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#### Acknowledgements

Principal contributors to the plan were Justin Scarr, Dr Richard Franklin, Peter Agnew, Ben Whibley, Rob Bradley, Brett Williamson OAM, Amy Peden and Tarina Rubin. Feedback was sought and received from a range of stakeholders across Government, water safety agencies and industry.

**Australian Water Safety Strategy 2008-2011 Strategic Framework** 

# **Aspirational Goal**

Reduce drowning deaths by 50% by 2020

# **Key Priority Areas**

Adopt a life stages approach

Address high risk locations

Meet key drowning challenges Strengthen drowning prevention pillars

# **Key Goal Areas**

- 1. Children under five
- 2. Men & Alcohol
- 3. Older people
- 4.Surf beaches5.Rural & Remote6.Home pools
- 7. High risk activities
- 8. High risk populations
- 9. Extreme weather
- 10. Safe venues
- 11. Lifesaving people
- 12. Legislation & Policy
- 13. Collaborate
- 14. Research

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#### **Australian Water Safety Strategy 2008-2011 Stakeholder Map**

	Community	<ul><li>Individuals eg. parents</li><li>Personal responsibility</li></ul>
	Regional	<ul><li>Regional water safety &amp; related agencies</li><li>Regional government agencies</li><li>Business sector</li></ul>
	State/Territory	<ul><li>State/Territory water safety agencies</li><li>State/Territory government agencies</li><li>Business sector</li></ul>
	National	<ul><li>Australian Government</li><li>National Water Safety Agencies</li><li>Business sector</li></ul>
	AWSC	Draws representatives from peak water safety agencies at National level

#### DEVELOPMENT OF THE STRATEGY

This Australian Water Safety Strategy 2008-2011 builds upon previous Australian Water Safety Plans and was developed by the Australian Water Safety Council (AWSC) in collaboration with water safety agencies, government and other groups with an interest in preventing drowning.

There were seven phases to the Strategy development process;

- Distribution drowning issues survey to stakeholders
- · Development workshop, Sydney August 2007
- Working group drafts the Strategy
- Circulation of draft one across stakeholders for review
- Conference review of draft two, May 2008
- · Consolidation and clarification of feedback
- · Publishing of final strategy

The Strategy Development Workshop was facilitated by Dr Tim Driscoll. A full list of those who participated in the Strategy development workshop is contained in Appendix 2 – Attendance List.

The Strategy working group consisted of;

- Justin Scarr
- Dr Richard Franklin
- Peter Agnew
- Ben Whibley
- Rob Bradley
- Brett Williamson OAM

Royal Life Saving Research Officers, Amy Peden and Tarina Rubin contributed to the literature review and editing of this Strategy.

#### The Australian Water Safety Council is comprised of:

Aquatic and Recreation Institute; Australian National Sportfishing Association; Australian Swim Coaches and Teachers Association; Australian Swimming Incorporated; AUSTSWIM; Divers Alert Network Asia-Pacific; Farmsafe; Kidsafe; National Marine Safety Committee; Royal Life Saving Society Australia; Standing Committee on Recreation and Sport (SCORS); Surfing Australia; Surf Life Saving Australia.

The development of this Strategy has been supported by the Australian Government Department of Health and Ageing.

#### FOREWORD BY MINISTER

#### FOREWORD BY AWSC CHAIR

The Australian Government supports the Australian Water Safety Strategy and the Australian Water Safety Council's goal to reduce drowning deaths by 50 per cent by 2020.

The four key priority areas identified in the 2008-2011 strategy set a strong framework for the future of water safety in Australia. They are:

- · Adopt a life stages approach
- · Address high risk locations
- · Meet key drowning challenges
- Strengthen drowning prevention pillars

In a country with such a popular beach and water sports culture, we need to promote water safety and minimise mortality and morbidity.

It is vital that we maintain the downward trend found in the 2007 National Drowning Report and improve safety in the areas in which drowning deaths have increased recently, including at the beach.

This strategy will build on the knowledge gained from previous water safety plans and is testament to the continued hard work by water safety agencies, governments, community groups and individuals to prevent drowning.

The 14 goals laid out in this strategy are a call for all of us to take action to prevent drownings for the next four years and into the future.

Congratulations to the council and all involved on this landmark strategy.

THE HON KATE ELLIS MP Minister For Sport



On behalf of the Australian Water Safety Council I commend to you the Australian Water Safety Strategy for 2008-2011 which contains the aspirational goal of reducing the current Australian drowning death toll by 50% by 2020.

This strategy comes at a critical time for Water Safety in Australia because there are some extremely disturbing trends emerging. Much of the hard work and positive results achieved over the past ten years appears to be eroding as the downward path of the drowning numbers has stalled or plateaued and in some demographics is increasing.

This situation can not be allowed to continue and it is vital that immediate and urgent steps are taken to reverse these upward trends. This is the time when additional resources, increased commitment and strong resolve must be provided in a collaborative and coordinated fashion. The Australian Water Safety Council believes that the Australian Water Safety Strategy 2008-2011 provides the direction and impetus for all parties with an interest and stake in water safety to pull together to achieve our objective of reducing drowning deaths by 50% by 2020.

The Australian Water Safety Council is committed to providing strong leadership for water safety in Australia and we look forward to working with the three tiers of Government, non-government and water safety organisations to deliver the Australian Water Safety Strategy 2008-2011.

ROB BRADLEY
AWSC Convener









# Reducing Drowning Deaths by 50% by 2020

This Australian Water Safety Strategy aims to achieve a 50% reduction in drowning deaths by the year 2020. This is an ambitious undertaking, but one the AWSC believes is entirely achievable through a strong, collaborative and evidenced based approach.

Our earliest records put the Australian drowning death rate as high as 8.76 deaths per 100,000 population in 1920 <sup>1</sup>. In today's terms, this rate would equate to approximately 1800 drowning deaths per annum. A program of lifesaving, water safety, drowning prevention and community action has resulted in a rate of less than 2 deaths per 100,000 population or approximately 270 drowning deaths in 2007.

#### What is the basis for this reduction? Is it enough?

This relative success can be attributed to a combination of factors, including the development of swimming and water safety foundation skills in the community; venues with strong risk management and surveillance systems; dedicated lifesavers, instructors and water safety advocates; collaboration among water safety agencies, government and the community; and continual research and development that has guided policy and practice. These drowning prevention pillars have underpinned this success and form the platform for achieving the bold vision of 50% less drowning deaths by 2020. Achieving a 50% reduction in drowning deaths by 2020 will require more than the incremental change achieved through advances in current practice. This Strategy aims to identify the key drivers to be implemented by the AWSC, Water Safety Agencies, Government and the Australian community to achieve a significant reduction in drowning and drowning deaths.

#### Three key drivers for drowning reduction

The AWSC has identified three key drivers, which in combination with efforts to leverage the drowning prevention pillars, will achieve the reduction aimed for in this Strategy. Taking a life stages perspective, targeting high risk locations and meeting several significant drowning challenges form the basis of this ambitious task.

Figure 1: Average drowning deaths and targets across Goal Areas

	Baseline	ine 2011		2020	
	3yr avg*	Milestone %	Milestone N	Goal %	Goal N
A LIFE STAGES APPROACH					
Children under five	32	16%	27	50%	16
Men aged 18 – 34 and Alcohol	20	25%	15	50%	10
People aged over 55 years	82	13%	71	50%	41
HIGH RISK LOCATIONS					
Rural and Remote	65	14%	56	50%	32
Surf Beaches	52	13%	45	50%	26
Backyard Swimming Pools	35	17%	29	50%	17
DROWNING CHALLENGES					
Activities	74	14%	64	50%	37
Indigenous	Unknown			50%	??
CALD	44	14%	38	50%	22
Tourists (Domestic & International)	147	12%	129	50%	74
Climate change	Unknown			50%	??
Total	291	12%	255	50%	146

<sup>\* =</sup> data collected from 2004-05 to 2006-07

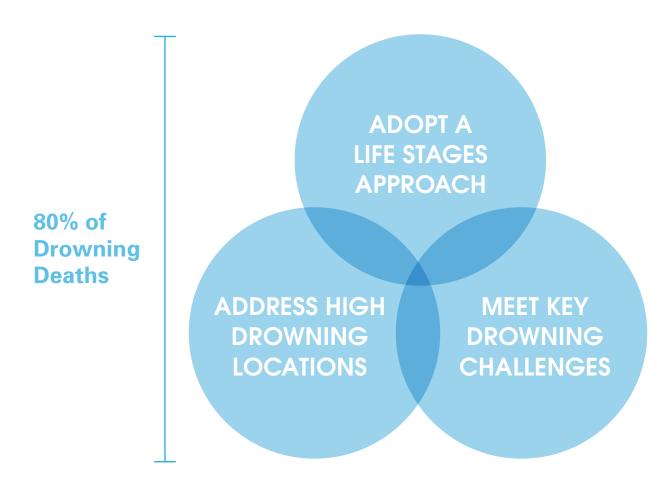
#### **Drowning Prevention Pillars**

To achieve the goal of reducing drowning deaths by 50% by 2020 it is essential that the impact of the drowning prevention pillars established over the past 100 years be extended. The pillars are;

- Safe Venues
- · Lifesaving People
- Legislation and Policy
- Collaborate
- Research

This area of the Strategy sets out to ensure that no ground is lost and that the Strategy goes further to leverage the assets, expertise and positioning of these key components of water safety in Australia.

Figure 2: Key drivers of drowning reduction



# **Drowning Prevention Pillars**

SAFE VENUES LIFESAVING PEOPLE LEGISLATION COLLAB-ORATE RESEARCH

## A Call to Action

This Australian Water Safety Strategy 2008-2011 (the Strategy) is comprised of 14 goals around 4 key priority areas. This Strategy is intended as a call to action for water safety agencies, State and Territory AWSC member groups, governments and the community to consider, prioritise and respond to each goal/area in a collaborative effort to achieve the overarching goal of a 50% reduction in drowning deaths by 2020.

#### **Key Priority Areas**

- 1. Adopt a life stages approach
- 2. Address high risk locations
- 3. Meet key drowning challenges
- 4. Drowning prevention pillars

#### GOALS OF THE STRATEGY

- 1. Reduce drowning deaths in children under five
- 2. Reduce alcohol related drowning deaths, particularly in men aged 18-34
- 3. Reduce drowning deaths in older people
- 4. Reduce rural and remote drowning deaths
- 5. Reduce surf beach drowning deaths
- 6. Reduce drowning deaths in home swimming pools
- 7. Reduce drowning deaths attributed to high risk recreational activities
- 8. Reduce drowning deaths in high risk populations
- 9. Reduce the impact of climate change and extreme weather on drowning deaths
- 10. Build systems that support safe aquatic recreation venues
- 11. Strengthen the skills, standards and contribution of our drowning prevention people
- 12. Strengthen policies, legislation and standards related to water safety
- 13. Foster collaborative approaches to drowning prevention
- 14. Extend the drowning prevention evidence base



# Adopt a Life Stages Approach

Adopting a life stages approach is the first key driver of this Strategy and provides the framework for its first Key Priority Area. Epidemiologically, life stages are used to differentiate between the complex drowning risk factors and exposure to hazards based on age. These vary naturally throughout a person's life, along with the physical, emotional and social developmental stages.

Injury profiles, or more specifically, drowning profiles are identifiable for each of the life stages <sup>2</sup>. By understanding the risk, hazard exposures and protective factors inherent in each stage, drowning prevention strategies are specifically targeted towards key demographics.

