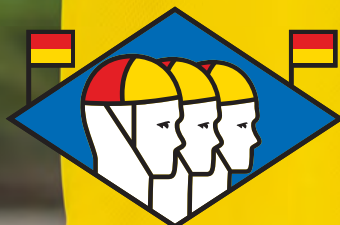


# NATIONAL BEACH & COASTAL SAFETY REPORT

10-YEAR OVERVIEW | 2010-20 & 1-YEAR OVERVIEW | 2019-20



**SURF LIFE SAVING**<sup>®</sup>

NEW ZEALAND

*In it for life*

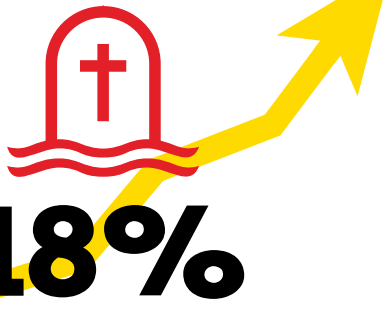
# KEY FINDINGS

10-YEAR OVERVIEW | 2010-20

**1**

**Fatal Drownings in New Zealand Have INCREASED.**

**18%**

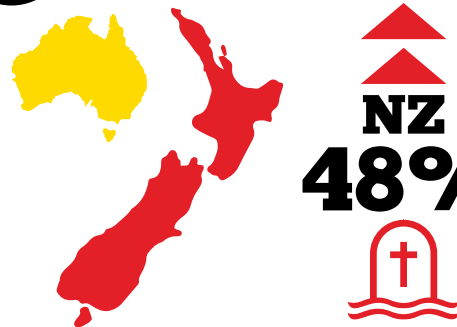


There has been an 18% increase in the number of beach and coastal fatal drownings over the last five years, when compared to the previous five years.

**2**

**Our Fatal Drownings are 48% HIGHER Than Australia's.**

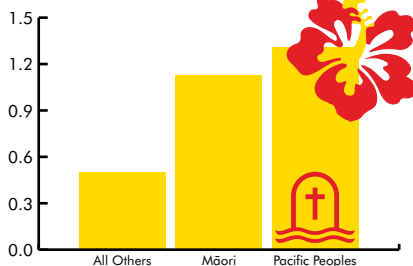
**NZ  
48%**



New Zealand has a 48% higher beach and coastal fatal drowning rate per capita (per 100,000 pop.) than Australia.

**5**

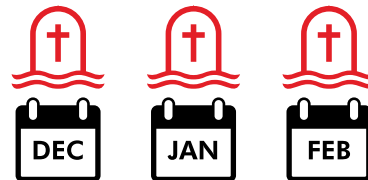
**Pasifika had the HIGHEST Fatal Drowning Rate Over the Last 10 years.**



Over the last ten years Pacific Peoples had the highest fatal drowning rate (1.31 per 100,000 pop.) of any ethnicity, closely followed by Māori (1.13 per 100,000 pop.).

**6**

**45% of Fatal Drownings Occured in SUMMER.**



Over the last ten years, 45% (n=172) of beach and coastal drowning fatalities occurred during the summer months of December, January and February. This figure represents nearly half of the total annual fatal drownings recorded, highlighting the increased risk associated with the busy summer season.

**9**

**Surf Beaches Pose the GREATEST Risk for Beach and Coastal Fatal Drowning in New Zealand.**

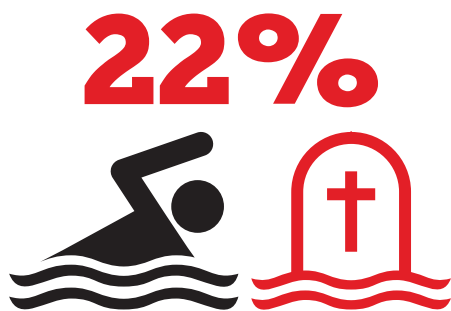
**38%**

Over the last ten years, 38% of beach and coastal fatal drownings occurred at a surf beach in New Zealand.



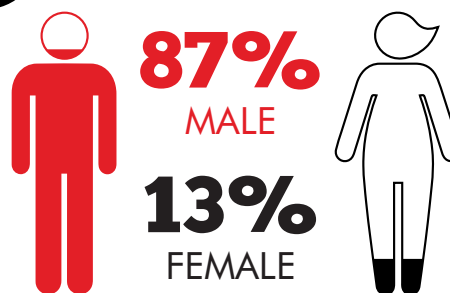
“ We call on those who have the authority, the legal or the moral responsibility, to work with us and our drowning prevention partners to stop the death toll from getting worse, and to reduce it to a level where we can be proud as an island nation to say ‘we have no preventable drownings on our beach and coastal areas’. ”

**3** Last Year 22% of Beach and Coastal Fatal Drownings Occurred While **SWIMMING/WADING**.



This figure represents nearly one quarter of the total number of drowning fatalities, highlighting the risk associated with swimming/wading.

**4** Males are Fatally Drowning **MORE** Than Females.



Of those who died from drowning over the last ten years, males represent 87% and females only 13%. Men are fatally drowning more on our beaches and coastlines than females.

**7** Northland has New Zealand's **HIGHEST** Fatal Drowning Rate



Between 2010-20, Northland had the greatest average fatal drowning rate per capita (3.04 per 100,000 pop.). Auckland (with a much larger population), has a fatal drowning rate of only 0.64. Therefore, the risk of drowning on the beach and coastline of Northland is nearly five times greater than Auckland.

**8** Adults are Fatally Drowning **MORE** Than Children and Young Adolescents.



Adults over the age of 15 account for 95% of all drowning fatalities in the beach and coastal environment. The 35-44 and 65+ age groups have the greatest number of fatal drownings.

**10** Over the Last 10 Years, the **GREATEST RISK** Activities on a Beach and Coastal Environment Have Been:



**However... Last Year, the GREATEST RISK Activities Were:**



# DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20



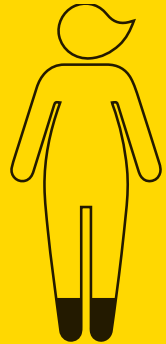
**360**

BEACH &  
COASTAL FATAL  
DROWNINGS



**87%**  
MALE

**13%**  
FEMALE



### LOCATION

**38%**  
SURF BEACH

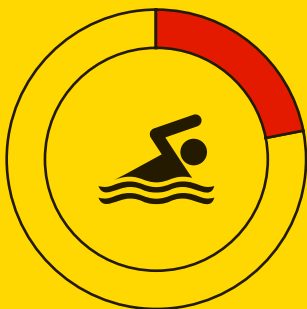


**17%**  
0-1KM  
OFFSHORE

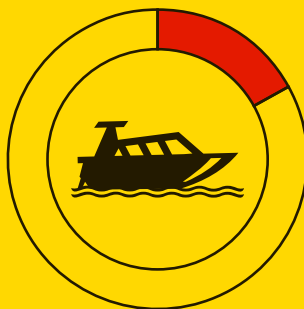
**14%**  
HARBOUR



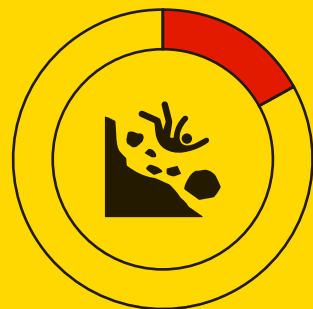
### ACTIVITY



**22%**  
SWIMMING/WADING



**17%**  
BOATING



**17%**  
FALLS

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# SYNOPSIS

**In the last five years, there has been an 18% increase in the number of Beach and Coastal Fatal Drownings compared to the previous five years.**

Each one leaves families and communities devastated. Our drowning toll is something every New Zealander should see as a national tragedy and one we all have a responsibility to address, but the real tragedy is that the majority of these are preventable.

Drowning is not just tragic for those involved, but each drowning has a considerable economic impact too. The social cost to New Zealand of one water drowning fatality has been estimated at \$3.948 million and this can be expected to be higher for children under 5 years-old who live longer. The social cost to New Zealand of one water-related serious injury resulting in hospitalisation is estimated as \$394,800 (ACC, 2016).

Each year, more than three million people visit beaches and 1.5 million go boating (Water Safety New Zealand, 2015). These people are exposed to a risk of drowning, which Surf Life Saving New Zealand (SLSNZ) is committed to reducing. SLSNZ is the leading beach and coastal safety, drowning prevention and rescue authority in New Zealand. The purpose of the organisation is to enable everyone to enjoy New Zealand's beaches safely, with a vision of zero preventable drownings.

The New Zealand coastline varies dramatically. The west coast is exposed to the energetic Tasman Sea whereas the east coast faces the South Pacific Ocean, which at times can be just as dangerous. The coastline of New Zealand is approximately 15,000km in length, the ninth longest coastline of any nation in the world. New Zealand beaches and coastal areas are known to be some of the most beautiful. However, our nation has a shocking annual beach and coastal drowning toll.

During the last ten years, there has been an average of 36 beach and coastal fatal drownings per year. When comparing the first half of the decade (2010-2015) to the later (2015-2020), there has been an 18% increase from 33 fatal drownings on average per year to 39.

Even allowing for population growth, there has been a 12% increase in the five-year average beach and coastal fatal drowning rate over the last five years (0.83 per 100,000 pop.), when compared to the previous five years (0.74 per 100,000 pop.).

The New Zealand 2019-20 fatal drowning rate is 0.85 per 100,000 pop., which is above the ten-year average (0.78

per 100,000 pop.). The New Zealand ten-year average beach and coastal fatal drowning rate is 48% greater than the Australian ten-year average (0.48 per 100,000 pop.).

Despite some drowning trends in New Zealand being on the decline (Water Safety New Zealand, 2020), beach and coastal drownings are on the increase. In order to help understand the problem in more detail, SLSNZ produces this report on an annual basis, documenting incidents that have occurred within the coastal zone. The coastal zone is defined as "Tidal waters (estuary, harbour, marina and river/harbour bar); ocean up to 1km offshore; or inland up to five times the width of the inlet/river".

This report is designed to complement the National Drowning Report produced by Water Safety New Zealand and to contribute to the New Zealand Water Safety Sector Strategy. The report provides an analysis of fatal and non-fatal drownings and rescues where a fatal or non-fatal drowning has been averted. It compares data from July 2019 – June 2020 with the ten-year average from July 2010 - June 2020. It also provides both a national and regional overview with a breakdown of who is drowning, where they are drowning and what they are doing when they drown.

The report in itself does not provide answers, it simply provides the data in a way that highlights the problem and will aid further analysis to help provide potential solutions. SLSNZ will continue to undertake a comprehensive Coastal Risk Assessment process using information gained from more in-depth studies of each fatal and non-fatal drowning as well as rescues. Using this information, SLSNZ is asking Central and Local Government, key landowners and stakeholders to clarify the responsibility for beach and coastal safety and then, using an evidence-based, collaborative and partnership approach, provide targeted safety interventions at local, regional and national levels that lead towards a safer future for all those that visit and recreate on beaches along New Zealand's coastline.

**Road, fire and boating safety have had significant investment in public education strategies and campaigns, which has not only dramatically reduced deaths and injuries but also raised awareness of the issues. It's now time to do the same for beach and coastal safety.**

This report is our way of drawing a line in the sand. We, Surf Life Saving New Zealand, are saying "enough is enough". We are calling for greater investment in a long term, evidence based beach and coastal safety education strategy.

## KEY FINDINGS

- Beach and coastal fatal drownings are increasing. There has been an 18% increase in the number of beach and coastal drowning fatalities over the last five years, when compared to the previous five years.

- New Zealand has a 48% higher ten-year average beach and coastal fatal drowning rate per capita (per 100,000 pop,) than Australia.

- Last year, 22% of beach and coastal fatal drownings occurred while swimming/wading. This highlights the risk associated with swimming/wading.

- Males are fatally drowning more than females on our beaches and coastline. Of those who died from drowning over the last ten years, males represent 87% and females 13%.

- Over the last ten years, Pacific Peoples had the highest fatal drowning rate per capita (1.31 per 100,000 pop.) of any ethnicity, followed by Māori (1.13 per 100,000 pop.) and Other (0.91 per 100,000 pop.).

- Over the last ten years, there were 172 beach and coastal drowning fatalities during the three summer months of December, January and February. This figure represents nearly half of the total annual beach and coastal drowning fatalities recorded, highlighting the increased risk associated with the busy summer season.

- Between 2010-20, Northland had the greatest average fatal drowning rate per capita (3.04 per 100,000 pop.). Auckland (with a much larger population), has a fatal drowning rate of only 0.64. Therefore, the risk of fatally drowning on the beach and coastal environments of Northland is nearly five times greater than Auckland<sup>1</sup>.

- Over the last ten years, adults over the age of 15 account for 95% of all drowning fatalities in the beach and coastal environment. The 35-44 and 65+ age groups have the greatest number of fatal drownings.

- Over the last ten years, 38% of beach and coastal fatal drownings occurred at a surf beach in New Zealand.

- Over the last 10 years, swimming/wading, boating and falls (trips/slips) have been the highest risk activities on the coast. Last year swimming/wading, boating and snorkelling were the highest risk activities.

- As part of the 'National Search and Rescue Framework', Volunteer SLSNZ Clubs are regularly called upon by the Police to respond to incidents out of hours. These call outs

have significantly increased in recent years as more and more people require our services.

- Over the last ten years, Surf Lifeguards have carried out 951,695 preventative actions involving 3,775,982 members of the public, 6545 assists and 10,229 rescues. That is a huge number of drownings that have been potentially averted because of the vital role that SLSNZ performs.

- SLSNZ also saves lives on the land as well as in the sea. All Surf Lifeguards are first aid trained and many are trained as First Responders. Over the last 10 years, Surf Lifeguards have treated 20,438 people who required minor or major first aid treatments.



**“ Males account for 87% of all Beach and Coastal Drowning Fatalities. Our Fatal Drowning Toll is something every New Zealander should see as a national tragedy which we all have a responsibility to address. ”**

<sup>1</sup> The population figures are based on those residing in the region, and do not include visitors. To gain a true picture of the 'drowning risk' in any area, future reports will attempt to allow for the seasonal influx of visitors.

The National Beach and Coastal Safety Report only documents incidents that have occurred within the coastal zone. The coastal zone is defined as "Tidal waters (estuary, harbour, marina and river/harbour bar); ocean up to 1km offshore; or inland up to five times the width of the inlet/river".





# CAPABILITY

## SECTION ONE

10-YEAR OVERVIEW | 2010-20  
&  
1-YEAR OVERVIEW | 2019-20

STATISTICS | 2010-20



**10,229**

RESCUES

**951,695**

PREVENTATIVE  
ACTIONS



**6,545**

ASSISTS



INVOLVING

**3,775,982**

MEMBERS OF THE PUBLIC



**2,946**

SEARCHES

**40**  
EMERGENCY  
CALLOUT SQUADS



**20,438**

FIRST AID  
TREATMENTS

# CAPABILITY

Surf Life Saving New Zealand has provided a Surf Lifeguard Service to the New Zealand public for 110 years. The service consists of 74 volunteer Surf Life Saving Clubs and Contract Surf Lifeguard Service. When combined, these services patrol a total 80+ locations country-wide. Between 2019-20 there were 4541 qualified Surf Lifeguards, with 862 gaining their Surf Lifeguard Award during the season. Beyond the red and yellow flags, Surf Life Saving New Zealand provides surveillance at many remote beaches and coastlines through a fleet of Inflatable Rescue Boats, Rescue Water Craft, All-Terrain Vehicles and 4x4's, and delivers an invaluable Search and Rescue service through a network of Volunteer Emergency Callout Squads.

## VOLUNTEER SURF LIFEGUARDS

Seasonal patrols are provided by 74 volunteer Surf Life Saving Clubs, with patrols typically occurring between Labour Weekend (October) and Easter (April). Over the past few years, Surf Life Saving Clubs have been reviewing and adapting season lengths and daily patrol timings to meet the ever-changing demands of the communities they serve. The recommended Surf Lifeguard service requirements are evidence-based and derived from coastal risk assessments, which have been tailored towards existing patrol locations nationally. The coastal risk assessment also recommends new patrol locations, based upon risk-adjusted water use values for each site. Surf Life Saving New Zealand works with Surf Life Saving Clubs, communities and stakeholders to deliver services to areas with the greatest need.

Volunteer clubs use standardised equipment that includes Rescue Tubes, Rescue Boards, Inflatable Rescue Boats and Rescue Water Craft to perform rescues and preventative actions that stop the public getting into dangerous situations. The organisation also provides a number of surveillance patrols to increase service coverage. All Terrain Vehicles and 4x4 vehicles equipped with first aid and rescue equipment, ensure coverage is extended across larger stretches of the coastline and remote beaches. A number of Rescue Water Craft provide rapid response to remote areas and rock foreshores and participate in both surveillance and Search and Rescue activities.

## CONTRACT SURF LIFEGUARD SERVICE

The Contract Surf Lifeguard Service is funded by Regional Councils and Local Territorial Authorities. Patrols primarily run on weekdays (Monday-Friday) through the summer school holidays (December-February). An evidence-based delivery model for the Contract Surf Lifeguard Service is also

being used to expand the service to meet community need. In some areas, surveillance-based patrolling methods have been used to extend patrolling hours into the evening. This approach has proven effective for preventing Surf Lifeguard fatigue. On-call based services have also been successfully trialled in the Bay of Plenty, to extend patrols in response to periods of prolonged settled weather and dangerous swimming conditions, as well as providing additional safety services to the public.

## SEARCH AND RESCUE

Emergency Callout Squads are used to assist Search and Rescue agencies or sometimes Maritime New Zealand, in NZ Police tasked incidents. There are currently 40 active Emergency Callout Squads nationally. In 2019-20 Emergency Callout Squads were involved in 73 Category 1 Search and Rescue Operations. As a result of the operations, 54 people were rescued, of which 54 people's lives were saved, with a further 31 people assisted to safety.

Emergency Callout Squads were also involved in retrieving 20 persons who died, returning them back to their whānau and loved ones. Surf Lifeguards provided over 633 hours of service as part of official Search and Rescue Operations.

## SURF LIFEGUARD INTERVENTIONS 2010-2020

The interventions performed whilst Surf Lifeguards have been protecting our beaches in the last decade have saved countless lives. The exact figure at present cannot be quantified, however through these actions Surf Life Saving New Zealand and its Volunteer Surf Lifeguards have likely saved more than 10,200 lives.

**Table 1**  
*Surf Lifeguard Interventions 2010-20 (last 10yrs)*

SURF LIFEGUARD INTERVENTION	TOTALS (2010-20)
<b>Rescues / Lives Saved</b>	10,229
<b>Assists</b> (new category since 2016/17)	6,545
<b>Preventative Actions</b> People in Preventatives: 3,775,982	951,695
<b>Searches</b>	2,946
<b>First Aid Treatments</b>	20,438
<b>TOTAL INTERVENTIONS</b>	<b>991,853</b>

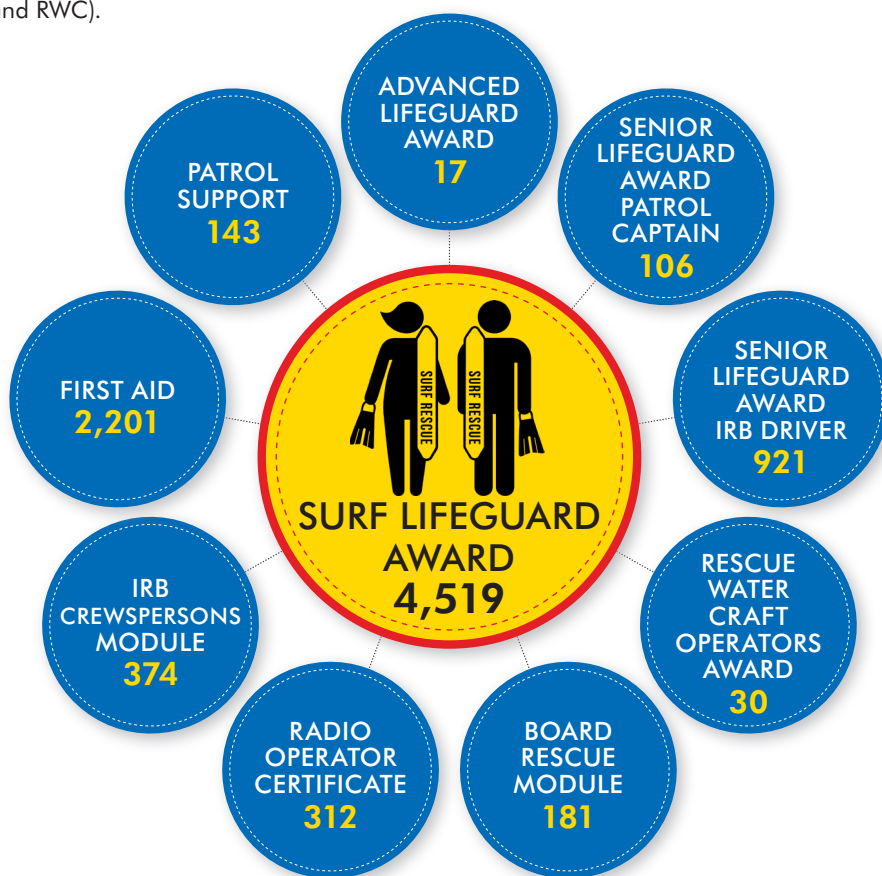
# CAPABILITY

1-YEAR OVERVIEW | 2019-20

**Figure 01**

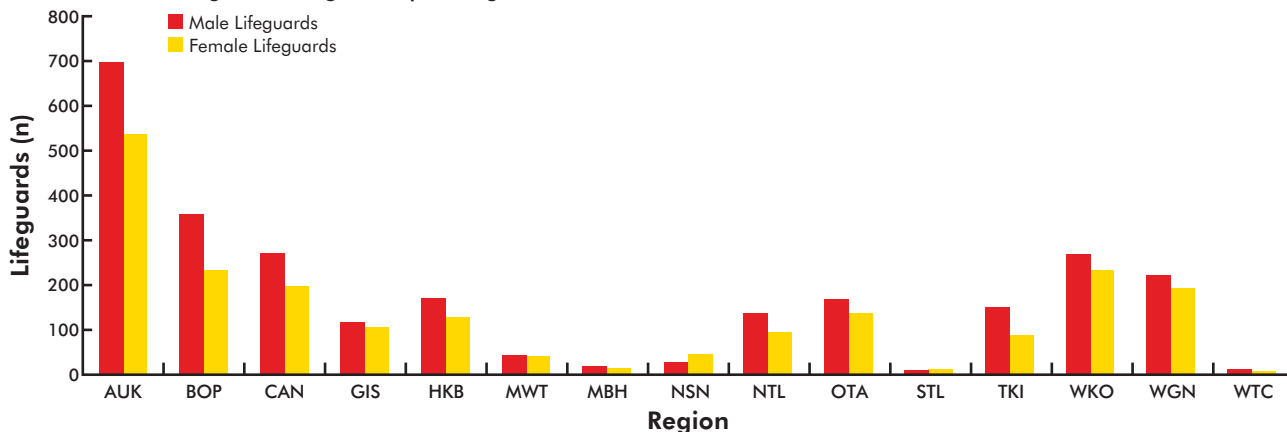
2019-20: Qualifications Held by Surf Lifeguards

There were a total of 4,519 proficient Surf Lifeguards in 2019-20, of which 862 were new recipients of the Surf Lifeguard Award. SLSNZ Surf Lifeguards currently hold a total of 8,953 awards, with 2,201 first aid awards and 1,365 craft qualifications (IRB and RWC).



**Figure 02**

2019-20: Patrolling Surf Lifeguards per Region



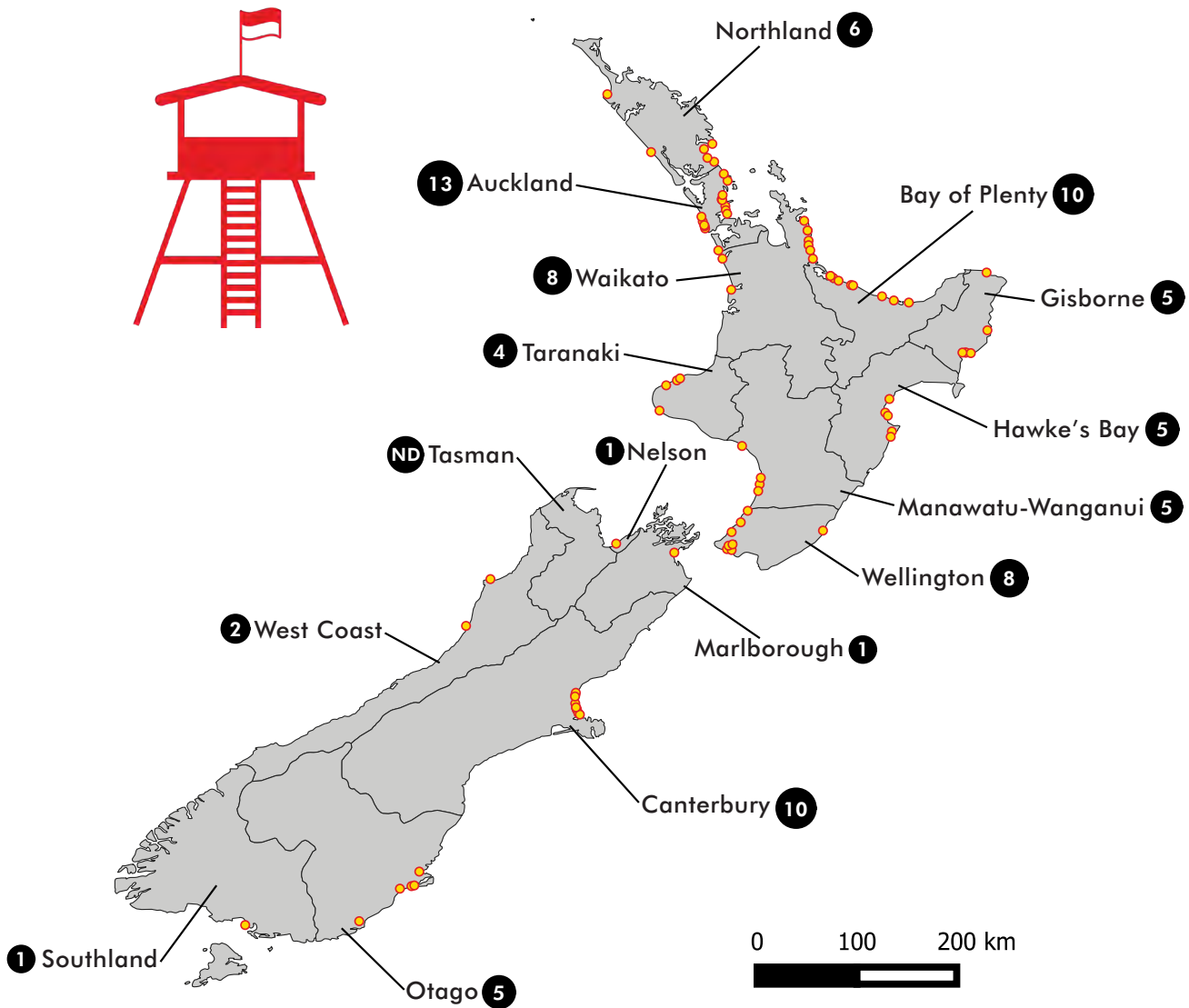
# SURF LIFE SAVING PATROL LOCATIONS

1-YEAR OVERVIEW | 2019-20

**Figure 03**

2019-20: Surf Life Saving Patrol Locations per Region

There are a total of 74 Surf Life Saving Clubs in New Zealand who provide voluntary patrols during varying season lengths between Labour and Easter weekends.



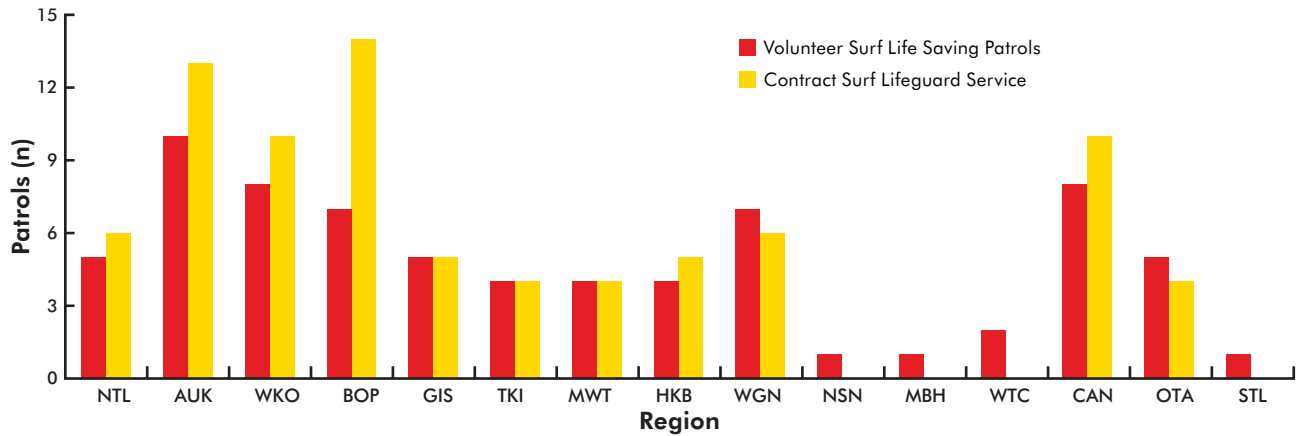
# SURF LIFEGUARD CAPABILITY

1-YEAR OVERVIEW | 2019-20

**Figure 04**

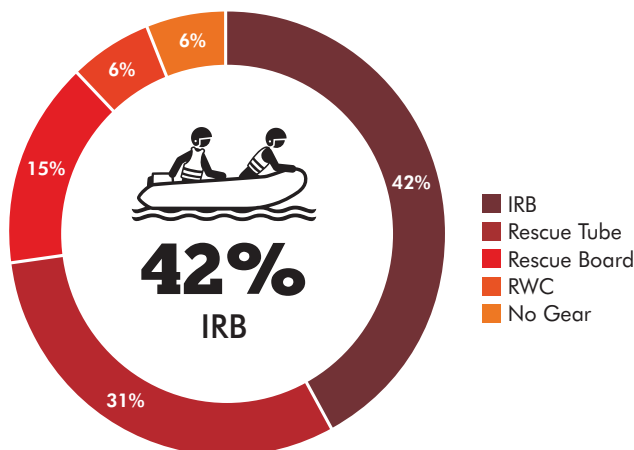
2019-20: Total Volunteer Surf Life Saving Patrols and Contract Surf Lifeguard Service per Region

There are a total of 74 Surf Life Saving Clubs in New Zealand which provide voluntary patrols, up to a maximum season length between Labour and Easter weekends. The Contract Surf Lifeguard Service (Monday-Friday) provides 80 Lifeguard Patrols nationally.



