Ko te hononga a whānau, he hononga mau roa

A family's connection has an everlasting sense of belonging

Maintaining strong relationships is vital for the wellbeing of all whānau. Regardless of the ups and downs of life, and the many difficulties we encounter, this whakataukī reminds us to cherish and appreciate our loved ones to ensure that we do not take one another for granted. When we understand this, it can assure individuals that they are not alone or isolated in times of need.

5. Drowning.

Pēpī and young tamariki are inquisitive, active and eager to explore. They can be especially attracted to water because it shines, ripples, and splashes, but they don't understand its dangers. In these cases, as little as 40 mm of water can pose a drowning risk. For all tamariki, swimming pools, rivers, and the sea pose a drowning risk, and even older tamariki who have developed some water competence [127] can quickly find themselves in danger.

This chapter focuses on tamariki hospitalisations for injury from drowning.

There were 30 tamariki drowning fatalities during the years 2014 to 2018. Of these, two thirds were male (67%, n=20) and slightly more (73%, n=22) were in the age group 0-4 years old.

Following suffocation (including SUDI), drowning was the second most common cause of death from injury (a rate of 1.4 per 100,000) over this period for tamariki aged 0 to 4 years.

Over this period, the highest number of tamariki fatalities from drowning were for European/other children (n=12), followed by tamariki Māori (n=9).

Tamariki living in the most relatively deprived areas of Aotearoa (NZDep quintile 5) comprised more than one third (37%, n=11) of all tamariki drowning fatalities.

Due to the small numbers, the only further analysis on fatalities from drowning that is presented in this chapter relates to gender.

127. Water competency is a broader term than swimming ability and refers to a broad spectrum of physical aquatic competencies as well as the integration of cognitive and affective competencies (Stallman et al, 2017).

In brief

In the years 2017 to 2021, 160 tamariki were hospitalised for injury from drowning (a hospitalisation rate of 3.4 per 100,000). Male tamariki had higher rates of hospitalisation than female tamariki.

The tamariki hospitalisation rates for drowning-related injury have remained largely the same over time.

The most common site of tamariki drowning-related injury leading to hospitalisation was swimming pools, accounting for nearly half of all tamariki hospitalisations for this issue (48%, n=76).

Almost two-thirds (64%, n=103) of all tamariki hospitalisations for drowning-related injuries were for those aged 0 to 4 years, with this age-group also representing the highest rates of hospitalisation for this issue (6.8 per 100,000). The majority of these hospitalisations occurred in tamariki aged 1 to 4 years.

Tamariki Māori had the highest rates of hospitalisations for drowning-related injury (4.6 per 100,000) of all ethnic groups, followed by Pacific children (3.9 per 100,000). Tamariki living in the most relatively deprived areas of Aotearoa (NZDep quintile 5) had the highest rate of drowning-related hospitalisations (4.69 per 100,000), accounting for over a third of relevant hospitalisations (37%, n=58).

Trend over time

In the years 2012 to 2021, 295 tamariki were hospitalised for injury from drowning, with 160 of these hospitalisations occurring between 2017 and 2021.

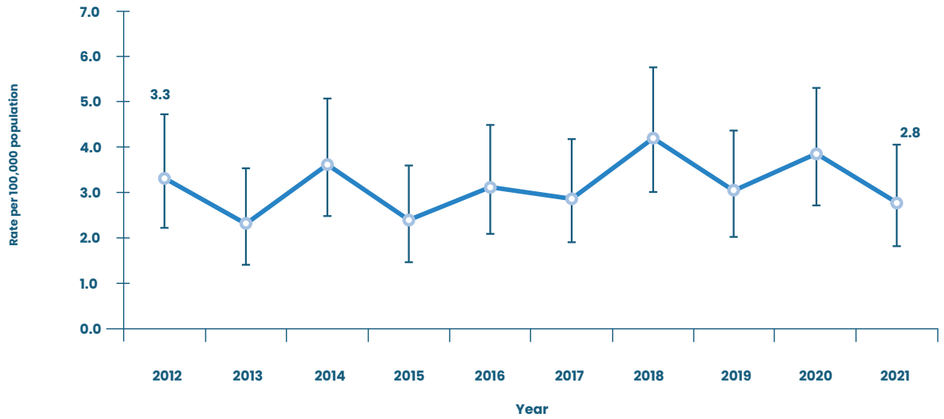
The tamariki hospitalisation rates for drowning-related injury fluctuated, with a peak in 2018, but it remained largely the same over time (3.3 per 100,000 in 2012; 2.8 per 100,000 in 2021).

