

ROYAL LIFE SAVING SOCIETY – AUSTRALIA
**NATIONAL DROWNING
 REPORT 2013**

EVERYONE CAN BE A LIFESAVER



Royal Life Saving
 ROYAL LIFE SAVING SOCIETY - AUSTRALIA

291

PEOPLE DROWNED IN
 AUSTRALIAN WATERWAYS

NATIONAL DROWNING REPORT 2013



238 53

291 people drowned in Australian waterways



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2013 SNAPSHOT OF FINDINGS

Overall

- 291 people drowned in Australia between 1 July 2012 and 30 June 2013
- This is an increase of 15 drowning deaths (or 5%) on the adjusted total of 276 drowning deaths in 2011/12
- This is a reduction of 6 drowning deaths (or 2%) on the 10 year average of 297 drowning deaths

Sex and Age

- 82% of all drowning deaths were male (238 drowning deaths)
- 18% of all drowning deaths were female (53 drowning deaths)
- 31 (11%) drowning deaths occurred in children aged 0-4 years
- 9 (3%) drowning deaths occurred in children aged 5-14 years
- 26 (9%) drowning deaths occurred in young people aged 15 to 24 years
- 114 (39%) drowning deaths occurred in people aged 55 years and over

State and Territory

- 104 (36%) drowning deaths occurred in New South Wales
- 64 (22%) drowning deaths occurred in Queensland
- 46 (16%) drowning deaths occurred in Western Australia

Location and Activity

- 99 (34%) drowning deaths occurred in Inland Waterway locations
- 65 (22%) drowning deaths occurred at Beach locations
- 45 (16%) drowning deaths occurred in Ocean / Harbour locations
- 58 people (20%) were using Watercraft immediately prior to drowning
- 52 people (18%) drowned as a result of Falls into water
- 48 people (16%) were Swimming and Recreating immediately prior to drowning



DROWNING DEATHS IN 2012/13

There were 291 drowning deaths in Australian waterways between 1 July 2012 and 30 June 2013. The number of people drowning in Australia has increased this year and is the highest number of drowning deaths seen since 2009/10.

This figure of 291 drowning deaths is an increase of 15 drowning deaths (or 5%) on the adjusted total of 276 in 2011/12. This is however, a reduction of 6 drowning deaths (or 2%) on the 10 year (2002/03 to 2011/12) average of 297 drowning deaths.

The crude drowning rate in 2012/13 is 1.27 per 100,000 people, compared to the 10 year average of 1.40 per 100,000 people (Figure 1).

Trends over time: Fatal drowning in Australia

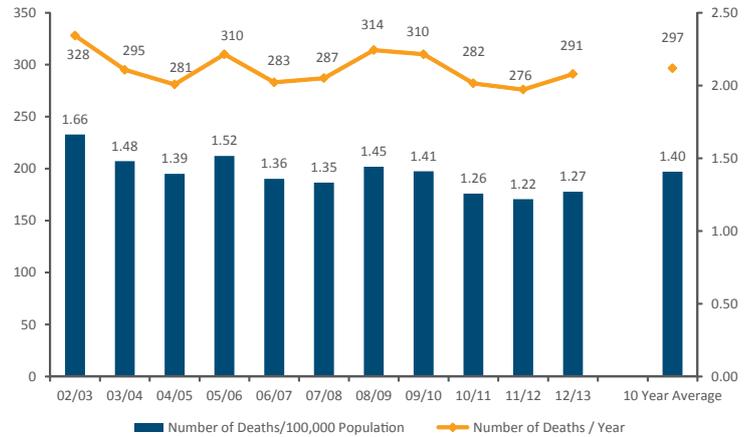


Figure 1: Unintentional Drowning Deaths and Death Rates, Australia 2002/03 to 2012/13, 10 Year Average

CASE STUDY:

Australian Water Safety Strategy 2012-15: Towards a nation free from drowning

The Australian Water Safety Strategy 2012-15 (AWSS 2012-15) continues to align the industry towards achieving a 50% reduction in drowning by the year 2020 by focusing efforts on key priority areas. The progress in 2013 against the goal areas of the AWSS 2012-15 are reported below:

| AWSS 2012-15 Goal Areas | Drowning Deaths in 2012/13 | | AWSS 2012-15 Target by 2020 | Progress |
|---|----------------------------|-----|-----------------------------|-----------------|
| 1. Reduce drowning deaths in children aged 0-14 years | Children 0-4 years | 31 | 17 | Of High Concern |
| | Children 5-14 years | 9 | 8 | On Track |
| 2. Reduce drowning deaths in young people aged 15-24 | | 26 | 18 | Of Some Concern |
| 3. Reduce drowning deaths in people aged 55+ | | 114 | 51 | Of High Concern |
| 4. Reduce drowning deaths in inland waterways | | 99 | 54 | Of High Concern |
| 5. Reduce surf beach drowning deaths | | 65 | 21 | Of High Concern |

Please note: A drowning death could be included in more than one goal area in the table above.

Figure 2: Progress of AWSS 2012-15 Goals and Target Reductions

The Australian Water Safety Strategy 2012-15 (AWSS 2012-15) can be downloaded from www.watersafety.com.au

CASE STUDY: Men Aged 25-34 years

This year saw the second highest number of drowning deaths occur in the 25-34 years age group. As 89% of these drowning deaths were males, a closer analysis of the circumstances of drowning in males in this age group is warranted.

A focused analysis of the drowning deaths of men aged 25-34 years in 2012/13 shows:

- 36% of all drowning deaths of men aged 25-34 took place in New South Wales. A further 26% in Queensland
- Inland waterways accounted for 41% of all drowning deaths. Beaches accounted for a further 23% of deaths
- Accidents involving watercraft accounted for 28% of all drowning deaths of men in this age group. Swimming accounted for 18% and Rock Fishing a further 13%
- Over half (56%) of those who drowned resided within 100kms of where they drowned. A further 18% were Intrastate visitors
- 36% of all drowning deaths of men in this age group took place in areas deemed Outer Regional, Remote and Very Remote

Males are overrepresented in drowning statistics and can be difficult to reach with traditional water safety and drowning prevention messages.

Drowning prevention strategies for men, including those aged 25-34 should address the use of watercraft. Specifically highlighted should be the risks of combining alcohol and watercraft and the importance of wearing lifejackets when on the water, particularly when recreating in inland waterways.

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DROWNING DEATHS
OF MEN AGED 25-34

WHO DROWNS?

Of the 291 drowning deaths that occurred in Australian waterways in 2012/13, 238 (82%) were male and 53 (18%) were female. The proportion of men drowning has stayed consistently high over the last 10 years with men accounting for 77% of all drowning deaths in Australian waterways across the last 10 years (2002/03 to 2011/12). The State with the largest population continues to have the highest number of drowning deaths with 104 drowning deaths (36%) in New South Wales. This was followed by 64 deaths in Queensland (22%) and 46 deaths in Western Australia (16%). When calculated as rates per 100,000 population, the Northern Territory has the highest rate of drowning in Australia at 3.80 followed by Western Australia (1.86) (Figure 3).

The average age of those who drowned was 43.2 years, with females on average being slightly younger than males (42.8 years for females compared to 43.3 years for males). The 55-64 years age group had the highest number of drowning deaths with 48, followed by 25-34 (44 deaths) and 35-44 years age groups (39 deaths).

Drowning deaths in the 18-24 and 45-54 years age group show pleasing reductions against the 10 year average but there are concerning increases against the 10 year average in the older age groups of 54-64 and 65-74 years (Figure 4).

