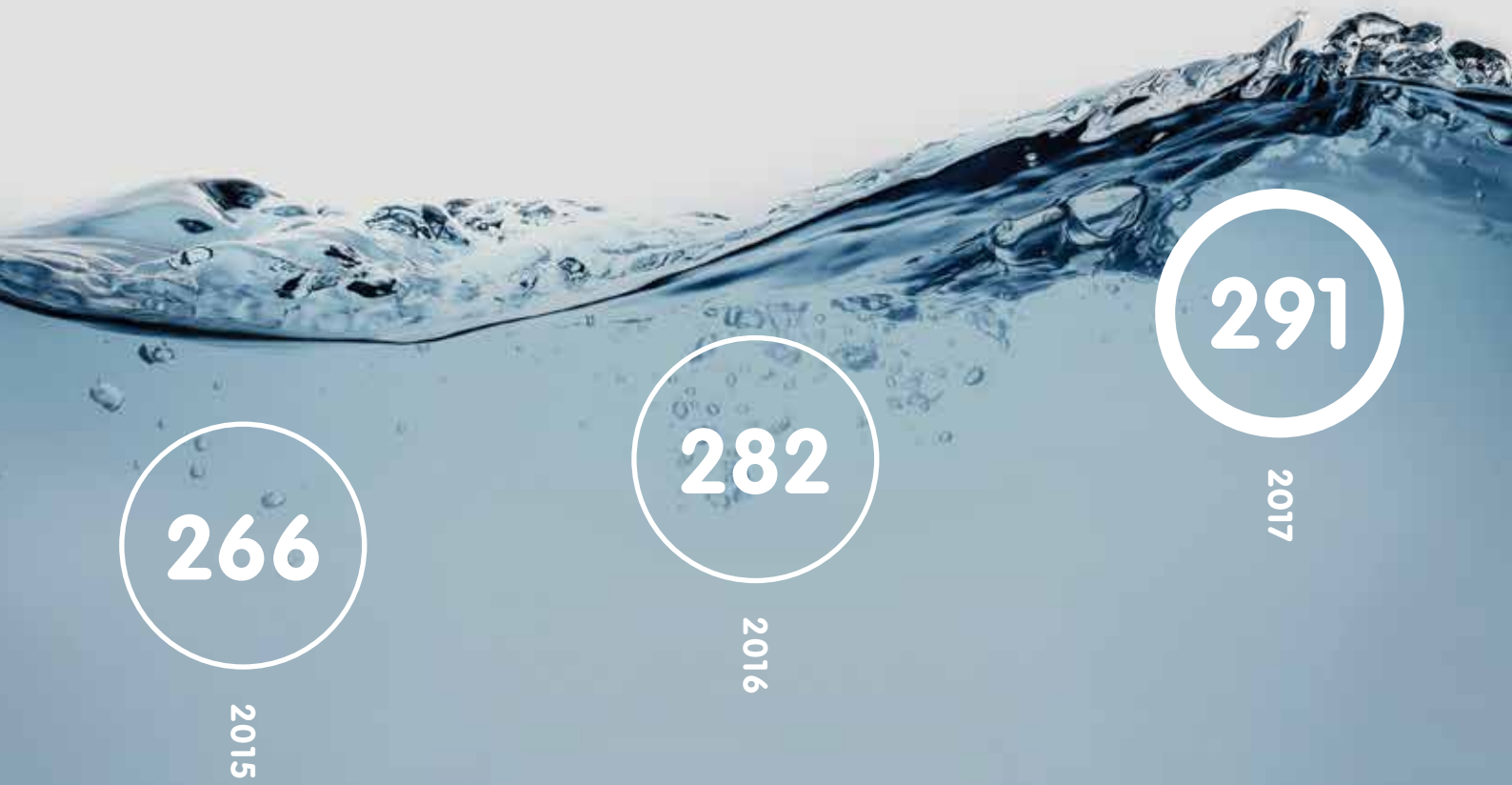
ROYAL LIFE SAVING NATIONAL DROWNING REPORT 2017

291 PEOPLE DROWNED IN AUSTRALIAN WATERWAYS



INSIDE

RESEARCH AND POLICY HIGHLIGHTS

EVERYONE CAN BE A LIFESAVER

Royal Life Saving

ROYAL LIFE SAVING SOCIETY - AUSTRALIA

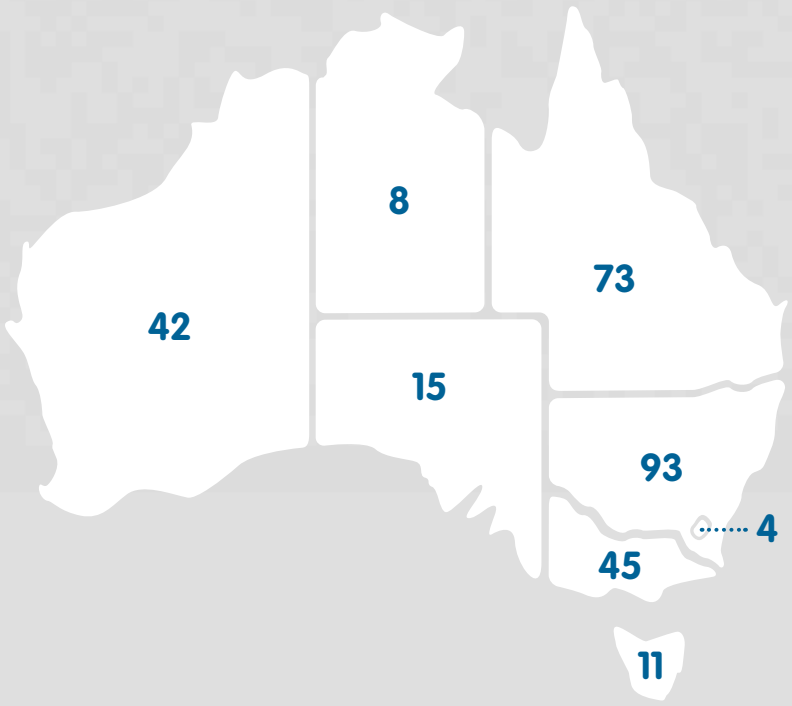
Supported by

Australian Government

1 JULY 2016 TO 30 JUNE 2017

291

PEOPLE DROWNED IN AUSTRALIAN WATERWAYS



TOP 3 LOCATIONS

- **23%** RIVER/CREEK/STREAM
- **17%** BEACHES
- **16%** OCEAN/HARBOUR

74% **26%**

TOP 3 ACTIVITIES

- **25%** SWIMMING & RECREATING
- **16%** FALLS INTO WATER
- **13%** BOATING

FOREWORD

We are pleased to present the Royal Life Saving National Drowning Report 2017. This is our most comprehensive report to date, with added features and analysis to assist everyone to take action to reduce drowning. Again, we wish to highlight six key points:

People, and Families not Cases or Data

We are conscious of the impact these reports can have on the families and loved ones of those who drowned. Drowning is always tragic for the people who lose their lives, the families and friends they leave behind, the rescuers who made valiant efforts to save their life and the community in general. We express our anguish for all those who lost someone to drowning this past year.

Many Survive Drowning, but Suffer Severe Life-long Consequences

Last year we foreshadowed significant work being undertaken to understand drowning, both fatal and non-fatal. Since then we have published a study investigating the burden of non-fatal drowning, and worked with the Australian Water Safety Council and partners Surf Life Saving Australia, to convene a national symposium on the issue. The 2017 National Drowning Report benefits from this collaboration and presents a new approach to estimating non-fatal drowning on an annual basis.

A National Action Plan to Increase Swimming and Water Safety Skills

The notion that many Australian children lack the swimming and water safety skills needed to enjoy our waterways safely is a major concern. Indigenous, migrant and refugee communities are most at risk, being the least likely to achieve national benchmarks. Convening a National Swimming and Water Safety Education Symposium on the issue in April 2017 is just one of the many ways Royal Life Saving is seeking to reverse this trend.

Respect the River, and Don't Let your Mates Drink and Drown

Our Respect the River campaign, continues to increase the focus on drowning prevention in regional areas, along our major rivers and in remote Australia. Community responses have been tremendous and early signs are positive. A renewed focus on the impact of alcohol and drug consumption on drowning resulted in a call for men to look out for their mates around the water.

Strengthening Data Collection, Analysis and Sharing

This year's Royal Life Saving National Drowning Report is the 23rd iteration. It is our most rigorous and comprehensive analysis to date. The Royal Life Saving National Fatal Drowning Database now stretches back 15 years, and includes over 4,000 cases. Partnerships with others are critical to its value in prevention terms. Coroners, Federal, State and Local Governments, institutions, researchers and other industry bodies have used the dataset to inform the development of drowning prevention policy.

We've made great progress, but much more is needed

This year we have conducted some additional analysis to see how we are tracking in our efforts to reduce drowning by 50% by 2020. Since the target was set in 2008, our understanding of drowning data and analysis has grown exponentially, as has our focus and collaboration towards the prevention of drowning.

This report serves as an important reminder to all Australians of the risks associated with exposure to our beautiful waterways, rivers, beaches, and community and backyard swimming pools. I urge you to share the messages of the report, infographics, prevention tips and support resources provided by Royal Life Saving to help us reduce both fatal and non-fatal drowning in Australia.

Justin Scarr
Chief Executive Officer,
Royal Life Saving Society - Australia

> "THIS REPORT PRESENTS A NEW APPROACH TO EXAMINING THE FULL BURDEN OF DROWNING"

DROWNING DEATHS IN 2016/17

There were 291 drowning deaths in aquatic locations across Australia between 1 July 2016 and 30 June 2017. This year's figure is an increase of 9 drowning deaths (or 3%) on the 282 drowning deaths recorded in 2015/16. It also represents an increase of 10 deaths (or 4%) on the 10 year average of 281 drowning deaths.

The crude drowning rate in 2016/17 is 1.19 per 100,000 population. This compares favourably to the 10 year average drowning rate of 1.28 drowning deaths per 100,000 population (Figure 1).

Based on statistical modelling of the relationship between numbers of fatal and non-fatal incidents for each age group between 2002/03 and 2014/15, we estimate that there were 685 non-fatal drowning incidents resulting in hospitalisation in 2016/17, assuming that the historical ratios between the number of fatal and non-fatal incidents held constant.

This is a 4% decrease against the 10 year average. When fatal and non-fatal drowning incidents are combined, 2016/17 recorded a crude drowning rate of 4.01 drowning incidents per 100,000 population (Figure 2).

ESTIMATED NON-FATAL DROWNING INCIDENTS RESULTING IN HOSPITALISATION IN 2016/17

Trends over time: Fatal drowning in Australia

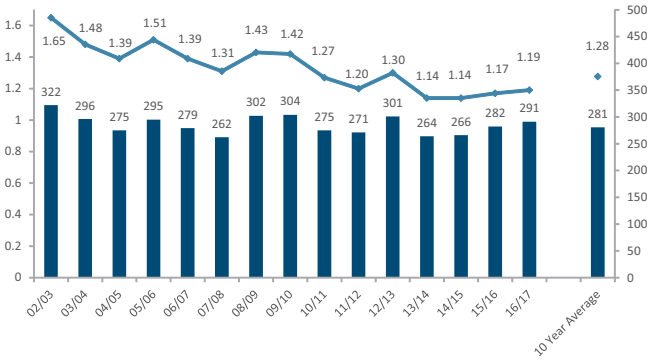


Figure 1: Unintentional Drowning Deaths and Death Rates, Australia 2002/03 to 2016/17, 10 Year Average

The impact of fatal and non-fatal drowning in Australia: trends over time

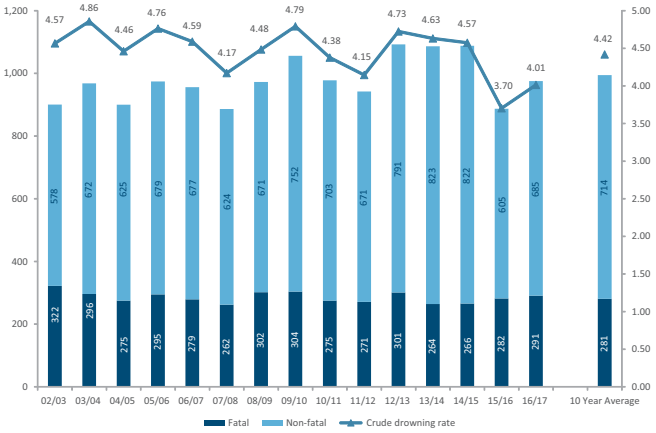


Figure 2: Comparison of fatal and non-fatal incidents, based on historical data (2002/03-2014/15) and projected figures (2015/16-2016/17) and crude rate of drowning incidents, Australia, 10 Year Average

HOW ARE WE TRACKING AGAINST THE GOAL OF A 50% REDUCTION IN DROWNING BY THE YEAR 2020?

In 2008, the Australian Water Safety Council set an ambitious goal of reducing drowning by 50% by 2020. This target has generated significant focus, increased effort and provided a basis for collaboration at national, state and local levels.

As 2020 is fast approaching, we conducted some interim analysis to check where progress has been made, and where more effort might be needed. It is important to note the many factors that have impacted on this goal, including significant changes in the size and make-up of the Australian population, as well as increased tourism, migration and international students (see Factors impacting achievement).

The graphic below shows progress on a population basis, expressed as rates per 100,000 population comparing 3 year averages from the start (2002/03–2004/05) to our most recent data (2014/15-2016/17) for the four key life stages of the Australian Water Safety Strategy 2016-2020. The graphic includes the current reduction achieved as a percentage. This interim analysis also shows an overall 24% reduction in fatal drowning since 2002/03. This reduction equates to approximately 90 fatal drownings averted per year.

