year average), meaning the Indigenous mortality rate was 2.4 times the rate for non-Indigenous children for all causes.¹⁶

The Aboriginal and Torres Strait Islander infant mortality rate was 6.5 deaths per 1,000 Indigenous births, compared with 3.6 deaths per 1,000 non-Indigenous births (5-year averages).

The level of over-representation was higher for certain causes of death, as illustrated in Figure 1.9. Mortality rates for Indigenous children were more than 3 times higher the non-Indigenous child mortality rates for:

- other non-intentional injury
- drowning
- suicide
- fatal assault and neglect.

¹⁴ Analysis is based on the Socio-Economic Indexes of Australia (SEIFA) score for the child's place of the usual residence. SEIFA is allocated to geographic areas to represent their level of advantage or disadvantage from Census data. www.abs.gov.au/websitedbs/censushome.nsf/home/seifa

¹⁵ Rates exclude deaths of children whose usual residence was outside Queensland. See the 18-year data tables available on the report home page for detailed data. 16 See **Appendix A Table A.2** for detailed data.

Aboriginal and Torres Strait Islander infants were also over-represented in sudden unexpected death in infancy with a mortality rate 3.4 times that for non-Indigenous infants (1.5 and 0.4 per 1,000 births, respectively).



Figure 1.9: Cause of death by Aboriginal and Torres Strait Islander status (rate), 2017–18 to 2021–22

Trends

Indigenous child mortality rates have decreased over the 18-year period, as shown in Figures 1.10 and 1.11. The Aboriginal and Torres Strait Islander child mortality rate, however, was over twice the non-Indigenous rate in the most recent 5-year period.

Decreases in Indigenous mortality have mirrored decreases in non-Indigenous mortality. The mortality rate for Indigenous children aged 0-17 years decreased on average 1.3% per year. This compares with an average annual decrease of 3.2% in the non-Indigenous rate.



Figure 1.10: Child deaths by Aboriginal and Torres Strait Islander status (5-year rolling rate), 2004–09 to 2017–22

Notes: Rates calculated per 100,000 Aboriginal and Torres Strait Islander and non-Indigenous children aged 0–17 years, averaged over 5 years.

For infant deaths, there was a greater reduction in the Aboriginal and Torres Strait Islander infant mortality rate, which decreased from 11.3 per 1,000 live births in 2004–09 to 6.5 per 1,000 births in 2017–22 (down 4.0% per year on average). The non-Indigenous infant mortality rate decreased by 2.3% per year on average over the same period, as shown in Figure 1.11.

Notes: Rates calculated per 100,000 Aboriginal and Torres Strait Islander and non-Indigenous children aged 0–17 years, averaged over 5 years.



Figure 1.11: Infant deaths by Aboriginal and Torres Strait Islander status (5-year rolling rate), 2004–09 to 2017–22

Notes: Rates calculated per 1,000 Aboriginal and Torres Strait Islander and non-Indigenous live births, averaged over 5 years.

Children known to the child protection system

The Department of Children, Youth Justice and Multicultural Affairs, specifically Child Safety services, administers the child protection system in Queensland. For this report, a child is deemed to have been known to Child Safety if, within 12 months before the child's death:

- Child Safety services was notified of concerns of alleged harm or risk of harm, or if
- Child Safety was notified of concerns before the birth of a child and reasonably suspected the child might be in need of protection after their birth, or if
- Child Safety took action under the Child Protection Act 1999, or if
- the child was in the custody or guardianship of Child Safety.

Sixty-nine children who died in 2021–22 were known to Child Safety in the 12 months prior to their deaths, an increase from 53 deaths in 2020–21. Twenty-two of these children died from natural causes, 28 from external causes, 2 from unexplained causes and 17 deaths were pending a cause at the time of reporting.

It is noted that the population of children known to the child protection system has increased 4% per year on average over the last 5 years, although the increase does not fully account for the increase in child deaths observed in 2021-22.¹⁷

The mortality rate for children known to Child Safety was almost twice the Queensland child mortality rate (61.0 deaths per 100,000 and 33.4 deaths per 100,000 respectively, averaged over 5 years).^{18,19}

The trends in deaths of children known to the child protection system are presented in Figure 1.12. From 2004–05 to 2013–14, statutory reviews were required for children 'known' to child protection in the 3 years prior to their death. Following changes to the child protection system as a result of the Queensland Child Protection Commission of Inquiry, since 2014–15 reviews are only completed for children 'known' to Child Safety in the 12 months prior to their death.²⁰

19 See Appendix A, Table A.3 for detailed data.

20 www.childprotectioninquiry.qld.gov.au

¹⁷ The population used as a denominator for deaths of children known to Child Safety is available in Appendix B—Methodology. <u>www.qfcc.qld.gov.au/about-us/</u> publications/child-death-reports-and-data

¹⁸ The population used as a denominator for 'children known to Child Safety' is the number of children known to Child Safety (as the subject of, or mentioned in, a child concern report, notification, investigation and assessment, ongoing intervention, child protection orders or placements) in the 12 months before the relevant year (e.g. the denominator for 2021–22 is the number of children known to Child Safety during 2020–21).



Figure 1.12: Deaths of children known to the child protection system (number), 2004–05 to 2021–22

Figure 1.13 illustrates the over-representation of children known to Child Safety in deaths from external and unexplained causes. Over the last 5 years, mortality rates for children known to Child Safety have been more than 3 times higher than the Queensland child mortality rates for:

- fatal assault and neglect
- drowning
- other non-intentional injury
- suicide.

Children known to the child protection system were also over-represented in sudden unexpected infant deaths, with a mortality rate almost 4 times the rate for all Queensland infants (respectively 2.3 and 0.6 per 1,000).

Children coming to the attention of the child protection system may have experienced significant disadvantage, abuse and neglect. The risk factors (often multiple) present in these children's lives may explain, in part, the over-representation of children known to the child protection system in child death statistics.

Figure 1.13: Deaths by child protection system status and cause of death (rate), 2017–18 to 2021–22



Children reported missing

Reporting on deaths where the child or young person had been reported missing arose from the QFCC review <u>When</u> <u>a child is missing: Remembering Tiahleigh</u>—a report into Queensland's children missing from out-of-home care.²¹

Five children in 2021–22 had been reported missing to the police at the time of their death. None of the children reported missing were also known to Child Safety.

²¹ QFCC (2016) When a child is missing: Remembering Tiahleigh—a report into Queensland's children missing from out-of-home care, QFCC, Queensland Government. www.qfcc.qld.gov.au/sector/child-death/system-reviews-after-child-death

Deaths from natural causes



Notes: Counting is by date of death registration. Percentages may not add to 100 due to rounding. * rate per 1,000 births. † in the 12 months prior to death.

Key findings

In 2021–22, 259 children and young people died from natural causes (diseases and morbid conditions). The mortality rate for natural causes was 23.1 deaths per 100,000 children aged 0–17 years (5-year average).^{22,23}

There has been a downward trend in child deaths from natural causes, with the mortality rate decreasing from 35.3 per 100,000 in 2004–09 to 23.1 per 100,000 in 2017–22 (a decrease of 3.2% per year on average). The majority of child deaths each year are from natural causes. Natural causes have accounted for 69% of all child deaths over the past 5 years.

Perinatal conditions and congenital anomalies were the most common natural causes in 2021–22 (118 and 78 deaths respectively). Together, these causes accounted for 76% of all deaths from natural causes.

Appendix A, Table A.4 provides summary data and key characteristics for deaths from natural causes.

Classification of causes of death using ICD-10

The QFCC uses the *International statistical classification of diseases and related health problems*, tenth revision (ICD-10) to classify causes of death.²⁴ The ICD-10 chapters and codes form the major groups and sub-groups of diseases and conditions in reporting on deaths from natural causes.

Sex

Child mortality from natural causes is marginally higher for males than females. The male mortality rate over the last 18 years is 1.2 times the rate for females (31.8 deaths per 100,000 male children and 26.9 deaths per 100,000 female children). In 2021–22, 133 male children died of natural causes, a rate of 24.9 per 100,000 (5-year averages). This compares with 124 female deaths, a rate 21.2 per 100,000 (5-year averages).

Age

Figure 2.1 illustrates the types of natural cause deaths for each age category in 2021–22. The following findings were evident:

- almost all natural causes of death for infants (under 1 year) were from perinatal conditions and congenital anomalies (93% of all natural causes within this age group)
- neoplasms (cancers and tumours) were the primary natural cause for children aged 5–9 years, 10–14 years and 15–17 years.
- congenital anomalies were the primary natural cause for children aged 1–4 years.

Figure 2.1: Deaths from natural causes by ICD-10 chapter and age (number), 2021–22



Notes: Excludes causes where the total number of deaths was less than 4.

22 Deaths are reported as explained diseases and morbid conditions only. Deaths from unexplained causes are included in Chapter 8.

23 Tables with data for 2004–22 are available online at www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

24 www.who.int/standards/classifications/classification-of-diseases

Neonatal and post-neonatal infants

Most child deaths from natural causes occur in the first year, most within the first days and weeks of life. Table 2.1 shows the age and causes of infant deaths in major groups in the last 5 years, across the neonatal and post-neonatal periods.

Neonatal period (0-27 days)

Neonatal deaths are those occurring in the first 28 days after birth (0–27 days). Of the 1,027 infant deaths due to natural causes in the last 5 years, 82% occurred in the neonatal period. Of the 845 neonatal deaths, 61% occurred on the day of birth and a further 19% had occurred by the end of the first week.

The two leading causes—perinatal conditions (585 deaths) and congenital anomalies (238 deaths)—represent 97% of the neonatal deaths from natural causes.

Post-neonatal period (28-364 days)

Post-neonatal deaths occur during the remainder of the first year (28–364 days). During the last 5 years, there were 182 deaths from natural causes during the post-neonatal period. The leading cause of death from natural causes in the post-neonatal period was congenital anomalies (73 deaths or 40%).²⁵

Age					
		Perinatal conditions (P00–P96)	Congenital anomalies (Q00–Q99)	Other diseases and morbid conditions ^a	Total
	<1	354	160	4	518
Neonatal (age in days)	1–6	114	46	4	164
(490 4490)	7–27	117	32	14	163
Neonatal total		585	238	22	845
	1*	30	21	11	62
2 3 4	2	7	13	12	32
	3	1	8	8	17
	4	2	11	5	18
	5	4	3	3	10
Post-neonatal (age in months)	6	2	5	7	14
(uge in months)	7	0	6	6	12
	8	1	2	1	4
	9	0	1	3	4
	10	1	2	2	5
	11	2	1	1	4
Post-neonatal tota	ost-neonatal total 50 73		59	182	
Total infants		635	311	81	1,027

Table 2.1: Age and cause of infant deaths from natural causes (number), 2017-18 to 2021-22

* 28 days to <2 months.

a Includes neoplasms (C00–D48); diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50–D89); endocrine, nutritional and metabolic diseases (E00–E90); diseases of the nervous system (G00–G99); diseases of the circulatory system (I00–I99); diseases of the respiratory system (I00–J99); symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99).

25 The leading cause of death in the post-neonatal period was SIDS and undetermined causes, see Table 1.1.

Major causes

Perinatal conditions

Perinatal conditions are diseases and conditions which originate during pregnancy or the neonatal period (first 28 days of life), even though death or morbidity may occur later. Perinatal conditions include maternal conditions which affect the newborn, such as complications of labour and delivery, disorders relating to fetal growth, length of gestation and birth weight, as well as disorders specific to the perinatal period such as respiratory and cardiovascular disorders, infections, and endocrine and metabolic disorders.

During 2021–22, there were 118 child deaths from perinatal conditions, at a mortality rate of 11.0 deaths per 100,000 children aged 0–17 years (5-year average). Perinatal conditions were the leading cause of death for infants (under 1 year).

As shown in Figure 2.2, over the past 5 years the majority of deaths due to perinatal conditions resulted from the fetus and/or newborn being affected by maternal factors or complications of pregnancy, labour and delivery (50%, 323 deaths), followed by disorders related to the length of gestation and fetal growth (17%, 107 deaths). Together, these causes accounted for 67% of all deaths due to perinatal conditions (430 of 642 deaths).²⁶

Figure 2.2: Deaths due to perinatal conditions by sex (number), 2017–18 to 2021–22



Notes: Excludes causes where the total number of deaths was less than 4.

Congenital anomalies

Congenital anomalies are mental and physical conditions present at birth which are either hereditary or caused by environmental factors.²⁷

During 2021-22, there were 78 child deaths from congenital anomalies, at a 5-year average rate of 6.2 deaths per 100,000 children aged 0-17 years.

As shown in Figure 2.3, over the last 5 years the leading causes of death due to congenital anomalies were malformations of the circulatory system (30%, 109 deaths) and congenital malformations of the nervous system (20%, 74 deaths).

26 Noting a small number of deaths from perinatal conditions occur in children aged 1 year and over.

²⁷ ICD-10 Chapter XVII, Congenital malformations, deformations and chromosomal abnormalities.



Figure 2.3: Deaths due to congenital anomalies by sex (number), 2017-18 to 2021-22

Notes: Excludes causes where the total number of deaths was less than 4.

Neoplasms (cancers and tumours)

The term 'neoplasm' is often used interchangeably with the words 'tumour' and 'cancer'.²⁸

Twenty-seven children and young people died from neoplasms in 2021–22, at a 5-year average rate of 1.9 deaths per 100,000 children aged 0–17 years. Neoplasms was the leading cause of death (all causes) for ages 5–9 and 10–14 years.

