Annual Report

Deaths of children and young people Queensland 2023–24

Queensland Family & Child Commission

Queensland Government

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 2023 to 30 June 2024. 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.

Accessibility

The Queensland Government is committed to providing accessible services to Queenslanders from all culturally and linguistically diverse backgrounds. If you have difficulty understanding this report, you can contact Translating and Interpreting Service National on 13 14 50 to arrange for an interpreter to effectively explain it to you. Local call charges apply if calling within Australia; higher rates apply from mobile phones and payphones.

Contact for enquiries

Queensland Family and Child Commission
Level 8, 63 George Street
PO Box 15217, Brisbane City East QLD 4002

Email: child_death_prevention@qfcc.qld.gov.au
Website: www.qfcc.qld.gov.au

Copyright

ISSN: 1833-9522 (Print)
ISSN: 1833-9530 (Online)

Licence

Queensland
Family & Child
Commission

Queensland
Government

31 October 2024

Attorney-General
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 2023 to 30 June 2024, with a particular focus on external (non-natural) causes.

Yours sincerely,

Luke Twyford
Principal Commissioner
Queensland Family and Child Commission

Level 8, 63 George Street
Brisbane Qld 4000
PO Box 15217
Brisbane City East Qld 4002
Telephone 07 3900 6000
Facsimile 07 3900 6050
Website **qfcc.qld.gov.au**

Contents

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 Child Safety, Seniors and Disability Services; 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 Community Safety is also acknowledged as administrator of the National Coronial Information System.

The QFCC would like to acknowledge the contribution of data from other Australian 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.

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

Principal Commissioner's message

The death of a child is a profound loss that reverberates through families, communities, and our society. Each life lost is a reminder of the importance of safeguarding the health and well-being of Queensland's children.

In the 12 months to 30 June 2024, the deaths of 422 children and young people aged 0–17 years were registered in Queensland. My deepest sympathies go out to the families and friends affected by these losses.

This year marks my third year as Principal Commissioner, and during this time, the details of more than 1,200 child deaths have crossed my desk. It's a sobering reminder of the importance of the Queensland Child Death Register, which has documented over 9,000 child deaths in its 20 years of operation. The Register is not merely an administrative tool, but a critical resource driving change. By analysing this data, we identify trends, support research, and inform policy improvements to create safer homes, roads, and systems of care.

Additionally, our data is driving significant safety initiatives. For example, the Australian Competition and Consumer Commission has introduced new safety standards for infant sleep products, informed by our child death data. The Department of Transport and Main Roads also launched child car restraint guides, benefiting from our insights on road crash data.

In partnership with the Queensland Paediatric Sepsis Program, we completed Australia's first population-based study on childhood sepsis deaths. This work has already prompted positive responses from key government agencies, and we are committed to ensuring its recommendations translate into real-world practice and policy.

We were also privileged to host the Australia and New Zealand Child Death Review and Prevention annual conference for the second consecutive year, fostering collaboration among professionals in child death research, review, and prevention.

These efforts highlight the importance of child death research in creating safer environments for children and ensuring they have the opportunity to lead healthy, fulfilling lives.

Kind regards

Luke Twyford
Principal Commissioner
Queensland Family and Child Commission

Executive summary

In the 12-month period from 1 July 2023 to 30 June 2024, the deaths of 422 children and young people aged 0–17 years were registered in Queensland.[1]

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 include suicide and fatal assault and neglect.

Child deaths in Queensland, 2023–24

422
child deaths in Queensland 2023–24*

314
children died of **natural causes** such as congenital and perinatal conditions

30
children had a cause of death that was **not yet determined** at the time of reporting

70
children died from **external causes**, including:

- **20** from transport incidents
- **10** from drowning
- **19** from other non-intentional injuries
- **19** from suicide
- **2** from fatal assault and neglect

8
children's deaths remained **unexplained**[2] even after comprehensive investigation:

- **7** from sudden infant death syndrome (SIDS)
- **1** from causes which could not be determined

27 infant deaths were in the research category **sudden unexpected deaths in infancy** (SUDI)

** By date of death registration.*

Recent increase in natural cause deaths

The 314 deaths from natural causes in 2023–24 was the second highest number in an 8-year period which contributed to the high total number of child deaths in the period (422). In contrast the 70 deaths from external causes in 2023–24 was the lowest since 2015–16 and second lowest for any year since 2004–05. The largest contributor to the increase in natural causes was deaths from perinatal conditions. Further analysis found that this increase primarily occurred across two underlying causes of death: disorders related to short gestation and low birth weight, not elsewhere classified (P05–P08); and other conditions originating in the perinatal period (P90–P96).

The increase does not appear to be due to deaths from coronavirus (COVID-19)—only 5 child deaths have been directly attributed to COVID-19 in Queensland—although the pandemic may have had indirect impacts on child health and mortality.

1 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.

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

Trends in child mortality

Notwithstanding the increased number of child deaths in the last 2 years, there has been an overall decrease in child mortality rates since the Child Death Register commenced operation in 2004 (down 2.0% per year on average). The trend has been driven, largely, by decreases in deaths from natural causes.

Transport-related child mortality has decreased 3.4% per year on average. However, higher numbers of transport deaths in the previous 3 years have seen these rates begin to increase. There were 20 transport-related deaths in 2023–24.

A slowly increasing trend in the rate of youth suicide is evident over time, however, the numbers have decreased in the last 3 years. Nineteen suicides were recorded in the last year, continuing to be below the higher 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.

Sudden unexpected deaths in infancy (SUDI) continue to represent a considerable proportion of infant deaths. There were 27 sudden unexpected infant deaths in Queensland in 2023–24, considerably lower than 2022–23 (40). This is the lowest number in 5 years and the second lowest for any year since 2004–05.

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
Infants	0–27 days	Perinatal conditions	Congenital anomalies	SIDS and undetermined causes
	28–364 days	SIDS and undetermined causes	Congenital anomalies	Perinatal conditions
	1–4 years	Cancers and tumours	Drowning	Transport
	5–9 years	Cancers and tumours	Nervous system diseases	Transport
	10–14 years	Suicide	Cancers and tumours	Transport
	15–17 years	Suicide	Transport	Cancers and tumours

** In the 5-year period 2019–20 to 2023–24.*

Vulnerable groups

Some children are more vulnerable to experiencing adversity—including experiences that increase risk of death—than others. Aboriginal and Torres Strait Islander children, and children who are known to the child protection system (Child Safety[3]), are consistently and significantly over-represented in child mortality statistics.

Aboriginal and Torres Strait Islander children were over-represented in child deaths. Ninety-one deaths in 2023–24 were of Aboriginal and Torres Strait Islander children. Of these, 67 died from natural causes (diseases and morbid conditions), 11 from external causes, 2 were unexplained deaths and 11 were pending a cause of death at the time of reporting.

3 Department of Child Safety, Seniors and Disability Services.

The mortality rate for Aboriginal and Torres Strait Islander children was 2.6 times higher than for non-Indigenous children (79.8 deaths per 100,000 Aboriginal and Torres Strait Islander children aged 0–17 years, compared with 30.4 deaths per 100,000 non-Indigenous children (5-year average)). For external causes of death specifically, the Aboriginal and Torres Strait Islander mortality rate was 3.1 times the non-Indigenous rate (5-year average).

Fifty-three of the 422 children who died in 2023–24 were known to Child Safety in the 12 months prior to their deaths, a decrease from 72 deaths in 2022–23. Children are considered known to Child Safety if they were the subject of an intake call or intervention in the preceding 12 months. It is important to note that only 4 child deaths occurred for children in care of the child safety system.

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. Children who are at an increased risk of child maltreatment are often from families with higher levels of economic disadvantage, poor parental mental health and problematic substance misuse and social instability, all of which are risk factors for adverse childhood outcomes—including death. The over-representation of children coming to the attention of the child protection system can therefore, at least in part, be explained by the often-multiple risk factors present in these children's lives.

Child death prevention activities

During 2023–24, the QFCC responded to 25 external requests for child death data, including the provision of data for or regarding:

- a coronial investigation into caustic ingestion injuries and consideration of regulating dangerous household products
- potential hazards in infant sleep devices to inform consideration of the Australian cot and portacot standard
- potential hazards in child and infant clothing to inform discussion on industry best practice guides
- drowning prevention research and reporting by the Royal Life Saving Society of Australia.

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
- Australian National Child Death Data Collection Working Group
- Consumer Product Injury Research Advisory Group
- Queensland Government Suicide Prevention Network
- Suicide Prevention Oversight Group
- QPQC Infant Mortality Sub-Committee
- QPQC Steering Committee
- Queensland Government Births and Deaths Working Group
- Road Safety Research Network
- QPQC genetic working group.

The QFCC continued to monitor and support the response to 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.

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 on the QFCC's website: **www.qfcc.qld.gov.au/safer-pathways-through-childhood**

The QFCC worked in partnership with the Queensland Paediatric Sepsis Program at Children's Health Queensland to complete Australia's first population-based study to better understand the true incidence of childhood deaths from sepsis. The ***Queensland paediatric sepsis mortality study*** was released in February 2024 and identifies opportunities for practice improvements that can lead to better identification of sepsis in children.

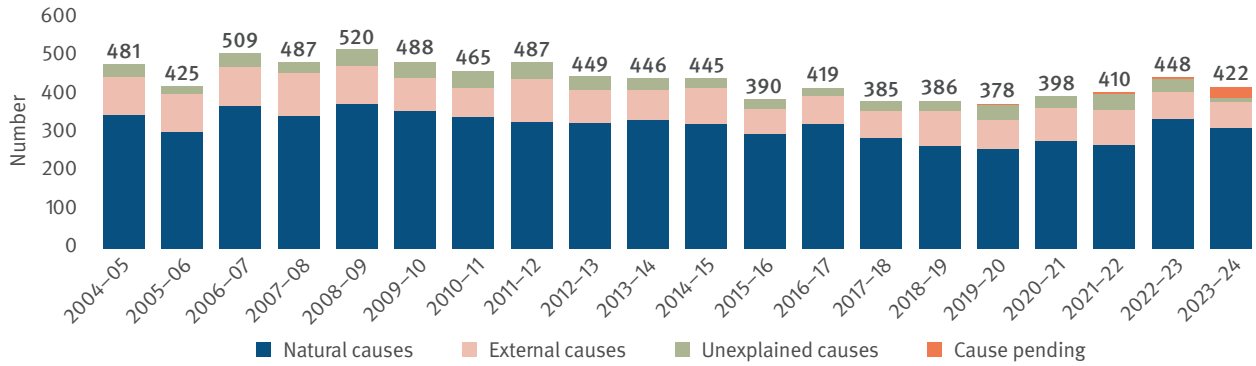
Collaborative partnerships

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.

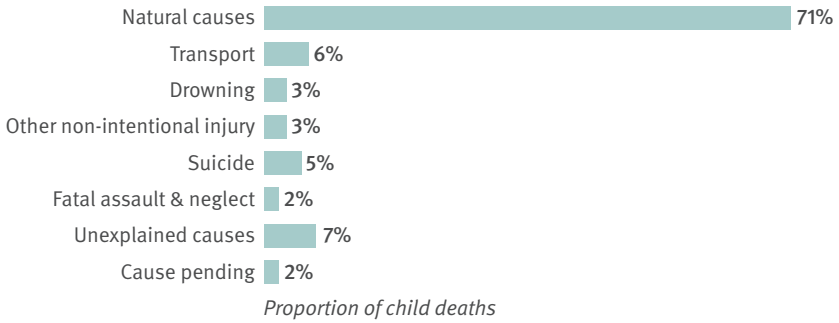
Data for prevention activities	Resources available at www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data
The QFCC works with researchers and government agencies to raise community awareness and develop prevention programs and policies by identifying risk factors, trends and emerging 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**	Annual report resources • 20-year summary tables • fact sheets • Australian child death statistics 2022 • Appendices B to G *Safer pathways through childhood framework 2022–2027*

1 Child deaths in Queensland

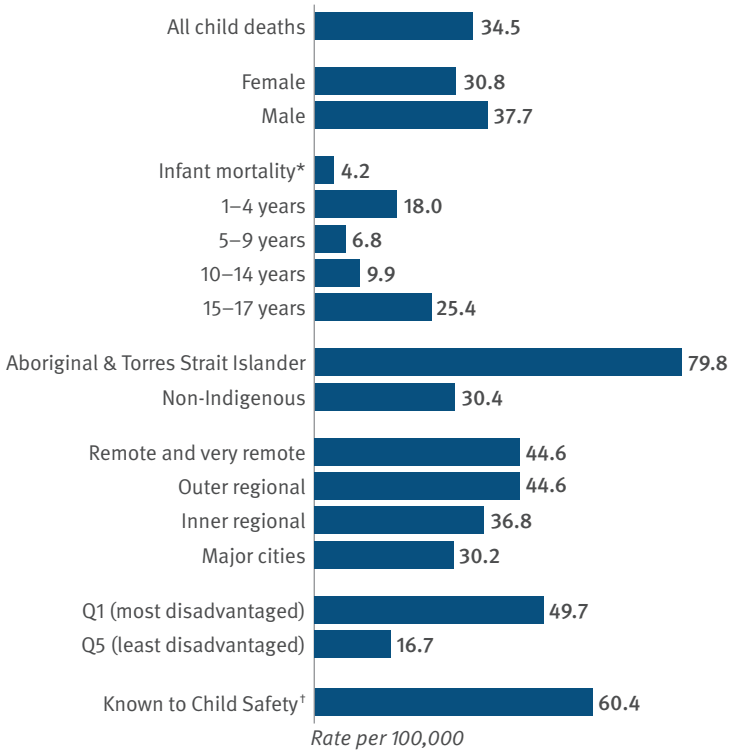
2004 to 2024



5-year summary (2019–2024) | Cause of death category



Demographics



Leading cause by age

0–27 days	**Perinatal conditions** 2.2 per 1,000 births
28–364 days	**SIDS and undetermined** 0.3 per 1,000 births
1–4 years	**Cancers and tumours** 2.8 per 100,000
5–9 years	**Cancers and tumours** 1.8 per 100,000
10–14 years	**Suicide** 2.0 per 100,000
15–17 years	**Suicide** 7.6 per 100,000

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 2023 and 30 June 2024, the deaths of 422 children and young people were registered in Queensland. The child mortality rate over the last 5 years was 34.5 deaths per 100,000 children aged 0–17 years and the infant mortality rate was 4.2 per 1,000 births.[4] Queensland's child mortality rate is high compared with other Australian states and territories. In 2021, Queensland's child mortality rate was 35.2 per 100,000 children aged 0–17 years, a mid to high-range value compared to other Australian jurisdictions which ranged between 23.9 and 72.5 per 100,000.[5]

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 74% of deaths of children and young people in 2023–24, occurring at a rate of 24.6 deaths per 100,000 (5-year average).[6]

Seventy deaths were from external causes (which include transport, drowning, other non-intentional injury, suicide and fatal assault and neglect). External causes accounted for 17% of child deaths in 2023–24 and occurred at a rate of 6.7 deaths per 100,000 (5-year average).

Other than natural causes, the leading causes of deaths in 2023–24 were transport incidents (20), suicide (19), other non-intentional injuries (19), followed by drowning (10). Eight children died from unexplained causes and two children died 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 422 deaths of children and young people in 2023–24, 7% (30 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

For the second year in a row there was a higher number of deaths from natural causes in 2023–24 (314) contributing to the high total child deaths in the period (422). Although the numbers decreased from natural cause and total deaths in 2022–23 (respectively 338 and 448), both years are high compared to the 5 previous years.

The higher natural cause deaths are also in contrast to the 70 deaths from external causes in 2023–24 which was second lowest after 2015–16 (67) for any year since 2004–05.

Child mortality rates, however, have generally declined over time. Broad trends in rates over the period 2004 to 2024 are illustrated in Figure 1.1 using 5-year rolling rates.[7] Key findings on changes between 2004–09 and 2019–24 include:

- the child mortality rate decreased 2.0% per year on average
- the overall trend is driven by decreases in child deaths from natural causes, which constituted the majority of child deaths, and decreased by 2.0% per year on average
- deaths from external causes decreased by 2.4% per year on average.[8]

4 For a summary of the population data used to calculate rates, see **Appendix B—Methodology** (available at **www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data**).

5 QFCC (2024) Australian and New Zealand child death statistics 2021. **www.qfcc.qld.gov.au/sector/child-death/child-death-statistics-anz**

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

7 Tables with data for 2004–2024 are available online at **www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data**

8 Average annual changes between 2004–09 and 2019–24 assume a linear change between the 2 periods.

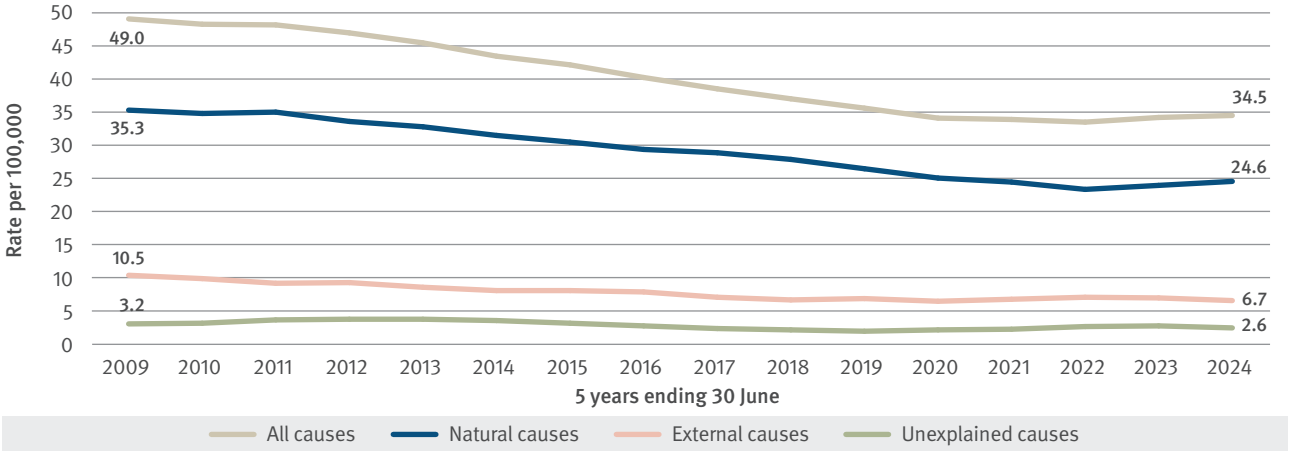
Five-year rolling mortality rates for external causes from 2004 to 2024 are illustrated in Figure 1.2. Transport had been the leading external cause of child death up until 2016, with rates at least twice those for other external causes. The transport mortality rate decreased 3.4% per year on average between 2004–09 and 2019–24. Notwithstanding the overall decrease since 2004, higher numbers of transport deaths especially in 2020 to 2023 have led to the rates increasing more recently.

In contrast, the rate of suicide has slowly increased over the period (up 0.6% per year on average), such that between 2013–17 and 2019–24 the rates of suicide and transport deaths have been at similar levels. High numbers of suicides recorded in 2018–19 and 2020–21 (37 and 30 respectively) contributed to an increase in rates, but with lower numbers in the last 3 years the suicide rate has decreased in the most recent period.

Rates of deaths from drowning, other non-intentional injury and fatal assault and neglect decreased between 2004–09 and 2019–24, with average annual decreases of 3.1%, 2.1% and 2.2% respectively.

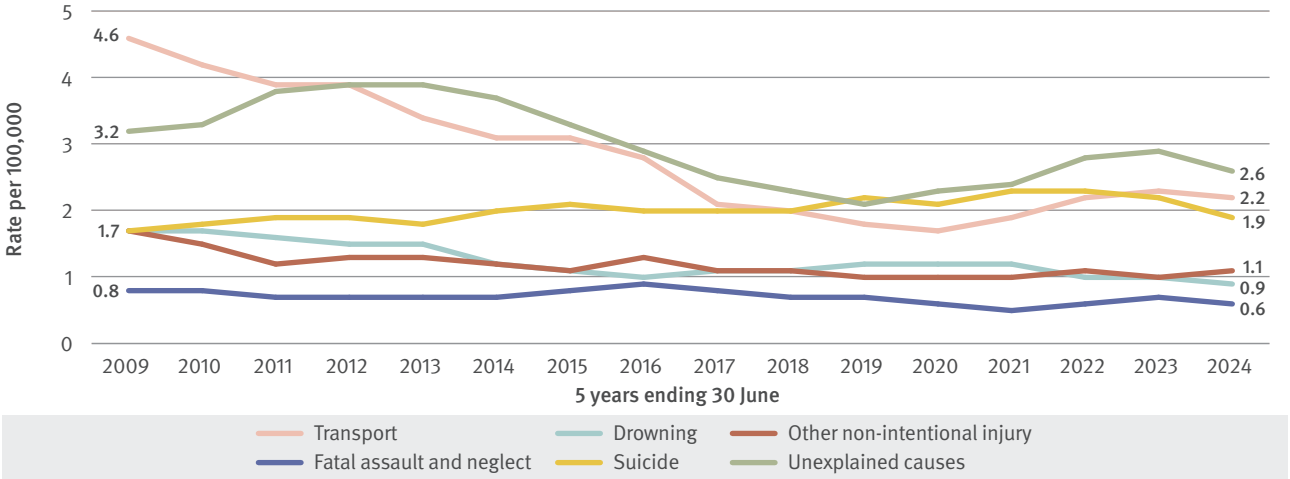
The mortality rate for deaths from unexplained causes is also illustrated on Figure 1.2. Between 2004–09 and 2019–24 the rate decreased by 1.3% per year on average. Almost all of this group are infant deaths certified as sudden infant death syndrome (SIDS) or undetermined causes. The dip in numbers and rates in the most recent periods is most likely due to the deaths which are pending a cause at the time of reporting, as opposed to an actual decrease.

Figure 1.1: Child deaths by major cause group (5-year rolling rate), 2004–09 to 2019–24



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

Figure 1.2: External-cause deaths by primary cause (5-year rolling rate), 2004–09 to 2019–24



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

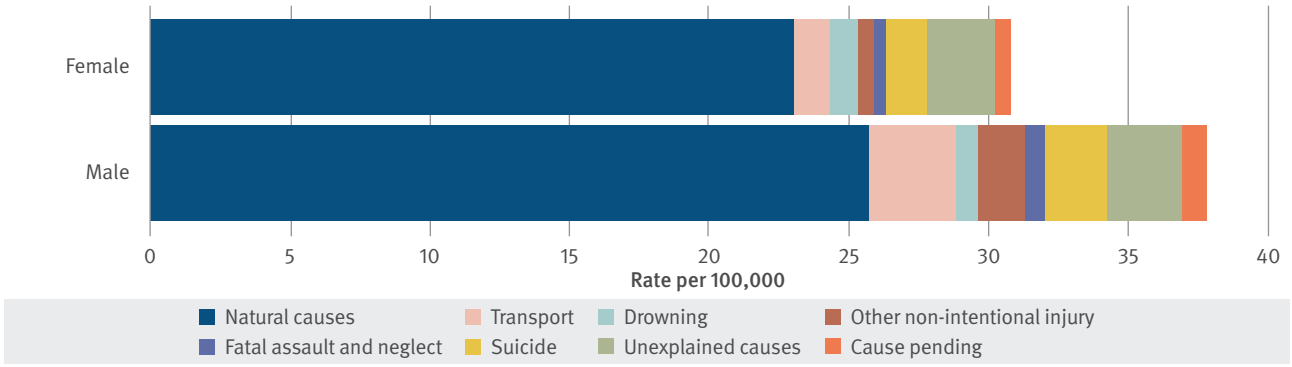
Demographics

Sex

In 2023–24, 57% of deaths were male children while 41% were female children. Eight deaths (1.9%) were infants of indeterminate sex.[9] The 5-year mortality rates per 100,000 population aged 0–17 years were 37.7 for males and 30.8 for females.

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.

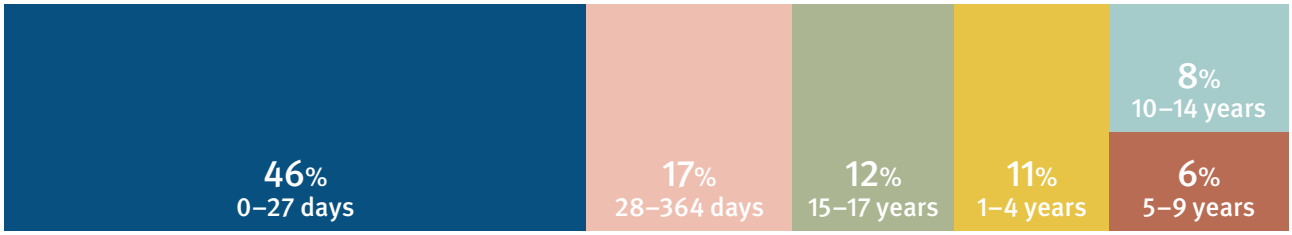
Figure 1.3: Deaths by sex and cause of death (rate), 2019–20 to 2023–24



Age

Figures 1.4 to 1.6 reveal the considerable differences in child deaths by age and cause. As shown in Figure 1.4, over the last 5 years, 46% 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).

Figure 1.4: Deaths by age (proportion), 2019–20 to 2023–24



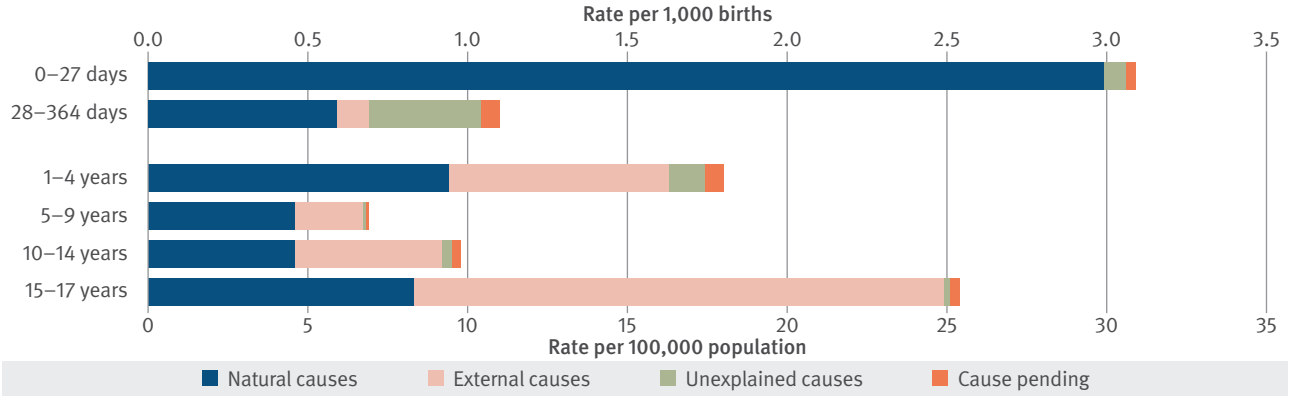
Notes: Percentages may not add to 100 due to rounding.

In Figure 1.5, 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 3.0 natural-cause deaths per 1,000 live births compared with the total mortality rate of 3.1 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 9.4 per 100,000 while the total mortality rate was 18.0 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 (16.6 external-cause deaths per 100,000 and 25.4 total deaths per 100,000) and 1–4 years (6.9 external-cause deaths per 100,000 and 18.0 total deaths per 100,000).

9 Arises in births of extreme prematurity.

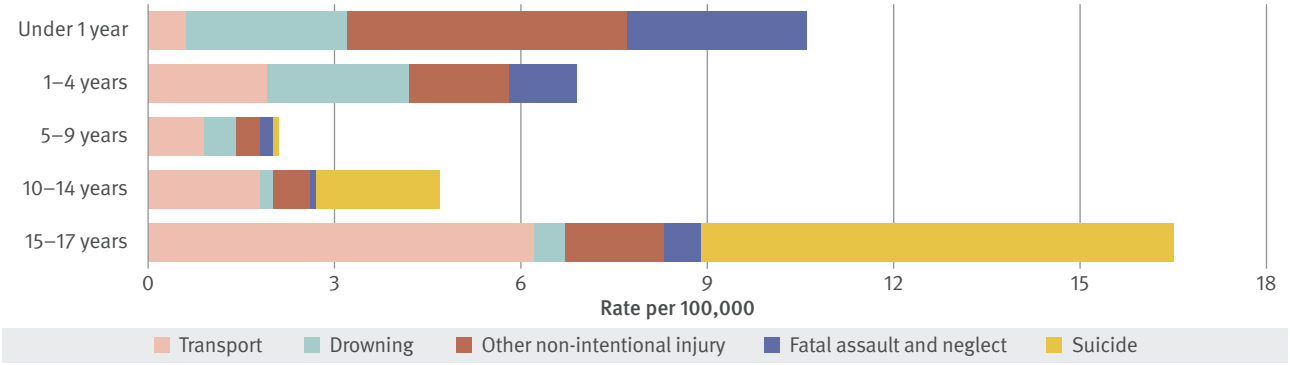
Figure 1.5: Deaths by age and major cause group (rate), 2019–20 to 2023–24



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.

