

# Fact Sheet

Number 74

December 2006

## *Auckland Beachgoers Swimming Behaviours and Perceptions of the Risk of Drowning*

### *Introduction*

Drowning and near drowning are significant causes of unintentional death and injury among New Zealanders. On average **130** people drown each year at a rate double that of Australia<sup>1</sup>. About **650** people are hospitalised each year for water-related injuries, with the related entitlement claims costing the country more than **\$17 million** in 2003-2004<sup>2</sup>. More than **2,000** people were rescued from the surf in 2004-2005<sup>3</sup>. The circumstances surrounding drowning, near drowning and other water-related injuries in New Zealand have been comprehensively reviewed<sup>4</sup>. However, without knowing what New Zealanders know, think and do with regards to their safety in and around water, the reasons why so many people get into difficulty in water remain speculative.

### *Methodology and Aims*

A cross-sectional study of Auckland's beachgoers was conducted between January and February 2006. The survey was completed by 3,371 adults at a range of Auckland beaches, with an overall response rate of 87.8%. Of the respondents, 56% were female and 47% were aged between 16-29 years. The ethnic mix of the respondents was 56.4% European, 10.4% Māori, 12.3% Pacific, 4.7% Asian, and 19% of "other" ethnic groups. The self-completed questionnaire surveyed frequency of swimming at the beach (e.g. daily, weekly), past swimming behaviours (e.g. swim between the flags) and perceptions of the risks associated with swimming at a beach

The aim of the study was to ascertain beachgoers' perceptions of drowning risk in terms of the severity of the risk, their vulnerability to risk of drowning, the efficacy of preventive measures and their ability to deal with the risk of drowning.

## Key Findings

### Swimming Frequency

- Participants in the youngest age group (16-29 years) were more likely than older age groups to report that they swim *often* at the beach.
- New Zealand European participants were more likely than all other ethnic groups to report swimming *often* at the beach.
- Pacific and Asian peoples were the least likely groups to swim *often* at the beach.

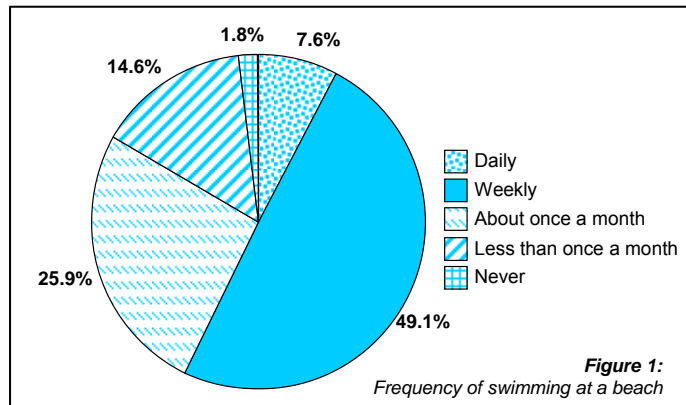


Figure 1:

Frequency of swimming at a beach

### Self-reported Swimming Ability

- The youngest age group (16-29 years) was more likely than older age groups to report a high level of swim competency.
- Males were more likely than females to report a higher level of swim competency.
- European, Māori and beachgoers who self-identified as being of 'other' ethnicities reported a higher level of swim competency than survey respondents of Asian and Pacific Island ethnic groups.

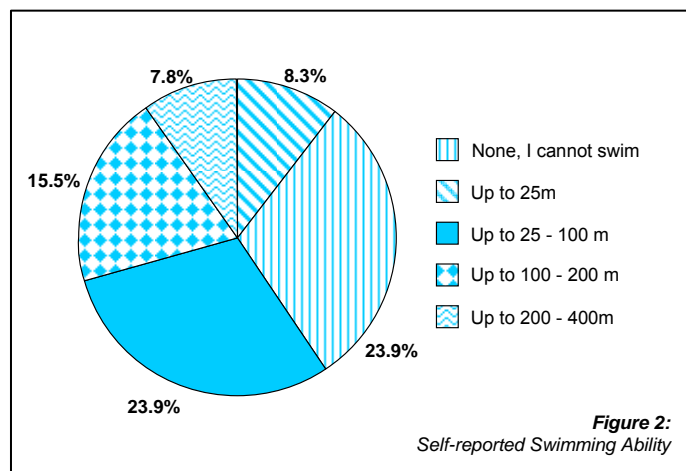


Figure 2:

Self-reported Swimming Ability

### Beach Swimming Behaviours

- Many beachgoers reported risky swimming behaviours such as swimming outside the patrol flags (53%), swimming where there was a rip (30%), or swimming after consuming alcohol (26%).
- The youngest age group (16-29 years) was more likely than older age groups to report risky swimming behaviours. For example, fewer swimmers aged 16-29 years always swam between patrol flags (64%) compared with swimmers aged 30-49 years (79%) and 50-plus years (82%). Fewer swimmers aged 16-29 years never drank alcohol before swimming (64%) compared with swimmers aged 30-49 years (84%) and 50-plus years (87%).
- Males were more likely than females to report risky swim behaviours. For example, fewer males than females always swam between patrol flags (64% v 76%) and never drank alcohol before swimming (65% v 80%).

