
314

PEOPLE DROWNED IN AUSTRALIAN WATERWAYS
BETWEEN 1 JULY 2009 AND 30 JUNE 2010

THE NATIONAL DROWNING REPORT 2010.

EVERYONE CAN BE A LIFESAVER



Royal Life Saving

ROYAL LIFE SAVING SOCIETY - AUSTRALIA

SPECIAL ISSUE:
Child Drowning Deaths

THE CHALLENGES

DROWNING DEATHS IN 2009/10

The number of people drowning in Australia has increased for the second year in a row, reminding us that we all have a part to play in preventing drowning.

There were 314 drowning deaths in Australian waterways between 1 July 2009 and 30 June 2010.

This figure is an increase of 12 (4%) on last year's drowning report figure and an increase of 34 (12%) on the five year average. The crude drowning death rate per 100,000 people was 1.43 (Figure 1).

Eliminating Child Drowning

Children, in particular those under five years of age, are some of the most vulnerable people in our population. We as a community should be doing our utmost to ensure their safety; this is especially so when they are in, on or around water. Parents, governments, water safety agencies and charities must address the risk of child drowning to ensure no further lives are lost this summer. Child drowning is preventable, particularly in children aged under 5 years. Parents and carers can reduce this risk and provide their children with valuable skills for life by following the Keep Watch actions of: close, constant and focused supervision; restricting the child's access to water; water awareness (water familiarisation lessons, setting rules and water education); and ensuring you have up to date resuscitation skills.

This year is the second year in a row where the number of child drowning deaths has increased. We need to take action today by:

- Improving pool fencing legislation and ensuring pool fences are checked regularly.
- Ensuring appropriate levels of funding for comprehensive integrated public awareness and education programs such as the Royal Life Saving Keep Watch program.

- Ensuring quality instructors in resuscitation and swimming and water safety programs.
- Educating those who have contact with parents and carers of young children.
- Continuing and increasing research into the causes and prevention of drowning.

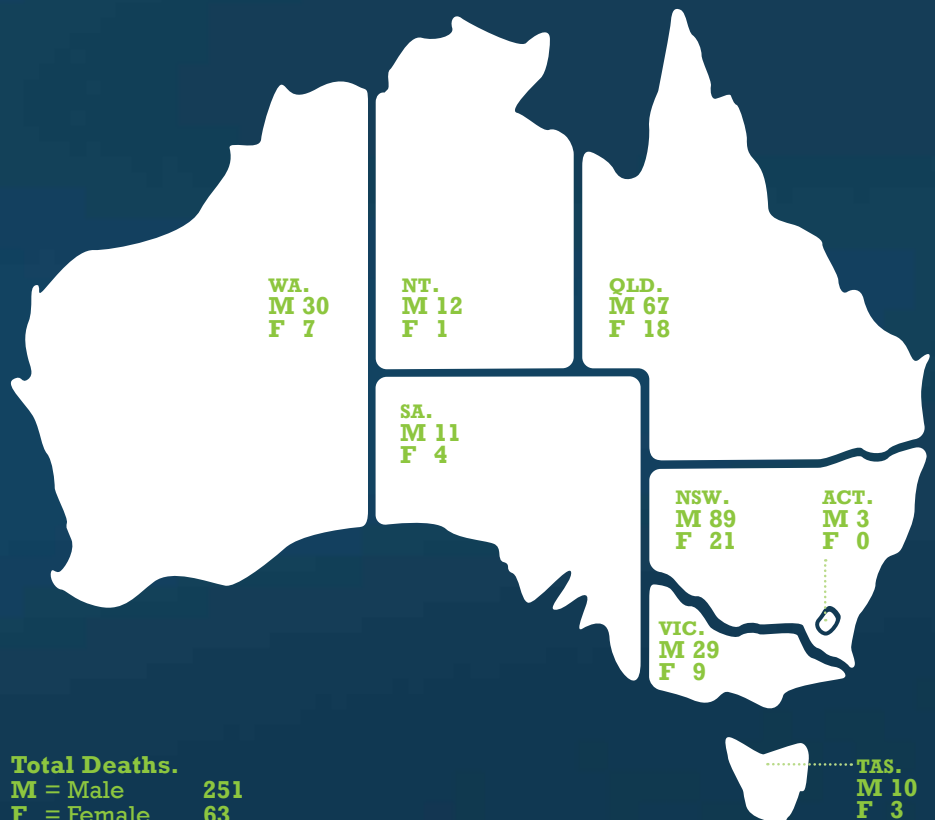
Older Australian Drowning Deaths

The need to reduce drowning deaths of older Australians is a mounting challenge, with the number of older Australians who drowned this year being up on the 5 year average. With the number of older Australians estimated to reach 7 million by 2020 there is a need to act now.

The Australian Water Safety Council in the Australian Water Safety Strategy 2008-2011, identified people aged over 55 years as a goal area with the specific objectives of creating and implementing a national public awareness campaign, creating and strengthening drowning prevention and health activity based programs, and implementing strategies which foster more inclusive aquatic venues and associated workforces.

There are a range of risk factors which affect an older persons chance of drowning including medication, drinking alcohol, mental health, underlying medical health and fitness, as well as knowledge of water safety.

Drowning Deaths by State and Territory



METHODS

Information for the National Drowning Report 2010 has been collected from State and Territory Coronial Offices, the National Coroners Information System (NCIS) and media reports. It is collated in partnership with Royal Life Saving Branches and analysed by the Royal Life Saving National Office.