Patterns in rates of external-cause deaths by age are indicated in Figure 1.6. Children aged 15–17 years and infants under 1 year had the highest rates of death from external causes, followed by children aged 1–4 years. Suicide was the leading external cause for children aged 10–14 and 15–17 years, while drowning was the leading external cause for children aged 1–4 years. The leading external causes for infants under 1 year were other non-intentional injuries, fatal assault and neglect and drowning.

Figure 1.6: External-cause deaths by age (rate), 2019–20 to 2023–24



Leading causes of death

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 Related Health Problems, tenth revision* (ICD-10). Further detail on causes of death by age can be found in **Appendix D** (available at **www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data**)

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).

Cancers and tumours and transport incidents were among the top 3 leading causes for each age category from 1–17 years. Cancers and tumours were the leading cause of death for children aged 1–4 years and 5–9 years.

Suicide and transport were leading causes of death for children aged 15–17 years and for those aged 10–14 years.

Young children aged 1–4 years are more vulnerable to external causes of death. After cancers and tumours, drowning, transport and other non-intentional injuries were leading causes in this age group.

Table 1.1: Top 4 leading causes of death by age (rate per 1,000/100,000), 2019–20 to 2023–24

Age category	1st	2nd	3rd	4th
0–27 days	Perinatal conditions (2.2)	Congenital anomalies (0.8)	SIDS and undetermined causes (0.07)	Cancers and tumours; Circulatory system (0.02)
28–364 days	SIDS and undetermined causes (0.3)	Congenital anomalies (0.3)	Perinatal conditions (0.2)	Nervous system diseases (0.05)
Under 1 year	Perinatal conditions (2.3)	Congenital anomalies (1.0)	SIDS and undetermined causes (0.4)	Nervous system diseases (0.06)
1–4 years	Cancers and tumours (2.8)	Drowning (2.3)	Transport (1.9)	Other non-intentional injury; Congenital anomalies (1.6)
5–9 years	Cancers and tumours (1.8)	Nervous system diseases (1.0)	Transport (0.9)	Congenital anomalies (0.7)
10–14 years	Suicide (2.0)	Cancers and tumours (1.8)	Transport (1.8)	Nervous system diseases (1.1)
15–17 years	Suicide (7.6)	Transport (6.2)	Cancers and tumours (2.3)	Nervous system diseases (2.2)
0–17 years	Perinatal conditions (12.2)	Congenital anomalies (6.1)	SIDS and undetermined causes (2.6)	Transport (2.2)

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 population in age categories 1–17 years.

Regional and remote areas

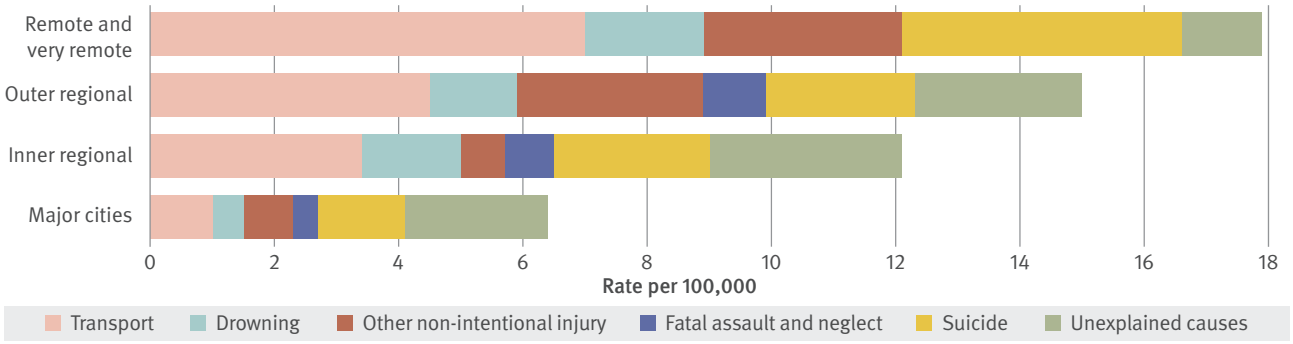
The child mortality rate from all causes was highest in remote and very remote areas and outer regional areas of Queensland, with rates of 44.6 per 100,000 children aged 0–17 years in both area groupings, compared with 36.8 in inner regional areas and 30.2 in major cities (5-year average).[10,11]

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.

10 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. www.qgso.qld.gov.au/about-statistics/statistical-standards-classifications/accessibility-remoteness-index-australia

11 Rates exclude deaths of children whose usual residence was outside Queensland. See the *20-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

Figure 1.7: ARIA+ of usual place of residence by selected causes of death (rate), 2019–20 to 2023–24



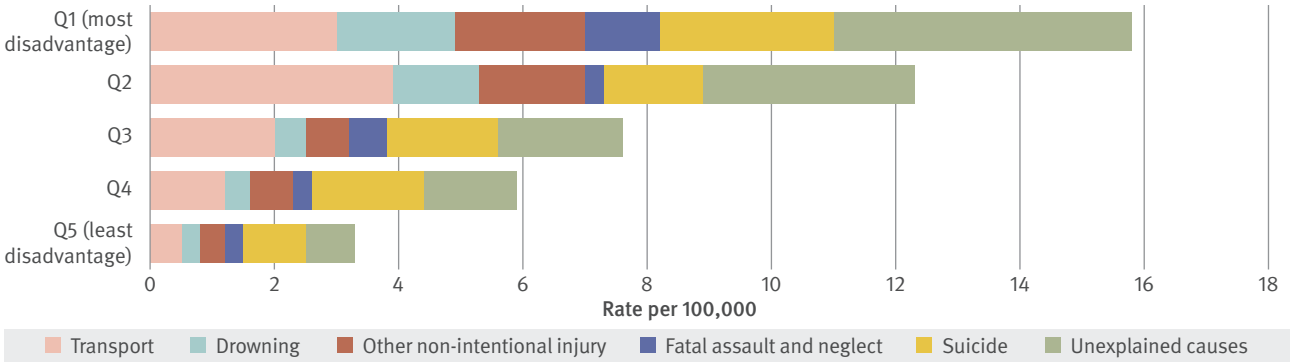
Notes: Rates calculated per 100,000 population aged 0–17 years in each ARIA+ category, averaged over 5 years. Excludes the deaths of children whose usual place of residence was outside Queensland.

Socio-economic disadvantage

The child mortality rate from all causes was highest in areas with the greatest levels of socio-economic disadvantage.[12] The rate of child deaths in quintile 1 areas (most disadvantaged) was 49.7 per 100,000 children aged 0–17 years, compared with 33.0 in quintile 3 areas and 16.7 in quintile 5 areas (least disadvantaged) (5-year average).[13]

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, suicide, 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), 2019–20 to 2023–24



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.

12 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**

13 Rates exclude deaths of children whose usual residence was outside Queensland. See the *20-year data tables* available on the report home page for detailed data.

Aboriginal and Torres Strait Islander children

The deaths of 91 Aboriginal and Torres Strait Islander children were registered in 2023–24, of which:

- 67 were from natural causes
- 11 were external causes
- 2 were unexplained causes
- 11 deaths were pending a cause at the time of reporting.

The 91 deaths in the latest year were a small decrease from 94 in 2022–23. There was an increase in deaths from natural causes (from 64 to 67), however there was a decrease in deaths from external causes from 18 to 11.

Aboriginal and Torres Strait Islander children are over-represented in child deaths. The mortality rate for Aboriginal and Torres Strait Islander children was 79.8 deaths per 100,000 Aboriginal and Torres Strait Islander children aged 0–17 years, compared with 30.4 deaths per 100,000 non-Indigenous children (5-year average). The Aboriginal and Torres Strait Islander mortality rate was 2.6 times the rate for non-Indigenous children for all causes.[14]

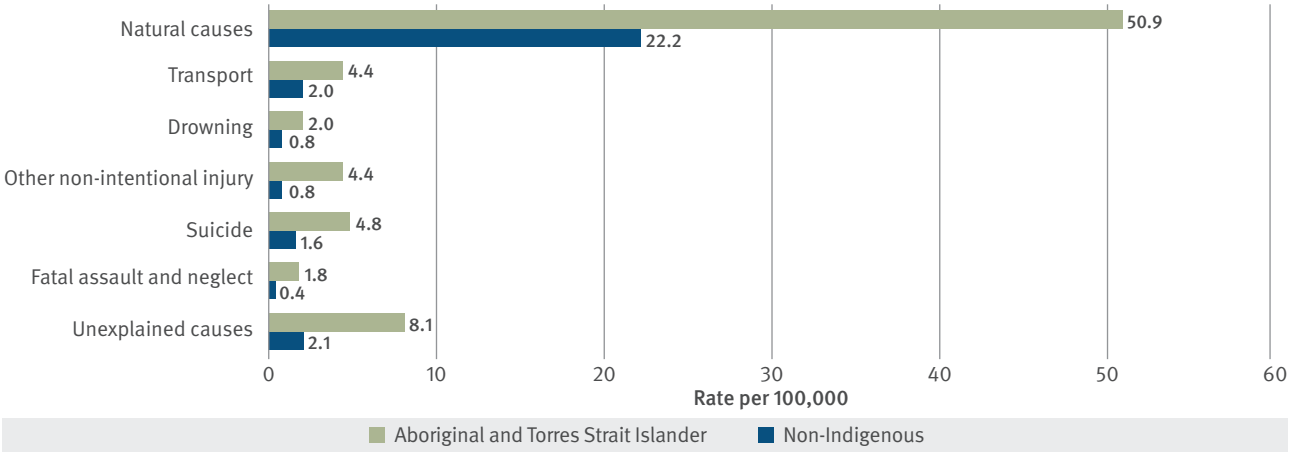
The Aboriginal and Torres Strait Islander infant mortality rate was 7.2 deaths per 1,000 Aboriginal and Torres Strait Islander births, compared with 3.8 deaths per 1,000 non-Indigenous births (5-year average).

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

- other non-intentional injury
- suicide
- fatal assault and neglect
- unexplained causes.

Aboriginal and Torres Strait Islander infants were also over-represented in sudden unexpected death in infancy with a mortality rate 3.8 times that for non-Indigenous infants (1.7 and 0.4 per 1,000 births, respectively).

Figure 1.9: Cause of death by Aboriginal and Torres Strait Islander status (rate), 2019–20 to 2023–24



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

14 See **Appendix A**, **Table A.2** for detailed data.

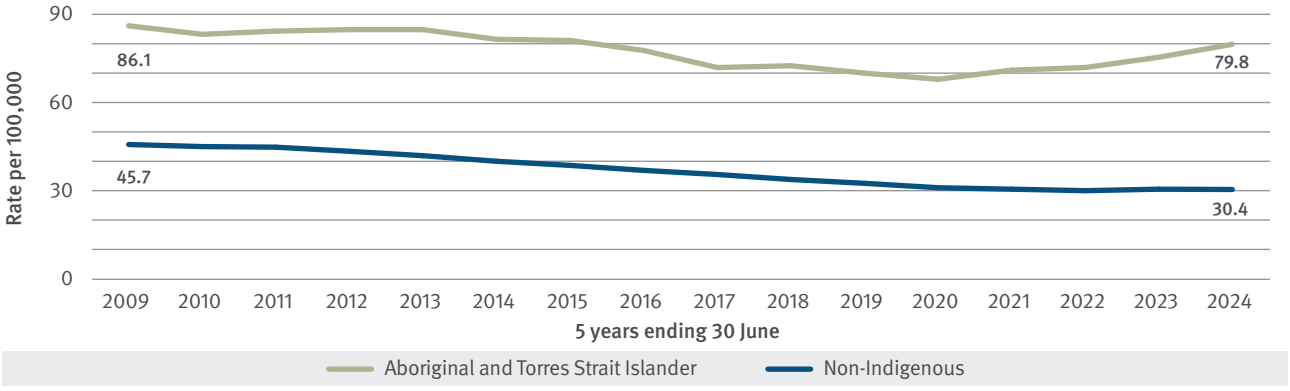
Trends

Aboriginal and Torres Strait Islander child mortality rates have decreased over the 20-year period. Between 2004–09 and 2019–24 the Aboriginal and Torres Strait Islander mortality rate (0–17 years) decreased 0.5% per year on average while the non-Indigenous rate decreased 2.2% on average. As shown in Figure 1.10, while decreases in the Aboriginal and Torres Strait Islander child mortality rate mirrored decreases in the non-Indigenous mortality rate over much of the period, the Aboriginal and Torres Strait Islander rate increased in the last 4 years whereas the non-Indigenous rate plateaued.

Aboriginal and Torres Strait Islander population estimates

Calculations of mortality rates for Aboriginal and Torres Strait Islanders in this report use as a denominator the estimated resident population (ERP), excepting for the age group under 1 year where the number of live births is used as the denominator. In July 2024, the Australian Bureau of Statistics released new estimates and projections for Aboriginal and Torres Strait Islander Australians based on Census 2021.[15] Readers are advised; however, that rates presented in this report used the ERPs based on Census 2016 as the Queensland estimates by age were not available at the time of reporting.

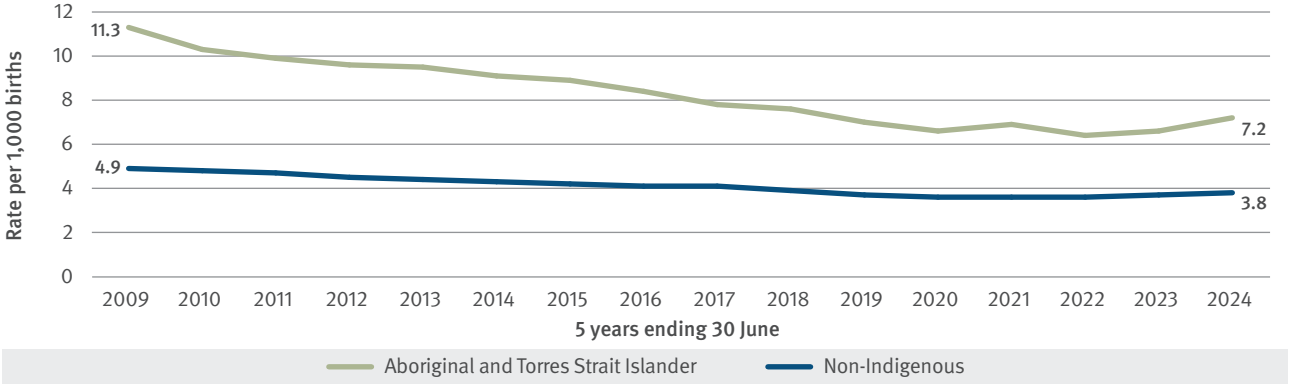
Figure 1.10: Child deaths by Aboriginal and Torres Strait Islander status (5-year rolling rate), 2004–09 to 2019–24



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 7.2 per 1,000 births in 2019–24 (down 2.4% per year on average). The non-Indigenous infant mortality rate decreased by 1.5% per year on average over the same period.

Figure 1.11: Infant deaths by Aboriginal and Torres Strait Islander status (5-year rolling rate), 2004–09 to 2019–24



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

15 ABS (2024) *Estimates and projections of the Aboriginal and Torres Strait Islander population for 2011 to 2031.* https://www.abs.gov.au/statistics/people/aboriginal-and-torres-strait-islander-peoples/estimates-and-projections-aboriginal-and-torres-strait-islander-australians/latest-release

Children known to the child protection system

The Department of Child Safety, Seniors and Disability Services, specifically Child Safety, 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 was notified of concerns of alleged harm or risk of harm, or
- 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
- Child Safety took action under the *Child Protection Act 1999*, or
- the child was in the custody or guardianship of Child Safety.

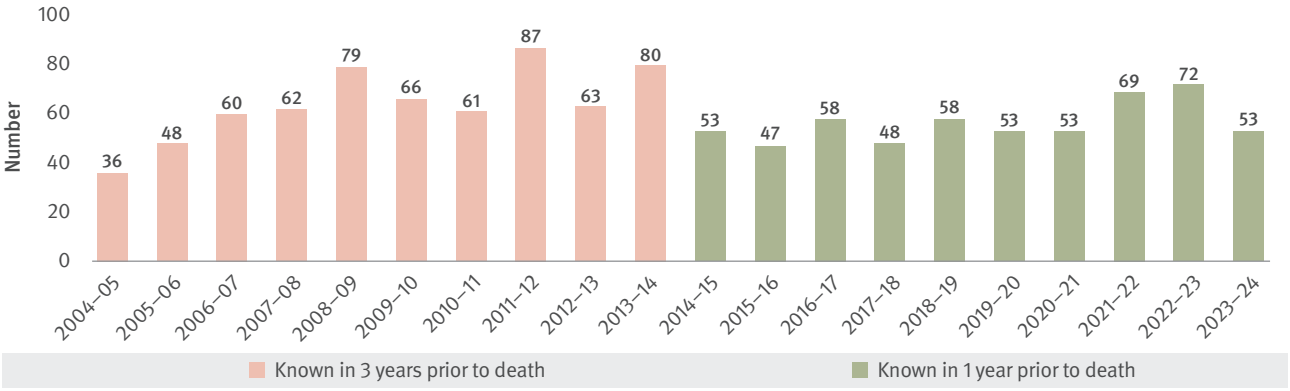
Fifty-three children who died in 2023–24 were known to Child Safety in the 12 months prior to their deaths, a decrease from 72 deaths in 2022–23. Twenty-three of these children died from natural causes, 19 from external causes, 2 from unexplained causes and 9 deaths were pending a cause at the time of reporting.

On occasion, children, who were not previously known, may come to the attention of Child Safety due to an incident causing critical injuries and subsequently died in hospital from their injuries. In 2023–24, 5 children of the 53 who were known to Child Safety at the time of death did not have a child protection history prior to the incident, or had a protection history but the contact was more than 12 months before the incident.

The mortality rate for children known to Child Safety was almost twice the Queensland child mortality rate (60.4 deaths per 100,000 and 34.5 deaths per 100,000 respectively, averaged over 5 years).[16,17]

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, reviews since 2014–15 are only completed for children known to Child Safety in the 12 months prior to their death.[18]

Figure 1.12: Deaths of children known to the child protection system (number), 2004–05 to 2023–24



16 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, intake inquiry, notification, investigation and assessment, ongoing intervention, child protection orders or placements) in the 12 months before the relevant year (e.g. the denominator for 2023–24 is the number of children known to Child Safety during 2022–23).

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

18 www.childprotectioninquiry.qld.gov.au

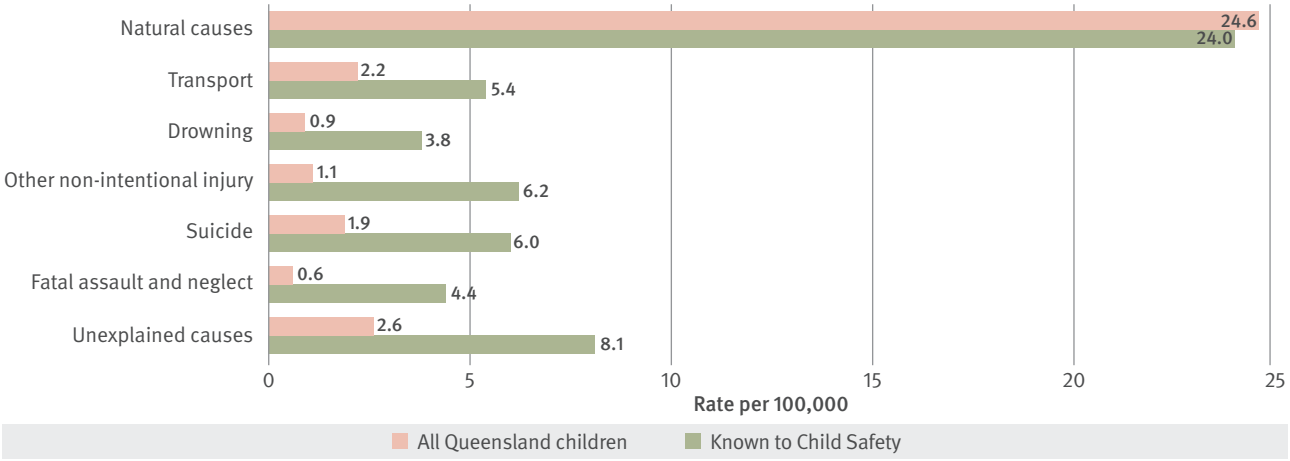
Figure 1.13 illustrates the over-representation of children known to Child Safety in deaths from external and unexplained causes (noting these figures include reference to those children who came to the attention of Child Safety as a result of the incident causing critical injuries and subsequent death). 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
- other non-intentional injury
- drowning
- suicide
- unexplained causes.

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 who are at increased risk of child maltreatment are often from families with higher levels of economic disadvantage, poor parental mental health and problematic substance use and social instability. All of which are risk factors for adverse childhood outcomes—including death.[19] It is therefore not the fact that being known to the child protection system that increases the risk of death, but the significant disadvantage, abuse and neglect that children experienced before they came to the attention of Child Safety and the multiple complex risk factors present in their lives.

Figure 1.13: Deaths by child protection system status and cause of death (rate), 2019–20 to 2023–24



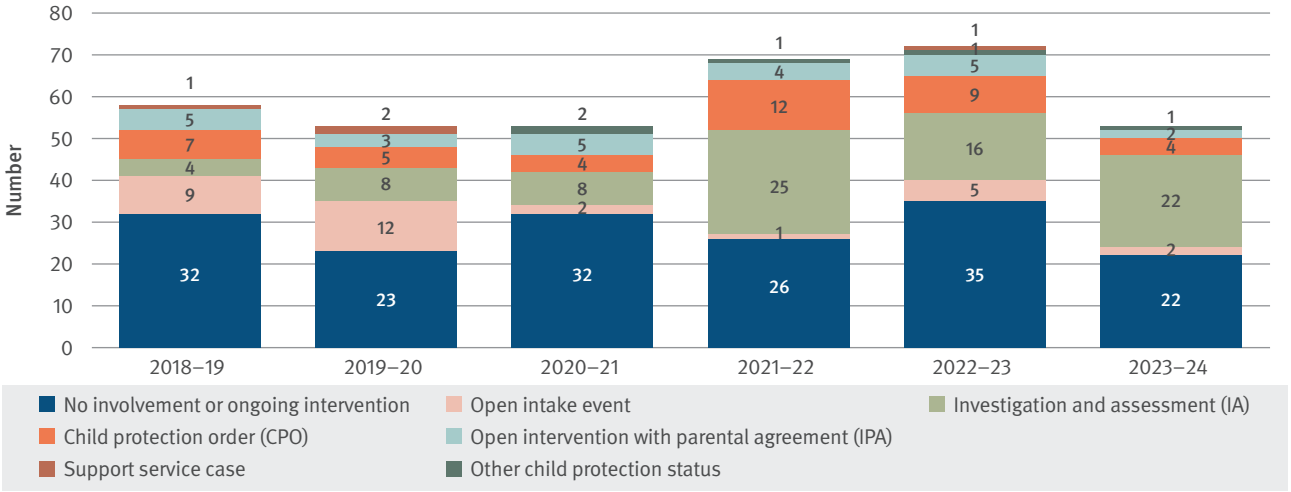
Notes: Rates calculated per 100,000 children known to Child Safety in the year prior to 30 June and per 100,000 population aged 0–17 years, averaged over 5 years.

19 Doidge J, Higgins D, Delfabbro P, Segal L (2017) 'Risk factors for child maltreatment in an Australian population-based birth cohort', *Child Abuse & Neglect*, 64, pp. 47–60.

'Known to child protection' is a broad cohort of children and is a proxy indicator for family wellbeing. Figure 1.14 provides, for the last 6 years, the child protection status recorded at the time of death. With reference to deaths in the last 5 years (only), the types of child protection status included:

- 46% – no involvement or ongoing intervention
- 26% – investigation and assessment (IA)
- 11% – child protection order (CPO)
- 7% – open intake event
- 6% – intervention with parental agreement (IPA).

Figure 1.14: Deaths of children known to the child protection system by status at the time of death (number), 2018–19 to 2023–24



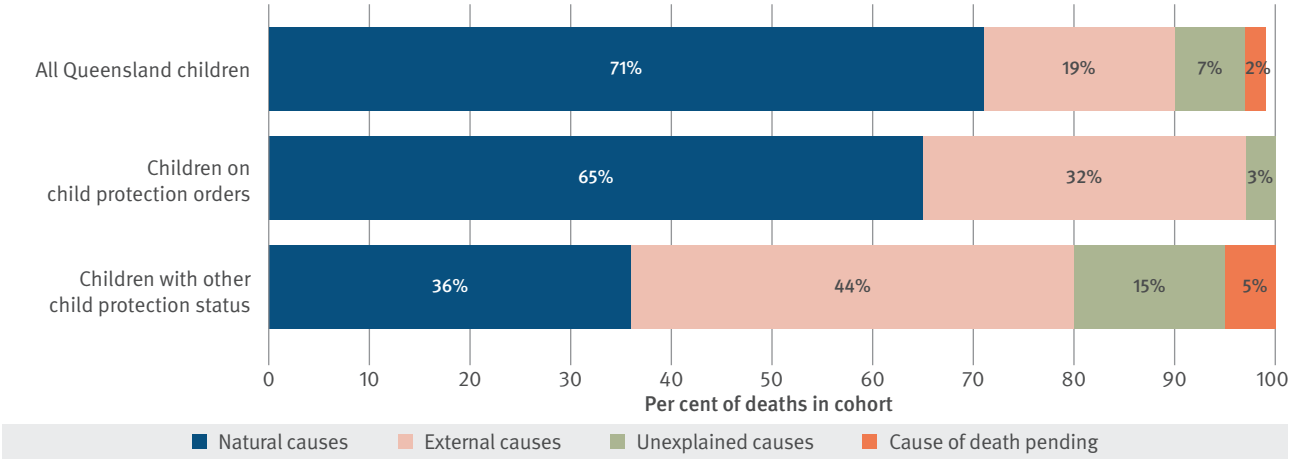
Children on child protection orders

A child protection order is an order made by the Childrens Court under the *Child Protection Act 1999*, when a child is assessed to be in need of protection. Custody or guardianship of a child may be granted to the chief executive (Director-General) of the department, or to a suitable person.

Four children who died in 2023–24 were subject to child protection orders at the time of death. In the last 5 years, 34 children were subject to child protection orders at the time of their death, representing 11% of the 300 deaths of children who were known to the child protection system.

Figure 1.15 illustrates the proportions of deaths by the major cause groups, in the cohorts of all Queensland children, children subject to child protection orders and children with other child protection statuses. The majority of children subject to child protection orders died from natural causes (65%). Some 32% of children subject to child protection orders died from external causes, which was a larger proportion than for Queensland deaths (19%) but a smaller proportion than deaths for all other children known to child protection (44%).

Figure 1.15: Deaths of children by child protection system by major cause group (per cent), 2019–20 to 2023–24



Children reported missing

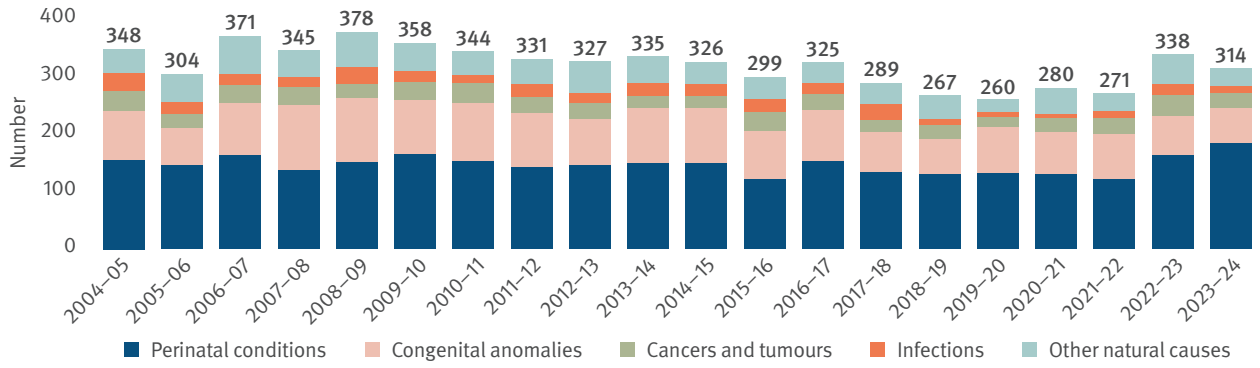
Reporting on deaths where the child or young person had been reported missing arose from the QFCC review ***When a child is missing: Remembering Tiahleigh***—a report into Queensland's children missing from out-of-home care.[20]

During 2023–24, 6 children in total had been reported missing to the police in relation to their death, 3 of the deaths were from drowning, one each from suicide, transport, and other non-intentional injury. One child reported missing was also known to Child Safety, but was not in out-of-home care.

