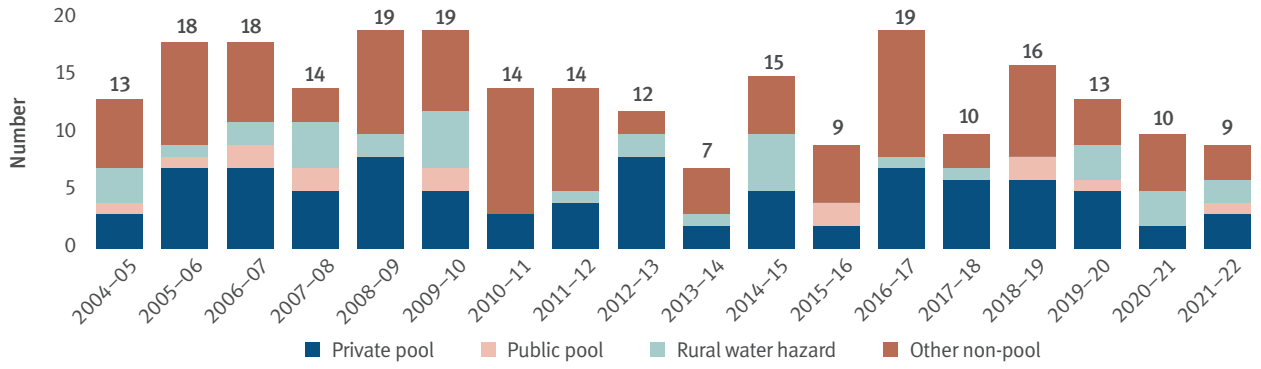
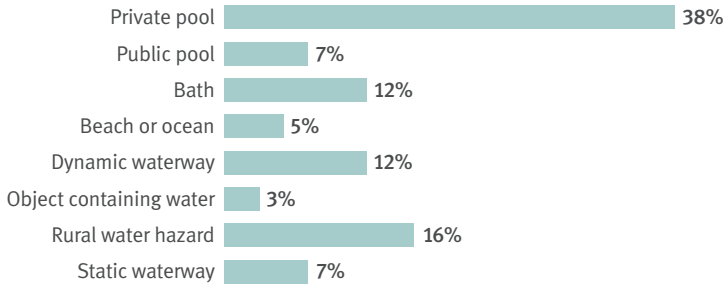
4 Drowning

