

# COASTSAFE REPORT 2020



# 2019/20 Drowning Snapshot

QUEENSLAND BEACHES









# **Contents**COAST SAFE REPORT 2020

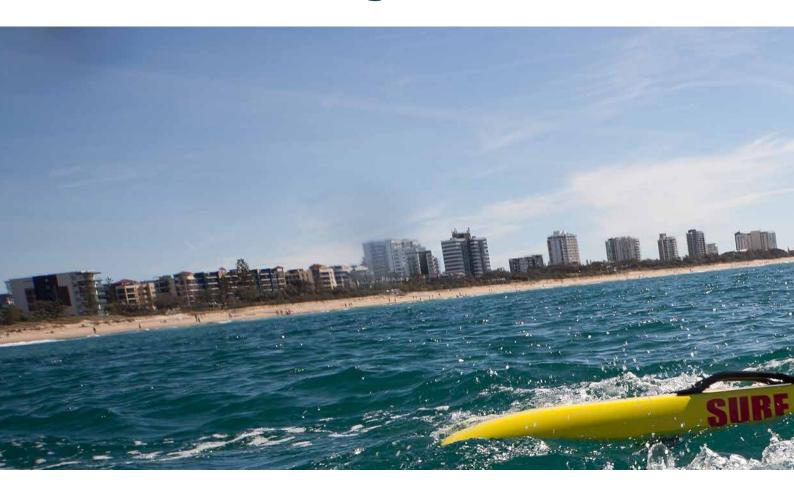
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All care has been taken to ensure the accuracy of statistical information included within this report, which has been measured between 1 July 2019 – 30 June 2020. However, it is important to note that data may be amended over time as new information comes to light and/or following the outcome of Coronial investigations that are ongoing at the time of publication.

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# **Surf Life Saving Queensland**



#### **WHO WE ARE**

Surf Life Saving Queensland (SLSQ) is the state's leading authority on aquatic safety and surf rescue, and one of the largest volunteer-based community service organisations in Australia.

From humble beginnings, when the first official rescue was recorded on a Queensland beach in 1909, SLSQ has developed into a ground-breaking and highly innovative organisation encompassing 57 clubs and more than 34,000 members across the state.

Since 1930, 146,946 people have returned home to their loved ones after being rescued by our surf lifesavers or paid lifeguards.

We have 57 established surf lifesaving clubs with members patrolling 8,000 kilometres of the Queensland coastline from Port Douglas to Rainbow Bay.

More than 34,000 Queenslanders are volunteer members of a surf lifesaving club and more than 462,000 are a member of an affiliated supporters' club.

As a not-for-profit organisation, SLSQ relies heavily on Government funding, community support and donations to continue our vital work both on and off Queensland's beaches. It is only with this generous support, we are able to help keep beachgoers safe.

SLSQ is directly affiliated with, and is part of, Surf Life Saving Australia (SLSA) and the International Life Saving Federation (ILS).

#### **OUR VISION**

Zero preventable deaths in Queensland waters.

Note: Public waters is defined by SLSQ as any freely accessible waterway including, but not limited to, beaches, rivers, creeks, dams, lakes, lagoons and streams; this excludes commercial and private swimming pools, as well as household waters such as bath tubs, sinks and backyard containers.



#### SURF LIFE SAVING **QUEENSLAND'S** STRATEGIC PLAN 2015-2020

#### **OUR MISSION**

SLSQ will operate as a proactive and effective peak body, leading the way in lifesaving service provision, education, sport, beach safety advocacy and community leadership.

#### **OUR STRATEGIC IMPERATIVES**

#### **Committed To Our Community**

To advocate water safety management and continue to enhance the reputation of SLSQ as the peak body.

#### **Connected To Our People**

To recruit and retain the best people through support and development of their skills and knowledge.

#### **Effective In Our Business**

To plan and execute our day-to-day operations to an outstanding level of efficiency, with continuous improvement always in mind.

#### **Sustainable For The Future**

To ensure SLSQ is equipped for the future through continuous growth, strong financial management and sound governance.

#### **OUR FUNDING**

SLSQ is a not-for-profit community service organisation that relies heavily on public and corporate support to fund our operations along Queensland's coastline. In addition to public donations and sponsorship, SLSQ also receives financial support from the Queensland Government via Queensland Fire and Emergency Service (QFES), grants, subsidies and service agreements.

#### **OUR PRIMARY TARGET**

International and domestic visitors to Queensland's beaches and waterways.

#### SURF LIFE SAVING QUEENSLAND'S STRATEGIC PLAN, ADVANCEMENT STRATEGY 2020-2025

From the new financial year, July 2020, Surf Life Saving Queensland has implemented a new Strategic Plan, Our Advancement Strategy for 2020-25:



#### **OUR PURPOSE**

We aim to equip, develop, empower and support our people to deliver vita aquatic rescue and safety services to save lives across Queensland.



#### **OUR AMBITION**

Zero preventable deaths in Queensland public waters -Our beaches, waterways and lagoons.



#### **OUR MOTTO**

Vigilance and Service.

WE EXIST TO SUPPORT OUR **VOLUNTEERS AND SAVE LIVES. WE** WILL STRENGTHEN OUR COMMERCIAL **BUSINESS, BRAND AND REPUTATION** TO FURTHER SUPPORT THIS FUNCTION.

### **Our Values**



#### **SAFETY**

We will prioritise, and take responsibility for safety at all levels across the organisation, both on and off the beach.



#### **TRUST**

We will work to ensure that trust and accountability are the cornerstones of our organisation; through open and honest communication, and by always delivering on our commitments.



#### COMMUNITY

We will work to build safer, healthier, and stronger communities, underpinned by a commitment to continuous improvement in education and advocacy in relation to water safety.



#### **LEADERSHIP**

As the peak body in coastal and aquatic safety, we will lead by example and foster a culture of empowerment, accountability, inclusivity and exceptional standards.



#### RESPECT

We will treat each other with respect, value each other's contributions, and celebrate our people who strive for excellence.



#### **TEAMWORK**

We will work collaboratively; combining our strengths, knowledge and beliefs in the best interests of the communities we serve.





# **Executive Summary**

The 2019/20 season was like no other for Surf Life Saving Queensland. For the first time in the organisation's proud history, flags were taken down on Saturday 28 March, due to the COVID-19 pandemic after the Federal and State government introduced social distancing restrictions.

International borders were closed at 9pm AEDT on Friday 20 March, 2020 and Queensland closed their borders to interstate visitors at midnight on Wednesday 25 March 2020. Both border restrictions remained in place until the end of SLSQ's 2019/20 season.

