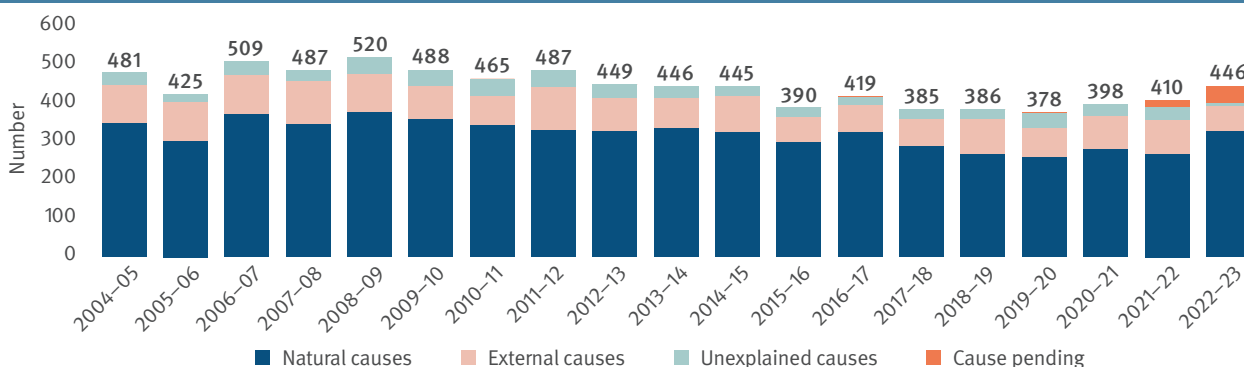
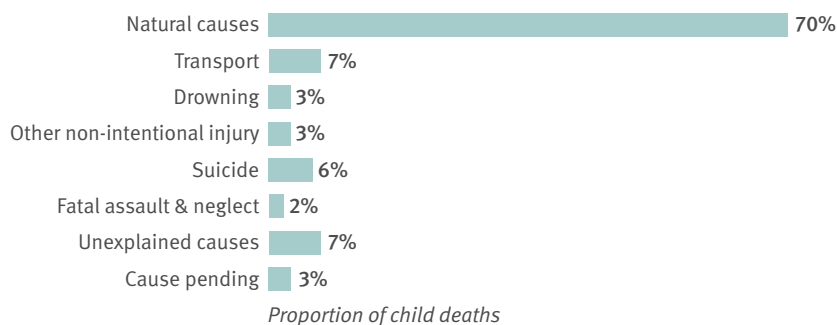


1 Child deaths in Queensland

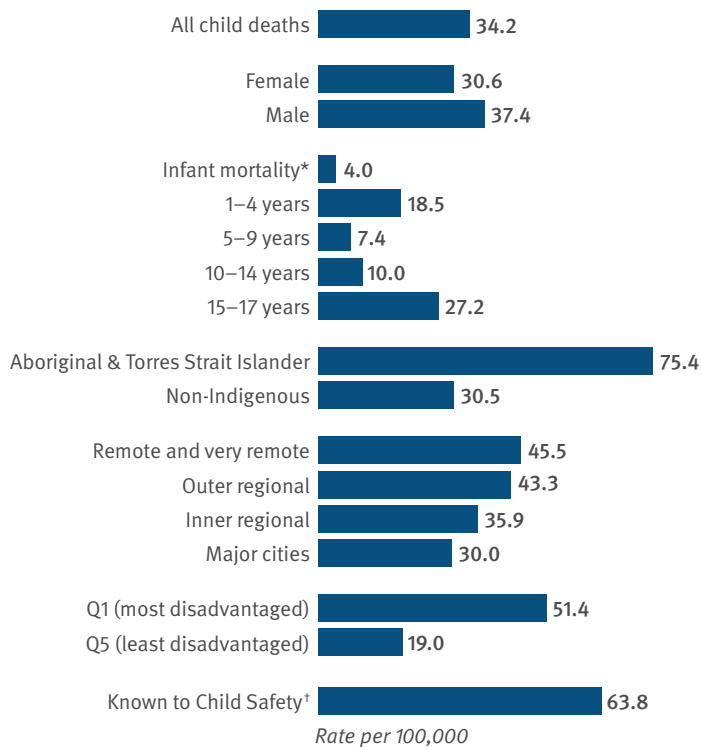
2004 to 2023



5-year summary (2018–2023) | Cause of death category



Demographics



Leading cause by age



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 2022 and 30 June 2023, the deaths of 446 children and young people were registered in Queensland. The child mortality rate over the last 5 years was 34.2 deaths per 100,000 children aged 0–17 years and the infant mortality rate was 4.0 per 1,000 births.⁵ Queensland's child mortality rate is high compared with other Australian states and territories. In 2020, Queensland's child mortality rate was the third highest in Australia at 33.7 per 100,000 children aged 0–17 years, while other jurisdictions ranged between 22.8 and 81.1 per 100,000.⁶

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 73% of deaths of children and young people in 2022–23, occurring at a rate of 23.8 deaths per 100,000 (5-year average).⁷

Sixty-seven deaths were from external causes (which include transport, drowning, other non-intentional injury, suicide and fatal assault and neglect). External causes accounted for 15% of child deaths in 2022–23 and occurred at a rate of 7.0 deaths per 100,000 (5-year average).

