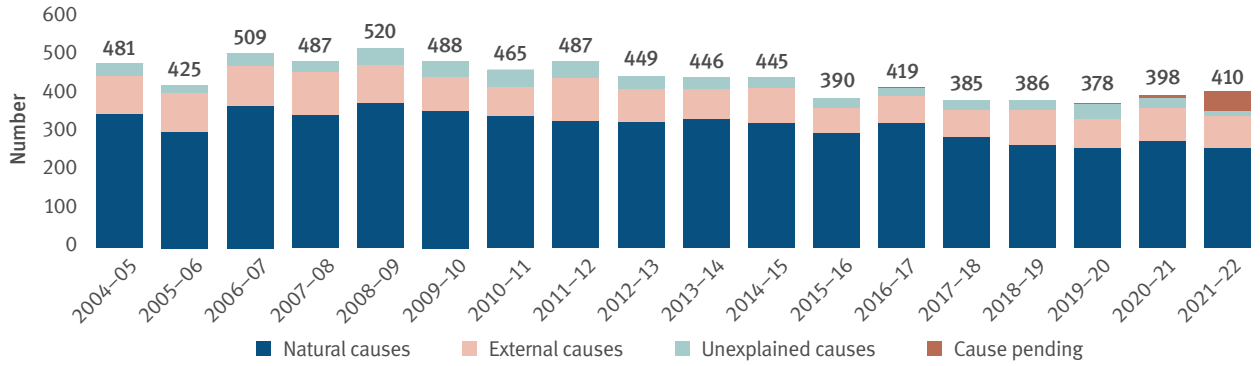
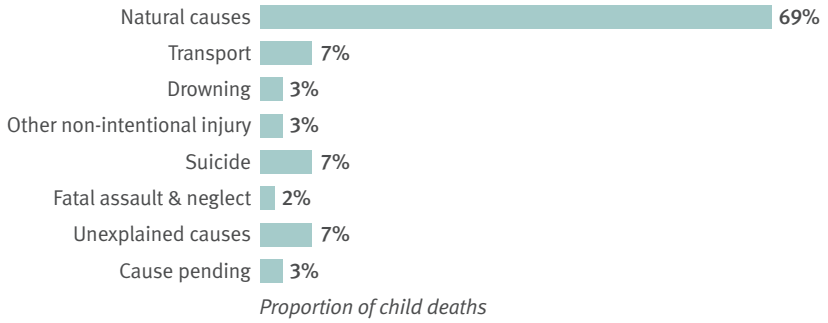
1 Child deaths in Queensland

