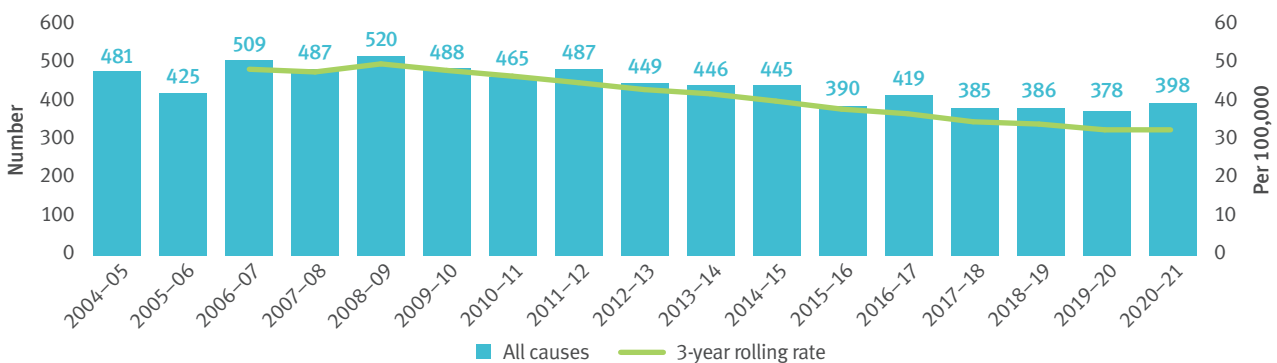


1 Child deaths in Queensland

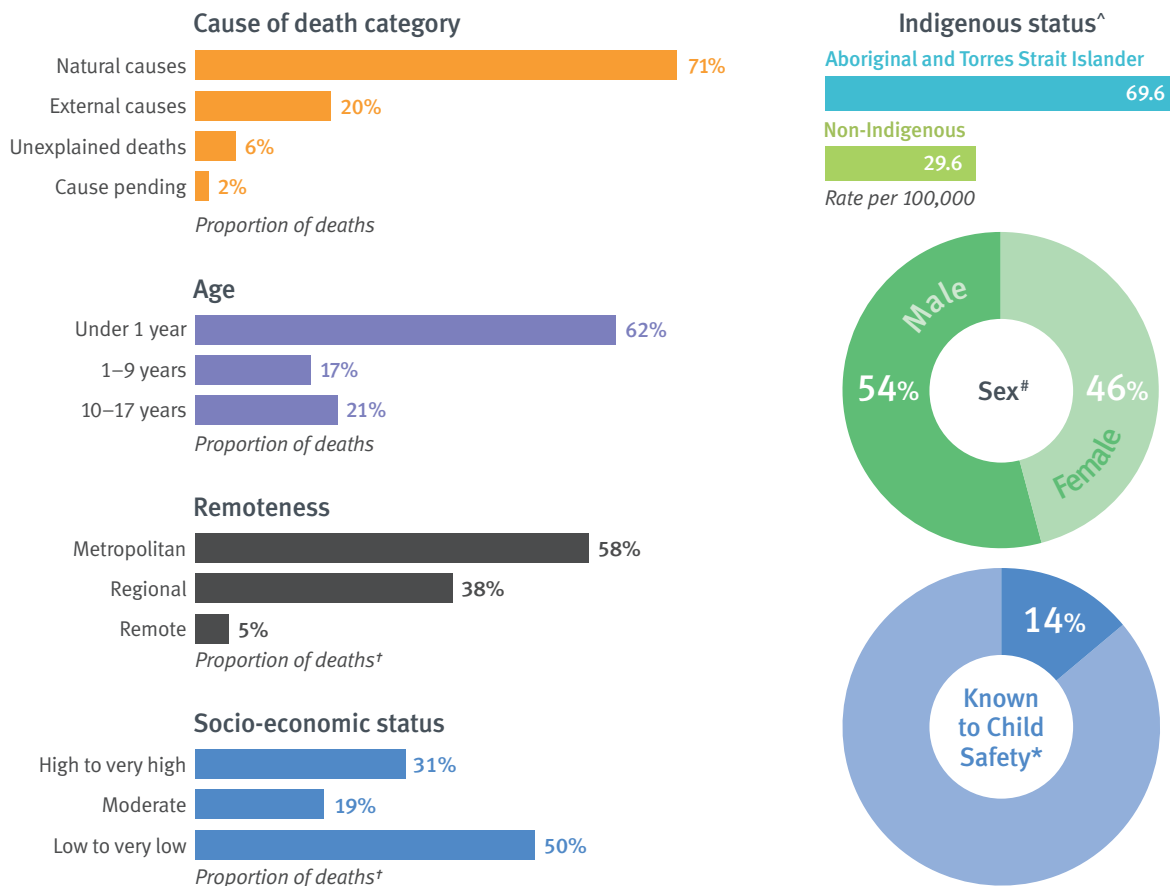
Overview

- 398 deaths of children and young people were registered in Queensland in 2020–21.
- The child mortality rate has declined since 2004, down 2.7% per year on average using 3-year rolling average rates.
- Aboriginal and Torres Strait Islander child mortality has declined; however Indigenous children were over-represented in child deaths by a factor of two.
- Sudden Infant Death Syndrome (SIDS) and undetermined causes is the leading cause of death in the post-neonatal period (28–364 days).
- Drowning is the leading cause of death for 1–4 year olds.
- Suicide is the leading cause for 15–17 year olds and second leading cause for 10–14 year olds.

