

# NSW SUMMER DROWNING REPORT 2016/17

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AN INVESTIGATION INTO  
DROWNING DEATHS IN NSW

EVERYONE CAN BE A LIFESAVER



**Royal Life Saving**

ROYAL LIFE SAVING SOCIETY - AUSTRALIA



## ABOUT ROYAL LIFE SAVING

Royal Life Saving is focused on reducing drowning and promoting healthy, active and skilled communities through innovative, reliable, evidence based advocacy; strong and effective partnerships; quality programs, products and services; underpinned by a cohesive and sustainable national organisation.

Royal Life Saving is a public benevolent institution (PBI) dedicated to reducing drowning and turning everyday people into everyday community lifesavers. We achieve this through: advocacy, education, training, health promotion, aquatic risk management, community development, research, sport, leadership and participation and international networks.

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Royal Life Saving Society – Australia  
The drowning prevention research of the Royal Life Saving Society – Australia is proudly supported by the Australian Government.



**Australian Government**

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[royallifesaving.com.au](http://royallifesaving.com.au)

This report was commissioned and funded by the NSW Government in response to the increase in drowning deaths in NSW during summer 2016/17.



## INTRODUCTION

Every year an average of 102 people drown in New South Wales (NSW), with summer usually accounting for the highest number of fatalities. During the 2016/17 summer period, NSW experienced a high number of drowning deaths across the state. The number of drowning deaths over summer and in particular between Christmas and New Year, resulted in extensive media coverage.

In response to this increase in drowning deaths, the NSW Government commissioned Royal Life Saving Society – Australia to undertake an investigation into drowning deaths over the summer period in NSW (December 2016 to February 2017). By analysing these events, the investigation sought to bring clarification and insight to the period. Key trends relating to age, sex, ethnicity, location, activity and risk factors are identified, as well emerging issues related to high-risk populations, locations and activities.

# 102

**PEOPLE DROWN IN  
NEW SOUTH WALES ON  
AVERAGE EVERY YEAR**

## METHODS AND DEFINITIONS

Summer 2016/17 cases analysed within this report were sourced from several methods including media monitoring, the National Coronial Information System (NCIS) and de-identified police reports obtained from the NSW Police Force in conjunction with the State Coroner's Court of NSW.

Historical drowning data were sourced from the Royal Life Saving National Fatal Drowning Database. NSW population data was sourced from the Australian Bureau of Statistics (ABS). Royal Life Saving excludes drowning deaths known to be as a result of suicide, homicide, animal-related attacks and natural causes.

### Historical Drowning Data

Historical drowning data used in this report is drawn from the Royal Life Saving National Fatal Drowning Database.

### Visitor Status

The distance between the incident and residential postcode was determined using Google Maps. A distance of less than 100km was considered 'not a visitor', more than 100km but within the same state was 'visitor - intrastate', a different state was 'visitor - interstate' and an overseas residential postcode as 'visitor – overseas'. In cases where the incident or resident postcode was unknown, this was entered as 'unknown'.

### Remoteness Classification

There are five remoteness classifications used to categorise the location of a drowning incident. These are major cities, inner regional, outer regional, remote and very remote. Remoteness classification was defined by cross referencing the postcode of a drowning incident with the Australian Standard Geographical Classification – Remoteness Area (ASGC-RA) system.

### Time of Day of Drowning Incident

The time of day of the drowning incident was coded into four bands: early morning (12:01am to 6am), morning (6:01am to 12pm), afternoon (12:01pm to 6pm) and evening (6:01pm to 12am).

### Disclaimer

Please note the fatal drowning statistics presented in this report are subject to change pending the outcome of ongoing coronial investigations.

# NEW SOUTH WALES SUMMER DROWNING REPORT: AN INVESTIGATION INTO DROWNING DEATHS

## OVERALL

# 41

### PEOPLE DROWNED IN NSW BETWEEN 1 DECEMBER 2016 & 28 FEBRUARY 2017

INCLUDING 17 BETWEEN CHRISTMAS & NEW YEAR  
(25 DECEMBER 2016 TO 2 JANUARY 2017)

## TRENDS OVER TIME

There were four times as many drowning deaths during the 2016/17 acute drowning period than the 10 year average for the same period.

Financial year	Number of deaths	
	Acute drowning period (25 December 2016 – 2 February 2017)	Total Summer (1 December 2016 to 28 February 2017)
<b>Historical drowning deaths</b>		
2006/07	4	37
2007/08	4	35
2008/09	4	45
2009/10	5	38
2010/11	3	34
2011/12	3	25
2012/13	5	33
2013/14	3	32
2014/15	6	33
2015/16	2	34
<b>Drowning deaths (known as at 24 April 2017)</b>		
2016/17	<b>17</b>	41
<b>Ten year average (2006/07 to 2015/16)</b>		
	<b>4</b>	35

Selection of news headlines about NSW summer drowning incidents.

