How Are We Drowning?

New Zealand Drowning Prevention Report - 2022 Karakia for Tangaroa

He huanui, he huaroa ki te Ao

From the energies of the extensive and intensive ocean we will learn

Omāio ki tua e

To maintain balance

Ka rongo ki te Waitai e

Reciprocation of healing is needed

Haramai e te Taipari – Haramai e te Taitimu

Celebrate the provisions of the full and low tides

Nāu e Hinemoana – Nāu Tangaroa ē

The sacred domain of Hinemoana and Tangaroa.



Water Safety New Zealand

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Water Safety New Zealand

Foreword

As I begin this report on drowning in New Zealand, I reflect with sadness that 94 preventable drownings occurred in 2022, the worst in a decade.

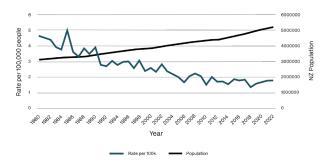
Each year, far too many lives are lost to drowning, leaving families and communities devastated. As you read this report, please remember that behind each of these statistics is a person with hopes, dreams, and loved ones. We must never forget that.

Drowning is a tragic and devastating event that can leave families and communities shattered. However, the dedicated and ongoing work undertaken by the water safety sector should be acknowledged. Since the early 1980s we have seen a near halving of our drowning rate from a peak in 1984 with 163 tragedies to where we are today, averaging about 80 drownings. Whilst a major contributor to this sustained reduction was the introduction of pool fencing legislation, improved education and continued frontline rescue services have also contributed to this dramatic decrease. The loss of 94 lives in New Zealand waters is a sobering reminder of the dangers that exist as we connect in, on and around the water.

New Zealand has the 10th longest coastline in the world (~15,000km) and is about 1600km long, about the same distance from Brisbane to Hobart. With the ease of access and high participation rates, New Zealand's beautiful coastline and numerous waterways pose a variety of challenges. New Zealand has one of the highest drowning rates in the developed world, 1.81 drownings per 100,000 people (see figure 1). Our rate of drowning in relation to a growing population has halved since the 1980s but now appears to have stalled over the past 10–15 years. Despite the great intentioned work of the water safety sector, this must remain a cause for concern.

What is the 2022 drowning report telling us as policymakers, sector leaders, programme deliverers and Kiwis? I think the report represents a strong call to action for the upper North Island and in particular Northland.

(figure 1) Drownings in NZ 1982 – 2022 per 100k of Population



The report makes it clear that this is where most people drown, and we need everyone focussed on reducing this risk. The report also acknowledges that pools, public and private, look to be well managed and have consistently low rates of drowning in NZ. This sets NZ apart from many other countries.

Water Safety NZ and the wider sector needs to make sense of these insights and use it to drive change by refining programmes to help those most at risk. Are we reaching enough of the right people at the right times with programmes that help them effectively reduce risk?

So, what is New Zealand's next drowning prevention circuitbreaker, like the pool fence legislation of the late 1980s? Could it be compulsory lifejacket use? That's a 3-decade political debate that remains ongoing, as boaties and their passengers continue to drown. Is it greater basic water survival skills? Could the refreshed school curriculum assist in supporting teachers to better provide these basic skills? Is it more lifeguards on more of our beaches? Or is it a drive to change the "she'll be right" behaviour and get people to take some personal responsibility and have a 'Hmm? before they jump in'?

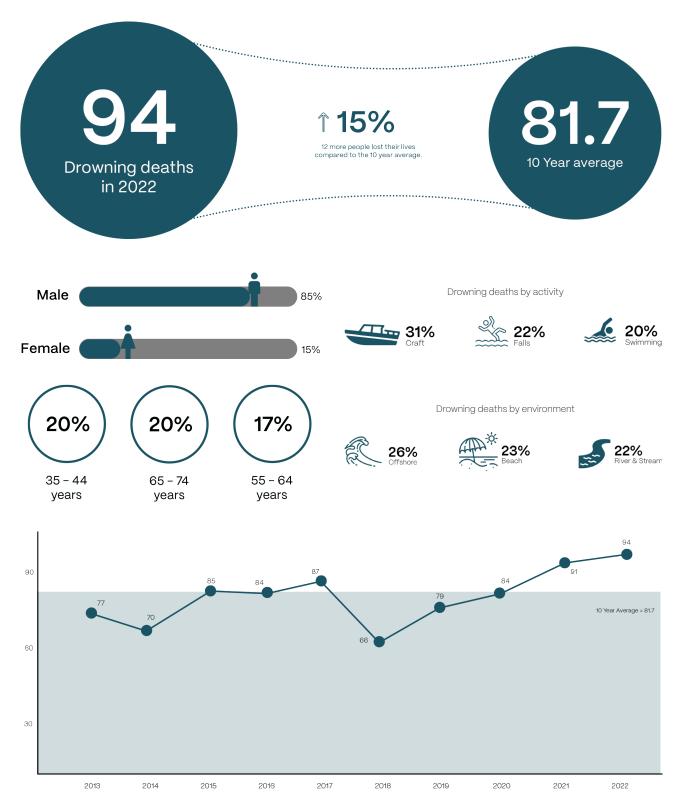
While it is vitally important that we continue to raise awareness of the risks associated with water activities, we must continue to celebrate the connection that we, as Kiwis, have to wai/ water, as our playground and pantry. Education, supervision, the use of appropriate safety equipment along with personal responsibility, I believe, are essential in reducing the number of drowning incidents.

I urge everyone to take responsibility for their safety and that of those around them. It's easy to think that drowning won't happen to us, that we are strong swimmers or that we don't need a life jacket today, but the reality is that anyone can fall victim to the challenges of water. So simply put; take some personal responsibility, follow the guidelines and warnings, swim between the flags, wear life jackets, and never underestimate the power of our oceans, lakes and rivers.

'Don't be that guy' who takes unnecessary risks and puts themselves and others in danger. Let us work together to prevent future drownings and keep our communities safe.

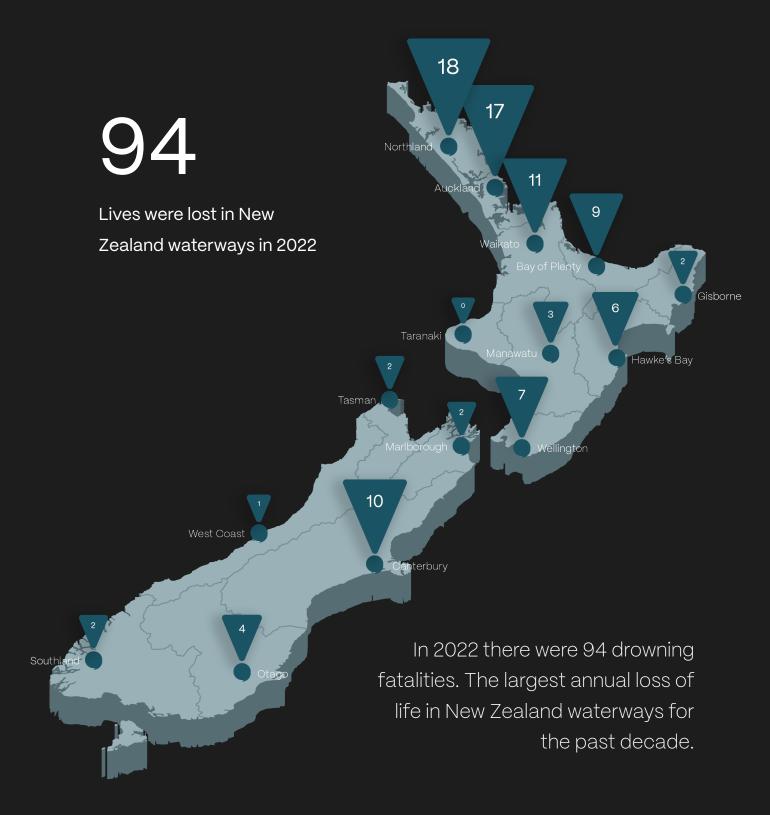
Daniel Gerrard CEO Water Safety New Zealand Executive Summary

Who is Losing Their Life?



Executive Summary

Where are People Drowning?



Water Safety New Zealand

Executive Summary

New Zealand Drowning Prevention Report – 2022 ISSN 2463–445X (Online)

The New Zealand Drowning Prevention Report provides an overview of the preventable drowning fatalities of 2022 against a longer term view of drowning fatalities by activity, environment and region. It also attempts to identify any patterns and trends that contributed to the 2022 numbers.

The numbers are in, and they're not great.

In 2022, New Zealand experienced the highest annual drowning fatalities in the last decade, with a total of 94 deaths across the country. This is 12 fatalities above the 2013–2022 10-year average of 82. However, the 10-year total annual fatality number is relatively flat over time.

