

An aerial photograph of a beach scene. The top portion shows a sandy beach with sparse green vegetation and several people walking or sitting. A yellow rectangular graphic element is positioned above the main title. The middle and bottom portions of the image show a large, powerful wave with white foam crashing onto the shore. Numerous people are seen wading or standing in the shallow water near the base of the wave. The water in the foreground is a clear, turquoise color.

NATIONAL COASTAL SAFETY REPORT 2018

SURF LIFE SAVING AUSTRALIA

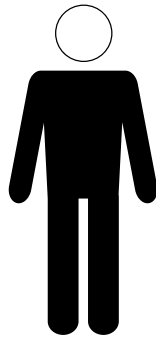


DROWNING

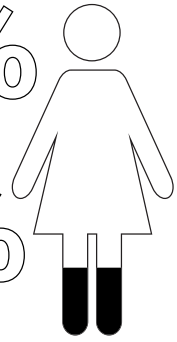
SNAPSHOT



110
COASTAL &
OCEAN
DROWNING
DEATHS



80%
MALE



20%
FEMALE

Location

42%
AT THE BEACH



OFFSHORE

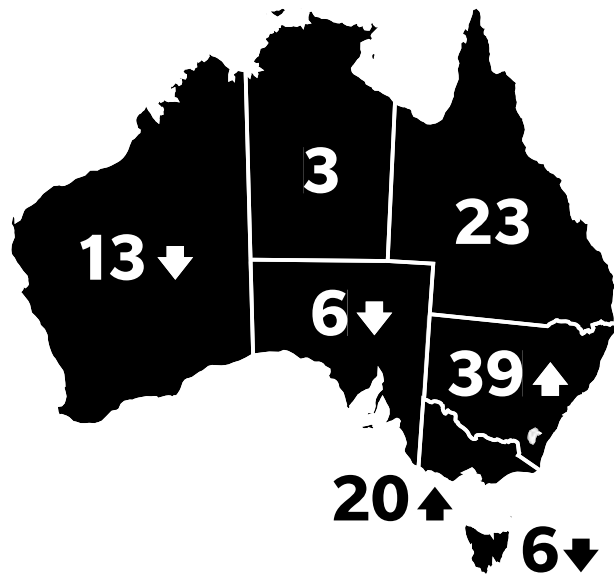
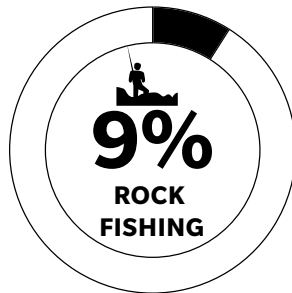
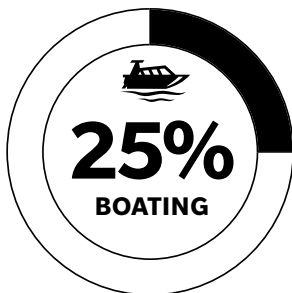
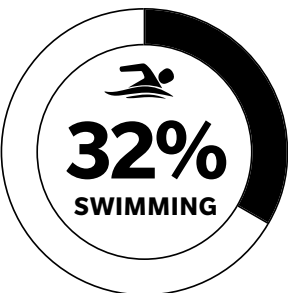
20%
ROCK/CLIFF



AT LEAST 5KM FROM A
LIFESAVING SERVICE

45%

Activity





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INTRODUCTION

The Australian coastline and related islands stretch for over 50,000 kilometres, including more than 11,500 beaches. More than 85 per cent of the population lives within 50 kilometres of the coast, and arguably Australia's most popular recreation destination, the beach. Recent research has resulted in updated figures for visitations to the Australian coast, with an estimated 300 million beach visitations annually.

While Australia boasts some of the best beaches in the world, there are far too many situations along our coast that end in individuals, or groups, having to be rescued and treated for injuries or finding themselves in circumstances that cost them their lives.

Surf Life Saving Australia (SLSA) is the peak coastal water safety, drowning prevention and rescue authority in Australia. The role of the organisation is to reduce injury and loss of life along the coastal areas of Australia, with a vision of zero preventable deaths.

The National Coastal Safety Report 2018 is a comprehensive summary and analysis of community perceptions, activities on the coast, coastal and ocean drowning deaths and related fatalities.

This year's report recognises 10,249 rescues were conducted around the country by SLS volunteers. Without these significant efforts there would have been an additional

- 512 coastal and ocean drowning deaths
- 307 people with permanent incapacitating injuries
- 1,435 people with injuries requiring follow up treatment.¹

While continuing to have a strong focus on coastal drowning incidents, the National Coastal Safety Report 2018 includes a complete overview of all coastal fatalities. A total 173 coastal fatalities were recorded for 2017-18, with 110 of these drowning deaths. The remaining 63 fatalities were due to other causes.

The 2017-18 summer period, December to February, recorded 52 coastal drowning deaths, making it the worst summer for coastal drowning from 2004.

Males continue to be overrepresented in the drowning death statistics however, this year women recorded the highest percentage of coastal drowning deaths for the 14-year period with 20 per cent.

Research into non-fatal coastal incidents has shown for each drowning death on the coast, there is on average one non-fatal incident that requires hospitalisation. Children under 10 years of age and women have a greater representation in non-fatal incidents compared to that of coastal drowning deaths. This reaffirms the need to ensure education, awareness and safety practices around water safety need to be applied across all ages, activities and gender.

“ THIS ANALYSIS PROVIDES SLSA CRITICAL EVIDENCE-BASED INSIGHTS AND UNDERSTANDING TO ADDRESS WATER SAFETY AND EDUCATION FOR THE COMMUNITY. ”

The National Coastal Safety Report 2018 acknowledges drowning is only part of the analysis that informs sound decision making regarding coastal safety. This report includes research into first aid treatments and preventative actions, as well as visitation, and perceptions relating to coastal hazards. This analysis provides SLSA critical evidence-based insights and understanding to address water safety and education for the community.

Surf Life Saving remains committed to the vision of zero preventable deaths along our coastline. The organisation is prepared to take on the challenges this poses, and through a commitment to collaboration and undertaking evidence-based research as part of the total strategy we will continue to work towards this objective.

I commend this report to you as a vital tool to assist in understanding and reducing drowning deaths on Australia's coast and remind all that the data presented within this report is more than facts and figures, but represent someone's family, friend or loved one.



Adam Weir
Chief Executive Officer
Surf Life Saving Australia

¹PWC (2011) *What is the economic contribution of Surf Life Saving in Australia*. SLSA: Sydney.

TOTAL SERVICE PLAN

The Total Service Plan is SLSA’s national drowning reduction strategy and service plan. It is created using an iterative process of analysis and review to identify coastal safety issues of national importance. This approach follows the public health model and is consistent with international risk management principles.

In collaboration with stakeholders, SLSA identifies coastal safety risks using incident monitoring, coastal risk assessments and participation analysis. This information is analysed to identify the top national coastal safety issues, priorities and blackspot areas that require intervention or mitigation strategies.

THE NATIONAL SAFETY AGENDA

The issues and blackspots identified through the Total Service Plan process form the basis of SLSA’s National Safety Agenda. The agenda influences lifesaving operations, including services and equipment allocation. It drives public education, including evidence-based mitigation strategies, communications campaigns and pilot projects, and informs SLSA’s research plan.

The Total Service Plan takes a risk management approach. It allows SLSA to use the evidence to ensure we locate lifesaving services and assets in areas of need and have appropriate public education programs and mitigation strategies to address the coastal safety issues and known blackspots. Embedded in the process is continual monitoring and evaluation to ensure the treatments and interventions are effective in reducing drowning deaths along the Australian coast.

The coastal safety needs of the Australian community reflected in the National Safety Agenda and the Surf Life Saving movement’s capacity and capability to meet these needs are explored in the ‘Capability’ section of this report.

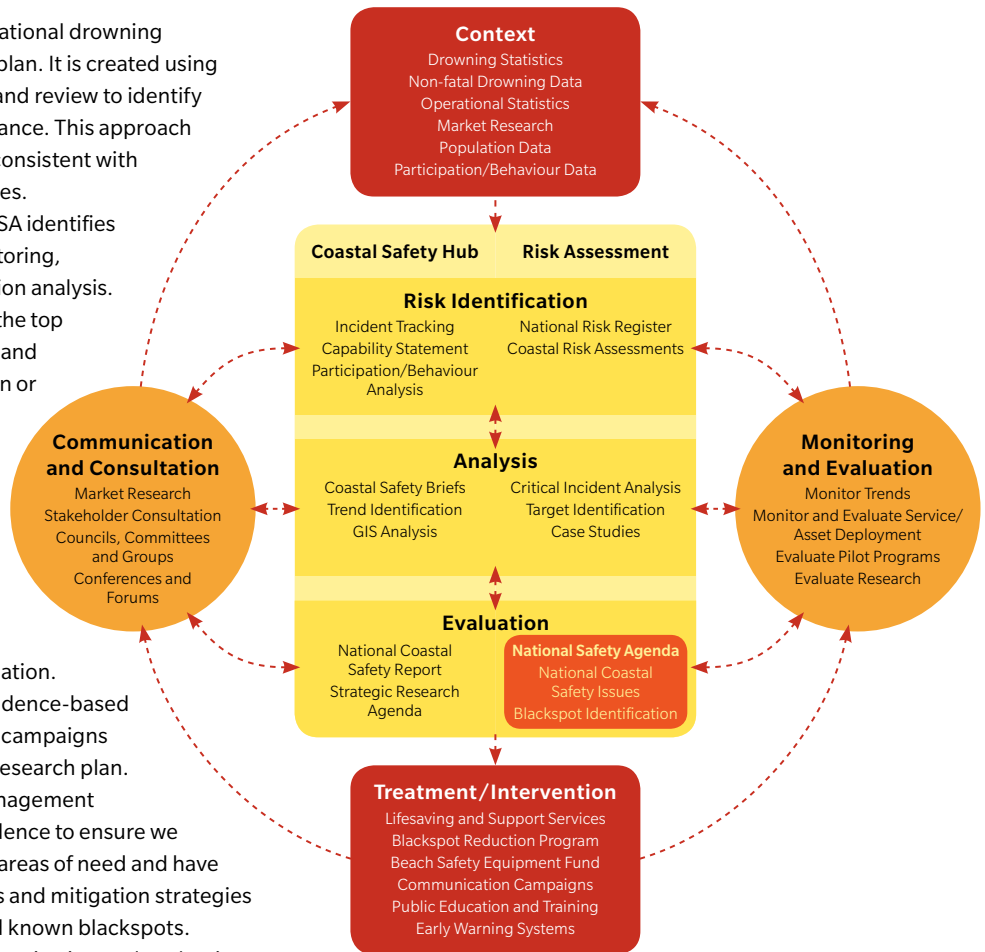


Figure 1
TOTAL SERVICE PLAN PROCESS OVERVIEW

The Total Service Plan aligns with the International Standard ISO 31000:2018 framework, which provides principles and guidelines for risk management.

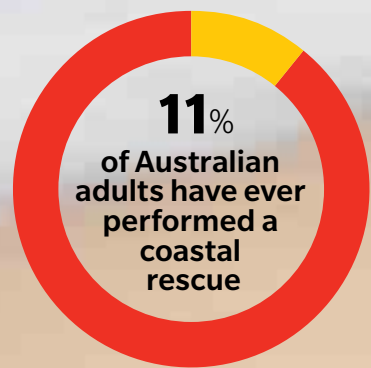
NATIONAL SAFETY AGENDA ISSUES

1. RIP CURRENTS
2. BOATING
3. ROCK FISHING
4. WATERCRAFT
5. TOXICITY & HEALTH
6. INTERNATIONAL TOURISTS
7. SNORKELLING & SCUBA DIVING
8. OVER 55 YEARS
9. DANGEROUS MARINE CREATURES
10. NEW MIGRANTS



COMMUNITY

SECTION ONE










AUSTRALIAN POPULATION

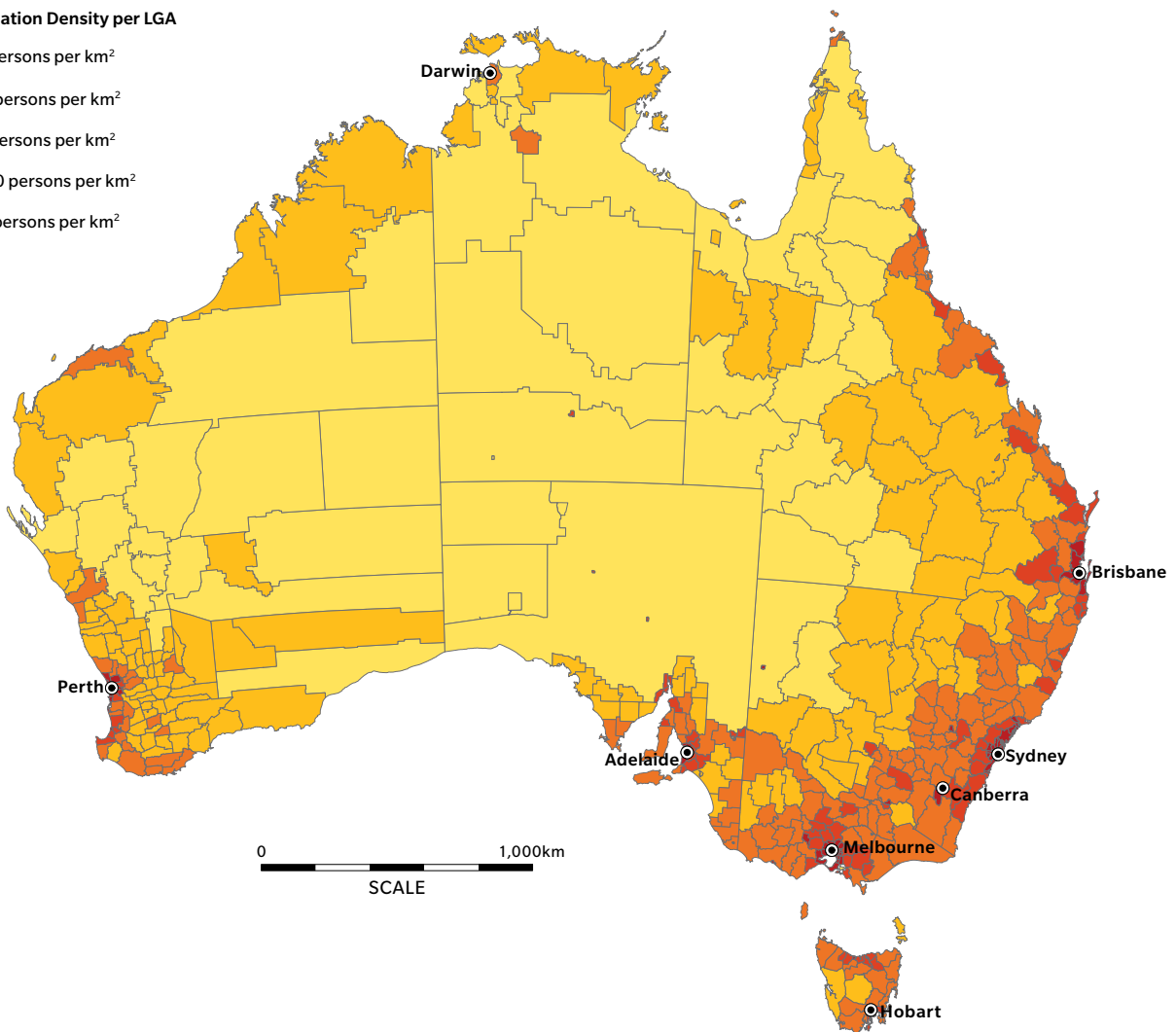
Figure 2

AUSTRALIAN POPULATION DENSITY PER LOCAL GOVERNMENT AREA (LGA)

This map shows the estimated Australian population density per LGA at June 2016. Most LGAs with a population density higher than 100 persons per square kilometre are located on Australia's coastal fringe.

Key to Population Density per LGA

-  < 0.1 persons per km²
-  0.1–1 persons per km²
-  1–10 persons per km²
-  10–100 persons per km²
-  > 100 persons per km²



COASTAL PARTICIPATION

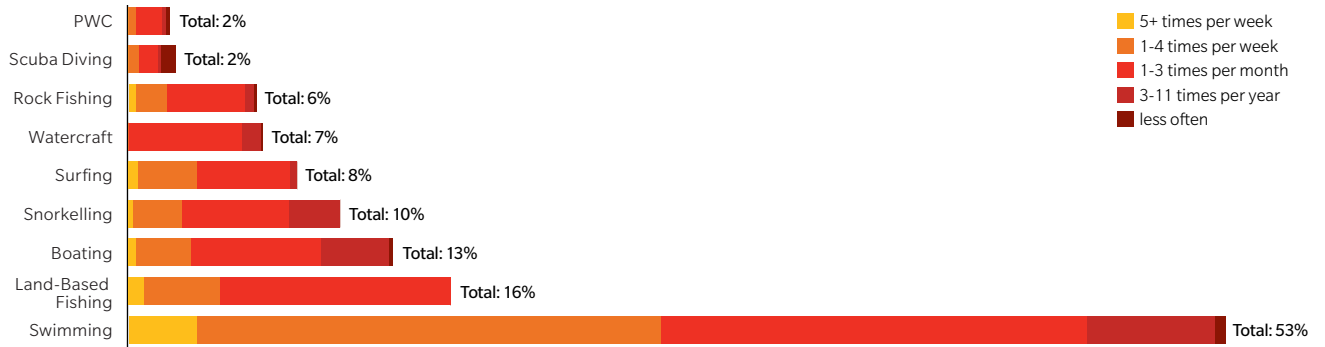


Figure 3

2018: COASTAL VISITATION BY ACTIVITY

Questions: Which of the following coastal activities have you participated in during the past 12 months?
How often do you participate in these activities?

FREQUENT VS OCCASIONAL PARTICIPATION

Annually, there are at least 14.9 million coastal activity participants.
On average Australians visit the coast 3.2 times per month.

Swimming



10 million swimmers
3.5 million frequent swimmers (at least once a month)
4 swimming hours per occasional swimmer per year
75 swimming hours per frequent swimmer per year

Watercraft



1.2 million watercraft users
0.4 million frequent watercraft users (at least once a month)
5 watercraft hours per occasional watercraft user per year
100 watercraft hours per frequent watercraft user per year

Surfing



1.5 million surfers
0.7 million frequent surfers (at least once a month)
5 surfing hours per occasional surfer per year
175 surfing hours per frequent surfer per year

Land-based Fishing



2.9 million fishers
1 million frequent fishers (at least once a month)
7 fishing hours per occasional fisher per year
125 fishing hours per frequent fisher per year

Rock Fishing



1.1 million rock fishers
0.5 million frequent rock fishers (at least once a month)
7 fishing hours per occasional rock fisher per year
175 fishing hours per frequent rock fisher per year

Scuba Diving



0.4 million scuba divers
0.2 million frequent scuba divers (at least once a month)
5 diving hours per occasional diver per year
90 diving hours per frequent diver per year

Snorkelling



1.9 million snorkellers
0.4 million frequent snorkellers (at least once a month)
3 snorkelling hours per occasional snorkeller per year
145 snorkelling hours per frequent snorkeller per year

Boating



2.4 million boaters
0.7 million frequent boaters (at least once a month)
6 boating hours per occasional boater per year
125 boating hours per frequent boater per year

Personal Water Craft (PWC)



0.4 million PWC users
0.1 million frequent PWC users (at least once a month)
1.5 PWC hours per occasional PWC user per year
50 PWC hours per frequent PWC user per year

