

OVERVIEW

Boating Safety Strategy

2007 Review of the New Zealand Pleasure Boat Safety Strategy



Introduction

New Zealand's national pleasure boat safety strategy has led to a 50% reduction in recreational boating fatalities over the last 6 years. The strategy is about using a combination of education and targeted legislation to tackle the key risk factors in recreational boating fatalities.

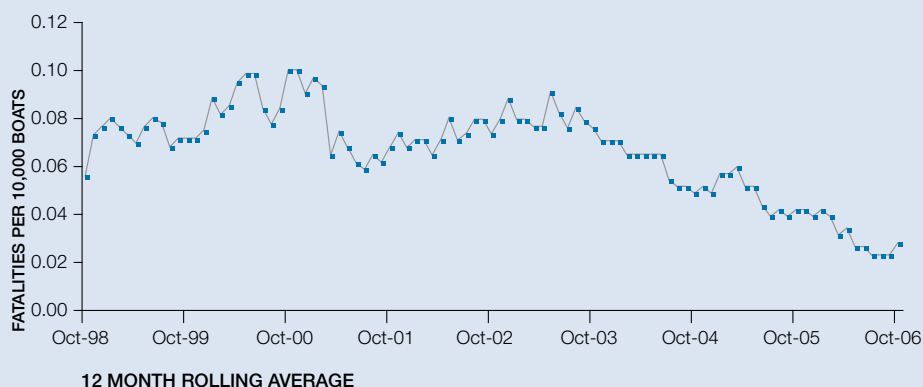
This brochure summarises the *Boating Safety Strategy: 2007 Review of the New Zealand Pleasure Boat Safety Strategy*, which recommends safety initiatives that will guide all organisations involved in boating safety for the next 5 plus years.

The review is the work of the National Pleasure Boat Safety Forum and involved:

- Accident Compensation Corporation
- Boating New Zealand (representing marine publications)
- Coastguard Boating Education
- Auckland and Wellington Regional Council harbourmasters and Queenstown Lakes District Council harbourmaster (representing regional councils)
- Kiwi Association of Sea Kayakers (representing the kayaking community)
- Marine Industry Association
- Maritime New Zealand
- Ministry of Transport
- New Zealand Coastguard
- New Zealand Jet Sports Boating Association
- Auckland Police Maritime Unit and SAR
- Toi Māori
- Underwater New Zealand
- Waka ama representative
- WaterSafety New Zealand
- Yachting New Zealand.

When measured against the number of boats, the graph below shows that the fatality rate in 2006 reduced to about a third of the 2000 figure.

Recreational boating fatality rate



How the strategy evolved

In 1999, the Pleasure Boat Safety Advisory Group (PBSAG) published a comprehensive report on recreational boating safety in New Zealand. It concluded that while the fatality rate in New Zealand was comparable to many overseas jurisdictions, there was clearly scope for significant improvement.

The report made **13 principal recommendations** that provided a framework to build an integrated national safety strategy for recreational boating.

Underpinning that framework was a simple but crucial message arising out of the analysis of boating accidents before 1999, ie accidents were **not** the result of deliberate reckless behaviour, but of a lack of safety awareness and knowledge.

PBSAG's recommendations focused, therefore, on promoting self-reliance and skipper responsibility, through **safety awareness and education campaigns** for pleasure boat operators and their crew.

In one area, PBSAG found an overwhelming case for **legislation** and recommended that carrying lifejackets in all vessels be mandatory.

The strategy, based on the 1999 PBSAG report, has proved very successful and resulted in a substantial and sustained lowering of fatalities in the last 6 years.

Before the implementation of the strategy, there were around 22 fatalities a year, with the number trending upwards. In recent years, the annual average has been around 12 fatalities and trending downwards. In 2006, the lowest boating toll on record was achieved at just seven fatalities.

These figures represent an average of six lives saved for each year that the strategy has been in place – a minimum of 36 lives saved over a 6-year period.