Annually, total fatality numbers are seen to increase and decrease in a broad sine wave pattern, which is likely due to the associated weather patterns. The relaxing of Covid restriction also occurred in 2022, as did several extreme weather events – all of which may have impacted on the number of fatalities. Consequently, annual figures and or short-term patterns (less than 10 years) should be looked at in context of long-term trends and therefore should be treated with caution.

The majority of these drownings were attributed to craft incidents (29 drowning fatalities). Swimming (19 drowning fatalities), which is usually the most common cause of recreational drowning fatalities, was just above the 10-year average (18) in 2022.

Māori and Pacific Peoples are significantly overrepresented. The majority of Māori deaths occurred while they were undertaking swimming, boating and underwater activities. Pacific Peoples died participating in a wider range of recreational activities than in previous years.

Twelve people in 2022 drowned in craft multiple fatality events – one in Auckland (two deaths), one in Northland (five deaths) and one in Canterbury (five deaths). This is the highest number of people who drowned in craft multiple fatality events since 2012, and more than twice the 10-year average (five total deaths in multiple fatality events). These events would have contributed significantly to the higher than average drowning fatality totals in Northland and Canterbury.

As we share this data for the 2022 year summary, there are recent drownings deaths that have highlighted another area of focus that is expected to increase in the coming years: the 9 drowning deaths already due to flooding so far in 2023.

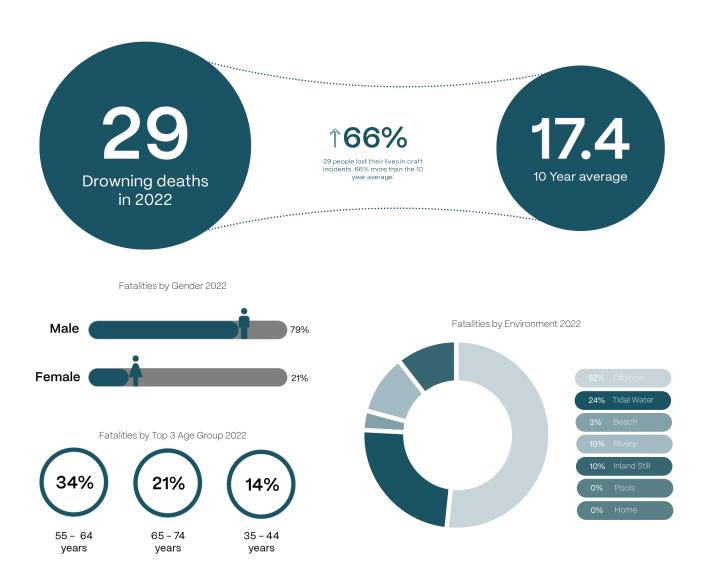
In the 43 years of records, 1980–2022, there were 18 drowning deaths due to flooding. The extreme weather events in Auckland in January 2023 and Cyclone Gabrielle on the east coast of New Zealand in February resulted in a 50% increase to that total in the space of 3 weeks. With forecasts of more extreme weather events due to the changing climate and more people finding themselves living in flood zones, it will take concentrated effort from local and national government, as well as flood water education to prevent more deaths.

Flood related deaths have no targeted age or ethnicity, or – unusually for water related activities – gender distinctions. The 27 flood drowning deaths range in age from toddler to age 90. and 56% of these were female. Almost half (44%) of flood drowning deaths were of people inside their house or trying to escape their house; a further third (33%) were in cars or trying to escape their car. The others were either attempting to cross floodwaters (11%) or viewing flood water in some capacity and fell in (11%).

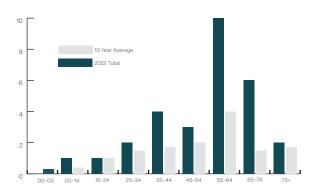
Overall, the report concludes that the high number of drowning fatalities in 2022 was mainly due to a higher than average number of multiple fatalities involving powered craft.



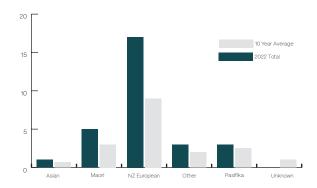
Craft



2022 Drowning Fatalities by Age Group compared to 10 year avg.



2022 Drowning Fatalities by Ethnicity compared to 10 year avg.



Craft



any other activity in 2022.

Craft

In the context of this report, a craft is any vessel or device that is designed or used for travel on water. Craft can be classified into two broad categories: powered and non-powered.

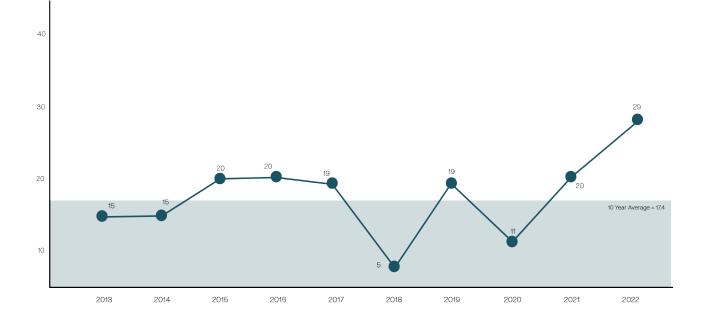
1. Powered craft: These are vessels that are propelled by a motor or engine, such as boats, jet skis, or motorised rafts. Powered craft can range in size from small personal watercraft to large commercial vessels, and can reach high speeds or operate in a variety of water conditions.

2. Non-powered craft: These are vessels that are not propelled by a motor or engine, such as canoes, kayaks, or stand-up paddleboards. Non-powered craft rely on human power or wind to move through the water, and can be used for a variety of recreational activities, such as fishing, touring, or surfing.

Craft-related incidents are the leading cause of drowning deaths in New Zealand, accounting for 31% of all such deaths in the country in 2022. A total of 29 lives were lost while taking part in craft activities that year. The majority of craft drowning deaths occur in the older age groups, with 72% of these deaths recorded among individuals over the age of 45. The most common age group for such deaths is between 55–64 years.

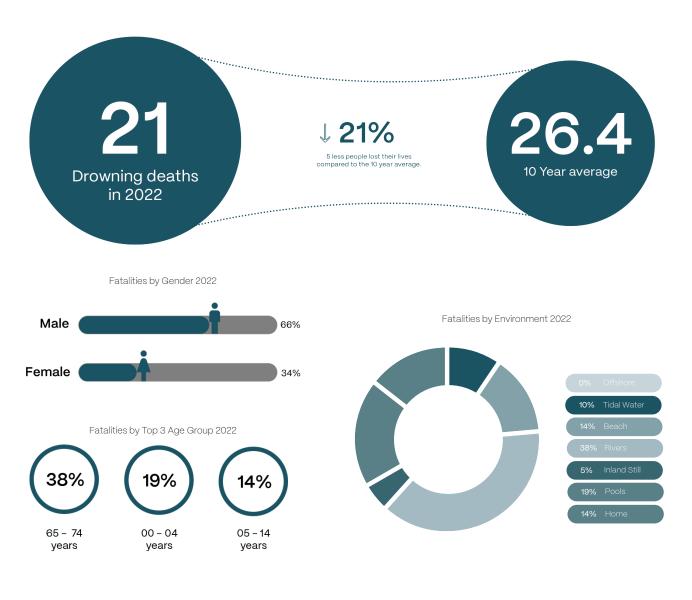
Over half of the total craft drowning deaths occur in offshore environments, while 24% of the deaths happened in tidal waters and 10% in rivers and streams.

The loss of life due to craft drownings in New Zealand is a tragic and preventable occurrence. While there are currently 19 different bylaws relating to lifejacket use in the country, the fact remains that many drowning deaths could be reduced if more people wore life jackets. Currently, in most regions, the decision on when it is appropriate to wear a lifejacket is left to the skipper. However, the data highlights the importance of updating legislation to ensure that skippers are not solely responsible for this vital decision.

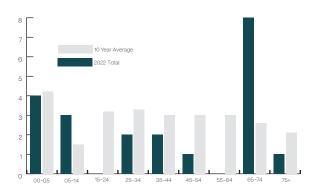




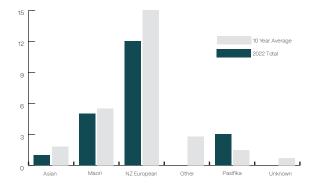
Falls



2022 Drowning Fatalities by Age Group compared to 10 year avg.



2022 Drowning Fatalities by Ethnicity compared to 10 year avg.







Falls typically refer to the broad range of incidents where a person slips, trips, or loses their balance and falls into and under the water.