ACTIVITY PARTICIPATION

COASTAL ACTIVITY PARTICIPANTS: DEMOGRAPHIC & LOCATION SELECTION

2018: SWIMMING/WADING

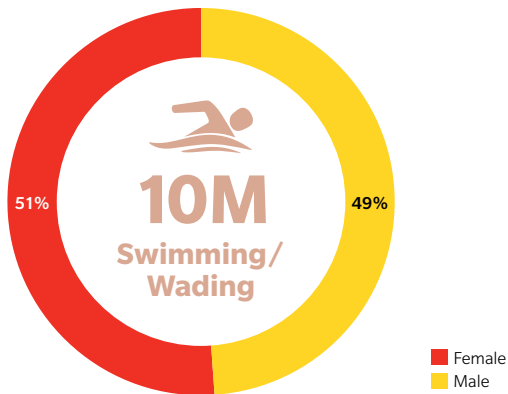


Figure 4
2018: SWIMMING/WADING PARTICIPATION BY GENDER

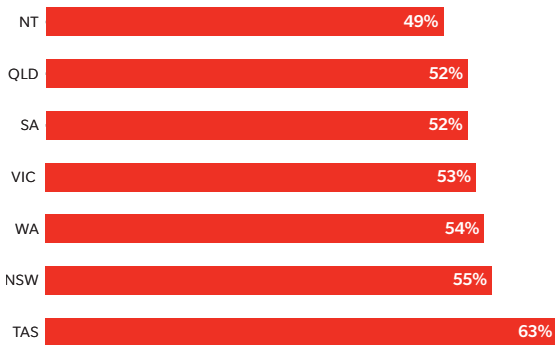


Figure 5
2018: SWIMMING/WADING PARTICIPATION BY STATE

26%

OF SWIMMERS
SAY THEY HAVE
BEEN CAUGHT IN
A RIP CURRENT
UNINTENTIONALLY

2018: WATERCRAFT

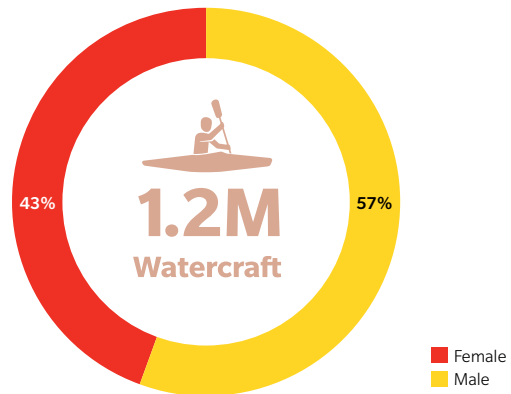


Figure 6
2018: WATERCRAFT PARTICIPATION BY GENDER

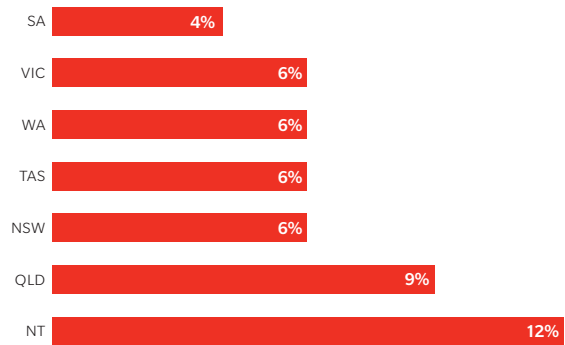


Figure 7
2018: WATERCRAFT PARTICIPATION BY STATE

CRAFT USE BY PARTICIPANTS

54% KAYAK

45% STAND UP PADDLE BOARD

2018: BOATING & PWC

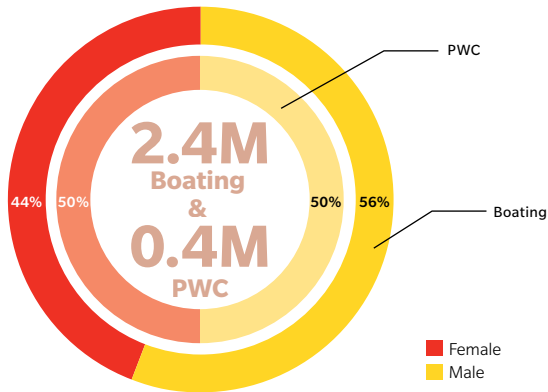


Figure 8
2018: BOATING AND PWC PARTICIPATION BY GENDER

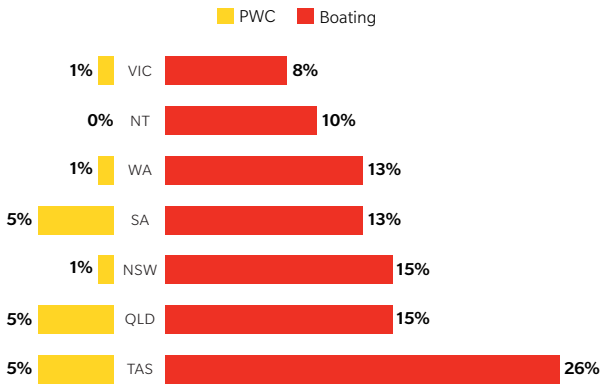


Figure 9
2018: BOATING AND PWC PARTICIPATION BY STATE

SAFETY EQUIPMENT CARRIED



97% LIFEJACKETS



94% MOBILE PHONE

2018: FISHING

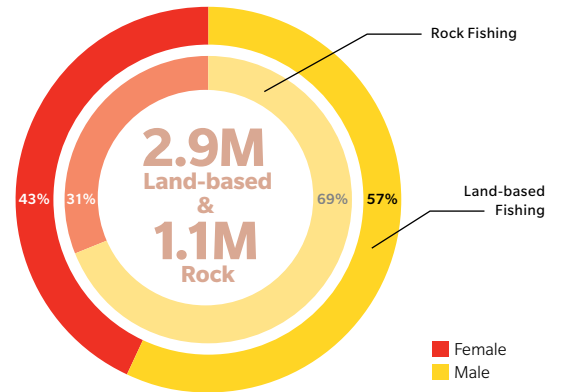


Figure 10
2018: FISHING PARTICIPATION BY TYPE AND GENDER

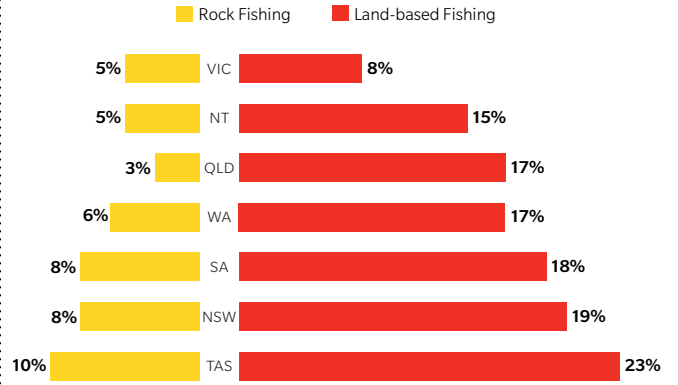


Figure 11
2018: FISHING PARTICIPATION BY TYPE AND STATE

PARTICIPANTS WHO HAVE BEEN RESCUED



3% LAND-BASED FISHING



8% ROCK FISHING

ACTIVITY PARTICIPATION

COASTAL ACTIVITY PARTICIPANTS: DEMOGRAPHIC & LOCATION SELECTION

2018: SURFING

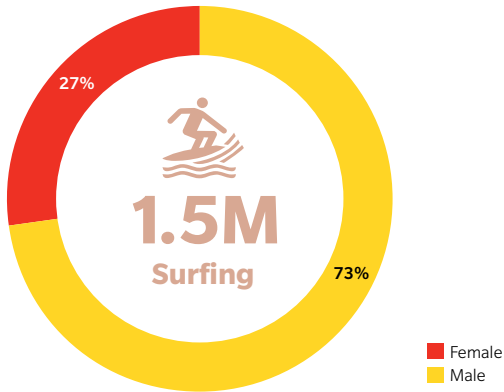


Figure 12
2018: SURFING PARTICIPATION BY GENDER

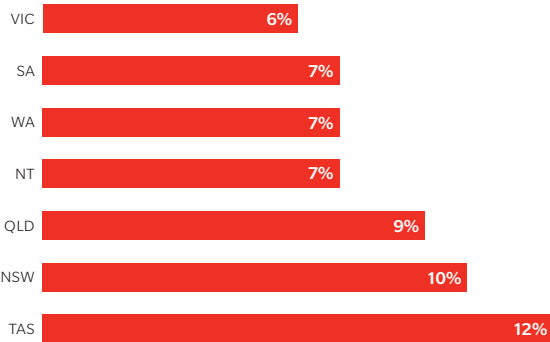


Figure 13
2018: SURFING PARTICIPATION BY STATE

SURFER DEMOGRAPHIC



20%

OF ADULTS AGED 16-24 GO SURFING



31%

SURFERS CONSIDER THEMSELVES BEGINNERS

2018: SNORKELLING & SCUBA DIVING

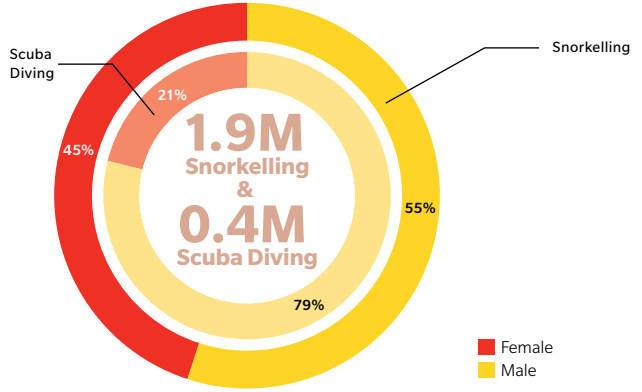


Figure 14
2018: SNORKELLING AND SCUBA DIVING PARTICIPATION BY GENDER

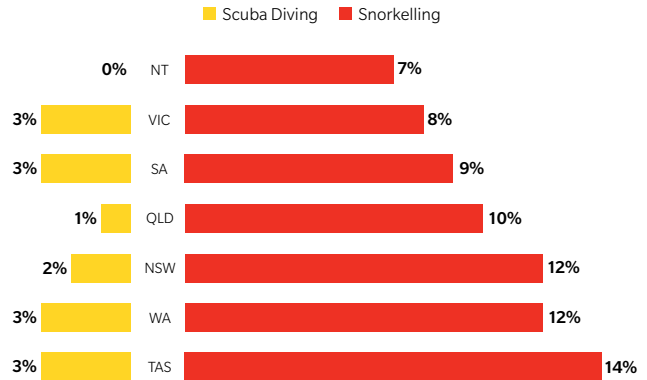


Figure 15
2018: SCUBA DIVING AND SNORKELLING PARTICIPATION BY STATE

PARTICIPANT LOCATION PREFERENCES



70%

SNORKELLERS CONSIDER UNDERSEA VISIBILITY AS THE MOST IMPORTANT



84%

SCUBA DIVERS CONSIDER MARINE WILDLIFE AS THE MOST IMPORTANT

ACTIVITY PARTICIPATION

PARTICIPATION FREQUENCY AND EXPERTISE

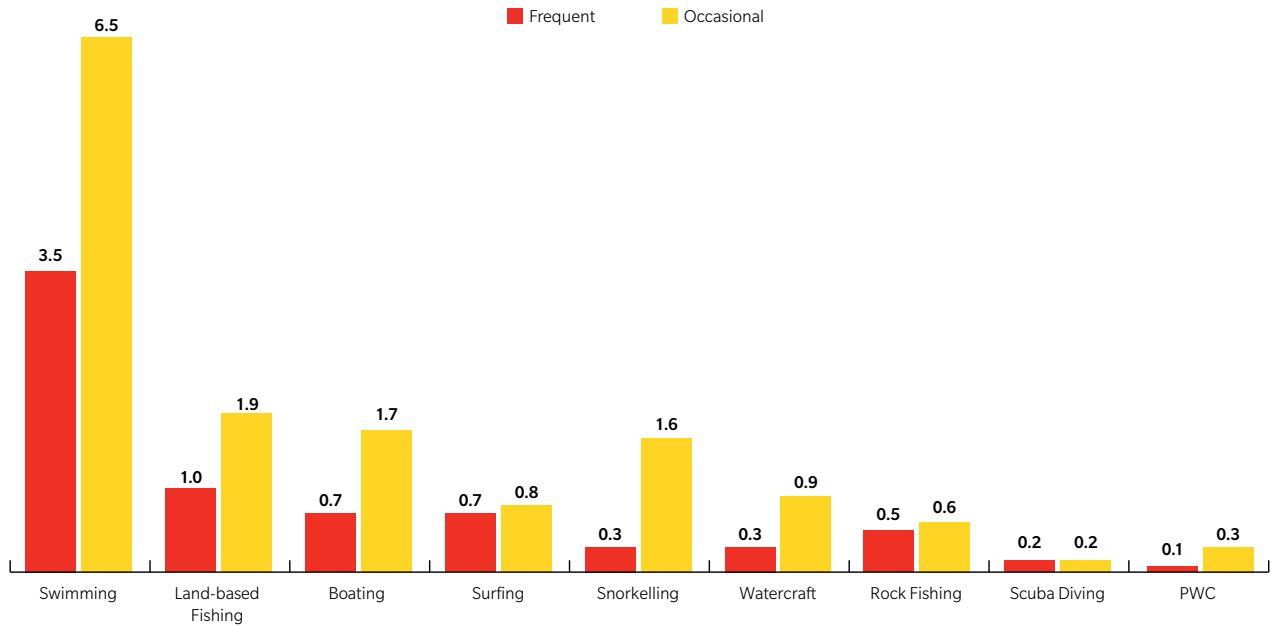


Figure 16
2018: PARTICIPANTS (MILLIONS) IN COASTAL ACTIVITIES

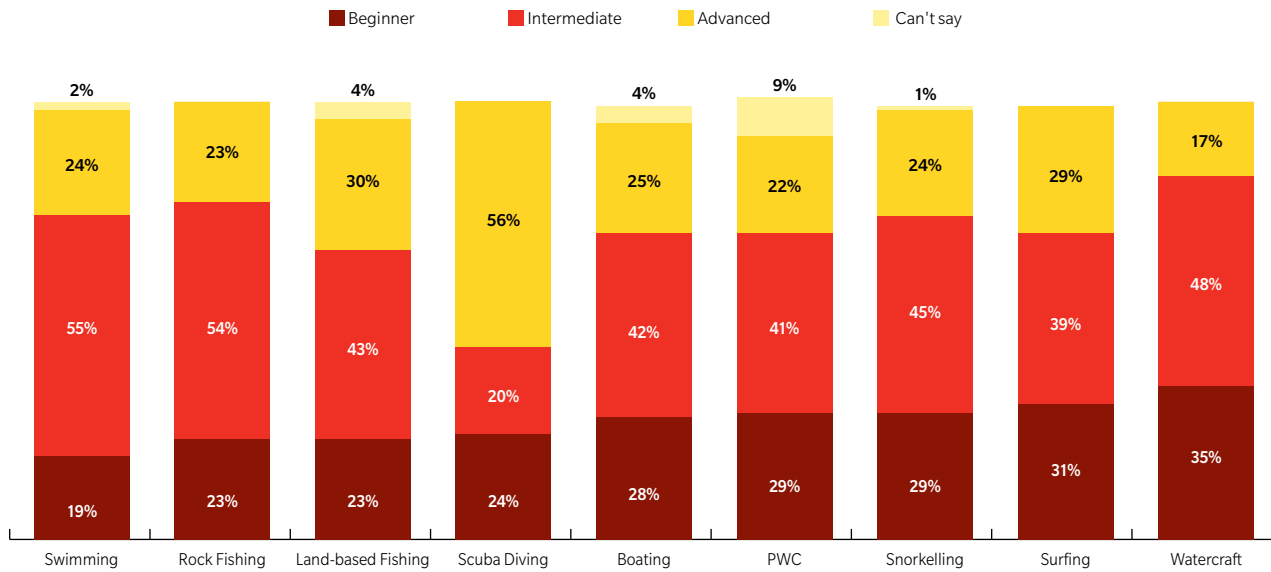



Figure 17
2018: PARTICIPANT INDICATED LEVEL OF EXPERIENCE OR EXPERTISE IN COASTAL ACTIVITIES

SWIMMING ABILITY

CONFIDENCE IN COASTAL ENVIRONMENTS



45%

OF ADULTS SAY THEY ARE UNABLE TO SWIM OR ARE WEAK SWIMMERS IN THE OCEAN

ALMOST 1/3 OF AUSTRALIAN ADULTS SAY THEY ARE COMPETENT OR HIGHLY COMPETENT SWIMMERS OVERALL

1/3

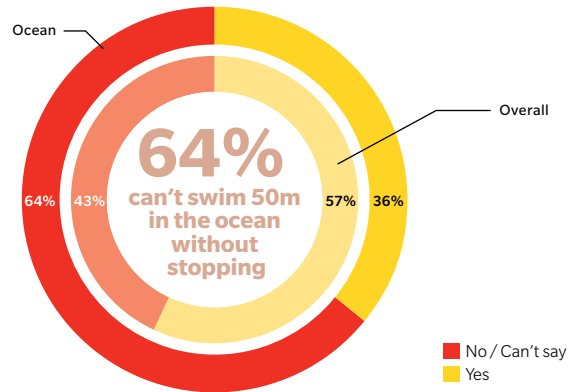


Figure 18
2018: ABILITY TO SWIM 50M WITHOUT STOPPING

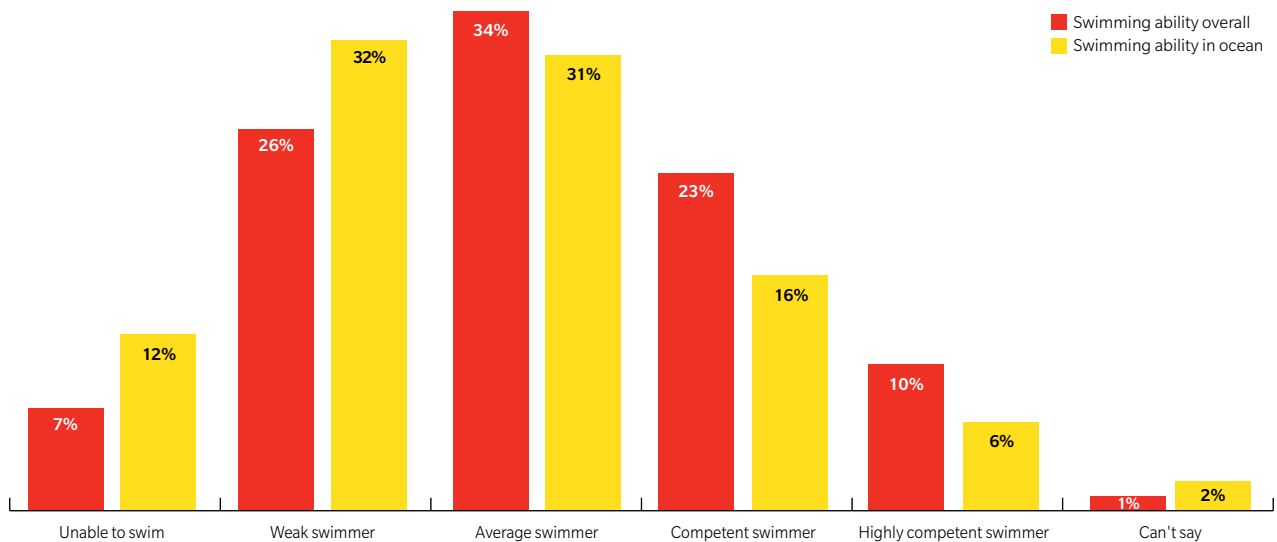
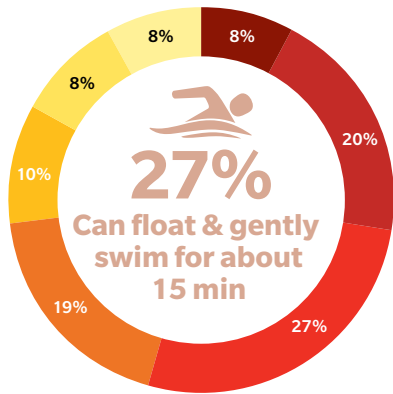


Figure 19
2018: SWIMMING ABILITY OF AUSTRALIAN ADULTS OVERALL VS IN THE OCEAN



- I cannot float or swim
- I can comfortably float for over 1 minute and swim a little distance
- I can comfortably float and gently swim for about 15 minutes
- I can comfortably float and gently swim for up to 30 minutes
- I can comfortably float and gently swim for up to 60 minutes
- I can swim constantly for over one hour and float as long as I wish
- Can't say



30%
**OF ADULTS SAY
THEY HAVE
NEVER SWUM
50M OR MORE
IN THE OCEAN**

Figure 20

2018: UNAIDED SWIMMING ABILITY OF AUSTRALIAN ADULTS IN COASTAL AREAS

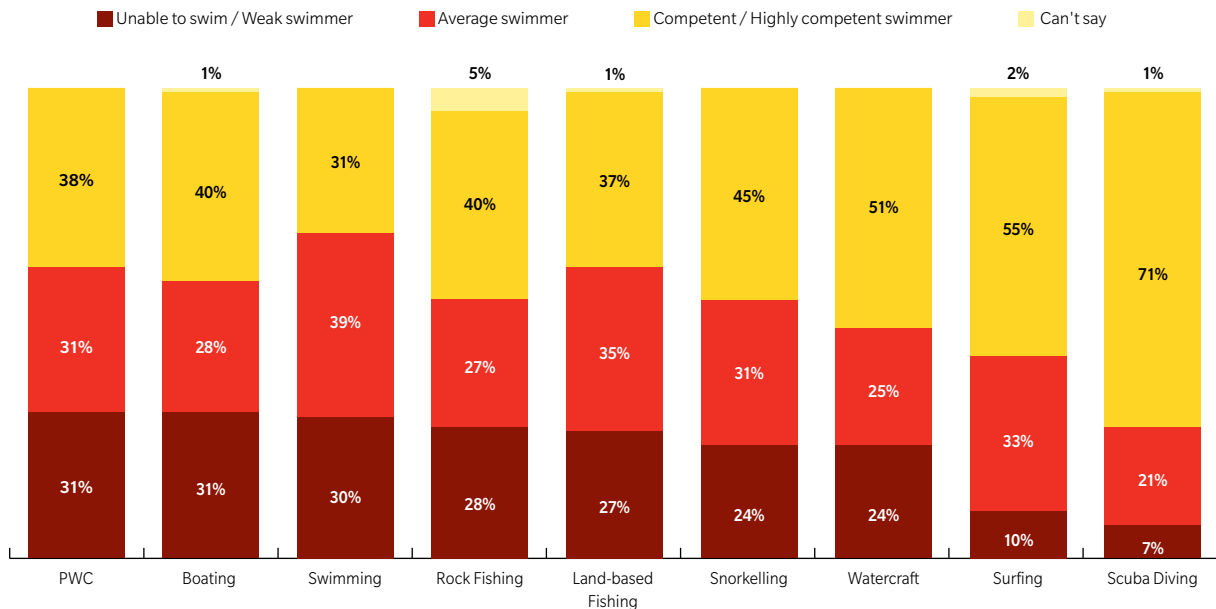


Figure 21

2018: OCEAN SWIMMING ABILITY OF PARTICIPANTS IN COASTAL ACTIVITIES

RISK PERCEPTION

HAZARD PERCEPTION OF COAST AND COASTAL ACTIVITY PARTICIPATION

Risk perception of coastal participants has been surveyed by SLSA for five years and has shown some clear disparities between perceived risk and reality. The National Coastal Safety Survey in 2018 asked coastal activity participants how *hazardous* they believe activities are and also how *safe* the same activities are. Figure 23 shows that when considering their 'safety' risk perception increases 9% on average. The most significant difference in perception is in snorkelling, which has become more prominent in both participation and drowning statistics in recent years.

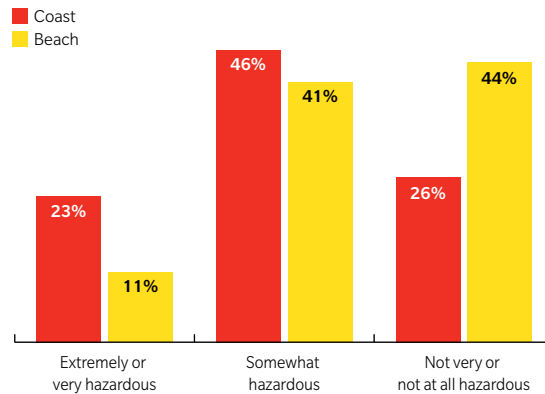


Figure 22
2018: HAZARD PERCEPTION OF THE COAST AND BEACH ENVIRONMENTS

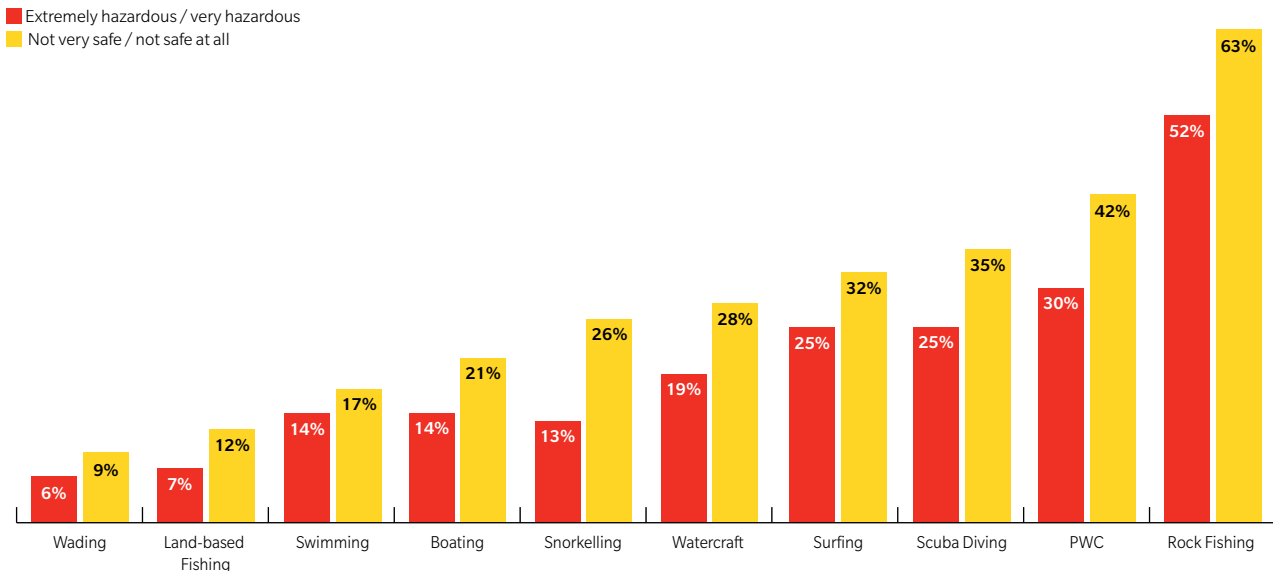


Figure 23
2018: THE DIFFERENCE IN COASTAL ACTIVITY PERCEPTION WHEN ASKED HOW 'SAFE' IT IS COMPARED TO HOW 'HAZARDOUS' IT IS

COASTAL RESCUES

ACTIVITIES AND EQUIPMENT INVOLVED IN COASTAL RESCUES

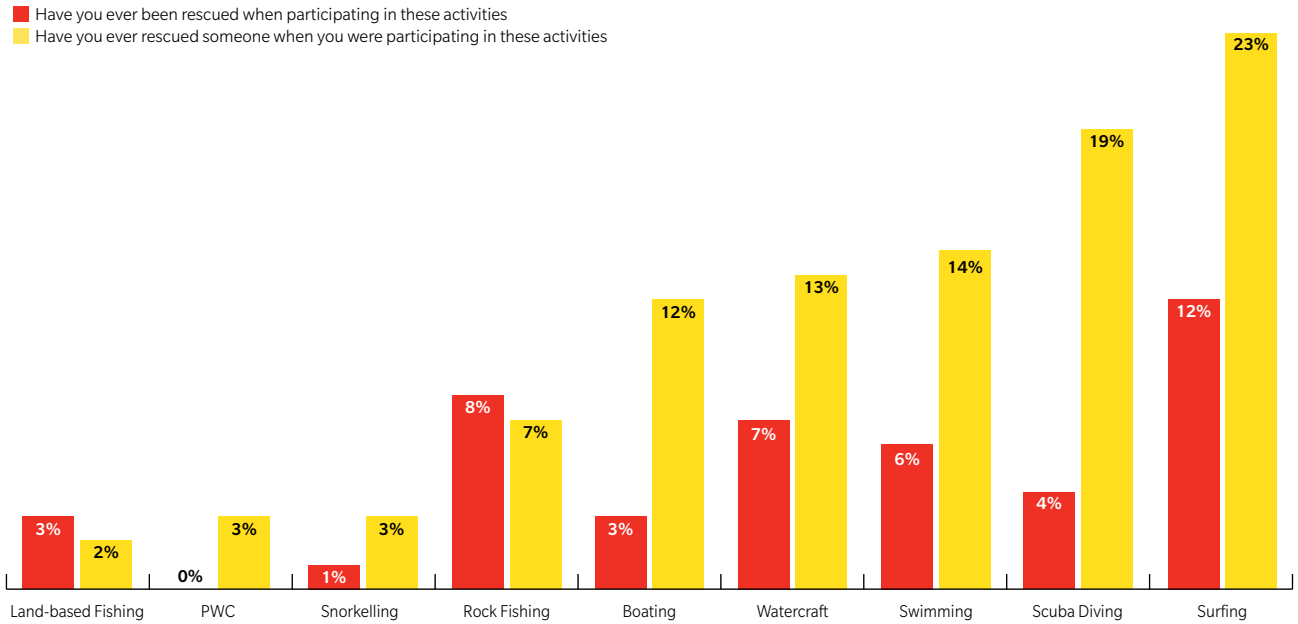


Figure 24

2018: PARTICIPANTS IN COASTAL ACTIVITIES WHO HAVE EVER BEEN RESCUED OR PERFORMED A RESCUE WHILE PARTICIPATING IN THESE ACTIVITIES

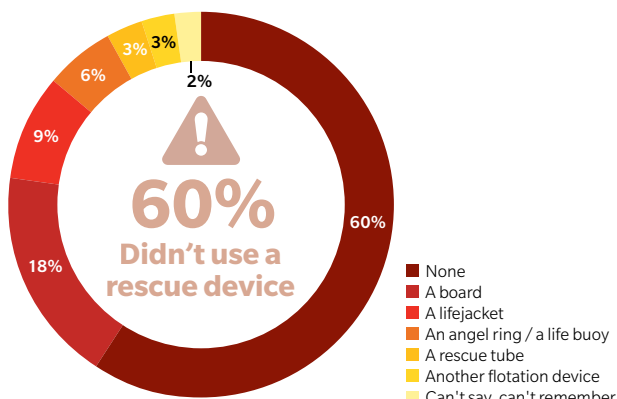


Figure 25

2018: EQUIPMENT USED BY PARTICIPANTS WHO HAVE PERFORMED RESCUES

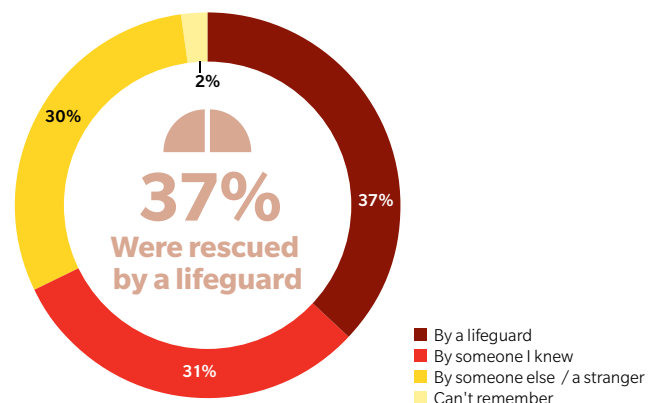


Figure 26

2018: WHO PERFORMED THE RESCUE FOR PARTICIPANTS IN COASTAL ACTIVITIES

SAFETY PRACTICES

SAFETY MEASURES SWIMMERS TAKE IN COASTAL ENVIRONMENTS

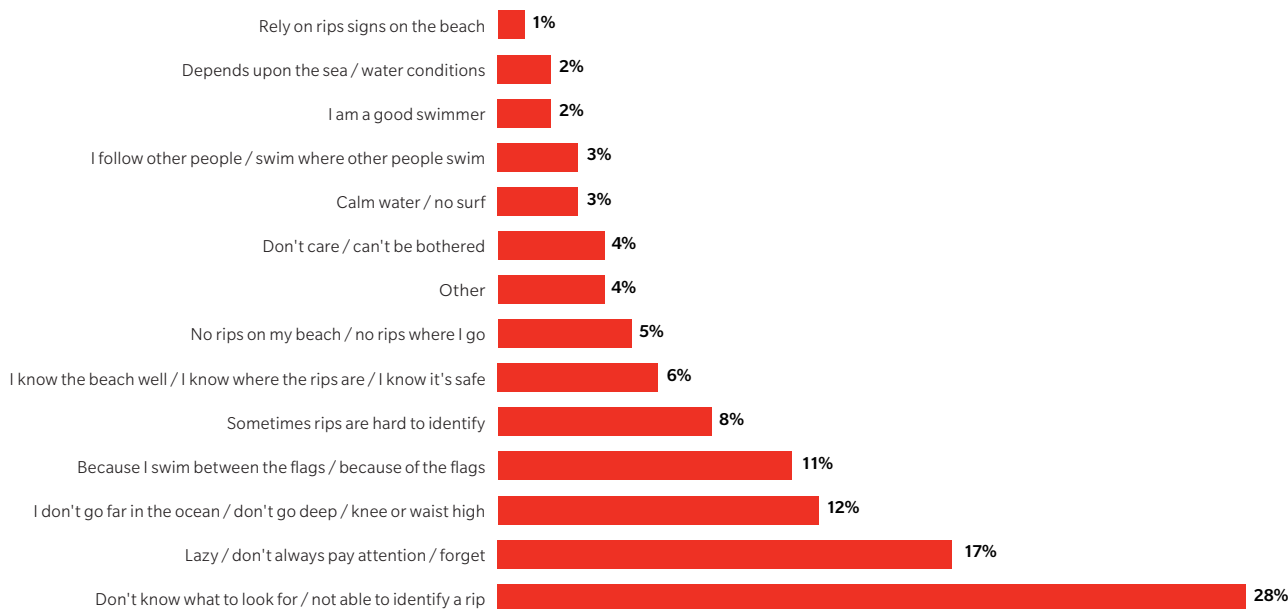


Figure 27

2018: THE REASONS WHY AUSTRALIAN ADULTS DON'T ALWAYS LOOK FOR THE PRESENCE OF RIP CURRENT

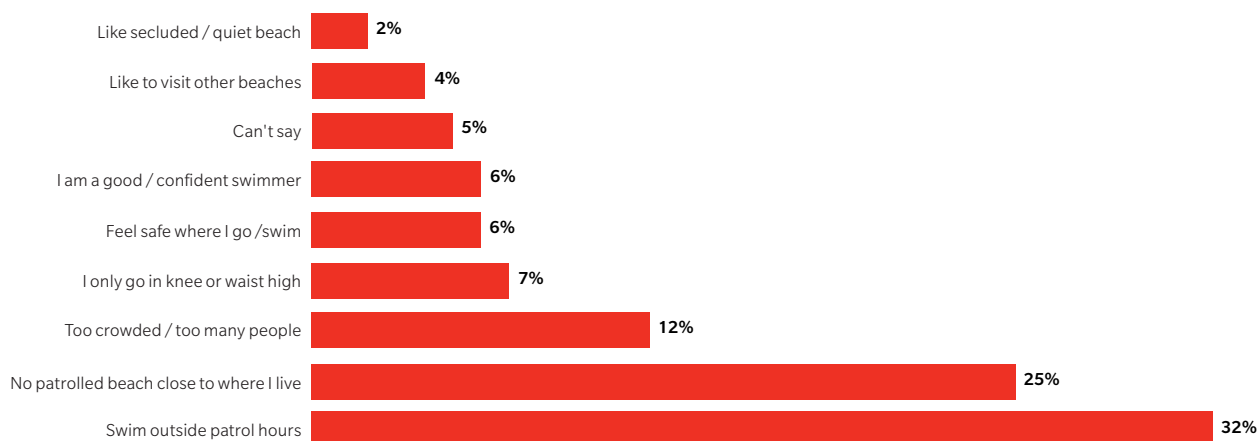
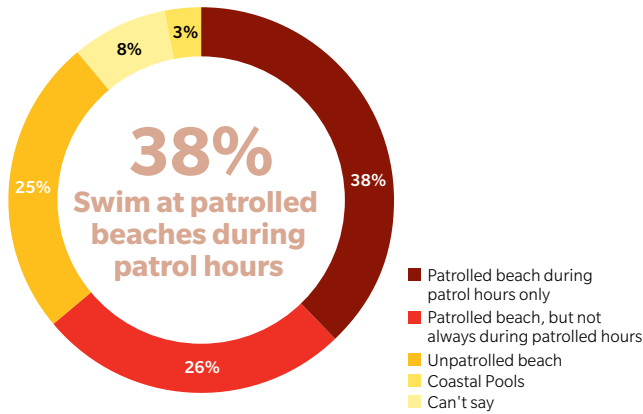


Figure 28

2018: THE REASONS WHY AUSTRALIAN ADULTS DON'T ALWAYS SWIM AT A PATROLLED BEACH DURING PARTOL HOURS



SLS recognises coastal and beach visitations in Australia are increasing and not everyone recreates at a patrolled location.



It is essential that beachgoers understand the risks and hazards that exist and how to stay safe. This highlights the importance of public education initiatives to prevent coastal injury and drowning.

Figure 29
2018: USUAL SWIMMING LOCATION FOR COASTAL SWIMMERS

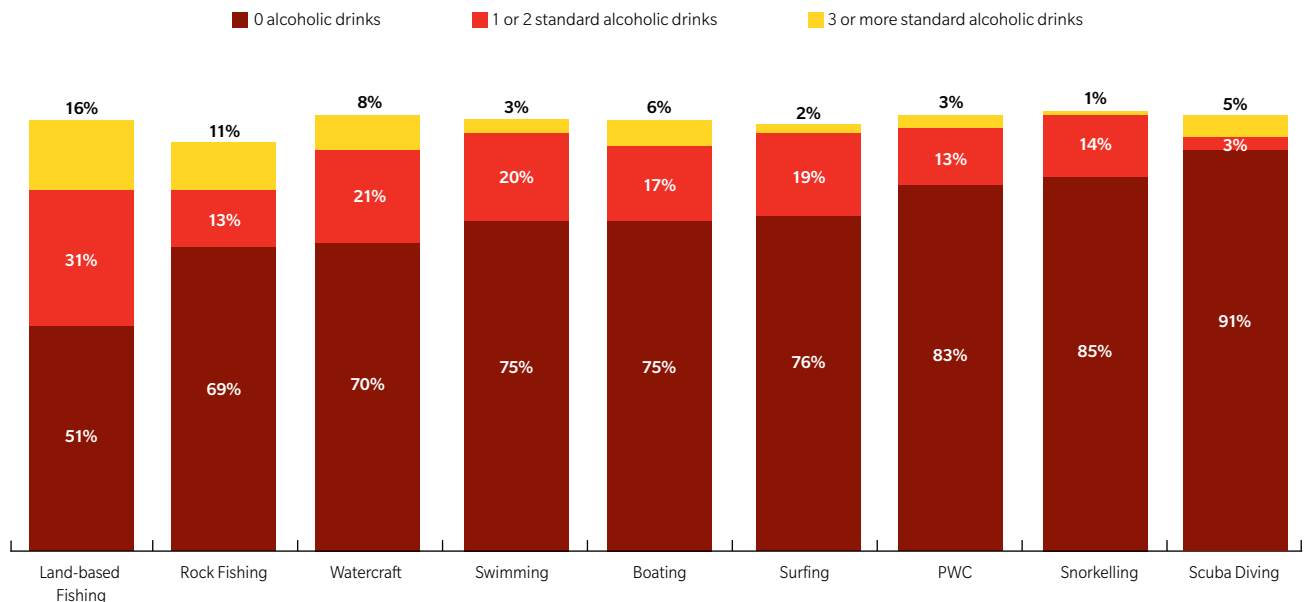


Figure 30
2018: THE NUMBER OF STANDARD ALCOHOLIC DRINKS COASTAL ACTIVITY PARTICIPANTS BELIEVE IS REASONABLE TO CONSUME BEFORE UNDERTAKING ACTIVITIES

Note: where data doesn't add up to 100% there were participants who answered 'can't say'.