The rate of tamariki hospitalisation for drowning-related injury in the years 2017 to 2021 was 3.4 per 100,000.

Figure 40 shows the rates of tamariki hospitalisation for drowning-related injury, for the years 2012 to 2021.

Additional data on tamariki hospitalisations for drowning-related injury, by year from 2012 to 2021, is provided in Appendix 2. [128]

Figure 40: Rates of tamariki hospitalisation for drowning-related injury, 2012-2021



128. Table 50, Appendix 2.

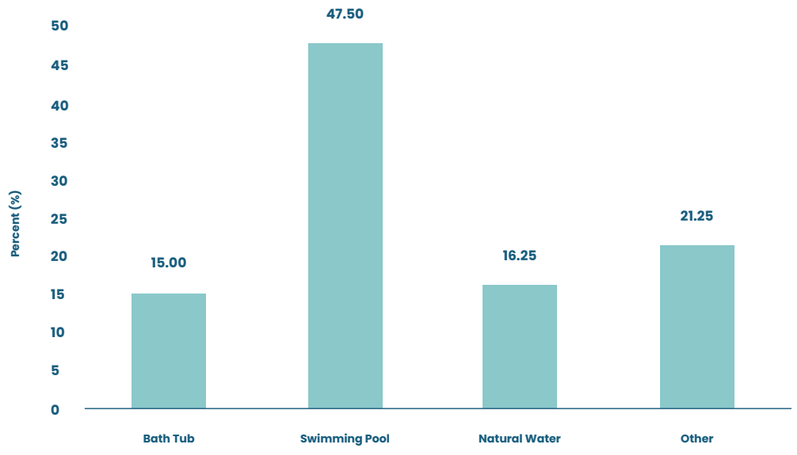
Location

Swimming pools were the most common location for drowning-related injury leading to tamariki hospitalisation during the years 2017 to 2021, accounting for nearly half (48%, n=76) of them. Of these drowning related injuries that occurred in a swimming pool, most occurred at a home setting (49%, n=37).

Sixteen percent (n=26) of tamariki hospitalisations for drowning-related injury were due to incidents that occurred in 'natural water' and 15% (n=24) were due to incidents in a 'bathtub'.

Figure 41 compares the locations of drowning injury leading to hospitalisation tamariki for the years 2017-2021.

Figure 41: Percentage of tamariki hospitalisations for drowning-related injury, by location, 2017–2021



Age Group

In the years 2017 to 2021, 64% of all drowning-related tamariki hospitalisations were for those aged 0 to 4 years (n=103), with this age-group representing the highest rate of hospitalisation (6.8 per 100,000). For the age group 0 to 4 years, tamariki under 1 year of age accounted for 17% (n=17) of the drowning-related hospitalisations, compared with 83% for those aged 1-4 years (n=86).

The rate of drowning-related hospitalisation decreased with tamariki age. For tamariki aged 5 to 9 years, the rate of hospitalisation from drowning was 2.2 per 100,000. Tamariki aged 10 to 14 years had the lowest rate (1.3 per 100,000).

Looking specifically at tamariki aged 0 to 4 years, the most common location for drowning-related injury in this period was in the home (61.2%, n=63).

For tamariki aged under one year of age, 16 of the 17 drowning-related hospitalisations in this period were from incidents that occurred in the home, 13 of them (76.5%) in the bathroom.

