ANNUAL REPORT

Deaths of children and young people Queensland

2019-20

Queensland Family & Child Commission



About this Report

This report has been prepared under section 29 of the *Family and Child Commission Act 2014*. It describes information on the deaths of children and young people in Queensland registered in the period 1 July 2019 to 30 June 2020.



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20 October 2020

The Honourable Yvette D'Ath MP Attorney-General and Minister for Justice Leader of the House 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 2019 to 30 June 2020, with a particular focus on external (non-natural) causes.

I draw your attention to section 29(7) of the *Family and Child Commission Act 2014* which requires you to table this report in the Parliament within 14 sitting days.

Yours sincerely

Cherry Varde

Cheryl Vardon Principal Commissioner Queensland Family and Child Commission

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Acknowledgements

The Queensland Family and Child Commission (QFCC) acknowledges the unique and diverse cultures of Aboriginal and Torres Strait Islander peoples and notes, throughout this document, the terms Aboriginal and Torres Strait Islander and Indigenous have been used to collectively describe two distinct groups of people. The QFCC respects the beliefs of the Aboriginal and Torres Strait Islander peoples and advises there is information regarding Aboriginal and Torres Strait Islander deceased people in this report.

The QFCC would like to thank the government departments and non-government organisations which contributed data and provided advice for this report. Particular appreciation is expressed to officers from the Registry of Births, Deaths and Marriages; the Coroners Court of Queensland; the Queensland Police Service; Queensland Health; the Department of Child Safety, Youth and Women (DCSYW); the Australian Bureau of Statistics (ABS); Queensland Ambulance Service; Queensland Treasury; and the Royal Life Saving Society of Australia. The Victorian Department of Justice and Regulation is also acknowledged as administrator of the National Coronial Information System.

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

The contribution of officers from the QFCC's Child Death Prevention team who maintained the Queensland Child Death Register, analysed the data and prepared the report is also acknowledged and appreciated.

Foreword

The death of a child, no matter the circumstances, is heartbreaking. On behalf of the Queensland Family and Child Commission, I extend my deepest condolences to the family, friends and communities who continue to grieve the loss of those children whose stories are reflected in the pages of this report.

As Principal Commissioner, one of my duties is to maintain a register of all child deaths in Queensland, and to analyse and report on trends and patterns in child mortality over time. I do this to make sure that, as a community, we may learn valuable lessons in how best to reduce and prevent future child deaths. This responsibility also makes sure the performance of the system of services designed to keep our children safe and well is actively monitored and any areas in which improvements can be made are identified and addressed as soon as possible.

This year marks the sixth year of operation for the Queensland Family and Child Commission (QFCC) and the 16th year of reporting on the deaths of children and young people in Queensland. It has brought with it a range of unanticipated challenges as governments and communities around the globe work to minimise the impact of the COVID-19 pandemic. The QFCC has risen to this challenge, adapting and modifying its approach to continue its important work to monitor the safety and wellbeing of Queensland's children. Despite these obstacles, this past year has also heralded some significant achievements for the QFCC in terms of its role in reducing and preventing child deaths.

With more than 16 years of data now held within the Queensland Child Death Register, this year the QFCC commenced a project to review the trends and patterns in child mortality in Queensland across this significant time period. I am pleased to report that Queensland has experienced a significant decline in child deaths over time—between 2004 and 2019, the child mortality rate decreased by an average of three per cent per year. Significant reductions were also evident in the rate of death from natural causes, Sudden Infant Death Syndrome (SIDS) as well as most external causes. This review did, however, identify a concerning increase in the rate of death from suicide, particularly for young people aged 15–17 years. This is an area I will continue to monitor closely. I will seek to partner with suicide prevention experts to determine how the valuable data held by the QFCC can contribute to suicide research and prevention efforts.

This past year also saw the establishment of the Child Death Review Board (CDRB), for which the QFCC provides secretariat support. The CDRB was established in response to the QFCC's 2017 recommendation that a new model for reviewing the deaths of children known to the child protection system was needed. From 1 July 2020, where a child known to the child protection system dies, relevant agencies who provided services to the child and their family in the year prior to their death must complete an internal review.¹ The CDRB will use these reports to inform its review of the service delivery of the child protection system as a whole. The role of the CDRB is to identify opportunities for improvement to systems, legislation, policies and practices as well as to mechanisms to reduce preventable deaths. In the coming year, as Chair of the CDRB, I anticipate this revised model will provide valuable insights into ways in which the system can better operate to provide co-ordinated services to vulnerable children and their families, and to reduce and prevent future deaths.



During this year, the QFCC recorded information relating to the deaths of 378 children whose deaths were registered between 1 July 2019 and 30 June 2020. This report focuses on the circumstances and risk factors surrounding the deaths of these children. While the majority of these deaths (66 per cent) were the result of natural causes, 75 children and young people died from external causes for which there are modifiable risk factors. By considering the interplay of these risk factors relevant to specific causes of death, the QFCC may contribute to a range of prevention mechanisms, from the development of prevention messages to providing an evidence base for policy and legislation.

In addition to maintaining my focus on youth suicide prevention, this past year has highlighted a need to monitor the rate of infant mortality, particularly those who die suddenly and unexpectedly. While the overall downward trend in the rate of infant mortality continued this year, the rate of sudden unexpected infant deaths has plateaued. The QFCC is working with the Queensland Paediatric Quality Council and other agencies to improve the information available on safe sleep practices and the supports provided to grieving families.

Twelve children and young people lost their lives due to assault or neglect in 2019–20, a figure which includes the deaths of several sibling groups who tragically died at the hands of a parent or step-parent. During this past year, I have conducted a number system reviews designed to improve responses to families in crisis with the aim of preventing such deaths occurring in the future.

Reviewing the circumstances of child deaths—on an annual basis as in this report, periodically as illustrated by the 16-year review, and at a systems level as undertaken by the CDRB—is critical to understanding the risk and protective factors at play and how individuals, services and systems can address these. In doing so, we can work together to learn what we can all do to help keep Queensland children safe and well.

Cheryl Vardon

Chery Varel

Principal Commissioner Queensland Family and Child Commission

Executive summary

The Queensland Family and Child Commission records information about the deaths of all children and young people aged under 18 years of age in Queensland in the Child Death Register. The register captures information about a child's demographics, cause and circumstances of death and, where known, certain characteristics or vulnerabilities. The register has been in existence since 2004. It is an important resource for informing child death prevention activities and measures.

In the 12-month period from 1 July 2019 to 30 June 2020, the deaths of 378 children and young people aged 0–17 years were registered in Queensland.²

Deaths from diseases and morbid conditions (natural causes) 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 (or non-natural) causes includes deaths from injuries, either non-intentional (accidental) injuries such as transport incidents or drowning, or from intentional injuries, which includes suicide and fatal assault and neglect. Due to the relatively small numbers involved, caution should be exercised in interpreting year-to-year changes.

Child deaths in Queensland, 2019–20

378 child deaths in Queensland 2019–20*				
249 children died of natural causes – such as congenital and perinatal conditions	75 children died from external causes, including:	19 children's deaths remained unexplained even after comprehensive investigation		
	21 from transport incidents	16 infants died of Sudden Infant Death Syndrome (SIDS)		
35	13 from drowning	or undetermined causes		
children had a cause of death that was not yet determined at the time of reporting	9 from other non-intentional injuries	3 children over 1 year of age died of undetermined causes		
	20 from suicide			
	12 from fatal assault and neglect			

* By date of death registration.



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Trends in child mortality

The number of child deaths and mortality rates have generally declined over the sixteen years the register has been in existence, driven to a large extent by decreases in deaths from natural causes. The overall child mortality rate has decreased 2.9% per year on average.

Transport-related child mortality has decreased 8.3% per year on average.

Child mortality from suicide; however, showed a slow increasing trend (1.9% per year on average).

16-year analysis of child deaths in Queensland

The QFCC report *Counting lives, changing pattern: Findings from the Queensland Child Death Register* 2004–2019 (2020) is an in-depth analysis of child deaths in Queensland. Using 16 years of data presented an opportunity to delve deeper than is possible in the QFCC's annual reporting on child deaths.

Leading cause by age, 2015–16 to 2019–20 (5-year period)

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

Age ca	tegory	Leading cause	
Inforto	0–27 days	Perinatal conditions	
infants	28–364 days	SIDS and undetermined causes	
1–4 years		Drowning	
5–9 years		Neoplasms (cancers)	
10–14 years		Neoplasms (cancers)	
15–17 years		Suicide	

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 those children who are known to the child protection system (Child Safety) often experience multiple vulnerabilities and are consistently and significantly over-represented in child mortality statistics.

Sixty-four deaths in 2019–20 were of Aboriginal and Torres Strait Islander children, 37 died from natural causes (diseases and morbid conditions), 19 from external causes, three were unexplained deaths and five were pending a cause at the time of reporting.

Aboriginal and Torres Strait Islander children were over-represented in child deaths. The mortality rate for Indigenous children was 64.5 deaths per 100,000 Indigenous children aged 0–17 years, compared to 31.3 deaths per 100,000 non-Indigenous children (5-year average). The Indigenous mortality rate was 2.1 times the rate for non-Indigenous children for all causes, while for deaths from external causes the Indigenous mortality rate was 2.9 times the non-Indigenous rate.

Of the 378 children and young people who died in 2019–20, 53 were known to Child Safety in the 12 months before they died. Causes of death for the 53 children at the time of reporting were:

- natural causes, 11
- transport incidents, 5
- drowning, 3
- other non-intentional injury, 2
- suicide, 8
- fatal assault and neglect, 9
- unexplained deaths, 1
- cause pending, 14.

The mortality rate for children known to Child Safety was almost twice the Queensland child mortality rate. For external causes of death, the mortality rate for children known to Child Safety was four times the rate for all children in Queensland.

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

Areas of focus

COVID-19

The World Health Organization declared the outbreak of the coronavirus COVID-19 as a pandemic in March 2020. The QFCC will continue to monitor trends in child deaths that may relate to COVID-19, including any impacts or effects on suicidal behaviours.

Youth suicide remains an area of deep concern. Analysis indicates a slow increasing trend in suicide over time. Adverse life experiences in childhood can contribute to increased vulnerability to poor mental health, and multiple family stressors including family violence were commonly present for young people who have taken their own lives.

Sudden unexpected infant deaths continue to represent a significant group of infant deaths from non-natural causes. Adopting safe sleep practices from birth offers the best protections to reduce the risk of SIDS and sleep accidents. The families of infants dying suddenly during sleep were often experiencing vulnerability. Risks for infants are highest in the first four to six months.

The family factors which lead to children becoming known to the child protection system—child neglect and abuse, domestic violence and substance misuse—are also factors which present an increased risk of fatal injury in children. The Queensland Child Death Review Board is from 1 July 2020 responsible for conducting systemic reviews following the death of a child connected to the child protection system. The Board's focus will be on opportunities to improve the child protection system and prevent future deaths.

Data for prevention activities

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

The QFCC can provide detailed child death data to researchers and organisations at no cost. Email <u>child death prevention@qfcc.qld.gov.au</u>

Resources available online

QFCC's 16-years data analysis report, *Counting lives, changing patterns*

Annual report resources

- 16-year summary tables
- fact sheets
- Australian and New Zealand child death statistics

This report includes chapters on categories of death and annual child death data for 2019–20. It identifies trends and contains a number of findings that may require further review. The QFCC will pursue opportunities to collaborate with researchers and other interested stakeholders.

Chapter 1 — Overview

Key findings

- 378 deaths of children and young people were registered in Queensland in 2019–20.
- The child mortality rate has declined since 2004, down 2.9% per year on average. •
- 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 leading cause of death for postneonates (28-364 days).
- Drowning leading cause of death for 1–4 year olds.
- Suicide leading cause for 15–17 year olds and 2nd leading cause for 10–14 year olds.









64.5

58%

49%

37%

32%

70





Child deaths in Queensland

Year in focus

Between 1 July 2019 and 30 June 2020, the deaths of 378 children and young people were registered in Queensland. The child mortality rate over the last three years was 32.9 deaths per 100,000 children aged 0–17 years and the infant mortality rate was 3.8 per 1000 births.³

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

Cause of death categories and rate calculations

In this year's annual report, diseases and morbid conditions will include only explained diseases and conditions and will be referred to throughout as deaths from natural causes. Deaths from unexplained causes, referred to as unexplained diseases and morbid conditions in previous reports, are included within Chapter 7.

Rates presented in this report are calculated as three or five-year rolling averages, to provide more reliable estimates of mortality rates and smooth out year to year fluctuations that arise with reporting on small numbers.

Diseases and morbid conditions (natural causes) accounted for the majority of deaths of children and young people in 2019–20 (66%), occurring at a rate of 23.0 deaths per 100,000 children aged 0-17 years (3-year average).⁴

Seventy-five deaths were from external causes (which includes transport, drowning, other nonintentional injury, suicide and fatal assault and neglect). External causes accounted for 20% of child deaths and occurred at a rate of 6.8 deaths per 100,000 children aged 0–17 years (3-year average).

The leading causes of deaths after natural causes in 2019–20 were transport incidents (21), suicide (20), deaths from unexplained causes (19) followed by drowning (13). Twelve children died as a result of fatal assault and neglect children and nine from other non-intentional injuries.

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 one to two years, at which point the child death register is updated to reflect the official cause. Of the 378 deaths of children and young people in 2019–20, 9% (35 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).

⁴ Detailed tables with data on cause of death and other demographics can be found in Appendix 1.

³ For a summary of the population data used to calculate rates, see Appendix 2 Methodology.

Trends in child deaths

Child deaths and mortality rates have generally declined. Child mortality rates over the period 2004 to 2020 are illustrated in Figure 1.1 using three-year rolling rates. Key points to note:

- 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 large majority of child deaths, and decreased by 3.2% per year on average.
- Deaths from external causes decreased by 3.1% per year on average.
- Deaths from unexplained causes decreased by 2.7% per year on average. Almost all of this group are infant deaths classified as Sudden Infant Death Syndrome (SIDS) or undetermined causes.

Figure 1.1: Child deaths by major cause group (3-year rolling rate), 2004–07 to 2017–20



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

Five year rolling rates of death from external (or non-natural) causes are further illustrated in Figure 1.2.

The largest change in rates was in transport-related deaths, which decreased 8.3% 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 (changes not statistically significant).

Deaths from suicide have increased, from 1.7 per 100,000 aged 0–17 years in 2004–09 to 2.1 per 100,000 in 2015–20 (up 1.9% per year on average).



Figure 1.2: External cause deaths by primary cause (5-year rolling rate), 2004–09 to 2015–20

Transport — Drowning — Other non-intentional injury — Suicide — Fatal assault and neglec Notes: Rates calculated per 100,000 population aged 0–17 years, averaged over three 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).





In Figure 1.4, rates of death are presented as per 1000 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 of 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), 2015-16 to 2019-20

Notes: Rates for 0-27 days and 28- 364 days calculated per 1000 births and, for age one year and over, per 100,000 population in each age category, averaged over five 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 42% and 25%). 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 and primary cause (proportion), 2015–16 to 2019–20

Leading causes by age

Table 1.1 indicates the leading causes of death in each age category, based on deaths in the last five 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 4.

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 one to 17 years. Suicide and transport incidents were leading 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), 2015–16 to 2019–20

•	Rank				
Age category	1 st	2nd	3rd	4th	
Less than 28 days (<i>n</i> = 889)	Perinatal conditions ^a 606, 68%	Congenital anomalies ^b 247, 28%	SIDS ^c and undetermined causes 9, 1.0%	Refer to note ^d	
28 days to 364 days (n = 322)	SIDS and undetermined causes 87, 27%	Congenital anomalies 72, 22%	Perinatal conditions 52, 16%	Diseases of the respiratory system 20, 6.2%	
1–4 years (n = 227)	Drowning 39, 17%	Neoplasms 25, 11%	Congenital anomalies 24, 11%	Transport 23, 10%	
5–9 years (n = 115)	Neoplasms 24, 21%	Transport 15, 13%	Congenital anomalies 14, 12%	Diseases of the nervous system 13, 11%	
10–14 years (n = 164)	Neoplasms 42, 26%	Suicide 30, 18%	Transport 17, 10%	Congenital anomalies 16, 10%	
15–17 years (n = 241)	Suicide 90, 37%	Transport 42, 17%	Neoplasms 21, 8.7%	Other non- intentional injury; Diseases of the nervous system 15, 6.2%	

^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 five years.

Sex

Males comprised 57% of child deaths, with a rate of 37.6 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 30.1 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

Figure 1.6 illustrates mortality data by the geographical remoteness ranking of the area of usual residence (known as ARIA+).⁵ The child mortality rate from all causes in remote areas of Queensland over the five years was 56.9 per 100,000 children aged 0–17 years, compared to 35.7 in regional areas and 30.4 in metropolitan areas.⁶

Mortality rates for deaths from natural causes were highest in remote areas compared to regional and metropolitan areas, where rates were similar. The rate of deaths from external causes increased with increasing remoteness from population centres and services (other differences were not statistically significant).





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

Figure 1.7 illustrates the differential in deaths occurring by increasing remoteness for transport, drowning, suicide and unexplained causes, when compared to the estimated resident population aged 0–17 years. Remoteness did not seem to impact on likelihood of deaths from unexplained causes, as the proportions in each category were similar to the child population.

Children from remote areas; however, made up larger proportions of suicide, drowning and transport deaths indicating the likelihood of death from these causes were two to four times the expected proportion. Children from regional areas also made up larger proportions of transport and drowning deaths compared to the expected proportion, with this effect being less than that for more remote areas.



Figure 1.7: Deaths from selected causes and population aged 0-17 years by ARIA+ (proportion), 2015-16 to 2019-20

Notes: Proportion of all deaths by ARIA+ category of usual residence, and proportion of Queensland's population aged 0–17 years in each ARIA+ category, averaged over five years. Excludes the deaths of children whose usual place of residence was outside Queensland.

⁵ The Accessibility/Remoteness Index of Australia Plus (ARIA+) is a measure of remoteness that ranks locations based on their distance by road to a centre that provides services. <u>https://www1.health.gov.au/internet/publications/publishing.nsf/Content/ARIA-Review-Report-2011~ARIA-Review-Report-2011-2~ARIA-Review-Report-2011-2-2-3.</u>

⁶ The ARIA+ category major cities is referred to as 'metropolitan' in this report, 'regional' combines categories inner and outer regional, and 'remote' combines categories remote and very remote. Rates by ARIA+ exclude deaths of children whose usual residence was outside Queensland.

Socio-economic disadvantage

Child mortality rates were higher in areas with greater socio-economic disadvantage, with this varying by cause of death (known as SEIFA).⁷ As illustrated in Figure 1.8, the child mortality rate was highest in areas with low to very low socio-economic status and lowest in areas with high to very high socio-economic status.⁸ Over the five years, the child mortality rate from all causes in low to very low socio-economic areas of Queensland was 41.2 per 100,000 children aged 0–17 years, compared to 31.2 in moderate socio-economic areas and 25.9 in high to very high socio-economic areas.

The rate of deaths from external causes was higher in areas with low to very low socio-economic status compared to moderate socio-economic areas and high to very high socio-economic areas. Other differences in mortality rates by socio-economic status are not statistically significant.



Figure 1.8: Deaths by SEIFA category and major cause group (rate), 2015–16 to 2019–20

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

Deaths of children from transport, drowning and unexplained causes were more likely to be from areas of greater disadvantage. As shown in Figure 1.9, more than half of deaths from these causes were from low to very low socio-economic areas, well above the population characteristic at 39%. By contrast, suicide deaths showed less variation by socio-economic status.



