

Drowning and Near Drowning Report 2011



Royal Life Saving

THE ROYAL LIFE SAVING SOCIETY WESTERN AUSTRALIA INC.



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Quick Facts

21 Western Australians drowned in 2011:

- 76% were male
- Two thirds of deaths occurred in regional and remote areas
- 28.6% involved people aged 25-34 years
- 23.8% of people were fishing at the time of the incident
- 42.9% were contributed to by medical conditions
- 38.1% involved tourists and/or visitors

Young Children 0-14 years

- Two drowning deaths recorded
- Both incidents occurred in the home environment
- 50 hospitalisations following a near-drowning incident

Young Adults 15-24 years

- Four drowning deaths recorded
- Five year average of 3.6 deaths per year
- 75% were male
- 75% occurred in regional and remote areas
- All incidents occurred while the person was in the water
- Contributing factors: tourists, alcohol, lack of experience and risky behaviour
- Seven hospitalisations following a near drowning incident

Adults 25-54 years

- 10 drowning deaths recorded
- Five year average of 5.6 deaths per year
- 60% were aged 25-34 years
- 70% occurred in regional and remote areas
- 60% occurred in the ocean
- 50% involved people from culturally and linguistically diverse backgrounds
- Contributing factors: tourists, medical conditions, alcohol, lack of safety equipment, poor weather conditions
- 25 hospitalisations following a near-drowning incident

Older Adults 55+ years

- Five drowning deaths recorded
- Five year average of 9.4 deaths per year
- 80% occurred at beach locations
- 40% occurred while the person was surfing
- 80% were contributed to by a medical condition
- 17 hospitalisations following a near-drowning incident



Introduction

Water related sport and recreation activities are an important part of the Western Australian culture and lifestyle. However, unfortunately each year too many people drown at our beaches, in our rivers and at home. This report provides an overview of the drowning deaths and hospitalisations as a result of a near-drowning incident that occurred in Western Australia from 1 January to 31 December 2011.

Methodology

Drowning death data was collected from the WA Coroner's Office and collated by the Royal Life Saving Society WA Inc. Only case files closed by the Coroner at the time of this report have been included to ensure that data is as reliable and accurate as possible. There were no open files at the time of this report. The data has been analysed by age, gender, location, activity, region and contributing factors.

Hospitalisation data was collected and collated by the Epidemiology Branch of the Department of Health WA. This data was analysed by age, gender, location, race and includes incident rates by region.

This year we have altered the age groups for reporting drowning and near-drowning data to be in line with the life stages approach outlined in the Australian Water Safety Strategy. Data from the previous five years has been altered to ensure that rates and comparisons are accurate.

While all care is taken to ensure that the information presented in this report is as accurate as possible, data is subject to change following ongoing coronial investigations.

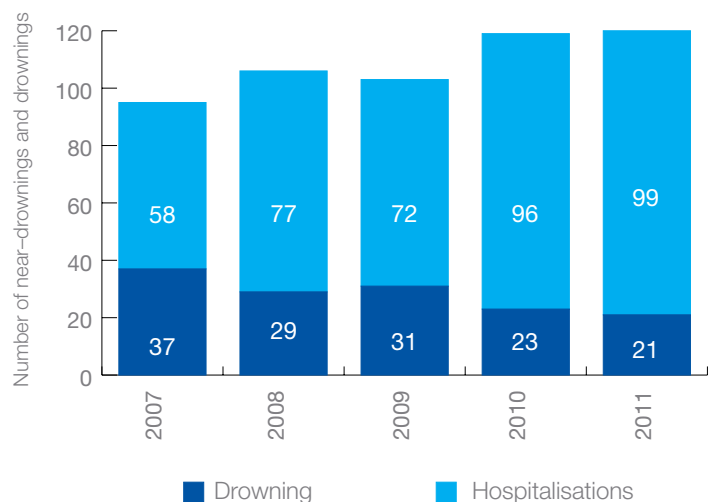
WA Drowning Deaths and Near-Drowning Hospitalisations 2011

In 2011, 24 drowning deaths were recorded in Western Australia. Of these, 21 cases were identified as unintentional drowning deaths and have been included in this report. This continues the downward trend in the number of drowning deaths recorded in WA seen over the past three years. 2011 figures show a slight decrease from numbers recorded in 2010 and remains lower than the five year average of 28 deaths per year.

