2014
WA COASTAL SAFETY REPORT
SAVING LIVES AND BUILDING GREAT COMMUNITIES

SURF LIFE SAVING
WESTERN AUSTRALIA
Surf Life Saving WA (SLSWA) is a volunteer based not for profit community service association and is the peak coastal aquatic safety and injury prevention organisation in WA. SLSWA creates a safe environment in and around our beaches through our patrolling presence on the beach, in the air and through community and workplace education and training programs.

SLSWA’s Coastal Safety Report is produced annually to inform coastal safety stakeholders about current drowning risks and trends at WA beaches. The information provided will assist all WA water safety agencies to achieve the aspirational goal set by the Australian Water Safety Strategy 2012-2015 of achieving a 50% reduction in national drowning deaths by the year 2020.

The Surf Life Saving movement began in WA at Cottesloe Beach in 1909 in response to a number of drowning incidents in the area. Over the next 20 years a number of additional clubs commenced patrol operations in country and metropolitan locations. To date SLSWA has more than 20,000 valuable members across 29 surf clubs, who assist in protecting lives at WA beaches and play a fundamental role in building healthy communities. During the 2013-14 season volunteer surf lifesavers and paid lifeguards performed 1,386 rescues at WA beaches.

Despite the efforts of trained volunteer surf lifesavers, paid lifeguards and support operations teams, people continue to drown along the West Australian coastline each year, at non-patrolled beaches or at times when lifesavers and lifeguards are not on duty. The aim of all lifesavers and lifeguards is to achieve zero coastal drowning deaths.

During the 2013-14 season volunteer surf lifesavers and paid lifeguards performed 1,386 rescues at WA beaches.
Between 1 May 2013 and 30 April 2014 there were 17 coastal drowning deaths, a tragic 30% increase above the seven year average of 13 deaths a year. Although drowning figures continue to increase, surf lifesaving services prevent this number from skyrocketing, performing 1,386 lifesaving rescues and performing 38,337 preventative actions. Without the education and direct intervention strategies of Surf Life Saving the drowning statistics would likely be significantly higher.

As dynamic, unpredictable, free and largely unsupervised environments, beaches are amongst the most dangerous locations for aquatic recreation.

Coastal activities that are high risk in WA include rock fishing, diving, snorkelling, boating and general free play activities.

The majority of drowning deaths were males (88%) and over 82% of all drowning deaths occurred in regional or remote areas of WA. High risk locations in WA include the Gascoyne, South West and Great Southern regions. All drowning fatalities occurred at unpatrolled locations or outside of patrol times, clearly demonstrating the value of surf lifesaving services.

Compared to other aquatic environments beaches pose many additional risks for drowning and injury such as rip currents, large waves, tidal surges and dangerous rocky coast. Rip currents are a contributing factor in approximately 24.5% of coastal drowning deaths with a significant proportion of the community mistaking rip currents as the safe area to swim due to the presence of calm water and lack of awareness.

Sadly, 35% of coastal drowning deaths were people of overseas nationality, with swimming ability, knowledge of sea conditions and level of experience in an ocean environment playing a significant risk factor for coastal drowning in this group.

In response to the increasing coastal drowning trend, SLWA developed the BeachSAFE Initiative in 2013 which takes a comprehensive and holistic approach to reducing coastal drowning deaths in WA. SLWA lifesaving services cannot be everywhere, all the time, and we have recognised that in the absence of our services the public lack the skills required to take responsibility for their own safety. The BeachSAFE Initiative therefore aims to improve the public’s awareness of coastal safety and promote the importance of coastal aquatic education.

The BeachSAFE Initiative encompasses four key safety principles which are integral to staying safe when recreating at the beach. These are;

- Supervision
- Aquatic Education
- First Aid
- Emergency Preparedness

The WA Coastal Safety Report aims to identify coastal drowning trends and support evidence-based decision making for future drowning prevention efforts.
Australian Water Safety Council 2012-2015

SLWA strategies align with the priorities outlined in the Australian Water Safety Strategy (AWSS) 2012-15. The AWSS 2012-15 builds upon previous Water Safety Plans and Strategies and was developed by the Australian Water Safety Council (AWSC) in collaboration with National water safety agencies, government and other groups with an interest in drowning prevention.

Figure 1.0
Australian Water Safety Strategy 2012-2015

The BeachSAFE Initiative

In response to increasing coastal drowning trends, Surf Life Saving WA has developed the BeachSAFE Initiative to help the WA community become safer on the beach. BeachSAFE is based around the four key principles of beach safety that are fundamental to safe recreation and represent the highest priorities for reducing drowning deaths in WA. These principles are:

Supervision
Whilst surf lifesaving services supervise beach-goers at over 30 beaches in WA, community members require the skills and knowledge to adequately supervise each other in the absence of supervision services.

Aquatic Education
Programs that increase the capacity of the community in relation to aquatic pursuits are at the core of the BeachSAFE Initiative. Increasing the communities understanding of the dynamic and ever changing hazards they may face on the coast and improving their skills to recreate safely significantly reduces their vulnerability.

First Aid
Early response first aid is often the difference between life and death in an emergency situation. Being equipped with the knowledge and awareness of first aid and CPR, community members can potentially save someone’s life should they be involved in a coastal drowning incident.

Emergency Preparedness
Emergency preparedness means dealing with and avoiding emergency situations. It involves ensuring the appropriate equipment and processes are in place to lessen the impact and improve the chance of survival in an emergency situation.

BeachSAFE Initiative: Aquatic Education Continuum

Surf Life Saving WA’s drowning prevention programs are consistent with the SAFE principles and align to the BeachSAFE Aquatic Education Continuum which was designed to address key goal areas relative to coastal drowning deaths in WA.

