Water Safety NEW ZEALAND

Report on drowning 2012

Contents

Water Safety New Zealand

Strategic objective

Lead the water safety sector in New Zealand

Strategic mission

To reduce drowning and injury in New Zealand

Drowning mortality in New Zealand

There were 98 drowning fatalities in New Zealand during 2012. This is a 26% decrease from the 2011 toll of 132 and the third lowest toll since 1980.

Water Safety New Zealand records all New Zealand drowning incidents in DrownBase™. All drowning data remains provisional, until it is confirmed by the coroner.

Water Safety New Zealand is a national incorporated society, made up of 37 member organisations that is governed by a Board.

What is drowning?

Drowning is the process of experiencing respiratory impairment from submersion/immersion in liquid (International Life Saving Federation, 2002). In effect, drowning occurs by submerging and suffocating in water or another liquid. It can be both fatal (mortality) and non-fatal (morbidity).

Case study: The Water Safety Code

New Zealand Search and Rescue, Water Safety New Zealand, Coastguard New Zealand and the Mountain Safety Council have formed a collaborative partnership to promote consistent safety messages to the New Zealand public and overseas visitors.

The Water Safety Code serves as a great starting point for planning a safe aquatic adventure.

1. Be Prepared

Learn to swim and survive.

Know the weather and water conditions before you get in.

Use safe and correct equipment.

2. Watch Out For Yourself and Others

Always watch children around water.

Swim with others and in lifeguard zones.

3. Be Aware Of the Dangers

Do not drink alcohol and swim.

Enter water feet first and obey all safety signs and warnings.

4. Know Your Limits

Learn safe ways of rescuing others without putting yourself in danger.

Research from 2010 showed that 80% of all ten year olds could not swim well enough to save themselves. Water Safety New Zealand believes all New Zealanders should be able to swim 200m.

55% of boating fatalities in 2012 had lifejackets carried but not worn.

3 pre-schoolers died from drowning in 2012, a significant decrease from 14 in 2011.

In 40% of incidents in 2012 the victim was alone.

10% of 2012 drowning fatalities involved alcohol.

For 57% of incidents during 2012, the victim was with others, or bystanders were nearby. 3% of fatalities were a result of people attempting to rescue others.

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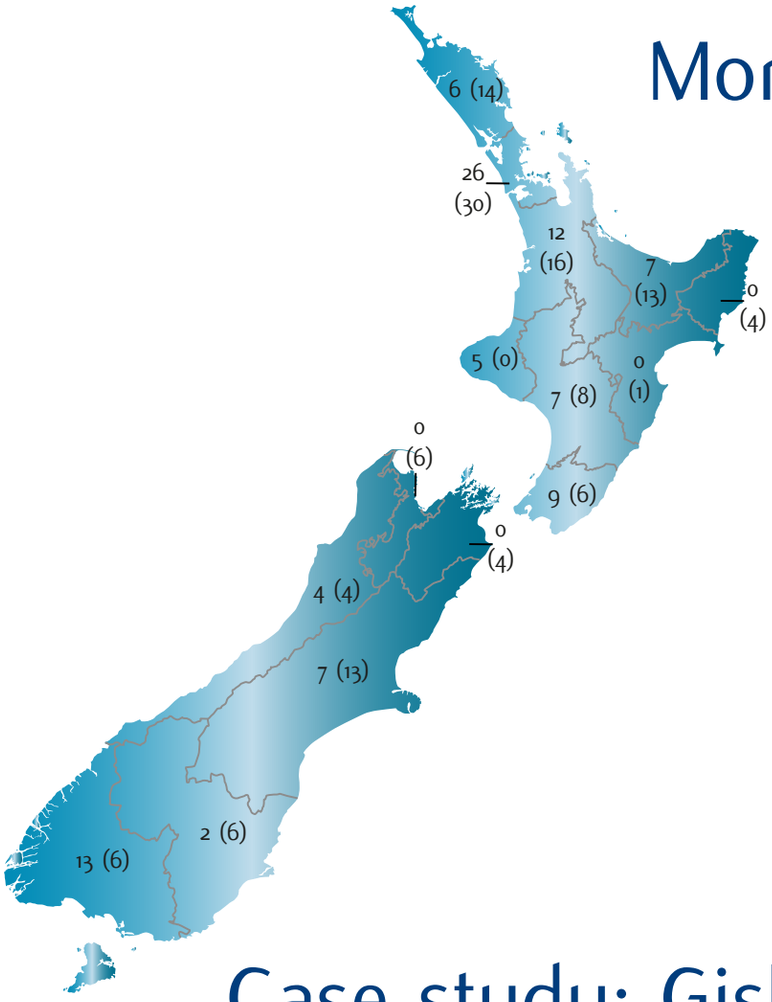
NZSAR New Zealand Search and Rescue

OUTDOOR SAFETY NEW ZEALAND MOUNTAIN SAFETY COUNCIL

COASTGUARD THE CHARITY SAVING LIVES AT SEA

Mortality by region



In 2012, there were four regions in New Zealand that did not have any fatalities: Gisborne, Hawkes Bay, Tasman and Marlborough – this is the first time that four different regions have recorded zero fatalities. Three regions experienced an increase in fatalities: Southland, Taranaki and Wellington.