These deaths contributed a total cost of \$33.6million to the broader Western Australian community. The crude incident drowning rate for 2011 was 0.9 deaths per 100,000 people (based on population statistics – 2,329,412 people).

While we have seen a decrease in the number of drowning deaths recorded in Western Australia, the number of hospitalisations following a near-drowning incident has continued to increase with 99 incidents recorded in 2011 which is significantly higher than the five year average of 80 incidents per year. The crude incident rate of 4.25 incidents per 100,000 people (based on population statistics – 2,329,412 people). The rate of hospitalisation from near-drowning is significantly higher than 2005 and 2006 and has almost doubled in WA over this time.

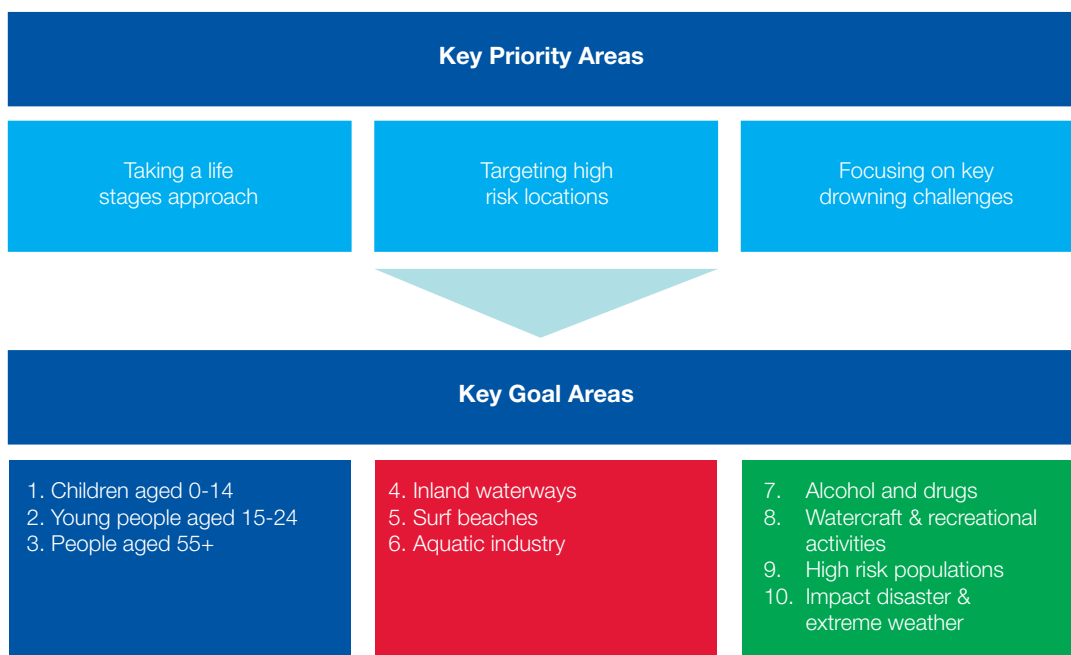
WA Drowning and Near Drowning in WA (2007-2011)



Australian Water Safety Strategy 2012-15

In 2008 the Australian Water Safety Council (AWSC) established an ambitious aspirational goal of achieving a 50% reduction in drowning deaths by the year 2020. Released on the 4th June 2012, the Australian Water Safety Strategy 2012-15 was developed by the AWSC in collaboration with water safety agencies, Government organisations and departments and other groups with an interest in preventing drowning deaths and improving water safety. Copies of the report can be obtained from www.watersafety.com.au. The report outlines three key drivers and 10 key goal areas that will achieve the reduction:

Australian Water Safety Strategy 2012-15



In Western Australia, there has been a 28% decrease in the number of drowning deaths since 2008 which means that we are half way to achieving the 50% reduction set out in the Australian Water Safety Strategy. While we are performing well in some key goal areas outlined in the strategy, others require more work to achieve significant reduction in drowning deaths in Western Australia.

Who drowns?

Of the 21 drowning deaths recorded in Western Australia in 2011 the majority involved males (76.2%; 16 cases) who were 3.2 times more likely to be involved in a drowning death than females which is similar to previous years. Similarly, the hospitalisation rate of near-drowning for males was significantly higher than females with males 1.9 times more likely to be hospitalised from near-drowning than females.