Throughout this period, Queensland surf lifesavers and lifeguards did not leave their post and remained in surveillance patrol until flags returned to Queensland beaches on Saturday 13 June.

Over the 2019/20 season there was still an estimated 18.5 million visitors to Queensland beaches and SLSQ patrols recorded 2,555 rescues, 48,688 first aid treatments and 660,105 preventative actions.

These figures are astounding as flags were down for 11 weeks, including the traditionally busy Easter period and with borders closed, less international and interstate visitors.

However, there were still 11 beach related drowning deaths in 2019/20 in Queensland. This was a 52% decrease on 2018/19, which was Queensland's worst year on record since SLSQ started tracking coastal data.

It is important to note that there were also 28 recorded fatalities that occurred in a coastal environment including, but not limited to, boating accidents, intentional self-harm and medical episodes.

In addition to this, a further 22 people drowned at inland aquatic locations and other public waters in 2019/20, a 33% decrease on last year's numbers.

The fatalities might have decreased, but for SLSQ one drowning is still one too many.

As we move forward into 2020/21 season, SLSQ is committed to delivering a range of services, strategies and programs to increase aquatic safety and beach safety awareness for all.

The following 2020 Coast Safe Report provides a detailed overview of beachrelated incidents, drowning deaths, and fatalities over the past 12 months and 10 years.

The data contained within this report will help SLSQ analyse long-term drowning trends, identify high-risk beaches and demographics, and develop key surf safety initiatives to underpin our vision of 'Zero preventable deaths in Queensland public waters.'

# **Australian Water Safety Strategy 2016-2020**

SLSQ has embraced the Australian Water Safety Strategy for 2016-2020 in relation to reducing drowning deaths.

As part of this, a number of key objectives have been identified to reduce drowning deaths across the country. These have been outlined below, alongside pertinent strategies and initiatives.

It is important to note these strategies are in addition to SLSQ regular patrols and beach safety services.

SLSQ will support and follow the next strategy presented by the Australian Water Safety Council.

#### **Objective Key SLSQ strategies** Continue to build on SLSQ's iconic nippers program, which has educated 250,000+ children since its inception. Continue to educate young children via SLSQ's award-winning Little Lifesavers program. Directly engage with, and up skill, school students via programs such as Beach to Bush and the Queensland Health Beach Safe Schools Program. **Reduce drowning deaths** Deliver SLSQ's Inland Waterways Blackspot Program, providing safety messaging around public in children aged 0-14 waterways. Deliver pop-up clinics at key locations through the Surf Crew Program. Build upon SLSQ's Water Safe Schools Program, providing aquatic safety skills and awareness to young students. • Target parents and youth demographics via social media channels and other relevant platforms. Increase engagement within high schools and universities to educate and upskill key demographics. Engage with, and educate, Schoolies via targeted presentations and initiatives. Continue to deliver dawn and dusk patrols on the Gold Coast. **Reduce drowning deaths** Engage with demographics via programs such as On The Same Wave, Water Safe Month, Inland in young people aged Waterways Blackspot Program, and the Surf Crew vehicle. 15-24 Build on SLSQ's 'Don't Drink and Swim' campaigns including targeted safety messaging at key locations. Build upon existing digital media strategy targeted towards key youth demographic on relevant channels and platforms. Build on SLSQ's 'Don't Drink and Swim' campaigns including targeted safety messaging at key locations. Increase engagement within universities and community groups to educate and up skill key demographics. **Reduce drowning deaths** • Continue to engage with multicultural beachgoers via SLSQ's On The Same Wave program. in males aged 25-64 Continue the Surf Crew program on the Gold and Sunshine Coasts, educating beachgoers via pop-up clinics. Build upon existing digital media strategy targeted towards key youth demographic on relevant channels and platforms. • Develop state-wide campaign to directly engage with older demographics. Work closely with key stakeholders to promote safety swimming practices and regular medical check-ups amongst beachgoers aged 50 and over. **Reduce drowning deaths** Continue to build upon SLSQ's Beach Safe Seniors program. in people aged 65+ Continue to roll out airport welcoming services at high-risk locations. Facilitation of surf safety presentations.

Continued community awareness presence at events relevant to the target demographic.

Objective	Key SLSQ strategies
Reduce drowning deaths in strengthening the aquatic industry	<ul> <li>Review and build upon front-line lifesaving services (e.g. surf lifesaving patrols, operations support, lifeguard services).</li> <li>Work with key stakeholders to advocate for safe swimming practices.</li> <li>Build upon SLSQ's Water Safe Month and Inland Waterways Blackspot Program.</li> <li>Strengthen and develop working relationship with Royal Lifesaving.</li> </ul>
Reduce drowning deaths in inland waterways	<ul> <li>Work with councils, government, and land managers to review and assess safety and signage at aquatic locations.</li> <li>Promote safe swimming and water practices via SLSQ's annual Beach to Bush Program.</li> <li>Develop and roll out water safety collateral, promoting safe swimming practices at dams, creeks, rivers, lagoons, and other waterways.</li> <li>Expand upon SLSQ's Inland Waterways Blackspot Program.</li> <li>Continue to educate swimmers via SLSQ's annual Water Safe Month.</li> <li>Build upon existing digital media strategy, targeted towards location-specific messaging relevant to inland waterways.</li> </ul>
Reduce drowning deaths in coastal waters	<ul> <li>Continue to roll out SLSQ's surf talks and beach safety clinics.</li> <li>Increase community awareness presence at schools, universities, and community events.</li> <li>Review and build upon front-line lifesaving services (e.g. surf life saving patrols, operations support, lifeguard services)</li> <li>Produce and distribute surf safety iMaps for all regions across the state.</li> <li>Continue to work with councils and land managers to review and implement surf safety signage.</li> <li>Continue to promote the 'Be Snorkelsafe' campaign.</li> <li>Integrate the Westpac Lifesaver Rescue Drone Program into beach patrols, expanding SLSQ's reach up and down the coast.</li> <li>Actively monitor high-risk and unpatrolled locations through coastal surveillance cameras and emergency response beacons.</li> <li>Roll out increased services and extended patrol hours during peak holiday periods.</li> </ul>
Reduce alcohol and drug-related drowning deaths	<ul> <li>Build on SLSQ's Don't Drink and Swim campaigns.</li> <li>Continue to leverage media coverage to promote safe swimming practices.</li> <li>Build upon dawn and dusk patrols at Surfers Paradise on the Gold Coast.</li> <li>Build upon existing digital strategy and collaboration in partnership with key agencies, including Queensland Health.</li> </ul>
Reduce boating, watercraft and recreational activity- related drownings	<ul> <li>Build upon our existing relationship with Maritime Safety Queensland.</li> <li>Targeted digital advertising to key demographics through podcasts, online media, and gaming industry.</li> <li>Build upon existing digital media strategy targeted towards key demographic on relevant channels and platforms.</li> </ul>
Reduce drowning deaths in high-risk populations	<ul> <li>Continue to engage with multicultural beachgoers via SLSQ's On The Same Wave program.</li> <li>Build upon SLSQ's dusk patrol service at Surfers Paradise on the Gold Coast.</li> <li>Continue to make use of SLSQ's Surf Speak booklet to engage with multicultural beachgoers.</li> <li>Seek to provide surf safety information to new Australian citizens.</li> <li>Continue to work with local Indigenous communities, including the Clontarf Academy Bronze Medallion course.</li> </ul>
Reduce the impact of disaster and extreme weather on drowning deaths	<ul> <li>Continue to build relationships with Local Disaster Management Groups across the state.</li> <li>Solidify SLSQ's seat on the State Disaster Management Group and other committees.</li> <li>Review and adjust SLSQ policies regarding the closure of beaches during natural disasters and emergency situations.</li> <li>Continued to roll out existing digital media strategy and crisis communications plan, including regular social media updates and key safety information during times of natural disaster.</li> </ul>