Figure 3: Age breakdown of deaths per 100,000 population, Australia, 2004-05 to 2006-07 (N=874)

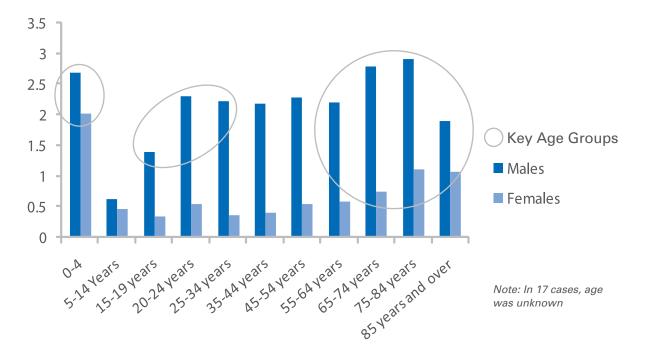


Figure 4: Key life stages and strategies

	Key locations and safety issues
Children under five	Swimming pools, baths and dams, lack of supervision, access to water
Young males (18-34 years)	Rivers and beach, swimming, alcohol, peer pressure, risk taking activities
Older People (55+ years)	Watercraft, beach, river and ocean, physical changes, overestimation of skills, lack of water safety knowledge, health ailments

In order to achieve a significant reduction in the number of drowning deaths, this Priority Area focuses on three key life stages: children under five, young males aged 18-34 and older people aged 55 years and over. Each is somewhat distinct, however there are still some variables within each stage that drowning prevention strategies should account for.

For example, within the under five years age group, there are distinct differences in the patterns of drowning between those in infancy and those aged between 1 and 4 years. Also, the life stage over 55 years could be divided into a number of sub-stages.

# Reduce Drowning Deaths in Children Under Five



#### **Key Objectives and Performance Indicators**

- 1.1 Strengthen programs that raise awareness and build skills in supervision
  - Programs are evidence based, targeted at parents, carers and supervisors of children under five and evaluated to ensure effectiveness
- 1.2 Create or strengthen systems that promote, monitor and enforce barrier/isolation fencing, such as four sided pool fencing, safe play areas on farms or fencing near public water hazards.
  - Promotion, monitoring and enforcement programs are implemented and evaluated in all jurisdictions
- 1.3 Investigate the effects of water familiarisation in children under five
  - Investigation explores the notion that water familiarisation builds skills and safe behaviours in children under five
- 1.4 Promote community wide rescue and resuscitation skills
  - · A national campaign or strategy is implemented promoting resuscitation skills to parents and carers

#### **Background**

Globally, drowning death rates are highest in children aged under five years <sup>3</sup> and research conducted by Royal Life Saving has found that for the three year period from 2004-05 to 2006-07 there were 96 children under the age of five who died from drowning in Australia. This represents 11% of the total drowning deaths for this period <sup>4</sup>. The most common locations where children under the age of five drowned were backyard pools, dams/lakes and bathtubs (Figure 5). The under five years age group is again the number one priority target group.

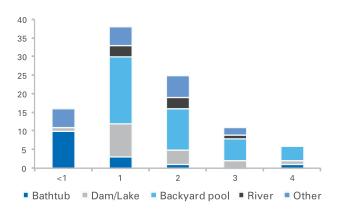
Home swimming pools remain the most common location for drowning death and injury in children under five, however for the very young (<1 Year) bathtubs were the most common location. Rural areas (such as dams, lakes and rivers) continue to be secondary locations, and strategies must be devised and implemented to address these locations.

#### **Home Pool Fencing**

Our strongest level of evidence in this age group shows that effective, maintained and carefully monitored home pool fencing can reduce drowning in children. A Cochrane Review of the protective effects of home swimming pool fencing has found that fencing which completely encloses all sides of a swimming pool and isolates it from the home is effective in preventing drowning of young children <sup>3</sup>.

A recent review <sup>5</sup> of home swimming pool legislation noted that legislation requiring pools to be fenced exists in each Australian State and Territory. However greater government and community action is required to ensure that compliance rates are monitored and in some cases enforced.

**Figure 5**: Drowning deaths by age and location for the under 5 years age group, Australia 2004-05 to 2006-07 (N = 96)



#### **Adult or Carer Supervision**

Adult or carer supervision has long been identified as having a protective effect against the risk of drowning in children aged under five years. Research into non-swimming pool child drowning deaths in Queensland identified carer supervision as a factor in these deaths and it is continually argued to be the most effective means of preventing drowning <sup>5</sup>.

A dramatic reduction in the number of drowning deaths of children under five in public swimming pools and spas in Victoria can be attributed in part to public awareness campaigns focused on carer supervision <sup>6</sup>.

#### **Safe Play Areas on Farms**

There is evidence that child safe play areas on farms can reduce the number of drowning deaths in children under five <sup>7</sup>. The creation of a safe play area is the most common intervention aimed at preventing child injury on farms <sup>8</sup> and the AWSC encourages strategies that take this prevention message directly to rural Australia.

#### **Water Familiarisation**

There is no clear evidence to suggest that water familiarisation for children under the age of five reduces the risk of death from drowning. However it is recognised that there may be broader benefits to parents and children. The water safety community needs to further investigate the potential effects of water familiarisation for children under five, parents and on safe behaviours.

Further research is also needed to determine the age where water familiarisation ceases to be beneficial and teaching children water safety and swimming skills should commence.

#### **Tertiary Prevention Skills**

Evidence supports the teaching of tertiary prevention skills such as cardio-pulmonary resuscitation (CPR) to parents to increase survival outcomes of drowning in children <sup>10</sup>. Parents are often first on the scene in these drowning cases and CPR, particularly the lifesaving skill of rescue breathing, has been shown to save lives <sup>11</sup>. The AWSC calls for compulsory CPR training for all parents of children under five.

#### **Public Awareness Campaigns**

The AWSC supports public awareness strategies such as Royal Life Saving's Keep Watch Program which advocates key areas of action, including swimming pool fencing, adult supervision, water familiarisation and CPR skills. Similar campaigns are conducted across many jurisdictions and by various agencies. There is a pressing need to ensure consistency and rigor in drowning prevention, as well as the careful targeting and evaluation of programs to ensure effectiveness.

**Newspaper Headlines Highlighting the Issues of Child Drowning** 

NSW: Near-drowned toddler fights for life in state's north

## TODDLER DROWNS IN UNFENCED POND

#### Mothers learn child first aid

NSW: TODDLER REVIVED AFTER NEAR DROWNING IN SPA

## Brain Damage Fears Held For Toddler

# **Parents Keep Watch**

# Reduce Alcohol Related Drowning Deaths, Particularly in Men Aged 18-34



#### **Key Objectives and Performance Indicators**

- 2.1 Create and implement a national alcohol and drowning reduction strategy
  - Alcohol and drowning reduction strategy is developed and is being implemented nationally
- 2.2 Investigate the role of alcohol in drowning, including social and cultural factors, and develop programs that aim to reduce drowning
  - A range of alcohol and drowning themes are researched and contribute to the design, development and evaluation of interventions in this area
- 2.3 Collaborate with recreational boating and fishing groups, alcohol related advocacy groups and government to build effective policy and interventions in this area.
  - Strategies are implemented that encourage collaboration among multiple stakeholders and result in effective policy and interventions

#### **Background**

Males are over represented in drowning statistics across the globe. In Australia, our love of aquatic recreational pursuits and the consumption of alcohol in the context of recreation lead to an increased risk of drowning and a decreased ability to respond to the associated hazards.

Of the 172 drowning deaths in men aged 18-34 years in the three year period from 2004-05 to 2006-07, alcohol or drugs were detected in 35% of cases. In 46% of cases the presence of alcohol or drugs was unknown <sup>4</sup> supporting the call for improvements in data collection to establish the true picture of alcohol related drowning deaths. Common locations where men drowned were rivers, beaches and oceans (Figure 6).

#### **Impaired Judgment**

Alcohol consumption is known to impair balance and coordination, judgment and cognition, thus placing the individual at greater risk of drowning. This effect is magnified when the person in question is skippering a vessel, supervising children or swimming alone <sup>12 13</sup>.

#### **Evidence to Support the Link**

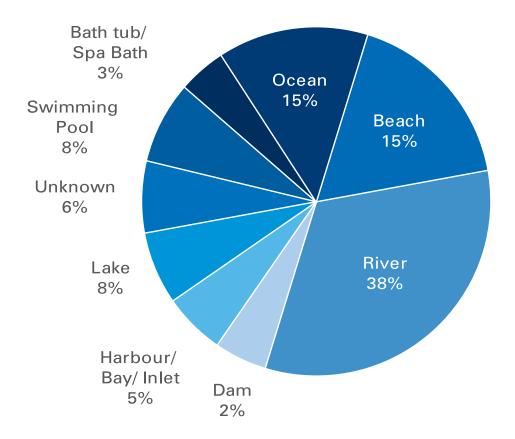
There is strong evidence that alcohol consumption significantly increases the likelihood of immersions resulting in drowning during aquatic activities <sup>14</sup>. One study found that alcohol contributed to approximately 30% of drowning deaths associated with recreational aquatic activity and to approximately 35% of recreational boating drowning deaths <sup>15</sup>.

#### **Blood Alcohol Levels**

Legislation prescribing maximum blood alcohol levels for recreational boat operators, coupled with random breath testing, logically have a drowning prevention impact although this impact requires further research.

Further research is required, including investigation of health interventions which target men and the consumption of alcohol in proximity to water. Gaps in our knowledge regarding effective strategies to reach this cohort must be filled, and key questions such as the role of community lifesaving education in preventing drowning in men must be answered.

**Figure 6**: Location of drowning deaths, males 18-34 years, alcohol or drug present, Australia, 2004-05 to 2006-07 (n=61)



## MALES 18-34 AND ALCOHOL -National Binge Drinking Strategy & National Alcohol Strategy

The health and social impacts of excessive consumption of alcohol and its broader effects on families and communities have been identified by the Rudd government's National Binge Drinking Strategy. The strategy focuses on high risk activities and promoting greater responsibility among young people for their behaviour. In total, \$53.5 million has been committed to combat this issue.

Just as there are known health and safety risks associated with excessive consumption of alcohol, so too are there risks associated with consuming alcohol in a recreational context. Alcohol has been found to lead to an increased risk of drowning and aquatic injury, and the effects of alcohol are magnified when in, on, or around the water. The National Alcohol Strategy 2006-09 also identifies the health impacts of alcohol (including drowning) as one of the four priority areas and aims to identify and minimise social harms (such as drowning) for both the drinker and those around them.

The binge drinking strategy needs to go further in addressing the effects of excessive alcohol consumption on the Australian population. Reducing the role of drugs and alcohol in aquatic based activity will go a long way to addressing high risk behaviours and improving responsibility among those that engage in risky behaviours.

AWSC research has identified males aged 18-34 as over represented in drowning statistics particularly where alcohol or drugs were involved. A comprehensive alcohol and drowning strategy may further improve the likely impact of the National Strategies and address the high number of males drowning due to alcohol in the 18-34 years age group.

Source: Prime Minister of Australia. National Binge Drinking Strategy Media Release. 2008 cited; Available from: http://www.pm.gov.au/media/Release/2008/media\_release\_0126.cfm
Ministerial Council on Drug Strategy, National Alcohol Strategy 2006-2009. 2006,
Ministerial Council on Drug Strategy: Canberra

# Reduce Drowning Deaths in Older People



#### **Key Objectives and Performance Indicators**

- 3.1 Create and implement a national public awareness campaign targeting drowning prevention strategies for older people
  - · Evidence based older person drowning prevention campaign is implemented and evaluated
- 3.2 Create or strengthen drowning prevention and healthy activity based programs targeting older people
  - · Availability and participation in programs focusing on healthy activity is measured and increased
- 3.3 Implement strategies that foster more inclusive aquatic venues and associated workforces to meet the growing needs of older people
  - Industry and workforce development programs are implemented and monitored

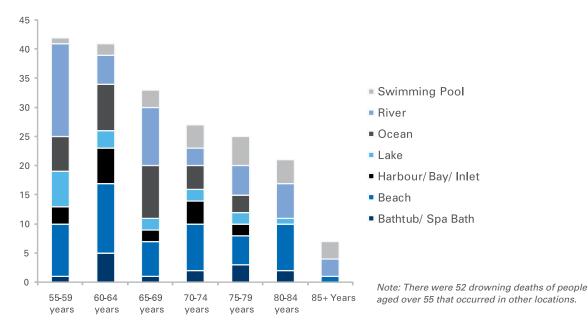
#### **Background**

It is well documented that Australia's population is ageing <sup>16</sup> and the ABS estimates that by 2020 there will be between 7.2 and 7.4 million Australians over the age of 55 years. Although there will be a smaller increase within the three year timeframe of this Strategy, work must commence now in order to build preventative skills and awareness for this future shift in Australia's population.