The development of the future strategy followed a comprehensive examination of legislation, organisations involved in enforcement and education activities, details of the boat population including participation rates, and a reconciliation of accident, drowning and fatality databases between 2000–2006.

“Accidents are *not* the result of deliberate reckless behaviour, but of a lack of safety awareness and knowledge”

The strategy for the future

In 2000 the National Pleasure Boat Safety Forum was established to co-ordinate and implement the recommendations in the 1999 report by the PBSG.

The monitoring of trends over the following years, culminating in the 2007 review, has led to the identification of the common features of fatal and non-fatal accidents, ie in nearly every boating accident where someone dies, one or more of the following factors is present:

- 1 The failure to wear lifejackets in small craft that are prone to capsize (those less than 6 m in length).
- 2 The inability to communicate distress following an immersion-type accident.
- 3 Bad weather and sea conditions.
- 4 Alcohol is a significant cause of accidents and fatalities, but is underreported as a causal factor.

As a result of the review, the forum agreed that continuing to focus on skipper responsibility and education targeting those four key factors is essential.

The members of the forum acknowledged that safety awareness promotion works best as part of an integrated strategic package that includes improvements and advances in the design and manufacture of vessels and equipment, search and rescue services, and the delivery of education programmes.

To that end, and based on more in-depth accident investigation and analysis of all fatal accidents over the past 7 years, they concluded that the strategy should be augmented by **new initiatives in these four key areas**.

And, because implementation of the strategy had been hampered by a lack of funding, mechanisms for providing funding to implement the strategy effectively are included in the options.



The results ...

Boating fatalities are about half of the 2000 figure, from about 22 fatalities a year to an average of 12 over the last 3 years. The following statistical analysis is based on data collected from fatal accidents between 2000 to 2006.

FATALITY STATISTICS	CONCLUSIONS
Wearing lifejackets would have had a high likelihood of preventing a fatality in 66% of accidents.	The increasing use of lifejackets has resulted in lives being saved, and more fatalities will be prevented if more people wear lifejackets.
Effective communications equipment , if available, was likely to have prevented 58% of fatalities.	The need for some form of communication that will work after an immersion accident has now become as significant as the need to wear a lifejacket.
Weather conditions (including the sea or river conditions) significantly contributed to 47% of recreational boating fatalities.	Weather (swell/wave action or river state) continues to be a major cause of accidents that have fatal consequences.
Fitted level flotation was highly likely to have prevented 43% of fatalities.	Fitting all new boats under 6 m in length with level flotation would reduce the number of fatalities.
Alcohol was a factor in 18% of recreational fatalities, but this is considered to be a conservative figure.	Alcohol is indicated as a significant cause of accidents and fatalities, but the inability to collect hard evidence results in this being underestimated as a causal factor.
Licensing and/or compulsory education might have prevented 12% of the fatalities that occurred. Boat registration is not a significant factor in preventing recreational boating fatalities, with only 3% of fatalities possibly being prevented if the boat had been registered.	The effectiveness of either compulsory skipper licensing or vessel registration would have minimal effect on the number of fatalities.
European males aged between 45 and 54 were the single largest demographic group in recreational fatalities, although Māori and Pacific peoples are overrepresented in terms of the general population.	Males in boats under 6 m in length, often going fishing, continue to be those most at risk. However, few, if any fatalities were the result of intentional misbehaviour.

The forum's conclusions

The forum members concluded that continuing the existing safety awareness campaigns and programmes focusing upon skipper education and training is imperative and recommended that they be supported with additional resources.

They also endorsed the need to reduce, as far as possible, any barriers to on-water training to ensure that skippers have the maximum opportunity to receive practical training at reasonable cost.

Future options supported by the forum

1 Mandatory alcohol limits for skippers

There is a need to establish a maximum blood-alcohol level for skippers of boats underway. Evidential testing is also recommended.

2 Mandatory carriage of communication equipment

The statistical analysis of fatal boating accidents from 2000 to 2006 indicated that the ability to communicate distress following an immersion-type accident has become just as important as wearing lifejackets in preventing fatalities. While many boats already carry a means of communication, every recreational craft needs an effective method of signalling for help following any type of accident, particularly those prone to capsize (under 6 m).