Other than natural causes, the leading causes of deaths in 2022–23 were transport incidents (28), suicide (20), deaths from drowning (10), followed by unexplained causes (6). Five children died as a result of fatal assault and neglect and 4 children died from other non-intentional injuries.

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 446 deaths of children and young people in 2022–23, 10% (46 deaths) were recorded as 'cause pending'. The majority pending a cause are infant deaths and are often found to be from unexplained causes (based on outcomes in previous periods).

Trends

In 2022–23, there was an 8-year high in deaths from natural causes (327) which contributed to the high total number of child deaths in the period (446). In contrast, the 67 deaths from external causes in 2022–23 was equal lowest (with 2015–16) for any year since 2004–05.

Child mortality rates, however, have generally declined over time. Broad trends in rates over the period 2004 to 2023 are illustrated in Figure 1.1 using 5-year rolling rates.⁸ Key findings on changes between 2004–09 and 2018–23 include:

- the child mortality rate decreased 2.2% 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 2.3% per year on average
- deaths from external causes decreased by 2.4% per year on average.⁹

Five-year rolling mortality rates for external causes from 2004 to 2023 are illustrated in Figure 1.2. Transport had been the leading external cause of child death across much of the period, with rates at least twice those for other external causes. However, the transport mortality rate decreased 3.6% per year on average between 2004–09 and 2018–23. Notwithstanding the overall decrease since 2004, higher numbers of transport deaths in the last 3 years have seen the rates begin to increase again.

5 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).

6 QFCC (2023) *Australian and New Zealand child death statistics 2020*. www.qfcc.qld.gov.au/sector/child-death/child-death-statistics-anz

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

8 Tables with data for 2004–2023 are available online at www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data

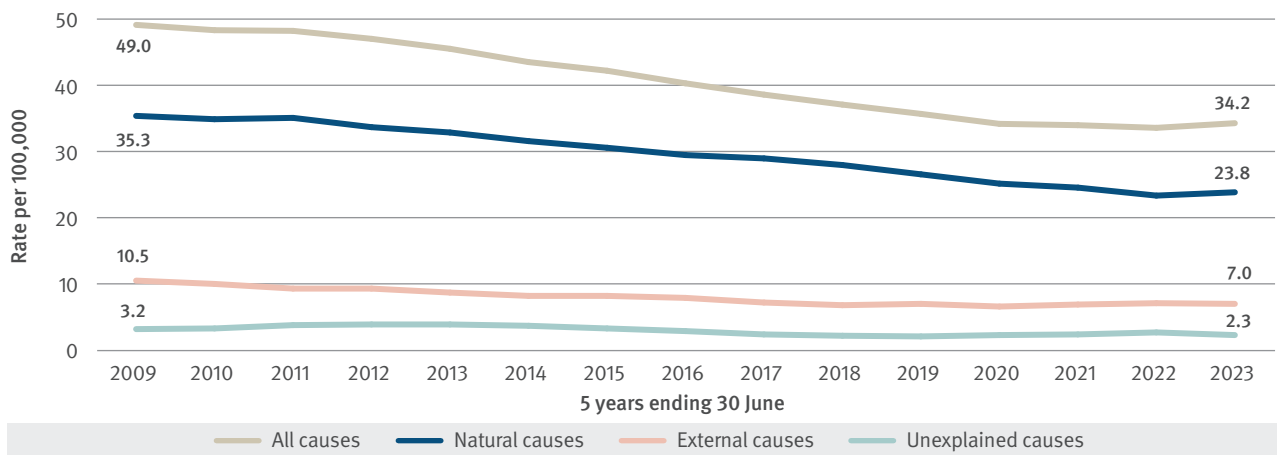
9 Average annual changes between 2004–09 and 2018–23 assume a linear change between the 2 periods.

In contrast, the rate of suicide has slowly increased over the period (up 1.9% per year on average), such that between 2013–17 and 2018–23 the rates of suicide and transport deaths have been at similar levels. The increase in suicide rates may have slowed as the 20 suicides in 2021–22 and 2022–23 were below the high numbers recorded in 2018–19 and 2020–21 (37 and 30 respectively).

Rates of deaths from drowning, other non-intentional injury and fatal assault and neglect decreased between 2004–09 and 2018–23, with average annual decreases of 2.8%, 3.4% and 1.6% respectively.