**Figure 05**

2019-20: Equipment Used in a Rescue



**Figure 06**

2019-20: Patrolling Surf Lifeguards



# RESCUES PER REGION

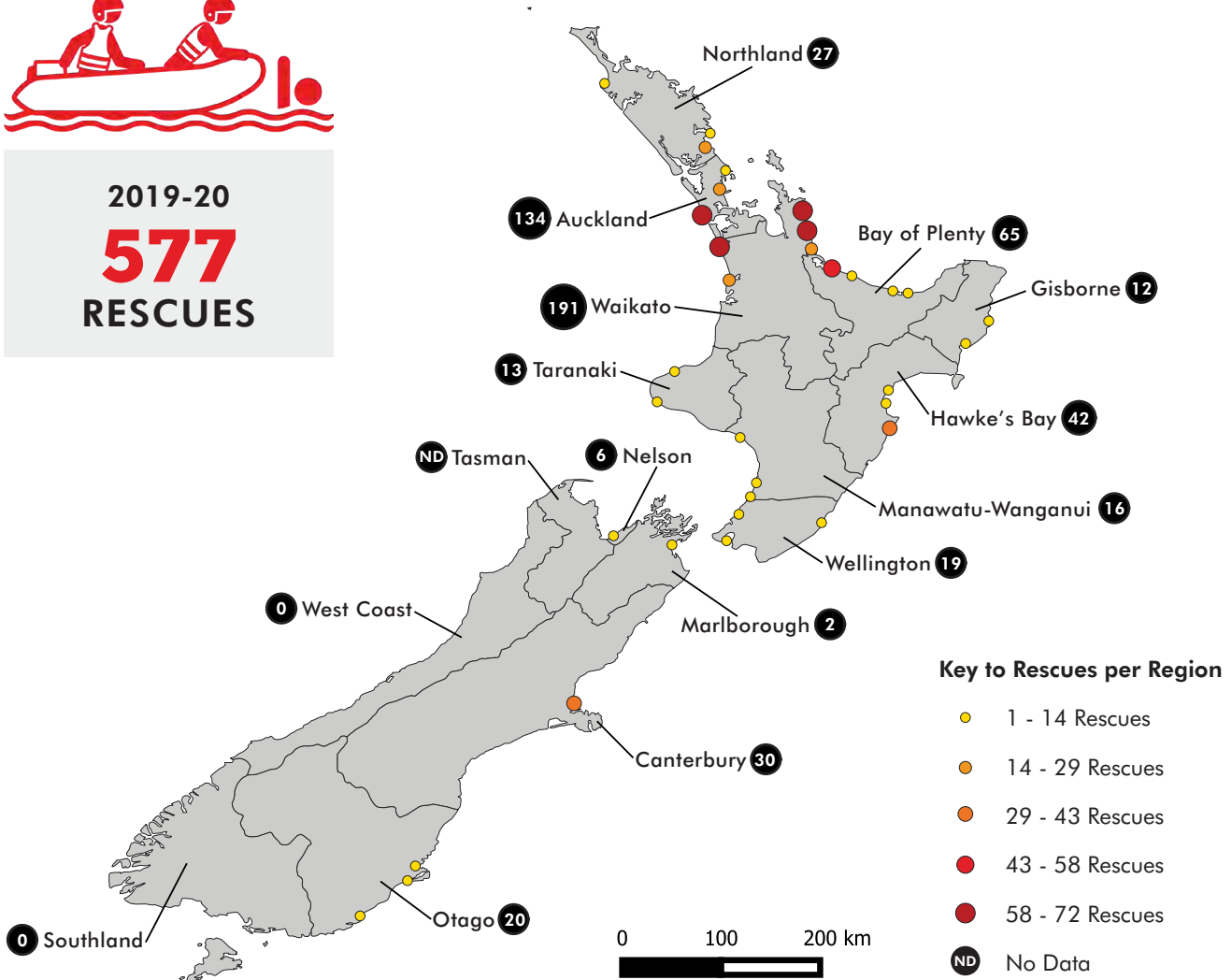
1-YEAR OVERVIEW | 2019-20

*“Rescue - Where a person requires immediate help to return to shore (or place of safety) and who without intervention would have suffered distress, injury or drowning.”*

**Figure 07**  
2019-20: Rescues per Region



2019-20  
**577**  
RESCUES



# ASSISTS PER REGION

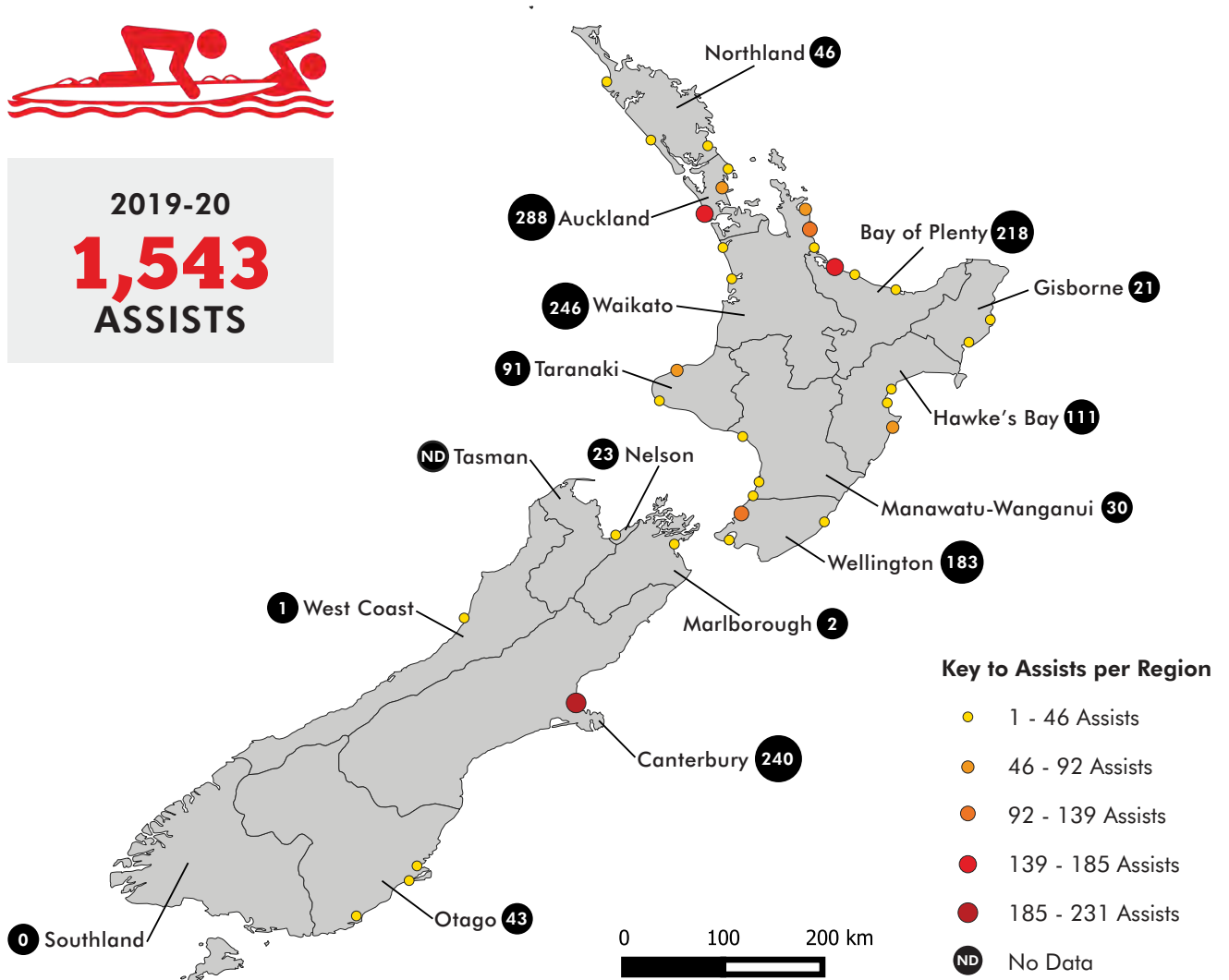
1-YEAR OVERVIEW | 2019-20

*“Assist - Where a person requires assistance to return to shore but would most likely be able to get themselves out of danger if unaided.”*

**Figure 08**  
2019-20: People Assisted to Safety per Region



2019-20  
**1,543**  
ASSISTS



# MAJOR FIRST AID INCIDENTS PER REGION

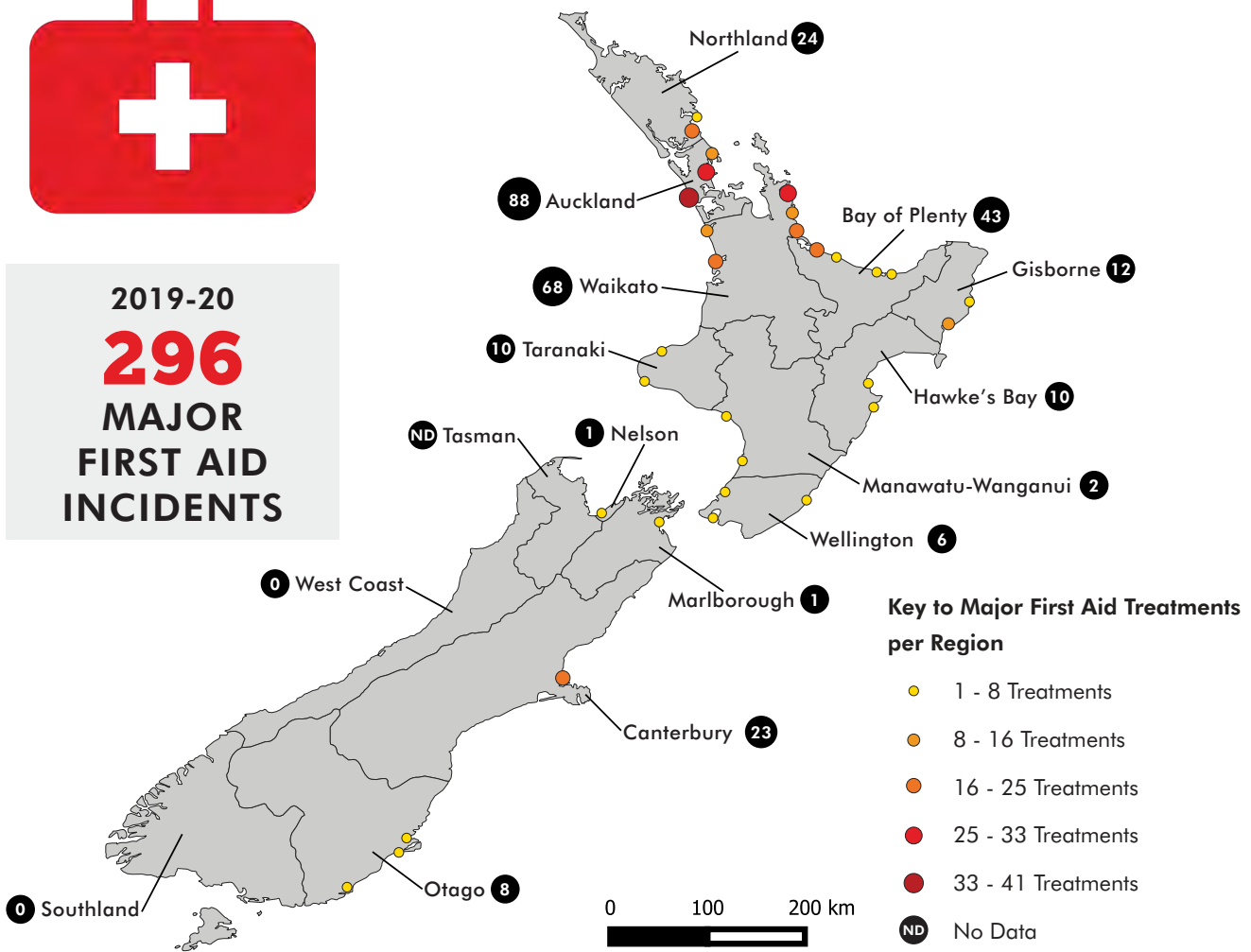
1-YEAR OVERVIEW | 2019-20

*“Major First Aid - Any incident where a patient is administered some form of advanced medical treatment, or requires hospitalization.”*

**Figure 09**  
2019-20: Major First Aid Incidents per Region



2019-20  
**296**  
MAJOR  
FIRST AID  
INCIDENTS



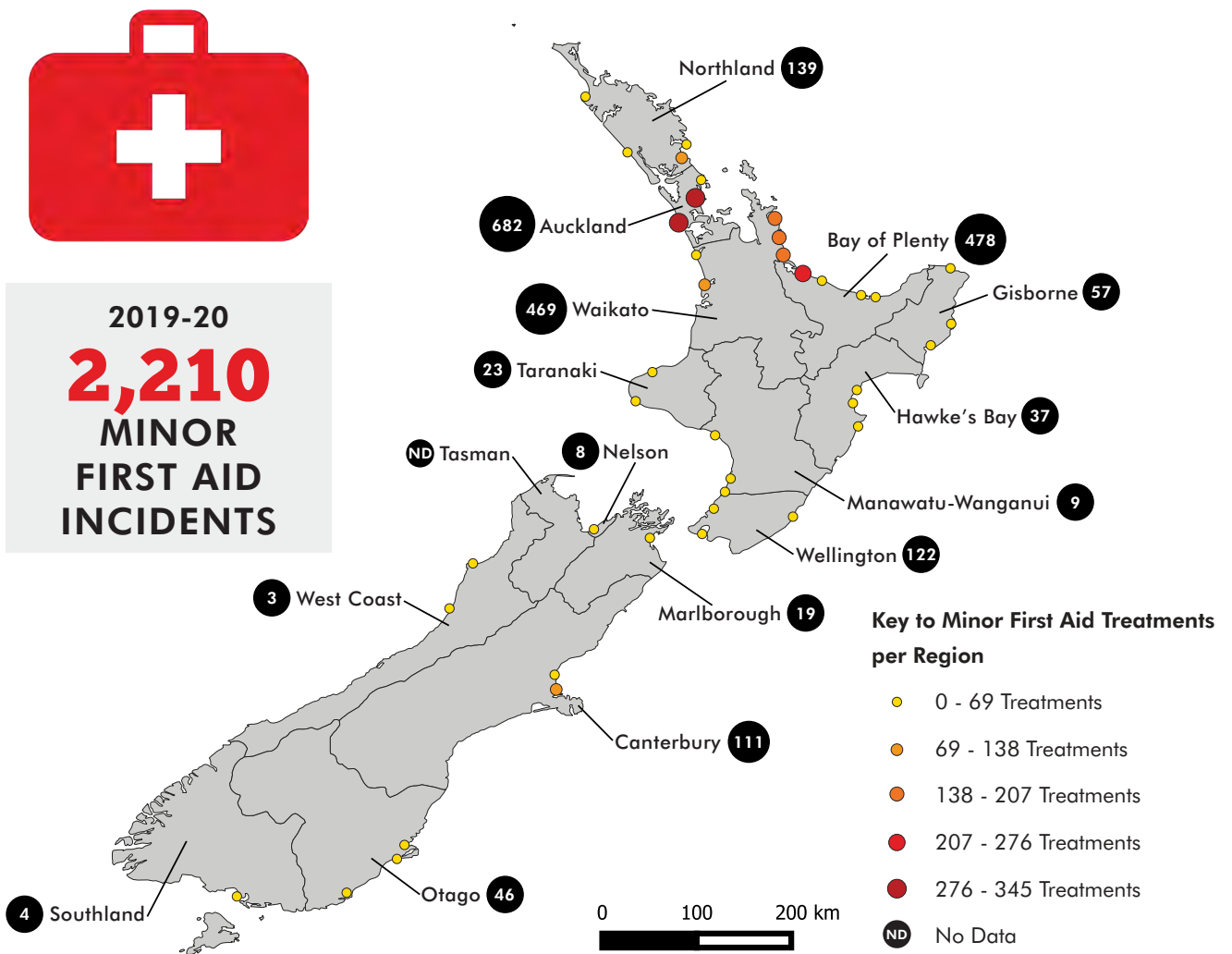


# MINOR FIRST AID INCIDENTS PER REGION

1-YEAR OVERVIEW | 2019-20

*“Minor First Aid - Where a patient is administered some form of minor medical treatment.”*

**Figure 10**  
2019-20: Minor First Aid Incidents per Region

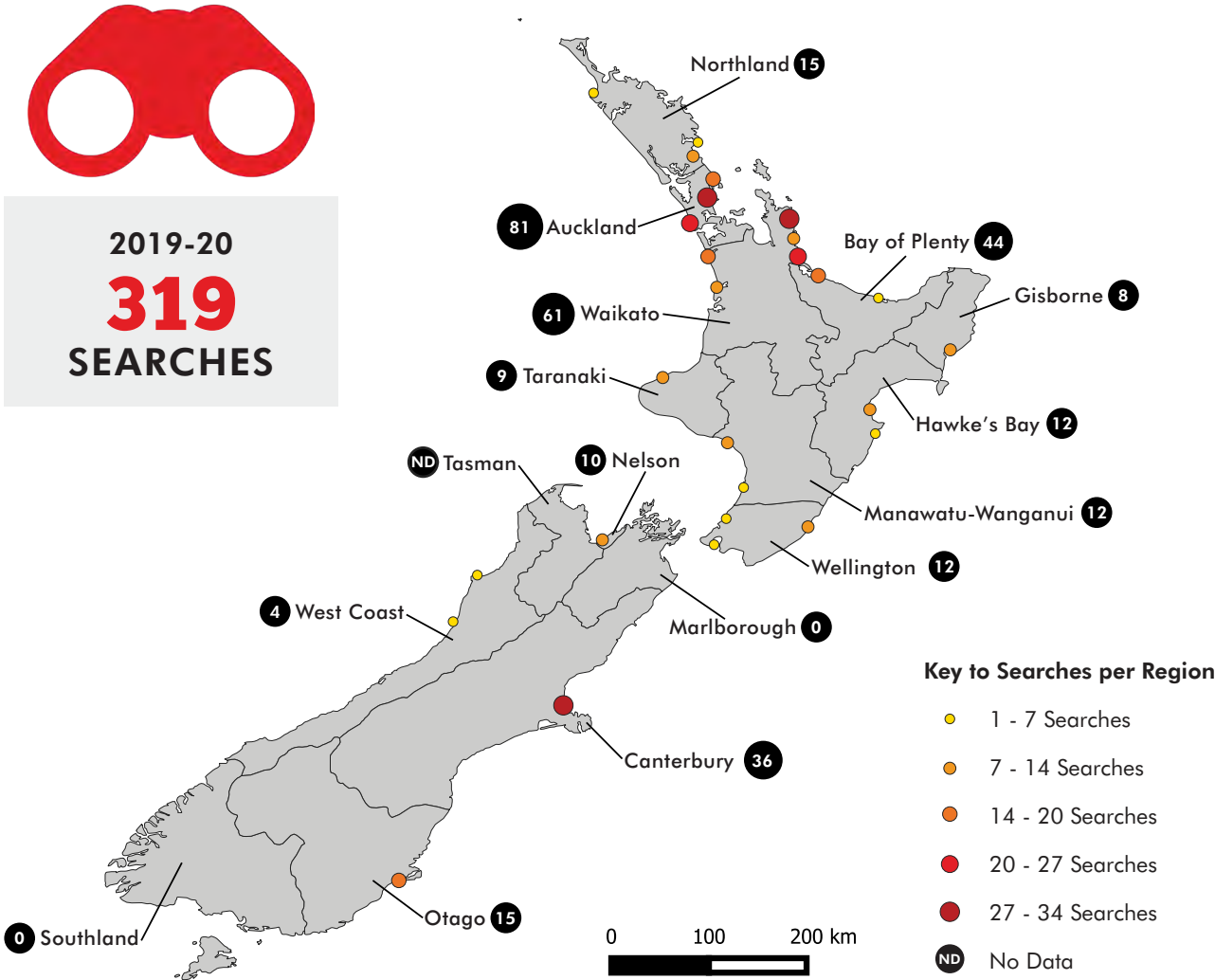


# SEARCHES PER REGION

1-YEAR OVERVIEW | 2019-20

*“Search - Any organised search for a missing person or group either at sea or on land. Searches include body recoveries.”*

**Figure 11**  
2019-20: Patrol Searches per Region

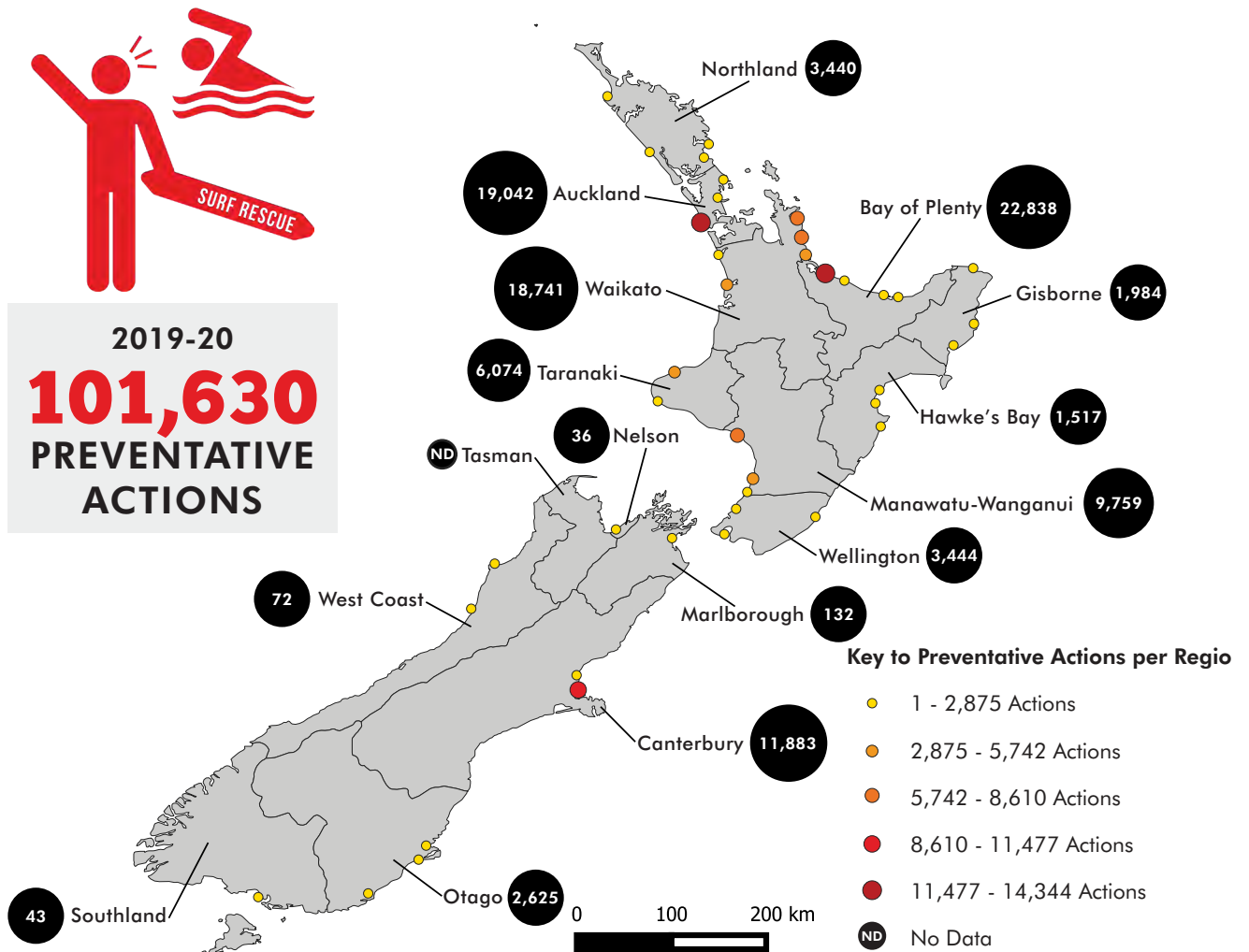


# PREVENTATIVE ACTIONS PER REGION

1-YEAR OVERVIEW | 2019-20

*“Preventative Action - Direct action taken to reduce or eliminate the probability of a specific rescue, first aid or other reportable incident occurring.”*

**Figure 12**  
2019-20: Preventative Actions per Region





# FATAL DROWNING ANALYSIS

## SECTION TWO

10-YEAR OVERVIEW | 2010-20



### LOCATION

**38%**  
SURF BEACH



**17%**  
0-1 KM OFFSHORE

**14%**  
HARBOUR



### ACTIVITY



**22%**  
SWIMMING/WADING



**17%**  
BOATING



**17%**  
FALLS

# NATIONAL OVERVIEW

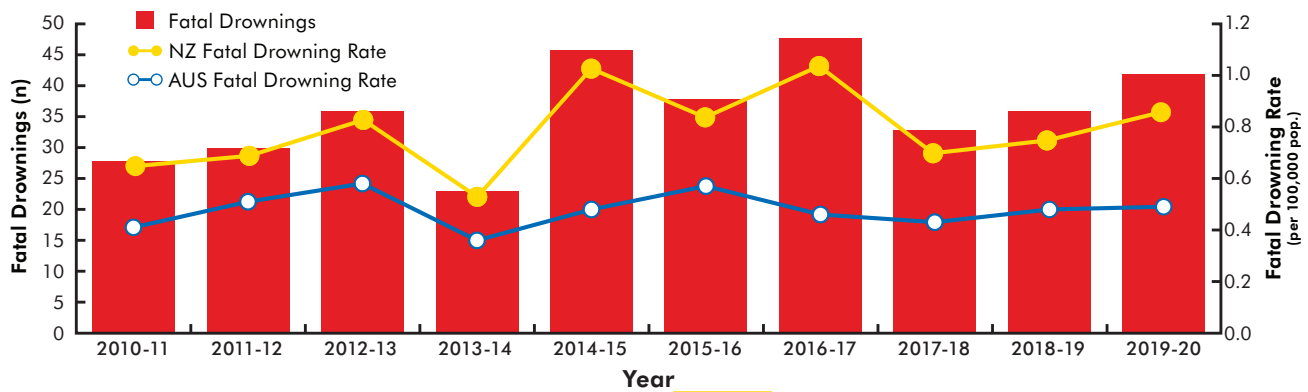
## 10-YEAR OVERVIEW | 2010-20

Each fatal drowning is a tragedy in its own right; it affects not only the close family and friends but the wider community. The research presented here aims to report and categorise fatal drownings, to better inform strategic decision making for preventative educational programmes and community engagement initiatives. The following section focuses on fatal drownings that have occurred in beach and coastal environments from 2010-20.

There were 360 fatal drownings from 2010-20. Auckland region has the highest number of fatal drownings (n=98), followed by Northland (n=57) and Waikato (n=45). Surf beaches were the most dangerous environment with 138 drowning fatalities, followed by 0-1 km from shore (n=60) and within harbours (n=51). The majority of beach and coastal fatal drownings occurred while swimming/wading (n=80) followed by boating (n=62) and falls (n=61).

**Figure 13**

2010-20: Total number of New Zealand beach and coastal fatal drownings per year from 2010-20 (n=360); and comparison of New Zealand vs Australian beach and coastal fatal drowning rates per 100,000 pop.



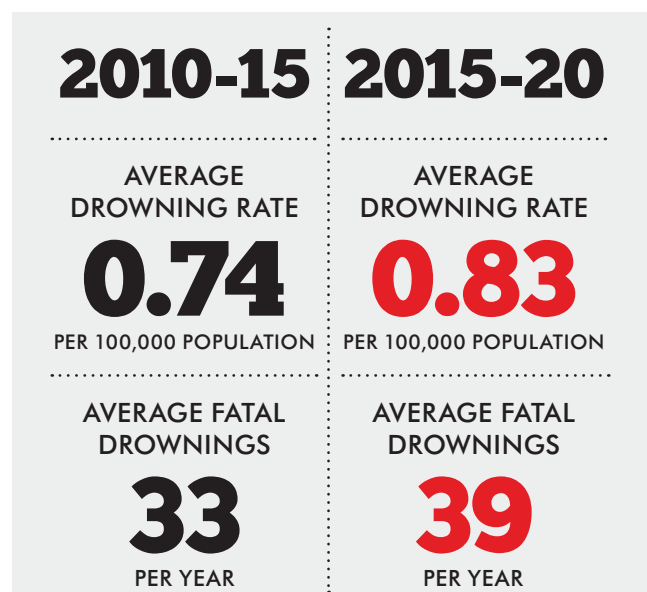
The NZ 2019-20 fatal drowning rate per 100,000 pop. is 0.85, which is above the ten-year average (0.78 per 100,000 pop.). The NZ ten-year average beach and coastal fatal drowning rate per 100,000 pop. is 48% greater than the Australian ten-year average (0.48 per 100,000 pop.).

**Figure 14**

2010-15 and 2015-20 five-year average beach and coastal fatal drownings and average fatal drowning rate per 100,000 pop.

**“ The New Zealand 10-year average beach and coastal fatal drowning rate is 48% higher than the Australian 10-year average, and is on the increase. ”**

When comparing the first half of the decade (2010-2015) to the later (2015-2020), there has been an increase from 33 (2010-2015) fatal drownings on average per year to 39 per year (2015-20). The five-year average fatal drowning rate has increased from 0.74 in the first half of the decade to 0.83 per 100,000 pop. in the later half.



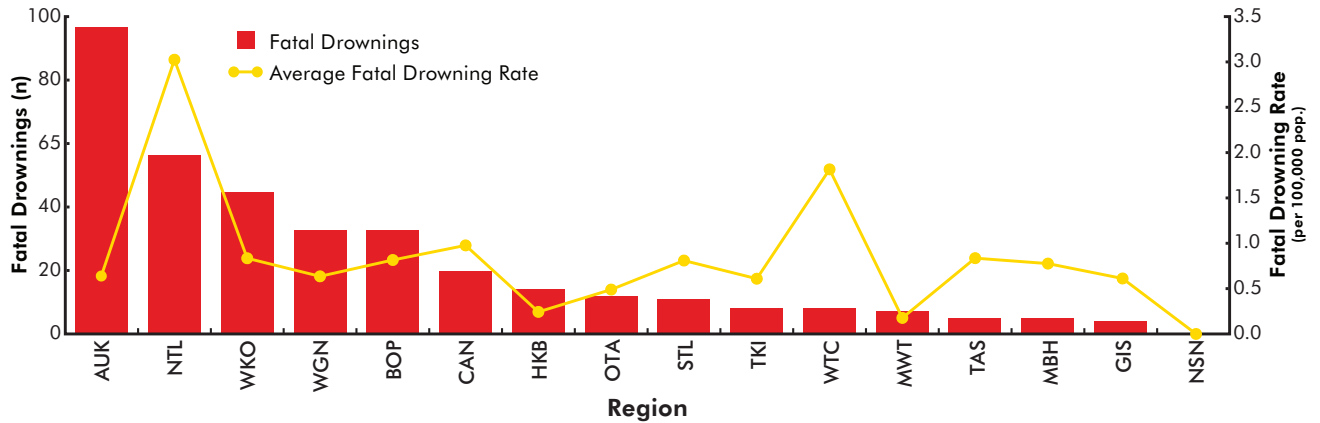
# NATIONAL OVERVIEW

10-YEAR OVERVIEW | 2010-20

**Figure 15**

2010-20: Regional comparison of total beach and coastal fatal drownings and fatal drowning rate per 100,000 pop. (n=360).