Research has identified that in the three year period between 2004-05 and 2006-07, a total of 248 people over the age of 55 died due to drowning in Australia <sup>4</sup>.

This makes this age group the second leading life stage in terms of drowning death. Common locations where older victims drowned included the beach (20%), river (19%) and ocean (12%) (Figure 7). Common activities performed immediately prior to drowning included swimming, paddling or wading in water (18%), undertaking activities on a water craft (15%) and walking or recreating near water (8%).

Figure 7: Drowning deaths by age and common location for people aged 55 years and over, Australia 2004-05 to 2006-07 (n=196)



#### **Risk Factors**

A Royal Life Saving report into the aquatic safety of older people <sup>17</sup> identified a range of factors including alcohol, drugs, mental health and other medical events which contribute to an increased risk of drowning in this life stage.

#### **Drowning Prevention Measures**

Drowning prevention measures must be developed and implemented for older people that consider the following factors;

- Increasing numbers living outside of residential care
- Diversity in language, culture, skills and life experience
- A third of the population aged over 55 years live outside of major cities
- Changes in income and the impact of this on recreation, location, mobility
- Working longer and/or contributing to community via volunteer pathways
- Role of older people, particularly grandparents, as carers of children
- · Increased life expectancy
- Use of medication(s)

Programs in this area are likely to have a duality of purpose by aiming to reduce drowning and increase health and well-being. Aquatic skill and fitness based activities may also be useful in fall prevention, increasing social inclusion and promoting strong community engagement among people over 55.

#### **Ageing Friendly Infrastructure**

There is some evidence of the need for further investigation into infrastructure management and development related to ageing friendly aquatic recreational facilities and services provided by public, private and local government sectors.

# THE GREY MEDALLION – Life Saving Skills for Over 55's

The Royal Life Saving Grey Medallion program aims to promote healthy, active and safe aquatic lifestyles in older Australians. Given Australia's ageing population and the increase in the number of older Australians moving to coastal locations for a 'sea change', water safety education and skills development in the older generation are important drowning prevention measures.

The Royal Life Saving Grey Medallion program aims to reduce drowning deaths in older Australians through achievements in four distinct areas:

- 1. Water Safety Knowledge
- 2. Resuscitation and Emergency Care
- 3. Aquatic Exercise
- 4. Personal Survival and Lifesaving Skills

Source: Grey Medallion Program Brochure, Royal Life Saving Society Australia: Sydney



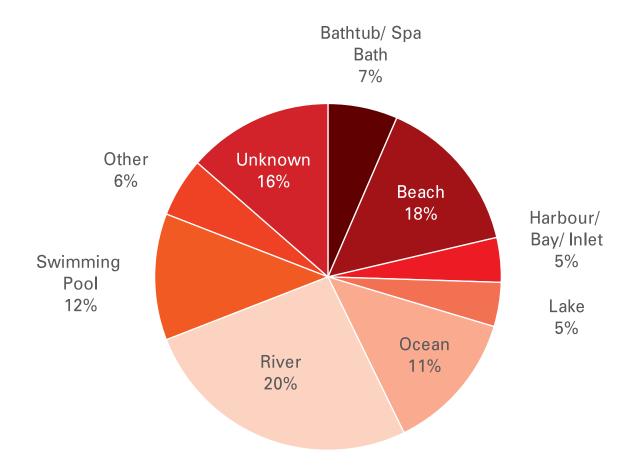


# Address High Risk Locations

The second key driver of the Australian Water Safety Strategy is the consideration of high risk drowning locations. An analysis of drowning data results in the identification of three key locations resulting in high rates of drowning; rural and remote locations, surf beaches and backyard swimming pools.

These locations account for 43% of drowning deaths. Reductions in the vicinity of 15% over the next three years will be required in order to achieve a 50% reduction in drowning deaths in high risk locations by 2020.

Figure 8 Location of drowning death, Australia 2004-05-2006-07 (N=874)



Note: 20% of all drowning deaths for the three year period from 2004-05 to 2006-07 occurred in a river. However 26% of these drowning deaths occurred in areas deemed rural and remote (Goal 4). The authors of this report recommend that further research is conducted into river drowning deaths.

# Reduce Rural and Remote Drowning Deaths



#### **Key Objectives and Performance Indicators**

- 4.1 Develop and implement a national rural and remote water safety strategy
  - A national rural and remote water safety strategy has been developed and is being implemented
- 4.2 Increase access to tailored water safety programs for people living in rural and remote areas
  - Rural and remote access to programs is being tracked and an increase in availability is evident
- 4.3 Address aquatic education instructor shortages in rural and remote areas
  - Shortages of aquatic education instructors in rural and remote areas have been addressed and are being monitored

#### **Defining Rural Areas**

Rural and remote areas of Australia include those areas considered outer regional, remote and very remote. A rural area is generally classified as having very restricted accessibility of goods, services and opportunities for social interaction <sup>18</sup>.

#### **Background**

Research has found that for the three year period from 2004-05 to 2006-07 there were 196 drowning deaths in areas of Australia deemed to be outer regional, remote and very remote<sup>4</sup>. This represented a rate of 4.5 drowning deaths per 100,000 males compared to a rate of 1.7 per 100,000 males living in major cities and inner regional areas; and 1.0 per 100,000 females compared to a rate of 0.6 per 100,000 females living in major cities and inner regional areas.

Rivers were the most common locations for drowning deaths in rural and remote Australia, with 51 deaths over the 3 year period (26%). This was followed by drowning deaths in the ocean (17%) and the beach (13%) <sup>4</sup> (Figure 9).

#### Hazards and Risks

Residents of rural and remote Australia are exposed to and use a range of water bodies. There is reduced accessibility to patrolled beaches and swimming pools. Agricultural systems such as irrigation channels, dams, pumps and locks pose increased risk to farm workers and young children.

Research identified that rivers were regularly used for recreational purposes by rural residents and hazards such as submerged rocks and logs, variable water depths and moving banks are often present <sup>19</sup>.

Figure 9: Rural and remote drowning deaths by location 2004-05 to 2006-07 (N=196)

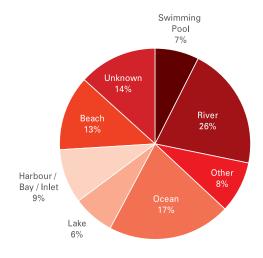
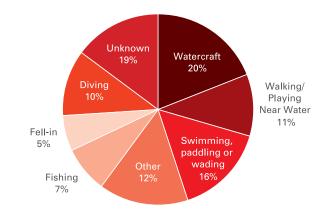


Figure 10: Rural and remote drowning deaths by activity 2004-05 to 2006-07 (N=196)



A report into rural and remote water safety found that large numbers of rural residents drown at beaches and coastal locations, often during annual seaside holidays <sup>20</sup>.

Over the period 2004-05 to 2006-07, using watercraft was the most common activity undertaken in rural and remote areas immediately prior to drowning (39 drowning deaths or 20%). This was followed by swimming, paddling or wading (16%) and walking or playing near water (11%) <sup>4</sup> (Figure 10).

As research has found that people are predominately drowning where they live, water safety information and programs need to be tailored to the different areas within rural and remote Australia.

#### **Rural Swimming and Water Safety Instructors**

A report addressing access to rural and remote aquatic education instructors found that there is limited access to AUSTSWIM trained instructors. This compounds problems associated with limited access to supervised aquatic recreational facilities <sup>21</sup>. Increased access to qualified instructors and programs must be facilitated to encourage rural residents to develop skills in swimming and water safety instruction.

#### **Rural Prevention Messages**

Respondents to a survey conducted by Franklin and Morris investigating water safety in rural and remote locations believed supervision, home pool fencing and swimming lessons would be effective drowning prevention measures in rural and remote areas <sup>22</sup>. This report found that safe play areas, fencing, swimming lessons and education were valuable drowning prevention measures for dams, weirs and effluent ponds, and that fencing, supervision, infant aquatics, resuscitation and education were vital measures for private swimming pools.

#### **Community Education Programs**

There are numerous examples of education programs targeting rural residents. The Surf Life Saving Australia (SLSA) Beach to Bush program aims to familiarise rural residents with beach risks and provide safety information. The program reaches 35,000 children per year. Farmsafe Australia promotes Safe Play Areas on farms and rural properties.

#### **Indigenous Communities**

Rural and remote locations may have a higher proportion of Aboriginal residents. Community education programs need to account for cultural sensitivities. Rural and remote indigenous communities may also be participants to Shared Responsibility Agreements (SRAs) with government. These SRAs must reinforce the social, health and economic benefits of a range of sport, recreation and drowning prevention activities.

#### **Rivers**

The environmental characteristics of rivers vary greatly as do the patterns of usage. Environmental characteristics influence hazards such as: crumbling banks and shifting river beds; strong or unpredictable currents; submerged hazards; increased turbidity and low visibility; and variable water depths. Recreational activities (eg swimming, boating, fishing, using watercraft) increase people's exposure to hazards and can result in unpredictable situations. Further investigation is required by the water safety community to ensure effective river drowning prevention strategies are developed.

# RURAL AND REMOTE AUSTRALIA – Dam Drowning Deaths

Recent media reports have highlighted the risks of dams, with a number of drowning deaths occurring in dams in rural and regional areas of Australia. Dams have inherent hazards such as cold and murky water, steep and often slippery banks, and submerged objects including pumps and locks, among others.

A recent double drowning case of a seven year old and an eight year old child who were both 'good swimmers' highlights the importance of constant supervision of children in, on, or around the water, regardless of swimming ability. Establishing safe play areas on farms is also an important drowning prevention measure for young children.

Source: Murphy, J., S. Molloy, and G. Waters, Siblings dead in dam accident, in Brisbane Times. 2007: Brisbane

# Reduce Surf Beach Drowning Deaths



#### **Key Objectives and Performance Indicators**

- 5.1 Identify non-patrolled surf beaches with high drowning rates and implement risk reduction strategies
  - A comprehensive surf beach black spot and risk assesment program is developed and implemented
- 5.2 Develop and implement a national rip awareness program
  - A national rip awareness program is developed, implemented and its effectiveness in reducing drowning is measured
- 5.3 Develop and implement interventions targeted at populations at high risk of surf beach drowning
  - Interventions targeting high risk populations are being implemented and evaluated
- **5.4** Expansion of surf lifesaving patrolling through improving technology and services
  - Utilisation of more advanced equipment, information technology and research in surf lifesaving practice

#### **Surf Beaches**

The coastal regions of Australia continue to have the highest population density in the country. Australian Bureau of Statistics most recently available Census-based research shows that the rate of growth in coastal local government authorities (LGAs) in the year to June 2004 was 60% higher than the national average Australiawide growth rate. These growth areas are centred around north-west Western Australia, the far North and far South Coast of New South Wales, and along the Pacific coastline of Queensland.

As a consequence, surf beaches experience high rates of drowning and this must be addressed in order for the AWSC to reduce drowning markedly. Only about 400 of Australia's 11,011 beaches on 35,877 km of coastline are patrolled by lifeguard/lifesaving services <sup>23</sup> and each have varying hazards and associated risk ratings.