Royal Life Saving uses a media monitoring service (both electronic and print all year round) to identify drowning deaths in the media. This information is then corroborated with information from the NCIS, police and members before being included in the National Drowning Report.

All care is taken to ensure that the information is as accurate as possible. However, these figures should be considered interim until the Australian Bureau of Statistics (ABS) releases its 'causes of death' figures for the year 2010.

Please note that these figures may change depending upon the ongoing coronial investigations and findings as 80% of cases compiled for this report (2009/10) are still open.

This report contains information on drowning deaths known as at 20 August 2010.

The 5 year averages are based on information from the NCIS and past Drowning Reports (2004/05 to 2008/09). Exclusions include: suicide, homicide, natural cause deaths (such as cardiac arrest), shark and crocodile attack, or hypothermia where known. All information presented is about drowning deaths or deaths where drowning was a factor (e.g. car rolled into water and person drowned).

SNAPSHOT: EXPOSURE

Not all people are at risk of drowning every day, however appropriate estimates of exposure are not readily available to adjust for a persons' exposure to water.

In a 2010 study by Mitchell et al published in the journal, *Injury Prevention*, they use drowning death and hospital morbidity data from NSW and survey data from the 2005 NSW Population Health Survey to estimate population-risk and person-time risk.

The study found that for exposure adjusted person-time estimates, drowning was 200 times higher than road traffic fatalities.

FIGURE 1. Unintentional Drowning Deaths and Death Rates, Australia 2002/03 to 2009/10, 5 year average



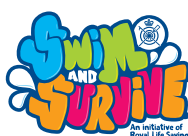
Mitchell RJ, Williamson AM, Olivier J (2010). Estimates of drowning morbidity and mortality adjusted for exposure to risk. *Injury Prevention* 16: 261-266

CASE STUDY: SWIM AND SURVIVE

The number of children 5-14 years of age who drowned in 2009/10 was 15. As part of Royal Life Saving's commitment to reducing drowning deaths in this age group by 50% by 2020, the 2010/11 summer will see a new design and material reinventing Swim and Survive. Royal Life Saving believes that children will be safer in the water by learning water safety and swimming skills at an early age.

Royal Life Saving designed the program to start children on a lifetime of safe participation in recreational activities in, on and around the water.

More information at www.swimandsurvive.com.au

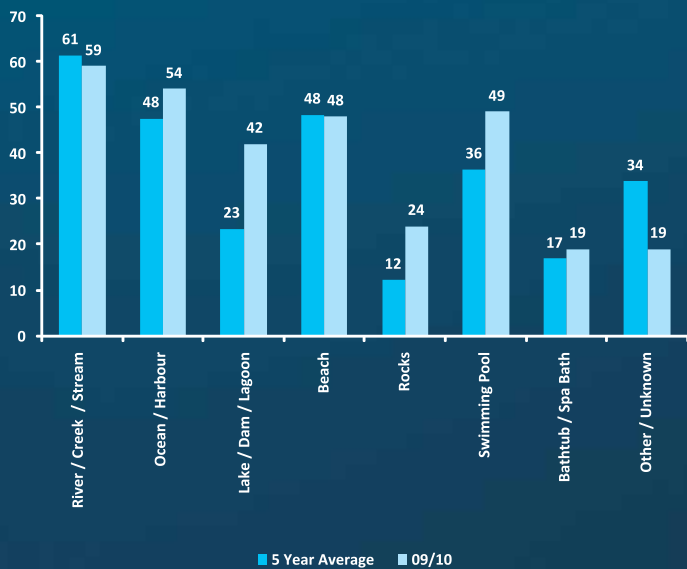


LOCATIONS OF DROWNING DEATHS

There has been an increase in the number of people drowning on the 5 year average in all locations except 'beach' which was down by 1%, 'river / creek / stream' which was down by 4% and 'other / unknown' which was down by 44% thanks to improved data collection methods.

The largest increases on the 5 year average were in the 'rock' category up by 97% and the 'lake / dam / lagoon' category up by 79%. Drowning deaths in 'swimming pools' was also up on the 5 year average by 35%.

FIGURE 2. Drowning Deaths by Location, Australia 5 Year Average, 2009/10



RIVER / CREEK / STREAM

There were 59 drowning deaths in River / Creek / Stream locations in 2009/10. The average age was 40 years (median = 40; range 1 to 83 years) (Figure R1). Drowning deaths in River / Creek / Stream locations occurred all year round with a peak in February (Figure R2). The most common activity people were undertaking prior to drowning was 'Swimming / leisure activities' (27%), followed by driving (15%) and using watercraft (11%) (Figure R3).