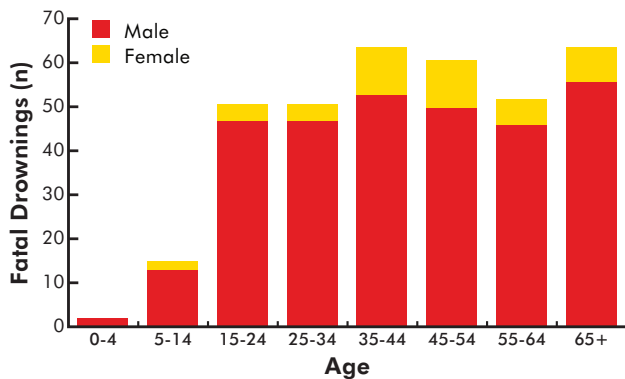
During 2010-20 there were 360 fatal drownings in the beach and coastal environments. Auckland (n=98) experienced the highest fatal drowning number per region, followed by Northland (n=57) and Waikato (n=45). Northland, has the highest average fatal drowning rate per region (3.04 per 100,000 pop.), followed by West Coast (1.82 per 100,000 pop.) and Hawke's Bay (0.98 per 100,000 pop.).



**Figure 16**

2010-20: Age groups and gender represented in beach and coastal fatal drownings (n=360).

Age groups above 15 years old account for 95% (n=343) of all beach and coastal fatal drownings from 2010-20. Males account for 87% (n=314) of all drowning fatalities, whereas females account for 13% (n=46). The fatal drowning rate for males is greater than females across all age groups.



“ More males are fatally drowning than females ”



MALE

87%



FEMALE

13%

“ More adults are fatally drowning than children ”

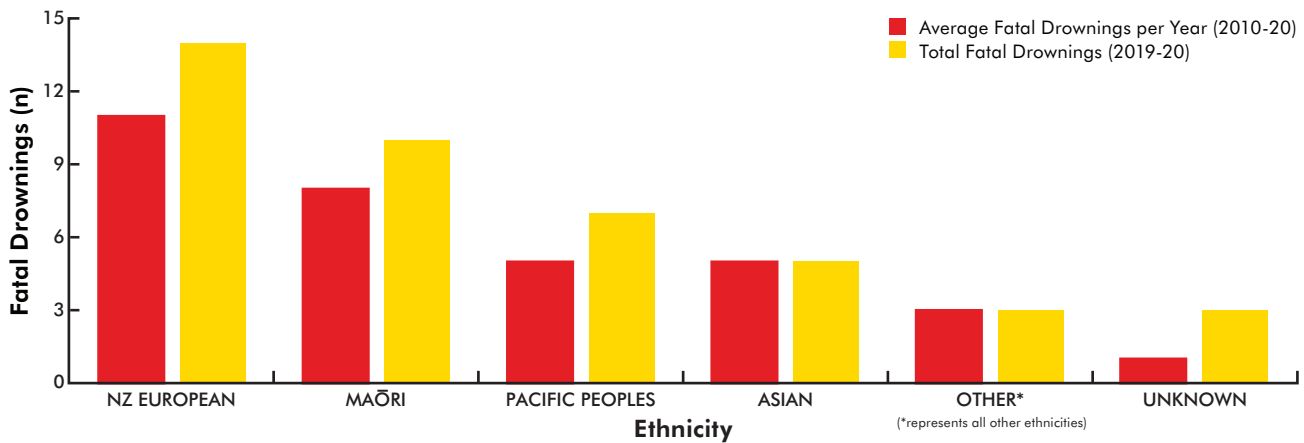
# NATIONAL OVERVIEW

## 10-YEAR OVERVIEW | 2010-20

**Figure 17**

2010-20 (ten-year average) and 2019-20: Total beach and coastal fatal drownings by ethnicity.

From 2010-20, NZ Europeans (n=13) had the greatest average number of total fatal drownings per year, followed by Māori (n=9), Asian (n=5) and Pacific People (n=5). In 2019-20, with the exception of Pacific Peoples, the annual fatal drowning toll for all ethnicities exceeded the ten-year average. Pacific Peoples was the only ethnicity where the 2019-20 fatal drowning number dropped below the ten-year average.



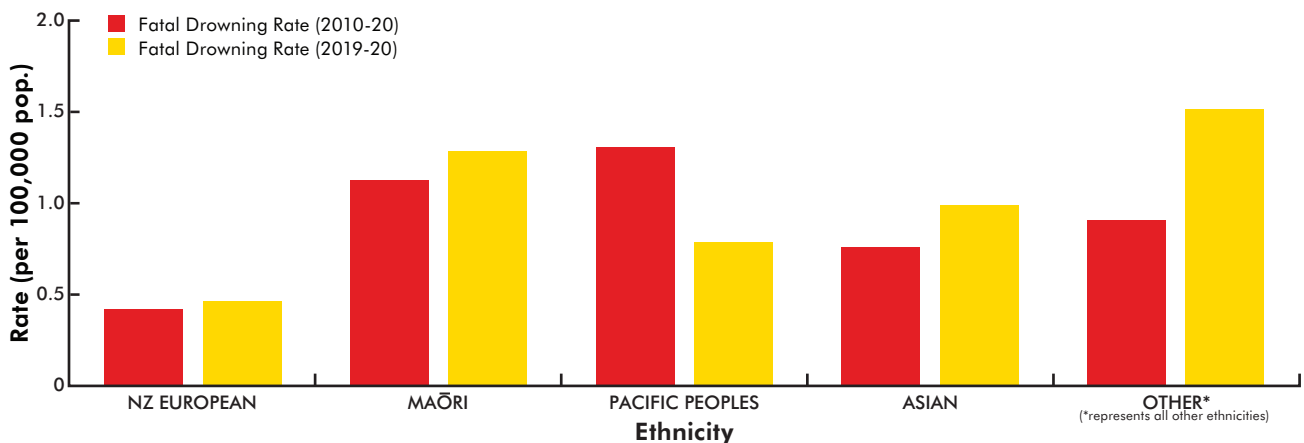
**Figure 18**

2010-20 (ten-year average) and 2019-20: Beach and coastal fatal drowning rates (per 100,000 pop.) by ethnicity (n=360).

From 2010-20, Pacific Peoples recorded the highest average fatal drowning rate (1.31 per 100,000 pop.) of any ethnicity, followed by Māori (1.13 per 100,000 pop.) and Other ethnicities (0.91 per 100,000 pop.).

During 2019-20 Other ethnicities represented the highest fatal drowning rate (1.52 per 100,000 pop.), followed by Māori (1.29 per 100,000 pop.) and Asian (0.99 per 100,000 pop.).

With the exception of Pacific Peoples, the 2019-20 fatal drowning rates for each ethnicity exceeded their respective ten-year average. Pacific Peoples were the only ethnicity where the 2019-20 fatal drowning rate (0.79 per 100,000 pop.) dropped below the ten-year average (1.31 per 100,000 pop.).





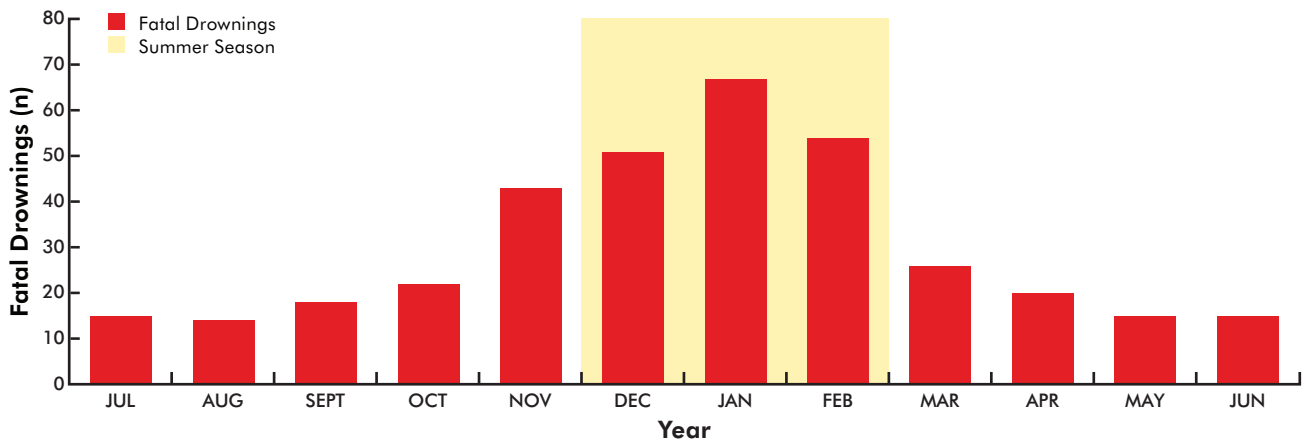
# NATIONAL OVERVIEW

10-YEAR OVERVIEW | 2010-20

**Figure 19**

2010-20: Beach and coastal fatal drownings by month (n=360).

The highest number of beach and coastal fatal drownings occurred in January (n=67), followed by February (n=54) and December (n=51). From 2010-20, 48% of all fatal drownings occurred during the summer months (Dec – Feb).



**Figure 20**

Comparison between the 2010-20 ten year average (n=360) and 2019-20 count (n=42) for beach and coastal fatal drownings by activity.

The activities listed below represent the top eight causes of fatal drowning within the beach and coastal environment between 2010-20. In 2019-20, the number of drowning fatalities while boating, snorkelling, using watercraft and land-based fishing were above the ten-year average. Falls and net/shell fishing activities were below the ten-year average.

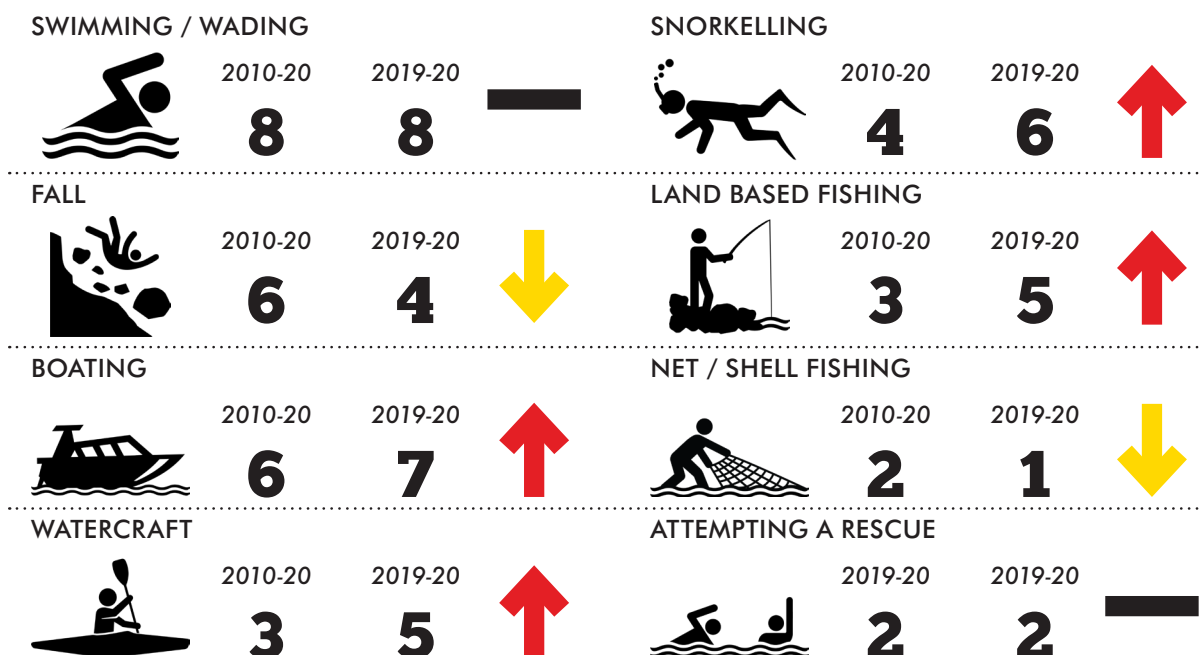
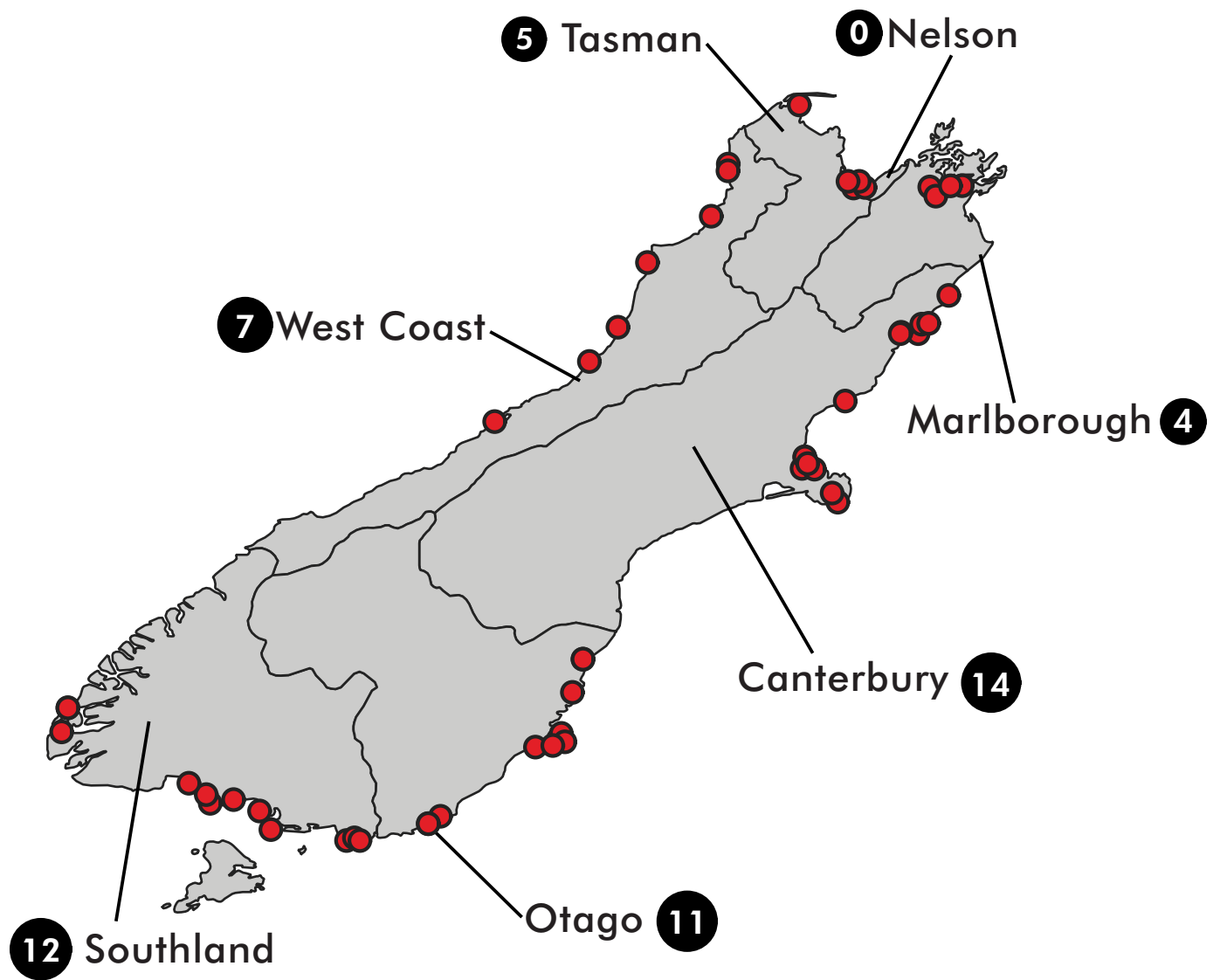


Figure 21

# 10 YEAR OVERVIEW | 2010-20

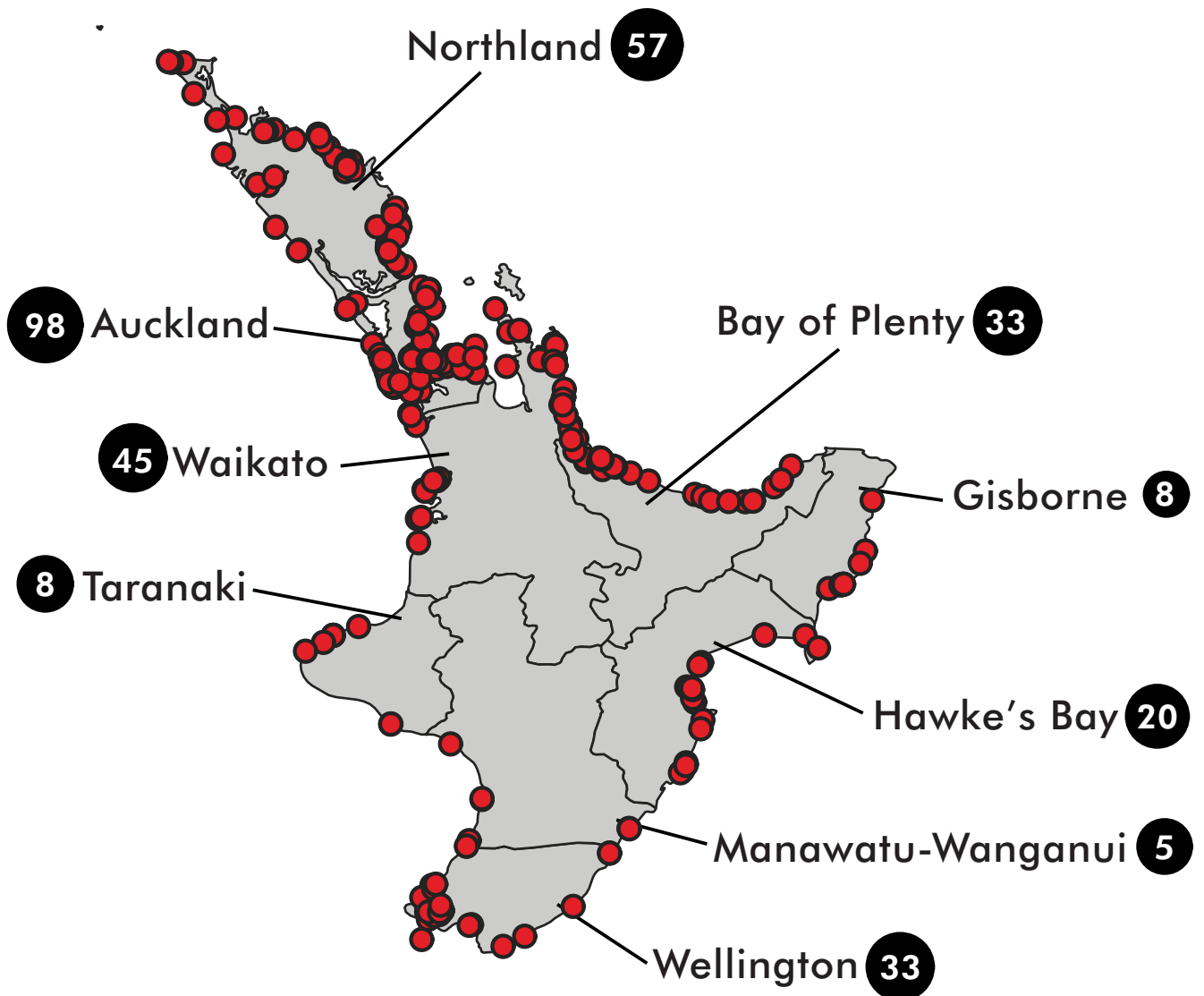
## Fatal Drownings Per Region

### South Island



4

# North Island



A TOTAL OF  
**360**  
BEACH AND  
COASTAL FATAL  
DROWNINGS





# FATAL DROWNING ANALYSIS

## SECTION THREE

1-YEAR OVERVIEW | 2019-20



**42**

BEACH &  
COASTAL FATAL  
DROWNINGS



**86%**  
MALE

**14%**  
FEMALE



### LOCATION

**38%**  
SURF BEACH

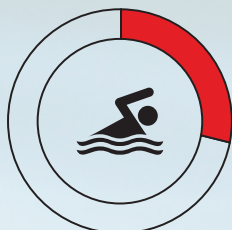


**17%**  
ROCKY  
FORESHORE

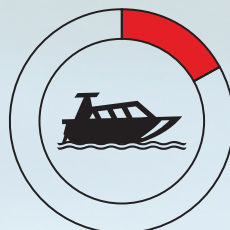
**17%**  
HARBOUR



### ACTIVITY



**19%**  
SWIMMING/WADING



**17%**  
BOATING



**14%**  
SNORKELLING

# NATIONAL OVERVIEW

1-YEAR OVERVIEW | 2019-20

In 2019-20 there were 42 fatal drownings at beach and coastal environments. Auckland had the highest fatalities per region (n=13), followed by Northland (n=8) and Wellington (n=5).

The majority of drowning fatalities occurred while swimming/wading (n=8), followed by boating (n=7) and snorkelling (n=6).

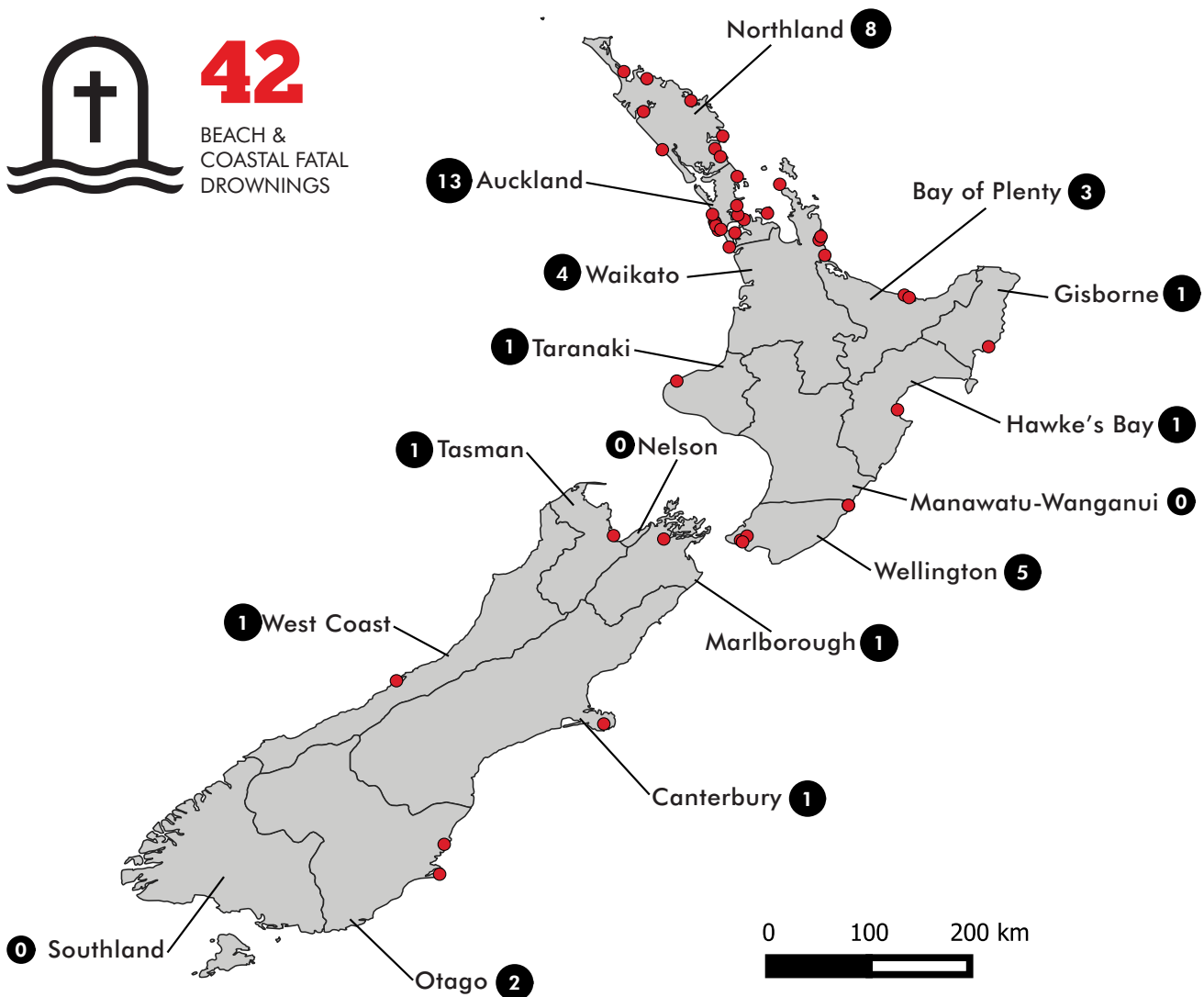
Surf beaches proved to be the most dangerous environment for drowning fatalities (n=16), followed by harbour (n=7) and rocky foreshore (n=7).

**Figure 22**  
2019-20: Beach and coastal fatal drownings per region (n=42).



**42**

BEACH &  
COASTAL FATAL  
DROWNINGS

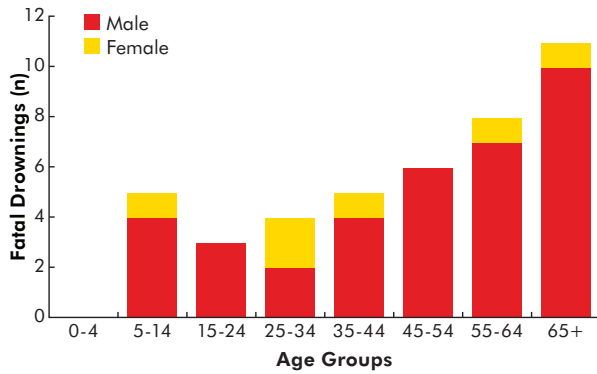


# NATIONAL OVERVIEW

1-YEAR OVERVIEW | 2019-20

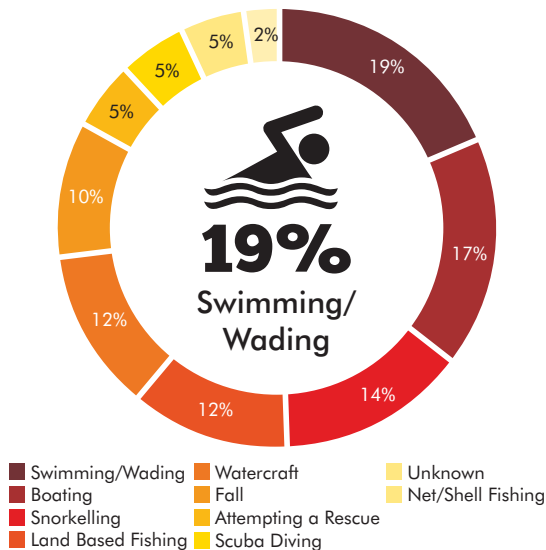
**Figure 23**  
2019-20: Beach and coastal fatal drownings by age and gender (n=42).

The highest number of fatal drownings occurred in the 65+ year age group (26%, n=11), followed by 55-64 (19%, n=8) and 45-54 (14%, n=6) age groups. Across all age groups males accounted for 86% (n=36) of fatal drownings, whereas females accounted for 14% (n=6). Within the 65+ age group males made up 100% of the fatal drownings.



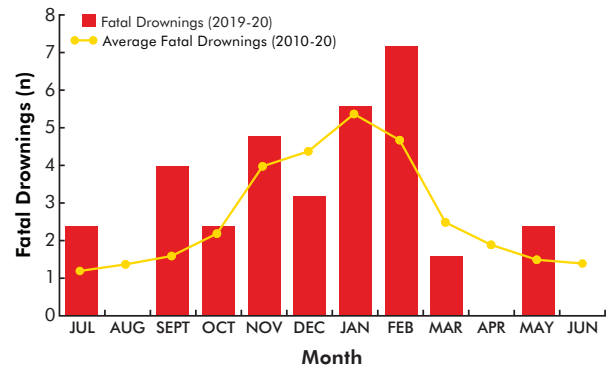
**Figure 24**  
2019-20: Beach and coastal fatal drownings by activity (n=42).

The majority of fatal drownings occurred while using watercraft (n=12), followed by swimming / wading (n=8) and rock fishing (n=5).



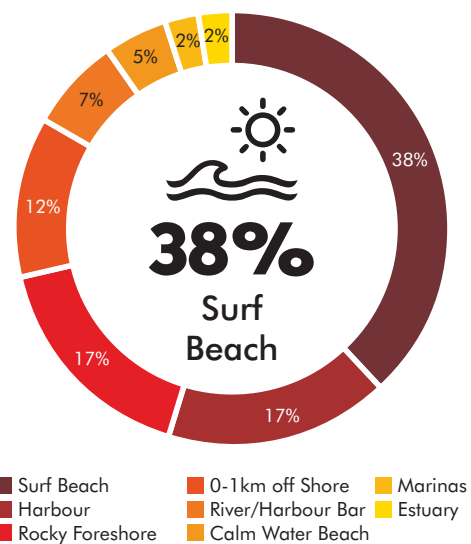
**Figure 25**  
2019-20: Beach and coastal fatal drownings by month (n=42).

The greatest number of fatal drownings occurred in February (21%, n=9), followed by January (17%, n=7) and November (14%, n=6). The summer months (Dec – Feb) accounted for nearly half (48%, n=21) of all fatal drownings. With the exception of Dec and Mar, the number of fatal drownings per month during 2019-20 exceeded the 10 year average.



**Figure 26**  
2019-20: Beach and coastal fatal drownings by location (n=42).

The majority of fatal drownings occurred at surf beaches (n=16), in harbours (n=7) and adjacent to rocky foreshores (n=7).





SURF LIFEGUARD

OP



# NON-FATAL DROWNING ANALYSIS

## SECTION FOUR

10-YEAR OVERVIEW | 2010-20

non-fatal drowning

*A subset of drowning, the process of experiencing respiratory impairment from submersion/immersion in liquid, where the outcome is classified as morbidity and no morbidity.*

**258**

NON-FATAL DROWNING INCIDENTS

AVERAGE NON-FATAL DROWNINGS PER YEAR

**26**

**40%**

UNDER THE AGE OF

**25**

**1:1.8**

RATIO FATAL : NON-FATAL DROWNING INCIDENTS (all ages)

INFANTS AND YOUNG CHILDREN (0-4) RATIO FATAL : NON-FATAL DROWNING INCIDENTS



# NON-FATAL DROWNING OVERVIEW

10-YEAR OVERVIEW | 2010-20

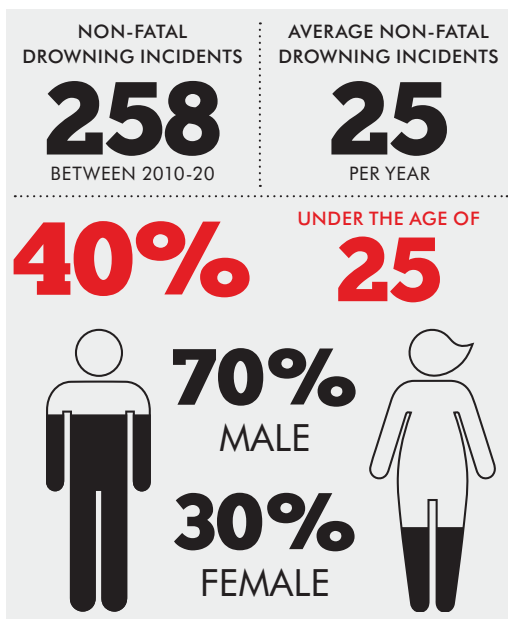
The focus of drowning prevention research has long been on fatal drowning. However, this is only part of the drowning toll. Non-fatal drowning incidents are more difficult to quantify but are still significant and can often result in life-changing injuries and illnesses. The social cost to New Zealand of one severe water-related injury resulting in hospitalisation has been estimated at \$394,800 (ACC, 2016).