Table 17 shows numbers of drowning-related tamariki hospitalisations, presented by age-group, for the years 2017 to 2021.

Figure 42 shows drowning-related hospitalisations for tamariki aged 0 to 4 years, by location, for the years 2017 to 2021

*Table 17: Tamariki hospitalisations for injury for drowning-related injury, by age-group, 2017-2021**

Age Group (Years)	No. of Hospitalisations	%	Rate per 100,000	95% CIs	
0 - 4	103	64	6.8	5.5	8.2
5 - 9	37	23	2.2	1.6	3.1
10 - 14	20	13	1.3	0.8	1.9
Total	**160**	**100.0**	**3.4**	**2.9**	**3.9**

** Population denominator for rate per 100,000 is children aged 0-14 years*

Figure 42: Percentages of drowning-related hospitalisations for tamariki aged 0–4 years, by location, 2017-2021

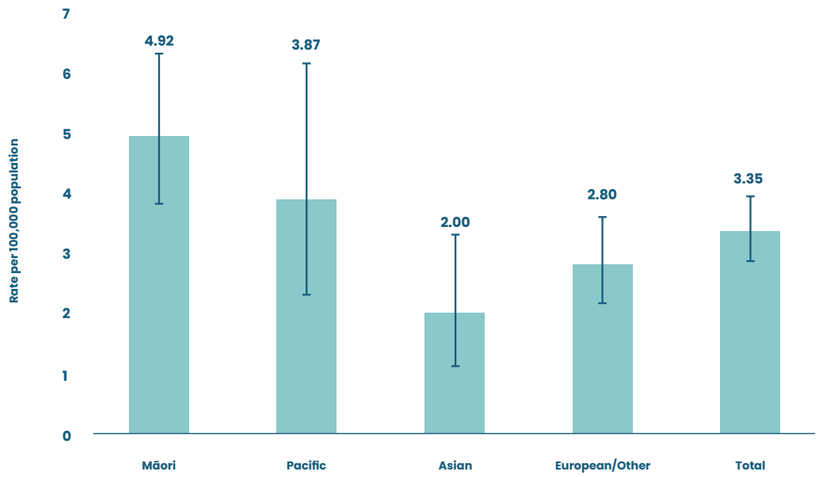
Ethnicity

In the years 2017 to 2021, out of all drowning-related tamariki hospitalisations:
- 40% were tamariki Māori (n=64)
- 39% were European/other children (n=63)
- 11% were Pacific children (n=18),
- 9% were Asian children (n=15). [129]

Over this same period, tamariki Māori had the highest rates of hospitalisation for drowning -related injury (4.9 per 100,000) followed by Pacific children (3.9 per 100,000), European/other children (3.0 per 100,000) and Asian children (2.0 per 100,000).

Figure 43 shows the rates of drowning-related tamariki hospitalisation, presented by prioritised ethnicity for the years 2017 to 2021.

Figure 43: Rates of drowning-related tamariki hospitalisation, by prioritised ethnicity, 2017-2021