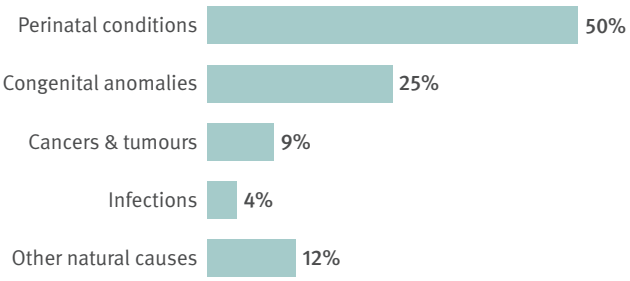
20 QFCC (2016) *When a child is missing: Remembering Tiahleigh—a report into Queensland's children missing from out-of-home care*, Queensland Government. www.qfcc.qld.gov.au/sector/child-death/system-reviews-after-child-death

2 Deaths from natural causes

2004 to 2024

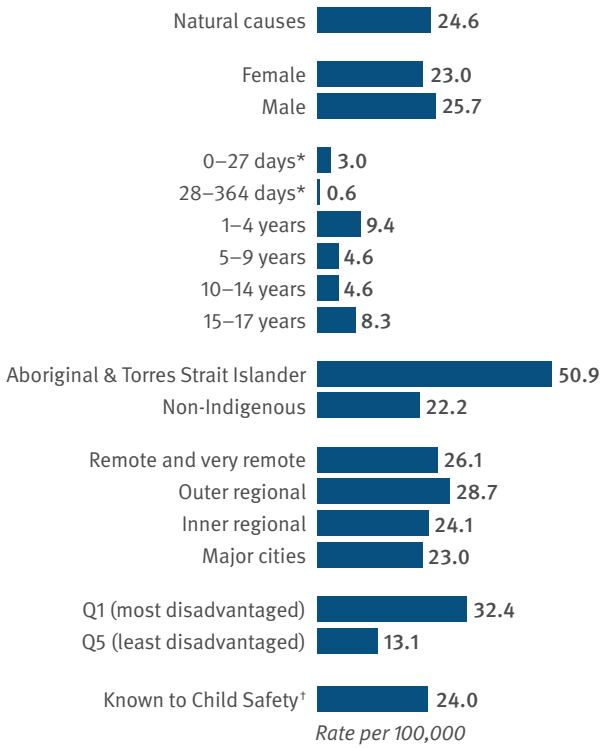


5-year summary (2019–24) | Cause of death category



Proportion of natural causes

Demographics



Rate per 100,000

Leading natural causes by age

0–27 days	**Perinatal conditions** 2.2 per 1,000 births
28–364 days	**Congenital anomalies** 0.3 per 1,000 births
1–4 years	**Cancers & tumours** 2.8 per 100,000
5–9 years	**Cancers & tumours** 1.8 per 100,000
10–14 years	**Cancers & tumours** 1.8 per 100,000
15–17 years	**Cancers & tumours** 2.3 per 100,000

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

Classification of causes of death using ICD-10

The QFCC uses the ***International statistical classification of diseases and related health problems***, tenth revision[21] (ICD-10) to classify causes of death. The ICD-10 chapters and codes form the major groups and sub-groups of diseases and conditions in reporting on deaths from natural causes.

Overall, there has been a downward trend in the mortality rate for natural causes (diseases and morbid conditions),[22] with the rate decreasing from 35.3 per 100,000 in 2004–09 to 24.6 per 100,000 in 2019–24 (a decrease of 2.0% per year on average).[23] The majority of child deaths each year are from natural causes. Natural causes have accounted for 71% of all child deaths over the past 5 years.

Perinatal conditions and congenital anomalies were the most common natural causes in 2023–24 (183 and 61 deaths respectively). Together, these causes accounted for 78% of all deaths from natural causes.

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

Recent increases in natural cause deaths

Although the broader trend in the natural cause mortality rate is decreasing, there have been higher natural cause deaths in the last 2 years with 338 in 2022–23 and 314 in 2023–24. In comparison, in the 5 years preceding the last 2, natural cause deaths were below 300 and ranged between 260 and 289.

The increased numbers are largely due to the increase in deaths from perinatal conditions, which increased from 121 in 2021–22 to 183 in 2023–24. Deaths from perinatal conditions, which predominantly occur in the neonatal period (0–27 days), are the largest contributor to child deaths. It is therefore understandable that the increases are reflected in the overall numbers.

Further analysis of the register found the increase in perinatal conditions in 2023–24 has primarily occurred across two underlying cause of death blocks: disorders related to short gestation and low birth weight, not elsewhere classified (P05–P08); and other conditions originating in the perinatal period (P90–P96).

The QFCC is currently working to understand the possible drivers of this increase.

Sex

In 2023–24, of the 314 child deaths from natural causes 168 were male while 138 were female (in addition there were 8 infants of indeterminate sex). Child mortality from natural causes is marginally higher for males than females. Over the last 5 years, the male mortality rate was 25.7 deaths per 100,000 male children compared to 23.0 deaths per 100,000 female children.

Age

Figure 2.1 illustrates the types of natural cause deaths for each age category in 2023–24. The following findings were evident:

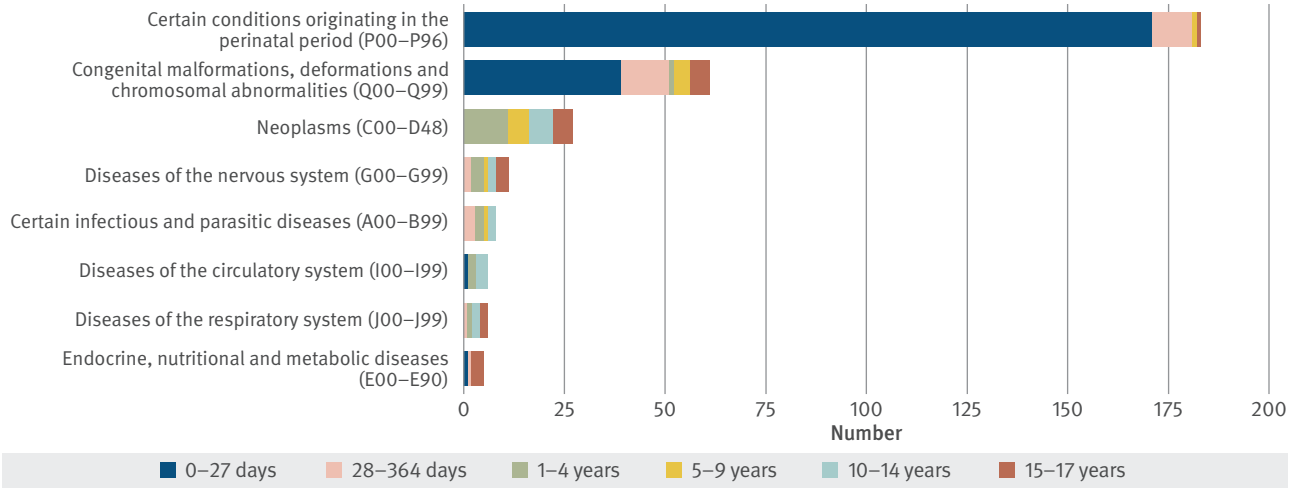
- Almost all natural causes of death for infants (under 1 year) were from perinatal conditions and congenital anomalies (96% of all natural causes within this age group).
- Neoplasms (cancers and tumours) was the primary natural cause for children aged 1–17 years.

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

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 2004–24 are available online at www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data

Figure 2.1: Deaths from natural causes by ICD-10 chapter and age (number), 2023–24



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

Neonatal and post-neonatal infants

Most child deaths from natural causes occur in the first year, predominantly 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 1,107 infant deaths due to natural causes in the last 5 years, 83% occurred in the neonatal period. Of the 924 neonatal deaths, 64% (588) occurred on the day of birth and a further 18% (170) had occurred by the end of the first week.

The 2 leading causes—perinatal conditions (667 deaths) and congenital anomalies (233 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 183 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 (81 deaths or 44%).[24]

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

Table 2.1: Age and cause of infant deaths from natural causes (number), 2019–20 to 2023–24

Age		Cause of death			Total
		Perinatal conditions (P00–P96)	Congenital anomalies (Q00–Q99)	Other diseases and morbid conditions[a]	
Neonatal (age in days)	<1	430	153	5	588
	1–6	126	41	3	170
	7–27	111	39	16	166
Neonatal total		667	233	24	924
Post-neonatal (age in months)	1*	31	25	10	66
	2	9	17	9	35
	3	1	7	5	13
	4	2	10	2	14
	5	4	4	4	12
	6	2	7	7	16
	7	0	4	3	7
	8	0	3	1	4
	9	1	1	5	7
	10	1	2	2	5
	11	2	1	1	4
Post-neonatal total		53	81	49	183
Total infants		720	314	73	1,107

* *28 days to <2 months.*

a *Includes certain infectious and parasitic diseases (A00–B99); 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 digestive system (K00–K93); diseases of the respiratory system (J00–J99); diseases of the musculoskeletal system and connective tissue (M00–M99); diseases of the genitourinary system (N00–N99); symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99); codes for special purposes (U00–U49).*

Major causes

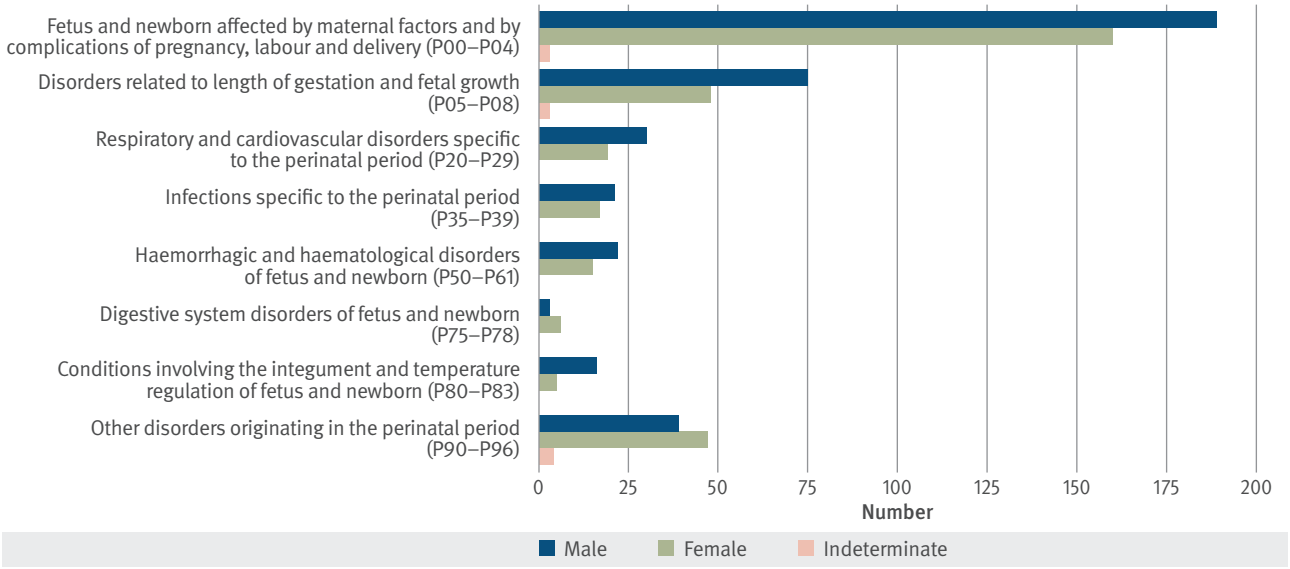
Perinatal conditions

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 2023–24, there were 183 child deaths from perinatal conditions, at a mortality rate of 12.2 deaths per 100,000 children aged 0–17 years (5-year average). Perinatal conditions was 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 (48%, 352 deaths), followed by disorders related to the length of gestation and fetal growth (17%, 126 deaths). Together, these causes accounted for 66% of all deaths due to perinatal conditions (478 of 728 deaths).[25]

Figure 2.2: Deaths due to perinatal conditions by sex (number), 2019–20 to 2023–24



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.[26]

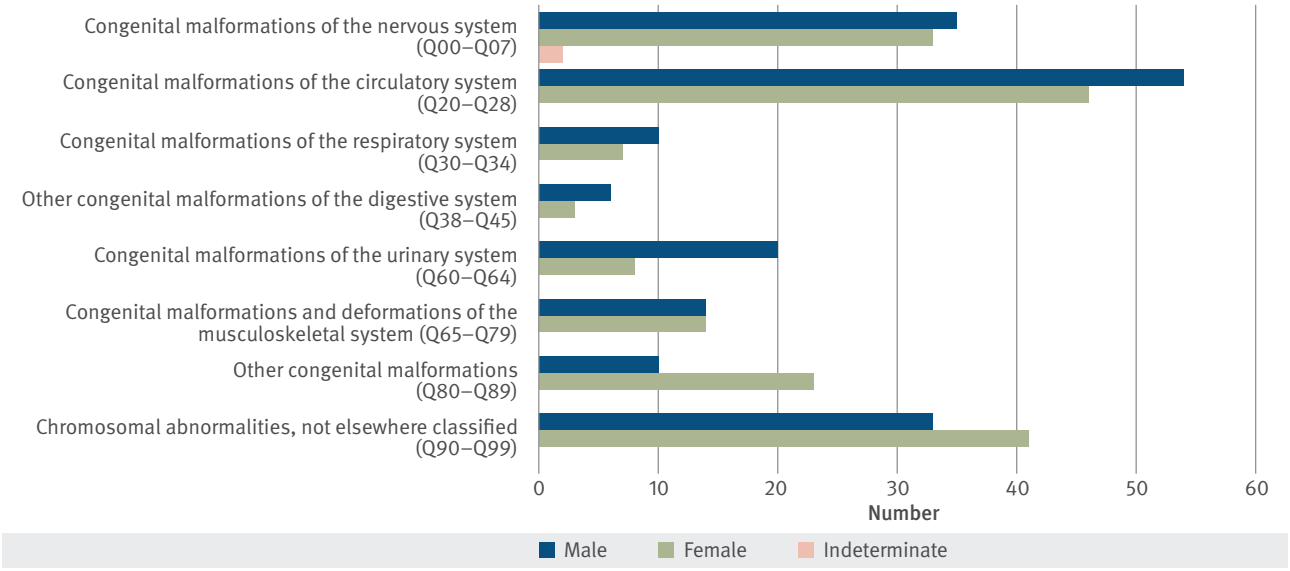
During 2023–24, there were 61 child deaths from congenital anomalies, at a 5-year average rate of 6.1 deaths per 100,000 children aged 0–17 years.

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 (27%, 101 deaths) and congenital malformations of the nervous system (19%, 68 deaths).

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

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

Figure 2.3: Deaths due to congenital anomalies by sex (number), 2019–20 to 2023–24



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

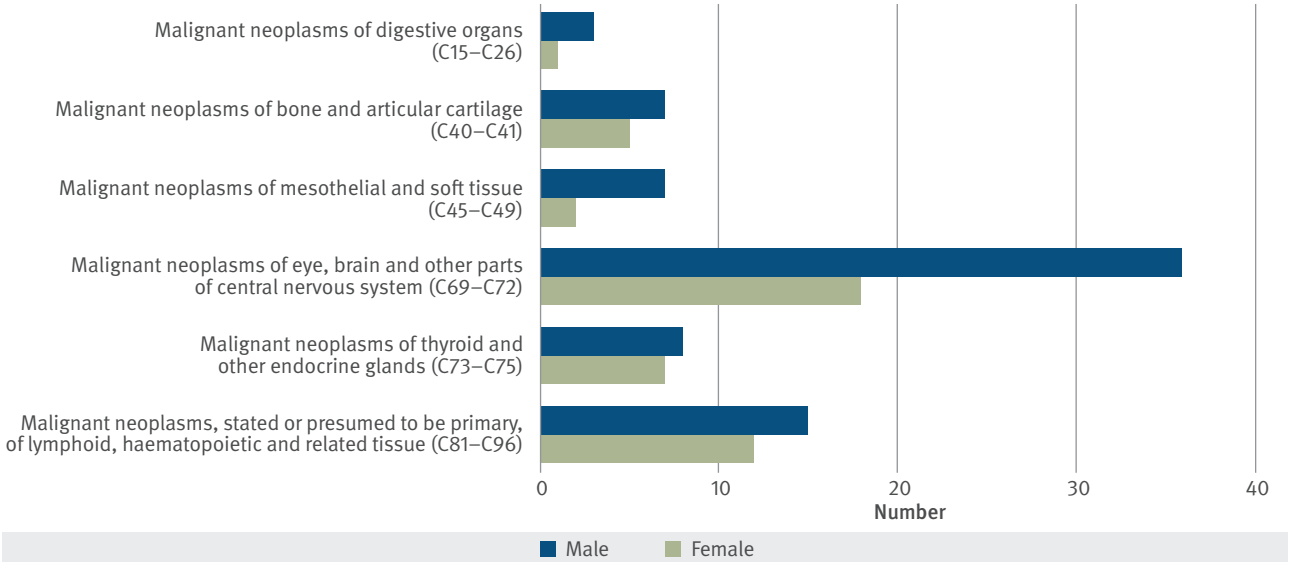
Neoplasms (cancers and tumours)

The term 'neoplasm' is often used interchangeably with the words 'tumour' and 'cancer'.[27]

Twenty-seven children and young people died from neoplasms in 2023–24, at a 5-year average rate of 2.2 deaths per 100,000 children aged 0–17 years. As noted in Chapter 1, neoplasms were the leading cause of death (all causes) for ages 1–9 years, and the leading natural cause of death for ages 10–17 years.

Over the last 5 years, 131 children lost their lives to cancers and tumours. As illustrated in Figure 2.4, the most common types were malignant neoplasms of eye, brain and other parts of central nervous system (54 deaths or 41%), followed by malignant neoplasms, stated or presumed to be primary, of lymphoid, haematopoietic and related tissue (27 deaths or 21%).

Figure 2.4: Deaths due to neoplasms by sex (number), 2019–20 to 2023–24



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

27 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.[28]

Thirteen children died from infections in 2023–24. Over the last 5 years, 62 children and young people died from infections. The highest number of infections were caused by Other bacterial diseases[29] (17 deaths or 27%), including sepsis (14 deaths), meningococcal infection (2 deaths) and unspecified bacterial (1 death), followed by Influenza and pneumonia (14 deaths or 23%).[30]

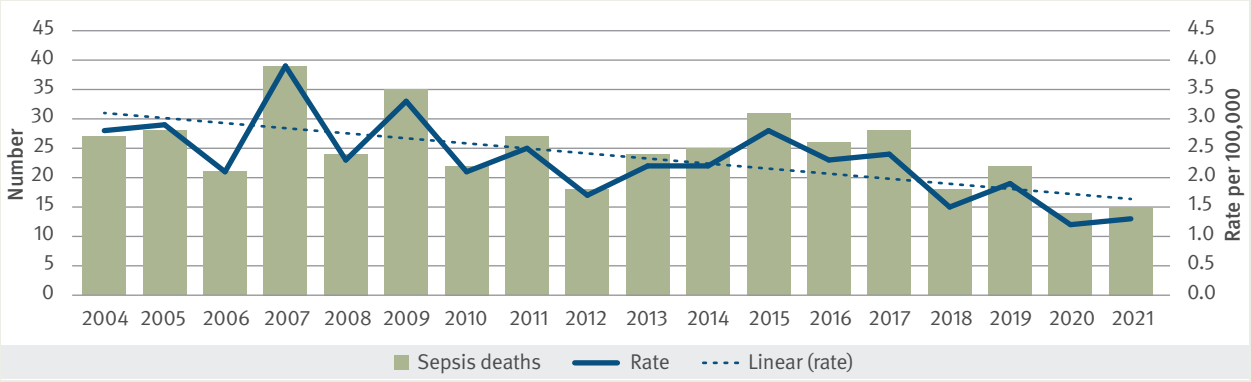
Queensland paediatric sepsis mortality study

Sepsis—a life threatening condition that occurs when the body's response to an infection damages the organs and tissues—is a significant cause of preventable childhood mortality worldwide. In February 2024 the QFCC in partnership with the Queensland Paediatric Sepsis Program released a report detailing the findings of the Queensland paediatric sepsis mortality study which addressed the incidence of, and factors associated with, sepsis-related child deaths, Queensland 2004–2021.[31]

The overarching aim of the study was to identify and describe the incidence of deaths due to sepsis in children aged less than 18 years in Queensland. As sepsis-related deaths may not be readily apparent in cause of death information, a methodology was developed to identify relevant deaths from ICD-10 mortality and morbidity codes, based on the internationally accepted approach which has been in use since the early 2000s.

Findings show that between 1 January 2004 and 31 December 2021, there were 444 sepsis-related deaths of infants and children in Queensland, a rate of 2.3 deaths per 100,000 children and young people.[32] Encouragingly, as shown in Figure 2.5, rates for sepsis-related deaths declined significantly across the study period. Sepsis deaths were highest among infants and pre-school-aged children, with primary-school aged children (5–11 years) having the lowest rates of death. Aboriginal and Torres Strait Islander children, children living in remote and very remote areas and children living in areas with socio-economic disadvantage were also over-represented.

Figure 2.5: Child deaths due to paediatric sepsis (number and rate), 2004 to 2021



28 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, COVID 19 codes U07.1–U07.2 only.

29 ICD-10 Chapter 1, Certain infectious and parasitic diseases, Other bacterial diseases (A30–A49).

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

31 Available at www.qfcc.qld.gov.au/sites/default/files/2024-03/Paediatric%20Sepsis%20Mortality%20Study.pdf

32 The study focussed on paediatric sepsis, a term used for sepsis-related deaths of infants and children who have been discharged from hospital following birth; paediatric sepsis may develop in the community or be acquired during a subsequent hospital admission.

Deaths from notifiable conditions

There are national and local public health legislation requirements for health practitioners and laboratories to notify public health authorities of certain diseases in Australia.[33] 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-four children and young people died from a notifiable condition over the latest 5-year period as shown in Table 2.2. Twenty-four (71%) of the 34 deaths due to notifiable conditions were the result of potentially vaccine-preventable conditions, with the most common of these being invasive pneumococcal disease.[34,35]

COVID-19 was added to Queensland's Schedule of Notifiable Conditions in the *Public Health Regulation 2018* in January 2020. There were 5 child deaths due to coronavirus (COVID-19) during the 5-year reporting period.[36]

Table 2.2: Deaths with notifiable conditions as underlying cause (number), 2019–20 to 2023–24

Notifiable condition	Total
Pneumococcal disease (invasive)^	11
Invasive group A streptococcal infection	8
Influenza^	6
Coronavirus (COVID-19)*	5
Meningococcal disease (invasive)^	2
Rheumatic heart disease	1
Respiratory syncytial virus	1
Total	**34**

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

* *Vaccines became available for coronavirus (COVID-19) for children during 2022.*

Notes: 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.

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

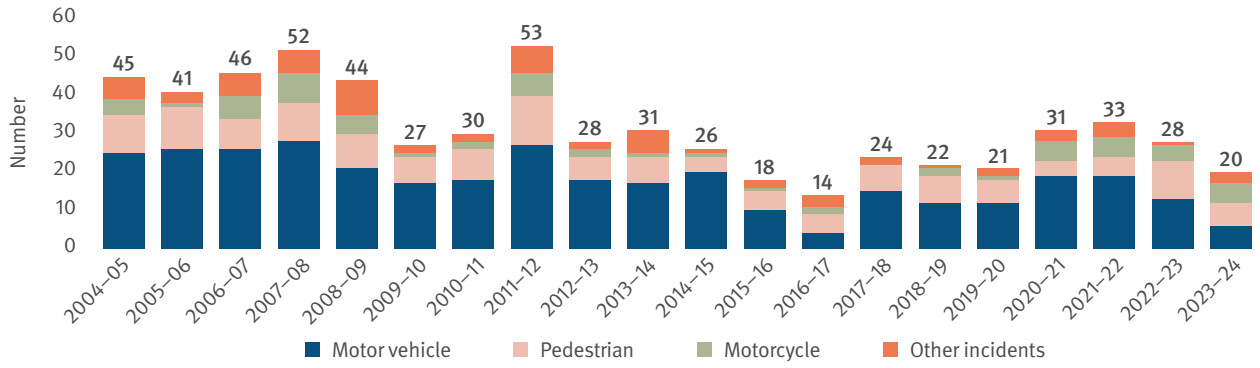
34 In Australia, publicly funded immunisation programs are administered by state and territory governments. The current National Immunisation Program Schedule (valid from April 2019) includes vaccinations against the following diseases: hepatitis B, diphtheria, tetanus, pertussis (whooping cough), poliomyelitis, Haemophilus influenzae type b (Hib), pneumococcal disease, rotavirus, measles, mumps, rubella, meningococcal ACWY disease, varicella (chicken pox), influenza and human papillomavirus (HPV).

35 Vaccines are available for only selected strains of influenza, meningococcal disease and pneumococcal disease.

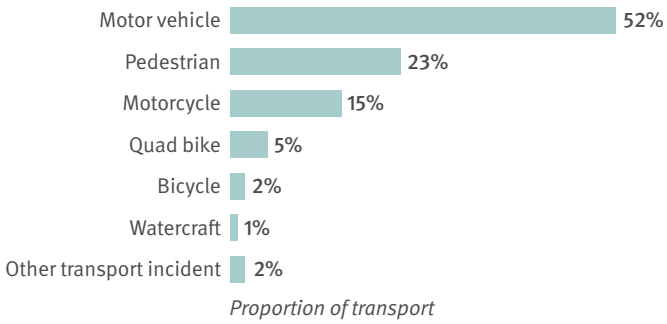
36 Information in this report on child deaths with notifiable diseases, including COVID-19, may differ from official reporting by Queensland Health due to different methodology. Further information about the QFCC's methodology can be found in the Methodology in **Appendix B** (available at **www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data**).

3 Transport-related deaths

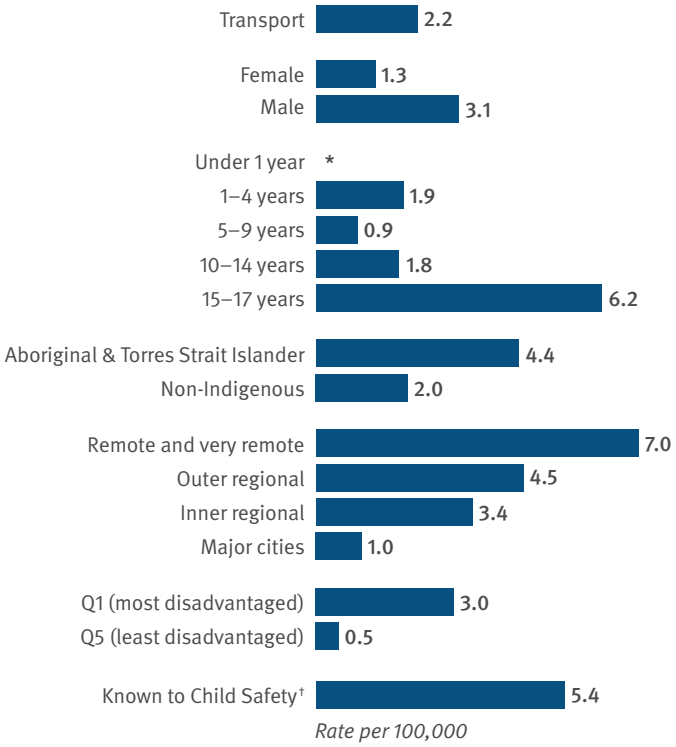
2004 to 2024



5-year summary (2019–24) | Incident type



Demographics



Risk factors in fatal motor vehicle crashes

55% excessive speed

41% no or inappropriate restraint

35% failure to follow road rules

34% alcohol and/or substance use

32% inexperienced driver

31% reckless driving

Notes: Counting is by date of death registration. Percentages may not add to 100 due to rounding.
** rate not calculated for numbers less than 4.*
† in the 12 months prior to death.

Key findings

During 2023–24, 20 children and young people died from transport-related incidents in Queensland. This is down from 28 in 2022–23 and 33 in 2021–22. This represents a 5-year average rate of 2.2 deaths per 100,000 children aged 0–17 years. **Table A.5** in **Appendix A** provides summary data and key characteristics for transport-related deaths in the last 5 years.[37]

The rates of transport-related child fatalities have declined over the last 20 years, with the 5-year rolling rates dropping by 3.4% per year on average (see Figure 1.2). Although there has been an overall decrease in the transport mortality rate since 2004, transport remained the leading external cause of death for children and young people in Queensland in the last 5 years.

Nature of transport incidents

In 2023–24, 6 children and young people died from motor vehicle crashes, 6 from pedestrian-related incidents, 5 from motorcycle, 2 from quad bike and one from watercraft incidents.

Over the last 5 years, the majority of the 133 transport-related fatalities were motor vehicle deaths (69 or 52%), followed by pedestrian deaths (31 or 23%) and motorcycle incidents (20 or 15%).

Sex

Seventeen male children died from transport-related incidents in 2023–24, compared with 3 female children.

Over the last 5 years, the average annual transport-related mortality rate for males was twice the rate for females (3.1 per 100,000 males and 1.3 per 100,000 females). The pattern of male over-representation in transport mortality has been attributed to, in part, greater risk-taking behaviours displayed by young males, including young male drivers.[38]

Age

Of the 20 transport-related fatalities during 2023–24, 9 were aged 15–17 years, 6 were aged 10–14 years, 3 were aged 1–4 years, and one each were aged 5–9 years and under 1 year.