Between 2010 and 2020, there were 258 cases of non-fatal drownings recorded on beaches, representing an average of 26 non-fatal beach drowning incidents per year.

For this report, we have assumed beach specific non-fatal drowning data includes both surf and calm water beach types.

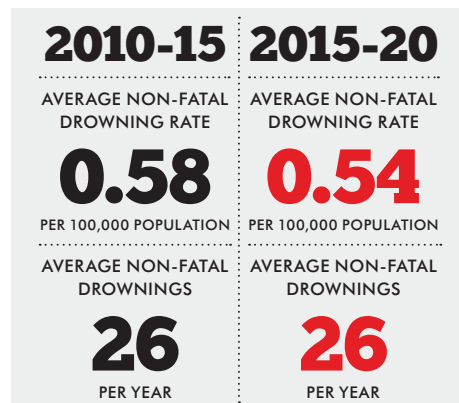
\*The non-fatal drowning data used in this report is based on hospital stays of at least 24 hours and has been provided by Water Safety New Zealand as recorded in DrownBase. A large amount of environmental coding is set to 'large body water' which does not allow for more specific data analysis.

There are likely more non-fatal drowning cases that have occurred within the coastal environment, however, due to the hospitalisation coding limitations highlighted above, many cases are indeterminable at this stage.



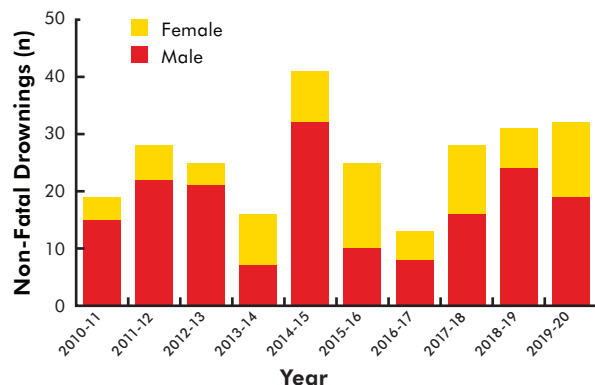
**Figure 27**  
2010-15 and 2015-20 five year average non-fatal drownings and average non-fatal drowning rate per 100,000 pop. at beaches.

When comparing the first half of the decade (2010-2015) to the later (2015-2020), there has been no change in the five year average number of non-fatal drownings (n=26) at beaches. The five year average non-fatal drowning rate has decreased from 0.58 in the first half of the decade to 0.54 per 100,000 pop. in the later half.



**Figure 28**  
2010-20: Non-fatal drowning incidents on beaches by year and gender (n=258).

The greatest number of non-fatal drowning incidents at beaches occurred during 2014-15 (n=41), followed by 2019-20 (n=32) and 2018-19 (n=31). Every year from 2010-20 the number of males involved in non-fatal drowning incidents exceeds females. Males account for 67% (n=174) of non-fatal drownings, whereas females account for 33% (n=84).



# COMPARISON OF NON-FATAL AND FATAL DROWNINGS ON NEW ZEALAND BEACHES BETWEEN 2010-20

To calculate the ratio of fatal to non-fatal drowning incidents the total number (n=141\*) of fatal beach drowning incidents (surf beach and calm water beach) was compared with the total number of non-fatal surf beach and calm water beach incidents (n=258).

The average ratio of fatal to non-fatal drowning incidents from 2010-2020 is 1:1.8. This figure indicates that for every fatal beach drowning, there are 1.8 non-fatal beach drowning incidents.

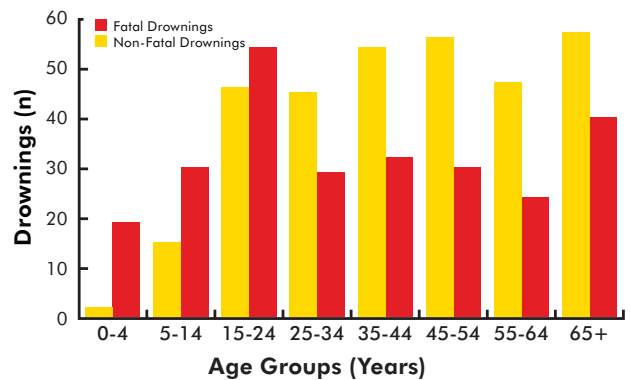
The ratio of fatal to non-fatal drowning incidents is variable across age groups. Infants and young children (0-4 years old) have the highest ratio (1:9.5), which indicates that for every fatal beach drowning, there are 9.5 non-fatal drowning incidents. On the other end of the spectrum, the 55-64 age group has the lowest ratio (1:0.5), indicating that for every beach drowning fatality, there are 0.5 non-fatal drownings.

TOTAL FATAL DROWNINGS	TOTAL NON-FATAL DROWNINGS
<b>141*</b>	<b>258</b>
-----	
RATIO FATAL : NON-FATAL	<b>1 : 1.8</b>
-----	
0-4 YEARS OLD RATIO FATAL : NON-FATAL	<b>1 : 9.5</b>
-----	
55-64 YEARS OLD RATIO FATAL : NON-FATAL	<b>1 : 0.5</b>

“ Except for 2016-17, the number of non-fatal drowning incidents at beaches exceeds fatal drowning incidents. ”

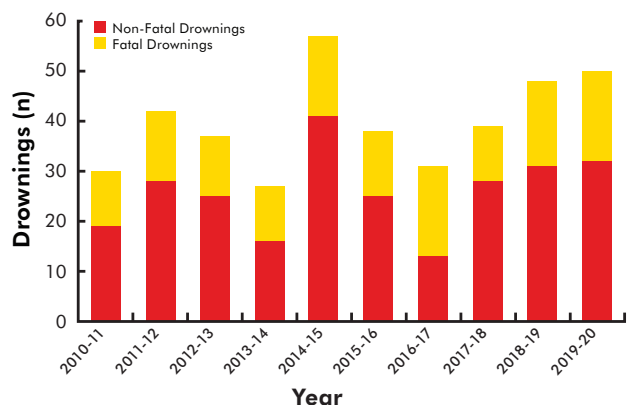
**Figure 29**  
2010-20: Fatal and non-fatal drowning incidents on beaches by age groups (n=399).

The greatest number of non-fatal drownings occurred in the 15-24 year age group (n=54), followed by 65+ (n=40) and 35-44 (n=32) age groups. The number of non-fatal drowning incidents exceeded fatal drowning incidents within the 0-24 year age groups. The number of fatal drowning incidents exceeded non-fatal drowning incidents in the 25-65+ year age groups.



**Figure 30**  
2010-20: Fatal and non-fatal drowning incidents on beaches by year (n=399).

Except for 2016-17, the number of non-fatal drowning incidents at beaches exceeds fatal drowning incidents. The combined fatal and non-fatal drowning incidents was highest in 2014-15 (n=57), followed by 2019-20 (n=50) and 2018-19 (n=48).





# REGIONAL OVERVIEWS

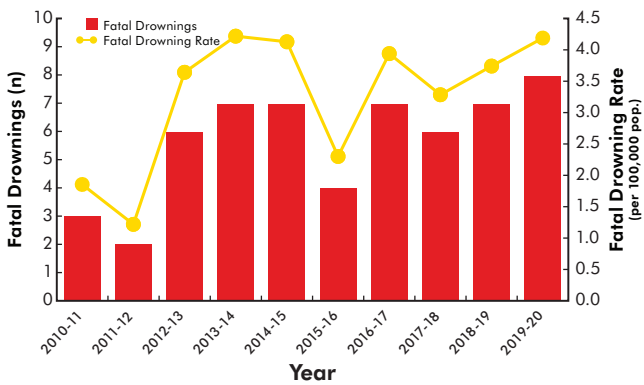
## SECTION FIVE



# NORTHLAND / TE TAI TOKERAU

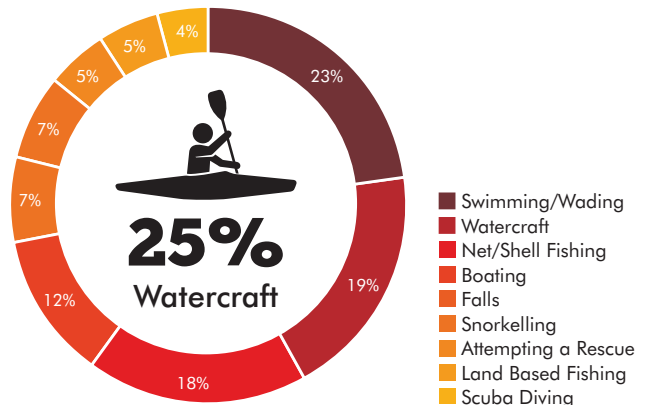
**Figure 31**  
2010-20: Northland Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=57).

During 2019-20, there were eight beach and coastal drowning fatalities within the Northland Region, which is less than the ten-year average of six per year. The 2019-20 fatal drowning rate (4.22 per 100,000 pop.) was greater than the ten-year average (3.04 per 100,000 pop.).



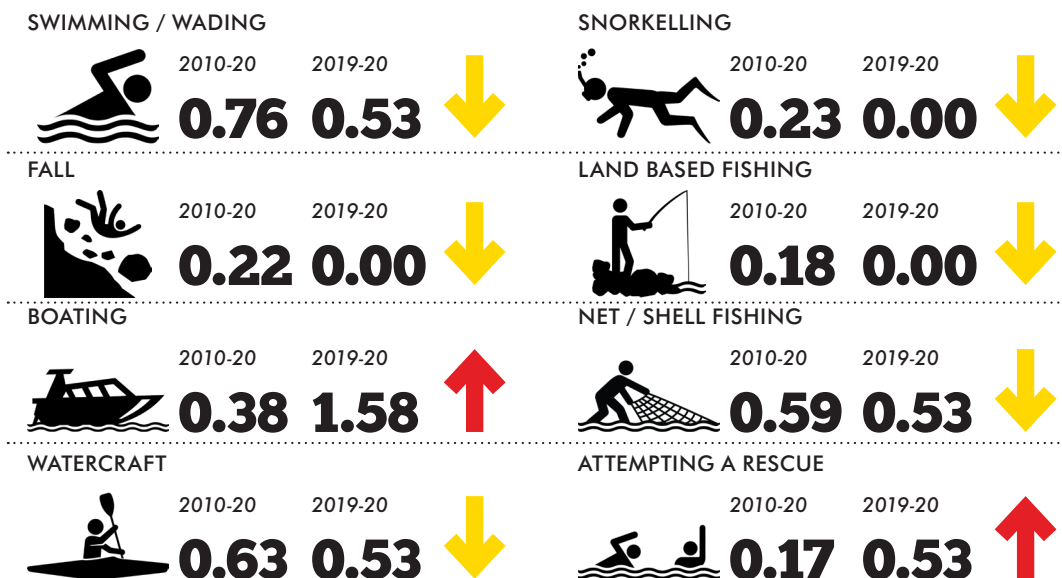
**Figure 32**  
2010-20: Northland Region beach and coastal drownings by activity (n=57).

Within the Northland Region during 2010-20, the majority of beach and coastal drowning fatalities occurred while swimming/wading (n=13), followed by using watercraft (n=11) and net/shell fishing (n=10).



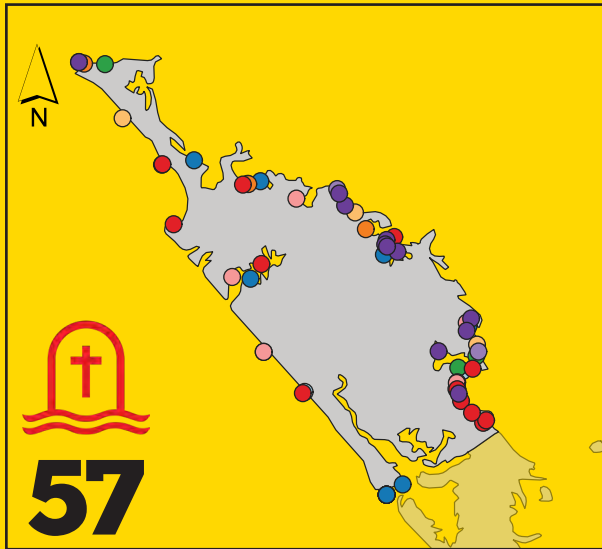
**Figure 33**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the Northland Region: 2010-20 (ten-year average) and 2019-20.

Within the Northland Region the 2019-20 fatal drowning rates (per 100,000 pop.) for swimming/wading, falls, watercraft, snorkelling, net/shell and land based fishing activities were less than their respective ten-year averages. However, the 2019-20 fatal drowning rates for boating and attempting a rescue activities were greater than the ten-year average.



# FATAL DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20



- Attempting a Rescue
- Boating
- Diving / Jumping
- Fall
- Net / Shell Fishing
- Rock Fishing
- Scuba Diving
- Snorkeling
- Swimming / Wading
- Watercraft

▶▶▶ TOTAL FATAL DROWNINGS: 57 ◀◀◀

AVERAGE FATAL DROWNINGS

**6**

PER YEAR

AVERAGE FATALITY

**3.04**

PER 100,000 POPULATION



**81%**  
MALE



**19%**  
FEMALE

KEY DEMOGRAPHIC

**45+**

YEAR OLD MALES  
SWIMMERS/WADERS

**45+**

YEAR OLD MALES  
WATERCRAFT

## 1-YEAR OVERVIEW | 2019-20

FATAL DROWNINGS

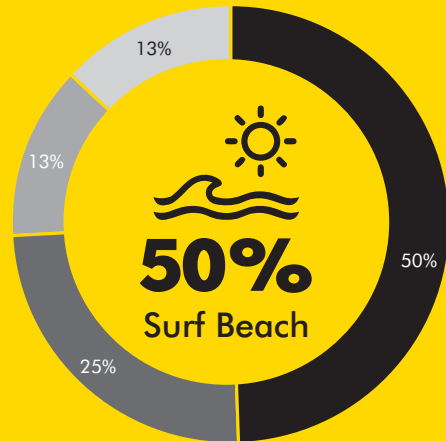
**8**

AVERAGE FATALITY

**4.22**

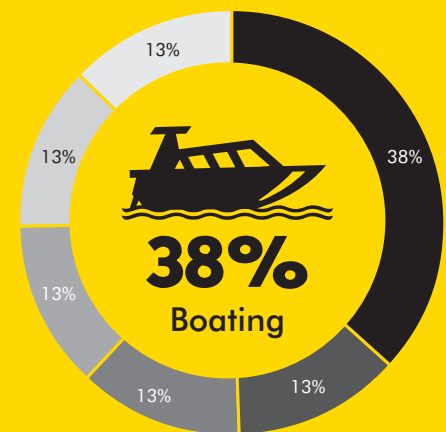
PER 100,000 POPULATION

FATAL DROWNINGS BY LOCATION



- Surf Beach
- Harbour
- 0-1 Km from Shore
- River/Harbour Bar

FATAL DROWNINGS BY ACTIVITY

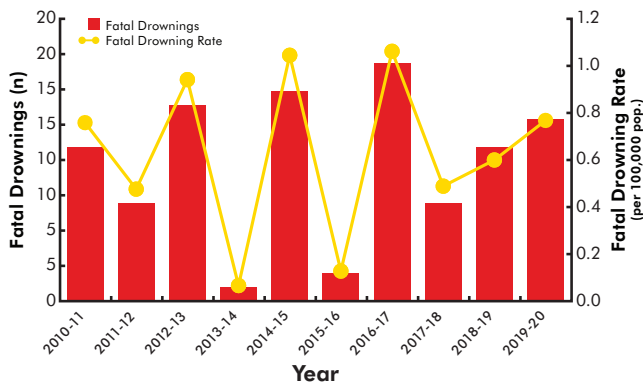


- Boating
- Scuba Diving
- Attempting a Rescue
- Net/Shell Fishing
- Swimming/Wading
- Watercraft

# AUCKLAND / TĀMAKI-MAKAU-RAU

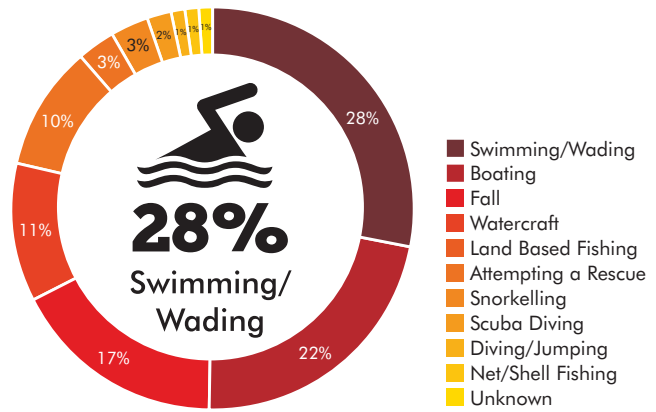
**Figure 34**  
2010-20: Auckland Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=98).

During 2019-20, there were thirteen beach and coastal drowning fatalities within the Auckland Region, which is greater than the ten-year average of ten per year. The 2019-20 fatal drowning rate (0.77 per 100,000 pop.) was greater than the ten-year average (0.63 per 100,000 pop.).



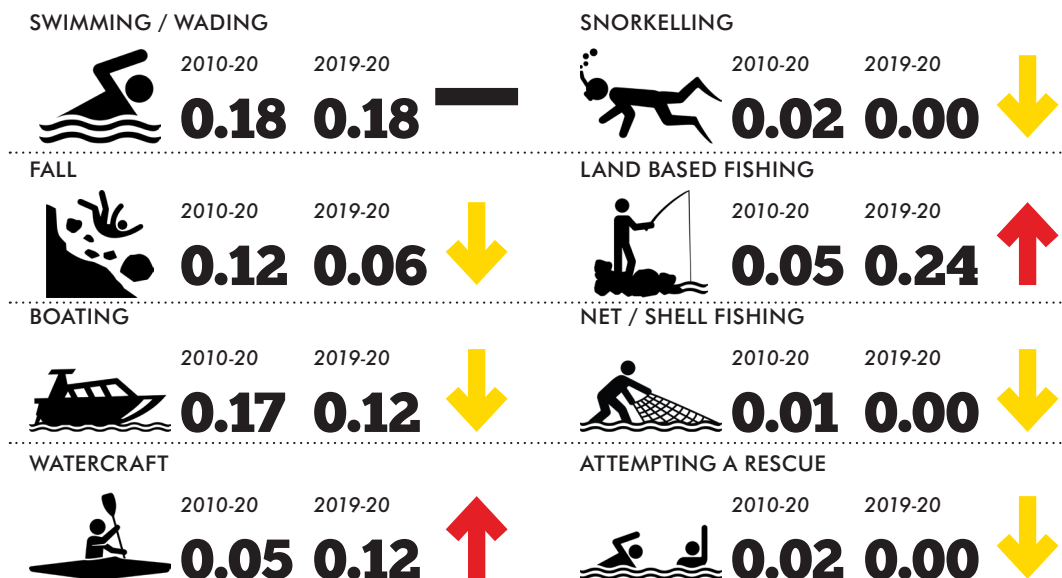
**Figure 35**  
2010-20: Auckland Region beach and coastal drownings by activity (n=98).

Within the Auckland Region during 2010-20, the majority of beach and coastal drowning fatalities occurred while swimming/wading (n=27), followed by boating (n=26) and falls (n=18).



**Figure 36**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the Auckland Region: 2010-20 (ten-year average) and 2019-20.

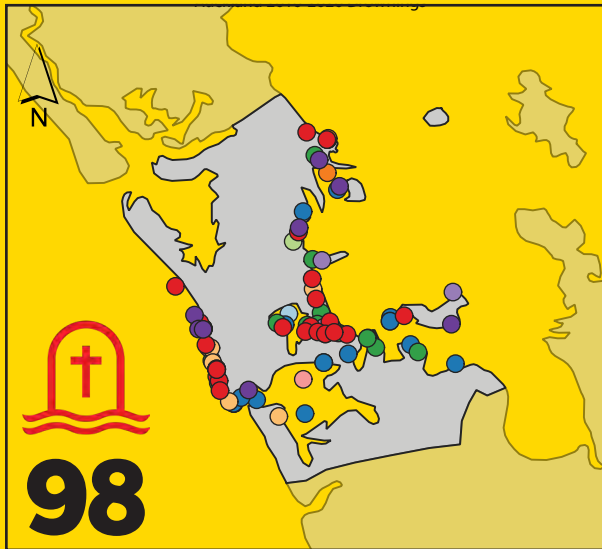
Within the Auckland Region the 2019-20 fatal drowning rates (per 100,000 pop.) for falls, boating, snorkelling, net/shell fishing and attempting a rescue activities were less than their respective ten-year averages. However, the 2019-20 fatal drowning rates for watercraft and land-based fishing activities were greater than the ten-year average.





# FATAL DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20



- Attempting a Rescue
- Boating
- Diving / Jumping
- Fall
- Net / Shell Fishing
- Rock Fishing
- Scuba Diving
- Snorkeling
- Swimming / Wading
- Watercraft

▶▶▶ TOTAL FATAL DROWNINGS: 98 ◀◀◀

AVERAGE FATAL DROWNINGS

**10**

PER YEAR

AVERAGE FATALITY

**0.63**

PER 100,000 POPULATION



**91%**  
MALE



**9%**  
FEMALE

KEY DEMOGRAPHIC

**15+**

YEAR OLD MALES  
SWIMMING/WADING

**25+**

YEAR OLD MALES  
BOATING

## 1-YEAR OVERVIEW | 2019-20

FATAL DROWNINGS

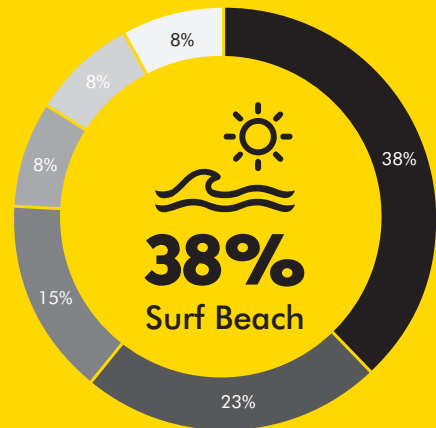
**13**

AVERAGE FATALITY

**0.77**

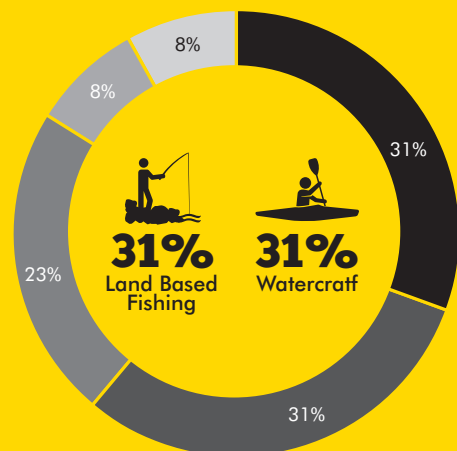
PER 100,000 POPULATION

FATAL DROWNINGS BY LOCATION



- Surf Beach
- Harbour
- Rocky Foreshore
- Calm Water Beach
- Estuary
- River

FATAL DROWNINGS BY ACTIVITY

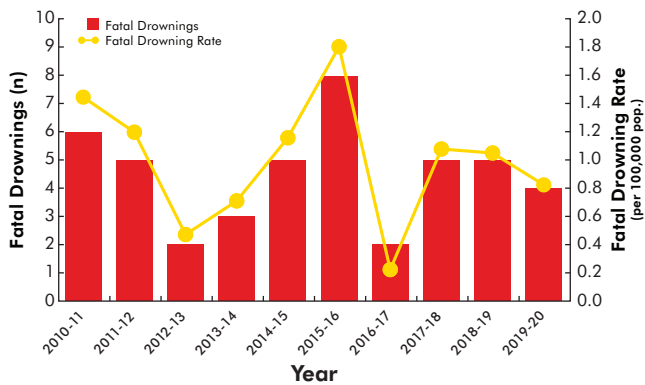


- Land Based Fishing
- Watercraft
- Swimming/Wading
- Fall
- Unknown

# WAIKATO

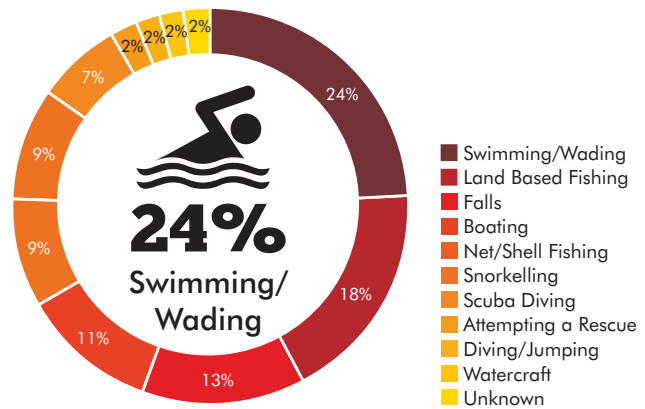
**Figure 37**  
2010-20: Waikato Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=45).

During 2019-20, there were four beach and coastal drowning fatalities within the Waikato Region, which equals the ten-year average of four per year. The 2019-20 fatal drowning rate (0.82 per 100,000 pop.) was less than the ten-year average (1.02 per 100,000 pop.).



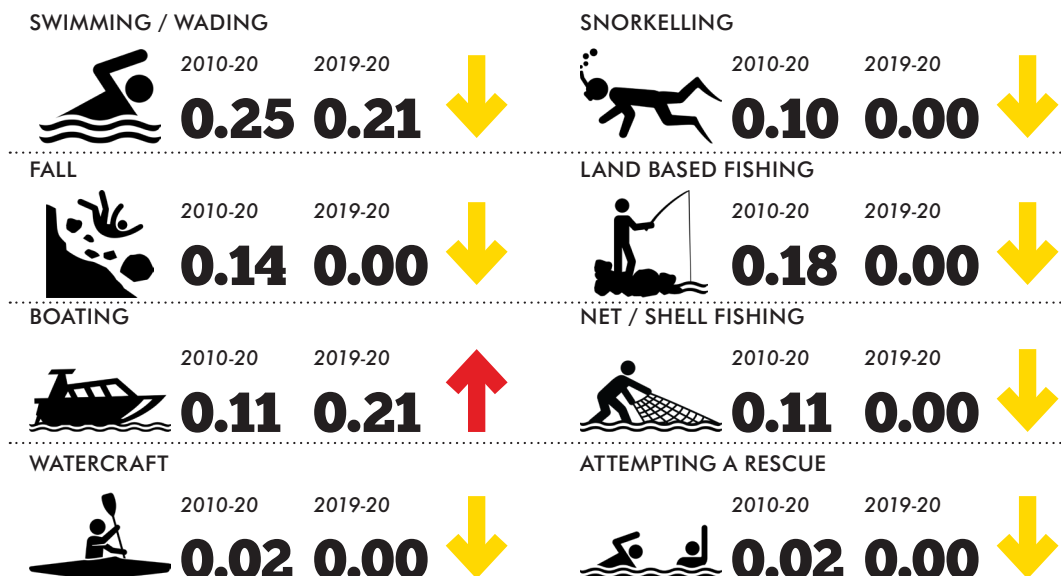
**Figure 38**  
2010-20: Waikato Region beach and coastal drownings by activity (n=45).

Within the Waikato Region during 2010-20, the majority of beach and coastal drowning fatalities occurred while swimming/wading (n=11), followed by land-based fishing (n=8) and falls (n=6).



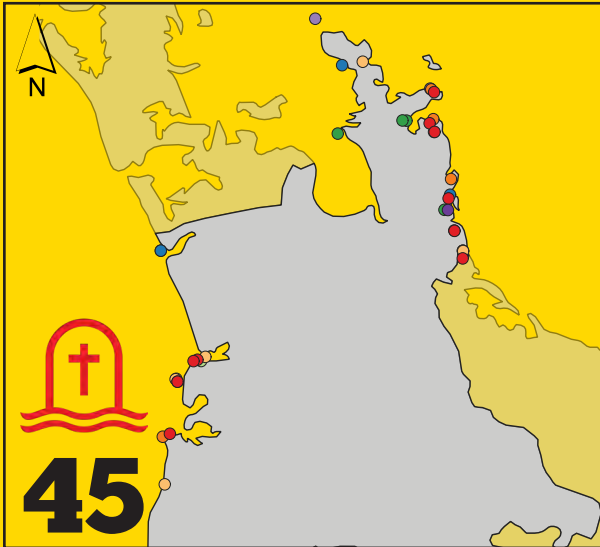
**Figure 39**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the Waikato Region: 2010-20 (ten-year average) and 2019-20.

Within the Waikato Region the 2019-20 fatal drowning rates (per 100,000 pop.) for swimming/wading, falls, watercraft, snorkelling, land-based fishing, net/shell fishing and attempting a rescue activities were less than their respective ten-year averages. However, the 2019-20 fatal drowning rate for boating activities was greater than the ten-year average.



# FATAL DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20



- Attempting a Rescue    ● Net / Shell Fishing    ● Swimming / Wading
- Boating    ● Rock Fishing    ● Watercraft
- Diving / Jumping    ● Scuba Diving
- Fall    ● Snorkeling

▶▶▶ TOTAL FATAL DROWNINGS: 45 ◀◀◀

AVERAGE FATAL DROWNINGS

**4**

PER YEAR

AVERAGE FATALITY

**1.02**

PER 100,000 POPULATION



**89%**  
MALE



**11%**  
FEMALE

KEY DEMOGRAPHIC

**15-34**

YEAR OLD MALES



SWIMMING/WADING

## 1-YEAR OVERVIEW | 2019-20

FATAL DROWNINGS

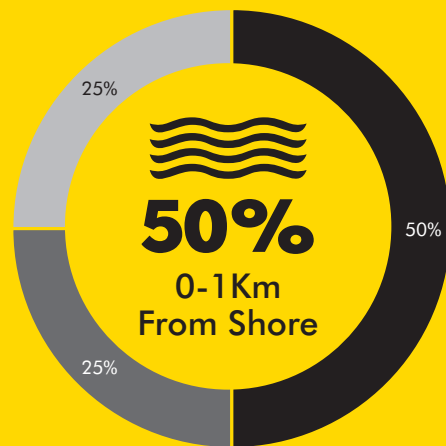
**4**

AVERAGE FATALITY

**0.82**

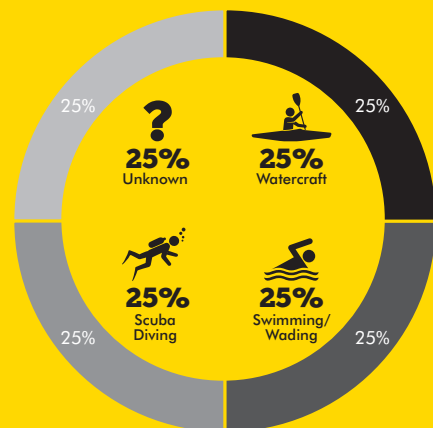
PER 100,000 POPULATION

### FATAL DROWNINGS BY LOCATION



■ 0-1Km From Shore ■ Harbour ■ Surf Beach

### FATAL DROWNINGS BY ACTIVITY

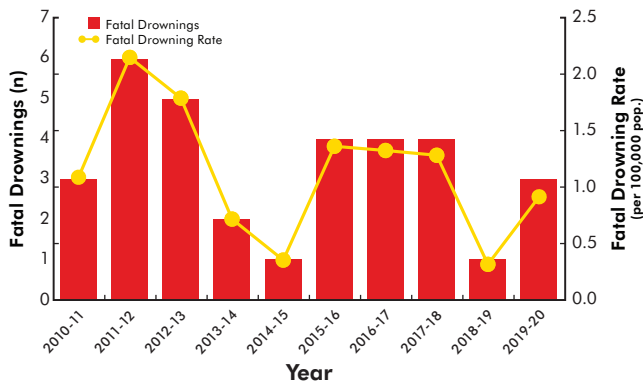


■ Watercraft ■ Scuba Diving  
■ Swimming/Wading ■ Unknown

# BAY OF PLENTY / TE MOANA-A-TOI

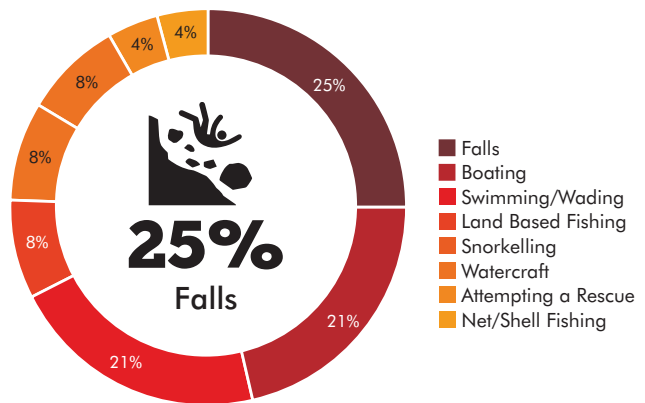
**Figure 40**  
2010-20: Bay of Plenty Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=33).