Falls

In the context of this report, "falls" typically refer to the broad range of incidents where a person slips, trips, or loses their balance and falls into and under the water. Falls can occur in a variety of water environments, such as swimming pools, paddling pools, baths, rocky foreshore, beaches, rivers, or riverbanks, and can pose a significant risk to water users and those not intending to enter the water.

Some common examples within the "falls" category include:

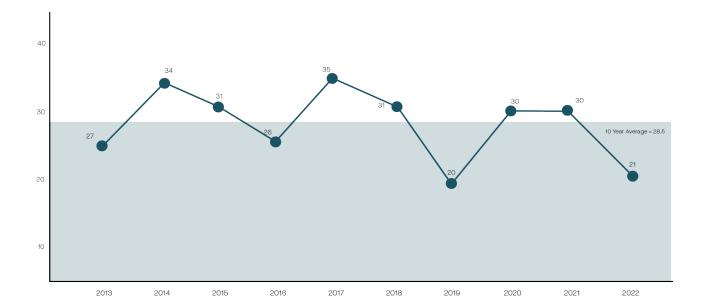
- Rescuing others
- River crossing
- Floods/civil emergencies
- Unknown immersion incidents

Slips and Falls drowning deaths accounted for 22% of the nationwide annual total in 2022. While there is no consistent long-term trend, the 2022 figures for this activity group were encouraging, showing a 30% reduction in drowning deaths compared to 2021 and sitting 20% below the ten-year average.

This activity group stands out with the largest gender and age spread and a relatively low 66% male drowning death rate. The age spread is evident, with 38% of deaths occurring among individuals aged between 65 - 75 years, while 34% of deaths were individuals younger than fifteen.

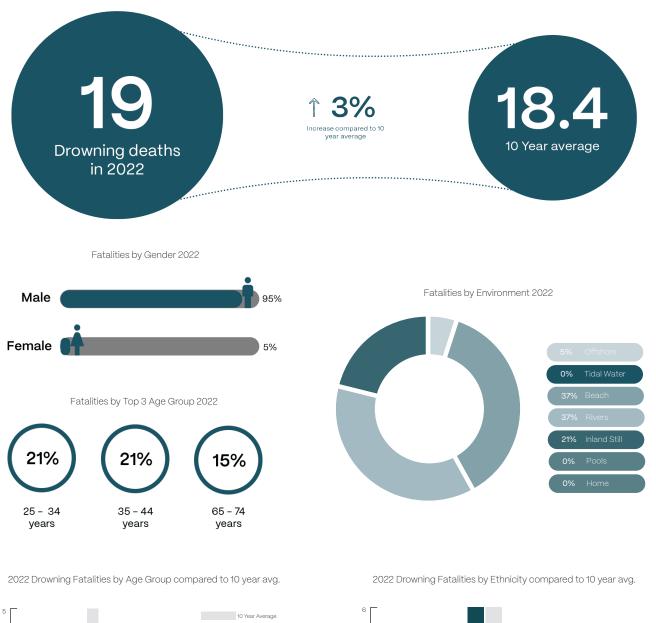
The spread of environments from which these drowning deaths occur is also relatively wide compared to other activity groups. The most common environments are rivers and streams, accounting for 38% of non-recreational drowning deaths, followed by pools at 19%, and home at 14%.

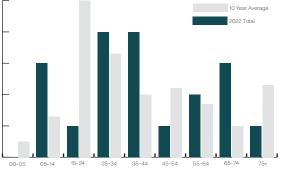
While the decrease in non-recreational drowning deaths in 2022 is a positive development, there is still much work to be done to prevent these tragic and preventable incidents.





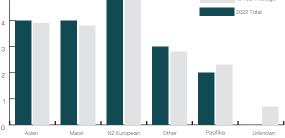
Swimming





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10 Year Average





Swimming



their lives within easy sight of the shore.

Swimming

Swimming or 'playing in water' typically refers to recreational activities that involve spending time in a body of water, such as a pool, lake, river, or ocean. These activities can include swimming, wading, or playing games.

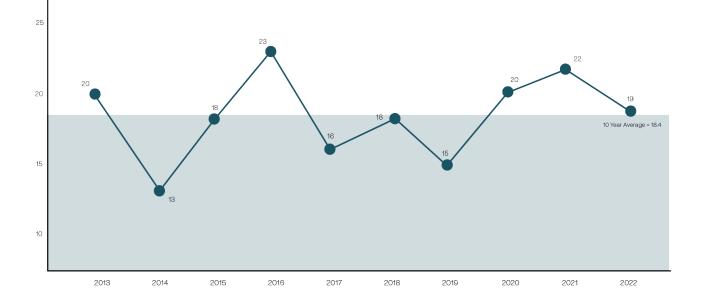
Swimming-related incidents account for the second-largest number of intentional drowning deaths in New Zealand. Unfortunately, 19 people lost their lives while swimming in 2022. The data for this activity group closely follows the overall trends for nationwide data. Males were disproportionately affected, accounting for 95% (18) of all drowning deaths.

Summer months saw a staggering 84% of all recorded drowning deaths, indicating that weather is a leading factor. The most common environments for drowning deaths in this category were beaches and rivers, each accounting for 36% of the total incidents.

Age-wise, this activity group tends to be slightly younger than other activities, with 63% of all swimming drowning deaths attributed to individuals under the age of 45. The age bracket with the highest drowning death rate in this category is between 25-34 and 35-44 years of age.

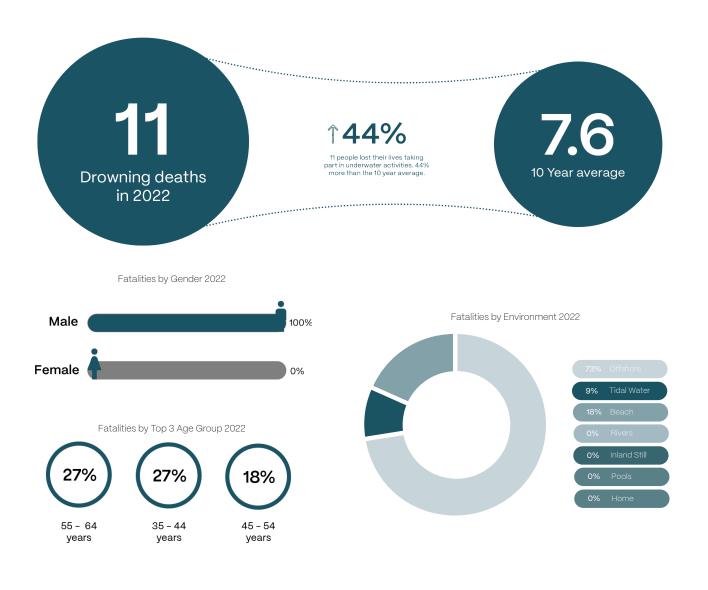
It's important to note that although 37% of all swimmingrelated drownings occur at beaches, there have been zero recorded drowning deaths among swimmers who stay within the designated flags at lifeguarded beaches. Therefore, if you're planning to swim at the beach, it's crucial to choose one that is patrolled by lifeguards and to swim between the flags. By making these simple choices, you can greatly reduce your risk of drowning.

Always swim with a buddy, supervise children closely, and be aware of your own swimming abilities and limitations. It's important to be aware of underwater hazards and to avoid diving or jumping into unknown waters.

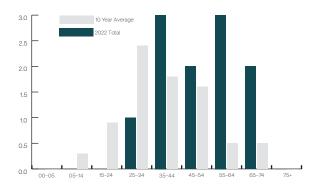




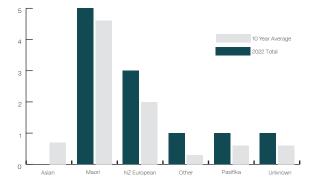
Underwater



2022 Drowning Fatalities by Age Group compared to 10 year avg.



2022 Drowning Fatalities by Ethnicity compared to 10 year avg.



Underwater



Underwater activity refers to any activity that involves being submerged or spending time underwater. This category encompasses popular pastimes such as diving, snorkeling, free diving, and kai gathering while submerged. Unfortunately, this category also accounts for the fourth most common activity associated with drowning deaths, responsible for 11% of all lives lost in 2022.

Clearly there is a lot of work to be done to better inform and protect Maori males while participating in underwater activities. Maori males represent 45% of all lives lost in this activity category, while only accounting for approximately 9% of our population. It's also worth noting that in 2022, no females lost their lives while participating in an underwater activity.