FEATURE: NON-FATAL DROWNING

NON-FATAL DROWNING OVERVIEW 2002-15

The focus of drowning prevention research has long been on fatal drowning. However, this is only part of the total drowning toll. Non-fatal drowning incidents are more difficult to quantify but represent a significant part of the total impact of drowning.

Between 2002 and 2015, there were 6,158 cases of non-fatal drowning recorded across all aquatic environments (including swimming pools, bath tubs and natural waters (Fig.31)). Beaches, the only quantifiable coastal environment in this dataset, accounted for 495 (8%) of the incidents. This represents an average of 38 non-fatal beach drowning cases per year.

It is likely that there are more non-fatal cases that have occurred within the coastal environment however, due to hospital coding limitations they are indeterminable at this stage.

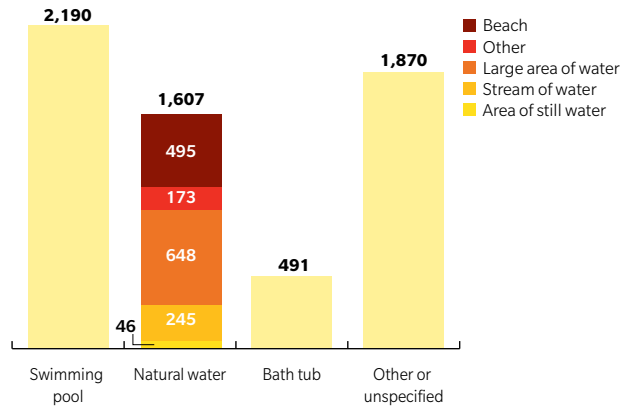


Figure 31
2002-15: LOCATION OF NON-FATAL DROWNING INCIDENTS (n=6,158)

495

NON-FATAL DROWNING INCIDENTS BETWEEN 2002-15

38

NON-FATAL DROWNING INCIDENTS PER YEAR

77%

MALE

25%

UNDER AGE OF 16

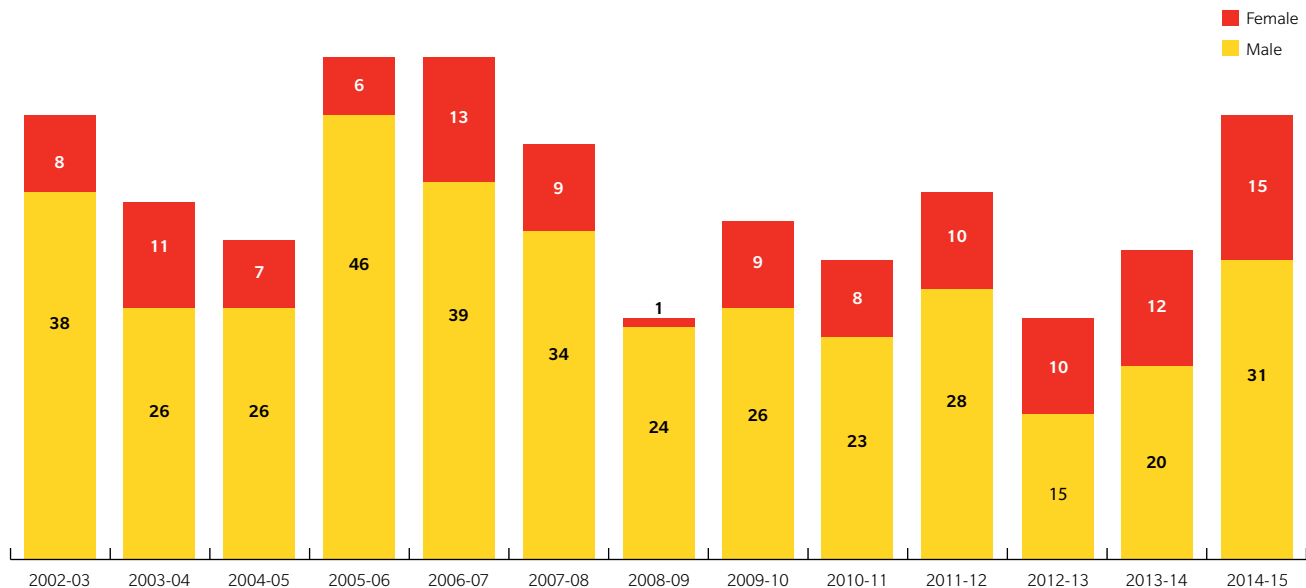


Figure 32
2002-15: NON-FATAL DROWNING INCIDENTS ON THE BEACH BY YEAR AND GENDER (n=495)

FEATURE: NON-FATAL DROWNING

COMPARISON OF FATAL AND NON-FATAL DROWNING AT BEACHES 2004-15

To calculate ratios of fatal to non-fatal drowning incidents, the total number of fatal beach drowning incidents were revised to match the much narrower definition of drowning used by the non-fatal data. Therefore, the number of fatal beach drowning cases in this section is lower than reported in other sections of the report.

The average ratio of fatal to non-fatal drowning from 2004 to 2015 is 1:1.08. This indicates that for every fatal drowning on a beach, there are 1.08 non-fatal beach drowning incidents.

The rate is highly variable across age groups – young children (0-4) show the highest ratio (38.00) indicating that for every fatal beach drowning there are 38 non-fatal ones. On the other end of the spectrum, the oldest age group (75+) represents the lowest ratio (0.38) indicating that for every three fatal beach drowning deaths one non-fatal drowning occurs.

For more information, see the Coastal Safety Brief – Beaches on www.sls.com.au/publications

RATIO FATAL : NON-FATAL

1:1.08



0-4 YEAR OLD RATIO
FATAL : NON-FATAL

1:38

FATAL
DROWNING

404

75+ YEAR OLD RATIO
FATAL : NON-FATAL

1:0.38

NON-FATAL
DROWNING

412

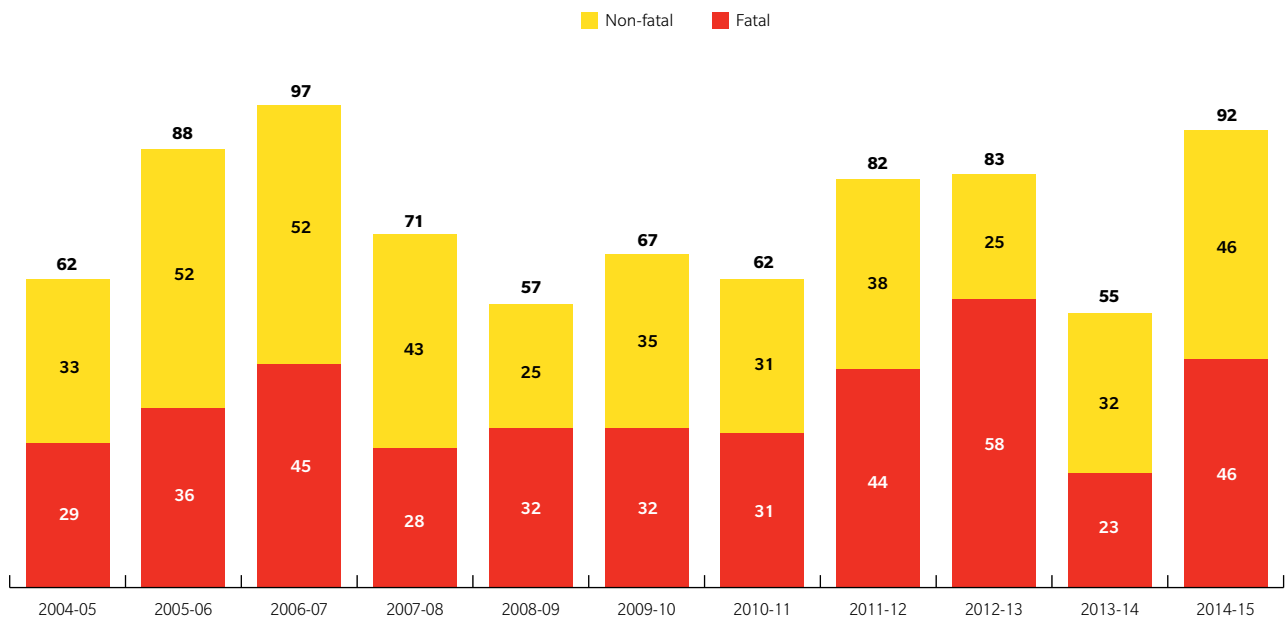


Figure 33

2004-15: FATAL AND NON-FATAL BEACH DROWNING INCIDENTS BY YEAR (n=816)



CAPABILITY

SECTION TWO

 **10,249**
RESCUES

48,371
PROFICIENT MEMBERS 

1,371,455
VOLUNTEER PATROL HOURS 



CAPABILITY

Surf Life Saving (SLS) has significant capability to provide coastal surveillance patrols and aquatic search and rescue (SAR) operations, working in close partnership with police and other emergency services.

These services are expertly delivered and managed by the 40,371 Bronze Medallion holders and 8,000 Surf Rescue Certificate holders (totalling 48,371 proficient surf lifesavers) through the 314 Surf Life Saving Clubs. This is alongside 700 fulltime, seasonal and casual lifeguards. Surf lifesavers and lifeguards receive specialised training to industry best-practice standards under the Australian Qualifications Framework ensuring the community receives consistent service of the highest quality across the nation.

Radio communications provide support to all services via SLS coastal radio networks or government radio networks, which are connected to SLS communication and operation centres. These centres provide operational support, data management and when required coordinate the SLS emergency response system.

VOLUNTEER SURF LIFESAVERS

Our volunteer surf lifesavers are provided with fit-for-purpose equipment designed to operate in the hazardous and challenging conditions that SLS services encounter. Surf lifesavers utilise thousands of rescue boards and rescue tubes mostly around the red and yellow flagged patrol areas. They are supported by 1,095 inflatable rescue boats, allowing surf lifesavers to quickly navigate the surf zone and inshore environment.

Roving surveillance patrols that actively monitor stretches of coastline near a primary patrolled areas are vital to the SLS drowning prevention strategy. Surf lifesavers undertake these patrols using 503 side-by-side (SSV) and 4WD vehicles.

SLS services extend beyond the red and yellow flags to provide surveillance and emergency response in isolated and hazardous coastal areas. Agile craft such as 162 rescue water craft (RWC) and six jet rescue boats (JRBs) allow surf lifesavers to access white-water areas such as coastal bars and rocky coastlines.

A fleet of 12 offshore rescue boats (ORBs) and 10 rigid-hull inflatable boats (RIBs) further extend the SLS response capability providing longer range surveillance, blue-water rescue and SAR operations.

📣 SLS SERVICES EXTEND BEYOND THE RED AND YELLOW FLAGS TO PROVIDE SURVEILLANCE AND EMERGENCY RESPONSE IN ISOLATED AND HAZARDOUS COASTAL AREAS. 📣

AUSTRALIAN LIFEGUARD SERVICE

The Australian Lifeguard Service (ALS) is a national lifeguard provider of beach and pool lifeguard services to 64 local government councils and land managers across Australia. It is the largest supplier of professional lifeguards in Australia.

ALS operations are fully integrated into the 24-hour surf emergency response system and work with SLS's volunteer lifesaving services including the strategically located Westpac Lifesaver Rescue Helicopter Services.

ALS patrols provide a range of services, from single-day patrols on periods of peak attendance (i.e. public holidays) to 365-day services for local governments. They are a crucial component in offering a seamless service to the community during peak periods. Several councils around Australia operate internal lifeguard services. Statistics for those services have not been included in this report.

WESTPAC LIFESAVER RESCUE HELICOPTERS

For rapid, isolated or complex rescues, nine Westpac Lifesaver Rescue Helicopters provide aerial support to lifesaving services and further extend our surveillance and SAR capability. These important assets also support police and other emergency services in a range of emergency and disaster situations.

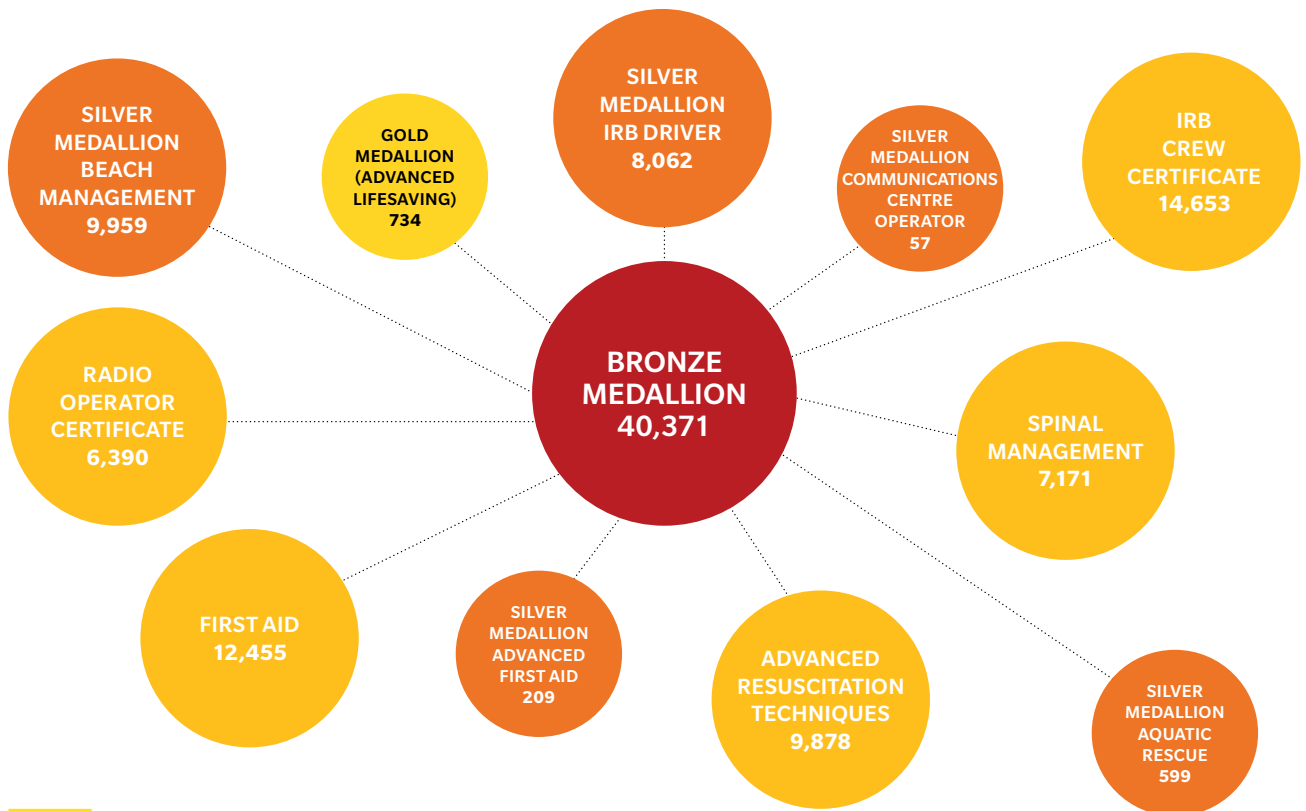


Figure 34
2017-18: QUALIFICATIONS HELD BY BRONZE MEDALLION HOLDERS

40,371 proficient Bronze Medallion holders also are proficient in eleven other lifesaving awards, totaling over 70,000 additional lifesaving qualifications. This highlights the large amount of additional volunteer training our surf lifesavers undertake to ensure they are highly skilled first responders.

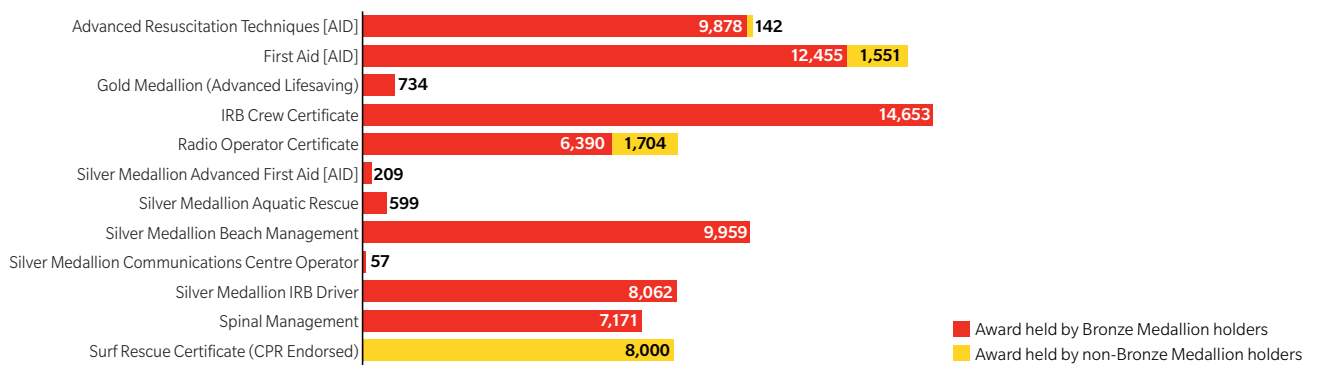


Figure 35
2017-18: TOTAL QUALIFICATIONS OF SURF LIFESAVERS

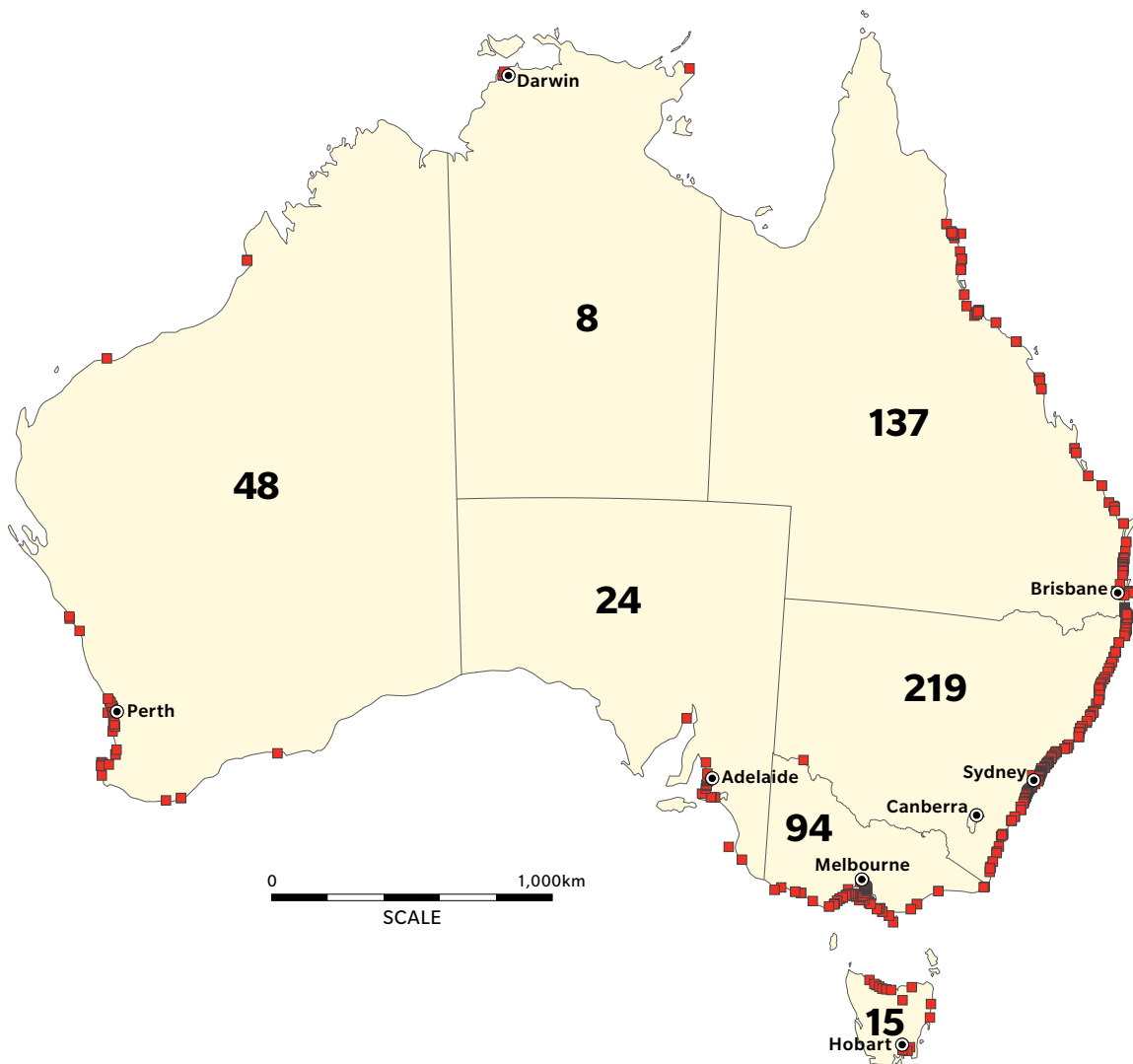
SURF LIFE SAVING SERVICES

Figure 36

2017-18: SURF LIFE SAVING SERVICES

There are 314 Surf Life Saving Clubs around Australia: 129 in New South Wales, 58 in Queensland, 57 in Victoria, 31 in Western Australia, 22 in South Australia, 14 in Tasmania and 3 in Northern Territory.

The Australian Lifeguard Service provides 231 lifeguard services around Australia: 90 in New South Wales, 79 in Queensland, 37 in Victoria, 17 in Western Australia, 2 in South Australia, 1 in Tasmania and 5 in Northern Territory.



MEMBERSHIP CAPACITY

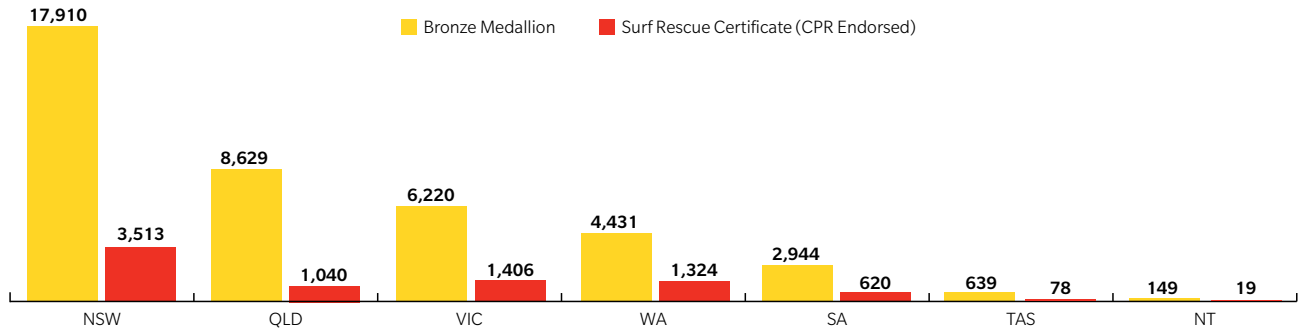


Figure 37

2017-18: PROFICIENT SURF LIFESAVERS

There was a total of 40,371 proficient Bronze Medallion holders and 8,000 Surf Rescue Certificate holders.

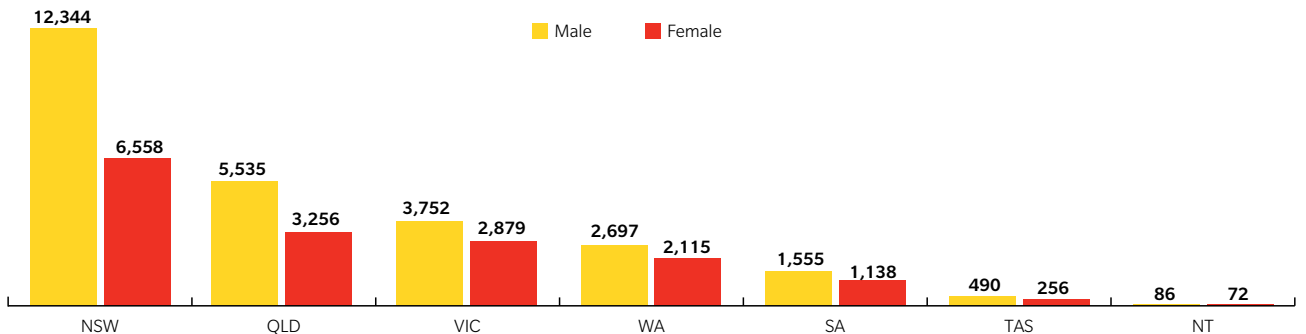


Figure 38

2017-18: PATROLLING SURF LIFESAVERS

There was a total of 42,740 members who performed a patrol. This includes 7 unspecified gender.

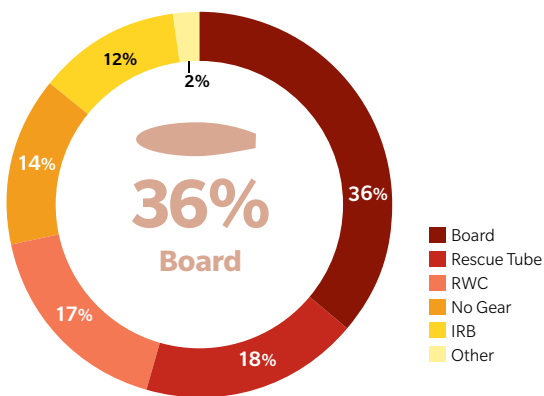
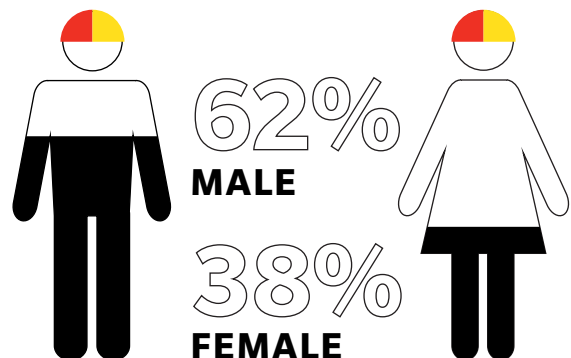


Figure 39

2017-18: EQUIPMENT USE IN RESCUES

2017-18: PATROLLING SURF LIFESAVERS



ASSET CAPABILITY

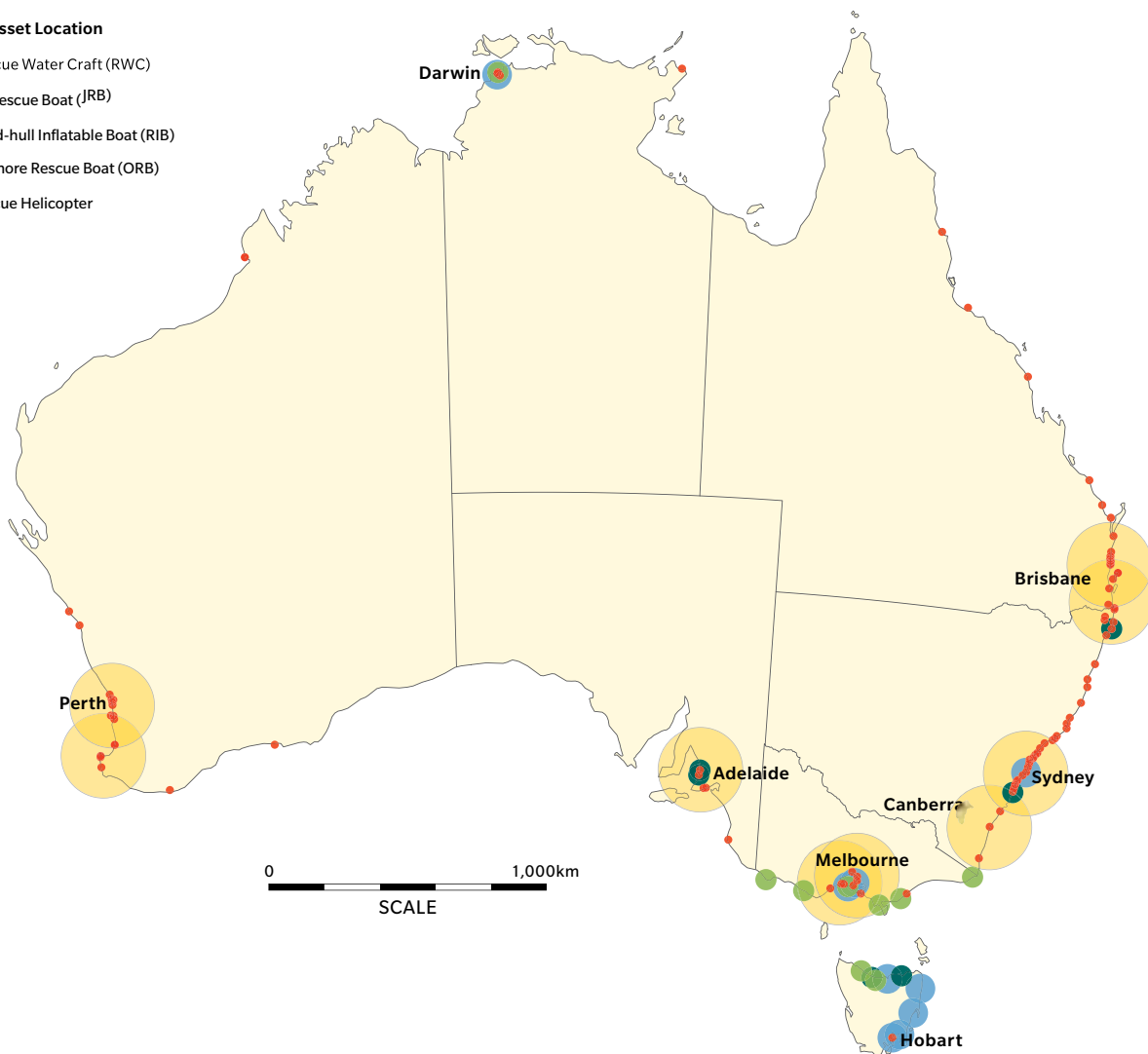
Figure 40

2017-18: SLS MAJOR ASSET LOCATION AND SERVICE RANGE

SLS maintains a fleet of 162 rescue water craft (RWC), as well as 6 jet rescue boats (JRB), 10 rigid-hull inflatable boats (RIB), 12 offshore rescue boats and 9 rescue helicopters. Their locations and service ranges are depicted on this map.