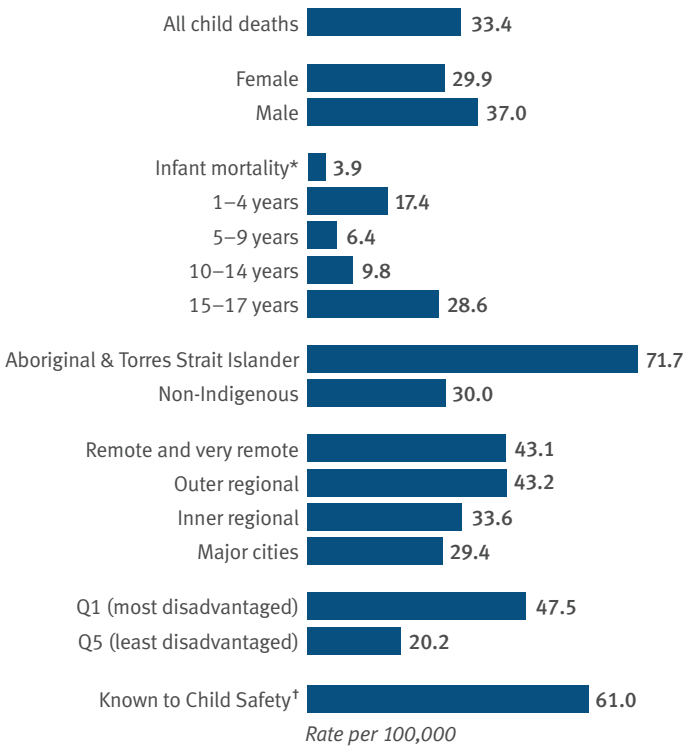
2004 to 2022



5-year summary (2017–22) | Cause of death category



Demographics



Leading cause by age

0–27 days	**Perinatal conditions** 1.9 per 1,000 births
28–364 days	**SIDS and undetermined** 0.3 per 1,000 births
1–4 years	**Drowning** 2.6 per 100,000
5–9 years	**Cancers and tumours** 1.5 per 100,000
10–14 years	**Cancers and tumours** 2.1 per 100,000
15–17 years	**Suicide** 10.8 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 2021 and 30 June 2022, the deaths of 410 children and young people were registered in Queensland. The child mortality rate over the last 5 years was 33.4 deaths per 100,000 children aged 0–17 years and the infant mortality rate was 3.9 per 1,000 births.[7] Queensland's child mortality rate is high compared with other Australian states and territories. In 2019, Queensland's child mortality rate was the second highest in Australia at 33.7 per 100,000 children aged 0–17 years, while other jurisdictions ranged between 14.2 and 54.9 per 100,000.[8]

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

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

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

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

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

Trends in child deaths

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

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

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

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

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

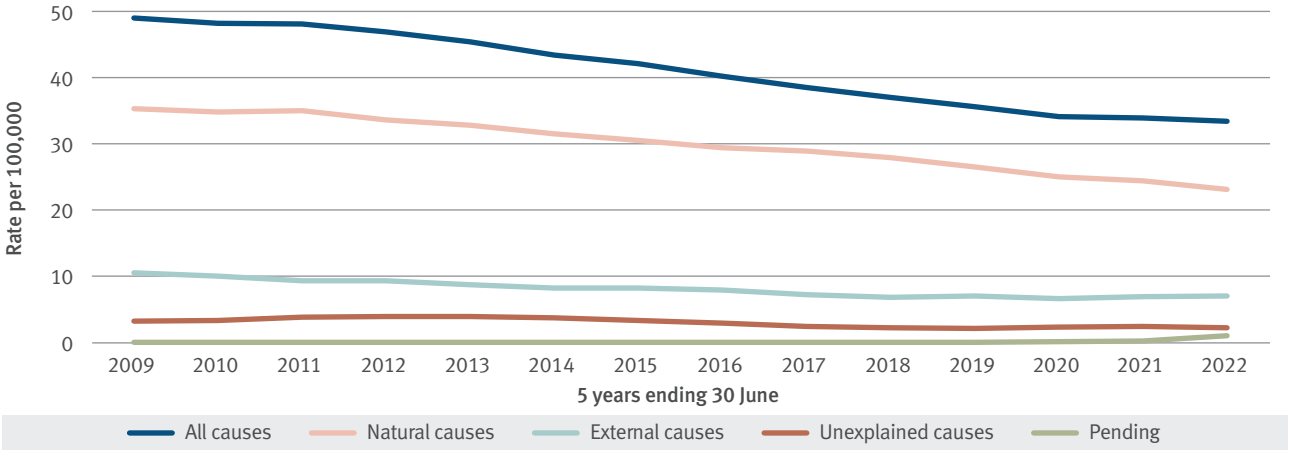
8 QFCC (2022) *Australian and New Zealand child death statistics 2019*. **www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data**

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

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

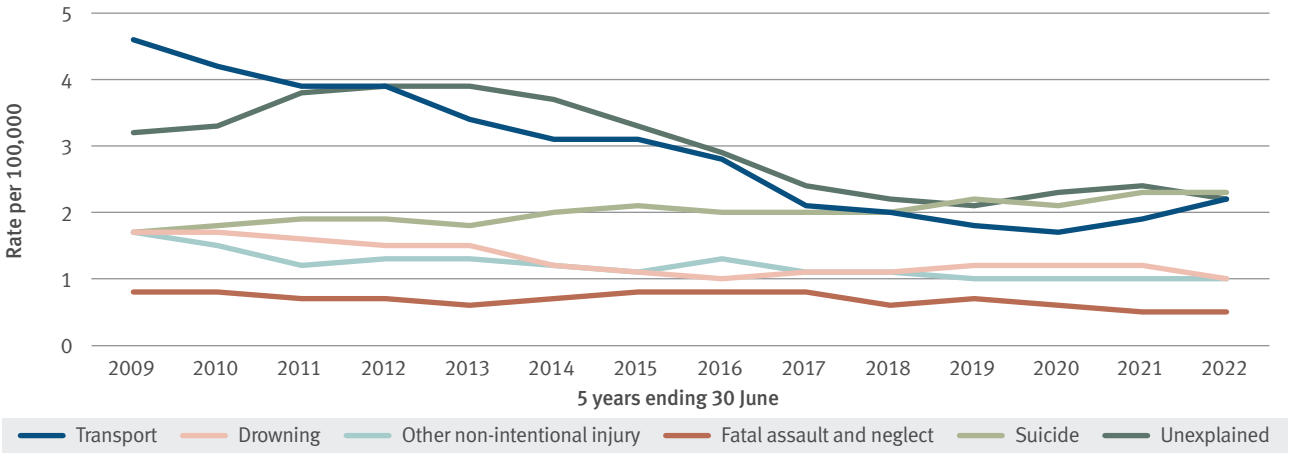
Rates of deaths from drowning, other non-intentional injury and fatal assault and neglect have decreased over the period, with average annual decreases of 3.5%, 3.4% and 2.8% respectively.