Over the last 5 years 114 children lost their lives to cancers and tumours. As illustrated in Figure 2.4 the most common types were neoplasms of the eye, brain and other parts of the central nervous system (40 deaths or 35%), followed by malignant neoplasms, stated or presumed to be primary, of lymphoid, haematopoietic and related tissue (29 deaths or 25%). Neoplasms was the leading cause of death (of all causes) for children aged 5–9 and 10–14 years, as noted in **Chapter 1**.

Figure 2.4: Deaths due to neoplasms (number), 2017–18 to 2021–22



Notes: Excludes causes where the total number of deaths was less than 4.

28 ICD-10 Chapter II, Neoplasms.

Infections

'Infections' is a hybrid category composed of certain infections and parasitic diseases, diseases of the nervous system and diseases of the respiratory system.²⁹

Eleven children died from infections in 2021–22. Over the last 5 years 67 children and young people died from infections. The highest number of infections were caused by influenza and pneumonia (21 deaths or 31%).³⁰

Deaths from notifiable conditions

There are national and local public health legislation requirements for health practitioners to notify public health authorities of certain diseases in Australia.³¹ Key factors considered when deciding if a condition should be notifiable include the overall impact of the disease on morbidity and mortality, potential for control, demonstrated public health concern and the availability of control measures. Notification allows authorities to detect outbreaks early and take rapid public health action, if necessary, and to plan and monitor these efforts. It also provides information on the occurrence of disease.

Thirty-one children and young people died from a notifiable condition over the latest 5-year period as shown in Table 2.2. Twenty-one (68%) of the 31 deaths due to notifiable conditions were the result of potentially vaccine-preventable conditions, with the most common of these being invasive pneumococcal disease, influenza and invasive meningococcal disease.^{32,33}

COVID-19 was added to Queensland's Schedule of Notifiable Conditions in the *Public Health Regulation 2018 in January 2020*. There were 2 child deaths due to coronavirus (COVID-19) during the 5-year reporting period.³⁴

Table 2.2: Deaths with notifiable conditions as underlying cause (number), 2017–18 to 2021–22

Notifiable condition	Total
Pneumococcal disease (invasive) [^]	7
Invasive group A streptococcal infection	6
Influenza^	5
Meningococcal disease (invasive)^	4
Melioidosis	3
Coronavirus (COVID-19)^	2
Salmonellosis	2
Haemophilus influenzae type b infection (invasive) [^]	1
Tuberculosis	1
Total	31

^ Potentially vaccine-preventable condition. Vaccines are available for selected strains of meningococcal, coronavirus (COVID-19), seasonal influenza and selected serotypes of pneumococcal disease. Serotyping information in relation to coronavirus (COVID-19), influenza, meningococcal and pneumococcal-related deaths is not available to the QFCC, and so deaths are reported as being potentially vaccine-preventable only.

Notes: Includes 4 deaths where the usual residence was outside of Queensland. The child deaths with notifiable conditions in this report may differ from communicable disease reports which use date of notification or date of onset of disease to define the reporting period. The deaths reported by QFCC use date of death registration to define the reporting period, which may occur sometime after the notification of disease.

29 ICD-10 references: Chapter I, Certain infectious and parasitic diseases; Chapter VI, Diseases of the nervous system, codes G00–G09 only; Chapter X, Diseases of the respiratory system, codes J00-J22 only, Chapter XXII, Codes for special purposes, codes U07.1-U07.2 only.

30 ICD-10 Chapter X, Diseases of the respiratory system, Influenza and pneumonia (J09–J18).

31 The Queensland Health list of notifiable conditions can be found at <u>www.health.qld.gov.au/clinical-practice/guidelines-procedures/diseases-infection/notifiable-</u> <u>conditions/list</u>

- 32 In Australia, publicly funded immunisation programs are administered by state and territory governments. The current National Immunisation Program Schedule (valid from April 2019) includes vaccinations against the following diseases: hepatitis B, diphtheria, tetanus, pertussis (whooping cough), poliomyelitis, Haemophilus influenzae type b (Hib), pneumococcal disease, rotavirus, measles, mumps, rubella, meningococcal ACWY disease, varicella (chicken pox), influenza and human papillomavirus (HPV).
- 33 Vaccines are available for only selected strains of influenza, meningococcal disease and pneumococcal disease.
- 34 Information in this report on child deaths with notifiable diseases, including COVID-19, may differ from official reporting by Queensland Health due to different methodology. Further information about the QFCC's methodology can be found in the Methodology in Appendix B. www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

Transport-related deaths







Notes: Counting is by date of death registration. Percentages may not add to 100 due to rounding. * rate not calculated for numbers between 1–3. † in the 12 months prior to death.

Key findings

In 2021–22, the deaths of 33 children and young people from transport-related incidents were recorded in Queensland. This represents a 5-year average rate of 2.2 deaths per 100,000 children aged 0–17 years. <u>Table A.5</u> in <u>Appendix A</u> provides summary data and key characteristics for transport-related deaths in the last 5 years.³⁵

The rates of transport-related child fatalities have declined over the last 18 years, with the 5-year rolling rates dropping by 4.9% per year on average (see Figure 1.2). However, the strong decreasing trend to 2016–17 (14 deaths) did not continue, and the 33 transport deaths in 2021–22 is the highest transport total in the last 10 years.

Nature of transport incidents

During 2021–22, 19 deaths involved motor vehicle crashes, 5 were pedestrian incidents, 4 were motorcycle incidents, 2 were quad bike incidents and 2 were other incident types.

Over the last 5 years, the majority of transport-related fatalities were motor vehicle deaths (59%) followed by pedestrian deaths (22%) and motorcycle incidents (10%).

Sex

Twenty-four male children died from transport-related incidents in 2021–22, compared with 9 female children.

Over the last 5 years, the average annual transport-related mortality rate for males was 1.8 times the rate for females (2.9 per 100,000 males and 1.6 per 100,000 females). The higher rate of death for males has been attributed to, in part, greater risk-taking behaviours displayed by young males, including young male drivers.³⁶

Age

Of the 33 transport-related fatalities during 2021-22, 7 were aged 1-4 years, 5 were aged 5-9 years, 9 were aged 10-14 years and 12 were aged 15-17 years.

The highest rate of transport deaths was among young people aged 15-17 years (6.0 per 100,000) which was almost 3 times the rate for the 1-4 year age group, which had the next highest rate (2.1 per 100,000) (5-year averages).

Transport-related characteristics

Motor vehicle incidents

Figure 3.1 illustrates the role of the child or young person in motor vehicle fatalities over the last 5 years. Of the 77 children and young people who died in motor vehicle incident deaths between 2017-18 and 2021-22, 13% (10) were driving at the time of the incident while 87% (67) were passengers.

Figure 3.1: Motor vehicle fatalities by role and age category (proportion), 2017–18 to 2021–22



35 Tables with data for 2004–2022 are available online at www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

36 AIHW (2011) <u>Young Australians: Their health and wellbeing</u>, cat. no: PHE 140, AIHW, Australian Government. <u>www.aihw.gov.au/reports/children-youth/young-australians-their-health-and-wellbeing-2011/report-editions</u>

Multiple fatalities

There was a total of 19 child deaths in 18 motor vehicle incidents in 2021–22. Six of these incidents resulted in the death of more than one person (7 child and 8 adult fatalities in total). Of those 6 incidents, one involved multiple child fatalities.

Twelve children died in 12 single fatality incidents.

Roadway type

Of the 19 children and young people who died in motor vehicle incidents in 2021–22, 7 died in crashes on highways (roadways with a speed limit greater than or equal to 100km/hr) and 5 on major roads (speed limit between 60 and 100km/hr). Over the last 5 years, 40% (31 out of 77) of child deaths in motor vehicle crashes occurred on highways, 21% were on major roads and 17% on residential streets.

Risk factors associated with motor vehicle crashes

Of the 19 motor vehicle fatalities in 2021–22, speed was the most commonly identified risk factor (8 fatalities), followed by driver inexperience (7 fatalities) and alcohol and/or substance use (6 fatalities).

Over the last 5 years, 77 died in 68 motor vehicle incidents (7 incidents involved multiple child fatalities). Single-vehicle accidents accounted for 65% (44) of those incidents. Sixty-three per cent of the incidents involved a young driver (up to 25 years of age) driving the vehicle in which the child/ren was/were travelling. Thirty-one children (40%) were either not wearing a restraint or were inappropriately restrained.

Risk factors identified in fatal motor vehicle incidents over the last 5 years are illustrated in Figure 3.2. The most common driver risk factors were:

- excessive speed 53%
- alcohol and/or substance use 34%
- inexperienced driver 32%.

Figure 3.2: Most common risk factors in motor vehicle incidents, by role of vehicle and age of driver (number of incidents), 2017–18 to 2021–22



Notes: The role of the vehicle applies to the vehicle in which the deceased child was travelling and, where applicable, any further vehicles involved in the incident. Multiple risk factors may be present in each incident.

Pedestrians

Five children and young people died in pedestrian incidents during 2021–22, with 4 incidents occurring in the context of a low-speed vehicle run-over.

Over the last 5 years, there have been 29 pedestrian incidents, the majority of which were low-speed vehicle run-overs (59%) followed by road and railway crossings (31%).

Children under 5 years are most at risk from pedestrian transport incidents, accounting for 20 of the 29 pedestrian deaths over the 5-year period. Children aged between 5 and 14 years accounted for 5 pedestrian deaths, 4 of which occurred while travelling on or crossing a roadway. Two deaths involved self-propelled kick scooters.³⁷ Four young people aged 15–17 years died in pedestrian incidents, with alcohol and/or substance misuse at the time of the incident identified as the most common risk factor.

Low-speed vehicle run-overs

'Low-speed vehicle run-over' (LSVR) is a term used to describe incidents where a pedestrian is injured or killed by a slow-moving vehicle in a non-traffic area or while entering or exiting a traffic area. Most of these incidents involve children under the age of 5. Over the last 5 years there have been 17 LSVR incidents, most commonly occurring at the child's home or the home of a person known to the child (82%), with the driver most frequently identified as a parent or other close relative (82%).

Motorcycles, quad bikes and bicycles

There were 5 deaths from motorcycle incidents in 2021–22. Over the last 5 years, there have been 13 deaths of children and young people riding motorcycles. Almost all of the motorcycles were being driven by the child or young person with excessive speed the most commonly reported risk factor.

There were 2 deaths from quad bike³⁸ incidents in 2021–22. Over the last 5 years, there have been 6 deaths of children and young people riding quad bikes. Five of the 6 deaths were children under the age of 16, driving or riding as passengers.

There have been 3 bicycle-related fatalities in the last 5 years, although none occurred in 2021–22.

Off-road fatalities

Eight children died in off-road environments in Queensland during 2021–22. Four deaths were pedestrian incidents, 2 children died in motorcycle incidents and a further 2 in quad bike incidents. The deaths of children and young people occurring in off-road environments are not included in the official road toll. Over the last 5 years, a total of 38 children and young people died in off-road environments.

Two children died in an airplane crash in 2021–22.

Charges and criminal proceedings

Of the 33 transport-related fatalities in 2021–22, 4 resulted in driving-related criminal charges (e.g. dangerous operation of a motor vehicle causing death). Over the last 5 years, there were criminal charges in relation to 26 of the 131 transport-related deaths.

Over the last 5 years, 11 young people who died were travelling in stolen vehicles in 7 distinct incidents.

³⁷ Incidents involving wheeled toys without the involvement of another motor vehicle are not considered transport accidents. Falls from wheeled toys or collisions with stationary objects are examined in other non-intentional injury. Where a vehicle collides with a child riding a wheeled toy, these incidents are classified as pedestrian incidents.

³⁸ Also known as all-terrain vehicles or ATVs. Includes side-by-side vehicles (SSVs) (also known as utility task vehicles (UTVs)).

Reducing the risk of low-speed vehicle run-overs

Young children are at particular risk of low-speed vehicle run-overs as they are not visible to a driver when they are near the rear (or front) of a vehicle. Lines of sight when reversing are worse in higher vehicles such as 4WDs. Reversing aid technologies in vehicles such as cameras and proximity alerts have the potential to prevent run-overs.

Public consultation on the Australian Government Department of Infrastructure, Transport, Regional Development, Communications and the Arts <u>Vehicle Reversing Aid Technologies Regulation Impact Statement</u>³⁹ occurred in March 2022. The QFCC made a submission supporting the option which would mandate a new national road vehicle standard. The standard would require all new light and heavy vehicles to be fitted with devices for rear visibility and detection to improve a reversing driver's awareness of persons located behind vehicles.

The standard, if implemented, is expected to be introduced in phases in 2024 and 2026.

Quad bike safety in workplaces

In 2022 Workplace Health and Safety Queensland (WHSQ) held a public consultation on government interventions to improve the safety of workers and others when operating quad bikes and side-by-side vehicles (SSVs) at the workplace.

The QFCC made a <u>submission</u>⁴⁰, referencing evidence from the Queensland Child Death Register, in support of the introduction of the work health and safety regulations.

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 3.1 outlines the QAS responses to over 4,500 transport incidents in the last year, including both fatal and non-fatal injuries. The majority involved motor vehicles, followed by motorcycle and bicycle incidents. The highest number of incidents involved young people aged 15–17 years.