The increasing non-metropolitan coastal population brings with it further challenges for these scarce resources. It exerts extra pressure on community infrastructure, including aquatic facilities, and exposes gaps or inadequacies in existing community groups such as lifesaving clubs.

Further to natural population growth and relocation, our beaches receive over 55 million domestic and international visitors each year. This brings with it additional challenges such as language barriers and cultural differences.

### Surf Beach Drowning Points of Interest

- 157 people died due to drowning at surf beaches around Australia in the last 3 years
- Males accounted for 84% of drowning deaths
- 64% of coastal drowning deaths were aged 25-64 years
- 31% of people drowned less than 1km from a patrolled area, 29% were between 1km and 5km away, 39% were more than 5km away
- 41% of drowning deaths occurred over the 2 days of a weekend
- 50% of those who drowned at surf beaches were swimming or wading at the time of death

#### **Expansion of Services**

To address these issues, improvement and more effective patrolling methods of existing services needs to be achieved. This can be done through increasing lifesaving/lifeguard services and the use of more advanced equipment, information technology and research. An example of this is the use of webcam monitoring systems that are now in development and the deployment of support operations (such as rescue watercraft (RWCs)) to unpatrolled locations.

#### **Drowning Deaths**

There have been 157 drowning deaths at surf beaches in Australia in the last 3 years. The number of people drowning at surf beaches has ranged from 44 to 58 per year, averaging 52 surf beach drowning deaths per annum. Approximately 2/3 of coastal drowning deaths occur in close proximity to surf beaches. Swimming/wading is the most common activity immediately prior to drowning. Other activities include surfing, fishing and snorkelling.

More than 50% of drowning deaths occur outside normal patrolling times, whether outside of normal patrolling season or at a time of day before or after a lifeguard/lifesaving service is on active duty. More than 80% of coastal drowning deaths involve males <sup>24</sup>.

#### **Swim Between the Flags**

There is strong evidence that swimming between the flags at patrolled beaches reduces the risk of drowning <sup>25</sup>. However, a recent report identified that more than 42% of people surveyed had swum outside of the red and yellow flags at some point during the year. This points to the need for further surf safety education to increase the number of people swimming in patrolled areas.

#### **Unpatrolled Surf Beaches**

Increased coastal migration, often to areas without adequate public safety infrastructure and services, is placing a greater number of people at risk of drowning. With only 4% of Australian beaches patrolled, there is a need to expand our reach or rethink lifeguard service provision.

#### **Drowning Black Spots**

A black spot refers to any area with a high concentration of coastal and ocean drowning combined with a likely probability of these recurring. It shows an assessment of lifesaving resources and population trends in these areas is required to develop strategies aimed at reducing drowning and incidents and removing the black spots.

The SLSA Total Service Plan 2009 – 2011 will examine these areas along with potential black spots and recommend national, state and local strategies to reduce coastal area drowning deaths.

#### **Rip Safety**

Rips aka rip currents continue to account for a high proportion of swimming and wading drowning. A rip is a strong current running out to sea and usually occurs where a channel forms between the shore and a sandbar. This creates a dragging effect and the larger the surf conditions, the stronger the rip.

#### **Marine Stingers**

Australia's marine and estuarine environment is home to many interesting animals including some harmful jellyfish collectively known as marine stingers. Marine stingers can cause discomfort (and some tropical species can be lethal), however they are easy to avoid. Residents of the top end of Queensland, the Northern Territory and Western Australia are particularly at risk of marine stingers. Work is required to develop, implement and evaluate a marine stingers awareness campaign.

# TELSTRA 'BEACH TO BUSH' – A Joint Initiative

With the assistance of Telstra, Surf Life Saving Australia has developed the 'Beach To Bush' program aimed at primary school students in rural areas Australia wide. Statistics reveal that beach users who reside over 50km from the beach represent a significant proportion of drowning deaths every year.

Using experienced and qualified Lifesavers a short interactive session is delivered using a number of resources such as beach signs, safety flags and rescue boards. Key messages focus primarily on beach safety including 'Swim between the F-L-A-G-S' and Rip safety and also touches on general aquatic safety skills to ensure children are safer in their own backyards.

To date the 'Beach To Bush' program has travelled more than 100,000 kilometres and reached about 135,000 students and teachers in over 1,000 schools.

Source: Surf Life Saving Australia. Telstra Beach to Bush. 2008 cited; Available from: http://www.slsa.com.au/default.aspx?s=beachtobush

# Reduce Drowning Deaths in Home Swimming Pools



#### **Key Objectives and Performance Indicators**

- 6.1 Create or strengthen systems that promote, monitor and enforce four sided home pool fencing
  - Promotion, monitoring and enforcement; programs are implemented and evaluated across jurisdictions in partnership with water safety agencies
- 6.2 Establish a mechanism that allows the home pool industry and local government to support further research into drowning prevention strategies
  - Home pool industry has been engaged in establishing and undertaking drowning prevention research
- 6.3 Establish a system where regular maintenance of home swimming pool fences, gates and latches is undertaken
  - Maintenance of home swimming pool fences, gates and latches are regularly conducted on an ongoing basis across all home swimming pools in Australia.

#### **Background**

Home swimming pool drowning deaths represented 12% of all drowning deaths for the three year period between 2004-05 and 2006-07 as identified by research by Royal Life Saving <sup>4</sup>.

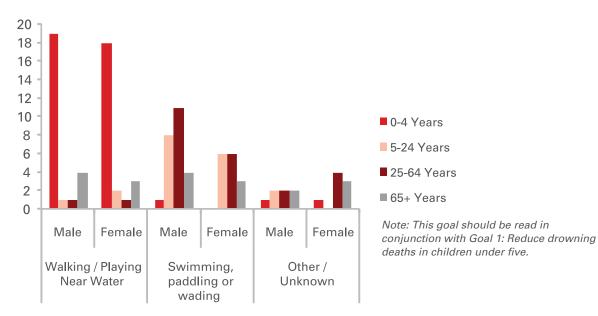
#### **Home Pool Drowning Statistics**

Home swimming pools remain the most common location for drowning death and injury in children under five. Over the period 2004-05 to 2006-07, 40 children under five died from drowning in a home swimming pool <sup>4</sup>. Of these, 37 deaths occurred while walking or playing near the water. Swimming, paddling or wading activities resulted in the highest number of home swimming pool drowning deaths in adults aged 25-64 years. (Figure 11)

#### **Home Pool Fencing**

It has been found that fencing which completely encloses all sides of a swimming pool (with correctly operating self-latching gates) and isolates it from the home is effective in preventing drowning of young children <sup>3</sup>. However, given the substantial number of deaths from drowning that occur among older children and adults whilst participating in aquatic activity in home swimming pools, further investigation is needed into wider preventative measures.

**Figure 11:** Home swimming pools drowning deaths by age group, sex and activity, 2004-05 to 2006-07, Australia (N=104)



#### **AS1926 – Swimming Pool Safety**

Australian Standards (AS) are not legislative documents, however they are referenced in State and Territory legislation and can be used in a court of law as evidence. AS1926.1 – 2007 Swimming pool safety Part 1: Safety barriers for swimming pools and AS1926.2 – 2007 Swimming pool safety Part 2: Location of safety barriers for swimming pools, are both in place to provide best practice information on home swimming pool fencing. The AWSC supports the use of AS1926.1 – 2007 and AS1926.2 – 2007 by all States and Territories to help prevent toddler drowning deaths.

#### **National Consistency**

The water safety community advocates for national consistency in home swimming pool fencing legislation as a means of reducing drowning deaths, particularly within the under 5 years age group. Pool barriers are mandatory in all areas of Australia and uniform standards apply for construction of new barriers. However, the regulation of home pool fencing varies within and between jurisdictions.

National consistency in legislation has been argued as being a means of improving the likelihood of compliance with legislation.

#### **Best Practice Regulation**

Australian Standards should continue to maximise the likelihood of compliance. To ensure Australian Standards are as effective as possible in improving health and safety, the Standards regulatory framework in Australia should minimise variations in the application of Standards as a means of simplifying regulation and improving cost-effectiveness. Regulatory systems should also be simplified as a means of improving their effectiveness.

### Toddler Drowning is Preventable

Recent toddler drowning deaths in home swimming pools highlight the need to ensure the pool is fenced, the fence is in working order and children are supervised when in, on, or around the water. Prevention of drowning deaths of toddlers in backyard swimming pools is possible through a combination of restricting the child's access to water (fencing the pool and having a self-closing, self-latching gate), and supervision. The pool fence and gate need to be in working order (ie no gaps under the fence, all the fence palings in place, the gate is closed and when open, returns to the closed position and latches) for it to be effective.

A survey conducted by the Sunshine Coast regional council aimed to identify community knowledge on maintaining an effective barrier around backyard swimming pools. Of the 450 returned surveys, 50% of respondents stated that children under the age of five had visited their property and 60% indicated there was a pool fence around their entire pool. The survey found widespread support for mandatory swimming pool fencing, with 74% of respondents in favour of swimming pool fencing being required by law. The survey also found that more emphasis needs to be placed on the promotion of compliant fencing around swimming pools, which may be achieved through water safety education and awareness campaigns.

Sources: Adelaide Advertiser (2007) Mother finds son dead in pool, 27 December, 2007 pg 2

Hills News (2008) Swimming pool fencing for safety, 5 February, 2008 pg 3

Royal Life Saving Society (2008) Media release: Royal Life Saving reminds parents to be vigilant and Keep Watch, 27 February, 2008, Sydney.

Thompson DC, Rivara FP. (2001) Pool fencing for preventing drowning in children (Cochrane Review). Issue 2 ed: The Cochrane Library.

Ridgeway, T. (2008). Swimming Pool Fencing Survey Statistics. 2008 Australian Water Safety Conference: Program and Proceedings May 2008, Sydney.











# Meet Key Drowning Challenges

Meeting key drowning challenges will require a range of different drowning prevention strategies dependent upon the background of the participant and the activities being undertaken prior to drowning.

This section highlights the need to consider people's cultural backgrounds and life experiences when developing these strategies.

Specifically this section looks at developing drowning prevention strategies for Indigenous people, people from culturally and linguistically diverse (CALD) communities, international students and tourists (both domestic and international).

Extreme weather conditions, as evidenced by flooding and the grounding of a super-tanker in Newcastle in 2007, highlight some of the effects of climate change.

This section seeks not to repeat those issues identified previously, but to identify those drowning challenges which will require a different approach, as well as those where there is currently a scarcity of information available about effective strategies to prevent drowning.

Aquatic recreational activities such as boating and other watercraft activity; fishing (particularly rock fishing); scuba diving and snorkelling present drowning risks and increased exposure to hazards. Drowning deaths across these categories represented 26% of all drowning deaths.

Community safety has been a long standing aim of lifesaving agencies. In accordance with this aim, the goals within this priority area specifically address the need to reduce drowning deaths that can be attributed to:

- High risk recreational activities such as using recreational watercraft, recreational fishing and scuba diving and snorkelling
- High risk populations such as Indigenous people, people from culturally and linguistically diverse backgrounds, tourists (both domestic and international) and international students
- The impact of climate change and extreme weather





#### **Key Objectives and Performance Indicators**

- 7.1 Increase access to drowning prevention education and skills for recreational watercraft users
  - Evidence based programs have been developed, are being implemented, monitored and evaluated
- 7.2 Advocate for national consistency in policy, legislation and best practice in recreational boating safety
  - Advocacy strategies have been implemented and policy, legislation and best practice established
- 7.3 Increase access to drowning prevention education and skills for recreational fishers
  - Evidence based programs have been developed, are being implemented, monitored and evaluated
- 7.4 Advocate for the development of a National Code of Practice for recreational scuba divers, snorkellers and dive professionals
  - A National Code of Practice that incorporates the relevant AS has been achieved through a process of consultation and the existence of the Code has been communicated to the relevant stakeholders

#### **Recreational Watercraft**

Recreational watercraft includes activities such as; boating, sailing, personal watercraft (PWC), canoeing, kayaking and surfing, and are a popular element of the Australian way of life. The extensive range of Australian waterways means that recreational watercraft related drowning deaths occur in almost all types of water bodies and often include multiple incidents.