The highest rate of transport deaths was among young people aged 15–17 years (6.2 per 100,000) which was more than 3 times the rate for the 1–4-year age group, which had the next highest rate (1.9 per 100,000) (5-year averages).

While risk taking in adolescent drivers may contribute to the higher rates of death in the 15–17 age group, driver inexperience, without an intention to drive recklessly, may also contribute. Relatively new drivers may lack critical driving skills such as hazard perception, attentional control and managing multiple driving tasks.[39]

37 Tables with data for 2004–2024 are available online at **www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data**

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

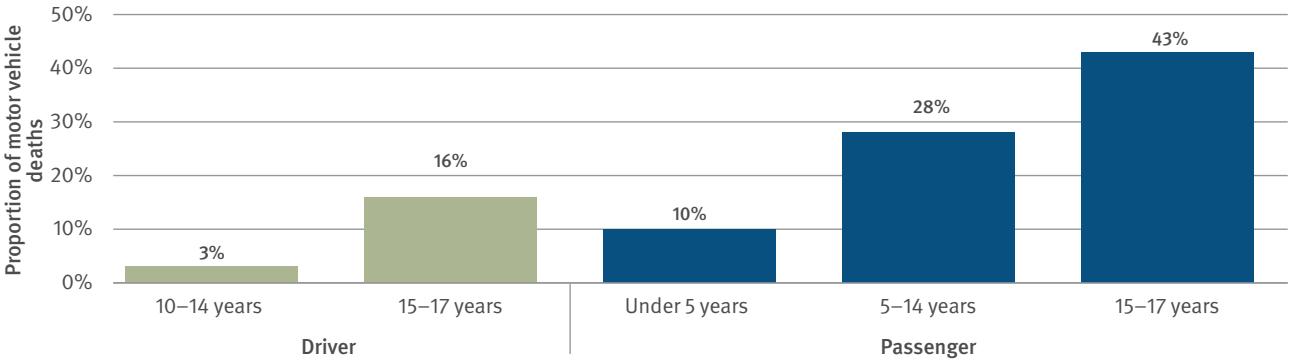
39 Centre for Accident Research & Road Safety Queensland (2019) *Adolescent risk-taking*, **https://research.qut.edu.au/carrs-q/wp-content/uploads/sites/296/2020/06/Adolescent-risk-taking.pdf**

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 69 children and young people who died in motor vehicle incidents between 2019–20 and 2023–24, 19% (13) were driving at the time of the incident while 81% (56) were passengers.

Figure 3.1: Motor vehicle fatalities by role and age category (proportion), 2019–20 to 2023–24



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

Multiple fatalities

No multiple fatalities were recorded in motor vehicle incidents in 2023–24. In the past 5 years, there were a total of 69 child deaths in 62 motor vehicle crashes. Five incidents involved multiple child fatalities, and 17 incidents involved adult fatalities.

Roadway type

Of the 6 children and young people who died in motor vehicle incidents in 2023–24, 2 died in crashes on highways (roadways with a speed limit equal to or greater than 100km/hr) and one each on a major road (speed limit between 60 and 100km/hr), residential street (speed limit under 60km/hr), rural roadway, and private roadway. Over the last 5 years, 33% (23 out of 69) of child deaths in motor vehicle crashes occurred on major roads, 32% were on highways, 17% on rural roadways and 10% on residential streets. Five deaths (7%) in the last 5 years occurred in off-road settings (i.e. not on public roadways).

Risk factors associated with motor vehicle crashes

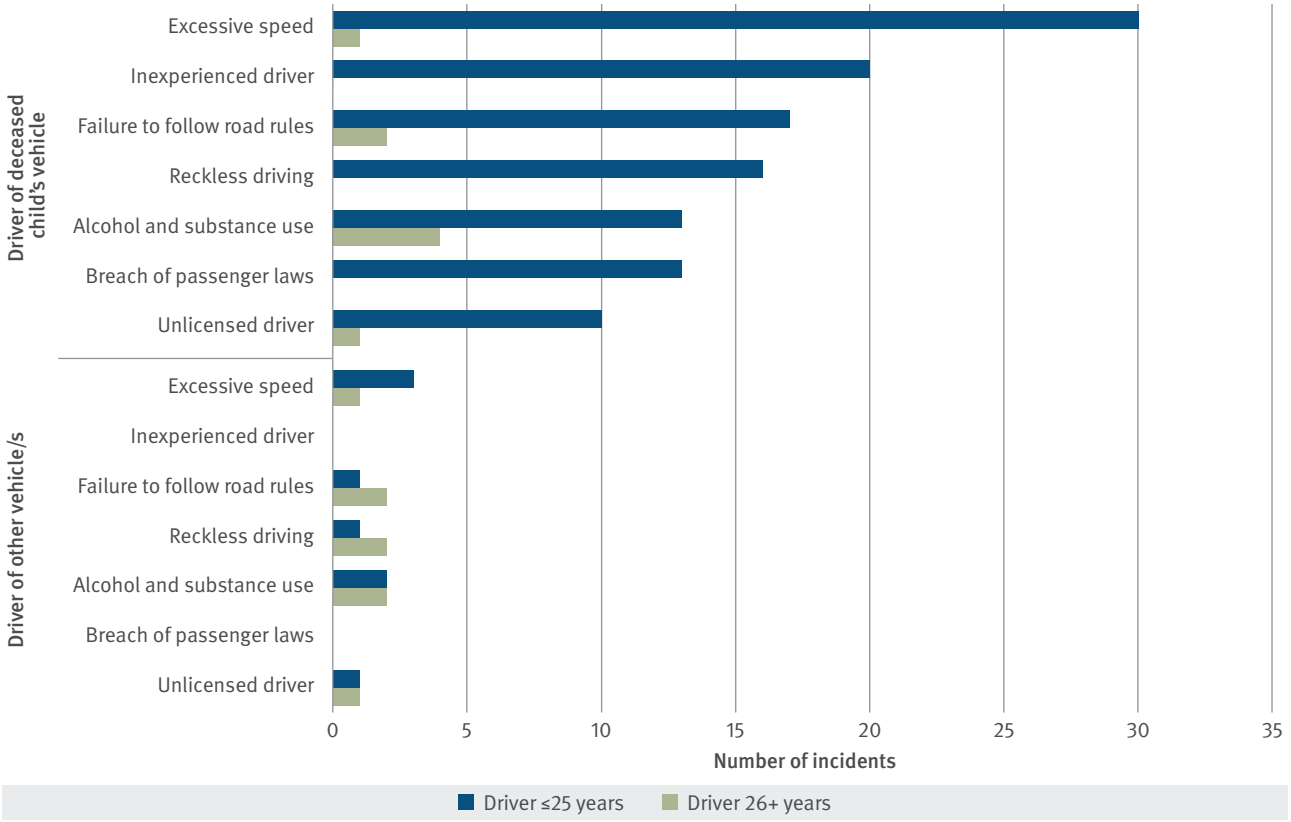
Of the 6 motor vehicles incidents in 2023–24, 4 were children and young people travelling as passengers. Excessive speed and no or inappropriate restraint were identified as a risk factor in half of the deaths (3), coupled with other risk factors such as alcohol or substance use, reckless use of vehicle, failure to follow road rules and fatigue.

Over the last 5 years, 69 children died in 62 motor vehicle incidents (5 incidents involved multiple child fatalities). Single-vehicle accidents accounted for 65% (40) of those incidents. Forty-nine incidents (79%) involved a young driver (up to 25 years of age) driving the vehicle in which the child/ren was/were travelling. Twenty-eight children (41%) were either not wearing a restraint or inappropriately restrained.

Risk factors identified in 62 incidents over the last 5 years are illustrated in Figure 3.2. The most common driver risk factors were:

- excessive speed (55%)
- failure to follow road rules (35%)
- alcohol and/or substance use (34%)
- inexperienced driver (32%)
- reckless/dangerous driving (31%).

Figure 3.2: Most common driver risk factors in motor vehicle incidents, by role of vehicle and age of driver (number of incidents), 2019–20 to 2023–24



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.

Car restraint guides for parents and carers

The Queensland Department of Transport and Main Roads (TMR) has released a series of videos to provide step-by-step instructions on how to safely install and use a variety of child restraints. The QFCC provided child death data to TMR to inform the development of the guides. The videos are available on the StreetSmarts website at **https://streetsmarts.initiatives.qld.gov.au/parents/child-restraints/**

The video guides were a core deliverable under the TMR's *Road safety education blueprint*. The blueprint contains 27 actions across 6 key areas, including actions that focus on higher risk youth such as those living in rural and remote or lower socio-economic areas, or in Aboriginal and Torres Strait Islander communities.

Pedestrians

Six children and young people died in pedestrian incidents during 2023–24, with 3 incidents occurring in the context of a low-speed vehicle run-over and 3 (including one E-scooter related incident) during a road or railway crossing.

Over the last 5 years, there have been 31 pedestrian incidents, the majority of which were low-speed vehicle run-overs (20 out of 31 or 65%), followed by road and railway crossings (8 out of 31 or 26%). The risk of pedestrian injuries differed by age groups:

- Children under 5 years are most at risk from pedestrian incidents, accounting for 58% (18 of 31) of the pedestrian deaths over the 5-year period.
- Children aged 5–14 years accounted for 7 pedestrian deaths, 5 of which occurred while travelling on or crossing a roadway.
- Six young people aged 15–17 years died in pedestrian incidents. Of the 6 deaths, 2 were recorded as having consumed alcohol and/or substance at the time of the incident.

Deaths involving E-scooters and other personal mobility devices are classified as pedestrian incidents in the Child Death Register, in line with coding rules in ICD-10 (coded to V09). As of November 2022, changes to Queensland's general road rules also include E-scooters within the scope of rules applying to personal mobility devices. Two young people have died in E-scooter related incidents since 2022.

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 20 LSVR incidents, with the majority occurring at the child's home or the home of a person known to the child, with the driver most frequently identified as a parent or other close relative.

Motorcycles, bicycles and quad bikes

There were 5 deaths from motorcycle incidents in 2023–24. Over the last 5 years, there have been 20 deaths of children and young people riding motorcycles. Almost all of the motorcycles were being driven by the child or young person (19 out of 20). Helmets not worn or inappropriately fastened were identified in half of the motorcycle incidents (10 out of 20). Speeding and alcohol and/or substance use were recorded as the most common risk factors.

There have been 3 bicycle deaths in the last 5 years, although none occurred in 2023–24.

There were 2 quad bike[40] deaths in 2023–24. Over the last 5 years, there have been 7 deaths of children and young people riding quad bikes. Five of the 7 deaths were children under the age of 16. The mechanism of the incidents were: rollover (3), thrown from vehicle (3) and collision with a stationary object (1). Of the 7 deaths, 6 were not wearing helmets.

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

Off-road fatalities

Eleven children and young people died in off-road environments in Queensland during 2023–24. Four deaths were motorcycle incidents, 3 were pedestrian incidents, 2 were quad bike incidents and one death each in motor vehicle and watercraft incidents. Over the last 5 years, a total of 49 children and young people died in off-road environments.

Charges and criminal proceedings

Of the 20 transport-related incidents in 2023–24, 3 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 33 of the 125 transport-related incidents.

Over the last 5 years, 8 young people who died were travelling in stolen vehicles in 5 distinct incidents.

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 5,200 transport incidents during 2023–24, including both fatal and non-fatal injuries. The majority involved motor vehicles (69%), followed by motorcycle (11%) and bicycle incidents (9%). Transport-related incidents occurred most frequently in young people aged 15–17 years or 10–14 years (37 % and 30% in each group respectively).

Table 3.1: Queensland Ambulance Service responses to transport incidents (number), 2023–24

Type of incident	Under 1 year	1–4 years	5–9 years	10–14 years	15–17 years	Total
Motor vehicle	169	581	676	817	1,353	3,596
Motorcycle	*	17	73	248	213	551
Bicycle	*	22	71	265	117	475
Scooter/E-scooter	*	5	27	159	183	374
Pedestrian	5	9	36	40	23	113
Quad bike	0	*	9	19	13	41
Watercraft	*	*	*	8	6	14
Other (e.g. go kart, skateboard)	0	*	*	*	5	5
Unknown type	15	18	18	5	14	70
Total	**189**	**652**	**910**	**1,561**	**1,927**	**5,239**

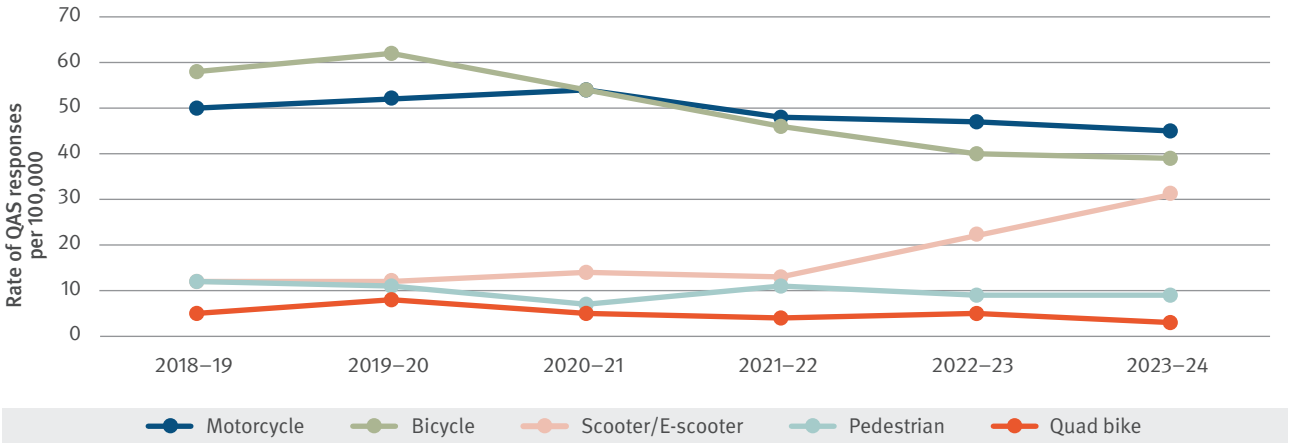
Data source: Queensland Ambulance Service (Aug 2024)

** 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 indeterminate (n=36). Numbers in the table do not add to the total number of transport incidents attended by QAS (n=5,259) as cells with less than 5 are not shown, and are excluded from table totals.

Analysis of the rate of QAS responses for selected transport incidents over the last 6 years are shown in Figure 3.3.[41] There has been a notable increase in the rate of responses for scooter/E-scooter incidents in the last 2 years. Further analysis of the 2023–24 data indicates 272 of the 374 scooter-related injuries involved E-scooters (73%).[42] Most of the incidents occurred in older children aged 10–17 years. Responses for bicycle incidents have decreased in recent years, while other categories have fluctuated with no strong trends.

Figure 3.3: Queensland Ambulance Services responses to selected transport incidents (rate per 100,000), 2018–19 to 2023–24



Data source: Queensland Ambulance Service (Aug 2024)

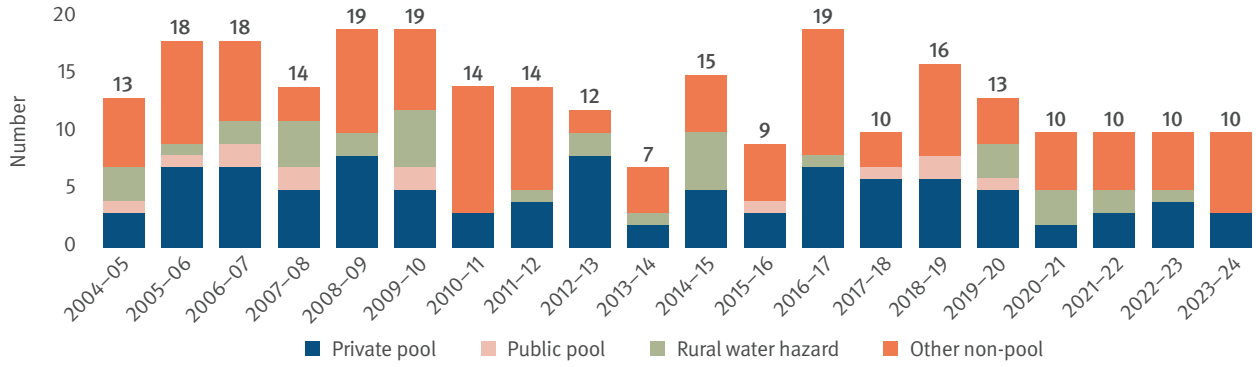
Notes: Excludes cases where gender was recorded as indeterminate or missing. Rates are calculated for each financial year per 100,000 population aged 0–17 years.

41 Data for the past years is published in previous editions of this report, from data originally provided by the QAS.

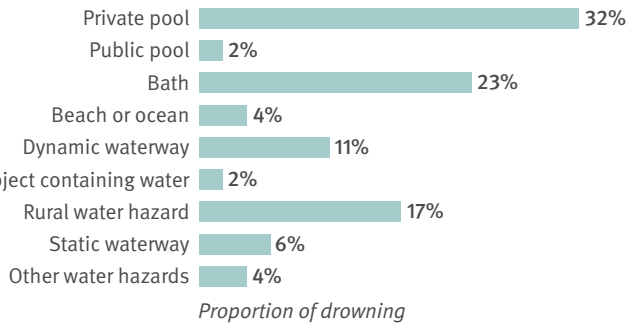
42 All scooter incidents were manually reviewed by QAS. Incidents were only identified as E-scooter incidents where the type of scooter was recorded somewhere in the record. QAS advise that E-scooter incidents may therefore be an under-estimate.

4 Drowning

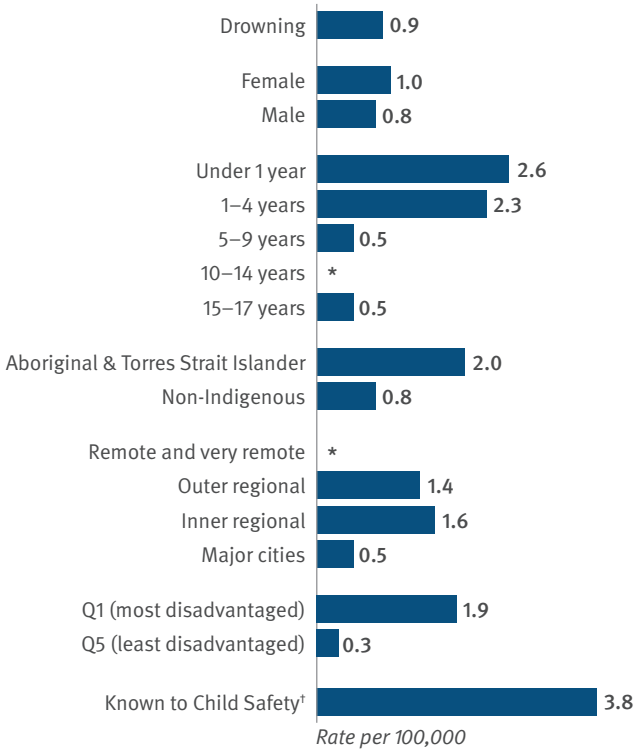
2004 to 2024



5-year summary (2019–24) | Water hazard type



Demographics



Risk factors

Under 5s
are at greatest risk

Drowning is the
leading external cause of death
in children 1–4 years

1–4 years

43% were in **private pools**

25% were in **rural water hazards**

Under 1s

In the last 5 years
7 out of 8 under 1 drownings
were **bathing incidents**

Notes: Counting is by date of death registration. Percentages may not add to 100 due to rounding.
** rate not calculated for numbers less than 4.*
† in the 12 months prior to death.

Key findings

The deaths of 10 children and young people were attributed to drowning in Queensland in 2023–24. This is a rate of 0.9 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.[43]

Types of drowning-related deaths

Of the 10 child deaths in drowning incidents in 2023–24, 3 occurred in swimming pools and 7 were non-pool incidents.

Fifty-three children drowned in the last 5 years. Private pools were the most common incident locations for child drownings (32%), with all 17 of these incidents in residential locations (homes, townhouse or units).[44] Bath drownings were the second most common location (12 deaths or 23%).

Other child drownings over the last 5 years included rural water hazards (e.g. dams) (9 deaths or 17%), dynamic waterways (e.g. rivers, creeks) (6 deaths or 11%), and static waterways (e.g. lakes, reservoirs) (3 deaths or 6%).

Sex

During 2023–24, 6 male children and 4 female children died in drowning incidents. The female drowning rate was slightly higher than the male rate over the last 5 years, with a female drowning rate of 1.0 per 100,000 compared with 0.8 per 100,000 for males.

Age

Children aged under 5 years made up the largest group of drowning deaths in 2023–24 (60%), with 3 children under 1 year and 3 children aged 1–4 years making up this group. The rate of drowning was highest in children aged under 1 year (2.6 per 100,000) followed by children aged 1–4 years (2.3 per 100,000) (5-year average). Drowning rates in the older age groups was 0.5 per 100,000 or less. Drowning was the leading external cause of death for children aged 1–4 years over the last 5 years.

Risk factors and age

Under 1 year

Eight children under the age of 1 year have drowned over the last 5 years, accounting for 15% of child drowning deaths. Seven deaths were bathing incidents, and in 5 of these incidents the infant was co-bathing with other children at the time. In all but one of the 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, 28 children aged 1–4 years have drowned, accounting for 53% of all drowning deaths over this period. Twelve of the 28 deaths (43%) occurred in private pools.

Pool fencing was non-compliant in all 12 incidents of private pool drownings. Non-compliant fencing includes the absence of fencing, fencing or gate defects or propping pool gates open. The pool gate was propped open in 7 of the 12 incidents and there was no pool fence in one incident.

43 Tables with data for 2004–2024 are available online at www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data

44 Non-residential private pools include, for example, those in motels and resorts.

Ten of the 12 incidents occurred at the child's usual place of residence, while 2 occurred at the homes of extended family.

Non-pool locations also present dangers to young children. Sixteen children aged 1–4 years drowned in non-pool incidents over the last 5 years with the most common being rural water hazards (7).

Fourteen of the 28 children were known to be in, on or around water hazards. None of those 14 children were within arm's reach, or being actively supervised by a capable supervisor, at the time of the incident.[45]

5–9 years

Nine children aged 5–9 years drowned over the last 5 years, accounting for 17% of all drowning deaths. The drownings involved a variety of water hazards.

In 5 of the 9, the child was known to be in, on or around water. All 5 children were either unsupervised or not actively supervised.[46] Four of the 5 children were identified by their families as weak or non-swimmers and 2 of the 5 were identified to have a medical condition or impairment that would require a higher level of supervision.[47]

10–17 years

Eight young people aged 10–17 years drowned over the last 5 years (3 aged 10–14 years and 5 aged 15–17 years), accounting for 15% of all drowning deaths. The drownings occurred across a variety of water hazards.

Three of the young people were identified by their families as weak or non-swimmers. One of the young people had a medical condition or impairment which would indicate a higher level of supervision was required.

Preventative factors

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; followed by various changes in requirements such as fence height. Compliance requirements for pool registration and inspection were introduced in 2009.

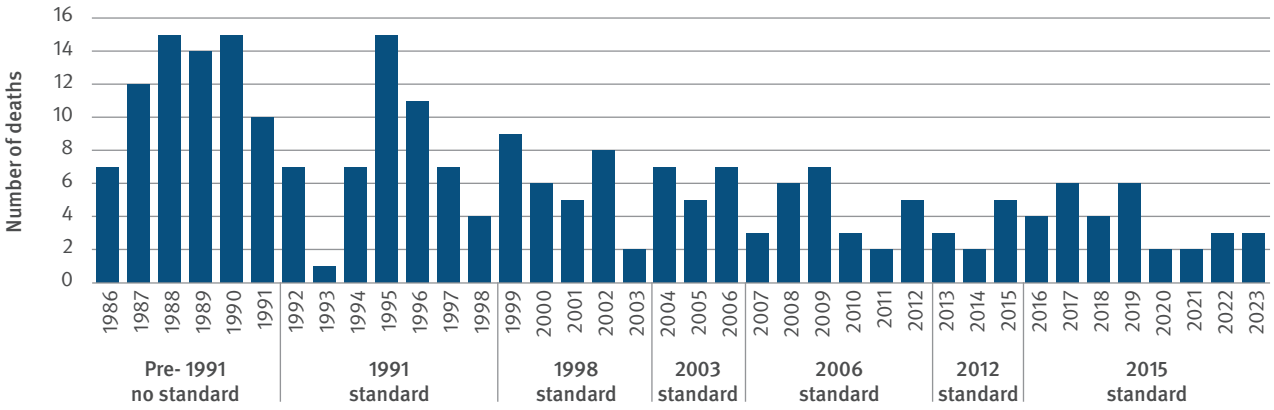
Decreasing numbers of deaths are apparent over time, with average annual deaths of 12 deaths in 1986–89, 8.6 in the 1990s, 5.6 in the 2000s, 4 in the 2010s and 2.5 in the 2020s to date. As this would be set against an expected increase in pool ownership over time provides evidence that the introduction and strengthening of pool fencing regulations have improved safety for young children by limiting access to private pools. It is important to emphasise; however, that age-appropriate supervision must be used in conjunction with compliant physical barriers—both are critical to preventing pool drowning deaths in this age group.

45 Supervision recommendations for children aged 0–4 years by Royal Life Saving Australia, www.royallifesaving.com.au/about/campaigns-and-programs/keep-watch/keep-watch-actions. Active supervision means focusing all of your attention on your children all of the time, when they are in, on or around the water.

46 Supervision recommendations for children aged 5–14 years by Royal Life Saving Australia, www.royallifesaving.com.au/stay-safe-active/communities/how-to-keep-children-safe/children-aged-5-to-14-years

47 Supervision recommendations for children with epilepsy by Royal Life Saving Australia, www.royallifesaving.com.au/stay-safe-active/risk-factors/epilepsy-and-drowning

Figure 4.1: Drowning deaths of children 0–4 years in Queensland private pools by applicable pool standard (number), 1986 to 2023



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 (2004–23).

Guidelines for inland waterway safety

In July 2024, Royal Life Saving Australia (RLS) released new national guidelines for inland waterway safety, informed by a 20-year analysis that found rivers, lakes, creeks and dams are prominent locations for unintentional fatal drownings.[48]

Data within the Child Death Registers indicates 87 children and young people have drowned in inland waterways in Queensland between 2004 and 2023. As illustrated in Figure 4.2, the most common locations for inland waterway drownings were rural dams (39%), rivers (18%) and lakes and ponds (18%).

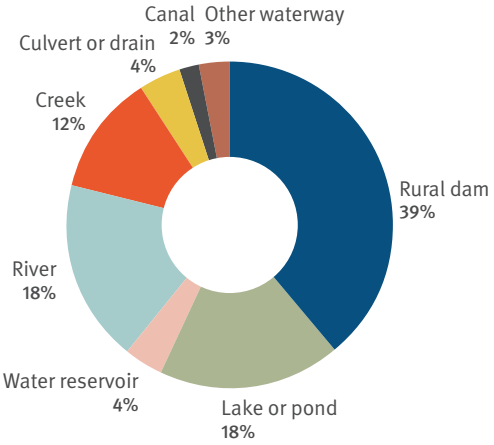
The guidelines offer a best practice framework for water and landowners to work together with community agencies and stakeholders. They include practical steps and strategies to mitigate the risk of drowning and aquatic injuries at inland waterways.

Created in response to the Australian Water Safety Strategy 2030, which aims to reduce drowning rates in inland waterways by half by 2030, the guidelines are based on two decades of research, coronial recommendations, legal findings, policy reviews, and extensive public consultation.

These guidelines provide resources and practical solutions for decision-making regarding public rescue equipment, safety signage, designated swimming areas, and community education.

48 Royal Life Saving Australia (2023) *Guidelines for Inland Waterway Safety,* www.royallifesaving.com.au/subscribers/guidelines-for-inland-waterway-safety

Figure 4.2: Drowning deaths of children and young people 0–17 years in Queensland inland waterways, 2004 to 2023



Medical conditions or impairments

Medical conditions, such as cardiac-related conditions, epilepsy, diabetes, and autism, should be taken into consideration when children are in and around water, according to advice from the RLS. Epilepsy has been found to be a risk factor for drowning, particularly in children. The increased risk is thought to be between 5 and 15 times greater than those without epilepsy. RLS advises that people with epilepsy consult with their doctor around water safety and the safety for the person to partake in water-related activities, regardless of the individual's swimming ability. It is also advisable that a child with epilepsy is actively supervised at all times when around water, including bath time.

Of children and young people who have drowned in Queensland in the last 5 years, 10 (19%) had a known or suspected impairment or medical condition. Two of the children had epilepsy or a history of seizures.

Royal Life Saving research shows that autistic children and adolescents are 3 times more likely to drown than non-autistic children.[49] Eight children known to be or suspected of being autistic have drowned in Queensland in the last 5 years. Prevention messaging for parents and carers of autistic children highlights the importance of:

- active adult supervision for all ages
- the erection of barriers to restrict access to water
- the creation of child safe play areas where there is a risk of drowning posed by natural waterways.

