

2010/2011 VICTORIAN

# DROWNING REPORT





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## SUGGESTED CITATION

Life Saving Victoria (2011). Victorian Drowning Report 2010/2011, Life Saving Victoria, Melbourne.

## COMPILED BY

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- Australian Bureau of Statistics
- Coroners Prevention Unit, Coroners Court of Victoria
- Emergency Services Policy & Support, Department of Justice
- National Coroners Information System
- Office of the Emergency Services Commissioner, Department of Justice
- Royal Life Saving Society - Australia
- Surf Life Saving Australia
- Victorian Injury Surveillance Unit

# 34

## **DROWNING DEATHS IN VICTORIA FROM 1 JULY 2010 - 30 JUNE 2011**

### **METHODS**

This report includes unintentional drowning incidents only. It does not include deaths due to natural causes, suicide, or homicide.

Information for the report has been collected from the Coroners Court of Victoria and the National Coroners Information System (NCIS).

This information relates to both open and closed cases. While all care is taken to ensure the results are as accurate as possible, these figures are provisional only and the report contains drowning deaths known as at 2 September 2011.

Coronial investigations and findings relating to open cases may alter the reported drowning figures. At the time of compilation, 17% of suspected drowning cases remained open on the NCIS.

Detailed information on the incidence of drowning deaths in Victoria from July 2000 to June 2010 has been used to provide a 10-year average of drowning deaths in Victoria. This is used throughout the current report to compare with drowning deaths that occurred this year (2010/2011).

# OUR PERFORMANCE

## PREVENTION

	KEY GOALS	KEY RESULTS
<b>REDUCE DROWNING</b>	Reduce Victorian drowning rate	<ul style="list-style-type: none"> <li>■ 34 drowning deaths in Victoria from 1 July 2010-30 June 2011 a reduction by 4 compared to 2009/2010</li> <li>■ Direct cost to society of lives lost estimated to be \$126 million (OBPR, 2008)</li> <li>■ Lowest number of drowning deaths recorded in Victoria</li> <li>■ Crude drowning rate 0.61 per 100,000 population</li> <li>■ 56% decrease in the drowning rate in Victoria since the start of the Play it Safe by the Water campaign (PISBTW) campaign in 1998</li> </ul>
<b>SERVICES</b>	Expand to meet public need/ sustainability/ membership development, growth and support	<ul style="list-style-type: none"> <li>■ 13% increase in rescues and 12% increase in First Aid cases per 100,000 beach visitors compared with 5 year average (2005-2010).</li> <li>■ Lifesavers volunteer 150,000 hours each year to patrol beaches, 169,233 hours to receive training and 33,010 hours to deliver training.</li> <li>■ The sum of the value of patrol hours and personal expenses incurred as a result of volunteering in Victoria is estimated at \$5.2 million per year (PwC, 2011)</li> <li>■ Total value of coastal services in Victoria based on the value of lives saved and avoided injuries is estimated at \$235 million per year (PwC, 2011)</li> </ul>
<b>EDUCATION &amp; TRAINING</b>	Continue development to ensure efficiency and expansion of delivery	<ul style="list-style-type: none"> <li>■ Over 200,000 participants took part in water safety education state wide</li> <li>■ Over 65,000 spectators exposed to water safety messages</li> <li>■ 53% increase in education program participation compared to 5 year average (2005-2010)</li> <li>■ Over 7500 CALD participants took part in education programs</li> <li>■ 85 aquatic facilities are registered Watch Around Water facilities, an increase of 166% from 2009/2010</li> <li>■ Over 11,700 people trained in LSV CPR, Child and Infant CPR or other First Aid courses</li> </ul>
<b>AQUATIC RISK &amp; RESEARCH</b>	Strive for excellence/ evidence based practice	<ul style="list-style-type: none"> <li>■ 82 Aquatic Facility Safety Assessments conducted to audit aquatic facilities against the best practice standards set out in the Guidelines for Safe Pool Operation</li> <li>■ Collaborative research into alcohol related drowning in Victoria from 2000-2008 with Coroners Prevention Unit, Coroners Court of Victoria</li> </ul>