Figure 1.9: Deaths from selected causes and population aged 0-17 years by SEIFA (proportion), 2015-16 to 2019-20

Notes: Proportion of all deaths by SEIFA category of usual residence, and proportion of Queensland's population aged 0–17 years in each SEIFA category, averaged over five years. Excludes the deaths of children whose usual place of residence was outside Queensland.

⁷ 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
 ⁸ 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

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

Aboriginal and Torres Strait Islander children				
64 child deaths in 2019–20				
 37 children died of natural causes 4 from transport incidents 1 from drowning 4 from other non-intentional injuries 7 from suicide 3 from fatal assault and neglect 3 died of SIDS or undetermined causes 5 cause not yet determined 				
Child mortality rates three or more than times the non-Indigenous child mortality rates for: suicide transport-related deaths 				

• other non-intentional injury

As shown in Figure 1.10, the mortality rate for Indigenous children was 64.5 deaths per 100,000 Indigenous children aged 0–17 years, compared to 31.3 deaths per 100,000 non-Indigenous children (5-year average). The Indigenous mortality rate was 2.1 times the rate for non-Indigenous children for all causes, while for deaths from external causes the Indigenous mortality rate was 2.9 times the non-Indigenous rate.

The Aboriginal and Torres Strait Islander infant mortality rate was 6.2 deaths per 1000 Indigenous births, compared to 3.7 deaths per 1000 non-Indigenous births (5-year average).



Figure 1.10: Deaths from selected causes and population aged 0-17 years by SEIFA (proportion), 2015-16 to 2019-20

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

Figure 1.11: External cause deaths by Aboriginal and Torres Strait Islander status and primary cause (rate), 2015–16 to 2019–20



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

Trends

Indigenous child mortality rates have decreased over the 16-year period, as shown in Figures 1.12 and 1.13. Aboriginal and Torres Strait Islander child mortality; however, continues to be close to twice the non-Indigenous rate as decreases in Indigenous mortality have been matched by similar decreases in non-Indigenous mortality.

The mortality rate for Indigenous children aged 0–17 years decreased on average 1.9% per year while the non-Indigenous rate decreased 3.5% on average.



Figure 1.12: Child deaths by Aboriginal and Torres Strait Islander status (5-year rolling rate), 2004–09 to 2015–20

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

There was a greater reduction in the Aboriginal and Torres Strait Islander infant mortality rate, which decreased from 9.9 per 1000 births in 2004–09 to 6.2 per 1000 births in 2015–20 (down 4.1% per year on average). In comparison the non-Indigenous rate decreased by 2.8% per year on average over the same period.



Figure 1.13: Infant deaths by Aboriginal and Torres Strait Islander status (5-year rolling rate), 2004–09 to 2015–20

Notes: Rates calculated per 1000 Aboriginal and Torres Strait Islander and non-Indigenous births, averaged over five years.

Children known to the child protection system

The Department of Child Safety, Youth and Women (DCSYW), specifically Child Safety Services, administers the child protection system in Queensland. For the purpose of this report, a child is deemed to have been known to Child Safety if, within one 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 the department (as the subject of a child concern report, notification, investigation and assessment, ongoing intervention, child protection orders or placements provided by Child Safety) in the 12 months *before* the relevant year (e.g. the denominator for 2019–20 is the number of children known to Child Safety during 2018–19).

Children known to the child protection system

53 deaths of children in 2019–20

- **11** children died of natural causes
- **5** from transport incidents
- **3** from drowning
- **2** from other non-intentional injuries
- **8** from suicide
- **9** from fatal assault and neglect (two were known to Child Safety only from the incident leading to their death)
- **1** died of SIDS or undetermined causes
- **14** cause not yet determined

Child mortality rates four or more than times the Queensland child mortality rates for:

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

The mortality rate for children known to Child Safety was almost twice the Queensland child mortality rate, as shown in Figure 1.14 (respectively 61.4 deaths per 100,000 and 34.0 deaths per 100,000 averaged over five years). For external causes of death, the mortality rate for children known to Child Safety was four times the rate for all children in Queensland.

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



Figure 1.14: Deaths by child protection system status and major cause group (rate), 2015–16 to 2019–20

While some 7% of Queensland children were known to Child Safety in a 12 month period (averaged over five years), Figure 1.15 illustrates the over-representation of children known to Child Safety in deaths from external and unexplained causes. Over the past five years, mortality rates for children known to Child Safety have been four or more times higher than the Queensland child mortality rates for:

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



Figure 1.15: Deaths by child protection system status and primary cause of death (proportion), 2015–16 to 2019–20

Known to Child Safety Not known to Child Safety

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 five years.

Other non-intentional injury-related deaths

The deaths of children in the category other non-intentional injury are from causes which fall outside the scope of the more common non-intentional injuries in transport incidents or drowning. The range of injury types in the category is set out in Appendix 6.

Nine children died from other non-intentional injuries in 2019–20. Over the last five years, the most common incident types were threats to breathing, accidental poisoning, being struck or crushed by objects, and residential house fires, as shown in Figure 1.16. Further summary information on deaths from non-intentional injuries can be found in Table A.10 in Appendix 1.

Figure 1.16: Other non-intentional injury deaths by incident type (proportion), 2015–16 to 2019–20

				Other, 7%	Falls, 5%
Threats to breathing, 25%	Non-intentional poisoning by noxious substances, 21%	Exposure to inanimate mechanical forces, 20%	Residential house fires, 14%	Electrocution, 4%	Exposure to excessive temp, 4%

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.⁹

Four children in 2019–20 had been reported missing to the police at the time of their death. One of the four reported missing was also known to Child Safety.

Chapter 2 — Deaths from natural causes

20



Queensland Family and Child Commission

Deaths from natural causes: Findings 2019–20 and last five years

During 2019–20, there were 249 deaths of children and young people from diseases and morbid conditions (or natural causes) registered in Queensland,¹⁰ at a 5-year average rate of 24.8 deaths per 100,000 children aged 0–17 years.¹¹

The majority of child deaths each year are from natural causes. Over the last five years, 73% of all deaths were from natural causes.

The largest categories within natural causes were perinatal conditions and congenital anomalies, which in 2019–20 were the causes for 129 and 77 deaths respectively. Together, these causes accounted for 83% of all deaths from natural causes.

Appendix 1, Table A.4 provides summary data and key characteristics for deaths from natural causes.

Classification of causes of death using ICD-10

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

Sex

During 2019–20, there were 145 deaths of male children from natural causes, compared to 103 female children, with mortality rates of 27.0 deaths per 100,000 male children and 22.4 deaths per 100,000 female children (5-year average).¹²

Child mortality from natural causes is marginally higher for males compared to females, with the male mortality rate over the last 16 years being about 1.2 times the rate for females (32.8 deaths per 100,000 male children and 27.4 deaths per 100,000 female children).

Age

Figure 2.1 illustrates the causes of death from natural causes, for each age category. The following findings by age were evident:

- Almost all natural causes of death for infants (under 1 year) were from perinatal conditions and congenital anomalies (95% of all causes within this group)
- Neoplasms (cancer) was the main natural causes for the age groups 1-4 years and 10-14 years
- Congenital abnormalities and diseases of the nervous system were the main natural causes for children aged 5–9 years
- Neoplasms and diseases of the nervous system were the main natural causes for young people aged 15–17 years.

¹⁰ Deaths are reported as explained diseases and morbid conditions only. Deaths from unexplained causes (referred to as unexplained disease and morbid conditions in previous reports) are included in Chapter 7.

[&]quot;Tables with data for 2004–20 are available online at https://www.qfcc.qld.gov.au/kids/preventing-child-injury-death

¹² One infant death in 2019–20 was of indeterminate sex.

Figure 2.1: Deaths from natural causes by ICD-10 chapter and age (number), 2019–20



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, the large majority 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 five years, divided into the neonatal and post-neonatal periods. Neonatal deaths are those which occur in the first 28 days after birth (0-27 days), while post-neonatal deaths occur during the remainder of the first year (28–364 days).

Neonatal period (o-27 days)

Of the 1,071 infant deaths due to natural causes in the last five years, 81% of deaths occurred in the neonatal period. Of the 872 neonatal deaths, 61% occurred on the day of birth and a further 21% had occurred by the end of the first week.

The two leading causes—perinatal conditions (606 deaths) and congenital anomalies (247 deaths)—represent 98% of the neonatal deaths from natural causes.

Post-neonatal period (28-364 days)

During the last five years there were 199 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 (72 deaths or 36%).¹³

¹³ The leading cause of death in post-neonatal period was SIDS and undetermined causes (87 deaths), see Table 1.1.

		Cause of death			
A	ge	Perinatal conditions (Poo-P96)	Congenital anomalies (Qoo–Q99)	Other diseases and morbid conditions ^a	Total
Neonatal	<1	368	160	5	533
(age in days)	1–6	123	58	5	186
	7–27	115	29	9	153
Neonatal total		606	247	19	872
Post-neonatal	1*	25	25	15	65
(age in months)	2	9	11	12	32
	3	5	7	7	19
	4	5	9	12	26
	5	3	3	6	12
	6	1	4	3	8
	7	1	5	3	9
	8	1	4	9	14
	9	0	1	3	4
	10	0	1	2	3
	11	2	2	3	7
Post-neonatal tota	al	52	72	75	199
Total infants		658	319	94	1,071

Table 2.1: Age and cause of infant deaths from natural causes (number), 2015–16 to 2019–20

* 28 days to <two months.

a Includes neoplasms (C00–D48), diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50–D89) endocrine, nutritional and metabolic diseases (E00–E90), diseases of the nervous system (G00–G99), diseases of the circulatory system (I00–I99), diseases of the respiratory system (J00–J99) and diseases of the digestive system (K00–K93).

Major causes

Perinatal conditions

During 2019–20 there were 129 child deaths from perinatal conditions, at a mortality rate of 11.6 deaths per 100,000 children aged 0–17 years (5-year average).

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 foetal 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.

As shown in Figure 2.2, over the past five years the majority of deaths due to perinatal conditions resulted from the foetus and/or newborn being affected by maternal factors or complications of pregnancy, labour and delivery (51%, 337 deaths), followed by disorders related to the length of gestation and foetal growth (19%, 128 deaths). Together, these causes accounted for 71% of all deaths due to perinatal conditions (465 of 666 deaths).¹⁴

¹⁴ Noting a small number of deaths from perinatal conditions occur in children aged one year and over.



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

Congenital anomalies

During 2019–20 there were 77 child deaths from congenital anomalies, at a 5-year average rate of 6.6 deaths per 100,000 children aged 0–17 years. Congenital anomalies are mental and physical conditions present at birth which are either hereditary or caused by environmental factors.¹⁵

As shown in Figure 2.3, over the last five years the leading causes of death due to congenital anomalies were malformations of the circulatory system (28%, 105 deaths) and congenital malformations of the nervous system (19%, 73 deaths).





Notes: Excludes causes where the total number of deaths was less than 4. Excludes the death of one infant from congenital malformations of the nervous system (Q00–Q27) and one infant from other congenital malformations (Q80–Q89) whose sex were indeterminate

¹⁵ ICD-10 Chapter XVII, Congenital malformations, deformations and chromosomal abnormalities.

Neoplasms (cancers and tumours)

The term 'neoplasm' is often used interchangeably with the words 'tumour' and 'cancer'.¹⁶ Cancer includes a range of diseases in which abnormal cells proliferate and spread out of control. Normally, cells grow and multiply in an orderly way to form organs which have a specific function in the body. However, occasionally cells multiply in an uncontrolled way after being affected by a carcinogen, or after developing a random genetic mutation. They may form a mass called a tumour or neoplasm. A 'benign neoplasm' refers to a noncancerous tumour, whereas a 'malignant neoplasm' usually refers to a cancerous tumour (that is, cancer). Benign tumours do not invade other tissues or spread to other parts of the body, although they can expand to interfere with healthy structures.

Seventeen children and young people died from neoplasms (cancer) in 2019–20, at a 5-year average rate of 2.2 deaths per 100,000 children aged 0–17 years.

Over the last five years 124 children and young person lost their lives to cancers and tumours, as illustrated in Figure 2.4 the most common types were neoplasms of the eye, brain and other parts of the central nervous system (40 deaths or 32%),¹⁷ followed by malignant neoplasms, stated or presumed to be primary, of lymphoid, haematopoietic and related tissue (35 deaths or 28%).¹⁸ Neoplasms was the leading cause of death (of all causes) for aged 5–9 and 10–14 years, as noted in Chapter 1.



Figure 2.4: Deaths due to neoplasms (number), 2015–16 to 2019–20

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



Male

Female

¹⁶ ICD-10 Chapter II, Neoplasms.

¹⁷ ICD-10 Chapter II, Neoplasms, Malignant neoplasms of eye, brain and other parts of the central nervous system (C69–C72).

¹⁸ ICD-10 Chapter II, Neoplasms, Malignant neoplasm, stated or presumed to be primary, of lymphoid, haematopoietic and related tissue (C81–C96).

Infections

'Infections' is a hybrid category composed of certain infections and parasitic diseases, diseases of the nervous system and diseases of the respiratory system.¹⁹ Seven children died from infections in 2019–20. Over the last five year 86 children and young people died from infections. The highest number of infections were caused by influenza and pneumonia (36 deaths or 42%).²⁰

Deaths from notifiable conditions

A disease may be notifiable to state health authorities if there is potential for its control or if there is a demonstrated public interest in a condition.²¹ Key factors considered when deciding if a condition should be notifiable include the overall impact of the disease on morbidity and mortality, 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 a five-year period as shown in Figure 2.6. Sixteen (47%) of the 34 deaths due to notifiable conditions were the result of potentially vaccine-preventable conditions, with the most common of these being influenza, invasive meningococcal disease and invasive pneumococcal disease.^{22,23}

Notifiable condition	Total
Influenza^	9
Invasive group A streptococcal infection	8
Pneumococcal disease (invasive) [^]	4
Meningococcal disease (invasive)^	3
Melioidosis	3
Salmonellosis	2
Cryptosporidiosis	1
Haemophilus influenzae type b infection (invasive)	1
Listeriosis	1
Syphilis (including congenital syphilis)	1
Tuberculosis	1
Total	34

Table 2.2: Child deaths due to notifiable conditions (number), 2015-16 to 2019-20

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.

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

¹⁹ 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 J00–22 only.

²⁰ ICD-10 Chapter X, Diseases of the respiratory system, Influenza and pneumonia (J09–J18).

 ²¹ For the complete Queensland Notifiable Conditions Schedule contained in the *Public Health Regulation 2018*, see Appendix 4 – Notifiable diseases. Certain conditions that are not diseases and morbid conditions, i.e. adverse events following vaccination, ciguatera intoxication and lead exposure, will also appear in this table, but are counted and discussed in the chapter appropriate to their cause of death, Chapter 5 – Other non-intentional injury-related deaths).
 ²² 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).

²³ Vaccines are available for only selected strains of influenza, meningococcal disease and pneumococcal disease.

Chapter 3 — Transport-related deaths

Key findings

- 21 deaths from transport-related incidents in 2019–20.
- 57% of deaths were in motor vehicle incidents.
- 521 children and young people lost their lives in transport-related incidents between 2004 and 2020, with an average of 33 deaths per year.



Top 5 risk factors in fatal motor vehicle crashes

- 52% excessive speed
- 42% no or inappropriate restraint
- **38%** driver aged ≤18 years with peer passenger/s
- 32% inexperienced driver
- 30% alcohol or substance use

Transport-related deaths: Findings 2019–20 and last five years

In 2019–20, the deaths of 21 children and young people from transport-related incidents were recorded in Queensland, representing a rate of 1.8 deaths per 100,000 children aged 0–17 years. Table A.5 in Appendix 1 provides summary data and key characteristics for transport-related deaths in the last five years.

The rates of transport-related child fatalities have declined over the last 16 years, with the 5-year rolling rates dropping by 8.3% per year on average. There was an average of 40 deaths each year in the first 10 years, whereas in the last six years the average was 21 deaths.

Nature of transport incidents

During 2019–20, twelve deaths were in motor vehicle crashes, six were in pedestrian incidents, and one death each in motorcycle, bicycle and quad bike incidents.

As illustrated in Figure 3.1, over the last five years, the majority of transport-related fatalities were motor vehicle deaths (54%) followed by pedestrian deaths (30%).

Figure 3.1: Incident type (proportion), 2015–16 to 2019–20



Sex

During 2019–20, seven female children died from transport-related incidents, compared to 14 male children.

Over the last five years, the average annual transport-related mortality rate for males was more than twice the rate for females (respectively, 2.3 per 100,000 males and 1.1 per 100,000 females). Higher rates of death for males has been attributed to, in part, greater risk-taking behaviours displayed by young males—this includes risk-taking behaviours of male drivers.²⁴

Age

Of the 21 transport-related fatalities during 2019–20, two were of children aged 1–4 years, three were of children aged 5–9 years, five were of children aged 10–14 years and 11 were of children aged 15–17 years. There were no deaths of children under the age of one year.

Over the last five years, children aged 15–17 years followed by 1–4 years had the highest rates of mortality from transport-related incidents compared to children from other age groups (4.5 and 1.8 per 100,000 children in each group respectively, compared to 1.1 per 100,000 children aged 10–14 years and 0.9 per 100,000 children aged 5–9 years).

²⁴ Australian Institute of Health and Welfare 2011, Young Australians: Their health and wellbeing. Cat no PHE 140.

Transport-related characteristics

This section provides information about specific types of transport-related incidents and an overview of charges and criminal proceedings in relation to transport-related fatalities in Queensland.

Motor vehicle incidents

Figure 3.2 illustrates the role of the child or young person in motor vehicle fatalities over the last five years. Of the 53 motor vehicle incident deaths, 19% (10) were driving at the time of the incident while 81% (43) were passengers.





Multiple fatalities

Of the 10 motor vehicle incidents where children and young people died in 2019–20, four incidents involved multiple fatalities (including children and adults). Over the last five years, 11 incidents involved multiple fatalities (child and adult) while 37 incidents involved single child fatalities.

Highway fatalities

Of the 12 children and young people who died in motor vehicle incidents, two died on highways (speed limit greater than or equal to 100 kilometres per hour). Over the last five years, 49% of child deaths in motor vehicle crashes occurred on highways.

Pedestrians

Six children and young people died in pedestrian incidents during 2019–20, with three incidents involving road or railway crossings, two were low-speed vehicle run-overs and one 'other' pedestrian incident type.

'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 whilst entering or exiting a traffic area. Most of these incidents involve children under the age of five. Over the last five years, the majority of pedestrian incidents were low-speed vehicle run-overs (57%) followed by road and railway crossings (30%).

Motorcycles and bicycles

There was one death of a child in a bicycle incident in 2019–20 and one death of child in motorcycle incidents. Some 9% of transport fatalities over the last five years were motorcycle or bicycle incidents.

Off-road fatalities

Seven children died in off-road transport environments in Queensland during 2019–20. Three deaths were pedestrian incidents, two were motor vehicle incidents and one death each in bicycle and quad bike incidents. The deaths of children and young people occurring in off-road environments are not included in the official road toll. Over the last five years, a total of 32 children and young person died in off-road environments.

Charges and criminal proceedings

Of the 21 transport-related fatalities in 2019–20, eight resulted in driving-related criminal charges (based on information available at the time of reporting). Over the last five years, about one third of the transport-related deaths resulted in driving-related charges.

