

## ROYAL LIFE SAVING

 NATIONAL DROWNING REPORT 2014
## EVERYONE CAN BE A LIFESAVER (㷂角)

Supported by 5


## 2014 SNAPSHOT OF FINDINGS

## OVERALL

- 266 people drowned in Australia between 1 July 2013 and 30 June 2014
- This is a reduction of 29 drowning deaths (or $10 \%$ ) on the adjusted total of 295 drowning deaths in 2012/13
- This is a reduction of 26 drowning deaths (or $9 \%$ ) on the 10 year average of 292 drowning deaths


## SEX AND AGE

- $81 \%$ of all drowning deaths were male (215 drowning deaths)
- 19\% of all drowning deaths were female (51 drowning deaths)
- 20 (8\%) drowning deaths occurred in children aged 0-4 years
- $10(4 \%)$ drowning deaths occurred in children aged 5-14 years
- 40 (15\%) drowning deaths occurred in young people aged 15 to 24 years
- 87 (33\%) drowning deaths occurred in people aged 55 years and over


## STATE AND TERRITORY

- 90 (34\%) drowning deaths ocurred in New South Wales
- 60 ( $23 \%$ ) drowning deaths occurred in Queensland
- 47 (18\%) drowning deaths occurred in Victoria


## LOCATION AND ACTIVITY

- 105 (39\%) drowning deaths occurred in Inland Waterway locations
- 39 (15\%) drowning deaths occurred in Swimming Pools
- 34 (13\%) drowning deaths occurred at Beaches
- 65 people (24\%) were Swimming and Recreating immediately prior to drowning
- 56 people ( $21 \%$ ) drowned as a result of Falls into water
- 43 people ( $16 \%$ ) were using Watercraft immediately prior to drowning


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There were 266 drowning deaths in Australian waterways between 1 July 2013 and 30 June 2014. The number of people drowning in Australia has decreased this year and is the lowest number recorded in the past 12 years.

This year's figure of 266 drowning deaths is a reduction of 29 drowning deaths (or $10 \%$ ) on the adjusted total of 295 drowning deaths in $2012 / 13$. This is a reduction of 26 drowning deaths (or 9\%) on the 10 year (2003/04 to 2012/13) average of 292 drowning deaths.

The crude drowning rate in 2013/14 is 1.14 per 100,000 population, compared to the 10 year average of 1.37 per 100,000 population (Figure 1).

Trends over time: Fatal drowning in Australia


Figure 1: Unintentional Drowning Deaths and Death Rates, Australia 2002/03 to 2013/14, 10 Year Average

CASE STUDY:

## PROGRESS TOWARDS THE TARGETS OF THE AUSTRALIAN WATER SAFETY STRATEGY 2012-15

The Australian Water Safety Strategy 2012-15 (AWSS 2012-15) continues to focus drowning prevention efforts towards achieving a $50 \%$ reduction in drowning by the year 2020. The progress in 2013/14 against the key priority areas of the AWSS 2012-15 is reported below:

| AWSS 2012-15 <br> Goal Areas | Drowning Deaths <br> in 2013/14 |  | AWSS 2012-15 <br> Target by 2020 | Progress |
| :--- | :---: | :---: | :---: | :---: |
| 1. Reduce drowning deaths <br> in children aged 0-14 years | Children 0-4 years | 20 | 17 | Progress being <br> made |
|  | Children 5-14 years | 10 | 8 | Progress being <br> made |
| 2. Reduce drowning deaths <br> in young people aged 15-24 |  | 40 | 18 | Of High Concern |
| 3. Reduce drowning deaths <br> in people aged 55+ | 87 | 51 | Of High Concern |  |
| 4. Reduce drowning deaths <br> in inland waterways | 90 | 54 | Of High Concern |  |
| 5. Reduce surf beach <br> drowning deaths | 34 | 21 | Progress being <br> made |  |

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

Of the 266 drowning deaths that occurred in Australian waterways in 2013/14, 215 ( $81 \%$ ) were male. New South Wales recorded the largest number of drowning deaths in 2013/14 with 90 drowning deaths (or $34 \%$ of all drowning deaths in 2013/14). This was followed by Queensland with 60 drowning deaths (23\%) and Victoria with 47 drowning deaths (18\%).

When calculated as rates per 100,000 population, the Northern Territory has the highest rate of drowning in Australia at 5.36 per 100,000 population, almost four times higher than NSW and QLD (1.21 and 1.28 respectively). The Australian Capital Territory has the lowest rate of drowning in Australia in 2013/14 with a rate of 0.52 (Figure 3).

The average age of those who drowned was 41.6 years, with females being on average older than males (47.6 years for females, compared to 40.1 years for males). The 25-34 years age group had the highest number of drowning deaths with 43 ( $16 \%$ of all drowning deaths in 2013/14), followed by the $35-44$ and $55-64$ years age groups with 36 drowning deaths respectively (Figure 4).