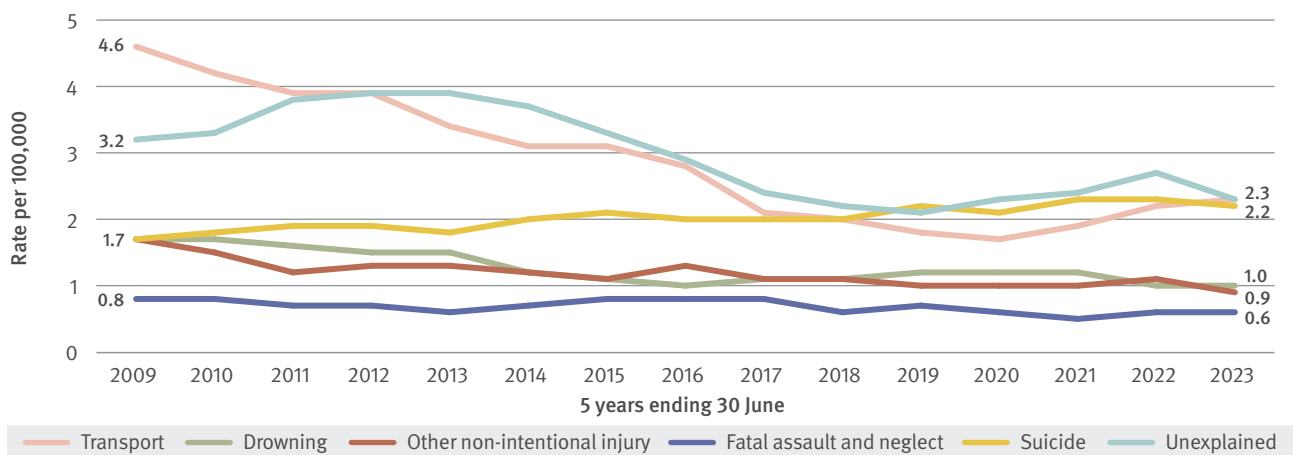
The mortality rate for deaths from unexplained causes is also illustrated on Figure 1.2. Between 2004–09 and 2018–23 the rate decreased by 1.9% per year on average. Almost all of this group are infant deaths certified as sudden infant death syndrome (SIDS) or undetermined causes. The dip in numbers and 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 2018–23



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 2018–23



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

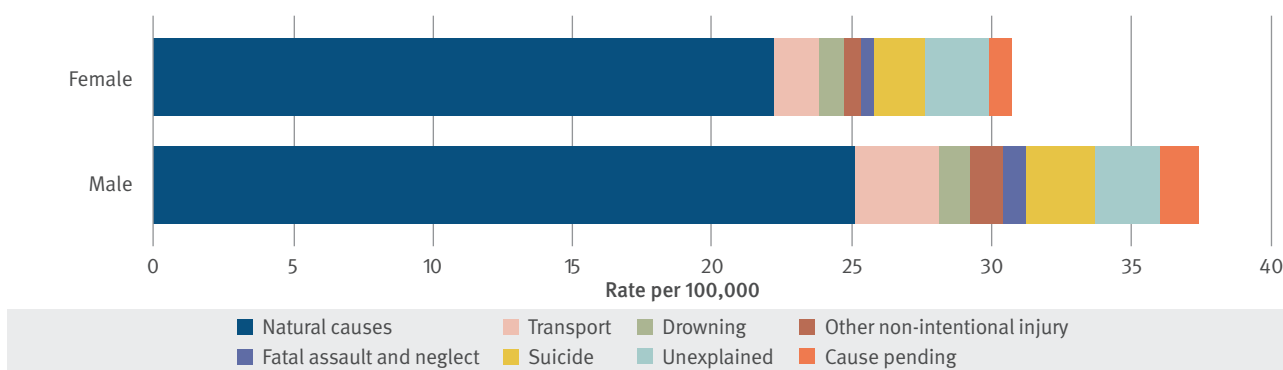
Demographics

Sex

In 2022–23, 57% of deaths were male children while 43% were female children. A small proportion of deaths (less than 1%) were infants of indeterminate sex. The 5-year mortality rates per 100,000 population aged 0–17 years were 37.4 for males and 30.6 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.

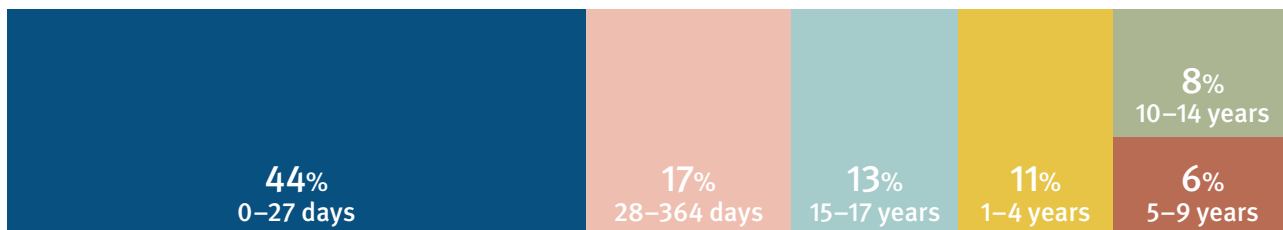
Figure 1.3: Deaths by sex and cause of death (rate), 2018–19 to 2022–23



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, 44% of all child deaths occurred in the first days and weeks of life (0–27 days), and a further 17% were post-neonatal infants (28–364 days).