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



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

Figure 1.2: External-cause deaths by primary cause (5-year rolling rate), 2004–09 to 2017–22



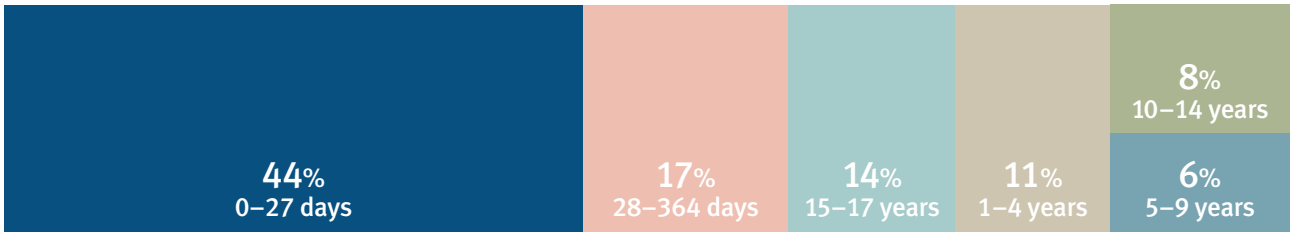
Notes: Rates calculated per 100,000 population aged 0–17 years, averaged over 5 years.

Demographics of child deaths

Age

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

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

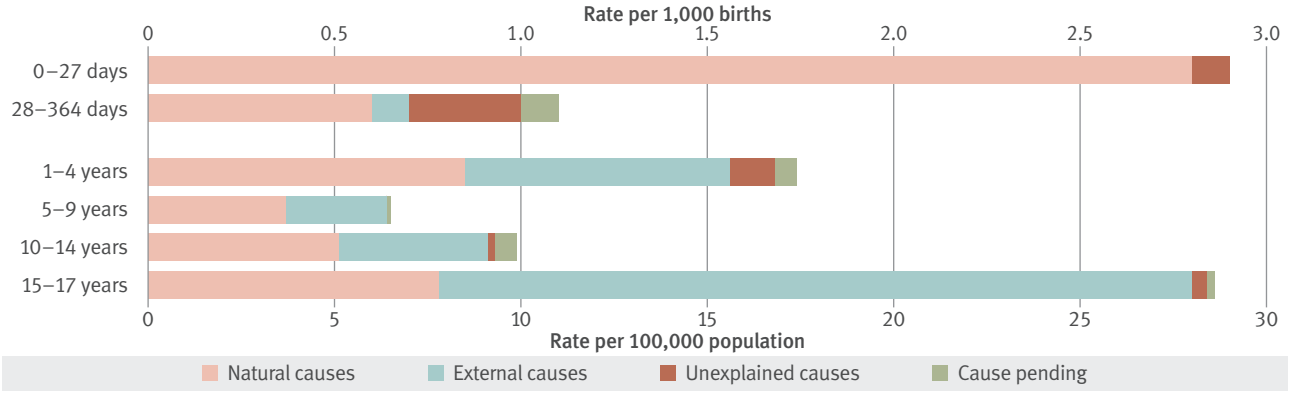


Notes: Percentages may not add to 100 due to rounding.