The 18-24 years age group was the only age group to record an increase against the 10 year average, with 35 drowning deaths, an increase of $17 \%$ on the 10 year average of 30 drowning deaths. All other age groups held steady or recorded reductions against the 10 year average, with the most notable reduction in the 2013/14 financial year occurring in the 0-4 years and 4554 years age groups with reductions of $29 \%$ and $25 \%$ respectively (Figure 4).

The Northern Territory continues to record the highest rate of drowning in Australia


Figure 3: Drowning Deaths by Sex and State / Territory, Drowning Death Rates, 2013/14

18-24 years age group the only age group to record an increase against the 10 year average


Figure 4: Drowning Deaths by Age Group, 10 Year Average, 2013/14

## CASE STUDY: 18 TO 24 YEAR OLDS

This year, the only age group to record an increase against the 10 year average was the 18 to 24 years age group. A focused analysis of the drowning deaths in this age group shows:

- 30 of the 35 drowning deaths in this age group were males ( $86 \%$ )
- Almost three quarters ( $71 \%$ ) occurred in New South Wales and Queensland
- The leading location for drowning deaths in this age group was the River / Creek / Stream category (34\%) followed by Beaches (20\%)
- Males accounted for $92 \%$ of drowning deaths in River / Creek / Stream locations
- Almost half ( $49 \%$ ) of all drowning deaths in this age group were as a result of Swimming and Recreating
- In 75\% of cases where alcohol was known to be involved in the drowning death, the amount of alcohol consumed directly contributed to the fatal drowning
- Almost half ( $40 \%$ ) of drowning deaths in this age group occurred in areas classified as Major Cities

Drowning deaths tend to rise sharply in the 18 to 24 years age group after low numbers are typically recorded in the 5-17 years age groups. We typically see young adults, recreating in unfamiliar aquatic locations, with issues such as risk taking behaviour, peer influences and alcohol consumption contributing to drowning. Drowning prevention strategies targeting this age group must address risk taking behaviour and the use of alcohol and drugs in and around aquatic environments. Learning swimming, lifesaving and survival skills during the secondary school years, including basic rescue and CPR, will assist in reducing the risk of drowning in young adults.

Drowning deaths occur throughout the year, however the largest number occurred in Summer (91 deaths), followed by Spring (65) and Autumn (61) (Figure 5).

February was the month with the highest number of drowning deaths (34).

The largest number of drowning deaths occurred on a Sunday with 67 drowning deaths or $25 \%$ of all drowning deaths in 2013/14. Mondays and Thursdays were the days of the week that recorded the lowest numbers of drowning deaths with 29 drowning deaths respectively (Figure 7).

The time of incident was recorded and grouped into one of four categories, where known ( $90 \%$ of cases). Drowning deaths most commonly occurred in the afternoon ( $12: 01 \mathrm{pm}$ to 6 pm ) with 100 deaths or $38 \%$ of all drowning deaths in the 2013/14 financial year. The lowest number of drowning deaths occurred in the early morning period (12:01am to 6am) with 24 drowning deaths (9\%) (Figure 8).

Fatal drowning in Australia occurs across all seasons


Figure 5: Drowning Deaths by Season, 2013/14

Highest number of drowning deaths across 2013/14 recorded in the month of February


Figure 6: Drowning Deaths by Month of Incident, 2013/14

Sunday the most common day of the week for drowning deaths in 2013/14


Figure 7: Drowning Deaths by Day of the Week of Incident, 2013/14

The largest number of drowning deaths occurred in the Afternoon


Figure 8: Drowning Deaths by Grouped Time of Incident, 2013/14 *
*Please note: Time of incident was unknown in 27 cases

## WHERE AND HOW DO THESE DROWNING DEATHS OCCUR?

The Rivers / Creek / Stream category was the category of aquatic location with the highest number of drowning deaths in 2013/14 with 80 (30\%), followed by Swimming Pools (15\%) and Beaches (13\%) (Figure 9). There were 15 drowning deaths where the location of the incident was coded as 'Other' which includes ponds, drains and quarries.

Rivers, creeks and streams account for over double the number of drowning deaths of the next closest category


Figure 9: Drowning Deaths by Location, 2013/14

Almost one quarter (24\%) of all drowning deaths occurred as a result of Swimming and Recreating ( 65 drowning deaths). Falls into water and incidents involving Watercraft accounted for 56 and 43 drowning deaths respectively. Activity immediately prior to drowning was unknown in $11 \%$ of cases ( 29 deaths) indicating there were a number of people who were recreating in or around water alone and the incident was not witnessed (Figure 10).