The Northern Territory has the highest rate of drowning in Australia per 100,000 population

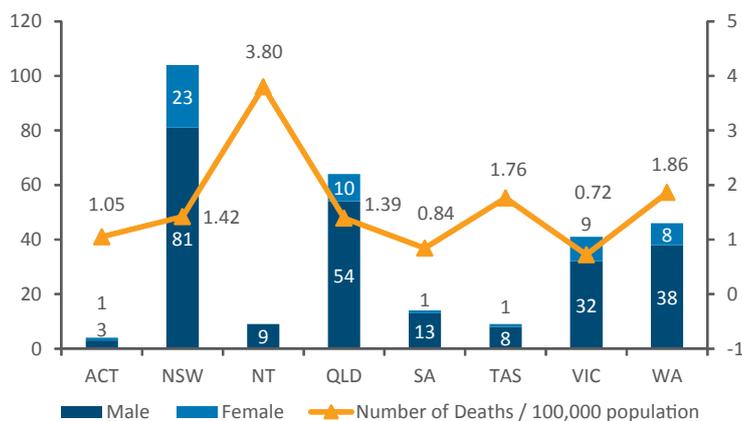


Figure 3: Drowning Deaths by Sex and State / Territory, Drowning Death Rates, 2012/13

Sharp increases on 10 year average in drowning in people aged 55-74

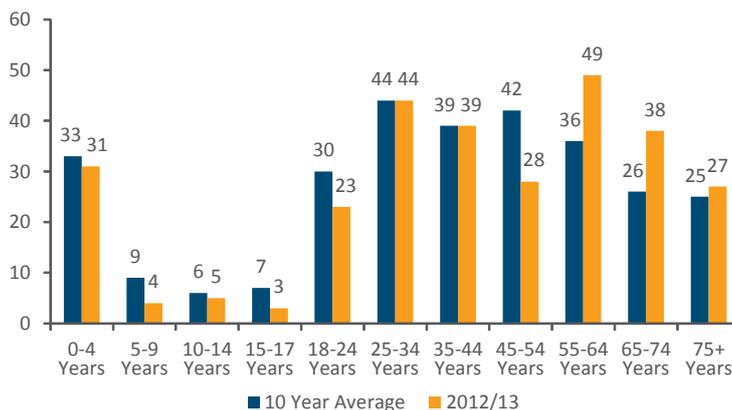


Figure 4: Drowning Deaths by Age Group, 10 Year Average, 2012/13

WHEN DO THESE DROWNING DEATHS OCCUR?

Drowning deaths in Australia occur throughout the year, however the largest number occurred in Summer (101 deaths), followed by Autumn (70) and Spring (64). The lowest number of drowning deaths occurred in Winter with 56 drowning deaths (Figure 5).

February was the month with the highest number of drowning deaths (37). August and October were the months that recorded the lowest number of drowning deaths with 15 each (Figure 6).

Drowning an issue in all seasons

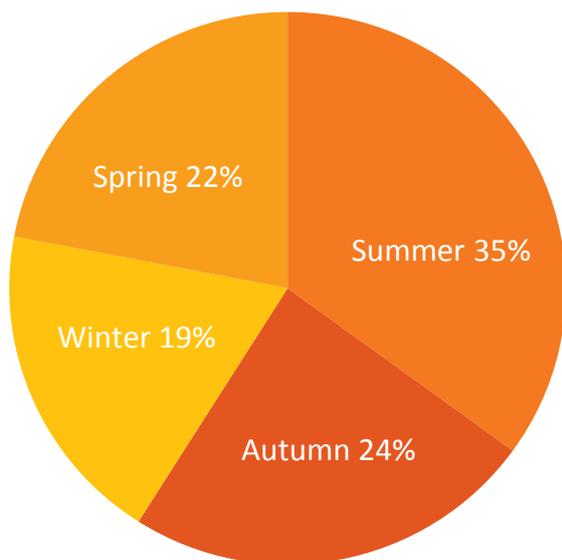


Figure 5: Drowning Deaths by Season, 2012/13

Drowning deaths occur throughout the year in Australia

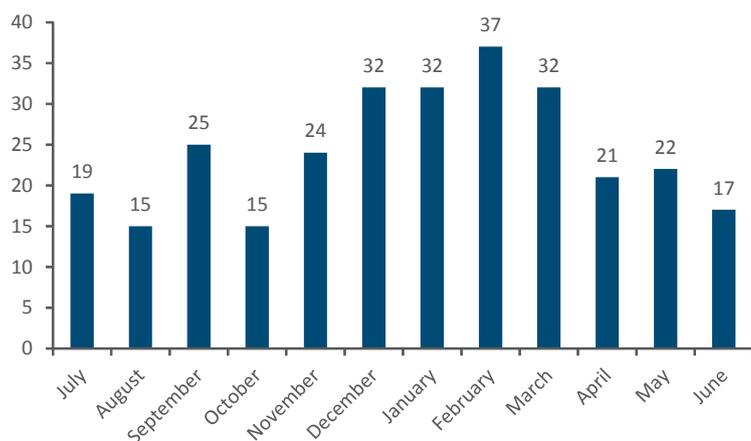


Figure 6: Drowning Deaths by Month of Incident, 2012/13

CASE STUDY: Drowning deaths in Autumn

This year, we saw a large number of drowning deaths take place in the Autumn months (March, April, May). In fact Autumn was the season with the second highest number of drowning deaths after Summer. In many of the southern States the weather begins to cool during these months. With such a high proportion of drowning deaths occurring during Autumn, discrete analysis was conducted to determine a profile of Autumn drowning deaths.

Analysis of the drowning deaths during the Autumn months found:

- Almost one quarter (24%) of all drowning deaths took place in the Autumn months
- Of the people who drowned in Autumn, 79% were male
- 21% of all drowning deaths in Autumn occurred in the 55-64 years age group and a further 20% occurred in the 25-34 years age group
- 37% of all drowning deaths in Autumn took place in NSW, followed by Victoria (23%) and Queensland (20%)
- 33% of all Autumn drowning deaths took place in inland waterways. This was followed by 24% of drowning deaths in Autumn occurred at the Beach and 21% at Ocean / Harbour locations
- Accidents involving watercraft accounted for 17% of all drowning deaths during Autumn. This was followed by Falls into water (14%), Diving (13%) and Swimming and Recreating (13%)
- 40% of all Autumn drowning deaths took place in areas deemed Major Cities, followed by 26% in Inner Regional Areas

Although water safety may be front of mind during the warmer Summer months, water safety should be a year round concern. As temperatures start to lower in southern States people continue to engage in aquatic activities. People must ensure that safe behaviours are still being undertaken in the cooler months when interacting with water. These include taking care when recreating in, on or around inland waterways, such as being aware of changeable conditions, submerged objects, murky water, steep edges and cold water. If recreating at the beach, people must always swim between the flags and ensure lifejackets are worn when using watercraft.

WHERE AND HOW DO THESE DROWNING DEATHS OCCUR?

Rivers, Creeks and Streams were the category of aquatic location that saw the highest number of drowning deaths, with 67 (23%) in 2012/13, followed by Beaches (22%) and Ocean / Harbour locations (16%) (Figure 7). There were 5 drowning deaths where the location of the incident was coded as 'Other'. Locations within the 'Other' category include fish ponds and storm water drains among others.

Rivers, creeks and streams the location with the highest number of drowning deaths

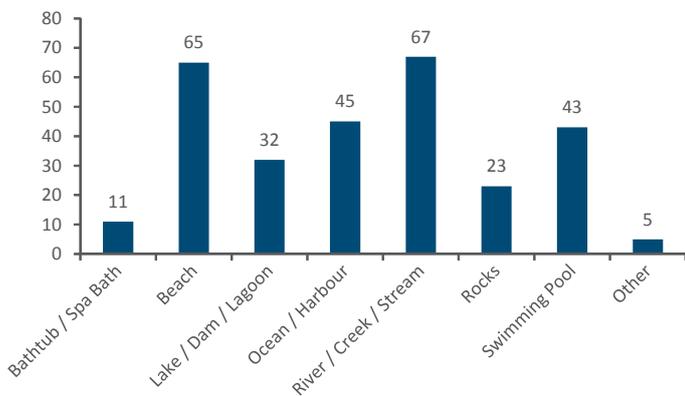


Figure 7: Drowning Deaths by Location, 2012/13

One fifth of all drowning deaths in the 2012/13 financial year occurred as a result of watercraft accidents (58 drowning deaths). Falls into water and Swimming and Recreating were the also commonly conducted activities immediately prior to drowning, accounting for 52 and 48 drowning deaths respectively. Activity immediately prior to drowning was unknown in 12% of cases (34 deaths) indicating there continue to be people who undertake aquatic activities alone where activity prior to drowning was not witnessed (Figure 8).