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

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

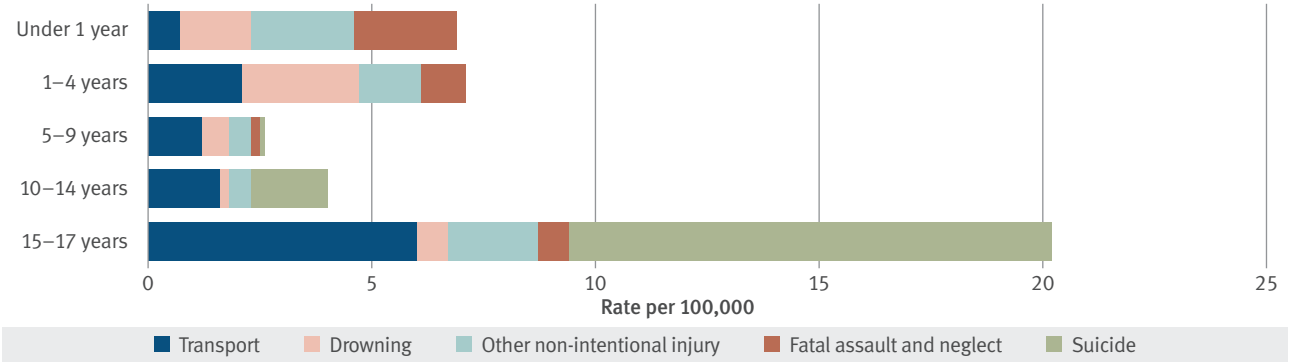
Figure 1.4: Deaths by age and major cause group (rate), 2017–18 to 2021–22



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

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



Leading causes by age

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

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

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

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

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

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.

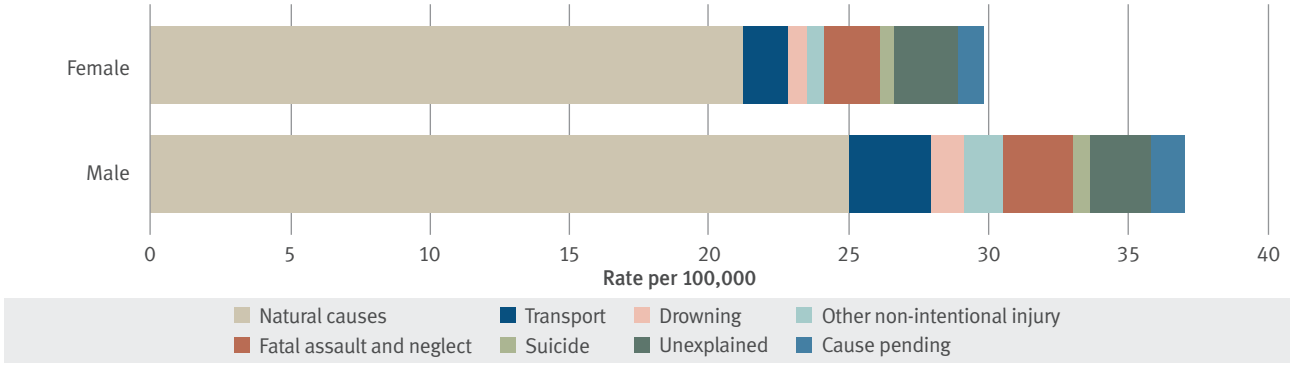
11 www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