Research conducted by the NSW Waterways Authority indicated that boating incidents are commonly attributable to environmental factors such as tides, river flows, poor visibility, rough seas, adverse weather, on coastal bars and boating at night. These heightened risk factors are difficult to eliminate. Preventative strategies such as the use of personal flotation devices (PFDs), legislation, watercraft user education and fostering communication strategies that link weather forecast announcements to drowning risk must all be explored by AWSC, governments and the Australian community.

#### **Recreational Fishing**

Recreational fishing includes fishing on inland waterways, from recreational boats and from coastal rock platforms. Coastal rock fishing is of greatest concern with an estimated 60,000 anglers fishing from rock platforms every year. This high risk activity has been described by the NSW Coroner in 1993 as having the highest fatality of any sport in the country.

In 2003 the NSW Water Safety Taskforce suggested four broad strategies to address drowning deaths in this area: improving knowledge about the risks of rock fishing; reducing risk taking behaviour through education and taking personal responsibility; promoting safe rock fishing, including the use of the 13 key messages identified; and increasing the ability of rock fishers to stay afloat <sup>26</sup>.

The link between fishing and recreational boating drowning deaths must be investigated, with many boating deaths occurring during or in transit to a fishing activity. This makes both boaters and anglers key targets for prevention strategies.

#### **Scuba Diving and Snorkelling**

Australia's costal environment and weather provide excellent conditions for diving and snorkelling. Diving and snorkelling continue to grow in popularity, with many people visiting Australia for the sole purpose of undertaking these activities. There are very few studies in Australia exploring the circumstances of diving or snorkelling deaths.

Over the period 1987–1996 there were 60 deaths due to snorkelling activities. Of those who drowned about one-third were inexperienced or were novices (38%), and one third were tourists (37%) <sup>27</sup>.

## DROWNING CHALLENGES – An Overview of the Recreational Scuba Diving and Snorkelling Safety in Australia Issues Paper

In February 2008 Royal Life Saving published an issues paper in partnership with the Divers Alert Network Asia Pacific. This issues paper, entitled 'Recreational Scuba Diving and Snorkelling Safety in Australia', identified that the number of drowning deaths of scuba divers and snorkellers has increased significantly in the last 30 years. The mortality rate among Australian scuba divers has been estimated to be 0.57 per 100,000 dives. If reliable, this estimate compares favourably with scuba diving mortality rates in other countries.

This paper found that there are a number of Standards, Regulations and Codes of Practice that apply to recreational diving and snorkelling in Australia. These include International and Australian Standards regulating training and equipment of divers. At a State and Territory level there are Occupational Health and Safety (OHS) regulations that relate to diving, a Code of Practice in QLD and WA, and a voluntary dive industry code of practice in Victoria.

In order to improve diving safety further, some of the recommendations from this paper are:

- Maintain existing Australian Standards for the training of recreational scuba divers and dive professionals, rather than adopt the less stringent ISO or RSTC Standards.
- Regulate to restrict the purchase of diving equipment which carries identified risks over and above those associated with normal recreational scuba equipment to those who have evidence of appropriate training
- Provide support for programs designed to educate divers about the importance of maintaining diving health and fitness and the need for appropriate periodic diving medical reassessment.
- Should the government of any State or Territory recognise the need to operate at a higher standard, then the National Code of Practice could be strengthened or resources provided to monitor or enforce compliance on similar lines taken to the approach in Queensland.

Source: Lippmann, J., Issues Paper. Recreational Scuba Diving and Snorkelling Safety in Australia: An identification, summary and analysis of policies, legislation and standards relevant to recreational scuba diving and snorkelling 2008: Sydney.

# Reduce Drowning Deaths in High Risk Populations



#### **Key Objectives and Performance Indicators**

- 8.1 Create and implement strategies to reduce drowning in Indigenous people
  - A range of strategies aimed at reducing drowning in Indigenous people have been implemented and their effectiveness evaluated
- 8.2 Promote a community development approach to working with culturally and linguistically diverse (CALD) communities including a skill building approach and workforce development
  - Programs targeting high risk populations reflect sound community development approaches
- 8.3 Develop and implement interventions targeted at reducing drowning in tourists and international students
  - Tourist and international student drowning has been addressed through targeted interventions

#### **Background**

Culturally and linguistically diverse (CALD), tourist (both domestic and international), international students and Indigenous groups have been identified by the AWSC as communities at an increased risk of drowning and aquatic injury when compared to the rest of the Australian population.

# Culturally and Linguistically Diverse (CALD) Communities

Building awareness of hazards, risks and the role of secondary and tertiary prevention measures is a significant factor in addressing drowning in high risk populations. Although the situation is improving, lifesaving systems are not as common in developing countries and even some high income countries, meaning that tourists and recently arrived migrants are at a greater risk of drowning due to lower levels of awareness and foundation aquatic skills.

Reaching culturally and linguistically diverse (CALD) communities with strategies to address drowning prevention and water safety is often difficult and these groups are far less likely to access programs via traditional modes. This issue is aggravated by an often heightened risk of drowning or injury due to a lack of knowledge about Australian aquatic conditions <sup>28</sup>.

Participation rates in aquatic education programs are much lower among CALD communities and strategies to address this through community development should be encouraged. This can be beneficial both for achieving a reduction in drowning and in promoting greater social cohesion across Australian communities.

#### **Tourist Drowning**

Tourists, both domestic and international, are often unaware of the hazards and risks that Australian waterways can pose, particularly on surf beaches. Whilst there has been a significant and justifiable focus on coastal and scuba drowning deaths, the issue is not restricted to these waterways and recreational activities <sup>29</sup>.

Additionally, tourist related swimming pool deaths involving very young children continue to be of concern. With increases in domestic tourism and tourists coming from Asia, the AWSC calls on the tourism industry to ensure the implementation of water safety and risk management plans in resorts, hotels and caravan parks. This includes signage, effective barriers and education programs targeting parental supervision in order to reduce drowning incidents.

#### **International Students**

There have been several drowning incidents involving international students, tertiary education being a key area of export growth across all States and Territories. International students differ from tourists as the length and location of their experience in Australia increases the likelihood that they will be exposed to hazardous and unfamiliar aquatic conditions.

A recent coronial inquest into the drowning of four people in NSW found that overseas students are not routinely given water safety information as part of their orientation to living in Australia <sup>30</sup>. A further study found that 77% of international students surveyed did not know what a rip was <sup>31</sup>.

Water Safety education, including the identification of hazards, should be a mandatory part of student orientation, particularly in educational institutions exposed to known local water hazards.

#### **Indigenous Drowning**

Indigenous drowning data indicates that this group is over three times more likely to drown than other Australians. Indigenous males living in rural and remote areas are 1.9 times and females 10.5 times more likely to drown than Indigenous Australians from other areas <sup>32</sup>. Previous National Water Safety Plan's have recommended increased access and availability of facilities, water safety programs and services to Aboriginal and Torres Strait Islanders.

Drowning incidents involving Indigenous people in remote areas, particularly those in the Northern Territory and Queensland, should be addressed with increased access to programs developed in a regionally and culturally sensitive fashion. Programs such as the Northern Territory Remote Pools Program aim to maximise the benefits of swimming pools in some of these communities, and have both a drowning prevention impact as well as providing a basis for social, economic and health benefits.

#### **Prevention Strategies and Programs**

Recognised primary prevention strategies which apply to all communities include advocating key issues, promoting supportive environments, strengthening community action and building personal skills. Water safety agencies play a key role in targeting and developing these strategies, as do local governments and managers of aquatic recreational facilities.

There have been numerous examples of water safety programs targeted at culturally identifiable groups. The SLSA 'On the Same Wave Program' as well as the Royal Life Saving's Muslim Aquatic Recreation programs (Swim for Life and Water Connections) have demonstrated strong water safety and community outcomes.

Translation of programs and resources into languages other than English must be encouraged, although this forms only part of a targeted approach. Increasing the quality and accessibility of local swimming pools is important in increasing employment opportunities and in reaping the known health benefits of aquatic activity in high risk populations

#### INDIGENOUS DROWNING -

### An Overview of Facilities, Programs and Services for Water Safety for Aboriginal and Torres Strait Islanders in Rural and Remote Australia

Aboriginal and Torres Strait Islander people in remote areas drown at a rate disproportionate to that of the general Australian population. In 2008, RLSSA published a paper on the issues in water safety for remote Aboriginal and Torres Strait Islander communities, funded by the Australian Government Department of Health and Ageing. The report found that where a community development approach is adopted to ensure that swimming pool facilities are utilised to their greatest capacity as a community resource and asset, outcomes are beneficial for more than water safety alone. Community pools also produce a wealth of wider health, social, economic and educational benefits for communities.

The issues paper recommends:

- All remote Aboriginal and Torres Strait Islander communities have access to swimming pool facilities, either in their community, a neighbouring community or in a regional centre.
- Water safety organisations work in partnership with remote Aboriginal and Torres Strait Islander communities to develop relevant and culturally appropriate programs. Whole of community support is essential to the success of these programs.
- Local community members are provided with opportunities to develop skills in aquatics, pool management and pool maintenance to ensure communities are self-sufficient in operating and maintaining swimming pool facilities and associated programs.
- Targeted Aboriginal and Torres Strait Islander water safety programs are incorporated into health promotion and education strategies that address broader community-identified priorities.

Source: Rubin, T., et al., Issues Paper. Facilities, Programs and Services for the Water Safety of Aboriginal and Torres Strait Islanders in Rural and Remote Australia. 2008: Sydney.





#### **Key Objectives and Performance Indicators**

- 9.1 Forge greater links and recognition of drowning prevention in national, regional and community level Disaster Mitigation Programs
  - Drowning and drowning prevention strategies have been incorporated into national, regional and local level Disaster Mitigation Programs
- 9.2 Implement strategies that raise community awareness and skills that prevent drowning in situations of flooding
  - Community awareness programs including increased signage have been implemented
- 9.3 Collaborate with government and emergency response agencies to strengthen skills and awareness of aquatic rescue strategies
  - Collaborative relationships have been established and strategies being implemented to strengthen aquatic rescue skills at an agency and community level

#### **Background**

Scientific consensus supports the view that the Australian climate is changing and the forecasted impacts of this change must not be ignored. Impacts include increasingly variable weather, heavy precipitation events, flooding, more intense storms, increased cyclonic activity and prolonged heat waves. The effects of climate change will vary across geographic regions and populations.

Whilst the impact of climate change on rates of drowning and drowning death is difficult to forecast there are some proactive strategies that AWSC advocates to mitigate effects of this long term risk.

Figure 12: Effects of Climate Change and Extreme Weather

Weather event	Impact on drowning hazard	People/regions most likely to be affected
Extreme weather - cyclones	Localised flooding Variable water conditions Storm surges	Northern Australia Coastal regions Remote coastal communities
Extreme weather - rain	Flash flooding Storm water Impact on community infrastructure including housing and roadways Change in water course	Coastal areas Low lying regions inland
Extreme weather - drought	Limited availability of water can force closure to recreational waterways and swimming pools. Changes to natural water courses Water collection methods that can pose a hazard	Rural and remote inland areas
Heat waves	Increased frequency and distribution of visitation at amenities including beaches, swimming pools and waterways.	The impact of heat waves has traditionally been felt along the southern states.
Sea levels rise	Pressure on existing coastal infrastructure. Hide previously visible hazards	Coastal areas, low lying inland areas

Changed weather conditions, gradual or sudden, impact upon water conditions and varying natural water flows will induce changes in recreational behaviours. These changes have short and long term impacts for water safety agencies, emergency services and rescue response agencies.