The average age of those who drowned in 2011 was 36.38 years (standard deviation of 19.44) and ranged from 2 – 68 years. Males who drowned were on average older than females (38.2 years compared to 30.8years). Rates of drowning show that drowning risk increases with age in WA.

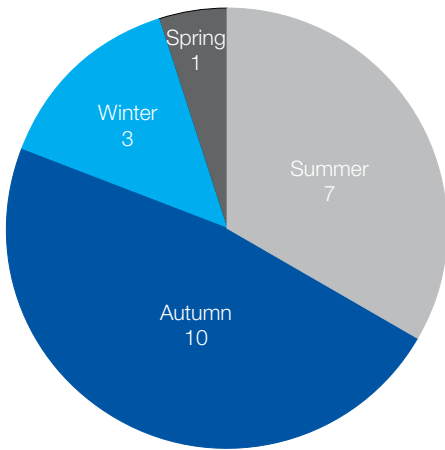
Hospitalisations from near-drowning increased across all age groups with the exception of children aged 5-14 years and young adults aged 15-24 years in 2011. Children under five years recorded the largest number with a crude rate of 28.15 incidents per 100,000 people which is significantly higher than any other age group.

When do they drown?

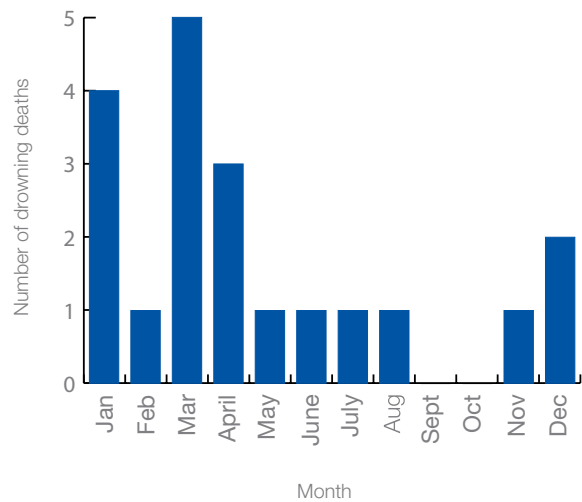
Drowning deaths can occur at any time of year, however the majority occur in the warmer autumn (47.6%; 10 cases) and summer (33.3%; 7 cases) months when people are more likely to participate in aquatic activities. Spring recorded the lowest number of drowning deaths in 2011 (4.8%; 1 case). This highlights the importance for water safety and drowning prevention messages to be promoted throughout the year with a focus on the time leading into summer and through autumn.

Similar to national figures March and January recorded the highest number of drowning deaths. September and October recorded the lowest numbers.

Drowning Deaths by Season (2011)



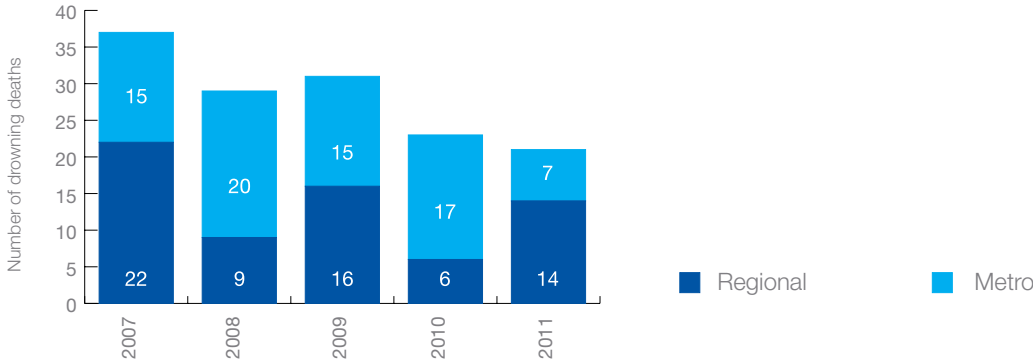
Drowning Deaths by Month (2011)



Where and How do people drown?