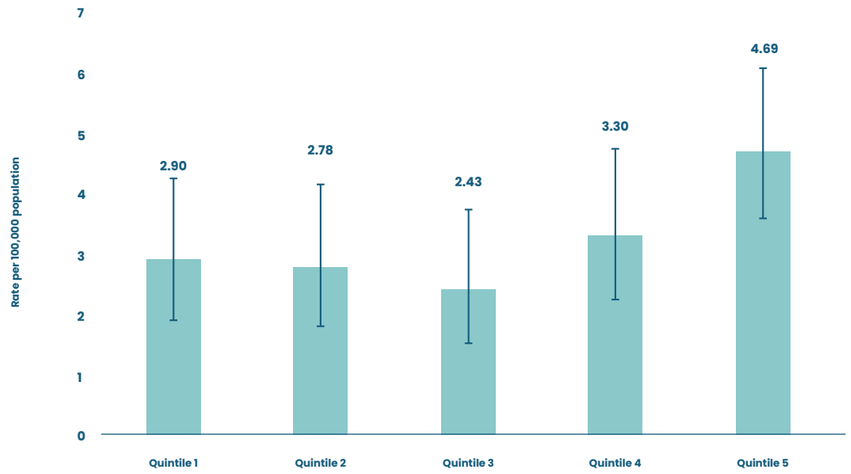
Socio-economic deprivation

In the years 2017 to 2021, tamariki living in the most relatively deprived areas of Aotearoa (NZDep quintile 5) had the highest rates of hospitalisation from drowning-related injury (4.69 per 100,000) of any NZDep quintile, accounting for more than a third (37%, n=58) of them.

Figure 44 shows the rates of drowning-related tamariki hospitalisation, presented NZDep quintile, for the years 2017 to 2021.

129. There are no MELAA hospitalisations related to drowning during this period and therefore MELAA is not included in denominator for this analysis.

*Figure 44: Rates of drowning-related tamariki hospitalisation, by NZDep quintile, 2017–2021**



* Missing Data = 5

Gender

In the years 2017 to 2021, male tamariki made up a higher proportion of hospitalisations (58%, n=93) than female tamariki (42%, n=67).

Table 18 shows tamariki drowning fatalities for the years 2014 to 2018 and hospitalisations for drowning-related injury for the years 2017 to 2021, presented by gender.

Table 18: Tamariki drowning fatalities for the years 2009-2018 and tamariki hospitalisations for drowning-related injury, by gender, 2017–2021

	Deaths (2014 - 2018)					Hospitalisations (2017 - 2021)				
	Number	**%**	**Rate/100,000**	**95% CIs**		**Number**	**%**	**Rate/100,000**	**95% CIs**	
Female	37	23	2.2	1.6	3.1	37	23	2.2	1.6	3.1
Male	20	13	1.3	0.8	1.9	20	13	1.3	0.8	1.9
Total	**160**	**100.0**	**3.4**	**2.9**	**3.9**	**160**	**100.0**	**3.4**	**2.9**	**3.9**

Policy implications

Active supervision

While this section focuses on the policy implications related to drowning and water safety, especially around swimming pools, one of the most important protection measures is active supervision of young tamariki. Adults must be vigilant with all young tamariki around water all of the time – remaining within arm's reach of tamariki aged less than 5 years. When a pēpī is in the bath an adult must maintain hand contact with the infant at all times.

Safe swimming pools

Swimming pools accounted for nearly half of all drowning-related hospitalisations. While the numbers of deaths and injuries are still unacceptably high, this is an area where – over time – we have seen some success. Legislation introduced in the 1980s, [130] requiring residential swimming pools to be fenced, had a real impact on reducing the numbers of deaths from drowning and drowning-related injuries in spite of growing numbers of swimming pools. [131]

Pool owner responsibilities were updated with the Building (Pools) Amendment Act 2016, which incorporated child safety provisions for residential swimming pools into the Building Act 2004. Under this legislation all residential pools are required to have a physical barrier that stops unsupervised young tamariki (under the age of 5 years) from entering the pool or area around it, and they must be inspected every three years by either a territorial authority (local councils) or an independently qualified pool inspector. A barrier can include a fence, a concrete block wall, or the wall of a house or other building. Where a building wall is part of the pool barrier there are additional requirements regarding windows (restricting the size of window openings) and doors (requiring self-closing devices or audible alarms, self-latching, and signage). [132]

130. Fencing of Swimming Pools Act 1987
131. Starship Child Health (2015) Submission to the Building (Pools) Amendment Bill 2015. Released on the Parliament website at https://www.parliament.nz/resource/en-NZ/51SCLGE_EVI_00DBHOH_BILL64825_1_A454556/6027973d-cb9efe5dc3b2f0d4784e0794844535a8
132. Ministry of Business, Innovation and Employment (2017) F9 Building Code Acceptable Solution, available online https://www.building.govt.nz/assets/Uploads/building-code-compliance/f-safety-of-users/f9-restricting-access-residential-pools/asvm/f9-restricting-access-to-residential-pools.pdf