To find out more about Life Saving Victoria's programs and partner programs visit [www.lifesavingvictoria.com.au](http://www.lifesavingvictoria.com.au)

# 56%

## DECREASE IN THE DROWNING RATE IN VICTORIA SINCE THE START OF THE PISBTW CAMPAIGN IN 1998

### PROGRESS

Progress against Australian Water Safety Strategy (AWSS) 2008-2011 drowning reduction goals

	BASELINE*	TARGET 2011	ACTUAL 2011	PROGRESS AGAINST TARGET
<b>KEY LIFE STAGES</b>				
Children under 5	4	3	1	Achieved target
Men aged 15-34**	17	13	13	Achieved target
People aged over 55 years	13	11	10	Achieved target
<b>HIGH RISK LOCATIONS</b>				
Rural and remote	23	20	20	Achieved target
Inland waterways ***	12	10	16	Urgent work needed
Home swimming pools	4	3	3	Achieved target

\*3 year average 2004-2007

\*\*Age range different to AWSS

\*\*\*Rivers most common location and alcohol often involved





**DHL**



**SURF RESCUE**

**DHL**

**Seabrook**

# CEO'S REPORT

## THIS YEAR, WE HAVE SEEN THE DROWNING TOLL REACH A NEW ALL-TIME LOW IN VICTORIA.

At 0.61 per 100,000 of population, this is a 56% reduction of the drowning rate since the start of the PISBTW campaign in 1998, which has worked to reduce drowning in Victoria by raising awareness through a range of education programs, advertising and media campaigns.

We are encouraged by this continued downward trend, however, consider that there is still much work to be done to minimise drowning and associated injuries.

This drowning report aims to provide support to the evidence base, which will be used to inform continued water safety services, education and campaigns in Victoria.

In the last year, 34 people drowned in Victoria.

Our research shows that while the number of drowning deaths in older adults has declined, they represent the highest rate of drowning in any age group. This together with drowning in children aged 5-14 years are our challenges into the future.

The cooler temperatures experienced over the summer months may have contributed to the overall lower drowning toll. However, widespread flooding across Victoria in 2010/2011 has also been a contributing factor this year, leading to the tragic loss of two lives.

Participation in aquatic pursuits and recreational activities continues to expand in Victoria. As an indicator of this, in Port Phillip Bay alone, there has been an average annual increase of 4% in visitations between 2001-2009.

There are numerous benefits associated with aquatic recreation, however we need to continue to enjoy the water safely.

Our past efforts show that a concerted multifaceted approach to drowning prevention can be effective. A great example of this is the dramatic reduction in toddler drowning from seven deaths in 2009/2010 to one death in 2010/2011. This may largely be attributed to a Victorian Government funded public awareness campaign, which targeted parents and carers to actively supervise children around water, with the message '20 seconds is all it takes' for a child to drown.

Efforts to reduce drowning in Culturally and Linguistically Diverse (CALD) communities are also demonstrating effects, with a reduction in drowning from 23% in 2008/2009 to 6% in 2010/2011. This would not have been possible without continued Government funding and proactive support of local community groups. Of concern however is that in almost two thirds of cases, country of birth or ethnicity is unreported or unknown. Of further concern is evidence to suggest up to 80% of people from CALD communities cannot swim.

Collaborative work with the Coroners Prevention Unit is also helping to improve the evidence base in terms of the link between alcohol use and drowning. This study has provided a more accurate picture of alcohol involvement in drowning, with an average of 9 drowning victims per year identified as having consumed alcohol prior to drowning. Therefore alcohol use appears to be a continuing persistent factor in drowning.

The Victorian Water Safety Master Plan 2012-2015, which will be released in November, aims to provide an overarching strategic framework to continue work to reduce drowning in Victoria.

The prevention of drowning deaths and aquatic related injury is achieved through a collective effort of a number of water safety and government agencies, in partnership with the aquatic industry and most importantly, the Victorian community.

We encourage every Victorian to partner with us in water safety, to work towards a zero drowning toll for Victoria.

We welcome your perusal and interest.