Diverse range of activities being undertaken prior to drowning in Australia


Figure 10: Drowning Deaths by Activity Immediately Prior to Drowning, 2013/14

## CASE STUDY:

## DROWNING DEATHS AS A RESULT OF SWIMMING AND RECREATING

Almost one quarter (24\%) of all drowning deaths in the 2013/14 occurred whilst the victim was Swimming and Recreating. As the leading activity prior to drowning death in this year's National Drowning Report, a detailed analysis of the profile of Swimming and Recreating drowning deaths was undertaken and identified the following:
$-89 \%$ of the victims who drowned whilst Swimming and Recreating were males

- Trends by State and Territory follow population distribution with NSW recording the highest number of drowning deaths in people who were Swimming and Recreating (22), followed by Queensland (17)
- Just over half ( $51 \%$ ) of all Swimming and Recreating drowning deaths occurred in people aged 18 to 34 years, all drowning deaths in this age group were male
- The 10-14 years age group is the only age group where more females drowned as a result of Swimming and Recreating than males.
- An underlying medical condition was present in $50 \%$ of Swimming and Recreating drowning cases in those aged 55+
- $32 \%$ of all drowning deaths as a result of Swimming and Recreating occurred in River / Creek / Stream locations, followed by Beaches ( $31 \%$ ) and Swimming Pools ( $25 \%$ )
- In $82 \%$ of cases where alcohol was known to have been consumed, the blood alcohol level was deemed to contributory to the fatal drowning

Royal Life Saving urges safety at all times when Swimming and Recreating. This includes making sure you never swim alone and do not swim whilst under the influence of alcohol or illicit drugs. For older Australians it is important to have a medical check prior to engaging in aquatic activity and to be mindful of the role of multiple medications and underlying medical conditions on the risk of drowning. If you haven't been in the water in some time, it's important to start slowly and test your skills and fitness in a controlled environment such as your local public swimming pool.

There were 105 drowning deaths in Inland Waterways (rivers, creeks, streams, lakes, dams and lagoons) in 2013/14. Of these, 80 drowning deaths occurred in River / Creek / Stream locations and 32 occurred in Lake / Dam / Lagoon locations.

The 2013/14 figure of 105 drowning deaths is an increase of 3 drowning deaths (or $3 \%$ ) on the 10 year average of 102 drowning deaths (Figure 11). Men accounted for $84 \%$ of the drowning deaths in Inland Waterways this financial year.

Significant increases against the 10 year average were experienced in the $18-24$ years age group and the $25-34$ years age group. Drowning deaths in inland waterways in people aged $25-34$ years increased by $33 \%$ to 20, compared to the 10 year average of 15 drowning deaths (Figure 12).

On a State and Territory basis, Victoria experienced a $50 \%$ increase in inland waterway drowning deaths against the ten year average, recording 21 drowning deaths in 2013/14. Queensland was the only other State or Territory to record an increase again the 10 year average (Figure 13).

Falls into water was the leading activity prior to drowning in Inland Waterways in 2013/14, with 29 deaths, an increase of $38 \%$ on the 10 year average. Increases against the 10 year average were also recorded in Inland Waterway drowning deaths as a result of Swimming and Recreating (27 deaths, an increase of $69 \%$ against the 10 year average) and incidents involving Watercraft ( 21 deaths, an increase of $31 \%$ against the 10 year average) (Figure 14).

Inland waterways, in particular rivers, creeks and streams, continue to claim a significant number of lives every year. Royal Life Saving urges caution when in, on and around our rivers, creeks and streams. Avoid alcohol, as even a small amount of alcohol can increase your risk of drowning. Always wear a lifejacket when boating and supervise young children around all aquatic locations. Ensure you know CPR and First Aid, particularly those recreating in isolated locations.

Drowning deaths in Inland Waterways increase in 2013/14 against the 10 year average


Figure 11: Inland Waterway Drowning Deaths 2002/03 to 2013/14, 10 Year Average

Steep increases against the 10 year average in Inland Waterway drowning deaths in people aged 18-34 years


Figure 12: Inland Waterway Drowning Deaths by Age Group, 10 Year Average, 2013/14

Victoria records a 50\% increase in Inland Waterway drowning deaths in 2013/14 against the 10 year average


Figure 13: Inland Waterway Drowning Deaths by State / Territory, 10 Year Average, 2013/14
$69 \%$ increase against 10 year average of Swimming and Recreating Inland Waterway drownings


Figure 14: Inland Waterway Drowning Deaths by Activity Immediately Prior, 10 Year Average, 2013/14

There were 39 drowning deaths in Swimming Pools in $2013 / 14$. This figure is a reduction of 4 drowning deaths (or $9 \%$ ) on the 10 year average of 43 drowning deaths (Figure 15). Men accounted for 72\% of all drowning deaths in Swimming Pools in the 2013/14 financial year. Children aged under five, continue to be the age group that accounts for the largest number of drowning deaths in Swimming Pools in Australia, with 14 drowning deaths in 2013/14 or $36 \%$ of all drowning deaths in Swimming Pools. The 14 drowning deaths in the 0-4 years age group represents an $18 \%$ reduction on the 10 year average of 17 drowning deaths (Figure 16).