A diverse range of activities being undertaken prior to drowning in Australia

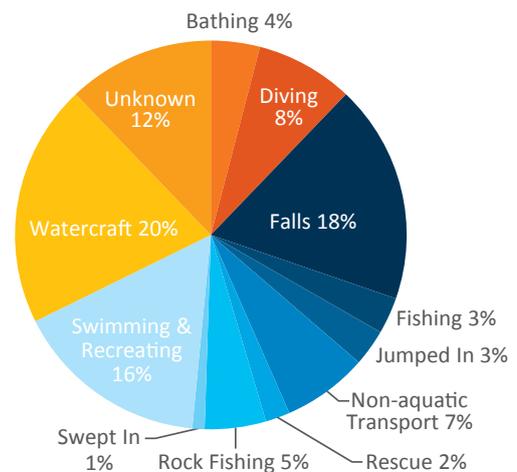


Figure 8: Drowning Death by Activity Immediately Prior to Drowning, 2012/13

CASE STUDY:

Watercraft related drowning deaths

One fifth of all drowning deaths in the 2012/13 financial year were a result of accidents involving watercraft. As the leading cause of drowning deaths in this year's report, a detailed analysis of the profile of watercraft related drowning deaths identified the following:

- 88% of all drowning victims involved in watercraft accidents were male
- 45% of all drowning deaths occurred in the 25-34 (12 deaths) and 55-64 (14 deaths) years age groups
- NSW experienced the largest proportion of watercraft drowning deaths accounting for 45%
- Ocean / Harbour locations experienced 45% of all watercraft drowning deaths. Inland waterways accounted for 34%
- Drowning deaths as a result of fishing from watercraft accounted for 26% of all drowning deaths, 14% occurred as a result of a fall from watercraft
- 12% of watercraft drowning deaths were a result of a capsized and 9% occurred whilst surfing or boogie boarding
- 64% of all watercraft involved in drowning deaths were powered watercraft. Where the length of powered watercraft was known, the majority were less than 5 metres in length
- 33% involved unpowered watercraft including surfboards, yachts, row boats and boogie boards
- There were 6 multiple fatality incidents involving watercraft in 2012/13. Five of these incidents resulted in double fatalities and one incident resulted in three fatalities

Royal Life Saving urges all people interacting with watercraft be it powered or unpowered, to do so safely. This includes wearing lifejackets when on board watercraft and carrying an EPIRB. Watercraft users should avoid consuming alcohol before operating watercraft and refrain from undertaking risky behaviours. Be sure to tell people where you are going and when you are due back.

LOCATION IN FOCUS: INLAND WATERWAYS

There were 99 (34%) drowning deaths in inland waterways (rivers, creeks, streams, lakes, dams and lagoons) in 2012/13. Of these 67 drowning deaths occurred in River / Creek / Stream locations and 32 occurred in Lake / Dam / Lagoon locations.

The 2012/13 figure of 99 drowning deaths is a reduction of 5 drowning deaths (or 5%) on the 10 year average of 104 drowning deaths (Figure 9). Men accounted for 84% of drowning deaths in inland waterways this year.

Significant increases against the 10 year average were experienced this year in the older age groups of 55+. Drowning deaths of people aged 55+ in inland waterways have increased by 48% to 46 compared to the 10 year average of 31 drowning deaths (Figure 10).

Inland waterway drowning deaths have experienced a 40% reduction in Victoria in 2012/13 compared to the 10 year average. Inland waterway drowning deaths continue to increase against the 10 year average in New South Wales, Queensland, South Australia and the Australian Capital Territory (Figure 11).

Accidents involving watercraft were the leading cause of drowning deaths in inland waterways (accounting for 20%), followed by non-aquatic transport (19%) and falls into water (18%). Drowning deaths as a result of swimming and recreating in inland waterways have decreased this year by 47% on the ten year average (Figure 12).

Inland waterways are one of the high risk locations identified in the Australian Water Safety Strategy 2012-15. Key objectives associated with the aim of a 50% reduction in drowning deaths in inland waterway locations include implementing and monitoring the National Rural and Remote Water Safety Strategy, increasing access to inland waterway safety programs and addressing infrastructure issues and human resources shortages in rural and remote areas to ensure adequate coverage of instructors and safety risk management.

Drowning deaths in inland waterways consistently high over past 11 years



Figure 9: Inland Waterway Drowning Deaths 2002/03 to 2012/13, 10 Year Average

Drowning deaths in inland waterways increase markedly in older age groups against 10 year average



Figure 10: Inland Waterway Drowning Deaths by Age Group, 10 Year Average, 2012/13

Victoria and the Northern Territory achieve 40% reductions in inland waterway drowning deaths against 10 year average



Figure 11: Inland Waterway Drowning Deaths by State / Territory, 10 Year Average, 2012/13

Drowning deaths as a result of fishing, jumping in and watercraft increase against 10 year average

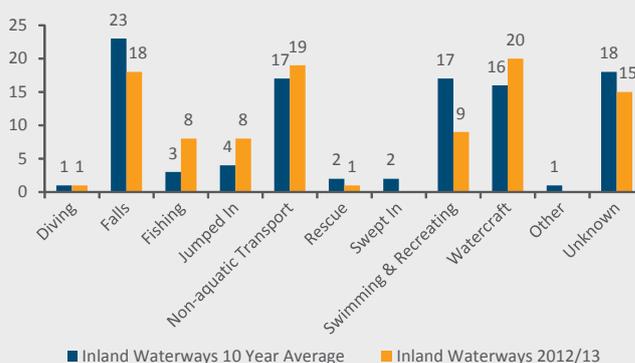


Figure 12: Inland Waterway Drowning Deaths by Activity Immediately Prior, 10 Year Average, 2012/13

LOCATION IN FOCUS: BEACHES

There were 65 drowning deaths at Australian beaches in 2012/13. This figure is an increase of 17 drowning deaths (or 35%) on the 10 year average of 48 drowning deaths (Figure 13). Men accounted for 88% of all drowning deaths at beaches in the 2012/13 financial year.

The largest increase in drowning deaths at beaches was seen in the 55-64 years age group, with the 20 drowning deaths of people aged 55-64 representing a 186% increase in 2012/13 when compared to the 10 year average of 7 drowning deaths. Increases against the 10 year average were also recorded in the 18-24, 65-74 and 75+ age groups (Figure 14).

Drowning deaths as a result of swimming and recreating accounted for the highest proportion of deaths at Australian beaches with 38%. This was followed by drowning deaths as a result of watercraft accidents (18%) and diving activities such as snorkelling (14%). Activity immediately prior to drowning was unknown in 18% of all drowning deaths at Beaches (Figure 15).

New South Wales was the State with the highest number of beach drowning deaths in 2012/13 with 24 (37%), followed by Western Australia and Victoria. These latter States experienced significant increases on the 10 year average in 2012/13, with Western Australia experiencing a 133% increase and Victoria an 86% increase (Figure 16).

Beaches are another high risk location identified in the Australian Water Safety Strategy 2012-15. Objectives identified in the Strategy that it is hoped will contribute to achieving reduction in drowning deaths at Australian beaches include: identifying non-patrolled beaches with high drowning rates and implementing risk reduction strategies; develop and implement a national rip awareness program and develop and implement interventions targeting high risk populations. Expansion of patrols through the use of improved technology and services are also recommended.