Risk factors associated with motor vehicle crashes

All 12 motor vehicle fatalities in 2019–20 were children and young people travelling as passengers. Speeding was identified as a risk factor in just over half of the deaths, coupled with other risk factors such as driver inexperience and alcohol or substance use.

The most common risk factors in motor vehicle crashes over the last five years are illustrated in Figure 3.3.25



Figure 3.3: Most common risk factors in motor vehicle incidents (proportion), 2015–16 to 2019–20
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 4000 transport incidents in the last year, including both fatal and non-fatal injuries. The majority of incidents involved motor vehicles, followed by bicycle and motorcycle incidents. The highest number of incidents involved young people aged 15–17 years.

Type of incident	Under 1 year	1–4 years	5−9 years	10–14 years	15–17 years	Total
Motor vehicle (including car, utility, bus, truck)	99	398	488	596	957	2,538
Bicycle	*	43	148	353	178	722
Motorcycle	0	17	108	253	231	609
Scooter	0	8	35	66	30	139
Pedestrian	*	19	32	49	34	134
Quad bike/ATV	0	14	25	33	18	90
Watercraft	0	6	9	16	15	46
Unknown type	12	13	10	35	25	95
Total	111	518	855	1,401	1,488	4,373

Table 3.1: Queensland Ambulance Service responses to transport incidents (number), 2019–20

Source: Queensland Ambulance Service (Aug-2020)

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

Notes: Excludes data for children and young people whose age and gender at the time of the incident were not known.

Introduction of new quad bikes safety standard

The *Consumer Goods (Quad Bikes) Safety Standard* was introduced in 2019, and the first stage of the mandatory requirements comes into force on 11 October 2020. The aims of the new standard are to improve information for potential purchases and enhance quad bike stability and rollover protection to reduce injuries and deaths.

In Stage 1 all new quad bikes will need to have information affixed to them about the degree of slope at which they will start to overturn. From October 2021 (Stage 2), new general use quad bikes will need to conform with minimum standards for stability on slopes as well as to have an operator protection device or rollover bar to reduce the risk of serious crush injuries and deaths in the event of a rollover. The new standards do not apply to second-hand quad bikes other than those imported into Australia.

Chapter 4 — Drowning

Key findings

- 13 drowning deaths of children and young people in 2019–20.
- Children aged 1–4 years are most at risk of drowning, with most occurring in backyard swimming pools.
- Infants and 1–4 year olds are also vulnerable if unsupervised while bathing.



Drowning: Findings 2019–20 and last five years

During 2019–20, the drowning deaths of 13 children and young people were registered in Queensland, at a rate of 1.2 deaths per 100,000 children aged 0–17 years over a five year period.

Table A.6 in Appendix 1 provides summary data and key characteristics for drowning deaths in the last five years.

Types of drowning-related deaths

During 2019–20, six pool drownings were recorded for the period, and seven drownings were non-pool incidents.

As illustrated in Figure 4.1, over the last five years the most common incident locations from child drownings was in private pools (40%) followed by bathtubs (16%). Almost all of the 27 private pool incidents were residential (homes, townhouse or units), although two were in resort pools. Dynamic waterways (e.g. rivers, creeks) made up 12% of the incidents and static waterways (e.g. lakes, reservoirs) were 9%.

Figure 4.1: Drowning incident type (proportion), 2015–16 to 2019–20

			Static inland	Public po	ol, 6%
			waterway, 9%		
		Dynamic	Dunal water becaud	Beach or	Other
Private pool, 40%	Bath, 16%	12%	7%	ocean, 4%	4%

Sex

During 2019–20, five male children and eight female children died in drowning incidents. Over the last five years; however, males made up 58% of children who drowned while 42% were female.

Age

During 2019–20, children aged 1–4 years made up the largest group of drowning deaths (10 deaths, 77%)—a pattern which has been found in all previous reporting periods, and an indication of the particular vulnerability of this age group. Drowning was the leading cause of death for children aged 1–4 years over the last five years.

Risk factors and age

Under 1 year

Six children under the age of one year have drowned over the last five years, accounting for 9% of all child drowning deaths. All six deaths were bathing incidents, and in four of these the infant was co-bathing with other children at the time. All six infants were not being actively supervised at the time of the incident.

1–4 years

Over the last five years, 39 children aged 1-4 years drowned, accounting for 58% of all drowning deaths over this period. Twenty-two of these deaths (56%) occurred in private pools.

Pool fencing was non-compliant in 20 of the 22 cases (non-compliant fencing includes the absence of fencing, fencing or gate defects or propping pool gates open). The circumstances of pool fencing and the number of drowning deaths for each is as follows:

- 16 with pool fencing believed to be non-compliant (including 6 where a gate was also propped open)
- 2 with pool fencing compliant but with the gate propped open
- 2 where the pool fencing was compliant and gate latched
- 2 with pool fencing absent (both were portable pools which were required to comply with pool fencing legislation).

Of the 22 private pool drowning deaths, 14 occurred at the child's usual place of residence, seven occurred at the homes of extended family, friends or neighbours, while one was in a resort pool.

One death occurred at a public pool.²⁶

Non-pool locations also presented dangers to young children. Sixteen 1–4 year olds drowned in non-pool incidents including bathtubs (4), rural water hazards (4), dynamic waterways (3) and objects containing water (3).

Seventeen of the 1–4 year olds (of 39) were known to be in, on or around water hazards (bathtubs, pools, dynamic and static waterways, beach or ocean, objects containing water and rural water hazards). None of the seventeen children were within arm's reach, or being actively supervised by a capable supervisor, at the time of the incident.

5–9 years

Twelve children aged 5–9 years drowned over the last five years, accounting for 18% of all drowning deaths. Six (50%) of those children were aged 5 years. The drownings involved a variety of water hazards, including pools, dynamic and static waterways.

In eleven of the twelve drownings (including all six 5-year olds), the child was known to be in, on or around water. Of those eleven, nine were either unsupervised or not actively supervised.

10-17 years

Ten young people aged 10–17 years drowned over the five years (three aged 10–14 years and seven aged 15–17 years), accounting for 15% of all drowning deaths. The drownings occurred across a variety of water hazards, including pools, waterways (static and dynamic) and the beach/ocean.

Six of the young people were international visitors or had recently moved to Australia. Five of the young people were identified as weak or non-swimmers.

²⁶ Swimming pool open to the public, whether or not on payment of money.

Preventative factors

Supervision

Lapses in supervision of young children in, on or around water hazards has been found to be a factor in drowning deaths of young children. The QFCC classifies the adequacy of supervision for drowning deaths of children under the age of five, based on the child's proximity and/or access to water. The model examines three key elements of effective supervision: the capacity of the supervisor, proximity to the child and continuity of supervision provided. The thresholds for each element are different depending on whether the child was known to be in, on or around water.

When a child is not known to be in, on or around water, it is still important to provide a level of supervision to ensure the child is protected from all hazards. Young children are unable to appropriately identify and negotiate risks, yet can be highly mobile. Reliance only on pool fences and gates to prevent drowning is not recommended, as breakdowns in protections can occur, such as pool gates being propped open or becoming non-compliant due to wear and tear. Accordingly, it is essential children aged under five years are regularly checked on by an active supervisor.

Pool fencing

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

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

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

Figure 4.2 tracks the number of drowning deaths over time of children aged 0–4 years in Queensland private pools against changes to fencing requirements. A number of changes in pool fencing standards have occurred—from no standards in place prior to 1991, to requirements for new pools to have fencing, later extended to existing pools; changes in requirements such as fence height; and more recently compliance requirements for registration and inspection.

The number of private pool drowning deaths in children aged 0–4 years has fluctuated from year to year; however, regulation is seen to have possibly impacted on the number of drownings, especially in the last two decades.

Figure 4.2: Drowning deaths of children o-4 years in Queensland private pools by applicable pool standard (3-year rolling average), 1988–2019



Data sources: Queensland Injury Surveillance Unit 2008, *Injury Bulletin: Domestic pool immersion in Queensland children under five years of age*. No.104; Queensland Child Death Register (2004–19)

Safe play areas to reduce rural drownings

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

There have been 24 deaths of children aged under five years in rural water hazards since 2004.

Drowning prevention is most effective when strategies are multi-faceted. Active supervision is the most effective strategy, but to maintain this continuously is not realistic. Establishing a safe play area around the family home can act as a critical means of preventing access to water hazards.

Children can also be taught from a young age about nearby dangers and 'no go' areas. Making sure young children are visible to supervisors and having barriers that separate the child from the water hazard can also help reduce the risk of drowning.

Life stages approach to drowning prevention

The Royal Life Saving Society of Australia (RLSSA) promotes a life stages approach to drowning prevention, allowing for targeted strategies that recognise risk priorities for each age group, with 'active supervision' being a key preventative factor.

Keep Watch

RLSSA's Keep Watch aims to prevent drowning deaths of children under five years of age in all aquatic locations.

For over 25 years Keep Watch has been advising Australian parents and carers on how to keep their children safe when in, on or around the water.

For every toddler drowning death approximately eight children are admitted to hospital as a result of non-fatal drowning.

The Keep Watch program has four key drowning prevention actions. When implemented together, these safety measures can help to maximise child safety around water.

1. Supervise: Active supervision means focusing all of your attention on your children all of the time, when they are in, on or around the water. Stay within arm's reach and be ready to respond quickly.

2. Restrict Access: Ensure there is a barrier between your child and a body of water. This could be a pool fence, or a barrier around the child to create a child safe play area.

3. Water Awareness: Building familiarity and confidence in the water. This includes water familiarisation lessons, removing water hazards and establishing basic safety rules around water.

4. Resuscitate: Learn CPR and lifesaving skills.

For more information visit: <u>https://www.royallifesaving.com.au/programs/keep-watch-toddler-drowning-prevention-program</u>

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. Over half (55%) of all immersion incidents involving children occurred in swimming pools. Immersion incidents were most common in the 1–4 year age category, and most likely to be identified as occurring in swimming pools. For children under 1 year of age, bathtubs were the most commonly identified location for immersion incidents.

Type of incident	Under 1 year	1–4 years	5−9 years	10–14 years	15–17 years	Total
Pool	6	79	36	13	9	143
Bath	29	12	0	*	*	41
Beach/ocean	0	*	*	10	11	21
Other immersion	*	18	16	10	11	55
Total	35	109	52	33	31	260

Table 4.1: Queensland Ambulance Service responses to immersion incidents (number), 2019–20

Source: Queensland Ambulance Service (Aug-2020)

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

Notes: Excludes data for children and young people whose age and gender at the time of the incident were not known.

Chapter 5 — Suicide

Key findings

- 20 children and young people died by suicide in 2019–20.
- A weak trend indicates a slow increase in youth suicides over time.
- Risk increases with increasing age, three in four young people who suicided were aged 15–17 years.



Defining and classifying suicide

In the Queensland Child Death Register, all suspected suicide cases are assessed and categorised using a suicide classification model based on an amended version of the Australian Institute of Suicide Research and Prevention's (AISRAP) suicide classification.²⁷

Previously-held beliefs, that children are unable to understand the concept and finality of death, led to a general under-appreciation of the risk of suicide in children. Historically, cases where suicide was suspected but intent was unclear (that is, the deceased did not leave a suicide note and did not state their intent before death) were recorded as accidents. This resulted in childhood and adolescent suicide being under-reported in official statistics, with a large proportion recorded as accidental deaths.²⁸

Suicide: Findings 2019–20 and last five years

During 2019–20, 20 confirmed or probable suicide deaths of young people were recorded in Queensland. The 20 deaths represent a marked decrease from 37 suicide deaths in 2018–19.

Fourteen deaths were classified as confirmed suicides in the 2019–20 period, and six deaths were probable suicides. Two deaths in the period were classified as possible suicides.²⁹

A total of 121 young people have died from suicide over the last five years, with an average of 24 deaths per year, at a rate of 2.1 deaths per 100,000 children aged 0-17 years.³⁰

Table A.8 in Appendix 1 provides summary data and key characteristics for suicide deaths in the last five years.

Coronial findings

At the time of reporting, coronial findings had been finalised for seven of the 20 suicides from 2019–20. Coroners made clear statements that the cause of death was suicide in six of these deaths. In the one remaining death, the Coroner made a clear statement that they considered the death to be non-intentional.³¹

Sex

Of the 20 young people who died from suicide in 2019–20, 14 (70%) were male and 6 (30%) were female.

Over the last five years, the average suicide rate for males was 1.3 times the rate for females (5.4 deaths per 100,000 males aged 10–17 years, compared to 4.2 deaths per 100,000 females aged 10–17 years). Male and female suicide rates in adult populations have a much greater disparity compared to youth suicides, with an 'all ages' suicide rate for males being three times that for females (24.9 deaths per 100,000 males, compared to 7.8 deaths per 100,000 females).³²

²⁷ See Appendix 6 for further details regarding the suicide classification model.

²⁸ Since 2013, the ABS publication *Causes of Death* includes an appendix presenting suicide deaths of children aged under 15.

²⁹ Suicides are only reported on in this chapter if they are classified as probable or confirmed suicide using the QFCC classification model.

³⁰ Tables with data for 2004–20 are available online at <u>www.qfcc.qld.gov.au</u>.

³¹ Based on the QFCC's suicide classification model, this case met the threshold for probable or confirmed suicide and has been included on that basis. ³² Australian Bureau of Statistics 2018, *Causes of Death, Queensland, 2017*, 'Table 4.3: Underlying cause of death, Selected causes by age at death, numbers and rates, Queensland, 2017, cat. No. 3303.0.

Age

Of the 20 suicide deaths during 2019–20, 14 (70%) were of young people aged 15–17 years and six (30%) were of young people aged 10–14 years.³³ Suicide was the leading external cause of death for young people from both age categories in Queensland during 2019–20.

Over the last five years, the suicide rate for young people aged 15–17 years was five times the rate for young people aged 10–14 years (9.7 deaths per 100,000 aged 15–17 years, compared to 1.9 deaths per 100,000 children aged 10–14 years).

On closer examination of youth suicide over the last five years, it is apparent that the proportion of suicide deaths increases with increasing age (see Figure 5.1).





Situational circumstances and risk factors

The literature on suicide provides a relatively consistent account of the factors and life circumstances that are associated with youth suicide.³⁴

- Research into youth suicide shows that a history of self-harming behaviour, suicidal ideation and previous suicide attempts are associated with future suicidality.
- A high proportion of mental illness has been found among young people who die by suicide.
- Childhood abuse and exposure to domestic violence have been found to be potential risk factors for future youth suicides. The *Adverse Childhood Experiences Study* has led research showing strong relationships between adverse experiences in childhood and health and social problems across the lifespan, with the link with depressive disorders.³⁵

Suicidal behaviours in young people are often not the result of a single cause, and multiple stressors and adverse life experiences may be present. Most suicides; however, cannot be predicted.³⁶

Figure 5.2 provides a summary of the most frequently reported risk factors and situational circumstances identified for the young people who suicided in Queensland in the last five years. The overview is based on information available to QFCC and may therefore under-represent the actual circumstances for the children and young people.

 $^{\mbox{\tiny 33}}$ Excludes the death of one child aged under 10 years.

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³⁴ CCYPCG 2009, *Reducing Youth Suicide in Queensland discussion paper.*

³⁵ Chapman, D, Whitfield, C, Felitti, V, Dube, S, Edwards, V, and Anda, R 2004, 'Adverse childhood experiences and the risk of depressive disorders in adulthood', *Journal of Affective Disorders*, 82: 217-225.

³⁶ Scott J, Ryan A, Hielscher E, and Thomas, H 2018, Suicide in children and adolescents in Queensland 2004-2015, QFCC Research Summary.



Figure 5.2: Summary of risk factors and situational circumstances (proportion), 2015–16 to 2019–20

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

Previous self-harm and suicidal behaviour

Fourteen of the 20 young people who suicided during 2019–20 had previously attempted suicide, self-harmed and/or expressed suicidal thoughts. Five had previously attempted suicide, with one young person attempting suicide on more than one occasion. Eight young people had previously engaged in self-harming behaviour, such as cutting.³⁷ Thirteen had previously expressed suicidal thoughts (ideation). There was no evidence of previous self-harm or suicidal behaviour for six young people.

Mental health issues and behavioural disorders

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

As indicated in Table 5.1, nine of the 20 young people who suicided during 2019–20 had a diagnosed mental health issue and/or behavioural disorder before their death, and a further six were suspected to have a mental health issue. Eight young people had accessed a mental health provider.

The most common diagnosed conditions were depression and anxiety. Five of the 13 young people were identified to have multiple mental health and/or behavioural disorders (co-morbid conditions).

³⁷ Each young person with identified self-harm or suicidal behaviour may have exhibited more than one type of behaviour.

Table 5.1: Mental health issues and behavioural disorders (number), 2019–20

Mental health issues and/or behavioural disorders					
Diagnosed mental health issue or behavioural disorder	9				
Known to have accessed mental health provider	7				
Currently or previously prescribed medication for mental health issue	4				
Suspected mental health issue	6				
Known to have accessed mental health provider	2				
Total	13				

Notes: More than one issue/factor may be present for each young person who suicided, therefore the sum of the counts may be greater than the total. 'Suspected mental health issue' refers to information from family members or friends who believed the young person to be experiencing a mental health issue, without having a diagnosed condition. Young people were recorded as not having a mental health issue where the QFCC did not have information to indicate otherwise. This is not an absolute finding in regard to the young person's mental health.

Intent stated or implied (orally or written)

There was evidence of suicidal intent in 9 of the 20 suicide deaths during 2019–20. Six young people stated or implied their intent to a family member, friend, boyfriend or girlfriend or online prior to their suicide. Intent was stated or implied by text or instant messaging, in person or by social media.³⁸ Suicide notes were left by three young people.

Contagion

Contagion refers to the process by which a prior suicide or attempted suicide of a family member or friend facilitates or influences suicidal behaviour in another person. Contagion was identified as a potential factor for six of the 20 young people who suicided during 2019–20.

Alcohol, drug and substance use

Thirteen of the 20 young people who suicided during 2019–20 were reported as having a history of alcohol, drug or substance use; with alcohol, cannabis, tobacco and volatile substances the most frequently cited substances used.³⁹

Stressful life events

Stressful life events (life stressors) were identified in 19 of the 20 suicide deaths of young people in Queensland during 2019–20. 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 over a period of time with strain accumulating over time.

The four most common stressors identified in young people who suicided in 2019–20 were parental separation or divorce, poor intra-familial relationships, transitions in education, exposure to domestic violence and maltreatment – emotional harm.

³⁸ Each young person may have stated or implied their intent using more than one communication method.
³⁹ Previous or current use of alcohol or drugs identified by friends, family members or in toxicology findings.

History of childhood abuse

Information available indicated nine of the 20 young people who suicided in 2019–20 had a history of alleged childhood abuse. A history of domestic and family violence within the young person's family was also identified for a small number of young people.

Precipitating incidents

Precipitating incidents were identified in 14 of the 20 suicide deaths of young people in Queensland during 2019–20. 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 week prior to death. Bereavement can be considered a precipitating incident, with an arbitrary time frame of up to 6 months between the death of the family member or friend and the suicide of the young person.

COVID-19

At the time of reporting, there was no evidence of an increase in youth suicide deaths as a direct or indirect result of COVID-19. The incidence of stressors commonly reported in youth suicide data, such as mental health, transitions, social isolation, domestic violence, family stress and academic achievement-related stress are likely to be heightened by the economic and social changes that have occurred over the preceding months. The QFCC will continue to closely monitor trends in youth suicide deaths throughout the pandemic period.