More information on drowning risk factors and preventions measures can be found on the RLS website: **www.royallifesaving.com.au/stay-safe-active/risk-factors**

49 Peden AE, Willcox-Pidgeon S (2020) *Autism spectrum disorder and unintentional fatal drowning of children and adolescents in Australia: an epidemiological analysis*. Archives of Disease in Childhood **https://adc.bmj.com/content/105/9/869?SQ_DESIGN_NAME=new**

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 273 immersion incidents. Of immersion incidents involving children, 33% occurred in swimming pools and 29% occurred at the beach or ocean. Immersion incidents were most common in children aged 1–4 years, and in this age group, the majority (76%) of incidents occurred in swimming pools.

Table 4.1: Queensland Ambulance Service responses to immersion incidents (number), 2023–24

Type of incident	Under 1 year	1–4 years	5–9 years	10–14 years	15–17 years	Total
Pool	*	78	6	*	*	84
Bath	21	9	*	*	*	30
Beach/ocean	*	6	15	22	30	73
Other immersion	7	9	24	15	13	68
Total	**28**	**102**	**45**	**37**	**43**	**255**

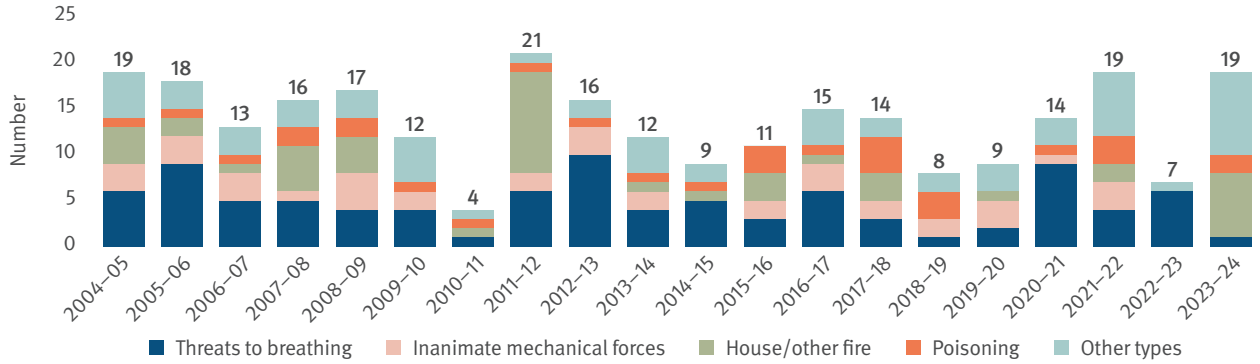
Data source: Queensland Ambulance Service (Aug 2024)

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

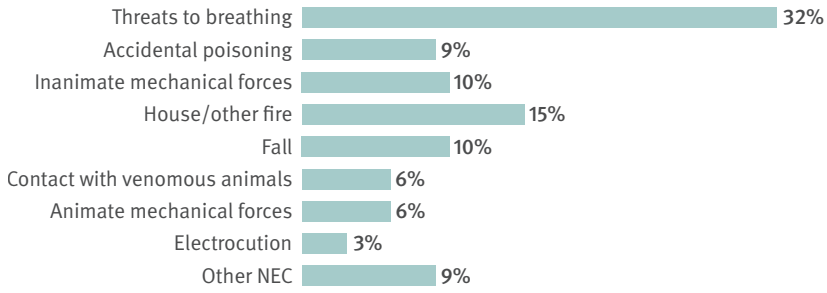
Notes: Numbers in the table do not add to the total number of immersion incidents attended by Queensland Ambulance Service (n=273) as cells with less than 5 are not shown, and are excluded from table totals.

5 Other non-intentional injury

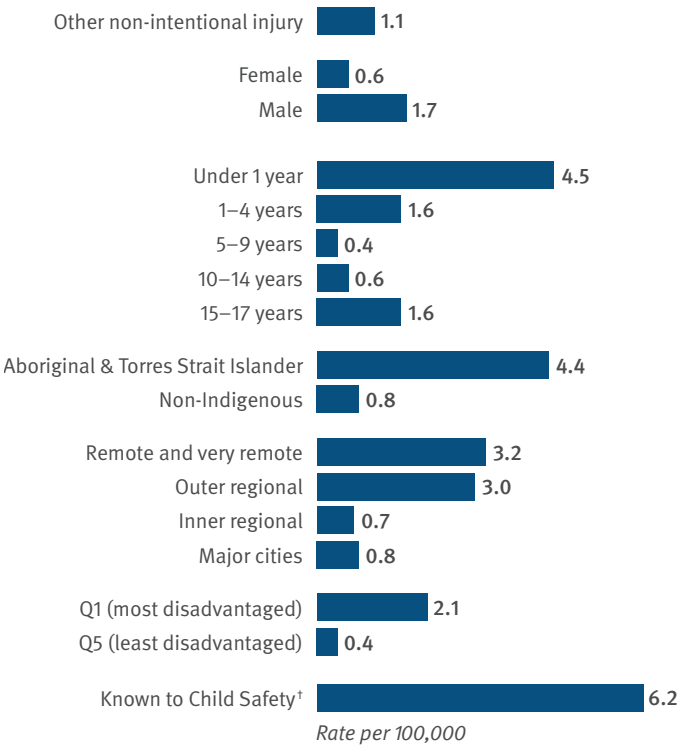
2004 to 2024



5-year summary (2019–24) | Incident type



Demographics



High risk groups

Under 5s

50% of deaths from non-intentional injury were aged **under 5 years**

53% of other non-intentional deaths in under 5s were from **threats to breathing**

Young people

24% of deaths from non-intentional injury were **aged 15–17 years**

67% of **accidental poisoning** deaths were aged between 15–17 years

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 **Appendix E** (available at **www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data**).

Injury type

Nineteen children died from other non-intentional injuries during 2023–24. These included 7 from house or other fire, 4 each from falls and exposure to forces of nature, 2 from accidental poisoning, and one each from threats to breathing and exposure to animate mechanical forces.

Sixty-eight children died from other non-intentional injury over the last 5 years. The most common injury types were threats to breathing (22), house or other fire (10), exposure to inanimate mechanical forces (7), and falls (7).[50]

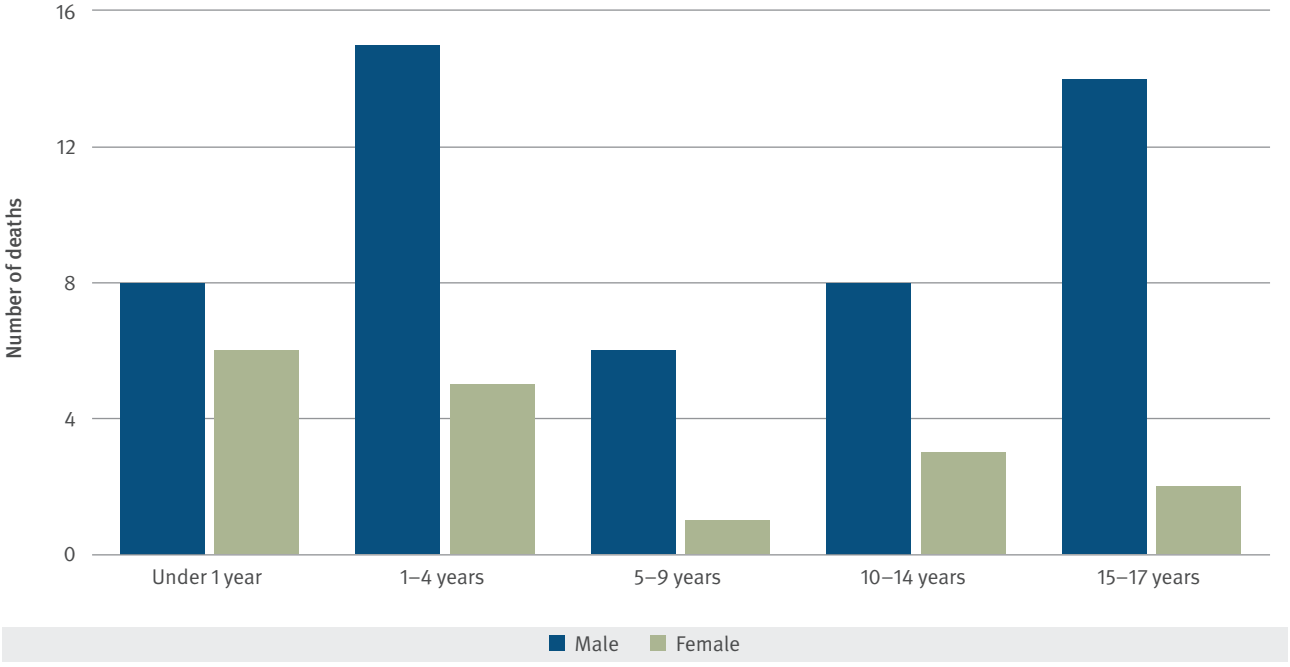
Table A.7 in **Appendix A** provides summary data on other non-intentional injury deaths in the last 5 years.[51]

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 75% of deaths from non-intentional injuries. With the exception of infants under 1 year, the deaths of male children outnumbered the deaths of female children by more than a factor of 2 for all age groups 1–17 years.

The rate of death from non-intentional injuries was highest for infants aged under 1 year (4.5 per 100,000), followed by children aged 1–4 years (1.6 per 100,000) and young people aged 15–17 years (1.6 per 100,000) (5-year averages).

Figure 5.1: Other non-intentional injury deaths by age and sex (number), 2019–20 to 2023–24



50 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.

51 Tables with data for 2004–2024 are available online at **www.qfcc.qld.gov.au/sector/child-death/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:

- Seven children died in 3 residential house fires.
- Seven children, all under the age of 4 years, died from heat stress when they were unintentionally left alone or became trapped in vehicles.[52]
- Threats to breathing was the most common injury type for children aged 0–4 years (82% or 18 of 22 deaths).

Sleep environment for infants

Infants are particularly vulnerable to sleep accidents due to their immature development and susceptibility to airway compromise from their environment. The **Queensland Clinical Guideline: Safer infant sleep** provides recommendations for infant caregivers around risk-reduction strategies, focusing primarily on a clear sleep space and airway.[53]

Of the 14 infant deaths due to other non-intentional injury over the last 5 years, 13 occurred during a sleep event. Incidents involved accidental over-lay by a co-sleeping person (6), entrapment/entanglement incidents in the sleep environment (5) and accidental suffocation by objects in the sleep environment (2).

Product safety

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

During 2023–24, two children died from caustic injuries after ingesting caustic substances contained in cleaning products. Since 2006, a total of 4 caustic injury related deaths were recorded in Queensland, and 3 of the 4 children who died were aged under 4 years at the time of the ingestion incidents.

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

- 3 from the use of an infant or child product where the products were either potentially maladapted, defective or with high intrinsic risk
- 2 from strangulation after becoming entangled in a roller blind cord (4 in total since 2004)
- one from ingesting a button battery (2 in total since 2004)
- one from toppling furniture (6 in total since 2004).

Unsafe petrol-handling practices were identified in 2 fire-related deaths. Further, there have been an additional 2 deaths of young children due to ingestion of petrol which had been decanted into bottles. These 2 deaths remain unregistered at the time of reporting and are not counted in the totals of this report. Queensland Poisons Information Centre provides guidance around the safe storage of petrol and other poisons in the home.[54]

Young children are particularly vulnerable to household hazards. Of note in the last 5 years is the storage practices of chemicals and poisons and the rapidity of fatal injury following ingestions. Kidsafe provides **A parent's guide to kidsafe homes** with a comprehensive list of common household risks and actions that caregivers can take to identify and reduce those risks within their homes.[55]

52 Only 5 of these deaths are counted in this chapter while the other 2 are included in **Chapter 7 – Fatal assault and neglect**.

53 www.health.qld.gov.au/__data/assets/pdf_file/0025/1166353/g-safer-sleep.pdf

54 www.poisonsinfo.health.qld.gov.au/household-poisons

55 https://kidsafe.com.au/wp-content/uploads/2020/11/202010-A-Parents-Guide-to-Kidsafe-Homes-Web.pdf

Infant sleep product safety

New national safety and information standards for infant sleep products, developed by the Australian Competition and Consumer Commission (ACCC), were released in July 2024. These standards cover both sleep and inclined non-sleep products, aiming to reduce the risks of death and injury to infants. The mandatory safety standard applies to design, construction, performance and testing requirements for infant sleep products. The mandatory information standard will ensure consumers are provided with important messaging on safe sleeping and infant product suitability.[56]

Toppling furniture hazard warnings

In May 2024 a new toppling furniture information standard came into force, requiring furniture suppliers to provide safety warnings to consumers about the dangers of toppling furniture. Securing furniture items to the wall or floor is one of the best ways to address the risks of toppling furniture. The toppling furniture information standard will require suppliers to attach a permanent warning label to furniture, include safety information and advice about anchoring furniture, and provide warnings about the hazards in furniture stores and online. The standard will apply to chests of drawers, wardrobes, bookcases, hall tables, display cabinets, buffets and sideboards with a height of 686mm or more, and entertainment units of any height.[57]

Campfire safety

Two deaths over the 5-year period involved injuries caused by campfires. Queensland Fire and Emergency Services provides guidance in their **Campfire and camping safety** information sheet around campfire safety practices, including safe ways to build and start a campfire, monitoring and extinguishing practices.[58]

Risk-taking activities

Several deaths have occurred in the context of risk-taking activities. In the 5 years ending 30 June 2024:

- 4 deaths involved drug overdose
- 3 deaths appeared to be the result of a choking game or prank
- 3 deaths occurred while exploring or recreating at waterfalls or natural pools.

In addition to the 3 other non-intentional injury deaths that occurred at waterfalls and natural pools, there were also 2 deaths that were the result of drowning (included in Chapter 3) in similar locations. Four of the 5 deaths were young people aged 15–17 years of age. Waterfalls and natural pools can pose a number of safety risks to visitors including slips or falls, striking submerged objects, cold water immersion, dynamic or fluctuating water levels and submersion or entrapment under flowing water. Royal Life Saving Australia's report **Drowning in rivers, creeks, lakes and dams: A 10-year analysis** identified an emerging theme in drowning data for incidents occurring at national parks and waterfalls.[59]

Of note, 67% of fatalities of 15–17 year olds due to other non-intentional injury were either the result of drug overdose or involved significant substance misuse at the time of the incident. There have also been 2 deaths, that were unregistered at the time of reporting, that occurred as a result of chroming with aerosol deodorant cans.

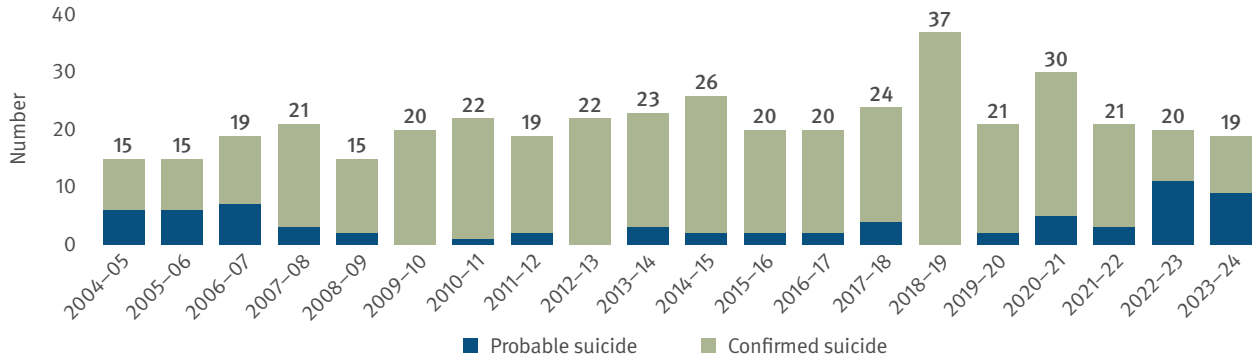
Charges and criminal proceedings

No deaths resulted in criminal charges in 2023–24. Over the last 5 years; however, there were criminal charges in relation to 4 deaths.

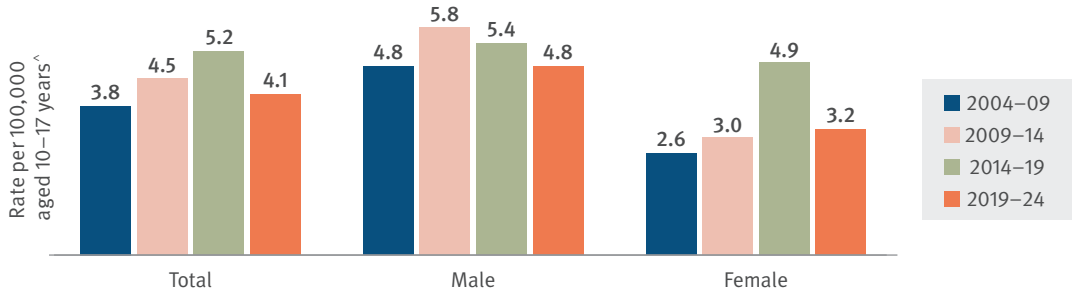
56 https://www.productsafety.gov.au/business/search-mandatory-standards/infant-sleep-products-mandatory-standards
57 www.productsafety.gov.au/product-safety-laws/safety-standards-bans/mandatory-standards/toppling-furniture
58 www.fire.qld.gov.au/sites/default/files/2021-12/CEU-CampfireSafety.pdf
59 www.royallifesaving.com.au/__data/assets/pdf_file/0006/72456/RLS_InlandWaterwaysReport2023_LR.pdf

6 Suicide

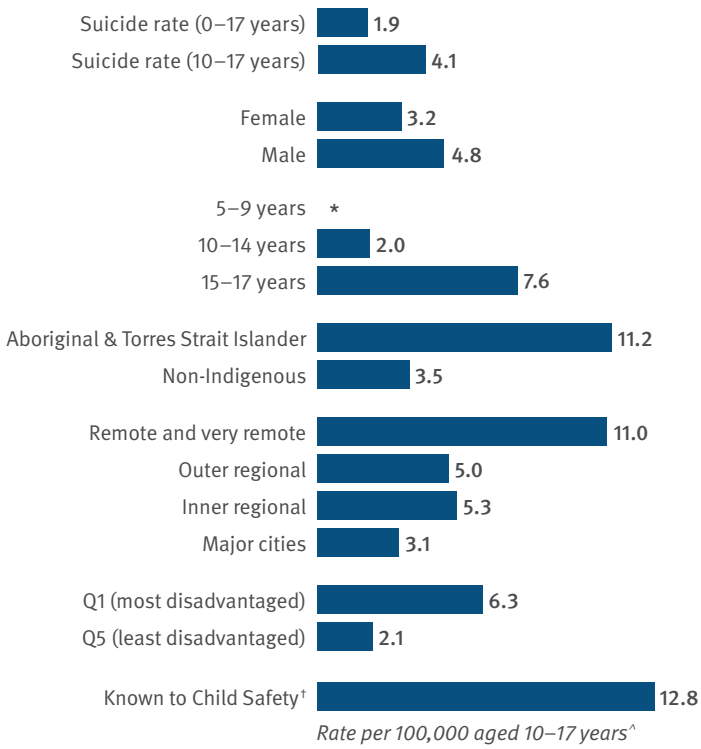
2004 to 2024



5-year summary (2019–24) | Sex



Demographics



Risk factors

45% adverse childhood experiences

41% diagnosed mental health condition

68% self-harm and suicidal behaviours

35% history of alcohol and/or substance misuse

41% history of behaviour problems and/or offending

Notes: Counting is by date of death registration.
** rate not calculated for numbers less than 4.*
^ 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.

Key findings

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 **Appendix F** (available at **www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data**).

Nineteen children and young people died by suicide in 2023–24, a small decrease from 20 deaths in the previous reporting period.

Ten deaths in the 2023–24 period were classified as confirmed suicides and nine deaths were probable suicides (i.e. more consistent with suicide than any other means).[60]

A total of 111 young people have died by suicide over the last 5 years, with an average of 22 deaths per year.[61] The rate of suicide per 100,000 young people aged 10–17 years increased between 2004–09 and 2014–18 from 3.8 to 5.2, but the most recent trend was a decrease in the rate to 4.1 in 2019–24.[62]

Suicide was the leading overall cause of death for both young people aged 10–14 years and 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 5 of the 19 suicides from 2023–24. Coroners made clear statements that suicide was the cause of death in all five cases.

Intent stated or implied (orally or written)

There was evidence of suicidal intent in 7 of the 19 suicide deaths during 2023–24. Four young people stated or implied their intent to a friend or parent. Intent was stated or implied either by text or instant message or in person.[63] Suicide notes were left by 5 young people.

Age

Of the 19 suicide deaths during 2023–24, 6 were aged 10–14 years and 13 were young people aged 15–17 years.

The 5-year suicide rate for young people aged 15–17 years was 3.8 times the rate for young people aged 10–14 years (7.6 deaths per 100,000 aged 15–17 years, compared with 2.0 deaths per 100,000 aged 10–14 years).

Suicide deaths among young people increase with increasing age, as illustrated in Figure 6.1. Young people aged 9–11 years made up 1% of suicides, with the proportions generally increasing with age. More than half of the suicides of children and young people over the past 5 years were aged either 16 years (24%) or 17 years (30%).

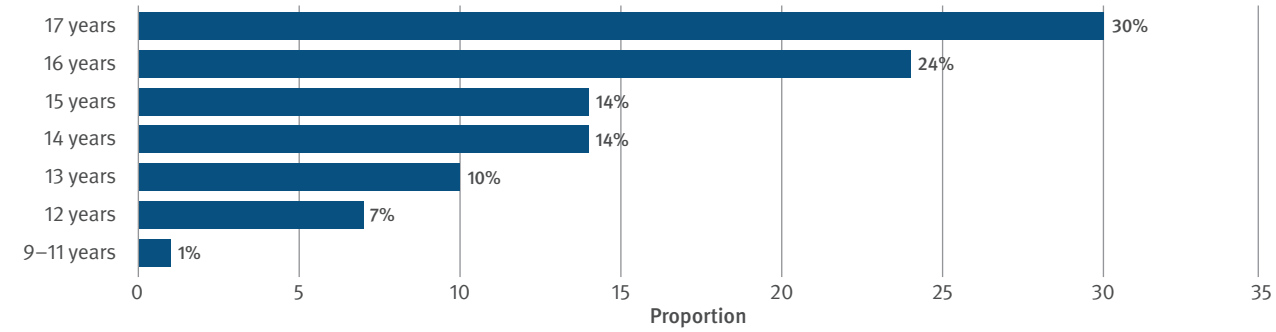
60 Suicide classifications are made based on information held by the QFCC at the time of reporting. Deaths are classified as possible suicides where there is insufficient information to determine fatal intent. Where the fatal outcome was most likely not intended, such as the consequences of risk-taking 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'.

61 Tables with data for 2004–24 are available online at **www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data**

62 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.

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

Figure 6.1: Suicide deaths by single year of age (proportion), 2019–20 to 2023–24



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

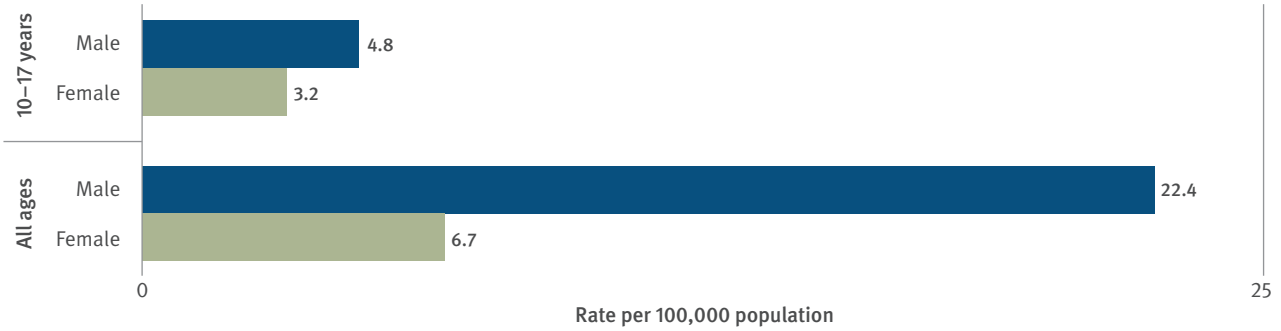
Sex

Of the 19 young people who died by suicide in 2023–24, 11 were male and 8 were female.

Over the last 5 years, 61% of young people who suicided were male and 39% were female. The average suicide rate for males was 1.5 times the rate for females (4.8 deaths per 100,000 males aged 10–17 years, compared with 3.2 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 (2019–24) and Queensland total suicide rates (2022, age-standardised)



Sources: QFCC Queensland Child Death Register; ABS (2023) Causes of Death, Queensland, 2022, 'Table 4.1: Underlying cause of death, All causes, Queensland, 2022', https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/2022#data-downloads

Risk factors

Adverse childhood experiences and child maltreatment

The National Health and Medical Research Council 2023 report, *The prevalence and impact of child maltreatment in Australia: Findings from the Australian child maltreatment study*, found that one in four 16–24 year olds reported experiencing child maltreatment and that the abuse often occurred over a number of years. The report also identified that young people aged 16–24 years who had experienced child maltreatment were at increased risk of:

- developing cannabis dependence (6.5 times)
- attempting suicide (4.5 times)
- non-suicidal self injury (3.5 times)
- developing a mental disorder (including symptoms consistent with major depressive disorder, generalised anxiety disorder and/or post-traumatic stress disorder) (2.9 times).

Other literature on suicide provides a relatively consistent account of the factors and life circumstances that are associated with youth suicide.[64] 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.[65]

Adverse childhood experiences (ACEs) include childhood abuse, neglect and household dysfunction (substance abuse, parent mental illness, exposure to domestic violence and parent criminal behaviour).

The Centers for Disease Control and Prevention indicates that ACEs can undermine a child's sense of safety, stability and bonding; negatively impacting on physical, mental, emotional and behavioural development. Over time, these negative impacts may limit a child's ability to process information, make decisions, interact with others and regulate emotions.[66]

Information available indicated 4 of the 19 young people who suicided in 2023–24 had a history of alleged childhood abuse and neglect. Sexual abuse and emotional abuse were the most common types of abuse reported.

Household dysfunction was identified in 3 of the 19 suicide deaths of young people in 2023–24, with exposure to domestic violence identified as the most common.

Complex behaviours

Young people can engage in risk-taking behaviours beyond that which is developmentally appropriate. These complex behaviours may interfere with development and daily functioning, pose serious risks to the young person's health and safety, and impair healthy functioning.

The behaviours often include substance dependency, self-harm and suicidal behaviours, verbal and physical assaults on others, destruction of property, engaging with adults who are considered exploitative, criminal behaviour, high-risk sexual behaviour and engaging in dangerous physical activities.[67]

64 McDermott B (2021) ***Highly vulnerable infants, children and young people***: *A joint child protection mental health response to prevent suicide*, Queensland Child Death Review Board. **https://www.qfcc.qld.gov.au/board/publications**

65 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, **https://doi.org/10.1016/j.jad.2003.12.013**

66 US Centers for Disease Control and Prevention, *We can prevent childhood adversity*, **https://vetoviolence.cdc.gov/apps/aces-infographic/assets/pdf/ACEs-Infographic-Narrative_508.pdf**

67 QFCC *Beyond behaviours discussion paper* (pending publication).

Alcohol and substance misuse

One of the 19 young people who suicided during 2023–24 was reported as having a history of alcohol, tobacco and/or substance use.[68]

Self-harm and suicidal behaviour

Research into youth suicide shows that a history of self-harming behaviour, suicidal ideation and previous suicide attempts are associated with future suicidality. In relation to the 19 young people who died by suicide in 2023–24:

- At least one risk factor was present for 15 of the 19 young people who suicided.
- Seven had previously attempted suicide, with one young person attempting suicide on more than one occasion.
- Ten young people had previously engaged in self-harming behaviour, such as cutting.
- Eleven had previously expressed suicidal thoughts (ideation).[69]
- There was no evidence of previous self-harm or suicidal behaviour for 4 young people.

In the 2023 Kids Helpline Impact Report, over a 5-year period, one in 6 contacts to the Helpline were suicide related with the youngest caller identified to be 7 years of age.[70]

Behavioural problems and offending

Six of the young people who suicided in 2023–24 were identified as having exhibited behavioural problems and offending, with aggression identified the most frequently.

Mental health

A high proportion of mental illness has been found among young people who die by suicide. 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.

Eight of the 19 young people who suicided during 2023–24 had a diagnosed mental health condition before their death. Eight young people were known to have engaged with a healthcare professional and 7 had been prescribed medication for their condition/s.

The range of mental health diagnoses included depressive disorders, anxiety disorders (including obsessive compulsive disorder) and eating disorders. The most common diagnosed conditions were depressive and anxiety disorders. One of the 8 young people was identified to have multiple mental health conditions (co-morbid conditions).

A further 8 young people were suspected to have a mental health issue. One of those young people had engaged with a healthcare professional.

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

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

70 Kids Helpline (2023) *Kids Helpline impact report 2023*, www.kidshelpline.com.au/about/impact-report-2023

Cohorts in youth suicide

The Adverse childhood experiences study and the Australian child maltreatment study both highlight the risks to future health outcomes for those who have a history of adverse childhood experiences, including the increased risk of suicidal behaviour. While the cohort of young people who experience these adversities accounts for a significant proportion (45%), it appears that there are a number of other distinct groups within youth suicides.

