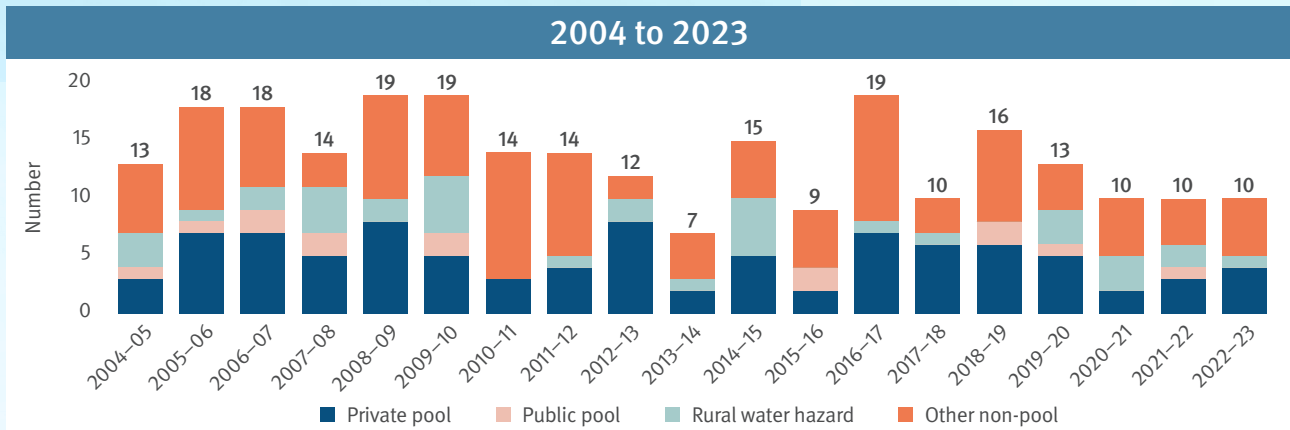
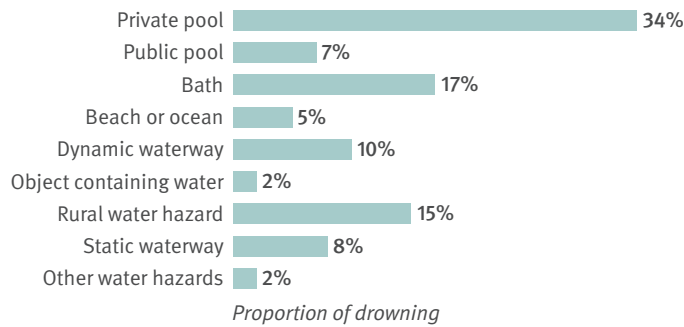