Child deaths in Queensland



Five-year summary (2016–21)



Notes: Counting is by date of death registration. Percentages may not add to 100 due to rounding.

[^] 3-year average rates
not shown, 0.1% sex indeterminate

† of Qld resident deaths only
* in the 12 months prior to death

Key findings

Between 1 July 2020 and 30 June 2021, the deaths of 398 children and young people were registered in Queensland. The child mortality rate over the last 3 years was 32.9 deaths per 100,000 children aged 0–17 years and the infant mortality rate was 3.8 per 1,000 births.⁵

A summary table of child deaths by cause and key characteristics can be found in **Table A.1** in **Appendix A**. Tables with data from 2004 are available online at <http://www.qfcc.qld.gov.au/kids/preventing-child-injury-death>

Rate calculations and percentages

Rates and percentages presented in this report are calculated as multi-year averages to provide more reliable estimates of mortality data and smooth out year to year fluctuations that arise with reporting on small numbers. Three-year rolling averages are used for trends in all causes, major cause groups, by Aboriginal and Torres Strait Islander status, and SUDI. Five-year averages are used for data further disaggregated by cause, type and demographics.

Data presented as percentages have in most cases been rounded to the nearest whole number. As a result, percentages may not add to 100 due to rounding.

Natural causes (or diseases and morbid conditions) accounted for the majority of deaths of children and young people in 2020–21 (67%), occurring at a rate of 22.4 deaths per 100,000 children aged 0–17 years (3-year average).⁶

Eighty-six deaths were from external causes (which includes transport, drowning, other non-intentional injury, suicide and fatal assault and neglect). External causes accounted for 22% of child deaths in 2020–21 and occurred at a rate of 7.2 deaths per 100,000 children aged 0–17 years (3-year average).

The leading causes of deaths after natural causes in 2020–21 were transport incidents (31), suicide (30), deaths from unexplained causes (17) followed by other non-intentional injuries (12). Ten children died from drowning and 3 children died as a result of fatal assault and neglect.

The cause may not be available for a number of child deaths until the outcomes of autopsy and coronial investigations are final. For this reason, the causes of a number of deaths are recorded as ‘pending’ in the year they are registered. Final outcomes are usually available within 1–2 years, at which point the Child Death Register is updated to reflect the official cause. Of the 398 deaths of children and young people in 2020–21, 7% (29 deaths) were recorded as ‘cause of death pending’. The majority pending a cause are infant deaths and are most likely to be found to be from unexplained causes (based on outcomes in previous periods).

Trends in child deaths

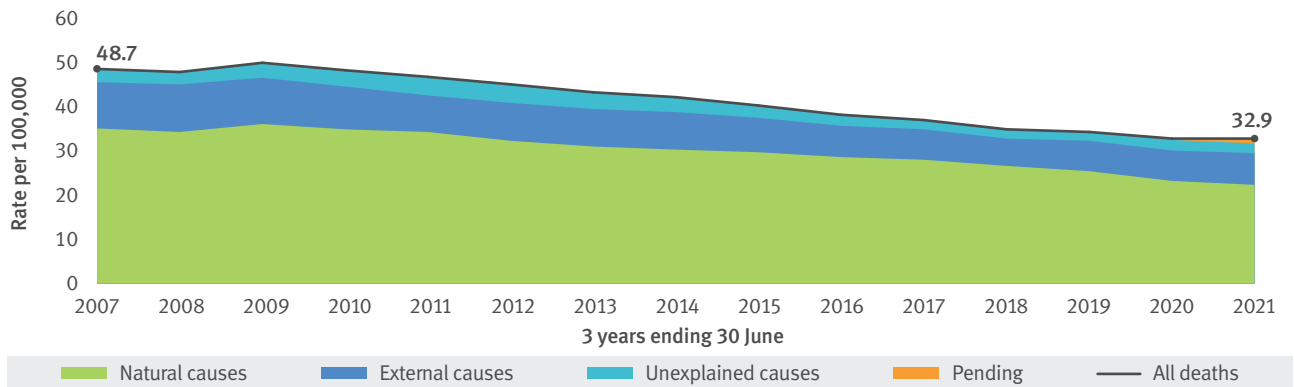
Child deaths and mortality rates have generally declined. Child mortality rates over the period 2004 to 2021 are illustrated in Figure 1.1 using 3-year rolling rates. Key points to note:

- The child mortality rate decreased 2.7% per year on average over the period.
- The overall trend is driven by decreases in child deaths from natural causes, which constituted the large majority of child deaths, and decreased by 3.1% per year on average.
- Deaths from external causes decreased by 2.4% per year on average.
- Deaths from unexplained causes decreased by 1.4% per year on average. Almost all of this group are infant deaths classified as Sudden Infant Death Syndrome (SIDS) or undetermined causes.