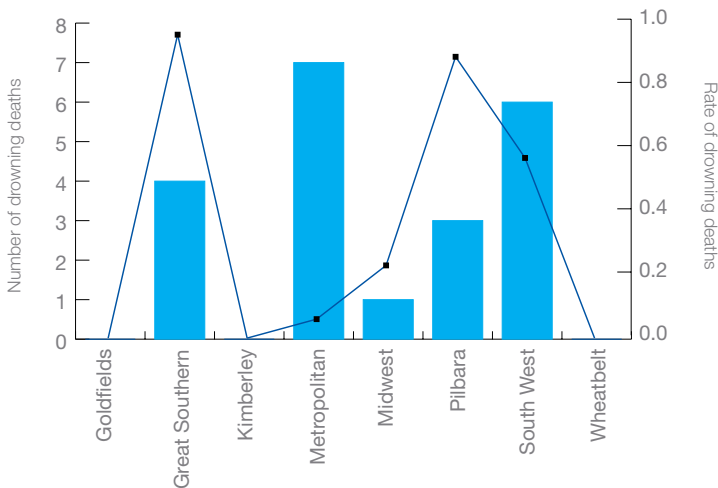
In 2011, people were twice as likely to drown in regional and remote areas than within the Perth metropolitan area, with two thirds of deaths recorded in these areas. This is significantly higher than the five year average of 47.2% for regional and remote areas in WA.

Regional and Remote Drowning Deaths (2007-2011)



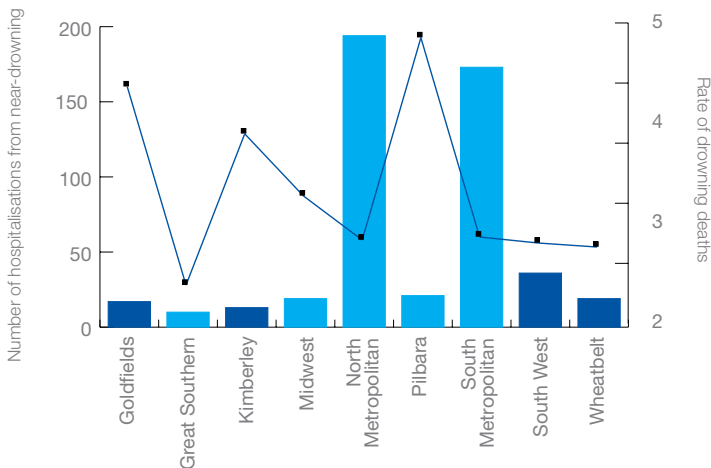
The metropolitan area recorded the highest number of drowning deaths of any health region in 2011 (7 cases) followed by the South West (6 cases) and Great Southern regions (4 cases). However, the Great Southern (0.96 deaths per 100,000 people) and Pilbara regions (0.89 deaths per 100,000 people) had the highest rate of drowning per 100,000 people.

Drowning Deaths and Rates by Region (2011)



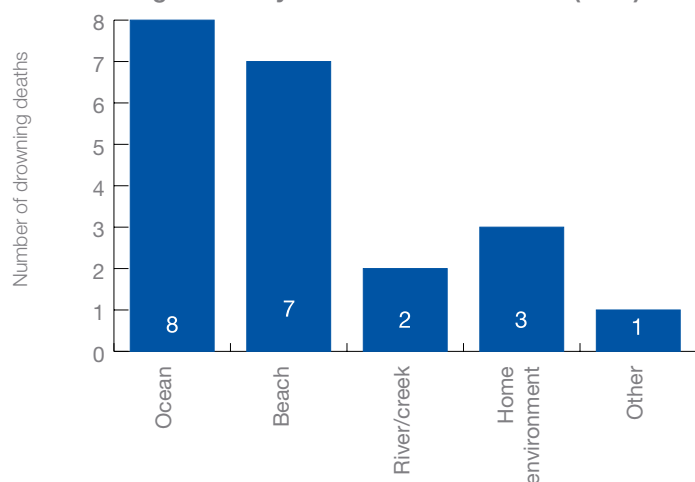
Similarly between 2005-2011, the Perth metropolitan area recorded the highest number of hospitalisations from near-drowning with 194 cases from the north metropolitan area and 173 from the south metropolitan area. The South West (36 cases), Midwest (19 cases) and Wheatbelt (19 cases) recorded the highest numbers within regional WA. However, crude hospitalisation rates were highest in the Pilbara (6.24 per 100,000), Kimberley (5.43 per 100,000) and Midwest (4.29 per 100,000) regions.