During 2019-20, there were three beach and coastal drowning fatalities within the Bay of Plenty Region, which equals the ten-year average of three per year. The 2019-20 fatal drowning rate (0.91 per 100,000 pop.) was less than the ten-year average (1.13 per 100,000 pop.).



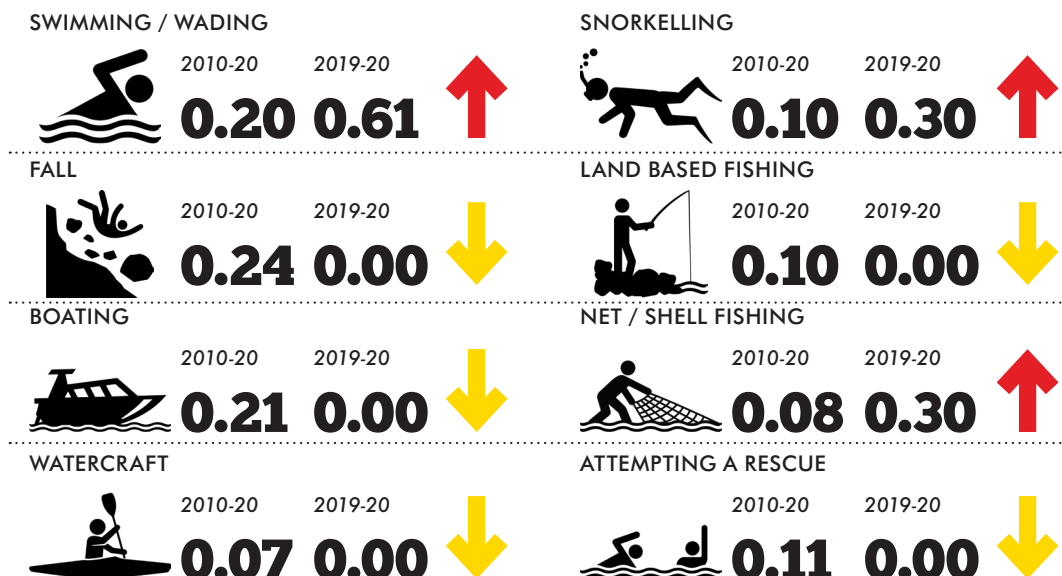
**Figure 41**  
2010-20: Bay of Plenty Region beach and coastal drownings by activity (n=33).

Within the Bay of Plenty Region during 2010-20, the majority of beach and coastal drowning fatalities were falls (n=7), followed by boating (n=6) and swimming/wading (n=6).



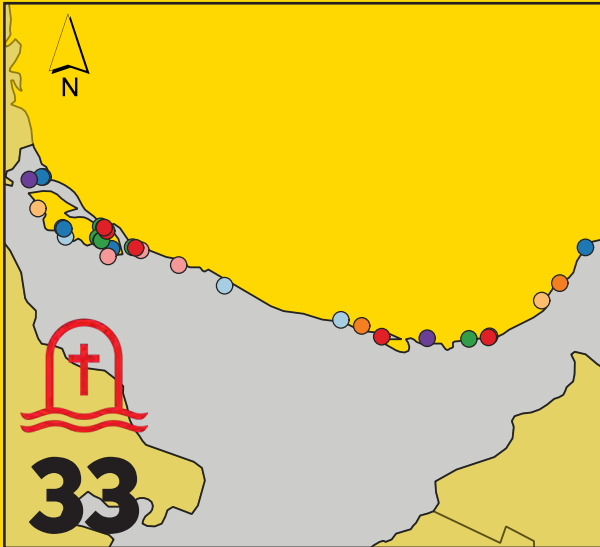
**Figure 42**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the Bay of Plenty Region: 2010-20 (ten-year average) and 2019-20.

Within the Bay of Plenty Region the 2019-20 fatal drowning rates (per 100,000 pop.) for falls, boating, watercraft, snorkelling, land-based fishing and attempting a rescue activities were less than their respective ten-year averages. However, the 2019-20 fatal drowning rates for swimming/wading and net/shell fishing were greater than the ten-year average.



# FATAL DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20



- Attempting a Rescue
- Boating
- Diving / Jumping
- Fall
- Net / Shell Fishing
- Rock Fishing
- Scuba Diving
- Snorkeling
- Swimming / Wading
- Watercraft

▶▶▶ TOTAL FATAL DROWNINGS: 33 ◀◀◀

AVERAGE FATAL DROWNINGS

**3**

PER YEAR

AVERAGE FATALITY

**1.13**

PER 100,000 POPULATION



**85%**  
MALE



**15%**  
FEMALE

KEY DEMOGRAPHIC

**15+**

YEAR OLD MALES



FALLS

## 1-YEAR OVERVIEW | 2019-20

FATAL DROWNINGS

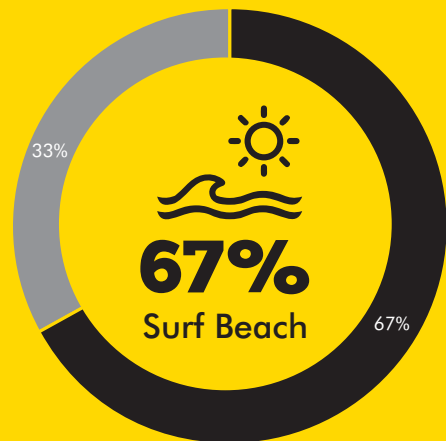
**3**

AVERAGE FATALITY

**0.91**

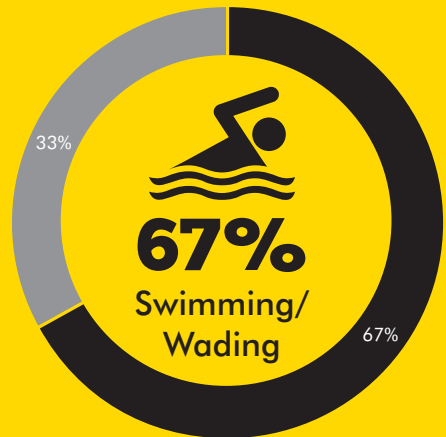
PER 100,000 POPULATION

FATAL DROWNINGS BY LOCATION



■ Surf Beach ■ Rocky Foreshore

FATAL DROWNINGS BY ACTIVITY

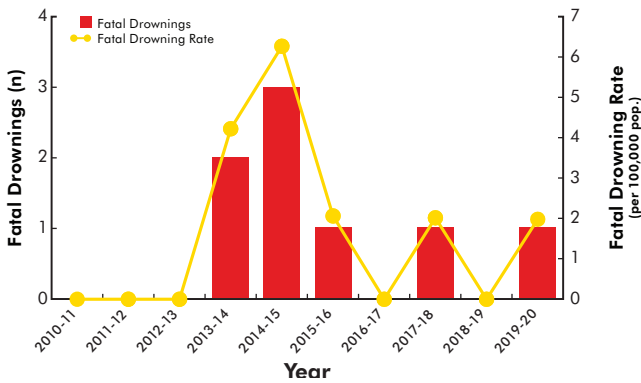


■ Swimming/Wading ■ Net/Shell Fishing

# GISBORNE / TE TAI RĀWHITI

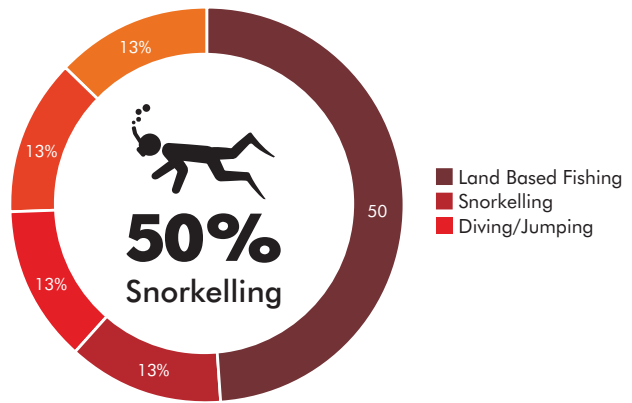
**Figure 43**  
2010-20: Gisborne Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=8).

During 2019-20, there was one beach and coastal drowning fatality within the Gisborne Region, which is the greater than the ten-year average of less than one per year. The 2019-20 fatal drowning rate (2.00 per 100,000 pop.) was greater than the ten-year average (1.67 per 100,000 pop.).



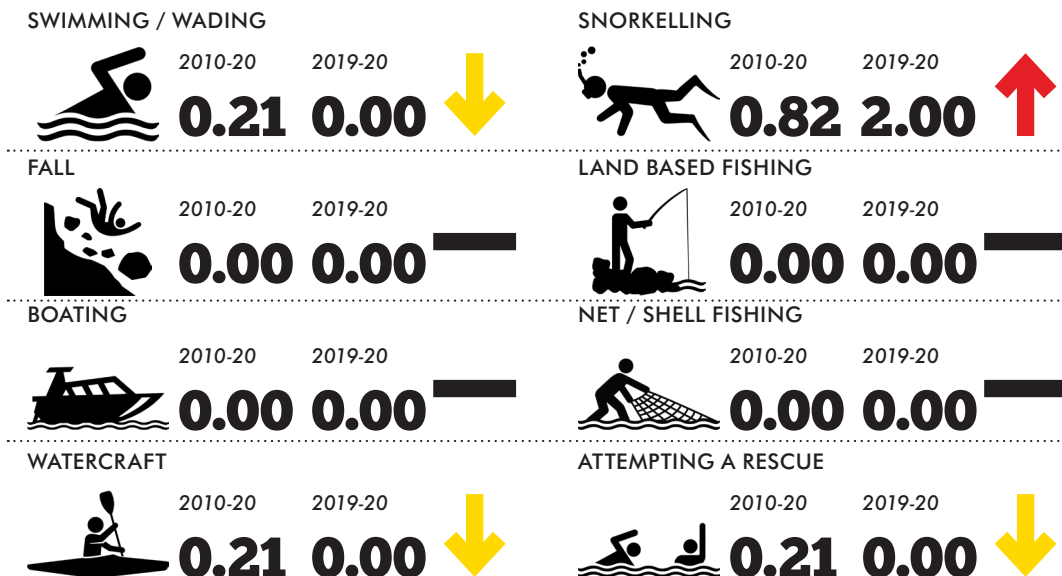
**Figure 44**  
2010-20: Gisborne Region beach and coastal drownings by activity (n=8).

Within the Gisborne Region during 2010-20, beach and coastal drowning fatalities were attributed to snorkelling (n=4), attempting a rescue (n=1), diving/jumping (n=1), swimming / wading (n=1) and watercraft (n=1) activities.



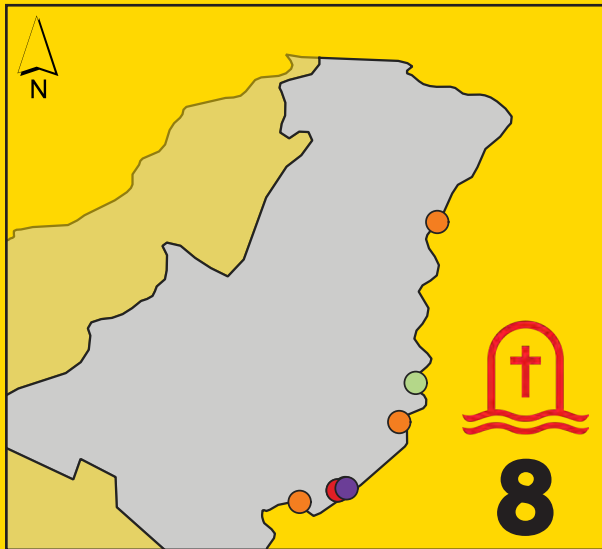
**Figure 45**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the Gisborne Region: 2010-20 (ten-year average) and 2019-20.

Within the Gisborne Region the 2019-20 fatal drowning rate (per 100,000 pop.) for swimming / wading, watercraft and attempting a rescue activities was less than their respective ten-year average. However, the 2019-20 fatal drowning rate for snorkelling activities was greater than the ten-year average.



# FATAL DROWNING SNAPSHOT

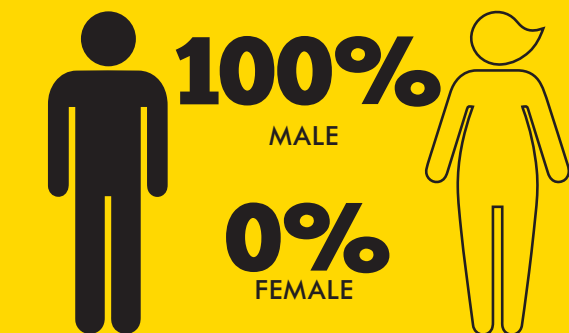
## 10-YEAR OVERVIEW | 2010-20



- Attempting a Rescue
- Boating
- Diving / Jumping
- Fall
- Net / Shell Fishing
- Rock Fishing
- Scuba Diving
- Snorkeling
- Swimming / Wading
- Watercraft

▶▶ TOTAL FATAL DROWNINGS: 8 ◀◀

AVERAGE FATAL DROWNINGS PER YEAR: **<1**  
 AVERAGE FATALITY PER 100,000 POPULATION: **1.67**



KEY DEMOGRAPHIC

**24-44**

YEAR OLD MALES



SNORKELLING

## 1-YEAR OVERVIEW | 2019-20

FATAL DROWNINGS: **1**  
 AVERAGE FATALITY PER 100,000 POPULATION: **2.00**

### FATAL DROWNINGS BY LOCATION



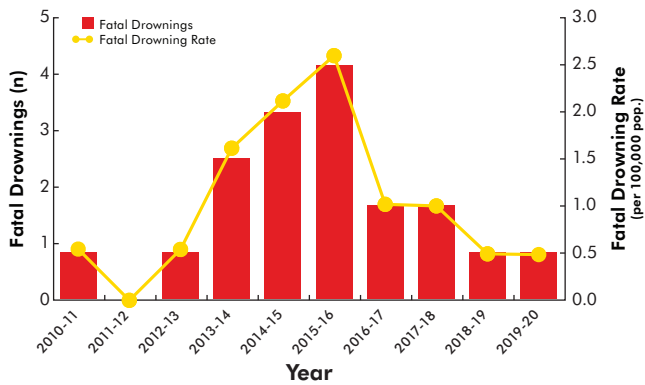
### FATAL DROWNINGS BY ACTIVITY



# HAWKE'S BAY / TE MATAU-A-MĀUI

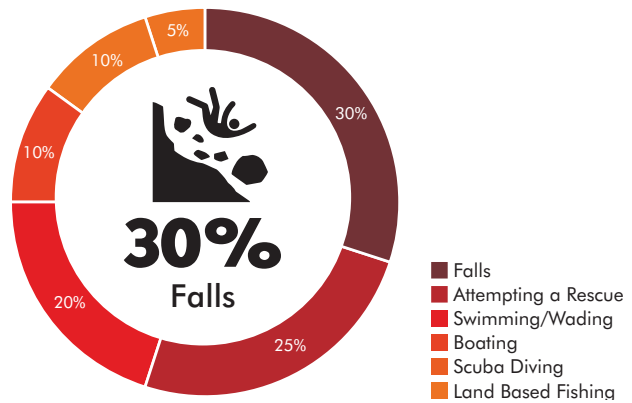
**Figure 46**  
2010-20: Hawke's Bay Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=20).

During 2019-20, there was one beach and coastal drowning fatality within the Hawke's Bay Region, which is less than the ten-year average of two per year. The 2019-20 fatal drowning rate (1.22 per 100,000 pop.) is less than the ten-year average (2.00 per 100,000 pop.).



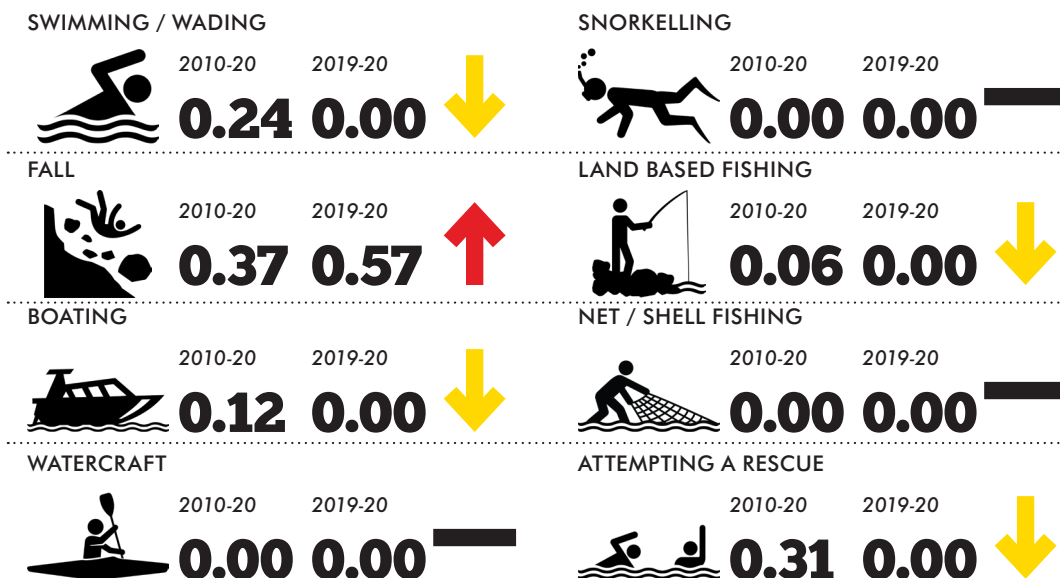
**Figure 47**  
2010-20: Hawke's Bay Region beach and coastal drownings by activity (n=20).

Within the Hawke's Bay Region during 2010-20, the majority of beach and coastal drowning fatalities occurred as a fall (n=6) attempting a rescue (n=5), followed by swimming/wading (n=4).



**Figure 48**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the Hawke's Bay Region: 2010-20 (ten-year average) and 2019-20.

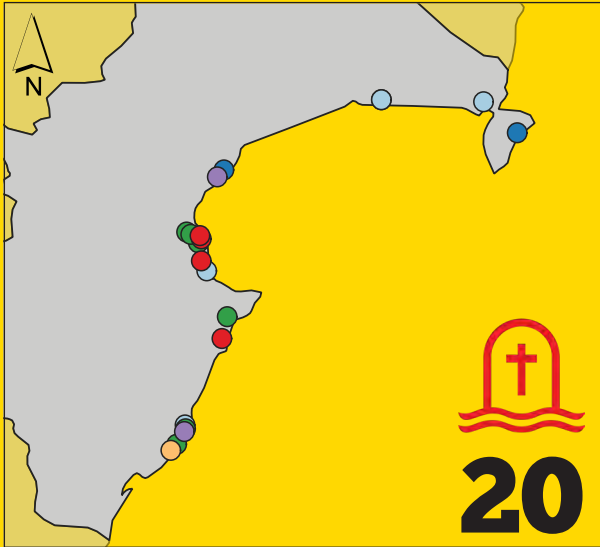
Within the Hawke's Bay Region the 2019-20 fatal drowning rates (per 100,000 pop.) for swimming/wading, boating, watercraft, land-based fishing and attempting rescue activities were less than their respective ten-year averages. However, the 2019-20 fatal drowning rate for falls was greater than the ten-year average.





# FATAL DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20



- Attempting a Rescue    ● Net / Shell Fishing    ● Swimming / Wading
- Boating    ● Rock Fishing    ● Watercraft
- Diving / Jumping    ● Scuba Diving
- Fall    ● Snorkeling

▶▶▶ TOTAL FATAL DROWNINGS: 20 ◀◀◀

AVERAGE FATAL DROWNINGS

**2**

PER YEAR

AVERAGE FATALITY

**1.22**

PER 100,000 POPULATION



**75%**  
MALE



**25%**  
FEMALE

KEY DEMOGRAPHIC

**0-24**

YEAR OLD MALES



FALLS

## 1-YEAR OVERVIEW | 2019-20

FATAL DROWNINGS

**1**

AVERAGE FATALITY

**0.57**

PER 100,000 POPULATION

FATAL DROWNINGS BY LOCATION



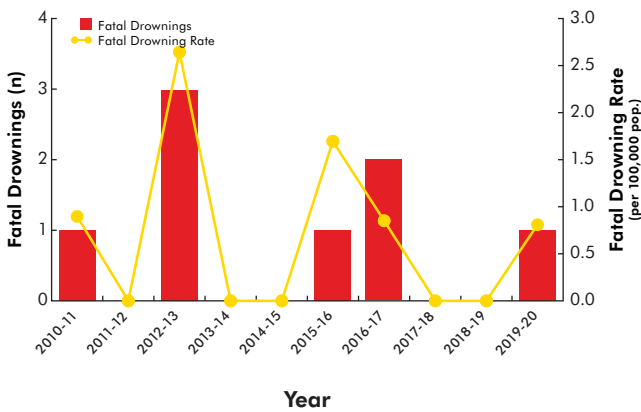
FATAL DROWNINGS BY ACTIVITY



# TARANAKI

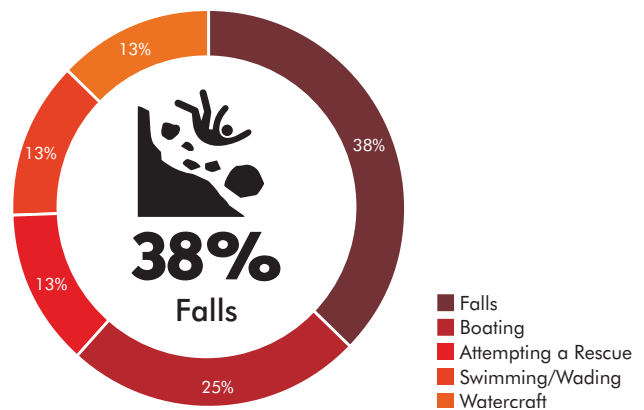
**Figure 49**  
2010-20: Taranaki Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=8).

During 2019-20, there was one beach and coastal drowning fatality within the Taranaki Region, which equals the ten-year average of one per year. The 2019-20 fatal drowning rate (0.81 per 100,000 pop.) was greater than the ten-year average (0.69 per 100,000 pop.).



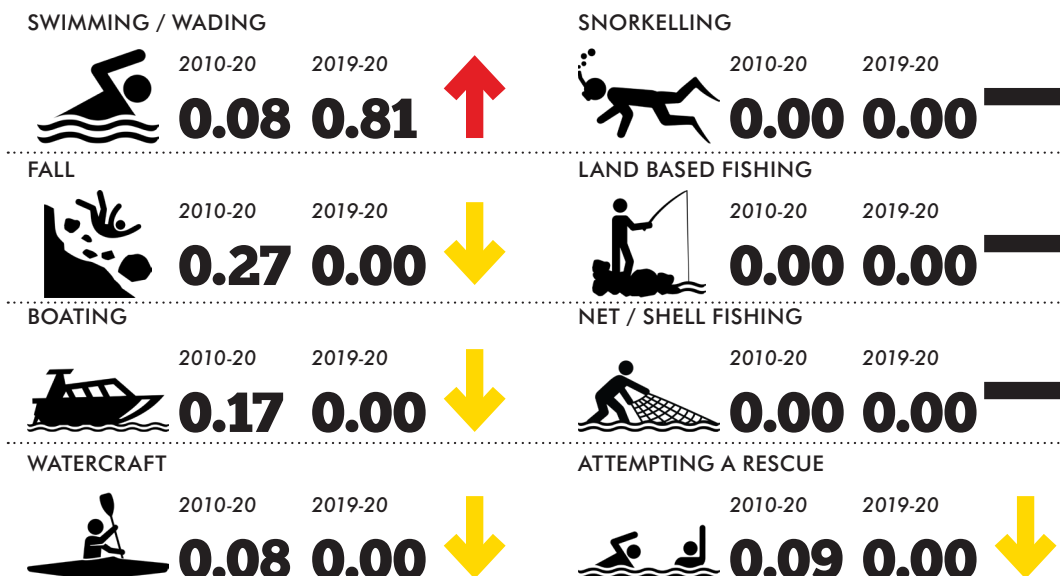
**Figure 50**  
2010-20: Taranaki Region beach and coastal drownings by activity (n=8).

Within the Taranaki Region during 2010-20, the majority of beach and coastal drowning fatalities resulted from falls (n=3), followed by boating (n=2) attempting a rescue (n=1), boating (n=1), swimming/wading (n=1) and watercraft activities (n=1).



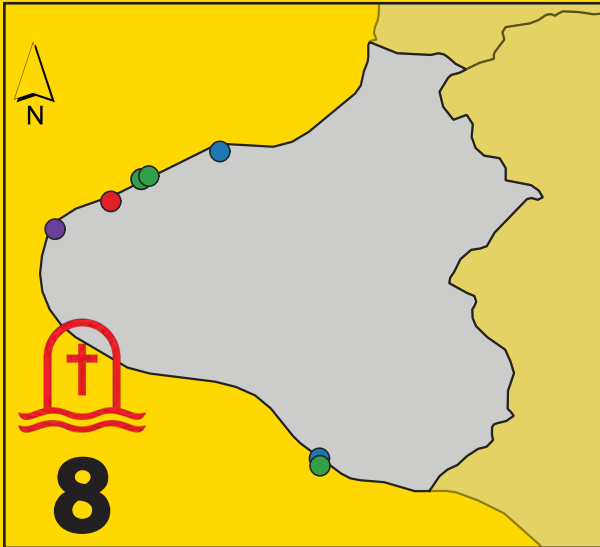
**Figure 51**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the Taranaki Region: 2010-20 (ten-year average) and 2019-20.

Within the Taranaki Region the 2019-20 fatal drowning rates (per 100,000 pop.) for falls, boating, watercraft and attempting rescue activities were less than their respective ten-year averages. However, the 2019-20 fatal drowning rate for swimming/wading was greater than the ten-year average.



# FATAL DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20



- Attempting a Rescue
- Boating
- Diving / Jumping
- Fall
- Net / Shell Fishing
- Rock Fishing
- Scuba Diving
- Snorkeling
- Swimming / Wading
- Watercraft

▶▶ TOTAL FATAL DROWNINGS: 8 ◀◀

AVERAGE FATAL DROWNINGS

**<1**

PER YEAR

AVERAGE FATALITY

**0.69**

PER 100,000 POPULATION



**75%**  
MALE



**25%**  
FEMALE

KEY DEMOGRAPHIC

**15-24**

YEAR OLD MALES



FALLS

## 1-YEAR OVERVIEW | 2019-20

FATAL DROWNINGS

**1**

AVERAGE FATALITY

**0.81**

PER 100,000 POPULATION

FATAL DROWNINGS BY LOCATION



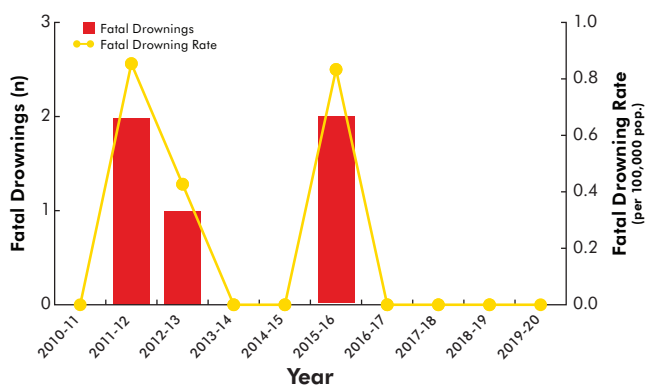
FATAL DROWNINGS BY ACTIVITY



# MANAWATŪ-WANGANUI

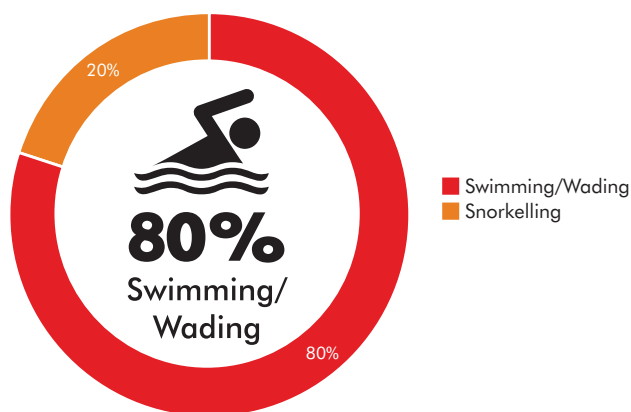
**Figure 52**  
2010-20: Manawatū-Wanganui Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=5).

During 2019-20, there were no beach and coastal drowning fatalities within the Manawatu-Wanganui Region, which is less than the ten-year average of less than one per year. The 2019-20 fatal drowning rate (0.00 per 100,000 pop.) was less than the ten-year average (0.17 per 100,000 pop.).



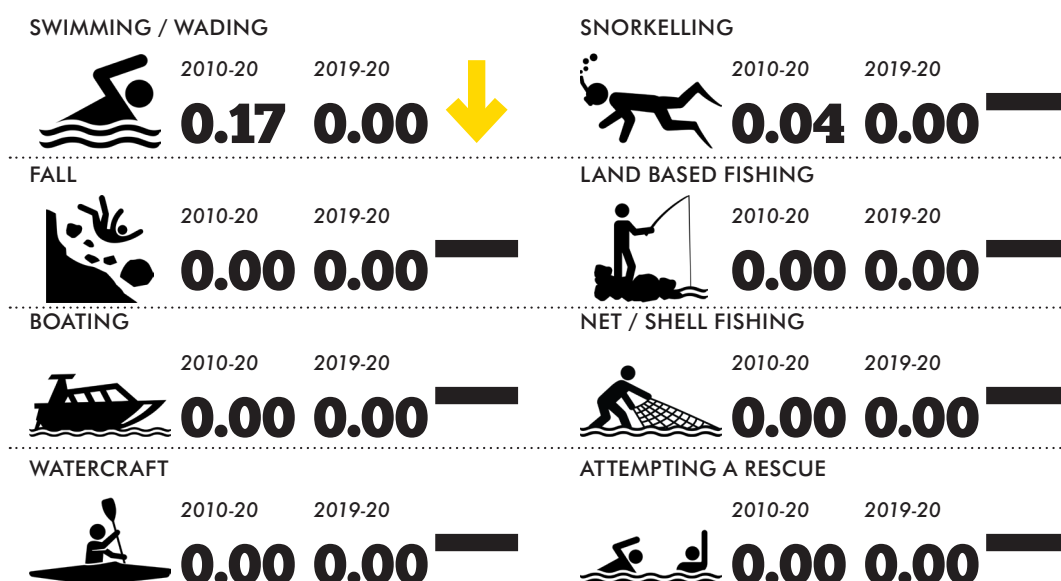
**Figure 53**  
2010-20: Manawatū-Wanganui Region beach and coastal drownings by activity (n=5).