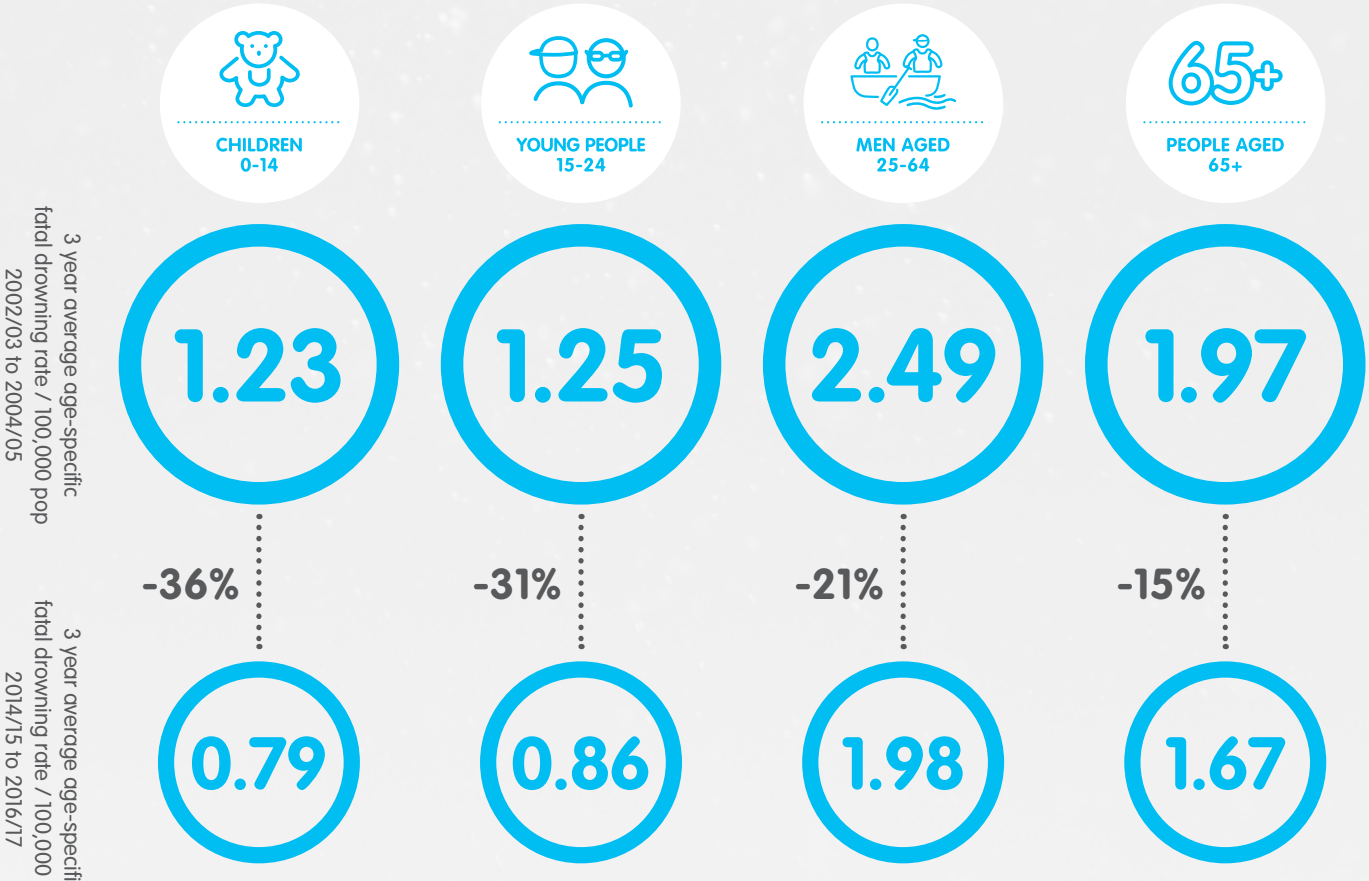
This approach brings drowning targets in-line with other approaches to monitoring public health outcomes. We continue to explore methods to track changes in exposure and waterway usage.

Factors impacting achievement

Since 2002/03 there has been a:

- 24% population increase
- 50% population increase in people aged 65+
- 49% increase in overseas migration
- 22% increase in people born overseas
- 101% increase in overseas inbound tourism
- 108% increase in international students

Sources: Royal Life Saving National Fatal Drowning Database and Australian Bureau of Statistics Data.



WHO DROWNS?

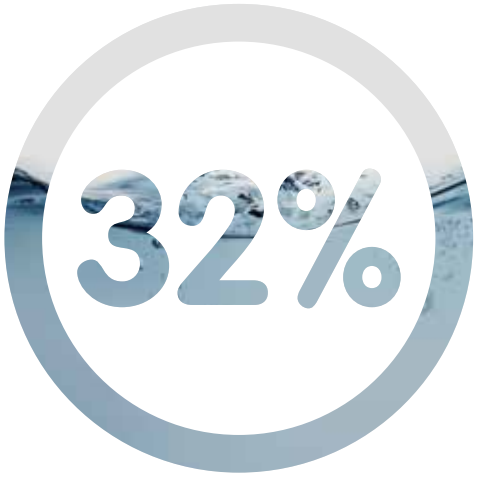
Of the 291 people who drowned, 74% were male. New South Wales (NSW) recorded the highest number of drowning deaths with 93 (32%). This was followed by Queensland (QLD) with 73 (25%) drowning deaths, Victoria (VIC) with 45 (15%) and Western Australia (WA) with 42 (14%). The Australian Capital Territory (ACT) recorded the lowest number of drowning deaths this year with 4 (Figure 3).

When calculated as rates per 100,000 population, the Northern Territory (NT) recorded the highest rate of drowning in Australia at 2.45 per 100,000 population. Tasmania (TAS) recorded the second highest rate at 2.12 drowning deaths per 100,000 population. Victoria had the lowest rate of drowning in Australia with 0.72 drowning deaths per 100,000 population (Figure 4).

The average age of those who drowned was 43.3 years, with the average age of females slightly lower than males (41.2 years for females and 44.1 years for males).

The largest number of drowning deaths (43) occurred among people aged 25-34 years, accounting for 15% of all deaths in 2016/17. The 45-54 years age group recorded the second highest number of drowning deaths at 40 (14%), which was an increase of 8% against the 10 year average.

The number of children aged 0-4 years who drowned (29) increased by 4% against the 10 year average of 29 drowning deaths. A decrease of 67% against the 10 year average was recorded for young people aged 15-17 years (Figure 5).



OF ALL DROWNING DEATHS IN 2016/17 OCCURRED IN NEW SOUTH WALES

NSW recorded the highest number of drowning deaths in 2016/17

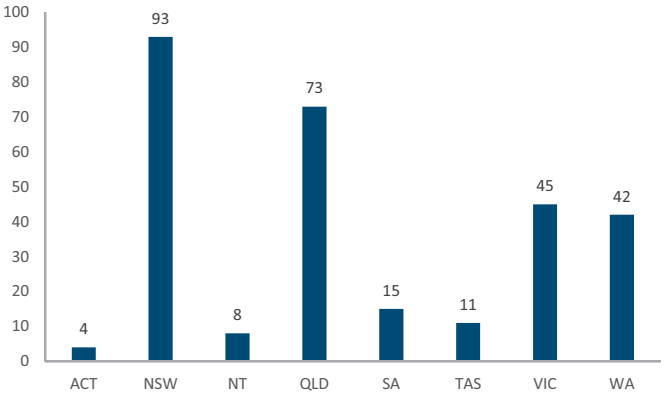


Figure 3: Drowning deaths by State/ Territory, 2016/17

Northern Territory recorded the highest drowning rate in Australia at 2.45 drowning deaths per 100,000 population

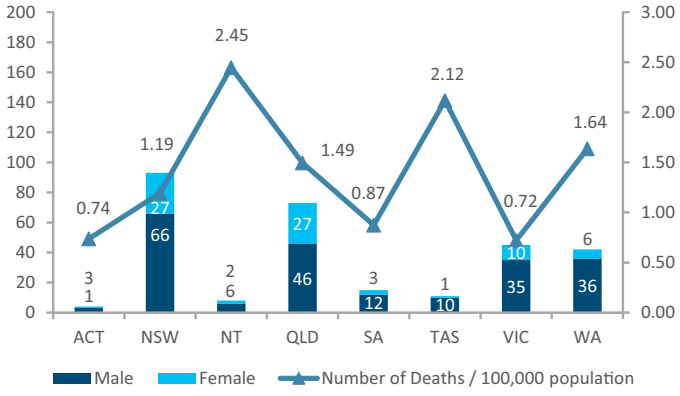


Figure 4: Drowning Deaths by Sex and State / Territory, Drowning Death Rates

The 75+ years age group recorded a 38% increase against the 10 year average

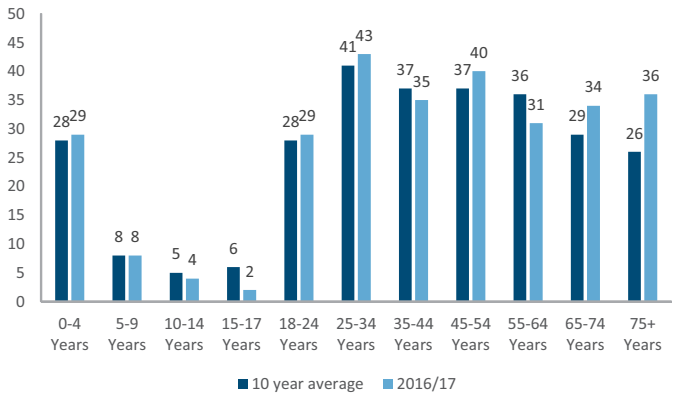


Figure 5: Drowning Deaths by Age Group, 10 Year Average, 2016/17

CASE STUDY

DON'T LET YOUR MATES DRINK AND DROWN

In April 2017, Royal Life Saving launched a campaign in response to research showing that 1,932 men have drowned in the last decade, one in four involving alcohol. Men are four times more likely to drown than women, with males accounting for 80% of all drowning deaths.

Of the men who had been drinking and subsequently drowned, 66% would have failed a random breath test with a recorded a blood alcohol content (BAC) above 0.05%. Alcohol increases the risk of drowning by impairing judgement, reducing coordination, delaying reaction time, and heightening the chance of hypothermia.

Royal Life Saving urges men to look out for their mates and stand up to the sorts of risk taking behaviour that can lead to accidents and drowning. The 'Don't Let Your Mates Drink and Drown' campaign shows Dave, a regular guy who finds a novel way to keep his mates safe from drowning after they've had a few drinks.

As part of the 'Don't Let Your Mates Drink and Drown' campaign, Royal Life Saving is alerting people to the dangers of mixing alcohol and water through social media advertising, local events, print advertising in pubs and clubs, and through key community groups.

Additionally, Royal Life Saving are releasing a series of community services announcements on TV, radio, and print to raise awareness of the dangers of drinking around waterways, and encouraging men to look out for each other.

Drowning prevention safety tips

- Avoid alcohol around water
- Don't swim or take a boat out under the influence of drugs or alcohol
- Never go in or on the water alone
- Always wear a lifejacket
- Always be prepared before heading out on the water

To view the campaign visit:
youtube/com/RoyalLifeSavingAust

WHEN DO THESE DROWNING DEATHS OCCUR?

Drowning deaths occur throughout the year; during all seasons, days of the week and times of the day.

The highest number of drowning deaths occurred in Summer (113 deaths), followed by Spring (83 deaths), Autumn (63 deaths) and Winter (32 deaths) (Figure 6). December was the month with the highest number of drowning deaths (49) (Figure 7).

The highest number of drowning deaths occurred on Sundays, which accounted for a fifth (21%) of all deaths (62 deaths). Thursday was the day of the week that recorded the lowest number of drowning deaths (26 deaths) (Figure 8).

Drowning deaths most commonly occurred in the afternoon (between 12:01pm and 6pm), with 144 deaths (49%) recorded, followed by the morning (between 6:01am and 12pm), with 71 deaths (24%). The time of drowning was unknown in 8 cases (3%) (Figure 9).

More than a third of drowning deaths occur in summer

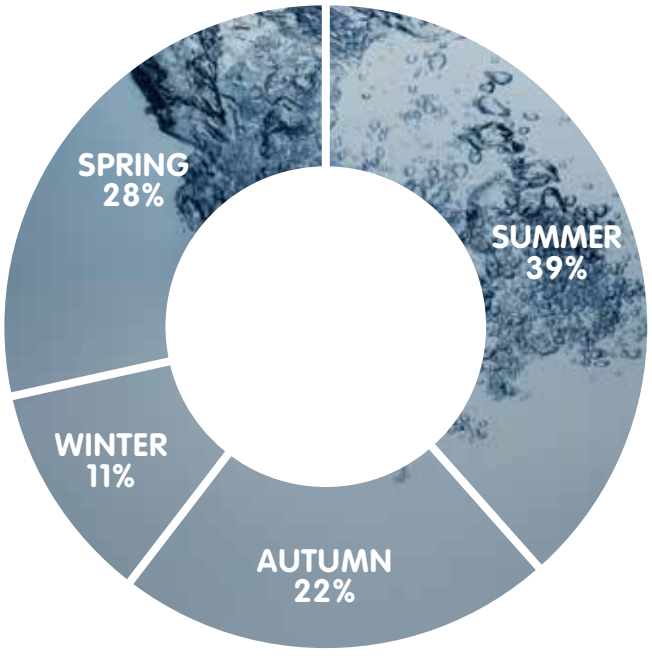


Figure 6: Drowning Deaths by Season, 2016/17

Drowning deaths in Australia occur year round but peak in December

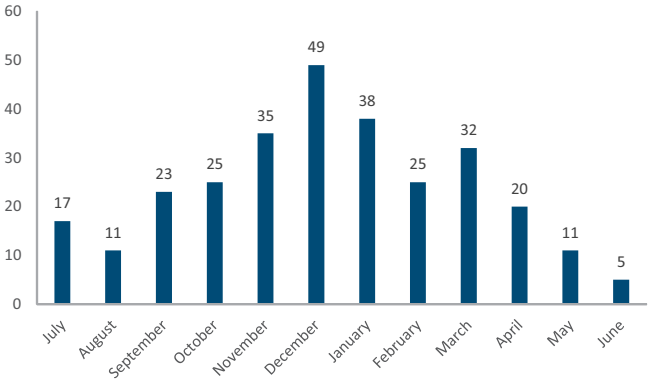


Figure 7: Drowning Deaths by Month of Incident, 2016/17

Sundays were the most common day for drowning deaths in 2016/17

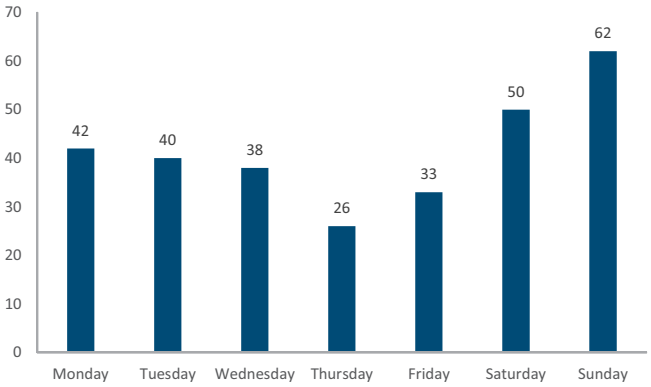


Figure 8: Drowning Deaths by Day of the Week of Incident, 2016/17

Almost half of all drowning deaths in 2016/17 occurred in the afternoon

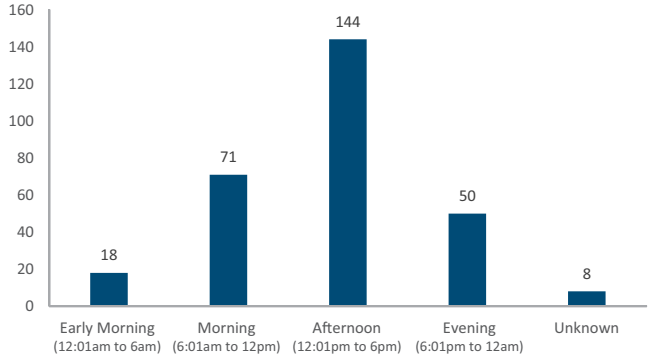


Figure 9: Drowning Deaths by Time of Incident Categories, 2016/17

CASE STUDY

DRIVING THROUGH FLOODWATERS

A joint study by Royal Life Saving Society – Australia and Griffith University has been undertaken into reasons why people drive through flooded waterways. The study, recently published in the 'Safety Science' journal, shows that driving through floodwaters is a leading cause of flood related drowning deaths.