Key to Asset Location

- Rescue Water Craft (RWC)
- Jet Rescue Boat (JRB)
- Rigid-hull Inflatable Boat (RIB)
- Offshore Rescue Boat (ORB)
- Rescue Helicopter



RESCUES

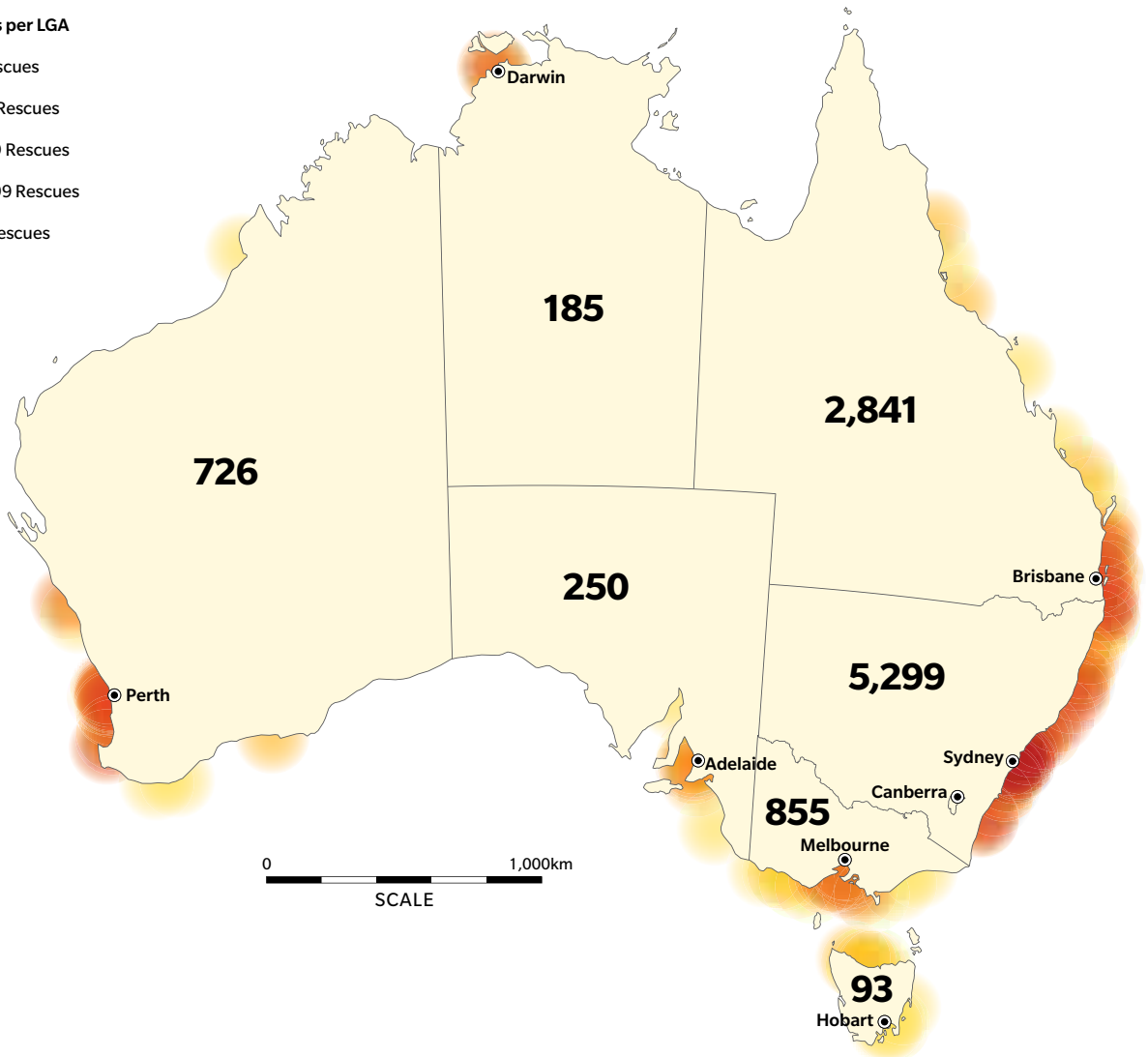
Figure 41

2017-18: RESCUES PER LOCAL GOVERNMENT AREA (LGA)

SLS lifesavers, lifeguards and lifesaving services performed 10,249 rescues across 119 LGAs around Australia.

Key to Rescues per LGA

- 1 - 9 Rescues
- 10 - 49 Rescues
- 50 - 149 Rescues
- 150 - 399 Rescues
- > 400 Rescues



PREVENTATIVE ACTIONS

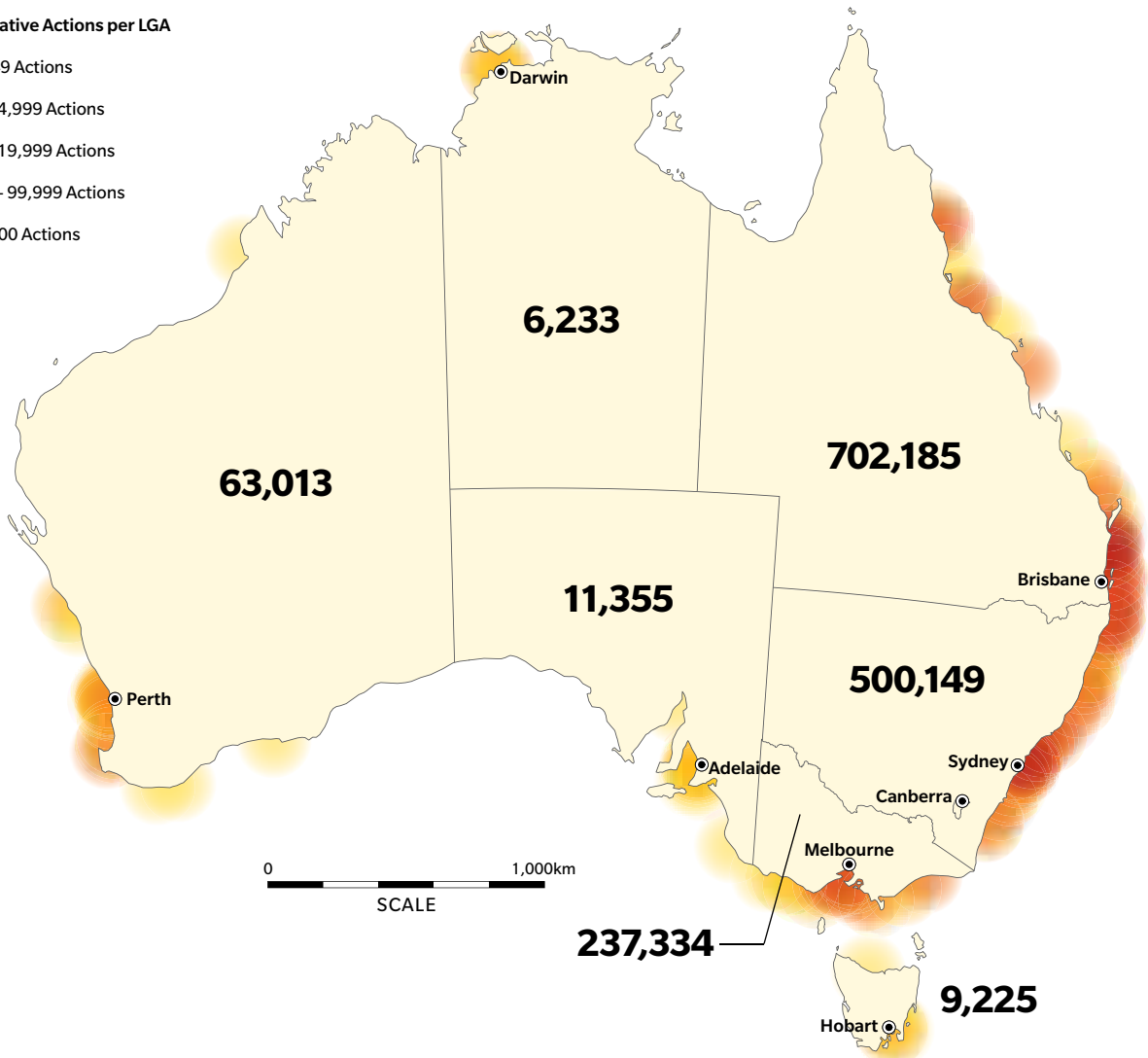
Figure 42

2017-18: PREVENTATIVE ACTIONS PER LOCAL GOVERNMENT AREA (LGA)

SLS lifesavers, lifeguards and lifesaving services performed 1,529,494 preventative actions across 119 LGAs around Australia.

Key to Preventative Actions per LGA

- 1 - 1,449 Actions
- 1,500 - 4,999 Actions
- 5,000 - 19,999 Actions
- 20,000 - 99,999 Actions
- > 100,000 Actions



FIRST AID

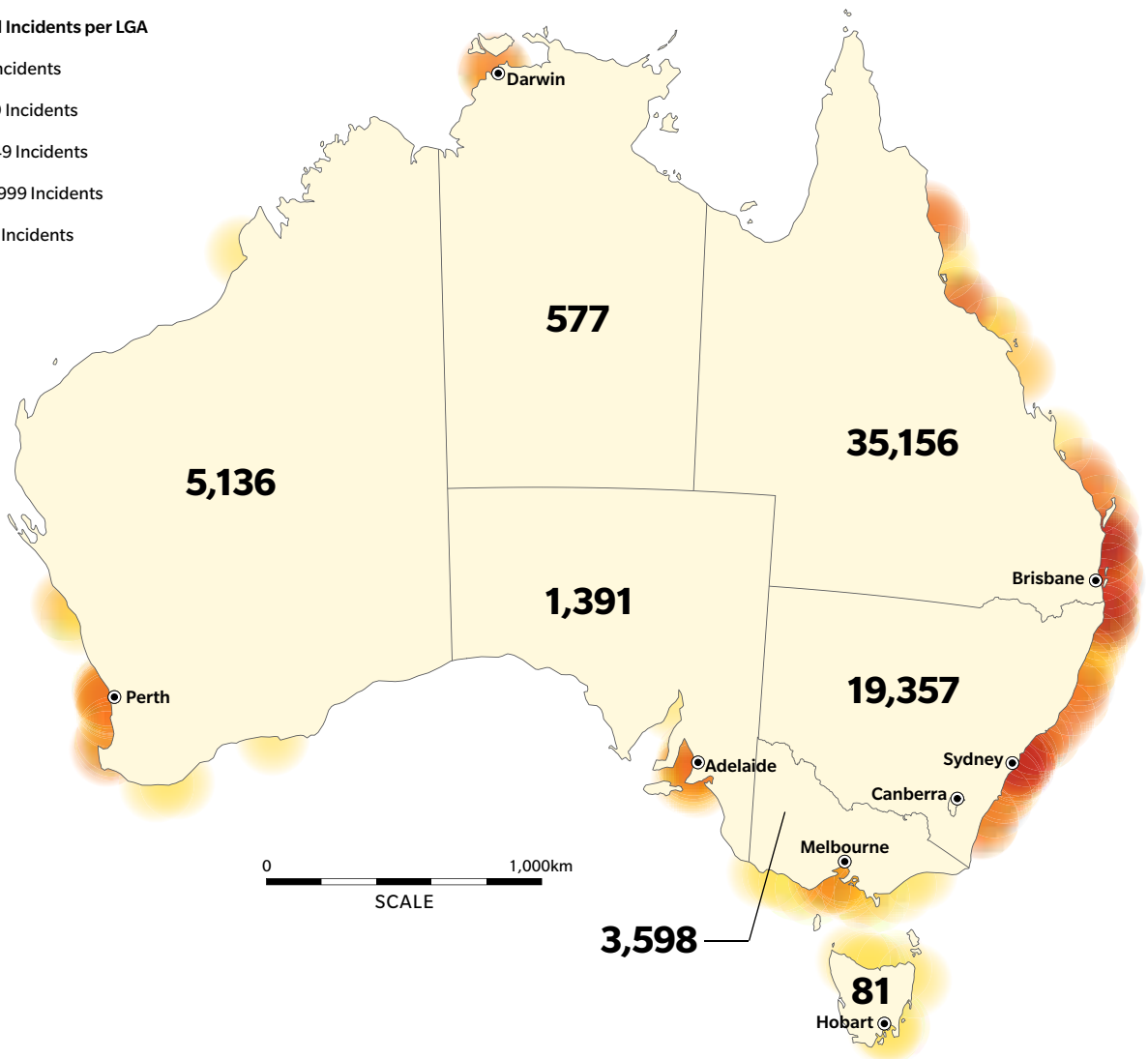
Figure 43

2017-18: FIRST AID PER LOCAL GOVERNMENT AREA (LGA)

SLS lifesavers, lifeguards and lifesaving services performed 65,296 first aid treatments across 119 LGAs around Australia.

Key to First Aid Incidents per LGA

- 1 - 49 Incidents
- 50 - 349 Incidents
- 350 - 649 Incidents
- 650 - 2,999 Incidents
- > 3,000 Incidents



FEATURE: BEACH SAFETY EQUIPMENT FUND

The Australian Government, through the Beach Safety Equipment Fund (BSEF) provided Australian Surf Life Saving Clubs with \$8 million of additional funding over five years (2013-2018) to purchase vital safety equipment. Looking after the safety and welfare of over 300 million visitors to Australian beaches is the responsibility of the world's largest volunteer water safety organisation, Surf Life Saving Australia.

The Australian Government worked with Australia's key water safety agencies to identify priority areas to promote water safety and reducing both fatal and non-fatal drowning incidents.

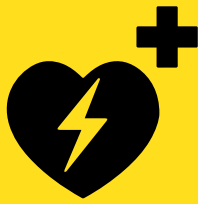
Beaches and inland waterways were identified as high-risk locations for drowning deaths as part of the Australian Water Safety Strategy 2016-2020.

The BSEF equated to an additional \$1.6 million per year for five years, providing on average approximately \$5,000 per year to each of the nation's 314 Surf Life Saving Clubs. The BSEF has achieved its intended purpose to deliver coordinated financial support to Surf Life Saving Australia's affiliated clubs to purchase over 10,000 pieces of vital rescue and first-aid equipment as detailed on the right.



Trigg Island Surf Life Saving Club members and the Hon Michael Keenan MP, Member for Stirling, Western Australia. Photo is from Stirling Times (2018).

281
DEFIBRILLATOR

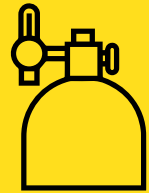


268
FIRST AID KIT



117
SPINAL
MANAGEMENT

531
OXYGEN
RESUSCITATION
EQUIPMENT



222
FUEL CELLS

339
IRB MOTOR

138
IRB HULL



120
MOTOR
PROPELLER
GUARD

84
TRAINING
EQUIPMENT
RESCUE MANIKINS

94
SIDE BY SIDE
VEHICLE

3,756
OTHER RESCUE
& LIFESAVING
EQUIPMENT

1,531
PPE INCLUDING
LIFE JACKETS



963
RESCUE BOARDS

530
RADIOS &
ACCESSORIES



1,271
RESCUE TUBES
AND ANCILLARY
EQUIPMENT

TOTAL EQUIPMENT
10,245

DROWNING ANALYSIS

SECTION THREE



110 COASTAL & OCEAN
DROWNING DEATHS

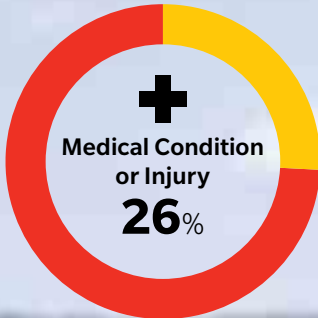
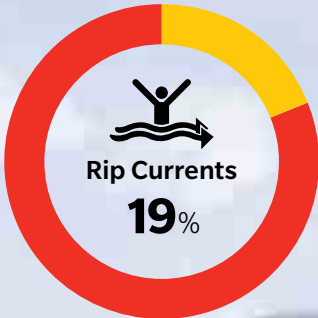


80%
MALE



20%
FEMALE

CONTRIBUTING FACTORS 2004-18





NATIONAL OVERVIEW

2004-18: 14-YEAR REVIEW

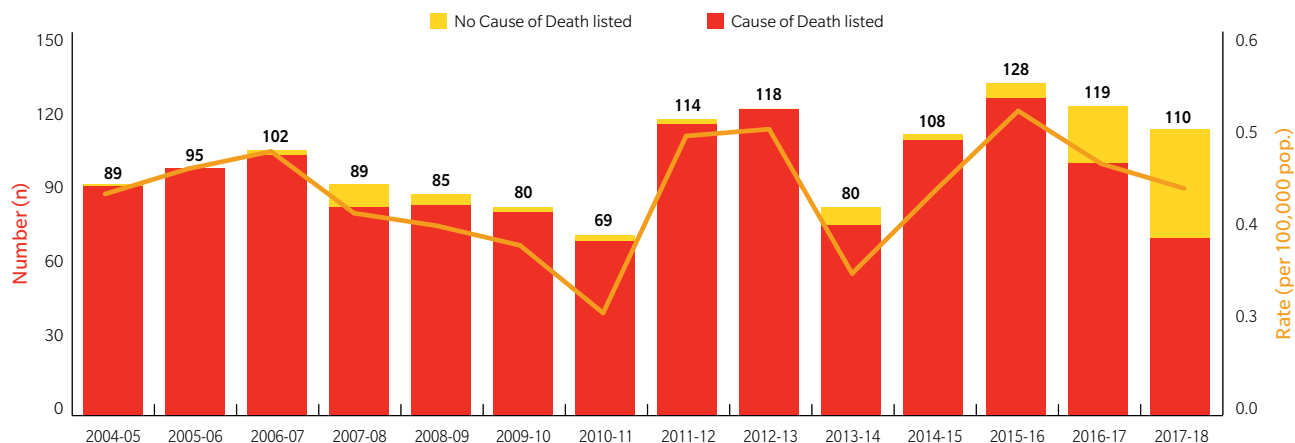


Figure 44

2004-18: 14-YEAR TREND OF NATIONAL COASTAL DROWNING DEATHS

National coastal and ocean drowning death numbers and crude drowning rates for 2004-18 are illustrated above. The 2017-18 rate per 100,000 population is 0.44, exactly on the 14-year average.

0.44
14-YEAR AVERAGE RATE
PER 100,000 POPULATION

99
14-YEAR AVERAGE
DROWNING DEATHS

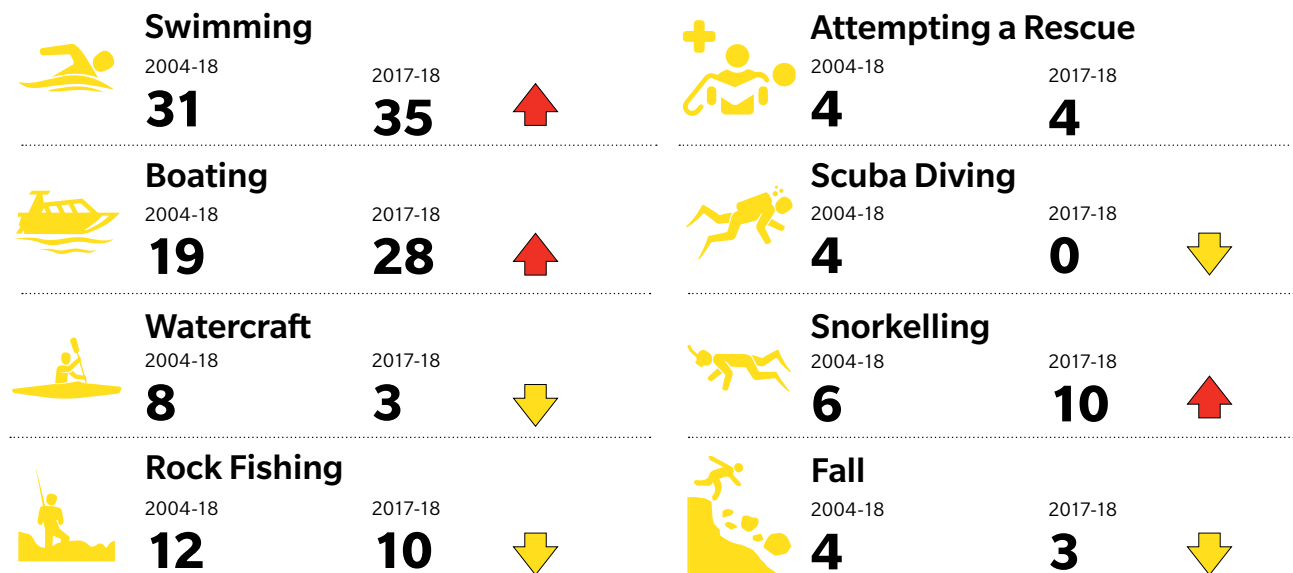


Figure 45

2004-18: 14-YEAR AVERAGE VS 2017-18 COASTAL & OCEAN DROWNING DEATHS BY ACTIVITY

Nationally, the number of activity types being undertaken when coastal and ocean drowning deaths occur varies over time. In 2017-18, the number of drowning deaths while swimming/wading, boating and snorkelling were above the 14-year average, while watercraft, rock fishing, scuba diving and fall related incidents were below the 14-year average. The number of drowning deaths while attempting a rescue were the same as the 14-year average.

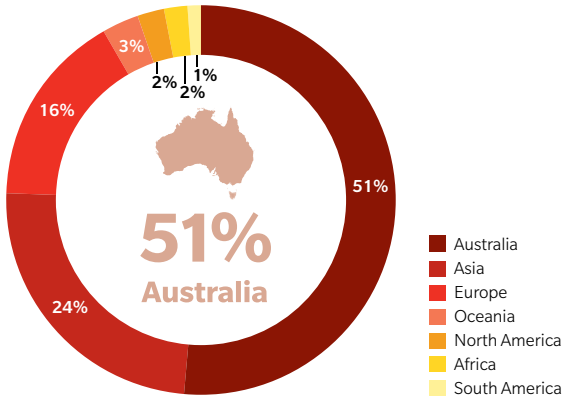
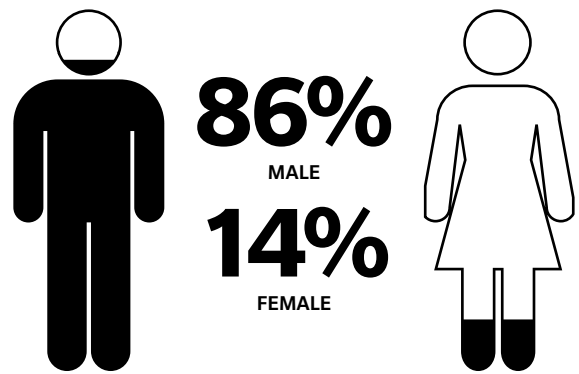


Figure 46
2004-18: COASTAL & OCEAN DROWNING DEATHS BY REGION OF BIRTH

Region of birth is currently known for 68% of all coastal and ocean drowning deaths (n=948). Half (51%) were born in Australia. When breaking it down to countries, the top 3 are Australia (n=486), UK (n=83) and China (n=59).

2004-18: KEY DEMOGRAPHICS IN COASTAL & OCEAN DROWNING STATISTICS

The 25-34 year old age group represents 19% of all drowning deaths. The 50-64 year old age group accounts for 24% of all drowning deaths.



25-34 & **50-64**
 YEARS OF AGE & YEARS OF AGE

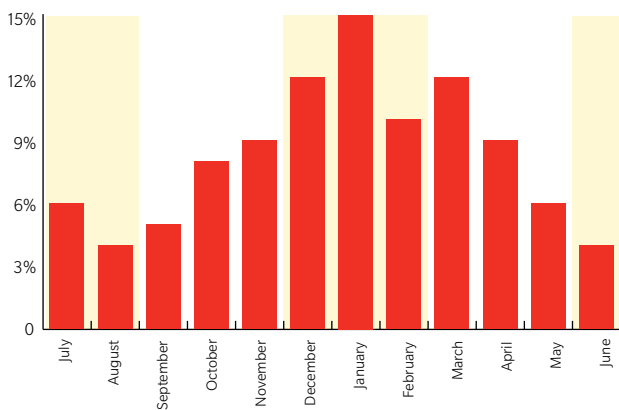


Figure 47
2004-18: COASTAL & OCEAN DROWNING DEATHS BY MONTH

The highest percentage of coastal and ocean drowning deaths occurred in the month of January (n=210), followed by December (n=172) and March (n=160). Sixty-three per cent occurred outside of the summer months. Shading denotes seasons.

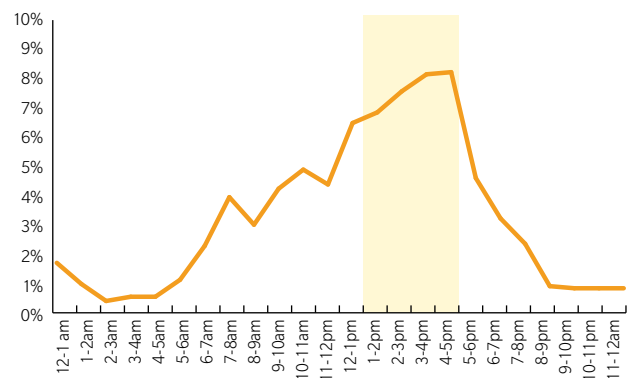


Figure 48
2004-18: COASTAL & OCEAN DROWNING DEATHS BY TIME

Incident time is currently known for 79% of all coastal and ocean drowning deaths (n=1,101). The highest density of fatalities occurred between 1pm and 5pm (n=427).

NATIONAL OVERVIEW

2017-18: 1-YEAR REVIEW

In the National Coastal Safety Report 2017, SLSA commenced reporting on coastal aquatic fatalities other than the drowning deaths it traditionally covers. These include fatalities due to medical conditions, injuries, marine wildlife and other causes. Coastal aquatic fatalities occur during a range of activities and in a range of locations, impacting on the community similarly to drowning related incidents. They often have long term, devastating impacts to family, friends and loved ones in addition to those who are involved in trying to save their lives. Through research we can obtain greater understanding of how these other coastal fatalities occur and be better informed to undertake and implement preventative education and awareness campaigns and services. We can also ensure that the SLS community and other emergency services are appropriately skilled and informed to address such situations.

In 2017-18, a total of 110 coastal drowning deaths were recorded. However, SLSA recorded a further 63 coastal fatalities taking the total number of coastal aquatic deaths to 173.

Acknowledging that 36 per cent of coastal aquatic deaths is not as a result of drowning creates a range of challenges for the greater community, SLS and all other aquatic emergency service agencies. Understanding the type of incidents that occur and the contributing elements and causes that lead to the fatality will assist all to help reduce incidents in the future.