The largest increase in drowning deaths in Swimming Pools was recorded in the 35-44 years age group with the 5 drowning deaths seen in this age group representing an increase of $150 \%$ against the 10 year average of 2 drowning deaths (Figure 16).

Falls into water accounted for almost half (49\%) of all drowning deaths in Swimming Pools in 2013/14. Swimming and Recreating was the next leading activity prior to drowning in Swimming Pools, accounting for $41 \%$ of Swimming Pool drownings in 2013/14 (Figure 17). Reductions against the 10 year average for Swimming Pool drowning deaths were recorded in New South Wales and Queensland, with reduction of $38 \%$ and $23 \%$ respectively. The Northern Territory and Western Australia both recorded increases in 2013/14 against the 10 year average for their State or Territory. Swimming Pool drowning deaths increased by 200\% in the Northern Territory and by $33 \%$ in Western Australia (Figure 18).

Children under five continue to account for a large proportion of drowning deaths in swimming pools, particularly home swimming pools. It is important to ensure that home pools are fenced with a correctly installed compliant pool fence with a self-closing and self-latching gate. Never prop the gate open or leave objects that could be climbed on near the fence. Regularly check your pool fence, gate and surrounds as the strength and integrity of the structure can weaken over time and exposure to the elements.

Swimming Pool drowning deaths decline against 10 year average


Figure 15: Swimming Pool Drowning Deaths 2002/03 to 2013/14, 10 Year Average

Children under five account for $36 \%$ of all Swimming Pool drowning deaths in 2013/14


Figure 16: Swimming Pool Drowning Deaths by Age Group, 10Year Average, 2013/14
$90 \%$ of Swimming Pool drownings as a result of Falls into water or Swimming and Recreating


Figure 17: Swimming Pool Drowning Deaths by Activity Immediately Prior, 2013/14

Reductions in Swimming Pool drowning deaths recorded against 10 Year average in NSW and QLD


Figure 18: Swimming Pool Drowning Deaths by State / Territory, 10 Year Average, 2013/14

There were 34 drowning deaths at Australian Beaches in the 2013/14 financial year. This figure is a reduction of 16 drowning deaths (or $32 \%$ ) on the 10 year average of 50 drowning deaths (Figure 19). Men accounted for $82 \%$ of all drowning deaths at Beaches.

The largest number of drowning deaths at Beaches occurred in the 25-34 years age group with 8 drowning deaths (or $24 \%$ of all beach drowning deaths in 2013/14). The age group to record the largest reduction against the 10 year average was the $35-44$ years age group. This age group recorded 2 drowning deaths in 2013/14, a reduction of $75 \%$ against the 10 year average of 8 drowning deaths. The 75+ years age group was the only age group to record an increase in 2013/14 against the 10 year average, with 4 drowning deaths (Figure 20).

Swimming and Recreating accounted for the majority of drowning deaths at Beaches in 2013/14, being undertaken in 59\% of drowning cases. Activity prior to drowning at Beaches this financial year was unknown in $18 \%$ of cases, suggesting that almost one fifth of Beach drowning victims were recreating alone when they drowned (Figure 21).

Almost every State and Territory recorded reductions in Beach drowning deaths against the 10 year average. New South Wales recorded the highest number of Beach drowning deaths in 2013/14 with 14 drowning deaths. This was a reduction of $33 \%$ against the 10 year average of 21 drowning deaths. Victoria recorded the second highest number of Beach drowning deaths with 6 , a reduction of $14 \%$ on the 10 year average of 7 drowning deaths (Figure 22).

Royal Life Saving encourages people to swim at patrolled beaches during patrol times and between the red and yellow flags. Avoid consuming alcohol prior to swimming or recreating at the beach and be aware of the conditions and your own skills and fitness. For older Australians it is important to be aware of the role that underlying medical conditions and multiple medications may have on your drowning risk.

Beach drownings records 32\% reduction in 2013/14 against the 10 year average


Figure 19: Beach Drowning Deaths, 2002/03 to 2013/14, 10 Year Average

Sharp reductions in Beach drownings in 35-44 and 45-54 years age groups


Figure 20: Beach Drowning Deaths by Age Group, 10 Year Average 2013/14

Over half of all Beach drowning deaths in 2013/14 as a result of Swimming and Recreating


Figure 21: Beach Drowning Deaths by Activity Immediately Prior, 2013/14

NT the only location where Beach drownings hold steady against 10 year average


Figure 22: Beach Drowning Deaths by State / Territory, 10 Year Average, 2013/14

## Children aged 0-4 years

There were 20 children between the ages of 0 and 4 years who drowned in Australia between 1 July 2013 and 30 June 2014. This is a reduction of 11 drowning deaths (or $36 \%$ ) on both the number of drowning deaths recorded in 2012/13 and the 10 year average. It is pleasing to see a continuation of the downward trend in child drowning deaths in Australia after a spike in drowning deaths among this age group in 2012/13 (Figure 23).