FIGURE R1. River / Creek / Stream Drowning Deaths by Age Group and Sex, Australia, 2009/10

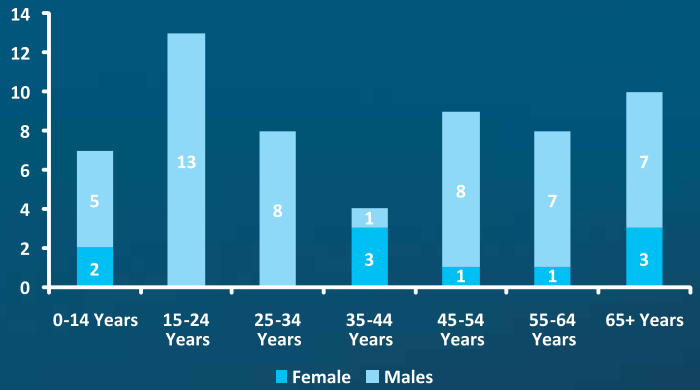


FIGURE R2. River / Creek / Stream Drowning Deaths, Month of Incident, Australia, 2009/10

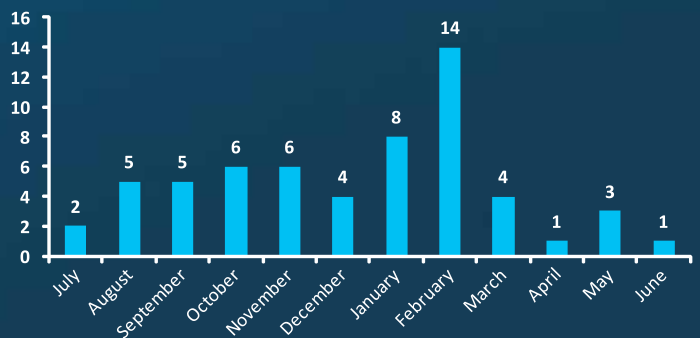
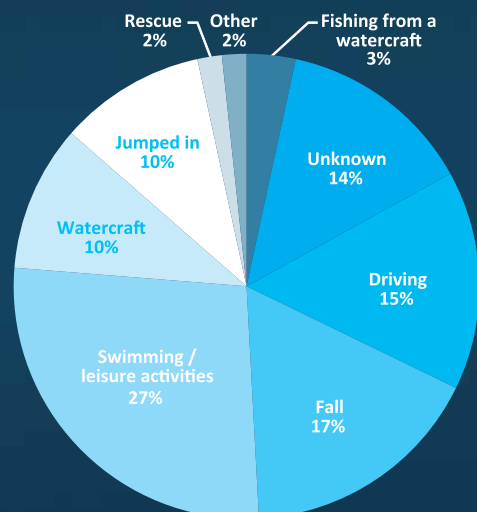


FIGURE R3. River / Creek / Stream Drowning Deaths, Activity Immediately Prior, Australia, 2009/10



314 people drowned in Australian waterways between 1 July 2009 and 30 June 2010.

Never try to drive through a flooded road.

OCEAN / HARBOUR

There were 54 drowning deaths in Ocean / Harbour locations in 2009/10. The average age was 50 years (median = 49; range 2 to 86 years) (Figure O1). Drowning deaths in Ocean / Harbour locations happen all year round with a peak in April (Figure O2.) Fishing (28%), either from a watercraft (19%) or from a jetty / pier (9%) was the most common activity, followed by using watercraft (20%) (Figure O3).

FIGURE O1. Ocean / Harbour Drowning Deaths by Age Group, and Sex Australia, 2009/10

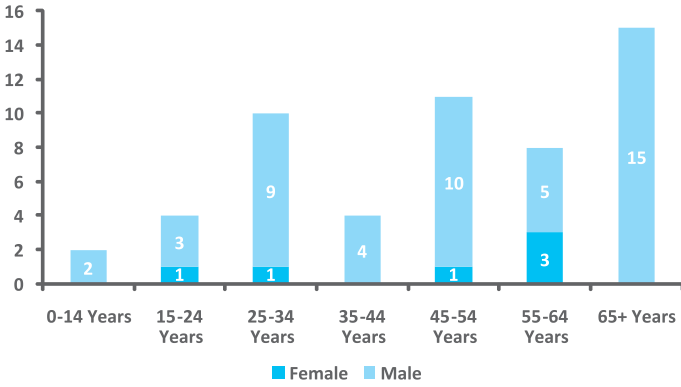


FIGURE O2. Ocean / Harbour Drowning Deaths, Month of Incident, Australia, 2009/10

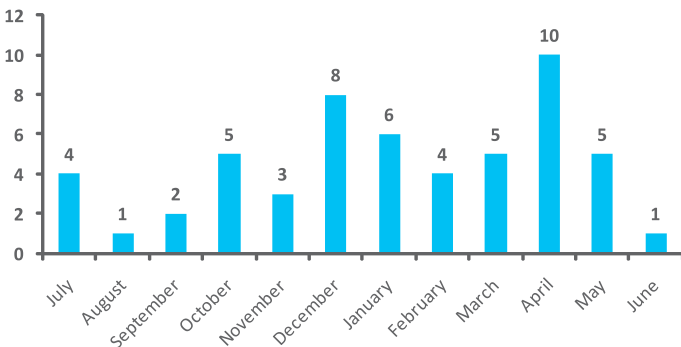
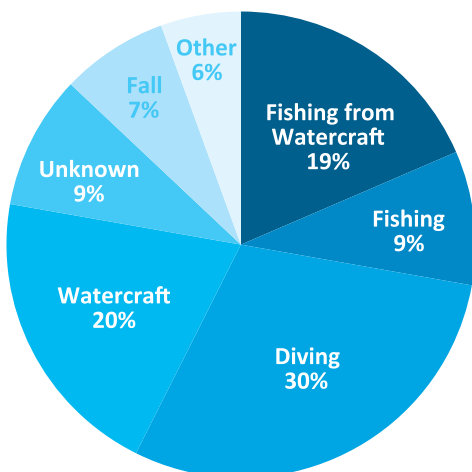


FIGURE O3. Ocean / Harbour Drowning Deaths, Activity Immediately Prior, Australia, 2009/10



Always wear a life jacket (personal flotation device) when on a watercraft.