#### **Likely Climatic Events**

The table on page 32 sets out some likely climatic events and their impact across Australia regions and communities (Figure 12).

#### **Hyogo Framework**

It may be valuable to view these strategies with reference to the United Nations International Strategy for Disaster Reduction - Hyogo Framework for Action 2005-15 33) which was developed to reduce deaths as a result of disasters. Titled "Building the Resilience for Nations and Communities to Disasters", the framework sets out five key priorities for action (Figure 13). These areas are addressed below, alongside some suggested areas for action.

#### **Water Rescue Training**

The water rescue training of emergency service workers may be supported by installation of rescue equipment in areas prone to flash flooding as an effective drowning prevention strategy. Community level preparedness and response programs must be facilitated in order to reduce drowning as a result of flash flooding.

#### **Building Codes**

Building codes including road ways, housing and infrastructure should consider the future impact of rising sea levels and increased flooding. Consideration must be given to the future development impact of this change on coastal infrastructure including surf life saving clubs.

Whilst there is still a level of community debate regarding climate change, efforts must be made to improve the scientific evidence base supporting the relationship between extreme weather and drowning. This research must include modelling the impact of changes in exposure and behaviour likely to result from climate change on drowning prevention strategies.

#### **National Vulnerability Assessments**

The Australian Government is working with the States and Territories through the Intergovernmental Coastal Advisory Group (ICAG) to assess Australia's coastal vulnerability to climate change. An early objective is to deliver a "First Pass" national vulnerability assessment of the Australian Coast and priority coastal systems (natural and artificial). This will identify risks and priorities and build foundation capacity towards future, more detailed assessments.

The participation of lifesaving agencies in these assessments is important to ensure human safety is addressed and risk mitigation and preparedness strategies are implemented.

Figure 13: United Nations Hyogo Framework

Hyogo Framework Five Key Priorities	Suggested Actions
1. Making disaster risk reduction a priority.	Greater links between AWSC and water safety advocates and National, state and community level Disaster Mitigation programs
2. Improving risk information and early warning.	Greater links to early warning systems     Signage at flash flood prone waterways
3. Building a culture of safety and resilience.	Community level awareness programs     Community level lifesaving, survival and rescue skill development programs
4. Reducing the risks in key sectors.	<ul> <li>Identification of groups and region at significant risk</li> <li>Strengthen building codes</li> <li>Monitor and/or modify floodway and storm water drains</li> <li>Community education awareness and preparedness</li> </ul>
5. Strengthening preparedness for response.	<ul> <li>Working with disaster response agencies</li> <li>Training emergency service workers in water rescue and response</li> <li>Increase in availability of public rescue equipment</li> </ul>



# Strengthen Drowning Prevention Pillars

Reducing drowning deaths by 50% by 2020 will require a strong, collaborative and evidence based approach across all areas of the Strategy. Previous drowning prevention success has been attributed to a combination of factors including; the development of a community with the foundation skills of swimming and water safety, venues with strong risk management and surveillance systems; dedicated lifesavers, instructors and water safety advocates; collaboration among water safety agencies, government and the community; and continual research and development that has guided our policy and practice.

The drowning prevention pillars underpin previous reductions in the number of drowning deaths. The achievements made in reducing drowning in Australia by the water safety community are support, in and of themselves, for the effectiveness of these pillars. However, these pillars represent areas where maintenance is continually required. Without support for these pillars, the number of drowning deaths occurring in Australia annually may increase again and the momentum gained within this area could be lost.

For the purpose of this Strategy these drowning prevention pillars have been organised into the following areas;

- · Safe venues
- Lifesaving people
  - · Water safety culture
  - Foundation skills
  - Lifesavers, instructors and water safety advocates
- Legislation and Policy
- Collaboration
- Research





#### **Key Objectives and Performance Indicators**

- 10.1 Implement programs that minimise risk in aquatic recreational environments
  - Risk assessment and associated reduction strategies and programs are developed, implemented and the effectiveness is being monitored
- 10.2 Research the role and contribution that safe venues make to drowning prevention and safe healthy communities in Australia
  - A comprehensive research project has been completed and its recommendations are influencing future practice

#### Safe Venues

There are many aquatic locations in Australia that have a range of safety issues and are managed by a variety of organisations.

These venues include over 11,700 beaches, 400 of which are patrolled, over 1200 public swimming pools in metropolitan, regional and rural communities, and a diversity of waterways including rivers, lakes and dams that are used for recreational purposes.

These facilities and venues play a vital role in aquatic skill development, recreation and leisure pursuits, sport and healthy active lifestyles of each community. Aquatic facilities provide employment opportunities for local people and are essential to the social fabric of the community, particularly in rural and remote communities.

#### **Venue Management**

Over the past decade there has been an obvious increase in the level of cooperation between water safety agencies and government to address the issue of aquatic venue safety. With aquatic facilities and locations of all types experiencing dramatically increased patronage it is critical that both risk and liability management issues are addressed through a range of standards, legislation and management strategies.

The continued management of safe venue requires ongoing work to ensure that standards, policies and practices consider the issues of drowning prevention.

In addition to Australian Standards, Codes of Practice and Organisational policy, Royal Life Saving and SLSA publish Guidelines intended to guide safety in swimming pools and coastal waterways.

#### Accreditation

The AWSC recognises the role that qualifications and training programs play in supporting venue safety, particularly by providing entry level pathways into industry positions. Industry based accreditation and ongoing professional development systems are of further significance to drowning prevention. Such systems provide an ongoing basis for currency of skills, competence and learning of best practice techniques.

Industry accreditation systems are vital in swimming and water safety instruction, where the AUSTSWIM award plays this role and in the Pool Lifeguarding context it is the Royal Life Saving Pool Lifeguard Award.

#### **Risk Management**

Risk assessments form an integral part of risk management and should be conducted at all regularly used aquatic locations - beaches, pools, inland swimming holes. Analysis of risk assessment outcomes at individual locations should be conducted using recent advances in technology that have significantly improved access to and affordability of technology. Using the results of the analysis a priority list should be developed and risk mitigation and control measures introduced based on priority evaluation.

# There are several areas of previous National Water Safety Plans that underpin venue safety. These include:

- Uniform identification that meets International Life Saving Federation guidelines of Red and Yellow
- Qualifications that support industry requirement for ongoing professional development including awards such as the Royal Life Saving Pool Lifeguard Award, AUSTSWIM and Bronze Medallion.

#### **Venue Access**

Accessibility of safe, convenient and affordable aquatic recreation venues is vital in providing aquatic education opportunities. The AWSC must research areas of need and lobby relevant authorities, institutions and organisations to ensure ongoing and improved accessibility.

#### **Guidelines for Safe Pool Operation (GSPO)**

The Guidelines for Safe Pool Operation (GSPO) is an example of a venue based risk management tool for improving aquatic health and safety. The GSPO acts as a voluntary guide for operators on the safe operation of swimming facilities through the provision of industry best practice information which assists an operator in satisfying their legislative duties.

The GSPO was established in consultation with industry and other expert personnel and are subject to ongoing review and formal evaluation. The GSPO takes a risk management approach to areas such as: general and technical operations, first aid, facility design, supervision, programs and low patronage pools.

#### **Australian Coastal Public Safety Guidelines**

The Australian Coastal Public Safety Guidelines (the Guidelines) is another example of a venue based risk management tool for improving aquatic health and safety. The Guidelines have been designed to assist coastal and beach managers and operators in providing a safe aquatic environment for all users. The Guidelines draw upon research and best practice and reference relevant national and international guidelines, standards and regulations.

The Coastal Public Safety Guidelines cover topics such as: safer environmental signs, general operations of beaches, coastal lifesaving services, emergency management and coastal tourism safety among others.

# RLSSA NSW Pool Lifeguard Licence

Coronial investigations and subsequent recommendations can provide tools for assisting in achieving drowning prevention and improving health and safety (see also Goal 14 of this Strategy). With respect to venue safety a coronial recommendation in New South Wales (NSW) saw the establishment of an accreditation for pool lifeguards to improve the health and safety of pool patrons.

Administered by RLSSA, the NSW Pool Lifeguard Licence is now the minimum qualification for professional pool lifeguards in NSW and was developed in response to a recommendation from the NSW State Coroner. The Licence ensures that all Pool Lifeguards working in a permanent aquatic facility have the appropriate levels of training and emergency knowledge. Minimum fitness levels for lifeguards have been established and are tested annually.

Source: RLSSA New South Wales (2008) Introduction to Lifeguarding.
Available from http://www.royallifesaving.com.au/www/html/406-lifeguarding-introduction.asp





#### **Key Objectives and Performance Indicators**

- 11.1 Implement strategies that strengthen our Australian culture of water safety
  - Water safety agencies and communities have implemented strategies to strengthen the culture of water safety
- 11.2 Promote water safety and lifesaving education to school aged children
  - Innovative and effective water safety and lifesaving education programs are being delivered to school children
- 11.3 Investigate the effects of survival swimming skills in children and youth
  - A research project investigating national benchmarks in survival swimming skills and its impact has been undertaken
- 11.4 Strengthen the skills, standards and recognition of our paid and volunteer drowning prevention workforce
  - Workforce development strategies have been developed, implemented and evaluated

#### Safe People

Human resources and culture, skills and knowledge at a community level are required to prevent drowning. Considering these, this section outlines areas of water safety culture, foundation skills, and lifesavers, lifeguards, instructors and water safety advocates vital to drowning prevention.

Lifesaving and the work of water safety agencies has always been seen to build significant social capital for the individuals involved and for the broader Australian community. Lifesaving agencies have promoted this through fostering; social responsibility and volunteerism, improved personal and physical health, promoting skill development and education, and contributing to economic performance.

#### **Water Safety Culture**

Water safety is defined as the process of ensuring that people are adequately prepared for living, working and recreating in a diversity of aquatic environments. A water safety culture therefore describes the behaviours and responses which individuals, communities, organisations and governments exhibit in response to drowning risk and hazards.

Australia has had a strong culture of water safety fostered largely by the environmental exposures that come with the geography of our country, as well as by the strong tradition of lifesaving, swimming and water safety organisations.

This culture includes; skills in survival swimming, rescue and resuscitation, volunteering for lifesaving activities and a recognition of the importance of teaching children swimming and survival skills.

Two areas of concern in further developing this important preventative factor are the need to reach new arrivals or those without a long term connection to water safety, and ensuring that the pressures of modern life don't negatively impact on skill development in early life.

#### **Foundation Skills**

Previous AWSC plans have advocated swimming and water safety frameworks targeting aquatic skill development in primary and secondary school. These frameworks prescribed benchmarks or targets to be achieved by school-aged children in the key areas of swimming, water safety and rescue education. Foundation skills are preliminary skills and actions that need to be achieved in order to proceed to higher level skills and actions. Foundation aquatic skills include water safety knowledge, water confidence, survival skills, safe water entry and exit and elementary swimming skills 34.

There is concern regarding falling swimming and water safety achievement levels in children across Australia. Benchmarks are not being met and this requires a focus on foundation skills to provide the basis for aquatic competency.

A survey conducted in the ACT by Kidsafe in 2006 infers a decrease in the level of swimming competence and confidence of children leaving primary school due to a reported decrease in school based aquatic activity. Of the 48 schools surveyed, 16% had ceased all learn-to-swim activities in the previous 12 months. Many other schools did not provide swimming lessons for all years <sup>35</sup>.

Further research is required to establish a benchmarking system for foundation aquatic survival skills across Australia which would provide a basis for targeting campaigns and strategies. Further work is required in order to fully understand the key success factors in the provision of programs developing foundation aquatic skills.

#### **Lifesavers, Instructors and Water Safety Advocates**

Much of the work of water safety agencies is conducted by lifesavers and instructors. These water safety advocates play an essential role in building a water safety culture and preventing drowning. Training standards and ongoing professional development are key components of supporting this workforce.