⁵ For a summary of the population data used to calculate rates, see **Appendix B** Methodology.

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

Figure 1.1: Child deaths by major cause group (3-year rolling rate), 2004–07 to 2018–21



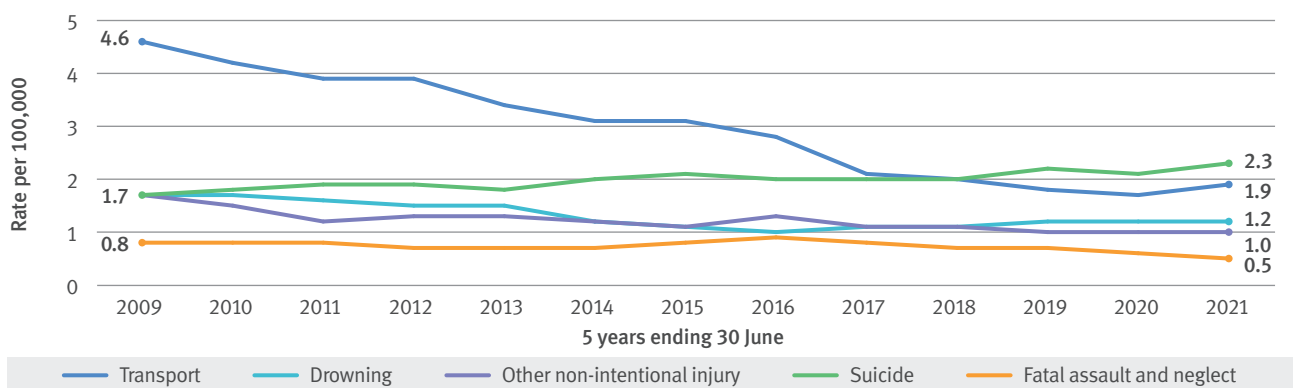
Notes: Rates calculated per 100,000 population aged 0–17 years, averaged over 3 years.

Five-year rolling rates of death from external causes are further illustrated in Figure 1.2.

The largest change in rates was in transport-related deaths, which decreased 6.6% per year on average over the period. While there were decreases in deaths from drowning, other non-intentional injury and fatal assault and neglect, the changes were not indicative of strong trends.

Deaths from suicide have increased, from 1.7 per 100,000 aged 0–17 years in 2004–09 to 2.3 per 100,000 in 2016–21 (up 2.4% per year on average).

Figure 1.2: External cause deaths by primary cause (5-year rolling rate), 2004–09 to 2016–21



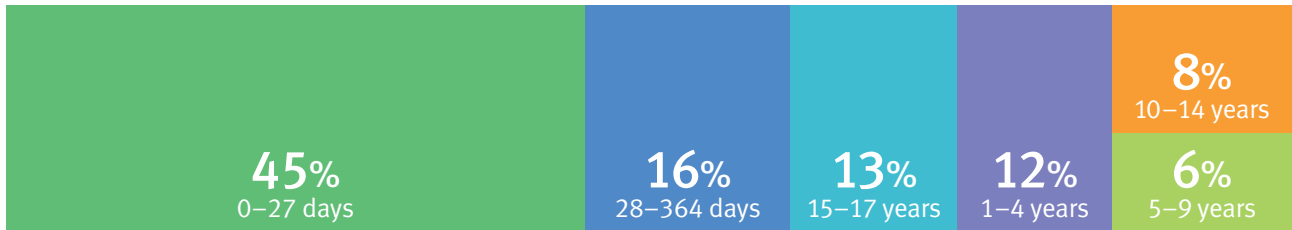
Notes: Rates calculated per 100,000 population aged 0–17 years, averaged over 5 years.

Demographics of child deaths

Age

Figures 1.3 to 1.5 reveal the considerable differences in child deaths by age and cause. Forty-five per cent of all child deaths occurred in the first days and weeks (0–27 days), and a further 16% were post-neonatal infants (28–364 days).

Figure 1.3: Deaths by age (proportion), 2016–17 to 2020–21

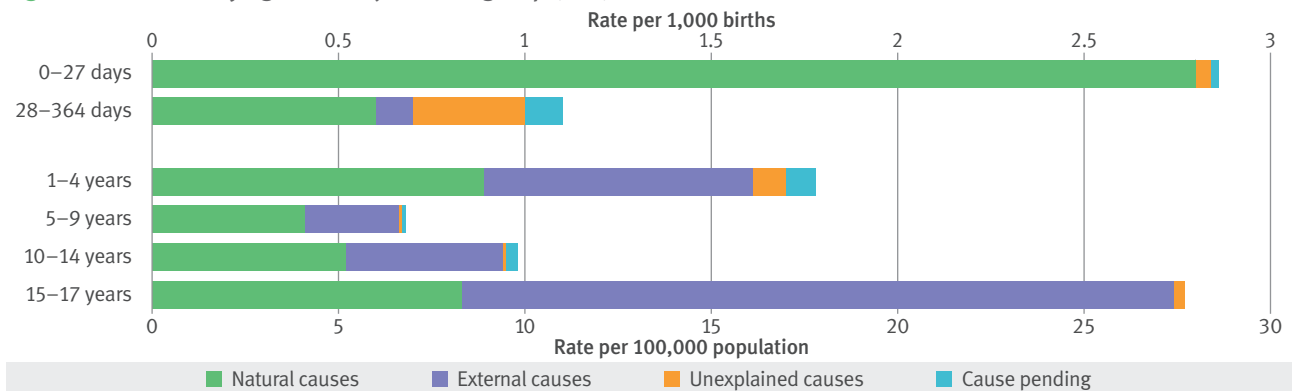


Notes: Percentages may not add to 100 due to rounding.