BEACHES

There were 48 drowning deaths at beach location in 2009/10. The average age was 46 years (median = 43; range 15 to 91 years) (Figure B1). Drowning deaths at beaches occurred all year round with one in January and another in May (Figure B2). The most common activity being undertaken immediately prior to drowning was swimming / leisure activities (67%) (Figure B3).

FIGURE B1. Beach Drowning Deaths by Age Group and Sex, Australia, 2009/10

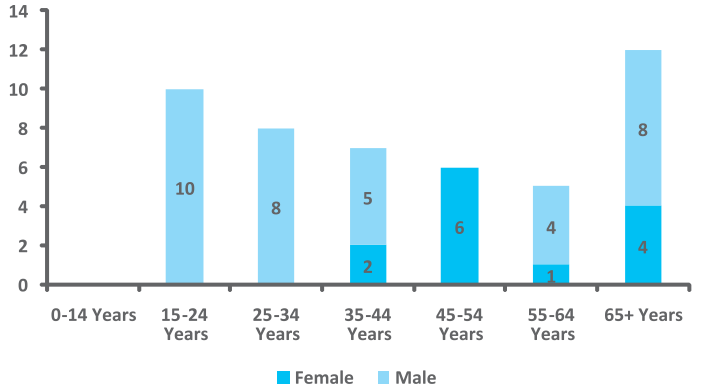


FIGURE B2. Beach Drowning Deaths, Month of Incident, Australia, 2009/10

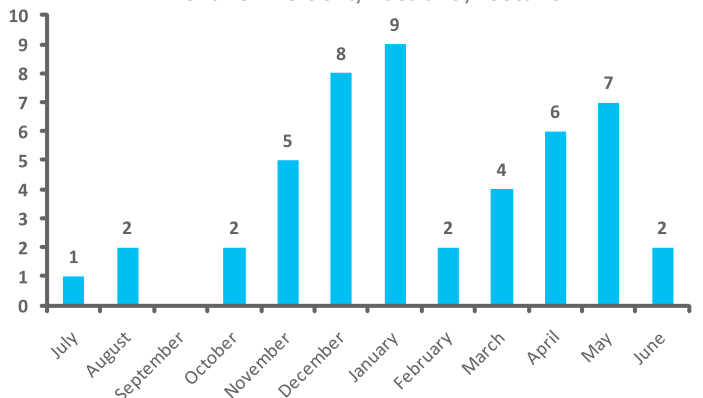
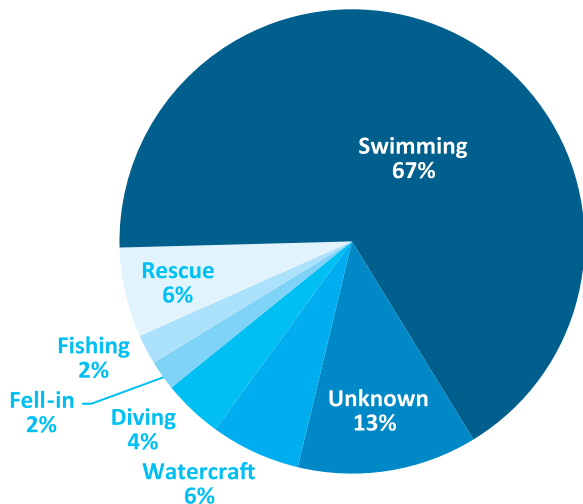


FIGURE B3. Beach Drowning Deaths, Activity Immediately Prior, Australia, 2009/10



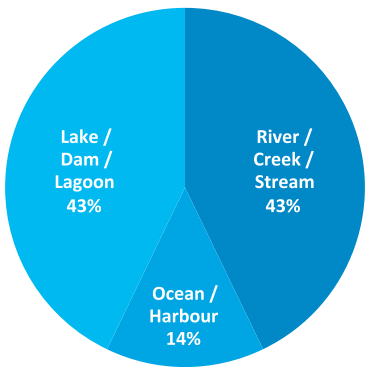
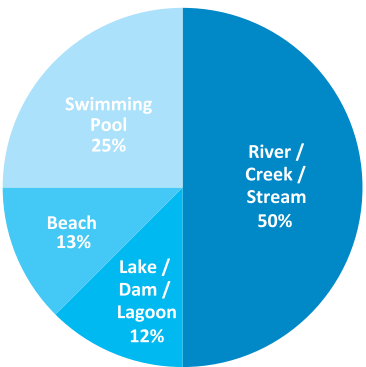
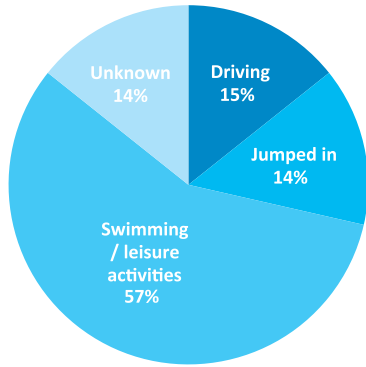
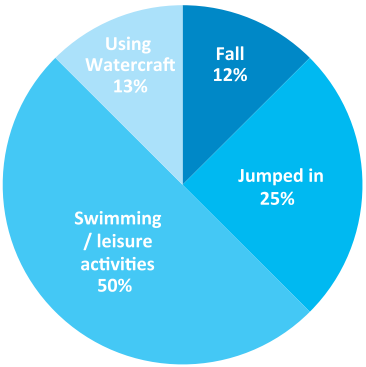
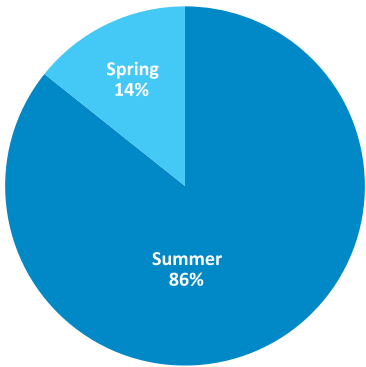
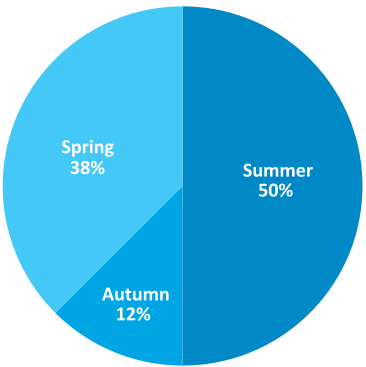
Always swim between the red and yellow flags.