Sex

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

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

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

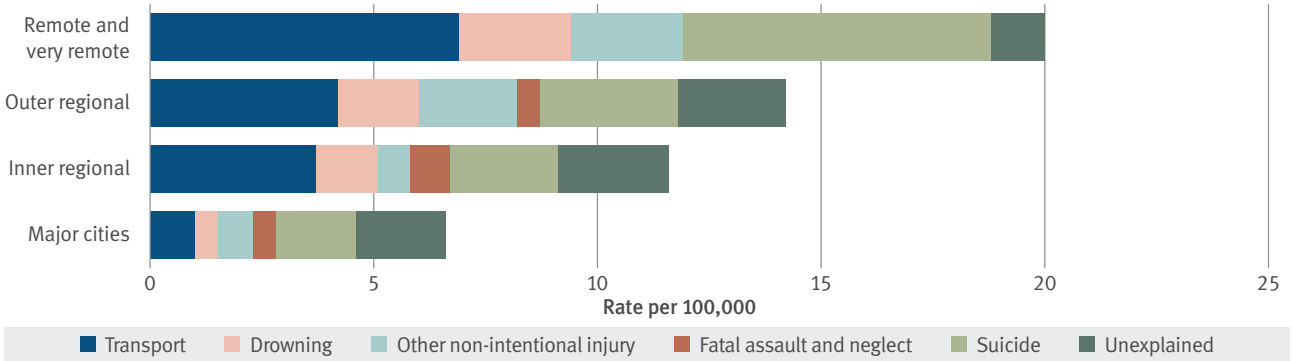


Regional and remote areas

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

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

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



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

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

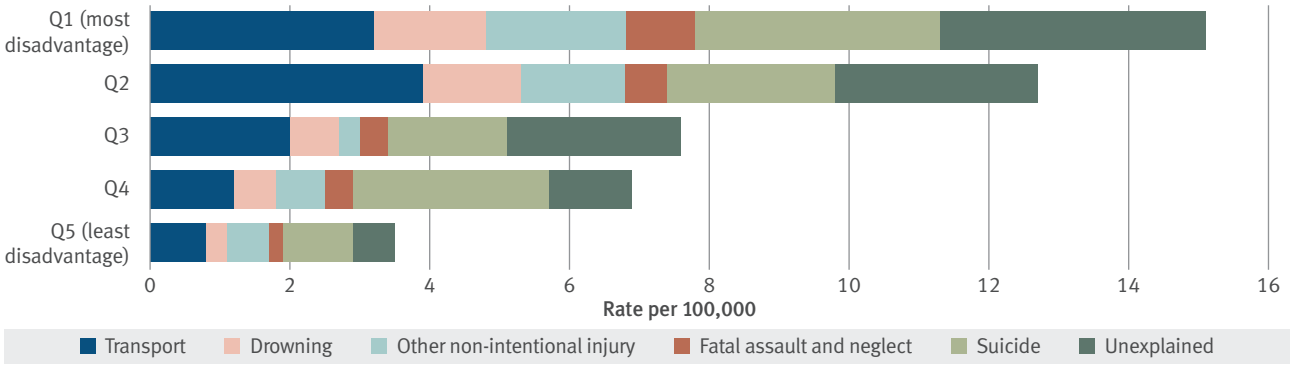
13 Rates exclude deaths of children whose usual residence was outside Queensland. See the 18-year data tables available on the report home page for detailed data www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

Socio-economic disadvantage

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

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

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



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

Aboriginal and Torres Strait Islander children

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

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

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

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

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

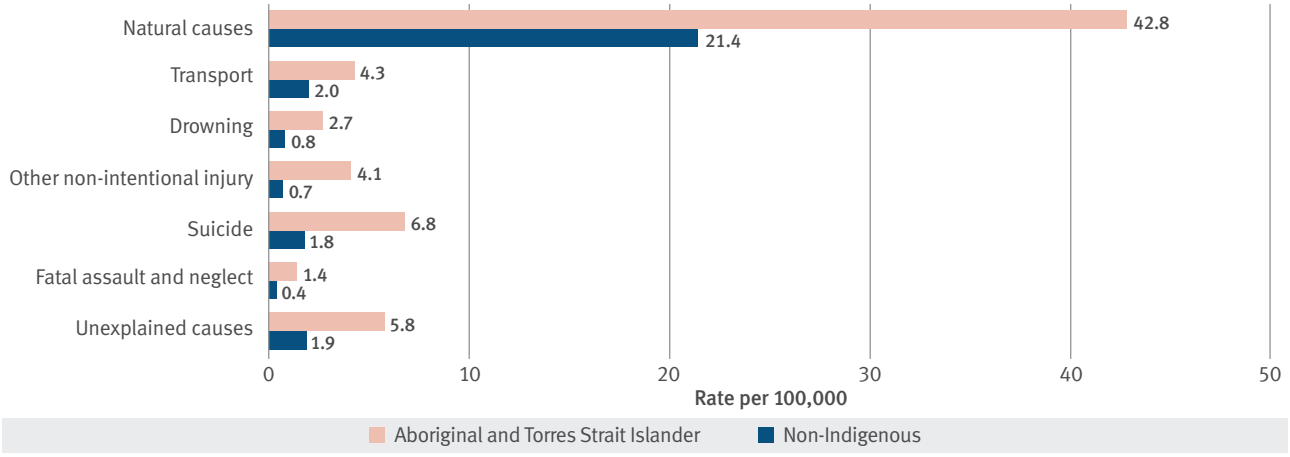
14 Analysis is based on the Socio-Economic Indexes of Australia (SEIFA) score for the child's place of the usual residence. SEIFA is allocated to geographic areas to represent their level of advantage or disadvantage from Census data. **www.abs.gov.au/websitedbs/censushome.nsf/home/seifa**