Beach drowning deaths increase 35% on 10 year average in 2012/13

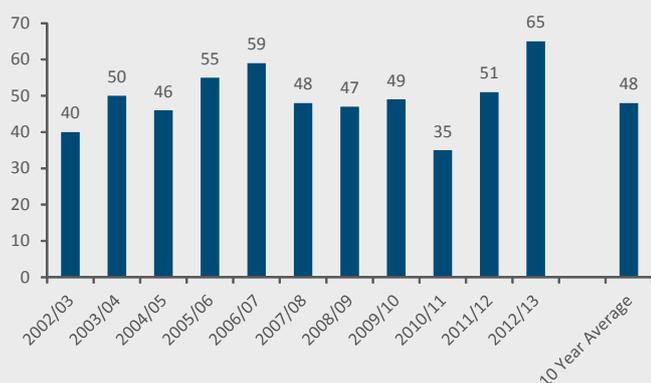


Figure 13: Beach Drowning Deaths 2002/03 to 2012/13, 10 Year Average

186% increase in beach drowning deaths of 55-64 year olds in 2012/13 compared to 10 year average

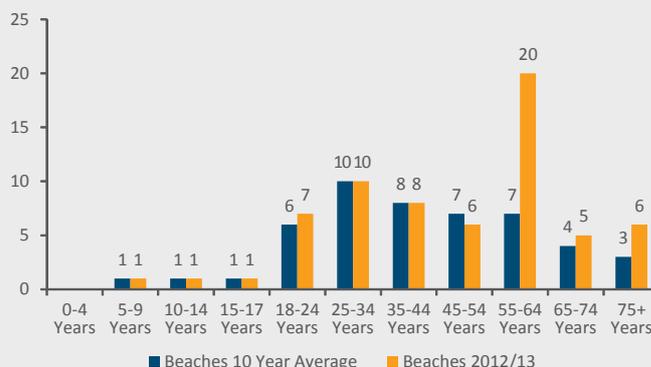


Figure 14: Beach Drowning Deaths by Age Group, 10 Year Average, 2012/13

Swimming and Recreating the leading activity prior to drowning at beaches in 2012/13

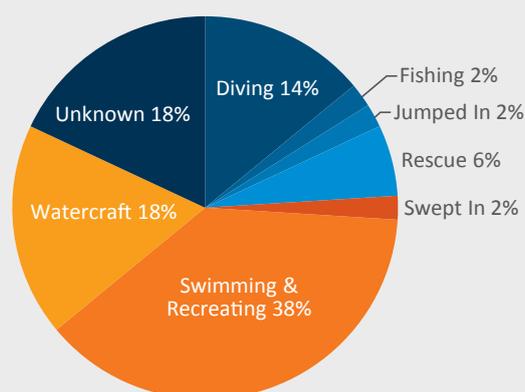


Figure 15: Beach Drowning Deaths by Activity Immediately Prior, 2012/13

New South Wales, Victoria and Western Australia experience jump in beach drowning deaths



Figure 16: Beach Drowning Deaths by State / Territory, 10 Year Average, 2012/13

LOCATION IN FOCUS: OCEAN / HARBOUR

There were 45 drowning deaths in 2012/13 at Ocean / Harbour locations, the same number of deaths as were experienced in 2011/12. This is a reduction of 10 drowning deaths (or 18%) on the 10 year average of 55 drowning deaths (Figure 17). Males accounted for 91% of all drowning deaths at Ocean / Harbour locations in 2012/13.

The largest number of drowning deaths at Ocean / Harbour locations occurred in the 65-74 years age group with 13 drowning deaths. This figure represents a 117% increase on the ten year average of 6 drowning deaths in this age group. There were no drowning deaths of children and adolescents under the age of 18 in Ocean / Harbour locations in 2012/13 (Figure 18).

Accidents involving watercraft accounted for over half (58%) of all drowning deaths at Ocean / Harbour locations with 26 drowning deaths. Drowning deaths as a result of diving accidents (such as scuba diving, snorkelling and free diving) account for over one quarter (27%) of all drowning deaths at these locations (Figure 19).

Ocean / Harbour drowning deaths in New South Wales and Victoria have increased against the 10 year average. In Victoria, the number of Ocean / Harbour drowning deaths experienced in 2012/13 represents a 43% increase on the 10 year average of 7 drowning deaths. The Northern Territory and the Australian Capital Territory did not experience an Ocean / Harbour drowning death in the period of this report (Figure 20).

Strategies aimed at reducing drowning deaths in Ocean / Harbour locations must target older Australians, particularly those in the 65-74 years age group. Although there are a diverse range of activities being undertaken at Ocean / Harbour locations, interventions must promote safe behaviours whilst using watercraft, such as the use of life jackets and EPIRBs. Those drowning at Ocean / Harbour locations are also overwhelmingly male and interventions must find innovative ways to target water safety education and drowning prevention strategies to males recreating in these aquatic environments.

Ocean / Harbour drowning deaths decline against 10 year average

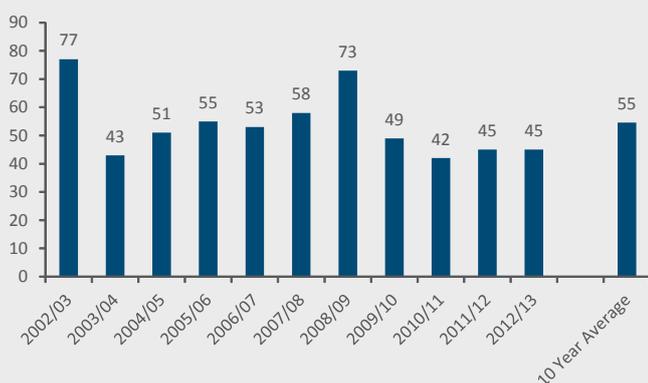


Figure 17: Ocean / Harbour Drowning Deaths, 2002/03 to 2012/13, 10 Year Average

65-74 years the only age group to increase against 10 year average

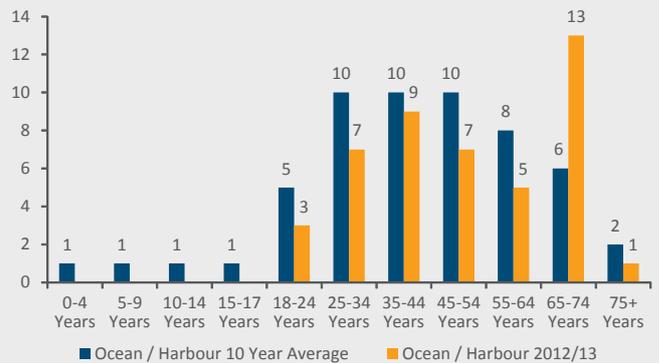


Figure 18: Ocean / Harbour Drowning Deaths by Age Group, 10 Year Average, 2012/13

Accidents involving watercraft account for over half of all Ocean / Harbour drownings

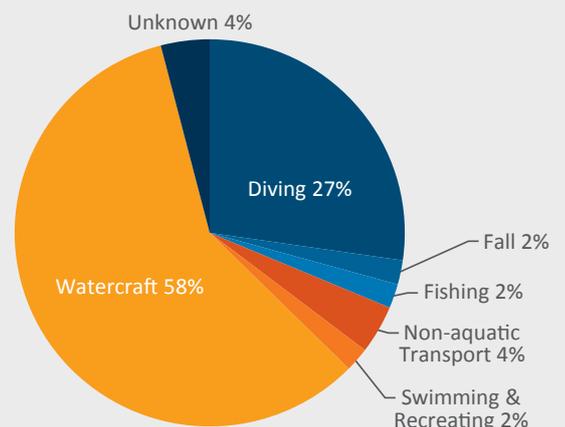


Figure 19: Ocean / Harbour Drowning Deaths by Activity Immediately Prior, 2012/13

New South Wales and Victoria record increases against 10 year average in 2012/13



Figure 20: Ocean / Harbour Drowning Deaths by State / Territory of Incident, 2012/13

LIFE STAGE IN FOCUS: CHILDREN AGED 0-14 YEARS

Children aged 0-4 years

There were 31 children between the ages of 0 and 4 years who drowned in Australia between 1 July 2012 and 30 June 2013. This is a reduction of 2 drowning deaths (6%) on the ten year average of 33 (Figure 21). Although in previous years we have seen pleasing reductions, the number of drowning deaths in the 2012/13 financial year is a disturbing reversal of the consistent downward trend observed in the previous 4 years. In particular, it is a 48% increase on 2011/12 figures for this age group.

Males account for 65% of drowning deaths in the 0-4 years age group in 2012/13. Swimming Pools continue to account for the largest proportion of drowning deaths in this age group, representing 61% of all drowning deaths in children aged 0-4 years. Swimming Pools are also the only location which has increased this year when compared to the 10 year average (Figure 22). Falls into water continue to account for the majority of drowning deaths in children aged 0-4 years, representing the activity being conducted immediately prior to drowning in 81% of cases. This was followed by Bathing which accounted for 13% of all drowning deaths in children under five (Figure 23).