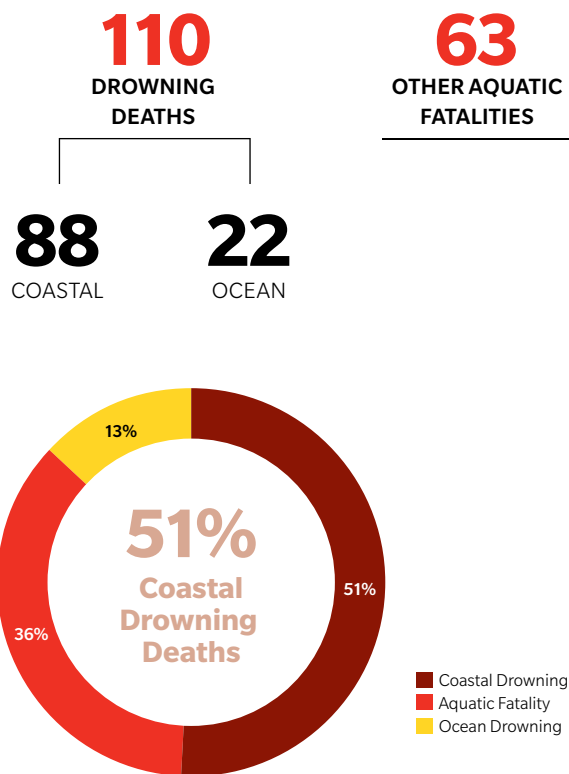


Figure 49
2017-18: OVERVIEW OF DROWNING DEATHS AND FATALITIES PER CATEGORY

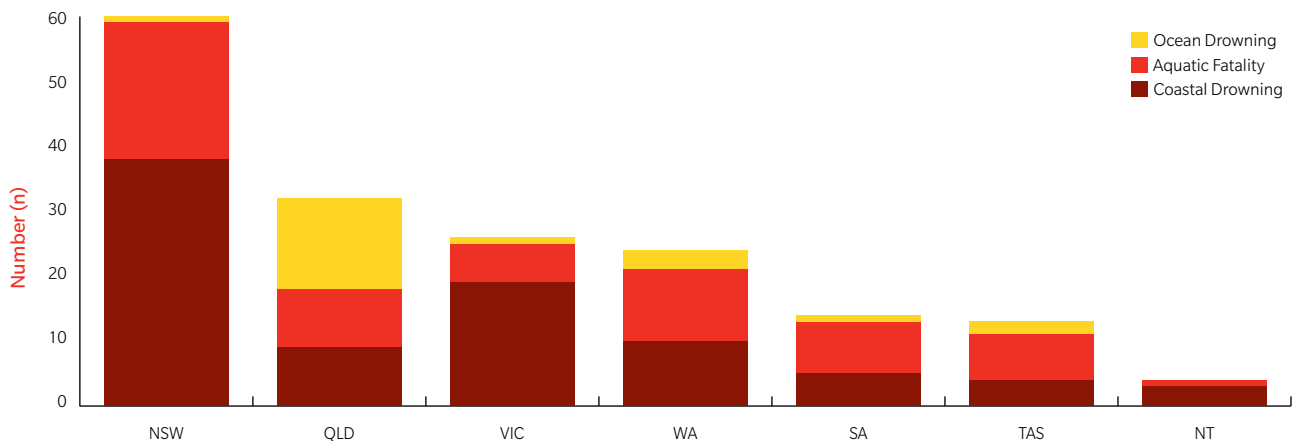


Figure 50
2017-18: OVERVIEW OF DROWNING DEATHS AND AQUATIC FATALITIES PER STATE

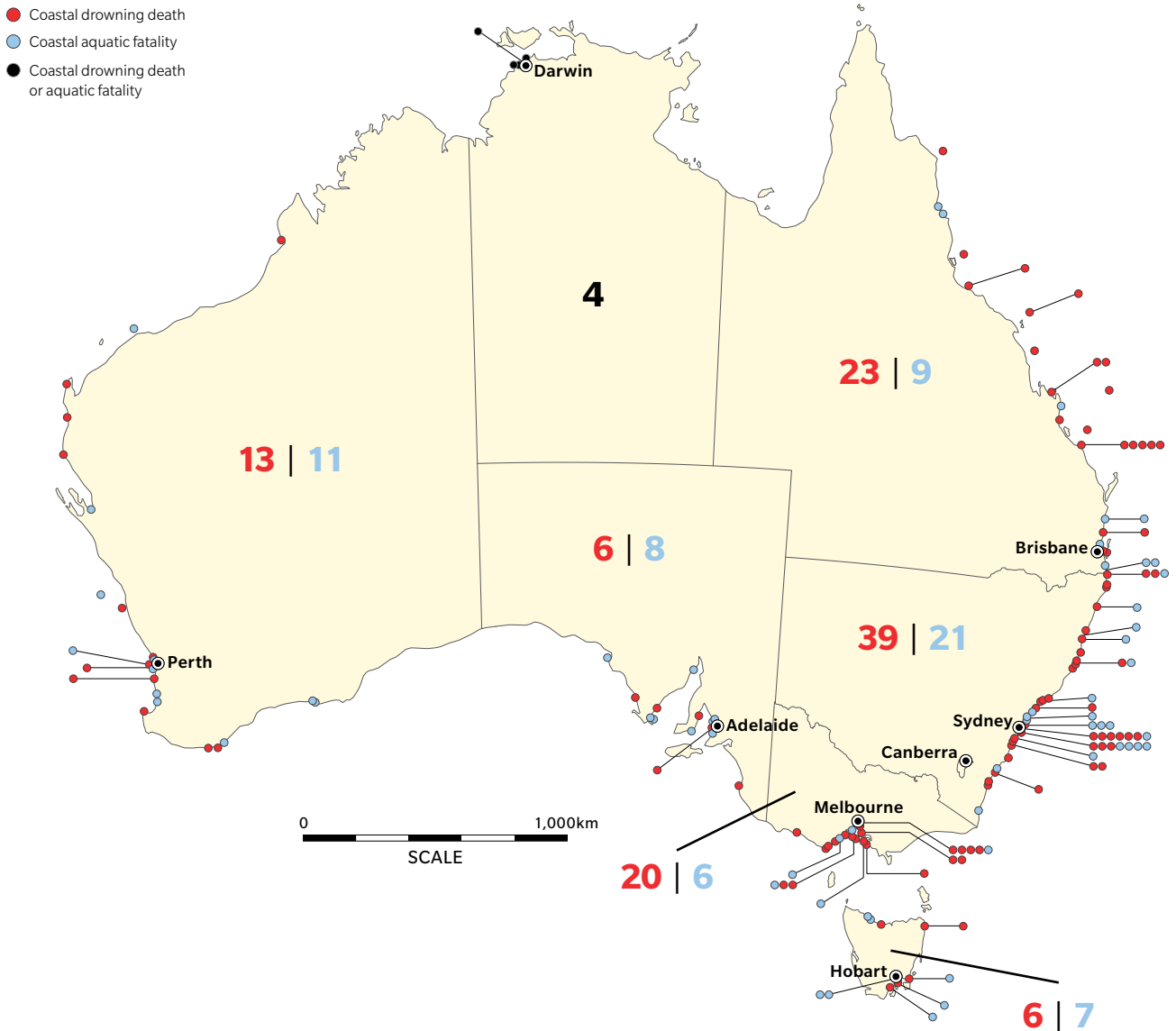


Figure 51

2017-18: COASTAL DROWNING DEATHS AND COASTAL AQUATIC FATALITIES BY STATE

In 2017-18 there were 110 coastal and ocean drowning deaths and 63 coastal aquatic fatalities. Red numbers indicate coastal and ocean drowning deaths per state. Blue numbers indicate coastal aquatic fatalities per state. The black number indicates both coastal drowning deaths and aquatic fatalities combined where the total incident number was lower than 5.

NATIONAL OVERVIEW

2017-18: 1-YEAR REVIEW



Figure 52

2017-18: COASTAL & OCEAN DROWNING DEATHS BY AGE AND GENDER (n=110)

The age group representing the highest rate of fatality is 40-44 (0.05 rate per 100,000 pop.). This is also the age group where females made up almost half (46%) of the drowning deaths. Overall, 80% (n=88) of fatalities were male.

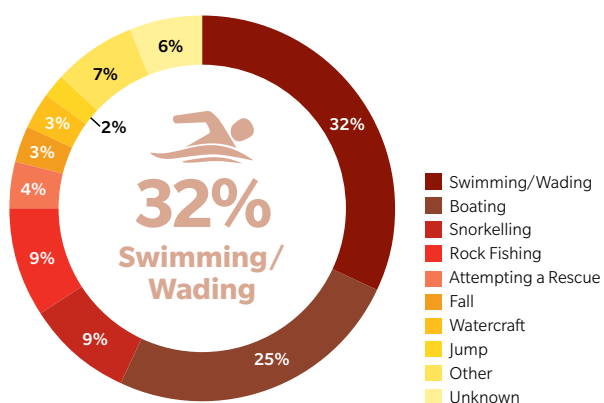


Figure 53

2017-18: COASTAL & OCEAN DROWNING DEATHS BY ACTIVITY (n=110)

The majority of coastal and ocean drowning deaths occurred while swimming or wading (n=35), boating (n=28), snorkelling (n=10) or rock fishing (n=10).

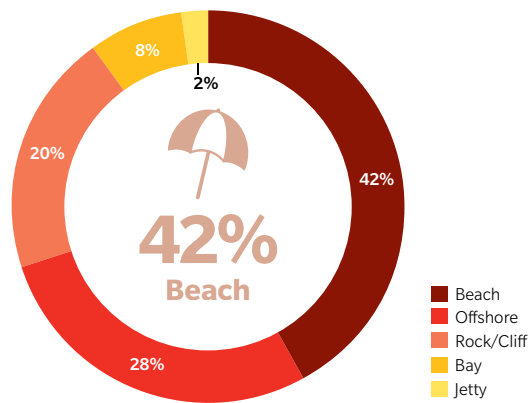


Figure 54

2017-18: LOCATION OF COASTAL & OCEAN DROWNING DEATHS (n=110)

The majority of coastal and ocean drowning deaths occurred at a beach (n=46), offshore (n=31) or at rock/cliff locations (n=22). Beach locations show a decrease (48% in 2015-16 and 43% in 2016-17) while offshore and rock/cliff locations show an increase from last year (26% and 15% respectively in 2016-17).

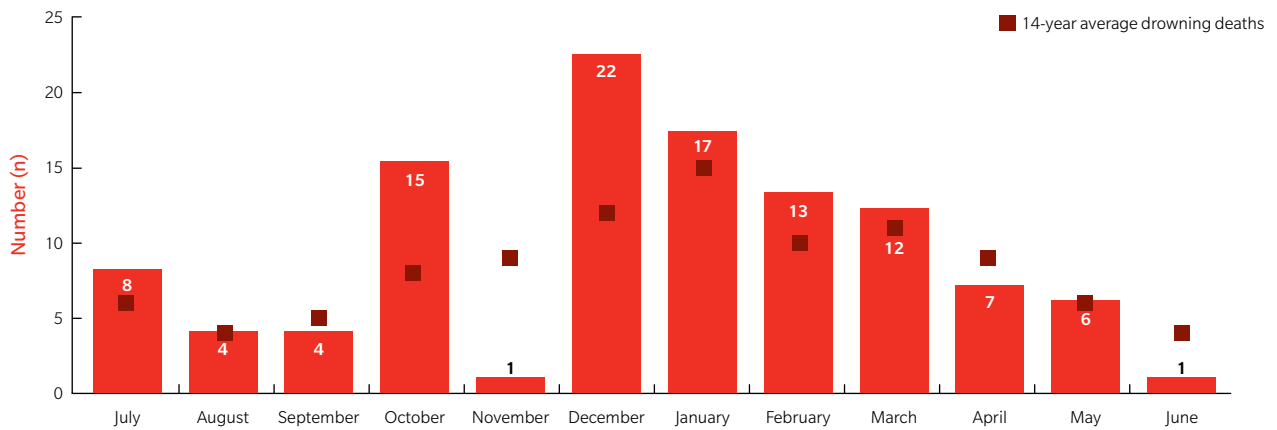


Figure 55
2017-18: COASTAL & OCEAN DROWNING DEATHS PER MONTH (n=110)

Of the 110 coastal and ocean drowning deaths, 47% (n=52) happened over the summer months (Dec-Feb) which is the highest on record from 2004 (average n=37). Dark-red squares indicate the 14-year average drowning deaths per month.

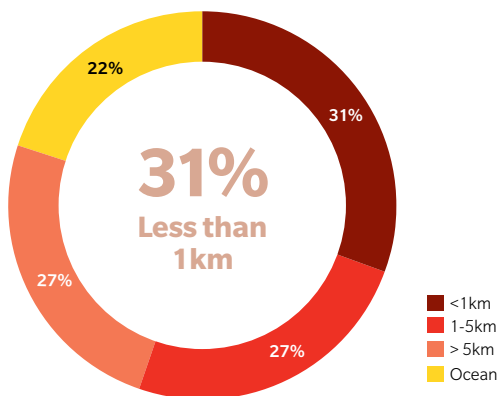


Figure 56
2017-18: DISTANCE FROM DROWNING LOCATION TO A LIFESAVING SERVICE (n=110)

Thirty-four individuals (31%) drowned within 1km of the nearest lifesaving service. Almost half (45%) of incidents happened further than 5km from a lifesaving service.

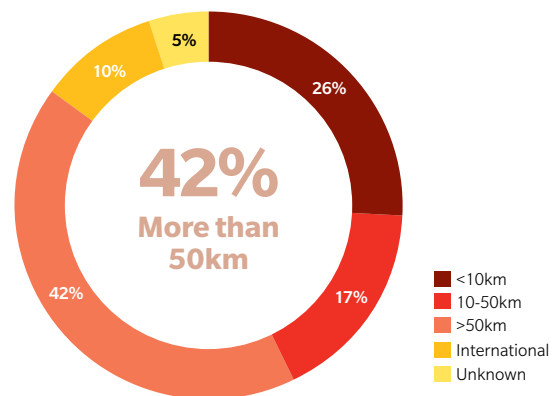


Figure 57
2017-18: DISTANCE FROM RESIDENCE TO DROWNING LOCATION (n=110)

Twenty-nine individuals lived less than 10km from the drowning location. 57 individuals (52%) lived more than 50km from the incident location or were international visitors.

DROWNING LOCATIONS

2004-18

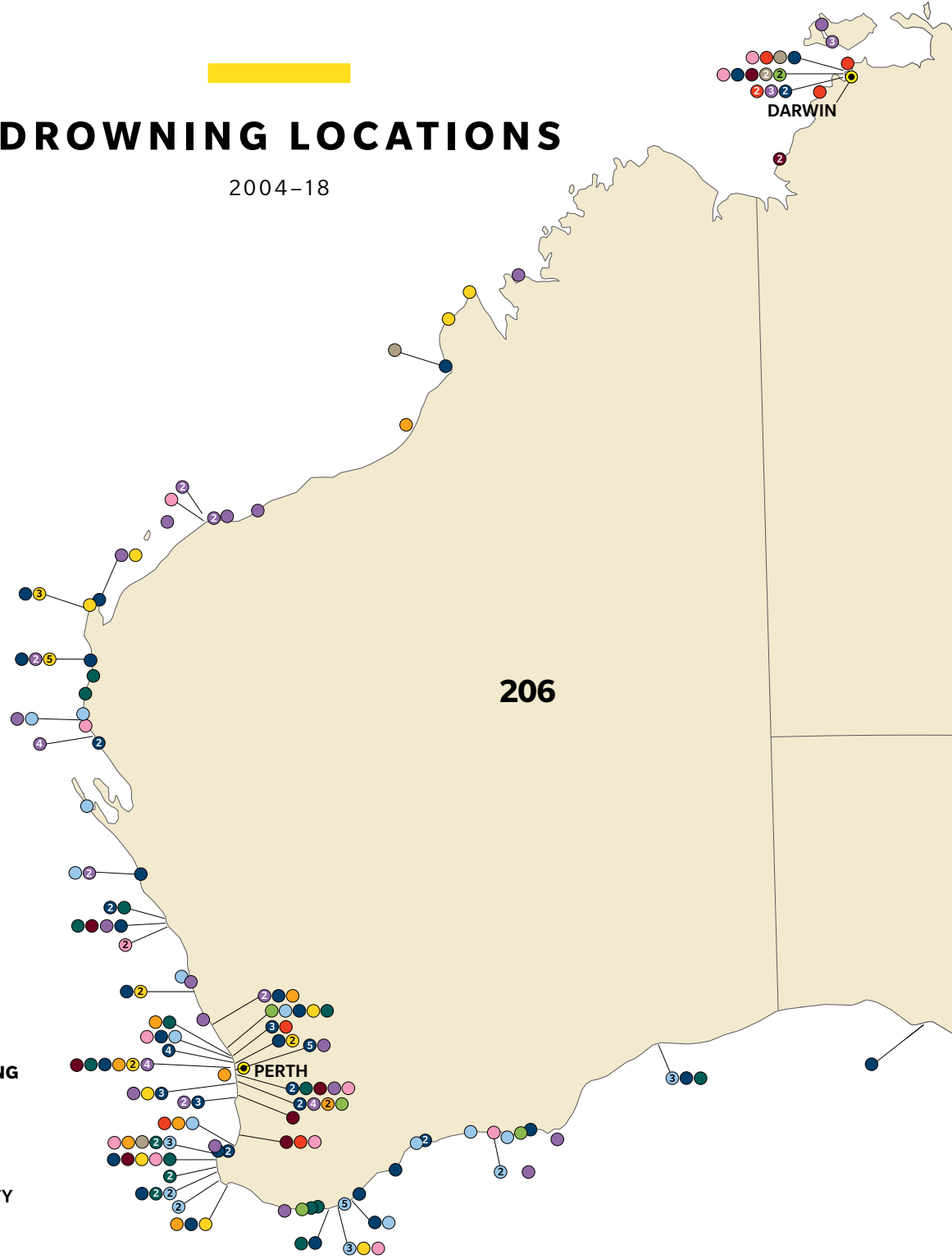
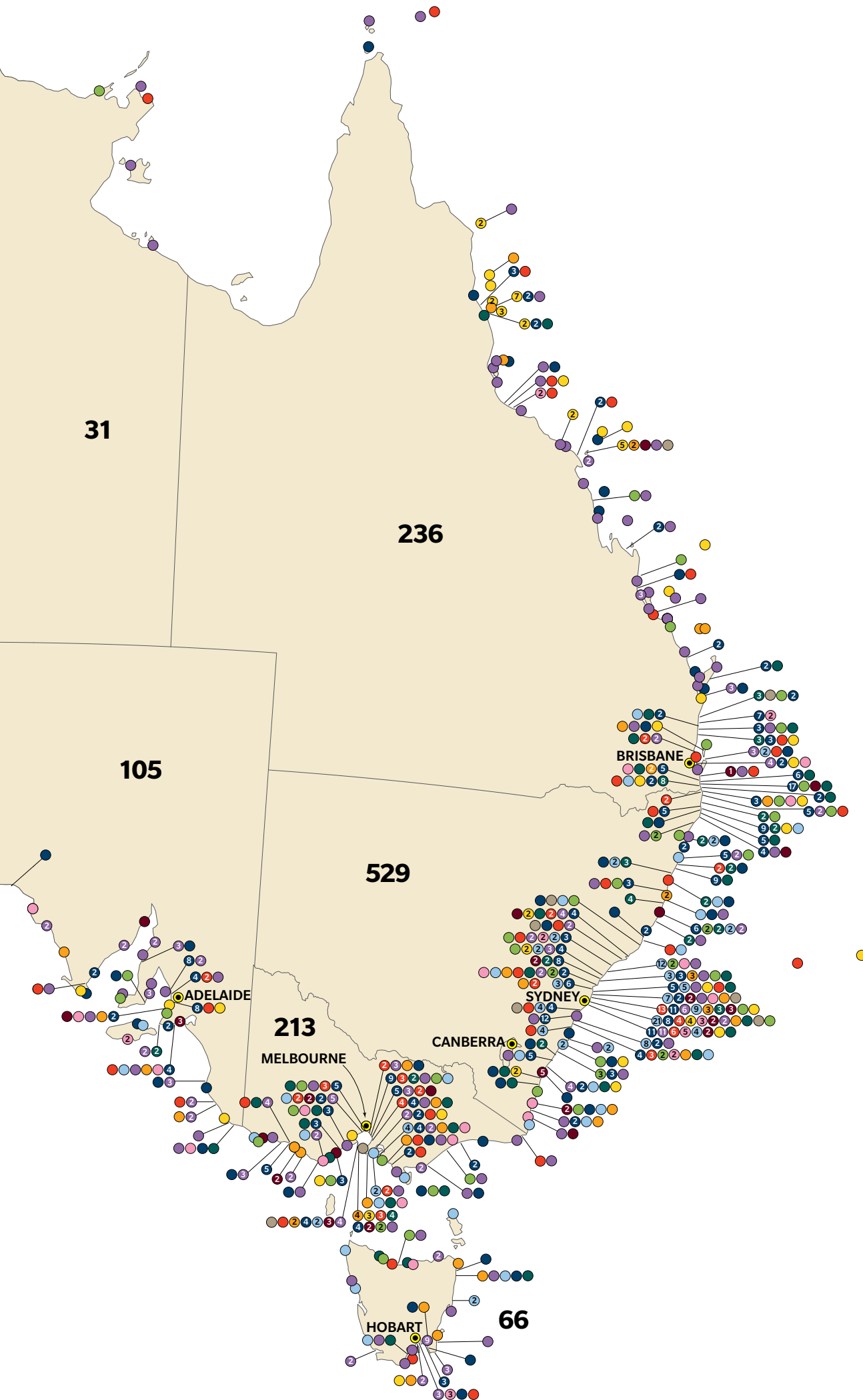


Figure 58
2004-18: COASTAL DROWNING DEATHS BY ACTIVITY

KEY TO DROWNING ACTIVITY

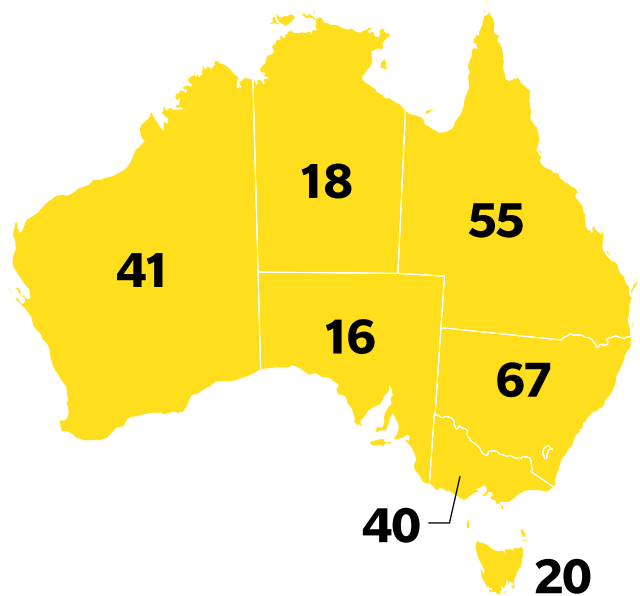
- Attempting a Rescue
- Boating
- Scuba Diving
- Rock Fishing
- Fall
- Jump
- Snorkelling
- Swimming/Wading
- Watercraft
- Other
- Unknown
- ② Multiple instances per activity at the same location
- Capital city

0 1,000km
SCALE



FEATURE: ALCOHOL AND DRUGS

A risk factor for drowning, non-fatal drowning and injury associated with aquatic activity is alcohol and drug misuse. Nineteen per cent (n=257) of drowning deaths that occurred on the coast are attributed to alcohol and drugs. Males aged 20 to 54 are highly represented (54%). Almost half (48%, n=124) of all cases occurred more than 5km away from the nearest surf life saving service.



74% AGED 20-54

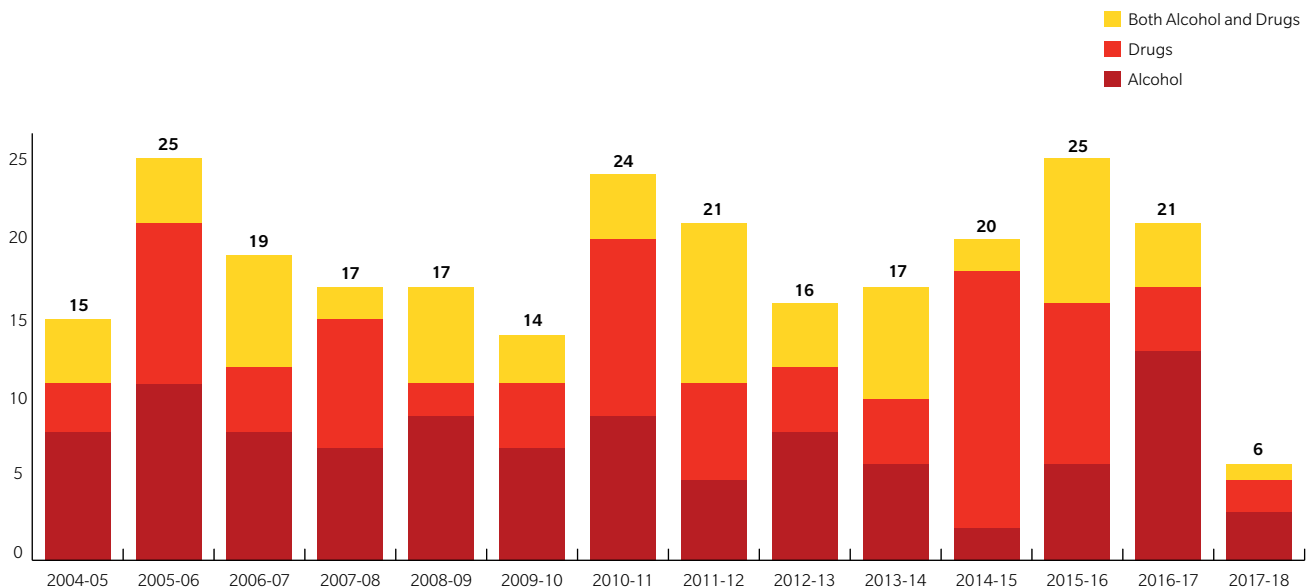


Figure 59

2004-18: COASTAL DROWNING DEATHS ATTRIBUTED TO ALCOHOL AND DRUGS BY YEAR (n=257)

The number of drowning deaths involving alcohol, drugs or both varies over time. Note that 86% of 2017-18 cases are still open in NCIS and no reliable toxicity data is available for these yet.

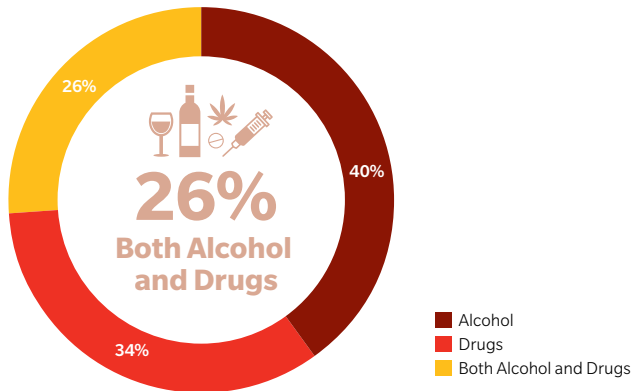


Figure 60
2004-18: ALCOHOL AND DRUG RELATED DROWNING DEATHS (n=257)

Of the cases where alcohol and drugs were involved, 40% consumed alcohol only, 34% consumed drugs only and 26% had both in their system.

40% OF ALCOHOL RELATED COASTAL DROWNING DEATHS WERE 4 TIMES OR MORE ABOVE THE LEGAL LIMIT



MOST ENCOUNTERED DRUGS



1. THC (CANNABIS)



2. AMPHETAMINES



3. PRESCRIPTION

LOCATION OF DROWNING



43% BEACH



18% OFFSHORE



17% ROCK/CLIFF

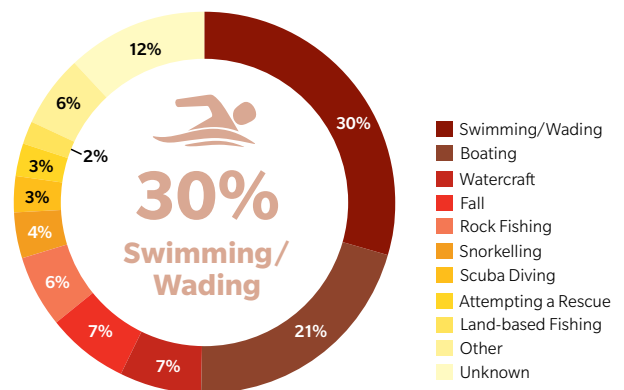


Figure 61
2004-18: ALCOHOL AND DRUG RELATED DROWNING DEATHS BY ACTIVITY (n= 257)

Swimming (n=76) and boating (n=54) are the two activities with the highest amount of alcohol and drug related drowning deaths.