Figure 6.3 provides a summary of the adverse childhood experiences, mental health diagnoses and complex behaviours identified for the 111 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.

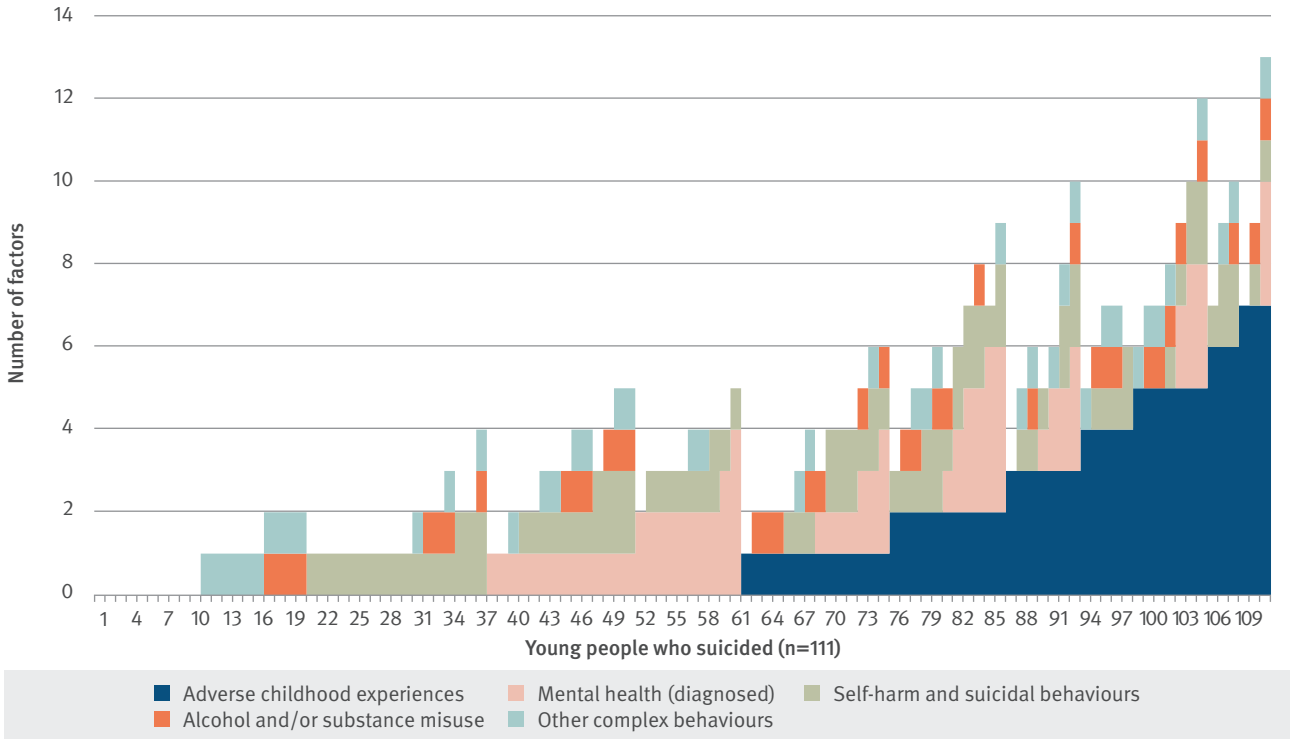
Across the cohort, 41% had a diagnosed mental health condition, 68% had a history of self-harm and/or prior suicide attempts, 35% had a history of alcohol and/or substance misuse, and 41% had other complex behaviours.

The data in Figure 6.3 shows a number of groups, based on the experiences of those young peoples' lives:

- Young people who have a history of adverse childhood experiences with, for most, co-occurring diagnosed mental health conditions and/or complex behaviours (45%).
- Young people with diagnosed mental health conditions with, for most, co-occurring complex behaviours (22%).
- Young people who demonstrate complex behaviours (24%) without other risk factors.
- Young people without any identified risk factors (9%).

The data highlights the importance of intervention and prevention strategies tailored to the life experiences of children and young people.

Figure 6.3: Adverse childhood experiences, diagnosed mental health conditions and complex behaviours in youth suicides (number), 2019–20 to 2023–24



Other factors

Neurodivergence

Four of the young people who suicided during 2023–24 were known to have been identified as neurodivergent. Neurodivergence is a term used to describe differences in how the brain works and can include autism, attention deficit hyperactivity disorder, Tourette's syndrome, dyspraxia, dyslexia, dyscalculia and other learning disabilities. The most common type of neurodivergence identified was attention deficit hyperactivity disorder.

School engagement

Five of the young people who suicided during 2023–24 were noted to have been experiencing difficulties with school engagement; with chronic absenteeism or non-participation identified.

Stressful life events and precipitating incidents

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.

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 timeframe of up to 6 months between the death of the family member or friend and the suicide of the young person.

Outside of adverse childhood experiences, the most common stressors and precipitating incidents evident for young people who suicided in 2023–24 were parental separation (9), bullying (6), transitions in education (4) and transitions in residence (4).

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 in one youth suicide during 2023–24.

COVID-19

COVID-19 was not identified as a direct stressor for any suicide deaths in 2023–24. There continues to be no evidence of a significant change in youth suicide deaths in Queensland attributable to COVID-19.

Queensland Ambulance Service data

Queensland Ambulance Service (QAS) data indicates in the last year almost 9,800 ambulance callouts occurred for suicidal behaviour and self-harm-related incidents involving children, including both fatal and non-fatal injuries (see Table 6.1). Female patients accounted for 67% of callouts.

Table 6.1: Queensland Ambulance Service responses to self-harm and suicidal behaviour incidents (number), 2023–24

Age	Female	Male	Not specified	Total
5–9 years	104	114	*	218
10–14 years	2,630	1,240	16	3,886
15–17 years	3,823	1,767	43	5,633
Total	**6,557**	**3,121**	**59**	**9,737**

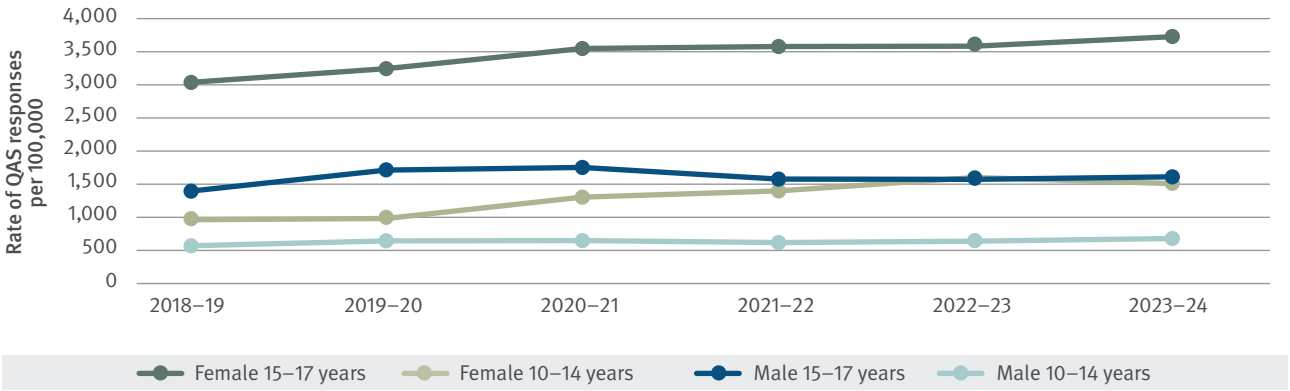
Data source: Queensland Ambulance Service (Aug 2024)

Notes: Not specified includes cases where gender was recorded as indeterminate or missing.

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

Analysis of the rate of QAS callouts for self-harm and suicidal behaviours over the last 6 years are shown in Figure 6.4.[71] The rate of callouts for 15–17 year old females was considerably higher than the other groups. While rates over time remained relatively stable for males, rates increased over time for females in both age groups.

Figure 6.4: Queensland Ambulance Services responses to self-harm and suicidal behaviour incidents (rate per 100,000), 2018–19 to 2023–24



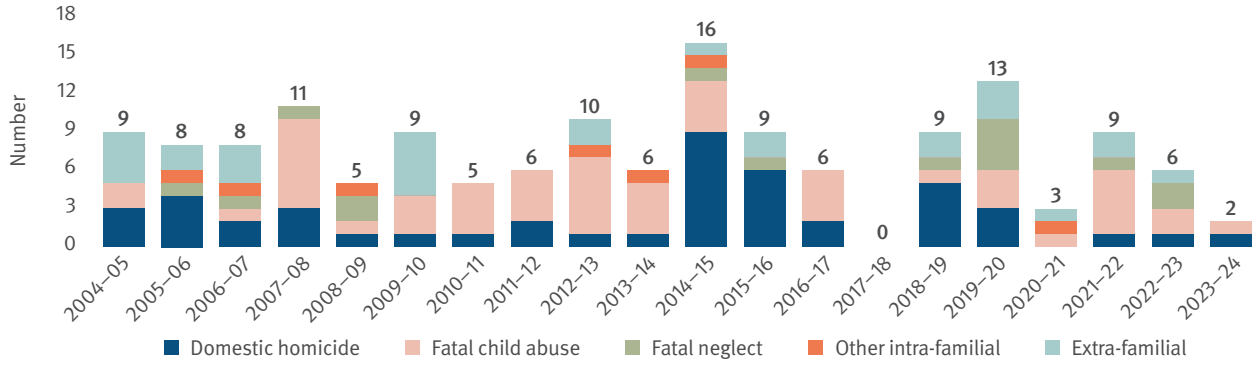
Data source: Queensland Ambulance Service (Aug 2024)

Notes: Excludes cases where gender was recorded as indeterminate or missing. Rates are calculated for each financial year per 100,000 children in each age/sex category.

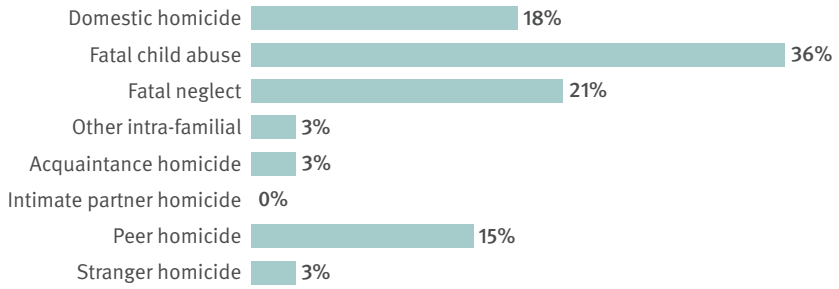
71 Data for the past years is published in previous editions of this report, from data originally provided by the QAS.

7 Fatal assault and neglect

2004 to 2024

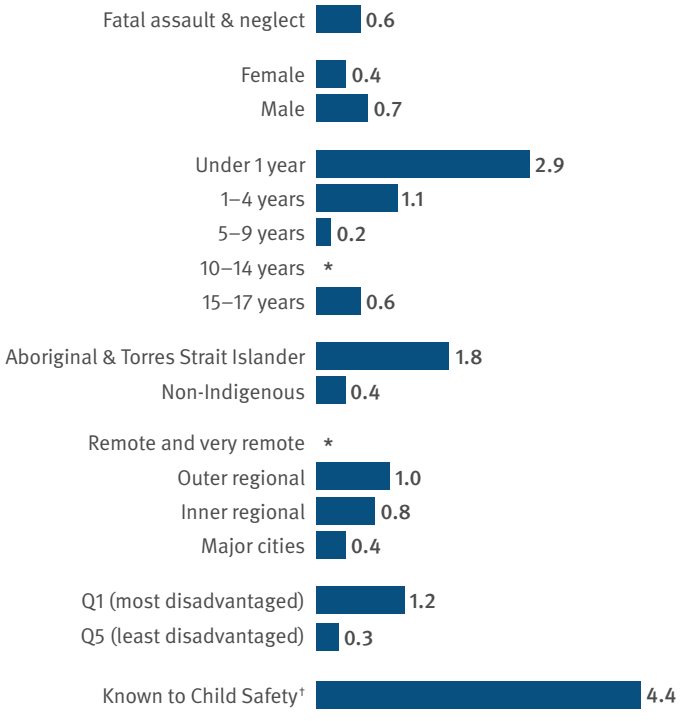


5-year summary (2019–24) | Incident type



Proportion of fatal assault and neglect

Demographics



Rate per 100,000

Intra-familial fatal assault and neglect risk factors

69% **child experienced previous abuse**

62% **household domestic and family violence**

43% alleged perpetrator had **history of offending**

30% alleged perpetrator had **alcohol and/or substance misuse**

35% alleged perpetrator had **suspected or diagnosed mental health issues**

Notes: Counting is by date of death registration. Percentages may not add to 100 due to rounding.
** rate not calculated for numbers less than 4.*
† in the 12 months prior to death.

Key findings

Based on information available to the QFCC at the time of reporting, 2 deaths were identified as being the result of fatal assault and neglect in Queensland during 2023–24.

Deaths are classified as fatal assault and neglect where evidence available to the QFCC indicates the child died as a result of inflicted injury or neglect, irrespective of whether a perpetrator has been identified and/or charged. Definitions for the types of fatal assault and neglect can be found in **Appendix C** and a description of the QFCC's screening criteria can be found in **Appendix G** (both available at **www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data**).

Over the last 5 years, 33 children died in 30 fatal assault and neglect incidents. Twenty-six deaths were categorised as intra-familial, meaning that the alleged perpetrator was a parent, family member or person acting in a parental role. Six children died in domestic homicides, including murder-suicide incidents where the alleged perpetrator also took their own life. Twelve children were found to have died as a result of child abuse, 7 died from neglect and 1 was other intrafamilial.

Seven deaths in the last 5 years were extra-familial homicides, including peer homicides (5), acquaintance homicide (1), and stranger homicide (1).

Further summary information on deaths from fatal assault and neglect can be found in **Table A.9** in **Appendix A**.[72]

Age and sex

Infants under 1 year had the highest rate of death from fatal assault and neglect over the last 5 years (2.9 per 100,000), followed by children 1–4 years (1.1 per 100,000) and 15–17 years (0.6 per 100,000). All children who died in intrafamilial homicides were aged under 9 years, while 6 of the 7 extra-familial homicide deaths were young people aged 15–17 years.

Of the 33 children who died from assault or neglect in 2019–24, 13 were female and 20 were male (a rate of 0.4 and 0.7 per 100,000, respectively). Males are more at risk of experiencing extra-familial homicide, 6 out of the 7 extra-familial homicide deaths were males over the last 5 years.

Charges and criminal proceedings

Of the 30 fatal assault and neglect incidents during 2019–24, alleged perpetrators for 28 incidents have been charged, while one perpetrator was deceased in the same incident (murder-suicide).

72 Tables with data for 2004–24 are available online at **www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data**

Vulnerability characteristics

Of the 33 child deaths from assault and neglect during 2019–24, 22 (67%) children were known to the child protection system within the 12 months prior to death and 5 were known outside the statutory review period. It is noted that 3 children were only known to child protection because of the incident leading to their death.

Available evidence indicated the following factors[73] were present for the 26 children who died from intra-familial homicide in 23 incidents over the last 5 years:

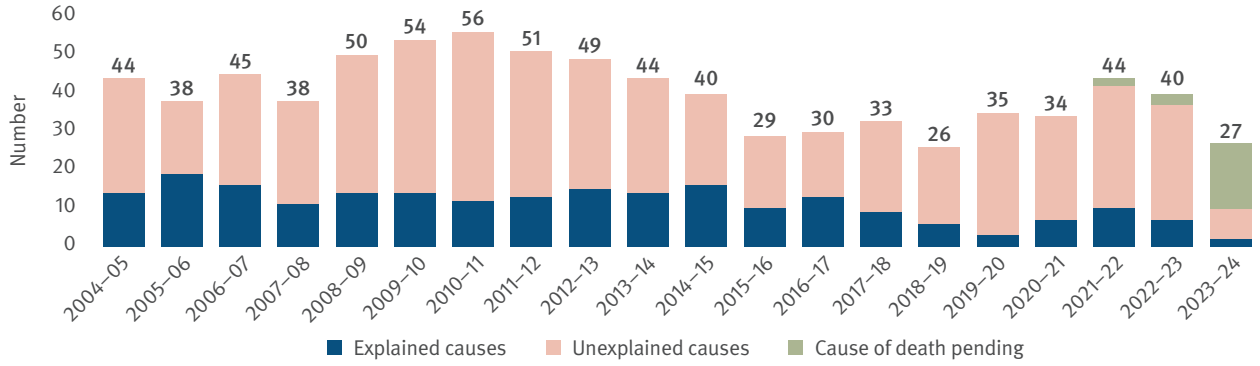
- 69% had experienced child abuse prior to the incident (18 of 26 children)
- 62% had evidence domestic and family violence was present in the child's household (16 of 26 children)
- 35% of the alleged perpetrators were identified as either having a diagnosed or suspected mental health issue (8 of the 23 incidents)
- 43% of the alleged perpetrators had a history of criminal offending (10 of the 23 incidents)
- 30% of the alleged perpetrators had a history of alcohol or substance use (7 of the 23 incidents).[74]

73 The QFCC collects information on vulnerability characteristics relating to the child, family and, where relevant, the perpetrator. The information is based on statements of fact or clear statements of opinion by credible external sources, as recorded in source documents (primarily police and coronial reports). The information is subject to limitations, in that it is based on those factors which can be identified in the source information. Given the small numbers in this analysis and these limitations, the findings are considered indicative only.

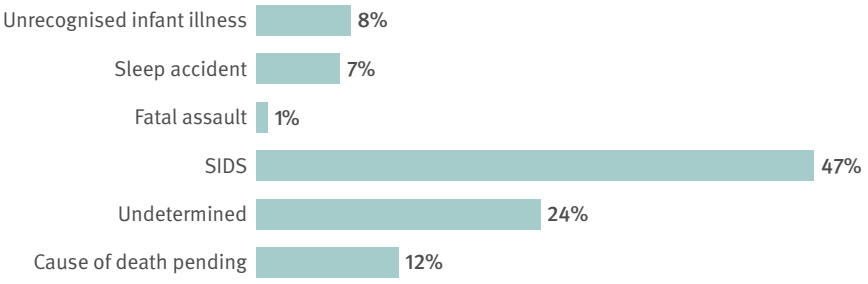
74 Alcohol use – evidence the person exhibited problematic drinking behaviours such as binge drinking or the consumption of alcohol in settings or circumstances where it is not appropriate or safe to do so (e.g. while driving). Substance use – evidence of the use of illicit drugs, misuse of prescription medication or volatile substances.

8 Sudden unexpected deaths in infancy (SUDI)

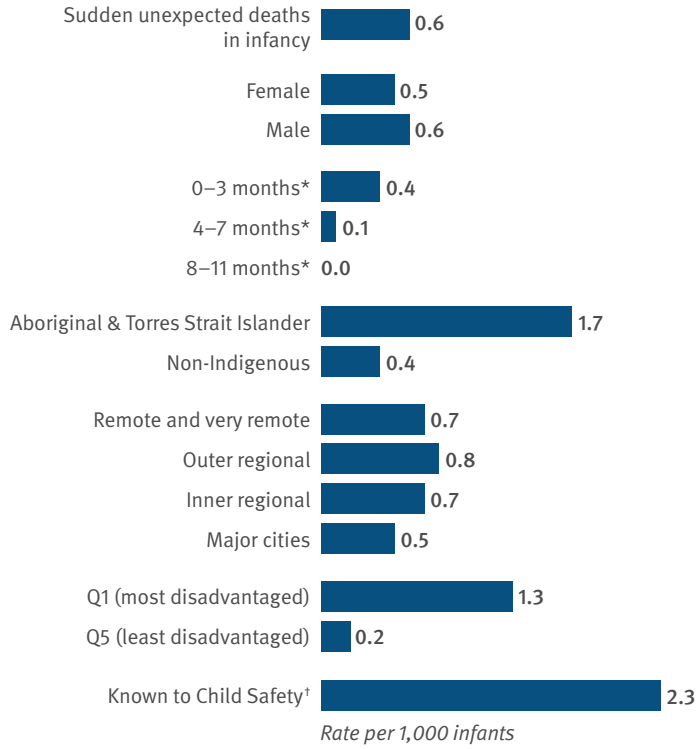
2004 to 2024



5-year summary (2019–24) | Cause of death category



Demographics



Key points

SUDI

Infants who die suddenly, usually during sleep, with no immediately obvious cause

36 SUDI per year

on average in last 5 years

SIDS and undetermined causes

Cause remains unexplained after investigation

Leading cause of death for infants 1–11 months

Unsafe sleep factors

present for many 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.

Key findings

Sudden unexpected death in infancy (SUDI) is a research classification which groups together the deaths of apparently well infants who would be expected to thrive, yet, for reasons often unknown, die suddenly and unexpectedly. It does not correspond with any single medical definition or categorisation. Identifying deaths in this way assists in the identification of possible risk factors for and associations with sudden infant death and, most significantly, those factors which may be preventable or amenable to change.

SUDI 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.

During 2023–24, there were 27 SUDI cases in Queensland, the lowest number of SUDI in the last 6 years. Of the 27 SUDI, 17 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.

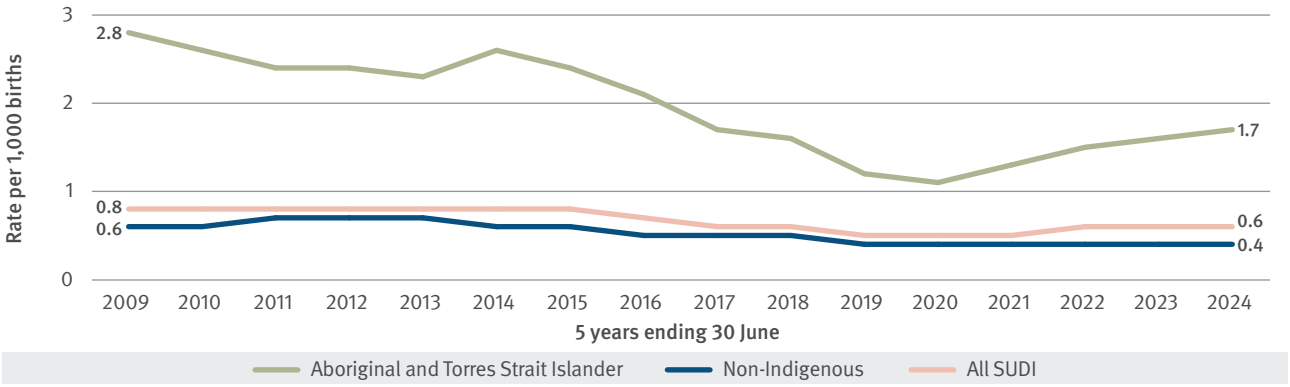
The SUDI mortality rate was 0.6 per 1,000 live births (5-year average).

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

Aboriginal and Torres Strait Islander infants

Figure 8.1 shows the trends in the 5-year rolling rates of Aboriginal and Torres Strait Islander SUDI, non-Indigenous SUDI and all SUDI in Queensland. The SUDI rate for Aboriginal and Torres Strait Islander infants was around 4 times the non-Indigenous SUDI rate between 2009 and 2016. Rates of Aboriginal and Torres Strait Islander SUDI dropped considerably between 2014 and 2020, reducing from 4.1 to 2.5 times the non-Indigenous rate in 2020.[75] In more recent periods the rates of Aboriginal and Torres Strait Islander SUDI have been increasing.

Figure 8.1: SUDI by Aboriginal and Torres Strait Islander status (5-year rolling rate), 2004–09 to 2019–24



75 Tables with data for 2004–2024 are available online at www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data

Cause of death category

Cases of SUDI with an official cause of death are grouped into the following categories and sub-categories. Deaths with an explained cause will also be counted within the relevant chapter, namely Chapter 2 for illnesses, Chapter 5 for sleep accidents, and Chapter 7 for non-accidental injury.

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
- Sleep accidents (threats to breathing)
- Non-accidental injury (fatal assault).

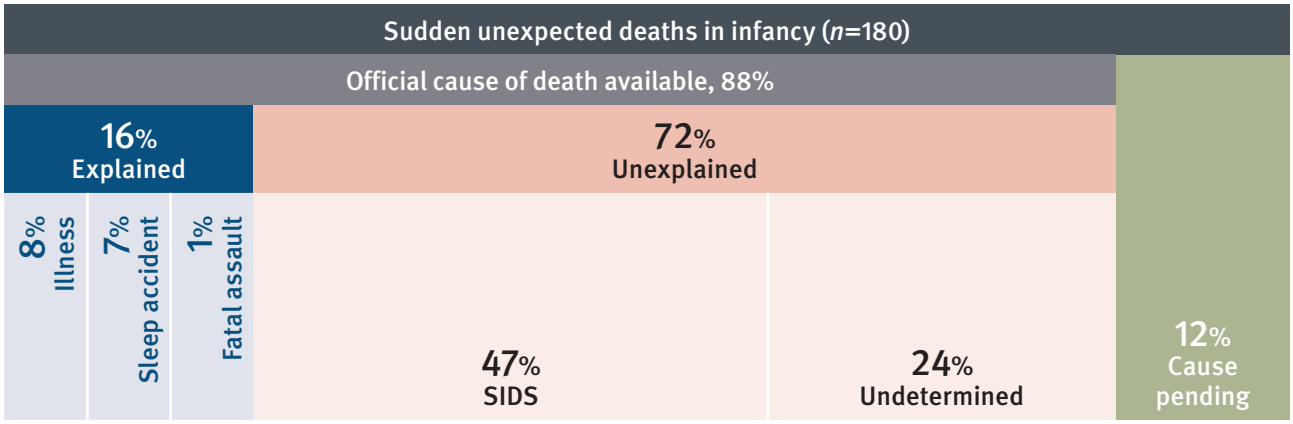
Unexplained SUDI—those infant deaths for which a cause could not be determined:

- Sudden infant death syndrome (SIDS)[76]
- Undetermined causes.[77]

It should be noted that postmortem examinations of SUDI cannot distinguish between undetermined causes and suffocation on the basis of the physiological findings.[78] This is known to contribute to an under classification of suffocation in official cause of death records.[79] Nonetheless in many of the infant deaths considered sudden and unexpected, one or more aspects of the sleep environment were not consistent with a safe sleep environment.[80]

There were 180 SUDI in the last 5 years and, as indicated in Figure 8.2, 72% were found to be unexplained SUDI (SIDS and undetermined causes) while 16% were explained SUDI (illness, sleep accident and fatal assault). A further 12% were pending a cause at the time of reporting.

Figure 8.2: SUDI by cause of death (proportion), 2019–20 to 2023–24



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

76 Krous HF, Beckwith JB, Byard RW, et al (2004) 'Sudden infant death syndrome and unclassified sudden infant deaths: a definitional and diagnostic approach', *Pediatrics*, 114:234–8, https://doi:10.1542/peds.114.1.234

77 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.

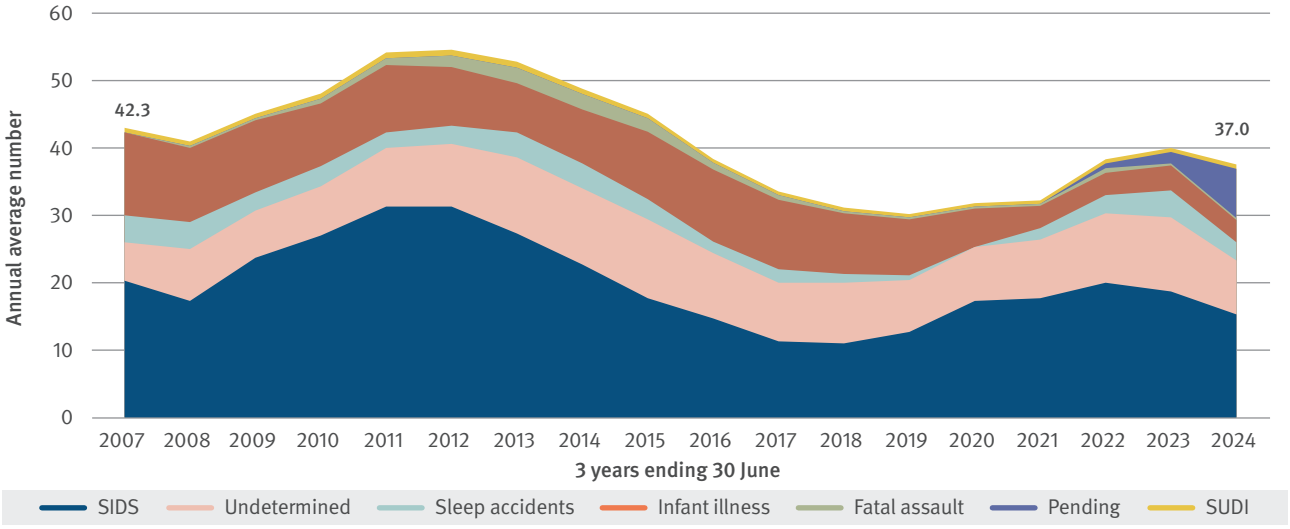
78 Byard RW, Jensen L (2007) 'Fatal asphyxia episodes in the very young – Classification and diagnostic issues.' *Forensic Science Medicine and Pathology* 3, 177-181; Byard RW (2018) "The autopsy and pathology of Sudden Infant Death Syndrome." In Duncan, JR & Byard, RW (eds.) *SIDS, sudden infant and early childhood death: the past, the present and the future*, pp.497-538. Adelaide: University of Adelaide Press.