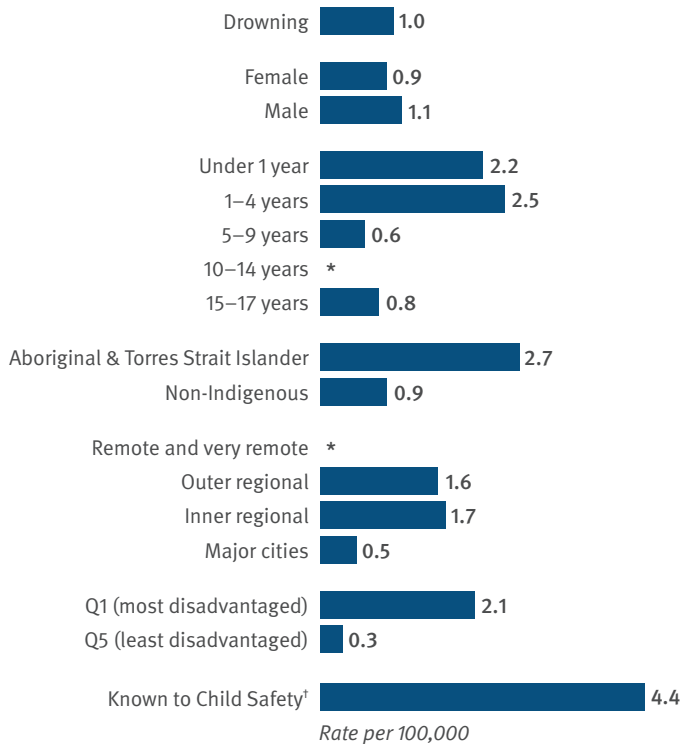
# 4 Drowning



### 5-year summary (2018-23) | 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**

**48%** were in private pools  
**23%** were in rural water hazards

**Under 1s**

In the last 5 years all 7 under 1 drownings were **bathing incidents**

Notes: Counting is by date of death registration. Percentages may not add to 100 due to rounding.  
\* rate not calculated for numbers less than 4.  
† in the 12 months prior to death.

## Key findings

The deaths of 10 children and young people were attributed to drowning in Queensland in 2022–23. 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.<sup>42</sup>

## Types of drowning-related deaths

Of the 10 child deaths in drowning incidents in 2022–23, 4 occurred in swimming pools and 6 were non-pool incidents.

Fifty-nine children drowned in the last 5 years. Private pools were the most common incident locations for child drownings (34%), with all 20 of these incidents in residential locations (homes, townhouse or units).<sup>43</sup> Bath drownings were the second most common location (10 deaths or 17%).

Other child drownings over the last 5 years included rural water hazards (e.g. dams) (9 deaths or 15%), dynamic waterways (e.g. rivers, creeks) (6 deaths or 10%), static waterways (e.g. lakes, reservoirs) (5 deaths or 8%), and public pools (4 deaths or 7%).

## Sex

During 2022–23, 3 male children and 7 female children died in drowning incidents. The male drowning rate was slightly higher than the female rate over the last 5 years, with a male drowning rate of 1.1 per 100,000 compared with 0.9 per 100,000 for females.

## Age

Children aged 1–4 years made up the largest group of drowning deaths in 2022–23 (50%). 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

Seven children under the age of 1 year have drowned over the last 5 years, accounting for 12% of child drowning deaths. All 7 deaths were bathing incidents, and in 5 of these incidents the infant was co-bathing with other children at the time. In all but one of the 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, 31 children aged 1–4 years have drowned, accounting for 53% of all drowning deaths over this period. Fifteen of the 31 deaths (48%) occurred in private pools.

Pool fencing was non-compliant in 14 of the 15 incidents of private pool drownings. Non-compliant fencing includes the absence of fencing, fencing or gate defects or propping pool gates open. Circumstances included:

- 10 incidents in which pool fencing is believed to be non-compliant (including 4 where a gate was also propped open)
- 3 incidents in which the pool gate was propped open but pool fencing was otherwise compliant
- one incident in which pool fencing was absent<sup>44</sup>
- in one incident the pool fencing was compliant and the gate latched.

<sup>42</sup> Tables with data for 2004–2023 are available online at [www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data](http://www.qfcc.qld.gov.au/sector/child-death/child-death-reports-and-data)

<sup>43</sup> Non-residential private pools include, for example, those in motels and resorts.

<sup>44</sup> Incident occurred in a spa which required a fence that complied with pool fencing legislation.

Of the 15 private pool drowning deaths, 12 occurred at the child's usual place of residence, while 3 occurred at the homes of extended family or family friends.

Non-pool locations also present dangers to young children. Sixteen children aged 1–4 years drowned in non-pool incidents over the last 5 years with the most common being rural water hazards (7).

Twelve of the 31 children aged 1–4 years who drowned were known to be in, on or around water hazards. None of those 12 children were within arm's reach, or being actively supervised by a capable supervisor, at the time of the incident.<sup>45</sup>

## 5–9 years

Ten children aged 5–9 years drowned over the last 5 years, accounting for 17% of all drowning deaths. Five (50%) of those children were aged 5 years. The drownings involved a variety of water hazards, including public pools (3) and dynamic waterways (3).