#### Rescues

#### YEAR IN REVIEW

Surf Life Saving Queensland surf lifesavers and professional lifeguards were busy throughout 2019/20 with approximately 18.5 million people visiting Queensland beaches during this time.

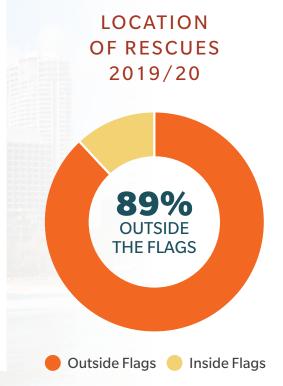
During this period SLSQ patrols directly rescued 2,555 swimmers in distress, performed 660,015 preventative actions and 48,688 first aid treatments.

It is important to note 2019/20 saw calmer surf conditions, compared to the year prior.

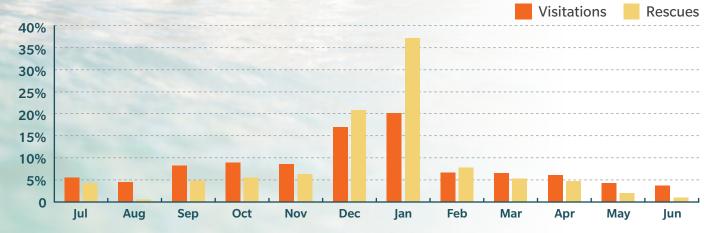
The most concerning aspect of the 2019/20 research data is the high number of people, 89%, being rescued outside of the flags. Of those people, 80% were Australian.

A breakdown of rescue data from the past 12 months has been provided below:

- 89% of all rescues were performed outside of the red and yellow flags, an increase of 5% from the previous
- 80% of the people rescued in 2019/20 were Australian
- 57% of all patients rescued were male, 43% female
- Tidal currents and rips were equally the highest cause of rescue, both 38%. This was followed by poor swimming ability at 7% and other factors at 17%
- 57% of the year's rescues were performed in December and January
- let skis were used for 53% of rescues, followed by rescue board (24%), rescue tube (10%) and IRB (6%) and other (7%)



#### VISITATIONS v RESCUES (%) 2019/20



# **Beach-Related Drowning Deaths**

#### **12 MONTH REVIEW**

During the 2019/20 season there were 11 drowning deaths recorded on Queensland beaches, a 52% decrease on the 2018/19 numbers, which was the worst year on record since SLSQ began tracking coastal and drowning data.

The trend of males over the age of 50 involved in beach related drowning deaths was again reflected in the 2019/20 numbers, with 64% of the overall number lying in this category.

Of the 11 deaths, eight were male, with seven of those over the age of 50. Of these seven victims, two were aged between 50-59 years, four between 60-69 years and one between 70-79 years.

Two female victims were also over the age of 50. Of the remaining four drownings, three were between 20-29 years and one in the 30-39 age demographic.

More than half the drowning deaths, six in total, occurred before patrolling commences at 8am, reflective again of the 2018/19 findings. The second highest time of day was 12pm-2pm (4), then 10:01-12 noon (1).

Five of the victims were Australian, five were international and one individual's nationality is unknown.

Of the 11 victims six were swimming at the time of the incident, four were riding a craft and one was snorkelling.

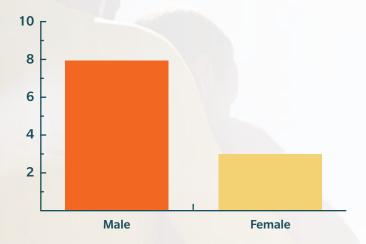
In terms of regions across Queensland, the greater Brisbane region recorded the highest number of drowning deaths in ten years, and doubled last year's numbers with four victims during the 2019/20 season. This was followed by Wide Bay, Sunshine Coast, Gold Coast, North Queensland.

Eight councils across Queensland recorded a drowning death at a beach in 2019/20. Redland City Council, City of Gold Coast and Sunshine Coast Council each had two victims, with Bundaberg Regional Council, Brisbane City Council, Cairns Regional Council, Moreton Bay Regional Council and Great Barrier Reef Marine Park each recording one drowning death.

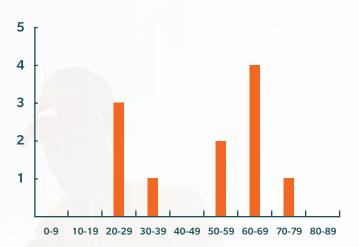
#### A further breakdown of the 2019/20 data has been provided below:

- Males accounted for 73% of drowning deaths, reaffirming their position as a 'high risk' demographic
- Five of the 11 victims were males over the age of 50
- 55% of drowning deaths occurred before 8am, when patrolling commences
- The victims' nationalities were evenly split between Australian (5) and International (5) and one unknown
- Six victims were swimming; four were riding a craft and one was snorkelling at the time of incident. Craft includes, but is not limited to, surf boards, boogie boards, and stand-up paddle boards.
- The summer months of January (3) and February (2) recorded five drowning deaths overall. Autumn recorded three in March, winter recorded one in June and spring recorded two in October.
- The most common day of the week for a drowning death to occur is Wednesday with four deaths in 2019/20. This was followed by Saturday (2), Sunday (2), Tuesday (2) and Friday (1).





#### AGE 2019/20



#### NATIONALITY 2019/20



For the purpose of this report, SLSQ defines a beach-related drowning death as any death caused directly by immersion or submersion that has occurred in a surf or beach environment within two nautical miles of shore.