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

16 See **Appendix A Table A.2** for detailed data.

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

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



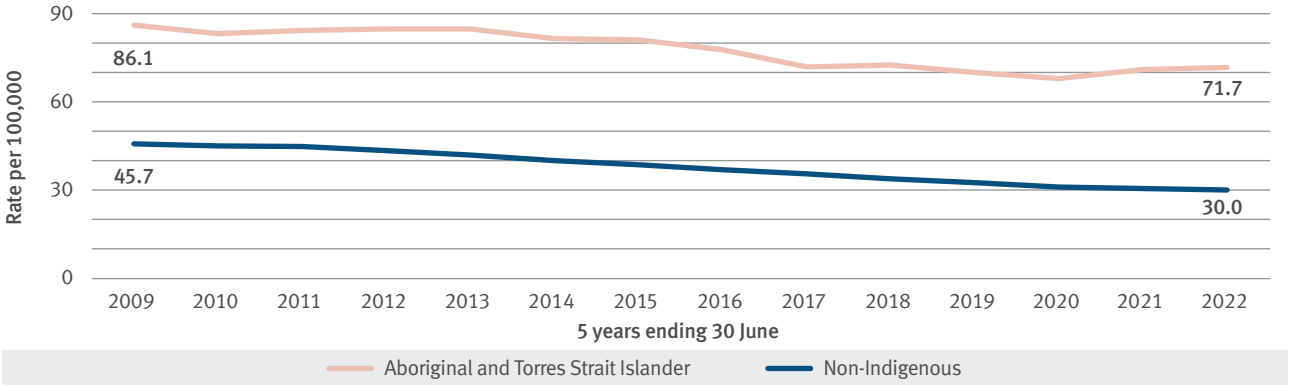
Notes: Rates calculated per 100,000 Aboriginal and Torres Strait Islander and non-Indigenous children aged 0–17 years, averaged over 5 years.

Trends

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

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

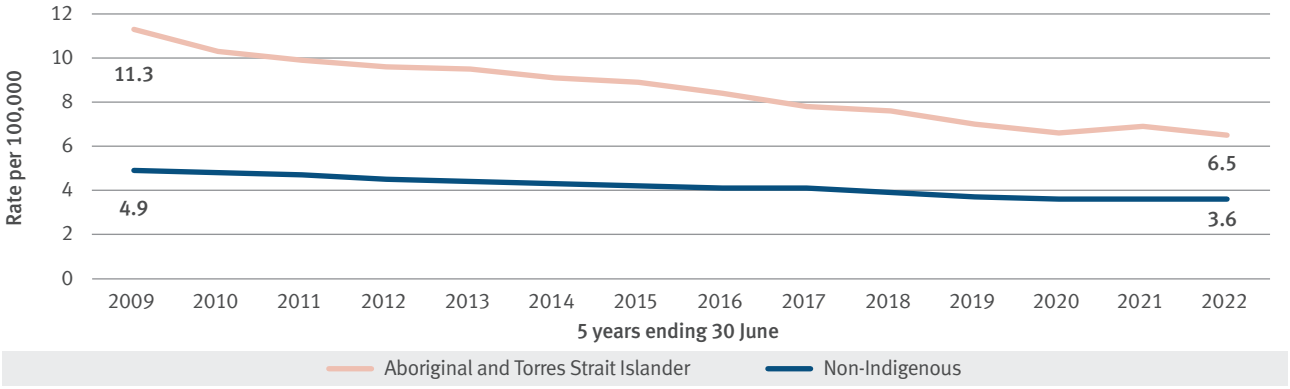
Figure 1.10: Child deaths by Aboriginal and Torres Strait Islander status (5-year rolling rate), 2004–09 to 2017–22