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 first 27 days were from natural causes, whereas in all other age groups between one and two-thirds of deaths were from natural causes.

Unexplained deaths made a larger contribution to the overall mortality rate for infants aged 28–364 days, while external causes were larger contributors for overall mortality in older age groups. This was most marked for age groups 15–17 years and 1–4 years.

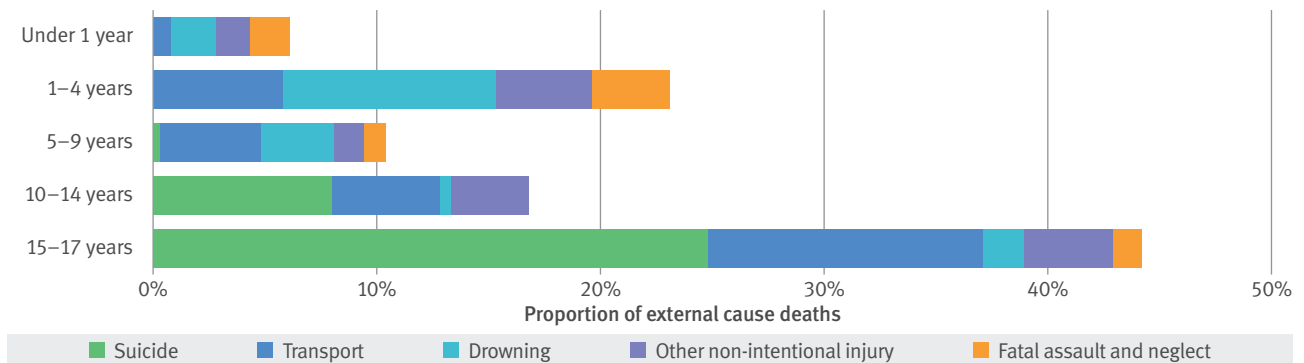
Figure 1.4: Deaths by age and major cause group (rate), 2016–17 to 2020–21



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 external causes by age are indicated in Figure 1.5. Children aged 15–17 years and 1–4 years made up the largest proportions of child deaths from external causes (respectively 44% and 23%). Suicide deaths made up the largest groups of external cause deaths in 15–17 and 10–14 year olds, while drowning was the largest external cause group for 1–4 year olds.

Figure 1.5: External cause deaths by age (proportion), 2016–17 to 2020–21



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](#).

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, with drowning as lead cause and transport incidents (predominantly low-speed vehicle runovers) the next non-natural cause.

Neoplasms was a top three leading cause for each age category from 1–17 years. Suicide and transport incidents were leading external causes of death for ages 15–17 years and 10–14 years.

Table 1.1: Leading causes of death by age (number, proportion of age group), 2016–17 to 2020–21

Age category	Rank			
	1st	2nd	3rd	4th
Less than 28 days (n = 894)	Perinatal conditions^a 611, 68%	Congenital anomalies^b 242, 27%	SIDS^c and undetermined causes 13, 1.5%	Refer to note ^d
28 days to 364 days (n = 321)	SIDS and undetermined causes 92, 29%	Congenital anomalies 69, 21%	Perinatal conditions 54, 17%	Diseases of the nervous system 18, 6%
1–4 years (n = 227)	Drowning 38, 17%	Neoplasms; Congenital anomalies 25, 11%	Transport 23, 10%	Other non-intentional injury 17, 7%
5–9 years (n = 111)	Neoplasms 23, 21%	Transport 18, 16%	Drowning; Congenital anomalies; Diseases of the nervous system 13, 12%	Refer to note ^d
10–14 years (n = 157)	Neoplasms 36, 23%	Suicide 32, 20%	Transport 19, 12%	Other non-intentional injury 14, 9%
15–17 years (n = 256)	Suicide 99, 39%	Transport 49, 19%	Neoplasms 21, 8%	Other non-intentional injury 16, 6%

a Certain conditions originating in the perinatal period.

b Congenital malformations, deformations and chromosomal abnormalities.

c Sudden Infant Death Syndrome.

d Cause and number too small to report.

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. Deaths by category are summed over 5 years.

Sex

Males comprised 56% of child deaths, with a rate of 36.9 deaths per 100,000 male children aged 0–17 years (5-year average). In comparison, females made up 44% of child deaths, with a rate of 30.4 deaths per 100,000 female children.