The study employed two phases – identifying common beliefs about driving through a flooded waterway and a scenario based risk situation with two depths of water to gauge people's intentions to drive through floodwaters; the low scenario (road covered in 20cm of water) and the high scenario (road covered in 60cm of water).

A range of beliefs emerged as predicting drivers' willingness to engage in this unsafe driving behaviour. These included attitudinal beliefs (e.g., sustain vehicle damage, become stuck/stranded), beliefs of social expectations (e.g., pressure from friends, family members, police), and efficacy beliefs (e.g., small distance of water to drive through, presence of signage).

The findings of the study highlight the role that specific key beliefs play in guiding people's willingness to drive through flooded waterways and, in turn, provide possible targets for future interventions to curb this risky and potentially fatal driving behaviour.

More information on the study visit:
journals.elsevier.com/safety-science/

WHERE AND HOW DO THESE DROWNING DEATHS OCCUR?

Rivers, creeks and streams were the locations with the highest number of drowning deaths in 2016/17 with 68 deaths (23%). This is a reduction of 6 deaths (or 8%) on the 10 year average.

Beaches were the location with the second highest number of deaths (50), an increase of 4% against the ten year average. The third leading location for drowning in 2016/17 was ocean / harbour locations with 46 deaths, representing 16% of the 2016/17 total (Figure 10).

One quarter (25%) of people were swimming and recreating immediately prior to drowning (73 deaths). A further 46 people (16%) fell into water, while 37 people (13%) were boating prior to drowning. The activity prior to drowning was unknown in 16 cases (6%), indicating there were a number of people who were alone when they drowned and the incident was not witnessed (Figure 11).

Drowning deaths in rivers, creeks and streams have decreased by 8% against the 10 year average

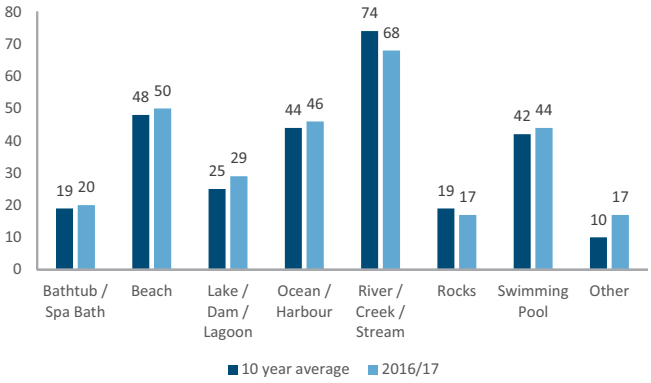


Figure 10: Drowning Deaths by Location, 2016/17

Swimming and recreating leads a diverse range of activities prior to drowning in Australia

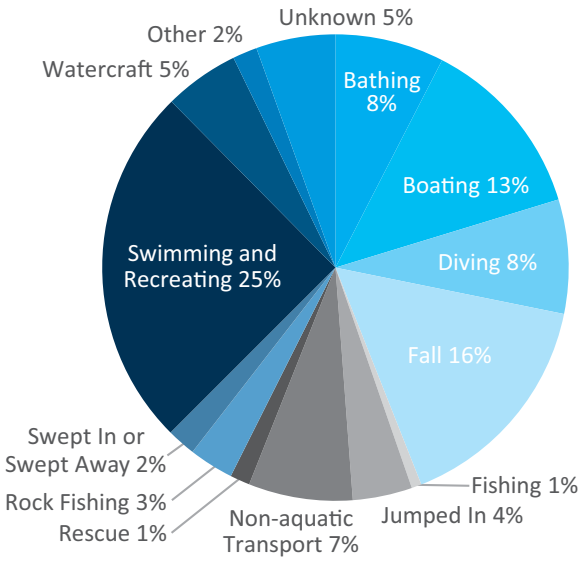
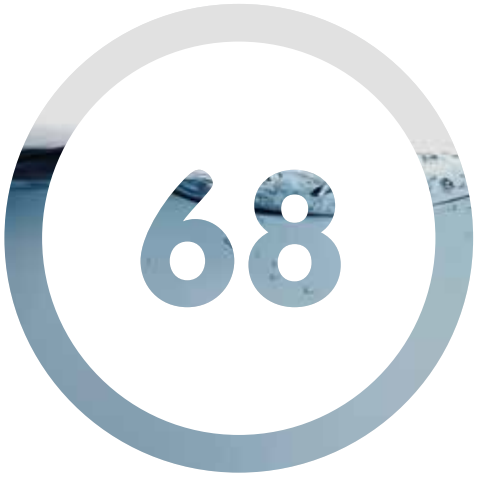


Figure 11: Drowning Deaths by Activity Immediately Prior, 2016/17



DROWNING DEATHS IN 2016/17 OCCURRED IN RIVERS, CREEKS & STREAMS

CASE STUDY

A 10 YEAR ANALYSIS OF THE ROLE OF ALCOHOL IN RIVER DROWNING DEATHS

In October 2016, a study on the role of alcohol in river drowning deaths in Australia was published in the journal 'Accident, Analysis and Prevention'. The joint study between Royal Life Saving Society – Australia and James Cook Universitry, examined the prevalence of alcohol and its contributory role in unintentional fatal river drowning in Australia with the aim of informing the development of strategies for prevention.

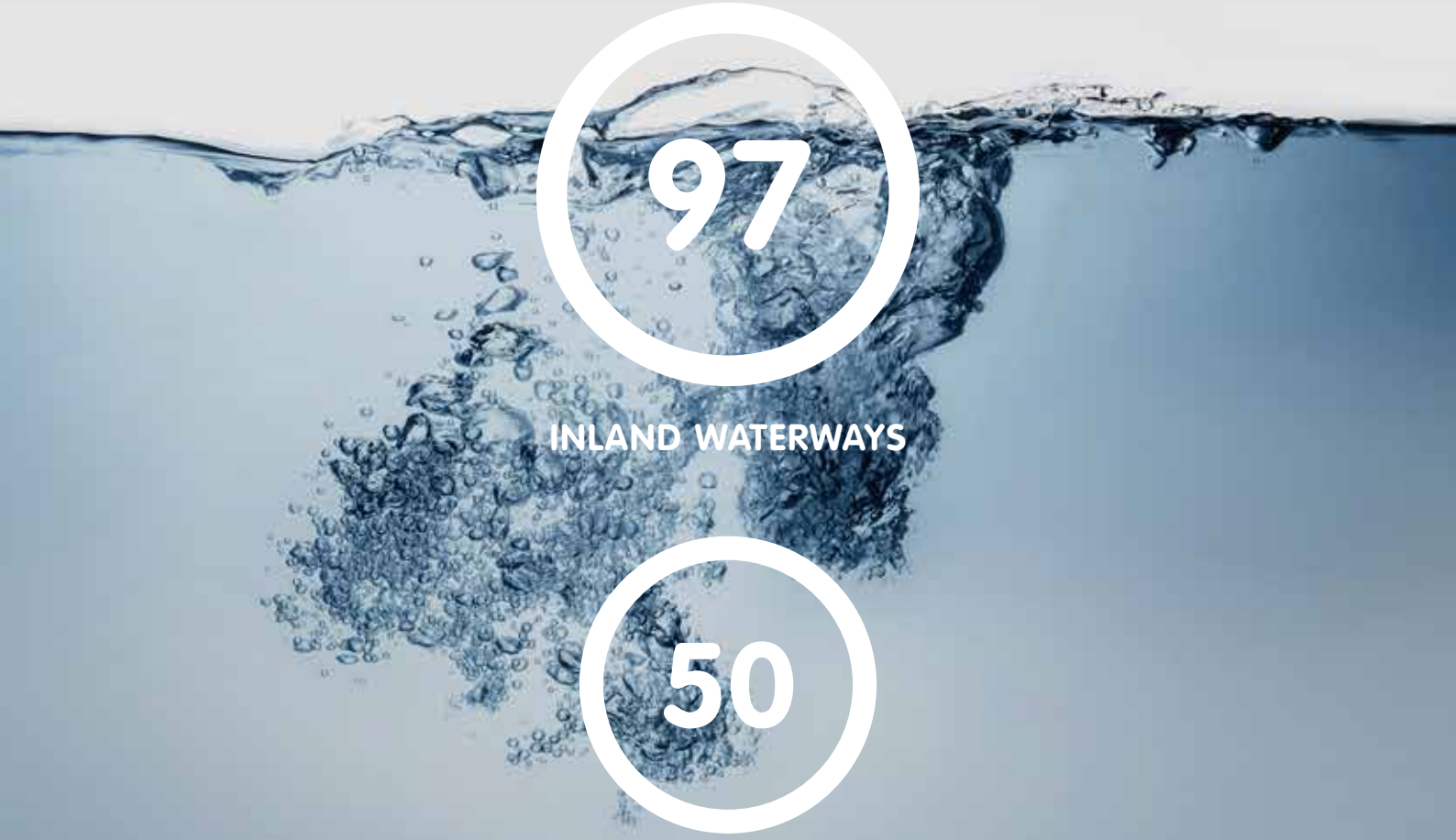
The study found that alcohol was known to be involved in 314 cases (41%) of the 770 river drowning deaths between 1 July 2002 and 30 June 2012. Of the 314 cases where alcohol was known to be involved, 196 people recorded a blood alcohol content (BAC) of ≥0.05% (a level that was deemed to be contributory to the drowning).

Two-fifths (40%) of adult victims with a BAC recorded a level of ≥0.20% (four times the legal upper limit of 0.05%). Known alcohol involvement was found to be significantly more likely for victims who drowned as a result of jumping in, identify as Aboriginal and Torres Strait Islander, and drowned in the evening and early morning hours.

The study showed that alcohol contributes to fatal unintentional drowning in Australian rivers. A concerning number of people who die from unintentional drowning in rivers in Australia have significant amounts of alcohol in their bloodstream and this includes adolescents under the legal drinking age. Although prevention is challenging, better data and exposure studies are the next step to enhance prevention efforts.

More information on the study can be found at:
elsevier.com/locate/aap

DROWNING DEATHS BY LOCATION



97

INLAND WATERWAYS

50

BEACHES

46

OCEAN / HARBOUR

44

SWIMMING POOLS

LOCATION IN FOCUS: **INLAND WATERWAYS**

There were 97 drowning deaths in inland waterways (rivers, creeks, streams, lakes, dams and lagoons) in Australia between 1 July 2016 and 30 June 2017. Of these, 68 occurred in rivers, creeks or streams and 29 occurred in lakes, dams or lagoons.

The 97 drowning deaths in 2016/17 is a reduction of 2 deaths (or 2%) on the 10 year average of 99 drowning deaths (Figure 12). Males accounted for 84% of all drowning deaths in inland waterways in 2016/17.

The number of people aged 18-24 years drowning in inland waterways increased by 45% against the 10 year average of 11 deaths. The 25-34 years age group also recorded a 20% increase against the 10 year average of 15 deaths. The 55-64 years age group recorded a 50% decrease against the 10 year average, with 7 deaths in 2016/17 (Figure 13).

Swimming and recreating was the most common activity being undertaken prior to drowning in inland waterways in 2016/17, accounting for 28% of all deaths. The 27 drowning deaths in inland waterways as a result of swimming and recreating represented a 50% increase on the 10 year average of 18 drowning deaths (Figure 14).

When examining inland waterway drowning deaths by State and Territory, Queensland and Tasmania were the only states to record a decrease against the 10 year average, with all other States and Territories either remaining steady or increasing (Figure 15).

Inland waterways continue to be the leading location for drowning in Australia. Through support from the Federal Government, Royal Life Saving is working to reduce these figures through community driven drowning prevention initiatives at Australia's river drowning blackspots. Now in its 4th year, the Respect the River program aims to raise awareness of the hazards at rivers, encouraging people to 'respect' this environment and ensure they are able to visit and utilise these locations safely.