Hospitalisations from Near-Drowning by Region (2005-2011)



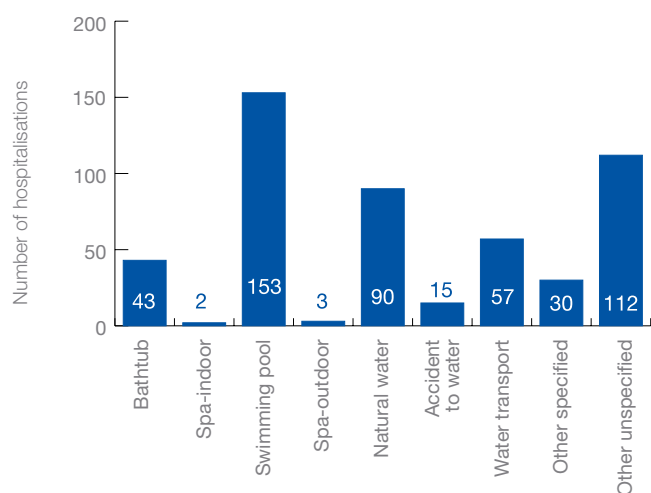
In 2011, drowning deaths were most likely to occur in the ocean (38.1%) or at the beach (33.3%) which is similar to previous years. The remaining deaths occurred at various inland waterway locations including rivers and locations in and around the home.

WA Drowning Deaths by Environmental Location (2011)



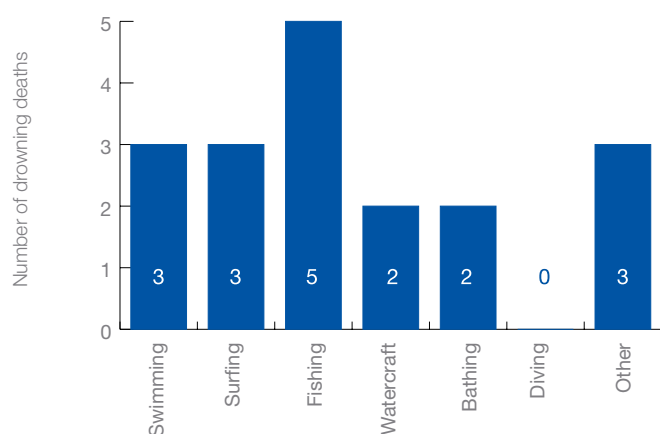
While there were no drowning deaths recorded in home swimming pools in 2011, 153 hospitalisations from a near-drowning have been recorded at this location since 2005. Of these 56.9% occurred while the person was already in the water and the remaining 43.1% occurred when someone fell into the water. Other common locations included natural water. In addition the rates for hospitalisation for from near-drowning rates in swimming pools were significantly higher than in bathtubs, natural water and water transport.

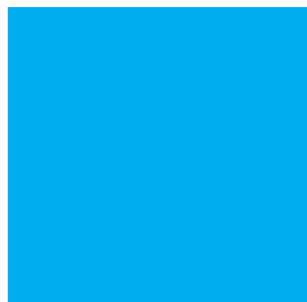
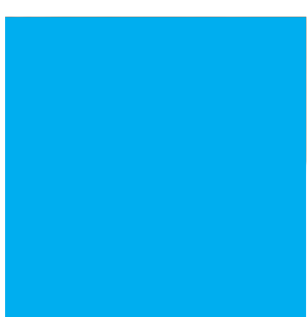
WA Hospitalisations from Near-drowning by Location (2005-2011)



Fishing, swimming (including snorkelling) and surfing were the three most common activities being undertaken at the time of the incident in 2011. The number of drowning deaths occurring while fishing has continued to increase over the past few years and is now identified as a key drowning prevention area in Western Australia that requires urgent action.

WA Drowning Deaths by Activity (2011)





Children (0-14yrs)

In this report we have combined the two age groups 0-4 and 5-14 years to be in line with the current Australian Water Safety Strategy and to allow us to investigate, in detail, the different trends as children progress through different developmental life stages.