SNAPSHOT: RIP CURRENTS

2004-2018



DROWNING DEATHS

262

AVERAGE DROWNING DEATHS PER YEAR

19

AVERAGE FATALITY RATE

0.09

PER 100,000 POPULATION

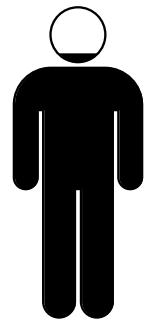
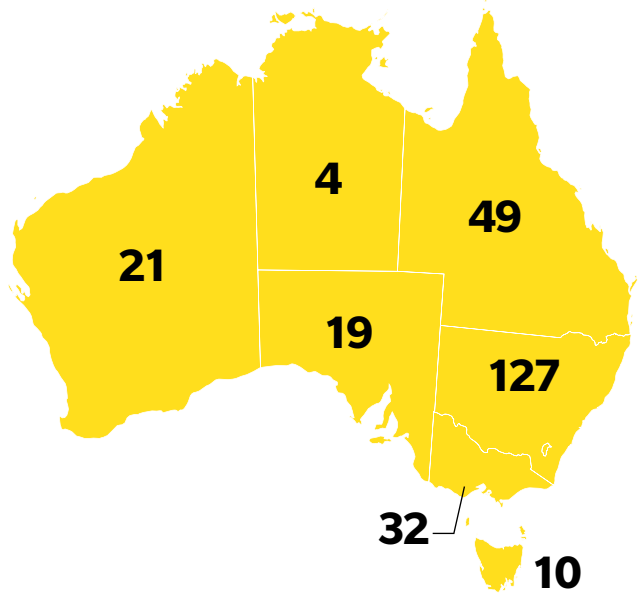
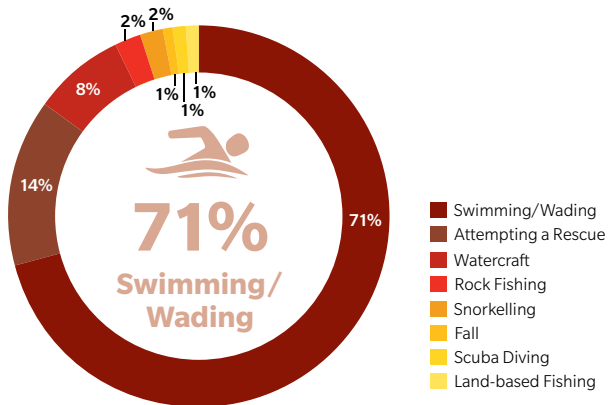
KEY DEMOGRAPHIC

15-39

YEAR OLD MALES

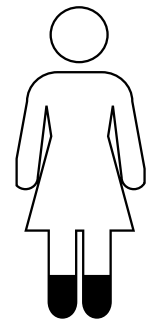
AUSTRALIAN RESIDENTS,
BORN IN AUSTRALIA OR
OVERSEAS

DROWNING DEATHS BY ACTIVITY

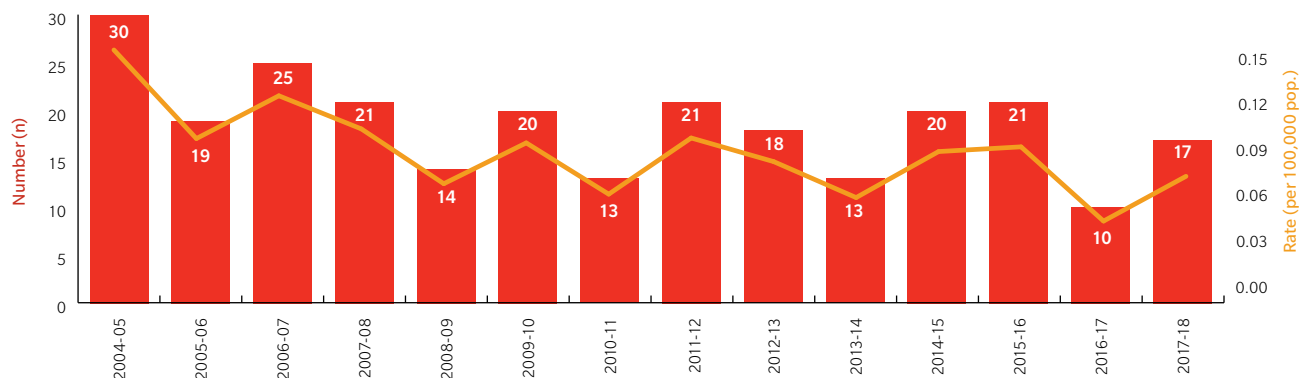


86%
MALE

14%
FEMALE



RIP-CURRENT DROWNING DEATHS 2004-18



SNAPSHOT: BOATING

2004-2018



DROWNING DEATHS

262

AVERAGE DROWNING DEATHS PER YEAR

19

AVERAGE FATALITY RATE

0.08

PER 100,000 POPULATION

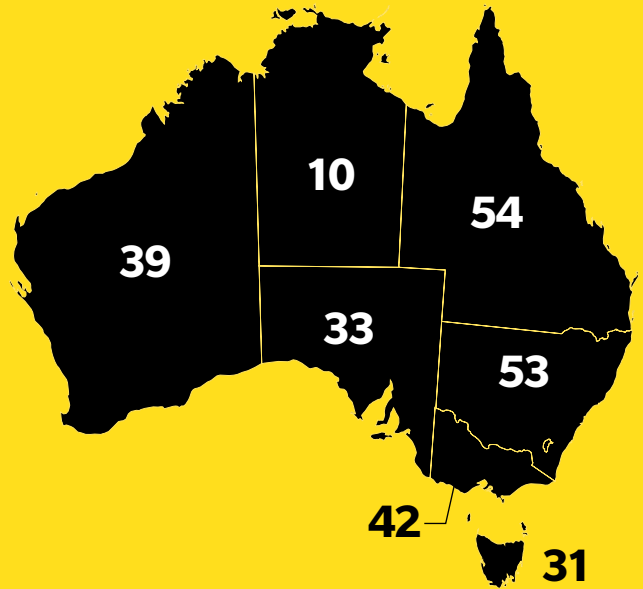
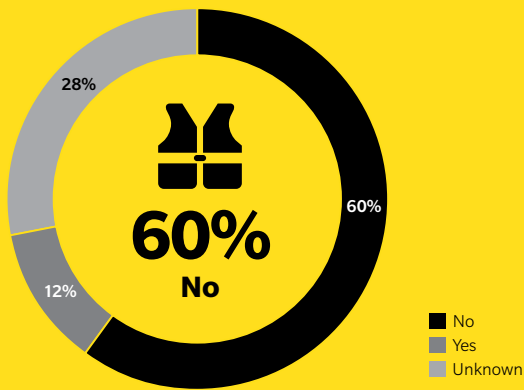
KEY DEMOGRAPHIC

60-75

YEAR OLD MALES

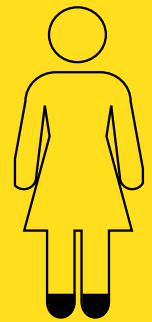
AUSTRALIAN RESIDENTS, AUSTRALIAN BORN

LIFEJACKET USE AT TIME OF INCIDENT



92%

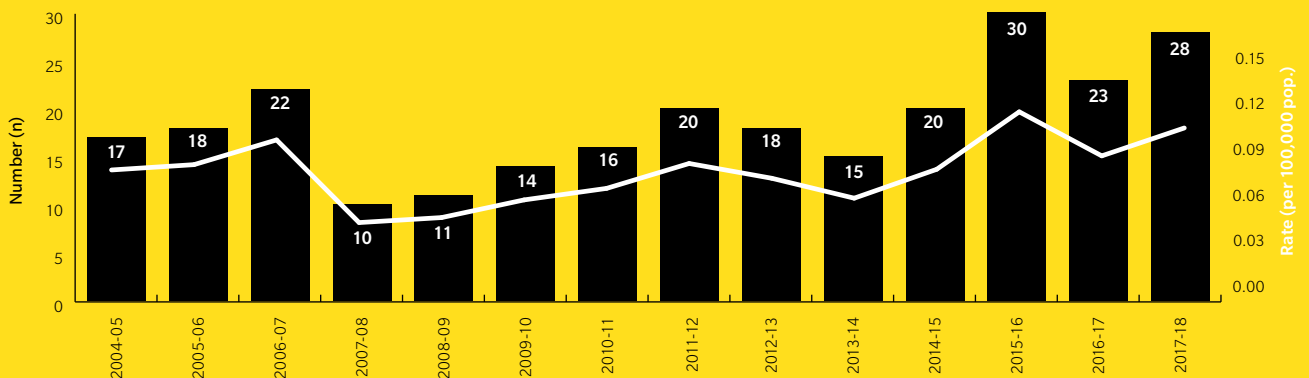
MALE



8%

FEMALE

BOATING DROWNING DEATHS 2004-18



SNAPSHOT: ROCK FISHING

2004-2018



DROWNING DEATHS

167

AVERAGE DROWNING DEATHS PER YEAR

12

AVERAGE FATALITY RATE

0.05

PER 100,000 POPULATION

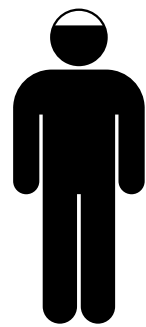
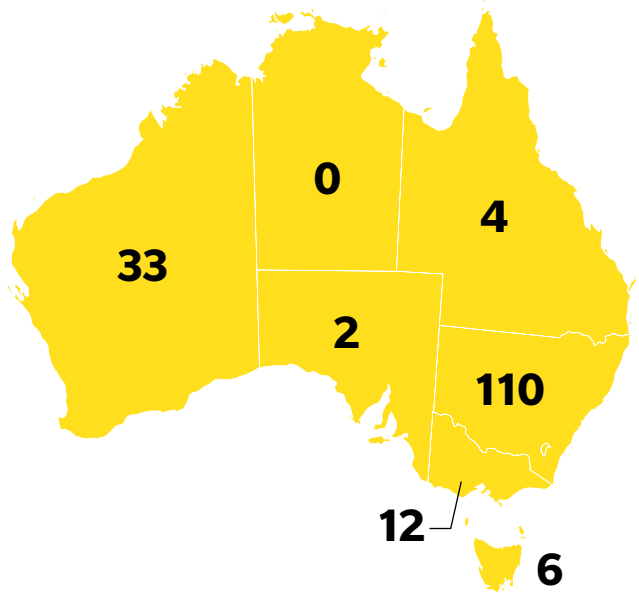
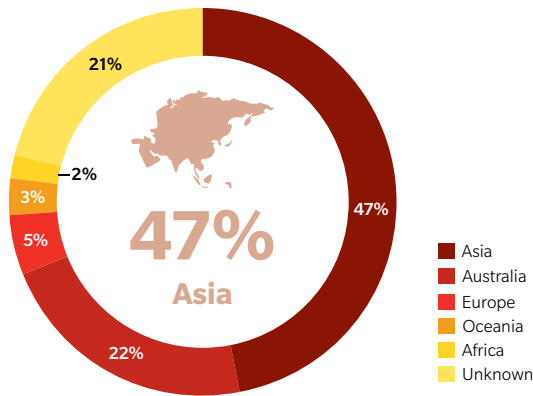
KEY DEMOGRAPHIC

40-65

YEAR OLD MALES

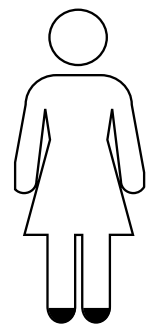
AUSTRALIAN RESIDENTS,
BORN IN AUSTRALIA OR
ASIA

REGION OF BIRTH

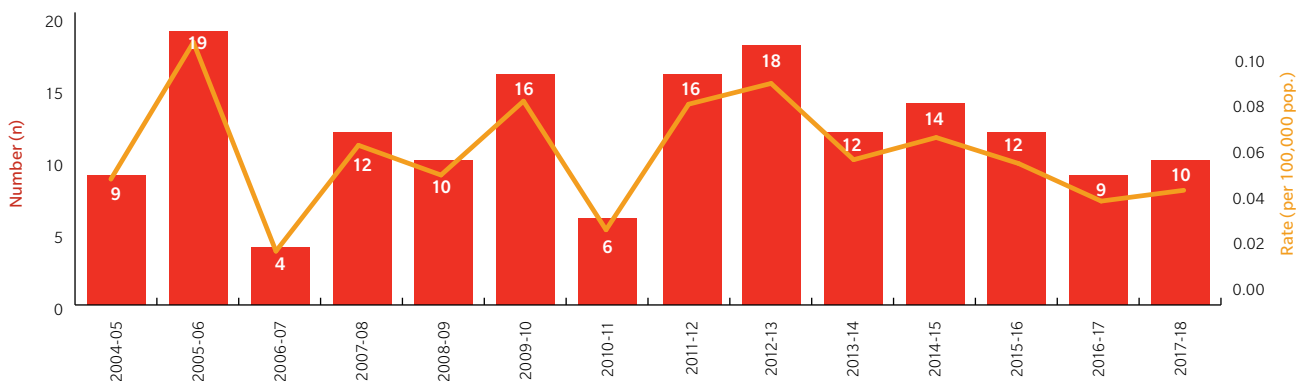


95%
MALE

5%
FEMALE



ROCK FISHING DROWNING DEATHS 2004-18



SNAPSHOT: WATERCRAFT

2004-2018



DROWNING DEATHS

105

AVERAGE DROWNING DEATHS PER YEAR

8

AVERAGE FATALITY RATE

0.03

PER 100,000 POPULATION

KEY DEMOGRAPHIC

25-39

YEAR OLD MALES

AUSTRALIAN RESIDENTS, SURFERS, BODY BOARDERS & KAYAKERS

55-64

YEAR OLD MALES

AUSTRALIAN RESIDENTS & SURFERS



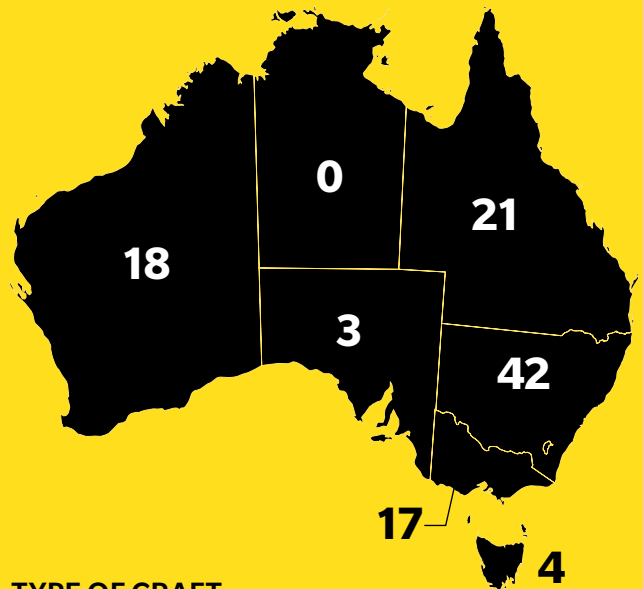
94%

MALE

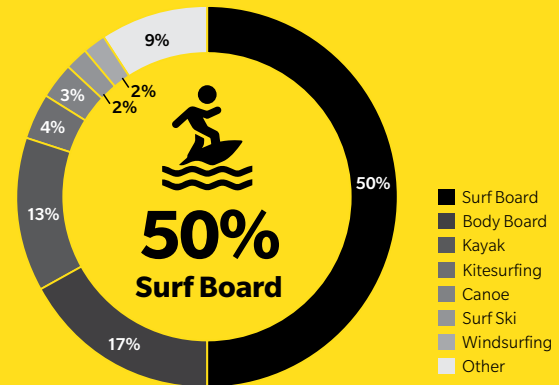


6%

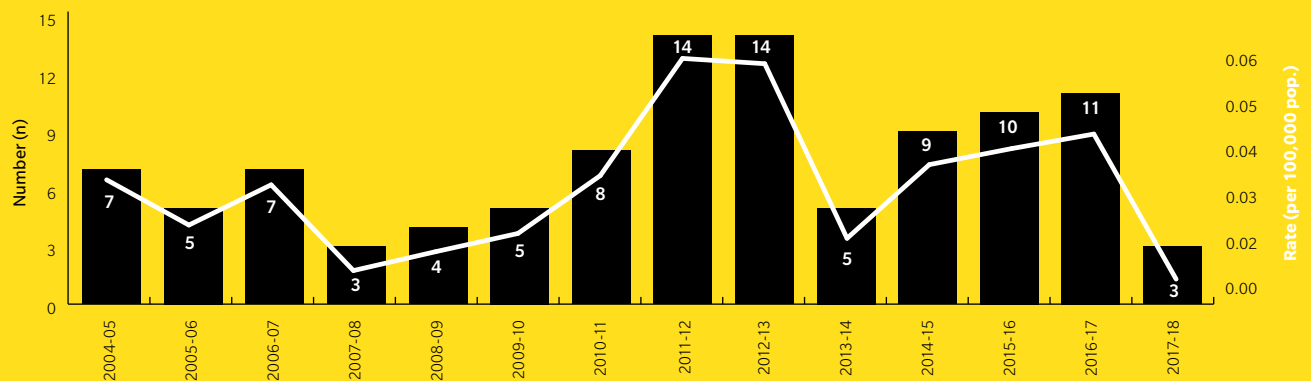
FEMALE



TYPE OF CRAFT



WATERCRAFT DROWNING DEATHS 2004-18



NEW SOUTH WALES

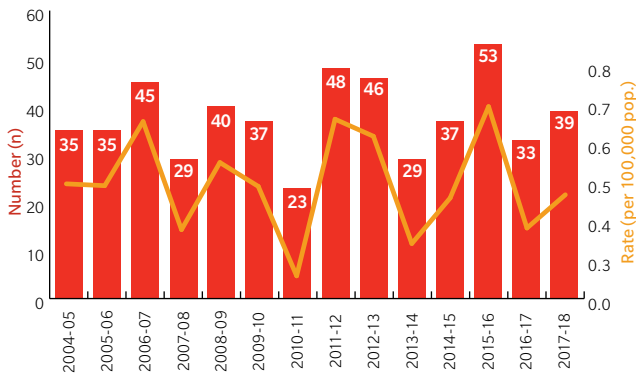


Figure 62
2004–18: 14-YEAR TREND OF NSW COASTAL & OCEAN DROWNING DEATHS

In 2017–18, coastal and ocean drowning deaths in New South Wales (NSW) were just over the 14-year average of 38. The rate per 100,000 population was 0.49, just under the average 14-year rate.

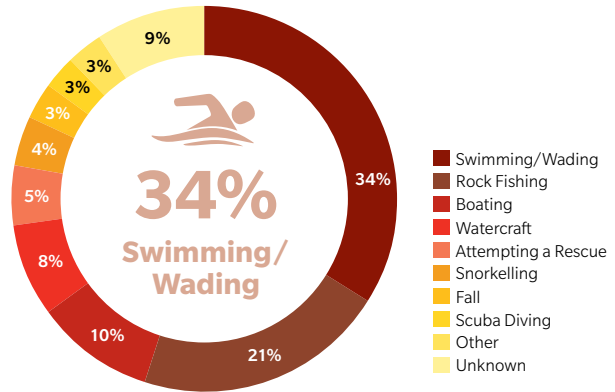


Figure 63
2004–18: COASTAL & OCEAN DROWNING DEATHS BY ACTIVITY (n=529)

The majority of coastal and ocean drowning deaths in NSW occurred when swimming/wading (n=178), rock fishing (n=110), boating (n=53) and using watercraft (n=43).

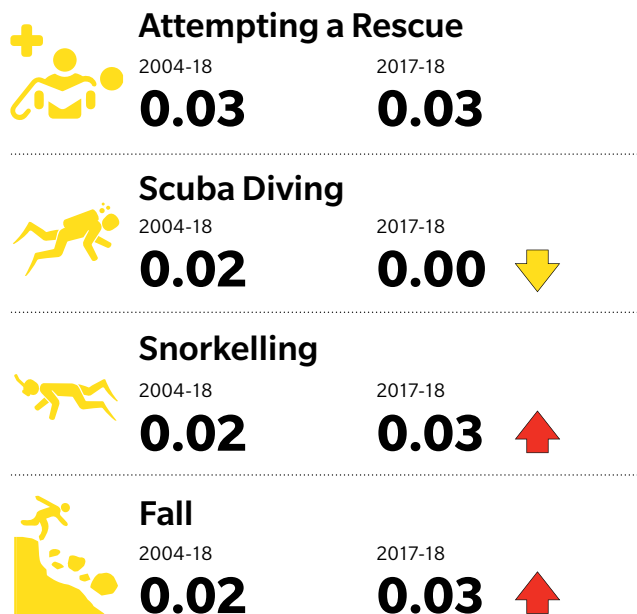
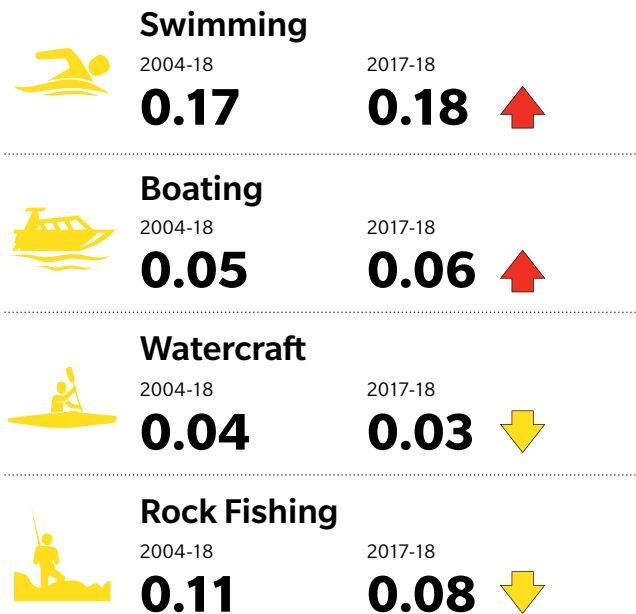
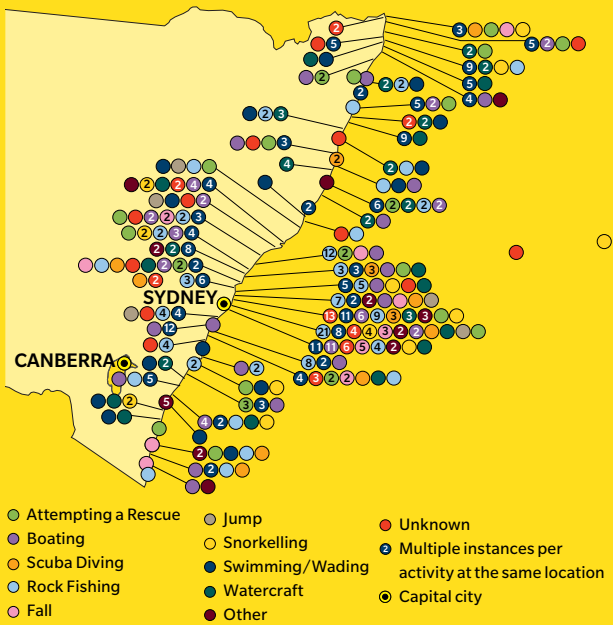


Figure 64
14-YEAR AVERAGE VS 2017-18 COASTAL & OCEAN DROWNING RATES BY ACTIVITY

In 2017-18 drowning death rates (per 100,000 population) were lower than the 14-year average in watercraft, rock fishing, attempting a rescue and scuba diving related incidents. The yearly rate of incidents related to swimming/wading, boating, snorkelling and falls was higher than the 14-year average.

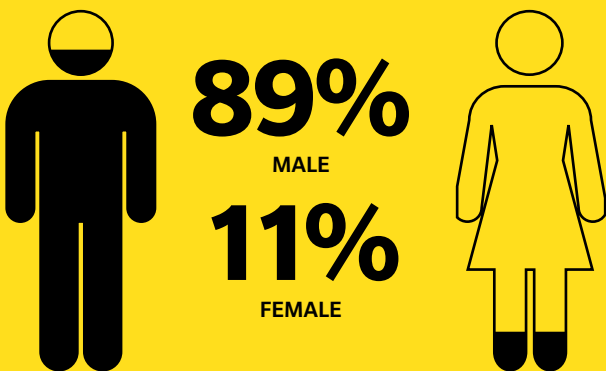
DROWNING SNAPSHOT

2004-18 COASTAL & OCEAN DROWNING DEATHS



AVERAGE NUMBER
38

AVERAGE FATALITY RATE
0.52
PER 100,000 POPULATION



KEY DEMOGRAPHIC

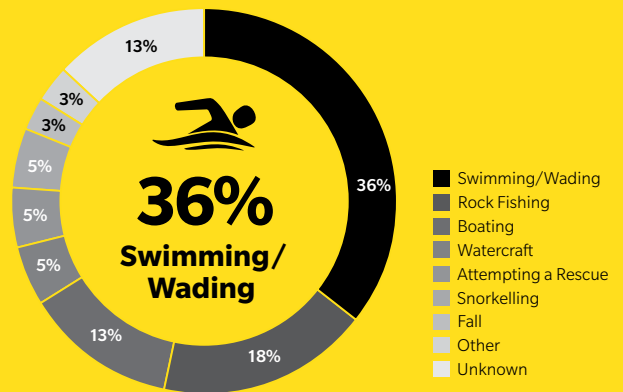
20-29 & **45-54**
YEAR OLD SWIMMERS/WADERS YEAR OLD ROCK FISHERS

2017-18 COASTAL & OCEAN DROWNING DEATHS

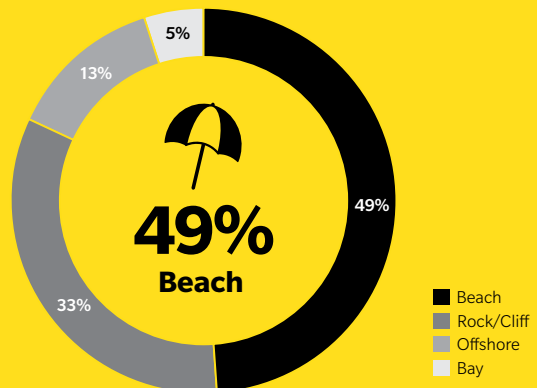
COASTAL & OCEAN DROWNING DEATHS
39

FATALITY RATE
0.49
PER 100,000 POPULATION

DROWNING DEATHS BY ACTIVITY



DROWNING DEATHS BY LOCATION



62% LESS THAN 1KM FROM A SURF LIFE SAVING SERVICE

QUEENSLAND

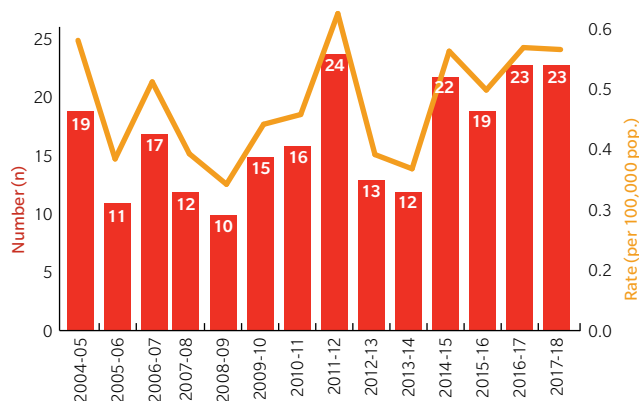


Figure 65
2004-18: 14-YEAR TREND OF QLD COASTAL & OCEAN DROWNING DEATHS

In 2017-18, 9 coastal and 14 ocean drowning deaths were recorded in Queensland (Qld). From 2004 to 2018, there has been an average of 17 coastal drowning deaths per year, which is an average rate of 0.36 per 100,000 population.

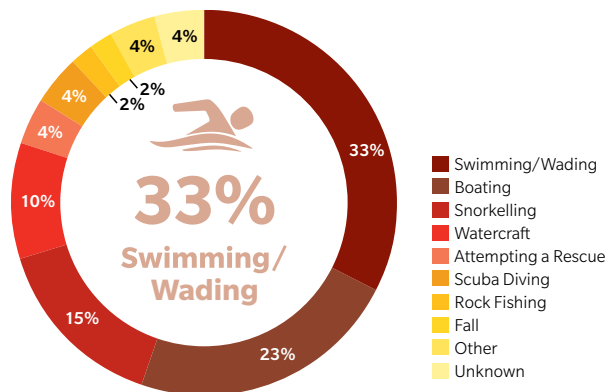


Figure 66
2004-18: COASTAL & OCEAN DROWNING DEATHS BY ACTIVITY (n=236)

The majority of coastal and ocean drowning deaths in Qld occurred when swimming/wading (n=77), boating (n=55), snorkelling (n=35) and using watercraft (n=23).