Drowning deaths in inland waterways have increased by 45% in people aged 18-24 years

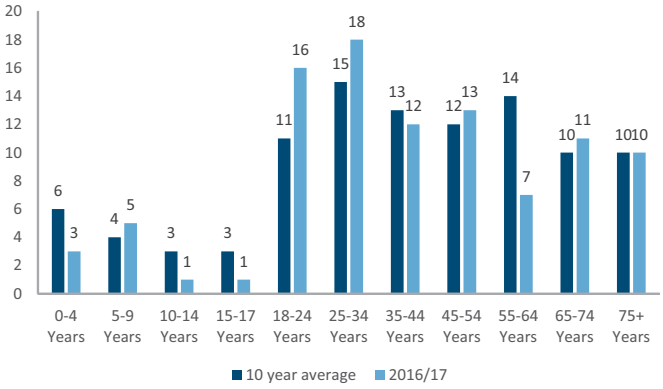


Figure 13: Inland Waterway Drowning Deaths by Age Group, 10 Year Average, 2016/17

Swimming and recreating recorded a 50% increase against the 10 year average

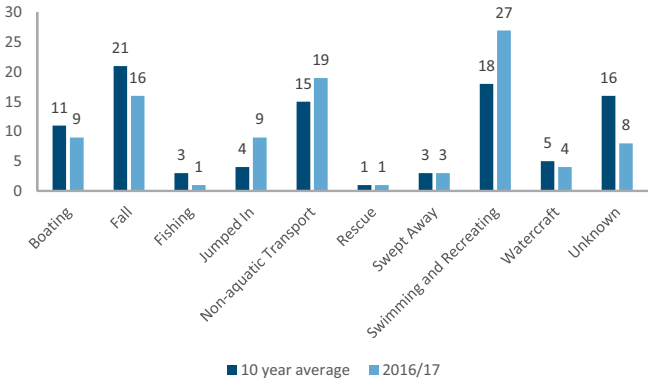


Figure 14: Inland Waterway Drowning Deaths by Activity Immediately Prior, 10 Year Average, 2016/17

Drowning deaths in inland waterways record a 2% decrease against the 10 year average

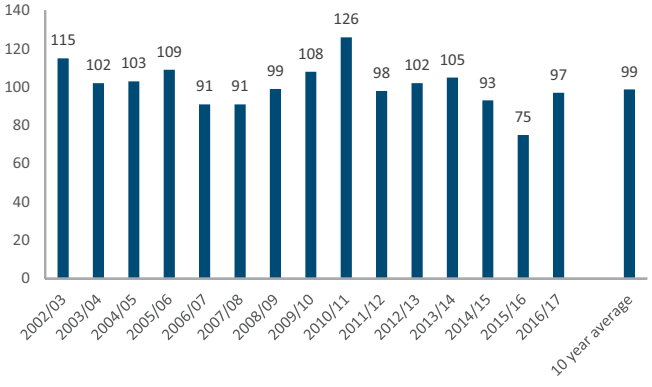


Figure 12: Inland Waterway Drowning Deaths 2002/03 to 2016/17, 10 Year Average

Inland waterway drowning deaths in Queensland have decreased by 45% against the 10 year average

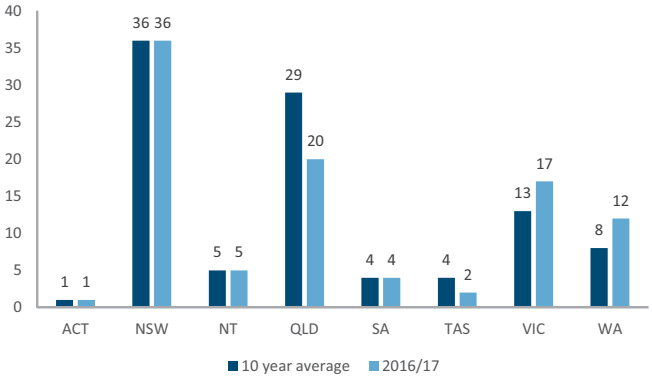


Figure 15: Inland Waterway Drowning Deaths by State / Territory, 10 Year Average, 2016/17

LOCATION IN FOCUS: **BEACHES**

There were 50 drowning deaths at beaches in Australia between 1 July 2016 and 30 June 2017. This figure is an increase of 4% on the 10 year average (Figure 16).

Males accounted for 80% of all drowning deaths at beaches. The 25-34 years age group recorded a 50% reduction against the 10 year average of 10 drowning deaths. Conversely, the 55-64 years age group recorded a 38% increase against the 10 year average, with 11 drowning deaths in 2016/17, compared to a 10 year average of 8 (Figure 17).

More than half (54%) of beach drowning deaths occurred while swimming and recreating, with watercraft and diving incidents accounting for a further 16% of deaths respectively (Figure 18).

New South Wales recorded the highest number of drowning deaths at beaches, accounting for almost one-third (30%) of all deaths. This year's total of 15 deaths in New South Wales was a 25% reduction on the 10 year average of 20 deaths. Fourteen deaths (28%) occurred in Western Australia and 9 occurred in Victoria (18%), which both represented increases on the 10 year average (Figure 19).

Royal Life Saving continues to encourage people to swim at patrolled beaches during patrol times and between the red and yellow flags. Be aware of water conditions and the limitations of your own skills and fitness. Given the increase in beach drowning deaths among people aged 55-64 years, it is important that older people are aware of any pre-existing medical conditions that may have an impact on their fitness and ability in the water and therefore, their risk of drowning.

50% decrease in drowning deaths in the 25-34 years age group against the 10 year average

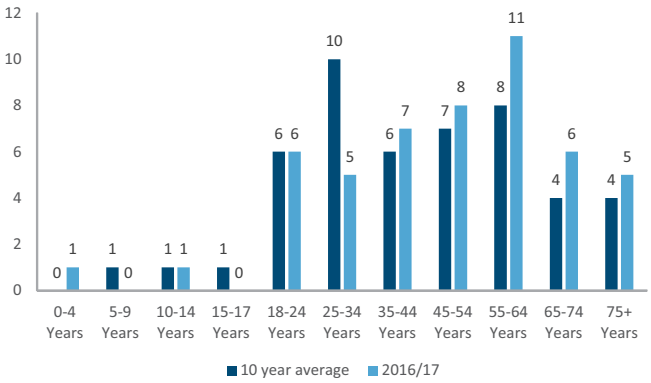


Figure 17: Beach Drowning Deaths by Age Group, 10 Year Average, 2016/17

Swimming and recreating accounts for more than half of all beach drowning deaths

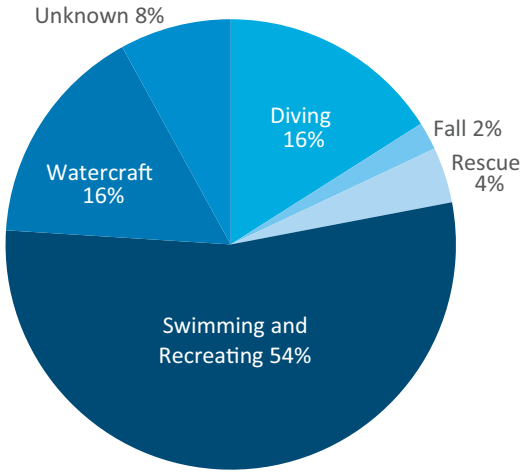


Figure 18: Beach Drowning Deaths by Activity Immediately Prior, 2016/17

Drowning deaths at beaches recorded an increase of 4% against the 10 year average

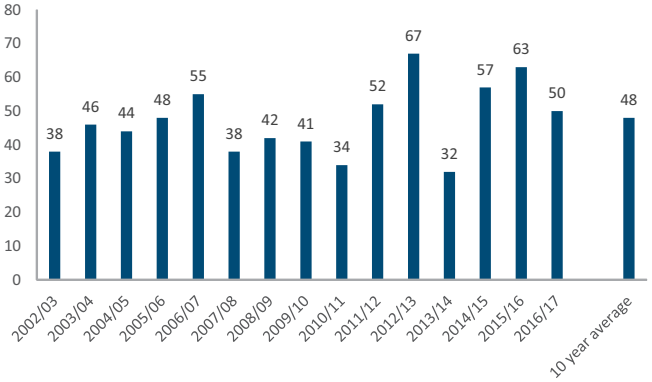


Figure 16: Beach Drowning Deaths 2002/03 to 2016/17, 10 Year Average

Western Australian beach drownings doubled when compared to the 10 year average

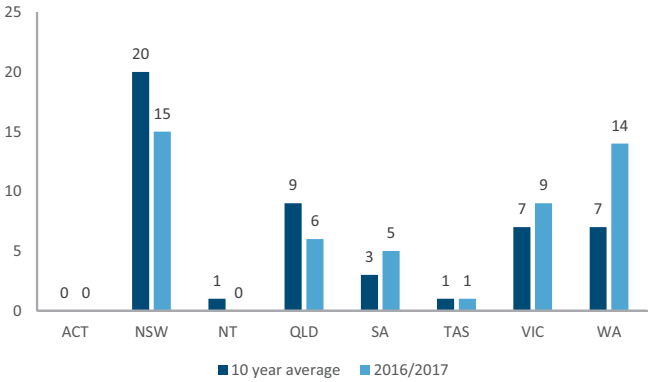


Figure 19: Beach Drowning Deaths by State / Territory, 10 Year Average, 2016/17

CASE STUDY

NATIONAL AQUATIC INDUSTRY SAFETY AWARDS

In April 2017, Royal Life Saving, with support from the National Aquatic Industry Safety Committee launched the inaugural National Aquatic Industry Safety Awards. The awards are designed to acknowledge the achievements of aquatic facilities and their staff and provide an opportunity to formally recognise their commitment to improving safety outcomes.

Establishing the awards program also provides a powerful motivation tool to encourage ongoing professional development for corporate organisations, community engagement and individual action in reducing drowning deaths and injuries in aquatic facilities. In addition, the awards establish new standards of excellence in aquatic facilities and act as a catalyst to increase safety activities in aquatic facilities around Australia.

Royal Life Saving is committed to ensuring continuous improvement and quality across aquatic industry services to ensure a high standard of water safety in Australia.

The awards program raises awareness about aquatic safety generally and promotes strategies that will assist in addressing health and safety issues in all aquatic facilities. They also provide a vehicle to further promote aquatic safety activities on a national scale and unite these programs under a single banner.

The winners, announced in August 2017 were:

- AquaPulse
- Gary Johnson
- Parkinson Aquatic Centre
- Milne Bay Aquatic and Fitness Centre
- Seadragonz Swim School
- Goulburn Aquatic Centre
- Hawthorn Aquatic and Leisure Centre

To view the winner's videos please visit:
youtube.com/RoyalLifeSavingAust

LOCATION IN FOCUS: **OCEAN / HARBOUR**

There were 46 drowning deaths in ocean / harbour locations in Australia between 1 July 2016 and 30 June 2017. This figure is an increase of 5% on the 10 year average (Figure 20).

Almost all drowning deaths in ocean / harbour locations were males, accounting for 85% of deaths. A sharp increase in deaths among people aged 75+ was recorded, increasing by 167% against the 10 year average. An increase of 67% against the 10 year average was also recorded for people aged 55-64 years (Figure 21).

Boating was the leading activity being undertaken prior to drowning in ocean / harbour locations, accounting for 59% of all deaths. A third (33%) of people were diving prior to drowning, including activities such as scuba diving and snorkelling (Figure 22).

The highest number of drowning deaths in ocean / harbour locations occurred in Queensland, which recorded 15 deaths (33%), followed by Western Australia with 10 deaths (22%) and Tasmania with 7 deaths (15%). Queensland, South Australia, Tasmania and Western Australia all recorded increases against the 10 year average (Figure 23).

Promoting safe boating practices is key to reducing the number of drowning deaths that occur in ocean / harbour locations. Royal Life Saving urges people to ensure they always wear a lifejacket, carry safety equipment such as an EPIRB, avoid alcohol around water and check weather conditions before heading out.

Sharp increase against the 10 year average in people aged 75+ years

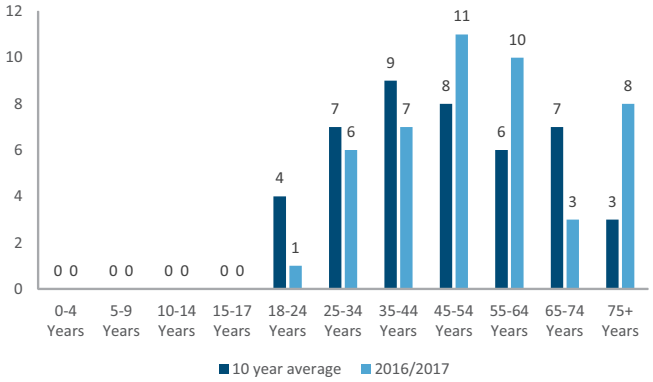


Figure 21: Ocean / Harbour Drowning Deaths by Age Group, 10 Year Average, 2016/17

Boating accounts for more than half of all ocean / harbour drowning deaths

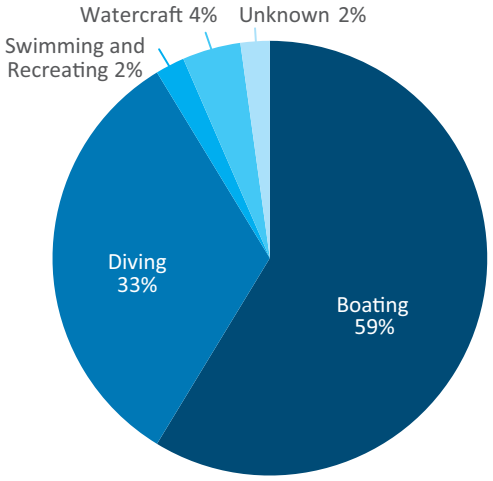


Figure 22: Ocean / Harbour Drowning Deaths by Activity Immediately Prior, 2016/17

Drowning deaths in ocean / harbour locations recorded an increase of 5% against the 10 year average

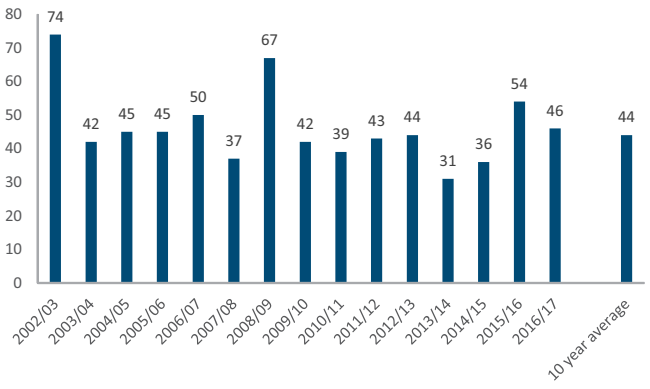


Figure 20: Ocean / Harbour Drowning Deaths, 2002/03 to 2016/17, 10 Year Average

Increases against the 10 year average were recorded in Queensland, South Australia, Tasmania and Western Australia