**Nigel Taylor ESM**

Chief Executive Officer  
Life Saving Victoria

## THIS DROWNING REPORT AIMS TO PROVIDE SUPPORT TO THE EVIDENCE BASE, WHICH WILL BE USED TO INFORM CONTINUED WATER SAFETY SERVICES, EDUCATION AND CAMPAIGNS IN VICTORIA.

KM OF VICTORIAN  
COASTLINE

1230



# OUR ENVIRONMENT

## KM OF PORT PHILLIP BAY COASTLINE

# 259

### MAKING POPULAR WATER DESTINATIONS SAFE IS A MAJOR CHALLENGE WHEN CONSIDERING THE COMPLEXITY OF THE FOLLOWING STATISTICAL PROFILE:

- Of the 1230km of Victorian coastline, there are 588 ocean beaches, which make up 811km (66%). There are 146 beaches along the 259km coastline of Port Phillip Bay (Short, 1996).
- Approximately 25,000 Life Saving Victoria (LSV) volunteers, drawn from a base of 57 patrolling clubs, supported by over 120 professional lifeguards, are responsible for patrolling 66 beaches across Victoria (LSV, 2010; LSV, 2011).
- Lifesavers perform over 750 rescues and resuscitations each year and conduct up to 54,000 preventative actions and assists (LSV; 2010; LSV, 2011).
- In 2008/2009, 73 million people visited Victoria's bays, while 33 million enjoyed the popular coastal beaches. In Port Phillip Bay alone, there has been an average annual increase of 4% in visitations between 2001-2009 (Newspoll, 2009).
- There are an estimated 139,000 backyard swimming pools in Victoria (ABS, 2009).
- There are approximately 450 public and commercial swimming pools throughout the State, 60% rural/regional and 40% metropolitan, attracting over 60 million visitations each year (VAIC, 2001).
- There are over 165,000 registered powered recreational boats in Victoria. There are around 300,000 licensed recreational boaters and personal watercraft (PWC) operators in Victoria (TSV, 2011).
- There are also approximately 10,000 passive watercraft users in Victoria; including kite surfers, canoeists, kayakers and windsurfers (TSV, 2011).
- Around 90 yacht clubs collectively have 20,000 registered members across Victoria (Yachting Victoria, 2010).
- In 2008/2009, it was estimated that 721,000 Victorians were involved in recreational fishing activities, with an estimated 8.7 million trips per year (VRFish, 2009).
- Between September 2010 and February 2011, many Victorian towns and communities were affected by floods, which caused widespread damage and loss.
- The strong La Niña conditions experienced in 2010 and 2011 dramatically punctuated long term rainfall deficiencies with record falls in the spring and summer of 2010/2011 (BOM, 2011a).

OF THE 34 DROWNING  
DEATHS IN VICTORIA

4

FEMALES

30

MALES



# WHO IS DROWNING?

## GENDER

Males remain more likely to drown than females. Of the 34 drowning deaths in Victoria, 30 (88%) were male and 4 (12%) female. The rate of drowning in males decreased by 16% in 2010/2011 compared to the 10 year average. However the reduction in the rate of drowning was most dramatic in females (61%).

## AGE

The number of drowning deaths in 2010/2011 was highest in those aged 35-59 years (9) and 60 years and over (9). However when comparing the drowning rate per 100,000 population, the most highly represented age group was those aged 60 years and over (0.85).