Within the Manawatu-Wanganui Region during 2010-20, the majority of beach and coastal drowning fatalities occurred while swimming/wading (n=3), followed by snorkelling activities (n=1).



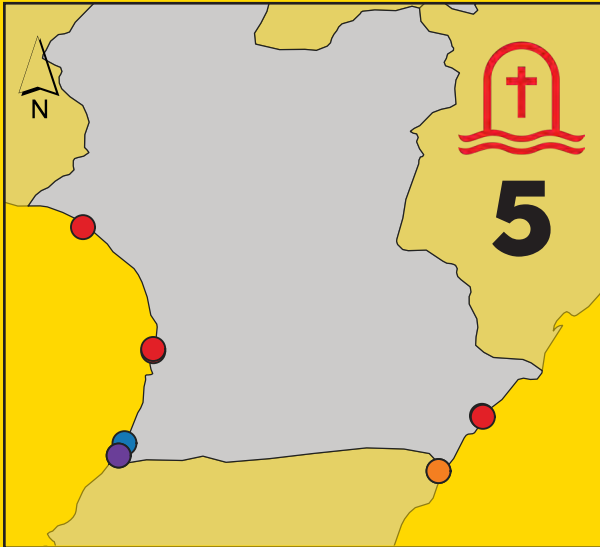
**Figure 54**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the Manawatū-Wanganui Region: 2010-20 (ten-year average) and 2019-20.

Within the Manawatu-Wanganui Region the 2019-20 fatal drowning rate (per 100,000 pop.) for swimming/wading and snorkelling activities were less than their respective ten-year average.



# FATAL DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20



- Attempting a Rescue
- Boating
- Diving / Jumping
- Fall
- Net / Shell Fishing
- Rock Fishing
- Scuba Diving
- Snorkeling
- Swimming / Wading
- Watercraft

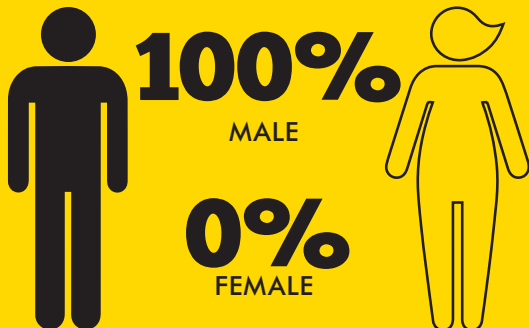
▶▶ TOTAL FATAL DROWNINGS: 5 ◀◀

AVERAGE FATAL DROWNINGS

◀1  
PER YEAR

AVERAGE FATALITY

0.17  
PER 100,000 POPULATION



KEY DEMOGRAPHIC

15-44

YEAR OLD MALES



SWIMMERS/WADERS

## 1-YEAR OVERVIEW | 2019-20

FATAL DROWNINGS

0

AVERAGE FATALITY

0.00

PER 100,000 POPULATION

FATAL DROWNINGS BY LOCATION



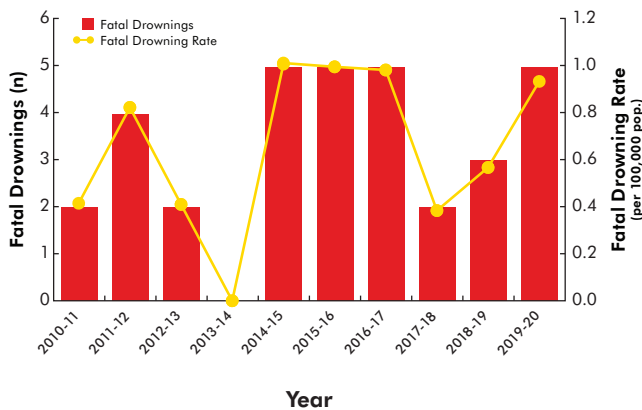
FATAL DROWNINGS BY ACTIVITY



# WELLINGTON / TE WHANGA-NUI-A-TARA

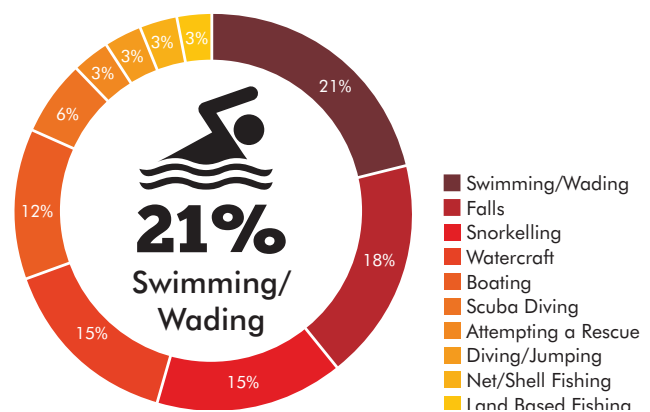
**Figure 55**  
2010-20: Wellington Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=33).

During 2019-20, there were five beach and coastal drowning fatalities within the Wellington Region, which is greater than the ten-year average of three per year. The 2019-20 fatal drowning rate (0.94 per 100,000 pop.) was greater than the ten-year average (0.65 per 100,000 pop.).



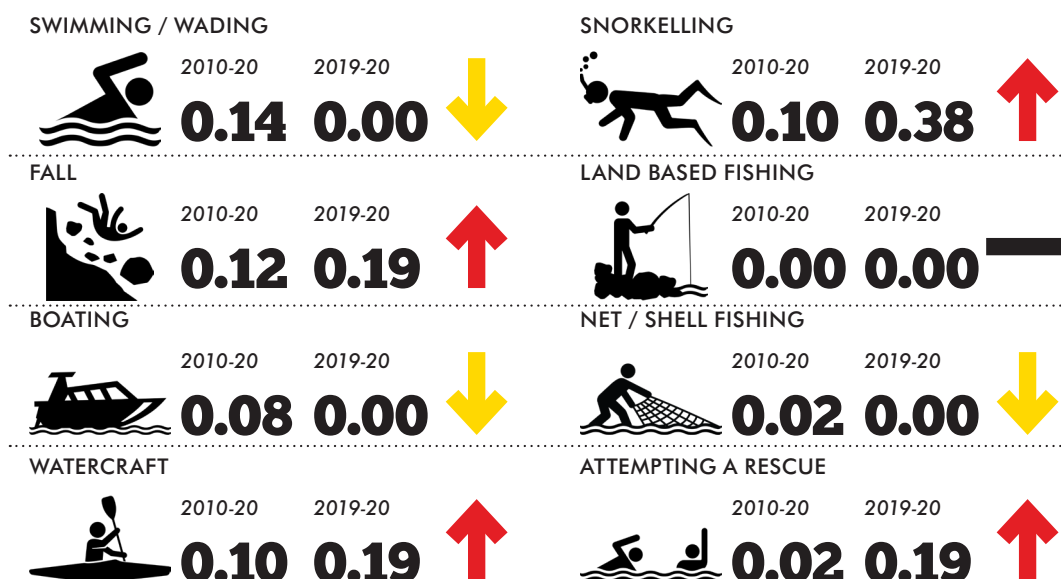
**Figure 56**  
2010-20: Wellington Region beach and coastal drownings by activity (n=33).

Within the Wellington Region during 2010-20, the majority of beach and coastal drowning fatalities occurred while swimming/wading (n=7), followed by falls (n=6), snorkelling (n=5) and watercraft activities (n=5).



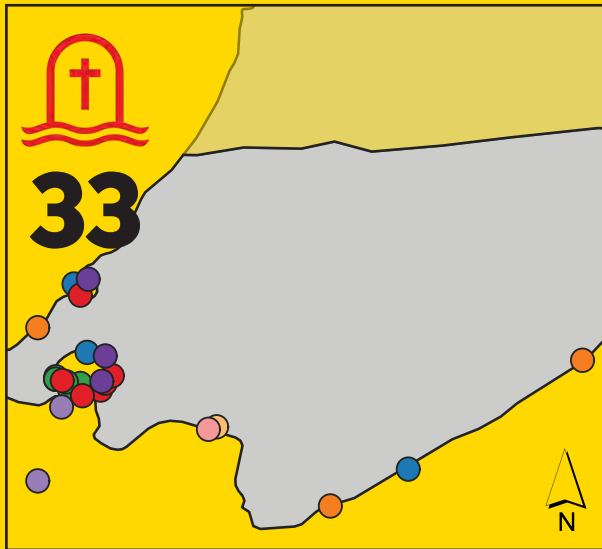
**Figure 57**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the Wellington Region: 2010-20 (ten-year average) and 2019-20.

Within the Wellington Region the 2019-20 fatal drowning rates (per 100,000 pop.) for swimming/wading, boating, land-based fishing and net/shell fishing activities were less than their respective ten-year averages. However, the 2019-20 fatal drowning rates for falls, watercraft, snorkelling and attempting a rescue activities were greater than the ten-year average.



# FATAL DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20

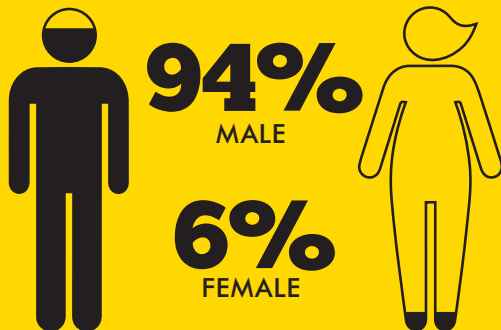


- Attempting a Rescue    ● Net / Shell Fishing    ● Swimming / Wading
- Boating    ● Rock Fishing    ● Watercraft
- Diving / Jumping    ● Scuba Diving
- Fall    ● Snorkeling

▶▶▶ **TOTAL FATAL DROWNINGS: 33** ◀◀◀

AVERAGE FATAL DROWNINGS  
**3**  
PER YEAR

AVERAGE FATALITY  
**0.65**  
PER 100,000 POPULATION



KEY DEMOGRAPHIC

**25-34**

YEAR OLD MALES    SWIMMING/WADING

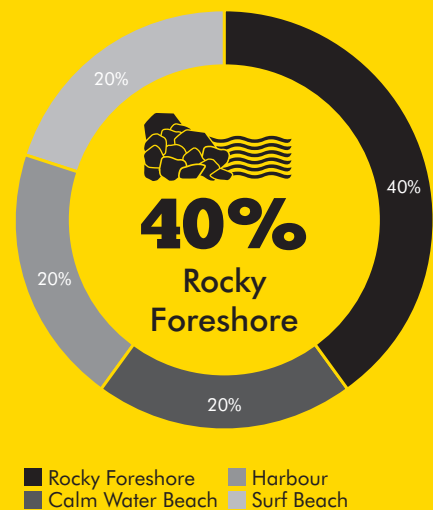


## 1-YEAR OVERVIEW | 2019-20

FATAL DROWNINGS    AVERAGE FATALITY

**5**    **0.94**  
PER 100,000 POPULATION

### FATAL DROWNINGS BY LOCATION



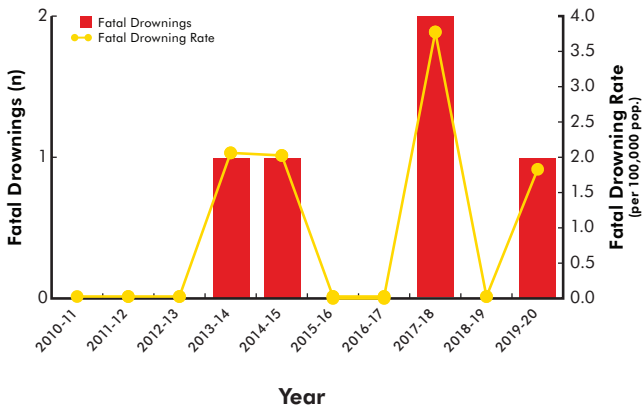
### FATAL DROWNINGS BY ACTIVITY



# TASMAN / TE TAI-O-AORERE

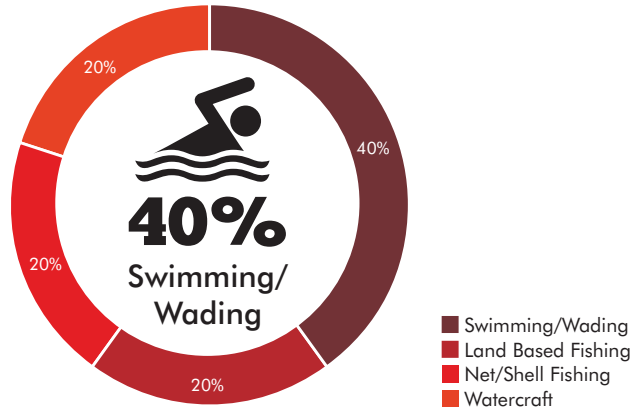
**Figure 58**  
2010-20: Tasman Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=5).

During 2019-20, there was one beach and coastal drowning fatality within the Tasman Region, which is greater than the ten-year average of less than one per year. The 2019-20 fatal drowning rate (1.81 per 100,000 pop.) was greater than the ten-year average (0.96 per 100,000 pop.).



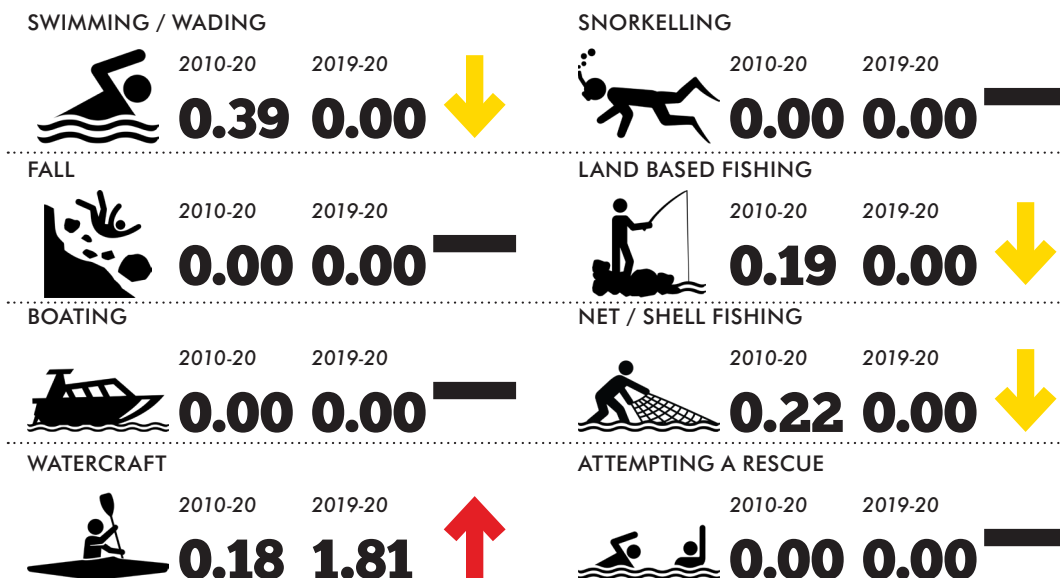
**Figure 59**  
2010-20: Tasman Region beach and coastal drownings by activity (n=5).

Within the Tasman Region during 2010-20, the beach and coastal drowning fatalities occurred while swimming/wading (n=2), net / shell fishing (n=1) land based fishing (n=1) and watercraft activities (n=1).



**Figure 60**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the Tasman Region: 2010-20 (ten-year average) and 2019-20.

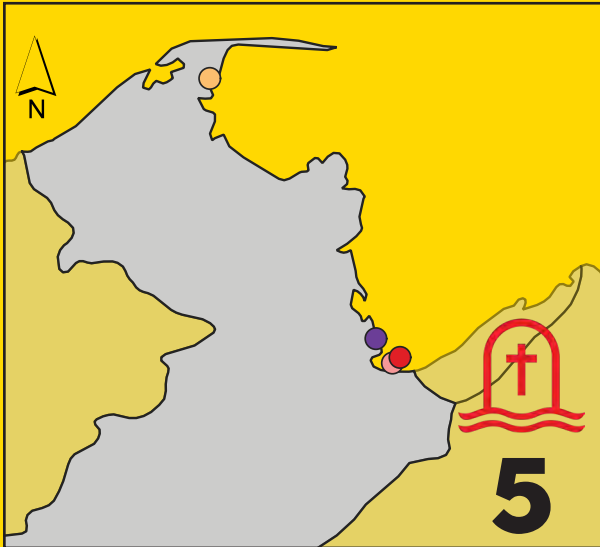
Within the Tasman Region the 2019-20 fatal drowning rates (per 100,000 pop.) for swimming/wading, land-based fishing and net/shell fishing activities were less than their respective ten-year averages. However, the 2019-20 fatal drowning rate for watercraft activities was greater than the ten-year average.





# FATAL DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20

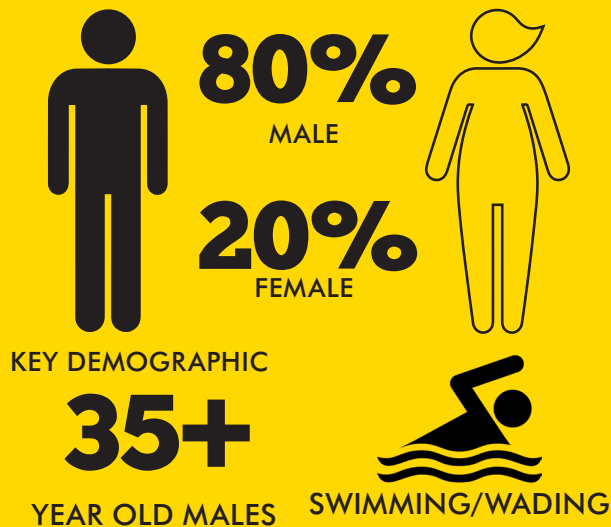


- Attempting a Rescue
- Boating
- Diving / Jumping
- Fall
- Net / Shell Fishing
- Rock Fishing
- Scuba Diving
- Snorkeling
- Swimming / Wading
- Watercraft

▶▶ TOTAL FATAL DROWNINGS: 5 ◀◀

AVERAGE FATAL DROWNINGS **<1** PER YEAR

AVERAGE FATALITY **0.96** PER 100,000 POPULATION



## 1-YEAR OVERVIEW | 2019-20

FATAL DROWNINGS **1**

AVERAGE FATALITY **1.8** PER 100,000 POPULATION

### FATAL DROWNINGS BY LOCATION



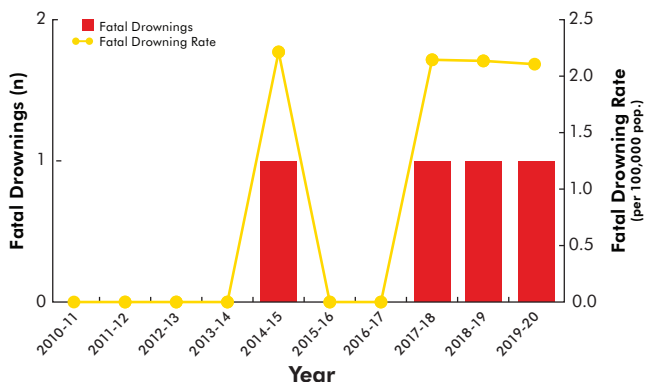
### FATAL DROWNINGS BY ACTIVITY



# MARLBOROUGH / TE TAUIHU-O-TE-WAKA

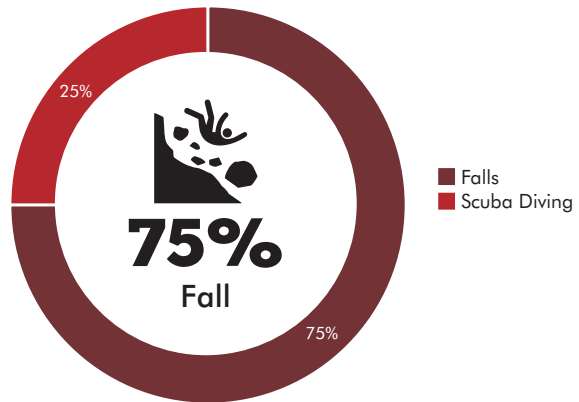
**Figure 61**  
2010-20: Marlborough Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=4).

During 2019-20, there was one beach and coastal drowning fatality within the Marlborough Region, which is greater than the ten-year average of less than one per year. The 2019-20 fatal drowning rate (2.02 per 100,000 pop.) was greater than the ten-year average (0.84 per 100,000 pop.).



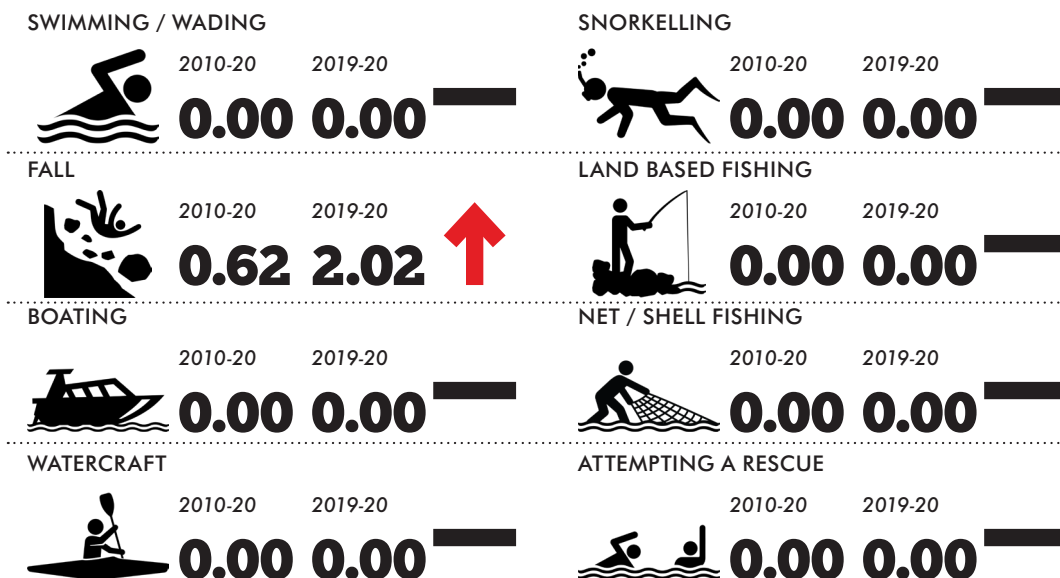
**Figure 62**  
2010-20: Marlborough Region beach and coastal drownings by activity (n=4).

Within the Marlborough Region during 2010-20, the majority of beach and coastal drowning fatalities were classified as falls (n=3), followed by scuba diving activities (n=1).



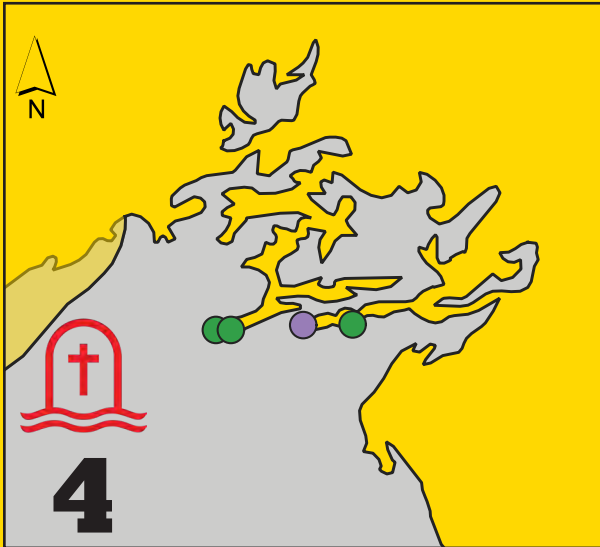
**Figure 63**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the Marlborough Region: 2010-20 (ten-year average) and 2019-20.

Within the Marlborough Region the 2019-20 fatal drowning rates (per 100,000 pop.) for falls was greater than the ten-year average.



# FATAL DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20



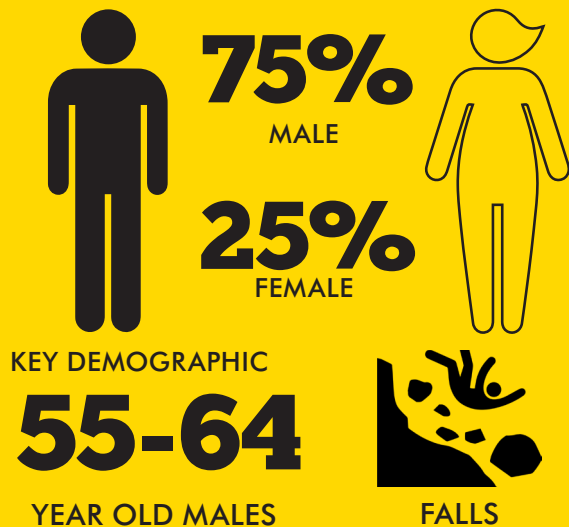
- Attempting a Rescue    ○ Net / Shell Fishing    ● Swimming / Wading
- Boating    ○ Rock Fishing    ● Watercraft
- Diving / Jumping    ○ Scuba Diving
- Fall    ○ Snorkeling

▶▶ TOTAL FATAL DROWNINGS: 4 ◀◀

AVERAGE FATAL DROWNINGS    AVERAGE FATALITY

**<1**    **0.84**

PER YEAR    PER 100,000 POPULATION



## 1-YEAR OVERVIEW | 2019-20

FATAL DROWNINGS    AVERAGE FATALITY

**1**    **2.02**

PER 100,000 POPULATION

### FATAL DROWNINGS BY LOCATION



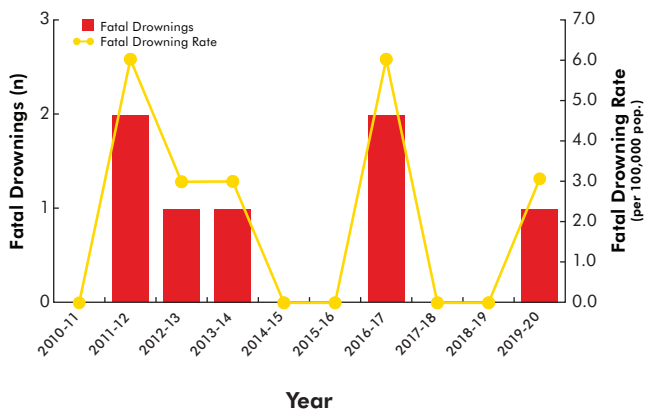
### FATAL DROWNINGS BY ACTIVITY



# WEST COAST / TE TAI POUTINI

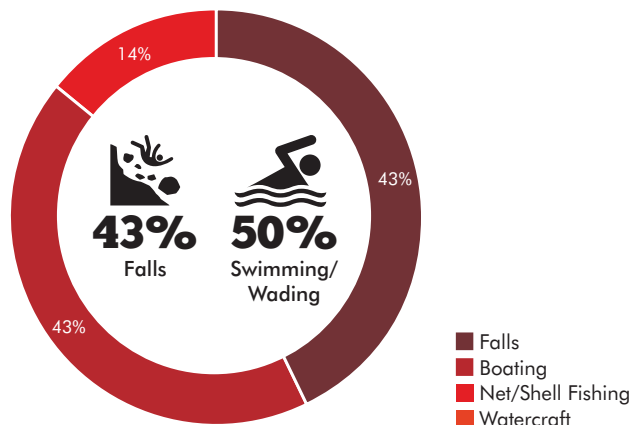
**Figure 64**  
2010-20: West Coast Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=7).

During 2019-20, there was one beach and coastal drowning fatality within the West Coast Region, which equals the ten-year average of one per year. The 2019-20 fatal drowning rate (3.10 per 100,000 pop.) was greater than the ten-year average (2.13 per 100,000 pop.).



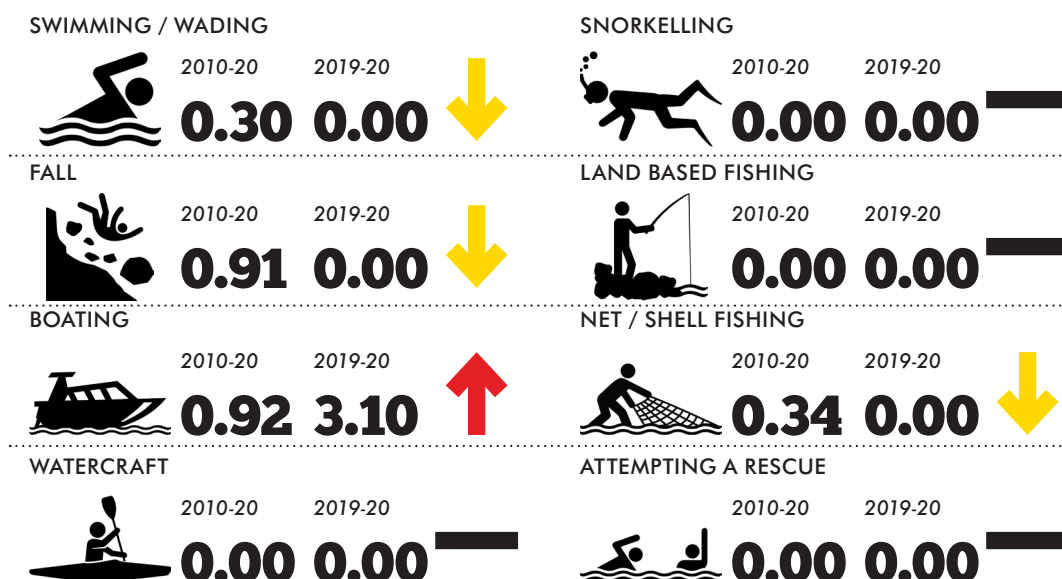
**Figure 65**  
2010-20: West Coast Region beach and coastal drownings by activity (n=7).

Within the West Coast Region during 2010-20, the majority of beach and coastal drowning fatalities were classified as boating (n=3) and falls (n=3), followed by swimming/wading (n=1).



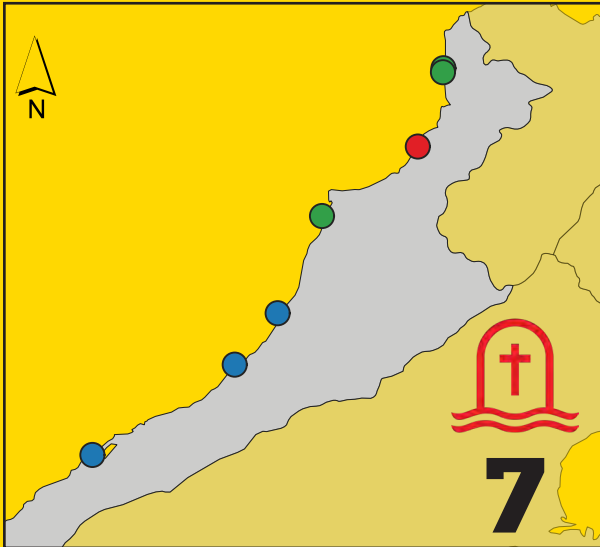
**Figure 66**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the West Coast Region: 2010-20 (ten-year average) and 2019-20.