Males account for 70\% of drowning deaths in the 0-4 years age group in 2013/14. Swimming Pools accounted for 70\% of the drowning deaths in this age group, more than 4.5 times that of any other location. All locations for drowning in children 0-4 years recorded reductions in 2013/14 against the 10 year average, most notably a $40 \%$ reduction in Bathtub / Spa Bath drowning deaths (Figure 24).

Falls into water accounted for the vast majority of drowning deaths in children aged 0-4 years, representing the activity being conducted immediately prior to drowning in 85\% of cases (Figure 25).

After a spike in 2012/13 - drowning deaths in children under five continue downward trend


Figure 23: Drowning Deaths of Children 0-4 Years, 2002/03 to 2013/14, 10 Year Average

Swimming Pools continue to account for majority of drowning deaths in children under five


Figure 24: Drowning Deaths of Children 0-4 Years by Location, 2013/14, 10 Year Average

Falls into water account for the vast majority of drowning deaths in children aged 0-4 years


Figure 25: Drowning Deaths of Children 0-4 Years by Activity Immediately Prior, 2013/14

## CASE STUDY:

## KEEP WATCH ACTIONS FOR PREVENTING CHILD DROWNING

Keep Watch is a comprehensive drowning prevention and water safety program for children under five. The Keep Watch program has four key drowning prevention actions:

- Supervise - Active supervision means focusing all of your attention on your children all of the time, when they are in, on or around the water.
- Restrict Access - Restricting a child's access to water can be done by placing a barrier between the child and the water. This can be done with pool fencing by using a Child Safe Play Area.
- Water Awareness - Water awareness combines a range of strategies including water familiarisation, checking for and removing water hazards and setting rules around water.
- Resuscitate - Many children are alive today because their parents knew how to perform CPR and responded quickly. Royal Life Saving encourages everyone to learn CPR.


## Children aged 5-14 years

There were 10 drowning deaths of children aged 5-14 years in Australian waterways between 1 July 2013 and 30 June 2014. The number of drowning deaths in this age group in 2013/14 is a reduction of 4 drowning deaths (or $29 \%$ ) on the 10 year average of 14 drowning deaths (Figure 26). Males accounted for $60 \%$ of the drowning deaths in this age group in 2013/14.

The Lake / Dam / Lagoon category was the aquatic location that recorded the largest number of drowning deaths within this age group, accounting for $40 \%$ of the deaths. This was followed by River / Creek / Stream and Beach locations which accounted for $20 \%$ of the deaths in this age group respectively (Figure 27).

With respect to activity immediately prior to drowning, in over half of all cases in the 5-14 years age group, the child was in the water, Swimming and Recreating prior to drowning. A further one fifth of drownings in this age group were as a result of Falls into water ( $20 \%$ ) (Figure 28).
$29 \%$ reduction in drowning deaths of children $5-14$ years in 2013/14 against the 10 year average


Figure 26: Drowning Deaths of Children 5-14 Years, 2002/03 to 2013/14, 10 Year Average

Inland Waterways account for $60 \%$ of drowning deaths in 5-14 year olds


Figure 27: Drowning Deaths of Children 5-14 Years by Location, 2013/14

Swimming and Recreating was the leading cause of drowning in children aged 5 to 14 years


Figure 28: Drowning Deaths of Children 5-14 Years by Activity Immediately Prior, 2013/14

## CASE STUDY:

## SWIM AND SURVIVE FUND INITIATIVE

To prevent drowning, every child must have basic swimming, water safety skills and knowledge of how to be safe when they are in, on, or around the water. Common barriers to participation in water safety education include the cost and time to access lessons, access to facilities, insufficient resources and insufficient capacity for instruction.

The Royal Life Saving Swim and Survive Fund aims to reduce these barriers by providing opportunities for school-aged children experiencing social or economic disadvantage, to learn valuable life skills in water safety, personal survival and basic rescue.


There were 40 drowning deaths of Young People aged between 15 and 24 years in Australia between 1 July 2013 and 30 June 2014. This represents a concerning increase of 12 drowning deaths (or $43 \%$ ) on the 28 drowning deaths recorded in 2012/13. It also represents an increase of $11 \%$ agains $\dagger$ the 10 year average of 36 drowning deaths (Figure 29). Males accounted for $88 \%$ of all drowning deaths in this age group.