Figure 2.0
Aquatic Education Continuum

The BeachSAFE Initiative aligns with the priorities outlined in the Australian Water Safety Strategy (AWSS) 2012-15 investigations. The AWSS 2012-15 builds upon previous Water Safety Plans and Strategies and was developed by the Australian Water Safety Council (AWSC) in collaboration with National water safety agencies, government and other groups with an interest in drowning prevention.

Figure 1.0
Australian Water Safety Strategy 2012-2015

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Figure 1.0
Australian Water Safety Strategy 2012-2015
The following are Surf Life Saving WA’s BeachSAFE Priorities, determined in response to the findings of the 2014 WA Coastal Safety Report:

Supervision
• Continue to support SLSWA lifesaving services to provide fast and effective patrols and emergency rescue and response services
• Promote Surf Life Saving memberships to people of diverse cultures to increase cultural capacity of surf lifesaving services

Aquatic Education
• Increase reach of the ‘Swim Between the Flags’ message
• Expand reach of community education programs to high risk regions such as the South West, Great Southern and Perth Metropolitan regions
• Provide culturally appropriate drowning prevention programs and resources
• Encourage participation in WA surf life saving clubs to high risk groups

First Aid
• Increase the communities confidence and skill set to provide First Aid and CPR in aquatic related incidents

Emergency Preparedness
• Continue to improve the provision of resources to surf lifesaving services
• Promote the beachsafe.org.au website and smartphone app
• Provide advocacy for safe participation in high risk aquatic activities such as rock fishing, diving and snorkelling
• Increase youth completion of the Surf Rescue Certificate to increase emergency response capacity

DEFINITIONS
• A coastal death is a fatality arising from various circumstances (e.g. heart attack, shark attack, fall, boat collision) occurring where the location of the death is coastal.
• A coastal drowning death is where the location of the drowning is on the coast, in the ocean up to 2NM off shore or inland up to 5 times the width of the inlet/river.
• A Lifeguard is a professional paid employee at a beach or other aquatic environment whose role is to rescue people in danger of drowning or prevent them getting into that situation.
• An ocean death is a fatality arising from various circumstances (e.g. heart attack, shark bite, fall) occurring where the location of the death is in the ocean greater than 2NM off shore, but no greater than 12NM.
• An ocean drowning death is where the location of the drowning is in the ocean greater than 2NM off shore but no greater than 12NM.
• A rescue is when intervention by a lifesaving resource removes a person/s from a life threatening or potentially life threatening situation.
• A Surf Life Saver is a volunteer at a beach or other aquatic environment whose role is to rescue people in danger of drowning or prevent them getting into that situation.
• An undetermined case – Cases that are not associated with a closed coroner’s report on NCIS are often left “undetermined” until an official cause of death has been determined. Some examples are cases where bodies have been found washed up on the beach or reports of individuals struggling in coastal environments are made and the bodies are not found. These deaths will all be followed up on and the incident category updated once coroner determinations are made accessible.
• A preventative action is when intervention by a lifesaving resource averts a person/s from getting into a life threatening or potentially life threatening situation.
• Wesfarmers Emergency Response Teams (WERT) is a lifesaving service which is part of the BeachSAFE Program and uses jet skis as a rapid response search and rescue resource to assist emergency response stakeholders 24 hours a day, seven days a week at WA beaches.
• The Westpac Lifesaver Helicopter is part of the BeachSAFE Program and performs aerial patrols in the Perth Metropolitan area, and the South West region as part of the Aerial Surveillance Program.

The SLSWA season begins on 1 May and ends on 30 April every year.
**Coastal Drowning**

- **Overall**: 17 coastal drowning deaths
  - 30% increase over the seven year average of 13

- **Demographics**
  - 88% were males
  - 70.5% were in the 25-54yr life stage
  - 35% were known to have an overseas nationality

- **Time**
  - 41% occurred in Autumn
  - 64.7% occurred in the afternoon

- **Activity**
  - 29.4% were rock fishing
  - 23.5% were diving / snorkelling
  - 23.5% were boating

- **Contributing Factors**
  - 29.4% were attributed to rip currents

- **Location**
  - All cases occurred in areas that Surf Lifesavers were not present
  - 82% were in regional or remote areas of WA

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**Surf Life Saving WA**

"The total economic value of Surf Life Saving WA’s coastal drowning and injury prevention efforts in WA are estimated to be more than $282 million”

Source: PricewaterhouseCoopers 2011

- **Preventative Actions**
  - 38,337 preventative actions

- **First Aids**
  - 4,399 first aids

- **Patrol Hours**
  - 104,578 volunteer lifesaver hours
  - 27,015 lifeguard hours

- **Reasses**
  - 1,386 lifesaving rescues

- **Club Membership**
  - 11,483 senior members
  - 8,536 junior members

- **Beachsafe Participants**
  - 23,900 community members participated in BeachSAFE programs through the BeachSAFE Initiative

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Source: WA Coastal Safety Report Database, SLWA Surf Guard Database 2014 and SLWA Annual Report 2014
Despite the vital efforts of SLSWA’s patrol services, coastal drowning deaths continue to increase in WA with an average of 13 drowning deaths occurring on the WA coast each year for the past seven years.

This report provides an overview of coastal drowning deaths that have occurred between 1 May 2007 and 30 April 2014 and submersion/immersion hospitalisations that have occurred at WA beaches between 1 January 2007 and 31 December 2013. The report will also outline the valuable lifesaving services delivered by SLSWA at over 30 locations from 1 May 2007 to 30 April 2014 that have heavily contributed to reducing drowning rates.

This information will be used to inform and support evidence-based decision making in regards to coastal drowning priorities for water safety stakeholders in WA.

**Methodology**

Coastal drowning data was obtained from the WA Coastal Safety Report Database compiled by SLSWA through media monitors and verified with National Coronal Information System data. The data has been analysed by gender, age, year, nationality, location, time and activity. All care is taken to ensure the information contained in this report is correct, however pending coronial investigations this data may be amended over time.