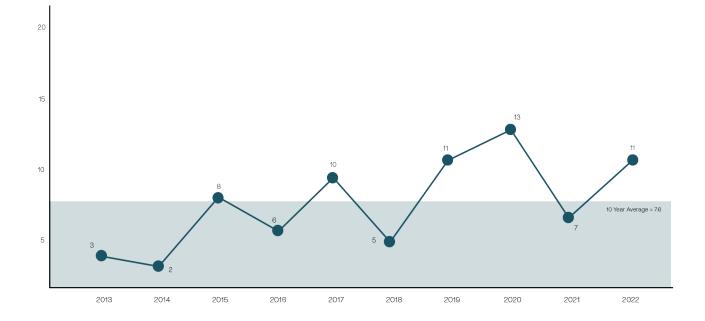
Increasing activity levels during different seasons also plays a significant role in determining the safety of underwater activities. In fact, 63% of all drowning deaths related to this category occurred during the summer months, with the remaining 37% occurring in spring.

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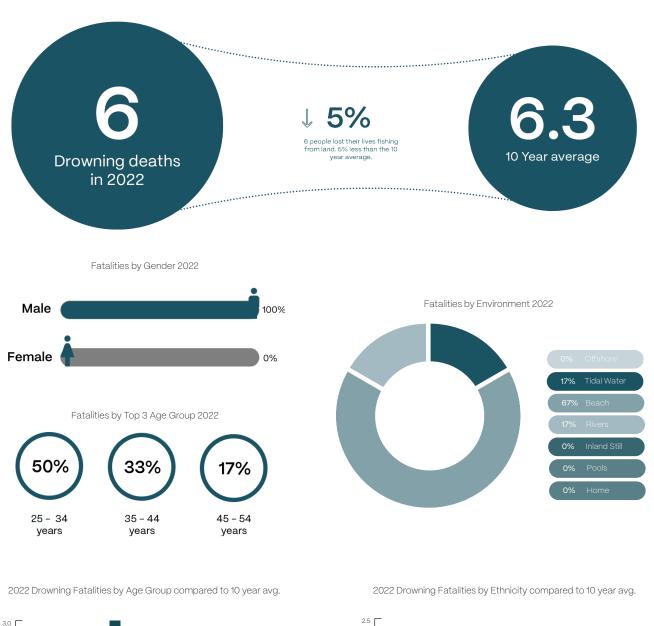
Given that most underwater activities take place offshore, it's not surprising that 73% of all recorded drowning deaths in this category occurred in this environment. Beaches and tidal waters were the next most common locations for underwater drowning deaths, respectively.

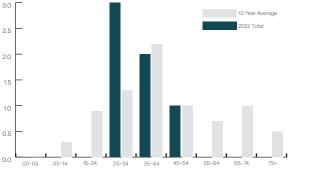
Additionally, drowning deaths in this activity are more prevalent among older age groups, with 27% of all deaths occurring in the 35-44 and 55-64 age groups, and the 65-74 age group contributing a significant 18% to the overall drowning deaths in this category.





Fishing From Land





20 10 Year Average 2022 Total 10 0.5 0.0 Asian Maori NZ European Other Pasifika Unknown

Fishing from Land



Fishing from land is an activity group that includes all fresh and salt water fishing whilst standing on land. This includes netfishing, angling and shellfishing. Rock fishing or land fishing is a popular recreational activity that involves fishing from rocks or cliffs along the shoreline. While rock fishing can be an enjoyable and rewarding activity, it can also be dangerous, as water conditions and the nature of the terrain can pose significant risks to rock fishers.

In 2022, drowning deaths in the fishing from land activity category experienced a decrease of 5% compared to the 10 year average. As with previous years, drowning incidents related to this activity were dominated by males, with 100% of all deaths attributed to males.

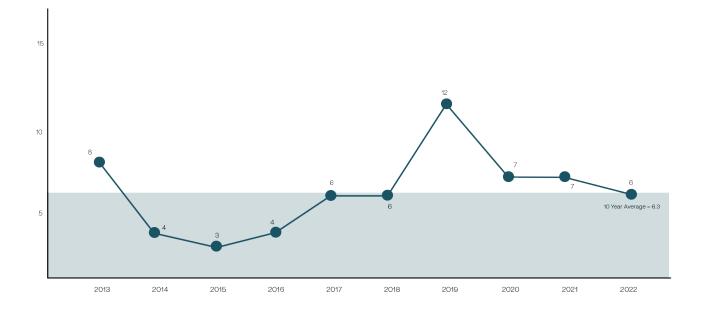
The environment also played a significant role in the recorded drowning deaths in this category, with 66% of all incidents occurring at beach locations, while tidal waters and rivers accounted for 16% each.

The correlation between the warmer summer weather and increased rock fishing activity levels understandably leads to a higher incidence of drowning deaths during the summer season, with 67% of all fishing from land-related drownings occurring in the summer, while autumn and winter each accounted for 16%

Furthermore, fishing from land also showed a higher proportion of deaths among those aged 25–34, potentially indicating a higher risk appetite among this age group around rough coastal waters.

Despite the overall decrease in drowning deaths related to fishing from land in 2022, it's important to note that this activity still carries a risk of drowning, particularly for males. While fishing can be an enjoyable pastime, it's crucial to prioritise safety at all times, especially when fishing in areas where the water conditions can change quickly.

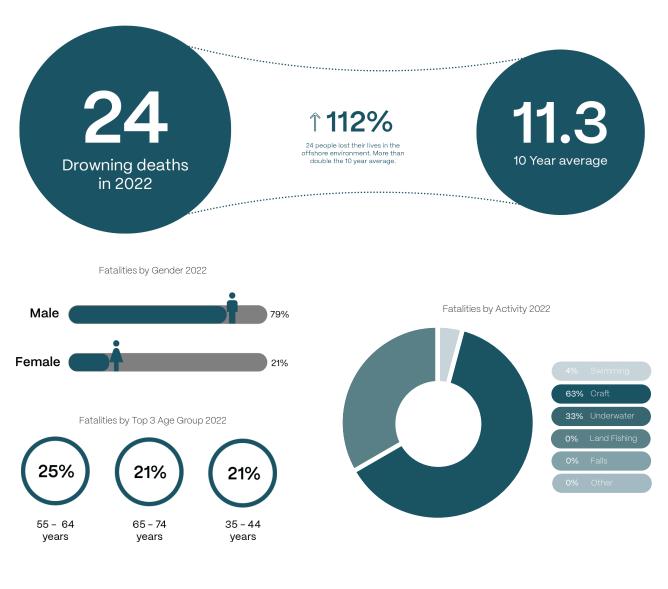
The fact that the majority of drowning incidents in this activity category occurred at beach locations underscores the importance of being aware of and responsive to changing weather conditions and tides. Fishers should take time to familiarize themselves with their chosen location and its potential hazards, wear a life jacket and avoid fishing alone, especially in hazardous conditions.