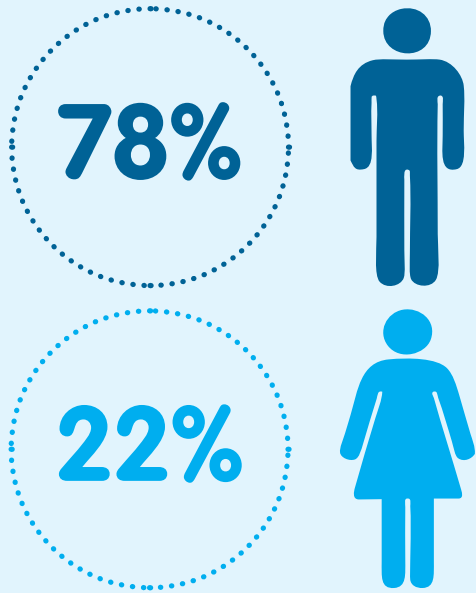


## WHO DROWNS?

### SUMMER

(1 December 2016 to 28 February 2017)

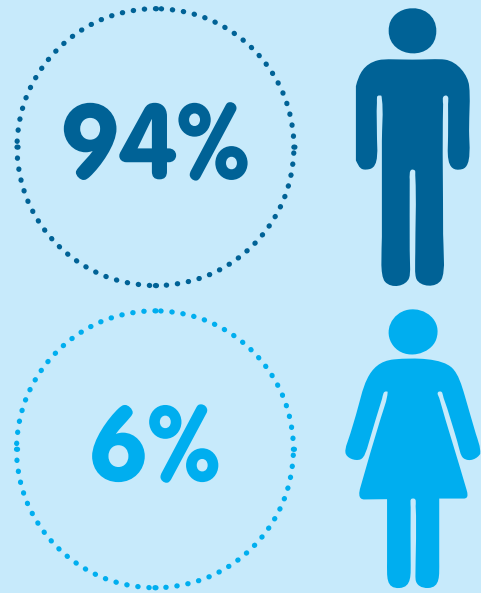
#### SEX



### ACUTE DROWNING PERIOD

(25 December 2016 to 2 January 2017)