The River / Creek / Stream category saw the largest number of drowning deaths in the 1524 years age group in 2013/14, recording 13 drowning deaths, an increase of $18 \%$ on the 10 year average. Reductions against the 10 year average were recorded in the categories of Bathtub / Spa Bath, Beach and Ocean / Harbour (Figure 30).

Swimming and Recreating was the activity being undertaken immediately prior to drowning in almost half ( $48 \%$ ) of all cases. The second most common activity being conducted immediately prior to the drowning deaths occurring in this age group was incidents involving Watercraft (13\%) followed by Falls into water (10\%) Activity immediately prior to drowning was unknown in 5\% of drowning cases in this age group (Figure 31).

New South Wales was the State that recorded the highest number of drowning deaths with 17 (or 43\% of all drowning deaths in this age group). This was followed by Queensland with 12 drowning deaths ( $30 \%$ of the total) and Victoria with 7 drowning deaths ( $18 \%$ of the total). There have been increases in the number of drowning deaths recorded in this age group against the ten year average across many States and Territories. New South Wales recorded a 31\% increase against its 10 year average and Victoria recorded a $40 \%$ increase against the 10 year average for this age group (Figure 32).

Drowning in 15-24 year olds increases by $11 \%$ in 2013/14 against 10 year average


Figure 29: Drowning Deaths of Young People 15-24 Years, 2002/03 to 2013/14, 10 Year Average
$18 \%$ increase against 10 year average in River / Creek / Stream drownings in 15-24 year olds in 2013/14


Figure 30: Drowning Deaths of Young People 15-24 Years by Location, 10 Year Average, 2013/14


MALES AGED
15-24 YEARS DROWNED

Swimming and Recreating accounts for almost half of all drowning deaths of people aged 15-24 years in 2013/14


Figure 31: Drowning Deaths of Young People 15-24 Years by Activity Immediately Prior, 2013/14

Drowning Deaths of 15-24 year olds in NSW increase by $31 \%$ on 10 year average


Figure 32: Drowning Deaths of Young People 15-24 Years by State / Territory, 10 Year Average, 2013/14


FEMALES AGED
15-24 YEARS
DROWNED

CASE STUDY:
ROYAL LIFE SAVING NATIONAL FATAL DROWNING DATABASE

The Royal Life Saving National Fatal Drowning Database holds valuable information on all unintentional fatal drowning across all aquatic locations around the country.

The depth and quality of information gathered, enhances the support Royal Life Saving provides to Government, Coroners and the community in terms of drowning prevention research and policy.

Royal Life Saving validates the cases within the National Fatal Drowning Database against the National Coronial Information System (NCIS), State and Territory Coronial Offices and other available information.

With the inclusion of cases presented in this year's National Drowning Report, the database now includes 12 financial years of fatal drowning incidents across all aquatic locations stretching back to 2002/03.

The information contained within the database has allowed Royal Life Saving to conduct distinct reports into fatal drowning in children and young people aged $0-19$ years, and in Australian rivers, creeks and streams over 10 years. The database also guides Royal Life Saving public awareness and drowning prevention advocacy work into the future.


There were 87 drowning deaths of people aged 55 years and over in Australian waterways between 1 July 2013 and 30 June 2014. This is a reduction of 27 drowning deaths (or $24 \%$ ) on the 114 drowning deaths recorded in this age group in $2012 / 13$. It is however, a reduction of 2 drowning deaths (or $2 \%$ ) on the 10 year average of 89 drowning deaths (Figure 33). Males account for $70 \%$ of all drowning deaths in this age group.

The River / Creek / Stream location was the category of aquatic location that recorded the largest number of drowning deaths in this age group in 2013/14 with 21 drowning deaths (or 24\% of all drowning deaths in this age group). This is however, a reduction of $16 \%$ on the 10 year average of 25 drowning deaths (Figure 34).

There were a diverse range of activities being undertaken immediately prior to drowning in this age group in the 2013/14 financial year. Falls into water and incidents involving Watercraft are the leading activities prior to drowning in this age group accounting for $22 \%$ respectively. Activity immediately prior to drowning was unknown in $18 \%$ of cases indicating almost a fifth of those aged 55 and over who drowned in 2013/14 were recreating alone when they drowned (Figure 35).

On a State and Territory basis, Victoria has recorded a $67 \%$ increase in drowning deaths in this age group, with 20 drowning deaths in 2013/14 compared to the 10 year average of 12 drowning deaths. Western Australia also recorded an increase against the 10 year average, with 14 drowning deaths in 2013/14 in this age group, an increase of $40 \%$ on the 10 year average of 10 drowning deaths (Figure 36).