# **Beach-Related Drowning Deaths**

#### **TEN YEAR REVIEW**

This part of the report draws on data recorded from 1 July 2010 through to 30 June 2020 and will provide a 10-year snapshot of coastal drowning deaths.

Since 1 July 2010 there have been 105 drowning deaths recorded on Queensland beaches. The 2018/19 season had 21 drowning deaths alone, the highest on record since SLSQ started tracking coastal data.

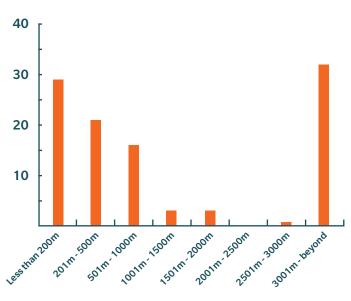
Over the past 10 years, males are consistently overrepresented in drowning death statistics, with 84% of all victims male.

The 50-59 age demographic has the highest amount of drowning deaths with 21 occurring over the past 10 years. This is followed by people between 30-39 years (18), 60-69 years (15), 40-49 years (14), 20-29 years and 70-79 years (13).

Australian residents represent 61% of the drowning deaths over the past ten years, with 33% international visitors and 10% unknown.

The Sunshine Coast was the most common region for drowning deaths over the past 10 years, recording 32. This was followed by the Gold Coast (29), North Queensland (19), Wide Bay (13), greater Brisbane region (9) and North Barrier (3).

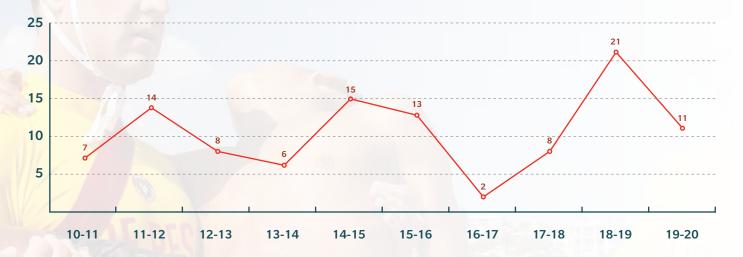
#### **DISTANCE FROM FLAGS** 2010-20



#### A further breakdown of beach-related drowning deaths data from past ten years has been provided below:

- Approximately 48% of drowning victims were over the age of 50; 17% between 30-39 years; 13% between 40-49 years and 13% between 20-29 years
- A total of 56 victims were actively swimming or wading just prior to drowning. Meanwhile, 20 were engaged in riding craft (including surf boards, paddleboards and body boards) and a further 15 were snorkelling.
- 28% of all drowning deaths occurred within 200 metres of a lifesaving or lifeguard service. A further 30% of all drowning deaths occurred more than three kilometres away from the nearest patrolled beach.
- Approximately 59% of all drowning deaths occurred within standard patrol times (8am-5pm). By comparison, almost 33% occurred after hours, while the exact time of eight drowning deaths remains unconfirmed.
- Over the past 10 years, roughly 34% of drowning deaths occurred in the peak summer season, followed by autumn with 30%, then spring with 25% and 11% in winter.
- March was the deadliest month over the past 10 years with 19 recorded deaths
- Saturday was the most common day of the week for a drowning to be recorded, with 18 taking place over the past ten years. This was closely followed by Wednesday (17), Sunday (16), Tuesday (16), Monday (13), Thursday (13) and Friday (12)
- In total, 34 drowning deaths occurred on a weekend.
- Outside of Australian residents, the most common nationalities of drowning victims were American, Chinese, Japanese, Korean, British, New Zealand, Malaysian, German, Taiwanese, Indian, Swiss and Ukrainian.
- The beaches with the highest amount of drowning deaths were Green Island (7), Surfers Paradise (6), Southport Spit (5) and Kirra Beach (3) and Fitzroy Island (3).

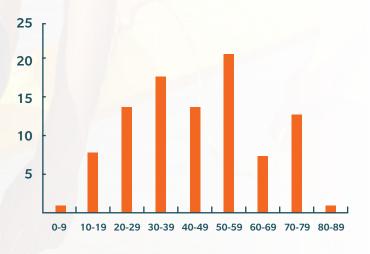
#### TOTAL BEACH RELATED COAST DEATHS OVER THE PAST 10 YEARS



#### **COUNCILS 2010-2020**

Council	10 Year Total
City of Gold Coast	29
Sunshine Coast Council	20
Cairns Regional Council	15
Noosa Shire Council	8
Redland City Council	6
Fraser Coast Regional Council Gladstone Regional Council Moreton Bay Regional Council Gympie Regional Council	3
Bundaberg Regional Council Livingstone Shire Council Whitsunday Regional Council Great Barrier Reef Marine Park	2
Sarina Regional Council Brisbane City Council Shire of Douglas Townsville City Council Department of National Parks Shire of Torres Mornington Shire Council	1

#### AGE 2010-20



#### LOCATIONS 2010-2020 (TOP 5)

Location		<b>Drowning Deaths</b>
Cairns	Green Island	7
Gold Coast	Surfers Paradise	6
	Southport Spit	5
	Kirra Beach	3
Cairns	Fitzroy Island	3

# **Inland Drowning Deaths**

#### **FIVE-YEAR REVIEW**

In addition to beaches, Surf Life Saving Queensland analyses drowning deaths at inland waterways, including but not limited to, rivers, dams, lakes, creeks, bays and swimming holes.

The inland drowning deaths reports draws on data recorded from July 1 2015 until June 30 2020. Please note, the following data does not include public and private pools or beach drowning deaths.\*

Over the past five years there have been 141 drowning deaths at inland waterway locations across Queensland, at an average of 28 per year. The highest total over the past five years was the 2015/16 season with 45 drowning deaths.

Similarly, to beach related drowning deaths, males are highly represented, with 85% of victims being male, compared to only 15% for females. The highest age demographic of victims are 20-29 years with 18%, followed by 60-69 years (16%) and 30-39 years (13%).

Rivers were the most common aquatic environment with 33% of the inland waterway deaths taking place there. This was followed by creeks (17%), falls (10%) and dams (8%).

In terms of council locations, City of Gold Coast recorded the highest amount of inland drowning deaths with 24 over the past five years. This is followed by Cairns Regional Council (16), Brisbane City Council (14) and Townsville City Council (12).