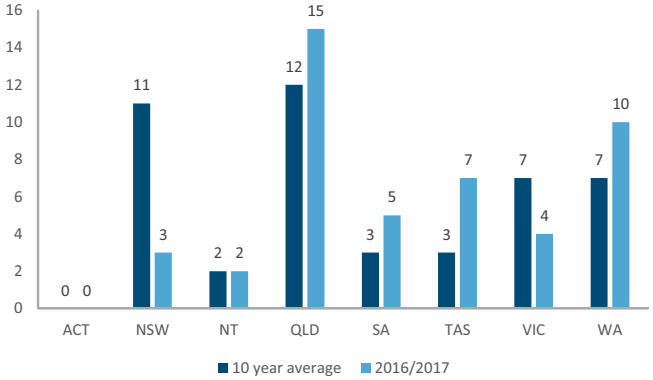
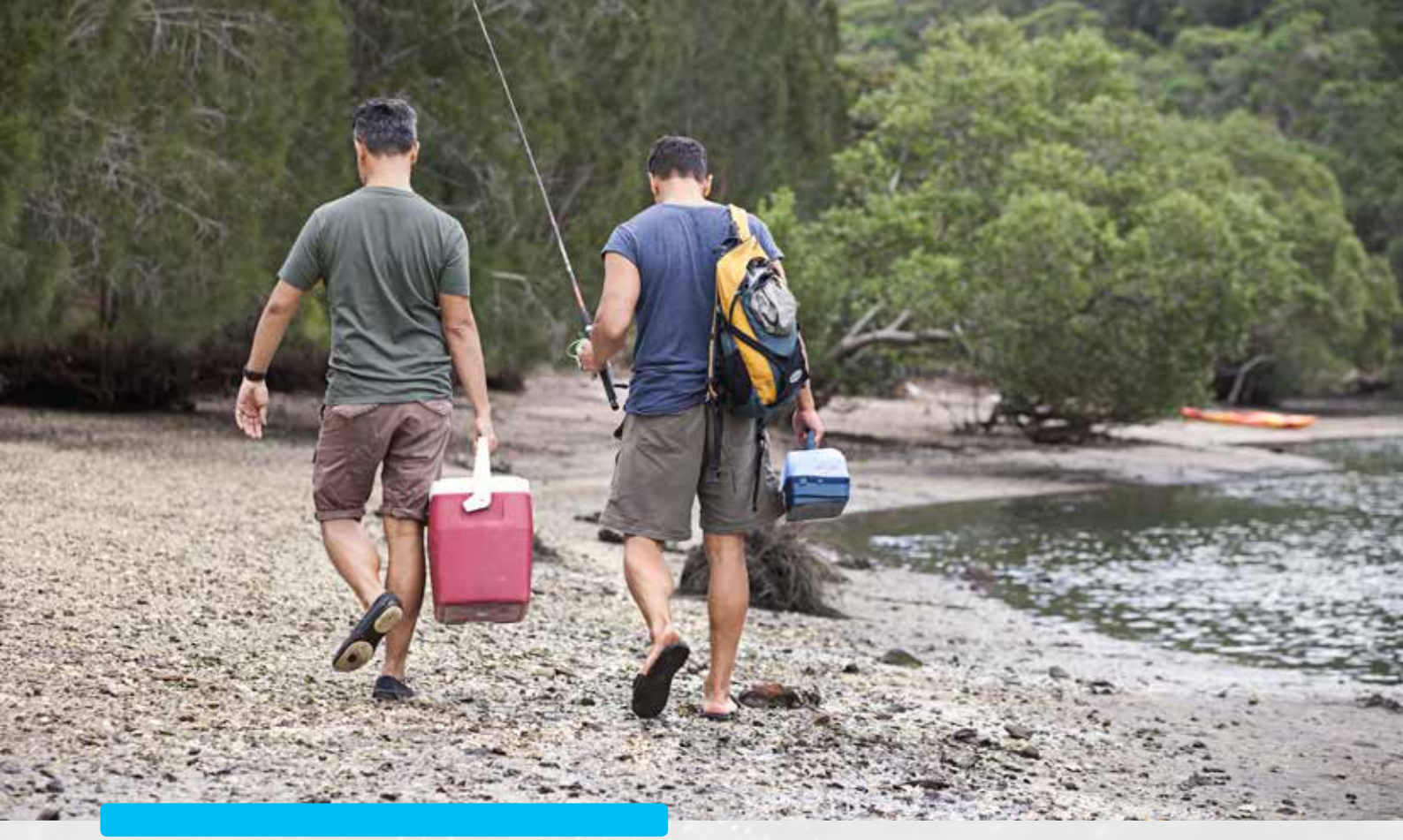


Figure 23: Ocean / Harbour Drowning Deaths by State / Territory, 10 Year Average, 2016/17



CASE STUDY

MULTIPLE FATALITY EVENTS

There were 14 Multiple Fatality Events (MFEs) in 2016/17 that claimed the lives of 35 people. A detailed analysis of these events found that:

- Males accounted for 66% of all drowning deaths as a result of MFEs
- The largest number of drowning deaths occurred in the 25-34 years age group and the 75+ years age group, accounting for 20% of all deaths as a result of MFEs respectively
- Queensland recorded 10 deaths as a result of MFEs, while New South Wales recorded 9 deaths and Tasmania 6 deaths
- More than one-third (37%) of all drowning deaths as a result of MFEs occurred in ocean / harbour locations, followed by rivers, creeks and streams (23%)
- The leading activity related to deaths as a result of MFEs was boating, accounting for 37% of deaths, followed by non-aquatic transport incidents (17%)
- 17% of the deaths as a result of MFEs that occurred during 2016/17 were associated with flooding

Multiple fatality events are tragic with far reaching effects on the victim's families, communities and rescue personnel. In order to reduce the number of MFEs every year, as well as reduce the number of lives lost, a number of drowning prevention strategies can be undertaken.

These include ensuring lifejackets are worn when boating or rock fishing, ensuring boats are seaworthy and fitted with appropriate safety equipment, monitoring weather reports and water conditions before and during activity and avoiding driving, walking or wading through flood waters.

66%

OF ALL DROWNING DEATHS AS A RESULT OF MFEs WERE MALE

There were 29 drowning deaths in children aged 0-4 years at aquatic locations across Australia between 1 July 2016 and 30 June 2017. This is an increase of 7 drowning deaths (or 32%) on last year's total of 22 drowning deaths, as well as an increase of 1 drowning death (or 4%) on the 10 year average of 28 deaths (Figure 24).

Females accounted for 52% of drowning deaths in children aged 0-4 years. Although swimming pools were the leading location for drowning among this age group, accounting for almost half (45%) of all deaths, there was a 13% decrease against the 10 year average. A 75% increase was recorded in the number of children under five drowning in bathtubs and spa baths (Figure 25).

Just over three-quarters of drowning deaths in children under five resulted from a fall into water (76%), while a further 24% drowned while bathing (Figure 26).

DROWNING DEATHS IN CHILDREN AGED 0-4 YEARS

Drowning deaths in children under five increased by 32% on the number of deaths last year

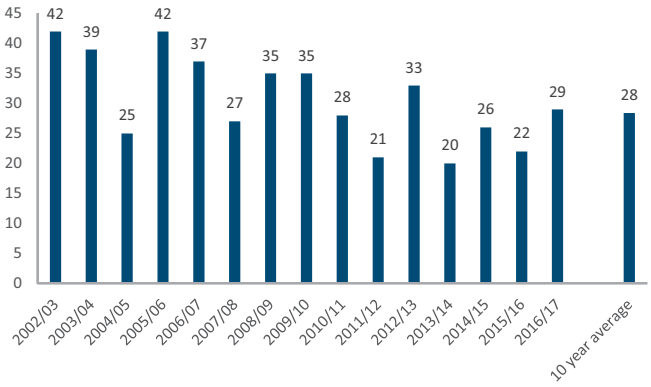


Figure 24: Drowning Deaths of Children 0-4 Years, 2002/03 to 2016/17, 10 Year Average

Swimming pool drowning deaths in children under five have decreased by 13% against the 10 year average

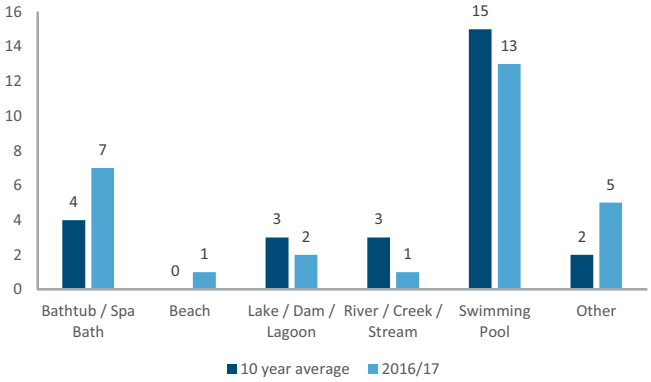


Figure 25: Drowning Deaths of Children 0-4 Years by Location, 10 Year Average, 2016/17

Falls into water account for most drowning deaths in children under five

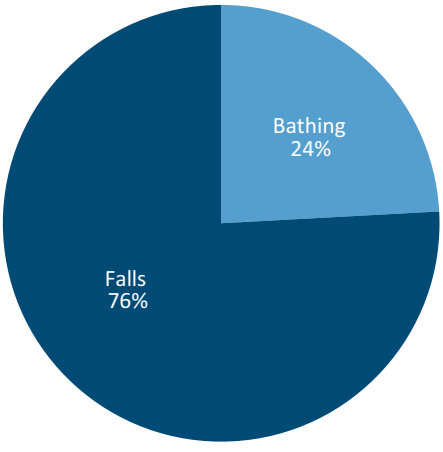


Figure 26: Drowning Deaths of Children 0-4 Years by Activity Immediately Prior, 2016/17

CASE STUDY

NORTHERN TERRITORY WATER SAFETY AWARENESS PROGRAM

The Water Safety Awareness Program has been running in the Northern Territory since 2002. The Program is funded by the Northern Territory Government, administered by Royal Life Saving NT and delivered by approved Providers. The Program was developed as a result of the Northern Territory's appalling drowning rate of children under 5 in 1999.

Parents and carers are the main target of the Program with four key messages being delivered to them. The key messages are:

- Supervision
- Restrict Access
- Water Familiarisation
- Learn CPR

The Program consists of 5 free water awareness sessions for all children and their parents or carers who reside in the Northern Territory, aged between 6 months and 5 years.

At the Program's inception in 2002, the Northern Territory Government set a Key Performance Indicator (KPI) of 750 children to be registered for the Program in a financial year. In 2014/15 this KPI was increased to 1100 registrations and in 2015/16 increased to 2000 registrations, with a strong focus on completion of all 5 sessions.

The Water Safety Awareness Program has received 19,575 registrations from its inception to 30th June 2017 and is currently achieving an 86% completion rate of all 5 sessions.

Data from the Australian Bureau of Statistics shows that the Northern Territory has the highest proportion of children under 15 years of age of all States and Territories in Australia, making the Water Safety Awareness Program critical to drowning prevention and family education in water safety.

Most importantly, the program continues to reach more families, who would otherwise miss out.

There were 12 drowning deaths in children aged 5-14 years at aquatic locations across Australia between 1 July 2016 and 30 June 2017. This is a decrease of 1 drowning death (or 8%) on the 10 year average of 13 deaths (Figure 27).

Males accounted for 75% of drowning deaths in this age group. Rivers, creeks and streams were the most common location for drowning among children aged 5-14 years, with 4 deaths (33%) recorded. There were no drowning deaths in bathtubs or spa baths in this age group in 2016/17 (Figure 28).

Swimming and recreating was the most common activity prior to drowning among children aged 5-14 years, accounting for 5 deaths (42%) (Figure 29). This highlights the importance of a basic level of swimming skills and water safety knowledge in this age group.

DROWNING DEATHS IN CHILDREN AGED 5-14 YEARS

Drowning deaths in children aged 5-14 years decreased by 8% against the 10 year average

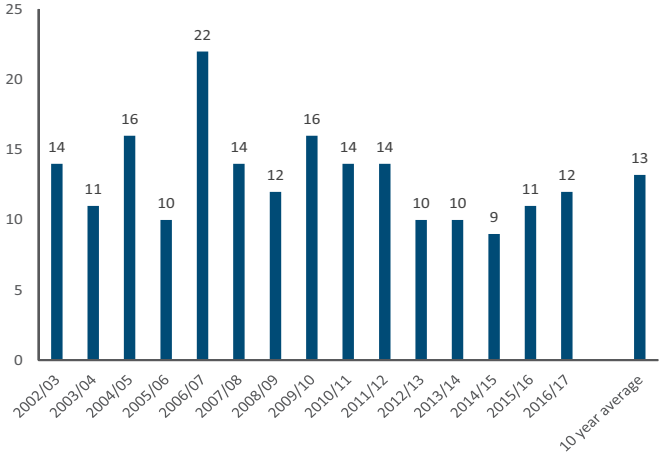


Figure 27: Drowning Deaths of Children 5-14 Years, 2002/03 to 2016/17, 10 Year Average

No drowning deaths were recorded in bathtubs or spa baths in children aged 5-14 years

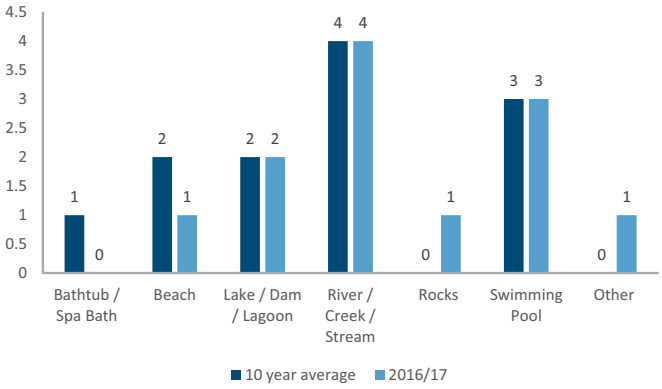


Figure 28: Drowning Deaths of Children 5-14 Years by Location, 2016/17

Swimming and recreating accounts for almost half of all drowning deaths in children 5-14 years

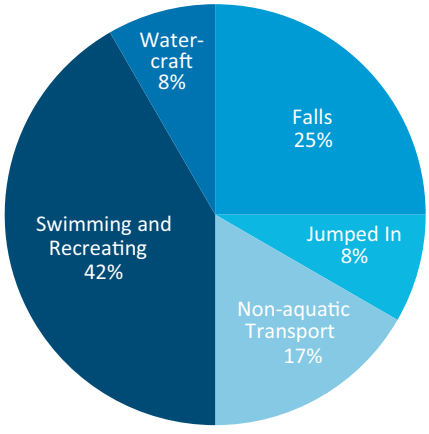


Figure 29: Drowning Deaths of Children 5-14 Years by Activity Immediately Prior, 2016/17

CASE STUDY

FUNDING KIDS AT RISK TO LEARN TO SWIM AND SURVIVE

The Swim and Survive Fund was established to directly address the lack of water safety knowledge and skills by providing lessons to vulnerable communities who are most likely to miss out, thereby leaving them at greater risk of drowning.