Children under 5 drowning deaths spike after consistent decline

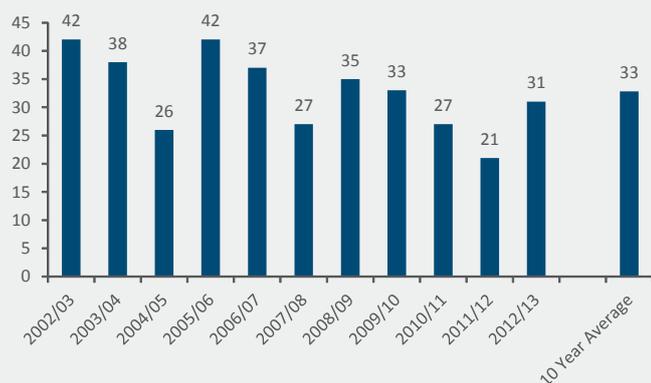


Figure 21: Drowning Deaths of Children 0-4 Years, 2002/03 to 2012/13, 10 Year Average

Swimming pool drowning deaths climb against 10 year average



Figure 22: Drowning Deaths of Children 0-4 Years by Location, 2012/13, 10 Year Average

Falls into water remain the most common cause of drowning in children under five

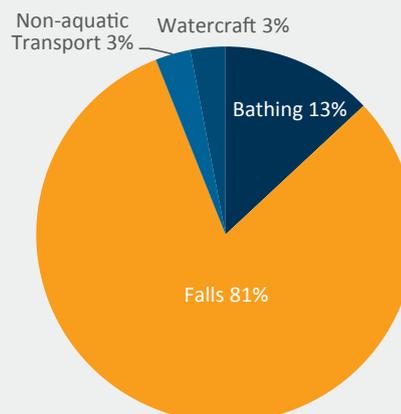


Figure 23: Drowning Deaths of Children 0-4 Years by Activity, 2012/13

CASE STUDY:

NSW Swimming Pool Legislation Changes

In response to the continually high numbers of children under five drowning in home swimming pools, some States and Territories in Australia have, in recent years, enhanced legislation and moved towards increased enforcement around swimming pool fencing and other safety considerations. In the past 10 years, 67 children under the age of five have drowned in backyard swimming pools in New South Wales. To improve child safety and reduce the number of children drowning in backyard pools, the NSW government has recently enacted new legislation that promotes the regular maintenance of pool barriers whilst ensuring those barriers comply with the applicable barrier safety standards.

From the 29th April 2013, swimming pool owners in New South Wales were required to register their backyard swimming pools in an online register provided by the NSW State Government. The register provides pool owners with pool safety checklists and Be Pool Safe resources to help them self-assess their pool's safety. Pool owners will be asked to indicate, to the best of their knowledge, if their swimming pool complies with the Standard applicable to their pool based on the age of the pool or property type.

For information on home pool safety please visit: www.royallifesaving.com.au and visit Programs – Home Pool Safety.

Children aged 5-14 years

There were 9 drowning deaths of children aged 5-14 years in Australian waterways between 1 July 2012 and 30 June 2013. This is a reduction of 6 (46%) drowning deaths on the 13 drowning deaths in 2011/12. It also represents a 40% reduction on the 10 year average of 15 drowning deaths (Figure 24). Of the 9 drowning deaths in this age group in 2012/13, males accounted for 89%.

Swimming Pools accounted for over half (56%) of all drowning deaths in this age group. Beaches were the location with the second highest number of drowning deaths, accounting for a further 22% of drowning deaths in this age group (Figure 25).

More than half of all drowning deaths in this age group occurred as a result of children intending to be in the water, with Swimming and Recreating the activity being conducted prior to drowning in 56% of all cases. Activity was unknown in 11% of cases (Figure 26).

Drowning deaths in 5-14 year olds in single figures for the first time in 11 years

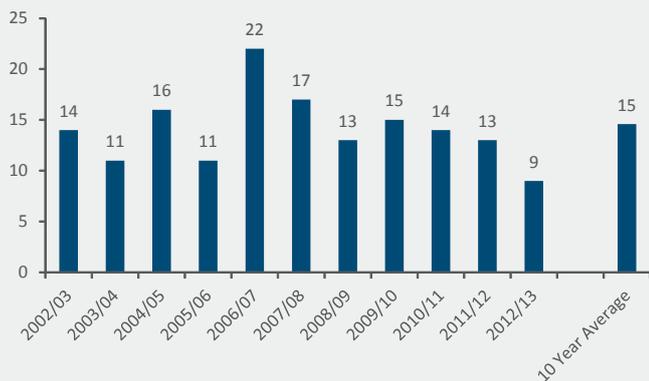


Figure 24: Drowning Deaths of Children 5-14 Years, 2002/03 to 2012/13, 10 Year Average

Swimming Pools account for over half of all drowning deaths of children 5-14 years

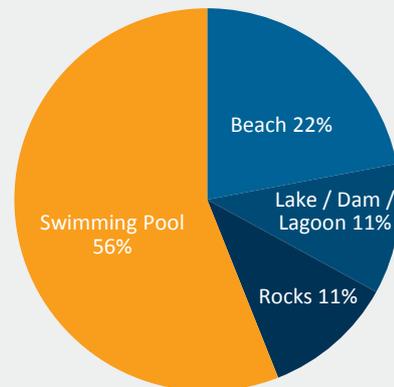


Figure 25: Drowning Deaths of Children 5-14 Years by Location, 2012/13

Swimming and Recreating is the leading cause of drowning deaths in children 5-14 years

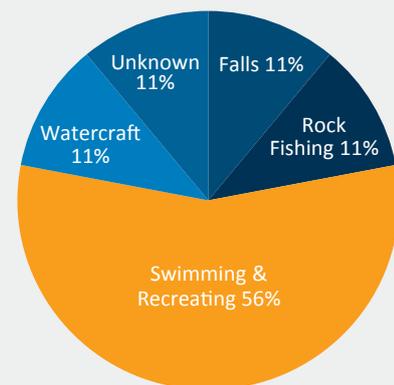


Figure 26: Drowning Deaths of Children 5-14 Years by Activity Immediately Prior, 2012/13

CASE STUDY:

ACT Department of Education Schools Swim & Survive Program 2012

The ACT Primary Schools Swimming and Water Safety program 2012 was another great success and involved 6,428 primary school students from across 50 ACT primary schools. The program has experienced rapid expansion over the last few years and currently employs 58 swim teachers and 5 on-deck coordinators.

The aim of the program is to ensure access for all ACT primary students to quality learn to swim opportunities and water safety education at an affordable rate. Through their participation in the program children learn to recognise the potential dangers in and around water environments.

They learn how to communicate in aquatic emergencies and are able to explore and learn their own limitations in the water. The program also links to Priority Area 4 of the Safe Waters ACT 2010-13 Action Plan which aims to eliminate drowning deaths in the ACT.

The program is set for further expansion in 2013.

LIFE STAGE IN FOCUS: YOUNG PEOPLE AGED 15-24 YEARS



There were 26 drowning deaths of Young People aged between 15 and 24 years in Australian waterways between 1 July 2012 and 30 June 2013. This represents a reduction of 11 drowning deaths (or 30%) on the 10 year average of 37 drowning deaths (Figure 27). Males account for 85% of all drowning deaths in this age group.

Beaches were the location with the highest number of drowning deaths of young people aged 15 to 24 years in 2012/13 with 8 drowning deaths. This is on par with the 10 year average. Most other locations recorded a reduction against the 10 year average with Rocks the only other location to experience an increase against the 10 year average (Figure 28).

Accidents involving watercraft, swimming and recreating and intentionally entering the water were responsible for 69% of all drowning deaths in young people in 2012/13 (23% each). The activity being conducted immediately prior to drowning was unknown in 12% of cases (Figure 29).

There has been a 67% decrease in drowning deaths of young people in Queensland this year against the 10 year average of 12 drowning deaths. New South Wales experienced 10 drowning deaths in this age group, which was only a reduction of three drowning deaths on the 10 year average of 13. Western Australia saw a 50% increase in drowning deaths in 15-24 year olds against the 10 year average. The Australian Capital Territory and Tasmania recorded zero drowning deaths in this age group in the 2012/13 financial year (Figure 30).

The ongoing challenge of reducing drowning deaths and improving water safety knowledge and skills in young people aged 15-24 is another goal identified in the Australian Water Safety Strategy 2012-15.