Within the West Coast Region the 2019-20 fatal drowning rates (per 100,000 pop.) for swimming/wading and falls activities were less than their respective ten-year averages. However, the 2019-20 fatal drowning rate for boating was greater than the ten-year average



# FATAL DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20



- Attempting a Rescue
- Boating
- Diving / Jumping
- Fall
- Net / Shell Fishing
- Rock Fishing
- Scuba Diving
- Snorkeling
- Swimming / Wading
- Watercraft

▶▶ TOTAL FATAL DROWNINGS: 7 ◀◀

AVERAGE FATAL DROWNINGS

**<1**

PER YEAR

AVERAGE FATALITY

**2.13**

PER 100,000 POPULATION



**86%**  
MALE



**14%**  
FEMALE

KEY DEMOGRAPHIC

**55+**

YEAR OLD MALES  
FALLS

**35-54**

YEAR OLD MALES  
BOATING

## 1-YEAR OVERVIEW | 2019-20

FATAL DROWNINGS

**1**

AVERAGE FATALITY

**3.10**

PER 100,000 POPULATION

FATAL DROWNINGS BY LOCATION



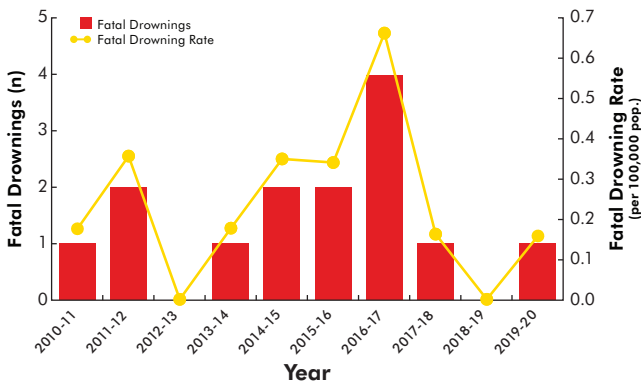
FATAL DROWNINGS BY ACTIVITY



# CANTERBURY / WAITAHA

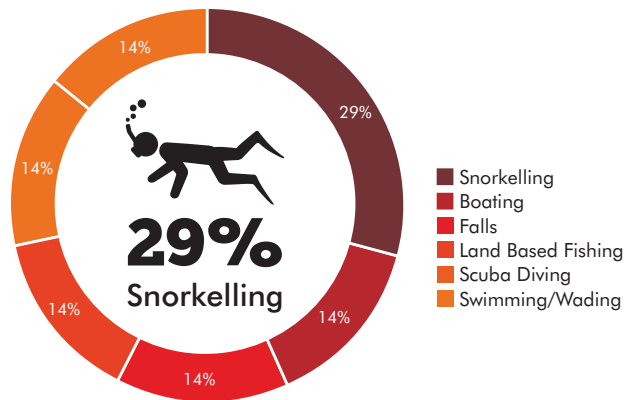
**Figure 67**  
2010-20: Canterbury Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=14).

During 2019-20, there was one beach and coastal drowning fatalities within the Canterbury Region, which equals the ten-year average of one per year. The 2019-20 fatal drowning rate (0.16 per 100,000 pop.) was less than the ten-year average (0.24 per 100,000 pop.).



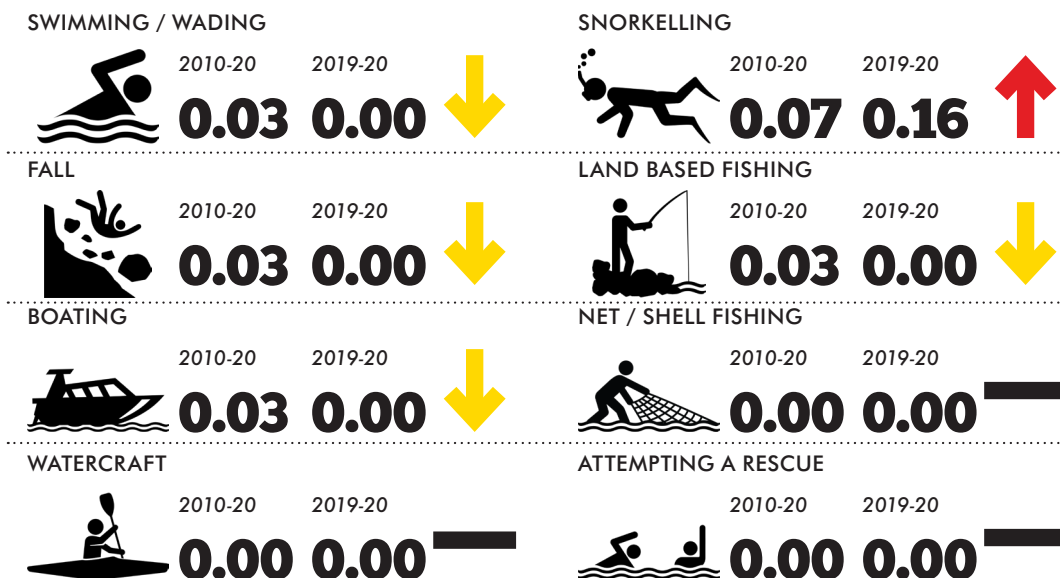
**Figure 68**  
2010-20: Canterbury Region beach and coastal drownings by activity (n=14).

Within the Canterbury Region during 2010-20, the majority of beach and coastal drowning fatalities occurred while snorkelling (n=4), followed by boating (n=2), falls (n=2), land based fishing (n=2), scuba diving (n=2) and swimming/wading activities (n=2).



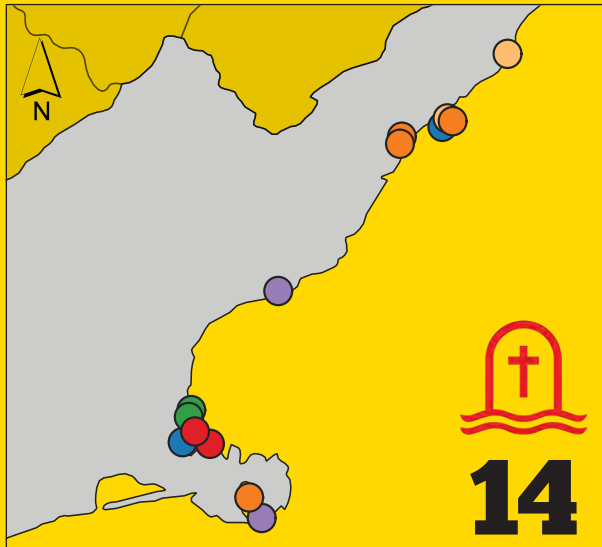
**Figure 69**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the Canterbury Region: 2010-20 (ten-year average) and 2019-20.

Within the Canterbury Region the 2019-20 fatal drowning rates (per 100,000 pop.) for swimming/wading, falls, boating and land based fishing were less than their respective ten-year averages. However, the 2019-20 fatal drowning rates for snorkelling was greater than the ten-year average.



# FATAL DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20



- Attempting a Rescue
- Boating
- Diving / Jumping
- Fall
- Net / Shell Fishing
- Rock Fishing
- Scuba Diving
- Snorkeling
- Swimming / Wading
- Watercraft

▶▶▶ **TOTAL FATAL DROWNINGS: 14** ◀◀◀

AVERAGE FATAL DROWNINGS

**1**

PER YEAR

AVERAGE FATALITY

**0.24**

PER 100,000 POPULATION



**93%**  
MALE



**7%**  
FEMALE

KEY DEMOGRAPHIC

**25-64**

YEAR OLD MALES



SNORKELLING

## 1-YEAR OVERVIEW | 2019-20

FATAL DROWNINGS

**1**

AVERAGE FATALITY

**0.16**

PER 100,000 POPULATION

FATAL DROWNINGS BY LOCATION



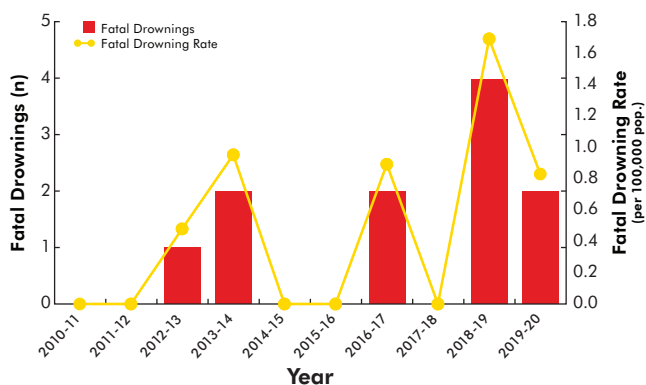
FATAL DROWNINGS BY ACTIVITY



# OTAGO / ŌTĀKOU

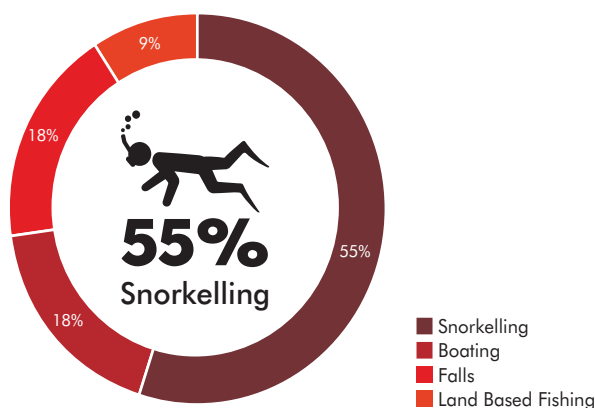
**Figure 70**  
2010-20: Otago Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=11).

During 2019-20, there were two beach and coastal drowning fatalities within the Otago Region, which is greater than the ten-year average of one per year. The 2019-20 fatal drowning rate (0.83 per 100,000 pop.) was greater than the ten-year average (0.49 per 100,000 pop.).



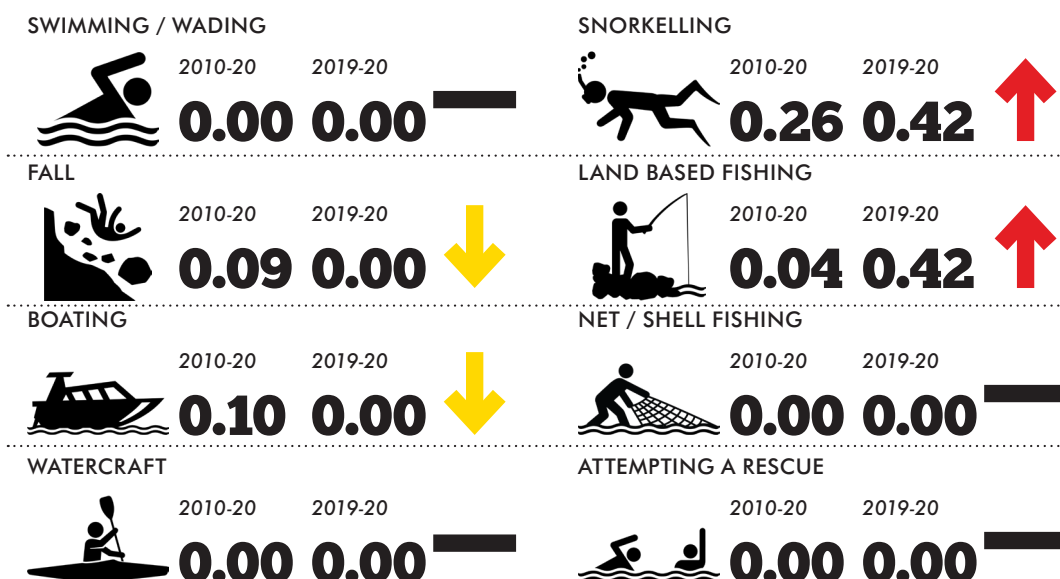
**Figure 71**  
2010-20: Otago Region beach and coastal drownings by activity (n=11).

Within the Otago Region during 2010-20, the majority of beach and coastal drowning fatalities occurred while snorkelling (n=6), followed by boating (n=2) and falls (n=2).



**Figure 72**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the Otago Region: 2010-20 (ten-year average) and 2019-20.

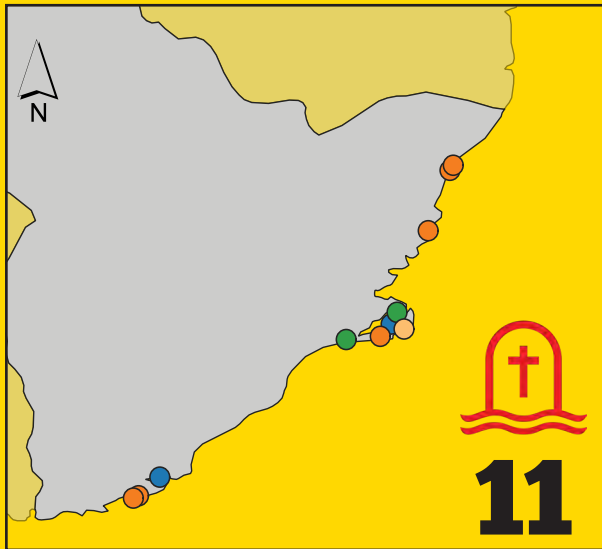
Within the Otago Region the 2019-20 fatal drowning rates (per 100,000 pop.) for falls, and boating were less than their respective ten-year averages. However, the 2019-20 fatal drowning rates for land-based fishing and snorkelling was greater than the ten-year average.





# FATAL DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20

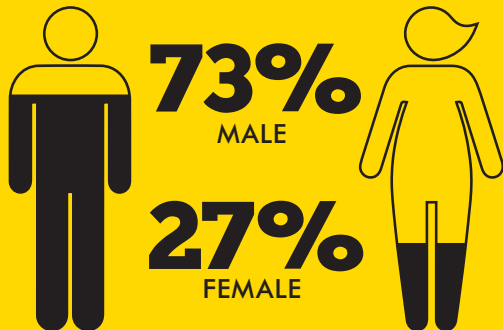


- Attempting a Rescue
- Boating
- Diving / Jumping
- Fall
- Net / Shell Fishing
- Rock Fishing
- Scuba Diving
- Snorkeling
- Swimming / Wading
- Watercraft

▶▶ TOTAL FATAL DROWNINGS: 11 ◀◀

AVERAGE FATAL DROWNINGS **1** PER YEAR

AVERAGE FATALITY **0.49** PER 100,000 POPULATION



KEY DEMOGRAPHIC

**15-54**

YEAR OLD MALES



SNORKELLERS

## 1-YEAR OVERVIEW | 2019-20

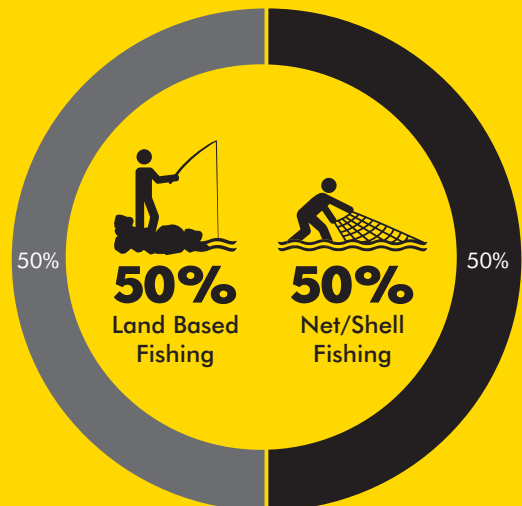
FATAL DROWNINGS **2**

AVERAGE FATALITY **0.83** PER 100,000 POPULATION

### FATAL DROWNINGS BY LOCATION



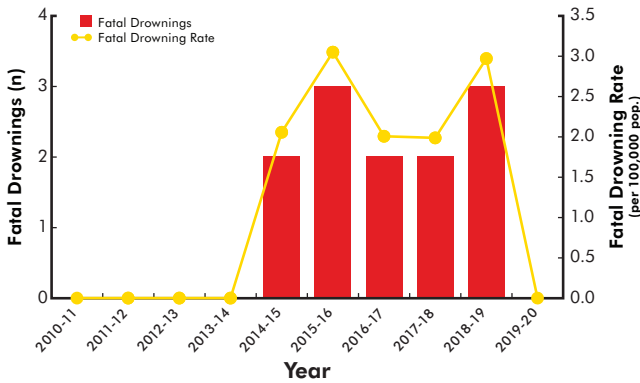
### FATAL DROWNINGS BY ACTIVITY



# SOUTHLAND / MURIHIKU

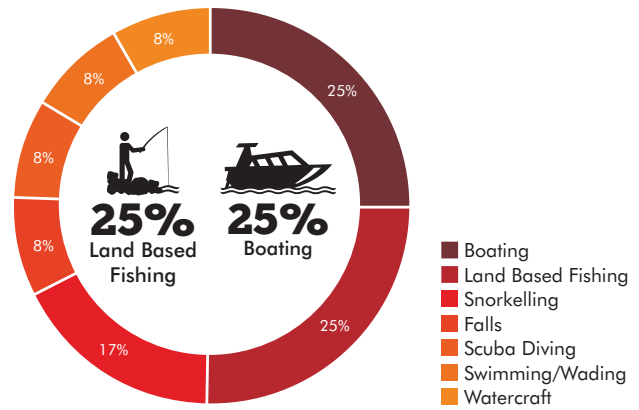
**Figure 73**  
2010-20: Southland Region beach and coastal fatal drownings and fatal drowning rate per 100,000 population (n=12).

During 2019-20, there were no beach and coastal drowning fatalities within the Southland Region, which is less than the ten-year average of one per year. The 2019-20 fatal drowning rate (0.00 per 100,000 pop.) was less than the ten-year average (1.21 per 100,000 pop.).



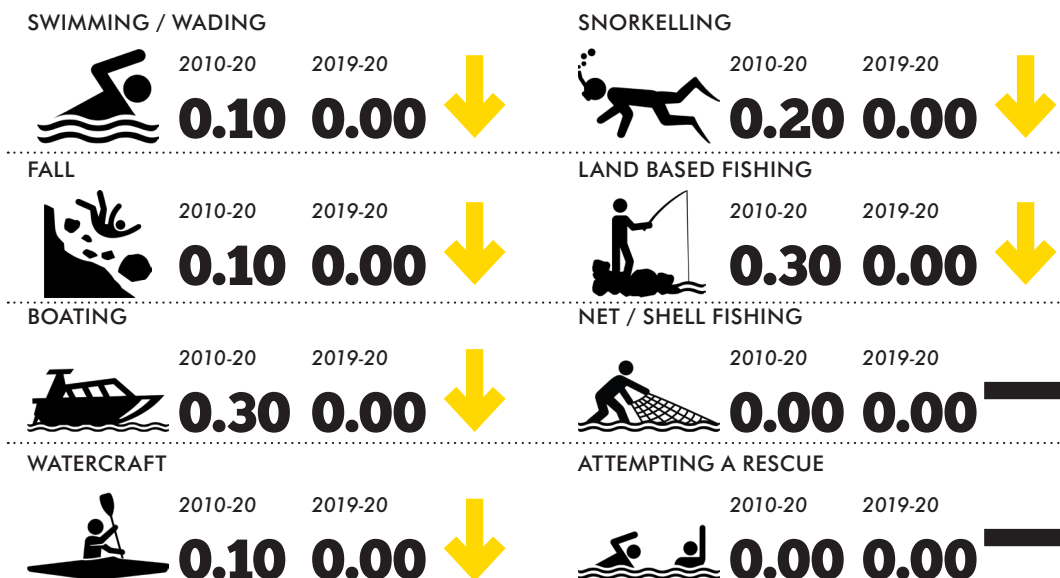
**Figure 74**  
2010-20: Southland Region beach and coastal drownings by activity (n=12).

Within the Southland Region during 2010-20, the majority of beach and coastal drowning fatalities occurred while boating (n=3) and based fishing (n=3), followed by snorkelling (n=2).



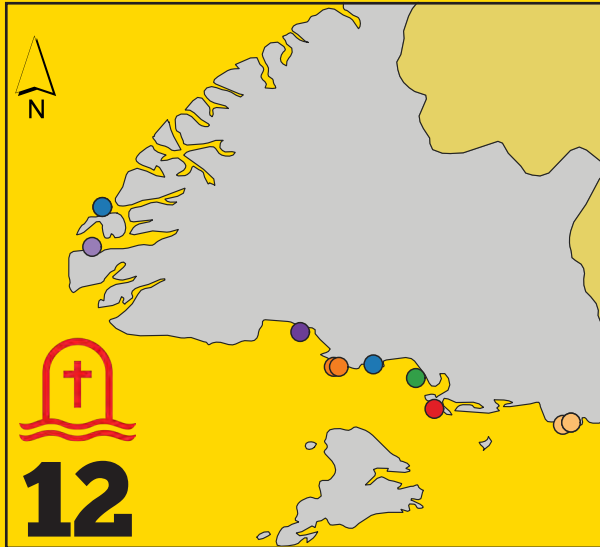
**Figure 75**  
Comparison of beach and coastal fatal drowning rates (per 100,000 pop.) by activity in the Southland Region: 2010-20 (ten-year average) and 2019-20.

Within the Southland Region the 2019-20 fatal drowning rates (per 100,000 pop.) for swimming/wading, falls, boating, watercraft, snorkelling and land-based fishing activities were less than their respective ten-year averages.



# FATAL DROWNING SNAPSHOT

## 10-YEAR OVERVIEW | 2010-20



- Attempting a Rescue
- Boating
- Diving / Jumping
- Fall
- Net / Shell Fishing
- Rock Fishing
- Scuba Diving
- Snorkeling
- Swimming / Wading
- Watercraft

▶▶▶ **TOTAL FATAL DROWNINGS: 12** ◀◀◀

AVERAGE FATAL DROWNINGS

**1**

PER YEAR

AVERAGE FATALITY

**1.21**

PER 100,000 POPULATION



**100%**  
MALE



**0%**  
FEMALE

KEY DEMOGRAPHIC

**15-34**

YEAR OLD MALES  
LAND BASED FISHING

**25+**

YEAR OLD MALES  
BOATING

## 1-YEAR OVERVIEW | 2019-20

FATAL DROWNINGS

**0**

AVERAGE FATALITY

**0.00**

PER 100,000 POPULATION

FATAL DROWNINGS BY LOCATION

**ZERO**  
Fatal  
Drownings

FATAL DROWNINGS BY ACTIVITY

**ZERO**  
Fatal  
Drownings



# 10 YEAR ACTIVITY OVERVIEW 2010-20

## SECTION SIX

**80**



SWIMMING/  
WADING

**62**



BOATING

**61**



FALLS  
(TRIPS/SLIPS)

**36**



SNORKELLING

**31**



WATERCRAFT

**31**



LAND BASED  
FISHING

# SNAPSHOT: SWIMMING/WADING

10 YEAR OVERVIEW | 2010-20



FATAL DROWNINGS

**80**

AVERAGE FATAL DROWNINGS PER YEAR

**8**

AVERAGE FATALITY RATE PER 100,000 POPULATION

**0.17**

KEY DEMOGRAPHIC

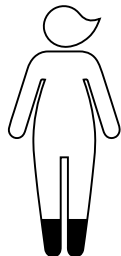
**15-44**

YEAR OLD MALES (NZ EUROPEAN)



**85%**

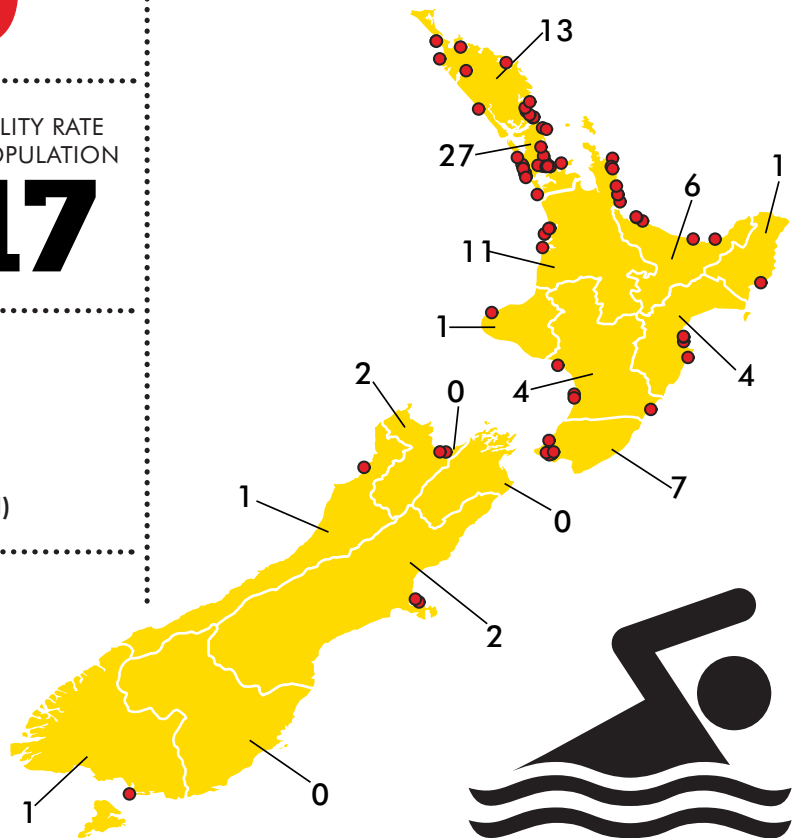
MALE



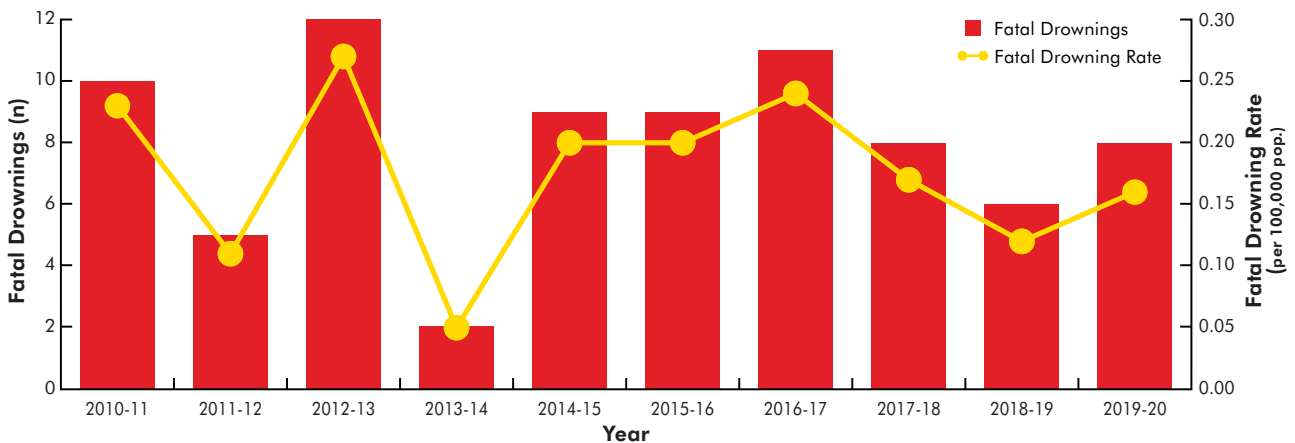
**15%**

FEMALE

SWIMMING/WADING FATAL DROWNINGS LOCATION



SWIMMING & WADING FATAL DROWNINGS 2010-20



# SNAPSHOT: BOATING

10 YEAR OVERVIEW | 2010-20



FATAL DROWNINGS

**62**

AVERAGE FATAL DROWNINGS PER YEAR

**6**

AVERAGE FATALITY RATE PER 100,000 POPULATION

**0.14**

KEY DEMOGRAPHIC

**35+**

YEAR OLD MALES (PACIFIC PEOPLES & NZ EUROPEAN)



**95%**

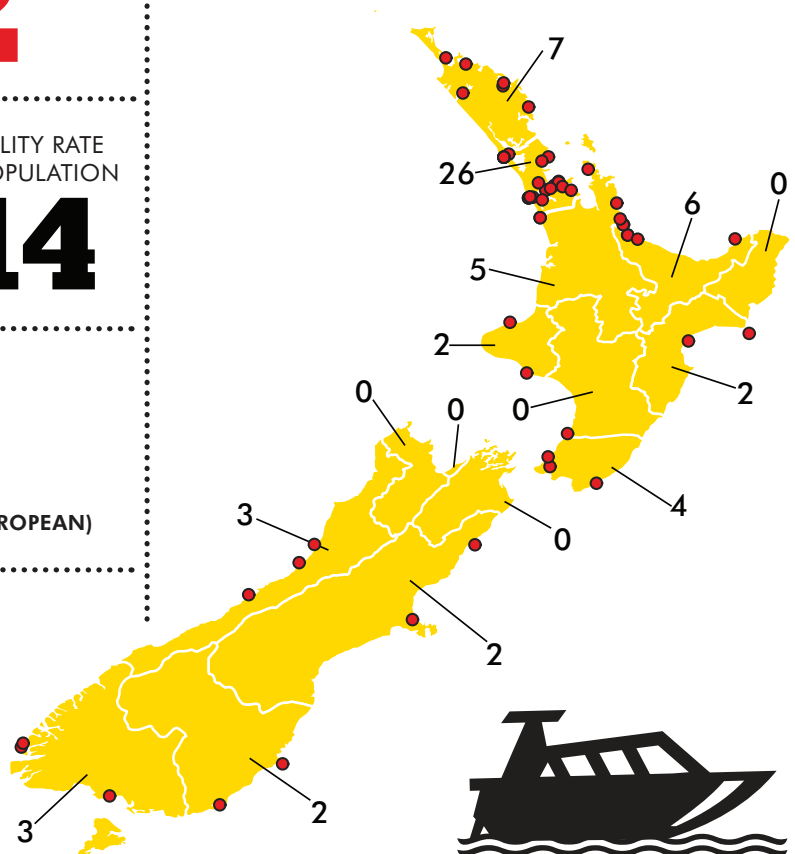
MALE

**5%**

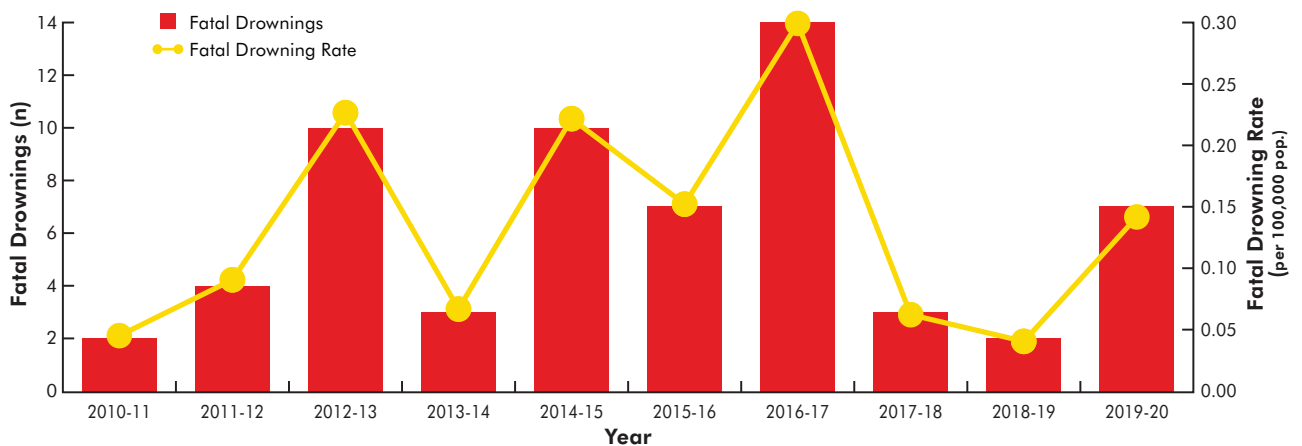
FEMALE



BOATING FATAL DROWNINGS LOCATION



BOATING FATAL DROWNINGS 2010-20



# SNAPSHOT: FALLS

10 YEAR OVERVIEW | 2010-20



FATAL DROWNINGS

**61**

AVERAGE FATAL DROWNINGS PER YEAR

**6**

AVERAGE FATALITY RATE PER 100,000 POPULATION

**0.13**

KEY DEMOGRAPHIC

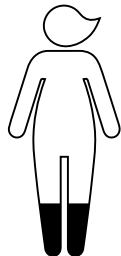
**15+**

YEAR OLD MALES (NZ EUROPEAN)