Figure 1.4: Deaths by age (proportion), 2018–19 to 2022–23

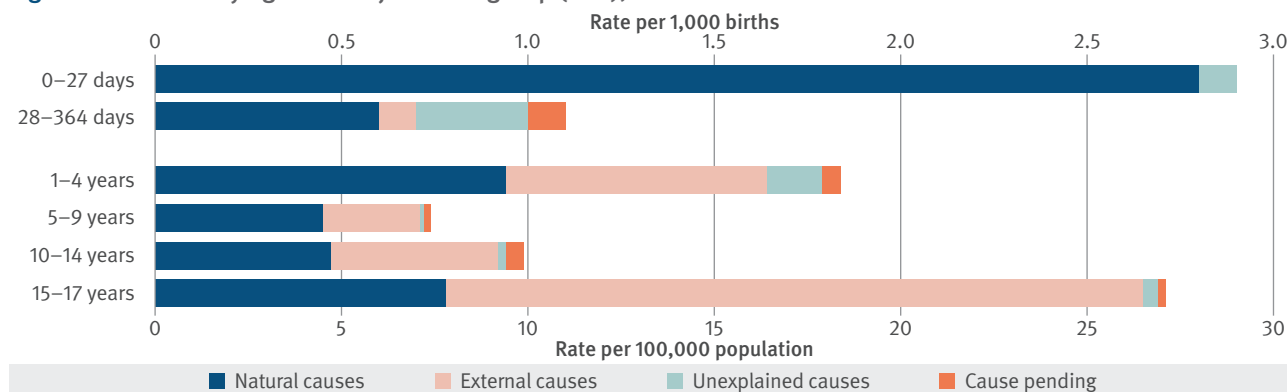


Notes: Percentages may not add to 100 due to rounding.

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 2.8 natural-cause deaths per 1,000 live births compared with the total mortality rate of 2.9 per 1,000. In all other age groups, however, between one-third and just over half of the mortality rates were from natural causes. For example, in the 1–4 age group the rate of natural-cause deaths was 9.4 per 100,000 while the total mortality rate was 18.5 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 (18.7 external-cause deaths per 100,000 and 27.2 total deaths per 100,000) and 1–4 years (7.0 external-cause deaths per 100,000 and 18.5 total deaths per 100,000).

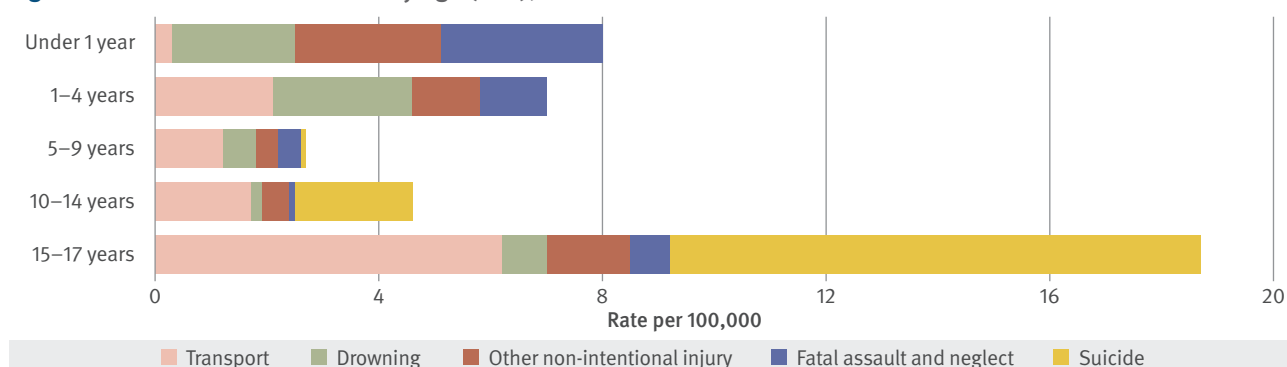
Figure 1.5: Deaths by age and major cause group (rate), 2018–19 to 2022–23



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 1–4 years had the highest rates of death from external causes as noted above. Suicide was the leading external cause for children aged 10–14 and 15–17 years, while drowning was the leading external cause for children in the 1–4 year age category.

Figure 1.6: External-cause deaths by age (rate), 2018–19 to 2022–23



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). Young children aged 1–4 years are more vulnerable to external causes of death. Drowning was the leading cause in this age group and transport was the third leading cause after cancers and tumours.

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

Table 1.1: Top 4 leading causes of death by age (rate per 1,000/100,000), 2018–19 to 2022–23

Age category	1st	2nd	3rd	4th
0–27 days	Perinatal conditions (2.0)	Congenital anomalies (0.7)	SIDS and undetermined causes (0.06)	Cancers and tumours (0.02)
28–364 days	SIDS and undetermined causes (0.3)	Congenital anomalies (0.3)	Perinatal conditions (0.2)	Nervous system diseases (0.06)
Under 1 year	Perinatal conditions (2.1)	Congenital anomalies (1.0)	SIDS and undetermined causes (0.4)	Nervous system diseases (0.07)
1–4 years	Drowning (2.5)	Cancers and tumours (2.3)	Transport (2.1)	Congenital anomalies (1.8)
5–9 years	Cancers and tumours (2.0)	Transport (1.2)	Nervous system diseases (1.0)	Drowning (0.6)
10–14 years	Suicide (2.1)	Cancers and tumours (2.0)	Transport (1.7)	Nervous system diseases (1.1)
15–17 years	Suicide (9.5)	Transport (6.2)	Cancers and tumours; Nervous system diseases (2.2)	Other non-intentional injury (1.5)
0–17 years	Perinatal conditions (11.4)	Congenital anomalies (6.1)	SIDS and undetermined causes (2.3)	Transport (2.3)