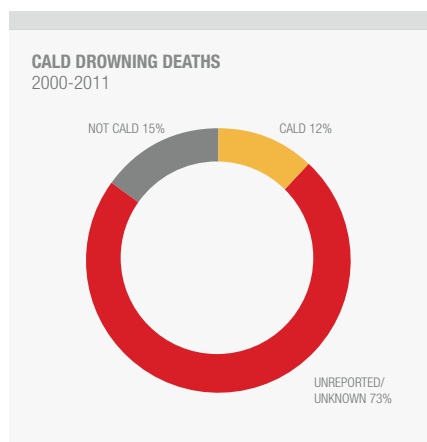
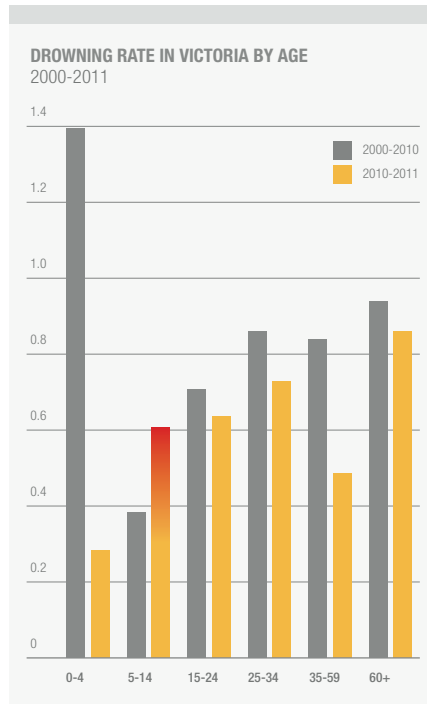
There was a decrease in the drowning rate per 100,000 population across all age groups in 2010/2011 compared with the 10 year average, except in children aged 5-14 years.

Most significantly there was an 80% decrease in the infant and toddler (age 0-4 years) drowning rate this year (0.28) compared with the 10 year average (1.39). One toddler drowned in 2010/2011 compared with 7 in 2009/2010.

The trend for an increase in drowning in children 5-14 years is of concern. This age group has typically seen the fewest number of drowning deaths and the lowest drowning rate, however in 2010/2011 there was a 58% increase in the drowning rate in children 5-14 years (0.60) compared to the 10 year average (0.38).

This year, typical of previous years, the most common activities children 5-14 years were involved in immediately prior to drowning were swimming, paddling or wading or walking/playing near water.

The locations of drowning deaths in this age group in 2010/2011 were in rivers or home pools. In previous years the most common locations were inland waterways (44%) including lakes, rivers, dams, and creeks followed by coastal locations, specifically beaches (20%), then home/other swimming pools (20%).



## CULTURAL AND LINGUISTIC DIVERSITY

*'In the Australian context, individuals from a CALD background are those who identify as having a specific cultural or linguistic affiliation by virtue of their place of birth, ancestry, ethnic origin, religion, preferred language, language(s) spoken at home, or because of their parents' identification on a similar basis.'*

Evidence is lacking to determine the full extent of drowning risk for people from CALD communities. However, data from the National Coroners Information System (NCIS), Victoria Police, Coroners Court of Victoria, the media and local communities indicates that 12% of drowning deaths in Victoria between 2000-2011 were people from CALD communities.

There was a peak in drowning deaths in CALD communities in Victoria in 2008/2009 (23%), however in the last 2 years there has been a trend for a decrease in drowning deaths of people from CALD communities.

This year 2 drowning victims were reported as being from CALD communities, however the nationality of 29 victims (85%) was unreported or unknown. Indeed from 2000-2010 it is estimated that country of birth or ethnicity is unlikely to be known in 61% of drowning deaths.

Due to the potential for increased drowning risk for people new to Australia, as well as those with little or no experience with Australian aquatic environments, more work is urgently needed in this area.

**THE TREND FOR AN INCREASE IN DROWNING IN CHILDREN 5-14 YEARS IS OF CONCERN. THIS AGE GROUP HAS TYPICALLY SEEN THE FEWEST NUMBER OF DROWNING DEATHS AND THE LOWEST DROWNING RATE, HOWEVER IN 2010/2011 THERE WAS A 58% INCREASE IN THE DROWNING RATE IN CHILDREN 5-14 YEARS.**

# WHEN, WHERE AND WHAT

## WHEN DID THEY DROWN?

### Season

Drowning incidents occur all year round. As in previous years the most drowning incidents resulting in death in 2010/2011 occurred in summer (14, 41%). The 5 (15%) drowning incidents in autumn (2010/2011) is 5% less than typically occurs in this season (8, 20%). This may be due to the colder than average temperatures experienced in autumn 2011 (BOM, 2011b).