Males were over-represented in most cause categories, with this highest in deaths from transport incidents and other non-intentional injuries. The exceptions were deaths from fatal assault and neglect and unexplained deaths, where male and female were more equally represented in child deaths.

Regional and remote areas

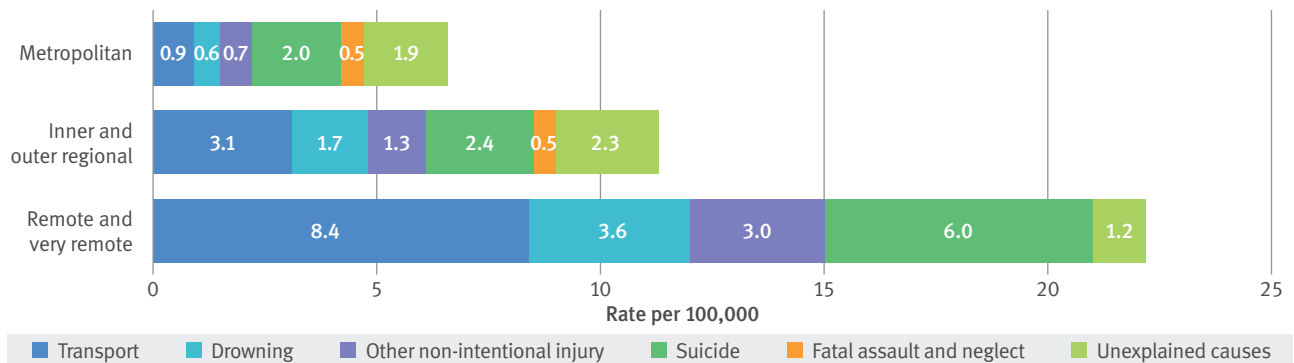
The child mortality rate from all causes was highest in remote areas of Queensland, with a rate of 52.4 per 100,000 children aged 0–17 years, compared to 36.4 in regional areas and 30.2 in metropolitan areas (5-year average).^{7,8}

Figure 1.6 illustrates the rates of deaths from external and unexplained causes, taken together, increase with increasing remoteness from population centres and services. Within the cause types, differences in transport rates by remoteness were statistically significant.

⁷ Analysis based on the Accessibility/Remoteness Index of Australia Plus (ARIA+) for the area of usual residence. ARIA+ is a measure of remoteness that ranks locations based on their distance by road to a centre that provides services. [Accessibility/Remoteness Index of Australia | Queensland Government Statistician's Office, Queensland Treasury \(qgso.qld.gov.au\)](https://www.qgso.qld.gov.au)

⁸ Rates exclude deaths of children whose usual residence was outside Queensland.

Figure 1.6: ARIA+ of usual place of residence by selected causes of death (rate), 2016–17 to 2020–21



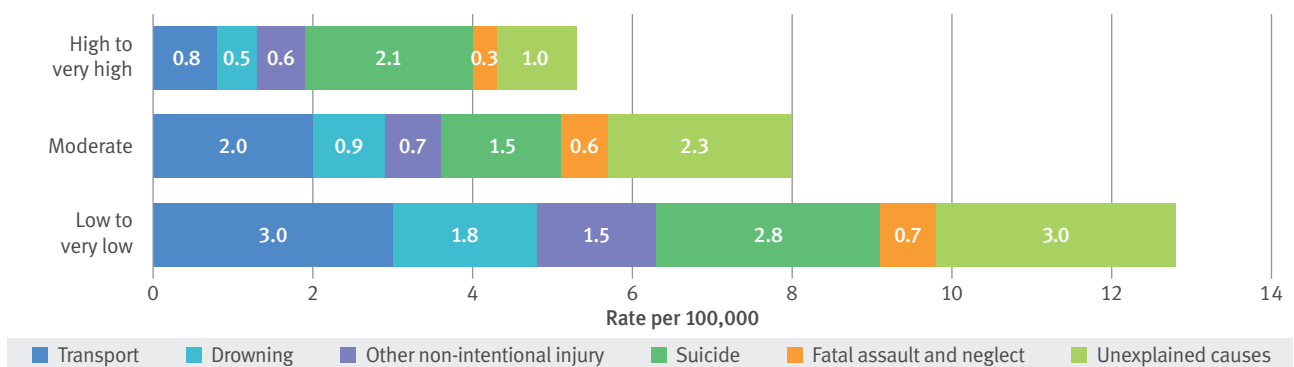
Notes: Rates calculated per 100,000 population aged 0–17 years in each ARIA+ category, averaged over 5 years. Excludes the deaths of children whose usual place of residence was outside Queensland.

Socio-economic disadvantage

The child mortality rate from all causes was highest in areas with the greatest levels of socio-economic disadvantage.⁹ The rate of child deaths in areas of low to very low socio-economic status was 41.8 per 100,000 children aged 0–17 years, compared to 31.2 in moderate socio-economic status areas and 25.2 in high to very high socio-economic status areas (5-year average).¹⁰

Figure 1.7 illustrates the rates of deaths from external and unexplained causes, taken together, increase with increasing socio-economic disadvantage. Within the cause types, differences in rates of transport, drowning and unexplained deaths between areas of greatest and least disadvantage were statistically significant.