CHILDREN: 0-17 YEARS OF AGE

Childhood is a time of wonder and mystery, exploration and fun, development and learning. Unfortunately it is also a time when children are vulnerable to drowning, particularly those under 5 years of age. Childhood is the best time to prepare children for safe aquatic participation and provide the skills and knowledge needed to have a lifelong safe association with water. The strategies used to prevent child drowning and prepare them for participation in aquatic activities change as they grow, but it remains essential that foundation skills and drills are developed at a young age.

	0-4 YEARS (N=33)	5-9 YEARS (N=8)																										
LOCATION	<table border="1"> <caption>Locations for 0-4 Years (N=33)</caption> <tr><th>Location</th><th>Percentage</th></tr> <tr><td>Swimming Pool</td><td>49%</td></tr> <tr><td>Bath tub / Spa Bath</td><td>15%</td></tr> <tr><td>Other / Unknown</td><td>12%</td></tr> <tr><td>Lake / Dam / Lagoon</td><td>12%</td></tr> <tr><td>River / Creek / Stream</td><td>9%</td></tr> <tr><td>Ocean / Harbour</td><td>3%</td></tr> </table>	Location	Percentage	Swimming Pool	49%	Bath tub / Spa Bath	15%	Other / Unknown	12%	Lake / Dam / Lagoon	12%	River / Creek / Stream	9%	Ocean / Harbour	3%	<table border="1"> <caption>Locations for 5-9 Years (N=8)</caption> <tr><th>Location</th><th>Percentage</th></tr> <tr><td>Swimming Pool</td><td>50%</td></tr> <tr><td>Other / Unknown</td><td>13%</td></tr> <tr><td>Lake / Dam / Lagoon</td><td>12%</td></tr> <tr><td>River / Creek / Stream</td><td>12%</td></tr> <tr><td>Bath tub / Spa Bath</td><td>13%</td></tr> </table>	Location	Percentage	Swimming Pool	50%	Other / Unknown	13%	Lake / Dam / Lagoon	12%	River / Creek / Stream	12%	Bath tub / Spa Bath	13%
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Super-vision	Parents – use close, constant and focused supervision.	Parents – Increasing distance, but always within eyesight and ready for action.																										
Rescue Skills	Parents – Learn Resuscitation.	Parent – Lifesaving and rescue skills Child – Personal survival skills; treading water and floating																										
Restrict Access	Ensure the pool is fenced with a working self closing and latching gate. Provide a safe play area, particularly if living on a farm or large property.	Set rules and behaviour in, on and around water and reinforce them often.																										
Water Skills	Water familiarisation and confidence - preparatory skills.	Learn to swim and water safety – basic foundation skills. Participate in Swim and Survive.																										

There were 56 children aged 0-17 years who drowned in Australia in 2009/10, which is 6 more than last year. Just over half (59%) of these were under 5 years of age. The location where children drown changes as they grow, from 'Swimming Pools' in the under 5 age group to 'River / Creek / Stream' locations for older children. Also as children age the activities they are undertaking immediately prior to drowning changes, from children who are playing and gain unintended access to water and fall in to being in or on the water (i.e. interacting with water) prior to drowning.

10-14 YEARS (N=7)	15-17 YEARS (N=8)	
		LOCATION
		ACTIVITY
		SEASON
<p>Increasing independence but need to physically check up on them regularly.</p>	<p>Swim with friends and ensure the safety of yourself and those with you.</p>	Super- vision
<p>Parent – Lifesaving and rescue skills Child – Personal survival and basic rescue skills; reach to rescue and rope throw.</p>	<p>Child – Personal survival, lifesaving rescue and emergency skills; Bronze Medallion and resuscitation training.</p>	Rescue Skills
<p>Setting rules and boundaries, guiding the selection of appropriate locations and activity.</p>	<p>Setting rules and boundaries, proving skills for selecting appropriate locations.</p>	Restrict Access
<p>Swim and Survive – essential water safety swimming and foundation skills.</p>	<p>Lifesaving, swimming and water safety – skills for aquatic activities.</p>	Water Skills

DROWNING DEATHS BY AGE AND GENDER

In the 2009/10 year there were 251 (80%) male and 63 (20%) female drowning deaths, making males four times more likely to drowning than females. This is a continuation of the historical trend where males outnumber females.

Drowning deaths are up by 12% on the 5 year average.