Only unintentional coastal drowning cases are included in this report. Deaths are omitted if they are reported as intentional, undetermined (open finding) or if drowning/immersion is not a primary cause of death. Omissions include; suicide, homicide and shark attack fatalities.

Hospitalisation data was accessed and verified through the Department of Health WA, Epidemiology Branch. This data was analysed by gender, age, year, location and country of birth.

Drowning and hospitalisation rates per 100,000 populations have been based on the ABS standard population data cube within ‘Australian Demographic Statistics’ (cat. no. 3101.0).

Surf lifesaving service statistics were obtained from the SLSWA Surf Guard Database and were analysed by patrol hours, rescues, preventative actions and First Aid treatments.

The data in this report will be presented in line with Priority 1 of the AWSS 2012-15 Strategy which is to take a life stages approach to drowning prevention.

Please note all drowning death data and SLSWA lifesaving service data is presented as a SLSWA season from 1 May to 30 April from 2007/08 to 2013/14 and immersion/submersion hospitalisation data is presented by calendar year 1 January to 31 December from 2007 to 2013.
A total of 124 coastal fatalities occurred along the WA coast between 1 May 2007 and 30 April 2014. Figure 3.0 displays the different types of fatalities that have occurred with coastal drowning deaths being the most represented cause of death with 94 occurring over the seven year period.

Please note the remainder of this report will focus on coastal drowning deaths only (94).

Coastal drowning deaths continue to rise in WA with 94 deaths occurring between 2007-08 and 2013-14. The most recent season saw one of the highest rates of coastal drowning deaths, with 17 cases occurring. This is a 30% increase above the seven year average of 13 drowning deaths at WA beaches every year.

The crude incident rate for the 2013-14 season was higher than the seven year average at 0.67 per 100,000 persons compared to 0.52 per 100,000 persons.

Figure 4.0 displays an increasing trend of coastal drowning deaths over time with an increase of 90% over the past seven years.

BeachSAFE Initiative: Case Study
In January 2014, lifeguards Janek Ferrandi and Ben Sowter rescued three surfers who had been dragged by a rip 500-600m offshore at Smiths Beach in WA’s south-west.

Ben and Janek spent close to an hour on their rescue boards in challenging conditions looking to assist the surfers back to the shore.

In the end, Janek and Ben chose to paddle the surfers through the break “Shallows”, a reef and a riskier path, after the Rescue Water Craft (RWC) was unable to help.

One surfer was able to catch a wave to shore and was assisted by a member of the public. After a further 10mins of waiting and watching for a lull in the waves, Janek and Ben returned the remaining surfers to shore. The surfers and the lifeguards were treated for minor injuries.

Through their heroic actions, Janek and Ben saved three lives. Their courageous efforts were recognised at the Parliamentary Friends of Surf Life Saving quarterly event at Parliament House, where the lifeguards were awarded with the national Rescue of the Month award.

There are on average 10 hospitalisations from a submersion/immersion incident at WA beaches every year. A dramatic increase was seen in 2013 with a 114% increase in hospitalisations from the previous year, as seen in Figure 5.0 below.

Coastal Drowning Deaths
Coastal Drowning Deaths by Year
WA 2007-08 to 2013-14

Data Source: WA Coastal Safety Report Database 2014

Hospitalisations from Immersion/Submersion
WA 2007 to 2013

Data Source: Epidemiology Branch, Department of Health 2014

Coastal Drowning Deaths by Type
WA 2007-08 to 2013-14

Data Source: WA Coastal Safety Report Database 2014
**WHO DROWNS AT THE COAST?**

**Age and Gender**

Of the 17 coastal drowning deaths recorded in WA in the 2013-14 season, 88% of cases were male. This has been a similar trend since 2007-08, with males 6.8 times more likely to be involved in a drowning death than females at WA beaches, and 2.2 times more likely to be hospitalised from an immersion/submersion incident at the beach. This is likely related to higher male participation in aquatic recreations such as boating and fishing activities combined with higher risk-taking behaviour.

The 2013-14 season saw most coastal drowning deaths occur in adults, with 70.5% occurring in the 25-54 year life stage and a further 23.3% in the 55+ life stage.

The average age of those who drowned over the previous seven years is 48 years with a standard deviation of 17.8 and a range of 13-81 years. The average for both males and females is similar with males averaging slightly younger at 45.5 years compared to females at 49 years.

The 15 to 40 year age group had the most hospitalisations from an immersion/submersion incident, with 30 incidents occurring since 2007 and 23 (77%) of these were male.

The age specific rate of coastal drowning deaths since 2007-08 is statistically higher for males than females in the 21-40 and 51-70 age group as seen in Figure 6.0.

**Nationality**

During the 2013-14 season 35% of coastal drowning deaths were people from culturally and linguistically diverse (CaLD) backgrounds and 17.6% were tourists or visitors to Western Australia. Similarly, 60% of coastal drowning hospital admissions were people born in countries other than Australia.

A large proportion of nationalities are unknown in drowning data however data collected since 2007-08 shows the majority of coastal drowning deaths are people with Australian and New Zealand nationalities, followed closely by European nationalities. Similarly, 35% of coastal drowning hospital admissions were people born in countries other than Australia.

Figure 6.0

**Age Specific Coastal Drowning Rates by Gender**

WA 2007-08 to 2013-14

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male Rate</th>
<th>Female Rate</th>
</tr>
</thead>
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<td>6</td>
<td>10</td>
</tr>
<tr>
<td>81+</td>
<td>2</td>
<td>4</td>
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</tbody>
</table>

Source: WA Coastal Safety Report Database and ABS 2014

Figure 7.0

**Number of Coastal Drowning Deaths by Nationality**

WA 2007-08 to 2013-14

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Number of Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian/NZ</td>
<td>38</td>
</tr>
<tr>
<td>African</td>
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<tr>
<td>American</td>
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<tr>
<td>Asian</td>
<td>22</td>
</tr>
<tr>
<td>European</td>
<td>13</td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
</tbody>
</table>

Source: WA Coastal Safety Report Database 2014

BeachSAFE Initiative: CaLD Inclusion Program

SLSWA recognises the importance of developing inclusive drowning prevention programs to increase the CaLD populations’ resilience to drowning. With support from the Department of Sport and Recreation, SLSWA aims to increase CaLD participation rates in BeachSAFE community programs and SLSWA lifesaving activities.