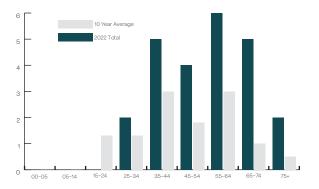


Key Environments

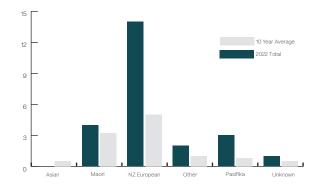
Offshore



2022 Drowning Fatalities by Age Group compared to 10 year avg.

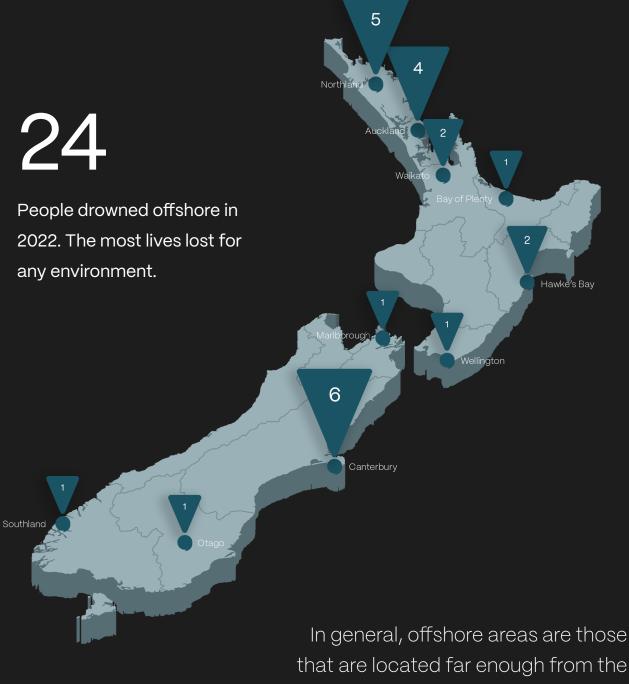


2022 Drowning Fatalities by Ethnicity compared to 10 year avg.



Key Environments

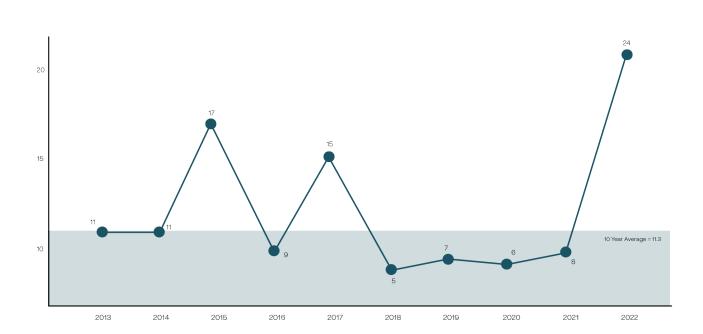
Offshore



that are located far enough from the shoreline that emergency services, such as lifeguards or rescue boats can't reach the incident in a timely manner. In the context of this report, "offshore" refers to areas of open water that are beyond surf zone, where the water is deeper, and conditions can be more challenging. Offshore areas may be subject to stronger winds, larger waves, and more unpredictable currents than nearshore areas, which can pose greater risks to swimmers, boaters, and other water users.

In general, offshore areas are those that are located far enough from the shoreline that emergency services, such as lifeguards or rescue boats, may take longer to reach in the event of an accident or emergency. The exact distance that constitutes "offshore" may vary depending on local conditions and regulations, but it is typically considered to be beyond the range of immediate assistance from shore–based services.

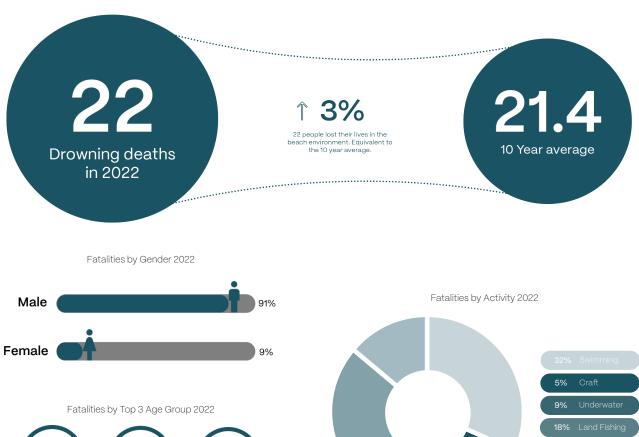
Offshore areas may be popular for activities such as surfing, fishing, diving or boating, but users should be aware of the risks and take appropriate safety precautions. This may include wearing appropriate personal flotation devices, checking weather and surf conditions before entering the water, and avoiding offshore areas during periods of high winds or waves.





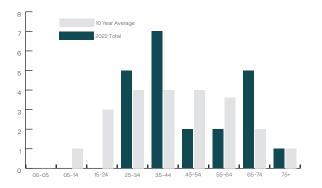
Key Environments

Beach

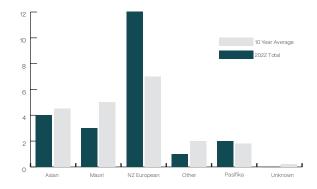




2022 Drowning Fatalities by Age Group compared to 10 year avg.



2022 Drowning Fatalities by Ethnicity compared to 10 year avg.



Key Environments

Beach



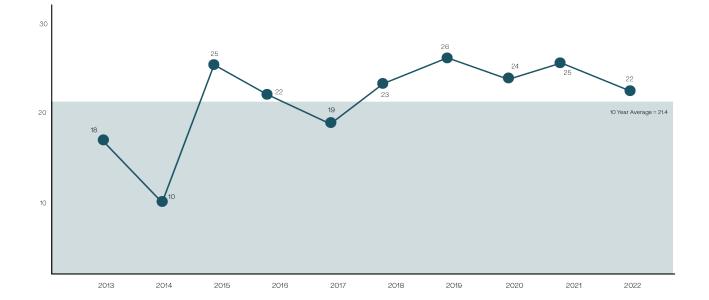
In the context of this report, a beach is an area of land that borders a coastal body of water. Beaches can vary widely in size, shape, and topography, but they typically have several common features that can impact water safety, including:

1. Surf conditions: Beaches with breaking waves can create strong currents and rip currents, which can be hazardous for swimmers and surfers.

2. Underwater hazards: Beaches may have rocks, reefs, or other underwater features that can pose a danger to swimmers, boaties and divers.

4. Weather conditions: Beaches may be subject to changing weather conditions such as wind, rain, or storms, which can impact water safety and create hazardous conditions for water users.

5. Beach facilities: Many beaches have facilities such as Surf clubs, public restrooms, or parking areas, which can help improve water safety by providing support and resources for beachgoers. These facilities also provide an ease of access that may lead to increased activity rate. Staying safe at beaches typically involves a range of measures to prevent accidents and ensure the safety of water users, including lifeguard patrols, warning signs and flags, education and awareness programmes, and emergency response procedures. Beachgoers are also encouraged to take responsibility for their own safety by checking water conditions, swimming between the flags, actively supervising children and following any posted rules or regulations.

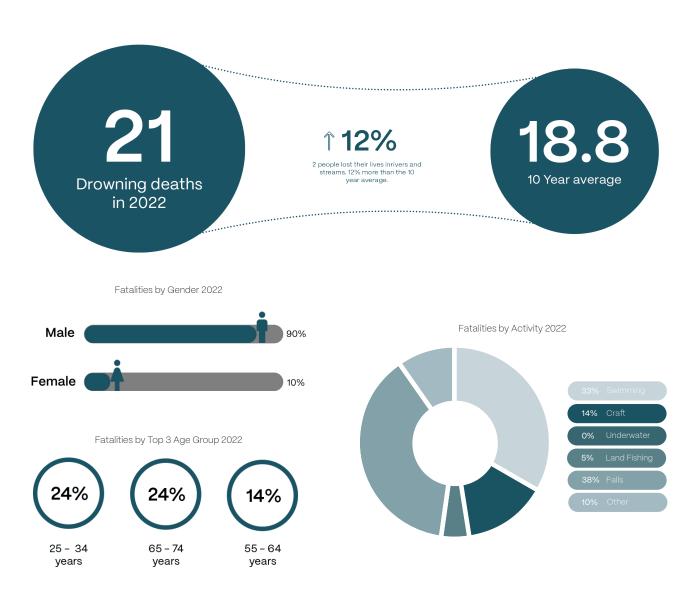




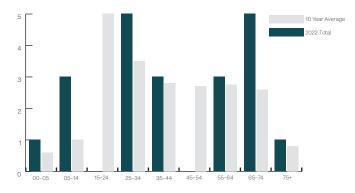
Key Environments

River

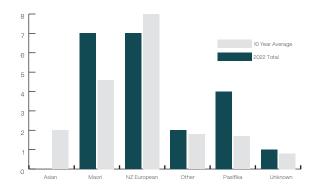
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2022 Drowning Fatalities by Age Group compared to 10 year avg.



2022 Drowning Fatalities by Ethnicity compared to 10 year avg.



Key Environments

River



range in size from small streams to large, navigable waterways. In the context of this report, a river is a body of water that flows downhill, typically from higher elevations to lower elevations, and can range in size from small streams to large, navigable waterways. Rivers can be popular destinations for a variety of water activities, such as swimming, fishing, kayaking, and rafting, but they can also pose significant safety risks, especially during times of high-water flow or changing conditions.

Water safety in rivers typically involves a range of measures to prevent accidents and ensure the safety of water users, including:

1. Understanding river flow and conditions: River flow can change rapidly, especially during periods of heavy rain or snowmelt. It's important for anyone planning to use a river for recreational purposes to be aware of current flow rates and conditions and to adjust their plans accordingly.

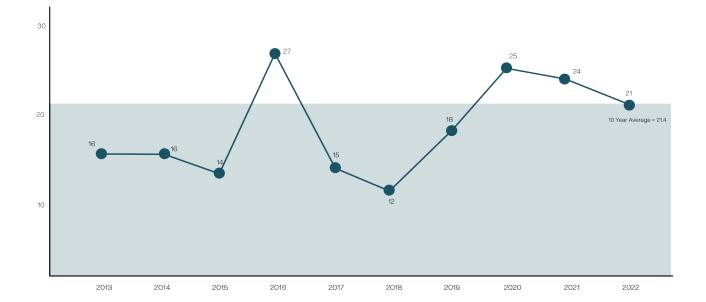
2. Wearing appropriate safety gear: Depending on the activity, water users may need to wear helmets, life jackets, wetsuits, or other safety gear to protect themselves from hazards such as rocks, rapids, or submerged objects.