A further breakdown of inland drowning data over the past five years has been provided below:

- 44% of the victims were Australian residents, 22% were international and 34% are unknown
- The type of activity the victim was engaged in prior to their death was also recorded, where known. In total, 25 people were swimming or wading, while 16 drownings were boating-related.
- In total, 44% of the victims were aged over 50; 35% were under the age of 30 and 21% were between 30-49 years of age. The victim's exact age was unconfirmed in nine cases.
- 43% of all inland drowning deaths over the past five years have taken place during the summer months.
- 37% of all inland drowning deaths over the past five years have taken place over a weekend, with 52 deaths in total.

<sup>\*</sup> It is important to note this data excludes drownings deaths at beaches and in public or private pools, but includes all other confirmed cases of drowning deaths which have occurred in Queensland waterways as determined by the Coroner's Office at the time of print.

#### **DROWNING DEATHS BY YEAR 2015-20**



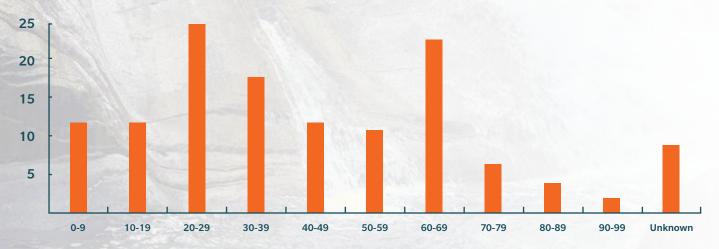
#### COUNCILS 2015-20 (TOP 4)

Council	5 Year Total
City of Gold Coast	24
Cairns Regional Council	16
Brisbane City Council	14
Townsville City Council	12

#### LOCATIONS 2015-20 (TOP 4)

Location / Beach	5 Year Total
Brisbane River Sector 2	9
Ross River (Townsville)	5
Tully River	4
Tallebudgera Creek	4

#### AGE 2015-20



# **Dangerous Marine Creatures**

In addition to tracking coastal and inland drowning deaths, SLSQ also monitors and analyses other key incidents along Queensland's coastline, including crocodile and shark attacks, and incidents involving marine stingers.

#### **IRUKANDJI**

The 2019/20 season saw a significant spike in Irukandji stings across the state, with the overall figure of 23 stings more than tripling on the previous year. This is the second highest sting rate in five years, with 2015/16 recording 35 in one season.

There were at least 17 suspected Irukandji stings across North Queensland and North Barrier in 2019/20. A further six beachgoers received Irukandji stings in the water off Fraser Island.

#### **IRUKANDJI STINGS** FIVE YEAR OVERVIEW 2015-2020\*

Year	Stings
2015/16	35
2016/17	10
2017/18	9
2018/19	6
2019/20	23

<sup>\*</sup>This data relates to stings recorded within SLSQ's North Queensland and North Barrier Branches, spanning an area from Sarina through to Far North Queensland.

#### **CROCODILES**

There were no confirmed crocodile attacks recorded across Queensland in 2019/20.

During the 2019/20 season there were 15 crocodile sightings.

#### **CROCODILE ATTACKS** FIVE YEAR OVERVIEW 2015-2020

Year	Location	Fatal/non fatal
2016	Thornton Beach	Fatal
2017	Johnston River Innisfail	Non-fatal
2017	Palmer Point Innisfail	Fatal
2017	Cape Tribulation Beach	Non-fatal
2017	Craiglie Creek in Craiglie	Fatal
2018	Nagir Island (Torres Strait)	Non-fatal
2019	Captain Billys Landing, Cape York Peninsula	Non-fatal



#### **BLUEBOTTLES**

There was a significant 44% drop of bluebottle stings compared to the previous year, with 21,237 beachgoers treated in 2019/20, compared to 47,785 in 2018/19. This significant drop is most likely due to the change of weather conditions.

# **SHARKS** There were five confirmed shark attacks recorded across Queensland in 2019/20, including one fatality at North West Island, Gladstone. There were two attacks in 2019/20 in the Whitsundays, a decrease from the season prior where there had been four attacks in total, including one fatality. Overall during the 2019/20 season there were 67 shark sightings. **Disclaimer:** It is important to note this publication only reports on marine stings and shark/crocodile incidents that were treated by SLSQ's surf lifesavers or lifeguards, reported to SLSQ, or otherwise confirmed by SLSQ in consultation with external agencies.

#### SHARK ATTACKS FIVE YEAR OVERVIEW 2015-2020

Year	Location	Fatal/non fatal
	Burleigh Heads	Uninjured
	Davies Reef, off Townsville	Uninjured
15/16	Russell Island, Frankland Islands, GBR	Injured
	Miall Island, Yeppoon	Injured
	Heron Island	Injured
	Caloundra	Injured
	Whitehaven Beach, Whitsunday Island	Injured
	Kings Beach, Sunshine Coast	Injured
	Lockhart River	Uninjured
	Northern Tip Of Cape York (Unknown Location)	Uninjured
16/17	Flaggy Rock	Injured
	Murry Island, Torres Strait, (80km East)	Injured
	Hinchinbrook Island	Injured
	North Qld Coast - Weipa	Uninjured
	Moreton Bay Off Redcliffe	Uninjured
	Hinchinbrook Island	Injured
17/18	Alma Bay	Injured
	Lizard Island	Injured
	Cid Harbour, Whitsunday Islands	Injured
	Cid Harbour, Whitsunday Islands	Injured
	Swains Reef, Yeppoon Coast	Injured
10/10	Cid Harbour, Whitsunday Islands	Fatal
18/19	1 km off shore, East of Moffat Beach	Uninjured
	Block Reef (Near Hardy Reef), Whitsunday Islands	Injured
	Catseye Beach	Injured
	Catseye Beach	Unknown
	Yandaran (North Of Bundaberg)	Injured
	Bells Esplanade, Pelican Waters, Sunshine Coast	Injured
	Magra Inlet (Cape Granville)	Injured
19/20	Reef Near Hook Passage, Whitsunday Island	Injured
	Reef Near Hook Passage, Whitsunday Island	Injured



# **Key initiatives** 2019/20

Each year SLSQ collates and analyses data related to drowning deaths, rescues, and other key incidents along Queensland's coastline. This helps the organisation identify any emerging trends, along with any particular 'high-risk' locations and/or demographics which may need a more targeted approach to surf safety.

Following an extensive review of coastal and aquatic safety data from across the past 12 months, SLSQ has identified the following areas of concern:

- A scattered map of drowning locations, with minimal discernible trends and 17 individual beaches recording drowning deaths;
- A strong shift towards older demographics amongst beach-related drowning victims in 2018/19, with 57% aged above 50;
- Continued overrepresentation of international tourists, migrants, and refugees within Queensland's drowning figures, with almost half of all victims this season born overseas:
- · High numbers of beachgoers being rescued or assisted outside of the red and yellow flags.