In 2013-14 approximately 1000 CaLD youth participated in BeachSAFE programs. In April 2014, over 100 kids from the African community organisation, KUSH Centre for Music Culture and Community Development, spent three fun filled days at Coogee and Sorrento Beach completing the Introduction to BeachSAFE session and Beach Activities program.

Program evaluation revealed that all participants increased their knowledge about beach safety including how to spot and avoid rip currents and the purpose of the red and yellow flags.
People are 2.6 times more likely to drown at regional or remote coastal locations where vital lifesaving services and resources are limited compared to the Perth Metropolitan region. The 2013-14 season saw a significant increase in regional and remote drowning deaths with 82% occurring in regional WA, compared to the average of 72% over the previous seven years.

Since 2007-08 the regions that have had the highest number of coastal drowning deaths were Perth Metropolitan (27.6%), South West (23%), Great Southern (13.8%) and Gascoyne (13.8%), this is a consistent trend across most life stages.

The most common activities being conducted prior to drowning in the Perth Metropolitan region were swimming/wading (42%) and diving/snorkelling (23%). Drowning deaths at regional or remote locations were most likely to occur as a result of rock fishing (26%) and diving/snorkelling (23%)

In contrast, people are more likely to be hospitalised from an immersion/submersion incident in the Perth metropolitan area compared to regional and remote areas of WA with 70% of hospital admissions being to metropolitan health services, compared to 30% of admissions at remote northern and southern country health services.

The 2013-14 season was reflective of this with the majority of coastal drowning deaths occurring in autumn (29%) and equally across summer, winter and spring.

Coastal drowning deaths occur all year round however over the previous seven years the majority have occurred in summer (33%) and autumn (30%) as seen below in Figure 9.0. These seasons are popular times of the year for coastal recreation due to the warmer temperatures and generally favourable weather conditions.

The BeachSAFE Initiative: Case Study
Port Bouvard SLSC members Jack Knobben and Jamie Olivier rescued four girls from a rip at Pyramids Beach in January 2014. The lifesavers helped the girls out of the rip when they became stuck and distressed.

The club received a letter of thanks from each of the young girls’ parents, commending them on their diligence and quick thinking.
Coastal aquatic sports and recreation continue to be a popular aspect of West Australian culture. Unfortunately, these activities do not come without risk. The 2013-14 season saw most coastal drowning deaths in WA occur whilst the person was either rock fishing (29%), diving/snorkelling (23.5%), or boating (23.5%).

This trend has continued from 2007-08 with diving/snorkelling, rock fishing and swimming/wading being the top three high risk activities for coastal drowning deaths in WA. Rip currents continue to be a contributing factor in over 24% of all coastal drowning deaths since 2007-08.

**How Do They Drown?**

Coastal aquatic sports and recreation continue to be a popular aspect of West Australian culture. Unfortunately, these activities do not come without risk. The 2013-14 season saw most coastal drowning deaths in WA occur whilst the person was either rock fishing (29%), diving/snorkelling (23.5%), or boating (23.5%).

This trend has continued from 2007-08 with diving/snorkelling, rock fishing and swimming/wading being the top three high risk activities for coastal drowning deaths in WA. Rip currents continue to be a contributing factor in over 24% of all coastal drowning deaths since 2007-08.

**Time**

The majority of coastal drowning deaths since 2007-08 have occurred in the afternoon between 12pm and 4pm (41%). This may be attributed to adverse weather conditions that are more likely to occur in the afternoon compared to the morning, such as a strong sea breeze, tidal changes and higher swells.

The 2013-14 season showed similar results with 53% of coastal drowning deaths occurring in the afternoon.

Almost half (45.7%) of all coastal drowning deaths in the reporting period occurred on weekends. This may be associated with higher beach attendance rates on weekends compared to weekdays. This was consistent in the 2013-14 season with 47% of coastal drowning rates occurring on weekends compared to weekdays.
High Risk Activities
Diving/Snorkelling
Diving and snorkelling are exhilarating recreational activities commonly participated in along the WA coastline. Unfortunately these activities have inherent risks and have accounted for 22% of coastal drowning deaths in WA since 2007-08, with 57% snorkelling, 33.3% scuba diving and 9.5% free diving at the time of the incident.

Diving is a high risk aquatic activity due to the use of technical equipment, high risk environments and effects from an individual’s health status. Lack of experience and familiarity with equipment and the environment prove to be common risk factors in diving/snorkelling incidents with the majority of divers/snorkellers becoming distressed and unable to cope in their environment for reasons unknown.

Rock fishing
Slippery and uneven surfaces combined with the unpredictable nature of the ocean make rock fishing one of the most dangerous recreational activities in Australia. The 2013-14 season saw high numbers of rock fishing fatalities with five lives lost in WA.

Since 2007-08 rock fishing fatalities have accounted for 20% of all coastal drowning deaths. Of these incidents, 93% were males and 88% were known to be of overseas nationality. The reduction of rock fishing related drowning deaths remains a priority for drowning prevention initiatives through the emergency preparedness principle of the BeachSAFE Initiative.

Swimming/Wading
As children further engage in coastal recreation independently or with peers, it is important that they are equipped with the skills and knowledge to do so safely. SLSSWA delivered community and first aid programs such as the SLSWA Life Skills for Life program in schools and community groups.