In 7 of the 10 drownings (including 3 of the 5-year-olds), the child was known to be in, on or around water. Six of the 7 were either unsupervised or not actively supervised.<sup>46</sup> Six of the 7 children were identified by their families as weak or non-swimmers and 3 of the 7 were identified to have a medical condition or impairment that would require a higher level of supervision.<sup>47</sup>

## 10–17 years

Eleven young people aged 10–17 years drowned over the last 5 years (3 aged 10–14 years and 8 aged 15–17 years), accounting for 19% of all drowning deaths. The drownings occurred across a variety of water hazards.

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

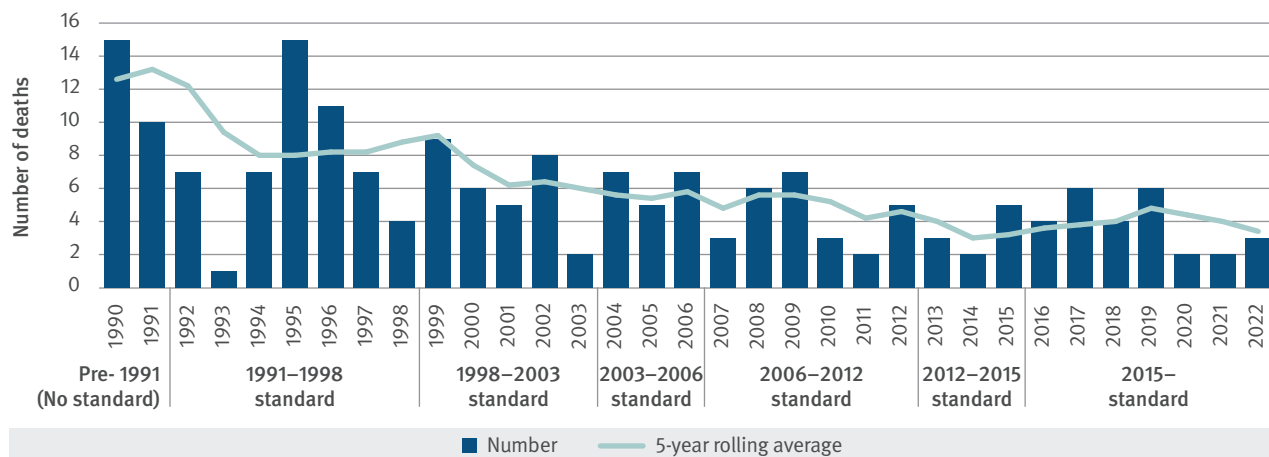
Figure 4.1 tracks the number of drowning deaths of children aged 0–4 years in private pools in Queensland against changes to fencing requirements over time. A number of changes in pool fencing standards have occurred—from no standards in place prior to 1991, to requirements for new pools to have fencing, 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. It is important to emphasise; however, that age-appropriate supervision must be used in conjunction with compliant physical barriers—both are critical to preventing pool drowning deaths in this age group.

<sup>45</sup> Supervision recommendations for children aged 0–4 years by Royal Life Saving Australia, [www.royallifesaving.com.au/about/campaigns-and-programs/keep-watch/keep-watch-actions](http://www.royallifesaving.com.au/about/campaigns-and-programs/keep-watch/keep-watch-actions). Active supervision means focusing all of your attention on your children all of the time, when they are in, on or around the water.

<sup>46</sup> Supervision recommendations for children aged 5–14 years by Royal Life Saving Australia, [www.royallifesaving.com.au/stay-safe-active/communities/how-to-keep-children-safe/children-aged-5-to-14-years](http://www.royallifesaving.com.au/stay-safe-active/communities/how-to-keep-children-safe/children-aged-5-to-14-years)

<sup>47</sup> Supervision recommendations for children with epilepsy by Royal Life Saving Australia: [www.royallifesaving.com.au/stay-safe-active/risk-factors/epilepsy-and-drowning](http://www.royallifesaving.com.au/stay-safe-active/risk-factors/epilepsy-and-drowning)

**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 2018–2022



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 (2004–22).