Queensland Ambulance Service data

Queensland Ambulance Service (QAS) data indicates in the last year approximately 7500 ambulance callouts occurred for suicidal behaviour and self-harm-related incidents involving children, including both fatal and non-fatal injuries (see Table 5.2). This suggests that for every youth suicide death there were around 370 callouts to treat children and young people in suicidal behaviour or self-harm incidents. Female patients accounted for 60% of callouts.

Age	Female	Male	Unknown	Total
5–9 years	64	160	*	224
10–14 years	1,591	1,109	18	2,718
15–17 years	2,924	1,620	42	4,586
Total	4,579	2,889	60	7,528

Table 5.2: Queensland Ambulance Service responses to self-harm and suicidal behaviour incidents (number), 2019–20

Source: Queensland Ambulance Service (Aug-2020)

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

Notes: Cases were selected using searches for relevant terms, categories or complaints. Further data cleansing removed cases with a high likelihood of being incorrectly coded.

Every life: The Queensland Suicide Prevention Plan 2019–2029

The Queensland Government's *Our Future State – Advancing Queensland's Priorities*, sets out the key areas for action. Our Future State includes a strong focus on mental health, and one of the major priorities is to reduce the suicide rate by 50% by 2026.

Released in September 2019, the *Queensland Suicide Prevention Plan 2019–2029* charts a whole-ofgovernment plan to reach the target.⁴⁰ The work is being led by the Queensland Mental Health Commission (QMHC). Action areas under the plan include: building resilience; reducing vulnerability; enhancing responsiveness; and working together.

⁴⁰ https://www.qmhc.qld.gov.au/sites/default/files/every life the queensland suicide prevention plan 2019-2029 web.pdf

Chapter 6 — Fatal assault and neglect

Key findings

- 12 child deaths from assault and neglect in 2019–20.
- More than half of children who died from assault or neglect were aged under five years,
- 130 children and young people died from assault and neglect since 2004, with an average of 8 deaths per year.



Vulnerability characteristics of intra-familial assault or neglect

- 86% children were known to the child protection system
- 64% household domestic violence
- **36%** perpetrator with mental health issues
- 32% perpetrator with history of criminal offending

Defining fatal assault and neglect

Deaths categorised as being caused by fatal assault and neglect include suspicious deaths where information available to the QFCC indicates a homicide investigation was initiated, an alleged perpetrator was charged, or the alleged perpetrator is known but deceased. The screening criteria used to establish the level of confirmation and categorisation as fatal assault and neglect are described in Appendix 8.

Fatal assault is defined in this report as a death where a child dies at the hands of another person who has inflicted harm on them through some means of force or physical aggression.⁴¹ Fatal neglect is defined as a death where a child who is dependent on a caregiver for the basic necessities of life dies owing to the failure of the caregiver to meet the child's ongoing basic needs. The definitions are intended to be child focused insofar as the perpetrator's intention is not relevant—the definition includes instances of violence or neglect leading to the child's death even though the perpetrator may not have intended such an outcome—as well as instances where the perpetrator intended to kill the child.^{42,43}

It is important to note that assault and neglect are not necessarily exclusive categories. For example, a child's death may be the culmination of a series of violent and neglectful acts perpetrated against them. Where more than one type of fatal assault and neglect was identified for the child at the time of death, a primary type of fatal assault or neglect in relation to the cause of death is identified for the child for reporting purposes.

Fatal assault and neglect: Findings 2019–20 and last five years

Twelve deaths were recorded as a result of assault and neglect in Queensland during 2019–20, based on information available to the QFCC at the time of reporting. Nine children were alleged to have been killed by a family member (intra-familial) and three were alleged to have been killed by a non-family member (extra-familial).

Table A.9 in Appendix 1 provides summary data on fatal assault and neglect deaths in the last five years.⁴⁴

Incident type

Thirty-five children died in 27 fatal assault and neglect incidents in the last five years.⁴⁵ As shown in Figure 6.1, 28 deaths (80%) were categorised as intra-familial, that is the alleged perpetrator was a parent, family member or person acting in a parental role. Twenty children (46%) 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 and five died from neglect.

Twenty per cent of deaths in the last five years were extra-familial homicides.

⁴¹ Deaths caused by drowning or transport-related incidents where a person has been charged with criminal offences are excluded from the definition of fatal assault and neglect unless the charge is charged with e exception of murder charges). These cases are counted in relevant chapters.

⁴² These definitions have been adapted from Lawrence R 2004, 'Understanding fatal assault of children: a typology and explanatory theory', *Children & Youth* Services Review, 26, 837–852

⁴³ Definitions for the various categories of fatal assault and neglect can be found in Appendix 3.

⁴⁴ Tables with data for 2004–20 are available online at <u>www.qfcc.qld.gov.au</u>

⁴⁵ By date death was registered with the Registry of Births Deaths and Marriages.



Figure 6.1: Context of fatal assault and neglect (proportion), 2015–16 to 2019–20

Sex

Of the 35 children who died from assault or neglect in 2015–20, eighteen (51%) were female and seventeen (49%) were male.

Age

Of the 35 children who died from assault or neglect in the last five years, seven were aged under 1 year, thirteen were aged 1–4 years, six were aged 5–9 years and nine were aged 10–17. More than half (57%) of children who died from assault or neglect were aged under five years, reflecting the higher degree of vulnerability for young children.

Vulnerability characteristic

Of the 28 children who died from intra-familial assault or neglect, 86% were known to the Queensland child protection system within the year before their deaths and 64% had experienced or been exposed to domestic and family violence.⁴⁶

Of the alleged familial perpetrators, 36% were identified as having either diagnosed or suspected mental health issues, 32% had history of criminal offending and 28% had history of alcohol or substance use.⁴⁷

⁴⁶ In some instances a child may only become known to child protection services from the incident leading to their death.

⁴⁷ Vulnerability characteristic findings are based on information available to the QFCC when analysis was conducted. The absence of evidence of vulnerability characteristic in the information relied upon does not mean vulnerability characteristics were not present. A history of a vulnerability characteristic refers to any known history of that characteristic and does not mean the behaviours were active at the time of the death incident. The presence of a mental health issue does not indicate the perpetrator meets the threshold for any consideration of state of mind in any criminal charges or court matters relating to the death incident.

Red flags project

The University of Queensland has been instrumental in advancing the Red flags project on behalf of the QFCC. The project stems from findings of a recent child death review and its aim was to identify risk factors which would justify raising a red flag for a child, using the following definition:

A Red Flag refers to the identification of an act or intention that is likely to adversely affect a child's immediate safety, such as injury, threats of harm or death; or an accumulation of risk factors that, when considered together, may adversely affect a child's immediate safety. The factors leading to a Red Flag response should be linked to a limited number of clearly identifiable indicator(s) of elevated risk; and information about these risk indicators should be readily accessible to those responsible for raising a Red Flag for elevated risk of fatal child assault and neglect.

Defining a red flag for a child is the first step in developing a system-wide solution for use across the family support and child protection system to identify, respond to and share information about red flags, specifically where there is a high likelihood of child fatal assault and neglect within an intra-familial context.

The project consisted of a literature review and quantitative and qualitative analyses of 109 individual case records held in the QFCC child death register and available inter-agency data. Focus group discussions were also held with several experts in a range of human service fields to provide insights into the frequency of the risk indicators emerging in the data compared with the at-risk populations with whom they practice.

Data analysis identified a number of factors which could justify raising a red flag if observed by any family support or child protection agency dealing with children. Some of these red flags arise from a combination of risk factors. Some factors include, threats to kill, extended hospitalisations for very young children especially where there are compounding risk factors, and the presence of a step-father (or mother's partner unrelated to the child) for very young children where there is repeated child protection contact. For the latter factor the risk is strong within the data analysed; however, requires further comparison with a matched atrisk cohort.

The project highlighted that children who are at risk of fatal child assault and neglect are in contact with a broad range of human service agencies and this is not limited to child protection services. In addition, the project acknowledges that even with the most robust protocols for responding to risk, not all fatalities due to child assault and neglect can be prevented. The features associated with increased risk may be hidden or appear too late for action. Nonetheless, the project identified that there is scope to reduce the number of child fatalities through evidence-informed action. The appropriate action will depend on the level of risk and the appropriate actions available for particular cases.

In 2020-21 the QFCC will continue to explore ways to help build awareness across the family support and child protection system regarding risk factors of child fatal assault and neglect and appropriate thresholds for raising a red flag for a child.

Chapter 7 — Sudden Unexpected Deaths in Infancy



* in the 12 months prior to death.

Sudden Unexpected Death in Infancy (SUDI) classification

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. 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.

Sudden Unexpected Death in Infancy (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. Cases of SUDI with an official cause of death are grouped into the following categories and sub-categories:

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

- Infant illnesses unrecognised at the time of death
- Sleep accidents
- Non-accidental injury (fatal assault)

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

- Sudden Infant Death Syndrome (SIDS)⁴⁸
- Undetermined causes⁴⁹

SUDI: Findings 2019–20 and last five years

During 2019–20, there were 35 SUDI cases in Queensland, of which 18 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. Table A.11 in Appendix 1 provides summary data on SUDIs in the last five years. Explained SUDIs are also included in the chapter relating to the specific causes of death.

There were 153 SUDIs in the last five years and, as indicated in Figure 7.1, 62% were found to be unexplained SUDI while 25% were explained SUDI. The SUDI mortality rate was 0.5 per 1000 births (5-year average).

Figure 7.1: SUDI by cause of death (proportion), 2015–16 to 2019–20

Sudden Unexpected Death in Infancy (n = 153)									
Explai	Explained, 25% Unexplained, 62%								
Illness, 22%	Sleep accident, 2%	Fatal assault, 1%	SIDS, 35%	Undetermined, 27%	13%				

⁴⁸ The definition of SIDS is as described by Krous H et al, 2004, 'Sudden infant death syndrome and unclassified sudden infant deaths: a definitional and diagnostic approach', *Paediatrics*, vol 114, pp 234–8.

⁴⁹ 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.

Trends

SUDI deaths have fluctuated over the last 16 years, as indicated in the rolling average numbers presented in Figure 7.2. While overall SUDIs have decreased, a small uptick is apparent in the most recent three-year average. SUDI numbers peaked across the periods 2008–10 to 2010–13.⁵⁰ While deaths from infant illness, undetermined causes and sleep accidents remained comparatively stable across the entire period, SIDS deaths rose and fell over the period with this driving the changes in SUDI totals.

However, some caution is warranted as assigning definitive causes for SUDIs remains complex and developments in cause of death classification are ongoing. 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. The SIDS deaths were the group most commonly recoded, with the panel coding most as undetermined causes.⁵¹ The findings of the expert panel review; however, are not reflected in this report which relies on cause classification from official causes of death.





Figure 7.3 shows the declining rate of Aboriginal and Torres Strait Islander SUDI deaths over the last 16 years. Across much of the time series the rate of Aboriginal and Torres Strait Islander SUDIs was 3–4 times the non-Indigenous SUDI rate. In more recent periods Indigenous over-representation was still evident; however, it had reduced to around 2–3 times the non-Indigenous rate.



Figure 7.3: SUDI by Aboriginal and Torres Strait Islander status (5-year rolling rate), 2004-09 to 2015-20

⁵⁰ An expanded table on SUDIs since 2004 is available on the report web page.

⁵¹ 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.

Sex and age

Of the 152 SUDIs in the last five years, 51% were female and 49% were male. However, over the full 16-year period from 2004, males made up a larger proportion (58%) compared to females (42%). These figures, and analysis in the rest of this chapter, exclude deaths from fatal assault.

Figure 7.4 shows SUDI by age at death in the last five years. More than half of sudden unexpected deaths (54%) occurred among infants aged under 4 months.





Notes: Excludes SUDIs from non-accidental injury.

Incident factors

Sleep surface

As indicated in Figure 7.5, for half (51%) of the SUDIs in the last five years the infant was on an adult sleep surface at the time of the incident and a further 6% were on a couch or a sofa. Only 38% of the SUDIs occurred when an infant sleep surface was being used.





Infant sleep position

Incident reports indicated some infants were placed in one position but were found in a different position, as shown in Table 7.1. While 30% were placed and found on their back, a further 21% had moved from their back to stomach or side position when found. Close to half of the infants were on their stomach or side when found (48%).

Position when		Total				
placed to sleep	Back	Stomach	Side	Other	Unknown	
Back	30%	18%	3%	1%	3%	54%
Stomach	0%	13%	1%	1%	1%	14%
Side	0%	3%	3%	1%	1%	7%
Other	1%	2%	1%	3%	0%	8%
Unknown	1%	4%	1%	0%	10%	16%
Total	32%	39%	9%	6%	14%	100%

Table 7.1: Infant sleep position in SUDIs (proportion), 2015–16 to 2019–20

Notes: Excludes SUDIs from non-accidental injury.

Season

As illustrated in Figure 7.6, there is a seasonal factor in SUDI deaths, with an increased frequency during the cooler months which may be linked to the use of heavier bedding or bedding not designed for infants.



Figure 7.6: Season at time of SUDI incident (proportion), 2015–16 to 2019–20

Shared sleeping

Around half (52%) of the infants whose deaths were sudden and unexpected were sharing a sleep surface with one or more people at the time of death. Sharing a sleep surface with a baby can increase the risk of SIDS and fatal sleep accidents in some circumstances.⁵²

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, or if the caregiver is excessively tired or there are multiple people in the bed with the infant.

Of the 79 SUDIs with shared sleeping over the last five years, additional co-sleeper risk factors identified included: alcohol or substance use (18%); smoking (11%); extreme fatigue (11%); and obesity (6%).

⁵² Red Nose 2017 (updated 2019), Information Statement. Sharing a Sleep Surface With a Baby. <u>https://rednose.org.au/downloads/InfoStatement_SharingSleepSurfacewithBaby_Dec2019.pdf</u>

Risk factors for SUDI deaths

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

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.

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.

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, high-risk lifestyles including alcohol and illicit drug abuse, and social disadvantage and poverty.

Selected characteristics of the infant and unsafe sleep factors in SUDI deaths over the last five years are shown in Figure 7.7. These indicate increased risk in the first months and for infants born with low birth weight, and breastfeeding as a potentially protective factor.

Using non-infant sleep surfaces (61% of SUDIs), shared sleeping (52%) and sleep position on side or stomach (48%) are all reported to increase the risk of sudden unexpected infant deaths, as are pillows (28%) and excess bedding in the sleep space.



Figure 7.7: SUDI by selected infant, family and sleep factors (proportion), 2015–16 to 2019–20

Notes: Excludes SUDIs from non-accidental injury.

Red Nose safe sleeping guidelines ⁵³							
Six ways to sleep baby safely and reduce the risk of sudden and unexpected death in infancy.	Safe sleeping environment night and day.						
1. Sleep baby on the back from birth, not on the tummy or side	Standard AS2172						
2. Sleep baby with head and face uncovered	2. Ensure a safe mattress which is firm, clean, flat and right size for cot						
 Keep baby smoke free before birth and after Provide a safe cleaning environment night and 	3. Tuck blankets in firmly or use a safe baby sleeping bag						
day	4. Do not use a pillow, cot bumper, lamb's wool, soft toy or doona in the cot day or night						
5. Sleep baby in their own safe sleeping place in the same room as an adult care-giver for the first six to twelve months							
6. Breastfeed baby							

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 one year and over (see Table A.10, Appendix 1). Three deaths in 2019–20 were categorised as unexplained causes. Over the last five years, while 86% of unexplained deaths were infants, 8% 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 inflicted.

⁵³ Red Nose Saving Little Lives 2015, Guidelines for new parents to reduce risk of SIDS. <u>https://rednose.com.au/news/guidelines-for-new-parents-to-reduce-risk-of-sids</u>.

Chapter 8 — Child death prevention activities

The QFCC continues to concentrate its efforts on maintaining the accuracy and comprehensiveness of information in the Child Death Register, meeting the legislated requirement to report annually and sharing data with researchers and the community. Collecting, analysing and publishing information on the causes of child deaths is an important step in preventing child deaths and serious injuries.

Maintaining the child death register

The QFCC maintains the Queensland Child Death Register under Part 3 of the *Family and Child Commission Act 2014*. Information from the register is analysed and an annual report on the deaths of all children in Queensland is produced. This assists to improve understanding of risk factors and supports new policies and practices to reduce child deaths.

The register contains data for some 7300 child deaths registered since 1 January 2004. It provides a valuable evidence base that is used to:

- develop safety and injury prevention activities
- monitor the effectiveness of prevention activities
- provide detailed child death data to researchers and government agencies.

Child death prevention publications

In December 2019, the *Annual Report: Deaths of Children and young people Queensland 2018–19* was tabled in Parliament. This was the 15th annual report to be produced on child deaths in Queensland. The authorised electronic version of the annual report can be accessed on the Queensland Parliament website and the <u>2018–19</u> report webpage.

Counting lives, changing patterns: Findings from the Queensland Child Death Register 2004-2019

The QFCC reviewed the 16 years of child death data held in its Child Death Register, with a focus on those causes of death considered to be most preventable by modifying behavioural or environmental factors.

The report, *Counting lives, changing patterns: Findings from the Queensland Child Death Register 2004-2019* provides a high-level overview of broad trends and patterns in child mortality in Queensland over the 16-year period. It identifies a number of areas requiring further research, which the QFCC intends to act on in collaboration with stakeholders.

By analysing all deaths occurring during the 16-year period, the QFCC was able to identify patterns and conduct complex statistical analysis to generate new insights into risk and protective factors for particular causes of death. In undertaking the review, we hope to provide direction for future research as well as policy and program development to minimise risks to children and young people and help keep them safe and well.

Child death prevention activities of the QFCC

Red flags project

In 2020 the QFCC commissioned the University of Queensland, to analyse information recorded in the Child Death Register and other key sources to determine an evidence-based definition for red flags (for example, acts or intentions likely to adversely affect a child's immediate safety).

Identifying a definition for red flags is the first step in developing a system-wide solution to identify, respond to and share information about red flags, specifically where there is a risk of fatal child assault.

Additional project information and preliminary findings can be found in Chapter 6.

This project is continuing into 2020–21.

Child Death Review Board

A new child death review model was recently introduced in Queensland. The new model requires certain government agencies to review the services provided to a child known to the child protection system who died or suffered a serious physical injury. It also introduced the independent Child Death Review Board (the Board), hosted by the QFCC. The new model commenced 1 July 2020.

The Board is established under Part 3A of the *Family and Child Commission Act 2014* and is responsible for conducting systemic reviews following the death of a child connected to the child protection system. The Board independently considers opportunities to improve the child protection system and prevent future deaths and makes recommendations to Government on how this can be achieved. Its work is informed by agency information, research and data as well as findings on child death prevention mechanisms from information contained in the Child Death Register. The Board consists of the Chair, five government members and six non-government members with diversity in experiences and expertise.

The implementation of the new child death review model follows a recommendation in the QFCC's 2017 report *A systems review of individual agency findings following the death of a child.*

Systems reviews relating to child deaths

In 2019–20, the QFCC began three whole-of-system reviews following the deaths of children known to Child Safety. These reviews are underway.

Activities to improve collection of child death information

The QFCC is progressing an upgrade to the database system which houses the register with enhanced data collection and reporting capabilities, allowing for improvement to the timeliness and accuracy of analysis and data provision to government and researchers, this upgrade will be completed in 2020-21.