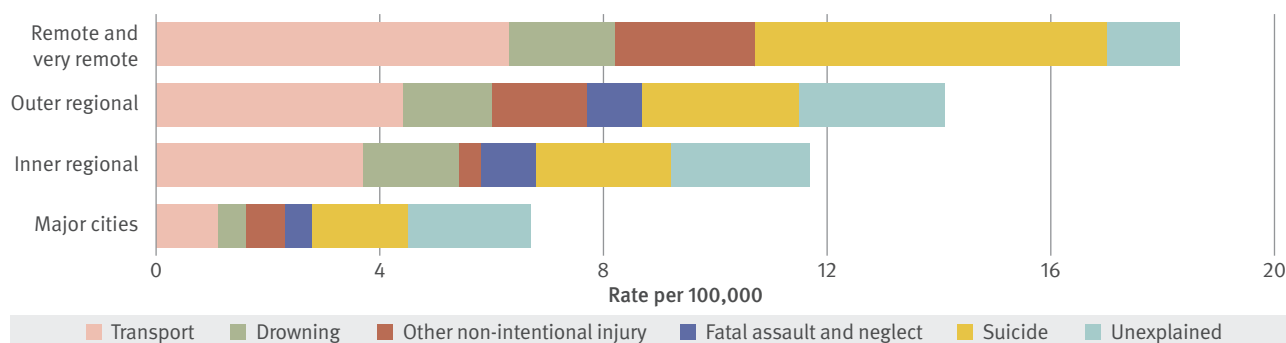
SIDS Sudden infant death syndrome.

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

Regional and remote areas

The child mortality rate from all causes was highest in remote and very remote and outer regional areas of Queensland, with rates of 45.5 and 43.3 per 100,000 children aged 0–17 years, compared with 35.9 in inner regional areas and 30.0 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.

Figure 1.7: ARIA+ of usual place of residence by selected causes of death (rate), 2018–19 to 2022–23

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.

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

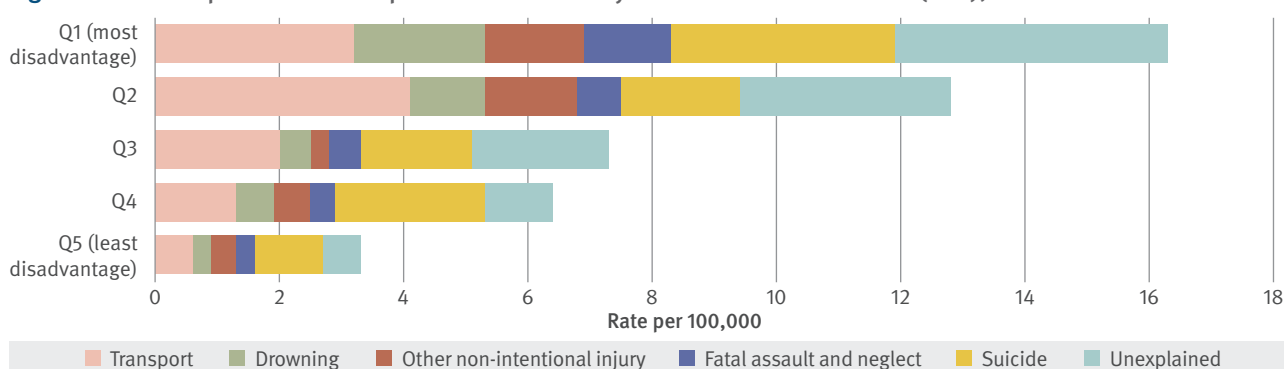
11 Rates exclude deaths of children whose usual residence was outside Queensland. See the 19-year data tables available on the report home page for detailed data www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

Socio-economic disadvantage

The child mortality rate from all causes was highest in areas with the greatest levels of socio-economic disadvantage.¹² The rate of child deaths in quintile 1 areas (most disadvantaged) was 51.4 per 100,000 children aged 0–17 years, compared with 31.7 in quintile 3 areas and 19.0 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), 2018–19 to 2022–23



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

Aboriginal and Torres Strait Islander children

The deaths of 94 Aboriginal and Torres Strait Islander children were registered in 2022–23, of which:

- 60 were from natural causes
- 16 were external causes
- 3 were unexplained causes
- 15 deaths were pending a cause at the time of reporting.

The 94 deaths in the latest year were an increase from 71 in 2021–22. The change was seen mostly in deaths from natural causes which increased from 32 to 60. The 16 deaths from external causes; however, was a decrease from 22 deaths in the previous year.