79 Shapiro-Mendoza CK et al (2014) 'Classification system for the Sudden Unexpected Infant Death Case Registry and its application.' *Pediatrics*, 134(1), e210–e219. https://doi.org/10.1542/peds.2014-0180; Shipstone RA et al (2020) 'An evaluation of pathologists' application of the diagnostic criteria from the San Diego definition of SIDS and unclassified sudden infant death.' *International Journal of Legal Medicine*, 134(3), 1015–1021. https://doi.org/10.1007/s00414-019-02126-w

80 Factors in safe and unsafe sleep environments are described in the *Best practice guide for the design of safe infant sleeping environments*, available at www.productsafety.gov.au/about-us/publications/best-practice-guide-for-the-design-of-safe-infant-sleeping-environments

Fluctuations in the number and causes of SUDI (rolling average) are shown in Figure 8.3. While the number of SUDI has decreased since 2011, average annual numbers have increased again since 2020.[81] Deaths from infant illness, undetermined causes and sleep accidents remained comparatively stable across the entire period; in contrast, SIDS deaths rose and fell. However, some caution is warranted as assigning definitive causes for SUDI remains complex and developments in cause of death classification are ongoing.[82]

Figure 8.3: SUDI by cause of death (3-year rolling average number), 2004–07 to 2021–24



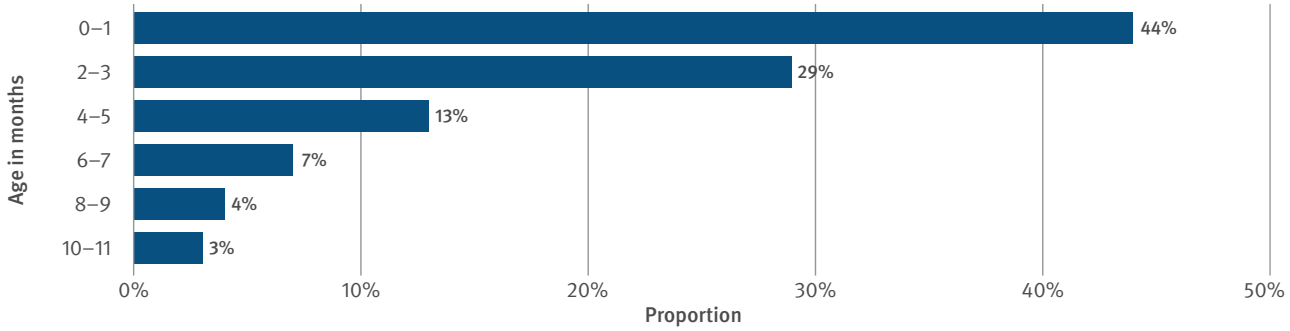
SUDI later found to be the result of fatal assault or neglect are excluded from the analyses presented throughout the remainder of this chapter.

Sex and age

A slightly larger proportion of SUDI in the last 5 years were males (56% male compared with 44% female), but there was not a significant difference in rates at 0.6 per 1,000 male births compared to 0.5 per 1,000 female births.

Figure 8.4 shows SUDI by age at death in the last 5 years. Almost three-quarters of sudden unexpected deaths (73%) occurred among infants aged 0–3 months.

Figure 8.4: SUDI by age in months (proportion), 2019–20 to 2023–24



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

81 An expanded table on SUDI since 2004 is available on the report web page.

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

Risk factors for SUDI

A number of factors have been associated with an increased risk of SUDI.[83] 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.

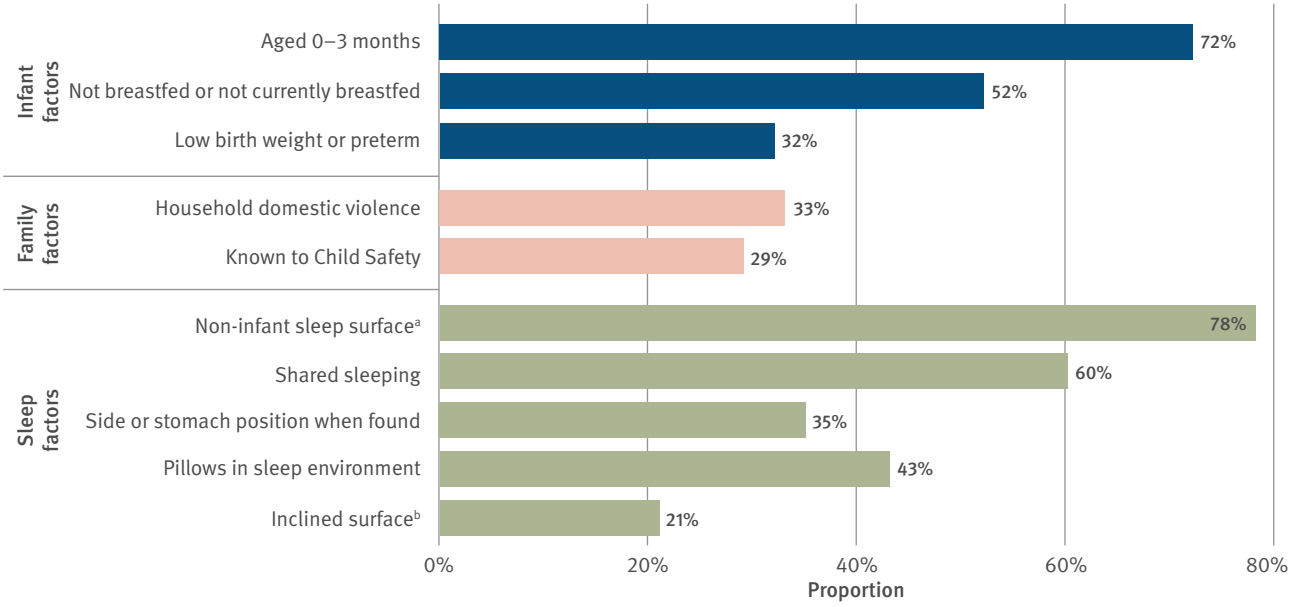
Family factors: Cigarette smoking during pregnancy and after birth, young maternal age (≤ 20 years), single marital status, high parity (number of births by mother) and short intervals between pregnancies, poor or delayed prenatal care, abuse or family violence, high-risk lifestyles including alcohol 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 SUDI deaths over the last 5 years are shown in Figure 8.5.[84] These indicate increased risk in the first months and for infants born with low birth weight.

Using non-infant sleep surfaces (78% of SUDI), sharing a sleep surface (60%) and sleep position on side or stomach (35%) are all reported to increase the risk of sudden unexpected infant deaths, as are pillows (43%) and excess bedding in the sleep space.

Figure 8.5: SUDI by selected infant, family and sleep factors (proportion), 2019–20 to 2023–24



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 SUDI from fatal assault and neglect.

83 The Triple Risk Model proposes SUDI risk increases with combined factors of vulnerable infant; critical development period; and external stressors https://rednose.org.au/article/why-are-safe-sleeping-recommendations-so-important

84 Analysis based on the 178 SUDI deaths in the last 5 years, excluding 2 deaths found to be from fatal assault and neglect.

Clinical guidelines: Safer infant sleep

The Queensland Health ***Safer infant sleep clinical guideline***, released in late 2022, highlights infant care practices that are associated with promoting airway protection for infants, which in turn reduces the risk of SUDI.[85]

Co-designed with key stakeholders including parent consumers, the guideline contains a clearly articulated risk minimisation approach to safer infant sleep. A risk minimisation approach ensures that caregivers receive information that includes benefits and risks, together with strategies to increase safety, in a range of diverse infant sleep environments, including shared sleeping. Evidence demonstrates risk minimisation approaches better equip families with the practical information they need to meet the needs of their infant within their family circumstances and the resources they have available.

Understanding infant vulnerabilities and removing as many factors as possible in the infant's environment which place them at increased risk for SUDI is a key message of the guideline. The new guideline also highlights the importance of communication between clinicians and families regarding implementation of these messages by families. Listening to and respecting family choices should shape how the information is shared so that families trust these messages and understand the relevance to their infant care decisions.[86]

Improving caregiver understanding of how infants breathe and the importance of protecting airways when sleeping helps families to understand why the safer sleep messages are relevant to their infant. It also creates the opportunity to assess risks in the infant sleep environment, consider infant vulnerabilities and make safer sleep plans which consider the family's unique circumstances.

The new guideline also describes the importance of having conversations about safer infant sleep repeatedly over multiple time points and involving a wide range of potential carers (e.g. fathers, grandparents etc.).

Applying this simple message:

Easier to breathe – Safer to sleep, every time an infant sleeps is critical

85 Queensland Health (2022) *Queensland Clinical Guidelines, Safer infant sleeping*. Guideline No. MN22.71-V1-R27 www.health.qld.gov.au/__data/assets/pdf_file/0025/1166353/g-safer-sleep.pdf

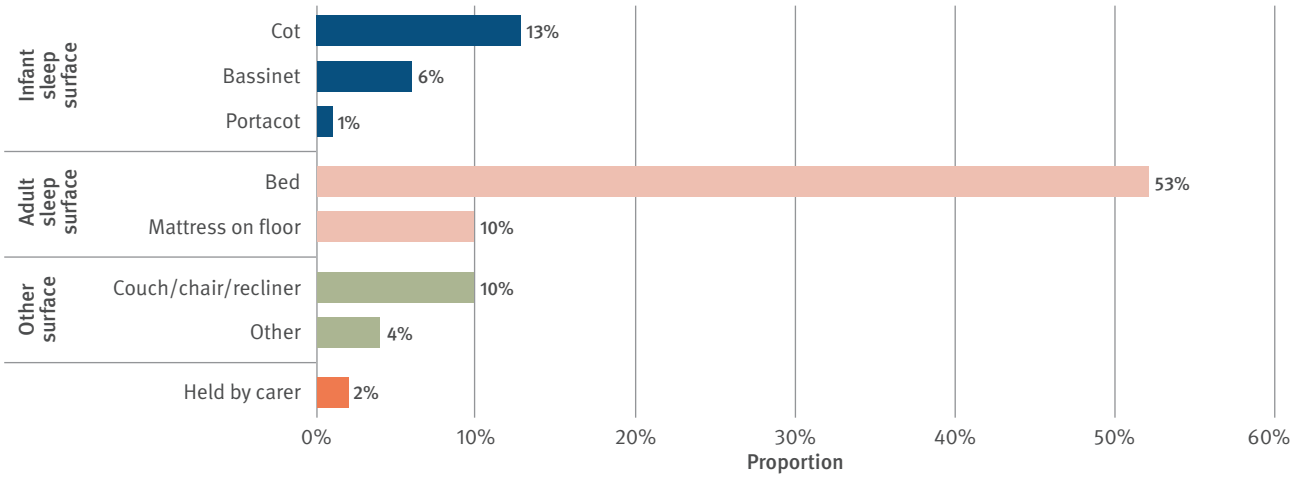
86 Pease A, Garstang JJ, Ellis C, Watson D, Ingram J, Cabral C, et al (2021) 'Decision-making for the infant sleep environment among families with children considered to be at risk of sudden unexpected death in infancy: a systematic review and qualitative metasynthesis'. *BMJ Paediatrics Open* https://bmjpaedsopen.bmj.com/content/5/1/e000983

Sleep environment factors

Sleep surface

As indicated in Figure 8.6, in over half the SUDI (63%) in the last 5 years the infant was on an adult sleep surface at the time of the incident and a further 10% were on a couch or recliner. Only 20% of SUDI occurred when an infant sleep product was being used.[87]

Figure 8.6: SUDI by sleep surface (proportion), 2019–20 to 2023–24



Notes: Excludes SUDI 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 77 deceased infants in the last 5 years were placed and found on their back, a further 24 had moved from their back to stomach or side position when found. Of the 178 infants dying suddenly and unexpectedly, 63 were on their stomach or side when found (35% of SUDI excluding those from non-accidental injury).

Table 8.1: Infant sleep position when placed and found (number), 2019–20 to 2023–24

Position when placed	Position when found						Total
	Back	Stomach	Side	Other	Held by carer	Unknown	
Back (supine)	77	19	5	1	0	6	108
Stomach (prone)	2	12	0	0	0	1	15
Side	2	9	9	0	0	1	21
Held by carer	2	4	0	2	5	1	14
Other	0	2	0	1	0	0	3
Unknown	4	3	0	2	0	8	17
Total	87	49	14	6	5	17	178

Notes: Excludes SUDI from fatal assault and neglect.

87 Percentages by surface types in Figure 8.6 may not add to subtotals 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.[88] Information in the Child Death Register indicates 21% of SUDI 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 hammock and infant car seat.

Shared sleeping

Over half (107, 60%) of the infants whose deaths were sudden and unexpected were sharing a sleep surface with one 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.[89] 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 107 SUDI 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 (32%)
- alcohol or substance use (24%)
- tobacco (40%)
- extreme fatigue (21%)
- obesity (7%).

88 Queensland Health (2022) *Queensland Clinical Guidelines. Safer infant sleep*, Guideline No. MN22.71V1-R27, www.health.qld.gov.au/__data/assets/pdf_file/0025/1166353/g-safer-sleep.pdf

89 Queensland Health (2022) *Queensland Clinical Guidelines. Safer infant sleep*, Guideline No. MN22.71V1-R27, www.health.qld.gov.au/__data/assets/pdf_file/0025/1166353/g-safer-sleep.pdf

Queensland Paediatric Quality Council update

Infant maturity and development and risk of SUDI

The Queensland Paediatric Quality Council (QPQC) seeks to identify opportunities for SUDI risk reduction and prevention by conducting detailed retrospective reviews of SUDI deaths in Queensland using the expertise of the Infant Mortality Subcommittee (IMSC) multidisciplinary panel. Reviews of SUDI patterns at different infant ages have shown that, as infants mature and develop, there is also a change in their interaction with their sleep environment, thus prevention strategies also need to change over time, as identified in the Queensland Health *Safer infant sleep clinical guideline*.[i]

Infant neurological maturity and motor development at the time of death are particularly relevant to the risk of SUDI in sleep; a risk which changes as an infant dynamically develops during the first year of life. For example, young infants aged 0–3 months typically cannot yet roll nor lift their heads and may be at risk for impaired breathing if their mouth and nose become covered or obstructed during sleep. In contrast, older infants who are more mobile during sleep are more likely to interact with objects in their sleep environment by rolling, pivoting or even crawling; resulting in entanglement or entrapment if they are not yet coordinated enough to free themselves.

The QPQC review of all SUDI occurring in Queensland in 2013 to 2016 (n=159) found that after investigation, 127 deaths which occurred in a sleep setting remained unexplained (ICD-10 R95–R99) or were determined to be the result of accidental suffocation (ICD-10 W75). In almost all of these cases, aspects of the sleep setting were determined as unsafe.

Infant developmental progress is unique for each infant, with variation dependent on factors such as gestational age, growth, medical or developmental conditions and the external environment. The developmental ability of the deceased infant was rarely described sufficiently in the investigations of cases reviewed. Instead, expected developmental progress was approximated by the QPQC based on average milestones using the corrected age of the infant adjusted for gestation (chronological age reduced by the number of weeks born before 40 weeks of gestation).

Table 1 categorises the 127 SUDI which occurred in a sleep setting into three developmental stages relevant to sleep safety (as described in the Queensland Health, *Safer infant sleep clinical guideline*) using both chronological age and corrected age. The high number in the 0–3 months corrected age group reflects the impact of correcting for gestation prior to 40 weeks. In the SUDI cohort, 87% (110 of 127) of infants were born before 40 weeks gestation. This is higher than expected, given the incidence of birth before 40 weeks for all Australian births is reported to be between 61% (in 2011) and 72% (in 2021).[ii] This finding supports the contribution of developmental immaturity as a risk factor.

Continued over page...

Queensland Paediatric Quality Council update *(continued)*

Infant maturity and development and risk of SUDI

Table 1: Developmental stage grouping of unexplained SUDI infant deaths reviewed occurring in a sleep setting (n=127)

Age range	Broad ability level	Number of deaths Chronological age	Number of deaths Corrected age
Up to and including 3 months	Most infants cannot roll. They can move their head side to side when placed on their back and begin to be able to lift their head for short periods of time if placed on their stomach for 'tummy time'.	82	90
4–5 months	Most infants learn to roll from front to back. Arm and leg movement become stronger, and they push with legs more often. They can change position but not extricate themselves if they become trapped or their airway is compromised.	28	23
6 months and older	Motor skills rapidly develop as infants learn to roll supine to prone, pivot laterally, sit, crawl and pull to stand. They are unlikely to stay stationary during sleep and may wake, move or play and then fall back asleep.	17	14

Of the 127 SUDI cases reviewed, younger infants (0–3 months corrected age who cannot roll) were more likely to die in a shared sleep environment (61%) than in a non-shared (solo) sleep space (39%). In contrast, for infants of 4–5 months corrected age (who are beginning to roll and move around in the sleep environment) there were fewer deaths in shared sleep environments (39%) than in a solo sleep space (61%). Infants of 6 months corrected age or older were more likely to die in a solo sleep space (79%). It is unlikely that this is because fewer older infants share a sleep surface. Several reviews suggest that the incidence of infants older than 6 months of age sharing sleep surfaces remains similar across ages or may even increase with age.[iii,iv] Instead, we hypothesise that the decreased apparent risk of shared sleep spaces for older infants is due to evolving neurological maturity and development of motor skills, which result in an improved infant arousal response when breathing is compromised in sleep, and sufficient motor skills to move themselves into positions where breathing is easier, consistent with findings of Blair and colleagues (2014).[v]

Soft bedding (including doonas, blankets, and soft sleep surfaces such as soft foam mattresses or sofas) in the sleep environment poses a risk at all infant ages; notably information was not always reported in enough detail for reviewers to assess (data available for 101/127 deaths). The risk of soft bedding was especially evident for infants of 6 months corrected age or older, with soft bedding identified as an environmental risk contributing to 100% of these deaths (data available in 13 of 14 deaths). For infants in the 0–3 months corrected age group, soft bedding was a likely contributor in the majority of deaths (81%, with data available in 56 of 90 deaths), and also contributed to the majority of deaths in the 4–5 months corrected age group (69%, with data available in 19 of 23 deaths). Although carers may assume that infants older than 6 months are safe to sleep in the presence of pillows, blankets and doonas, the reviews demonstrated that infants can become tangled in the bedding and when this happens, some infants cannot maintain the safety of their airway.

Continued over page...

Queensland Paediatric Quality Council update *(continued)*

Infant maturity and development and risk of SUDI

Key points for risk reduction and prevention

The maturity and development of an infant should be considered in safe sleep planning.

- Include infant developmental age and ability and how this may interact with the sleep environment during safe sleep conversations and planning.
- The new Queensland Health *Safer infant sleep clinical guideline* provides detailed information on considerations for risk minimisation as the infant grows and develops.[i]
- Soft bedding (pillows, blankets, doonas) is a risk factor for SUDI occurring at every age.

Consideration of the developmental ability of an infant at the time of the incident should be included in the investigation of SUDI. The QPQC, QFCC, Forensic Pathology & Coronial Services and Coroners Court of Queensland are currently working towards an infant health interview format, which includes questions around developmental ability, to be conducted as part of the investigation of SUDI.

i Queensland Health (2022) *Queensland Clinical Guidelines. Safer infant sleep*, Guideline No. MN22.71V1-R27, www.health.qld.gov.au/__data/assets/pdf_file/0025/1166353/g-safer-sleep.pdf

ii Australian Institute of Health and Welfare (2024) *Australia's mothers and babies*. Australian Government. https://www.aihw.gov.au/reports-data/population-groups/mothers-babies/overview

iii Cole, R. Young, J. Kearney, L. Thompson, J.M.D. (2022) 'Infant Care Practices, Caregiver Awareness of Safe Sleep Advice and Barriers to Implementation: A Scoping Review' *Int. J. Environ. Res. Public Health*, 19, 7712. https://doi.org/10.3390/ijerph19137712

iv Garrido, F. Gonzalez-Caballero, JL., Garcia, P., Gianni, ML., Garrido, S., Gonzalez, L., Atance, V., Raffaeli, G., Cavallaro, G. (2024) 'Association between co-sleeping in the first year of life and preschoolers sleep patterns' *European Journal of Pediatrics* 183:2111–2119 https://doi.org/10.1007/s00431-024-05429-2

v Blair PS, Sidebotham P, Pease A, Fleming PJ. (2014) 'Bed-sharing in the absence of hazardous circumstances: is there a risk of sudden infant death syndrome? An analysis from two case-control studies conducted in the UK' *PLoS One*;9(9):e107799. https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0107799

Unexplained deaths of children aged 1–17 years

While this chapter primarily examines sudden unexpected deaths of infants, a smaller proportion of unexplained-cause deaths were of children aged 1 year and over (see **Table A.10**, **Appendix A**). Over the last 5 years, while 85% of unexplained deaths were infants, 9% were aged 1–4 years and 6% 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 intentional.

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 9,000 records that have been classified by cause of death, demographic and incident characteristics. It allows the QFCC to extract information from its 20 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.

Publications

In March 2024, the *Annual Report: Deaths of children and young people Queensland 2022–23* was tabled in Parliament. This was the 19th 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).[90]

Resources associated with the annual report, including the 19-year summary tables, **Appendices B to G**, and fact sheets, can be found at **www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data**

The QFCC also published the report ***Australian child death statistics 2021***, prepared on behalf of the members of the Australian and New Zealand Child Death Review and Prevention Group (ANZCDR&PG). The report is available at **www.qfcc.qld.gov.au/sector/child-death/child-death-statistics-anz**

Australian and New Zealand child death review conference and meeting

On 14 May 2024, the QFCC hosted the ANZCDR&PG conference for the second year. This online conference was a professional development opportunity for the specialist teams in each jurisdiction responsible for child death reviews and registers. The conference attracted over 150 participants from across Australia and New Zealand from child protection, injury prevention, health, coronial and research sectors.

The conference featured subject matter experts from both Australia and internationally presenting on a range of captivating topics:

- Dr Joan Luby MD from the Washington University School of Medicine presented on the Preschool Predictors of Early Adolescent Suicidality.
- Dr Emily Hielscher from the University of Queensland presented a session around the Australia Youth Self-Harm Atlas: Spatial modelling and mapping of self-harm prevalence to inform youth suicide prevention strategies.
- Dr Paula Lister from the Queensland Paediatric Sepsis Program and Dr Rebecca Shipstone from the QFCC shared their research findings and recommendations from the Paediatric Sepsis Mortality Study.
- Dr Sharon Anne McAuley and Jodie Osborne from the Queensland Paediatric Quality Council shared their findings from reviews of serious paediatric clinical incident reports in Queensland.
- Dr Joanna Garstang from the National Health Service in the United Kingdom presented on the use of genome testing in child death review and prevention.
- Converge Internation ran an interactive session on vicarious trauma in the workplace for the participants.
- Colleagues from New Zealand, Kiri Matiatos (Family Violence Mortality Review) and Dr Gabrielle McDonald from Otago University presented on New Zealand's response to survivors of family violence homicide and the machinery of child death prevention, best practice for recommendations to be implemented respectively.

Session recordings can be found here: **https://www.qfcc.qld.gov.au/events/2024/ANZCDRPG-Conference**

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

On 21 May 2024, representatives from child death review teams from each state and territory across Australia met for the annual meeting of the ANZCDR&PG, to share experiences, practices, barriers and priorities in relation to child death review and prevention. The group discussed a range of emerging issues including peer homicide, asthma deaths, suicide risk factors, malnutrition and neglect. One of the key focus areas for the group is the development of a national dataset to strengthen child death and injury prevention and research to inform practice and policy.

QFCC submissions

Two significant outcomes have been achieved in the last year in areas of QFCC's advocacy on product safety.

The Australian Competition and Consumer Commission (ACCC) established new national safety and information standards for infant sleep products. These standards cover both sleep and inclined non-sleep products, aiming to reduce the risks of death and injury to infants. The QFCC has been involved in collaborative advocacy efforts and has, over the past 4 years, made 2 relevant submissions to the ACCC during their inquiry stage and provided child death data on 3 occasions.

A new mandatory information standard to increase awareness of the dangers of toppling furniture has also been introduced by the ACCC. Under the standard, furniture suppliers will be required to provide safety warnings to consumers about the dangers of toppling furniture hazards. The QFCC has previously advocated for the introduction of safety and information standards to the ACCC and, in relation to rental reforms in Queensland, for renters to be able to install safety features such as those used to anchor furniture to prevent toppling.

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 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, including through the Queensland Government implementation plan for *Shifting minds: The Queensland Mental Health, Alcohol and Other Drugs, and Suicide Prevention Strategic Plan 2023–2028* (*Shifting minds*), which is led by the Queensland Mental Health Commission.

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.[91] Applications to obtain data can be made by emailing child_death_prevention@qfcc.qld.gov.au

In 2023–24, the QFCC responded to 25 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.

91 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.

Table 9.1: Child death data requests by agency and purpose, 2024–25

Type of data	Requesting agency	Purpose
All deaths	Department of Education	Background for consideration of funding additional supports to pregnant or parenting students in state school communities
	Queensland Civil and Administrative Tribunal	Notice to Produce information on deaths of children where the child had spent time in a watchhouse
	Request for information (RTI)	Respond to RTI seeking information on deaths of children where the child had spent time in a watchhouse
Children known to the child protection system	Coroners Court of Queensland	Confirm child protection status in relation to coronial case investigation
	Queensland Child Death Review Board	Provide child death and coronial information required to undertake case reviews
Diseases and morbid conditions	Centre for Children's Health Research	Scope opportunities to share data between the Child Death Register and the Paediatric Diabetes Registry
	Children and Young People Death Review Committee ACT	Report on the prevalence of deaths attributed to respiratory diseases and influenza across the states and territories
	Children's Health Queensland	Investigation of the incidence of, and factors associated with, child deaths due to sepsis in Queensland (collaborative project with QFCC)
Drowning	Royal Life Saving Society Australia	Inform the National Drowning Report and drowning prevention research and advocacy
Fatal assault and neglect	Queensland Police Service (QPS)	Comparison of QFCC data and QPS statistics to ensure all relevant incidents have been captured
	Courier Mail	Filicide data as background for media article
Interstate residents	Children and Young People Death Review Committee ACT	Australian Capital Territory reporting on deaths of residents in other jurisdictions
	Child Death Review and Prevention Committee NT	Northern Territory reporting on deaths of residents in other jurisdictions
	Child Death and Serious Injury Review Committee SA	South Australian reporting on deaths of residents in other jurisdictions

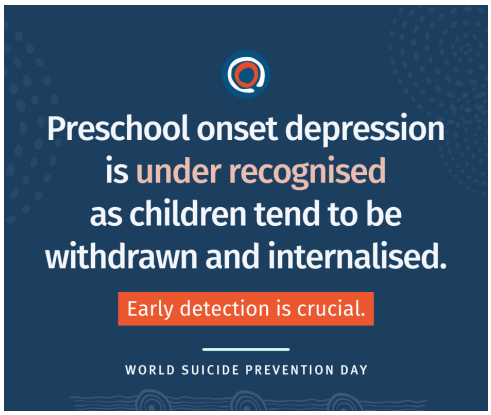
Table 9.1: Child death data requests by agency and purpose, 2024–25 *(continued)*

Type of data	Requesting agency	Purpose
Non-intentional injury	Queensland Injury Surveillance Unit	Inform coronial investigation into caustic ingestion injuries and consideration of regulating dangerous household products
	Queensland Injury Surveillance Unit	Identify potential hazards in infant sleep devices to inform consideration of the Australian cot and portacot standard
	Queensland Injury Surveillance Unit	Identify potential hazards in child and infant clothing to inform discussion on industry best practice guides
Suicide	Department of Child Safety, Seniors and Disability Services	Confirming details of suicide deaths of children who were known to the child protection system
	The Guardian	Enquiring if there is evidence of a suicide cluster in a region
Transport	ABC Sunshine Coast	Low speed run over data as background for media article

Notes: Not all requests are shown.

Prevention messaging

The QFCC uses its social media channels to raise awareness of child safety hazards and prevention messages. During 2023–24 the QFCC promoted prevention messaging via social media across a range of topics including: road safety, sepsis awareness, access to mental health services, suicide prevention, button battery safety, and water safety.



Participation in state and national advisory groups

QFCC officers participated in the following advisory bodies during 2023–24:

- Australian and New Zealand Child Death Review and Prevention Group
- Australian National Child Death Data Collection Working Group
- Consumer Product Injury Research Advisory Group
- Queensland Government Suicide Prevention Network
- Suicide Prevention Oversight Group
- Queensland Paediatric Quality Council (QPQC) Infant Mortality Sub-Committee
- QPQC Steering Committee
- QPQC genetic working group
- Queensland Government Births and Deaths Working Group
- Road Safety Research Network.