Supporting youth suicide and SUDI prevention efforts

The QFCC continued to monitor and support prevention of suicide deaths of children and young people. In 2019–20, this included:

- sharing information with the Department of Education to support suicide postvention in affected schools
- promoting mental wellbeing tips through QFCC social media channels
- a commitment to lead a systemic review of suicides of young people known to child safety services, with a focus on improving system responses to highly vulnerable young people.

SUDI prevention was also an area of focus and in the last year the QFCC contributed by:

- providing SUDI data for several initiatives including reviews of infant product safety standards
- supporting activities led by the Queensland Paediatric Quality Council
- raising product safety concerns with the Office of Fair Trading in relation to an infant sleep product
- highlighting the omission of SUDI prevention and infant sleep safety in the draft National Injury Prevention Strategy and recommending their inclusion.

Policy submissions

During 2019–20, the QFCC used information in the Queensland Child Death Register to provide advice and recommendations in three submissions:

- The Australian Competition and Consumer Commission's (ACCC) review of the safety standard for button batteries (two submissions). The QFCC strongly supported mandatory regulation of button batteries and products containing button batteries.
- The Commonwealth Treasury consultation Improving the effectiveness of the consumer product safety system. The QFCC was supportive of a new safety duty with a higher safety threshold requiring traders to ensure products placed on the market are safe by adhering to prescriptive requirements (modelled on the United Kingdom General Safety Provision). The QFCC considers that this option has the highest likelihood of significantly reducing the frequency and severity of serious injuries and deaths, by ensuring that only safe products are made available to the market.

The National Injury Prevention Strategy 2020-2030

The Strategy, which is currently under development, aims to create a *national focus on injuries and their prevention.*⁵⁴ The Strategy seeks to encourage collective investment and action on evidence-based strategies to prevent the types of injuries with the highest burden for each of the priority population groups. A consultation process is assisting to prioritise areas for action and identify lead agencies responsible for injury prevention programs, resourcing, data, and workforce development.

During the 2019–20 the QFCC participated in stakeholder consultations and provided feedback on the draft strategy.

Research summaries

The QFCC provides short Research Summaries of contemporary research findings which are designed to make research more accessible to policy makers and practitioners. A key element of the Research Summaries is identifying the implications of the findings for policy and practice. In 2019–20, a Research Summary was produced on child drowning prevention, *Reducing drowning among children 0-17 years*, highlighting the challenges in drowning prevention and the implications for policy and practice.⁵⁵

Researcher access to child death data

A key strategy to support child death and injury prevention is to make data held in the register available for research, public education, policy development and program design. Access to the comprehensive dataset is available at no cost to genuine researchers.⁵⁶ Stakeholders wishing to access the register to support their research, policy or program initiatives can email their request to <u>child death prevention@qfcc.qld.gov.au</u>.

In 2019–20, the QFCC responded to 24 requests for access to the child death register. Figure 8.1 gives an overview of the type of data provided in 2019–20 and the purpose for which it was used.

⁵⁴ https://www.health.gov.au/initiatives-and-programs/national-injury-prevention-strategy-2020-2030-0

⁵⁵ <u>https://www.qfcc.qld.gov.au/reducing-drowning-among-children-0-17-years</u>

⁵⁶ 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.



Figure 8.1: Type of data requested by purpose (number), 2019-20

Source: QFCC Register of child death data requests (Aug-2020)

Projects provided with child death information include the following:

- youth suicide data provided to James Cook University to support PhD research and journal article on the topic of *Healing after experiencing the suicide of a young person Aboriginal and Torres Strait Islander perspectives informed by Indigenous knowledge*
- data on child drowning provided on a regular basis to the Royal Life Saving Society Australia to support its National Drowning Report and research program
- SUDI data provided to the Infant Safe Sleep Working Group (ISSWG) to inform the development of industry guidelines for infant sleep and swaddling products, as well as to support activities intended to reduce the risk of injury or death to infants associated with the supply and unsafe use of infant sleep products
- data on all non-natural causes provided to the ACCC as evidence to support the General Safety Provision proposal
- data on child drowning provided to the Gold Coast City Council as evidence to support *Safety Standard* (*Portable wading pools*) 2013
- Queensland Building and Construction Commission to support its quality assurance of fatal immersion incidents 2017–19
- youth suicide data provided to Northern Queensland PHN to inform a Health Needs assessment update
- child drowning data provided to the Department of Housing and Public Works for public education
- youth suicide data provided to the Fraser Coast Regional Council to analyse possible over representation of youth suicide in the region and inform policy and program development
- child death data provided to the Department of Health and Human Services, Safer Care Victoria to support the Consultative Council on Obstetric and Paediatric Mortality and Morbidity (CCOPMM) annual reporting
- accidental death data provided to the Office of Fair Trading to enable a comprehensive product safety assessment and investigation in relation to a specific product
- data on accidental child death provided to Queensland Health to inform the Mental Health, Alcohol and Other Drugs (MHAOD) roundtable
- child death data provided to the ACT Children and Young People Death Review Committee for annual reporting
- SUDI data provided to the ACCC as to inform national standards for inclined infant sleep surfaces
- data relating to deaths of children known to the child protection system provided to the Department of Child Safety, Youth and Women to inform policy and program development.

Research findings supported through child death data

Data provided from QFCC's Child Death Register has supported research in a number of fields of child death and injury prevention, leading to the following published findings:

Drowning-related research

- Peden AE, and Franklin R C 2020, 'Causes of distraction leading to supervision lapses in cases of fatal drowning of children 0–4 years in Australia: A 15-year review' *Journal of Paediatrics and Child Health*, 56(3), 450–456. <u>https://doi.org/10.1111/jpc.14668</u>
- Peden AE and Franklin RC 2019, 'Exploring flood-related unintentional fatal drowning of children and adolescents aged 0-19 years in Australia', *Safety* 5(3) DOI: 10.3390/safety5030046
- Peden AE, Franklin RC and Pearn JH 2019, 'The prevention of child drowning: the causal factors and social determinants impacting fatalities in portable pools', *Health Promotion Journal of Australia* 2019. 00:1-8. <u>http://doi.org/10.1002/hpja.282</u>
- Peden AE and 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* doi: 10.1136/archdischild-2019-318658
- Royal Life Saving Australia 2019, National Drowning Report 2019.

SUDI-related research

- Byard RW, Shipstone RA, Young J. Continuing major inconsistencies in the classification of unexpected infant deaths. *J Forensic Leg Med.* 2019;64:20–22. doi: 10.1016/j.jflm.2019.03.007
- Queensland Paediatric Quality Council 2019, 'Sudden Unexpected Deaths in Infancy (SUDI) Part 2', *Paediatric Matters*, edition 4
- Shipstone RA, Thompson JMD, Young J, and Byard RW 2019, 'The use of post-mortem lividity to determine sleep position in sudden unexpected deaths in infancy' *Acta Paediatrica* 109(6):1162-1165. doi: 10.1111/apa.14834
- Shipstone RA, Young J, Thompson JMD, and Byard RW, 2019, 'An evaluation of pathologists' application of the diagnostic criteria from the San Diego definition of SIDS and unclassified sudden infant death', *Int J Legal Med.* doi: 10.1007/s00414-019-02126-w
- Shipstone RA, Young J, Kearney L, and Thompson JMD 2020, 'Prevalence of risk factors for sudden infant death among Indigenous and non-Indigenous people in Australia', *Acta Paediatrica* doi: 10.1111/ apa.15274 [Epub ahead of print]

Suicide-related research

• Ward RM 2019, Suicide prevention: exploring Aboriginal understandings of suicides from a social and emotional wellbeing framework [Thesis (PhD/Research)]

Participation in state and national advisory groups

The COVID-19 global pandemic has disrupted planned stakeholder engagement during 2019-20, including the annual meeting of the Australian and New Zealand Child Death Review and Prevention Group which was cancelled due to travel restrictions. Many state-based networks have continued to meet via online platforms. QFCC officers participated in the following advisory bodies during 2019–20:

- Consumer Product Injury Research Advisory Group
- Infant Safe Sleep Working Group
- Queensland Government Births and Deaths Working Group
- Queensland Paediatric Quality Council Infant Mortality Sub-Committee
- Queensland Paediatric Quality Council Steering Committee
- Road Safety Research Network
- Suicide Prevention Plan Cross-agency Working Group.

A spotlight on Queensland's Consumer Product Injury Research Advisory Group (CPIRAG)

CPIRAG began from a small project in 2010, funded by the former Queensland Injury Prevention Council, analysing availability of injury data related to consumer products in QLD.

CPIRAG meets regularly and has grown to include wide-ranging representation across government, academia and industry. In addition to identifying new hazards, and sharing injury data, evidence and expertise via key stakeholder networks and public communication, CPIRAG regularly informs policy development through collaborative submissions to Government and advocates for injury prevention initiatives more broadly. This group has undertaken significant research, education and policy development in a range of areas including baby slings, infant safe sleep environments, change tables, small powerful magnets, button batteries, quad bikes, ladders, personal electric mobility devices and e-scooters, and the General Safety Provision.

Membership: ACCC; Office of Fair Trading; Electrical Safety Office; QFCC; Queensland University of Technology; Jamieson Trauma Institute; University of the Sunshine Coast, Red Nose National Scientific Advisory Group, Queensland Ambulance Service; Queensland Injury Surveillance Unit; Queensland Poisons Information Centre; Queensland Paediatric and Quality Council; and non-government agencies such as Kidsafe Queensland and Goodstart Early Learning.

Appendices

Appendix 1 – Summary tables on child deaths in Queensland

All deaths of children

Table A.1: Summary of deaths of children and young people in Queensland, 2015–20

	2015–16	2016–17	2017–18	2018–19	2019–20	5 year average
	n	n	n	n	n	Rate per 100,000
All deaths						
Deaths of children 0–17 years	390	419	385	386	378	34.0
Cause of death						
Natural causes	299	325	289	266	249	24.8
External causes	66	73	72	92	75	6.6
Transport	18	14	24	22	21	1.7
Drowning	9	19	10	16	13	1.2
Other non-intentional injury-related death	10	15	14	8	9	1.0
Suicide	20	20	24	37	20	2.1
Fatal assault and neglect	9	5	0	9	12	0.6
Unexplained deaths	25	20	24	24	19	1.9
SIDS and undetermined causes	25	20	24	24	19	1.9
Cause of death pending	0	1	0	4	35	0.7
Sudden Unexpected Deaths in Infancy (SUDI)						
Sudden unexpected infant deaths	29	30	33	26	35	0.5ª
Sex ^b						
Female	167	190	163	162	163	30.1
Male	223	229	221	224	214	37.6
Age category						
Under 1 year	235	268	242	220	246	3.9ª
1–4 years	41	53	41	50	42	17.8
5–9 years	23	27	21	27	17	6.9
10–14 years	38	35	31	32	28	10.3
15–17 years	53	36	50	57	45	26.1
Aboriginal and Torres Strait Islander status						
Indigenous	52	57	71	62	64	64.5
Non-Indigenous	338	362	314	324	314	31.3
Known to the child protection system						
Known to Child Safety	47	58	48	58	53	61.4

Data source: Queensland Child Death Register (Aug-2020)

a. Rate per 1000 births for SUDI and age under 1 year.

b Excludes deaths of children whose sex was indeterminate.

1. Data presented are current in the Queensland Child Death Register as at August 2020 and thus may differ from previously published reports. Totals in 2016–17 and 2017–18 have been revised (respectively down one and up one).

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 1000 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, 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, 2015–20

	2015–16	2016–17	2017–18	2018–19	2019–20	5 year average
	n	n	n	n	n	Rate per 100,000
Aboriginal and Torres Strait Islander deaths						
Total	52	57	71	62	64	64.5
Cause of death						
Natural causes	39	44	46	37	37	42.8
External causes	11	11	19	19	19	16.7
Transport	4	3	7	3	4	4.4
Drowning	2	3	2	3	1	2.3
Other non-intentional injury-related death	1	1	5	2	4	2.7
Suicide	4	3	5	10	7	6.1
Fatal assault and neglect	0	1	0	1	3	1.1
Unexplained deaths	2	2	6	6	3	4.0
SIDS and undetermined causes	2	2	6	6	3	4.0
Cause of death pending	0	0	0	0	5	1.1
Sudden Unexpected Deaths in Infancy (SUDI)						
Sudden unexpected infant deaths	4	3	10	5	8	1.0ª
Age category						
Under 1 year	31	35	44	34	42	6.2ª
1–4 years	9	4	8	9	7	34.1
5–9 years	5	8	5	4	1	16.9
10–14 years	2	4	4	6	4	15.5
15–17 years	5	6	10	9	10	54.9

Data source: Queensland Child Death Register (Aug-2020)

a. Rate per 1000 births for SUDI and age under 1 year.

1. Data presented are current in the Queensland Child Death Register as at August 2020 and thus may differ from previously published reports.

2. Rates are averaged over 5 years and calculated per 100,000 children (in the sex/age/Indigenous status) in Queensland, excepting rates for SUDI and age under 1 year which are per 1000 births.

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

Children known to Child Safety

Table A.3: Summary of deaths of children known to Child Safety in Queensland, 2015–20

	2015–16	2016–17	2017–18	2018–19	2019–20	5 year average
	n	n	n	n	n	Rate per 100,000
Deaths of children known to Child Safety						
Total	47	58	48	58	53	61.4
Cause of death						
Natural causes	20	26	25	22	11	24.2
External causes	18	27	18	30	27	27.9
Transport	2	2	5	2	5	3.7
Drowning	2	10	5	5	3	5.8
Other non-intentional injury-related death	5	2	6	2	2	4.0
Suicide	5	8	2	14	8	8.6
Fatal assault and neglect	4	5	0	7	9	5.8
Unexplained deaths	9	4	5	5	1	5.6
SIDS and undetermined causes	9	4	5	5	1	5.6
Cause of death pending	0	1	0	1	14	3.7
Sudden Unexpected Deaths in Infancy (SUDI)						
Sudden unexpected infant deaths	11	7	10	8	9	*
Age category						
Under 1 year	20	15	20	18	18	*
1–4 years	11	18	11	12	16	75.2
5–9 years	3	9	5	5	2	18.3
10–14 years	6	6	3	8	7	22.7
15–17 years	7	10	9	15	10	76.9

Data source: Queensland Child Death Register (Aug-2020)

Rate not calculated as no denominator data are available.

1. Data presented are current in the Queensland Child Death Register as at August 2020 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 (in each age category) who were known to Child Safety, through either being subject to a child concern report, notification, investigation and assessment, ongoing intervention, orders or placement, in the 1-year period prior to the reporting period.

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

Natural causes

Table A.4: Summary of deaths from natural causes of children and young people in Queensland, 2015–20

	2015–16	2016–17	2017–18	2018–19	2019–20	5 year average
	Total n	Total n	Total n	Total n	Total n	Rate per 100,000
All natural cause deaths						
Disease and morbid condition	299	325	289	266	249	24.8
Category						
Perinatal conditions	121	153	133	130	129	11.6
Congenital anomalies	85	87	70	60	77	6.6
Neoplasms	32	29	21	25	17	2.2
Infections ^a	22	19	28	10	7	1.5
Other disease or morbid conditions NEC	39	37	37	41	19	3.0
Sex ^b						
Female	132	152	125	116	103	22.4
Male	167	173	163	150	145	27.0
Age category						
Under 1 year	212	243	215	196	205	3.5°
1–4 years	22	30	23	27	14	9.1
5–9 years	20	19	14	14	9	4.6
10–14 years	24	17	22	17	13	5.9
15–17 years	21	16	15	12	8	7.8
Aboriginal and Torres Strait Islander status						
Indigenous	39	44	46	37	37	42.8
Non-Indigenous	260	281	243	229	212	23.2
Geographical area of usual residence (ARIA+)						
Remote	13	21	8	6	11	35.3
Regional	108	108	108	80	81	24.5
Metropolitan	170	188	161	171	151	23.3
Socio-economic status of usual residence (SEIFA)						
Low to very low	131	165	138	117	99	28.9
Moderate	60	51	50	49	58	23.3
High to very high	100	101	89	91	86	19.9
Known to the child protection system						
Known to Child Safety	19	26	25	22	11	23.9

Data source: Queensland Child Death Register (Aug-2020)

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.

b. Excludes the deaths of 2 infants of indeterminate sex in 2017–19.

c. Rate per 1000 births for age under 1 year.

1. Data presented are current in the Queensland Child Death Register as at August 2020 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 1000 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, 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 and young people in Queensland, 2015–20

	2015–16	2016–17	2017–18	2018–19	2019–20	5 year average
	Total n	Total n	Total n	Total n	Total n	Rate per 100,000
All transport deaths						
Transport	18	14	24	22	21	1.7
Incident type						
Motor vehicle	10	4	15	12	12	0.9
Pedestrian	5	5	7	7	6	0.5
Low-speed vehicle run-over	4	3	5	3	2	0.3
Motorcycle	1	2	0	2	1	0.1
Quad bike	0	0	1	0	1	*
Watercraft	0	1	1	0	0	*
Bicycle	0	1	0	1	1	*
Other	2	1	0	0	0	*
Sex						
Female	4	3	7	9	7	1.1
Male	14	11	17	13	14	2.3
Age category						
Under 1 year	0	1	1	0	0	*
1–4 years	5	4	7	5	2	1.8
5–9 years	1	2	3	6	3	0.9
10–14 years	3	2	3	4	5	1.1
15–17 years	9	5	10	7	11	4.5
Aboriginal and Torres Strait Islander status						
Indigenous	4	3	7	3	4	4.4
Non-Indigenous	14	11	17	19	17	1.5
Geographical area of usual residence (ARIA+)						
Remote	2	4	4	1	1	7.2
Regional	10	5	13	13	14	2.8
Metropolitan	4	5	7	8	5	0.8
Socio-economic status of usual residence (SEIFA)						
Low to very low	8	7	16	12	11	2.3
Moderate	0	6	2	4	4	1.4
High to very high	8	1	6	6	5	1.2
Known to the child protection system						
Known to Child Safety	2	2	5	2	5	3.7

Data source: Queensland Child Death Register (Aug-2020)

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

1. Data presented are current in the Queensland Child Death Register as at August 2020 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. The 'other' incident type category can include deaths involving aircraft, horse riding, specialised industrial vehicles and side-by-side vehicles.