0-4 Years

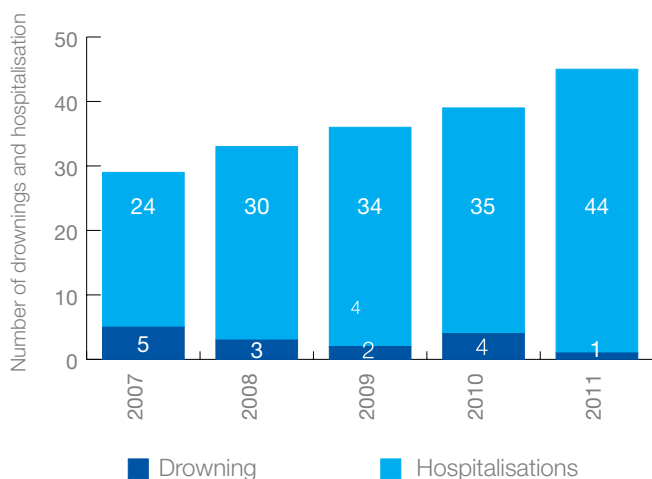
Globally, drowning death rates are highest in children under five years of age. In 2011 we saw a significant decrease in drowning deaths recorded amongst this age group in WA with only 1 death recorded. Drowning deaths amongst this age group have fluctuated over the past five years with the numbers recorded in 2011 the lowest seen over the past decade.

Since 1997 we have seen a 65% decrease in the average number of drowning deaths recorded amongst this age group in WA (double that seen at a national level) and a 51% decrease in the number of toddler drowning deaths recorded at home swimming pools. Pool barrier legislation and ongoing education and awareness programs have provided a significant contribution towards these achievements.

Looking at drowning deaths amongst this age group over the past five years some key risk factors include: lack of appropriate adult supervision, inadequate or faulty pool barriers, males and living in regional and remote areas

While we have seen significant improvements in the number of drowning deaths amongst this age group, there were 44 hospitalisation from near-drowning in 2011. In addition the number of hospitalisations from a near-drowning have increased significantly since 2005 and are significantly higher than any other age group in Western Australia.

WA Drowning and Near-Drowning – 0 to 4 years (2007-2011)



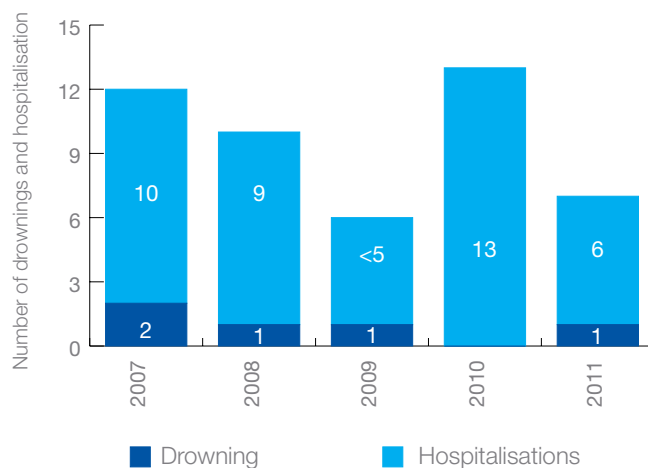
5-14 Years

There was only one drowning death recorded amongst the 5-14 year age group in 2011 which is on par with the five year average of one death per year. This is the fifth year that there has been a low number of drowning deaths recorded amongst this age group in Western Australia and highlights the impact that learn to swim programs, education and awareness programs and safe venues have had on maintaining these low numbers.

Continuing to facilitate access to these programs to ensure that every child in Western Australia learns to swim and is provided with the skills and knowledge to participate safely in aquatic activities is the key to long term sustainable results within this age group.

Similarly, the number of hospitalisations from near-drowning among this age group has remained low in 2011 with six incidents reported.

WA Drowning and Near-Drowning – 5 to 14 years (2007-2011)



Recommendations

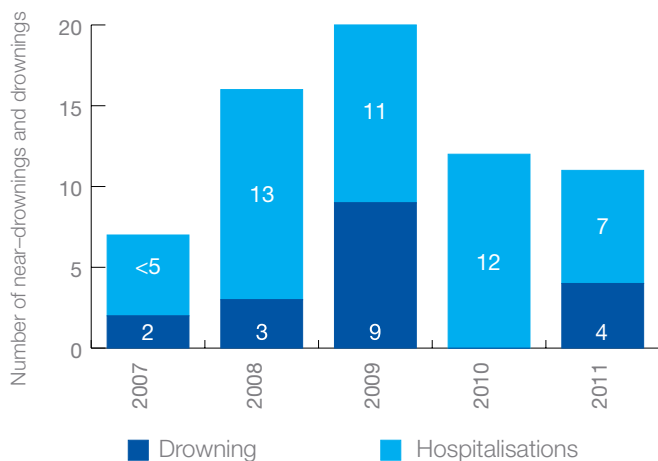
1. Continue to develop education and awareness programs that promote and build skills of adequate supervision of young children around aquatic environments
2. Continue to promote, monitor and enforce pool barrier legislative requirements for home swimming pools, spas and inflatable pools
3. Continue to develop strategies and messages to target water safety and drowning prevention on the farm including having a designated safe play area for children
4. Promote community wide rescue, first aid and resuscitation skills
5. Ensure continued access to learn to swim lessons for all children in Western Australia