Type of incident	Under 1 year	1–4 years	5–9 years	10–14 years	15–17 years	Total
Motor vehicle	127	404	619	620	1,269	3,039
Bicycle	*	27	89	295	139	550
Motorcycle	*	9	86	254	215	564
Scooter	0	7	28	73	50	158
Pedestrian	*	9	25	63	34	131
Quad bike	*	5	9	17	11	42
Watercraft	*	5	7	10	21	43
Other (e.g. go kart, skateboard)	0	5	10	22	38	75
Unknown type	0	0	5	14	7	26
Total	127	471	878	1,368	1,784	4,628

Table 3.1: Queensland Ambulance Service responses to transport incidents (number), 2021–22

Source: Queensland Ambulance Service (Aug 2022)

* Not reported for numbers less than 5 and excluded from totals.

Notes: Excludes data for children and young people whose gender was recorded as missing or indeterminant (n=19).

39 www.infrastructure.gov.au/have-your-say/reversing-aid-technologies-vehicles

40 www.qfcc.qld.gov.au/sector/policy/policy-submissions





leading cause of death in children 1–4 years



21% were in rural water hazards

Under 1s

All 5 were unsupervised while bathing

Notes: Counting is by date of death registration. Percentages may not add to 100 due to rounding. * rate not calculated for numbers between 1–3. † in the 12 months prior to death.

Rate per 100,000

0.7

0.8

0.5

2.7

2.5

4.6

1.8

1.4

1.6

15–17 years

Non-Indigenous

Outer regional

Inner regional

Q5 (least disadvantaged) 0.3

Major cities

Remote and very remote

Q1 (most disadvantaged)

Known to Child Safety[†]

Aboriginal & Torres Strait Islander

Key findings

The deaths of 9 children and young people were attributed to drowning in Queensland in 2021-22. This is a rate of 1.0 deaths per 100,000 children aged 0-17 years over a 5-year period.

Table A.6 in Appendix A provides summary data and key characteristics for drowning deaths in the last 5 years.⁴¹

Types of drowning-related deaths

Of the 9 child deaths in drowning incidents in 2021–22, 4 occurred in swimming pools and 5 were non-pool incidents.

Over the last 5 years, private pools were the most common incident locations for child drownings (38%), with all 22 of these incidents in residential locations (homes, townhouse or units). Rural water hazards (e.g. dams) were the second most common location (8 deaths or 16%).

Bath drownings and dynamic waterways (e.g. rivers, creeks) each made up 12% of drowning incidents. Public pools and static waterways (e.g. lakes, reservoirs) both individually made up 7% of drowning deaths in 2017–2022.

Sex

During 2021–22, 7 male children and 2 female children died in drowning incidents. Males were over-represented in child drownings, with a male drowning rate of 1.2 per 100,000 compared with 0.7 per 100,000 for females (5-year averages).

Age

Children aged 1–4 years made up the largest group of drowning deaths in 2021-22 (6 of 9 deaths). This pattern has been found in all previous reporting periods and is an indication of the vulnerability of this age group. Drowning was the leading cause of death for children aged 1–4 years over the last 5 years.

Risk factors and age

Under 1 year

Five children under the age of 1 year have drowned over the last 5 years, accounting for 9% of the child drowning deaths. All 5 deaths were bathing incidents, and in 4 of these the infant was co-bathing with other children at the time. In all 5 incidents the adult supervisors were aware of the infant's presence in the bath, however they were not actively supervising at the time of the incident.

1-4 years

Over the last 5 years, 33 children aged 1-4 years have drowned, accounting for 57% of all drowning deaths over this period. Eighteen of the 33 deaths (55%) occurred in private pools.

Pool fencing was non-compliant in 17 of the 18 incidents of private pool drownings. Non-compliant fencing includes the absence of fencing, fencing or gate defects or propping pool gates open. Circumstances included:

- 14 incidents in which pool fencing is believed to be non-compliant (including 5 where a gate was also propped open)
- 2 incidents in which the pool gate was propped open but pool fencing was otherwise compliant
- 1 incident where the pool fencing was compliant and the gate latched
- 1 incident in which pool fencing was absent. This involved a portable pool which was required to comply with pool fencing legislation.

41 Tables with data for 2004–2022 are available online at www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

Of the 18 private pool drowning deaths, 13 occurred at the child's usual place of residence, while 5 occurred at the homes of extended family, friends or neighbours.

Non-pool locations also present dangers to young children. Fifteen children aged 1-4 years drowned in non-pool incidents over the last 5 years including rural water hazards (7), beaches or oceans (2), dynamic waterways (2), objects containing water (2) and baths (1).

Nine of the 33 children aged 1-4 years who drowned were known to be in, on or around water hazards (bathtubs, pools, dynamic and static waterways, beach or ocean, objects containing water and rural water hazards). None of those 9 children were within arm's reach, or being actively supervised by a capable supervisor, at the time of the incident.

5-9 years

Ten children aged 5–9 years drowned over the last 5 years, accounting for 17% of all drowning deaths. Four (40%) of those children were aged 5 years. The drownings involved a variety of water hazards, including pools (3 public, 1 private), dynamic waterways (3), rural water hazards (2) and baths (1).

In 7 of the 10 drownings (including 3 of the 5-year-olds), the child was known to be in, on or around water. Of those 7, 6 were either unsupervised or not actively supervised. Six of the children known to be in, on or around water were identified by their families as weak or non-swimmers.

10-17 years

Ten young people aged 10-17 years drowned over the last 5 years (3 aged 10-14 years and 7 aged 15-17 years), accounting for 17% of all drowning deaths. The drownings occurred across a variety of water hazards, including pools (3 private, 1 public), static waterways (3), dynamic waterways (2) and the beach/ocean (1).

Four of the young people were international visitors or had recently moved to Australia. Three of the young people were identified by their families as weak or non-swimmers. Two of the young people had a medical condition or impairment which would indicate a higher level of supervision was required.

Preventative factors

Supervision

Lapses in supervision of young children in, on or around water hazards has been found to be a factor in drowning deaths. When a young child is known to be in, on or around water, the Royal Life Saving Society of Australia (RLSSA) recommends the use of active supervision. Active supervision means a supervisor focusing all of their attention on the child/ren all of the time, when they are in, on or around the water. Parents need to be within arms' reach, interacting with the child/ren.⁴²

A level of supervision is still required even when a child is not known to be in, on or around water. Young children can be highly mobile and may circumvent barriers to access water features. Reliance only on pool fences and gates to prevent drowning is not recommended, as breakdowns in protections can occur, such as pool gates being propped open or becoming non-compliant due to wear and tear. Accordingly, it is essential children aged under 5 years are regularly checked on by an active supervisor.

Heightened supervision is advisable when away from the home environment, such as visiting other homes with pools, or in the period after moving to a new residence.

The RLSSA promotes a lifestage approach to drowning prevention, with targeted strategies to address risk priorities for each age group. Acknowledging that children aged under 5 years are at most risk of drowning, the RLSSA recommends some level of active supervision for all children under 15 years of age. Further information about the RLSSA's lifestage approach for children aged 0–4 years and 5–14 years can be found at <u>www.royallifesaving.com.au/stay-safe-active/communities/how-to-keep-children-safe</u>.

⁴² Royal Life Saving Australia (no date) Keep Watch Actions, www.royallifesaving.com.au/about/campaigns-and-programs/keep-watch/keep-watch-actions, accessed 19 August 2021.

Pool fencing

Pools in residential settings pose a considerable risk of drowning to young children. Graduated changes to Queensland pool fencing laws have increased the obligation on pool owners to enhance the safety of pool areas. In accordance with the requirements:

- compliant fencing is required for all pools and spas—including portable pools and spas capable of being filled with 300 millimetres or more of water
- the latest CPR sign must be displayed and be easily visible to people in or near the pool
- all pools must be registered on the Pool Safety Register
- a local government inspection is mandatory following any immersion incidents involving a child under the age of 5 years.

The effectiveness of swimming pool fencing is dependent upon fencing and gates being compliant with the regulation, in good working order and used correctly (such as not propping open a pool gate).

Figure 4.1 tracks the number of drowning deaths of children aged 0–4 years in private pools in Queensland against changes to fencing requirements over time. A number of changes in pool fencing standards have occurred—from no standards in place prior to 1991, to requirements for new pools to have fencing, later extended to existing pools; changes in requirements such as fence height; and more recently in 2009, compliance requirements for registration and inspection. The 5-year rolling average shows a decline following these changes in legislation, with regulation seen to have possibly impacted on the number of drownings. However, from 2015 the number of private pool drowning deaths in children aged 0–4 years has seen a gradual increase until the 2020 calendar year. This highlights the importance of age-appropriate supervision used in conjunction with compliant physical barriers. Both are critical to preventing drowning deaths in this age group.





Sources: Queensland Injury Surveillance Unit 2008, Injury Bulletin: Domestic pool immersion in Queensland children under 5 years of age. No.104; Queensland Child Death Register (2004–21)

Safe play areas to reduce rural drownings

Rural water hazards, such as dams and troughs, may not be recognised as presenting a drowning risk and are often at a distance from the family home. As children love water play and can travel significant distances to access water, any body of water should be considered a potential risk regardless of its location.

Easy access to water and lack of direct adult supervision are the main factors in child drowning deaths in rural settings.

There have been 28 deaths of children aged under 5 years in rural water hazards since 2004, 7 of which have occurred in the last 5 years.

Drowning prevention is most effective when strategies are multi-faceted. Active supervision is the most effective strategy, but to maintain this continuously is not realistic. Children can also be taught from a young age about nearby dangers and 'no go' areas. Establishing a safe play area in or around the family home can act as a critical means of preventing access to water hazards. Evidence of a safe play area was present in less than half of the rural water hazard deaths since 2004 (12).

A safe play area should be securely fenced, high enough and constructed of materials appropriate to make it difficult for a child to climb. The area should be fitted with a self-closing, self-latching gate.

Royal Life Saving's <u>Keep Watch@The Farm</u>⁴³ initiative is aimed at preventing children aged 0 to 4 years from drowning by recommending parents and carers undertake 4 simple <u>Keep Watch actions</u>: Supervise, Restrict, Teach and Respond.⁴⁴

Queensland Ambulance Service data

Table 4.1 presents data on ambulance responses for fatal and non-fatal immersion injuries of children in the last year. There was a total of 296 immersion incidents. Almost half (49%) of all immersion incidents involving children occurred in swimming pools. Immersion incidents were most common in children aged 1–4 years, and in this age group, the majority (71%) of incidents occurred in swimming pools. Swimming pool immersions were also the most common incident type for children under 1 representing 46% of immersion incidents for this age group.

Type of incident	Under 1 year	1-4 years	5–9 years	10–14 years	15–17 years	Total
Pool	16	71	34	16	7	144
Bath	10	9	7	7	*	33
Beach/ocean	*	7	10	26	14	57
Other immersion	9	13	9	19	9	59
Total	35	100	60	68	30	293

Table 4.1: Queensland Ambulance Service responses to immersion incidents (number), 2021–22

Source: Queensland Ambulance Service (Aug 2022)

* Not reported for numbers less than 5 and excluded from totals.

Notes: Numbers in the table do not add to the total number of immersion incidents attended by Queensland Ambulance Service (n=296) as cells with less than 5 are not shown, and are excluded from table totals.

⁴³ www.royallifesaving.com.au/about/campaigns-and-programs/keep-watch

 $^{44 \ \}underline{www.royallifesaving.com.au/about/campaigns-and-programs/keep-watch/keep-watch-actions}$

5 Other non-intentional injury



Notes: Counting is by date of death registration. Percentages may not add to 100 due to rounding. † in the 12 months prior to death.
Key findings

This chapter considers all non-intentional injury-related deaths outside of transport or drowning fatalities. A comprehensive outline of the types of incidents included in 'other non-intentional injury-related deaths' can be found in <u>Appendix E.</u>⁴⁵

Injury type

Sixteen deaths from other non-intentional injuries were recorded during 2021–22. These included falls (3), drug overdose (3), dog attack (2), crush injuries from falling objects (3), contact with venomous animals (2), fire (2), and 1 from a sleep accident.

Over the last 5 years, the most common injury types were threats to breathing, exposure to inanimate mechanical forces, accidental poisoning and fire.⁴⁶

Table A.7 in Appendix A provides summary data on other non-intentional injury deaths in the last 5 years.⁴⁷

Age and sex

As illustrated in Figure 5.1, patterns in differential risk of death by age and sex emerge in deaths from non-intentional injuries. Over the last 5 years, males have made up 70% of deaths from non-intentional injuries. While a gender difference was not seen in the under 1 and 10-14 age groups, deaths of males in the 1-4, 5-9 and 15-17 age groups clearly outnumbered deaths of females.

The rate of death from non-intentional injuries was highest for infants aged under 1 year (2.3 per 100,000), followed by young people aged 15-17 years (2.0 per 100,00) and children aged 1-4 years (1.4 per 100,000) (5-year averages).

Figure 5.1: Other non-intentional injury deaths by age and sex (number), 2017–18 to 2021–22



45 www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

46 Threats to breathing includes suffocation, strangulation and other threats to breathing. Exposure to inanimate mechanical forces includes, for example, struck or crushed by an object and accidental firearm discharge.