Figure 1.7: SEIFA of usual place of residence by selected causes of death (rate), 2016–17 to 2020–21



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

9 Analysis is based on the Socio-Economic Indexes of Australia (SEIFA) score for the area of the usual residence. SEIFA is allocated to geographic areas to represent their level of advantage or disadvantage from Census data. <https://www.abs.gov.au/websitedbs/censushome.nsf/home/seifa>

10 SEIFA quintiles 1 (most disadvantaged) and 2 are combined and referred to as 'low to very low' socio-economic areas in this report, moderate refers to quintile 3, and quintiles 4 and 5 (most advantaged) are combined to 'high to very high'. Rates exclude deaths of children whose usual residence was outside Queensland.

Aboriginal and Torres Strait Islander children

Indigenous status information

The information in the Child Death Register is based on the Aboriginal and Torres Strait Islander status recorded on source documents. Where Indigenous status for an individual is inconsistent between the sources, the QFCC applies business rules to decide the individual status allocated for reporting from the Register.

The redesign of the Child Death Register has allowed additional source records on the Aboriginal and Torres Strait Islander status of deceased children to be included in the Register. The business rules have been reviewed to align with the best practice approaches described by the Australian Institute of Health and Wellbeing and more recent research findings.

Following these processes, an audit was undertaken of the decisions in the Register resulting in changes in status for some children. As a result, there may be minor differences from previously reported mortality data by Indigenous status.

Aboriginal and Torres Strait Islander children

71
child deaths in 2020–21

41 children died of natural causes	3 from transport incidents	4 from drowning	4 from other non-intentional injuries
4 from suicide	1 from fatal assault and neglect	3 died of SIDS and undetermined causes	11 cause not yet determined

Aboriginal and Torres Strait Islander children are over-represented in child deaths.

The mortality rate for Indigenous children was 69.6 deaths per 100,000 Indigenous children aged 0–17 years, compared to 29.6 deaths per 100,000 non-Indigenous children (3-year average), indicating the Indigenous mortality rate was 2.3 times the rate for non-Indigenous children for all causes.¹¹

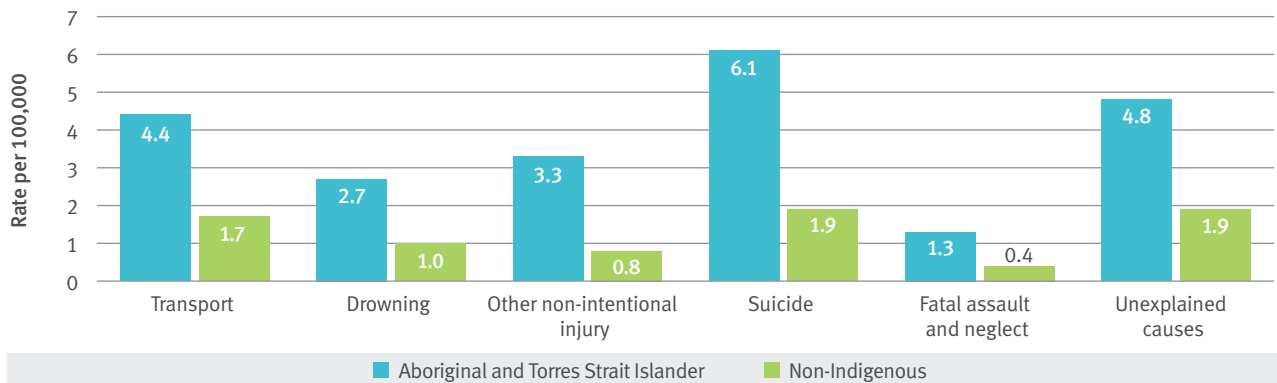
The Aboriginal and Torres Strait Islander infant mortality rate was 6.5 deaths per 1,000 Indigenous births, compared to 3.5 deaths per 1,000 non-Indigenous births (3-year average).

¹¹ See [Appendix A Table A.2](#) for detailed data. Tables with data from 2004 are available online at <http://www.qfcc.qld.gov.au/kids/preventing-child-injury-death>

Figure 1.8 illustrates the over-representation of Aboriginal and Torres Strait Islander children in deaths from external and unexplained causes. Mortality rates for Indigenous children were more than 3 times the non-Indigenous child mortality rates for:

- suicide
- other non-intentional injury.