In January 2024, new safety guidance was released by the Ministry of Business, Innovation and Employment's Building Performance section for swimming pool owners (including inflatable, portable and temporary pools). This explains the risks swimming pools pose to tamariki, the legislative obligations of swimming pools owners, and how the enforcement of swimming pool requirements works. [133]

While it is too soon to make conclusive observations about the effectiveness of the most recent legislative changes, we note that a quarter of private pools checked by Auckland Council in 2023 were found to be unsafe, highlighting the importance of regular homeowner checks, regular inspection and the need for local councils to keep up-to-date swimming pool registers. [134]

Public swimming pools

- **We recommend taking a more in depth look at whether current self-regulation and voluntary schemes are sufficiently robust and resourced appropriately to ensure swimming pool safety.** Owners of swimming pool facilities (such as local councils) should make sure their facilities are safe – this extends beyond fencing requirements. Many, but not all, public pools in Aotearoa are part of a voluntary pool or water safety scheme, indicating – for example – trained lifeguards will be on duty at all times. Voluntary schemes, while they have many positive aspects, mean that some of the geographic areas that most need additional pool safety and harm-prevention activities miss out.

- **We recommend investment in building up the lifeguard workforce skills and numbers.** There are also reports of difficulties in recruiting lifeguards across the country. [135] Lifeguards are an essential workforce for public swimming pools. Life guarding should be recognised as a legitimate career pathway, and the profile of the appropriate qualifications should be raised. Attention should be given to recruiting Māori and Pacific lifeguards, given the increased rates of drowning-related tamariki hospitalisation for these ethnic groups.

133. Safety guidance for pool owners is available online at: https://www.building.govt.nz/building-code-compliance/f-safety-of-users/pool-safety/guidance-for-pool-owners/
134. Radio New Zealand (15 December 2023) "Quarter of pools checked by Auckland Council unsafe". Available online https://www.rnz.co.nz/news/national/504850/quarter-of-all-pools-checked-by-auckland-council-unsafe
135. Recreation Aotearoa (2023) Poolsafe Annual Report, available online at: https://www.nzrecreation.org.nz/Site/aquatics/poolsafe.aspx

Developing Water Competence

- **We recommend a continued focus on building lifelong water competence amongst tamariki, connected to te taiao (the natural environment).** Developing water competence, including learning to swim is an important life skill for tamariki, and there is evidence of their effectiveness, including in areas of high socioeconomic deprivation. [136] Including water skills in the health and physical education curriculum at schools and connecting this to an appreciation of the natural environment, in recognition that swimming pools are not the only place where people swim or injure themselves near water, is an important step towards reducing drowning-related injury.

Supporting culturally relevant approaches to water safety

- **We recommend investment in culturally relevant and appropriate programmes to address the inequitable impacts of drowning-related injury and death for tamariki Māori and Pacific children.** This would include, for e xample, supporting Māori water safety education programmes built on mātauranga Māori, emphasising and strengthening the connection with water as a means of recreation and physical activity, a source of traditional kai, and a link to tīpuna. [137]

136. Safekids Aotearoa (2017) Child Unintentional Deaths and Injuries in New Zealand and Prevention Strategies. Auckland, NZ; Safekids Aotearoa. P. 53.
137. This has also been identified as a priority in the New Zealand Water Safety Sector Strategy 2025, available online at https://www.watersafetynz.org/_files/ugd/6f2a10_79f64b16287d4950b97d2dea2eb6e9ee.pdf

Tū whitia te hopo, mairangatia te angitū!

Feel the fear, but do it anyway!

While fear may have the potential to stop us in our tracks, it can also be acknowledged and embraced to help us move forwards. This whakataukī encourages us to be brave and to not let our fear get the better of us. It urges the individual to eliminate the negative and, by doing so, accentuate the positive – resulting in confidence and triumph in facing and overcoming challenges and obstacles.