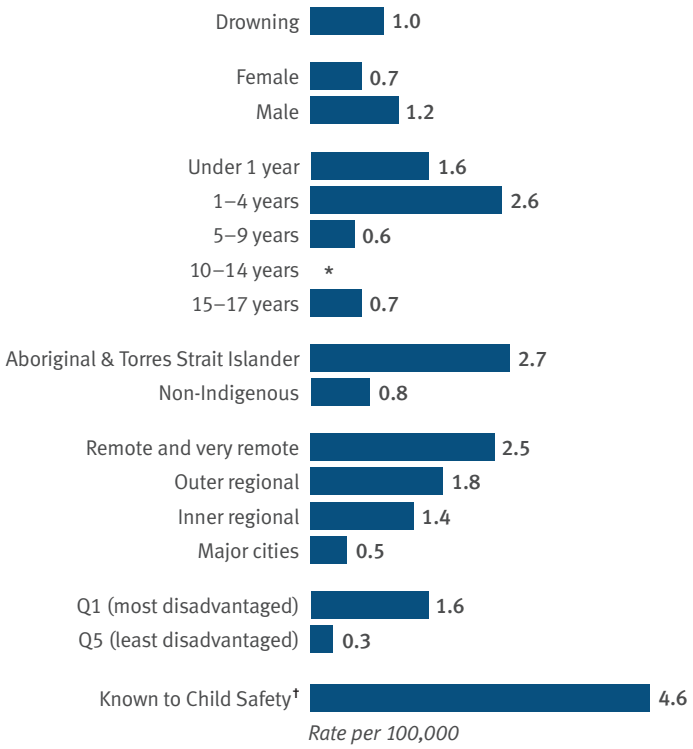
2004 to 2022



5-year summary (2017–22) | Water hazard type



Demographics



Risk factors

12 children on average **drowned each year** over the last 5 years

Under 5s are at greatest risk

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

1–4 years

55% were in **private pools**

21% were in **rural water hazards**

Under 1s

All 5 were **unsupervised while bathing**

Notes: Counting is by date of death registration. Percentages may not add to 100 due to rounding.
** rate not calculated for numbers between 1–3.*
† in the 12 months prior to death.

Key findings

The deaths of 9 children and young people were attributed to drowning in Queensland in 2021–22. This is a rate of 1.0 deaths per 100,000 children aged 0–17 years over a 5-year period.

Table A.6 in Appendix A provides summary data and key characteristics for drowning deaths in the last 5 years.[41]

Types of drowning-related deaths

Of the 9 child deaths in drowning incidents in 2021–22, 4 occurred in swimming pools and 5 were non-pool incidents.

Over the last 5 years, private pools were the most common incident locations for child drownings (38%), with all 22 of these incidents in residential locations (homes, townhouse or units). Rural water hazards (e.g. dams) were the second most common location (8 deaths or 16%).

Bath drownings and dynamic waterways (e.g. rivers, creeks) each made up 12% of drowning incidents. Public pools and static waterways (e.g. lakes, reservoirs) both individually made up 7% of drowning deaths in 2017–2022.

Sex

During 2021–22, 7 male children and 2 female children died in drowning incidents. Males were over-represented in child drownings, with a male drowning rate of 1.2 per 100,000 compared with 0.7 per 100,000 for females (5-year averages).

Age

Children aged 1–4 years made up the largest group of drowning deaths in 2021–22 (6 of 9 deaths). This pattern has been found in all previous reporting periods and is an indication of the vulnerability of this age group. Drowning was the leading cause of death for children aged 1–4 years over the last 5 years.

Risk factors and age

Under 1 year

Five children under the age of 1 year have drowned over the last 5 years, accounting for 9% of the child drowning deaths. All 5 deaths were bathing incidents, and in 4 of these the infant was co-bathing with other children at the time. In all 5 incidents the adult supervisors were aware of the infant's presence in the bath, however they were not actively supervising at the time of the incident.

1–4 years

Over the last 5 years, 33 children aged 1–4 years have drowned, accounting for 57% of all drowning deaths over this period. Eighteen of the 33 deaths (55%) occurred in private pools.

Pool fencing was non-compliant in 17 of the 18 incidents of private pool drownings. Non-compliant fencing includes the absence of fencing, fencing or gate defects or propping pool gates open. Circumstances included:

- 14 incidents in which pool fencing is believed to be non-compliant (including 5 where a gate was also propped open)
- 2 incidents in which the pool gate was propped open but pool fencing was otherwise compliant
- 1 incident where the pool fencing was compliant and the gate latched
- 1 incident in which pool fencing was absent. This involved a portable pool which was required to comply with pool fencing legislation.

41 Tables with data for 2004–2022 are available online at www.qfcc.qld.gov.au/about-us/publications/child-death-reports-and-data

Of the 18 private pool drowning deaths, 13 occurred at the child's usual place of residence, while 5 occurred at the homes of extended family, friends or neighbours.

Non-pool locations also present dangers to young children. Fifteen children aged 1–4 years drowned in non-pool incidents over the last 5 years including rural water hazards (7), beaches or oceans (2), dynamic waterways (2), objects containing water (2) and baths (1).

Nine of the 33 children aged 1–4 years who drowned 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 those 9 children were within arm's reach, or being actively supervised by a capable supervisor, at the time of the incident.