As is typical of previous years, there were 8 (24%) drowning incidents in spring and 7 (21%) in winter.



## WHERE DID THEY DROWN

### Remoteness of incident

This year the majority of incidents occurred in regional and remote areas of Victoria (20, 59%) compared with major cities (14, 41%). This is a reversal of the trend in recent years of more drowning deaths occurring in major cities with an average of 21 (57%) deaths per year from 2005-2010.

### Remoteness of residence

Of the 34 people who drowned in Victoria, 19 (56%) were persons residing in major cities of Victoria, 14 (41%) in regional and remote Victoria and 1 (3%) unknown place of residence. While the majority of drowning deaths involved people residing in major cities of Victoria, the drowning rate per 100,000 population is greater in persons residing in regional and remote Victoria.

The overall drowning rate in people residing in regional and remote Victoria in 2010/2011 decreased by 4% compared to the 10 year average (2000-2010). However people living in regional Victoria remain twice as likely to drown as those in major cities.

### Waterways

Sixteen (47%) people drowned in inland waterways this year. This is an increase of 10% compared to the 10 year average (15, 35%, 2000-2010). There was an increase in drowning deaths in rivers with 9 (26%) in 2010/2011 compared with an average of 5 per year from 2000-2010 (13%).

Drowning deaths in the home decreased this year compared to previous years with 5 (15%) in 2010/2011 compared with an average of 10 (25%) per year from 2000-2010. This decrease is most likely due to the reduction in toddler drowning in home pools and bathtubs.

## WHAT WERE THEY DOING?

### Activity

Consistent with previous years, in 2010/2011 the most common activities undertaken immediately prior to the drowning were walking or playing near water (8, 24%), and swimming, paddling or wading (6, 18%).

There was a decrease in cases where the person was bathing with 2 (6%) drowning deaths this year compared to an average of 5 (11%) per year from 2000-2010.

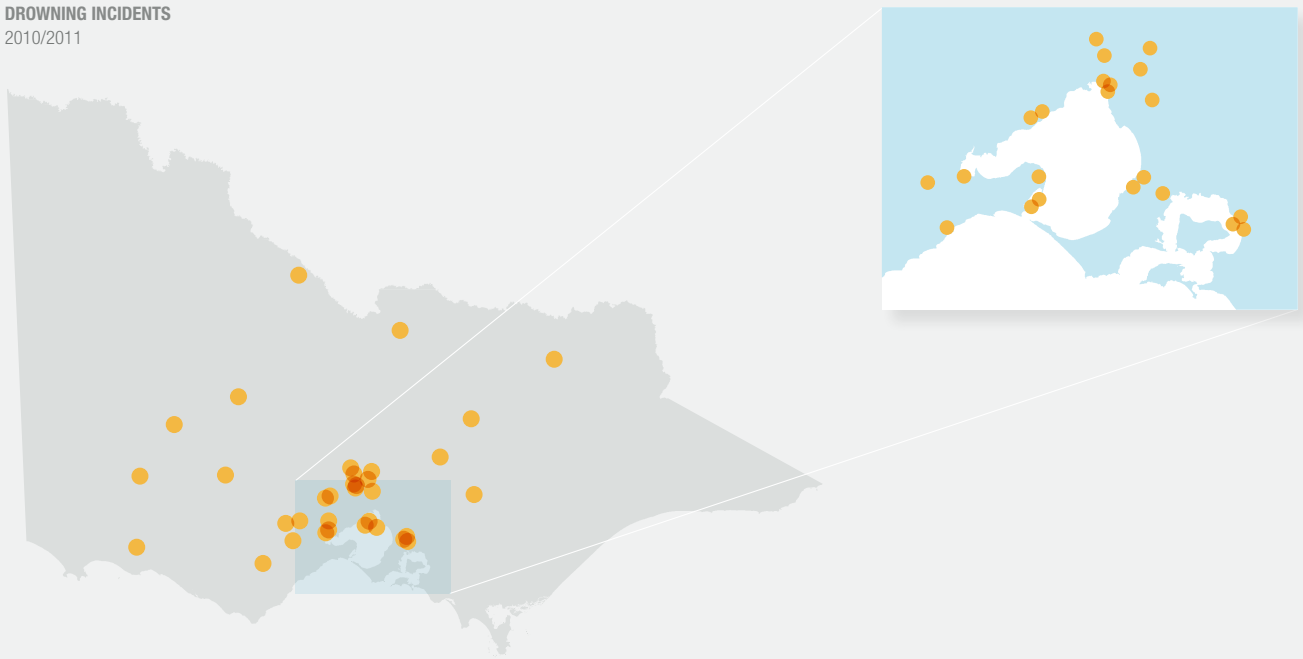
There was an increase in boating incidents in 2010/2011 (5, 15%) compared to the previous 5 year average (3, 8%) from 2005-2010. The average from 2000-2005 was 10 per year (21%).