47 Tables with data for 2004–2022 are available online at www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

Risk factors

Situational risks

Children, particularly young children, are at risk in certain settings and circumstances. Over the last 5 years:

- 5 children, all aged under 1 year, died in sleep accidents. Incidents involved accidental over-lay by a co-sleeping person (3) and entrapment/entanglement incidents in the sleep environment (2)
- 5 children died in residential house fires (all aged under 7 years)
- 4 children died from heat stress when they were unintentionally left alone or became trapped in vehicles.⁴⁸

Threats to breathing was the most common injury type for children aged 0-4 years (42% or 10 of 24 deaths).

Product safety

Various consumer products are subject to mandatory or voluntary safety standards, including products which present a higher risk of injury to children.

Child fatalities involving consumer products in Queensland over the 5 years included:

- 2 from strangulation after becoming entangled in a roller blind cord (4 in total since 2004)
- 1 from ingesting a button battery (2 in total since 2004).

Risk-taking activities

Some deaths have occurred during risk-taking activities. In the 5 years ending 30 June 2022:

- 3 deaths were from volatile substance misuse (also known as inhalant abuse or chroming)—the substances involved in the majority of deaths were aerosol deodorants
- 8 deaths involved drug overdoses and/or excessive consumption of alcohol
- 3 deaths appeared to be the result of a choking game or prank
- 93% of fatalities involving risk taking activities were of children aged 12–17 years.

Review of safety standards for toppling furniture

In June 2022 the QFCC made a <u>submission</u>⁴⁹ to the Australian Competition and Consumer Commission (ACCC) in relation to regulatory options to reduce injuries and fatalities related to toppling furniture.

Six deaths involving the toppling of freestanding storage furniture have been recorded in the Queensland Child Death Register since 2004. The age of the children who died ranged from 1 to 2 years. Five of the furniture items were chests of drawers (with or without televisions on them) with no evidence of furniture anchoring.

The QFCC supported the introduction of a mandatory safety standard with labelling, safety information, anchoring devices and stability requirements.

48 Only two of these deaths are counted in this chapter while the other two are included in <u>Chapter 7</u> – Fatal assault and neglect. 49 <u>www.qfcc.qld.gov.au/sector/policy/policy-submissions</u> Suicide



5-year summary (2017-22) Sex





Notes: Counting is by date of death registration. * rate not calculated for numbers between 1–3. ^ deaths in 5–9 age group are included in 10–17 year rates, with exception of age group rates. † in the 12 months prior to death.

Defining and classifying suicide

Suspected suicide cases are assessed and categorised using a suicide classification model that considers factors such as: whether the incident was more consistent with death by suicide than any other cause; whether intent was communicated; any prior suicide attempts; and mental health history. Further information on the classification model can be found in <u>Appendix F</u>.⁵⁰

Key findings

Twenty children and young people died by suicide in 2021–22, a decrease from the 30 deaths in 2020–21.

Twelve deaths in the 2021–22 period were classified as confirmed suicides and 8 deaths were probable suicides (i.e. more consistent with suicide than any other means). A further 6 deaths in the period were classified as possible suicides and recorded as cause pending at the time of reporting. Once coroner findings are received a final assessment of the cause of death will be made.⁵¹

A slow increasing trend in youth suicide rates is evident over time. Between 2004–09 and 2017–22 the rate of suicide increased from 3.8 to 5.0 per 100,000 young people aged 10–17 years.⁵² A total of 132 young people have died by suicide over the last 5 years, with an average of 26 deaths per year.⁵³

Suicide was the leading external cause of death for young people aged 10–14 years and the leading cause overall for young people aged 15–17 years over the 5-year period.

Table A.8 in Appendix A provides summary data and key characteristics for suicide deaths in the last 5 years.

Coronial findings

At the time of reporting, coronial findings had been finalised for 10 of the 20 suicides from 2021–22. Coroners made clear statements that suicide was the cause of death in 9 of these cases. In the one remaining death, hanging was confirmed as the cause of death, although there were no specific findings in relation to suicidal intent.

Age

Of the 20 suicide deaths during 2021-22, 14 were young people aged 15-17 years, 5 were aged 10-14 years and one was aged under 10 years.

The 5-year suicide rate for young people aged 15-17 years was 6 times the rate for young people aged 10-14 years (10.8 deaths per 100,000 aged 15-17 years, compared with 1.7 deaths per 100,000 aged 10-14 years).

As illustrated in Figure 6.1, youth suicide deaths increase with each year of age. Young people aged 9-11 years made up 2% of suicides, with the proportions increasing with age. Seventeen-year-olds comprised 37% of youth suicides over the past 5 years. Two thirds of youth suicides were among young people aged 15-17 years.

⁵⁰ www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

⁵¹ For example, where the fatal outcome was most likely not intended, such as the consequences of risk-taking behaviour, these deaths will be classified as 'other non-intentional injury'. Where the coroner has not been able to determine whether death was the intended outcome, these cases are reported in the category 'unexplained'.

⁵² Suicide rates in this chapter are per 100,000 population aged 10–17 years and, with the exception of age specific rates, include the small number of suicides of children aged 5–9 years.

⁵³ Tables with data for 2004–22 are available online at www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data



Figure 6.1: Suicide deaths by single year of age (proportion), 2017–18 to 2021–22

Notes: Percentages may not add to 100 due to rounding.

Sex

Of the 20 young people who died by suicide in 2021–22, 13 were male and 7 were female.

Over the last 5 years, 57% of young people who suicided were male and 43% were female. The average suicide rate for males was 1.2 times the rate for females (5.6 deaths per 100,000 males aged 10-17 years, compared with 4.5 deaths per 100,000 females aged 10-17 years). While the latest youth suicide rates are similar for males and females, during the first 10 years of the Child Death Register, males suicided at almost twice the rate of females.

Figure 6.2 presents the male and female suicide rates in the youth population in contrast to the population level suicide rates by sex (age-standardised). It illustrates the much higher rate of male suicide in the 'all ages' data compared with the much closer male and female rates for 10-17-year-olds.

Figure 6.2: Male and female youth suicide rates (2017–22) and Queensland total suicide rates (2020, age-standardised)



Sources: QFCC Queensland Child Death Register; ABS (2021) <u>Causes of Death, Queensland, 2020</u>, 'Table 4.1: Underlying cause of death, All causes, Queensland, 2020', ABS website, accessed 11 August 2022. <u>www.abs.gov.au/statistics/health/causes-death/causes-death-australia/</u> <u>latest-release</u>

Situational circumstances and risk factors

The literature on suicide provides a relatively consistent account of the factors and life circumstances that are associated with youth suicide:⁵⁴

- Research into youth suicide shows that a history of self-harming behaviour, suicidal ideation and previous suicide attempts are associated with future suicidality.
- A high proportion of mental illness has been found among young people who die by suicide.
- Childhood abuse and exposure to domestic and family violence have been found to be potential risk factors for future youth suicides. The *Adverse Childhood Experiences Study* has led research showing strong relationships between adverse experiences in childhood and health and social problems across the lifespan, with a link to depressive disorders.⁵⁵

Suicidal behaviours in young people are often not the result of a single cause. Instead, multiple stressors and adverse life experiences may be present. Most suicides, however, cannot be predicted.⁵⁶

Figure 6.3 provides a summary of the most frequently reported risk factors and situational circumstances identified for the young people who suicided in Queensland in the last 5 years. This overview is based on information available to the QFCC and may therefore under-represent the actual circumstances for the children and young people.



Figure 6.3: Summary of risk factors and situational circumstances (proportion), 2017–18 to 2021–22

Notes: Young people who suicided may have experienced more than 1 risk factor, precipitating incident or stressful life event. Interpersonal conflict includes conflict in parental relationships, including issues with intimate partners, family, friends or acquaintances or bullying. Interpersonal loss includes the loss or perceived loss of something, someone or a number of individuals and includes the death of a loved one (including pets), loss of social supports (often due to transitions) and parental divorce or separation. Family stress includes stressors that put real or perceived demands on, or cause interpersonal conflict for, an individual. Examples include poor intra-familial relationships, parental abandonment, familial alcohol or substance use or psychopathology, financial problems, parental offending or detention, family law court proceedings, parental medical conditions, housing issues or domestic and intimate partner violence. Social stress includes any stressors that may have impacted on the young person, such as illness or disability, unemployment, school stress, body image issues, sexual identity or gender issues or pregnancy. Transition includes transitions from or into care, transition of residence, transition in education, transition in work. Victim of alleged maltreatment includes reports of the young person experiencing physical, emotional or sexual harm, neglect or reports that the young person was the victim of a criminal offence. Disciplinary issues refers to consistent rule breaking or behavioural problems, including in the home, at school or contact with authorities. Only a selection of risk factors and situational circumstances are presented in this figure, focusing on those most frequently found.

⁵⁴ McDermott B (2021) <u>Highly vulnerable infants, children and young people</u>: A joint child protection mental health response to prevent suicide, Queensland Child Death Review Board. <u>www.cdrb.qld.gov.au/reports-and-publications</u>

⁵⁵ Chapman DP, Whitfield CL, Felitti VJ, Dube SR, Edwards VJ, Anda RF (2004) 'Adverse childhood experiences and the risk of depressive disorders in adulthood', Journal of Affective Disorders, 82(2):217–225, doi:10.1016/j.jad.2003.12.013.

⁵⁶ Scott J, Ryan A, Hielscher E, Thomas H (2018) 'Suicide in children and adolescents in Queensland 2004–2015', QFCC Research Summary, QFCC, Queensland Government. www.qfcc.qld.gov.au

Previous self-harm and suicidal behaviour

Prior suicide attempts, ideation and self-harming behaviours are recognised as risk factors for suicide. At least 1 form of these risk factors was present for 15 of the 20 young people who suicided during 2021–22. Seven had previously attempted suicide, with 3 young people attempting suicide on more than one occasion. Five young people had previously engaged in self-harming behaviour, such as cutting.⁵⁷ Eleven had previously expressed suicidal thoughts (ideation). There was no evidence of previous self-harm or suicidal behaviour for 5 young people.

Mental health issues and behavioural disorders

While mental health issues are prevalent among young people who suicide, many young people are treated for these conditions and only a very small number may go on to suicide.

Eleven of the 20 young people who suicided during 2021–22 had a diagnosed mental health issue and/or behavioural disorder before their death. Ten young people were known to have engaged with a healthcare professional and 8 had been prescribed medication for their condition/s.

The most common diagnosed conditions were depression and anxiety. Seven of the 11 young people were identified to have multiple mental health and/or behavioural disorders (co-morbid conditions).

Four young people were suspected to have a mental health issue. One young person had engaged with a healthcare professional.

Intent stated or implied (orally or written)

There was evidence of suicidal intent in 8 of the 20 suicide deaths during 2021–22. Five young people stated or implied their intent to a friend, intimate partner, family member or healthcare professional. Intent was stated or implied either during a phone call, text or instant messaging, in person or on social media.⁵⁸ Suicide notes were left by 3 young people.

Contagion

Contagion refers to the process by which a prior suicide or attempted suicide of a family member or friend facilitates or influences suicidal behaviour in another person. Contagion was identified as a potential factor for 3 of the 20 young people who suicided during 2021–22.

Alcohol, drug and substance use

Nine of the 20 young people who suicided during 2021–22 were reported as having a history of alcohol, drug or substance use; with cannabis and alcohol the most frequently cited substances used.⁵⁹

Stressful life events

Stressful life events (life stressors) were identified in 19 of the 20 suicide deaths of young people in Queensland during 2021–22. Life stressors are events or experiences which produce significant strain on an individual; they can occur at any stage over the course of a person's lifetime and vary in severity and duration. Life stressors differ from precipitating incidents as they are more likely to occur in the background with strain accumulating over a period of time.

The 4 most common stressors evident in case information for young people who suicided in 2021–22 were parental separation or divorce, domestic and family violence, familial alcohol and/or substance misuse and transitions of residence.

⁵⁷ Each young person with identified self-harm or suicidal behaviour may have exhibited more than one type of behaviour.

⁵⁸ Each young person may have stated or implied their intent using more than one communication method.

⁵⁹ Previous or current use of alcohol or drugs identified by friends, family members or in toxicology findings.

Impacts of COVID-19

In 2021 the QFCC conducted a survey of young Queenslanders aged 13–18 years, to explore their experiences during the COVID-19 pandemic. The *Growing up in Queensland: Living through COVID* report⁶⁰ indicated the impacts on social relationships, changes to schooling and engagement in recreational activities were the worst outcomes of lockdowns. Some 3% of participants in the survey identified a decline in their mental health as the worst outcome of lockdowns. Further, some participants in the survey also reported boredom, feelings of isolation, loneliness and uncertainty as the worst aspect of lockdowns.

While COVID-19 was explicitly identified as a stressor for a small proportion of young people, there was no evidence of a significant change in youth suicide deaths in Queensland attributable to COVID-19.

History of childhood abuse

Information available indicated 6 of the 20 young people who suicided in 2021–22 had a history of alleged childhood abuse. A history of domestic and family violence within the young person's family was also identified for 6 young people.

Precipitating incidents

Precipitating incidents were identified in 15 of the 20 suicide deaths of young people in Queensland during 2021–22. Precipitating incidents refer to events or stressors which occur prior to a suicide and which appear to have influenced the decision for a person to end their life. Most precipitating incidents will occur in the hours, days or weeks prior to death. Bereavement can be considered a precipitating incident, with an arbitrary time frame of up to 6 months between the death of the family member or friend and the suicide of the young person. The most common precipitating incidents were relationship breakdowns; followed by conflict with family members, intimate partners or friends; bereavement; and unemployment/financial challenges.