Key objectives for achieving reductions in drowning deaths in this age group include identifying underlying factors for drowning and developing programs that provide the skills and knowledge needed for safe aquatic participation such as swimming and rescue skills. Addressing themes of alcohol consumption and risk taking behaviour around water are also key for preventing drowning in this age group.

Drowning deaths in young people aged 15-24 the lowest they have been in at least 11 years

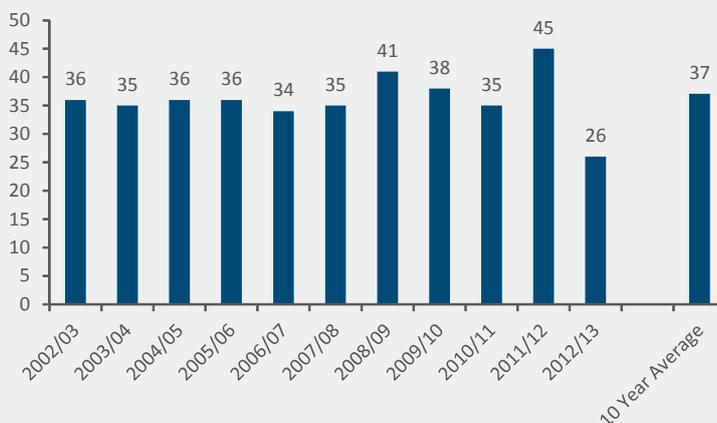


Figure 27: Drowning Deaths of Young People 15-24 years, 2002/03 to 2012/13, 10 Year Average

River drowning deaths decrease by 36% when compared to 10 year average

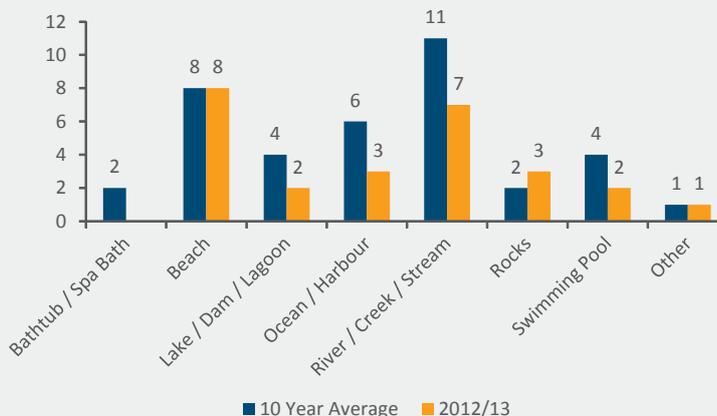
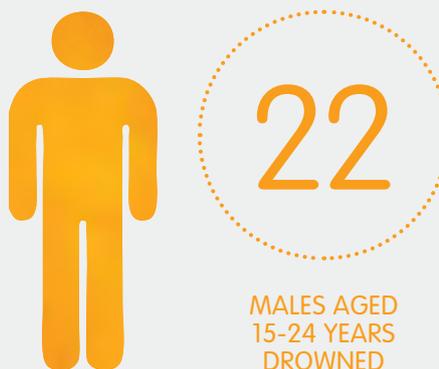


Figure 28: Drowning Deaths of Young People 15-24 Years by Location, 10 Year Average, 2012/13



CASE STUDY: Shallow Water Blackout

The term “shallow water blackout” is commonly used to describe a loss of consciousness under water caused by a lack of oxygen to the brain following breath-holding. Although the term refers to ‘shallow water’, it can occur at any depth. The risk of shallow water blackout can be encountered by healthy adults or adolescents who hyperventilate before initiating prolonged underwater swimming activities.

Hyperventilation, or over-breathing, involves breathing faster and/or deeper than the body requires. This causes the carbon dioxide level in the blood to be lowered. In turn, this results in the carbon dioxide taking longer to build up to trigger the need to take a breath. The oxygen in the body may be used up before reaching the trigger level, resulting in a sudden loss of consciousness.

Hyperventilating prior to engaging in underwater activities where the breath is held can lead to a loss of consciousness and drowning. There is usually no warning that alerts the swimmer of the impending unconsciousness.

Although this is not a common cause of drowning deaths, fatalities have been recorded related to spear fishing, free diving and even in swimming pools.

Safety tips to reduce the risk of shallow water blackout:

- Avoid taking a series of faster and deeper breaths prior to swimming underwater.
- Limit all competitive, repetitive or continuous breath-holding activities.
- Repeated hyperventilation together with repeated breath-holding activities increases the risk.
- Avoid pushing your endurance limits in underwater swimming.
- Leave the water if you are experiencing a shortness of breath or dizziness.
- Always swim with someone that can assist should the need arise.

Watercraft, swimming and intentionally entering the water responsible for most drownings

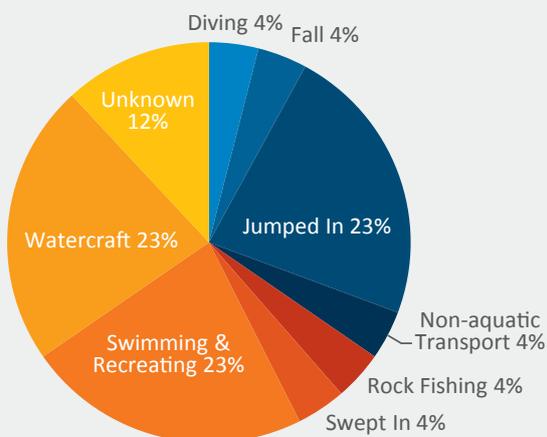


Figure 29: Drowning Deaths of Young People 15-24 Years by Activity Immediately Prior, 2012/13

Sharp decline in drowning deaths of young people aged 15-24 in QLD compared to 10 year average

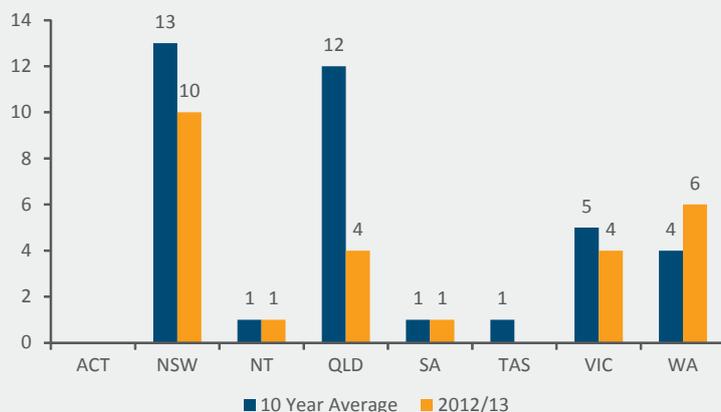


Figure 30: Drowning Deaths of Young People 15-24 Years by State / Territory, 10 Year Average, 2012/13



FEMALES AGED
15-24 YEARS
DROWNED

There were 114 drowning deaths of people aged 55 years and over in Australian waterways between 1 July 2012 and 30 June 2013. This is an increase of 27 drowning deaths (or 31%) on the 10 year average of 87 drowning deaths (Figure 31). Males accounted for 79% of all drowning deaths in this age group.

Beaches were the location with the highest number of drowning deaths of people aged 55 years and over with 31 drowning deaths. Beach drowning deaths have also more than doubled this year compared to the 10 year average of 14 drowning deaths. Lakes / Dams / Lagoons also recorded a sharp increase in drowning deaths in people aged 55+ with 19 drowning deaths, compared to the 10 year average of 7. Almost all aquatic locations recorded an increase in drowning deaths of people aged 55 years in 2012/13 when compared to the 10 year average (Figure 32).

Accidents involving watercraft were responsible for the largest number of drowning deaths in people aged 55+ with 27 drowning deaths or 24% of all drowning deaths in this life stage. This was followed by Swimming and Recreating (15%) and Falls into water (14%). Activity immediately prior to drowning was unknown in 18% of drowning deaths in people aged 55+ (Figure 33).

There are a diverse range of activities being undertaken by people aged 55+ prior to drowning. When examining activity prior to drowning by the age bands within this life stage, drowning deaths as a result of accidents involving watercraft decrease as people age, declining from 14 drowning deaths in people aged 55-64 to just 4 drowning deaths in those aged 75+. In the elderly (75+) drowning deaths as a result of falls increase and the more active pursuits of undertaking a rescue or rock fishing resulted in no drowning deaths in this age group (Figure 34).