3 Fitted buoyancy to provide level flotation

There is a safety benefit of having a craft that floats level following a capsize. Even if it cannot be righted, a craft that remains horizontal provides a far better platform for survivors, permits retrieval of essential equipment from under the boat and creates a much larger target for rescuers.

The forum endorsed work already done by some builders of small craft and supports further initiatives by designers and builders for level flotation in all craft under 6 m.

4 Default wearing of lifejackets in craft under 6 m

The current legislation requires lifejackets to be worn on a recreational craft only in circumstances of increased risk. However, in spite of a significant increase in lifejacket use generally, more than half of the fatalities in the past 7 years involved people not wearing lifejackets.

Very few of those fatal accidents occurred in vessels over 6 m in length.

By introducing a change in the wording of legislation, the onus would be placed on the skipper to decide when it was safe to take a lifejacket off, as opposed to when it was necessary to put it on, as required currently. This legislation would apply to all boats prone to capsize, ie those under 6 m in length.

5 Promotion of boating safety awareness

Given the impact of the 2003-2006 promotion of lifejacket wearing on the reduction of fatalities in boating accidents, the forum strongly endorsed the need to continue safety promotion by every possible means and focusing on the four key safety messages.

6 Taxpayer funding for safety programmes

The forum supported taxpayer funding for safety programmes, noting that only a small proportion of the tax currently paid into the road fund from petrol used in pleasure boats was returned to the recreational boating sector.

Options not supported by the forum

The forum decided against the following options because they would not result in the greatest impact:

- 1** Registration of powered recreational vessels
- 2** Mandatory licences for skippers
- 3** Mandatory construction standards for vessels
- 4** Registration of pleasure craft with an annual safety charge
- 5** Sales tax on boats and boating equipment
- 6** Seabed licences.



The way ahead

The key components of the safety strategy will continue to involve:

- **safety awareness** – the nationwide promotion of the four key safety messages – lifejackets, communications, the weather and alcohol
- **education** – increasing the opportunities for training and education for pleasure boat owners and operators attending courses
- **level flotation** – developing voluntary industry standards for vessels under 6 m, with further research into retrofitting level flotation in existing pleasure boats
- **enforcement** – improving capability, eg using infringement notices for offences
- **safe boating advisors** – the development of the volunteer safety advisor and honorary enforcement officer programmes by MNZ and local authorities
- **accident analysis** – in-depth accident investigation and analysis of all fatal recreational boating accidents and, where possible, all other serious boating accidents.

In addition, the forum recommends that the following targeted legislation be introduced to augment the strategy:

- **blood alcohol limits and testing** – setting a maximum blood alcohol concentration for the skipper of a recreational vessel underway and permitting evidential testing by police following any accident/incident; and educating boat users of the dangers of alcohol in boats
- **default lifejacket wearing** – amending the Navigation Safety Rule (and Navigation Safety Bylaws) to state that wearing a lifejacket in a recreational vessel under 6 m is required unless the skipper has decided the risk is low at the time
- **mandatory carriage of communications equipment** – making it mandatory for all craft to carry at all times an effective means of communicating distress appropriate to the situation, which in the case of vessels under 6 m in length remains effective after immersion.

In addition, the forum is supporting the proposal that **funding from road tax** (revenue collected as road tax from fuel used in pleasure boats) provide additional funding for pleasure boat safety.



LEVEL 10, OPTIMATION HOUSE
1 GREY STREET, PO BOX 27006
WELLINGTON 6141

[New Zealand Government](http://www.maritimenz.govt.nz)

This publication was produced by Maritime New Zealand on behalf of the members of the National Pleasure Boat Safety Forum.

For more copies of this overview or the full review:

- **Email:** publications@maritimenz.govt.nz
- **Telephone:** freephone: 0508 22 55 22 (NZ only) or (04) 473 0111

WWW.MARITIMENZ.GOVT.NZ

FEBRUARY 2008