This increase should be considered cautiously as there are still a large number of cases open (80%), i.e. being investigated by State and Territory Coroners.

The average age was 41 years (Median = 42; range 1-91). There was an increase in the number of drowning deaths against the 5 year average for all age groups except 35-44 years.

The age groups with the largest increase on the 5 year average was 65+ years (35%), 25-34 years (22%), 54-64 years (18%) and 15-24 years (16%) (Figure 3).

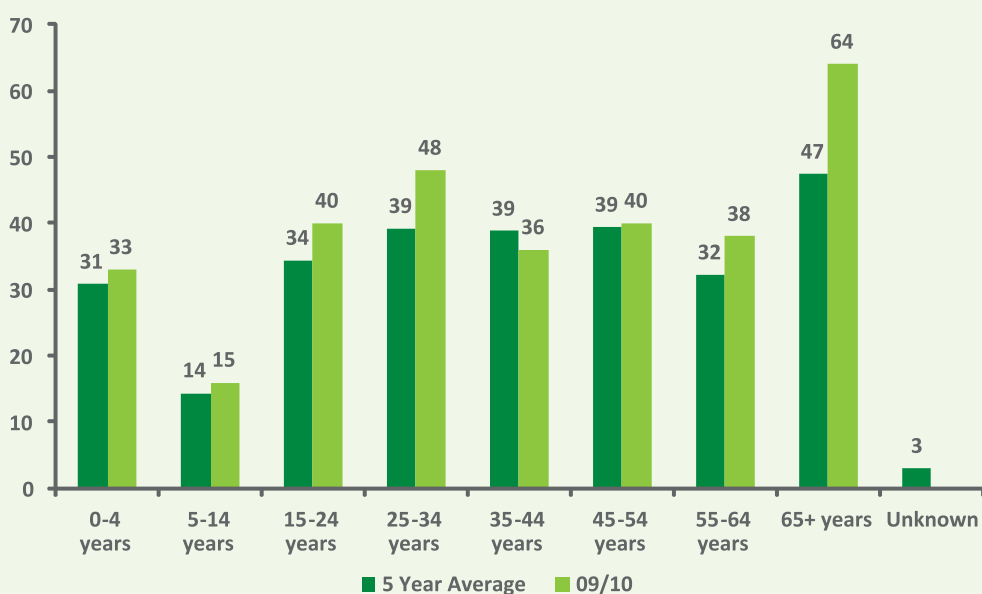
SNAPSHOT: 18-34 YEAR OLD MALES

Men aged 18-34 years and alcohol have been identified as a priority issue in the Australian Water Safety Strategy 2008-2011 and while information about alcohol consumption is not available for this report the following gives a snapshot of the incidence of drowning deaths in this age group.

In 2009/10 there were 74 drowning deaths of males aged 18-34 years. Common locations included beach / rocks (34%), river / creek / stream (23%) and lake / dam / lagoon (20%).

The most common activity was swimming or undertaking recreational activities in the water (58%) and just over two thirds (70%) occurred during summer and autumn.

FIGURE 3. Drowning deaths by Age Group, Australia, 5 Year Average, 2009/10



SNAP SHOT: EPILEPSY

People with epilepsy have a 15-19 fold increased risk of drowning. Epilepsy is a term used to describe a group of nervous system disorders where there are recurring seizures. Seizures can affect vision, speech and movement; last for varying periods of time (from seconds to minutes) and vary from person to person (from staring off into space to falling down with rapid jerking of the arms and legs). When a seizure occurs in the aquatic environment they can result in drowning unless swift action is taken to remove them from the water. It is unknown how many people each year drown due to epilepsy, however in 2009/10 there were 5 definite drowning deaths identified as epilepsy related.

CASE STUDY: HOME SWIMMING POOLS

There were 35 drowning deaths in home swimming pools in the 2009/10 financial year of which 69% were male and 31% female. Just under half (46%) of drowning deaths were of children less than 5 years of age, however one quarter (26%) were of people aged over 65 years.

Royal Life Saving Society has initiated a campaign to make this weekend your Home Pool Safety Weekend - reminding every home pool owner to check, fix and maintain their home pool this summer.

For more information visit www.homepoolsafety.com.au



DROWNING DEATHS IN YOUNG CHILDREN

CHILDREN: 0-4 YEARS

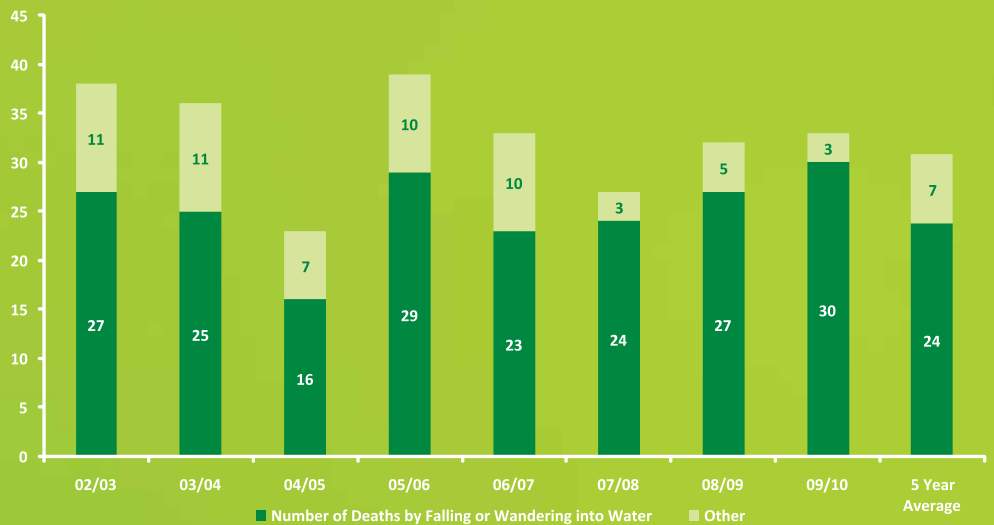
Most drowning deaths of young children resulted from the child falling or wandering into water (Figure 4).