(The number in brackets indicates the 2011 toll).

Case study: Gisborne Tairawhiti

Gisborne Tairawhiti is one of the regions in 2012 to achieve zero fatalities – down from four in 2011 and the first year since records began in 1980 to achieve this. WSNZ has implemented a variety of learn to swim and survive initiatives in this area, as one of our national strategies to lower the drowning toll across New Zealand.

When the Tairawhiti Sealord Swim for Life (TSSFL) initiative was launched in 2011 it targeted low decile rural schools to ensure all Gisborne tamariki learn how to swim and survive and are safer around the water.

Almost 6,000 primary school aged children in the Gisborne area have been learning to swim through Sealord Swim for Life. These children are learning vital water safety skills as they work towards an ultimate goal of being able to swim 200 metres.

Across a nine month period, two participants of the TSSFL initiative saved two children from nearly drowning. One Gisborne student who achieved the 200 metre swim was able to save his friend from drowning in the Waimata river in October 2012, and another was part of a group that saved another child who had fallen into a pool.

Sealord Swim for Life is proving WSNZ's investment in teaching children to learn to swim and survive can save lives.

Mortality per capita

In 2012 Southland had the highest number of fatalities per capita. A major contributing factor to this number is the Easy Rider tragedy when eight of the nine passengers on board the fishing trawler died when two freak waves struck the vessel in Foveaux Strait. See also Case Study: Boating.

Rank	Region	Rate per capita
1	Southland	13.9
2	West Coast	12.5
3	Taranaki	4.7
4	Northland	3.9
5	Manawatu/Wanganui	3.1
6	Waikato	3
7	Bay of Plenty	2.6
8=	Auckland	1.9
8=	Wellington	1.9
10	Canterbury	1.3

New Zealand's per capita rate (five year average) is 2.6.

Mortality by age group

Under fives
3

Children 5-14
6

Adults 15-54
66

Older people 55+
23

Drowning is an issue for all age groups. This year, the highest number of fatalities (20) occurred in the 15-24 age group. 50% of these occurred while participating in recreational activities such as swimming.

The 5-14 age group is usually low as its five year average sits at just 2, however this year the number has increased to six.

Water Safety New Zealand is committed to achieving zero fatalities in the under five age group, and in 2012 there was just three. See the case study on the opposite page.

Case study: Towards zero fatalities for under fives

Three children between the ages of 0-4 died from drowning in New Zealand during 2012. This is a decrease of 79% from the 14 under five fatalities during 2011.

Under five drowning fatalities can be prevented through constant and vigilant supervision by adults. That's why WSNZ, in partnership with Plunket, since 2011 have promoted the importance of supervision by parents and caregivers around water.

A non-slip bath/shower mat is provided to each family by a Plunket nurse at the 5 month core check. The Plunket nurse discusses the water safety message while handing the bathmat over to the family. The mat displays the message, "Always supervise children around water... always" and "Tiakina nga tamariki ki te taha wai I nga wa katoa". At the 9 month checkup, the Plunket Nurse provides a reminder sticker in the child's Well Child Tamariki Ora book.

In the past 10 years (2003-2012), 75% of all under five domestic and home pool fatalities were children aged 2 or under, with 47% occurring at age 1 (12-23 months).

The 10-year research on this issue tells us that in relation to bath drowning fatalities, children are usually left momentarily to finish other household tasks or answer the phone. In 2012, this was the case for two out of three fatalities in this age group. In the third case, lack of supervision and inadequate fencing led to a fatality in a home pool.

Tens of thousands of bath mats have been delivered into New Zealand homes at the 5 month well check visit by Plunket Nurses to date. The third year of the bathmat campaign has just been evaluated by Ignite Research, with 45% of participants saying the campaign positively changed their behaviour and 97% stating they believed it absolutely critical for young children to be constantly supervised by a responsible adult.