Aboriginal and Torres Strait Islander children are over-represented in child deaths. The mortality rate for Aboriginal and Torres Strait Islander children was 75.4 deaths per 100,000 Aboriginal and Torres Strait Islander children aged 0–17 years, compared with 30.5 deaths per 100,000 non-Indigenous children (5-year average). The Aboriginal and Torres Strait Islander mortality rate was 2.5 times the rate for non-Indigenous children for all causes.¹⁴

The Aboriginal and Torres Strait Islander infant mortality rate was 6.6 deaths per 1,000 Aboriginal and Torres Strait Islander births, compared with 3.6 deaths per 1,000 non-Indigenous births (5-year average).

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 19-year data tables available on the report home page for detailed data.

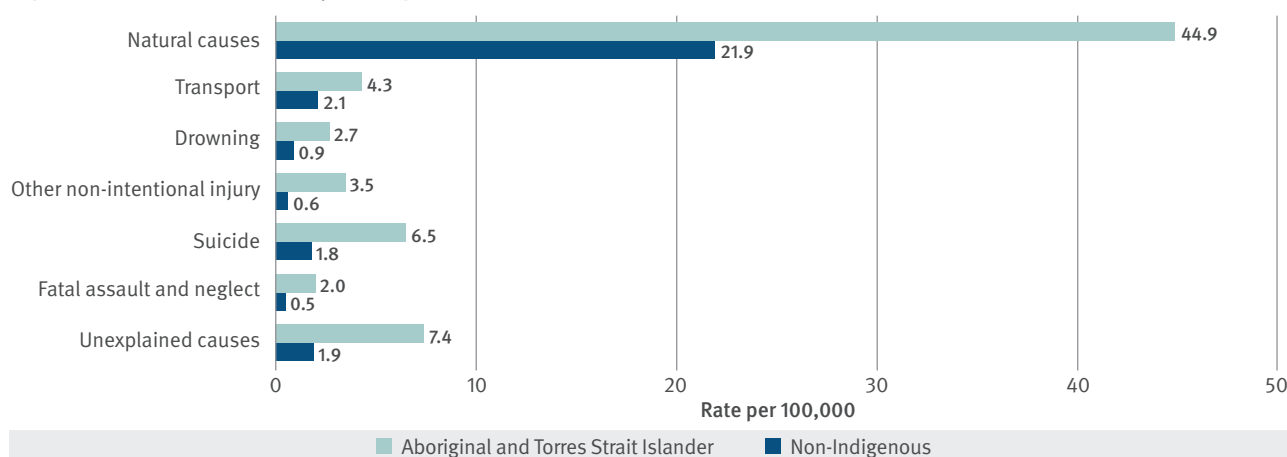
¹⁴ See [Appendix A, Table A.2](#) for detailed data.

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
- drowning
- suicide
- fatal assault and neglect.

Aboriginal and Torres Strait Islander infants were also over-represented in sudden unexpected death in infancy with a mortality rate 3.6 times that for non-Indigenous infants (1.6 and 0.4 per 1,000 births, respectively).

Figure 1.9: Cause of death by Aboriginal and Torres Strait Islander status (rate), 2018–19 to 2022–23

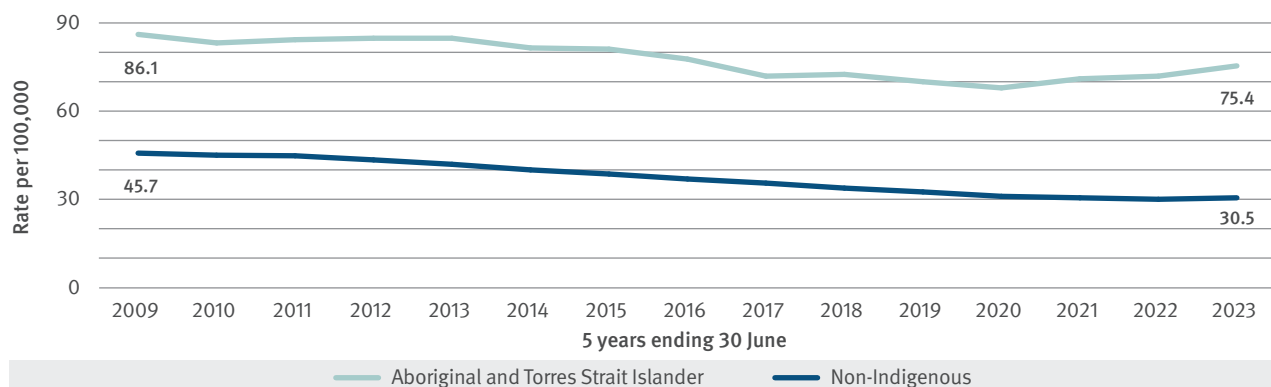


Notes: Rates calculated per 100,000 Aboriginal and Torres Strait Islander and non-Indigenous children aged 0–17 years, averaged over 5 years.

Trends

Aboriginal and Torres Strait Islander child mortality rates have decreased over the 19-year period. Between 2004–09 and 2018–23 the Aboriginal and Torres Strait Islander mortality rate (0–17 years) decreased 0.9% per year on average while the non-Indigenous rate decreased 2.4% 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 3 years whereas the non-Indigenous rate plateaued.