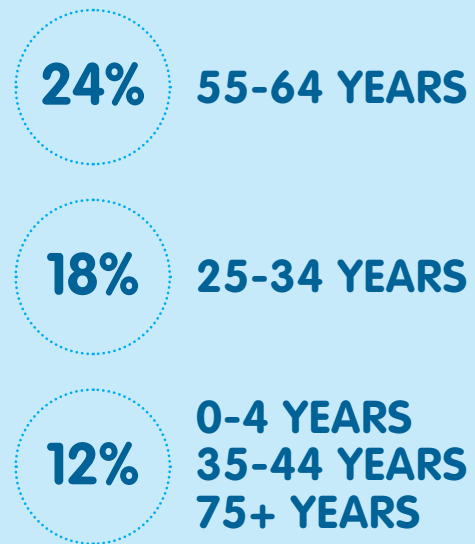
#### SEX



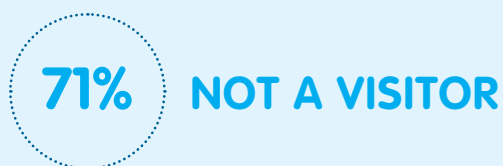
#### KEY LIFE STAGES



#### KEY LIFE STAGES



#### VISITOR STATUS



#### VISITOR STATUS

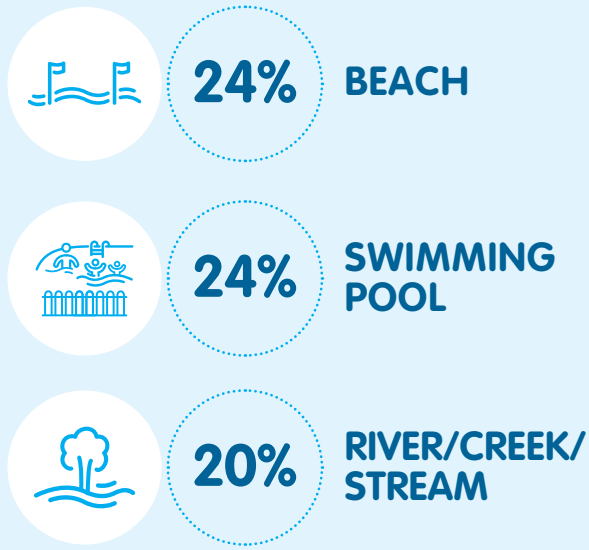


**WHERE, WHEN AND HOW DO THESE DROWNING DEATHS OCCUR?**

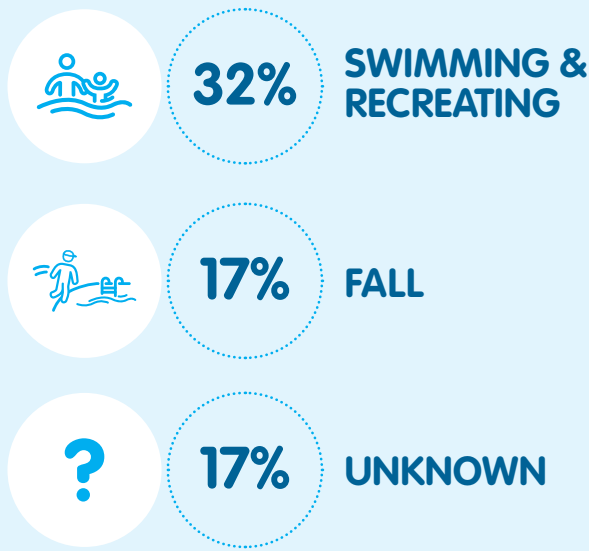
**SUMMER**

(1 December 2016 to 28 February 2017)

**LOCATION OF DROWNING INCIDENT**



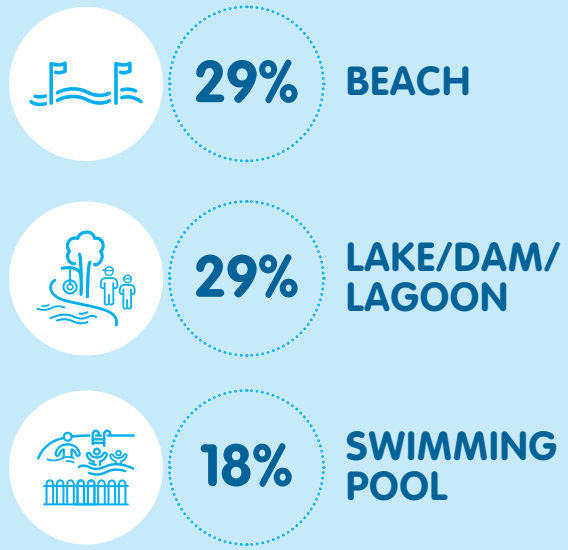
**ACTIVITY PRIOR TO DROWNING**



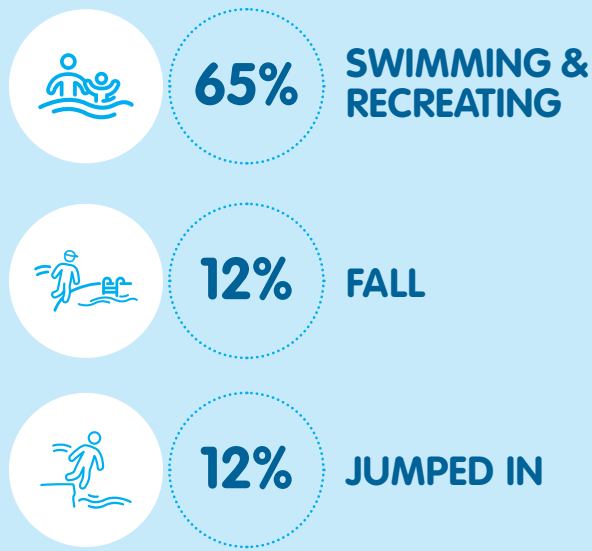
**ACUTE DROWNING PERIOD**

(25 December 2016 to 2 January 2017)

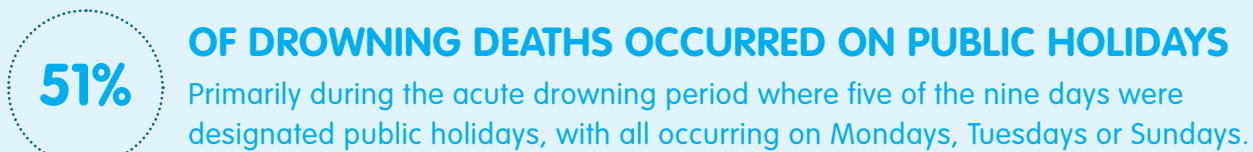
**LOCATION OF DROWNING INCIDENT**



**ACTIVITY PRIOR TO DROWNING**



**PUBLIC HOLIDAYS**



WHERE, WHEN AND HOW DO THESE DROWNING DEATHS OCCUR?