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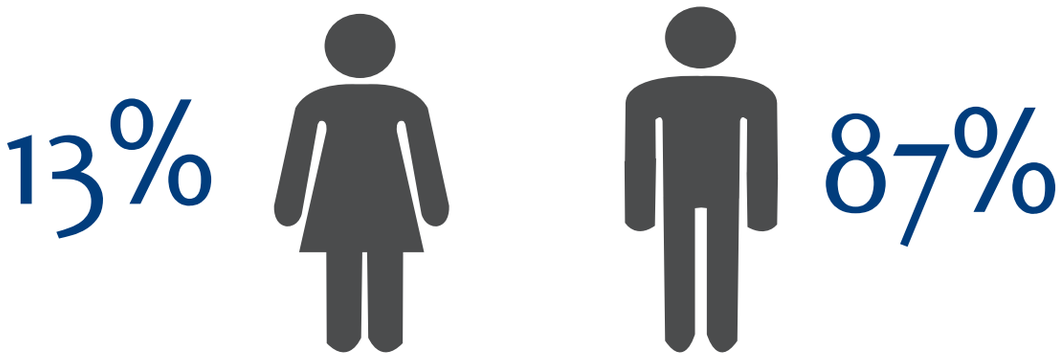
Plunket

We acknowledge ACC and the New Zealand Lottery Grants Board for their support of this project.

Mortality by gender

The overrepresentation of males in New Zealand's statistics is increasing. 87% of fatalities in 2012 were male, compared with 80% in 2011 and 76% in 2010.



Case study: Males

87% of fatalities in 2012 were male. The majority of these victims were over the age of 15, however the fact that the ratio of male to female fatalities is 7:1 means that male fatalities cover all ethnicities, environments and activities.

Such a ratio suggests that males take more risks than females, particularly as the morbidity (hospitalisation) data for 2012 tells us that 4 males were hospitalised for every one female. After removing non-recreational fatalities such as suicides and accidental immersions, we are left with the fact that 96% of recreational drowning fatalities in 2012 were male. Male fatalities occurred in 13 different recreational activities (including swimming, diving and boating) compared with just one (swimming) for females.

Generally, males are more active in water based activities like fishing, boating and diving. Therefore they are in, on and under the water more than females.

Water Safety New Zealand has commissioned research into the relationship between males and drowning. The research report, completed by the University of Otago reviewed international literature and analysed New Zealand drowning mortality data in order to establish the risk factors contributing to the high prevalence of male drowning in New Zealand.

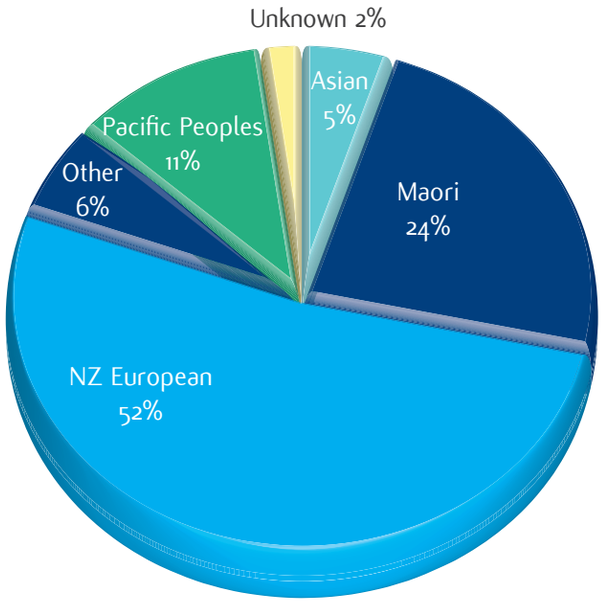
The report found that a large range of factors contribute to male drowning in New Zealand, including age, ethnicity and activity. Therefore intervention strategies need to be targeted and carefully considered, rather than a 'one size fits all approach'.

Mortality by ethnicity

Maori, Pacific and Asian communities are all overrepresented in New Zealand drowning death statistics. In 2012, Maori constituted 23% of fatalities, however they make up 15% of the population. The five year average for Maori fatalities is 22%.

One particular initiative committed to lowering the Maori toll is Kia Maanu Kia Ora (Stay Afloat, Stay Alive). A partnership between Water Safety New Zealand and New Zealand Post, Kia Maanu Kia Ora has a central focus on providing Maori with the skills to educate Whanau, Iwi and members of the Maori community on staying safe while enjoying their traditional and cultural links with the water. This project includes the provision of portable pools for areas that have a low provision of water space.

One of the ways Kia Maanu Kia Ora reaches rural Maori children is through the portable pool project. This pool is set up at a different school each term and enables rural Maori children to learn valuable water safety skills. The value of this pool has already been proved as two students from Ngati Haua school in Cambridge used their new skills to save a family member from drowning while swimming at a local swimming hole.