BeachSAFE Initiative: Case Study
On 1 December 2013, during the allocated abalone fishing hour, surf lifesavers at Yanchep Lagoon rescued 14 fishers and administered first aid on two. Between 150 to 200 fishers ventured on to the reef at Yanchep to take advantage of the abalone fishing opportunity, despite a large swell being present in the area that day.

In the past two years, three people have lost their lives whilst abalone fishing in WA. This is an alarmingly high figure for just one coastal recreational activity.

Yanchep Surf Life Saving Club president John Heesters has witnessed firsthand the tragedies of abalone season, and is devoted to developing targeted surf lifesaving patrols to improve the safety of those taking part.

“Abalone days are generally action days, putting our lifesavers to the test. We continue to evolve as individuals and as a club to ensure fast and effective responses on the day”, he said. Mr Heesters stressed the importance of fishers taking responsibility for their own safety, dressing appropriately, assessing their abilities to the conditions and talking to lifesavers before entering the water.

As children further engage in coastal recreation independently or with their peers, it is important that they are equipped with the skills and knowledge to do so safely. SLSSWA delivered community programs to in excess of 10,000 school students and community members in regional and metropolitan WA, introducing the four principles of the BeachSAFE Initiative to increase their capacity to recreate safely at the coast.

BeachSAFE Initiative: 0 to 14 years
Parents, carers and surf lifesaving services providing adequate supervision are to be commended for the low rates of coastal drowning and injury amongst the 0 to 14 year age group. In 2013-14 SLSSWA delivered its SurfBabies and SurfKids program to 1,800 parents and their children in WA, including the newly introduced regional location of Albany. Children aged two to seven gained valuable water familiarisation and coping skills whilst their parents and carers learnt how to effectively supervise their children at the beach.

BeachSAFE Priorities
1. Continue supporting SLSSWA lifesaving services to provide effective patrols and search and rescue solutions.
2. Expand the reach and further promote parental supervision programs such as the SLSWA SurfBabies and SurfKids programs.
3. Continue implementation and further promotion of aquatic education and first aid programs such as the SLSWA Life Skills for Life program in schools and community groups.
4. Provide culturally appropriate solutions to diverse groups, particularly about the role of surf lifesaving services and the ‘Swim between the Flags’ message.
5. Promote the beachsafe.org website and smartphone app to parents and carers of young children.
6. Work with land managers to ensure appropriate coastal aquatic safety signage is installed at beaches including appropriate CaLD solutions if required.

Children 0-14 years
Coastal drowning deaths and hospitalisations remain low in the 0-14 year age group. Since 2007-08 there have been zero drowning deaths in the 0-4 age group and less than five hospitalisations from an immersion/submersion incident at the beach.

Since 2007-08 there has been one drowning death in the 0-14 age group which occurred whilst swimming/wading in which a rip current was present.

BeachSAFE Priorities
1. Continue supporting SLSSWA lifesaving services to provide effective patrols and search and rescue solutions.
2. Expand the reach and further promote parental supervision programs such as the SLSWA SurfBabies and SurfKids programs.
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4. Provide culturally appropriate solutions to diverse groups, particularly about the role of surf lifesaving services and the ‘Swim between the Flags’ message.
5. Promote the beachsafe.org website and smartphone app to parents and carers of young children.
6. Work with land managers to ensure appropriate coastal aquatic safety signage is installed at beaches including appropriate CaLD solutions if required.
Young people 15-24 years
A tragic ten people aged between 15 and 24 years have drowned at WA beaches since 2007-08 with another 14 young people hospitalised from a submersion/immersion incident at the beach. During the 2013-14 season one coastal drowning case occurred at WA beaches in this age group.

Of the ten (10) lives lost since 2007-08, all were males with half of the coastal drowning deaths in this age group (50%) identified as having an overseas nationality.

Common activities at the time of the incident include diving/snorkelling (30%), rock fishing (30%) and operating non-powered watercraft (20%).

A majority (90%) of these drowning deaths occurred in the regional areas of WA with 40% occurring in the South West, 40% in the Great Southern and the remainder of drowning deaths occurring in the Perth Metropolitan area and the Kimberley region.

The incidents occurred all year round with 40% occurring in autumn. Over half (60%) occurred in the afternoon which is likely to be associated with adverse weather conditions such as a strong sea breeze, high swells and tidal changes. Rip currents were involved in 50% of coastal drowning deaths in this age group.

BeachSAFE Initiative: 15 to 24 years
Males are commonly represented in coastal drowning statistics particularly in the 15 to 24 year age group. This is likely attributed to increased male participation in risk-taking behaviour and activities such as rock fishing, diving and snorkelling. Drowning prevention programs for young people aged 15 to 24 years should address emergency preparedness for high risk activities such as rock fishing and diving/snorkelling.

SLSWA currently offers a range of emergency preparedness programs to equip young adults with valuable life saving skills to reduce injury and increase chances of survival if an emergency does occur. The 2013-14 season saw 1,400 community members complete the Surf Rescue certificate, which provides adult performing rescue; identifying dangers and basic supervision and emergency first aid skills.

The recent year saw an increase in the number of high school students completing the course in schools and through SLSWA’s cadet program which is comprised of seven school cadet units.

Adults 25-54 years
During the 2013-14 season 12 (70%) adults aged 25-54 years drowned at WA beaches as a result of immersion. Common activities at the time of the incident include diving/snorkelling (33%) and boating (25%). Others were rock fishing, swimming/leading or participating in rock/cliff related activities. 75% occurred in the regions with the majority occurring in the Gascoyne and South West.

A total of 51 coastal drowning deaths occurring at WA beaches between 2007-08 and 2013-14. Of these drowning deaths, 41% were younger adults aged 25-36 years, and another 41% were older adults aged 45-54 years. Hospitalisations follow a similar trend with 31% of all hospitalisations occurring in the 25-39 year age group.