Royal Life Saving research has identified that community groups who are most likely to miss out on formal swimming and water safety education are from a range of backgrounds. These include children who: are Indigenous, are from a culturally or linguistically diverse background, are from a low socio-economic community, live in a regional or remote area, have newly arrived in Australia, or are living with a disability.

Recently, with some assistance from the Aurizon Community Giving Fund, 77 children from Indigenous communities or located in a remote area were given the opportunity to learn essential water safety and survival skills. Sixty children living in Eromanga and Cunnamulla in South West Queensland, almost as far as you can get from the ocean, participated in the program to help them safely enjoy the inland waterways and pools in their towns.

A further 17 children from community schools in Kalgoorlie, Western Australia attended an intensive swimming and water safety program.

Some of these children had little previous exposure to water and were afraid to put their head under water. By the end of the program almost every participant progressed to the next ability level.

7,942 CHILDREN AND TEENS HAVE RECEIVED SWIMMING AND WATER SAFETY LESSONS THROUGH THE SWIM AND SURVIVE FUND

"We come from a background where I don't know how to swim and have always been scared of the water, so if my children want to go swimming I get scared as I can't save them if they get into trouble. It means a lot that my children are learning to swim in the water. Now that my children are learning swimming I feel more confident and not as scared. I don't feel comfortable to teach them by myself as I can't swim and can't afford normal lessons so am very happy with the program.**" - Father of participant at a Swim and Survive funded program, Mirrabooka, WA**

"I was scared to put my head under water and now I'm not.**" - 7 year old participant, WA**

For more information on the Swim and Survive fund visit: **royallifesaving.com.au**

There were 43 drowning deaths in people aged 25-34 years at aquatic locations across Australia between 1 July 2016 and 30 June 2017. This was a 5% increase against the 10 year average of 41 drowning deaths (Figure 30). Males accounted for 79% of drowning deaths in this age group.

Rivers, creeks and streams were the leading location for drowning among people aged 25-34 years, accounting for 14 deaths (33%). This was a 27% increase against the 10 year average. A further 6 people drowned at ocean / harbour locations (14%) and 5 at beaches and on rocks (12% respectively) (Figure 31).

People in this age group were undertaking a variety of activities prior to drowning. The most common activity was swimming and recreating (35%), followed by boating (19%) and jumping in (14%) (Figure 32).

Males continue to drown at a higher rate than females, which is particularly evident in this age group. The use of alcohol and illegal drugs while undertaking aquatic activity is an ongoing challenge, particularly around rivers, creeks and streams, which accounted for the highest number of deaths in this age group and are often located in regional and remote locations.

DROWNING DEATHS IN PEOPLE AGED 25-34 YEARS

The 25-34 years age group recorded a 5% increase on the 10 year average in 2016/17

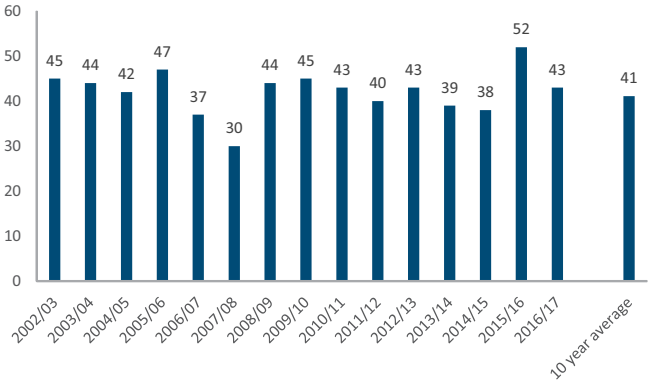


Figure 30: Drowning Deaths of People 25-34 Years, 2002/03 to 2016/17, 10 Year Average

Rivers, creeks and streams were the leading location for drowning in people aged 25-34 years

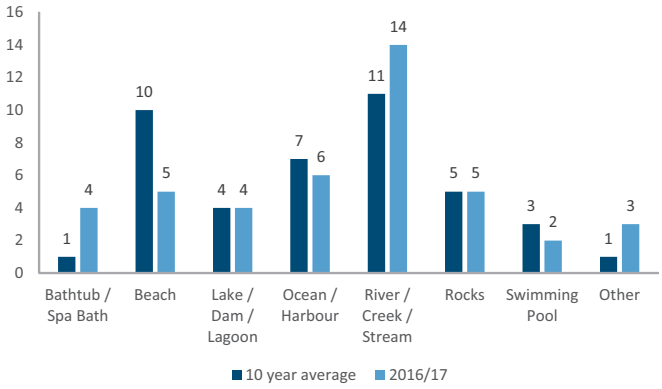


Figure 31: Drowning Deaths of People 25-34 Years by Location, 10 Year Average, 2016/17

Swimming and recreating accounted for just over a third of all drowning deaths in people aged 25-34 years

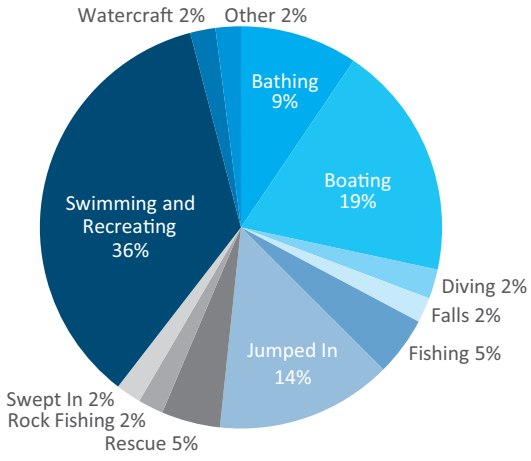


Figure 32: Drowning Deaths of People 25-34 Years by Activity Immediately Prior, 2016/17

LIFE STAGE IN FOCUS: **PEOPLE AGED 65 YEARS AND OVER**

There were 70 drowning deaths in people aged 65 years and over at aquatic locations across Australia between 1 July 2016 and 30 June 2017. This was a 27% increase against the 10 year average of 55 drowning deaths and an increase of 21% on the 58 drowning deaths reported in this age group in 2015/16 (Figure 33). Males accounted for 71% of all drowning deaths in this age group.

Swimming pools recorded the largest number of drowning deaths among this age group in 2016/17, with 18 deaths (26%). Drowning deaths in swimming pools in 2016/17 doubled when compared to the 10 year average. The second most common location for drowning among people aged 65 years and over was beaches and ocean / harbour locations with 11 deaths each (or 16% respectively) (Figure 34).

Almost half of all drowning deaths in people aged 65 years and over occurred while either swimming and recreating (23%) or as a result of a fall into water (20%). A further 17% of deaths occurred as a result of a boating incident (Figure 35).

Older people are encouraged to test their skills and fitness in the controlled environment of a public swimming pool prior to recreating in open water locations, such as beaches and rivers. Participation in a Royal Life Saving Grey Medallion course or Adult Learn to Swim course are great ways to revise important swimming skills and water safety knowledge.

DROWNING DEATHS IN PEOPLE AGED 65 YEARS & OVER

Highest number of drowning deaths in people aged 65 years and over in 15 years

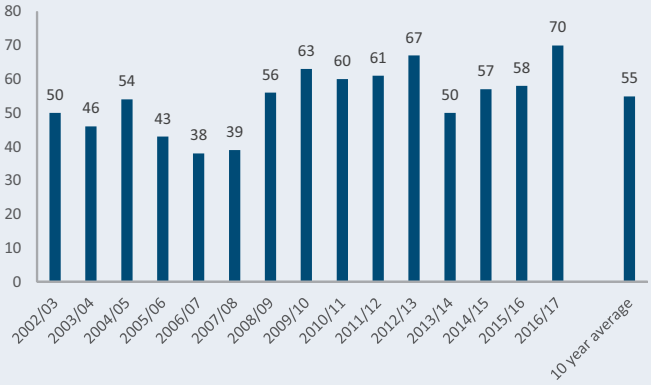


Figure 33: Drowning Deaths of People Aged 65+ Years, 2002/03 to 2016/17, 10 Year Average

Drowning deaths in swimming pools in people aged 65 years and over doubled in 2016/17 when compared to the 10 year average

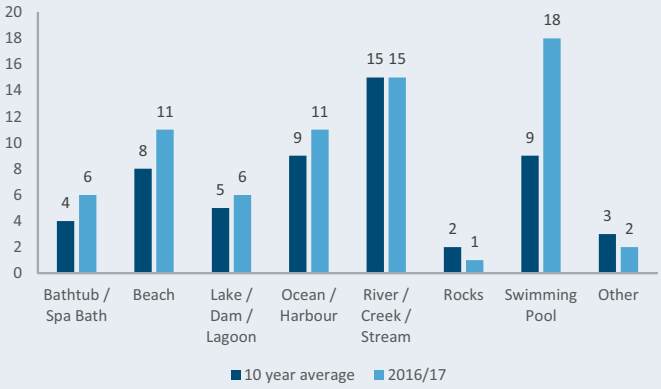


Figure 34: Drowning Deaths of People Aged 65+ Years by Location, 10 Year Average, 2016/17

Swimming and Recreating was the leading activity prior to drowning in people aged 65 years and over

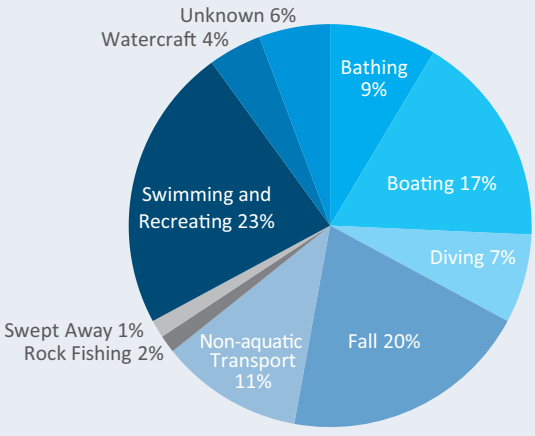


Figure 35: Drowning Deaths of People Aged 65+ Years by Activity Immediately Prior, 2016/17

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 location of the drowning incident. Two thirds (69%) of drowning deaths in 2016/17 took place in areas deemed to be major cities or inner regional (Figure 36).

Drowning deaths in major cities most commonly occurred at swimming pools (26%) and beaches (19%), while swimming and recreating (27%) or following a fall into water (20%). Rivers, creeks and streams accounted for over one quarter (29%) of all drowning deaths in inner regional and outer regional locations, commonly while swimming and recreating (22%) and boating (14%).

Drowning deaths in areas deemed remote or very remote accounted for 10% of all deaths and most commonly occurred at the beach (31%) or at river, creek or stream locations (31%). People who drowned in remote or very remote locations did so whilst swimming and recreating (31%) or boating (31%).

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 risk of undertaking aquatic recreation alone in isolated areas, and the importance of first aid and CPR skills for first responders is vital for reducing drowning deaths in these locations.

Figure 36: Drowning Deaths by Remoteness Classification of Incident Postcode, 2016/17

THE ROLE OF PRE-EXISTING MEDICAL CONDITIONS IN PEOPLE AGED 65+

In March, a joint study by Royal Life Saving Society – Australia and James Cook University into the role of pre-existing medical conditions in fatal drowning incidents among people aged 65 years and over in Australia was published in the 'Heathy Aging Research' journal.

The number of older people drowning in Australia is increasing and chronic medical conditions are common. Using coronial data the study examined the medical details and causal factors leading to drowning among people aged 65 years and over in all aquatic locations in Australia between 1 July 2002 and 30 June 2012.

Across the study period, a total of 506 people drowned, 69% of whom had a pre-existing medical condition. The leading contributory medical condition was cardiovascular disease, followed by dementia, depression, epilepsy, and Parkinson's disease.

All conditions except cardiovascular disease and depression were overrepresented compared with the proportion of the disease in the population. Falling into water was the most common activity immediately before drowning, especially among those with dementia, whereas those with cardiovascular disease were most likely to drown while swimming.

This study shows that pre-existing medical conditions contribute to drowning in older people but with unequal contributions. With the prevalence of medical conditions expected to increase as the population ages, targeted education for older people will be important. Risk management will enable older people to safely participate in aquatic activities.


Fatal, unintentional drowning in older people: an assessment of the role of preexisting medical conditions

For more information about this study visit:
journals.lww.com/har-journal/pages/default.aspx

DROWNING RISK FACTORS

Risk factors that can increase a person's chance of drowning include age, sex and socio-economic status, as well as the presence of pre-existing medical conditions and prior consumption of drugs and/or alcohol.

The following are case studies investigating the frequency of several risk factors in the drowning deaths that occurred in 2016/17.

PRE-EXISTING MEDICAL CONDITIONS

Of the 291 people who drowned, 47 were known to have a pre-existing medical condition. This represents 16% of all drowning deaths in this year's National Drowning Report. Of these, 72% were male and more than half (53%) were aged 65 years and over.

The most common medical conditions were cardiac conditions, such as hypertension, ischaemic heart disease and coronary artery atherosclerosis. Cardiac conditions were recorded in 66% of cases where a pre-existing medical condition was known to be present. Other commonly occurring medical conditions were epilepsy (11%) and mental and behavioural disorders (19%).

A pre-existing medical condition was deemed to have been contributory to the chain of events that led to the drowning in 66% of cases where a medical condition was known to be present.

Royal Life Saving recommends that people aged 65 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.

47

PEOPLE DROWNED WHO HAD PRE-EXISTING MEDICAL CONDITIONS

VISITOR STATUS

In 67 cases (23%) the person who drowned was known to be a visitor to the location where they drowned. Of these, 31 people drowned within their own State or Territory in a postcode that was 100km or further from their residential postcode. A further 16 people were visiting a different State or Territory when they drowned.

This year, 20 people who drowned were overseas tourists, predominantly from European (45%) and Asian (40%) countries. Overseas tourists commonly drowned at ocean / harbour locations (45%) or at the beach (40%). The most common activities prior to drowning were diving (50%) and swimming and recreating (40%).

Regardless of how far you live from the aquatic environment you visit, particularly with inland waterways, conditions can change rapidly and without warning. 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 between the flags and to take care when recreating in and around our inland waterways.