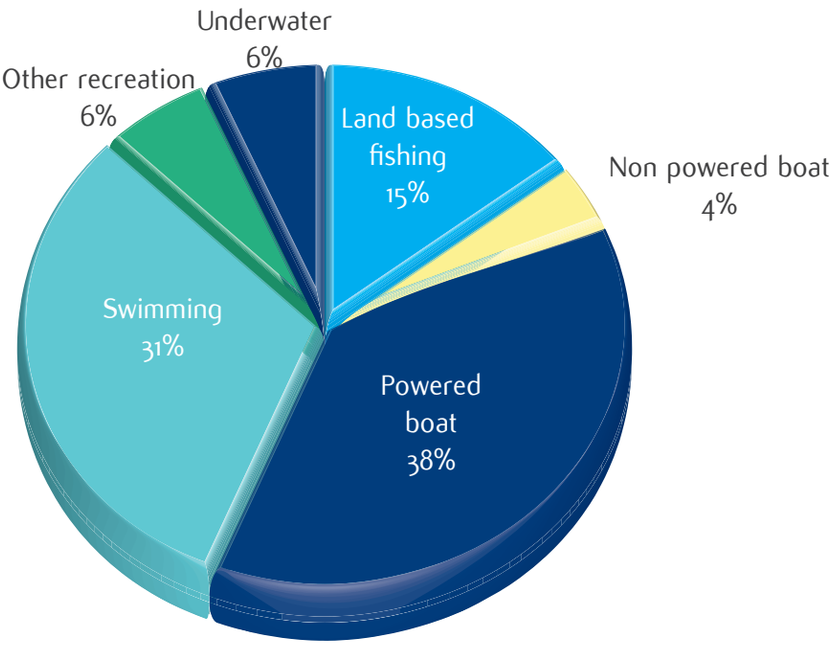


Kia Maanu, Kia Ora!
Active Post
New Zealand Post
Water Safety NEW ZEALAND

Mortality by activity

Many recreational activities have seen a decrease in fatalities, with Land Based Fishing incidents decreasing 36% from 2011 and Underwater incidents decreasing 77% from 2011. Non-Powered Boat incidents (including kayaking and rafting), decreased by 75% from the five year average.

However, the number of Powered Boat incidents has increased by 200% since in 2010.



Case study: Boating and lifejackets

In 2012, 20 out of the 98 drowning fatalities in New Zealand were due to Boating incidents. In 2011 and 2010 the primary activity causing fatalities was Water Sport/Recreation.

Contributing to the rise in Boating related drowning fatalities in 2012 was the sinking of the 'Easy Rider', a 12m boat that was travelling from Bluff to the Muttonbird Islands. After a rogue wave hit the boat, 8 of the 9 passengers died. The only survivor and the four bodies that have been recovered were not wearing lifejackets.

In the boating incidents where the wearing of lifejackets was known, 76% of victims did not wear a lifejacket. Over the past five years, in 78% of cases a lifejacket was not worn.