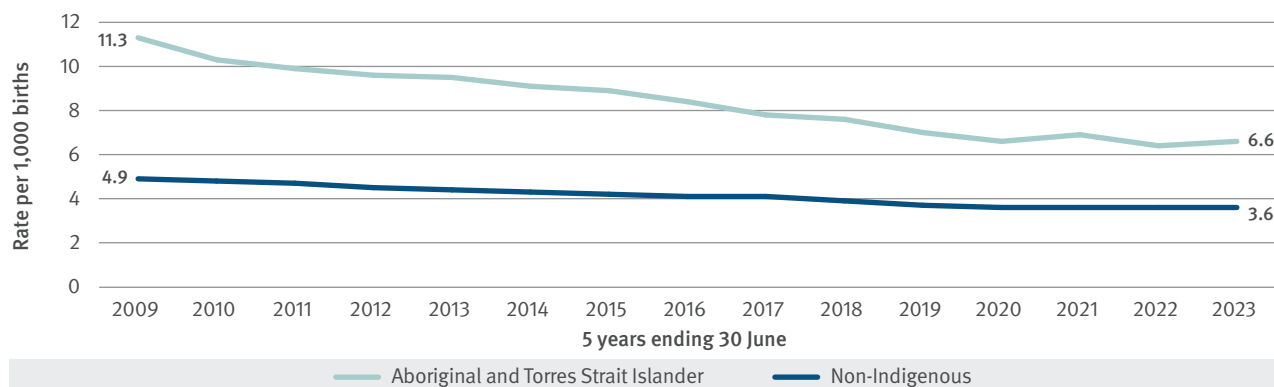
Figure 1.10: Child deaths by Aboriginal and Torres Strait Islander status (5-year rolling rate), 2004–09 to 2018–23



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

For infant deaths, there was a greater reduction in the Aboriginal and Torres Strait Islander infant mortality rate, which decreased from 11.3 per 1,000 live births in 2004–09 to 6.6 per 1,000 births in 2018–23 (down 3.0% per year on average). The non-Indigenous infant mortality rate decreased by 1.9% 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 2018–23



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

Children known to the child protection system

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

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

Seventy-two children who died in 2022–23 were known to Child Safety in the 12 months prior to their deaths, an increase from 69 deaths in 2021–22. Thirty-one of these children died from natural causes, 25 from external causes, one from unexplained causes and 15 deaths were pending a cause at the time of reporting.

On occasion, children may come to the attention of Child Safety due to an incident causing critical injuries (for example, in a road crash) and have subsequently died in hospital from their injuries. Of note in 2022–23, 9 children of the 72 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.¹⁵

The mortality rate for children known to Child Safety was almost twice the Queensland child mortality rate (63.8 deaths per 100,000 and 34.2 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

¹⁵ A new field has been introduced into the Child Death Register, allowing the QFCC to assess and report on this aspect.

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 2022–23 is the number of children known to Child Safety during 2021–22).

¹⁷ See [Appendix A, Table A.3](#) for detailed data.

¹⁸ www.childprotectioninquiry.qld.gov.au

Figure 1.12: Deaths of children known to the child protection system (number), 2004–05 to 2022–23