Drowning deaths in this age group decline on 2012/13 and against 10 year average


Figure 33: Drowning Deaths of People Aged 55+ Years, 2002/03 to 2013/14, 10 Year Average

River / Creek / Stream locations the leading location for drowning in those aged 55 and over


Figure 34: Drowning Deaths of People Aged 55+ Years by Location, 10 Year Average, 2013/14


MALES AGED
55 YEARS AND OVER DROWNED

Falls into water and Watercraft incidents leading activities prior to drowning in those aged 55 and over


Figure 35: Drowning Deaths of People Aged 55+ Years by Activity Immediately Prior, 2013/14

Victoria records $67 \%$ increase against 10 year average


Figure 36: Drowning Deaths of People Aged 55+ Years by State / Territory, 10 Year Average, 2013/14

## CASE STUDY:

## DROWNING DEATHS IN AUSTRALIAN RIVERS, CREEKS AND STREAMS: A 10 YEAR ANALYSIS

Royal Life Saving has conducted a 10 year review of drowning deaths in Australian rivers, creeks and streams between 2002 and 2012.

This report, released in May 2014, found:

- Rivers accounted for more drowning deaths than any other aquatic location across the same period, being responsible for 735 drowning deaths or $25 \%$ of all drowning deaths across the 10 year period.
- Men accounted for $80 \%$ of all drowning deaths in rivers, creeks and streams. Men drowned at a rate 4 times that of women in rivers.
- Alcohol was involved in $37 \%$ of all river drowning deaths, although this likely under represents the true incidence. In 13\% of cases the Blood Alcohol Content (BAC) of the victim was equal to or greater than four times the legal limit ( $0.2 \mathrm{~g} / \mathrm{L}$ ).
- Almost half ( $42 \%$ ) of all river drowning deaths took place in areas deemed to be regional and remote. A concerning $10.3 \%$ of all river drowning deaths occurred in areas classified as Very Remote.
- Drowning in rivers is largely an issue of local people drowning in their local waterways, with $74 \%$ of river victims drowning within 100 kms of their home postcode.

This research has enabled Royal Life Saving to identify the top 10 river drowning black spots across the country. The Murray River was identified as the number one river drowning black spot in the country with 43 deaths, followed by the Brisbane River in Queensland and the Yarra River in Victoria.

The remaining top 10 river drowning black spots are: the Swan River (WA), Hawkesbury River (NSW), Murrumbidgee River (NSW), Sandy Creek (QLD), Derwent River (TAS), Katherine River (NT) and rounding out the top ten is the Macquarie River (NSW).

Risk factors that increase a person's chance of drowning can include age, gender, socio-economic status, presence of underlying medical condilions, 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 2013/14.

## Underlying Medical Conditions

There were 71 people who drowned who were known to have an underlying medical condition in $2013 / 14$. This represents $27 \%$ of all drowning deaths that occurred in the 2013/14 financial year. Of these, 76\% were male and almost half (49\%) were aged 55 years and over.

The most common conditions were cardiac conditions such as ischaemic heart disease and coronary artery disease, recorded in 49\% of cases where an underlying medical condition was known to be present Other commonly occurring underlying medical conditions included epilepsy (14\% of cases known to involve an underlying medical condition) and Dementia (6\%).

An underlying medical condition was deemed to have been contributory to the chain of events that led to the drowning in $61 \%$ of cases where an underlying medical condition was known to be present.

Royal Life Saving recommends that people aged 55 years and over undergo regular medical checkups, 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 68 cases ( $26 \%$ of all drowning deaths in 2013/14) the person who drowned was known to be a visitor to the location where they drowned. Of these, 37 people drowned within their own State or Territory in a postcode that was 100 kms or greater from their residential postcode. A further 20 were visiting a different State or Territory when they drowned.

Eleven people who drowned in 2013/14 were overseas tourists, predominately from Asian countries such as China (27\%), European countries such as Germany ( $27 \%$ ) and the United States (18\%). Overseas tourists in 2013/14 commonly drowned in Ocean / harbour locations (36\%), followed by Beaches, River / Creek / Stream and Swimming Pools (18\% respectively). Commonly undertaken activities prior to drowning include Diving and Swimming and Recreating (36\% respectively).

Regardless of how far you live from the aquatic environment you recreate in, particularly 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 ensure they take care when diving in the ocean, to always swim at patrolled beaches and to take care when recreating in and around our rivers, creeks and streams.

PEOPLE DROWNED WHO HAD UNDERLYING MEDICAL CONDITIONS

68
PEOPLE DROWNED WHO WERE VISITORS TO THE INCIDENT LOCATION

## Drugs \& Alcohol

There were 47 people who drowned who 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 equal to or greater than the legal limit for operating watercraft and vehicles in most States and Territories ( $0.05 \mathrm{mg} / \mathrm{L}$ ). Of those, almost half (49\%), recorded a blood alcohol content reading that was four times the legal limit ( $0.2 \mathrm{mg} / \mathrm{L}$ ) or higher.