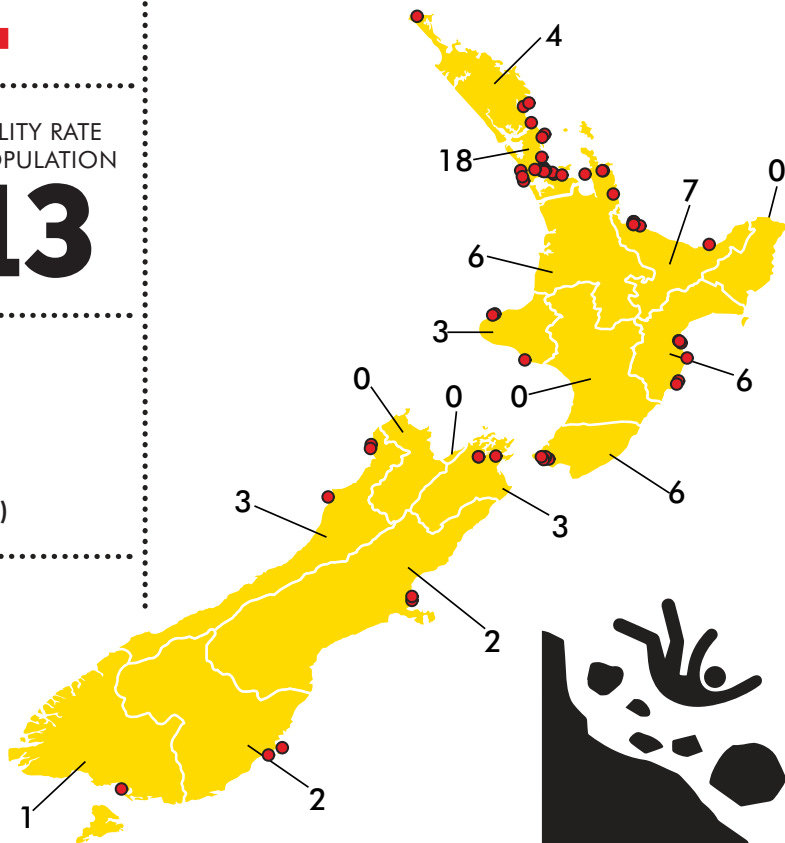


**79%**  
MALE

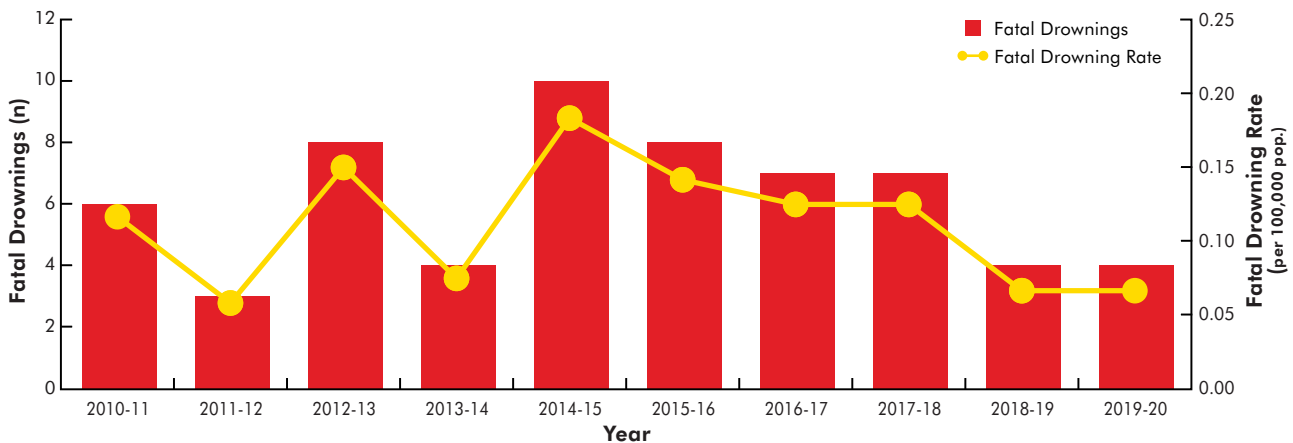
**21%**  
FEMALE



FALLS FATAL DROWNINGS LOCATION



FALLS FATAL DROWNINGS 2010-20





# SNAPSHOT: SNORKELLING

10 YEAR OVERVIEW | 2010-20



FATAL DROWNINGS

**36**

AVERAGE FATAL DROWNINGS PER YEAR

**4**

AVERAGE FATALITY RATE PER 100,000 POPULATION

**0.08**

KEY DEMOGRAPHIC

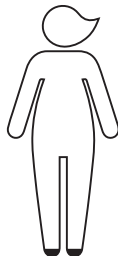
**25-54**

YEAR OLD MALES (MĀORI)



**97%**

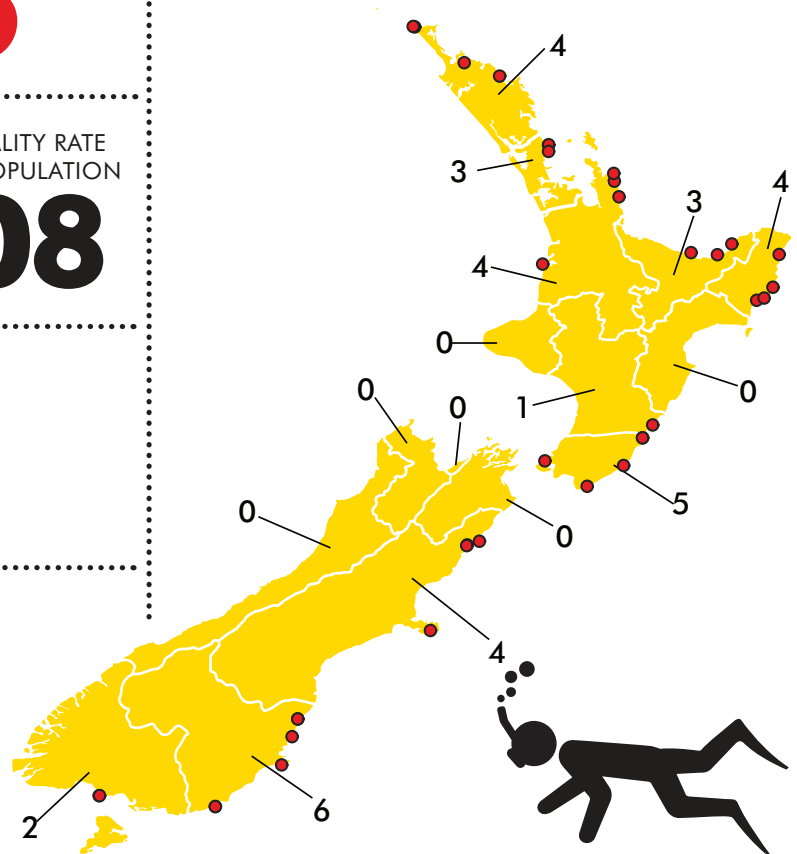
MALE



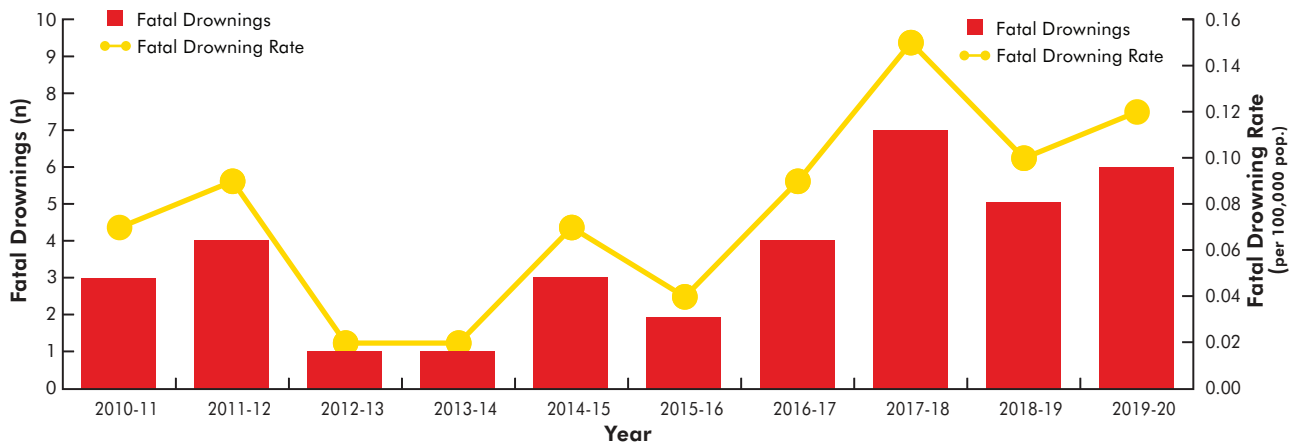
**3%**

FEMALE

SNORKELLING FATAL DROWNINGS LOCATION



## SNORKELLING FATAL DROWNINGS 2010-20



# SNAPSHOT: WATERCRAFT

10 YEAR OVERVIEW | 2010-20



FATAL DROWNINGS

**31**

AVERAGE FATAL DROWNINGS PER YEAR

**3**

AVERAGE FATALITY RATE PER 100,000 POPULATION

**0.07**

KEY DEMOGRAPHIC

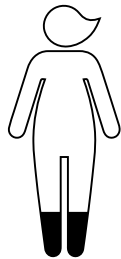
**45+**

YEAR OLD MALES (NZ EUROPEAN)

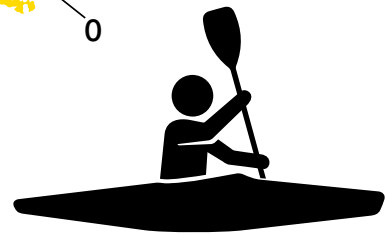
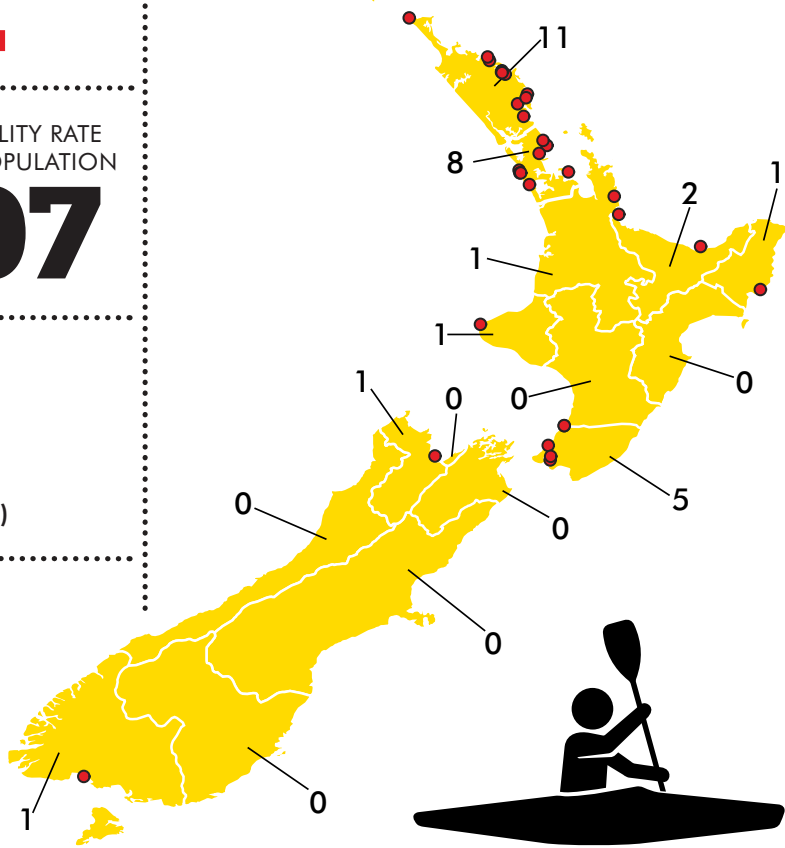


**84%**  
MALE

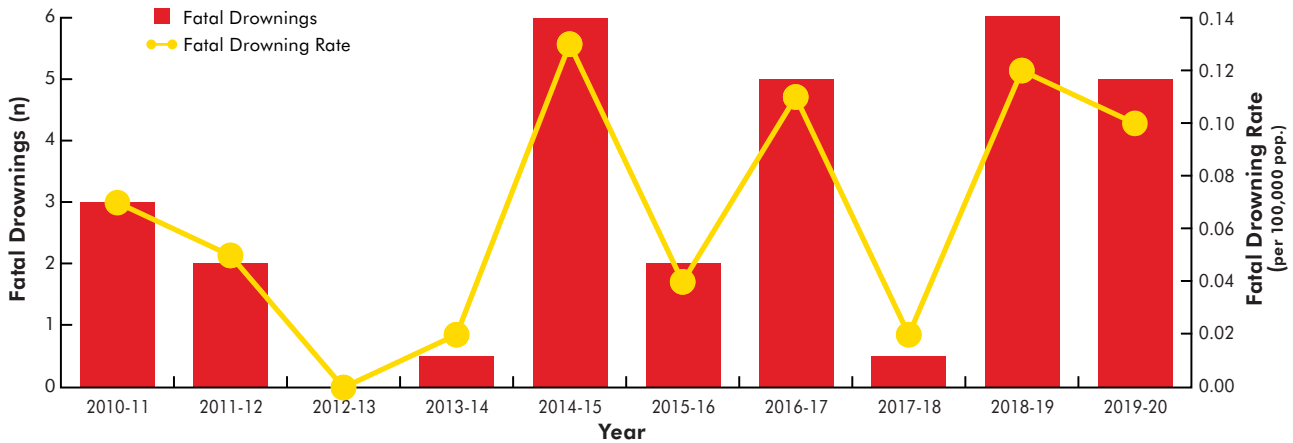
**16%**  
FEMALE



WATERCRAFT FATAL DROWNINGS LOCATION



WATERCRAFT FATAL DROWNINGS 2010-20



# SNAPSHOT: LAND BASED FISHING

10 YEAR OVERVIEW | 2010-20



FATAL DROWNINGS

**31**

AVERAGE FATAL DROWNINGS PER YEAR

**3**

AVERAGE FATALITY RATE PER 100,000 POPULATION

**0.07**

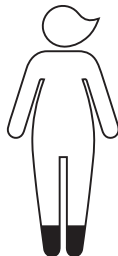
KEY DEMOGRAPHIC

**25-64**

YEAR OLD MALES (ASIAN)

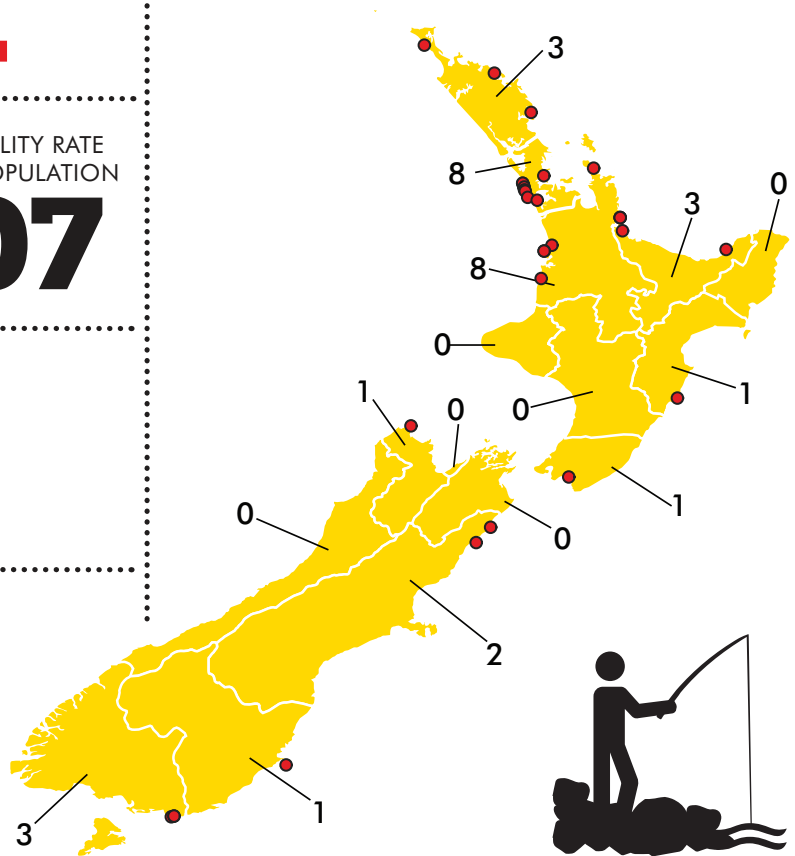


**90%**  
MALE

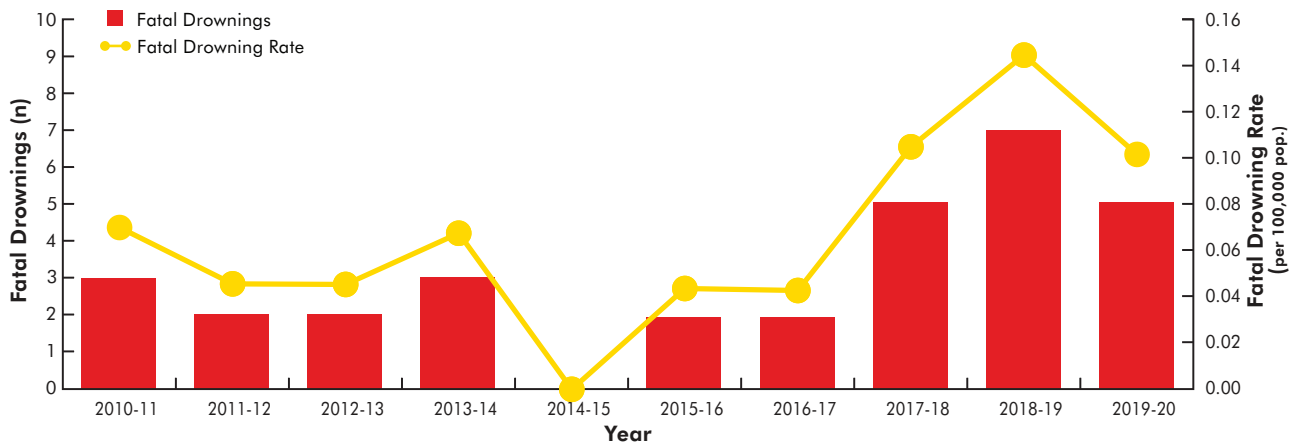


**10%**  
FEMALE

LAND BASED FISHING FATAL DROWNINGS LOCATION



LAND BASED FISHING FATAL DROWNINGS 2010-20



# KEY TERMS

**Adult** – For this report, adults refer to a person 15 years of age and over, which aligns with the Stats NZ Tatauranga Aotearoa classification.

**Assist** – Where a person requires assistance to return to shore but would most likely be able to get themselves out of danger if unaided.

**Attempting a Rescue** – Trying to retrieve a person in distress and deliver them to a place of safety.

**Beach** – A wave-deposited accumulation of sediment – usually sand, but ranging in size up to boulders – deposited between the upper tidal limit and the offshore area where waves first start breaking.

**Beach Fatal Drowning** – Where the location of the fatality occurs on a surf beach, calm water beach or rocky foreshore and the cause of death involves drowning or immersion.

**Boating** – Using either a powered vessel or sailing boat for pleasure and/or fishing.

**Bystander** – A person who is present at an incident but not part of it initially.

**Calm Water Beach** – An area of estuarine coastline with sand, gravel or pebbles that contains a sheltered foreshore, with no surf zone – e.g. harbour beach.

**Coastal** – Tidal waters (estuary, harbour, marina and river/harbour bar); ocean up to 1km offshore; or inland up to five times the width of the inlet/river.

**Category 1 Search and Rescue Operations** – Search and Rescue coordinated at a local level by the New Zealand Police; including land operations, river, lake and inland waterway operations and close-to-shore marine operations.

**Coastal Fatal Drowning** – Where the location of the fatality is in tidal waters (estuary, harbour, marina and river/harbour bar), in the ocean up to 1km offshore or inland up to five times the width of the inlet/river and the cause of death includes drowning or immersion.

**Coastal Risk Assessment** – A report that recommends levels of service provision at a location.

**Contract Surf Lifeguard Service** – Surf Lifeguard services that are funded by regional councils and local territorial authorities, and managed by Surf Life Saving New Zealand or Surf Life Saving Northern Region

**Drowning** – The process of experiencing respiratory impairment from submersion/immersion in liquid; outcomes are classified as death, morbidity and no morbidity.

**DrownBase™** – Database run by Water Safety New Zealand that collates all of the deaths from drowning in New Zealand. The dataset also includes information on non-fatal drownings.

**Emergency Callout Squads (ECOS)** – These are made up of several combined clubs and volunteer surf lifeguards attached to external local rescue/emergency services. Squad

members are qualified and equipped to respond to any incident within the beach and coastal environment.

**Emergency Response** – An action taken by an SLS entity in response to a call for assistance from an emergency management organisation.

**Estuary** – A partially enclosed coastal body of water that is either permanently or periodically open to the sea

**Falls (trips/slips)** – An event that results in a person tripping/slipping so they end up accidentally immersed in water.

**Fatal Drowning Rate** – A comparative rate of drowning (as the cause of death) to the size of the population in a given area.

**First Aid** – First aid is the first and immediate assistance given to any person suffering from either a minor or serious illness or injury, with care provided to preserve life, prevent the condition from worsening, or to promote recovery.

**Harbour** – Large inner body of water surrounded on several sides by prominences of land

**Hazard** – A source of potential harm.

**Incident** – Any unplanned event requiring lifesaving services intervention.

**Intervention** – An action performed by a Surf Lifeguard to prevent a situation from deteriorating, which includes injury or drowning. Interventions include preventative actions, assists, rescues, searches, major first aids and minor first aids.

**IRB** – Inflatable rescue boat.

**Land Based Fishing** – Attempting to catch fish from the shoreline. The locations for such activities are generally rocky headlands, rock platforms, though wharfs, jetties and beaches are also common.

**Major First Aid** – Any incident where a victim is administered some form of advanced medical treatment or requires hospitalization.

**Marina** – A boat basin offering dockage and other service for small craft.

**Minor First Aid** – Where a victim is administered some form of minor medical treatment – minor cut, bluebottle sting, sand in the eye, minor strain or sprains.

**Morbidity** – Any physical or psychological state considered to be outside the realm of normal well-being. The term morbidity is often used to describe illness, impairment, or degradation of health.

**Net Fishing** – Using a net to trawl the shallows of a beach/estuary for fish.

**Non-fatal Drowning** – A subset of drowning, the process of experiencing respiratory impairment from submersion/immersion in liquid, where the outcome is classified as morbidity and no morbidity.

**Patrol** – Surf Lifeguard service to monitor activities in/around

an aquatic environment and respond accordingly through either preventative actions or rescue operations. A patrol will use the red and yellow patrol flags to assign a safer swimming area.

**Patrol Flags** – Red/yellow horizontally divided flags which are set after performing a risk assessment to determine the most suitable area for swimming. The flags identify a zone for swimming and bodyboarding within a patrolled location.

**Patrolled Location** – A location supervised by a Surf Lifeguard service.

**Preventative Action** – Direct action taken to reduce or eliminate the probability of a specific rescue, first aid or other reportable incident from occurring.

**Rescue** – Where a person requires immediate help to return to shore (or place of safety) and who without intervention would have suffered distress, injury or drowning.

**Risk-Adjusted Water Use Values** – Dictates how many lifeguards are required at patrol location at any given time.

**Rock/Cliff** – A rock platform that may or may not have a high steep face.

**Rocky Foreshore** - The area of coastline with shoreline rocks, including steep rocky cliffs that is exposed by low tides and submerged by high tides.

**RWC** – Rescue water craft or JetSki.

**Scuba Diving** – Swimming underwater with the aid of scuba equipment for recreational or commercial purposes.

**Searches** - Any organised search for a missing person or group either at sea or on land. Searches include body recoveries.

**Search and Rescue** – The search for and provision of aid to people who are in distress or imminent danger.

**Season** – For the context of this report, the 2019/20 season is for the period of July 2019 to June 2020.

**Shell Fishing** – Collecting shellfish while onshore or wading/swimming in water.

**Snorkelling** – Swimming with a snorkel and face mask.

**Surf Beach** – An area of land with sand, gravel or pebbles that contains a foreshore and surf zone. Surf beaches include low energy and exposed coasts.

**Surf Lifeguard** – An individual who undertakes patrols at a beach. As a minimum requirement they are qualified in surf rescue and basic lifeguard support.

**Surf Lifeguard Service** – A coordinated group that exists to provide aquatic safety services to the public. This includes Volunteer Surf Life Saving Clubs, Contract Surf Lifeguards, RWCs, IRB's, ATV's and 4WD units.

**Surf Life Saving Club** – An affiliated not-for-profit organisation that has volunteer members who provide patrols and coastal safety services to the community.

**Surf Life Saving New Zealand** – The leading beach and coastal safety, drowning prevention and rescue authority

in New Zealand. The purpose of the organisation is to reduce injuries, fatal drownings and non-fatal drownings on our beaches and coasts with a vision of zero preventable drownings.

**Surveillance Patrols** – Surf Lifeguard services that monitor beach and water users without designating a red and yellow flagged area. This approach is effective for extending patrolling hours or season length, where resources are limited.

**Swimming** – Moving through water by moving the body or parts of the body.

**Wading** – Walking through water while partially immersed.

**Water Safety New Zealand** – Water Safety New Zealand works with water safety sector organisations, individuals and the public to reduce the incidence of drowning and injury in New Zealand. The purpose is to lead a step change in New Zealand so people don't drown with a vision that by 2025 more people in New Zealand respect the water and have the skills, knowledge and awareness to enjoy it safely.

**Watercraft** – A piece of non-powered recreational equipment used in water. Examples include surfboards, stand-up paddleboards, body boards, windsurfers or kayaks.

## SYMBOL KEY



# REFERENCES

## METHODOLOGY

The National Beach and Coastal Safety Report 2020 contains information on SLS capability and membership capacity; rescues and emergency response; and fatal and non-fatal drownings for the period of 1 July 2010 to 30 June 2020. This information is correct as of 17 November 2020. All care has been taken to ensure the statistical information included within this report is correct. However, pending the outcome of ongoing coronial investigations, this data may be amended. Data in figures may not always add up to 100% due to rounding.

The National Beach and Coastal Safety Report only documents incidents that have occurred within the coastal zone. The coastal zone is defined as "Tidal waters (estuary, harbour, marina and river/harbour bar); ocean up to 1km offshore; or inland up to five times the width of the inlet/river".

## LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

The regional fatal drowning rates per 100,000 population use regional population estimates obtained from Stats NZ. However, these regional estimates do not include visitors from elsewhere in New Zealand or visitors from overseas. Further research is recommended to adjust these figures to account for the seasonal influx of visitors to each respective region.

Further research is required to enable Surf Life Saving New Zealand and water safety stakeholders to gain a greater understanding of how and why people are recreating on our coastlines. Additional research is also required to understand how residents and international tourists use beach and coastal areas for recreation. Whilst applied psychological research is also recommended to assess public behaviour and perception of risk on our beaches. These findings will be used to inform community engagement and education strategies nationally.

## CAPABILITY ANALYSIS

The Patrols and Memberships (PAM) database is a central repository for all Surf Life Saving clubs in New Zealand. It is used to log details of members (contact details, awards, memberships), patrols and incidents. PAM holds this information securely, and the data gives us an understanding of trends across the whole organisation. The database includes the Customer Relationship Management System

(CRM) which includes operational data such as rescues, first aids, membership statistics and awards. Information was extracted from the CRM to identify how many interventions were performed by volunteers, lifeguards and lifesaving services during 2019-20; and how many active Surf Lifeguards and award holders there were during this period.

## FATAL DROWNING DATA ANALYSIS

Fatal drownings statistics was recorded in DrownBase™ and shared for this report by Water Safety New Zealand (2020). Water Safety New Zealand gives no warranty as to the correctness of the information or the data provided as it is supplied to WSNZ by third parties, not under its control. While WSNZ is satisfied as to its accuracy for the purposes for which it is supplied to it, WSNZ shall not be liable for any loss or damage arising directly or indirectly from the use of any data supplied. All reported statistics are provisional.

The non-fatal drowning data used in this report is based on hospital stays of at least 24 hours and has been provided by WSNZ's as recorded in DrownBase™. The data is sorted by the ICD-10-AM/ACHI/ACS international coding system.

SUGGESTED CITATION: Surf Life Saving New Zealand. (2020). National Beach and Coastal Safety Report 2020. Wellington: Surf Life Saving New Zealand.

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The report was compiled by Dr Mick Kearney (National Coastal Safety Manager), Adam Wooler (Chief Operations Officer) and Rajal Middleton (Head of Commercial and Marketing).

## PHOTOGRAPHIC MATERIAL

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“ Road, fire and boating safety have had significant investment in public education strategies and campaigns, which has not only dramatically reduced deaths and injuries but also raised awareness of the issues. It's now time to do the same for beach and coastal safety. ”

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REFERENCES

ACC. (2016). Value of a Statistical Life (VOSL) or “social costs” of drowning and drowning injury. Unpublished Report.

Statistics New Zealand. (2020, October 10). Population Estimates-DPE. <http://infoshare.stats.govt.nz/>

Water Safety New Zealand. (2015). New Zealand Water Safety Sector Strategy 2020. [https://cdnflightdec.userfirst.co.nz/uploads/sites/watersafety/files/PDFs/Official\\_Documents/Sector-Strategy-Published-Version-Aug-2015.pdf](https://cdnflightdec.userfirst.co.nz/uploads/sites/watersafety/files/PDFs/Official_Documents/Sector-Strategy-Published-Version-Aug-2015.pdf)

Water Safety New Zealand. (2020). Water Safety New Zealand Annual Report 2020. [https://cdn-flightdec.userfirst.co.nz/uploads/sites/watersafety/files/Annual\\_Reports/WSNZ\\_2020-AnnualReport-FINAL\\_W.pdf](https://cdn-flightdec.userfirst.co.nz/uploads/sites/watersafety/files/Annual_Reports/WSNZ_2020-AnnualReport-FINAL_W.pdf)



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