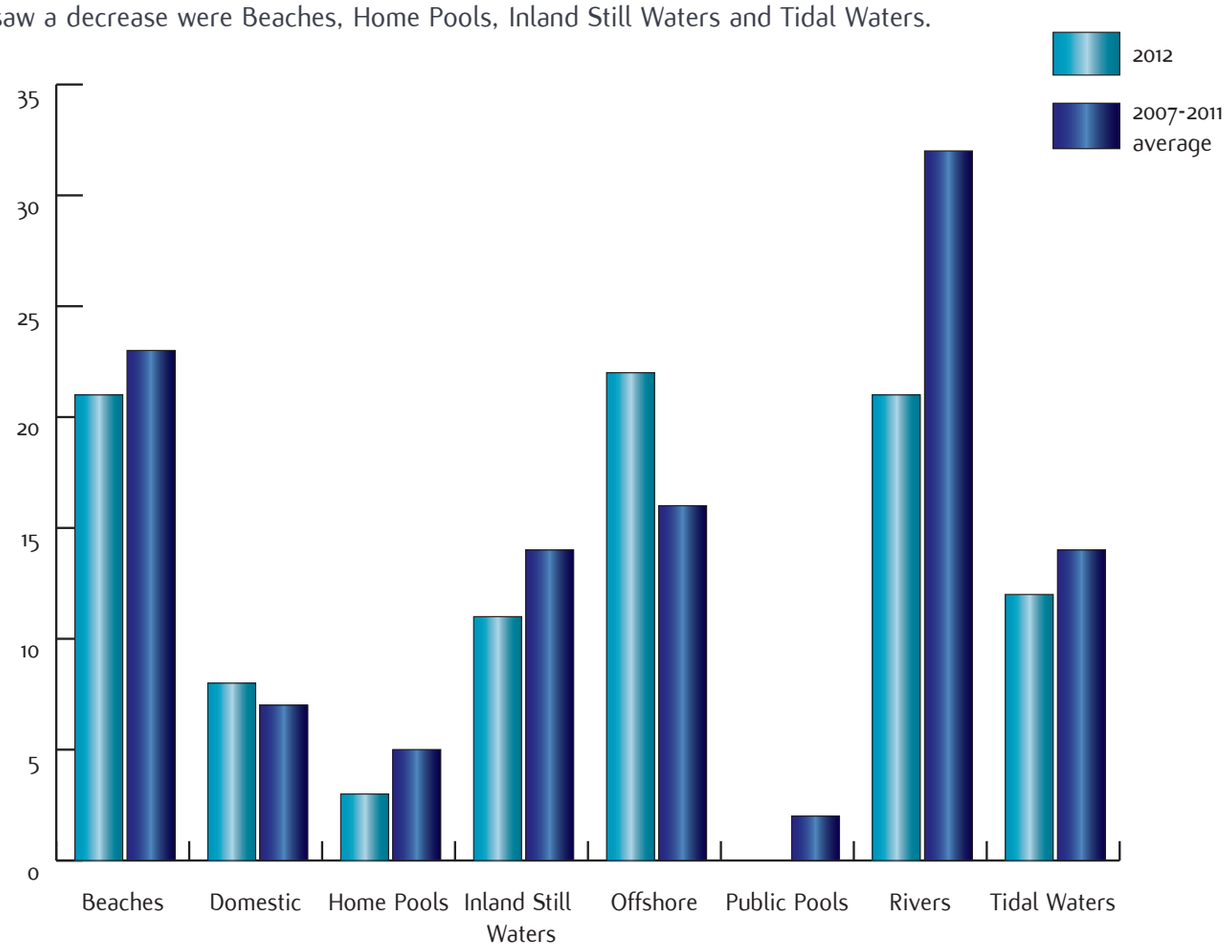
Between 2008-2012, 80% of total fatalities have been male; in Boating incidents, the percentage is 97%. It is important that all skippers undertake boating education courses, such as those run by Coastguard Boating Education.

Mortality by environment

The Offshore environment had the highest number of fatalities in 2012. This number is 38% higher than 2011.

Historically Rivers are the environment with the most fatalities; however, since 2011 this has been decreasing. In 2012 21 people died in rivers, a decrease from the five year average of 32.

Zero deaths occurred in Public pools in 2012, a decrease of 100% from the five year average. Other environments that saw a decrease were Beaches, Home Pools, Inland Still Waters and Tidal Waters.