Drowning deaths in older people increase by 30% on 10 year average

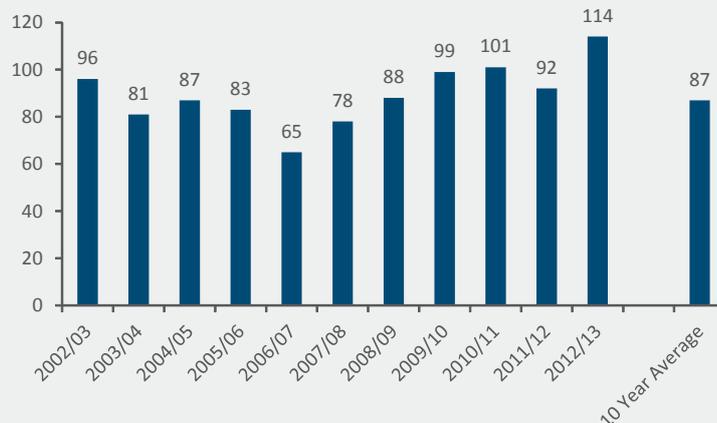


Figure 31: Drowning Deaths of People Aged 55+ Years, 2002/03 to 2012/13, 10 Year Average

Drowning deaths of older people increase against 10 year average in almost all aquatic locations

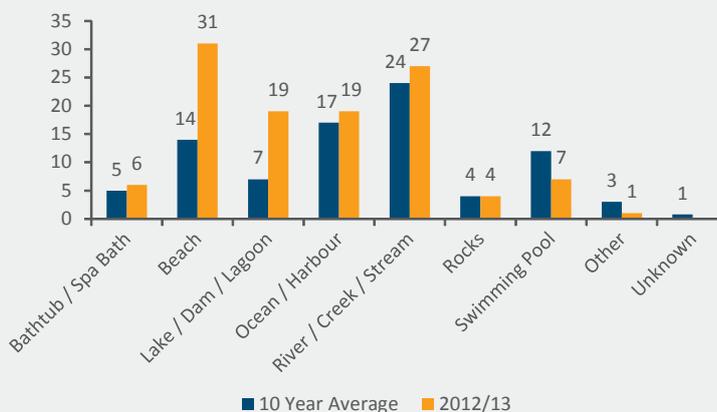


Figure 32: Drowning Deaths of People Aged 55+ Years by Location, 10 Year Average, 2012/13



Incidents involving Watercraft responsible for the largest number of drowning deaths in older people

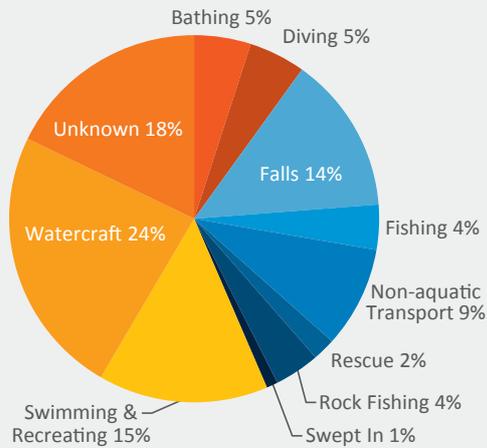


Figure 33: Drowning Deaths of People Aged 55+ Years by Activity Immediately Prior, 2012/13

Drowning deaths as a result of falls, swimming and watercraft a concern throughout the older years

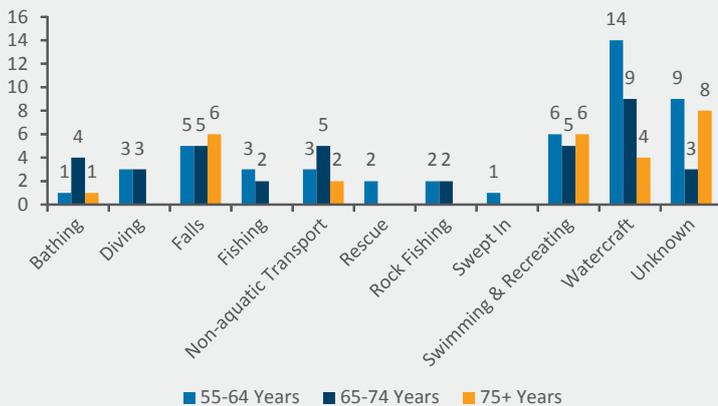
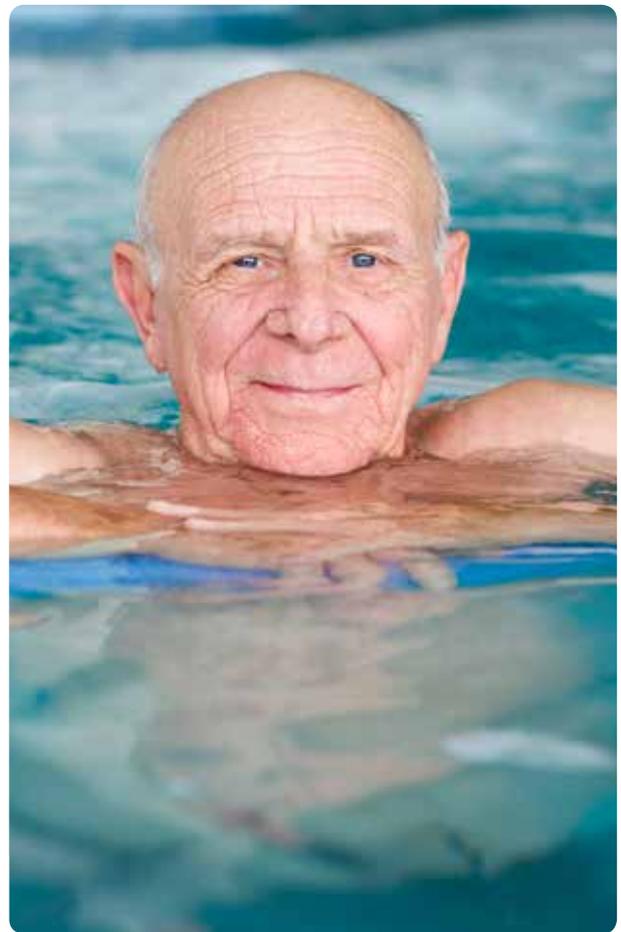


Figure 34: Drowning Deaths of People Aged 55+ Years by Age Group and Activity Immediately Prior, 2012/13



24

FEMALES AGED 55 YEARS AND OVER DROWNED



CASE STUDY: Australian Water Safety Strategy 2012-15

Addressing the consistently high number of drowning deaths in people aged 55+ is a goal of the Australian Water Safety Strategy 2012-15.

The 30% increase in drowning deaths of people aged 55+ this year when compared to the 10 year average highlights the need for evidence based drowning prevention strategies specifically developed for older Australians.

The Strategy highlights key objectives for achieving reductions in drowning deaths in this age group through the development and implementation of a national public awareness campaign. Other objectives include strengthening drowning prevention and healthy activity through programs and implementing strategies that foster more inclusive aquatic venues that address the growing needs of people aged 55+.

DROWNING RISK FACTORS

Risk factors that increase a person's chance of drowning can include age, gender, socio-economic status, underlying medical conditions, skill level and agent factors such as the consumption of drugs and alcohol. The following are case studies investigating the frequency of several risk factors in the drowning deaths that occurred in 2012/13.

Underlying Medical Conditions

There were 50 people who were known to have an underlying medical condition that may have contributed to their drowning deaths. Of these 82% were males and over half (56%) were aged 55 years or older.

The most common category of medical condition was diseases of the circulatory system (11%), such as ischaemic heart disease, hypertension (high blood pressure) and coronary artery disease. The next most common category of medical condition was diseases of the nervous system such as epilepsy and cerebral palsy.

Royal Life Saving recommends that people aged 55 years and over undergo regular medical check-ups, as well as anyone participating in activities such as scuba diving. Children or adults with a history of epilepsy should always be supervised when in, on, or around the water.

Visitor Status

In 70 cases (24%), the person who drowned was a visitor to the location where they drowned. Of these 43 people drowned within their own State or Territory in a postcode that was 100kms or greater from their residential postcode. A further 16 were visiting a different State or Territory when they drowned.