Queensland Ambulance Service data

Queensland Ambulance Service (QAS) data indicates in the last year over 8,600 ambulance callouts occurred for suicidal behaviour and self-harm-related incidents involving children, including both fatal and non-fatal injuries (see Table 6.1). This was an increase of approximately 200 callouts from the number reported for 2020–21.

Female patients accounted for 67% of callouts.

Table 6.1: Queensland Ambulance Service responses to self-harm and suicidal behaviour incidents (number),2021–22

Age	Female	Male	Total
5–9 years	87	130	217
10-14 years	2,371	1,108	3,479
15–17 years	3,377	1,577	4,954
Total	5,835	2,815	8,650

Source: Queensland Ambulance Service (Aug 2022)

Notes: Excludes data for 147 children and young people whose gender was recorded as missing or indeterminant.

60 QFCC (2021) Growing up in Queensland: Living through COVID, Queensland Government. www.qfcc.qld.gov.au/youth/growing-up-in-queensland/2021

Fatal assault and neglect



Notes: Counting is by date of death registration. Percentages may not add to 100 due to rounding. * rate not calculated for numbers between 1–3. † in the 12 months prior to death.

Key findings

Based on information available to the QFCC at the time of reporting, 6 deaths were identified as being the result of fatal assault and neglect in Queensland during 2021–22. Definitions for the types of fatal assault and neglect can be found in <u>Appendix C</u> and a description of the screening criteria can be found in <u>Appendix G</u>.⁶¹

Over the last 5 years, 31 children died in 25 fatal assault and neglect incidents. Twenty-three deaths were categorised as intra-familial, meaning that the alleged perpetrator was a parent, family member or person acting in a parental role. Eight children died in domestic homicides, including murder-suicide incidents where the alleged perpetrator also took their own life. Eight children were found to have died as a result of child abuse, 4 died from neglect and 3 were other intra-familial incidents.

Eight deaths in the last 5 years were extra-familial homicides, 5 of which were peer homicides.

Further summary information on deaths from fatal assault and neglect can be found in Table A.9 in Appendix A.62

Age and sex

Infants under 1 year had the highest rate death from fatal assault and neglect over the last 5 years (2.3 per 100,000), followed by children 1–4 years and 15–17 years (1.0 and 0.7 per 100,000, respectively). All children who died in intra-familial assault or neglect were aged under 9 years, while 7 of the 8 extra-familial homicide deaths were young people aged 15–17 years.

There was little difference in male and female rates of deaths from assault and neglect (respectively 0.6 and 0.5 per 100,000 over 5 years). However, males made up 7 of the 8 extra-familial homicide deaths.

Vulnerability characteristics

Of the 31 child deaths from assault and neglect during 2017–22, 23 (74%) children were known to the child protection system within the 12 months prior to death and one was known outside the statutory review period. It is noted that 2 of these children were only known to child protection because of the incident leading to their death.

The following factors were present for the 23 children who died from intra-familial assault or neglect in 17 incidents over the last 5 years (see Figure 7.1):

- 61% had been exposed to domestic and family violence (12 of 23 children)
- 61% had experienced child abuse prior to the incident (12 of 23 children)
- 65% of the alleged perpetrators were identified as either having a diagnosed or suspected mental health issue (in 11 of the 17 incidents)
- 53% of the alleged perpetrators had a history of criminal offending (9 of the 17 incidents)
- 47% of the alleged perpetrators had a history of alcohol or substance use (8 of the 17 incidents).

Seven of the 23 children who died from intra-familial assault or neglect were exposed to all 4 of the vulnerability characteristics: household domestic and family violence; and exposure to a perpetrator with mental health; offending history; and alcohol/substance use.

62 Tables with data for 2004–22 are available online at www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

 $^{61 \ \}underline{www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data}$

Figure 7.1: Vulnerability characteristics in intra-familial fatal assault and neglect (proportion), 2017–18 to 2021–22



Red flags for filicide

A QFCC system review completed following the death of a child prompted the QFCC to explore the concept of 'red flags' to identify children who are at risk of fatal assault or neglect by a parent—an act known as filicide. A red flag is an act or intention (such as injury, threats of harm or death) or accumulation of risk factors likely to adversely affect a child's immediate safety. During 2020–21, the QFCC worked with researchers from the University of Queensland to develop an evidence base for red flags using data from the Queensland Child Death Register. This project identified several risk factors that, when occurring together, may indicate a child is at increased risk of filicide:

- a recorded threat to kill a child
- domestic and family violence
- repeated contact with the child protection authorities
- presence of a new male partner (or stepfather), especially for children aged 0-4 years
- illicit drug or alcohol misuse by parents or caregivers
- parent or caregiver with a severe mental health disorder
- recent separation (within the last 12 months)
- extended hospitalisation of the child.

A final report was released in May 2022 and based on the outcomes of this research, the QFCC considered a 'Red Flags' protocol for filicide was not warranted. The QFCC acknowledges that a threat to kill a child by a parent (found by this study to be a significant standalone risk factor for filicide) is already embedded in risk assessment frameworks that are currently used by child protection and police professionals.

The QFCC produced the paper <u>Taking Lives: A Queensland study on parents who kill their children</u> as a systemwide resource.⁶³ It summarises the main findings of the study and raises awareness on filicide risk factors across the broad range of professionals working with children and families.

Sudden Unexpected Deaths in Infancy (SUDI)



Notes: Counting is by date of death registration. Percentages may not add to 100 due to rounding. * rate per 1,000 births. † in the 12 months prior to death.

Classification of Sudden unexpected death in infancy (SUDI)

SUDI is a research classification which is defined as the death of an infant aged less than 12 months, that is sudden and unexpected and where the cause was not immediately apparent at the time of death. Cases of SUDI with an official cause of death are grouped into the following categories and sub-categories:

Explained SUDI—infant deaths for which a cause was not immediately obvious; but for which post-mortem examinations were able to identify a specific reason

• Infant illnesses or condition unrecognised at the time of death

Unexplained SUDI—those infant deaths for which a cause could not be determined

- Sudden Infant Death Syndrome (SIDS)⁶⁴
- Undetermined causes⁶⁵

- Sleep accidents
- Non-accidental injury (fatal assault)

Key findings

During 2021–22, there were 44 SUDI cases in Queensland, an increase from 34 in 2020–21 and the highest number of SUDIs in 8 years. Of the 44 SUDIs, 31 were pending a cause at the time of reporting—this reflects the longer timeframes for SUDI cases due to the complexity of the post-mortems and coronial investigation.

<u>Table A.11</u> in <u>Appendix A</u> provides summary data on SUDIs in the last 5 years. Explained SUDIs are also included in the chapter relating to the specific causes of death.

There were 172 SUDIs in the last 5 years, of which 63% were found to be unexplained SUDI (SIDS and undetermined causes) while 16% were explained SUDI (illness, sleep accident and fatal assault). A further 21% were pending a cause at the time of reporting.

The SUDI mortality rate was 0.6 per 1,000 live births (5-year average).

Figure 8.1 shows the trends in the 5-year rolling rates of Aboriginal and Torres Strait Islander SUDIs, non-Indigenous SUDIs and all SUDIs in Queensland. The total SUDI rate has decreased between 2004–09 and 2017–22. Rates of Aboriginal and Torres Strait Islander SUDI dropped considerably between 2014 and 2020. The SUDI rate for Aboriginal and Torres Strait Islander infants was around 4 times the non-Indigenous SUDI rate between 2009 and 2016. The degree of over-representation has reduced over time to 3.4 times the non-Indigenous rate by 2017–22.⁶⁶

Discouragingly, in more recent periods the rates of both Indigenous and non-Indigenous SUDIs have been increasing.

⁶⁴ Krous HF, Beckwith JB, Byard RW, Rognum TO, Bajanowski T, Corey T, Cutz E, Hanzlick R, Keens TG, Mitchell EA (2004) 'Sudden infant death syndrome and unclassified sudden infant deaths: a definitional and diagnostic approach', *Pediatrics*, 114:234–8, doi:10.1542/peds.114.1.234.

⁶⁵ A finding where: natural disease processes are detected and are not considered sufficient to cause death but preclude a diagnosis of SIDS; there are signs of significant stress; non-accidental, but non-lethal, injuries are present; toxicology testing detects non-prescribed but non-lethal drugs; or a full autopsy has not been performed and a cause is not otherwise identified.

⁶⁶ Tables with data for 2004–2022 are available online at www.gfcc.gld.gov.au/about-us/publications/child-death-reports-and-data



Figure 8.1: SUDI by Aboriginal and Torres Strait Islander status (5-year rolling rate), 2004–09 to 2017–22

Fluctuations in the number and causes of SUDIs (rolling average) are shown in Figure 8.2. While the number of SUDI deaths has decreased since 2011, average annual numbers have increased again since 2020.⁶⁷ While deaths from infant illness, undetermined causes and sleep accidents remained comparatively stable across the entire period, SIDS deaths rose and fell, driving the changes in SUDI totals. However, some caution is warranted as assigning definitive causes for SUDIs remains complex and developments in cause of death classification are ongoing.⁶⁸



Figure 8.2: Cause of SUDI death (3-year rolling average number), 2004–07 to 2019–22

SUDIs later found to be the result of fatal assault or neglect are excluded from the analyses presented throughout the remainder of this chapter.

68 An expert panel review of Queensland post-neonatal SUDI deaths from 2013 recoded around half of the deaths to a different cause, with shifts occurring from explained to unexplained causes and vice versa. McEniery J, Cruice D (2018) 'The voice of the infant: Cause of death coding does not always reflect what really mattered in the life of the infant who died suddenly and unexpectedly' [poster presentation], Perinatal Society of Australia and New Zealand Conference, Auckland, accessed 12 August 2021. www.childrens.health.qld.gov.au/chq/health-professionals/qpqc

⁶⁷ An expanded table on SUDIs since 2004 is available on the report web page.

Sex and age

A slightly larger proportion of SUDIs in the last 5 years were males (52% male compared with 48% female), but there was no difference in rates at 0.6 per 1,000 male/female births.

Figure 8.3 shows SUDI by age at death in the last 5 years. Two-thirds of sudden unexpected deaths (71%) occurred among infants aged 0-3 months.

Figure 8.3: SUDI by age in months (proportion), 2017–18 to 2021–22



Notes: Excludes SUDIs from fatal assault and neglect. Percentages may not add to 100 due to rounding.

Risk factors for SUDI deaths

A number of factors have been associated with an increased risk of SUDI.⁶⁹ These can be classified according to whether they are associated with the infant, the family or the sleep environment.

- Infant factors: Prematurity and low birth weight, multiple gestation (twins, triplets), neonatal health problems, male sex and recent history of minor viral respiratory infections and/or gastrointestinal illness.
- Family factors: Cigarette smoking during pregnancy and after birth, young maternal age (≤ 20 years), single marital status, high parity (number of births by mother) and short intervals between pregnancies, poor or delayed prenatal care, abuse or family violence, high-risk lifestyles including alcohol and illicit drug abuse, and social disadvantage and poverty.
- **Sleep environment factors:** Sleeping on soft surfaces and loose bedding, prone (stomach) and side sleeping position, some forms of shared sleeping, and overwrapping or overheating.

Selected characteristics of the infant, family and unsafe sleep factors in 171 SUDI deaths over the last 5 years are shown in Figure 8.4. These indicate increased risk in the first months and for infants born with low birth weight, and breastfeeding as a potentially protective factor.

Using non-infant sleep surfaces (70% of SUDIs), sharing a sleep surface (55%) and sleep position on side or stomach (36%) are all reported to increase the risk of sudden unexpected infant deaths, as are pillows (39%) and excess bedding in the sleep space.

⁶⁹ The Triple Risk Model proposes SUDI risk increases with combined factors of vulnerable infant; critical development period; and external stressors. rednose.org.au/article/the-triple-risk-model.



Figure 8.4: SUDI by selected infant, family and sleep factors (proportion), 2017–18 to 2021–22

a Includes adult sleep surfaces and other surfaces such as a couch/chair or infant product not primarily for sleep (e.g. pram/stroller, baby capsule).

b Includes infants propped on pillows or other items, and products with an inclined surface: pram/stroller; infant swing/rocker; baby capsule/car seat.

Notes: Excludes SUDIs from fatal assault and neglect.

Clinical guidelines: Safer infant sleep	Safer sleep messages
The Queensland Clinical Guidelines <u>Safer infant sleep</u> were released by the Queensland Paediatric Quality Council in 2022, describing infant care practices that are associated with reducing the risk of sudden unexpected deaths in infancy. ⁷⁰ The Safer sleep messages for SUDI risk-reduction practices are provided here.	 Place infant in a safe sleep position in a safe sleep environment: place infant on their back for every sleep keep head and face uncovered smoke free before and after birth keep sleep space clear for every sleep safe sleep place in the same norm as careciver
	for first 6–12 months
	 breastfeeding is recommended

70 www.childrens.health.qld.gov.au/chq/health-professionals/qpqc

Sleep environment factors

Sleep surface

As indicated in Figure 8.5, in over half (59%) of SUDIs in the last 5 years the infant was on an adult sleep surface at the time of the incident and a further 8% were on a couch or recliner. Only 28% of the SUDIs occurred when an infant sleep product was being used.⁷¹

Figure 8.5: Sleep surface in SUDIs (proportion), 2017–18 to 2021–22



Notes: Excludes SUDIs from fatal assault and neglect. Percentages may not add to 100 due to rounding.