3. Knowing the river and its hazards: Different rivers can have unique hazards, such as rapids, submerged trees or logs, or undercut banks. It's important for water users to understand the specific hazards of the river they plan to use and to take appropriate safety measures.

4. Planning for emergencies: In the event of an emergency, such as a capsize or injury, it's important to have a plan for getting help quickly. This may involve carrying a communication device, such as a cell phone or whistle, and knowing how to signal for help.

5. Seeking training or guidance: For activities such as kayaking or rafting, it's important to have proper training or guidance from a qualified instructor to ensure safe practices and techniques.

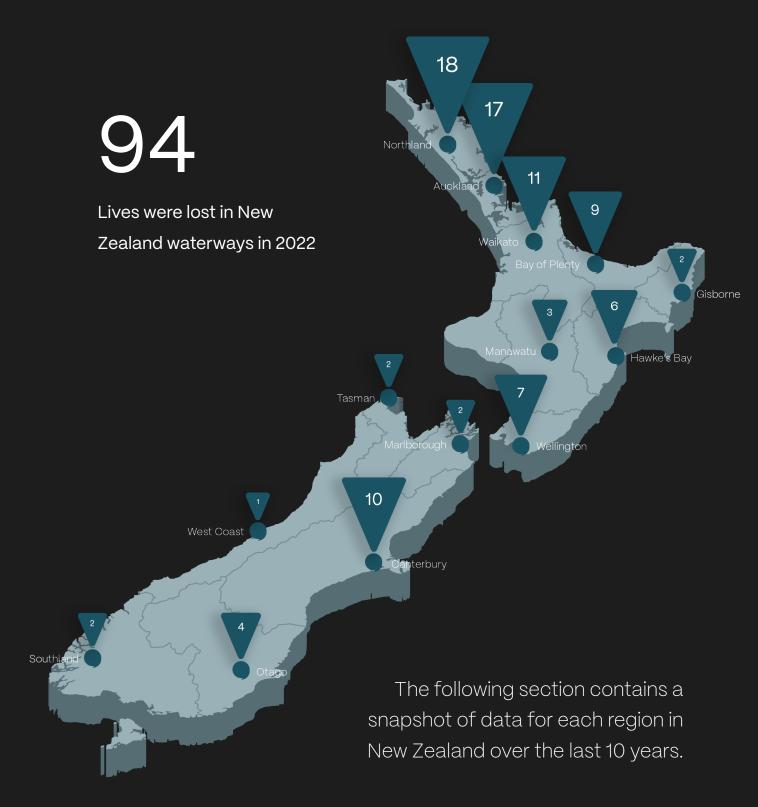
Water safety in rivers requires a combination of awareness, preparation, and caution, as well as a willingness to adjust plans or activities based on changing conditions. By taking these measures, water users can enjoy the beauty and excitement of river recreation while minimising the risk of accidents or injuries.





Regional Breakdown

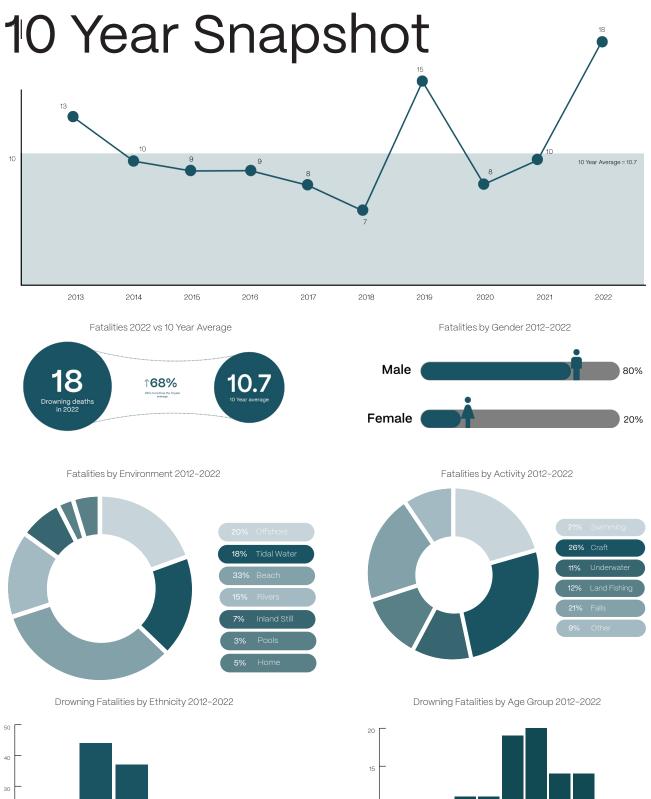
Where are People Drowning?

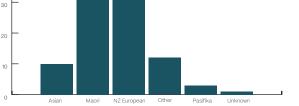


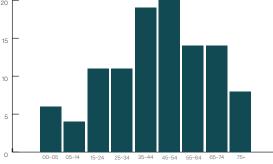
Northland

18 18 Northland Lives were lost in the Northland region in 2022.

Northland



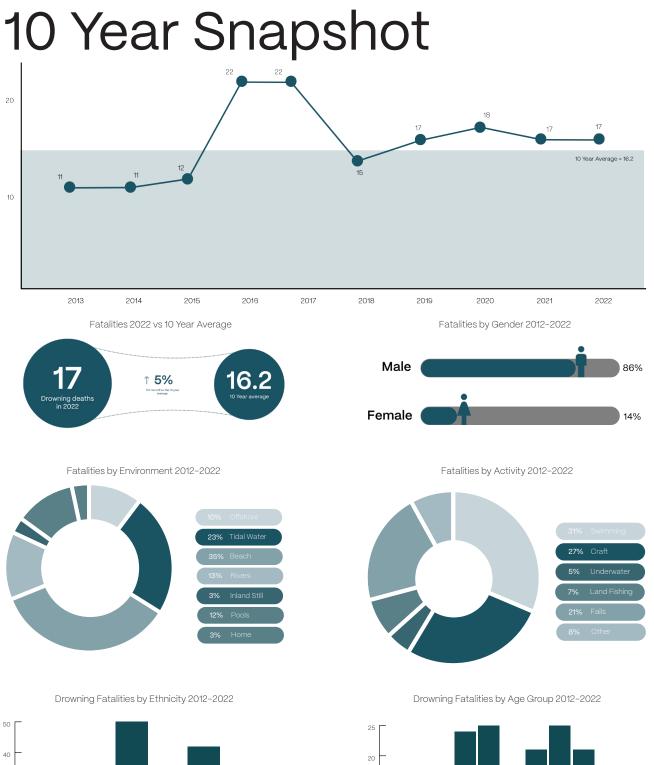


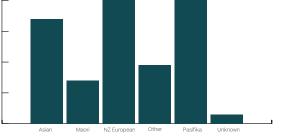


Auckland

17 17 Auckland Lives were lost in the Auckland region in 2022.

Auckland





Ρ.

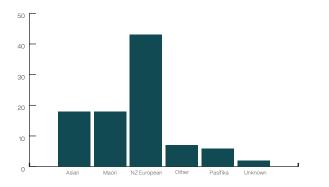
Waikato



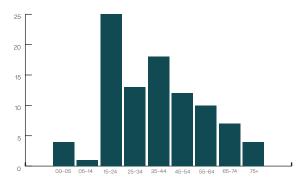
Waikato



Drowning Fatalities by Ethnicity 2012–2022



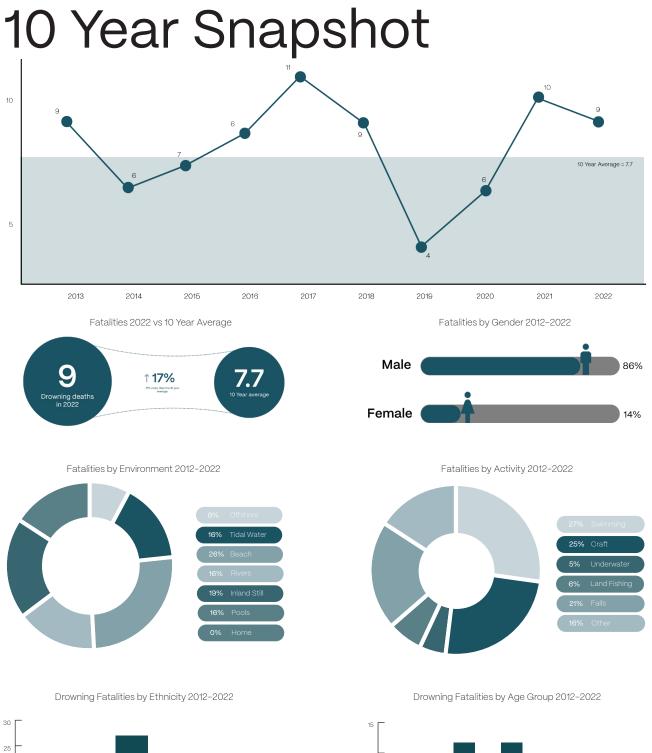
Drowning Fatalities by Age Group 2012–2022