Safer pathways through childhood: Actions in 2023–24

The ***Safer pathways through childhood framework*** provides a roadmap for the QFCC's child death prevention activities over the period 2022–27. Each year the QFCC publishes its action plan of specific prevention activities to address priority areas in the coming year. The Safer pathways through childhood framework, annual action plans, and published reports, ***Swimming pool immersions of young children*** and ***Queensland paediatric sepsis mortality study***, can be found at **www.qfcc.qld.gov.au/safer-pathways-through-childhood**

Progress on activities during 2023–24 is summarised in the Action plan for 2024–25. This includes the following new and continuing projects: redefining fatal assault and neglect, preventable childhood mortality, child car seat restraints, and data linkage.

Queensland paediatric sepsis mortality study

In February 2024, the QFCC released the **Queensland paediatric sepsis mortality study** (the study). Completed in partnership with the Queensland Paediatric Sepsis Program (QPSP), the study is an Australian first, and possibly the first of its kind globally. Its aim was to identify every sepsis-related child death that occurred in Queensland between 2004 and 2021 in hospitals, at home or in the community to better understand the true incidence of childhood sepsis and to find opportunities to better identify, treat and prevent it.

The study found that children from disadvantaged socio-economic backgrounds, those living in remote and very remote areas, and First Nations children were overrepresented in the deaths. Several recommendations for practice improvements were made to improve the identification, treatment and prevention of childhood sepsis, including:

- identifying sepsis and the responsible pathogen on the cause of death certificate
- embedding sepsis red flags into infection HealthPathways of Queensland Primary Health Networks
- safety netting for children to highlight signs of deterioration
- improved clinical history gathering during coronial investigations of infection-related deaths
- undertaking media campaign to increase caregiver and community awareness of sepsis symptoms.

Continued over page...

Safer pathways through childhood: Actions in 2023–24 *(continued)*

Lead government agencies have responded positively to these recommendations, and an implementation plan has been developed specifying the high-level actions, coordinating agency, and resourcing required to implement change.

The QFCC is working collaboratively with the QPSP, the Queensland Paediatric Quality Council (QPQC), coroners, forensic pathologists, and coronial nurses to develop a child and family health questionnaire to be used to gather more detailed clinical history in suspected infection-related child deaths, including underlying medical conditions, vaccination history, and touchpoints with health services in the lead up to death. This will be trialled by coronial nurses during 2024–25.

In a further action, the QPSP is developing education packages and implementation plans within the 16 Queensland Hospital and Health Services to upskill clinicians on death certification processes if sepsis is a known cause or contributor to death. The benefit of this initiative is expected to be better identification of sepsis in children, including improved death records.

Appendices

Appendices available online

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

Appendix A
Summary tables on child deaths in Queensland

All child deaths

Table A.1: Summary of deaths of children aged 0–17 years in Queensland, 2019–24

	2019–20	2020–21	2021–22	2022–23	2023–24	5-year average
	n	*n*	*n*	*n*	*n*	Rate per 100,000
All deaths						
Deaths of children 0–17 years	378	398	410	448	422	34.5
Cause of death						
Natural causes	**260**	**280**	**271**	**338**	**314**	**24.6**
External causes	**77**	**88**	**92**	**71**	**70**	**6.7**
Transport	21	31	33	28	20	2.2
Drowning	13	10	10	10	10	0.9
Other non-intentional injury-related death	9	14	19	7	19	1.1
Suicide	21	30	21	20	19	1.9
Fatal assault and neglect	13	3	9	6	2	0.6
Unexplained causes	**39**	**30**	**41**	**34**	**8**	**2.6**
Cause of death pending	**2**	**0**	**6**	**5**	**30**	**0.7**
Sudden unexpected death in infancy (SUDI)						
Sudden unexpected infant deaths	35	34	44	40	27	0.6
Sex[a]						
Female	163	185	175	194	173	30.8
Male	214	213	233	253	241	37.7
Age category						
Under 1 year	246	239	250	281	280	4.2
1–4 years	42	41	44	52	43	18.0
5–9 years	17	19	24	37	18	6.8
10–14 years	28	31	43	37	34	9.9
15–17 years	45	68	49	41	47	25.4
Aboriginal and Torres Strait Islander status						
Aboriginal and Torres Strait Islander	66	73	71	94	91	79.8
Non-Indigenous	312	325	339	354	331	30.4
Known to the child protection system						
Known to Child Safety	53	53	69	72	53	60.4

Data source: Queensland Child Death Register (Aug 2024)

Rate per 1,000 live births.

a Excludes deaths of children whose sex was indeterminate.

1. *Data presented are current in the Queensland Child Death Register as at August 2024 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.*
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. The denominator for calculating rates is the 5-year average number of children aged 0–17 who were known to Child Safety, through either being subject to a child concern report, intake inquiry, notification, investigation and assessment, ongoing intervention, orders or placement, in the 1-year period prior to the reporting period.*

Aboriginal and Torres Strait Islander children

Table A.2: Summary of deaths of Aboriginal and Torres Strait Islander children and young people in Queensland, 2019–24

	2019–20	2020–21	2021–22	2022–23	2023–24	5-year average
	n	*n*	*n*	*n*	*n*	Rate per 100,000
Aboriginal and Torres Strait Islander deaths						
Total	66	73	71	94	91	79.8
Cause of death						
Natural causes	**40**	**48**	**33**	**64**	**67**	**50.9**
External causes	**19**	**17**	**22**	**18**	**11**	**17.6**
Transport	4	3	4	7	4	4.4
Drowning	1	4	2	2	1	2.0
Other non-intentional injury-related death	4	5	6	3	4	4.4
Suicide	7	4	7	4	2	4.8
Fatal assault and neglect	3	1	3	2	0	1.8
Unexplained causes	**7**	**8**	**13**	**10**	**2**	**8.1**
Cause of death pending	**0**	**0**	**3**	**2**	**11**	**3.2**
Sudden unexpected deaths in infancy (SUDI)						
Sudden unexpected infant deaths	9	12	15	14	9	1.7
Age category						
Under 1 year	45	50	36	59	67	7.2
1–4 years	6	8	12	11	12	42.9
5–9 years	1	1	4	9	1	11.8
10–14 years	4	4	7	4	7	19.0
15–17 years	10	10	12	11	4	60.1
Known to the child protection system						
Known to Child Safety	22	27	31	27	22	96.2

Data source: Queensland Child Death Register (Aug 2024)

Rate per 1,000 live births.

1. *Data presented are current in the Queensland Child Death Register as at August 2024 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.*

Children known to Child Safety

Table A.3: Summary of deaths of children and young people known to Child Safety in Queensland, 2019–24

	2019–20	2020–21	2021–22	2022–23	2023–24	5-year average
	n	*n*	*n*	*n*	*n*	Rate per 100,000
Deaths of children known to Child Safety						
Total	53	53	69	72	53	60.4
Cause of death						
Natural causes	**16**	**21**	**25**	**34**	**23**	**24.0**
External causes	**27**	**23**	**33**	**27**	**19**	**26.0**
Transport	5	5	7	10	0	5.4
Drowning	2	5	5	4	3	3.8
Other non-intentional injury-related death	2	7	6	5	11	6.2
Suicide	8	4	8	6	4	6.0
Fatal assault and neglect	10	2	7	2	1	4.4
Unexplained causes	**9**	**9**	**10**	**10**	**2**	**8.1**
Cause of death pending	**1**	**0**	**1**	**1**	**9**	**2.4**
Sudden unexpected deaths in infancy (SUDI)						
Sudden unexpected infant deaths	9	13	11	13	8	2.3
Age category						
Under 1 year	18	24	22	27	21	4.7
1–4 years	16	9	19	15	14	76.4
5–9 years	2	5	4	11	3	17.5
10–14 years	7	8	11	9	7	27.4
15–17 years	10	7	13	10	8	59.0
Aboriginal and Torres Strait Islander status						
Aboriginal and Torres Strait Islander	22	27	31	27	22	96.2
Non-Indigenous	31	26	38	45	31	47.2
Child protection status						
No involvement or ongoing intervention	23	32	26	35	22	. .
Open intake event	12	2	1	5	2	. .
Investigation and assessment (IA)	8	8	25	16	22	. .
Child protection order (CPO)	5	4	12	9	4	. .
Open intervention with parental agreement (IPA)	3	5	4	5	2	. .
Support service case	0	2	1	1	1	. .
Other child protection status	2	0	0	1	0	. .

Data source: Queensland Child Death Register (Aug 2024)

Rate per 1,000 aged under 1 year.

. . Not calculated.

1. *Data presented are current in the Queensland Child Death Register as at August 2024 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, intake enquiry, 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 aged 0–17 years in Queensland, 2019–24

	2019–20	2020–21	2021–22	2022–23	2023–24	5-year average
	n	*n*	*n*	*n*	*n*	Rate per 100,000
All natural cause deaths						
Disease and morbid condition	260	280	271	338	314	24.6
Category						
Perinatal conditions	132	129	121	163	183	12.2
Congenital anomalies	80	74	80	69	61	6.1
Neoplasms	17	24	27	36	27	2.2
Infections[a]	10	8	12	19	13	1.0
Other disease or morbid conditions NEC	21	45	31	51	30	3.0
Sex						
Female	109	131	131	156	138	23.0
Male	150	149	138	181	168	25.7
Indeterminate	1	0	2	1	8	. .
Age category						
Under 1 year	210	204	209	240	244	3.6
1–4 years	17	24	18	34	23	9.4
5–9 years	9	13	12	31	12	4.6
10–14 years	14	16	19	17	15	4.6
15–17 years	10	23	13	16	20	8.3
Aboriginal and Torres Strait Islander status						
Aboriginal and Torres Strait Islander	40	48	33	64	67	50.9
Non-Indigenous	220	232	238	274	247	22.2
Geographical area of usual residence (ARIA+)						
Remote and very remote	11	4	7	13	6	26.1
Outer regional	37	57	40	49	48	28.7
Inner regional	49	44	53	80	48	24.1
Major cities	157	172	162	189	205	23.0
Socio-economic status of usual residence (SEIFA)						
Q1 (most disadvantage)	61	68	61	99	99	32.4
Q5 (least disadvantage)	39	45	26	28	17	13.1
Known to the child protection system						
Known to Child Safety	16	21	25	34	23	24.0

Data source: Queensland Child Death Register (Aug 2024)

Rate per 1,000 live births.

. . Not calculated.

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.

NEC Not elsewhere classified.

1. *Data presented are current in the Queensland Child Death Register as at August 2024 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.*
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. The denominator for calculating rates is the 5-year average number of children aged 0–17 who were known to Child Safety, through either being subject to a child concern report, intake inquiry, notification, investigation and assessment, ongoing intervention, orders or placement, in the 1-year period prior to the reporting period.*

Transport

Table A.5: Summary of transport-related deaths of children aged 0–17 years in Queensland, 2019–24

	2019–20	2020–21	2021–22	2022–23	2023–24	5-year average
	n	*n*	*n*	*n*	*n*	Rate per 100,000
All transport deaths						
Transport	21	31	33	28	20	2.2
Incident type						
Motor vehicle	12	19	19	13	6	1.2
Pedestrian	6	4	5	10	6	0.5
Low-speed vehicle run-over	2	3	4	8	3	0.3
Motorcycle	1	5	5	4	5	0.3
Quad bike	1	2	2	0	2	0.1
Bicycle	1	1	0	1	0	*
Other	0	0	2	0	1	*
Sex						
Female	7	14	9	6	3	1.3
Male	14	17	24	22	17	3.1
Age category						
Under 1 year	0	1	0	0	1	*
1–4 years	2	5	7	7	3	1.9
5–9 years	3	4	5	2	1	0.9
10–14 years	5	5	9	6	6	1.8
15–17 years	11	16	12	13	9	6.2
Aboriginal and Torres Strait Islander status						
Aboriginal and Torres Strait Islander	4	3	4	7	4	4.4
Non-Indigenous	17	28	29	21	16	2.0
Geographical area of usual residence (ARIA+)						
Remote and very remote	1	4	1	3	2	7.0
Outer regional	9	8	10	6	3	4.5
Inner regional	5	9	10	8	7	3.4
Major cities	5	9	10	10	6	1.0
Socio-economic status of usual residence (SEIFA)						
Q1 (most disadvantage)	4	13	5	7	7	3.0
Q5 (least disadvantage)	5	0	0	0	1	0.5
Known to the child protection system						
Known to Child Safety	5	5	7	10	0	5.4

Data source: Queensland Child Death Register (Aug 2024)

* *Rates have not been calculated for numbers less than 4.*

1. *Data presented are current in the Queensland Child Death Register as at August 2024 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.*
7. *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 0–17 who were known to Child Safety, through either being subject to a child concern report, intake inquiry, notification, investigation and assessment, ongoing intervention, orders or placement, in the 1-year period prior to the reporting period.*

Drowning

Table A.6: Summary of drowning deaths of children aged 0–17 years in Queensland, 2019–24

	2019–20	2020–21	2021–22	2022–23	2023–24	5-year average
	n	*n*	*n*	*n*	*n*	Rate per 100,000
All drowning deaths						
Drowning	13	10	10	10	10	0.9
Incident type						
Pool	6	2	3	4	3	0.3
Private pool	5	2	3	4	3	0.3
Public pool	1	0	0	0	0	*
Non-pool	7	8	7	6	7	0.6
Bath	0	3	2	4	3	0.2
Beach or ocean	1	0	1	0	0	*
Dynamic waterway	2	1	0	0	3	0.1
Object containing water	1	0	0	0	0	*
Rural water hazard	3	3	2	1	0	0.2
Static inland waterway	0	1	1	1	0	*
Other non-pool water hazard NEC	0	0	1	0	1	*
Sex						
Female	8	6	3	7	4	1.0
Male	5	4	7	3	6	0.8
Age category						
Under 1 year	0	2	1	2	3	2.6
1–4 years	9	5	6	5	3	2.3
5–9 years	2	1	1	2	3	0.5
10–14 years	0	1	1	0	1	*
15–17 years	2	1	1	1	0	0.5
Aboriginal and Torres Strait Islander status						
Aboriginal and Torres Strait Islander	1	4	2	2	1	2.0
Non-Indigenous	12	6	8	8	9	0.8
Geographical area of usual residence (ARIA+)						
Remote and very remote	2	0	0	0	1	*
Outer regional	2	3	3	1	2	1.4
Inner regional	4	5	4	5	0	1.6
Major cities	5	2	3	4	7	0.5
Socio-economic status of usual residence (SEIFA)						
Q1 (most disadvantage)	5	4	5	4	5	1.9
Q5 (least disadvantage)	1	1	0	1	0	0.3
Known to the child protection system						
Known to Child Safety	2	5	5	4	3	3.8

Data source: Queensland Child Death Register (Aug 2024)

* *Rates have not been calculated for numbers less than 4.*

1. *Data presented are current in the Queensland Child Death Register as at August 2024 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.*
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 0–17 who were known to Child Safety, through either being subject to a child concern report, intake inquiry, notification, investigation and assessment, ongoing intervention, orders or placement, in the 1-year period prior to the reporting period.*

Other non-intentional injury

Table A.7: Summary of other non-intentional injury-related deaths of children aged 0–17 years in Queensland, 2019–24

	2019–20	2020–21	2021–22	2022–23	2023–24	5-year average
	n	*n*	*n*	*n*	*n*	Rate per 100,000
All other non-intentional injury deaths						
Other non-intentional injury	9	14	19	7	19	1.1
Incident type						
Threats to breathing	2	9	4	6	1	0.4
Exposure to inanimate mechanical forces	3	1	3	0	0	0.1
Accidental poisoning	0	1	3	0	2	0.1
Deaths from fire	1	0	2	0	7	0.2
Falls	0	0	3	0	4	0.1
Contact with venomous animals and plants	1	1	2	0	0	0.1
Other incidents	2	2	2	1	5	0.2
Sex						
Female	2	7	3	1	4	0.6
Male	7	7	16	6	15	1.7
Age category						
Under 1 year	0	5	4	4	1	4.5
1–4 years	3	4	3	2	8	1.6
5–9 years	2	1	3	0	1	0.4
10–14 years	1	1	4	0	5	0.6
15–17 years	3	3	5	1	4	1.6
Aboriginal and Torres Strait Islander status						
Aboriginal and Torres Strait Islander	4	5	6	3	4	4.4
Non-Indigenous	5	9	13	4	15	0.8
Geographical area of usual residence (ARIA+)						
Remote and very remote	1	2	0	1	1	3.2
Outer regional	3	2	7	4	8	3.0
Inner regional	1	0	1	2	4	0.7
Major cities	3	10	11	0	6	0.8
Socio-economic status of usual residence (SEIFA)						
Q1 (most disadvantage)	2	5	7	3	8	2.1
Q5 (least disadvantage)	0	2	3	0	0	0.4
Known to the child protection system						
Known to Child Safety	2	7	6	5	11	6.2

Data source: Queensland Child Death Register (Aug 2024)

* *Rates have not been calculated for numbers less than 4.*

1. *Data presented are current in the Queensland Child Death Register as at August 2024 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. *Other incidents includes exposure to animate mechanical forces; exposure to electrical current, radiation and extreme ambient air temperature/pressure; and exposure to forces of nature.*
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 0–17 who were known to Child Safety, through either being subject to a child concern report, intake inquiry, notification, investigation and assessment, ongoing intervention, orders or placement, in the 1-year period prior to the reporting period.*

Suicide

Table A.8: Summary of suicide deaths of children aged 0–17 years in Queensland, 2019–24

	2019–20	2020–21	2021–22	2022–23	2023–24	5-year average
	n	*n*	*n*	*n*	*n*	Rate per 100,000
All suicide deaths						
Suicide	21	30	21	20	19	1.9[a]
Sex						
Female	6	12	8	9	8	3.2
Male	15	18	13	11	11	4.8
Age category						
10–17 years[b]	21	30	21	20	19	4.1
5–9 years	0	0	1	0	0	*
10–14 years	6	6	6	11	6	2.0
15–17 years	15	24	14	9	13	7.6
Aboriginal and Torres Strait Islander status						
Aboriginal and Torres Strait Islander	7	4	7	4	2	11.2
Non-Indigenous	14	26	14	16	17	3.5
Geographical area of usual residence (ARIA+)						
Remote and very remote	3	1	1	1	1	11.0
Outer regional	4	6	3	2	4	5.0
Inner regional	5	7	10	4	3	5.3
Major cities	9	16	7	12	10	3.1
Socio-economic status of usual residence (SEIFA)						
Q1 (most disadvantage)	7	10	4	8	5	6.3
Q5 (least disadvantage)	2	4	0	3	3	2.1
Known to the child protection system						
Known to Child Safety	8	4	8	6	4	12.8

Data source: Queensland Child Death Register (Aug 2024)

* *Rates have not been calculated for numbers less than 4.*

a *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.*

b *Includes deaths of children aged under 10 years.*

1. *Data presented are current in the Queensland Child Death Register as at August 2024 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. *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. 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, intake inquiry, notification, investigation and assessment, ongoing intervention, orders or placement, in the 1-year period prior to the reporting period.*
5. *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 aged 0–17 years in Queensland, 2019–24

	2019–20	2020–21	2021–22	2022–23	2023–24	5-year average
	n	*n*	*n*	*n*	*n*	Rate per 100,000
All fatal assault and neglect deaths						
Fatal assault and neglect	13	3	9	6	2	0.6
Category of fatal assault and neglect						
Intra-familial	10	2	7	5	2	0.4
Domestic homicide	3	0	1	1	1	0.1
Fatal child abuse	3	1	5	2	1	0.2
Fatal neglect	4	0	1	2	0	0.1
Other intra-familial assault NEC	0	1	0	0	0	*
Extra-familial	3	1	2	1	0	0.1
Intimate partner homicide	0	0	0	0	0	*
Peer homicide	2	1	2	0	0	0.1
Acquaintance homicide	1	0	0	0	0	*
Stranger homicide	0	0	0	1	0	*
Sex						
Female	6	2	1	3	1	0.4
Male	7	1	8	3	1	0.7
Age category						
Under 1 year	4	0	2	1	2	2.9
1–4 years	5	2	4	2	0	1.1
5–9 years	1	0	1	2	0	0.2
10–14 years	0	0	0	1	0	*
15–17 years	3	1	2	0	0	0.6
Aboriginal and Torres Strait Islander status						
Aboriginal and Torres Strait Islander	3	1	3	2	0	1.8
Non-Indigenous	10	2	6	4	2	0.4
Geographic area of usual residence (ARIA+)						
Remote and very remote	0	0	0	0	0	*
Outer regional	0	1	4	3	0	1.0
Inner regional	2	0	2	3	2	0.8
Major cities	11	2	3	0	0	0.4
Socio-economic status of usual residence (SEIFA)						
Q1 (most disadvantage)	3	1	4	4	2	1.2
Q5 (least disadvantage)	3	0	0	1	0	0.3
Known to the child protection system						
Known to Child Safety	10	2	7	2	1	4.4

Data source: Queensland Child Death Register (Aug 2024)

* *Rates have not been calculated for numbers less than 4.*

1. *Data presented are current in the Queensland Child Death Register as at August 2024 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.*
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. The denominator for calculating rates is the 5-year average number of children aged 0–17 who were known to Child Safety, through either being subject to a child concern report, intake inquiry, notification, investigation and assessment, ongoing intervention, orders or placement, in the 1-year period prior to the reporting period.*

Unexplained causes

Table A.10: Summary of deaths from unexplained causes of children aged 0–17 years in Queensland, 2019–24

	2019–20	2020–21	2021–22	2022–23	2023–24	5-year average
	n	*n*	*n*	*n*	*n*	Rate per 100,000
All deaths from unexplained causes						
Unexplained causes	39	30	41	34	8	2.6
Cause of death						
Sudden infant death syndrome (SIDS)	22	17	21	18	7	27.5
Undetermined cause (infants)	10	10	11	12	1	14.2
Undetermined cause (1–17 years)	7	3	9	4	0	0.4
Sex						
Female	24	13	19	10	3	2.4
Male	15	17	22	24	5	2.7
Age category						
Under 1 year	32	27	32	30	8	41.7
1–4 years	5	1	6	2	0	1.1
5–17 years	2	2	3	2	0	0.2
Aboriginal and Torres Strait Islander status						
Aboriginal and Torres Strait Islander	7	8	13	10	2	8.1
Non-Indigenous	32	22	28	24	6	2.1
Geographic area of usual residence (ARIA+)						
Remote and very remote	0	0	1	1	0	*
Outer regional	5	8	6	2	1	2.7
Inner regional	8	6	8	11	2	3.1
Major cities	24	16	25	20	5	2.3
Socio-economic status of usual residence (SEIFA)						
Q1 (most disadvantage)	11	11	19	15	2	4.8
Q5 (least disadvantage)	1	2	1	4	1	0.8
Known to the child protection system						
Known to Child Safety	9	9	10	10	2	8.1

Data source: Queensland Child Death Register (Aug 2024)

* *Rates have not been calculated for numbers less than 4.*

1. *Data presented are current in the Queensland Child Death Register as at August 2024 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 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.*
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. The denominator for calculating rates is the 5-year average number of children aged 0–17 who were known to Child Safety, through either being subject to a child concern report, intake inquiry, notification, investigation and assessment, ongoing intervention, orders or placement, in the 1-year period prior to the reporting period.*

Sudden unexpected deaths in infancy (SUDI)

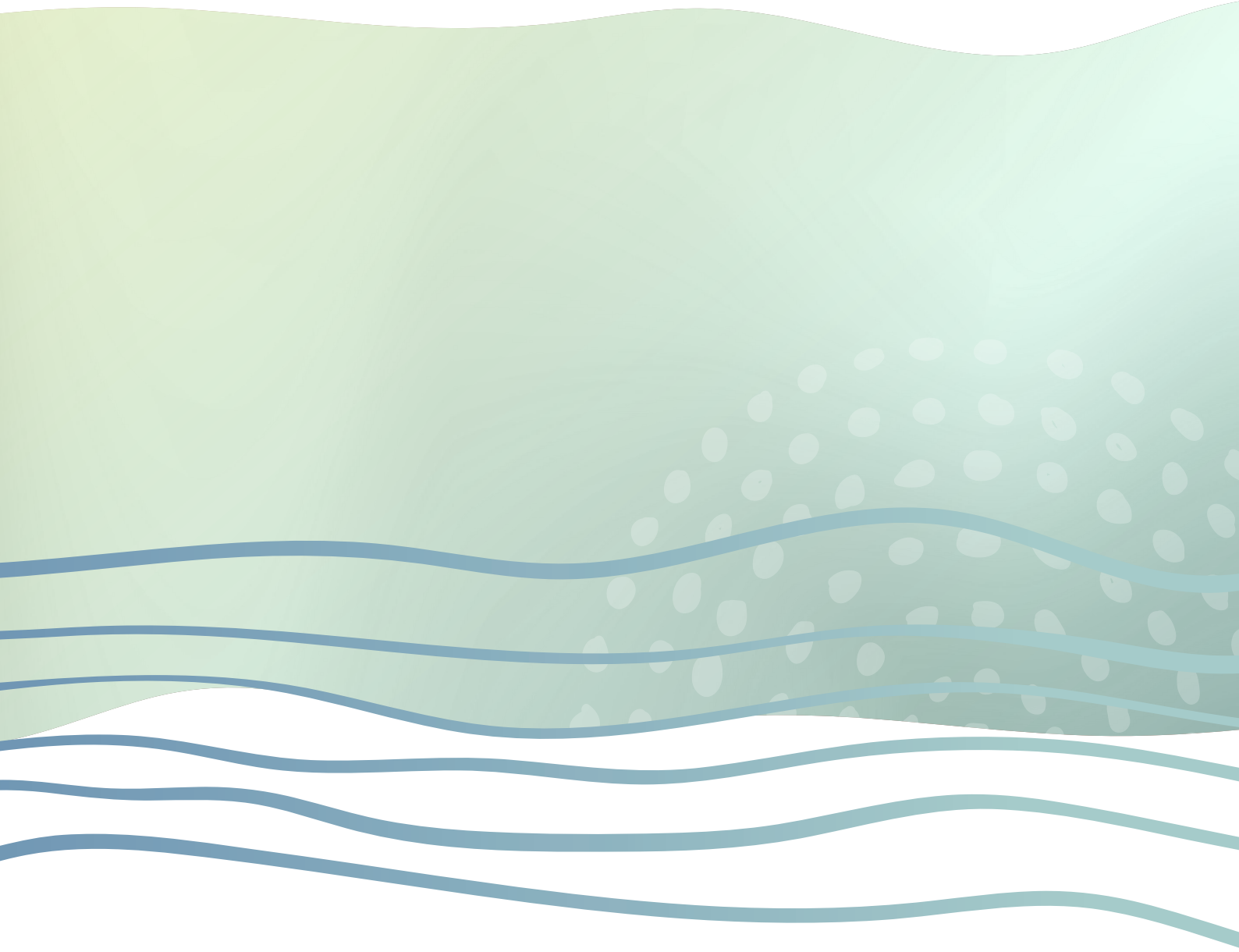
Table A.11: Summary of SUDI in Queensland 2019–24

	2019–20	2020–21	2021–22	2022–23	2023–24	5-year average
	n	*n*	*n*	*n*	*n*	Rate per 1,000
All sudden unexpected deaths in infancy (SUDI)						
SUDI (infants)	35	34	44	40	27	0.6
Cause of death						
Explained causes	**3**	**7**	**10**	**7**	**2**	**0.1**
Unrecognised infant illness	2	2	6	3	1	0.0
Sleep accident	0	5	3	4	1	0.0
Fatal assault	1	0	1	0	0	*
Unexplained causes	**32**	**27**	**32**	**30**	**8**	**0.4**
SIDS	22	17	21	18	7	0.3
Undetermined	10	10	11	12	1	0.1
Cause of death pending	**0**	**0**	**2**	**3**	**17**	**0.1**
Sex						
Female	21	17	21	11	9	0.5
Male	14	17	23	29	18	0.6
Aboriginal and Torres Strait Islander status						
Aboriginal and Torres Strait Islander	9	12	15	14	9	1.7
Non-Indigenous	26	22	29	26	18	0.4
Geographic area of usual residence (ARIA+)						
Remote and very remote	0	1	2	1	2	0.7
Outer regional	5	8	9	9	2	0.8
Inner regional	6	7	9	13	5	0.7
Major cities	22	18	23	17	18	0.5
Socio-economic status of usual residence (SEIFA)						
Q1 (most disadvantage)	12	12	24	19	12	1.3
Q5 (least disadvantage)	1	3	1	2	2	0.2
Known to the child protection system						
Known to Child Safety	9	13	11	13	8	2.3

Data source: Queensland Child Death Register (Aug 2024)

* *Rates have not been calculated for numbers less than 4.*

1. *Data presented are current in the Queensland Child Death Register as at August 2024 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. The denominator for calculating rates is the 5-year average number of children aged 0–17 who were known to Child Safety, through either being subject to a child concern report, intake inquiry, notification, investigation and assessment, ongoing intervention, orders or placement, in the 1-year period prior to the reporting period.*



Queensland
Family & Child
Commission

Queensland
Government