Infant sleep position

Safer infant sleep advice is to place infants on their backs to sleep (supine). Once infants can roll of their own accord it remains important that the sleep surface is firm and flat—the infant's face/nose may be obstructed if the surface is too soft.

Information from incident reports on infant sleep position is shown in Table 8.1. While 70 deceased infants in the last 5 years were placed and found on their back, a further 27 had moved from their back to stomach or side position when found. Of the 171 infants dying suddenly and unexpectedly, 77 were on their stomach or side when found (36% of SUDIs excluding those from non-accidental injury).

Position	Position when found								
when placed	Back	Stomach	Side	Other	Held by carer	Unknown	Iotal		
Back (supine)	70	23	4	3	0	5	105		
Stomach (prone)	0	20	0	0	0	0	20		
Side	1	6	6	0	0	2	15		
Held by carer	2	2	1	4	5	0	14		
Other	0	1	0	1	0	0	2		
Unknown	1	3	1	0	0	10	15		
Total	74	55	12	8	5	17	171		

Table 8.1: Infant sleep position when placed and found (number), 2017–18 to 2021–22

Notes: Excludes SUDIs from fatal assault and neglect.

71 Percentages by surface types in Figure 8.5 may not add to sub-totals presented in this paragraph due to rounding.

Inclined surface

A firm, flat sleeping surface (not tilted or elevated) is recommended to reduce the risk of SUDI, including for babies with reflux.⁷² Information in the Child Death Register indicates 15% of SUDIs in the last 5 years were placed on an inclined surface. Most of these involved propping infants on pillows or other items. Some incidents involved an infant product with an inclined surface, including a pram/stroller, infant swing and infant car seat.

Shared sleeping

Over half (94, 55%) of the infants whose deaths were sudden and unexpected were sharing a sleep surface with 1 or more people at the time of death. Not all shared sleeping was planned—in some incidents the carer has fallen asleep while nursing the infant.

Sharing a sleep surface with a baby can increase the risk of SIDS and fatal sleep accidents in some circumstances.⁷³ Some studies have found there is an increased risk of SIDS only when mothers who smoke share a bed with their infant, although such findings are insufficient to enable complete reassurance that bed sharing is safe for non-smokers.

Risks are also associated with shared sleeping if infants are sharing a sleep surface with a caregiver who is under the influence of alcohol or drugs which cause sedation, if the caregiver is excessively tired or there are multiple people in the bed with the infant.

Of the 94 SUDIs in a shared sleep environment over the last 5 years, the following additional risk factors were identified:

- position in sleep environment, such as placed between 2 people or on top of a co-sleeping person (36%)
- alcohol or substance use (28%)
- tobacco (46%)
- extreme fatigue (17%)
- obesity (5%).

Effectiveness of the Pépi-Pod® Program

The Queensland Paediatric Quality Council (QPQC) released the evaluation report <u>Measuring the effectiveness of</u> <u>the Pépi-Pod</u>[®] <u>Program in reducing infant mortality in Queensland</u> in 2022.⁷⁴ The Pépi-Pod[®] Program is a portable sleep space embedded in safe sleep education with a family invitation to share what they have learned about protecting babies as they sleep.

The findings demonstrated the Program's positive impact on Queensland's long standing high infant mortality rates. They also demonstrate the benefits of using a strength-based family partnership approach to integrate the Pépi-Pod[®] Program into the delivery of health services to families with young infants.

Given the clear potential for more families to be supported and more infant lives to be saved in Queensland with wider uptake of the Pépi-Pod[®] Program, the QFCC wrote in support of the report's recommendation that the program should be implemented without delay and upscaled to reach all priority Queensland populations.

⁷² Queensland Health (2022) Queensland Clinical Guidelines. Safer infant sleep, Guideline No. MN22.71V1-R27. www.childrens.health.qld.gov.au/chq/healthprofessionals/qpqc

⁷³ Queensland Health (2022) Queensland Clinical Guidelines. Safer infant sleep, Guideline No. MN22.71V1-R27. www.childrens.health.qld.gov.au/chq/healthprofessionals/qpqc

⁷⁴ www.childrens.health.qld.gov.au/chq/health-professionals/qpqc

Infant product safety

In August 2021 the QFCC made a submission to the Australian Competition and Consumer Commission's (ACCC) issue paper on safety options for inclined infant products such as rockers, bouncers, swings, co-sleepers, wedges, recliners, bassinet-type products and inclined sleep accessories. These products pose a risk if an infant sleeps while positioned at an incline and is contrary to safe sleep advice.

The QFCC <u>submission</u>⁷⁵ provided data from the Queensland Child Death Register and supported the option for a combination of mandatory safety standards and information standards for inclined infant sleep and non-sleep products.

Industry guide for safe infant sleep environments

The *Best practice guide for the design of safe infant sleeping environments* was released in mid-2022 and provides a guide for industry to reduce the risk of death and life-threatening injuries in infants.⁷⁶

Unexplained deaths of children aged 1-17 years

While this chapter primarily examines sudden unexpected deaths of infants, a smaller proportion of unexplainedcause deaths were of children aged 1 year and over (see <u>Table A.10</u>, <u>Appendix A</u>). Five deaths of children aged 1-17in 2021–22 were categorised as unexplained causes. Over the last 5 years, while 83% of unexplained deaths were infants, 11% were aged 1-4 years and 5% were aged 5-17 years.

Some deaths in the younger age group show similarities to SUDI deaths in that they occurred during sleep with SUDI risk factors present. In some unexplained deaths, investigations have found the cause of death to be injury; however, it cannot be determined whether the cause of the injury was accidental or inflicted.

^{75 &}lt;a href="http://www.qfcc.qld.gov.au/sector/policy/policy-submissions">www.qfcc.qld.gov.au/sector/policy/policy-submissions

⁷⁶ www.productsafety.gov.au/about-us/publications/best-practice-guide-for-the-design-of-safe-infant-sleeping-environments

9 Child death prevention activities

Maintaining the Child Death Register

The QFCC maintains Queensland's Child Death Register in accordance with Part 3 of the *Family and Child Commission Act 2014*, under which it is required to produce an annual report on the deaths of all children in Queensland.

The Child Death Register was established in 2004 and currently contains over 8,000 records that have been classified by cause of death, demographic and incident characteristics. It allows the QFCC to extract information from its 18 years of recorded data, highlighting risk factors and trends that can inform research, support policy improvement and community safety initiatives to help reduce the likelihood of child deaths.

The redesigned Child Death Register database ('Coda') was implemented in early 2021. In addition to the QFCC's routine activities to audit and cleanse data in Coda, the QFCC also undertook the following system improvement projects during 2021–22:

- concluded the migration of child death data from the previous system into the Coda database
- completed system enhancements to improve functionality in several areas
- developed the Coda data dictionary and master field list as a resource and reference for QFCC officers involved in the entry, use and analysis of information contained in Coda.

Publications

In February 2022 the *Annual Report: Deaths of children and young people Queensland 2020–21* was tabled in Parliament. This was the 17th annual report to be produced on child deaths in Queensland. The electronic version of the annual report can be accessed on the **Queensland Parliament website** (authorised version).⁷⁷

The QFCC also published the *Australian and New Zealand child death statistics 2019* report, prepared on behalf of the members of the Australian and New Zealand Child Death Review and Prevention Group (ANZCDR&PG). This report, along with fact sheets and 17-year data tables, are available at <u>www.qfcc.qld.gov.au/about-us/</u><u>publications/child-death-reports-and-data</u>.

In 2022, the QFCC published 2 papers arising from a study of filicide data in the QFCC's Child Death Register the *Final Report – A study of indicators of red flags for fatal child assault and neglect in Queensland* and the summary paper *Taking lives – A Queensland study on parents who kill their children*.⁷⁸

QFCC submissions

During 2021–22, the QFCC used information in the Queensland Child Death Register to provide advice and recommendations in relation to the following consultations:⁷⁹

- Australian Competition and Consumer Commission's (ACCC) review of infant inclined products. The QFCC supported proposals to introduce mandatory safety standards and information standards
- ACCC confidential discussion paper on helium balloon kit safety. The QFCC recommended improved safety measures and product labelling
- Department of Infrastructure, Transport, Regional Development, Communications and the Arts review of vehicle reversing aid technologies. The QFCC supported the introduction of a new Australian Design Rule, which requires rear visibility and detection devices be fitted into new vehicles
- ACCC's assessment of regulatory options to prevent injury and death from toppling furniture. The QFCC supported the combination of a mandatory safety standard and information standard
- Workplace Health and Safety Queensland's consultation on quad bikes and side-by-side vehicles used in the workplace. The QFCC supported the introduction of regulatory changes for safety requirements including age restrictions on drivers and passengers.

77 www.parliament.qld.gov.au/Work-of-the-Assembly/Tabled-Papers/Online-Tabled-Papers

78 www.qfcc.qld.gov.au/node/274

⁷⁹ QFCC submissions can be at www.qfcc.qld.gov.au/sector/policy/policy-submissions

Supporting youth suicide prevention

The QFCC continued to monitor and support prevention of suicide deaths of children and young people. This included a crucial information sharing process with the Department of Education to inform student wellbeing policy development and support suicide postvention in affected schools. The QFCC contributed to suicide prevention by:

- increasing awareness across government of trends and spikes in suicide numbers
- reporting on situational circumstances and risk factors affecting young people
- providing suicide data to government agencies to support development of mental health and wellbeing initiatives.

Safer infant sleep

The QFCC contributed to SUDI prevention projects resulting in publications released in mid-2022:

- the Queensland Paediatric Quality Council (QPQC) released the <u>Queensland Clinical Guidelines: Safer infant sleep</u>, providing safer sleep recommendations for infant care practices that have been associated with a reduced risk of SUDI⁸⁰
- the *Best practice guide for the design of safe infant sleeping environments*, developed by the Infant Safe Sleeping Working Group to provide a guide for industry to reduce the risk of death and life-threatening injuries in infants.⁸¹

Researcher access to child death data

A key strategy to support child death and injury prevention is to make data held in the Child Death Register available for research, public education, policy development and program design. Data from the comprehensive dataset is available at no cost to genuine researchers.⁸² Applications to obtain data can be made by emailing child_death_prevention@qfcc.qld.gov.au.

In 2021–22, the QFCC responded to 21 external requests for Child Death Register data. Data provided to genuine researchers may be either aggregated or presented as confidential unit records. Table 9.1 gives an overview of the key projects and agencies for which data was provided.

Type of data	Requesting agency	Purpose			
Aboriginal and	Queensland Government Statistician's Office	Inform Aboriginal and Torres Strait Islander life expectancy analysis			
deaths		Closing the Gap reporting on suicide deaths of childre and young people			
	Kidsafe Queensland Inc.	Prepare presentation for child protection officers on preventable child deaths			
Drowning	Queensland Building and Construction Commission	Prepare presentation on pool barrier compliance for local government, pool safety inspectors and building certifiers			
	Royal Life Saving Society Australia	Inform the National Drowning Report and drowning prevention research and advocacy			

Table 9.1: Child death data requests by agency and purpose, 2021–22

80 www.childrens.health.qld.gov.au/chq/health-professionals/qpqc

81 www.productsafety.gov.au/about-us/publications/best-practice-guide-for-the-design-of-safe-infant-sleeping-environments

82 Under section 28 of the FCC Act, the QFCC is able to provide child death information for genuine research, defined as research relating to childhood mortality or morbidity with a view to increasing knowledge of incidence, causes and risk factors relating to same. Genuine research includes policy and program initiatives to reduce child death or injury.

Type of data	Requesting agency	Purpose		
	ACT Children and Young People Death Review Committee	Inform ACT reporting on deaths of residents in other jurisdictions		
Interstate residents	NT Child Death Review and Prevention Committee	Inform NT reporting on deaths of residents in other jurisdictions		
	Safer Care Victoria	Inform Victorian reporting on deaths of residents in other jurisdictions		
Children known to the child protection system	Child Death Review Board	Provide child death and coronial information required to undertake case reviews		
	Australian Competition and Consumer Commission	Inform a review of safety standards in relation to toppling furniture		
	(ACCC)	Inform issues papers reviewing infant inclined products and the risks associated with infant sleep products		
		Inform the Keeping Baby Safe campaign and Know Your First Steps website and social media		
Non-intentional injury and SUDI	Queensland Injury Surveillance Unit	Support ACCC research into potential safety issues associated with sleep aid toys in the sleeping environment for infants and toddlers		
		Information for the national car restraint standards advisory group in relation to reducing the risk of heat stress deaths in vehicles		
	University of Sunshine Coast	Inform a report responding to Australian Children's Education & Care Quality Authority guidelines on Safe Sleep and Rest Policy for use in childcare centres around Australia		
	Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships	Inform development of support services in Aboriginal and Torres Strait Islander communities		
Suicide	First Children and Families Board	Inform understanding suicide risk for Aboriginal and Torres Strait Islander children and young people and children known to the child protection system		
	Local Government Association of Queensland	Contribute to youth suicide prevention policy and advocacy to support First Nations councils		

Table 9.1 (continued): Child death data requests by agency and purpose, 2021–22

Notes: Not all requests are shown.