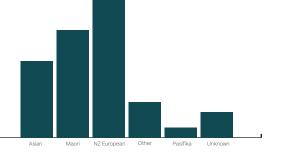




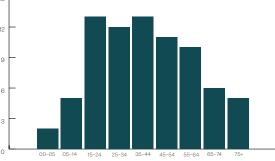


Bay of Plenty





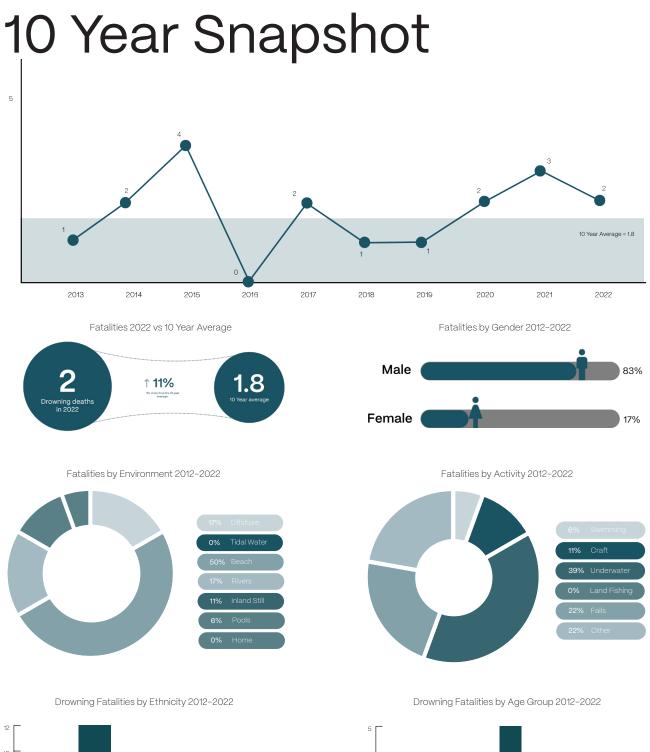
20 15 10

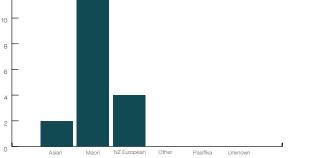


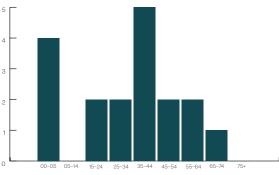
Gisborne



Gisborne









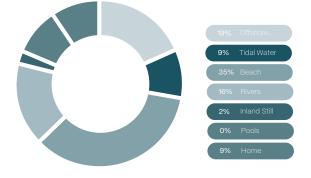


Hawke's Bay

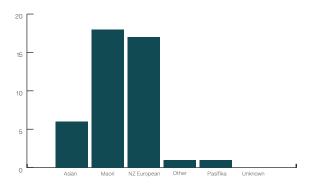


Female

Fatalities by Environment 2012–2022

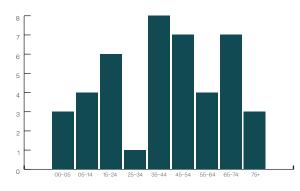


Drowning Fatalities by Ethnicity 2012–2022



Drowning Fatalities by Age Group 2012–2022

Fatalities by Activity 2012–2022



19%

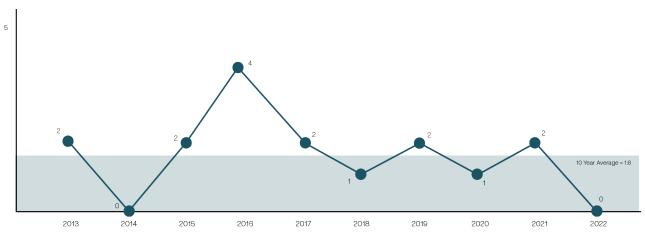
16% Underwater

Taranaki



Taranaki

10 Year Snapshot



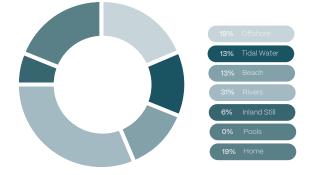
Fatalities 2022 vs 10 Year Average



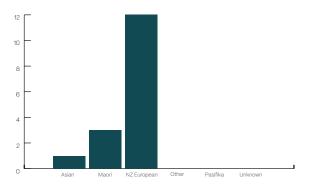
Fatalities by Gender 2012-2022



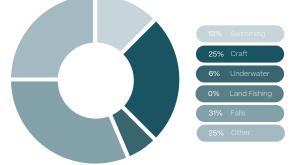
Fatalities by Environment 2012–2022



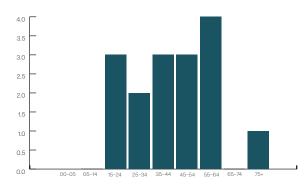
Drowning Fatalities by Ethnicity 2012–2022



Fatalities by Activity 2012–2022



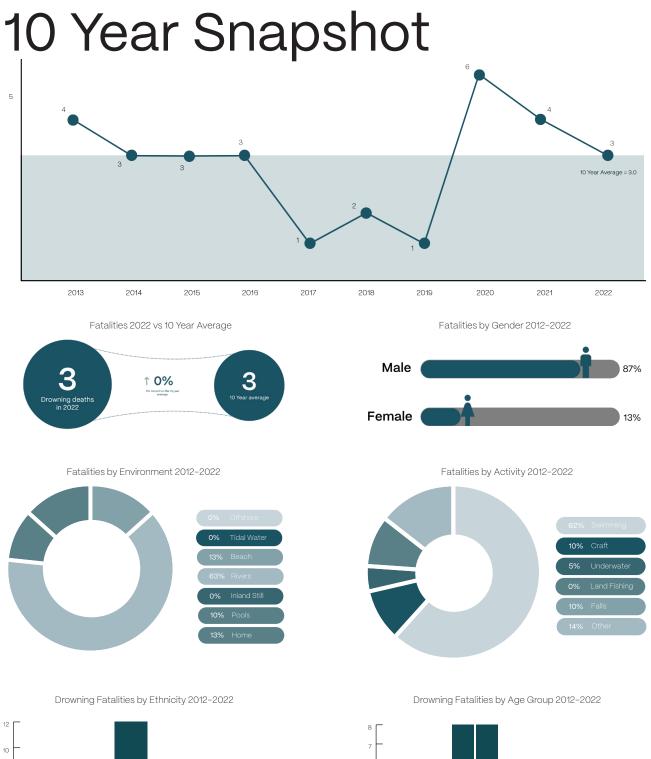
Drowning Fatalities by Age Group 2012–2022