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

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

6. 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, 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 and young people in Queensland, 2015-20

	2015–16	2016–17	2017–18	2018–19	2019–20	5 year average
	Total n	Total n	Total n	Total n	Total n	Rate per 100,000
All drowning deaths						
Drowning	9	19	10	16	13	1.2
Incident type						
Pool	4	7	6	8	6	0.5
Private pool	3	7	6	6	5	0.5
Public pool	1	0	0	2	1	0.1
Non-pool drownings	5	12	4	8	7	0.6
Bath	1	5	2	2	1	0.2
Beach or ocean	0	1	0	1	1	*
Dynamic waterway	2	1	1	3	1	0.1
Rural water hazard	0	1	1	0	3	0.1
Static inland waterway	2	2	0	2	0	0.1
Other	0	2	0	0	1	*
Sex						
Female	4	11	3	2	8	1.0
Male	5	8	7	14	5	1.3
Age category						
Under 1 year	0	3	1	2	0	1.9ª
1–4 years	5	11	7	6	10	3.1
5–9 years	0	4	2	4	2	0.7
10–14 years	2	0	0	1	0	*
15–17 years	2	1	0	3	1	0.8
Aboriginal and Torres Strait Islander status						
Indigenous	2	3	2	3	1	2.3
Non-Indigenous	7	16	8	13	12	1.1
Geographical area of usual residence (ARIA+)						
Remote	0	2	1	1	2	3.6
Regional	4	9	4	6	6	1.5
Metropolitan	4	7	5	4	5	0.7
Socio-economic status of usual residence (SEIFA)						
Low to very low	4	11	5	7	9	1.6
Moderate	2	5	2	1	2	1.0
High to very high	2	2	3	3	2	0.5
Known to the child protection system						
Known to Child Safety	2	10	5	5	3	5.8

Data source: Queensland Child Death Register (Aug-2020)

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

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

1. Data presented are current in the Queensland Child Death Register as at August 2020 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, 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 in Queensland, 2015–20

	2015–16	2016–17	2017–18	2018–19	2019–20	5 year average
	Total n	Total n	Total n	Total n	Total n	Rate per 100,000
All other non-intentional injury deaths						
Other non-intentional injury	10	15	14	8	9	1.0
Incident type						
Threats to breathing	2	6	3	1	2	0.2
Accidental poisoning	3	1	4	3	1	0.2
Exposure to inanimate mechanical forces	2	3	2	2	2	0.2
Deaths from fire	3	1	3	0	1	0.1
Other incidents	0	4	2	2	3	0.2
Sex						
Female	1	3	3	4	2	0.5
Male	9	12	11	4	7	1.5
Age category						
Under 1 year	1	2	1	0	0	1.3ª
1–4 years	5	3	4	3	3	1.4
5–9 years	0	0	1	1	2	0.2
10–14 years	2	8	2	2	1	0.9
15–17 years	2	2	6	2	3	1.6
Aboriginal and Torres Strait Islander status						
Indigenous	1	1	5	2	4	2.7
Non-Indigenous	9	14	9	6	5	0.8
Geographical area of usual residence (ARIA+)						
Remote	0	1	1	0	1	*
Regional	3	7	10	3	4	1.4
Metropolitan	6	7	3	4	3	0.6
Socio-economic status of usual residence (SEIFA)						
Low to very low	5	6	10	5	7	1.5
Moderate	1	4	1	0	1	0.6
High to very high	3	5	3	2	0	0.6
Known to the child protection system						
Known to Child Safety	5	2	6	2	2	4.0

Data source: Queensland Child Death Register (Aug-2020)

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

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

1. Data presented are current in the Queensland Child Death Register as at August 2020 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, 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 and young people in Queensland, 2015–20

	2015–16	2016–17	2017–18	2018–19	2019–20	5 year average
	Total n	Total n	Total n	Total n	Total n	Rate per 100,000*
All suicide deaths						
Suicide ³	20	20	24	37	20	2.1
Sex						
Female	7	6	14	18	6	4.2
Male	13	14	10	19	14	5.4
Age category						
10–17 years	20	20	23	37	20	4.8
5–9 years	0	0	1	0	0	*
10–14 years	4	8	4	8	6	1.9
15–17 years	16	12	19	29	14	9.7
Aboriginal and Torres Strait Islander status						
Indigenous	4	3	5	10	7	14.4
Non-Indigenous	16	17	19	27	13	4.0
Known to the child protection system						
Known to Child Safety	5	8	2	14	8	8.6

Data source: Queensland Child Death Register (Aug-2020)

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

1. Data presented are current in the Queensland Child Death Register as at August 2020 and thus may differ from previously published reports.

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

3. Overall suicide rates are calculated per 100,000 children aged 0–17 years in Queensland. All other rates, except known to the child protection population, are calculated per 100,000 children aged 10–17 years in Queensland.

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

5. The number of children known to the child protection system represents the number of children whose deaths were registered in the reporting period, who were known to Child Safety Services within the 1-year period prior to their death. The denominator for calculating rates is the 5-year average number of children aged 0–17 who were known to Child Safety, through either being subject to a child concern report, notification, investigation and assessment, ongoing intervention, orders or placement, in the 1-year period prior to the reporting period.

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

Fatal assault and neglect

Table A.9: Summary of deaths from assault and neglect of children and young people in Queensland, 2015-20

	2015–16	2016–17	2017–18	2018–19	2019–20	5 year average
	Total n	Total n	Total n	Total n	Total n	Rate per 100,000
All fatal assault and neglect deaths						
Fatal assault and neglect	9	5	0	9	12	0.6
Sex						
Female	6	2	0	4	6	0.6
Male	3	3	0	5	6	0.6
Age category						
Under 1 year	1	1	0	2	3	2.3ª
1–4 years	1	3	0	4	5	1.0
5–9 years	2	1	0	2	1	0.4
10–14 years	3	0	0	0	0	*
15–17 years	2	0	0	1	3	0.6
Aboriginal and Torres Strait Islander status						
Indigenous	0	1	0	1	3	1.1
Non-Indigenous	9	4	0	8	9	0.6
Geographical area of usual residence (ARIA+)						
Remote	2	0	0	0	0	*
Regional	1	0	0	6	3	0.5
Metropolitan	6	5	0	3	9	0.6
Socio-economic status of usual residence (SEIFA)						
Low to very low	2	2	0	8	4	0.7
Moderate	2	2	0	0	3	0.6
High to very high	5	1	0	1	5	0.5
Known to the child protection system						
Known to Child Safety	4	5	0	7	9	5.8
Category of fatal assault and neglect						
Intra-familial	7	5	0	7	9	0.5
Neonaticide	0	0	0	0	0	0.0
Domestic homicide	6	2	0	5	3	0.3
Fatal child abuse	0	2	0	2	3	0.1
Fatal neglect	1	1	0	0	3	0.1
Extra-familial	2	0	0	2	3	0.1
Intimate partner homicide	1	0	0	1	0	*
Peer homicide	0	0	0	0	1	*
Stranger homicide	0	0	0	0	1	*
Acquaintance homicide	1	0	0	1	1	*

Data source: Queensland Child Death Register (Aug-2020)

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

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

1. Data presented are current in the Queensland Child Death Register as at August 2020 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.

. 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, 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 and young people in Queensland, 2015-20

	2015–16	2016–17	2017–18	2018–19	2019–20	5 year average
	Total n	Total n	Total n	Total n	Total n	Rate per 100,000
All deaths from unexplained causes						
Total	25	20	24	24	19	1.9
Cause of death						
Sudden Infant Death Syndrome (SIDS) (R95)	10	8	16	12	8	17.5ª
Undetermined cause (infants) (R99)	11	9	8	6	8	13.6ª
Undetermined cause (>1 year) (R99)	4	3	0	6	3	0.3
Sex						
Female	13	13	11	8	11	2.0
Male	12	7	13	16	8	1.9
Age category						
Under 1 year	21	17	24	18	16	31.1ª
1–4 years	3	2	0	4	0	0.7
5–17 years	1	1	0	2	3	0.2
Aboriginal and Torres Strait Islander status						
Indigenous	2	2	6	6	3	4.0
Non-Indigenous	23	18	18	18	16	1.8
Geographical area of usual residence (ARIA+)						
Remote	1	0	0	2	0	1.8
Regional	9	8	11	9	5	2.1
Metropolitan	14	11	12	13	12	1.7
Socio-economic status of usual residence (SEIFA)						
Low to very low	14	9	12	16	10	2.7
Moderate	0	6	6	5	4	1.8
High to very high	10	4	5	3	3	1.1
Known to the child protection system						
Known to Child Safety	10	4	5	5	1	5.8

Data source: Queensland Child Death Register (Aug-2020)

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

Data presented are current in the Queensland Child Death Register as at August 2020 and thus may differ from previously published reports.
 Rates are averaged over 5 years and calculated per 100,000 children (in the sex/age/Indigenous status) in Queensland, excepting rates SIDS,

Undetermined causes (<1 year) and age under 1 year which are per 100,000 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, notification, investigation and assessment, ongoing intervention, orders or placement, in the 1-year period prior to the reporting period.

Sudden Unexpected Deaths in Infancy

Table A.11: Summary of SUDI infant deaths in Queensland 2015-20

	2015–16	2016–17	2017–18	2018–19	2019–20	5 year average
	Total n	Total n	Total n	Total n	Total n	Rate per 100,000
All Sudden Unexpected Deaths in Infancy (SUDI)						
SUDI (infants)	29	30	33	26	35	0.5
Cause of death						
Explained causes	9	13	9	6	1	0.1
Unrecognised infant illness	8	10	9	6	1	0.1
Sleep accident	1	2	0	0	0	*
Fatal assault	0	1	0	0	0	*
Unexplained causes	20	17	24	18	16	0.3
SIDS	10	8	16	12	8	0.2
Undetermined	10	9	8	6	8	0.1
Cause of death pending	0	0	0	2	18	0.1
Sex						
Female	17	17	13	9	21	0.5
Male	12	13	20	17	14	0.5
Aboriginal and Torres Strait Islander status						
Indigenous	4	3	10	5	8	1.0
Non-Indigenous	25	27	23	21	27	0.4
Geographical area of usual residence (ARIA+)						
Remote	1	0	0	1	0	*
Regional	12	14	17	9	11	*
Metropolitan	16	15	15	16	22	*
Socio-economic status of usual residence (SEIFA)						
Low to very low	19	17	16	18	20	*
Moderate	0	6	8	3	7	*
High to very high	10	6	8	5	6	*
Known to the child protection system						
Known to Child Safety	11	7	10	8	9	*

Data source: Queensland Child Death Register (Aug-2020)

* Rates have not been calculated for numbers less than four or where denominator data are not available.

1. Data presented are current in the Queensland Child Death Register as at August 2020 and thus may differ from previously published reports.

2. Rates are averaged over 5 years and calculated per 1000 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.

Appendix 2 — Methodology

This appendix provides an overview of the methodology employed in the production of the *Annual Report: Deaths of children and young people, Queensland, 2019–20.* It also explains the process of maintaining the Queensland Child Death Register and the methods used for the analysis of trends and patterns in the data.

Queensland Child Death Register

Under Part 3 (sections 25–29) of the *Family and Child Commission Act 2014*, the QFCC has the responsibility to maintain a register of all deaths of children and young people under the age of 18 years that are registered in Queensland. The information in the register is required to be classified according to cause of death, demographic information and other relevant factors. The Queensland Child Death Register contains information in relation to all child deaths registered in Queensland from 1 January 2004. The *Family and Child Commission Act 2014* also outlines functions of the QFCC to help reduce the likelihood of child deaths, including to conduct research, make recommendations about laws, policies, practices and services and provide access to data contained in the Queensland Child Death Register to persons undertaking genuine research. Under the *Family and Child Commission Act 2014*, the Principal Commissioner must prepare an annual report in relation to child deaths in Queensland.

To support the establishment and maintenance of the register, the Registry of Births, Deaths and Marriages and the Office of the State Coroner both advise the Principal Commissioner of a child's death and provide available relevant particulars.

Data comparability and accuracy

The *Annual Report: Deaths of children and young people in Queensland, 2019–20* brings together information from a number of key sources and presents it in a way which facilitates consideration and interpretation of the risk factors associated with the deaths of children and young people in Queensland. The report also allows comparisons to be made between different population subgroups, such as Aboriginal and/or Torres Strait Islander children and children known to the child protection system.

Caution must be exercised; however, when making comparisons and interpreting rates due to the small number of deaths analysed. An increase or decrease of one or two deaths across the course of a year may have a significant impact on the rates when small numbers are involved.

As the register relies on administrative data sources, a small margin of error is possible. There are no mechanisms available to formally verify the complete accuracy of the datasets provided to the QFCC.

Registry of Births, Deaths and Marriages

The information contained in the Queensland Child Death Register is based on death registration data from the Queensland Registry of Births, Deaths and Marriages. The *Births, Deaths and Marriages Registration Act 2003* provides the registrar must give notice of the registration of all child deaths to the Principal Commissioner.⁵⁷

⁵⁷ Section 48A (details of stillborn children are not included in the information given to the QFCC).

The data provided include:

- death registration number
- child's name
- child's date and place of birth
- child's usual place of residence
- child's age
- child's sex
- child's occupation, if any
- child's Aboriginal or Torres Strait Islander status
- duration of the last illness, if any, had by the child
- date and place of death
- cause of death, and
- mode of dying.⁵⁸

To the extent practicable, this information is provided within 30 days after the death is registered. Where the death is a natural death (due to diseases or morbid conditions), and a Cause of Death Certificate is issued by a medical practitioner, only death registration data (as outlined above) are available for analysis. In coronial cases, additional information on the death is available.

Coroners Court of Queensland

In cases of reportable child deaths, coronial information is also available. Section 8 of the *Coroners Act 2003* defines a reportable death as a death where the:

- identity of the person is unknown
- death was violent or unnatural
- death occurred in suspicious circumstances
- death was health care-related
- Cause of Death Certificate was not issued, or is not likely to be issued
- death occurred in care
- death occurred in custody, or
- death occurred in the course of, or as a result of, police operations.

A death in care occurs when the person who has died:

- had a disability (as defined under the *Disability Services Act 2006*) and was living in a residential service provided by a government or non-government service provider or hostel
- had a disability, such as an intellectual disability, or an acquired brain injury or a psychiatric disability; and lived in a private hostel (not an aged-care hostel)
- was being detained in, taken to or undergoing treatment in a mental health service, or
- was a child in foster care or under the guardianship of the Department of Child Safety, Youth and Women.⁵⁹

A death in custody is defined as a death of someone in custody (including someone in detention under the *Youth Justice Act 1992*), escaping from custody or trying to avoid custody.⁶⁰

⁵⁸ Section 48B of the *Births, Deaths and Marriages Act 2003* enables the registrar to enter into an arrangement with QFCC to provide additional data. Aboriginal and Torres Strait Islander status, date of birth and mode of dying are provided by administrative arrangement only. ⁵⁹ Section 9 of the *Coroners Act 2003*.

⁶⁰ Section 10 of the *Coroners Act 2003*.

To help the QFCC fulfil its child death review functions, the *Coroners Act 2003* imposed an obligation on the State Coroner to notify the Principal Commissioner of all reportable child deaths. The information provided by the State Coroner includes:

- the Police Report of Death to a Coroner (Form 1), which includes a narrative giving a summary of the circumstances surrounding the death
- autopsy and toxicology reports, and
- the coroner's findings and comments.⁶¹

For the major categories of reportable deaths, which include deaths from external causes and Sudden Unexpected Deaths in Infancy (SUDI), coronial information is reviewed with a view to identifying key risk factors.

Of the 378 deaths of children and young people registered in 2019–20, 38% were reportable under the *Coroners Act 2003* (142 deaths). At the time of reporting, coronial findings had been finalised for 24% (34 deaths) of reportable deaths. Autopsy reports, where autopsies were performed, were provided in 32 of the 34 finalised cases and in 31 of the 108 cases where coronial findings are still outstanding.

Access to other data sources

The QFCC has information sharing arrangements with the following agencies:

- Registry of Births, Deaths and Marriages⁶²
- Coroners Court of Queensland⁶³
- Department of Child Safety, Youth and Women (including records relating to child safety)
- Queensland Police Service
- Queensland Ambulance Service
- Department of Justice and Attorney-General (including records relating to Workplace Health and Safety Queensland)
- Australian Bureau of Statistics
- Queensland Health
- Department of Education, and
- National Coronial Information System.

Confidentiality

Accompanying the QFCC's privileged access to information is a duty of confidentiality specified in the *Family and Child Commission Act 2014*. Section 36 (Confidentiality of Information) of the Act states:

If a person gains confidential information through involvement in the administration of this Act, the person must not –

(a) make a record of the information or intentionally disclose the information to anyone, other than under subsection (3),⁶⁴ or

(b) recklessly disclose the information to anyone.

⁶¹ Section 45 of the *Coroners Act 2003* provides the Coroner must give written copies of his/her findings relating to child deaths to the Principal Commissioner. Coroners' findings are the findings of coronial investigations and should confirm the identity of the person; how, when and where the person died; and what caused the death. Section 46 provides, in the case of a child death, the Coroner must give written copies of his/her comments to the Principal Commissioner. Coroners' comments may arise from an inquest that relates to public health or safety or relates to the administration of justice or ways to prevent future deaths.

⁶² The agreement between the Registry of Births, Deaths and Marriages and the QFCC was developed in accordance with the provisions of section 48B of the Births, Deaths and Marriages Act 2003.

⁶³ The agreement between the Office of the State Coroner and the QFCC was developed in accordance with the provisions of section 54A of the *Coroners Act* 2003.

⁶⁴ Subsection 3 permitted a person to make a record of, or disclose, confidential information for this Act to discharge a function under another law, for a proceeding in a court or tribunal or if authorised under a regulation or another law.

Coding cause of death

The QFCC used the *International statistical classification of diseases and related health problems, tenth revision* (ICD-10) to code underlying and multiple causes of death. ICD-10 was developed by the World Health Organization (WHO) and is designed to promote international comparability in the collection, processing, classification and presentation of morbidity and mortality statistics.

What is the underlying cause of death?

The concept of the underlying cause of death is central to mortality coding and comparable international mortality reporting. The WHO has defined the underlying cause of death as the:

- disease or injury which initiated the chain of morbid events leading directly to death, or
- circumstances of the incident or violence which produced the fatal injury.

Stated simply, the underlying cause of death is the condition, event or circumstances without the occurrence of which the person would not have died.

Qualified mortality coders

QFCC staff trained in ICD-10 mortality coding are responsible for the coding of all external cause deaths.

In addition, the QFCC has a formal arrangement with the Australian Bureau of Statistics (ABS) for the provision of mortality coding services. Qualified ABS mortality coders review all available information for natural cause deaths and code the underlying and multiple causes of death according to ICD-10 cause of death coding regulations. ABS also undertakes quality assurance of external cause deaths coded by the QFCC.

Classification of external-cause deaths

The QFCC recognises that ICD-10 carries certain inherent limitations, particularly in regard to recognising contextual subtleties of cases, and in adequately capturing deaths due to:

- drowning in dams
- low-speed vehicle run-overs that occur in driveways
- four-wheel motorcycle (quad bike) incidents
- SUDI.

To help overcome the limitations of ICD-10, the QFCC primarily classifies deaths according to their circumstances. Based on the information contained in the Police Report of Death to a Coroner (Form 1), such classification enables the QFCC to discuss deaths occurring in similar circumstances, even where an official cause of death has not yet been established, or where the ICD-10 code does not accurately reflect the circumstances of death.⁶⁵

All reportable deaths are classified as being caused by disease and morbid conditions, transport incidents, drowning, other non-intentional injury, suicide or fatal assault and neglect. SUDI are also grouped together for the purpose of analysis.

As outlined above, discrepancies may exist between research categories and ICD-10 figures. The QFCC primarily reports by the broad external cause classifications described above. ICD-10 coding is still used to report on deaths from natural causes. Full details of ICD-10 coding for external-cause deaths can be found in Appendix 3.

⁶⁵ Cases which have not received an official cause of death, as established at autopsy or coronial investigation, cannot be coded according to ICD-10.

Geographical distribution (ARIA+)

The 2011 version of the Accessibility/Remoteness Index of Australia Plus (ARIA+) is used to code geographical remoteness. The QFCC is in the process of implementing a new database system for the Child Death Register, and will transition to the 2016 version of ARIA+ once the new system is in place.

ARIA+ is a standard distance-based measure of remoteness developed by the National Centre for the Social Applications of Geographic Information Systems (GISCA) and the former Australian Department of Health and Aged Care (now Department of Health).