Figure 14: NWSP 2004-07 Water Safety Education Competency Framework 28

SCHOOL LEVEL	COMPETENCY FRAMEWORK	MINIMUM DEMONSTRATION OF COMPETENCIES	SUCCESS RATES % target population
(I) INFANT AND PRE-SCHOOL	Infant Aquatics section of the National Swimming and Water Safety Framework	Participation in the program	100%
(II) PRIMARY SCHOOL	Personal Aquatic Survival section of the National Swimming and Water Safety Framework  • Competencies to be achieved by the completion of Primary School education	<ul> <li>Equivalent to Swim and Survive Level 4 (and Surf Ed where available)</li> <li>Level 5 Swim and Survive (and Surf Ed where available)</li> <li>Level 6 Swim and Survive (and Surf Ed where available)</li> </ul>	100% 75% 50%
(III) SECONDARY SCHOOL	Life Saving section of the National Water Safety Framework – including exposure to Basic First Aid & Resuscitation Training.  Competencies to be achieved by the completion of Year 10	<ul> <li>Equivalent to RLSSA Bronze Star Dry Rescue, including Resuscitation (and SLSA Surf Survival where available)</li> <li>RLSSA Bronze Star (and SLSA Surf Survival where available)</li> <li>RLSSA/SLSA Bronze Medallion</li> </ul>	100% 75% 50%

# FOUNDATION SKILLS -

# Innocenti Research in East and South Asia (An Overview)

The importance of foundation swimming and water safety skills has been highlighted by a series of research papers produced by the UNICEF Innocenti Research Centre. Previously unrecognised as a major cause of child death, this research found drowning accounts for about half of all child injury deaths in Vietnam, Bangladesh, Thailand, the Philippines and China. Drowning is also identified as a significant cause of death during infancy and is easily preventable. Estimates of child drowning deaths for the Asian region exceed 300,000 deaths annually.

Research identified teaching a child to swim mirrors the effects of immunisation, as it confers life long protection against drowning. Teaching most children to swim can also provide "herd protection" for the non-swimming children as they can be rescued by those that can swim.

The papers identify Bangladesh as an example of the effect of foundation skills on preventing drowning and aquatic related injury. Prevention programs in rural villages have found that drowning before the age of five can be prevented by increasing supervision and decreasing exposure to water and after five by teaching children to swim.

Source: Linnan, M., et al., Child Mortality and Injury in Asia: Policy and Programme Implications in Innocenti Working Paper 2007-07, Special Series on Child Injury No. 4. 2007, UNICEF Innocenti Research





#### **Key Objectives and Performance Indicators**

- 12.1 Develop, implement, advocate and improve policies, legislation and standards related to water safety
  - All relevant water safety policies are identified, summarised and analysed for consistency, and evidence base
  - •Advocacy for improved policy, legislation and standards relevant to water safety is being conducted and its effectiveness is being evaluated.
- 12.2 Research into the role and effectiveness of policies, legislation and standards relevant to water safety
  - Reports on the role of and effectiveness of policies, legislation and standards

#### Background

To prevent people from drowning and improve water safety in Australia there are a number of policies, legislation and standards available. Legislation and policies can and do vary from each State and Territory <sup>36</sup>.

While consistency of legislation and policies are important, the compliance with and enforcement of policy and legislation is critical to their effectiveness. There is a clear need for legislation, policies and standards to draw upon evidence based best practice. Policy agencies must also be reflective and responsive towards the changing evidence base.

Following are some examples of policies, legislation and standards that currently impact positively on water safety;

#### **Pool Fencing Legislation**

A Cochrane review conducted into home pool fencing has found that mandatory pool fencing has been effective in reducing child drowning deaths<sup>3</sup>. Home pool fencing legislation exists in all States and Territories and all have also adopted the agreed national standard for construction of new barriers.

Research in this area has identified that legislation is applied differently in each jurisdiction and it is recommended that consistency in legislation and enforcement is adopted to improve compliance <sup>37</sup>.

# **Boating Legislation and Personal Flotation Devices (PFDs)**

Legislation on Personal Flotation Devices (PFDs) exists in most States and Territories, however the activities requiring PFDs to be worn differ between jurisdictions <sup>38</sup>. There is a legislative duty in most states to wear PFDs when operating personal watercraft. Victorian legislation requires operators of commercial fishing vessels to provide adequate safety equipment on board whilst at sea, including PFDs <sup>39</sup>.

Research has identified that PFDs are an effective water safety measure and are a vital tool for preventing drowning deaths. However research has identified that PFD wear rates are low and it is recommended that legislation be strengthened through more effective enforcement <sup>39</sup>.

#### **Guidelines for Safe Pool Operation (GSPO)**

The Guidelines for Safe Pool Operation (GSPO) are an example of evidence based regulations. Though a set of voluntary guidelines, the GSPO assist an operator in meeting their legislative duties with respect to water safety whilst also representing industry best practice <sup>40</sup>.

The GSPO takes a risk management approach to topics such as general and technical operations, first aid, facility design, supervision, programs and low patronage pools. The GSPO sits in support of water safety policy and legislation.

#### **Australian Standards**

Australian Standards are documents presenting highly technical information on specific topics. Though not legislative documents, Standards may be referenced within legislation and can be used as evidence of an operator not adhering to their legislative requirements.

There are a number of Australian Standards that are relevant to the issue of water safety. AS2416: Design and Application of Water Safety Signs aims to regulate the use of water safety signage throughout Australia. There are also two Standards on home pool fencing.

# National Aquatic and Recreational Signage Style Manual

The National Aquatic and Recreational Signage Style Manual 3rd edition was first developed in Victoria and then published by the Australian Water Safety Council in collaboration with Surf Life Saving Australia (SLSA) and Royal Life Saving Society Australia (RLSSA). The signage style manual gives a guide to land managers and venue operators of a system for providing signage. It uses existing Australian and International Standards for aquatic and recreational signage. Such a system, when used within a risk management plan, provides users with information about signs in order to identify hazards at aquatic locations.

# PUBLIC SWIMMING POOL LEGISLATION IN AUSTRALIA (An Overview)

A recently published report has identified and examined legislation relevant to the operation of public aquatic facilities in Australia. This report found that the operation of an aquatic facility is a highly involved process and operators are responsible for ensuring the health and safety of millions of people every year.

This report examined the legislative duties of operators across a number of different areas including: first aid, water safety, risk management, staff induction, training, instruction and supervision and chemical safety among others.

This report recommended that legislative documents take a best practice approach, recommending a risk management approach to water safety and sitting in support of the GSPO. Further to this, legislation should move towards consistent use of terminology across jurisdictions and improving readability and access for all ages and education levels to increase compliance.

Source: Peden, A., R. Franklin, and S. Eccleston, Position Paper. Public Swimming Pool Legislation in Australia: An examination of the legislation. 2007, Australian Water Safety Council: Sydney.





#### **Key Objectives and Performance Indicators**

- 13.1 Provide effective leadership to water safety agencies and government
  - AWSC has a clearly articulated position on all major water safety issues and is governed in an inclusive, engaging manner
- 13.2 Create and implement strategies that build the capacity of the sector to reduce drowning
  - AWSC has implemented strategies that support the work of water safety agencies at all levels.

#### **Background**

Collaboration sees individuals and/or separate organisations working in similar or related fields sharing skills and resources to work towards achieving a common goal. Collaboration between the water safety agencies, government and the community is vital to ensuring the objectives and goals of this Strategy are met and the 50% reduction in drowning deaths is achieved.

By pooling limited resources, collective expertise and unique localised experience it is hoped that more relevant and successful strategies for drowning prevention can be developed and implemented. The principles of maximising our collective efforts from the limited resources dictate the need for effective collaboration across Water Safety Agencies, Government and the community. Currently, the AWSC takes its representation from peak water safety and related agencies.

#### **Water Safety Councils**

This Strategy provides State and Territory water safety councils with a framework for targeting and resourcing actions for achieving a reduction in drowning deaths. This framework should be considered through the lens of State and Territory perspectives to ensure that drowning prevention strategies are targeted to areas of greatest need. The framework also provides markers for regular reporting of progress.

It is vital, however, that the jurisdictional water safety councils regularly co-ordinate to maximise collaboration and activity synergies while minimising duplication and ineffective use of limited resources.

#### Government

Water safety is an issue that spans many portfolios and jurisdictions. Government at all levels has been a key partner in drowning prevention and this is demonstrated through it's support of water safety agencies and the Australian community. Government support is important for achieving the ongoing reduction of drowning deaths that this Strategy aims to achieve.

#### **Community**

The general community is responsible for contributing to the overall goal of drowning prevention in several ways. Personal responsibility is key and the simple action of people taking responsibility for themselves and others in their care, when in, on, or around the water will aid in drowning prevention.

This is particularly important for parents and carers, particularly of very young children and toddlers. Supervision is one of the most effective drowning prevention measures and should be employed at all times when in or near aquatic environments in order to minimise the risk of drowning.

Water safety practitioners provide an important interaction with the community and its specific drowning prevention issues. These community led lifesavers must be supported with best practice resources.

## COLLABORATION CASE STUDY – Coroners Findings as Drowning Prevention Tools

Collaboration between industry groups, coroners and governments is vital to ensuring that a reduction in drowning deaths is achieved in Australia. Coronial findings offer specific drowning prevention recommendations for incorporation into policy/legislation.

A coroner's finding into the death of a teenage boy in a public swimming pool in 1998 prompted collaboration between local council and industry groups to improve both parental and staff supervision at public pools and staff training.

The coronial recommendations aimed to strengthen industry guidelines and practice as well as to inform legislation and policy on the issue by recommending the need for enforceable swimming pool safety guidelines. Linked to this was a recommendation to review RLSSA Guidelines for Safe Pool Operation be undertaken for the State government in an attempt to prevent further drowning deaths.

Source: Berry, J., Staff contributed to boy pool death, in The Age. 2004: Melbourne Byrne, P., Coroner's Record of Investigation into Death (CO 527). 2004, Moreland Council

# Extend the Drowning Prevention Evidence Base



#### **Key Objectives and Performance Indicators**

- 14.1 Collaborate to foster meaningful drowning and aquatic injury research
  - The AWSC is engaging the research community and influencing water safety agencies to conduct drowning and aquatic injury research
- 14.2 Conduct annual reviews of drowning related research to ensure that our strategies reflect global best practice
  - An annual review of drowning related research is published with recommendations influencing practice
- 14.3 Advocate for increased funding for drowning prevention research
  - Strategies have been developed, implemented and have resulted in an increase in drowning research

#### **Background**

It is vital that drowning prevention strategies and programs are based upon a solid evidence base. Of equal importance is the use of research strategies to fill gaps in our knowledge and to discover new and effective strategies.

#### **Investment in Research**

Investment in water safety research has increased steadily over previous National Water Safety Plans. This research has responded to issues identified by stakeholders and has been conducted across a range of methods by water safety agencies, government and research institutions.

The AWSC advocates for increased funding for water safety research and investigations into the effectiveness of drowning prevention interventions.

#### **Impacting Policy and Practice**

The key success measure of research is its impact on policy and practice. Good research will have a significant influence on the way that things are done. Collaboration between researchers and water safety agencies is key to delivering informative outcomes.

#### **Research Capacity**

Research capacity must be built across water safety agencies. This involves both the capacity to research but also the capacity to use research. Understanding the availability and limitations of evidence provides a powerful tool to those developing programs and interventions.

#### **Communicating Research**

New research is being developed and published daily. It is essential that water safety agencies consider new developments and adjust policy and practice accordingly. Systems should be developed to communicate changes in the evidence base across AWSC stakeholders. A simple scan of new articles, national and international, must be undertaken during the review of practice and/or the drafting of new policy.