## Swimming pool immersions of young children in Queensland, 2011–2021

In 2022, the QFCC released an information paper analysing all fatal and non-fatal immersion incidents of children aged 0–4 years in Queensland that have occurred in pools covered by Queensland’s swimming pool safety legislation since 2011.<sup>48</sup> The analysis used information from the Queensland Child Death Register, immersion notifications and the Queensland Pool Register to identify regional patterns and findings about the 2 key methods of drowning prevention—pool fencing and supervision.

Key findings included:

- Queensland has almost 400,000 registered swimming pools required to comply with the pool safety standard introduced in 2010 (regulated pools).
- Forty children aged 0–4 years lost their lives in regulated pools between 2011 and 2021 and a further 853 received medical attention after a non-fatal immersion incident.
- While the number of total immersion incidents has increased over time, the rate of immersions per 1,000 pools has remained steady. This suggests increases in the number of total immersions is largely in line with the swimming pools registered each year.
- There are clear regional patterns in immersions across the state, with Central Queensland having the highest total immersion rate per 1,000 pools.
- Despite the strong standards, fencing was found to be non-compliant in 90% of fatal immersions, with a concerning trend identified in which pool gates were deliberately propped open.
- The supervision of young children was considered inadequate for the circumstances in 65% of fatal immersions.
- There is a clear need to increase public awareness of the importance of maintaining pool fencing and of appropriate supervision for young children.

The regional analysis was shared with local Councils, which have carriage of pool fencing compliance. Strong media coverage of the findings was received across regional Queensland and a number of commitments were made by Councils to address the issues identified.

<sup>48</sup> QFCC (2022) *Swimming pool immersions of young children in Queensland, 2011–2021* [www.qfcc.qld.gov.au/safer-pathways-through-childhood](http://www.qfcc.qld.gov.au/safer-pathways-through-childhood)

## Medical conditions or impairments

Royal Life Saving Australia (RLS) advises that medical conditions, such as cardiac-related conditions, epilepsy, diabetes, and autism, should be taken into consideration when children are in and around water. In the last 5 years, 17% (10) of children and young people who have drowned in Queensland have had a known or suspected impairment or medical condition which should be considered when deciding the level of supervision required.

Epilepsy has been found to be a risk factor for drowning, particularly in children. The increased risk is thought to be between 5 and 15 times greater than those without epilepsy. Three children and young people with epilepsy or a history of seizures drowned in Queensland in the last 5 years. RLS advises that people with epilepsy consult with their doctor around water safety and the safety for the person to partake in water-related activities, regardless of the individual's swimming ability. It is also advisable that a child with epilepsy is actively supervised at all times when around water, including bath time.

Royal Life Saving research shows that autistic children and adolescents are 3 times more likely to drown than non-autistic children.<sup>49</sup> Six children known to be or suspected of being autistic have drowned in Queensland in the last 5 years. Prevention messaging for parent's and carers of autistic children highlights the importance of:

- active adult supervision for all ages
- the erection of barriers to restrict access to water
- the creation of child safe play areas where there is a risk of drowning posed by natural waterways.

More information on drowning risk factors and preventions measures can be found on the Royal Life Saving website: [www.royallifesaving.com.au/stay-safe-active/risk-factors](http://www.royallifesaving.com.au/stay-safe-active/risk-factors)

## 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 262 immersion incidents. Almost half (45%) 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 (72%) of incidents occurred in swimming pools.

**Table 4.1:** Queensland Ambulance Service responses to immersion incidents (number), 2022–23

Type of incident	Under 1 year	1–4 years	5–9 years	10–14 years	15–17 years	Total
Pool	*	68	28	13	*	109
Bath	12	6	*	*	*	18
Beach/ocean	*	*	*	13	9	22
Other immersion	7	21	15	29	25	97
<b>Total</b>	<b>19</b>	<b>95</b>	<b>43</b>	<b>55</b>	<b>34</b>	<b>246</b>

Source: Queensland Ambulance Service (Aug 2023).

\* 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=262) as cells with less than 5 are not shown, and are excluded from table totals.

49 Peden, A. E. & 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 [https://adc.bmj.com/content/105/9/869?SQ\\_DESIGN\\_NAME=new](https://adc.bmj.com/content/105/9/869?SQ_DESIGN_NAME=new)