#### In 2019/20, SLSQ will seek to introduce the following initiatives to help reduce drowning deaths on Queensland beaches.

Queensiand beaches.			
Objective	Strategies		
	Develop and deliver a state-wide campaign to directly engage with older males and encourage them to put safety first at all times while in and around the water.		
Reduce beach-related	<ul> <li>Work closely with key stakeholders, industry groups, and relevant health organisations to encourage regular medical check-ups amongst beachgoers aged 50 and over.</li> </ul>		
drowning deaths amongst males aged	<ul> <li>Increase surf safety awareness and educational efforts, with a particular focus on targeting older demographics.</li> </ul>		
50+.	<ul> <li>Up skill beachgoers via the delivery of free surf safety clinics featuring first aid and CPR skills.</li> </ul>		
	<ul> <li>Continue to roll-out key initiatives including dawn and dusk patrols at key beaches, extended patrol services during peak periods, roving patrols, and SLSQ's after-hours emergency response groups.</li> </ul>		
	Formalise and implement an International Water Skills Assessment within     Queensland state schools, equipping students from culturally and linguistically     diverse backgrounds with the skillset and knowledge to protect themselves within     aquatic environments.		
	Work with key stakeholders to develop and disseminate multilingual beach safety information.		
Reduce beach-related	<ul> <li>Work with relevant multicultural groups and associations to directly target international tourists, migrants, and refugees.</li> </ul>		
drowning deaths amongst international tourists and migrants.	<ul> <li>Partner with tourism bodies, accommodation providers, and travel networks to reach international groups more effectively.</li> </ul>		
	<ul> <li>Roll out increased surf safety pop-up clinics, with a particular focus on targeting international tourists.</li> </ul>		
	<ul> <li>Continue to deliver key safety messaging to beachgoers via SLSQ's On The Same Wave Program.</li> </ul>		
	<ul> <li>Continue to roll-out key initiatives including dawn and dusk patrols at key beaches, extended patrol services during peak periods, roving patrols, and SLSQ's after-hours emergency response groups.</li> </ul>		
Increase general beach safety and awareness, and encourage swimming between the flags, with a particular focus on younger age groups.	<ul> <li>Develop and deliver key programs to increase surf safety awareness within high schools and universities.</li> </ul>		
	• Increase advertising, media, and other targeted promotional activities encouraging safe behaviour and swimming between the flags.		
	<ul> <li>Maximise existing infrastructure and facilities (including lifeguard huts and flag stands) to communicate key safety information.</li> </ul>		
	<ul> <li>Continue to build upon key community awareness initiatives including, but not limited to, the Surf Crew, Beach Safe Schools, and Inland Waterways Programs.</li> </ul>		
	<ul> <li>Continue to roll-out key initiatives including dawn and dusk patrols at key beaches, extended patrol services during peak periods, roving patrols, and SLSQ's after-hours</li> </ul>		

emergency response groups.

# SURF LIFE SAVING QUEENSLAND'S MORETON ISLAND SERVICE

Surf Life Saving Queensland implemented a lifeguard service on Moreton Island in 2015 after a high number of incidents were recorded on the island, specifically around the North Point area and the Tangalooma Wrecks. Previously, volunteer surf lifesavers had patrolled this area from as early as September 2009.

SLSQ Lifeguards operate from 8am – 5pm every day during the Christmas and Easter school holiday period and will typically be stationed at the wrecks, while completing either a four-wheel-drive or jet ski roving patrol over to North Point or the eastern side of the island.

Lifeguard services are critical as being an island, emergency service access is limited. A large number of national and international tourists visit the area each year, with many unfamiliar with Australian surf conditions. Hundreds of people can be rescued on any given day around the wrecks, as the tides are so large they can feel like an invisible rip.

SLSQ fund this critical service, with support in the form of fuel and accommodation provided by Tangalooma Resort. National Parks and QYAC manage the lands outside of the resort, where the Tangalooma wrecks are located. The service is costly, due to its remote nature and challenging logistics.



#### STRADBROKE ISLAND EMERGENCY RESPONSE BEACONS

Surf Life Saving Queensland's Stradbroke Island Emergency Response Beacons were installed in September 2019 due to a large number of rescues and resuscitations occurring in the area.

The beacons are located at the Frenchman's Beach and The Gorges. These areas have been identified as blackspot locations, with lifeguards and surf lifesavers performing high volumes of rescues each year due to the rocky headlands and tidal currents.

There is limited mobile phone reception on Stradbroke Island, so an emergency link is vital. The push to talk function automatically links the person to the State Operations and Communications Centre (SOCC), which can connect them to nearby lifeguards, surf lifesavers and emergency response groups.

Two full time SLSQ lifeguards are stationed on Stradbroke Island at Cylinder and Main Beach throughout the year. During Easter, Christmas and September school holidays SLSQ provide an additional service at Adder Rock.

During the season from September to May SLSQ surf lifesavers patrol beaches on weekends.





# DROWNING VICTIMS - AN AGING DEMOGRAPHIC CONTINUED

The 2019 Coast Safe Report revealed the alarming trend of older men being overrepresented in drowning statics. Sadly, this pattern has continued in the 2019/20 season.

Seven of the 11 victims were males over the age of 50, who were either swimming at an unpatrolled beach or during unpatrolled hours.

A 52-year-old man could have been another victim, had it not been for quick-thinking Maroochydore surf lifesavers.

On October 27, 2019 the 52-year-old had been swimming at an unpatrolled location when he collapsed on the beach after coming out of the water. He had suffered cardiac arrest.

Surf lifesavers from Maroochydore SLSC were on a roving patrol when they were called to help.

They performed CPR on a motionless man several times and then attached a defibrillator and delivered four shocks.

He was transported to hospital and placed in an induced coma for 24 hours.

If it was not for these three surf lifesavers completing a roving patrol, the man may not have returned to his loved ones.



#### **GOLD COAST DAWN AND DUSK PATROLS**

Dawn patrols on Gold Coast beaches commenced in March 2005 after seven people had lost their lives between the hours of 5:30am - 8am between July 2000 - February 2005.

15 years later and SLSQ is proud to say that the service has continued.

In the 2019/20 season the Gold Coast dawn patrol performed 6,874 preventative actions and one rescue.

SLSQ have also implemented dusk patrol services, which take place during peak holiday periods on the Gold Coast. In the 2019/20 season this service recorded 676 preventative actions.

The implementation of these services has seen a significant reduction of drowning deaths during these times and locations.