Participation in state and national advisory groups

QFCC officers participated in the following advisory bodies during 2021–22:

- Australian and New Zealand Child Death Review and Prevention Group
- Consumer Product Injury Research Advisory Group
- Interim Queensland Government Suicide Prevention Network
- QPQC Infant Mortality Sub-Committee
- QPQC Steering Committee
- Queensland Government Births and Deaths Working Group
- Road Safety Research Network
- SUDI multiagency advisory meeting.

Child death prevention framework: Safer pathways through childhood

In 2022 the QFCC launched *Safer pathways through childhood*.⁸³ The framework, designed to maximise the impact of the QFCC's legislated child death prevention functions, provides a roadmap for the QFCC's child death prevention activities over the next 5 years (2022–27).

Working collaboratively with our stakeholders, each year the QFCC will develop a program of work intended to address the following focus areas:

- the influence of family-level adversity across all causes of child death
- origins and impact of risk-taking behaviour
- guidelines for supervision
- barriers to help-seeking and access to services
- advancements in regulation and product safety
- improved data for First Nations children
- impacts of COVID-19
- preventing youth suicide
- certification and classification of sudden unexpected death in infancy
- deaths from preventable natural causes.

In addition to fulfilling our legislative obligations the QFCC will, in consultation with stakeholders, identify specific prevention activities to address priority areas each year. The action plan for the coming year can be found on the <u>Safer pathways</u> webpage.⁸⁴

83 www.qfcc.qld.gov.au/safer-pathways-through-childhood

84 www.qfcc.qld.gov.au/safer-pathways-through-childhood

Appendices

Appendices available online

www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

Appendix B — Methodology

Appendix C — Abbreviations and definitions

Appendix D — Cause of death by ICD-10 mortality coding classification

Appendix E — Inclusions within the other non-intentional injury category

Appendix F — Suicide classification model

Appendix G — Fatal assault and neglect definitions and screening criteria

Appendix A Summary tables on child deaths in Queensland

All child deaths

Table A.1: Summary of deaths of children and young people in Queensland, 2017–22

	2017–18	2018–19	2019–20	2020–21	2021–22	5-year average
	п	п	п	п	п	Rate per 100,000
All deaths						
Deaths of children 0–17 years	385	386	378	398	410	33.4
Cause of death						
Natural causes	289	267	260	278	259	23.1
External causes	72	92	77	87	84	7.0
Transport	24	22	21	31	33	2.2
Drowning	10	16	13	10	9	1.0
Other non-intentional injury-related death	14	8	9	13	16	1.0
Suicide	24	37	21	30	20	2.3
Fatal assault and neglect	0	9	13	3	6	0.5
Unexplained causes	24	27	39	27	14	2.2
Cause of death pending	0	0	2	6	53	1.0
Sudden Unexpected Death in Infancy (SUDI)						
Sudden unexpected infant deaths	33	26	35	34	44	0.6ª
Sex ^b						
Female	163	162	163	185	176	29.9
Male	221	224	214	213	232	37.0
Age category						
Under 1 year	242	220	246	239	250	3.9 ^a
1–4 years	41	50	42	41	44	17.4
5–9 years	21	27	17	19	24	6.4
10–14 years	31	32	28	31	43	9.8
15–17 years	50	57	45	68	49	28.6
Aboriginal and Torres Strait Islander status						
Aboriginal and Torres Strait Islander	73	65	66	73	70	71.7
Non-Indigenous	312	321	312	325	340	30.0
Known to the child protection system						
Known to Child Safety	48	58	53	53	69	61.0

Data source: Queensland Child Death Register (Aug 2022)

a Rate per 1,000 live births for SUDI and age under 1 year.

b Excludes deaths of children whose sex was indeterminate.

1. Data presented are current in the Queensland Child Death Register as at August 2022 and thus may differ from previously published reports.

2. Rates are averaged over 5 years and calculated per 100,000 children (in the sex/age/Indigenous status) in Queensland, excepting SUDI and age under 1 year which are per 1,000 births.

3. SUDI is a research category applying to infants only, where the death was sudden with no immediately obvious cause. The category is not a cause of death, which will be counted within the relevant cause, and will not add to the total.

Aboriginal and Torres Strait Islander children

Table A.2: Summary of deaths of Aboriginal and Torres Strait Islander children and young people in Queensland,2017–22

	2017–18	2018–19	2019–20	2020–21	2021–22	5-year average			
	п	п	п	п	п	Rate per 100,000			
Aboriginal and Torres Strait Islander deaths									
Total	73	65	66	73	70	71.7			
Cause of death									
Natural causes	48	40	40	47	32	42.8			
External causes	19	19	19	16	21	19.4			
Transport	7	3	4	3	4	4.3			
Drowning	2	3	1	4	3	2.7			
Other non-intentional injury-related death	5	2	4	4	5	4.1			
Suicide	5	10	7	4	7	6.8			
Fatal assault and neglect	0	1	3	1	2	1.4			
Unexplained causes	6	6	7	6	3	5.8			
Cause of death pending	0	0	0	4	14	3.7			
Sudden Unexpected Deaths in Infancy (SUD	I)								
Sudden unexpected infant deaths	10	5	9	12	14	1.5ª			
Age category									
Under 1 year	46	37	45	50	35	6.5ª			
1–4 years	8	9	6	8	12	39.0			
5–9 years	5	4	1	1	4	11.0			
10–14 years	4	6	4	4	7	18.7			
15–17 years	10	9	10	10	12	67.5			

Data source: Queensland Child Death Register (Aug 2022)

a Rate per 1,000 births for SUDI and age under 1 year.

1. Data presented are current in the Queensland Child Death Register as at August 2022 and thus may differ from previously published reports.

2. Rates are averaged over 5 years and calculated per 100,000 children (in the sex/age/Indigenous status) in Queensland, excepting rates for SUDI and age under 1 year which are per 1,000 live births.

3. SUDI is a research category applying to infants only, where the death was sudden with no immediately obvious cause. The category is not a cause of death, which will be counted within the relevant cause, and will not add to the total.

Children known to Child Safety

Table A.3: Summary of deaths of children known to Child Safety in Queensland, 2017–22

	2017-18	2018–19	2019–20	2020–21	2021–22	5-year average		
	п	п	п	п	п	Rate per 100,000		
Deaths of children known to Child Safety								
Total	48	58	53	53	69	61.0		
Cause of death								
Natural causes	25	22	16	20	22	22.8		
External causes	18	30	27	22	28	27.2		
Transport	5	2	5	5	7	5.2		
Drowning	5	5	2	5	4	4.6		
Other non-intentional injury-related death	6	2	2	6	6	4.8		
Suicide	2	14	8	4	7	7.6		
Fatal assault and neglect	0	7	10	2	4	5.0		
Unexplained causes	5	6	9	7	2	6.3		
Cause of death pending	0	0	1	4	17	4.8		
Sudden Unexpected Deaths in Infancy (SUD	I)							
Sudden unexpected infant deaths	10	8	9	13	11	2.3ª		
Age category								
Under 1 year	20	18	18	24	22	4.5 ª		
1–4 years	11	12	16	9	19	72.4		
5–9 years	5	5	2	5	4	15.5		
10–14 years	3	8	7	8	11	26.6		
15–17 years	9	15	10	7	13	76.2		

Data source: Queensland Child Death Register (Aug 2022)

a Rate per 1,000 aged under 1 year for SUDI and age under 1 year.

1. Data presented are current in the Queensland Child Death Register as at August 2022 and thus may differ from previously published reports.

2. 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 Child Safety Services within the 1-year period prior to their death.

3. Five-year average rates of death for children known to Child Safety use as a denominator the 5-year average number of children aged 0–17 years who were known to Child Safety, through either being subject to a child concern report, notification, investigation and assessment, ongoing intervention, orders or placement, in the 1-year period prior to the reporting period.

4. SUDI is a research category applying to infants only, where the death was sudden with no immediately obvious cause. The category is not a cause of death, which will be counted within the relevant cause, and will not add to the total.

Natural causes

Table A.4: Summary of deaths from natural causes of children and young people in Queensland, 2017–22

	2017–18	2018–19	2019–20	2020-21	2021–22	5-year average			
	п	п	п	п	п	Rate per 100,000			
All natural cause deaths									
Disease and morbid condition	289	267	260	278	259	23.1			
Category									
Perinatal conditions	133	130	132	129	118	11.0			
Congenital anomalies	70	61	80	74	78	6.2			
Neoplasms	21	25	17	24	27	1.9			
Infections ^a	28	10	10	8	11	1.1			
Other disease or morbid conditions NEC	37	41	21	43	25	2.9			
Sex ^b									
Female	125	116	109	130	124	21.2			
Male	163	151	150	148	133	24.9			
Age category									
Under 1 year	215	196	210	203	203	3.4 ^c			
1–4 years	23	27	17	23	16	8.5			
5–9 years	14	14	9	13	12	3.7			
10-14 years	22	17	14	16	16	5.1			
15–17 years	15	13	10	23	12	7.8			
Aboriginal and Torres Strait Islander Status									
Aboriginal and Torres Strait Islander	48	40	40	47	32	42.8			
Non-Indigenous	241	227	220	231	227	21.4			
Geographical area of usual residence (ARIA-	-)								
Remote and very remote	8	6	11	4	7	22.4			
Outer regional	46	44	37	57	38	27.1			
Inner regional	62	37	49	43	48	20.8			
Major cities	161	171	157	171	157	21.9			
Socio-economic status of usual residence (S	EIFA)								
Q1 (most disadvantage)	73	69	61	68	56	29.8			
Q5 (least disadvantage)	41	53	39	45	23	16.2			
Known to the child protection system									
Known to Child Safety	25	22	16	20	22	22.8			

Data source: Queensland Child Death Register (Aug 2022)

a 'Infections' is a hybrid category composed of ICD-10 Chapter I, Certain infectious and parasitic diseases; ICD-10 Chapter VI, Diseases of the nervous system, codes G00–G09 only; ICD-10 Chapter X, Diseases of the respiratory system, codes J00–J22 only, Chapter XXII, Codes for special purposes, codes U07.1–U07.2 only.

b Excludes the deaths of 1 infant of indeterminate sex in 2017–18 and 2019–20 each.

c Rate per 1,000 live births for age under 1 year.

NEC Not elsewhere classified.

1. Data presented are current in the Queensland Child Death Register as at August 2022 and thus may differ from previously published reports.

2. Rates are averaged over 5 years and calculated per 100,000 children (in the sex/age/Indigenous status) in Queensland, excepting for age under 1 year which is per 1,000 live births.

3. ARIA+ and SEIFA exclude the deaths of children whose usual place of residence was outside Queensland.

Transport

Table A.5: Summary of transport-related deaths of children and young people in Queensland, 2017–22

	2017–18	2018–19	2019–20	2020-21	2021–22	5-year average
	п	п	п	п	п	Rate per 100,000
All transport deaths						
Transport	24	22	21	31	33	2.2
Incident type						
Motor vehicle	15	12	12	19	20	1.3
Pedestrian	7	7	6	4	5	0.5
Low-speed vehicle run-over	5	3	2	3	4	0.3
Motorcycle	0	2	1	5	4	0.2
Quad bike	1	0	1	2	2	0.1
Watercraft	1	0	0	0	0	*
Bicycle	0	1	1	1	0	*
Other	0	0	0	0	2	*
Sex						
Female	7	9	7	14	9	1.6
Male	17	13	14	17	24	2.9
Age category						
Under 1 year	1	0	0	1	0	*
1–4 years	7	5	2	5	7	2.1
5–9 years	3	6	3	4	5	1.2
10–14 years	3	4	5	5	9	1.6
15–17 years	10	7	11	16	12	6.0
Aboriginal and Torres Strait Islander status						
Aboriginal and Torres Strait Islander	7	3	4	3	4	4.3
Non-Indigenous	17	19	17	28	29	2.0
Geographical area of usual residence (ARIA	.+)					
Remote and very remote	4	1	1	4	1	6.9
Outer regional	4	3	9	8	10	4.2
Inner regional	9	10	5	9	10	3.7
Major cities	7	8	5	9	10	1.0
Socio-economic status of usual residence (SEIFA)					
Q1 (most disadvantage)	7	6	4	13	5	3.2
Q5 (least disadvantage)	2	3	5	0	0	0.8
Known to the child protection system						
Known to Child Safety	5	2	5	5	7	5.2

Data source: Queensland Child Death Register (Aug 2022)

* Rates have not been calculated for numbers between 1-3.

1. Data presented are current in the Queensland Child Death Register as at August 2022 and thus may differ from previously published reports.

2. Low-speed vehicle run-over is a subset of the 'pedestrian' category; hence, summing categories will exceed the total.

3. Quad bike includes side-by-side vehicles.

4. The 'other' incident type category can include deaths involving aircraft, horse riding and specialised industrial vehicles.