Eleven people who drowned in 2012/13 were overseas tourists, predominately from European countries such as Germany, Estonia and England. Over half (55%) drowned at Beaches, with another 18% drowning at Rivers, Creeks and Streams. The most commonly undertaken activities were surfing and body boarding, swimming and recreating and snorkelling.

Regardless of how far you live from the aquatic environments you recreate in, with natural waterways, conditions can change regularly. Where possible you should check with a local resident regarding the conditions prior to entering the water. International tourists to Australia should be provided with water safety information on arrival to Australia and be encouraged to swim between the flags at Australian beaches.

Drugs & Alcohol

Fifteen victims were known to have recorded positive readings for alcohol in their bloodstream at the time they drowned. Almost all (81%) recorded a blood alcohol reading that was significantly higher than the legal limit for operating watercraft and vehicles (0.05). The highest blood alcohol reading identified was 0.229 which is 4.5 times the legal limit.

Fifteen victims were also known to have some kind of drug in their system when they drowned. In almost half of these cases, the drugs were known to be illegal or abuse of legal drugs. Commonly occurring illegal drugs were methamphetamines and cannabis. There were a further 258 cases where involvement of drugs and alcohol is not currently known, indicating that the involvement of drugs and alcohol in drowning deaths in 2012/13 is likely to be far greater than currently known.

The ingestion of illegal drugs and/or alcohol prior to undertaking aquatic activity is known to increase the risk of drowning as they can impair judgement, slow reaction times, impair coordination and can result in greater risk taking behaviour. Some medications may also increase the risk of drowning as they may make people unsteady on their feet or slow reaction times. Mixing prescription medication with alcohol can also increase a person's risk of drowning. Royal Life Saving strongly urges people to refrain from consuming alcohol or taking illegal drugs and to consider the possible side effects of prescription medication when interacting with water.

50

PEOPLE DROWNED WHO HAD UNDERLYING MEDICAL CONDITIONS

70

PEOPLE DROWNED WHO WERE VISITORS TO THE INCIDENT LOCATION

15

PEOPLE DROWNED WHO RECORDED POSITIVE READINGS FOR ALCOHOL

CASE STUDY: Drowning Deaths by Remoteness

By collecting data on the postcode of the drowning incident location, it is possible to determine the remoteness classification of the incident location. Two thirds (66%) of drowning deaths in 2012/13 took place in areas deemed to be Major Cities or Inner Regional. One quarter of all drowning deaths in Major Cities and Inner Regional Areas took place at Beaches, with another 21% at Rivers. The most common activities being conducted immediately prior to drowning in Major Cities and Inner Regional areas were Falls into water (21% of all drowning deaths in these remoteness classifications), followed by Swimming and Recreating (19%) and Watercraft (14%).

Drowning deaths in Outer Regional areas were most likely to occur as a result of accidents involving Watercraft (36% of all Outer Regional drowning deaths) followed by accidents involving non-aquatic transport (13%) and diving (10%).

Rivers, creeks and streams was the aquatic location with the highest number of drowning deaths in Outer Regional areas accounting for 27% of all drownings.

Eleven percent of all drowning deaths in 2012/13 occurred in areas deemed Remote or Very Remote. Drowning deaths in these locations were most commonly as a result of accidents involving Watercraft (21%) and Swimming and Recreating or Falls into water (15% respectively). Rivers saw the highest number of drowning deaths, accounting for 24% of all drowning deaths in Remote or Very Remote areas.

Access to timely medical assistance in Remote and Very Remote areas is made all the more difficult due to isolation from major services. Therefore promoting an increased awareness of the risks of undertaking aquatic recreation alone in isolated areas and the importance of first aid and first responder skills is extremely important.



Figure 35: Drowning deaths by Remoteness Classification of Incident Postcode, 2012/13



METHODS

Information from the Royal Life Saving Society – Australia National Drowning Report 2013 has been collected from State and Territory Coronial Offices, the National Coronial Information System (NCIS) and media reports. Cases are collated in partnership with Royal Life Saving State and Territory Member Organisations and analysed by Royal Life Saving Society – Australia.

Royal Life Saving uses a media monitoring service (both broadcast and print) all year round to identify drowning deaths reported in the media. This information is then corroborated with information from the NCIS, Police and Royal Life Saving State and Territory Member Organisations (STMOs) 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 2012 and 2013. Figures may change depending upon the ongoing coronial investigations and findings as 79% of cases were still under investigation (i.e. open) at the time of the production of this report.

This report contains information on 2012/13 drowning deaths known as of 23rd August 2013. All other data is correct as of 1 July 2013, in accordance with Royal Life Saving's ongoing quality assurance and data checking processes. All cases in the Royal Life Saving database are checked against the NCIS on a regular basis and figures are updated in drowning reports from year to year as cases close. The 10 year averages were calculated from drowning death data from 2002/03 to 2011/12 inclusive.

Drowning rates per 100,000 population are based on the ABS publication 'Australian Demographic Statistics' (Cat. No 3101.0) which are calculated using the 2011 Census data. Percentages and averages are presented as whole numbers and have been rounded up or down accordingly.

Exclusions from this report include: suicide, homicide, deaths from natural causes, shark and crocodile attacks, or hypothermia where known. All information presented is about drowning deaths or deaths where drowning was known to be a factor (e.g. a car rolled into the water and a person drowned).

Non-aquatic Transport replaces the activity category of 'Driving' used in previous reports. Non-aquatic Transport related to drowning deaths involving means of transport not primarily designed for aquatic use such as cars, motorbikes, bicycles and aeroplanes among others. Means of transport primarily used for aquatic purposes are captured in the 'Watercraft' category (e.g. boats, jet skis, canoes, kayaks etc).

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Royal Life Saving would like to thank the following people and organisations for their assistance in producing the Royal Life Saving National Drowning Report 2013:

- Royal Life Saving State and Territory Member Organisations (STMOs)
- The National Coronial Information System (NCIS)
- The Queensland Commission for Children and Young People and Child Guardian (CCYPCG)
- Surf Life Saving Australia (SLSA)
- Leanne Daking (NCIS)
- Professor John Pearn, Royal Life Saving Society – Australia National Medical Advisor
- Barbara Brighton (SLSA)
- Justin Scarr (RLSSA)
- Rick Carter (Jimmy Too Design)
- Stephanie Muller (CCYPCG)
- Reyelle McKeever (CCYPCG)

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This report was compiled by Amy Peden, National Manager – Research and Policy, Royal Life Saving Society – Australia.

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CHILDREN AGED
0-4 YEARS DROWNED
IN 2012/13



Watch our video & help save a life:
[youtube.com/RoyalLifeSavingAust](https://www.youtube.com/RoyalLifeSavingAust)



CHILDREN 0-4 YEARS

31 children aged 0-4 years drowned in 2012/13

48% increase on last year

First increase since a steady decrease from 2009/10

Swimming pools account for 61% of all drowning deaths in children under 5

Children under 5 account for 44% of all swimming pool drowning deaths in the 2012/13 financial year

An absence of supervision was identified in 94% of cases

SUPERVISE

Close/Constant/Focused



WATER AWARENESS

Familiarise/Develop/Educate



RESTRICT ACCESS

Fence /Gate/Maintain



RESUSCITATE

Learn/Update/Act



114

PEOPLE AGED
55 YEARS AND OVER
DROWNED IN 2012/13



Watch our video & help save a life:
[youtube.com/RoyalLifeSavingAust](https://www.youtube.com/RoyalLifeSavingAust)



PEOPLE AGED 55 YEARS AND OVER

114 drowning deaths of people aged 55 years and over in Australian waterways between 1 July 2012 and 30 June 2013

This is an increase of 27 drowning deaths (or 31%) on the 10 year average of 87 drowning deaths

Beaches were the location with the highest number of drowning deaths of people aged 55 years and over with 31 drowning deaths or 27% of all drowning deaths in people of this age group

Accidents involving watercraft were responsible for the largest number of drowning deaths in people aged 55+ accounting for 24% of all drowning deaths during this lifestage

Over half (56%) of those who were known to have an underlying medical condition, were aged 55 years or older

24% INVOLVED WATERCRAFT



56% WITH MEDICAL CONDITIONS
WERE AGED 55+



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