DRUGS & ALCOHOL

There were 15 people who drowned who were known to have recorded positive readings for alcohol in their bloodstream at the time of drowning. Four-fifths (80%) recorded a blood alcohol reading that was equal to or greater than the legal limit for operating boats and vehicles in most States and Territories (0.05%). Of those, 75% recorded a blood alcohol reading that was four times the legal limit (0.20%) or higher.

There were 21 people who drowned who were known to have some kind of drug in their system when they drowned. In almost a third of cases (29%), the drugs consumed were known to be illegal or an abuse of legal drugs. Commonly occurring illegal drugs were cannabis (50% of all drowning deaths which involved illegal drugs) and methamphetamine (33%). The consumption 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 result in greater risk taking behaviour.

Some medications can 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 when around water, as well as considering the possible side effects of prescription medication.

METHODS

Information presented in the Royal Life Saving National Drowning Report 2017 has been collated from the National Coronial Information System (NCIS), State and Territory Coronial offices and year round media monitoring. Cases are collated in partnership with Royal Life Saving State and Territory Member Organisations (STMOs) and Surf Life Saving Australia and are analysed by Royal Life Saving Society – Australia.

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

All care is taken to ensure that the information in this report 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 2016 and 2017. Figures may change depending upon the ongoing coronial investigations and findings as 83% of cases were still under investigation (i.e. open) at the time of the production of this report.

This report contains information on 2016/17 drowning deaths known as of 23rd August 2017. All other data is correct as of 1 July 2017, in accordance with Royal Life Saving's ongoing data quality assurance policy. 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 annual National Drowning Reports as cases close. The 10 year averages in this report were calculated from drowning death data from 2006/07 to 2015/16 inclusive.

Drowning rates per 100,000 population are calculated using population data from the ABS publication 'Australian Demographic Statistics' (Cat 3101.0). Percentages and averages are presented as whole numbers and have been rounded up or down accordingly.

Exclusions from this report include: drowning deaths as a result of suicide or homicide, deaths from natural causes, shark and crocodile attacks, or hypothermia. All information presented is about drowning deaths or deaths where drowning is a contributory cause of death. The category of 'Non-aquatic Transport' related to drowning deaths involving means of transport not primarily designed or intended for aquatic use such as cars, motorbikes, bicycles and aeroplanes among others. Means of transport primarily used for aquatic purposes are captured in the 'Boating' (water-based wind or motor powered vessels, boats, ships and personal watercraft, e.g. boats, jet skis, sail boats, yachts) and 'Watercraft' categories (water-based non-powered recreational equipment such as those that are rowed or paddled, e.g. rowboats, surfboats, kayaks, canoes, boogie boards).

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

In the absence of up-to-date data on non-fatal drowning, non-fatal drowning incidents in 2015/16 and 2016/17 were estimated using the observed ratios of fatal to non-fatal incidents for each age group and sex between 2002/03 and 2014/15. The applicable average ratio of fatal to non-fatal incidents over that period was then used to project the likely number of non-fatal incidents based on the number of fatal incidents for that age group and sex in 2015/16 and 2016/17, respectively. Since available counts of non-fatal incidents do not include all drowning incidents, the proportion of missing incidents was estimated based on a four year sample of fatal incident data which compared incident counts using both broad and restrictive definitions of 'drowning'. The estimated proportion of drowning incidents not captured in existing non-fatal data for each age group was then used to scale-up estimates of non-fatal incidents to arrive at a projection comparable with the broad definition of drowning used to count fatal drowning incidents in this report.

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- Royal Life Saving State and Territory Member Organisations (STMOs)
- The National Coronial Information System (NCIS)
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Data in this report was compiled by Amy Peden, National Manager – Research and Policy and Alison Mahony, Senior Project Officer – Research and Policy, Royal Life Saving Society – Australia. The report was written by Amy Peden.

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291

PEOPLE DROWNED IN AUSTRALIAN WATERWAYS

1 JULY 2016 AND 30 JUNE 2017

This year's figure of 291 drowning deaths is an increase of 9 drowning deaths (or 3%) on the 282 drowning deaths recorded in 2015/16

This is also an increase of 10 deaths (or 4%) on the 10 year average of 281 drowning deaths

SEX AND AGE GROUP

- ▼ **214 (74%)** drowning deaths were male
- ▲ **77 (26%)** drowning deaths were female
- ▲ **29 (10%)** drowning deaths occurred in children aged 0-4 years
- ▼ **12 (4%)** drowning deaths occurred in children aged 5-14 years
- ▲ **43 (15%)** drowning deaths occurred in people aged 25-34 years
- ▲ **70 (24%)** drowning deaths occurred in people aged 65 years and over

STATE AND TERRITORY

- ▼ **93 (32%)** drowning deaths occurred in New South Wales
- ▲ **73 (25%)** drowning deaths occurred in Queensland
- ▲ **45 (15%)** drowning deaths occurred in Victoria
- ▲ **42 (14%)** drowning deaths occurred in Western Australia

LOCATION AND ACTIVITY

- ▼ **68 (23%)** drowning deaths occurred at rivers, creeks and streams
- ▲ **50 (17%)** drowning deaths occurred at beaches
- ▲ **46 (16%)** drowning deaths occurred in ocean / harbour locations
- ▲ **73 (25%)** were swimming and recreating immediately prior to drowning
- ▼ **46 (16%)** drowned as a result of falls into water
- ▲ **37 (13%)** were boating immediately prior to drowning

▲ **Means an increase on the 10 year average**

▼ **Means a decrease on the 10 year average**

2016/17 RESEARCH AND POLICY HIGHLIGHTS

Royal Life Saving's research and policy contribution in 2016/17 has been diverse and continues to impact drowning prevention policy and programs.

Below we showcase our achievements across the year in numbers.

2 GOVERNMENT SUBMISSIONS MADE

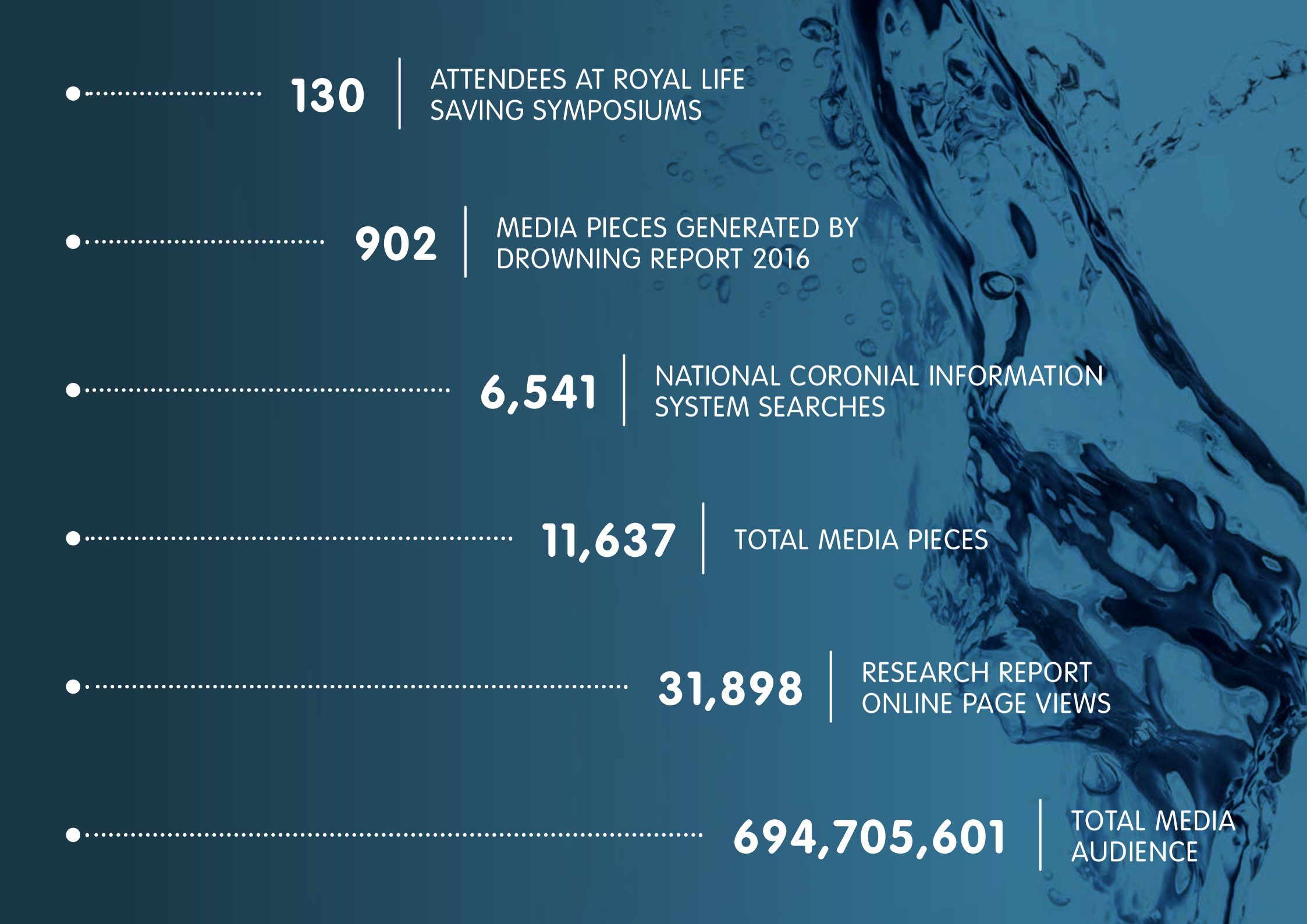
4 AUSTRALIAN STANDARDS COMMITTEE REPRESENTATION

7 ACADEMIC ARTICLES PUBLISHED

8 REPORTS PUBLISHED

18 PRESENTATIONS DELIVERED

52 DATA REQUESTS PROVIDED



130 | ATTENDEES AT ROYAL LIFE SAVING SYMPOSIUMS

902 | MEDIA PIECES GENERATED BY DROWNING REPORT 2016

6,541 | NATIONAL CORONIAL INFORMATION SYSTEM SEARCHES

11,637 | TOTAL MEDIA PIECES

31,898 | RESEARCH REPORT ONLINE PAGE VIEWS

694,705,601 | TOTAL MEDIA AUDIENCE

NON-FATAL DROWNING IN AUSTRALIA

A 13 year national study of non-fatal drowning in Australia: Data challenges, hidden impacts and social costs

Every year Royal Life Saving collects, analyses and publishes information on fatal drowning in the National Drowning Report. However, for every drowning death, there are many more people who are also affected by drowning; surviving the incident but often with lifelong health complications. In order to gain a greater understanding of the full burden of drowning, non-fatal drowning data were collected and published in the report, 'A 13 year national study of non-fatal drowning in Australia: Data challenges, hidden impacts and social costs'.

Non-fatal drowning incidents that occurred in Australia between 1 July 2002 and 30 June 2015 were collated using hospitalisation data obtained from the Australian Institute of Health and Welfare's (AIHW) National Hospital Morbidity Database (NHMD). Hospital separations where the principal diagnosis was any code in ICD-10-AM Chapter XIX Injury, poisoning and certain other consequences of external causes (S00-T98) and the first reported external cause of morbidity was Accidental Drowning and Submersion (W65-W74) were included. Non-fatal drowning data were then compared to fatal drowning data using the Royal Life Saving National Fatal Drowning Database.

Between 1 July 2002 and 30 June 2015 there were 6158 cases of non-fatal drowning in Australia; an average of 474 non-fatal drowning incidents each year. Non-fatal incidents increased by 42% over the course of the study, with males accounting for 66% of all cases. Across the thirteen years, for every 1 drowning death, there were 2.8 non-fatal incidents.

Young children aged 0-4 years accounted for 42% of non-fatal drowning incidents, which is between 5 and 14 times higher than any other age group. Among children under five years, for every 1 fatal drowning, there were 7.6 non-fatal drowning incidents. More than a third of non-fatal incidents occurred in swimming pools (36%), including both home and public pools. For every 1 drowning death in a swimming pool, there were 4.3 non-fatal incidents.

Non-fatal drowning symposium: Acknowledging the full burden of drowning

The Australian Water Safety Council (AWSC) held the non-fatal drowning symposium in Sydney on 30 June 2017, bringing together more than 40 representatives from industry, Government, private sector and academia in order to review the latest research, consider lessons from the field and gain a greater understanding of the human impacts of non-fatal drowning.

Speakers from across Australia presented research on non-fatal drowning, including national data trends, as well as State and Territory perspectives. Attendees also heard from those directly affected by non-fatal drowning, including current programs designed to support families and communities impacted by non-fatal drowning. An emphasis on group and panel discussions facilitated dialogue on research, policy, advocacy and support, with all attendees given the opportunity to contribute to the conversation.

The full Non-Fatal Drowning Report can be downloaded at **royallifesaving.com.au**

Reducing the burden of non-fatal drowning: Symposium declaration

Following the event, the symposium declaration was drafted based on the ideas generated through the workshop sessions, with a consultative draft circulated to attendees to gather feedback. All feedback was carefully considered, resulting in the final version of the document, 'Reducing the burden of non-fatal drowning: Symposium declaration'.

The declaration contains an outline of relevant non-fatal drowning research, including presentations from the event and a comparison to other areas of injury prevention. As well as exploring the scale of non-fatal drowning, the economic costs and social consequences are also considered.

The document contains recommendations moving forward, with actions required in the areas of Research, Policy, Advocacy, Support and Collaboration. These actions were proposed during the workshop sessions of the event, with the consultation process used to fine-tune these important next steps.

The full Symposium Declaration can be downloaded at **royallifesaving.com.au**

Next steps: Recommendations for the future

Over the next 12 months, Royal Life Saving commits to:

- Work with our industry, Government, private sector and academic partners, through the AWSC, to follow through on the recommendations proposed in the symposium declaration in the areas of Research, Policy, Advocacy, Support and Collaboration
- Provide leadership to the issue of non-fatal drowning, ensuring a platform for discussion and collaboration
- Increase awareness of non-fatal drowning among the general community and media, as well as the drowning prevention sector
- Progress non-fatal drowning research through ongoing data collection to identify and monitor trends over time
- Incorporate non-fatal drowning data and perspectives into future research reports, drowning prevention strategies and water safety programs
- Promote the importance of rescue and resuscitation techniques, highlighting the need for prompt action in the case of an emergency
- Advocate for improved support services for individuals, families and communities impacted by non-fatal drowning

Sources: Mahony A, Barnsley P, Peden AE, Scarr J. (2017) A thirteen year national study of non-fatal drowning in Australia: Data challenges, hidden impacts and social costs, Royal Life Saving Society – Australia. Sydney.