High risk activities in the 25 to 54 year age group include diving/ snorkelling (25%), rock fishing (21.5%) and swimming/leading (21.5%). Other activities included boating and operating non-powered watercraft.

Regional beaches were the location of 70.5% of incidents and in 23.5% of all drowning deaths in this age group rip currents were identified as being a contributing factor.

In a trend across all life stages, males were predominantly represented at 84.3% of coastal drowning deaths and 49% also identified as having an overseas nationality.

Drowning deaths occurred across all seasons however over 68.6% occurred in summer and autumn. Nearly 58.8% of drowning deaths occurred in the afternoon between 12 and 6pm, coinciding with common adverse weather conditions experienced in the afternoons.

BeachSAFE Priorities
1. Increase support to SLSWA lifesaving services to provide fast and effective emergency response services.
2. Further promote and establish BeachSAFE community programs in high risk regions including the South West, Great Southern and Perth Metropolitan area.
3. Develop culturally appropriate programs and resources for this life stage.
4. Address emergency preparedness education in young people, particularly for rock fishing and diving/snorkelling.
5. Promote the beachsafe.org.au website and smartphone app to young people 15-24 years.

BeachSAFE Initiative: 25 to 54 years
The 25 to 54 year age group has the highest number of coastal drowning deaths of all life stages between 2007-08 and 2013-14. As common activities for this age group often occur outside of patrolled locations, drowning prevention methods should include access to beach safety information that assists participants to make informed decisions regarding their recreational choice.

SLSWA has recently increased accessibility for CaLD beachgoers to live and localised beach conditions through the installation of QR codes signage at popular WA beaches. The addition of the QR codes to existing standardised beach signage links beachgoers to the beachsafe.org website in over 72 languages via their smart phone.

The QR code signs were initially developed as part of a coastal drowning prevention program funded by the Department of Health in which partnerships were formed with coastal local governments to identify risks and trends within each jurisdiction and develop strategies to address these. The innovative nature and cost effectiveness of the QR codes has led to their inclusion as a common recommendation for local governments following a safety audit of their coastline.

BeachSAFE Initiative: 15 to 24 years
Males are commonly represented in coastal drowning statistics particularly in the 15 to 24 year age group. This is likely attributed to increased male participation in risk-taking behaviour and activities such as rock fishing, diving and snorkelling. Drowning prevention programs for young people aged 15 to 24 years should address emergency preparedness for high risk activities such as rock fishing and diving/snorkelling.

SLSWA currently offers a range of emergency preparedness programs to equip young adults with valuable life saving skills to reduce injury and increase chances of survival if an emergency does occur. The 2013-14 season saw 1,400 community members complete the Surf Rescue certificate, which provides adult performing rescue; identifying dangers and basic supervision and emergency first aid skills.

The recent year saw an increase in the number of high school students completing the course in schools and through SLSWA’s cadet program which is comprised of seven school cadet units.

Adults 25-54 years
During the 2013-14 season 12 (70%) adults aged 25-54 years drowned at WA beaches as a result of immersion. Common activities at the time of the incident include diving/snorkelling (33%) and boating (25%). Others were rock fishing, swimming/leading or participating in rock/cliff related activities. 75% occurred in the regions with the majority occurring in the Gascoyne and South West.

A total of 51 coastal drowning deaths occurring at WA beaches between 2007-08 and 2013-14. Of these drowning deaths, 41% were younger adults aged 25-36 years, and another 41% were older adults aged 45-54 years. Hospitalisations follow a similar trend with 31% of all hospitalisations occurring in the 25-39 year age group.

High risk activities in the 25 to 54 year age group include diving/snorkelling (25%), rock fishing (21.5%) and swimming/leading (21.5%). Other activities included boating and operating non-powered watercraft.

Regional beaches were the location of 70.5% of incidents and in 23.5% of all drowning deaths in this age group rip currents were identified as being a contributing factor.

In a trend across all life stages, males were predominantly represented at 84.3% of coastal drowning deaths and 49% also identified as having an overseas nationality.

Drowning deaths occurred across all seasons however over 68.6% occurred in summer and autumn. Nearly 58.8% of drowning deaths occurred in the afternoon between 12 and 6pm, coinciding with common adverse weather conditions experienced in the afternoons.

BeachSAFE Priorities
1. Increase support to SLSWA lifesaving services to provide fast and effective emergency response services, particularly in high risk areas including the South West and Gascoyne regions.
2. Develop culturally appropriate programs and resources for this life stage.
3. Address emergency preparedness initiatives for rock fishing and diving/snorkelling safety.
4. Promote the beachsafe.org.au website and smartphone app to adults 25-54 years.
5. Continue to work with land managers to ensure appropriate coastal aquatic safety signage is installed at beaches, including options for CaLD groups.
Older Adults 55+ years

Four people aged 55 and over drowned at WA beaches in the 2013-14 season. All drowning deaths occurred in the regions including the Great Southern, Mid-West and South West. All cases were males with the majority rock fishing (75%) and boating (25%) at the time of the incident.

Between 2007-08 and 2013-14, 32 coastal drowning deaths occurred in the 55 and over age group. Males were over represented, accounting for 87.5% of all coastal drowning deaths. Over 40.6% of this age group identified as having an overseas nationality and another 37.5% identified as being Australian or New Zealander, with other nationalities being unknown.

Common activities at the time of the incident include swimming/wading (22%), operating non-powered watercraft (22%) diving/snorkelling (15.6%) and boating (18.75%). Rip currents were only reported in 15.6% of drowning deaths within this age group, which may indicate this age group are aware of how to identify and avoid rip currents.

Drowning deaths occurred equally across all seasons within this age group, and predominantly occurred in the afternoon (33%), which is likely to be associated with adverse weather conditions.

A significant amount of coastal drowning deaths (45%) occurred in the regions with the majority (25%) occurring in the South West alone.

Over 30% of coastal drowning deaths in this age group were knowingly associated with pre-existing health conditions with 80% of these related to cardiovascular disease.