Young People (15-24yrs)

There were four drowning deaths recorded amongst young people aged 15-24 years in Western Australia in 2011, a four fold increase from figures seen in 2010. The five year average for this age group is 3.6 deaths per year and the crude rate for 2011 was 0.12 deaths per 100,000 people

WA Drowning and Near-Drowning – 15 to 24 years (2007-2011)



Of these incidents 75% were male, a continuing trend amongst this age group. Research indicates that young males have greater tendencies toward greater risk taking which can be associated with a greater risk of death and injury.

Three quarters of the drowning deaths amongst this age group occurred in regional and remote areas of Western Australia in 2011 with 50% occurring within the summer and autumn months. All of the deaths that occurred within this age group in 2011 occurred while the person was recreating in the water. Common activities being undertaken at the time of the incident included: fishing, swimming and surfing.

In a continuing trend, alcohol was a contributing factor in 25% of deaths amongst this age group. The risk to personal safety from alcohol consumption amongst young people recreating in aquatic environments is a priority outlined within the Australian Water Safety Strategy 2012-15.

In addition, there were seven hospitalisations from near-drowning amongst this age groups recorded in 2011. This figure has decreased from 2010.

Recommendations

1. Develop targeted interventions to ensure young people in regional and remote areas have access to drowning prevention and water safety programs, resources and services
2. Focus awareness and education programs on males and addressing risk taking behaviour
3. Develop effective communication strategies to promote drowning prevention and water safety messages to young people including social media
4. Implement school based education strategies as part of a multi faceted approach to drowning prevention for this age group

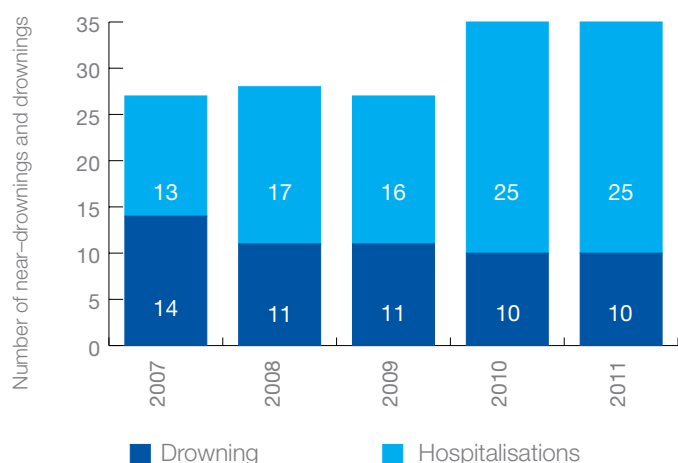


Adults (25-54yrs)

In 2011, 10 adults aged 25-34 years drowned in Western Australia. This is the same number as recorded in 2010 and is slightly lower than the five year average of 11.2 deaths per year. Of these, 60% of drowning deaths occurred amongst adults aged 25-24 years and the remaining 40% amongst adults aged 45-64 years. The crude death rate for this age group is 0.16 deaths per 100,000 people.

In addition, there were 25 hospitalisations from near-drowning amongst this age group in 2011 which is the same as recorded in 2010 and continues the increasing trend seen over the past five years.

WA Drowning and Near-Drowning – 25 to 54 years (2007-2011)



In a continuing trend, males were more than twice as likely to drown than females in this age group with 70% of deaths involving males.

Deaths amongst this age group were most likely to occur in autumn (60%) and were more than twice as likely to occur in regional and remote areas with 70% occurring outside the Perth metropolitan area.

The majority of incidents (60%) occurred in the ocean with an additional 20% occurring at inland waterway locations in 2011 which is similar to previous years.