Boating incidents decreased from 2005-2010 compared with 2000-2005. This may be due to the introduction of marine safety regulations regarding the compulsory wearing of personal flotation devices (PFDs) for recreational boaters, introduced in December 2005. However the increase in the number of deaths that occurred while boating this year compared to the past 5 years is of concern.

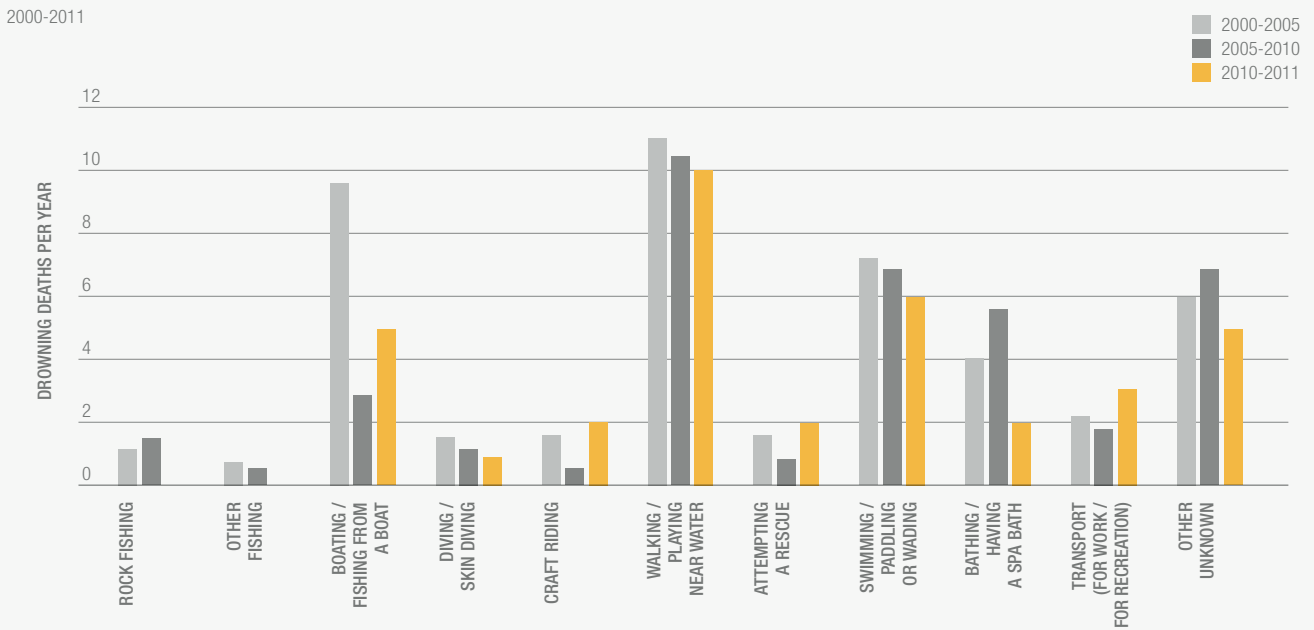
There were no drowning deaths associated with rock fishing this year, compared to 3 rock fishing related drowning deaths last year.