There were 40 people who drowned who were known to have some kind of drug in their system when they drowned. In almost half ( $48 \%$ ) of cases, the drugs were known to be illegal or an abuse of legal drugs. Commonly occurring illegal drugs were Cannabis (recorded in $28 \%$ of cases where drugs were known to have been consumed prior to drowning) and Methamphetamine (18\%).

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 illicit drugs and to consider the possible side effects of prescription medication when interacting with water.
47
PEOPLE DROWNED WHO RECORDED POSITIVE READINGS FOR ALCOHOL

By collecting data on the postcode of the drowning incident location, it is possible to determine the remoteness classification of the location of the drowning incident. Just over two thirds (68\%) of all drowning deaths in 2013/14 took place in areas deemed Major Cities or Inner Regional (Figure 37).

Just over one quarter (26\%) of drowning deaths in Major Cities and Inner Regional areas took place at River / Creek / Stream locations, followed by Beaches and Swimming Pools ( $14 \%$ respectively). The most common activities being conducted immediately prior to drowning in Major Cities and Inner Regional areas were Swimming and Recreating (22\% of all drowning deaths in these remoteness classifications) and Falls into water (21\%).

Drowning deaths in Outer Regional areas were most likely to occur as a result of Swimming and Recreating (27\%) and Falls into water (25\%).

Drowning deaths in River / Creek / Stream locations accounted for $39 \%$ of all drowning deaths that occurred in Outer Regional areas in 2013/14.

Ten percent of all drowning deaths in 2013/14 occurred in areas deemed Remote or Very Remote. Drowning deaths in these locations most commonly took place in River / Creek / Stream locations ( $41 \%$ ), followed by Ocean / Harbour (22\%). Drowning deaths in these locations were as a result of Swimming and Recreating (33\%), Watercraft incidents ( $19 \%$ ) and Falls into water ( $11 \%$ ).

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 CPR skills for first responders is extremely important for reducing drowning deaths in such locations.


Figure 37: Drowning Deaths by Remoteness Classification of Incident Postcode, 2013/14


> Information presented in the Royal Life Saving Society - Australia National Drowning Report 2014 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 2013 and 2014. Figures may change depending upon the ongoing coronial investigations and findings as $64 \%$ of cases were still under investigation (i.e. open) at the time of the production of this report.

The report contains information on 2013/14 drowning deaths known as of 5th September 2014. All other data is correct as of 1 July 2014, in accordance with Royal Life Saving's ongoing quality assurance and data checking processes. All cases in the Royal Life Saving National Fatal Drowning 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 2003/04 to 2012/13 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 results of the 2011 Census of Population and Housing. 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).

The category of 'Non-aquatic Transport' relates 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).

The category of 'Swimming Pools' includes home swimming pools, public swimming pools, hotel and motel swimming pools and portable swimming pools among others.

Royal Life Saving would like to thank the following people and organisations for their assistance in producing the Royal Life Saving National Drowning Report 2014:

- Royal Life Saving State and Territory Member Organisations (STMOs)
- The National Coronial Information System (NCIS)
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This report was compiled and written by Amy Peden, National Manager Research and Policy, Royal Life Saving Society - Australia.

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# PEOPLE DROWNED IN AUSTRALIAN WATERWAYS BETWEEN 1 JULY 2013 AND 30 JUNE 2014 



TOP 3
DROWNING LOCATIONS


1. RIVER/CREEK/STREAM
2. SWIMMING POOLS

## 3. BEACHES

## HELP MAKE YOUR COMMUNITY FREE FROM DROWNING



WEAR A
LIFEJACKET


SUPERVISE CHILDREN


LEARN CPR AND FIRST AID

AROUND WATER LIFESAVING SKILLS


NO ALCOHOL


LEARN

## FOR MORE INFORMATION

 ABOUT THIS REPORT CONTACT:Royal Life Saving Society - Australia
Phone 0282173111
E-mail info@rlssa.org.au
Visit www.royallifesaving.com.au

CONTACT ROYAL LIFE SAVING
IN YOUR STATE OR TERRITORY:

| ACT | Phone | 0262605800 |
| :---: | :---: | :---: |
|  | E-mail | act@rlssa.org.au |
| NSW | Phone | 0296343700 |
|  | E-mail | nsw@royalnsw.com.au |
| NT | Phone | 0889270400 |
|  | E-mail | nt@rlssa.org.au |
| QLD | Phone | 0738232823 |
|  | E-mail | admin@rlssq.com.au |
| SA | Phone | 0882104500 |
|  | E-mail | training@royallifesavingsa.com.au |
| TAS | Phone | 0362437558 |
|  | E-mail | tas@rlssa.org.au |
| VIC | Phone | 0396766900 |
|  | E-mail | mail@lifesavingvictoria.com.au |
| WA | Phone | 0893838200 |
|  | E-mail | info@rlsswa.com.au |

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