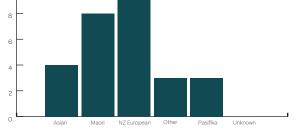


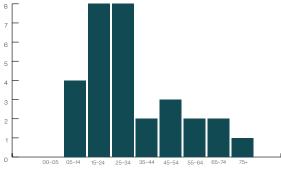
Manawatu – Wanganui



Manawatu-Wanganui



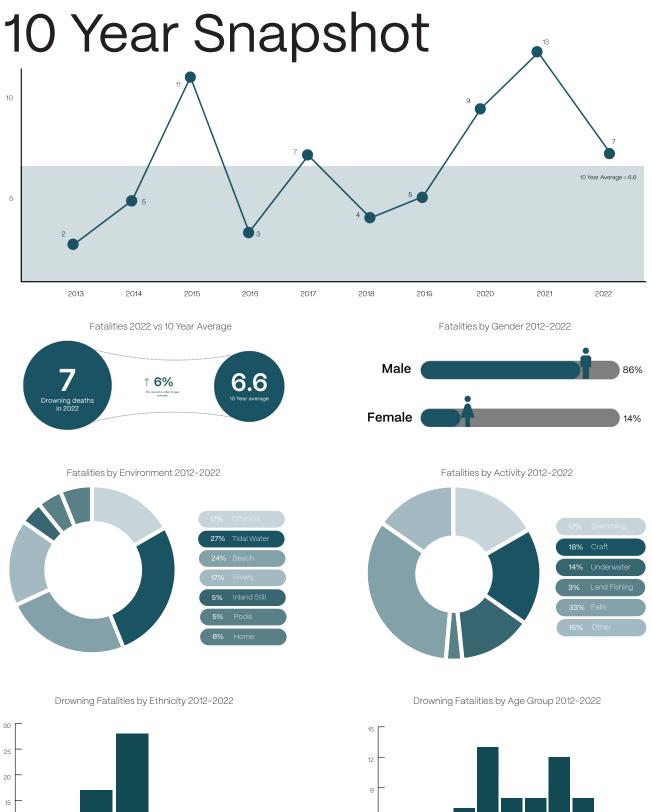


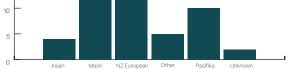


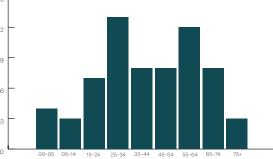
Wellington



Wellington



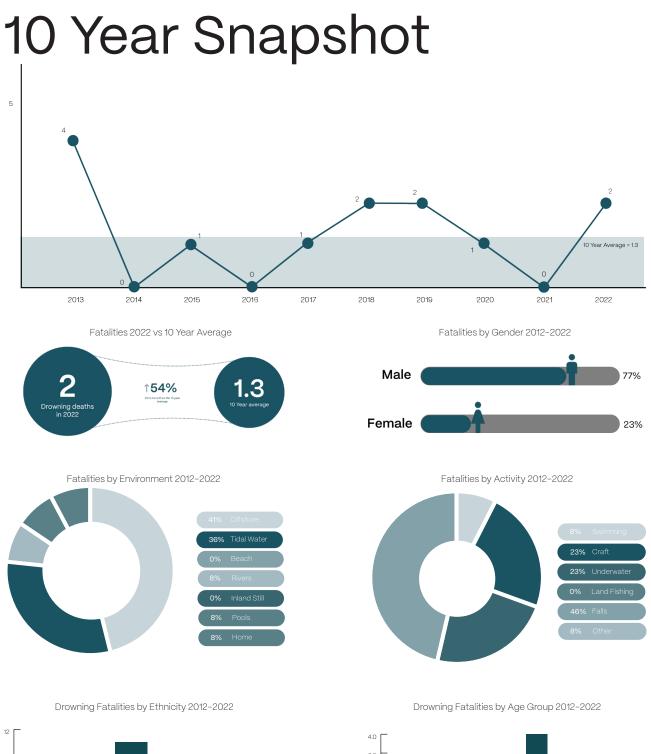


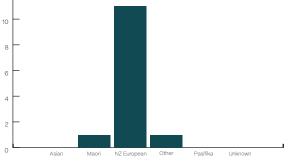


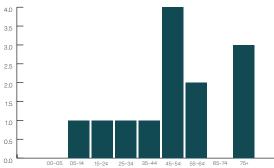
Marlborough



Marlborough







Tasman

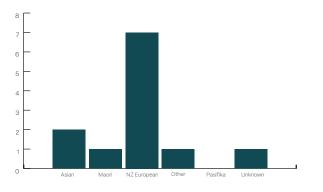


Tasman

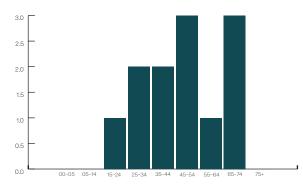
10 Year Snapshot



Drowning Fatalities by Ethnicity 2012–2022



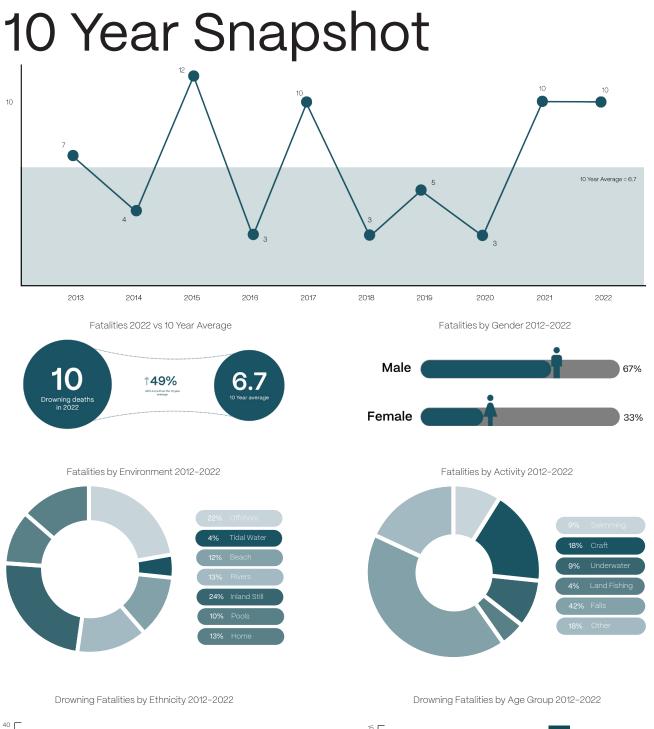
Drowning Fatalities by Age Group 2012–2022

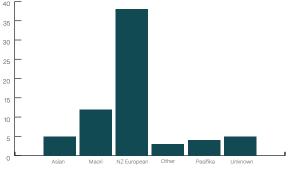


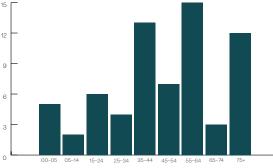
Canterbury



Canterbury







West Coast



West Coast

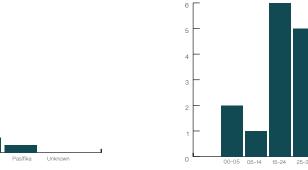
15

10

NZ European

Maori



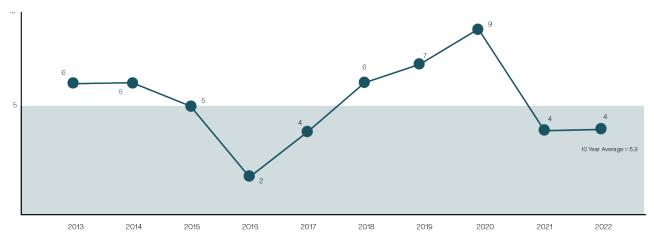


Otago

4 X Lives were lost in the Otago region in 2022. 4

Otago





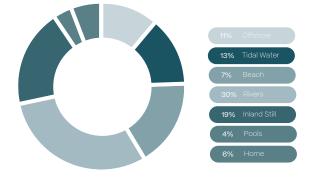
Fatalities 2022 vs 10 Year Average



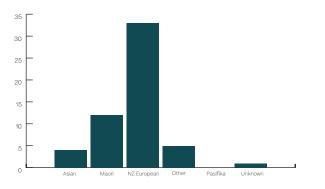
Fatalities by Gender 2012–2022



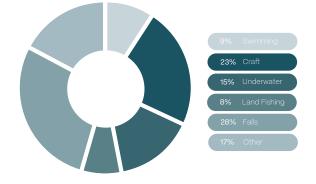
Fatalities by Environment 2012–2022



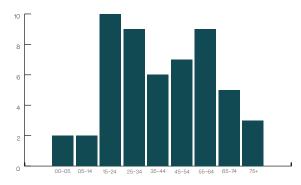
Drowning Fatalities by Ethnicity 2012–2022



Fatalities by Activity 2012–2022



Drowning Fatalities by Age Group 2012–2022



Southland



Southland

10 Year Snapshot



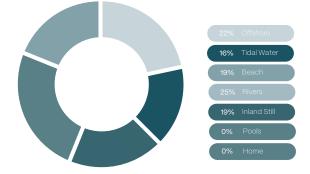
Southland Fatalities 2022 vs 10 Year Average



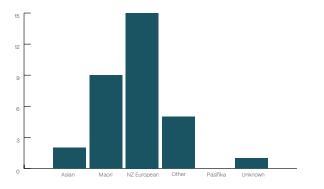
Southland Fatalities by Gender 2012–2022



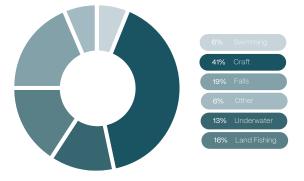
Southland Fatalities by Environment 2012–2022



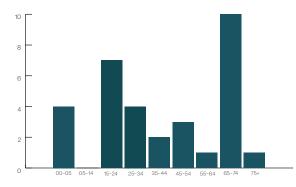
Southland Drowning Fatalities by Ethnicity 2012–2022



Southland Fatalities by Activity 2012–2022



Southland Drowning Fatalities by Age Group 2012–2022



Water Safety New Zealand

Contact

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