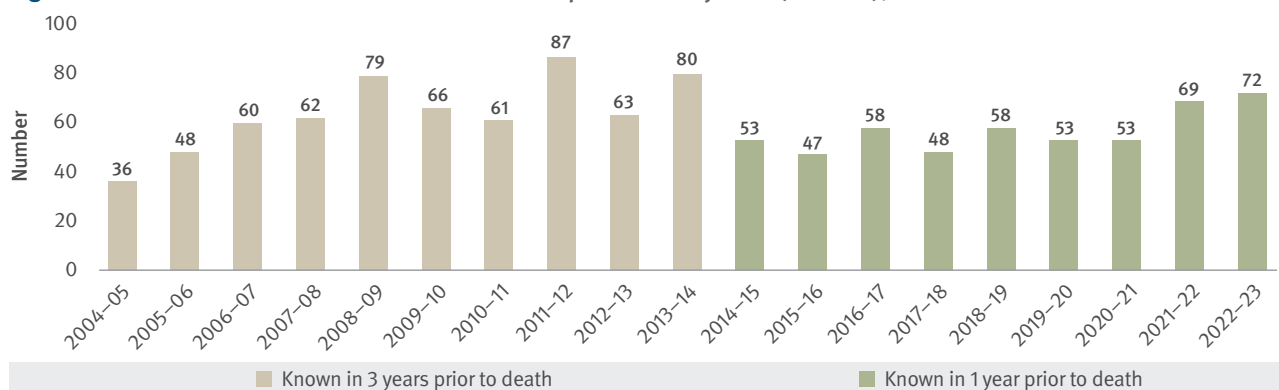


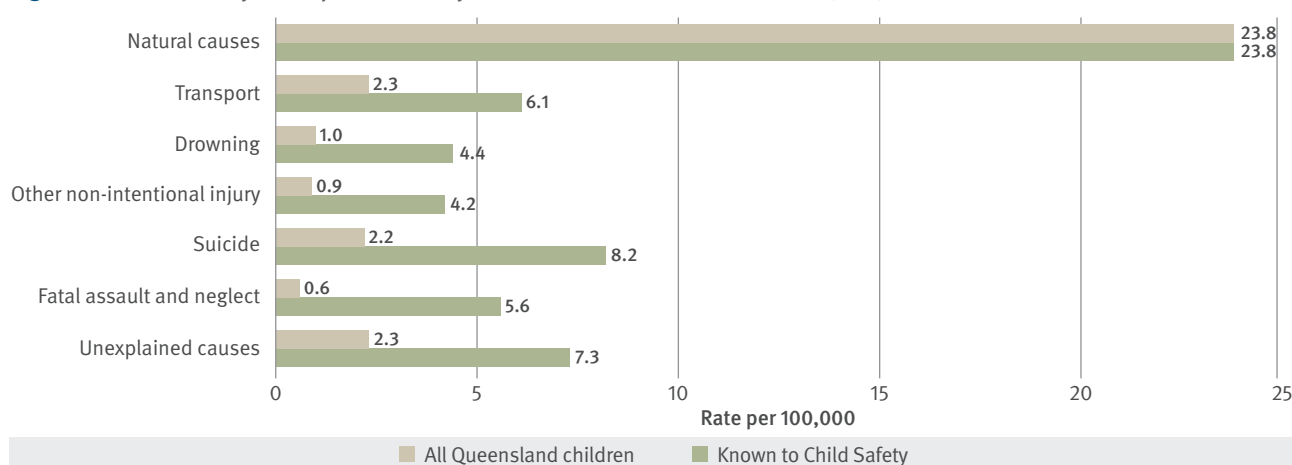
Figure 1.13 illustrates the over-representation of children known to Child Safety in deaths from external and unexplained causes (noting these figures include reference to those children who came to the attention of Child Safety as a result of the incident causing critical injuries and subsequent death).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

Children known to the child protection system were also over-represented in sudden unexpected infant deaths, with a mortality rate around 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 misuse 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), 2018–19 to 2022–23



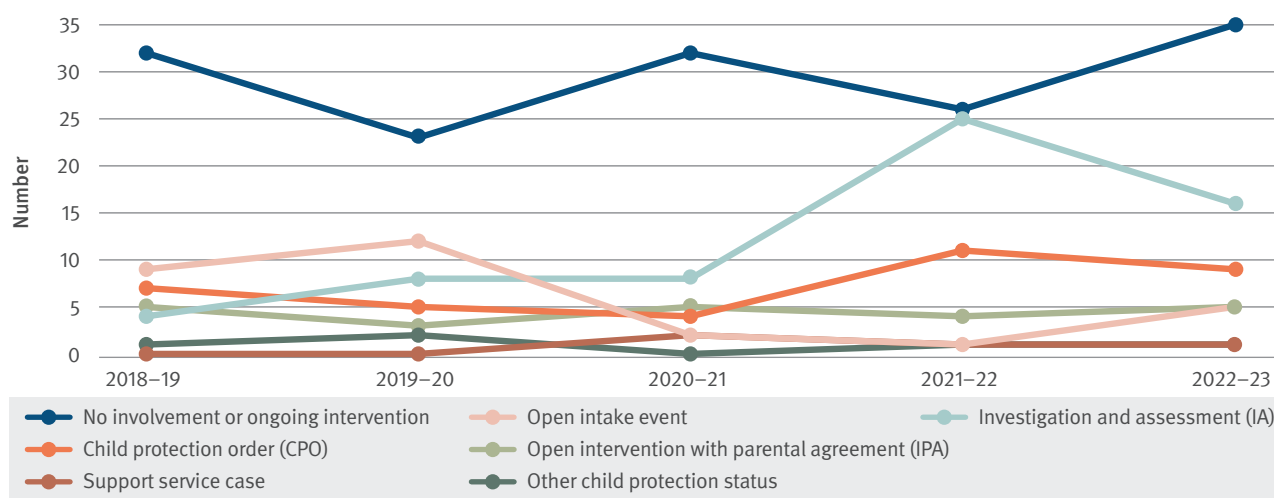
Notes: Rates calculated per 100,000 children known to Child Safety in the year prior to 30 June and per 100,000 population aged 0–17 years, averaged over 5 years.

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 the child protection status recorded at the time of death. Over the 5 years, the child protection status included:

- 49% – no involvement or ongoing intervention
- 20% – investigation and assessment (IA)
- 12% – child protection order (CPO)
- 10% – open intake event
- 7% – 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 2022–23



Notes: Excludes child protection status not stated (one in 2021–22).

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

Five children in 2022–23 had been reported missing to the police in relation to their death, 3 of the deaths were from suicide and 2 from drowning. Two of the children reported missing were also known to Child Safety (neither of the children were 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*, QFCC, Queensland Government. www.qfcc.qld.gov.au/sector/child-death/system-reviews-after-child-death