It interprets remoteness based on access to a range of services; the remoteness of a location is measured in terms of distance travelled by road to reach a centre that provides services.⁶⁶

All child deaths are classified according to the ARIA+ index. The analysis of geographic distribution in the child death annual report refers to the child's usual place of residence, which may differ from the place of death or the incident location.

For the purposes of analysis in this report, the following general categories of remoteness are reported:

- Metropolitan: includes major cities of Queensland⁶⁷
- Regional: includes inner and outer regional Queensland,68 and
- Remote: includes remote and very remote Queensland.⁶⁹

Socio-economic status (SEIFA)

Of the Socio-economic Indexes for Areas (SEIFA) developed by the ABS, the Index of Advantage/ Disadvantage has been used in the child death report. This index aims to rank geographical areas to reflect both advantage and disadvantage at the same time, effectively measuring a net effect of social and economic conditions. The 2011 version of SEIFA is used within the Child Death Register, which will be transitioned to the 2016 version once the QFCC's new database system is in place.

Variables associated with advantage include the proportion of families with high incomes, the proportion of people with a university degree or higher and the proportion of people with skilled occupations.

Variables associated with disadvantage include the proportion of families with low incomes, the proportion of persons with relatively low levels of education and the proportion of people in low-skilled occupations.

To determine the level of advantage and disadvantage, the child's usual place of residence was used for coding the geographic area. For this reason, measures of socio-economic status (SES) used in the Annual Report are measures of the status of the areas in which children and young people reside, not the SES of each individual child or their family.

Aboriginal and Torres Strait Islander status

Historically, the identification of Indigenous status on death registration forms was often incomplete or inaccurate, leading to an undercount of the actual numbers of deaths of Aboriginal and/or Torres Strait Islander people. The identification of the deaths of Indigenous people has improved considerably in recent years; however, the extent of any continued under-reporting is not known and it is likely some undercount of the number of deaths registered as Aboriginal and/or Torres Strait Islander continues.

⁶⁶ ARIA+ is a purely geographic measure of remoteness, which excludes any consideration of socio-economic status, rurality and population size factors (other than the use of natural breaks in the population distribution of urban centres to define the service centre categories).

⁶⁷ Relatively unrestricted accessibility to a wide range of goods and services and opportunities for social interaction.

⁶⁸ Significantly restricted accessibility of goods, services and opportunities for social interaction.

⁶⁹ Very restricted accessibility of goods, services and opportunities for social interaction.

The child death register records Aboriginal and/or Torres Strait Islander status as noted in the death registration data, on the Form 1 and in other official records. There are instances of inconsistent reporting of Aboriginal and/or Torres Strait Islander status across official records. For instance, several cases have been recorded where a child has been identified as Indigenous by the reporting police officer in completing the Form 1; but the death registration form, often completed by funeral directors on behalf of family members, did not identify the child as Indigenous. In cases where there has been inconsistent reporting of Aboriginal and/or Torres Strait Islander status across official records, a guideline is used by the QFCC to determine which status will be recorded within the register.

Children known to the child protection system

The deaths of children known to the child protection system have been analysed as a separate cohort, as the Queensland child protection system has legislative responsibilities in relation to these deaths. In accordance with Chapter 7A of the *Child Protection Act 1999*, the deaths of all children known to the Queensland child protection system are subject to an internal review by the Department of Child Safety, Youth and Women (DCSYW). These reviews are undertaken to facilitate learning, improve service delivery and promote accountability.⁷⁰

A child is deemed to have been known to the Queensland child protection system, if within one year before the child's death:

- DCSYW was notified of concerns of alleged harm or risk of harm, or
- DCSYW 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
- DCSYW took action under the Child Protection Act 1999, or
- the child was in the custody or guardianship of DCSYW.⁷¹

Prior to 1 July 2014, a review was required if the child was known to the department within the 3 years before their death. The timeframe was reduced to one year, following recommendations made in the *Queensland Child Protection Commission of Inquiry Final Report—Taking Responsibility: A Road Map for Queensland Child Protection.* This change was made to focus the reviews on recent service delivery (that is, on policies and procedures that are likely to still be in place) and to enhance opportunities for in-depth exploration of the various decisions and issues.⁷² The scope of these reviews was also expanded to include children who have suffered serious physical injuries.⁷³

Analysis and reporting

Analysis period

The Queensland Child Death Register is analysed according to date of registration of the death (rather than date of death). This is in accordance with national datasets managed by the ABS and the Australian Institute of Health and Welfare (AIHW), as well as child death datasets managed by other Australian states and territories.

Reporting period

This annual report examines the deaths of 378 children and young people aged from birth to 17 years, registered between 1 July 2019 and 30 June 2020.

⁷⁰ Section 245(3) of the Child Protection Act 1999.
 ⁷¹ Section 246A of the Child Protection Act 1999.
 ⁷² Child Death Case Review Committee 2012, Submission to the Child Protection Commission of Inquiry; Department of Communities, Child Safety and Disability Services 2012, Submission to the Child Protection Commission of Inquiry.
 ⁷³ Section 246 of the Child Protection Act 1999.

Place of residence

The Queensland Child Death Register records the deaths of children which occur within Queensland, regardless of the child's usual place of residence. Deaths of interstate and international residents that occur within Queensland are therefore recorded (visitors, holidaymakers and children who die while accessing specialist and emergency medical care). Deaths of Queensland residents that occur within other jurisdictions are not recorded.

Differences from previously published data

Information on child deaths can be received at a much later date than the original registration data, following processes of child death reviews, autopsies and coronial investigations. A critical element of the register's comprehensiveness and research value is the inclusion of new information relating to individual child deaths as it is received. However, it should be noted the information on deaths in previous periods may therefore differ from those presented in earlier published annual reports.

Copies of the Appendix 1 summary tables containing the complete 16-year time series data are available online at <u>www.qfcc.qld.gov.au</u>.

Population data used in calculations of child death rates

Child death rates are calculated per 100,000 children (for each sex/age category/Indigenous status/child protection status/ARIA+ region/SEIFA region) in Queensland.

This annual report uses the estimated resident population (ERP) data to calculate rates, excepting for the age group under 1 year where the number of births is used as the denominator. Infant mortality rates are calculated per 1000 births; however, for comparative purposes rates are also presented as per 100,000 births. Rates are not calculated for numbers less than four deaths because of the unreliability of such calculations.

In this report, 5-year mortality rates are calculated as the average number of deaths over 5 years divided by the average population (or births) over 5 years.

The Queensland Government Statistician's Office provides updated ERPs each year. ERP by age, sex and Indigenous status for the latest year 2019 were preliminary at the time of reporting. ERPs for SEIFA and ARIA+ and for births were missing for 2019. In calculations, the 2018 values were used as proxies to replace the missing 2019 values.

Infant mortality rates

Chapters 1 and 2 present infant mortality rates, defined as the number of deaths of infants aged under one year per 1000 live births. In the 2018 calendar year, there were 61,931 live births in Queensland, including 6362 Indigenous live births.⁷⁴

Rates of death for children known to the child protection system

Rates of death for children known to Child Safety are calculated using, as the denominator, the number of distinct children known to the Queensland child protection system in the one-year period before the relevant financial year.

The denominator data, shown in Table A.12, represents the number of distinct children (aged 0–17 years) who had any of the following forms of contact with the Child Safety in the preceding financial year:

- Child Concern Report
- Child Protection Notification
- Investigation and Assessment Order
- Ongoing intervention
- Child Protection Order, or
- Placement in care.

Table A.12: Children known to the Queensland child protection system

Reporting period	Number of distinct children known to the child protection system
2015–16	84,262
2016–17	80,510
2017–18	84,597
2018–19	88,824
2019–20	92,040

Data source: DCSYW (2020)

Appendix 3 — Abbreviations and definitions

ABS	Australian Bureau of Statistics.
Acquaintance homicide	A child killed by an adult (over 18 years) known to-but not intimately connected with or in a friendship with-the victim. Perpetrators may include neighbours, family friends, teachers or a person who had interacted with the child in an online context. This differs from domestic homicide, where there is an unambiguous familial association, and stranger homicide, where there is no prior association whatsoever between the perpetrator and victim.
AIHW	Australian Institute of Health and Welfare.
ANZCDR&PG	Australian and New Zealand Child Death Review and Prevention Group.
ARIA+	Accessibility/Remoteness Index of Australia Plus. An index of remoteness derived from measures of road distance between populated localities and service centres. These road distance measures are then used to generate a remoteness score for any location in Australia.
Autopsy	Also 'post-mortem'. A detailed physical examination of a person's body after death. An autopsy can be external only, external with full internal or external with partial internal.
Bathtub	A large open container for water in which a person may wash their body and includes a bathtub or baby bath.
Beach or ocean	Beach refers to the shoreline of an ocean (the land component) and ocean refers to the sea.
Bullying	Repeated hurtful behaviour which involves a power imbalance. It includes physical, verbal, social (often covert) and cyber bullying behaviours.
Bystander	Pedestrian incident in which a child who has not entered or attempted to enter a roadway or other area where vehicles are usually driven, is struck by a vehicle that has left the designated roadway or area. For example, a child playing in the front yard of a home is struck by a vehicle that has left the roadway after the driver has lost control.
Cause of death pending	Used to categorise deaths that do not have an immediately obvious cause (such as a transport incident), and where official cause of death information has not yet been received to enable classification.
CCYPCG	The Commission for Children and Young People and Child Guardian (Qld). The CCYPCG ceased operations on the 30 June 2014 following the repeal of the <i>Commission for Children and Young People and Child Guardian Act 2000.</i> Prior to the establishment of the QFCC on 1 July 2014, the CCYPCG was responsible for maintaining the Queensland Child Death Register.
Child	A person aged from birth up to, but not including, 18 years.
Child known to Child Safety	A child is deemed to have been known to Child Safety if, within one 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 <i>Child Protection Act 1999</i>, or if the child was in the custody or guardianship of Child Safety.⁷⁵

Congenital anomalies	Congenital anomalies (ICD-10 Chapter XVII, Congenital malformations, deformations and chromosomal abnormalities) are mental and physical conditions present at birth that are either hereditary or caused by environmental factors.
CPR	Cardiopulmonary resuscitation.
Death in care	 A death as defined under section 9 of the <i>Coroners Act 2003</i>. This occurs when a person who had died: had a disability and was living in a residential service provided by a government or non-government service provider or hostel had a disability and lived in a private hostel (not aged-care) was being detained in, taken to, or undergoing treatment in a mental health service
	• was a child in foster care or placed at a residential facility under the guardianship of the DCSYW.
Death in custody	A death as defined under section 10 of the <i>Coroners Act 2003</i> . This includes the death of someone in custody (including someone in detention under the <i>Youth Justice Act 1992</i>), escaping from custody or trying to avoid custody.
Death incident location	The address at which the set of circumstances leading to death occurred. This may be the same as, or different from, the place of death.
DCSYW	Department of Child Safety, Youth and Women (Qld). Queensland government agency responsible for administering the <i>Child Protection Act 1999</i> .
Diseases and morbid conditions	Also referred to as natural causes. A cause of death category used for those cases where the official cause of death has been given an ICD-10 Underlying Cause of Death which corresponds to Chapters 1–17 of the ICD Codebook (except deaths coded as R95 and R99 which are included in unexplained causes). Diseases and morbid conditions cannot be assigned as a category of death until an official cause of death has been received and coded. All reportable deaths suspected to be the result of a disease or morbid condition are assigned a category of death of 'Unknown–cause of death pending', until the official cause of death has been received and coded. Previous reports included unexplained diseases and morbid conditions within this category; however, in this report they are referred to as unexplained causes and are included as a discrete category.
Domestic homicide	Homicide committed by someone in the child's familial network or foster carer where there is a clear intent to cause life threatening injury on the part of the perpetrator. Such events are usually characterised by evidence of a breakdown in the parental relationship and/or acute mental illness in one or both parents. It is characterised by an obvious critical event or angry impulse in which the perpetrator acts overtly (and usually suddenly) to end the life of one or more family members. Children of any age may be victims. It is common in cases of domestic homicide for a perpetrator to suicide subsequent to their killing of one or more family members. This subtype of domestic homicide is often referred to as murder-suicide. Parents, step-parents, foster parents and extended family members can be involved in these incidents.
Drowning	Deaths that occur as a direct or indirect result of immersion in some form of liquid.
Dynamic waterway	A waterway with a flowing momentum, that is rivers and/or creeks.
ERP	Estimated resident population.
External causes of death	Pertaining to environmental events and circumstances that cause injury, poisoning and other adverse effects. Broadly, external-cause deaths are generally more amenable to prevention than many deaths from disease and morbid conditions.

Fatal assault	Death of a child at the hands of another person who has inflicted harm to them through some means of force or physical aggression.
Fatal child abuse	Describes deaths from physical abuse perpetrated by a parent or caregiver against a child who is reliant upon them for care and protection where the intent was to harm the child (e.g. over-use of force or excessive disciplinary behaviours). It may be characterised by a history of chronic and escalating abuse or by an isolated incident. It also includes cases where the child is permanently injured from physical harm but dies at a later stage from medical issues initiated by the physical harm incident (late effects of abuse). Victims are predominantly infants, toddlers and preschool-aged children.
Fatal neglect	Defined as where a child, dependent on a caregiver for the basic necessities of life, dies owing to the failure of the caregiver to meet the child's ongoing basic needs. This may involve acts or omissions on the part of a caregiver that are either deliberate or extraordinarily irresponsible or reckless. It is most likely to involve younger children who are wholly reliant upon their primary caregivers.
Floodwater	A body of water that has escaped its usual boundaries (including overflows of drainage systems), water that exceeds the capacity of the structure normally holding it (including creeks and rivers), or water that temporarily covers land not normally covered by water (flash flooding).
ICD-10	International statistical classification of diseases and related health problems, tenth revision.
Indigenous	Refers to people who identify as being Aboriginal and/or Torres Strait Islander.
Intimate partner homicide	Homicide committed by intimate partners or former intimate partners. Intimate refers to a romantic or coupled relationship characterised by a level of mutual trust, dependence or commitment between the child and the perpetrator. It does not include friendship-only relationships. There is no age threshold for this category.
Known to be in or on water	When a child aged under 5 years is known by the carer to be actively swimming, paddling, wading, playing, bathing in water or on a watercraft.
Known to be around water	When the carer of a child aged under 5 years is aware of the existence of a nearby water hazard and a reasonable person could foresee that the child could quickly or easily gain access to it (i.e. no barrier or a defective barrier). Examples include where a carer leaves a child playing on the floor of the bathroom while the bath is filling up, or the carer leaves the child playing in the backyard but has propped open the pool gate.
Low-speed vehicle run- over	An incident where a pedestrian is injured or killed by a slow-moving vehicle travelling forwards or reversing. The incident can occur in a non-traffic area (e.g. residential driveway) or as a vehicle is merging into or out of a traffic area (e.g. school pick-up zone).
Neonatal death	A neonatal death is the death of an infant within 0–27 days of birth who, after delivery, breathed or showed any other evidence of life, such as a heartbeat. This is the definition used by the Australian Bureau of Statistics in all cause-of-death publications.
Neonaticide	The killing of an infant within 24 hours of birth. It is to be differentiated from infanticide, which is commonly defined as the killing of an infant under the age of one year by a parent. Neonaticide is typically characterised by an attempt to conceal birth by disposing of the foetal remains but can also include intentional harm to the infant (regardless of the presence of mind of the offender at the time). This definition does not limit neonaticide to acts or omissions involving mothers, as fathers and stepfathers may also be involved.

Neoplasms (cancers and tumours)	The term 'neoplasm' (ICD-10 Chapter II) is often used interchangeably with words such as 'tumour' and 'cancer'. Cancer includes a range of diseases in which abnormal cells proliferate and spread out of control. Normally, cells grow and multiply in an orderly way to form organs that have a specific function in the body. Occasionally; however, cells multiply in an uncontrolled way after being affected by a carcinogen, or after developing a random genetic mutation. They may form a mass that is called a tumour or neoplasm. A 'benign neoplasm' refers to a non-cancerous tumour, whereas a 'malignant neoplasm' usually refers to a cancerous tumour (that is, cancer). Benign tumours do not invade other tissues or spread to other parts of the body, although they can expand to interfere with healthy structures.
Notifiable condition	A condition made notifiable to state health authorities if there is potential for its control. See Appendix 4 for a full list of notifiable conditions.
Not known to be around water	When the carer of a child aged under 5 years is not aware the child is exposed to a water hazard (i.e. the carer thinks the water hazard is appropriately restricted and is not aware that the child has gained access to it) or the presence of the water hazard was not known. Examples include where a child is thought to be sleeping or playing safely in a restricted area but has gained access to a water hazard by climbing the fence to the pool or filling up the bathtub.
Object containing water	An object that acts as a vessel for water such as a mop bucket or laundry bucket.
Other non-intentional injury-related deaths	Other non-intentional injury-related deaths include those resulting from a fall, electrocution, poisoning, suffocation, strangulation and choking, fire, and other non-intentional injury-related deaths that are not discussed in chapter 3 (Transport) or chapter 4 (Drowning) of the Annual Report. The complete list is included in Appendix 5.
Peer homicide	Lethal confrontations that occur between peers. Peers are classified as young people (under 18 years) who are of a similar age and/or developmental level, or two people of any age who are friends and therefore of the same social standing and peer network.
Peer passengers	Refers to the laws regarding restrictions on the number of passengers that a P1- type provisional licence holder under 25 years may carry in a vehicle. During the period between 11pm on a day and 5am on the next day, the P1-type provisional driver must not drive on a road in a vehicle carrying more than one passenger under the age of 21 years who is not an immediate family member.
Perinatal condition	Perinatal conditions (ICD-10 Chapter XVI, Certain conditions originating in the perinatal period) are diseases and conditions that originated during pregnancy or the neonatal period (first 28 days of life), even though death or morbidity may occur later. These include maternal conditions that affect the newborn, such as complications of labour and delivery, disorders relating to foetal 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.
Perinatal period	The perinatal period refers to infants of at least 20 weeks gestation or at least 400 grams birth weight, and all neonates (all live born babies up to 28 completed days of life after birth, regardless of gestational age or birth weight). This is based on the ABS definition of the perinatal period. The ABS has adopted the legal requirement for registration of a perinatal death as the statistical standard as it meets the requirements of major users in Australia. This definition differs from the World Health Organization's recommended definition of perinatal deaths, which includes infants and foetuses weighing at least 500 grams or having a gestational age of 22 weeks or a body length of 25 centimetres crown–heel.
Place of death	The address at which the child was officially declared deceased.
	-

Place of usual residence	The address nominated by the child's family as the child's primary residential address upon registering the death with the Registry of Births, Deaths and Marriages.
Police Report of Death to a Coroner (Form 1)	A form completed by the police in accordance with section 7 of the <i>Coroners Act</i> 2003–Duty to Report Deaths.
Post-neonatal death	A post-neonatal death is the death of an infant 28 or more days, but less than 12 months, after birth. This is the definition used by the ABS in all cause-of-death publications.
Postvention	The provision of crisis intervention, support and assistance for those affected by a completed suicide.
Precipitating factor	An event that occurred in the months preceding a young person's suicide which may be considered to have contributed to the young person's decision to take their own life.
Principal Commissioner	Principal Commissioner of the Queensland Family and Child Commission.
Quad bike	Previously referred to as all-terrain vehicles (ATVs), these are four-wheeled motorcycles primarily used for agricultural purposes
QFCC	Queensland Family and Child Commission enacted by the <i>Family and Child Commission Act 2014</i> on 1 July 2014.
The Registrar	Registrar of the Registry of Births, Deaths and Marriages (Qld).
Registry	Registry of Births, Deaths and Marriages (Qld).
	 includes any death where the: identity of the person is unknown death was violent or unnatural death occurred in suspicious circumstances death was health care-related Cause of Death Certificate was not issued and is not likely to be issued death occurred in care death occurred in custody, or death occurred in the course of, or as a result of, police operations.
Rural water hazard	Sources of water used in agricultural activities, such as dams, irrigation channels, livestock dips and troughs.
SES	Socio-economic status.
SEIFA	Socio-Economic Indexes for Areas 2011. Developed by the ABS using data from the 2011 Census of Population and Housing, SEIFA 2011 provides a range of measures to rank areas based on their relative social and economic wellbeing.
Self-harm	The non-socially or culturally sanctioned deliberate destruction of one's own body tissue and can be suicidal or non-suicidal in intent. Generally it does not include self-harm that is done for religious or cultural purpose, such as rites of passage.
Sex	The biological distinction between male and female, as separate and distinct from a person's gender or sexual identity. Indeterminate sex is recorded where medical practitioners are unable to ascertain an infant's sex due to extreme prematurity or non-viable gestation.
SIDS	Sudden infant death syndrome.
Speeding/excessive speed	May be a contributing factor when police have indicated that speed was definitely or likely a factor in the death incident or there is other evidence which can confirm the speed at which the vehicle was travelling to be above the speed limit for the place of incident.
Static inland waterway	A waterway without a flowing momentum such as dams and ponds.