## Risk Perceptions

### Past life threatening swimming experience\*

- Males were significantly more likely to report that they had experienced a life-threatening incident compared to females
- Adults in the middle age category (30–49 years) were slightly more likely to report having had a life-threatening experience in the past
- Māori and Pacific peoples reported slightly higher ‘near misses’ than other ethnic groups

### Past life-threatening swimming experience

	Yes n (%)	No n (%)	Total n (%)
<b>Age</b>			
15-29 years	469 (30.0)	1095 (70.0)	1564 (100)
30-49 years	451 (32.6)	931 (67.4)	1382 (100)
50 + years	101 (27.2)	270 (72.8)	371 (100)
<b>Sex</b>			
Male	540 (53.0)	895 (38.8)	1435 (100)
Female	478 (47.0)	1410 (61.2)	1888 (100)
<b>Ethnic Group</b>			
New Zealand European	559 (30.7)	1260 (69.3)	1819 (100)
Maori	128 (36.6)	222 (63.4)	350 (100)
Pacific	93 (37.2)	157 (62.8)	250 (100)
Asian	41 (26.3)	115 (73.7)	156 (100)
Other	175 (26.8)	477 (73.2)	652 (100)

### General Risk Perceptions

- Over half the sample (61.3%) reported a heightened perception of drowning risk for a range of possible danger scenarios, consistent with the expectations of risk in these situations. However, 38.7% of the sample reported a lesser perception of risk for the same scenarios.
- Females were more likely than males to perceive a higher risk of drowning (51% v 69%) with the given scenarios. Similarly, beachgoers aged over 50-plus years were more likely to perceive a higher risk (72%) compared with the younger age groups 16-29 years (59%) and 30-49 years (61%).
- Asian (78%) and Pacific Island peoples (69%) were also more likely to report high perceptions of drowning risk than European (59%), Māori (54%) and ‘other’ (64%) ethnicities.
- Males, younger people and Māori (compared with other ethnic groups) reported higher levels of perceived self-efficacy (belief in ability to manage risk situation) in beach swimming situations.
- Females, older adults and Asian participants reported higher perceptions of vulnerability (personal perceived risk) when swimming at a beach.
- Females and older aged adults reported higher levels of response efficacy (ability to respond effectively to a risk situation).

\* These reported experiences do not account for differences in the amount of swimming undertaken between groups.

- Females, older aged adults and Asian participants (compared with other ethnic groups) were more likely to perceive severe consequences as a result of a life-threatening incident while swimming at a beach.
- Females, older aged adults and Asian participants also reported higher levels of concern about the likelihood of drowning while swimming at a beach.

## Recommendations

- Water safety education programmes could benefit from a greater awareness of the differences among beachgoers in swimming abilities, risk-taking behaviours, as well as perceptions of risky situations and responses to these. An understanding of these differences could help design programmes that address the underestimation of drowning risk and overestimation of ability to cope with that risk by some groups, especially young men.
- Media campaigns targeting high-risk groups need to focus on the dangers of underestimation of risk, and overestimation of ability as a key message.
- Based on the survey findings, changing notions of drowning risk through health promotion initiatives disseminated in schools and the wider community could be considered a useful focus of activity for implementation and evaluation within the Drowning Prevention Strategy<sup>5</sup>.

## Further Research

The present survey provides valuable baseline information on behaviours and perceptions of risk relating to water safety for the Auckland region. Further research should continue to monitor trends over time in Auckland as well as other regions of New Zealand.

## Acknowledgements

This fact sheet is based on research and subsequent report<sup>6</sup>, conducted by Judith McCool, Kevin Moran and Shanthi Ameratunga under the auspices of the Injury Prevention Research Centre, University of Auckland. The Accident Compensation Corporation provided financial support for this research project. Fact sheet prepared by: J. McCool, K. Moran, S. Ameratunga, K. Lawson, G. Richards

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