Figure 1.8: Selected causes by Aboriginal and Torres Strait Islander status (rate), 2016–17 to 2020–21



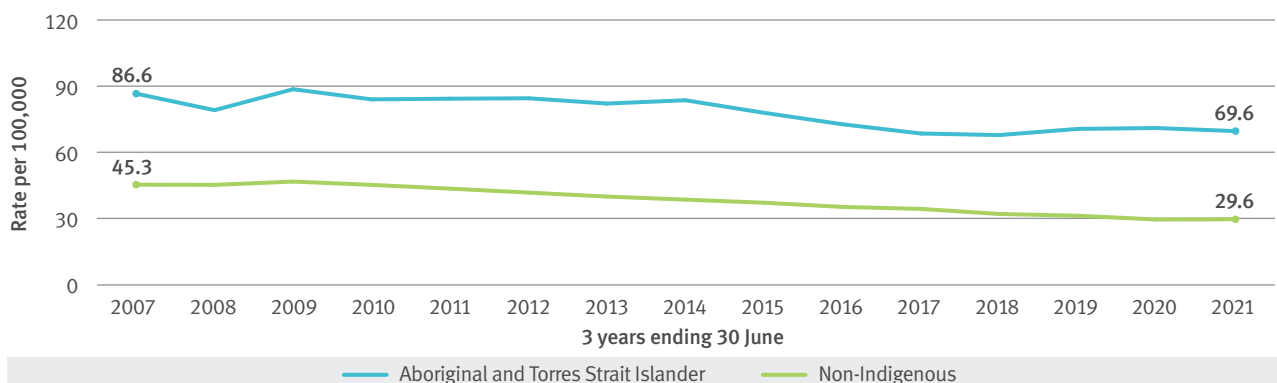
Notes: Rates calculated per 100,000 population aged 0–17 years in each category, averaged over 5 years.

Trends

Indigenous child mortality rates have decreased over the 17-year period, as shown in Figures 1.9 and 1.10. Aboriginal and Torres Strait Islander child mortality; however, was over twice the non-Indigenous rate.

Decreases in Indigenous mortality have not kept pace with decreases in non-Indigenous mortality. The mortality rate for Indigenous children aged 0–17 years decreased on average 1.4% per year compared to the non-Indigenous rate with an average decrease of 3.2%.

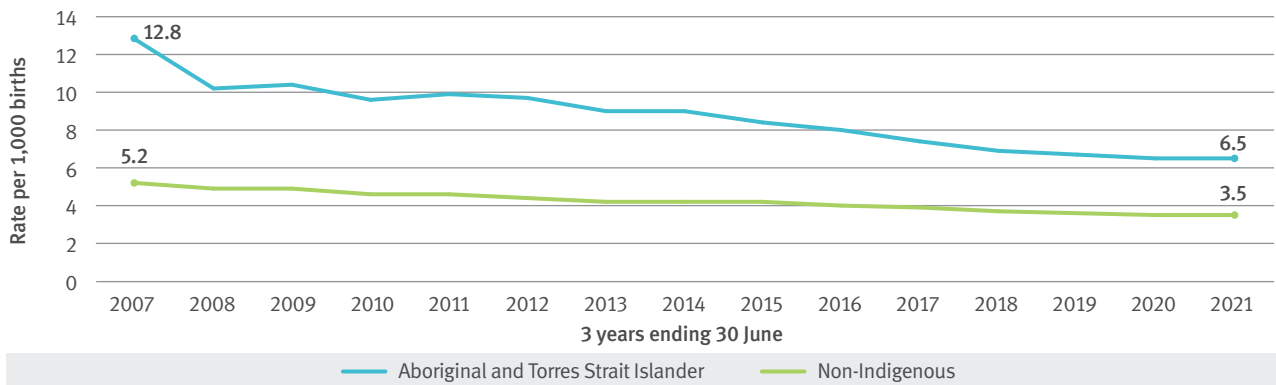
Figure 1.9: Child deaths by Aboriginal and Torres Strait Islander status (3-year rolling rate), 2004–07 to 2018–21



Notes: Rates calculated per 100,000 Aboriginal and Torres Strait Islander and non-Indigenous children aged 0–17 years, averaged over 3 years.

There was a greater reduction in the Aboriginal and Torres Strait Islander infant mortality rate, which decreased from 12.8 per 1,000 live births in 2004–07 to 6.5 per 1,000 births in 2018–21 (down 4.6% per year on average). In comparison the non-Indigenous rate decreased by 2.9% per year on average over the same period.

Figure 1.10: Infant deaths by Aboriginal and Torres Strait Islander status (3-year rolling rate), 2004–07 to 2018–21



Notes: Rates calculated per 1,000 Aboriginal and Torres Strait Islander and non-Indigenous live births, averaged over 3 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 1 year before the child’s death:

- Child Safety 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.