Scarr J, Peden AE, Mahony A. (2017) Reducing The Burden of Non-Fatal Drowning: Symposium Declaration. Australian Water Safety Council, Sydney.

SOCIAL CONTEXT OF CHILDREN'S SWIMMING AND WATER SAFETY EDUCATION

Parents and carers of children were surveyed to understand their experiences and perspectives relating to children's swimming and water safety education with a focus on the reasons for participation, barriers to participation and the notion of funding responsibility.

Reasons for participation in lessons:
- Safety and survival
- Confidence and skill development
- Part of the Australian culture
- Close proximity of home to water
- Enjoyment and leisure
- Physical activity

Barriers to participation in lessons:
- Existing knowledge and ability
- Skill progression and age
- Cost of lessons
- Location of lessons
- Unsuitable weather
- Alternative sporting commitments
- Medical condition or disability

- 87% of participants reported that their children were either currently participating in lessons or had previously participated in lessons with a qualified instructor
- 74% of participants reported their children participated in lessons between the ages of 5 and 14 years
- 62% of participants reported their children participated in lessons for a period of 1 to 4 years, with few continuing for more than 6 years
- 52% of participants believed that parents have the primary responsibility for funding lessons, with approximately 15% believing it was a shared responsibility between parents, schools and government
- Children of participants who were born in another country were significantly less likely to be participating in lessons (or have participated previously) than those who were born in Australia
- Children of participants who spoke a language other than English at home were significantly less likely to be participating in lessons (or have participated previously) than those who did not speak another language at home

Source: Mahony A, Larsen P, Peden A. (2017) The social context of children's swimming and water safety education: A national survey of parents and carers, Royal Life Saving Society – Australia. Sydney.

BOATING AND WATERCRAFT DROWNING DEATHS: A 10 YEAR ANALYSIS (2005/06 – 2014/15)

473

PEOPLE DROWNED WHILST PARTICIPATING IN BOATING OR WATERCRAFT ACTIVITY

92%

WERE MALE

19%

WERE AGED OVER 65 YEARS OLD

72% OCCURRED WHEN USING POWERED BOATS

28% OCCURRED DURING FISHING ACTIVITY

52% OCCURRED IN THE SUMMER AND SPRING, MOSTLY ON A SATURDAY OR SUNDAY

92% OF PEOPLE WERE NOT WEARING A LIFEJACKET

26% HAD ALCOHOL IN THEIR SYSTEM, OF WHICH 59% WERE OVER THE 0.05% LIMIT

31% HAD DRUGS IN THEIR SYSTEM, OF WHICH 31% WERE ILLEGAL SUBSTANCES

63% WERE CONSIDERED A LOCAL RESIDENT TO THE LOCATION WHERE THEY DROWNED

Source: Pidgeon S, Mahony A. (2016) Boating and watercraft drowning deaths: A 10 year analysis. Royal Life Saving Society – Australia

SWIMMING AND WATER SAFETY EDUCATION

Research

Royal Life Saving Society – Australia has been investigating Australian children's swimming and water safety ability over many years. Research conducted during 2016/17 specifically addressed the swimming and survival skills of children attending private swimming lessons.

The aims of this research were to: 1) examine the swimming and water safety skills of children attending private swimming lessons, 2) provide a 'snapshot' of what children in private swim lessons are learning against the Year 4 'Benchmark', 3) provide a better understanding of achievement levels in relation to demographic factors and participation on a national level and; 4) estimate the investment required to achieve the 'Benchmark'.

This research was primarily focused on primary school aged children (5 – 12 years) (N = 46,409). The average age was 6.5 years, 51% were male, 94% were from major cities, and 61% were living in decile areas ranked 7 – 10. The average cost per lesson was $15.50; in NSW the average lesson cost was $19.00 compared to $15.50 in Victoria and South Australia.

The most widely taught skills are freestyle (67%) and backstroke (64%) and breaststroke (60%). Less than 50% of children were being taught water safety skills; 44% treading/sculling, 34% survival backstroke, and 5% rescue techniques. Of the 136 individual swim levels recorded, 21% did not contain any water safety or survival skills.

The average age children were achieving 50 metres (m) freestyle and backstroke was at 9.2 years, 25m survival backstroke at 10.4 years and 25m breaststroke at 10.4 years. The average age that children can tread/scull for at least 1 minute is at 8.0 years and for at least 2 minutes is at 8.9 years. Children are being taught rescues from the age of 5 years, reach rescue is the most common rescue being taught. Analysing the skills of 12 year old children (usual age of finishing primary school), 60% can swim 50m freestyle and backstroke, 76% can swim 25m survival backstroke, and 32% can tread/scull for at least 2 minutes.

This snapshot confirms previous benchmarking research that children who regularly attend lessons should be able to achieve the Year 4 benchmark skills before leaving primary school, irrespective of age, sex and socio-economic status. Whilst children of all ages are achieving the benchmark, getting to this point requires a considerable amount of time, resources and money over a sustained period of time by children and their parents, and even more so for the children not achieving.

Swimming and Water Safety Education Symposium

In April 2017, Royal Life Saving convened the National Swimming and Water Safety Symposium in Sydney. The Symposium brought together 50 representatives from across Government, the Education Sector, Academia and the Aquatic Industry, all keen to explore a common set of objectives:

- Support Australian Water Safety Strategy Goal 1 – Reduce Drowning deaths in Children Aged 0-14 years, specifically key objectives VI & VII relating to swimming and water safety education;
- Engage a range of key stakeholders from across Industry, Government, Private Sector and Academia to consider key issues related to policy and practice;
- Facilitate the development and publication of an Industry Statement on Swimming and Water Safety including but not limited to:
  - Reviewing, amending and confirming the National Swimming and Water Safety Framework;
  - Strategies to increase access and equity to quality programs;
  - Development of benchmarking systems to monitor achievement rates.

Output from the Symposium

A key outcome of the symposium was to draft a collective statement aimed at increasing children's swimming and water safety skills and reducing barriers that prevent or limit participation.

At the close of the Symposium, all present jointly developed a set of statements with complementary actions aimed at building a national approach to increasing swimming and water safety education for all Australian children. The Symposium Statements aim to guide the next steps to ensure the issues continue to be addressed through further research, working groups, collaboration and consultation.

The Symposium Statements are high level calls to action in the following areas:

- Strengthen school and vacation swimming and water safety programs in the community;
- Revise the National Swimming and Water Safety Framework;
- Set and report progress against a National Benchmark;
- Devise strategies to increase access and participation for those 'at risk';
- Improve availability and access to aquatic facilities;
- Increase the swimming and lifesaving skills of Secondary School students.

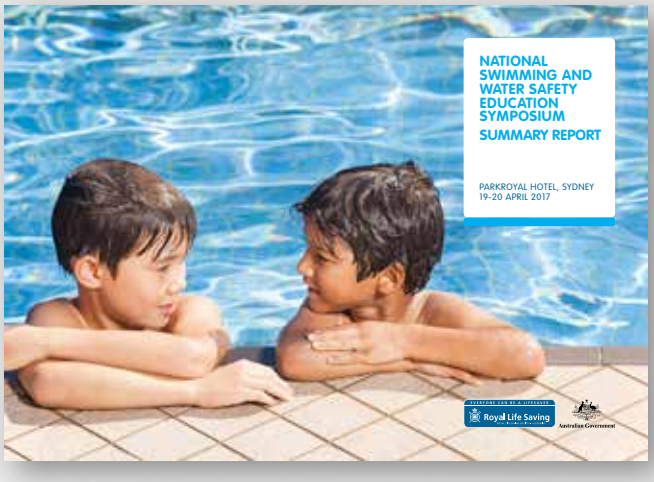
Sources: Pidgeon S, Larsen P, Barnsley P, Scarr J, Peden A. (2017) Benchmarking children's water safety and swimming skills: private swim school data. Royal Life Saving Society – Australia. Sydney.

Royal Life Saving Society – Australia (2017) National Swimming and Water Safety Education Symposium Summary Report. Royal Life Saving Society – Australia, Sydney.

Next steps

Over the next 12 months Royal Life Saving commits to the following actions as a result of the Symposium:

- Conduct research into the swimming and water safety skills of secondary school aged children;
- Investigate the current state of Lifesaving in secondary schools and provide recommendations for improvement;
- Establish a cross-sector Swimming and Water Safety Education Working Group to revise, collaborate and encourage alignment of the National Swimming and Water Safety Framework.



The Summary Symposium Report can be downloaded at **royallifesaving.com.au**

PUBLIC AQUATIC FACILITIES ACROSS AUSTRALIA
(AND A SIMILAR NUMBER OF SWIM SCHOOLS)

ANNUAL COSTS OF FATAL DROWNING IN AUSTRALIA

IN REVENUE EARNED BY THE SWIM SCHOOL INDUSTRY IN 2014/15

5% OF AUSTRALIA'S BURDEN OF DISEASE AND INJURY IS DUE TO INACTIVITY

40% OF AUSTRALIANS ARE "INACTIVE"

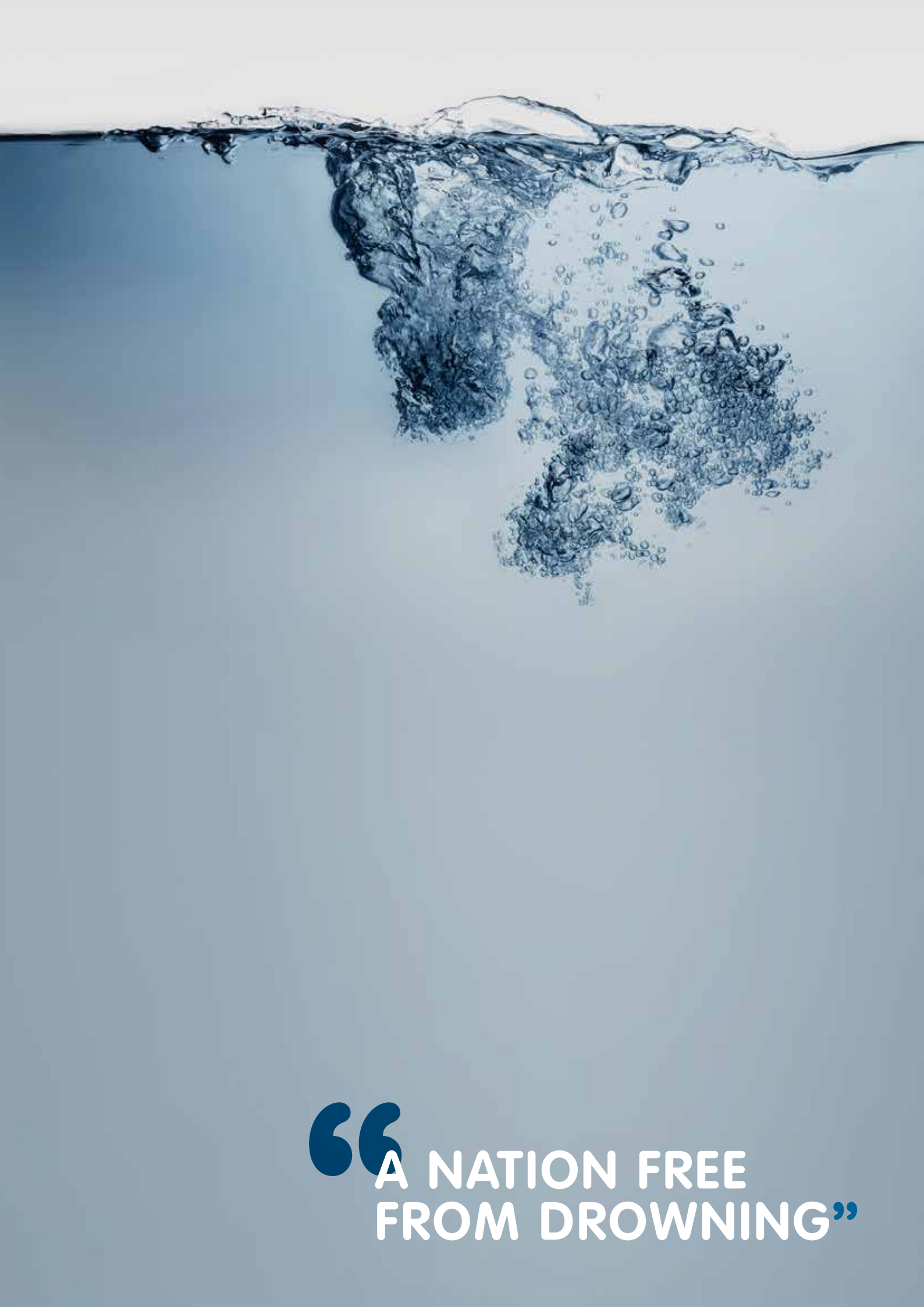
$26 WORTH OF HEALTH BENEFITS FOR AN AVERAGE SWIMMING POOL VISIT

4.4 THE NUMBER OF TIMES PER YEAR THE AVERAGE AUSTRALIAN VISITS AN AQUATIC FACILITY

$2.8 BILLION – VALUE OF HEALTH BENEFITS GENERATED BY THE AQUATIC INDUSTRY EVERY YEAR

23 NUMBER OF NEW AQUATIC FACILITIES REQUIRED IN AUSTRALIA'S TEN HIGHEST GROWTH AREAS

$4.2 MILLION – THE AVERAGE COSTS FROM A FATAL DROWNING INCIDENT



“A NATION FREE FROM DROWNING”

FOR MORE INFORMATION ABOUT THIS REPORT CONTACT

Royal Life Saving Society - Australia
02 8217 3111
info@rlssa.org.au

CONTACT ROYAL LIFE SAVING IN YOUR STATE OR TERRITORY

ACT 02 6260 5800
act@rlssa.org.au

NSW 02 9634 3700
nsw@royalnsw.com.au

NT 08 8981 5036
nt@rlssa.org.au

QLD 07 3823 2823
admin@rlssq.com.au

SA 08 8210 4500
training@royallifesavingsa.com.au

TAS 03 6243 7558
tas@rlssa.org.au

VIC 03 9676 6900
mail@lifesavingvictoria.com.au

WA 08 9383 8200
info@rlsswa.com.au

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