For more information visit www.keepwatch.com.au

There were 33 drowning deaths of young children in 2009/10, which is 7% higher than the 5 year average (Figure 4). Royal Life Saving believes that these deaths can be prevented by parents becoming lifesavers and following the four simple Keep Watch actions:

- Supervise young children constantly (within arms' reach) whenever they are in, on, or near water.
- Restrict a young child's access to water either by putting a barrier around the water or around the child.
- Undertake water awareness by familiarising your child with water, setting rules, becoming aware of your child's abilities and helping educate them about the dangers around water.
- Learn resuscitation and update it annually so you are able to respond in an emergency.

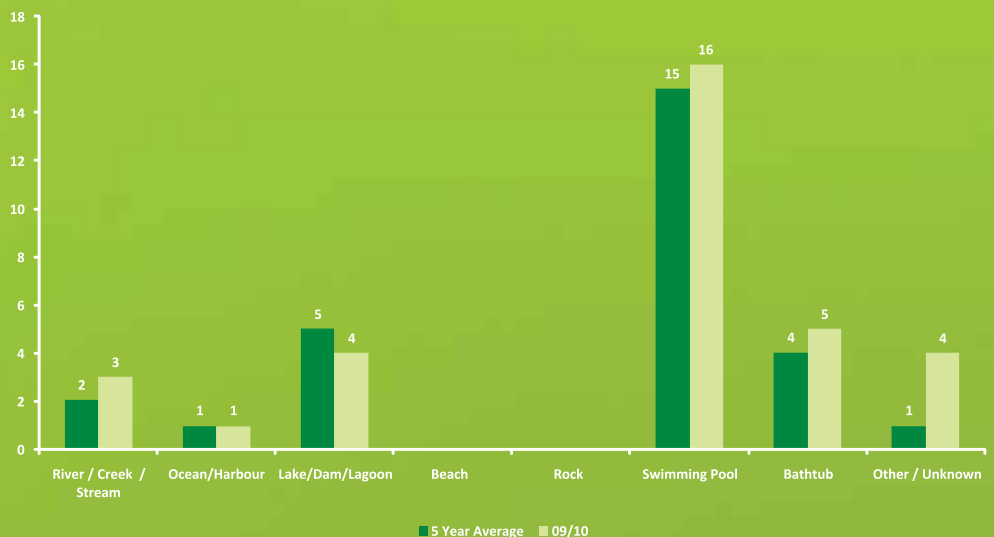
FIGURE 4. Drowning deaths of Young Children 0-4 Years, Australia 2002/03-2009/10, 5 year average



LOCATION OF CHILD DROWNING DEATHS

The swimming pool was again the most common location where young children drowned with all of the children gaining unintended access and falling-in. The next most common location was bathtubs. The 2009/10 year also lists children as having drowned in buckets, cattle dip and a spa demonstrating that anywhere there is water there is a potential hazard for children to drown.

FIGURE 5. Location of Drowning Deaths, Young Children 0-4 Years, 5 Year average



OLDER AUSTRALIANS 55+ YEARS

There were 102 drowning deaths of Australians aged over 55 years in 2009/10, which is up by 22 (28%) on the 5 year average. Of the 102 drowning deaths, 77% were male (Figure 6).

Older people drown in a diverse range of aquatic settings, requiring them to have a broad range of lifesaving skills and knowledge to stay safe. Beach / rock (26%), ocean / harbour (23%), river / creek / stream (18%) and swimming pools (18%) were common locations for drowning deaths (Figure 7).

FIGURE 6. Drowning deaths of Older Australians 55+ years, Australia 2002/03 to 2009/10, 5 Year Average

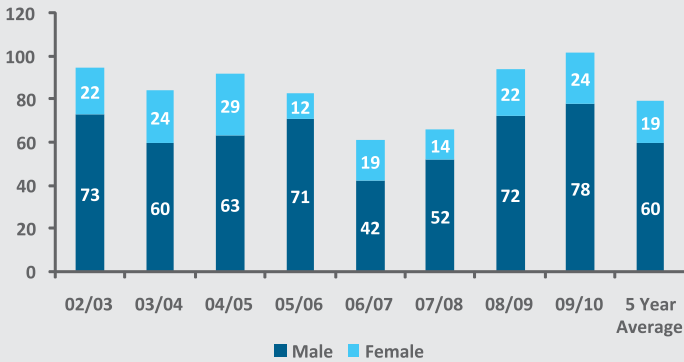
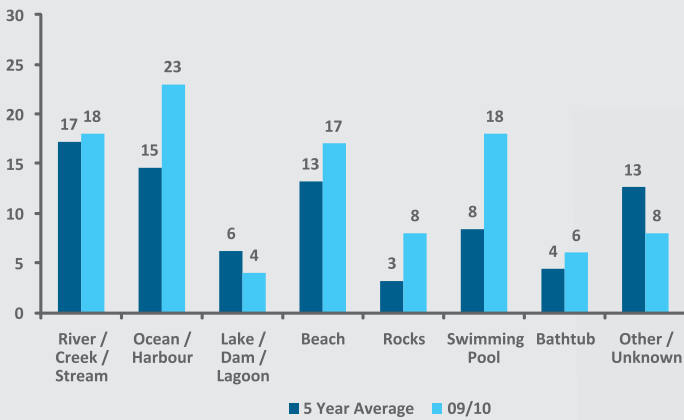