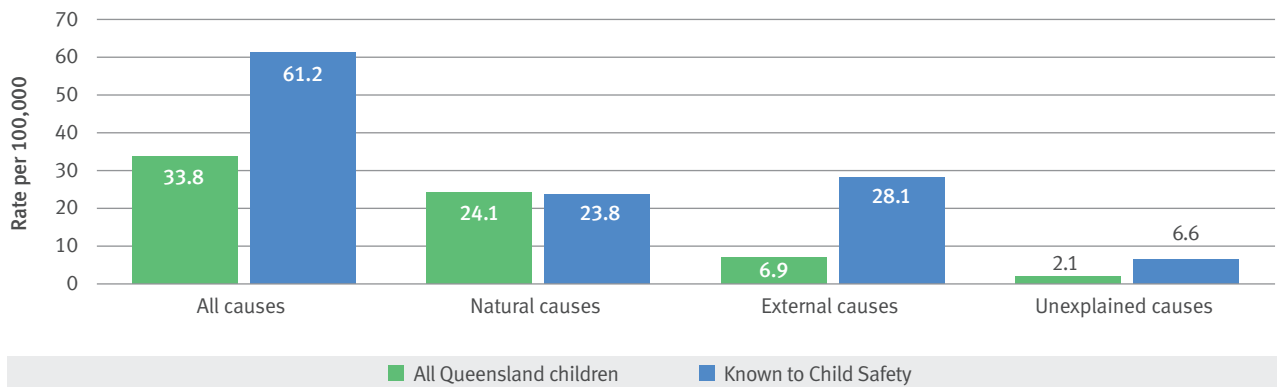
The population used as a denominator for ‘children known to Child Safety’ is the number of children known to Child Safety (as the subject of a child concern report, notification, investigation and assessment, ongoing intervention, child protection orders or placements) in the 12 months before the relevant year (e.g. the denominator for 2020–21 is the number of children known to Child Safety during 2019–20).

Children known to the child protection system			
53 deaths of children in 2020–21			
17 children died of natural causes	5 from transport incidents	5 from drowning	6 from other non-intentional injuries
4 from suicide	2 from fatal assault and neglect	5 died of SIDS and undetermined causes	9 cause not yet determined

The mortality rate for children known to Child Safety was almost twice the Queensland child mortality rate, as shown in Figure 1.11 (respectively 61.2 deaths per 100,000 and 33.8 deaths per 100,000 averaged over 5 years).¹² For external causes of death, the mortality rate for children known to Child Safety was 4 times the rate for all children in Queensland.

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

Figure 1.11: Deaths by child protection system status and major cause group (rate), 2016–17 to 2020–21



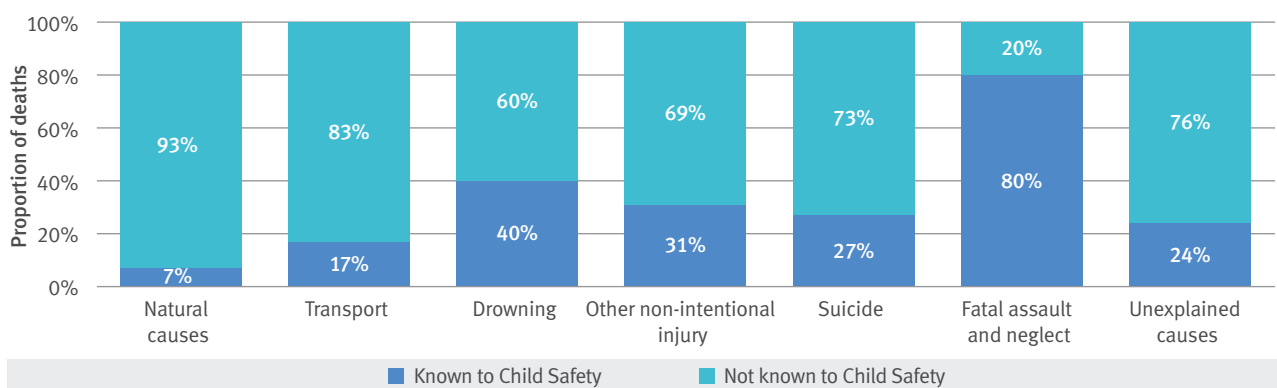
Notes: Rates calculated per 100,000 children known to Child Safety in the year prior to 30 June and per 100,000 population aged 0–17 years, averaged over 5 years.

Over the past 5 years, mortality rates for children known to Child Safety have been more than 3 times the Queensland child mortality rates for:

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

While some 8% of Queensland children were known to Child Safety in a 12 month period (averaged over 5 years), Figure 1.12 illustrates the over-representation of children known to Child Safety in deaths from external and unexplained causes.

Figure 1.12: Deaths by child protection system status and primary cause of death (proportion), 2016–17 to 2020–21



¹² See [Appendix A Table A.3](#) for detailed data. Tables with data from 2004 are available online at <http://www.qfcc.qld.gov.au/kids/preventing-child-injury-death>

Child deaths from fatal assault and neglect

Three deaths were recorded as a result of assault and neglect in Queensland during 2020–21, based on information available to the QFCC at the time of reporting. Two of the deaths were in relation to incidents which occurred some years earlier.

Thirty children died in 25 fatal assault and neglect incidents in the last 5 years. Twenty-four deaths (80%) were categorised as intra-familial, that is the alleged perpetrator was a parent, family member or person acting in a parental role. Ten children (32%) died in domestic homicides, including murder-suicide incidents where the alleged perpetrator also took his or her own life. Seven children were found to have died as a result of child abuse, 4 died from neglect and 3 were other intrafamilial incidents.

Six deaths in the last 5 years were extra-familial homicides.

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

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*.¹³

Five children in 2020–21 had been reported missing to the police at the time of their death. Two of the 5 reported missing were also known to Child Safety.

¹³ QFCC (2016) *When a child is missing: Remembering Tiahleigh—a report into Queensland’s children missing from out-of-home care*, QFCC, Queensland Government.