# Key initiatives 2020/21

Following an extensive review of coastal and aquatic safety data over the past 12 months, SLSQ has identified the following areas of concern:

- A continued over-representation of men aged over 50 in beach-related drowning deaths
- A concerning number of people being rescued swimming outside of the flags
- A concerning number of Australians being rescued
- International tourists, migrants and refugees accounting for almost half of all drowning victims in 2019/20
- Nearly 50% of beach coastal drowning deaths taking place on islands

#### **Objective**

#### **Strategies**

• Develop and deliver a state-wide campaign that speaks directly to men over the age of 50. SLSQ will seek to engage a high-profile person in this age demographic who will encourage men to put their safety first and swim between the flags during patrol hours.

The campaign will directly target men who think "she'll be right" when swimming alone, outside of flagged areas or before and after patrol hours.

#### Reduce beach-related drowning deaths amongst men over the age of 50

- Work closely with key stakeholders, industry groups and relevant health organisations to encourage men over the age of 50 to have regular medical checkups.
- Increase surf safety awareness for older demographics by conducting educational sessions at caravan and camping shows, gyms and retirement villages.
- Conduct a water safety seniors' program at retirement villages across Queensland.
- Continue to roll-out key lifesaving initiatives including dawn and dusk patrols at key beaches, extended patrol services during peak periods, roving patrols and SLSQ after-hours emergency response groups.

#### Increase surf safety and beach awareness for Australians.

Almost 50% of those who drowned at a coastal beach location in 2019/20 were Australian and 80% of

the people we rescued

were Australian.

- Develop and deliver a state-wide campaign with general messaging that speaks directly to Australians. The campaign will encourage Australians not to be complacent when swimming.
- Water safety education for children and people in rural areas through SLSQ's Beach to Bush Program.
- Conduct a signage audit on 'at risk' islands.
- Ensure existing infrastructure and facilities, including lifeguard towers and flag stands, communicate key beach safety messaging.
- Continue to roll out key lifesaving initiatives including dawn and dusk patrols at key beaches, extended patrol services during peak periods, roving patrols and SLSQ after-hours emergency response groups.
- Continue to build upon key community awareness programs, including but not limited to, On The Same Wave, Surf Crew, Beach Safe Schools and Inland Waterways Programs.

#### **Support the Tourism** Queensland's "Good to go" campaign by providing beach safety awareness to visitors and people from diverse backgrounds

- Work with Tourism Queensland, Queensland Tourism Industry Council, accommodation providers and travel networks in delivering key beach and waterway safety messages to visitors.
- Provide updated video safety messaging to popular tourist destinations, in particular islands.
- Provide updated signage and beach safety information at all Queensland airports.
- Continue the International Water Skills Assessment within Queensland schools, equipping students from culturally and linguistically diverse backgrounds with the skillset and knowledge to protect themselves within aquatic environments.

# **Challenges and** Opportunities

Surf Life Saving Queensland foresees the upcoming 2020/21 season to be different from any experienced before.

It is possible that international and national borders could be closed in Queensland during the busy summer months. Although there may be fewer foreign visitors, SLSQ are expecting Queenslanders to flock to the beaches over the holiday period.

SLSQ has identified a number of key challenges and opportunities when it comes to reducing, and ultimately eliminating, drowning deaths and other fatalities at coastal and inland aquatic locations.

## **Challenges**

- Surf Life Saving Queensland and the 57 clubs have experienced severe financial difficulties due to COVID-19. This could impact the purchasing power of critical equipment and limit research into new technology
- Increased costs of patrolling Queensland beaches
- Stretched resources at SLSQ and clubs
- Complacency and/or overconfidence of Australian swimmers at Queensland beaches resulting in both a high number of drowning deaths and rescues
- An ongoing, concerning increase in the number of rescues occurring outside of the flags, placing a strain on SLSQ's existing resources at patrolled beaches
- A number of councils across Queensland opting not to endorse standard recommendations regarding safety signage, emergency beacons, cameras, and drone operations;

- An inconsistent approach to aquatic safety amongst some tourism operators; and
- A limited pool of allocated funding to effectively advocate and manage drowning prevention strategies in Queensland.
- An increased rate of low to poor swimming ability amongst school students aged five to 17 years old, with a significant number of rescues performed across this age group on Queensland beaches
- International migrants permanently relocating to Queensland, many of whom have limited experience in and around the ocean and other waterways;

# **Opportunities**

- Increase communication and collaboration with key health agencies across Queensland
- Reinforce our surf safety message to Queenslanders of swimming between the red and yellow flags
- Expand SLSQ's reach at unpatrolled and high-risk beaches through the use of drones, coastal cameras and emergency beacons
- Build relationships with Tourism Queensland, Queensland Tourism Industry Council and other key tourism industry bodies, operators and airline to develop consistent and widespread surf safety messaging for travellers in Queensland
- Work directly with key stakeholders to develop and implement mandatory school-based programs, designed to help improve the swimming ability of Queensland residents
- Continue to work closely with land managers to increase the use of appropriate and consistent aquatic safety signage at high-risk locations across Queensland

- Build on SLSQ's century of experience saving lives along Queensland's coastline, and transfer this expertise to protecting swimmers at inland aquatic locations across the state
- Further develop SLSQ's suite of educational programs, designed to improve public knowledge and understanding of coastal and aquatic dangers
- Build upon SLSQ's 24/7 emergency response capacity in all key locations across the state
- · Increase communication, collaboration, and integration with key health agencies across Queensland in a bid to improve the accuracy of marine stinger and coastal safety data
- Seek additional Government funding and support to ensure that SLSQ has the capacity and resources to continue saving lives and eliminating drowning deaths at all public waters in Queensland
- Work closely with key stakeholders to promote safety swimming behaviours amongst identified high-risk groups and demographics

# Methodology, Research and Acknowledgements

#### **METHODOLOGY**

Contained within the Coast Safe Report 2020 is information and data obtained by SLSQ's major incident notification forms, as well as witness reports, media analysis, and Surf Life Saving Australia. Where possible, this information has been verified with National Coronial Information System (NCIS) data for coastal drowning deaths for the period 1 July 2019 to 30 June 2020.

While all care has been taken to ensure that statistical information included within this report is accurate as of the date of publication, it is important to note that data may be amended over time following the outcome of coronial investigations that are ongoing at the time of

SLSQ works with the Department of Justice and Community Safety as the source organisation of the

#### **CAPABILITY AND RESCUE ANALYSIS**

SurfGuard, the Lifesaving Incident Management System and Operational Console (LIMSOC), the Incident Report Database (IRD), and SurfCom management system are web-based applications making up part of a suite of applications that enables members, clubs, branches and states to enter and access Surf Life Saving data. This data includes operational (including rescues, preventative actions and first aid treatments), capability (including assets and services), educational, and administrative. Information extracted from LIMSOC can be used to identify how many rescues were performed by volunteers, lifeguards and support services during the 2019/2020 patrol season.