NOTES

## Facilitating Communication of the Strategy to Key Stakeholders

#### **Background**

Communication and implementation of the Australian Water Safety Strategy 2008-2011 by key stakeholders is vital to maximising the Strategy's success in reducing the number of drowning deaths in Australia.

Just as the Strategy puts the onus back on individual organisations and water safety advocates to act to reduce drowning deaths in Australia, this goal encourages individual stakeholders to contribute to the effective communication of the Strategy.

Accordingly the AWSC aims to provide tools for the communication of this Strategy by member organisations and other stakeholder groups.

#### **Guiding Principles**

The communication of the Strategy is guided by the following principles:

- The AWSC is a water safety advocacy group that supports the implementation of the Strategy by member organisations.
- The AWSC relies on the contributions of the water safety community and government to achieve the goals of this Strategy.
- This Strategy is intended to influence and guide the policies and actions of water safety organisations and stakeholders.
- The ultimate measure of success is the reduction of drowning and this is central to the communication of the Strategy.
- Drowning is complex and prevention strategies need to be multifaceted and be conducted across jurisdictions.
- Government and water safety agencies are encouraged to adopt communication strategies aimed at reinforcing the goals and objectives of the Strategy.
- The principal activities of the AWSC include meetings with stakeholders and biennial water safety conferences.

#### Stakeholder Analysis and Suggested Actions

Identifying stakeholders and their roles and responsibilities underpins the effective communication of this Strategy (see Stakeholder map on pg 3 of this Strategy). Stakeholder analysis involves identifying stakeholders likely to be involved in, affected by, or part of the activities or outcomes of a project. By identifying stakeholders, it is possible to gain insights into how best to engage them in the Strategy.

The AWSC acknowledges that there are many stakeholders to this Strategy at National, State & Territory and local levels. National stakeholders to the Strategy include national water safety agencies, the aquatic industry and Australian government agencies. At a State and Territory level, stakeholders are State and Territory based water safety agencies, industry and governments. At a local level, local councils, local government organisations, the aquatic industry, members of the water safety workforce and community safety groups are stakeholders to this Strategy.

There are actions that stakeholders should undertake internally and externally to promote the Strategy. Internal communication should aim to influence the alignment of activities to elements of the Strategy. Modifying organisational plans to reflect relevant goals and objectives of the Strategy is an example of successful internal communication.

Communicating elements of the Strategy externally, such as to businesses, corporate partners and the community, may be effective in gaining additional support. This may be measured through media monitoring or the collection of media clips incorporating language used by stakeholders in support of the Strategy.

#### **Communication Tools and Strategies**

To facilitate communication of the Strategy as well as track progress against the goals, meetings between stakeholders should be conducted. The development of flexible tools and strategies will also assist in the communication of this Strategy across jurisdictions. The AWSC advocates the use of the following mechanisms to communicate the existence and content of the Australian Water Safety Strategy 2008-2011.

#### **Terminology**

The use of accurate and consistent terminology is important for ensuring the effective communication of the Strategy across stakeholders. As such, the following tools and strategies are proposed:

- 1. The full name of the Strategy is to be used in all cases, that is, the Australian Water Safety Strategy 2008-2011.
- 2. The document may then be referred to as the Strategy if point 1 has been followed.
- 3. Reference should also be made to the overarching aim of the Strategy which is a 50% reduction in drowning deaths by the year 2020.

#### **Graphic Devices**

The icons used to identify each of the goals of the Strategy in this document succinctly communicate the focus of each goal. The icons are also colourcoded, grouping each goal under one of the four key goal areas of the Strategy. The following actions are proposed for wider use of these icons:

- 1. Icons in this Strategy should be created to be used as individual communication tools.
- Icons are to be used in annual reports for outlining progress against each of the Strategy's goals.
- Consideration should be given to utilising the icons in web content. This could be via individual web pages on the AWSC website devoted to each goal of the Strategy.

#### **Media Statements**

The media is a powerful tool for communication and raising awareness. To compete in an already crowded sphere, messages around the Strategy need to be clear and consistent. As such, the following statements should be considered for use by individual water safety agencies when engaging with the media:

- 1. The Australian Water Safety Strategy 2008-2011 aims to reduce drowning deaths by 50% by the year 2020.
- The Australian Water Safety Strategy 2008-2011
  has been developed by the AWSC through a
  consultative process focused on identifying
  evidence based prevention strategies.
- 3. Where possible, a statement linking action to a specific goal of the Strategy should be included. E.g. "The Royal Life Saving Keep Watch Campaign is working towards achieving Australian Water Safety Strategy 2008-2011 Goal 1: Reduce drowning deaths in children under five through the promotion of its four key messages: Supervision, restricting access, water familiarisation and resuscitation."

#### **Annual Reporting**

Annual reporting by AWSC stakeholders is useful in measuring achievements against the individual goals of the Strategy as well as measuring success against the overall goal of reducing drowning deaths by 50% by the year 2020. As such, the following tools and strategies are proposed:

- 1. A template for annual reporting of progress against the Strategy is to be developed for use by AWSC member organisations.
- Stakeholders are encouraged to make information available to the AWSC that supports achievements against the Strategy.
- 3. The AWSC will encourage similar processes of annual reporting at the State & Territory and local level.
- 4. A reporting device for communicating progress against the Strategy should also be considered.

#### **Communication Activities**

There are a number of activities that the AWSC will conduct or facilitate to further enhance the communication of the Strategy to government and the water safety community.

#### Conferences

The AWSC will facilitate biennial water safety conferences. Conference content and presentations will track progress against the Strategy. Conference streams will reflect the Strategy, potentially linking to specific goals.

#### Website

The Strategy is to be made available on the AWSC website. The structure and manner in which the information is communicated should be considered. A separate page may be devoted to each goal of the Strategy, with opportunities for news updates highlighting achievements in real time.

#### Workshops/Seminars

Workshops and seminars should be conducted to further communicate and facilitate discussion of the Strategy. The AWSC supports and encourages frequent dialogue on the Strategy's goals and objectives as a means of prompting further action and disseminating new ideas and approaches.

#### Distribution

The AWSC should ensure that a copy of the Strategy has been distributed to all key stakeholders. This may be through printed or electronic means, or by directing stakeholders to the AWSC website (www.watersafety.com.au). Updates of progress should also be distributed to stakeholders. This can be achieved through reporting of actions against the goals and performance indicators of the Strategy.

## Example Actions

#### Facilitate the communication of the Strategy to key stakeholders.

 The Strategy has been communicated to key stakeholders at National, State & Territory, and local levels.

# Develop tools that support stakeholders in the communication of the Strategy to internal and external partners.

- A copy of the Strategy has been distributed to all key stakeholders.
- Innovative and effective tools that use consistent terminology, such as templates for reporting, graphic devices and media statements, have been developed and communicated to key stakeholders for use internally and externally.

#### Develop a range of activities that promote the Strategy to stakeholders.

• The Strategy is promoted to stakeholders via additional mechanisms such as conferences, the AWSC website, workshops and seminars etc.

# Facilitate a process of reporting achievements against the Strategy at a National, State & Territory, and local level.

• Mechanisms for reporting have been established at a National, State & Territory and local level and reporting is occurring on a regular basis.

The intent of the Australian Water Safety Strategy 2008 -2011 is to promote the alignment of national, state and regional water safety plans to the fourteen Goals of the Strategy. These Goals underpin the planning, implementation, measurement and evaluation of the Strategy. Consistency in planning is a key outcome of this Strategy and if we are to realise our aspirational Goal of reducing drowning deaths by 50% by 2020 it is essential that all actions are considered against the AWSC Strategy.

#### **Planning Template**

An implementation planning template is contained in Appendix 1 to encourage water safety agencies, key stakeholders and Government to align their plans to this Strategy. This template outlines potential strategies or actions that the water safety community may utilise or adapt to suit their own organisations scope and objectives. The table below outlines the planning template in order to demonstrate example actions in relation to Goal 1; Reduce drowning deaths in children under five.

#### **Example Implementation Plan**

This template (and others) available on the AWSC website (www.watersafety.com.au)

Goal:	1 Reduce drowning deaths in children under five				
Objective:	<ol> <li>Strengthen programs that raise awareness and build skills in supervision</li> <li>Create or strengthen systems that promote, monitor and enforce four sided pool fencing.</li> <li>Investigate the effects of water familiarisation in children under five</li> <li>Promote community wide rescue and resuscitation skills</li> </ol>				
Performance Indicators	Actions	Progress at 15 May 2008	Completed by	Responsibility	
Programs are evidence based, targeted at parents, carers and supervisors of children under five and evaluated to ensure effectiveness	<ul> <li>Complete an evaluation of the RLSSA Keep Watch Program</li> <li>Expansion of RLSSA Keep Watch Program to target farm related children drowning deaths</li> </ul>	Underway	1.10.2008 1.10.2008	RLSSA	
<ul> <li>Promotion, monitoring and enforcement programs are implemented and evaluated in all jurisdictions</li> </ul>	• INSERT ACTIONS HERE				

#### **Prioritisation**

The prioritisation of the Goals contained in the Strategy is based on an overview of the patterns of drowning across Australia. When developing a plan it is essential that a contextualisation of the goals occurs and emphasis is given to the areas of pressing need. It is also vital that each organisation or individual give priority to the goals they can best address or that closely align with the organisation's scope and objectives.

#### **Tracking Progress**

Water Safety Agencies are encouraged to communicate their activity against the plan in a fashion consistent with the Goals of the Strategy. Forecasting action and tracking contributions will assist the AWSC in evaluating the progress of this Strategy as well as assist in defining future direction. Tracking progress will also provide member organisations with the opportunity to evaluate their own achievements against the goals and objectives of this Strategy.

#### Reporting

In order to measure progress made against the goals and objectives of this Strategy, the AWSC encourages annual reporting by member organisations and the broader water safety community. This will provide support for current actions as well as ensure that future Strategies target areas of most need and therefore maximise success.

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# APPENDIX 1 - IMPLEMENTATION TEMPLATE

Goal:				
Objective:				
Performance Indicators	Actions	Progress at / /	Completed by	Responsibility

An Australian Water Safety Strategy Planning Workshop entitled 'Future Priorities for Water Safety' was held at the Crowne Plaza Coogee Beach, Sydney on the 14th and 15th of August 2007.

In attendance at the meeting were:

- Peter Agnew (SLSA)
- Warren Bolton (QLD Department of Local Government)
- Robert Bradley (RLSSA)
- Carolyn Brimfield (Department of Tourism, Sport and Recreation)
- Ann Campton (DCITA)
- Samantha Diplock (Department of Health and Ageing)
- Tim Driscoll
- Peter Fox (TAS Water Safety Council)
- Richard Franklin (RLSSA)
- Sean Hodges (RLSSA ACT Branch)
- Rebecca Kelley (ACT Department of Sport and Rec)
- Stan Konstantaras (ANSA National)
- Gordon Mallett (AUSTSWIM)
- Chris Maschotta (SA Department of Sport and Rec)
- Greg Morris (DCITA)
- Shaan Myall (Water Safety Advisory Council NT)
- Chris Mylka (National Marine Safety Council)
- Gary Penfold (ARI)
- · Adam Pine (Swimming Australia)
- Rob Pitt (QISU)
- Daphne Read (Water Safety Advisory Council NT)
- Ralph Richards (ASCTA)
- Justin Scarr (RLSSA)
- Monique Sharp (RLSSA)
- Dawn Spinks (Australian Safe Communities Foundation)
- Nigel Taylor (Life Saving Victoria)
- Ben Whibley (SLSA)
- Brett Williamson (SLSA)









#### AUSTRALIAN WATER SAFETY COUNCIL

Suite 6, Level 4 173-179 Broadway (Cnr Mountain St) Broadway NSW 2007 PO Box 558, Broadway NSW 2007

Tel: (02) 8217 3111 Fax: (02) 8217 3199