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

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

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



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

Children known to the child protection system

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

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

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

It is noted that the population of children known to the child protection system has increased 4% per year on average over the last 5 years, although the increase does not fully account for the increase in child deaths observed in 2021–22.[17]

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

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

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

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

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

20 www.childprotectioninquiry.qld.gov.au

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

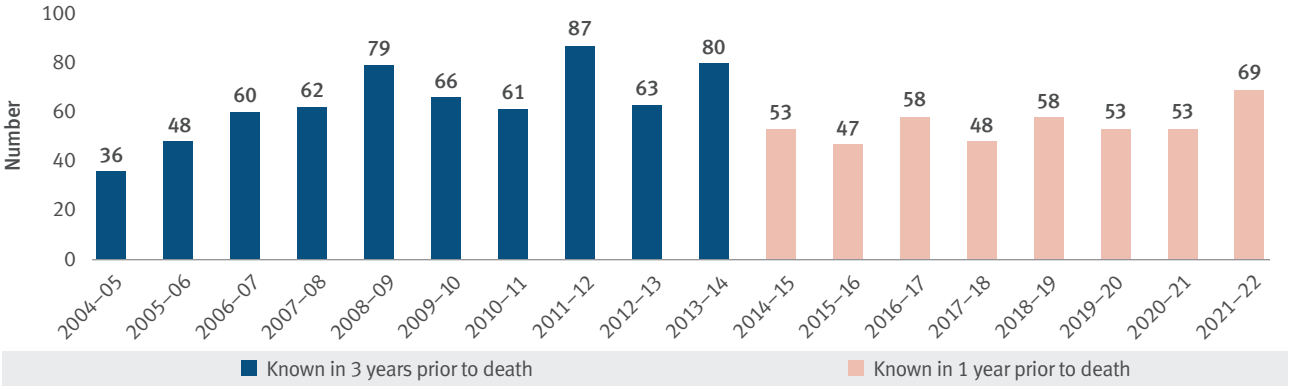


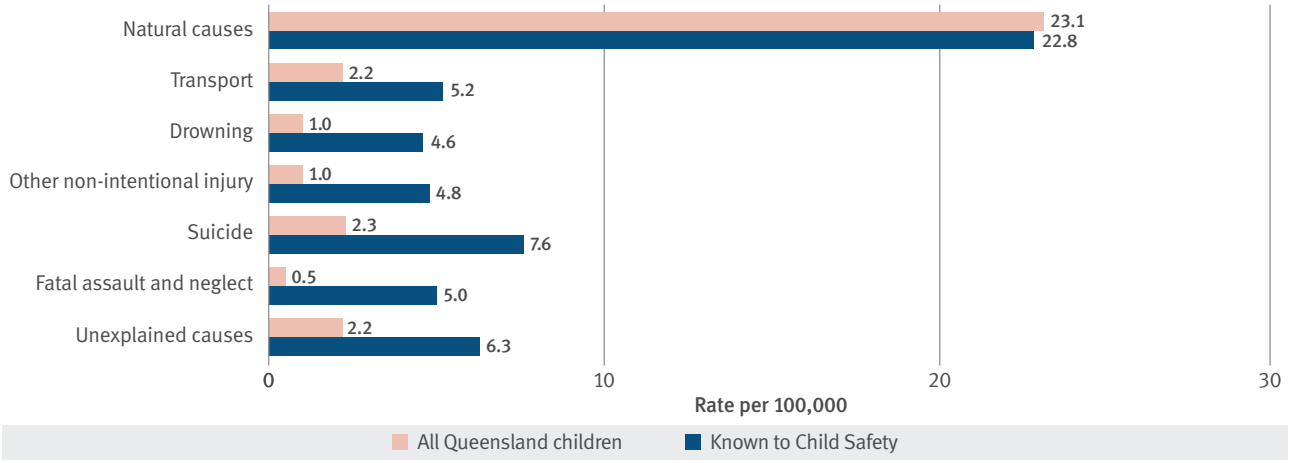
Figure 1.13 illustrates the over-representation of children known to Child Safety in deaths from external and unexplained causes. Over the last 5 years, mortality rates for children known to Child Safety have been more than 3 times higher than the Queensland child mortality rates for:

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

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

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

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



Children reported missing

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

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

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