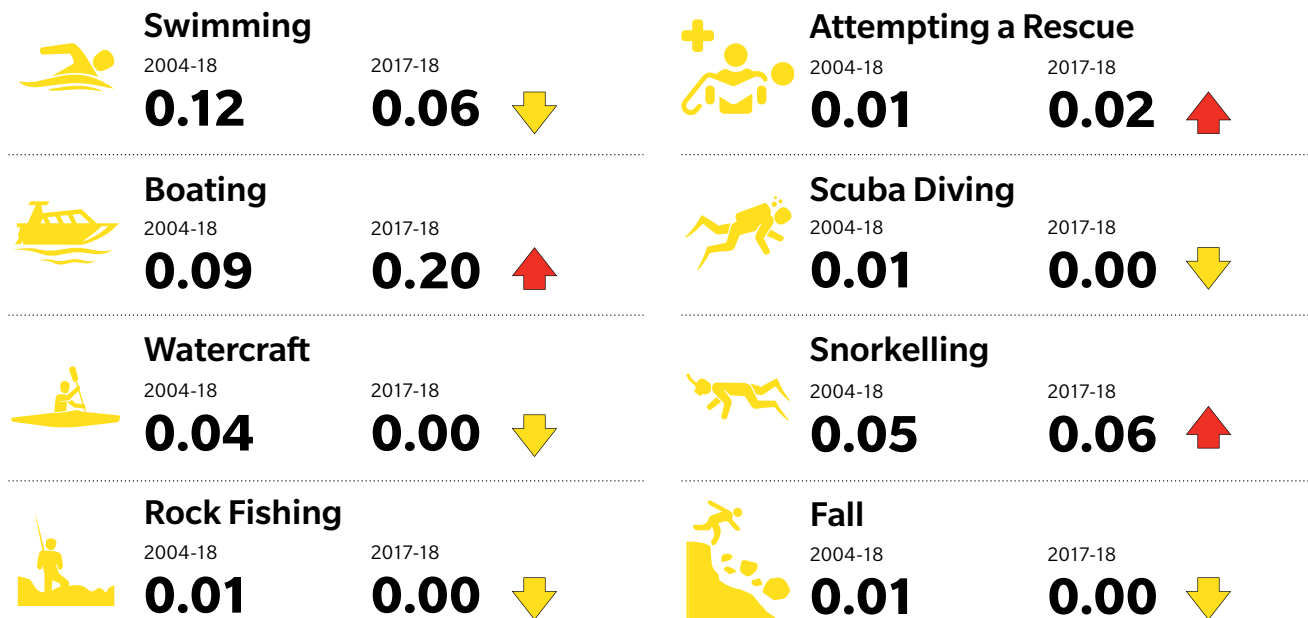
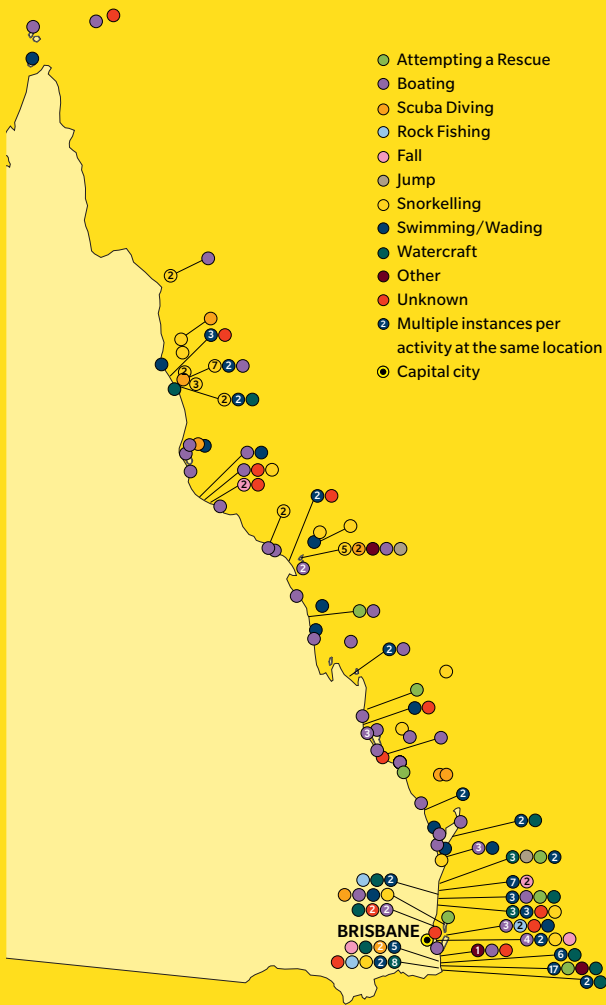


Figure 67
14-YEAR AVERAGE VS 2017-18 COASTAL & OCEAN DROWNING RATES BY ACTIVITY

Drowning death rates (per 100,000 population) were lower than the 14-year average in most activities in 2017-18. Exceptions are boating, attempting a rescue and snorkelling incidents.

DROWNING SNAPSHOT

2004-18 COASTAL & OCEAN DROWNING DEATHS



2017-18 COASTAL & OCEAN DROWNING DEATHS

COASTAL & OCEAN DROWNING DEATHS

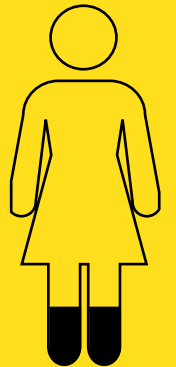
23

43%
BOATING

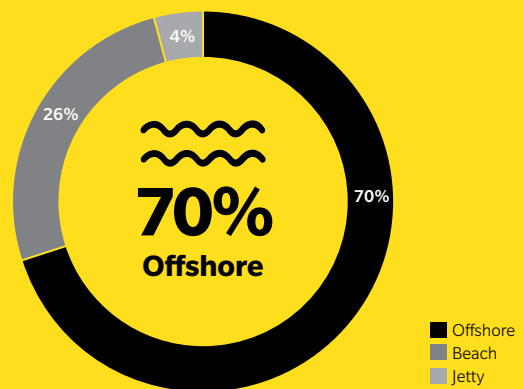


83%
MALE

17%
FEMALE



DROWNING DEATHS BY LOCATION



AVERAGE NUMBER

17

AVERAGE FATALITY RATE

0.36

PER 100,000 POPULATION

KEY DEMOGRAPHIC

25-34

&

60-64

YEAR OLD SWIMMERS/
WADERS

YEAR OLD BOATERS

87%

GREATER THAN
5KM FROM A SURF
LIFE SAVING SERVICE

VICTORIA

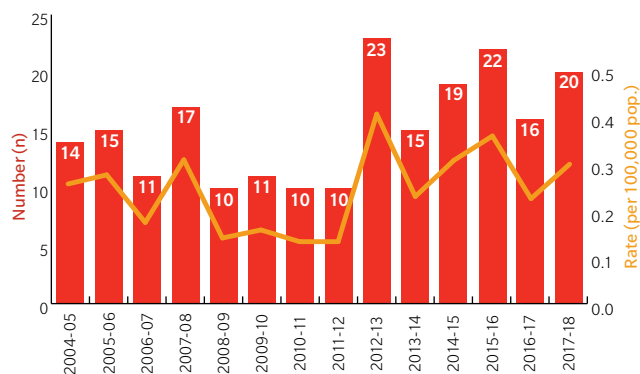


Figure 68
2004-18: 14-YEAR TREND OF VIC COASTAL & OCEAN DROWNING DEATHS

In 2017-18, the number of coastal and ocean drowning deaths in Victoria (Vic) showed an increase from 2016-17 and was above the 14-year average of 15.

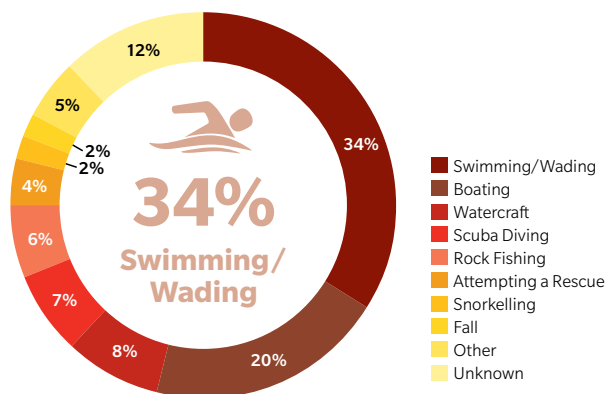


Figure 69
2004-18: COASTAL & OCEAN DROWNING DEATHS BY ACTIVITY (n=213)

The majority of coastal and ocean drowning deaths in Vic occurred when swimming/wading (n=73), boating (n=42) and using watercraft (n=17).

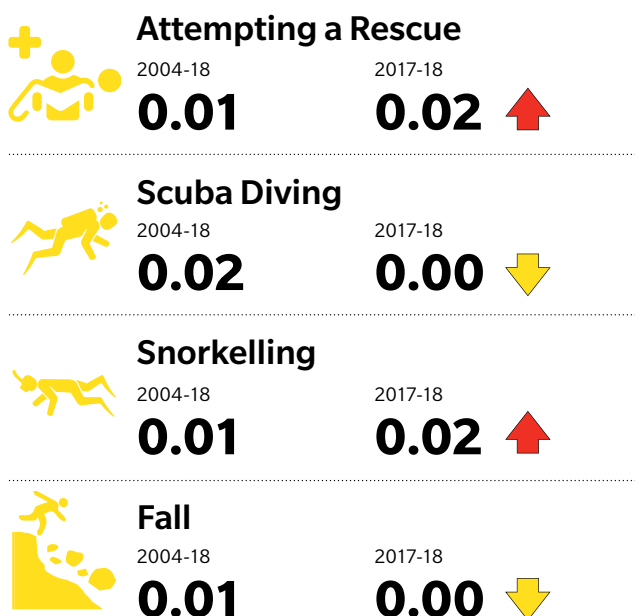
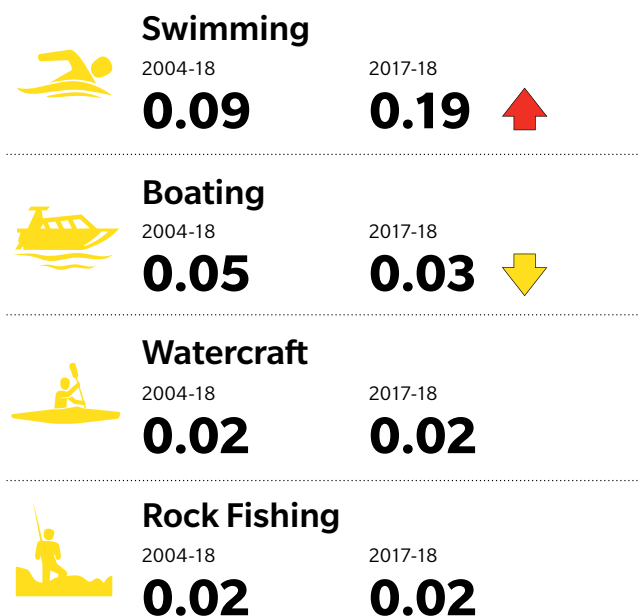
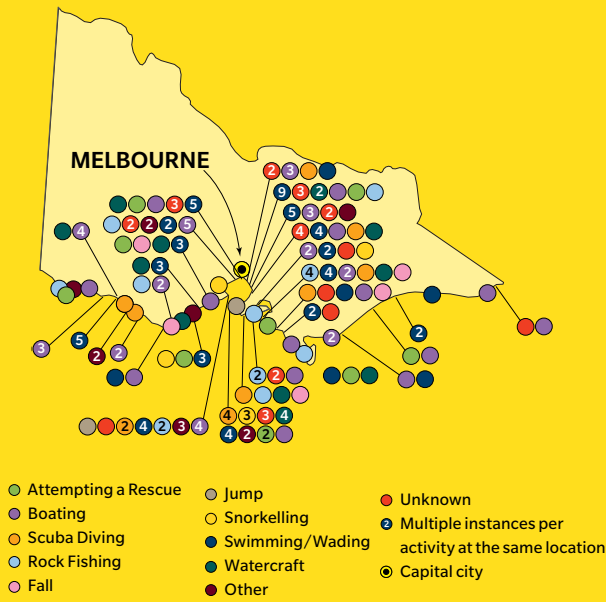


Figure 70
14-YEAR AVERAGE VS 2017-18 COASTAL & OCEAN DROWNING RATES BY ACTIVITY

In 2017-18 drowning death rates (per 100,000 population) were lower than or equal to the 14-year average in boating, watercraft, rock fishing, scuba diving and falls. The yearly rate of incidents related to swimming/wading, attempting a rescue and snorkelling was higher than the 14-year average.

DROWNING SNAPSHOT

2004-18 COASTAL & OCEAN DROWNING DEATHS



AVERAGE NUMBER
15

AVERAGE FATALITY RATE
0.26
PER 100,000 POPULATION



KEY DEMOGRAPHIC

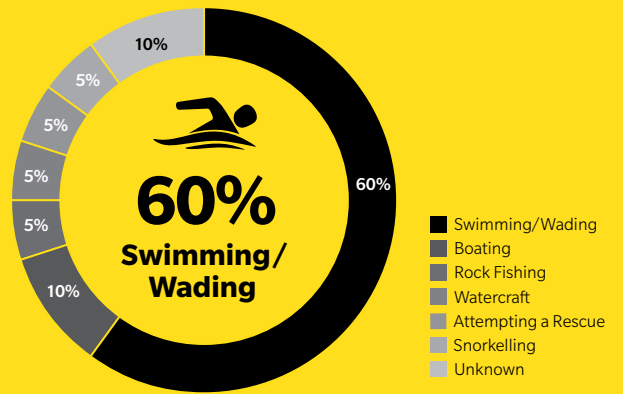
30-44 & **60-64**
YEAR OLD SWIMMERS & YEAR OLD BOATERS

2017-18 COASTAL & OCEAN DROWNING DEATHS

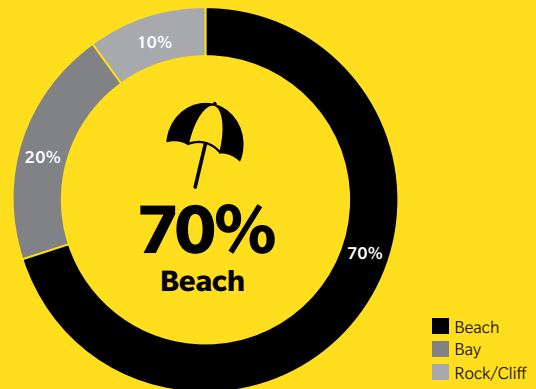
COASTAL & OCEAN DROWNING DEATHS
20

FATALITY RATE
0.31
PER 100,000 POPULATION

DROWNING DEATHS BY ACTIVITY



DROWNING DEATHS BY LOCATION



50% BETWEEN 1 AND 5KM FROM A SURF LIFE SAVING SERVICE

WESTERN AUSTRALIA

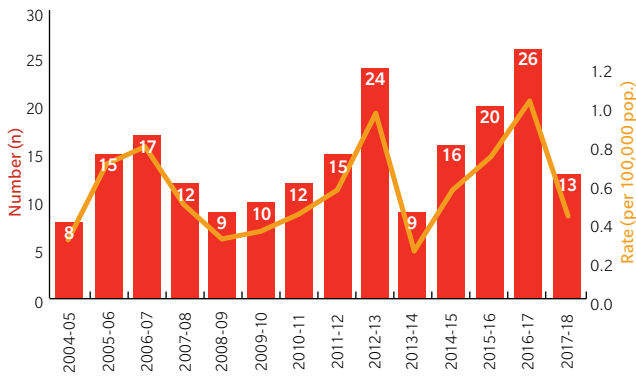


Figure 71
2004-18: 14-YEAR TREND OF WA COASTAL & OCEAN DROWNING DEATHS

In 2017-18, coastal and ocean drowning deaths in Western Australia (WA) dropped to below the 14-year average of 15 after a record high in 2016-17. From 2004 to 2018, the average rate per 100,000 population is 0.62.

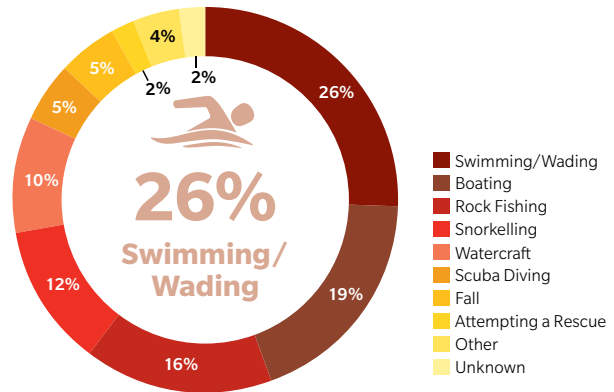


Figure 72
2004-18: COASTAL & OCEAN DROWNING DEATHS BY ACTIVITY (n=206)

The majority of coastal and ocean drowning deaths in WA occurred when swimming/wading (n=53), boating (n=39), rock fishing (n=33) and snorkelling (n=24).

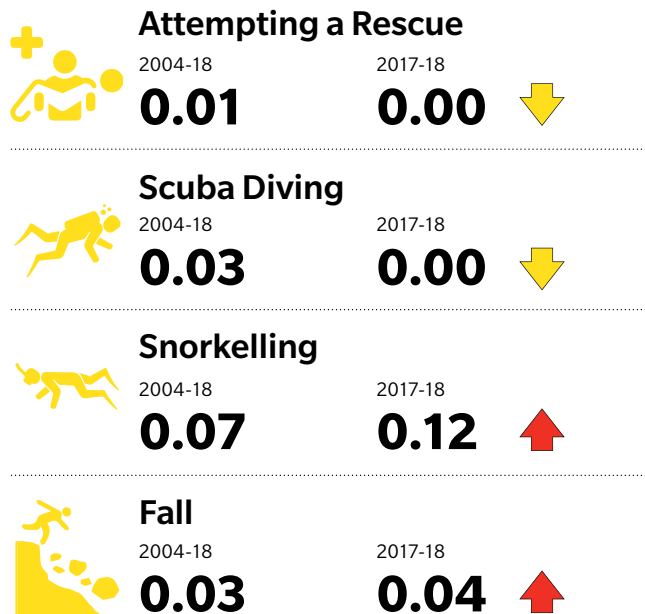
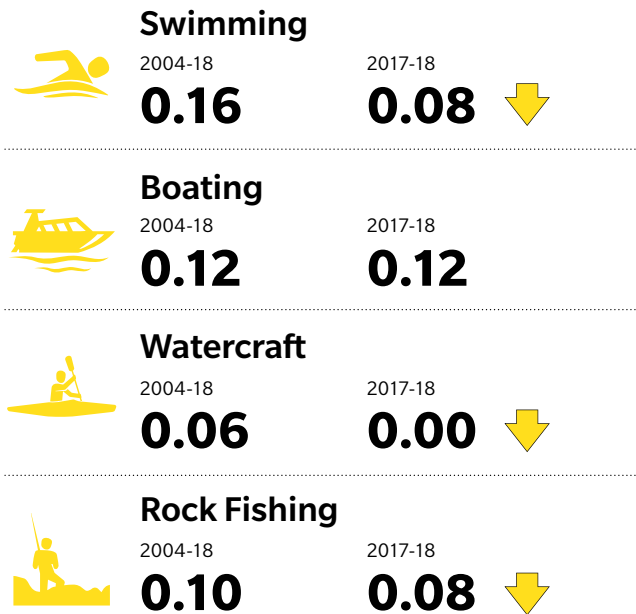


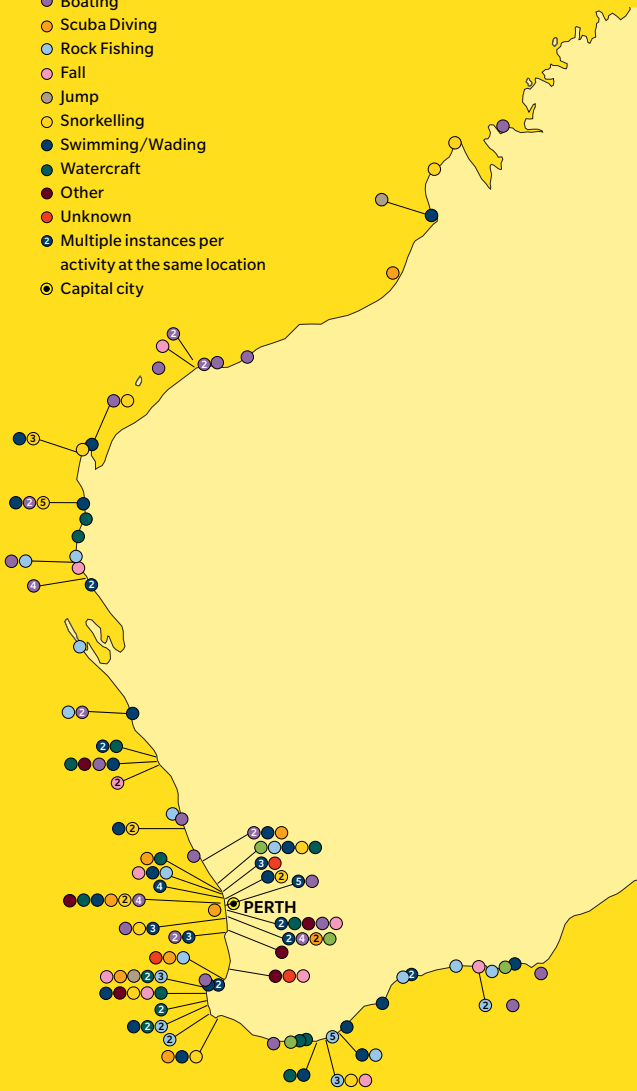
Figure 73
14-YEAR AVERAGE VS 2017-18 COASTAL & OCEAN DROWNING RATES BY ACTIVITY

Drowning death rates (per 100,000 population) were lower than the 14-year average in most activities in 2017-18. Exceptions are snorkelling and fall related incidents.

DROWNING SNAPSHOT

2004-18 COASTAL & OCEAN DROWNING DEATHS

- Attempting a Rescue
- Boating
- Scuba Diving
- Rock Fishing
- Fall
- Jump
- Snorkelling
- Swimming/Wading
- Watercraft
- Other
- Unknown
- Multiple instances per activity at the same location
- Capital city



2017-18 COASTAL & OCEAN DROWNING DEATHS

COASTAL & OCEAN DROWNING DEATHS

13



23%
BOATING

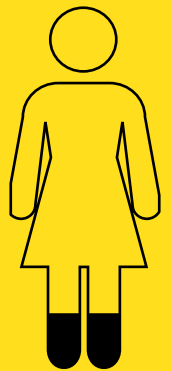


85%

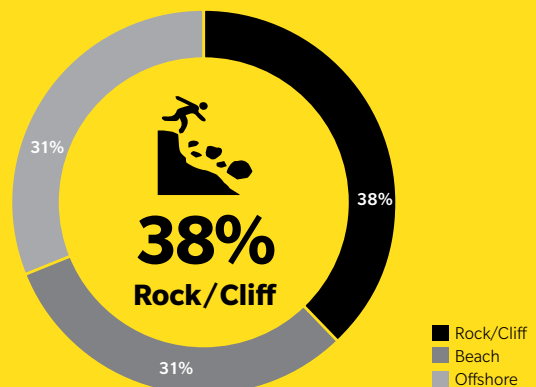
MALE

15%

FEMALE



DROWNING DEATHS BY LOCATION



KEY DEMOGRAPHIC

25-34 & **65-69**

YEAR OLD SWIMMERS/
WADERS & SNORKELLERS

YEAR OLD BOATERS

62%

GREATER THAN
5KM FROM A SURF
LIFE SAVING SERVICE

SOUTH AUSTRALIA

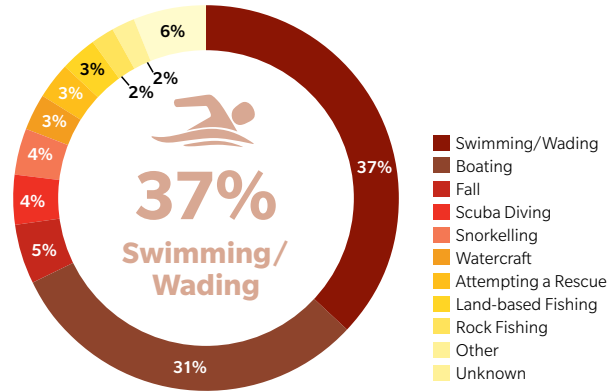
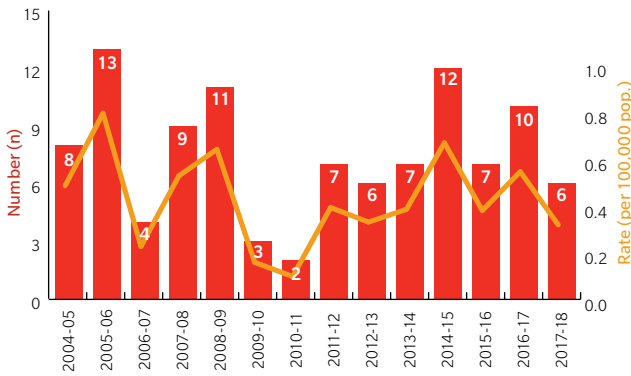


Figure 74
2004-18: 14-YEAR TREND OF SA COASTAL & OCEAN DROWNING DEATHS

In 2017-18, the number of coastal and ocean drowning deaths in South Australia (SA) dropped below the 2004-18 annual average of 8. This year, the rate per 100,000 population was also lower than the average of 0.46.

Figure 75
2004-18: COASTAL & OCEAN DROWNING DEATHS BY ACTIVITY (n=105)

The majority of coastal and ocean drowning deaths in SA occurred when swimming/wading (n=39) and boating (n=33).

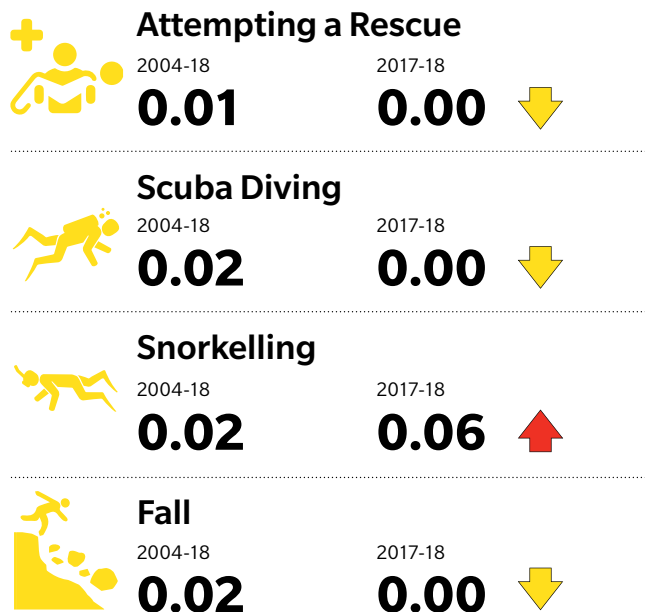
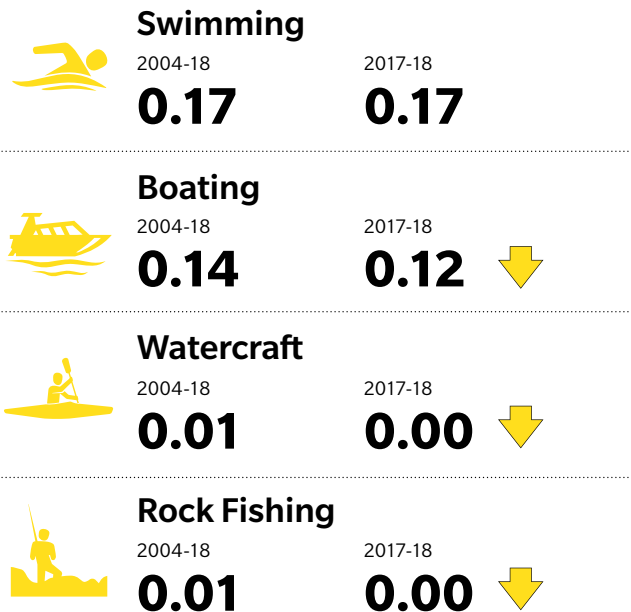
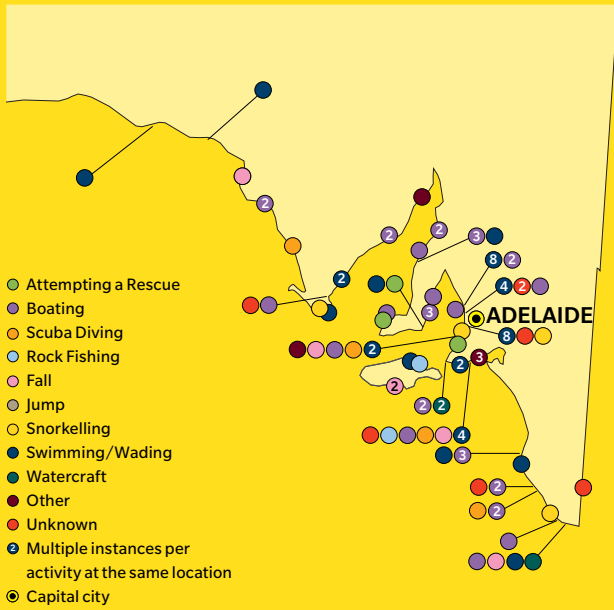


Figure 76
14-YEAR AVERAGE VS 2017-18 COASTAL & OCEAN DROWNING RATES BY ACTIVITY

Drowning death rates (per 100,000 population) were lower than the 14-year average in most activities in 2017-18. Snorkelling related incidents are the exception.

DROWNING SNAPSHOT

2004-18 COASTAL & OCEAN DROWNING DEATHS



AVERAGE NUMBER

8

AVERAGE FATALITY RATE

0.46

PER 100,000 POPULATION



80%

MALE

20%

FEMALE



KEY DEMOGRAPHIC

25-29

YEAR OLD BOATERS

&

45-54

YEAR OLD BOATERS

2017-18 COASTAL & OCEAN DROWNING DEATHS

COASTAL & OCEAN DROWNING DEATHS

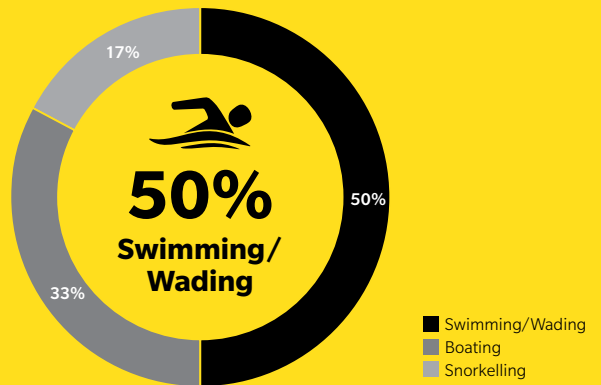
6

FATALITY RATE

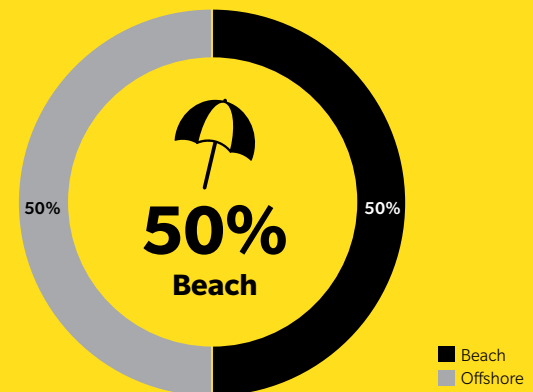
0.35

PER 100,000 POPULATION

DROWNING DEATHS BY ACTIVITY



DROWNING DEATHS BY LOCATION



67%

GREATER THAN 5KM FROM A SURF LIFE SAVING SERVICE

TASMANIA

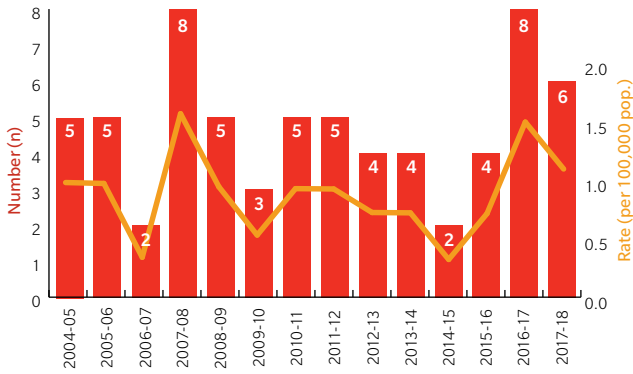


Figure 77
2004-18: 14-YEAR TREND OF TAS COASTAL & OCEAN DROWNING DEATHS

In 2017-18, there were 6 coastal and ocean drowning deaths in Tasmania (Tas). This is above the 14-year annual average of 5 but lower than last year's high of 8.