FIGURE 7. Location of Drowning Deaths of Older Australians 55+ years, Australia, 5 Year Average, 2009/10



In 2009/10 the three most common activities being undertaken immediately prior to drowning were swimming / leisure activities in the water (22%), falling in following playing or recreating near water (22%), and fishing (19%) (Figure 8).

While drowning deaths of older Australian occurred all year round, one third 33% occurred in summer, with approximately a quarter occurring in spring (29%) and autumn (24%) (Figure 9).

FIGURE 8. Drowning Deaths by Activity, Older Australians 55+ years, Australia, 5 Year Average, 2009/10

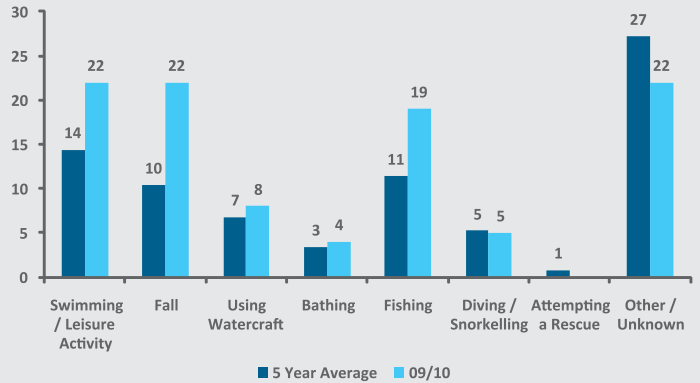
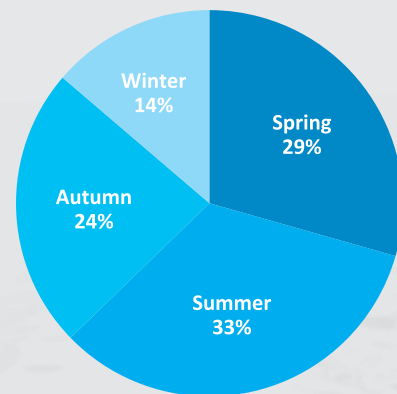


FIGURE 9. Drowning Deaths by Season, Older Australians 55+ years, Australia 2009/10



CASE STUDY: GREY MEDALLION

Older people have been identified as a priority area of the Australian Water Safety Strategy 2008-2011. It is critical to note that by 2020 it is estimated that there will be over 7 million people living in Australia aged over 55 years.

To help address drowning deaths of older Australians Royal Life Saving has developed the Grey Medallion to provide water safety and lifesaving skills aimed at reducing the drowning rates and encouraging a health, independent and active lifestyle.

There are four main components of the program:

- Water Safety Knowledge
- Resuscitation and Emergency Care
- Aquatic Exercise
- Personal Survival and Lifesaving skills

For more information visit www.greymedallion.com.au



QUICK FACTS ON DROWNING

Young children 0-4 Years

- 33 young children 0-4 years (10% of all drowning deaths)
- 23 (70%) were male
- 16 (49%) were in swimming pools
- 30 (91%) fell or wandered into water
- 19 (57%) occurred during summer

Children 5-14 Years

- 15 children 5-14 years (5% of all drowning deaths)
- 12 (80%) were male
- 4 (27%) were at river / creek / stream locations
- 4 (27%) were at lake / dam / lagoon locations
- 4 (27%) were in swimming pools
- 7 (36%) were swimming or undertaking leisure activities
- 8 (53%) occurred in summer

People 15-34 Years

- 88 people 15-34 years (28% of all drowning deaths)
- 82 (93%) were male
- 21 (24%) at river / creek / stream locations
- 18 (21%) at beaches
- 32 (36%) were swimming or undertaking leisure activities
- 36 (41%) occurred in summer

People 35-54 Years

- 76 people 35-54 years (24% of all drowning deaths)
- 56 (74%) were male
- 15 (20%) at ocean / harbour locations
- 14 (18%) at lake / dam / lagoon locations
- 23 (30%) were swimming or undertaking leisure activities
- 29 (38%) occurred in summer

People 55+ years

- 102 people aged 55+ years (32% of all drowning deaths)
- 78 (77%) were male
- 23 (23%) at ocean / harbour locations
- 18 (18%) at river / creek / stream locations
- 18 (18%) in swimming pools
- 22 (22%) were swimming or undertaking leisure activities
- 22 (22%) fell in
- 34 (33%) occurred in summer

SNAPSHOT: STATE OF THE INDUSTRY

The Guidelines for Safe Pool Operation (GSPO) is produced and published by Royal Life Saving and is the minimum standard for safety in commercial and public swimming pools across Australia. An analysis of the results from audits of public swimming pools was conducted in March 2010.

The results from the analysis found that those pools that participated in regular audits improved the safety at their facilities, reporting a mean compliance 16% higher than those pools that had only had one audit. Signage at pools was an area where more work was required to improve their use.

To read the full report visit, www.royallifesaving.com.au

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