#### **DROWNING DATA ANALYSIS**

SLSO collects data and information on key coastal incidents and fatalities from LIMSOC IRDs, SurfCom, SLSA, the NCIS, and media reports. This information is verified and compiled for analysis by SLSQ's Lifesaving Operations Department.

For the purpose of this report, SLSQ defines a beachrelated coastal drowning death as any death caused directly by immersion or submersion that has occurred in a surf or beach environment within two nautical miles of shore.

#### DROWNING DATA LIMITATIONS

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 differ slightly from annual totals previously reported. It is noted that our current year's data may change with closure of investigations. Once a closure occurs to NCIS cases, SLSQ can modify undetermined cases, those with unknown intent, and those where the cause of death is not drowning.

All deaths known to have occurred in coastal waters have been included as coastal drowning deaths, unless otherwise stated.

#### INDUSTRY EXPERTS

SLSQ continues to work with industry experts and external agencies when it comes to the collation and analysis of drowning and coastal data. SLSQ acknowledges the support of the following people and organisations:

- Phoebe Meagher, Taronga Zoo, for assistance with the collation and analysis of data pertaining to sharks in Queensland waters;
- Jamie Seymour and James Cook University for expert advice and guidance regarding Irukandji and other marine stingers;
- The Department of Agriculture and Fisheries for their assistance with the collation and analysis of data pertaining to sharks in Queensland waters;
- The Department of National Parks, Sport, and Racing and Queensland Parks and Wildlife for assistance with the collation and analysis of data pertaining to crocodiles in Queensland;
- Charlie Manolis, Wildlife Management International, for assistance with the collation and analysis of data pertaining to crocodiles in Queensland;
- Surf Life Saving Australia;
- · National Coronial Information System; and
- Oueensland Coroner's Office.

#### **FUNDING SUPPORT**

SLSQ acknowledges and thanks the Queensland and Federal Governments for their continued support and funding of our organisation and its vision of saving lives.

## Glossary

ALSQ - Australian Lifeguard Service Queensland.

Aquatic environment - Areas such as coastal and inland beaches and waterways, swimming pools and their facilities, and other bodies of water, slurry and other agricultural and industrial liquids storage.

**Beach-related drowning death -** A death by immersion or submersion that has occurred in a beach environment.

**Blackspot -** An area with a high concentration of coastal/ocean incidents and a high probability/risk of ongoing recurrence.

Coastal drowning death - Where the location of the drowning is on the coast, in the ocean up to two nautical miles (2NM) offshore.

**Drowning -** The process of experiencing respiratory impairment from submersion/immersion in liquid; outcomes are classified as death, morbidity and no morbidity.

First aid - Assessments and interventions that can be performed by a bystander (or by the victim) with minimal or no medical equipment.

**Incident -** Any unplanned event requiring lifesaving services intervention.

**Inland -** An area that is beyond the high waterline or within a landward distance of 5 times the width of the coastal inlet/river mouth and is an aquatic influenced environment located within land boundaries.

**International -** An individual who is confirmed to reside overseas and/or is a temporary visitor to Australia.

IRB - Inflatable rescue boat.

**Lifeguard** - An individual that undertakes patrols at a beach or another aquatic environment. This is typically a salaried member, qualified in public safety and aquatic rescue.

**Lifesaver -** An individual that undertakes patrols at a beach or another aquatic environment. This is typically a non-salaried member, qualified in public safety and aquatic rescue.

**Lifesaving service -** A coordinated group that exists to provide aquatic safety services to the public. This includes surf and life saving clubs, lifeguards, SurfCom, rescue water craft, inflatable rescue boats, helicopters, ATVs and 4WDs.

**LIMSOC -** Lifesaving Incident Management System and Operational Console.

Local Government Area (LGA) - Also known as local councils, LGAs include cities, towns, shires, municipalities or boroughs.

NCIS - National Coronial Information System.

Ocean drowning death - Where the location of the drowning is in the ocean further than 2NM offshore, but no further than 12NM.

Offshore - Beyond the surf zone.

**Open ocean -** The seabed, water and air space above the water between 2NM and 12NM (the Australian territorial waters limit) offshore.

Operations support - Rapid response rescue units, not affiliated to any specific surf life saving club.

Patrol - Service undertaken to monitor activities in/around an aquatic environment and respond accordingly through either preventative actions or rescue operations.

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. Note: A preventative action will be recorded as the singular activity taken (i.e. clearing the water for lightning will be one action. The number of people warned/altered as a result of this action will be recorded separately as a warning).

**Prevention -** Where intervention by a lifesaving resource averts a person/s from getting into a potentially life-threatening situation.

Public waters - Any freely accessible waterway including, but not limited to, beaches, rivers, creeks, dams, lakes, lagoons and streams; this excludes commercial and private swimming pools, as well as household waters such as bath tubs, sinks and backyard containers.

**Rescue -** Retrieving 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.

Rescue water craft (RWC) - A personal water craft (e.g. jet ski) used by lifesavers and lifeguards for performing rescues and preventative actions.

**Resuscitation - Preservation or restoration of life by** establishing and maintaining a person's airway, breathing and circulation.

**Riding craft -** A piece of non-powered recreational and/ or sporting equipment used in the surf and other aquatic environments including surfboards and boogie boards.

Rip current - A seaward flowing current of water moving through a surf zone.

**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 2018 to June 2019.

**SLSA -** Surf Life Saving Australia.

**SLSQ -** Surf Life Saving Queensland.

**SOCC -** State Operations and Communications Centre.

Surf life saving club (SLSC) - An SLS-affiliated not-for-profit organisation which has volunteer members who provide coastal safety services to the community.

**SurfCom -** SLS radio communications centre which assists in managing the communications of lifesaving operations and data collection.

**Undetermined -** Cases that are not associated with a closed Coroner's report on NCIS are often left 'undetermined' until an official cause of death has been determined. Some examples are cases where bodies have been found washed up on the beach; reports of individuals struggling in coastal environments are made and the bodies are not found/missing persons reports are not made; or a suspected heart attack in a coastal environment rather than death due to immersion. These deaths will all be followed up on and the incident category updated once Coroner determinations are made accessible.

Unpatrolled location - An area that has no service, is not monitored or not patrolled.

**Unpowered craft -** A piece of non-powered recreational and/or sporting equipment used in the surf and other aquatic environments. Examples include kayaks and canoes.

Watercraft - A piece of non-powered recreational equipment used in the water. Examples include surfboards, stand-up paddle boards, boogie boards, windsurfers or kayaks.