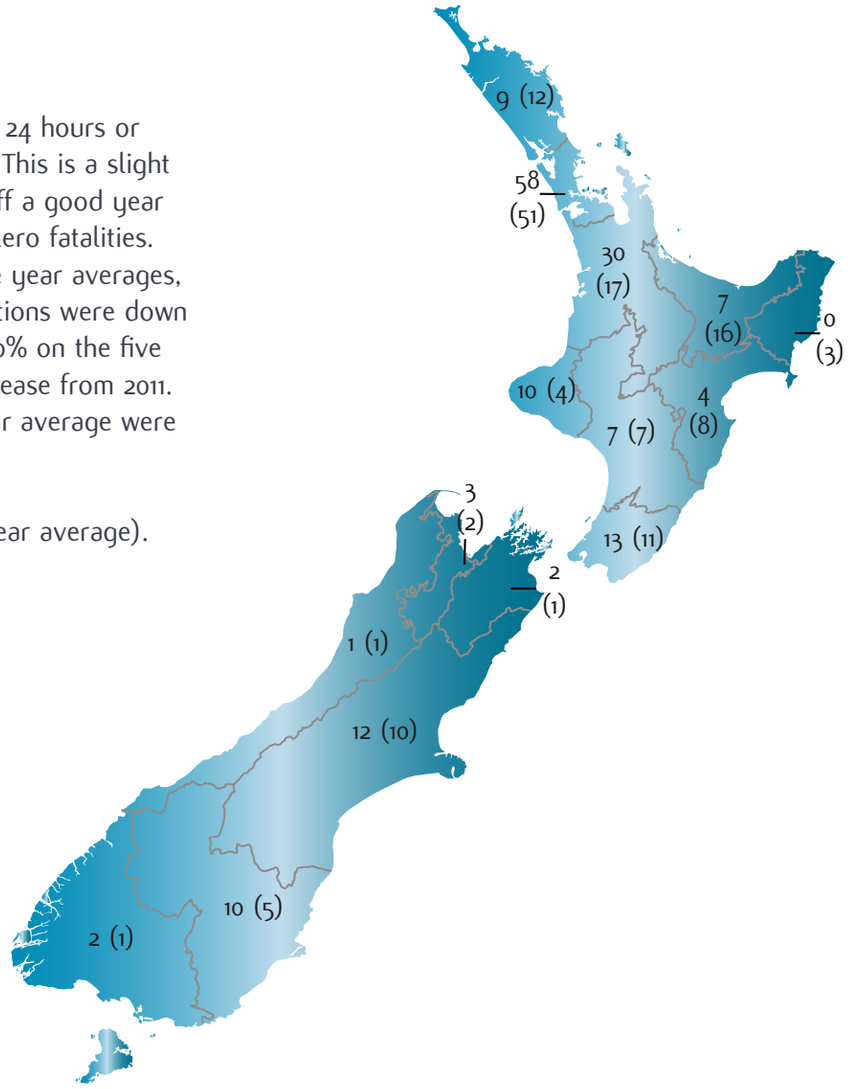


Morbidity (Hospitalisations)

Hospitalisations by region

There were 176 hospitalisations (period of 24 hours or more) due to drowning incidents in 2012. This is a slight increase on 2011 (168). Gisborne capped off a good year with zero hospitalisations to match their zero fatalities. Only four regions were down on their five year averages, including Bay of Plenty whose hospitalisations were down 56%. Taranaki hospitalisations were up 150% on the five year average, with a significant 900% increase from 2011. Other noticeable increases on the five year average were Waikato (up 76%) and Otago (up 50%).

(The number in brackets indicates the 5 year average).



Hospitalisations per capita

Rank	Region	Hospitalisations per capita
1	Taranaki	9.3
2	Waikato	7.6
3	Northland	5.9
4	Otago	5.0
5	Marlborough	4.6
6	Auckland	4.2
7	Tasman	3.3
8=	West Coast	3.1
8=	Manawatu-Wanganui	3.1
10	Wellington	2.8

New Zealand's per capita rate (five year average) for hospitalisations is 3.9.

Hospitalisations by age group

Under fives	Children 5-14	Adults 15-54	Older people 55+
36	15	88	37

Hospitalisations continue to be high in the 0-5 age group, with incidents in this age group increasing 9% on the five year average. This is the largest amount for any one age group. Water Safety New Zealand is committed to achieving zero fatalities and reducing hospitalisations in the under five age group. See the Bath Mat case study.

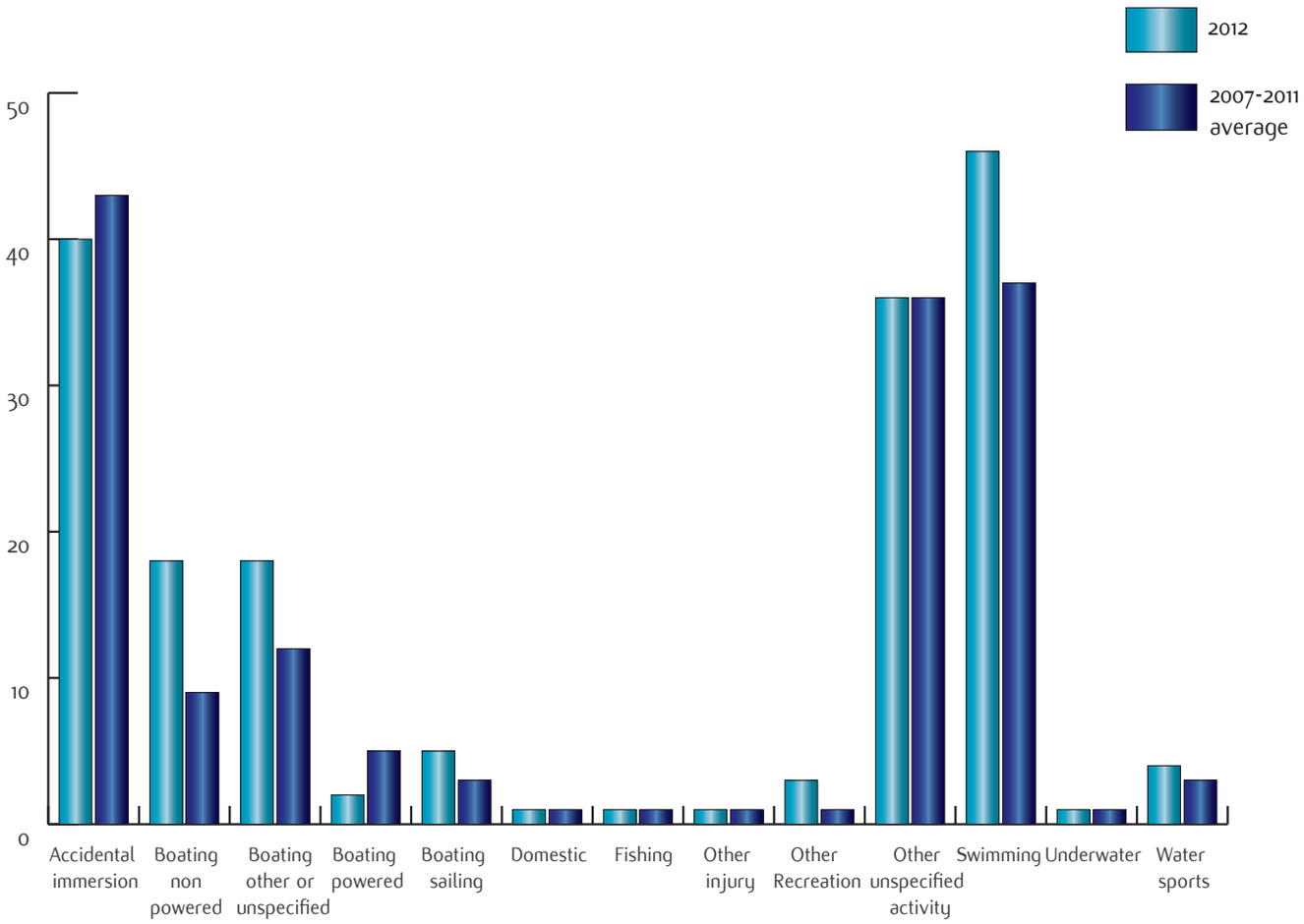
There was also a noticeable increase on the five year average in hospitalisations for the over 45's - particularly the age group 65+ (up by 156%).