**SUMMER**

(1 December 2016 to 28 February 2017)

REMOTENESS CLASSIFICATION OF DROWNING LOCATION

**51%** MAJOR CITIES

**34%** INNER REGIONAL

**12%** OUTER REGIONAL

**ACUTE DROWNING PERIOD**

(25 December 2016 to 2 January 2017)

REMOTENESS CLASSIFICATION OF DROWNING LOCATION

**47%** MAJOR CITIES

**41%** INNER REGIONAL

**12%** OUTER REGIONAL

TIME OF DAY OF DROWNING INCIDENT

**61%** AFTERNOON  
(12:01PM TO 6PM)

**24%** EVENING  
(6:01PM TO 12AM)

**7%** MORNING  
(6:01AM TO 12PM)

TIME OF DAY OF DROWNING INCIDENT

**71%** AFTERNOON  
(12:01PM TO 6PM)

**24%** EVENING  
(6:01PM TO 12AM)

**6%** MORNING  
(6:01AM TO 12PM)

TIME OF DAY

**61%**

**OF DROWNING DEATHS OCCURRED IN THE AFTERNOON**

The afternoon (12:01pm to 6:00pm) was the most common time for summer drowning deaths in New South Wales to occur.

## WHY DO THESE DROWNING DEATHS OCCUR?

### ALCOHOL, DRUGS AND MEDICAL CONDITIONS

#### ALCOHOL AND ILLICIT DRUGS



#### PRE-EXISTING MEDICAL CONDITIONS



Common medical conditions:

- Cardiac conditions (ischaemic heart disease, hypertension)
- Dementia
- Epilepsy

### HIGH RISK POPULATIONS

#### CULTURALLY AND LINGUISTICALLY DIVERSE



Countries of birth included Vietnam, Pakistan, China and Nepal.

#### INTERNATIONAL STUDENTS



#### INDIGENOUS

Indigenous people were overrepresented in NSW summer drowning statistics.



## SUMMER CAUSAL FACTORS

### WEATHER & THE CONCEPT OF SWIMMABLE DAYS

27°

Swimmable days were defined as days where the temperature was 27+ degrees and no rain

6 of the 9 acute drowning period days were swimmable days – compared to the 10 year average of 1.5

### INCREASED POPULATION AND DENSITY

1.43%

POPULATION GROWTH IN NSW

### INCREASED LEISURE TIME & REDUCTION IN COMMUTER NUMBERS

The three days that were not public holidays or weekends in the acute drowning period saw a:



76% TO 78% REDUCTION IN COMMUTER NUMBERS COMPARED TO AVERAGE WEEKENDS



78% TO 81% REDUCTION IN COMMUTER NUMBERS COMPARED TO AVERAGE PUBLIC HOLIDAYS

Normal weekdays between Christmas and New Year are far more like typical weekends or public holidays in regards to commuter trips, indicating a substantial proportion of people take annual leave during this period.

### EXPOSURE



13-98% INCREASE VISITATION AT A SAMPLE OF PUBLIC POOLS



5-6% DECREASED VISITATION AT SURF LIFE SAVING NSW BEACHES



62-144% INCREASED VISITATION AT LAKE MACQUARIE CITY COUNCIL BEACHES



SIGNIFICANT INCREASE IN VISITATION AT BENTS BASIN RESERVE AND WATTAMOLLA LAGOON IN NSW NATIONAL PARKS



10% INCREASE IN RADIO CALLS AND A 6% INCREASE IN VESSEL LOGONS FOR BOATING RELATED ACTIVITY ON NSW WATERWAYS

### MEDIA COVERAGE

696

PIECES GENERATED NATIONALLY ACROSS SUMMER

47.6

MILLION PEOPLE COMBINED AUDIENCE

## SUMMER CAUSAL FACTORS

### PROMOTION OF SECRET SWIMMING SPOTS



**INCREASED PROMOTION OF "SECRET" "HIDDEN" NATURAL SWIMMING LOCATIONS**

#cliffjumping

### Headlines promoting secret swimming locations published during summer.



### News websites referenced

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<http://www.dailytelegraph.com.au/news/nsw/get-back-to-nature-with-a-dip-at-sydneys-best-waterholes-and-rock-pools/news-story/a44343c5bfb77b6ccd75fc965c2f99e>

<https://concreteplayground.com/sydney/travel-leisure/leisure/the-ten-most-unusual-swimming-holes-to-try-around-sydney/>

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<http://www.dailytelegraph.com.au/lifestyle/parenting/school-holidays/waterfalls-top-five-hidden-gems-in-and-around-sydney-packed-with-wow-factor/news-story/92f3d79aafbc24f737b18d2642b045df>

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