**PEOPLE LIVING IN REGIONAL VICTORIA REMAIN TWICE AS LIKELY TO DROWN AS THOSE IN MAJOR CITIES.**

**DROWNING INCIDENTS**  
2010/2011



**DROWNING DEATHS BY ACTIVITY**  
2000-2011





**59%**

**OF DROWNING DEATHS OCCURRED IN REGIONAL  
AND REMOTE AREAS OF VICTORIA**



**56**<sup>%</sup>

**OF DROWNING DEATHS WERE PERSONS  
RESIDING IN MAJOR CITIES OF VICTORIA**



78%

**OF PEOPLE WHO DROWNED DURING RECREATIONAL BOATING, OR OTHER ACTIVITIES WHERE A PFD IS REQUIRED OR RECOMMENDED TO BE WORN, WERE REPORTEDLY NOT WEARING A PFD**

# CONTRIBUTING FACTORS

## ALCOHOL RELATED DROWNING DEATHS

There has been increasing evidence to confirm the association between alcohol use during aquatic recreational activities and risk of drowning. However the true extent of alcohol involvement among drowning deaths in Victoria is currently unknown, restricting the capacity to examine trends in alcohol-related drowning deaths and to devise appropriate prevention strategies.

A recent study by Life Saving Victoria and the Coroners Prevention Unit (Matthews et al, 2011) was conducted to:

- determine the number of drowning deaths in Victoria from 2000-2008 where alcohol was present;
- examine whether the presence of alcohol among drowning deaths has changed over time; and
- identify trends in demographics of alcohol-related drowning victims.

Preliminary analysis of these deaths showed that:

- Alcohol was present in 23% (n=78) of drowning victims.
- The number of drowning deaths where alcohol was present remained unchanged from 2000-2008, with an average of 9 deaths per year.
- Among the drowning deaths where alcohol was present:
  - Males accounted for 82% of the deaths.
  - The greatest proportion of deaths occurred in those aged 35-44 years.
  - The deceased was most commonly swimming at the time of the incident.
  - Deaths most often occurred in inland waterways, particularly rivers.

82%

OF ALCOHOL RELATED DROWNING VICTIMS ARE MALE

## PERSONAL FLOTATION DEVICES (PFDs)

Not wearing a life jacket or PFD has been cited as a contributing factor in many drowning deaths, particularly in boating activities and more recently in rock fishing fatalities.

Of all drowning deaths between 2000-2011 involving recreational boating or other activities where a PFD is required or recommended to be worn, (such as rock fishing), 78% (63) of victims were reportedly not wearing a PFD.

Many incidents involved unexpected large waves, leaving insufficient time to put on a PFD. This emphasises the importance of always wearing a PFD when boating or rock fishing.



# KEY WATER SAFETY AGENCIES AND ORGANISATIONS

THERE ARE A RANGE OF AGENCIES AND ORGANISATIONS WITH ROLES AND RESPONSIBILITIES THAT CONTRIBUTE TO IMPROVING WATER SAFETY AND DROWNING PREVENTION IN VICTORIA.

## VICTORIAN WATER SAFETY COUNCIL (VWSC)

- Life Saving Victoria
- Aquatics & Recreation Victoria
- Australian Volunteer Coast Guard – Victoria
- Boating Industry Association of Victoria
- Country Fire Authority
- Department of Justice – Emergency Services Policy & Support
- Emergency Services Telecommunications Authority
- Parks Victoria
- Surfing Victoria
- Swimming Victoria Inc
- Transport Safety Victoria
- Victoria Water Police/Search & Rescue Squads
- Victorian Recreational Fishers
- Yachting Victoria
- YMCA

## OTHER WATER SAFETY AGENCIES AND ORGANISATIONS

- Central Coastal Board
- Civic Mutual Plus
- Department of Education and Early Childhood Development
- Department of Planning and Community Development
- Department of Sustainability and Environment
- Kidsafe Victoria
- Life Saving Clubs
- Local Government Authorities
- Municipal Association of Victoria
- Royal Children’s Hospital Safety Centre
- Swimming Pool and Spa Association
- Victorian Coastal Council
- Victorian Managed Insurance Authority
- Victorian Multicultural Commission

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