Hospitalisations by gender

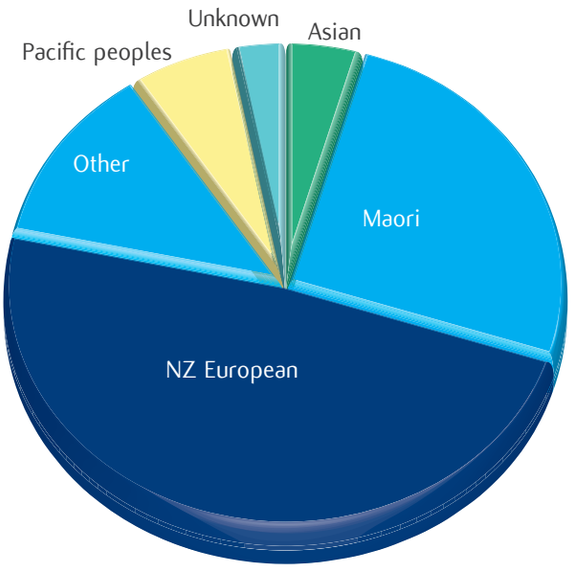
80% of 2012 hospitalisations were male, and as per fatalities is an increase on the five year average. This concerning increase has lead Water Safety New Zealand to commission research into the relationship between males and drowning.

Hospitalisations by activity

Swimming climbed past Accidental Immersion to be the single activity with the most hospitalisations in 2012. Swimming incidents increased 35% on 2011. The total of boating hospitalisations in 2012 increased 54% on the five year average. See also the case study on boating/lifejackets.