BeachSAFE Initiative: 55+

With an aging population, the 55+ age group is the second highest life stage for coastal drowning deaths in WA. A high proportion of these coastal drowning deaths were attributed to pre-existing medical conditions. Had these incidents occurred in lifesaver patrolled locations, or had other suitably qualified persons been present, the chance of survival would have been significantly greater given the possibility of rescue and immediate administration of First Aid and CPR.

Early response First Aid and CPR can be the difference between life and death in an emergency situation. Unfortunately SLSWA lifesaving services cannot be present at all times and it is important for individuals to be equipped with lifesaving First Aid and CPR skills. It is recommended this age group complete regular First Aid and CPR courses to ensure they can respond in the event of an emergency. The 2013-14 season saw over 13,900 West Australians complete a training course with Surf Life Saving WA, equipping them with the skills to save a life.
Over 30 WA beaches are patrolled by a combination of professional and volunteer lifesaving services that both protect and save people’s lives on the coast. These services include:

- Volunteer lifesaver patrols
- Professional Lifeguards patrols
- Wesfarmers Emergency Response Teams (Jet ski patrols)

These services survive on community support and involvement. Without this contribution the number of coastal drowning deaths and related injury would be drastically higher in WA. This is a testament to the countless hours of training, skill and dedication of Surf Life Saving patrol members.

Rescues

On average SLSWA lifesaving services rescue approximately 1245 people every year at WA beaches. Without these services, it is anticipated that a significant proportion of these people would have drowned and many more would have been seriously injured.

Figure 12.0 shows the number of rescues performed by SLSWA beach patrols remains steady due to a significant shift in patrol service proactivity around educating the public about beach safety. This means a lesser percentage of people require rescuing as SLSWA lifesaving services are focusing on implementing ‘preventative actions’ which aim to prevent someone from getting into a potentially life threatening situation, such as educating people about how to avoid and escape rip currents.

Secret Harbour Surf Life Saving Club was named DHL Club of the Year at the National 2014 Surf Life Saving Australia Awards of Excellence. The WA club was commended for its patrol services and delivering public education programs to increase safety.
Preventative Actions
Preventative actions performed by SLSWA lifesaving services have been increasing since the 2009-10 season with an increase of over 200% as displayed in Figure 13.0. Preventative actions are when intervention by a lifesaving resource averts a person/s from getting into a life threatening or potentially life threatening situation.

These are key to the effectiveness of SLSWA lifesaving services in regards to drowning and injury prevention as they educate the public about beach safety, support behaviour change and allow the public to be better informed when recreating at the beach.

Source: SLSWA Surf Guard Database 2014

Surf Lifesaving preventative actions have increased by 200% since the 2009-10 season.

![Figure 13.0](Image)

BeachSAFE Initiative: Case Study
Penguin Island is a popular tourist destination seeing more than 80,000 visitors each year. The island can be reached by a ferry service, shuttling visitors to the island in the warmer months, or by crossing the 800m shallow sandbar that extends from the mainland to the island. Conditions on the sandbar change very quickly, particularly in the afternoon when the sea breeze comes in.

In favourable conditions the crossing can take as little as 15 minutes, but crossing can become very dangerous for the uneducated if they choose to cross in unfavourable conditions.

Unfortunately many walkers who attempt the sandbar crossing do not have the adequate swimming skills, understanding of local conditions or fitness abilities to undertake the crossing safely. These are factors that attributed to the tragic loss of two men who attempted the crossing in December 2010.

SLSWA and Secret Harbour Surf Life Saving Club responded to this issue by increasing their supervision of the area, implementing extra lifesaving patrols that began in 2011-12 and producing warning brochures in multiple languages.

Secret Harbour Surf Life Saving captain Rick Lowe said surf lifesavers had devoted more than 710 hours to patrolling the sandbar, preventing tourists from crossing and assisting those in difficulty last season. In 2013-14 lifesavers directly prevented 3,748 people from hazardous situations and performed 51 lifesaving rescues.

“We have provided extensive supervision and education to warn people of the dangers, without doubt contributing to a safer tourist experience,” Rick said.

BeachSAFE Initiative: Case Study
Surf Life Saving WA duty lifeguard Peter Hansworth rescued a 15-year old girl from a rip at Yanchep Lagoon in January 2014. Holly Kincart was only in waist-deep water when she was hit by a wave, and became caught in a rip which took her out to sea. Once notified, Peter managed to reach Holly in a very short period of time, despite having to paddle out 400 metres to reach her. The young lifeguard performed a successful board rescue, and paddled Holly back in to shore in difficult and choppy conditions.
First Aid Treatments
The WA community has benefited from over 30,853 First Aid Treatments from qualified SLSWA lifesaving services in the previous five years. A recent decrease in First Aids from the previous season is likely attributed to SLSWA’s direct preventative actions and community based education programs.

First Aid can reduce the severity of an injury acquired in a beach environment and can also preserve life until professional medical assistance arrives.

Patrol Hours
Over the five year period 2009-10 to 2013-14 the community benefited from over 673,609 supervision hours from SLSWA lifesaving services at WA beaches.

WA is currently the fastest growing state in Australia and is one of the fastest growing urban sprawl cities in the world. With this large urban sprawl, more and more beaches are becoming accessible to the community.

In addition, the popularity of beach recreation is increasing and a more diverse range of activities are occurring on the coast such as abalone fishing and kite boarding. This increase in beach recreation places more demand on SLSWA lifesaving services. Supervision hours by SLSWA lifesaving services have increased every year in WA since 2009-10 as seen in figure 15.0 below.