5–9 years

Ten children aged 5–9 years drowned over the last 5 years, accounting for 17% of all drowning deaths. Four (40%) of those children were aged 5 years. The drownings involved a variety of water hazards, including pools (3 public, 1 private), dynamic waterways (3), rural water hazards (2) and baths (1).

In 7 of the 10 drownings (including 3 of the 5-year-olds), the child was known to be in, on or around water. Of those 7, 6 were either unsupervised or not actively supervised. Six of the children known to be in, on or around water were identified by their families as weak or non-swimmers.

10–17 years

Ten young people aged 10–17 years drowned over the last 5 years (3 aged 10–14 years and 7 aged 15–17 years), accounting for 17% of all drowning deaths. The drownings occurred across a variety of water hazards, including pools (3 private, 1 public), static waterways (3), dynamic waterways (2) and the beach/ocean (1).

Four of the young people were international visitors or had recently moved to Australia. Three of the young people were identified by their families as weak or non-swimmers. Two of the young people had a medical condition or impairment which would indicate a higher level of supervision was required.

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. When a young child is known to be in, on or around water, the Royal Life Saving Society of Australia (RLSSA) recommends the use of active supervision. Active supervision means a supervisor focusing all of their attention on the child/ren all of the time, when they are in, on or around the water. Parents need to be within arms' reach, interacting with the child/ren.[42]

A level of supervision is still required even when a child is not known to be in, on or around water. Young children can be highly mobile and may circumvent barriers to access water features. 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 5 years are regularly checked on by an active supervisor.

Heightened supervision is advisable when away from the home environment, such as visiting other homes with pools, or in the period after moving to a new residence.

The RLSSA promotes a lifestage approach to drowning prevention, with targeted strategies to address risk priorities for each age group. Acknowledging that children aged under 5 years are at most risk of drowning, the RLSSA recommends some level of active supervision for all children under 15 years of age. Further information about the RLSSA's lifestage approach for children aged 0–4 years and 5–14 years can be found at **www.royallifesaving.com.au/stay-safe-active/communities/how-to-keep-children-safe**.

42 Royal Life Saving Australia (no date) **Keep Watch Actions**, **www.royallifesaving.com.au/about/campaigns-and-programs/keep-watch/keep-watch-actions**, accessed 19 August 2021.

Pool fencing

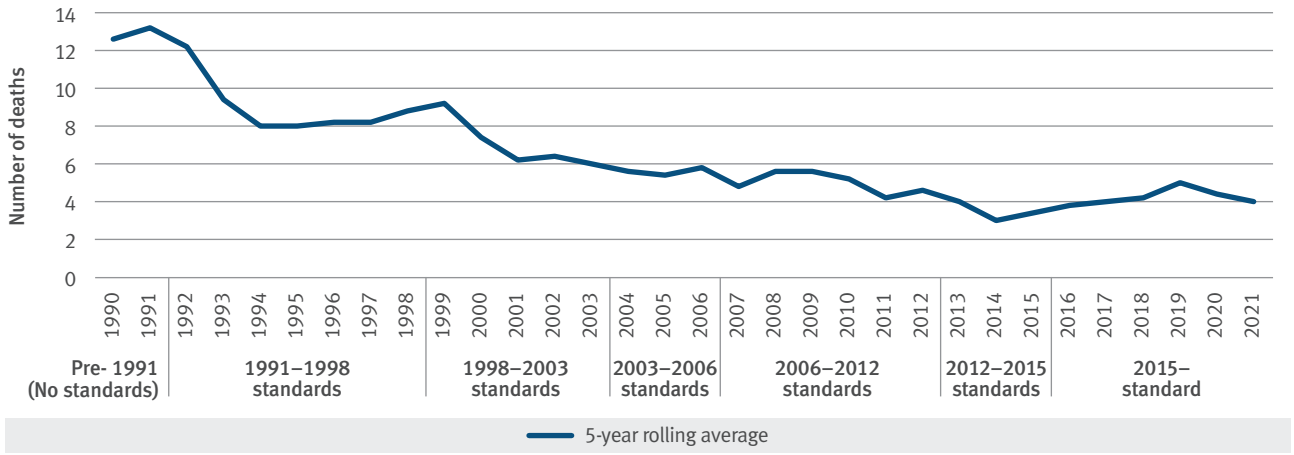
Pools in residential settings pose a considerable risk of drowning to young children. Graduated changes to Queensland pool fencing laws have increased the obligation on pool owners to enhance the safety of pool areas. In accordance with the requirements:

- compliant fencing is required for 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 Pool Safety Register
- a local government inspection is mandatory following any immersion incidents involving a child under the age of 5 years.

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 4.1 tracks the number of drowning deaths of children aged 0–4 years in private pools in Queensland against changes to fencing requirements over time. A number of changes in pool fencing standards have occurred—from no standards in place prior to 1991, to requirements for new pools to have fencing, later extended to existing pools; changes in requirements such as fence height; and more recently in 2009, compliance requirements for registration and inspection. The 5-year rolling average shows a decline following these changes in legislation, with regulation seen to have possibly impacted on the number of drownings. However, from 2015 the number of private pool drowning deaths in children aged 0–4 years has seen a gradual increase until the 2020 calendar year. This highlights the importance of age-appropriate supervision used in conjunction with compliant physical barriers. Both are critical to preventing drowning deaths in this age group.

Figure 4.1: Drowning deaths of children 0–4 years in Queensland private pools by applicable pool standard (5-year rolling average), 1986–1990 to 2017–2021



Sources: Queensland Injury Surveillance Unit 2008, Injury Bulletin: Domestic pool immersion in Queensland children under 5 years of age. No.104; Queensland Child Death Register (2004–21)

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.

Easy access to water and lack of direct adult supervision are the main factors in child drowning deaths in rural settings.

There have been 28 deaths of children aged under 5 years in rural water hazards since 2004, 7 of which have occurred in the last 5 years.

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. Children can also be taught from a young age about nearby dangers and 'no go' areas. Establishing a safe play area in or around the family home can act as a critical means of preventing access to water hazards. Evidence of a safe play area was present in less than half of the rural water hazard deaths since 2004 (12).

A safe play area should be securely fenced, high enough and constructed of materials appropriate to make it difficult for a child to climb. The area should be fitted with a self-closing, self-latching gate.

Royal Life Saving's **Keep Watch@The Farm**[43] initiative is aimed at preventing children aged 0 to 4 years from drowning by recommending parents and carers undertake 4 simple **Keep Watch actions**: Supervise, Restrict, Teach and Respond.[44]

Queensland Ambulance Service data

Table 4.1 presents data on ambulance responses for fatal and non-fatal immersion injuries of children in the last year. There was a total of 296 immersion incidents. Almost half (49%) of all immersion incidents involving children occurred in swimming pools. Immersion incidents were most common in children aged 1–4 years, and in this age group, the majority (71%) of incidents occurred in swimming pools. Swimming pool immersions were also the most common incident type for children under 1 representing 46% of immersion incidents for this age group.

Table 4.1: Queensland Ambulance Service responses to immersion incidents (number), 2021–22

Type of incident	Under 1 year	1–4 years	5–9 years	10–14 years	15–17 years	Total
Pool	16	71	34	16	7	144
Bath	10	9	7	7	*	33
Beach/ocean	*	7	10	26	14	57
Other immersion	9	13	9	19	9	59
Total	35	100	60	68	30	293

Source: Queensland Ambulance Service (Aug 2022)

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

Notes: Numbers in the table do not add to the total number of immersion incidents attended by Queensland Ambulance Service (n=296) as cells with less than 5 are not shown, and are excluded from table totals.

43 www.royallifesaving.com.au/about/campaigns-and-programs/keep-watch

44 www.royallifesaving.com.au/about/campaigns-and-programs/keep-watch/keep-watch-actions