Stillborn/stillbirth A stillborn child is a child who has shown no sign of respiration or hearthcat, or other sign of life, after completely leaving the child's mother and who has been gestated for 20 wecks or more, or weighs 400 grams or more. Stranger homicide A child death that occurs at the hands of an adult person (over 18 years) who is unknown to the child. Stressful life event An event that occurred over the course of the child's life, with the stressor first occurring more than six months before death. These types of events are often considered to be more chronic and longstanding in nature than a precipitating incident. Sudden cardiace death An unexplained or presumed arrhythmic sudden death, occurring in a short time period (generally within one hour of symptom onset), in a child or young person with no previously known cardiac discase. SUDI Sudden unexplected death in infancy. This is a research classification and does not correspond with any single medical definition or categorisation. The aim of the grouping is to report on the deaths of anparently normal infants who would on ot survive. The QFCC adopted the following working criteria for the inclusion cases in the SUDI grouping: the death was unexpected, the infant had no known condition likely to cause death, and the infant had no immediately obvious cause of death. Suicidal act Involves self-inflicted injury that is accompanied by the intention of the individual to die from the result of the action taken. Suicidal intent Suicidal intent may be communicated directly or implied to a significant person in a child or young person's life such as a family member/carer, fiend, health professional or educator. Notitcasto		
Stranger homicide A child death that occurs at the hands of an adult person (over 18 years) who is unknown to the child. Stressful life event An event that occurred over the course of the child's life, with the stressor first occurring more than six months before death. These types of events are often considered to be more chronic and longstanding in nature than a precipitating incident. Sudden cardiac death An unexplained or presumed arhythmic sudden death, occurring in a short time period (generally within one hour of symptom onset), in a child or young person with no previously known cardiac disease. SUDI Sudden unexpected death in infancy. This is a research classification and does not correspond with any single medical definition or categorisation. The aim of the grouping is to report on the deaths of apparently normal infants who would be expected to thrive yet, for reasons often not known or immediately apparent, do not survive. The QFCC adopted the following working criteria for the inclusion of cases in the SUDI grouping: the death was or an infant less than on year of agg, the death was sudden in mature, the death was unexpected, the infant had no known condition likely to cause death, and the infant had no immediately obvious cause of death. Suicidal contagion The process by which a prior suicide or attempted suicide facilitates or influences suicidal ideation Suicidal intent Suicidal intent may be communicated directly or implied to a significant person is child yourg person's iffe such as a family member/care, friend, health professional or educator. Notification of suicidal intent may occur in person, be verbalised with telephone or be written or expressed using online technology (SMS text messagli	Stillborn/stillbirth	A stillborn child is a child who has shown no sign of respiration or heartbeat, or other sign of life, after completely leaving the child's mother and who has been gestated for 20 weeks or more, or weighs 400 grams or more.
Stressful life eventAn event that occurred over the course of the child's life, with the stressor first occurring more than six months before death. These types of events are often considered to be more chronic and longstanding in nature than a precipitating incident.Sudden cardiac deathAn unexplained or presumed arrhythmic sudden death, occurring in a short time period (generally within one hour of symptom onset), in a child or young persons with no previously known cardiac disease.SUDISudden unexpected death in infancy. This is a research classification and does not correspond with any single medical definition or categorisation. The aim of the grouping is to report on the deaths of apparently normal infants who would be expected to thriv yet, for reasons often not known or immediately apparent, do not survive. The OFCC adopted the following working criteria for the inclusion of cases in the SUDI grouping: the death was of an infant less than one year of age, the death was sudden in nature, the death was unexpected, the infant had no known condition likely to cause death, and the infant had no immediately obvious cause of death.Suicidal aetInvolves self-inflicted injury that is accompanied by the intention of the individual to die from the result of the action taken.Suicidal ideationThe explicit communicatied directly or implied to a significant person in a child or young person's life such as a family member/carer, friend, health professional or educator. Notification of suicidal intent may occur in person, be verbalised via telephone or be written or expressed using online technology (SMS text messaging, online messenger and email, or through social media platforms).Suicidal intentSa suicidal act causing injury but not leading to death.Suicide attemptA	Stranger homicide	A child death that occurs at the hands of an adult person (over 18 years) who is unknown to the child.
Sudden cardiac death An unexplained or presumed arrhythmic sudden death, occuring in a short time period (generally within one hour of symptom onset), in a child or young person with no previously known cardiac disease. SUDI Sudden unexpected death in infancy. This is a research classification and does not correspond with any single medical definition or categorisation. The aim of the grouping is to report on the deaths of apparently normal infants who would be expected to thrive yer, for reasons often not known or immediately apparent, do not survive. The QFCC adopted the following working criteria for the inclusion of cases in the SUDI grouping: the death was of an infant less than one year of age, the death was sudden in nature, the death was unexpected, the infant had no known condition likely to cause death, and the infant had no immediately obvious cause of death. Suicidal act Involves self-inflicted injury that is accompanied by the intention of the individual to die from the result of the action taken. Suicidal ideation The explicit communication of having thoughts of suicide. Suicidal intent Suicidal intent may be communicated incetly or implied to a significant person in a child or young person's life such as a family member/carer, friend, health professional or educator. Notification of suicidal intent may occur in person, be verbalised via telephone or be written or expressed using online technology (SMS text messaging, online messenger and email, or through social media platforms). Suicide Death resulting from a voluntary and deliberate act against conself, where death is a reasonably expected outcome of such act. This includes those cases where it can be established the person intended to die and those where it	Stressful life event	An event that occurred over the course of the child's life, with the stressor first occurring more than six months before death. These types of events are often considered to be more chronic and longstanding in nature than a precipitating incident.
SUDISudden unexpected death in infancy. This is a research classification and does not correspond with any single medical definition or categorisation. The aim of the grouping is to report on the deaths of apparently normal infants who would be expected to thrive yet, for reasons often not known or immediately apparent, do not survive. The QFCC adopted the following working criteria for the inclusion of cases in the SUDI grouping: the death was of an infant less than one year of age, the death was sudden in nature, the death was unexpected, the infant had no known condition likely to cause death, and the infant had no immediately obvious cause of death.Suicidal actInvolves self-inflicted injury that is accompanied by the intention of the individual to die from the result of the action taken.Suicidal ideationThe process by which a prior suicide or attempted suicide facilitates or influences suicidal behaviour in another person.Suicidal intentSuicidal intent may be communicated directly or implied to a significant person in a child or young person's life such as a family membr/carer, friend, health professional or educator. Notification of suicidal intent may occul in person, be verbalised via telephone or be written or expressed using online technology (SMS text messaging, online messenger and email, or through social media platforms).SuicideDeath resulting from a voluntary and deliberate act against oneself, where death s a reasonably expected outcome of such act. This includes those cases where it can be established the person intended to die and those where intent is unclear, or the person may not have the capacity of reason to intend death, such as children under 15 years or persons with a serious mental illness.Suicide attemptA suicidal act causing injury but not leading to death	Sudden cardiac death	An unexplained or presumed arrhythmic sudden death, occurring in a short time period (generally within one hour of symptom onset), in a child or young person with no previously known cardiac disease.
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	WHO	World Health Organization.

Appendix 4 — Cause of death by ICD-10 mortality coding classification

Table A.13 provides a summary of the ICD-10 categories for child deaths from diseases and morbid conditions (or natural causes) registered during 2019–20. Table A.14 provides the ICD-10 categories for child deaths from external causes.

The numbers in Table A.13 are equal to the numbers of deaths from explained diseases and morbid conditions and unexplained causes (SIDS and Undetermined) presented in the Annual Report. Deaths are categorised as such only when an official cause of death has been assigned by Queensland Health or the Coroner, which provides the necessary information to determine the ICD-10 code.

The numbers in Table A.14 will not necessarily equal the numbers of external-cause deaths presented in the Annual Report. In some cases, the general nature of the death can be identified (e.g. transport-related death); however there is insufficient information to determine the underlying cause of death. An ICD-10 code cannot be assigned for these cases until an official cause of death has been determined. As such, these cases have not been included in Table A.13.

Table A.13: Deaths from diseases and morbid conditions and unexplained causes (number) 2019–20

Cause of death	Under 1 year	1–4 years	5–9 years	10–14 years	15–17 years	Total
Diseases and morbid conditions	205	14	9	13	8	249
Certain infectious and parasitic diseases (A00–B99)	0	3	0	0	0	3
Neoplasms (C00–D48)	2	4	2	7	2	17
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50–D89)	1	0	0	0	0	1
Endocrine, nutritional and metabolic diseases (E00–E90)	2	0	0	1	1	4
Diseases of the nervous system (G00–G99)	1	2	3	0	2	8
Diseases of the circulatory system (100–199)	3	0	0	0	0	3
Diseases of the respiratory system (J00–J99)	1	1	0	0	0	2
Diseases of the digestive system (K00–K93)	1	0	0	0	1	2
Diseases of the genitourinary system (N00–N99)	0	1	0	1	0	2
Certain conditions originating in the perinatal period (P00–P96)	128	0	1	0	0	129
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	66	3	3	4	1	77
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	0	0	0	0	1	1
Unexplained causes	16	0	0	2	1	19
Sudden infant death syndrome (R95)	8	0	0	0	0	8
Other ill-defined and unspecified causes of mortality (R99)	8	0	0	2	1	11
Total	221	14	9	15	9	268

Table A.14: De	eaths from	external cau	ıses (number)	2019-20
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Cause of death	Under 1 year	1–4 years	5–9 years	10–14 years	15–17 years	Total
Transport total	0	2	3	5	11	21
Pedestrian injured in transport accident (V01–V09)	0	2	1	1	2	6
Pedal cyclist injured in transport accident (V10–V19)	0	0	1	0	0	1
Car occupant injured in transport accident (V40–V49)	0	0	1	3	8	12
Motorcycle rider injured in transport accident (V20–V29)	0	0	0	0	1	1
Other land transport accidents (V80–V89)	0	0	0	1	0	1
Fatal assault and neglect total	3	5	1	0	3	12
Assault (X85-Y09)	3	3	1	0	3	10
Event of undetermined intent (Y10–Y34)	0	2	0	0	0	2
Other non-intentional injury-related death total	0	3	2	1	3	9
Falls (W00–W19)	0	0	0	0	1	1
Exposure to inanimate mechanical forces (W20–W49)	0	1	1	0	0	2
Exposure to animate mechanical forces (W50–W64)	0	0	0	0	1	1
Other accidental threats to breathing (W75–W84)	0	1	0	1	0	2
Exposure to smoke, fire and flames (X00–X09)	0	0	1	0	0	1
Exposure to forces of nature (X30–X39)	0	1	0	0	0	1
Accidental poisoning by and exposure to noxious substances (X40–X49)	0	0	0	0	1	1
Drowning total	0	10	2	0	1	13
Accidental drowning and submersion (W65–W74)	0	10	2	0	1	13
Suicide total	0	0	0	6	14	20
Intentional self-harm (X60–X84)	0	0	0	6	14	20
Total	3	20	8	12	32	75

88

Appendix 5 — Notifiable diseases

Table A.15: Schedule of Notifiable Conditions (Public Health Regulation 2018)

Acute flaccid paralysisDAcute flaccid paralysisDengueAcute viral hepatitisDiphtheriaAdverse event following vaccinationDiphtheriaAdverse event following vaccinationFAnthraxFArbovirus (mosquito borne) infectionsF- alphavirus infections including:Food-borne or waterborne illness in 2 or more cases- getahG- sindbisH- bunyavirus infections including:G- granHaemolytic uraemic syndrome (HUS)- termeilHaemolytis influenzae type b infection (invasive)- trubanamanHepatitis A• fatvirus infections including:Hepatitis B- trubanamanHepatitis C- terde fluyHepatitis C- terde fluyHepatitis C- StratfordHepatitis COther unspecified arbovirus infectionsHepatitis (other)NB: dengue fever, yellow fever, Japanese encephaltisInfluenzaand Muray Valley encephalitis are listed separatedInvasi group A streptococcal infectionAvian influenzaJBJapanese encephalitisBotulismLead exposure (5 ug/dL or more)BrucellosisLead exposure (5 ug/dL or more)ChancoidListeriosisChancoidListeriosis	Α	Cryptosporidiosis			
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Chikungunya	Chancroid	Leptospirosis			
emitanganja	Chikungunya	Listeriosis			
Chlamydia trachomatis infection Lyssavirus (unspecified)	Chlamydia trachomatis infection	Lyssavirus (unspecified)			
Cholera M	Cholera	Μ			
Ciguatera poisoning Malaria	Ciguatera poisoning	Malaria			
Coronaviruses Measles	Coronaviruses	Measles			
COVID-19 Melioidosis	• COVID-19	Melioidosis			
Middle East respiratory syndrome coronavirus Meningococcal disease (invasive)	Middle East respiratory syndrome coronavirus	Meningococcal disease (invasive)			
(MEKS-COV) • severe acute respiratory syndrome (SARS) Mumps	(MEKS-COV) • severe acute respiratory syndrome (SARS)	Mumps			
Cruetzfeldt_Jakob disease Murray Valley encephalitis	Cruetzfeldt_Jakoh disease	Murray Valley encephalitis			

N
Non-tuberculous mycobacterial diseases
Р
Paratyphoid
Pertussis
Plague
Pneumococcal disease (invasive)
Poliomyelitis
Psittacosis (Ornithosis)
Q
Q fever
R
Rabies
Rheumatic heart disease
Rotavirus
Rubella (including congenital rubella)
S
Salmonellosis
Shiga toxin or vero toxin producing Escherichia coli infection (STEC/VTEC)
Shigellosis
Smallpox
Syphilis (including congenital syphilis)
Т
Tetanus
Tuberculosis
Tularaemia
Typhoid
V
Varicella–zoster virus infection (chickenpox, shingles and unspecified)
Viral haemorrhagic fevers (Crimean-Congo, Ebola, Lassa fever and Marburg viruses)
Y
Yellow fever
Yersiniosis
Z
Zika virus

Appendix 6 — Inclusions within the other non-intentional injury category

Causes of death included in other non-intentional injury-related death category:

- falls
- exposure to inanimate mechanical forces, examples include:
 - struck by object
 - caught or crushed between objects
 - contact with machinery
 - foreign body entering through eye, orifice or skin
- exposure to animate mechanical forces, examples include:
 - struck by other person
 - struck or bitten by mammal
 - contact with marine animal
- threats to breathing, examples include:
 - non-intentional suffocation or strangulation
 - threat to breathing due to cave-in, falling earth and other substances
 - inhalation of gastric contents
- exposure to electrical current, radiation and extreme ambient air temperature/pressure
- exposure to smoke, fire and flames
- exposure to heat and hot substances
- contact with venomous animals and plants
- exposure to forces of nature, examples include:
 - lightning
 - exposure to sunlight
 - excessive natural cold
- accidental poisoning by noxious substances, examples include:
 - inhalation of volatile substances
 - non-intentional overdose
 - unintended consumption
- complications of medical and surgical care.

Appendix 7 — Suicide classification model

The suicide classification model is used to classify all cases of suspected suicide into one of three levels of certainty.⁷⁶ In classifying these deaths, the QFCC considers a number of factors, including whether intent was stated previously, the presence of a suicide note, witnesses to the event, previous suicide attempts and any significant precipitating factors or life stressors.

Information used to classify suicide certainty is based on data available to the QFCC at the time of reporting. Information is gathered from numerous records, including the Police Report of Death to a Coroner (Form 1), additional information requested from police (including the contents of suicide notes), autopsy and toxicology report, child protection system records and coronial findings.

Levels of classification are as follows:

- **Confirmed:** The available information refers to at least one significant factor that constitutes a virtually certain level of suicide classification, or coronial investigations have found that the death was a suicide.
- **Probable:** The available information is not sufficient for a judgement of confirmed, but is consistent more with death by suicide than with death by any other means. Risk factors for suicide have been identified and/or the method and circumstances surrounding the death are such that intent may be inferred.
- **Possible/undetermined:** The police have indicated (on the Form 1) that the case is a suspected suicide or the QFCC identified the possibility of a suicide but, because of a lack of information on the circumstances of the death, there is a substantial possibility that the death may be the result of another cause, or is of undetermined intent.

Deaths are only reported as suicides in Chapter 5 of this report if the classification is listed as probable or confirmed.

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Figure A.1: Suicide classification model



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Appendix 8 — Fatal assault and neglect screening criteria

The QFCC uses the fatal assault and neglect screening criteria to classify all cases of suspected fatal assault and neglect into one of three levels of certainty. In classifying these deaths, the QFCC considers a number of factors. Information is gathered from numerous records, including the Police Report of Death to a Coroner (Form 1), autopsy and toxicology reports, child protection system records and coronial findings. Additional information from criminal proceedings and sentencing is also reviewed.

Information used to confirm fatal assault and neglect deaths is based on data available to the QFCC at the time of reporting.

Levels of confirmation are as follows:

Confirmed

- A perpetrator has been charged for a criminal offence relating to the death of the child and, regardless of the outcome, the facts establish the death was the result of inflicted harm or neglect, and/or
- coronial findings indicate (either expressly or impliedly) that the death was a result of inflicted harm or neglect, and/or
- a perpetrator has suicided in conjunction with the death of the child and has expressly or impliedly stated that they were responsible for the child's death.

Probable

- The evidence available to the QFCC indicated that there was a high likelihood that the death was a consequence of inflicted injury or neglect (i.e. but for the inflicted injury or neglect the child probably would not have died), and/or
- there is medical evidence to suggest the death was a consequence of inflicted injury or neglect, and/or
- a perpetrator has suicided in conjunction with the apparent non-accidental death of the child.

Possible

• The initial evidence available to the QFCC indicated that the child may have experienced inflicted harm or neglect which may have contributed to or caused the death (i.e. these deaths demonstrated the presence of risk factors at the time of the incident that could potentially have played some role in relation to the child's death, without establishing a probable likelihood of this having occurred).

Deaths are only reported as fatal assault and neglect in Chapter 6 of this report if the classification is listed as probable or confirmed.