Hospitalisations by ethnicity

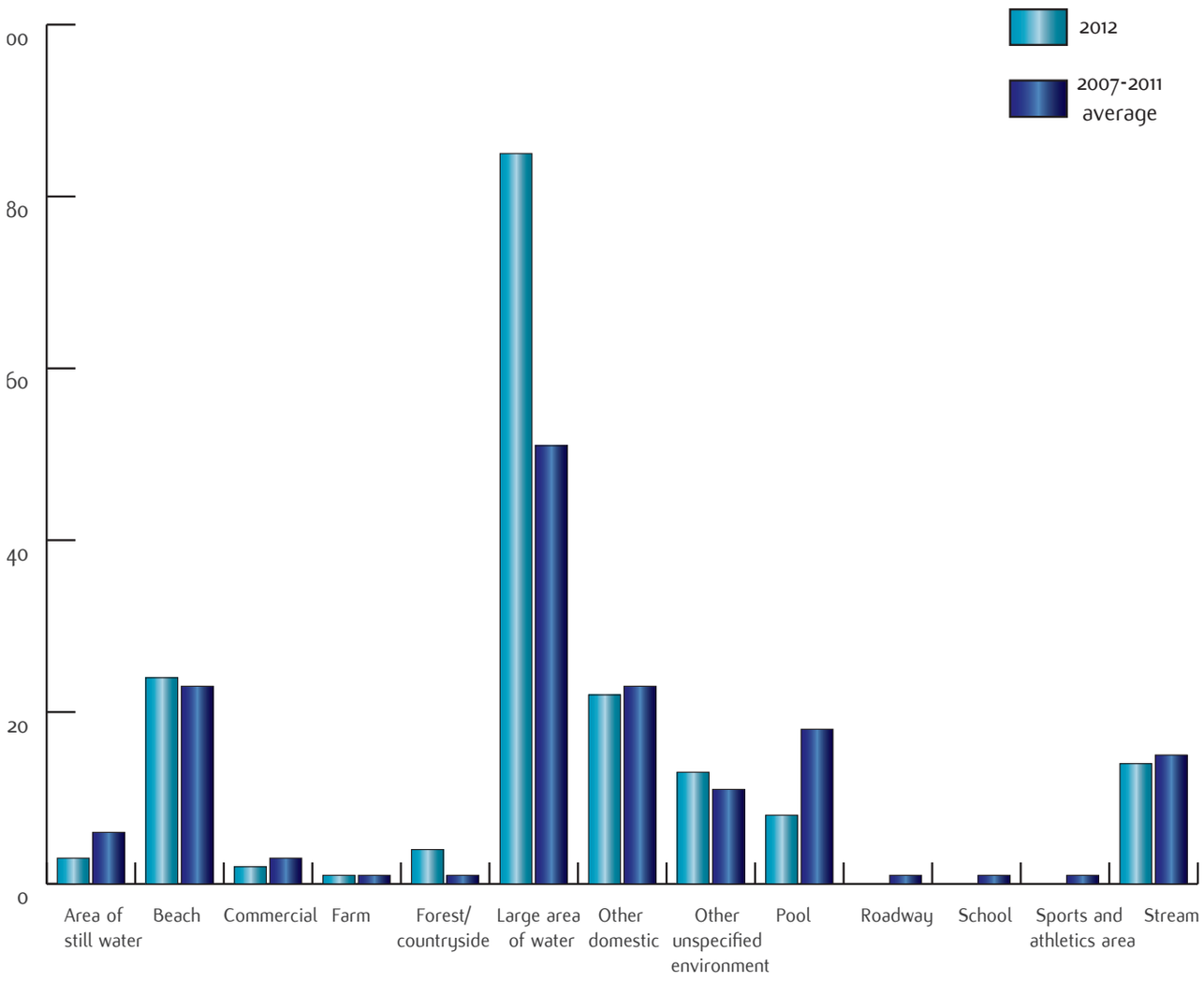


Maori made up 25% of total hospitalisations during 2012, consistent with the five year average. This is high, as Maori only represent 15% of the population. Hospitalisations of Pacific, Asian and NZ European ethnicities remain fairly static.

Hospitalisations by environment

2012 hospitalisations increased on the five year average in the Large Area of Water environment (includes lakes and rivers)* by 67%. It is heartening to see Pool hospitalisations down 55% on the five year average (down 68% on 2011's total).

* New Zealand uses the ICD-10-AM/ACHI/ACS coding system which uses broad fields on input.



Acknowledgement

Water Safety New Zealand gratefully acknowledges the New Zealand Lottery Grants Board for its ongoing support of water safety education, awareness and prevention in New Zealand.

Lottery Grants Board
Te Puna Tahua
LOTTO FUNDS FOR YOUR COMMUNITY

Quick facts

	2012		5 Year Average	
	Numbers	% (rounded)	Numbers	% (rounded)
Recreational Activity				
Land Based Fishing	7	8	8	7
Non Powered Boat	2	2	8	7
Powered Boat	18	19	8	7
Sailing	0	0	2	2
Swimming	15	16	15	13
Underwater	3	3	8	7
Other Recreation	3	3	8	7
Non Recreational Activity				
Immersion Incidents	22	24	29	26
Occupational	4	4	1	1
Other	24	26	26	23
Total	98	105	113	100
Environment				
Beaches	21	23	23	20
Domestic	8	9	7	6
Home Pools	3	3	5	4
Inland Still Waters	11	12	14	12
Offshore	22	24	16	14
Public Pools	0	0	2	2
Rivers	21	23	32	28
Tidal Waters	12	13	14	12
Total	98	105	113	100
Ethnicity				
Asian	5	5	8	7
Maori	23	25	24	21
NZ European	51	55	60	53
Other	6	6	7	6
Pacific Peoples	11	12	9	8
Unknown	2	2	5	4
Total	98	105	113	100
Gender				
Female	13	14	25	22
Male	85	91	88	78
Total	98	105	113	100
Age Group				
00 - 04	3	3	9	8
05 - 14	6	6	2	2
15 - 24	20	22	18	16
25 - 34	14	15	15	13
35 - 44	16	17	17	15
45 - 54	16	17	20	18
55 - 64	12	13	15	13
65+	11	12	17	15
Total	98	105	113	100