Source: SLSWA Surf Guard Database 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of First Aid Treatments</th>
<th>Number of Patrol Hours</th>
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<tr>
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<td>3,874</td>
<td>83,940</td>
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</tr>
<tr>
<td>2013/14</td>
<td>4,399</td>
<td>104,578</td>
</tr>
</tbody>
</table>

Figure 14.0
SLSWA First Aid Treatments by Year
WA 2009-10 to 2013-14

Figure 15.0
SLSWA Patrol Hours by Year
WA 2009-10 to 2013-14
SLSWA operates two Westpac Lifesaver Rescue Helicopters. The services are operated by 25 qualified, full time and volunteer aviation staff, providing valuable aerial patrols to the Perth Metropolitan and the South West regions of WA.

The Perth Metropolitan service operates full time, 365 days a year and provides coastal surveillance, search and rescue response and support to emergency services from Mandurah in the south to Yanchep in the north. The South West service situated in Busselton commenced primarily as a surveillance operation at the end of 2011; however it has now increased its capability to provide search and rescue response and assistance to other emergency services such as Police, Fire and Ambulance.

**Search and Rescues**
The Westpac Lifesaver Rescue Helicopter Services are on stand-by 365 days to respond quickly to assist our lifesavers and lifeguards as required; as well as providing support to emergency services by conducting search and rescue both on water and land.

Figure 16.0 displays the number of search and rescue operations performed by the Perth Metro and South West Helicopter services since the commencement of the South West service in 2011.

**Preventative Actions**
The Westpac Lifesaver Rescue Helicopter crews are on the lookout for potential hazards and incidents on the coastline, such as rip currents, marine sightings and vessels in distress.

The Perth Metro and South West services directly prevented 58 incidents occurring on the WA coastline during the 2013-14 season this was achieved by alerting swimmers and lifesavers on the beach of visible hazards from the aircraft.

Perth Metro and South West helicopter services directly prevented 58 incidents occurring on the WA coastline during the 2013-14 season.
BeachSAFE Initiative: Case Study

In February 2014 the Westpac Lifesaver Rescue Helicopter was involved in a search for three missing fishermen after they failed to return to Woodman Point after a fishing trip in a newly purchased boat. Having been missing from more than 12 hours, grave fears were held for the men. After an extensive search, the Westpac Lifesaver Rescue Helicopter crew sighted the three men mid-morning, some ten kilometres off the coast of Fremantle. Fortunately all three men were wearing life jackets and after more than fifteen hours in the water they were rescued.

Wearing their bright yellow life jackets allowed the helicopter to spot the men and allowed them to float and conserve more energy to keep themselves from suffering severe hypothermia.

The action of these men wearing life jackets and tying themselves together supports the fundamental BeachSAFE principle of Emergency Preparedness.

Figure 18.0
Patrol Hours by Year
WA 2011-12 to 2013-14

Patrol Hours
Flight times and length of patrols depend on a range of factors including weather conditions, search and rescue operations, beach usage and events and other environmental factors.

The Perth Metro Westpac Lifesaver Rescue Helicopter is a full time service on call 365 days a year, spending a total of 425 hours in the air during the 2013-14 season.

The South West Westpac Lifesaver Rescue Helicopter flew for 278 hours during the 2013-14 season across the peak summer period and returning for key holiday periods such as Easter when the region is at its busiest.

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BeachSAFE Initiative: Case Study

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The men did not have time to activate their EPIRB and luckily they were found in time by the SLSWA Westpac Lifesaver Rescue Helicopter. 15 hours after they had entered the water near Carnac Island.

Wearing their bright yellow life jackets allowed the helicopter to spot the men and allowed them to float and conserve more energy to keep themselves from suffering severe hypothermia.

The action of these men wearing life jackets and tying themselves together supports the fundamental BeachSAFE principle of Emergency Preparedness.

Source: SLSWA Surf Guard Database 2014
This report highlights a number of key drowning issues which addressed will assist in reducing the number of coastal drowning deaths in WA. This will also contribute to reaching the AWSC goal of achieving a 50% reduction in drowning deaths in Australia by 2020.

The following are Surf Life Saving WA’s BeachSAFE Priorities, determined in response to the findings of the 2014 WA Coastal Safety Report:

**Supervision**
- Continue to support SLSWA lifesaving services to provide fast and effective patrols and emergency rescue and response services
- Promote Surf Life Saving memberships to people of diverse cultures to increase cultural capacity of surf lifesaving services

**Aquatic Education**
- Increase the reach of the ‘Swim Between the Flags’ message
- Expand the reach of community education programs to high risk regions such as the South West, Great Southern and Perth Metropolitan regions
- Provide culturally appropriate drowning prevention programs and resources
- Encourage participation in WA surf life saving clubs to high risk groups

**First Aid**
- Increase the communities confidence and skill set to provide first aid and CPR in aquatic related incidents

**Emergency Preparedness**
- Continue to improve the provision of resources to surf lifesaving services
- Promote the beachsafe.org.au website and smartphone app
- Provide advocacy for safe participation in high risk aquatic activities such as rock fishing, diving and snorkelling
- Increase youth completion of the Surf Rescue Certificate to increase emergency response capacity

These are common trends which SLSWA endeavours to address through the four fundamental principles of the BeachSAFE Initiative. It is important to take a life stages approach to reduce coastal drowning deaths in WA. This ensures each target group can be engaged with effectively by supporting community development and capacity building within each community and fostering sustainable partnerships to reduce drowning deaths in the long term.

The data provided in this report provides water safety stakeholders with information to drive evidence based decision making in regards to coastal aquatic safety.
Partners
• Surf Life Saving Australia
• Public Health and Clinical Services Division, Department of Health WA
• Epidemiology Branch, Department of Health WA
• National Coronial Information System
• 29 West Australian surf life saving clubs
• 17 Professional Lifeguard Services
• Local Government Authorities with surf life saving clubs and/or professional lifeguard services

SLSWA would like to highlight the dedication and contribution of WA volunteer patrol members from the 29 WA surf life saving clubs for their work in recording invaluable data into the Surf Guard database.

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