5. Rates are averaged over 5 years and calculated per 100,000 children (in the sex/age/Indigenous status) in Queensland.

6. ARIA+ and SEIFA exclude the deaths of children whose usual place of residence was outside Queensland.

Drowning

Table A.6: Summary of drowning deaths of children and young people in Queensland, 2017–22

	2017-18	2018–19	2019–20	2020-21	2021–22	5-year average
	п	п	п	п	п	Rate per 100,000
All drowning deaths						
Drowning	10	16	13	10	9	1.0
Incident type						
Pool	6	8	6	2	4	0.4
Private pool	6	6	5	2	3	0.4
Public pool	0	2	1	0	1	0.1
Non-pool drownings	4	8	7	8	5	0.5
Bath	2	2	0	3	0	0.1
Beach or ocean	0	1	1	0	1	*
Dynamic waterway	1	3	2	1	0	0.1
Rural water hazard	1	0	3	3	2	0.2
Static inland waterway	0	2	0	1	1	0.1
Other	0	0	1	0	1	*
Sex						
Female	3	2	8	6	2	0.7
Male	7	14	5	4	7	1.2
Age category						
Under 1 year	1	2	0	2	0	1.6ª
1–4 years	7	6	9	5	6	2.6
5–9 years	2	4	2	1	1	0.6
10–14 years	0	1	0	1	1	*
15–17 years	0	3	2	1	1	0.7
Aboriginal and Torres Strait Islander status						
Aboriginal and Torres Strait Islander	2	3	1	4	3	2.7
Non-Indigenous	8	13	12	6	6	0.8
Geographical area of usual residence (ARIA-	+)					
Remote and very remote	1	1	2	0	0	2.5
Outer regional	3	3	2	3	4	1.8
Inner regional	1	3	4	5	3	1.4
Major cities	5	4	5	2	2	0.5
Socio-economic status of usual residence (S	EIFA)					
Q1 (most disadvantage)	0	4	5	4	5	1.6
Q5 (least disadvantage)	1	1	1	1	0	0.3
Known to the child protection system						
Known to Child Safety	5	5	2	5	4	4.6

Data source: Queensland Child Death Register (Aug 2022)

* Rates have not been calculated for numbers between 1-3.

a Rate per 100,000 births for age under 1 year.

1. Data presented are current in the Queensland Child Death Register as at August 2022 and thus may differ from previously published reports.

2. 'Other' non-pool water hazards include objects containing water and flood-related incidents.

3. Rates are averaged over 5 years and calculated per 100,000 children (in the sex/age/Indigenous status) in Queensland, excepting rates for age under 1 year which are per 100,000 births.

4. ARIA+ and SEIFA exclude the deaths of children whose usual place of residence was outside Queensland.

Other non-intentional injury

Table A.7: Summary of other non-intentional injury-related deaths of children in Queensland, 2017–22

	2017-18	2018–19	2019–20	2020-21	2021–22	5-year average
	п	п	п	п	п	Rate per 100,000
All other non-intentional injury deaths						
Other non-intentional injury	14	8	9	13	16	1.0
Incident type						
Threats to breathing	3	1	2	8	1	0.3
Exposure to inanimate mechanical forces	2	2	3	1	3	0.2
Accidental poisoning	4	3	0	1	3	0.2
Deaths from fire	3	0	1	0	2	0.1
Falls	1	0	0	0	3	0.1
Contact with venomous animals and plants	0	0	1	1	2	0.1
Other incidents	1	2	2	2	2	0.2
Sex						
Female	3	4	2	6	3	0.6
Male	11	4	7	7	13	1.4
Age category						
Under 1 year	1	0	0	4	2	2.3ª
1–4 years	4	3	3	4	3	1.4
5–9 years	1	1	2	1	3	0.5
10–14 years	2	2	1	1	3	0.5
15–17 years	6	2	3	3	5	2.0
Aboriginal and Torres Strait Islander status						
Aboriginal and Torres Strait Islander	5	2	4	4	5	4.1
Non-Indigenous	9	6	5	9	11	0.7
Geographical area of usual residence (ARIA-	+)					
Remote and very remote	1	0	1	2	0	2.5
Outer regional	5	2	3	2	6	2.2
Inner regional	5	1	1	0	1	0.7
Major cities	3	4	3	9	9	0.8
Socio-economic status of usual residence (S	EIFA)					
Q1 (most disadvantage)	6	3	2	5	6	2.0
Q5 (least disadvantage)	2	0	0	2	3	0.6
Known to the child protection system						
Known to Child Safety	6	2	2	6	6	4.8

Data source: Queensland Child Death Register (Aug 2022)

a Rate per 100,000 births for age under 1 year.

1. Data presented are current in the Queensland Child Death Register as at August 2022 and thus may differ from previously published reports.

2. Rates are averaged over 5 years and calculated per 100,000 children (in the sex/age/Indigenous status) in Queensland, excepting rates

for age under 1 year which are per 100,000 births.

3. ARIA+ and SEIFA exclude the deaths of children whose usual place of residence was outside Queensland.

Suicide

Table A.8: Summary of suicide deaths of children and young people in Queensland, 2017–22

	2017–18	2018–19	2019–20	2020-21	2021–22	5-year average			
	п	п	п	п	п	Rate per 100,000			
All suicide deaths									
Suicide ³	24	37	21	30	20	2.3			
Sex									
Female	14	15	6	12	7	4.5			
Male	10	19	15	18	13	5.6			
Age category									
10–17 years	23	37	21	30	19	5.1			
5–9 years	1	0	0	0	1	*			
10–14 years	4	8	6	6	5	1.9			
15–17 years	19	29	15	24	14	11.7			
Aboriginal and Torres Strait Islander status									
Aboriginal and Torres Strait Islander	5	10	7	4	7	15.8			
Non-Indigenous	19	27	14	26	13	4.1			
Geographical area of usual residence (ARIA+)									
Remote and very remote	2	4	3	1	1	17.5			
Outer regional	4	8	4	6	3	6.8			
Inner regional	3	3	5	7	9	5.0			
Major cities	15	21	9	16	7	4.2			
Socio-economic status of usual residence (SEIFA)									
Q1 (most disadvantage)	6	11	7	10	4	7.9			
Q5 (least disadvantage)	1	5	2	4	0	2.0			
Known to the child protection system									
Known to Child Safety	8	2	14	8	4	16.7			

Data source: Queensland Child Death Register (Aug 2022)

* Rates have not been calculated for numbers between 1–3.

1. Data presented are current in the Queensland Child Death Register as at August 2022 and thus may differ from previously published reports.

2. Rates are averaged over 5 years and calculated per 100,000 children (in the sex/age/Indigenous status) in Queensland.

3. Overall suicide rates are calculated per 100,000 children aged 0–17 years in Queensland. All other rates are calculated per 100,000 children aged 10–17 years in Queensland.

4. ARIA+ and SEIFA exclude the deaths of children whose usual place of residence was outside Queensland.

5. 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 Child Safety Services within the 1-year period prior to their death. The denominator for calculating rates is the 5-year average number of children aged 10–17 who were known to Child Safety, through either being subject to a child concern report, notification, investigation and assessment, ongoing intervention, orders or placement, in the 1-year period prior to the reporting period.

6. Data relating to method of death are available to genuine researchers by request.

Fatal assault and neglect

Table A.9: Summary of deaths from assault and neglect of children and young people in Queensland, 2017–22

	2017–18	2018–19	2019–20	2020-21	2021–22	5-year average			
	п	п	п	п	п	Rate per 100,000			
All fatal assault and neglect deaths									
Fatal assault and neglect	0	9	13	3	6	0.5			
Category of fatal assault and neglect									
Intra-familial	0	7	10	2	4	0.4			
Domestic homicide	0	5	3	0	0	0.1			
Fatal child abuse	0	1	3	1	3	0.1			
Fatal neglect	0	0	3	0	1	0.1			
Other intra-familial assault NEC	0	1	1	1	0	*			
Extra-familial	0	2	3	1	2	0.1			
Intimate partner homicide	0	1	0	0	0	*			
Peer homicide	0	0	2	1	2	0.1			
Acquaintance homicide	0	1	1	0	0	*			
Sex									
Female	0	4	6	2	1	0.5			
Male	0	5	7	1	5	0.6			
Age category									
Under 1 year	0	2	4	0	1	2.3ª			
1–4 years	0	4	5	2	2	1.0			
5–9 years	0	2	1	0	1	0.2			
10–14 years	0	0	0	0	0	0.0			
15–17 years	0	1	3	1	2	0.7			
Aboriginal and Torres Strait Islander status									
Aboriginal and Torres Strait Islander	0	1	3	1	2	1.4			
Non-Indigenous	0	8	10	2	4	0.4			
Geographic area of usual residence (ARIA+)									
Remote and very remote	0	0	0	0	0	0.0			
Outer regional	0	1	0	1	2	0.5			
Inner regional	0	5	3	0	2	0.9			
Major cities	0	3	10	2	2	0.5			
Socio-economic status of usual residence (SEIFA)									
Q1 (most disadvantage)	0	4	3	1	3	1.0			
Q5 (least disadvantage)	0	0	3	0	0	*			
Known to the child protection system									
Known to Child Safety	0	7	10	2	4	5.0			

Data source: Queensland Child Death Register (Aug 2022)

* Rates have not been calculated for numbers between 1-3.

a Rate per 100,000 births for age under 1 year.

1. Data presented are current in the Queensland Child Death Register as at August 2022 and thus may differ from previously published reports.

2. Rates are averaged over 5 years and calculated per 100,000 children (in the sex/age/Indigenous status) in Queensland, excepting rates for age under 1 year which are per 100,000 births.

3. ARIA+ and SEIFA exclude the deaths of children whose usual place of residence was outside Queensland.

Unexplained causes

Table A.10: Summary of deaths from unexplained causes of children and young people in Queensland, 2017–22

	2017–18	2018–19	2019–20	2020-21	2021-22	5-year average			
	п	п	п	п	п	Rate per 100,000			
All deaths from unexplained causes									
Unexplained causes	24	27	39	27	14	2.2			
Cause of death									
Sudden Infant Death Syndrome (SIDS)	16	14	22	14	4	23.0			
Undetermined cause (infants)	8	6	10	10	5	12.8			
Undetermined cause (1–17 years)	0	7	7	3	5	0.4			
Sex									
Female	11	9	24	11	9	2.3			
Male	13	18	15	16	5	2.2			
Age category									
Under 1 year	24	20	32	24	9	35 . 9ª			
1–4 years	0	5	5	2	3	1.2			
5–17 years	0	2	2	1	2	0.2			
Aboriginal and Torres Strait Islander status									
Aboriginal and Torres Strait Islander	6	6	7	6	3	5.8			
Non-Indigenous	18	21	32	21	11	1.9			
Geographic area of usual residence (ARIA+)									
Remote and very remote	0	2	0	0	0	*			
Outer regional	6	3	5	6	0	2.4			
Inner regional	5	7	8	6	3	2.5			
Major cities	12	15	24	15	10	2.0			
Socio-economic status of usual residence (SEIFA)									
Q1 (most disadvantage)	10	9	11	8	4	3.8			
Q5 (least disadvantage)	2	2	1	2	1	0.6			
Known to the child protection system									
Known to Child Safety	5	6	9	7	2	6.3			

Data source: Queensland Child Death Register (Aug 2022)

* *Rates have not been calculated for numbers between 1–3.*

 $a\;$ Rate per 100,000 births for SIDS, Undetermined causes (<1 year) and age under 1 year.

1. Data presented are current in the Queensland Child Death Register as at August 2022 and thus may differ from previously published reports.

2. Rates are averaged over 5 years and calculated per 100,000 children (in the sex/age/Indigenous status) in Queensland, excepting rates SIDS, Undetermined causes (<1 year) and age under 1 year which are per 100,000 live births.

3. ARIA+ and SEIFA exclude the deaths of children whose usual place of residence was outside Queensland. The denominator for calculating rates is the estimated population aged under 1 year by ARIA/SEIFA category.

Sudden Unexpected Deaths in Infancy

Table A.11: Summary of SUDI infant deaths in Queensland 2017-22

	2017–18	2018–19	2019–20	2020-21	2021–22	5-year average			
	п	п	п	п	п	Rate per 1,000			
All Sudden Unexpected Deaths in Infancy (SUDI)									
SUDI (infants)	33	26	35	34	44	0.6			
Cause of death									
Explained causes	9	6	3	5	4	0.1			
Unrecognised infant illness	9	6	2	1	3	0.1			
Sleep accident	0	0	0	4	1	0.0			
Fatal assault	0	0	1	0	0	*			
Unexplained causes	24	20	32	24	9	0.4			
SIDS	16	14	22	14	4	0.2			
Undetermined	8	6	10	10	5	0.1			
Cause of death pending	0	0	0	5	31	0.1			
Sex									
Female	13	9	21	17	22	0.6			
Male	20	17	14	17	22	0.6			
Aboriginal and Torres Strait Islander status									
Aboriginal and Torres Strait Islander	10	5	9	12	14	1.5			
Non-Indigenous	23	21	26	22	30	0.4			
Geographic area of usual residence (ARIA+)									
Remote and very remote	0	1	0	1	2	0.4			
Outer regional	7	2	5	8	9	0.8			
Inner regional	10	7	6	7	9	0.7			
Major cities	15	16	22	18	23	0.5			
Socio-economic status of usual residence (SEIFA)									
Q1 (most disadvantage)	12	10	12	12	24	1.2			
Q5 (least disadvantage)	4	3	1	3	1	0.2			
Known to the child protection system									
Known to Child Safety	10	8	9	13	11	2.3			

Data source: Queensland Child Death Register (Aug 2022)

* Rates have not been calculated for numbers between 1–3.

1. Data presented are current in the Queensland Child Death Register as at August 2022 and thus may differ from previously published reports.

2. Rates are averaged over 5 years and calculated per 1,000 births (in the sex/Indigenous status) in Queensland.

3. ARIA+ and SEIFA exclude the deaths of children whose usual place of residence was outside Queensland.

4. 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 Child Safety Services within the 1-year period prior to their death.