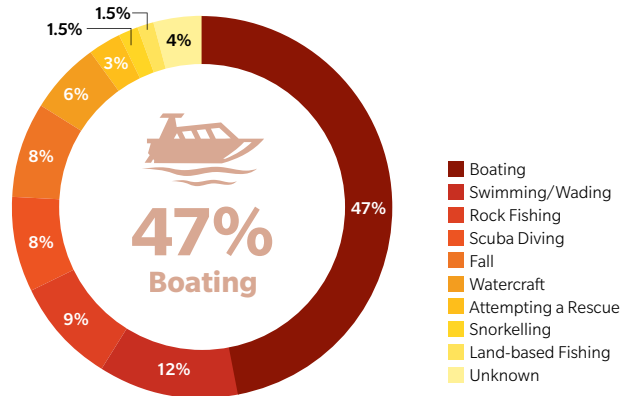


Figure 78
2004-18: COASTAL & OCEAN DROWNING DEATHS BY ACTIVITY (n=66)

The majority of coastal and ocean drowning deaths in Tas occurred when boating (n=31), swimming/wading (n=8) and rock fishing (n=6).

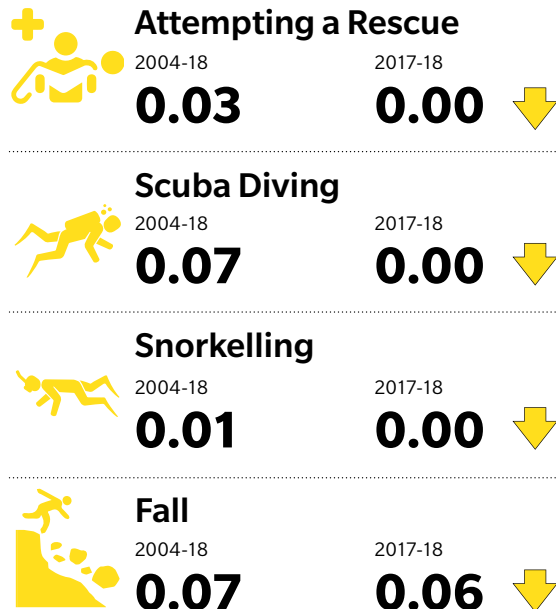
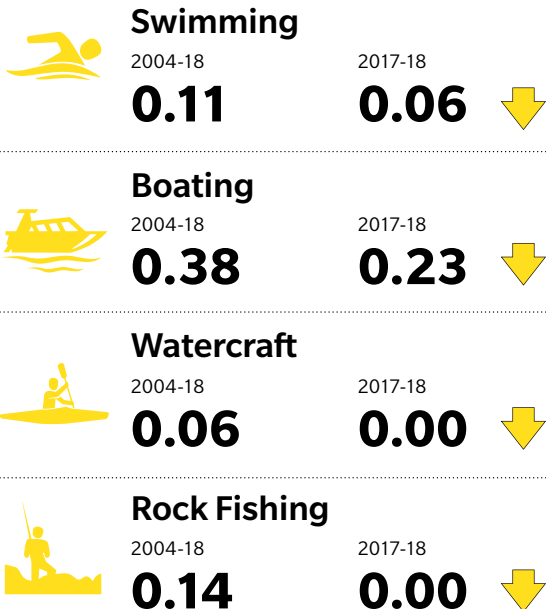
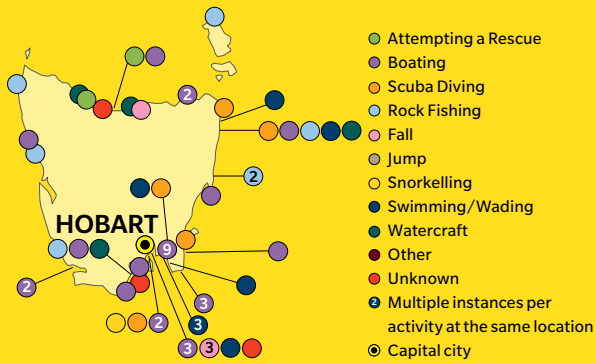


Figure 79
14-YEAR AVERAGE VS 2017-18 COASTAL & OCEAN DROWNING RATES BY ACTIVITY

Drowning death rates (per 100,000 population) were lower than the 14-year average in all activities in 2017-18.

DROWNING SNAPSHOT

2004-18 COASTAL & OCEAN DROWNING DEATHS



AVERAGE NUMBER

5

AVERAGE FATALITY RATE

0.93

PER 100,000 POPULATION



85%

MALE

15%

FEMALE



KEY DEMOGRAPHIC

25-29

YEAR OLD BOATERS

55-59

YEAR OLD BOATERS

2017-18 COASTAL & OCEAN DROWNING DEATHS

COASTAL & OCEAN DROWNING DEATHS

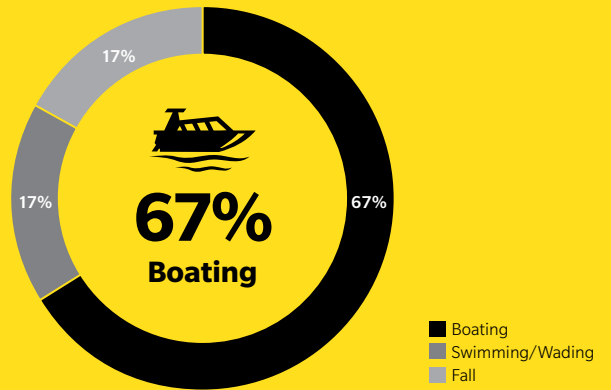
6

FATALITY RATE

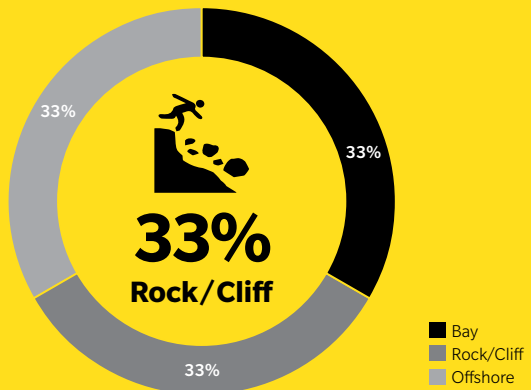
1.14

PER 100,000 POPULATION

DROWNING DEATHS BY ACTIVITY



DROWNING DEATHS BY LOCATION



67%

GREATER THAN 5KM FROM A SURF LIFE SAVING SERVICE

NORTHERN TERRITORY

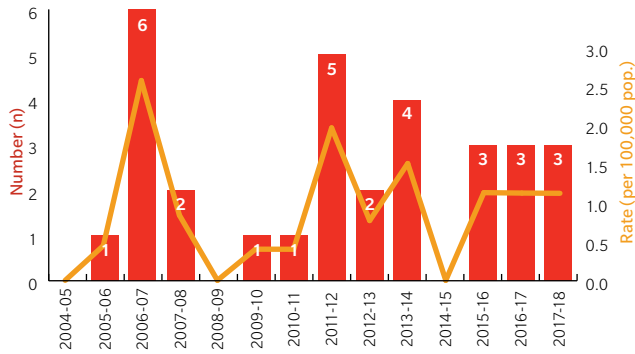


Figure 80
2004-18: 14-YEAR TREND OF NT COASTAL & OCEAN DROWNING DEATHS
 In 2017-18, coastal and ocean drowning deaths in Northern Territory (NT) remained at 3, just above the 14-year average of 2.

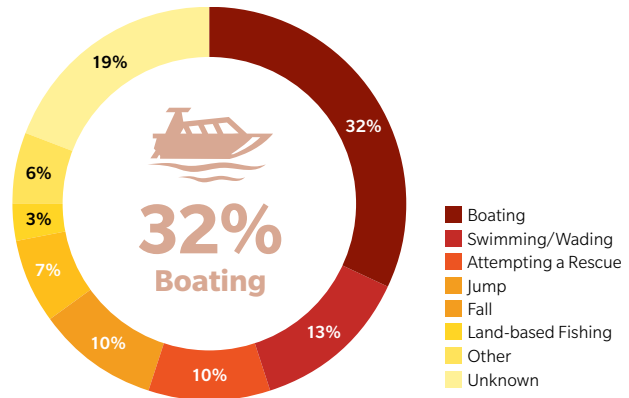


Figure 81
2004-18: COASTAL & OCEAN DROWNING DEATHS BY ACTIVITY (n=31)
 The majority of coastal and ocean drowning deaths in NT occurred when boating (n=10) and swimming/wading (n=4).

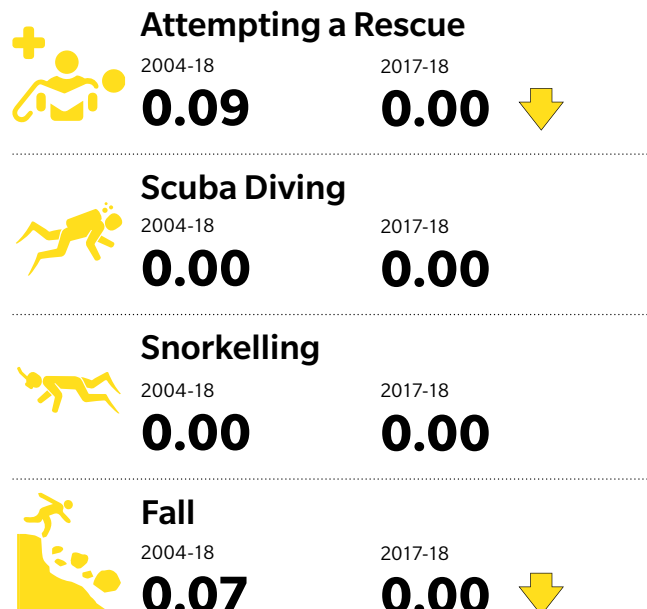
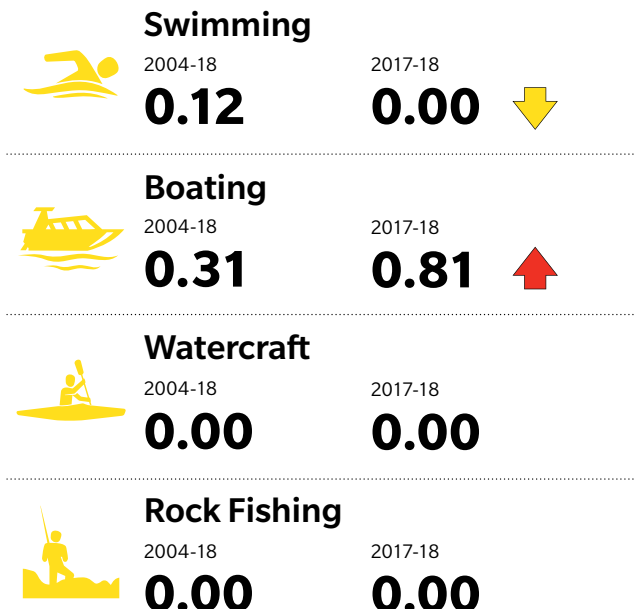


Figure 82
14-YEAR AVERAGE VS 2017-18 COASTAL & OCEAN DROWNING RATES BY ACTIVITY
 Drowning death rates (per 100,000 population) were lower than the 14-year average for swimming, attempting a rescue and fall related incidents in 2017-18. Boating fatality rates were higher than the 14-year average.

DROWNING SNAPSHOT

2004-18 COASTAL & OCEAN DROWNING DEATHS



- Attempting a Rescue
- Boating
- Scuba Diving
- Rock Fishing
- Fall
- Jump
- Snorkelling
- Swimming/Wading
- Watercraft
- Other
- Unknown
- Multiple instances per activity at the same location
- Capital city

AVERAGE NUMBER

2

AVERAGE FATALITY RATE

0.95

PER 100,000 POPULATION

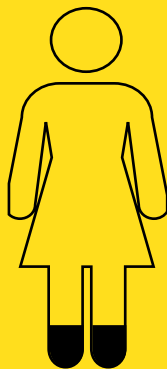


87%

MALE

13%

FEMALE



KEY DEMOGRAPHIC

30-44

YEAR OLD BOATERS

2017-18 COASTAL & OCEAN DROWNING DEATHS

COASTAL & OCEAN DROWNING DEATHS

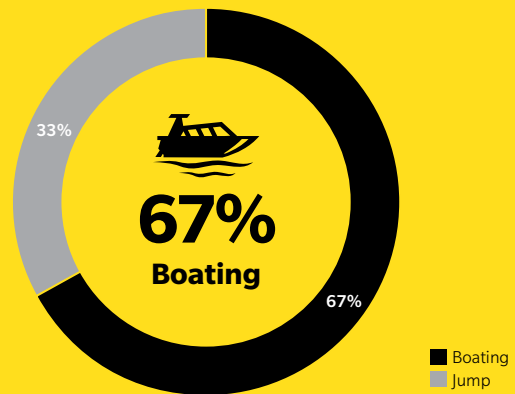
3

FATALITY RATE

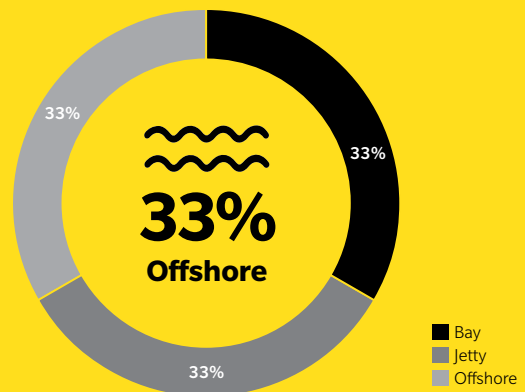
1.22

PER 100,000 POPULATION

DROWNING DEATHS BY ACTIVITY



DROWNING DEATHS BY LOCATION



67%

GREATER THAN 5KM FROM A SURF LIFE SAVING SERVICE

GLOSSARY

- Adult** – For the purpose of this report, adults refer to a person 16 year of age and over.
- Advanced Resuscitation Techniques** – A certification providing the skills and knowledge required to use specialised equipment in the provision of resuscitation in line with the Australian Resuscitation Council (ARC) guidelines.
- ALS** – Australian Lifeguard Service.
- Apply First Aid** – A certification providing the skills and knowledge required to provide a first aid response to a casualty.
- Attempting a rescue** – Trying to retrieve a person in distress and deliver them to a place of safety.
- AWSC** – Australian Water Safety Council – also Australian Water Safety Conference.
- AWSS** – Australian Water Safety Strategy.
- Bay** – A body of water partially enclosed by land but with a wide mouth, affording access to the sea.
- Beach** – A wave-deposited accumulation of sediment – usually sand, but ranging in size up to boulders – deposited between the upper swash limit and wave base.
- Blackspot** – An area with a concentration of coastal/ocean incidents and a high probability/risk of ongoing recurrence.
- Boating** – Using either a powered vessel or sailing boat for pleasure and/or fishing.
- Bystander** – A person who is present at an incident but not part of it initially.
- Coastal** – Describes the foreshore, seabed, coastal water and air space above a large body of water (harbour/bay/inlet), including areas up to 3nm offshore and of which the landward boundary is the line of mean high water, except where that line crosses a river/inlet, the landward boundary at that point shall be the point upstream that is calculated by multiplying the width of the river/inlet mouth by five. (Adopted from the Resource Management Amendment Act 1993 – New Zealand).
- Coastal drowning death** – Where the location of the death is on the coast, in the ocean up to 3nm offshore or inland up to five times the width of the inlet/river and the cause of death includes drowning or immersion.
- Coastal fatality** – Where the location of the death is on the coast, in the ocean up to 3nm offshore or inland up to five times the width of the inlet/river and the cause of death does not include drowning or immersion.
- COD** – Cause of death.
- Crude drowning rate** – A comparative rate of drowning to the size of the population in a given area.
- Dangerous surf warning** – An alert issued by the Bureau of Meteorology indicating that surf conditions in an area are unsafe for coastal activities. The warnings are calculated based on wave height, swell direction and swell period and must exceed the predetermined limitations to be in effect.
- Drowning** – The process of experiencing respiratory impairment from submersion/immersion in liquid; outcomes are classified as death, morbidity and no morbidity.
- Drugs** – A medicine or other substance which has a physiological effect when ingested or otherwise introduced to the body. The category includes therapeutic, over-the-counter and illicit drugs.
- Emergency response** – An action taken by an SLS entity in response to a call for assistance from an emergency management organisation.
- Falls (trips/slips)** – Events that result in a person coming to rest inadvertently on the ground or other lower level.
- First Aid** – Assessments and interventions that can be performed by a bystander (or by the victim) with minimal to no equipment.
- Fishing** – Attempting to catch a fish.
- Foreign ethnicity** – Describes an individual who identifies with a cultural group other than Australian based on heritage, language or shared customs. This identification is extrapolated from reported data such as the individuals' country of birth and the main language spoken at home.
- Hazard** – A source of potential harm.
- ILS** – International Life Saving Federation.
- Incident** – Any unplanned event requiring lifesaving services intervention.
- Inland** – An area that is beyond the line of mean high water or within a landward distance of five times the width of the coastal inlet/river mouth.
- Inshore** – The coastal water area within 500m of the low tide area of the foreshore.
- International** – Describes an individual who is confirmed to reside overseas and/or is a temporary visitor to Australia.
- IRB** – Inflatable rescue boat.
- IRD** – Incident report database. A web-based portal used by SLS services to electronically record incident reports.
- Jetty** – An artificial structure that projects out into the water from land.
- JRB** – Jet rescue boat.
- Jump(ing)** – The activity of launching off a cliff, rock platform, pier, jetty. Aka tombstoning (UK/Europe/North America).
- Lake** – An inland body of water surrounded by land.
- Lifeguard** – An individual who undertakes patrols at a beach or another aquatic environment. He/she is typically a salaried member, qualified in public safety and aquatic rescue.

- Lifejacket** – A buoyant or inflatable garment or device designed to keep a person afloat in water and increase their likelihood of survival.
- Lifesaving Service** – A coordinated group that exists to provide aquatic safety services to the public. This includes Surf Life Saving Clubs, Lifeguards, SurfCom, RWCs, RIBs, JRBs, ORBs, Rescue Helicopters and 4WD units.
- Local Government Area (LGA)** – Also known as local councils, LGAs include cities, town, shires, municipalities or boroughs.
- Marina** – A boat basin offering dockage and other service for small craft.
- Medical** – For the purpose of this report, medical refers to an aquatic incident that was caused by a medical episode, e.g. a heart attack or epileptic seizure.
- NCIS** – National Coronial Information System.
- Non-fatal drowning** – A subset of drowning, the process of experiencing respiratory impairment from submersion/immersion in liquid, where the outcome is classified as morbidity and no morbidity.
- Offshore** – Describes the coastal water area beyond the surf zone and inshore area from 500m to 12nm.
- Ocean** – The seabed, water and air space above the water between 3nm and 12nm (the Australian territorial waters limit) offshore.
- Ocean drowning death** – Where the location of the death is in the seabed, water or air space above the water between 3nm and 12nm offshore and the cause of death includes drowning or immersion.
- Ocean fatality** - Where the location of the death is in the seabed, water or air space above the water between 3nm and 12nm offshore and the cause of death does not include drowning or immersion.
- ORB** – Offshore rescue boat.
- Other** – An uncommon known activity not otherwise listed (e.g., paragliding, aircraft crash).
- Patrol** – Service undertaken to monitor activities in/around an aquatic environment and respond accordingly through either preventative actions or rescue operations.
- Patrol flags** – Red/yellow horizontally divided flags which are set after performing a risk assessment to determine the most suitable area for swimming. The flags identify a zone for swimming and bodyboarding within a patrolled location.
- Patrolled location** – A location supervised by a lifesaving service.
- Preventative action** – Direct action taken to reduce or eliminate the probability of a specific rescue, first aid or other reportable incident from happening in the future.
- PWC** – Personal water craft, also known as jet ski.
- Rescue** – The retrieval of a person in distress, delivering them to a place of safety and the application of first aid and basic life support as may be required.
- Resuscitation** – Prevention or restoration of life by establishing and maintaining a person’s airway, breathing and circulation.
- RIB** – Rigid-hull inflatable boat.
- Rip current** – A seaward flowing current of water moving through a surf zone.
- River** – A natural stream of water flowing into an ocean or bay.
- Rock/cliff** – A rock platform that may or may not have a high steep face.
- Rock fishing** – Attempting to catch fish from a coastal rock platform or off a groyne.
- Rock shelf** – A section of rock above or below the water level that projects out from the coast.
- RWC** – Rescue water craft.
- Scuba diving** – Swimming underwater with the aid of scuba equipment for recreational or commercial purposes.
- Service season and hours** – Vary between states due to climatic factors, but in the context of this report, the season is for the period July 2017 to June 2018.
- Snorkelling** – Swimming with a snorkel and face mask.
- SurfCom** – SLS radio communications centre that assists in managing the communications of lifesaving operations and data collection.
- Surf lifesaver** – An individual who undertakes patrols at a beach or other aquatic environment. He/she is typically a non-salaried member qualified in public safety and aquatic rescue.
- Surf Life Saving Club** – A SLS affiliated not-for-profit organisation that has volunteer members who provide coastal safety services to the community.
- Swimming** – Moving through water by moving the body or parts of the body.
- Territorial sea** – The seaward limits of Australia’s maritime zones, from the coastline to 12nm from the low tide line.
- Total Service Plan** – An assessment of current and future lifesaving resources, trends, national blackspots and coastal safety issues combined with evidence-based mitigation strategies to address these issues.
- Toxicity** – The degree to which a chemical substance or a particular mixture of substances is toxic or poisonous to an organism. In the context of this report, toxicity refers to alcohol or drug used by a drowning victim.
- Wading** – Walking through water while partially immersed.
- Watercraft** – A piece of non-powered recreational equipment used in water. Examples include surf boards, stand-up paddle boards, boogie boards, windsurfers or kayaks.

REFERENCE

METHODOLOGY

The National Coastal Safety Report 2018 contains information on Australian community behaviours and attitudes to the coast; SLS capability and membership capacity; rescues and emergency response; and coastal drowning deaths for the period of 1 July 2017 to 30 June 2018. This information is correct as of 24 July 2018. All care is taken to ensure the statistical information included within this report is correct. However, pending the outcome of ongoing coronial investigations and as SLS state/territory entities update their operational information, this data may be amended. Data in figures may not always add up to 100% due to rounding.

THE AUSTRALIAN COMMUNITY ANALYSIS

Information about community swimming ability, behaviours and attitudes to coastal safety, risk perceptions, safety strategies and rescues was gathered from the SLSA National Coastal Safety Survey. Conducted by Omnipoll Market Research, the latest survey was run online over the period 12 - 19 April 2018 among a national sample of 1,597 respondents aged 16 and above. The study was carried out in compliance with AS-ISO 20252 - Market, Social and Opinion Research. To reflect the population distribution, results were post-weighted (on age, gender, geographic strata and education) and projected to Australian Bureau of Statistics data. The Australian population aged 16 and above (the reference population for this survey) is 18,712,000.

CAPABILITY AND RESCUE ANALYSIS

SurfGuard, the Incident Report Database (IRD) and SurfCom management system (SurfCom) are web-based applications and part of a suite of applications that enable members, clubs, branches, state offices and SLSA to enter and access SLS operational (including rescues and first aids), capability (including assets and services), educational and administrative data. Information was extracted from SurfGuard to identify how many rescues were performed by volunteers, lifeguards and lifesaving services during 2017-18; and how many active surf lifesavers and award holders there were during 2017-18. The data was verified by SLS state/territory entities. Information about assets and services were gathered from each SLS state/territory entity.

DROWNING DATA ANALYSIS

SLSA collects incident data from SurfGuard, the IRD, SurfCom, the National Coronial Information System (NCIS) and by monitoring media reports for drowning incidents. The information is verified with the assistance of each state/territory SLS entity and compiled for analysis by SLSA's Coastal Safety Department. The following variables are used to match drowning cases from more than one data source: incident date; location; age; gender; and incident description. The NCIS is considered the 'gold standard' when there is a discrepancy in the detail collected from different data sources. Deaths are excluded as a coastal drowning if they are reported as 'intentional deaths', they are inland locations, or 'drowning/immersion' is not a contributory factor as noted by the coroner. Coastal incidents that are deemed intentional or not due to drowning/immersion are logged as coastal fatalities instead.

The non-fatal drowning data used in this report were made available by the Australian Institute of Health and Welfare (AIHW). The authors are responsible for the use made of the data in this report. More detailed methodology can be found in the 2018 Coastal Safety Brief - Beaches.

DROWNING DATA LIMITATIONS

Over years of investigation as part of the NCIS process, some cases are amended prior to their closure, resulting in changes to the classification of cases in our datasets. Therefore, the number of coastal drowning deaths published in this report may be different from annual totals previously reported. In an effort to produce a timely report on our current year's data we acknowledge that these figures will change. Each year, the changes that occur in the previous year's report will be made transparent. The data in this current report are not the final figures as 86% of 2017-18 coastal drowning deaths reported remain open cases and 38% of cases do not have a cause of death (COD) listed yet. Once NCIS closes a case, SLSA modifies those with unknown intent and those where the cause of death is not drowning, from 'coastal drowning' to 'coastal fatality'. Bars of two different colours are used to illustrate the incidents where a COD has not been listed on NCIS in Figure 44. The incidents are included in our annual totals and analysis, and they will remain so until a COD is listed other than drowning/immersion.

CHANGES FROM PREVIOUS REPORTS

As part of the NCIS investigation process, some cases are amended prior to their closure and have resulted in changes to our datasets. This year SLSA has commenced a thorough review of its drowning database to update all cases to the same inclusion standards.

Table 1

CHANGES IN THE NUMBER OF COASTAL AND OCEAN DROWNING DEATHS AS PREVIOUSLY REPORTED

	2014 NCSR	2015 NCSR	2016 NCSR	2017 NCSR	2018 NCSR
2004–05	89	89	89	89	89
2005–06	95	95	96	96	95
2006–07	98	98	102	102	102
2007–08	89	89	89	89	89
2008–09	89	89	88	88	85
2009–10	85	85	85	85	80
2010–11	69	69	69	69	69
2011–12	113	113	113	114	114
2012–13	118	118	118	118	118
2013–14	84	83	84	82	80
2014–15		102	105	105	108
2015–16			130	128	128
2016–17				116	119
2017–18					110

SUGGESTED CITATION: Surf Life Saving Australia (2018) National Coastal Safety Report 2018. SLSA: Sydney.

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ACKNOWLEDGEMENTS

SLSA wishes to thank the following people and organisations for their contribution to the National Coastal Safety Report 2018: the Australian Government: Department of Health; National Coronial Information System: Leanne Daking; Omnipoll: Frederic Anne; Royal Life Saving Society Australia: Amy Peden & Alison Mahony; SLS state centres, branches, clubs, support operations and ALS; SLSA major national corporate partners: DHL, Holden and Westpac.

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Shane Daw.

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Anika Martin.



Australian Government
Australian Institute of
Health and Welfare

CONTACT INFORMATION

SLS receives Government funding to commence valuable initiatives and programs. However, we rely on the generosity of the community and corporate support to ensure they continue.

To help Surf Life Saving please donate to:

Surf Life Saving Foundation—slsfoundation.com.au

For more information:

Surf Life Saving Australia—sls.com.au

Surf Life Saving New South Wales—surflifesaving.com.au

Surf Life Saving Northern Territory—lifesavingnt.com.au

Surf Life Saving Queensland—lifesaving.com.au

Surf Life Saving South Australia—surflifesavingsa.com.au

Surf Life Saving Tasmania—slst.asn.au

Life Saving Victoria—lsv.com.au

Surf Life Saving Western Australia—mybeach.com.au

DROWNING

SNAPSHOT



110
COASTAL &
OCEAN
DROWNING
DEATHS



80%

MALE

20%

FEMALE



Location

42%

AT THE BEACH



OFFSHORE

28%

20%

ROCK/CLIFF



AT LEAST 5KM FROM A
LIFESAVING SERVICE

45%

Activity