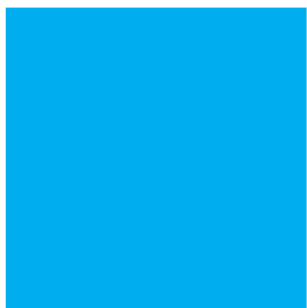
Fishing (30%) and Swimming (30%) were the two most common activities being undertaken at the time of the incident. Over the past five years, fishing has emerged as high risk activity for this age group and has become a priority issue for immediate action in Western Australia.

The presence of pre-existing medical conditions was a contributing factor to 30% of drowning deaths amongst adults in 2011. In addition 20% of drowning deaths were contributed to by alcohol consumption with an average blood alcohol content of 0.271. Other common contributing factors included poor swimming ability (20%), lack of appropriate safety equipment for the activity being undertaken (30%) and poor weather conditions (40%).

Overall, 50% of incidents amongst this age group involved people from culturally and linguistically diverse backgrounds who had limited swimming ability and a lack of awareness and knowledge of local conditions. Of these, 60% were tourists or visitors to the area.

Recommendations

1. Develop consistent fishing safety programs and messages specifically targeting rock fishing and boat fishing that promote safe fishing behaviours
2. Develop strategies and messages to promote drowning prevention and general water safety messages to tourists and visitors to Western Australia (including translated resources and information)
3. Target water safety and drowning prevention messages and strategies to high risk activities and locations (particularly for adults aged 24-34 years)
4. Promote community wide rescue, first aid and resuscitation skills



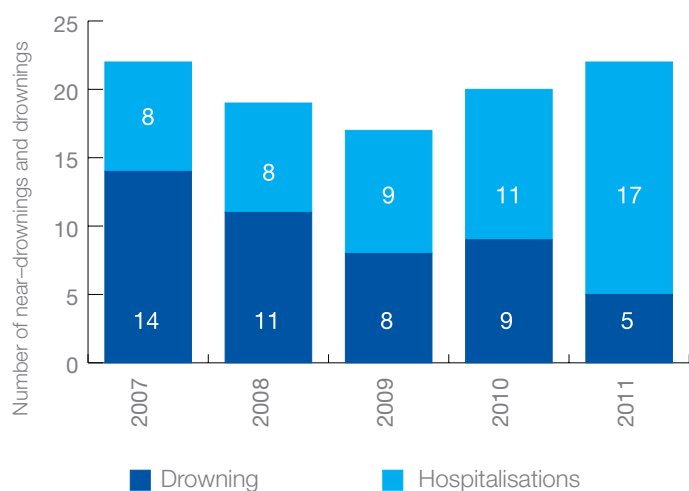
Older Adults (55+yrs)

It is well documented that Australia has an ageing population and projections suggest that this will continue to have a significant impact in many areas including drowning prevention.

In 2011, five older adults over 55 years of age drowned in Western Australia, which continues the downward trend seen amongst this age group over the past five years and is almost half that recorded in 2010. This number is also significantly lower than the five year average amongst this age group of 9.4 deaths per year. The crude death rate is 0.19 deaths per year.

While the number of drowning deaths amongst older adults has decreased, the number of hospitalisations from a near-drowning increased in 2011 with 17 incidents recorded. The number of hospitalisations from near-drowning have continued to increase over the past five years.

WA Drowning and Near-Drowning – 55+ years (2007-2011)



All of the incidents amongst this age group involved males, a trend which has been consistent over the past five years amongst this age group. 60% of people were aged 55-64 years and the remaining 40% were aged 65-74 years.

All of the drowning deaths recorded amongst this age group occurred at coastal locations with 80% occurring at the beach while swimming or surfing.

In a continuing trend, 80% of incidents were contributed to by the presence of a pre-existing medical condition. Of these, 75% of medical conditions were related to cardiovascular disease.

Recommendations

1. Conduct further investigation of risk and causal factors amongst this age group to better understand the needs of this group
2. Develop strategies to raise awareness of the impact that pre-existing medical conditions and prescribed medication has on a person's abilities to participate in aquatic activities
3. Encourage older adults to participate regularly in aquatic activities by creating ageing friendly environments, venues and programs
4. Promote community wide rescue, first aid and resuscitation skills

For further information or to obtain additional copies of the 2011 Drowning Report, please contact:



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