

S u r f S a f e t y

Find the flags & swim between them

Look at the safety signs

Ask a lifesaver for advice

Get a friend to swim with

Stick your hand up for help



Surf Life Saving Australia would like to thank our supporters.



Helping Australians to have a Kellogg's Surf Safe Summer

In a bid to help address the issues of community surf safety in the 2002/03 season, Surf Life Saving Australia has joined with major sponsor Kellogg's to develop the Kellogg's Surf Safe Summer campaign – a community awareness program designed to educate Australians on how to stay safe in the surf.

The program, which is national in focus, will see surf safety messages communicated on the back of millions of cereal packs. This will be accompanied by a television advertising campaign, online surf safety information and a public relations program.

To help further the community education effort, world champion swimmer Susie O'Neill has been enlisted to spearhead the program.

According to Susie, who trained to be a surf lifesaver before she became a professional swimmer, age and strength are no protection against the surf. "Surf safety is certainly an issue close to my heart. Even in my adult years I have experienced what it is like to feel the tug of a rip towing you out to sea. I know that swimming between the flags at a patrolled beach is essential and if I can use my profile to get other Australians to understand that, then I will be very happy," she added.

Under the Kellogg's Surf Safe Summer program, individual clubs will receive subsidised patrol uniforms and rescue equipment. Key lifesaving conferences and leadership camps will also be supported.



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The life of the beach.

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NATIONAL SURF SAFETY REPORT 2002

Surf Life Saving Australia

61 people drowned along the Australian coastline last year



The life of the beach.



Surf Life Saving Australia (SLSA) has collected data on a total of 61 water related deaths along the Australian coastline for the year 1 July 2001 to 30 June 2002. This data is collected through the Coastal Incident Database, part of the Australian Beach Safety and Management Program (ABSAMP), drawing on data collected by all SLSA services.

The data indicate a significant reduction in water related deaths in coastal areas from the previous season's total of 77 fatalities, as well as falling below the five year average of 63 fatalities per year (Figure 1). The 61 recorded fatalities for the year ending 30 June 2002 also represent the second lowest rate of drowning recorded in the past five seasons (Figure 2).

Whilst the reduction in coastal drownings from last season is an encouraging sign, many of these drownings could have been prevented by bathing at patrolled beaches. SLSA's communication of the 'surf safe' message to the wider population will take time due to the geographic & demographic diversity of Australia, however there are a number of consistencies between the findings of this report and the data from previous years. This report contains specific data of

demographic variables, circumstances and nature of injuries that detail the areas of highest risk of coastal drowning.

This report also details the actions of SLSA services, ensuring many coastal incidents were prevented on over 300 beaches patrolled by SLSA's 33,000 plus volunteer surf lifesavers, in cooperation with the increasing number of SLSA's professional lifeguard services.

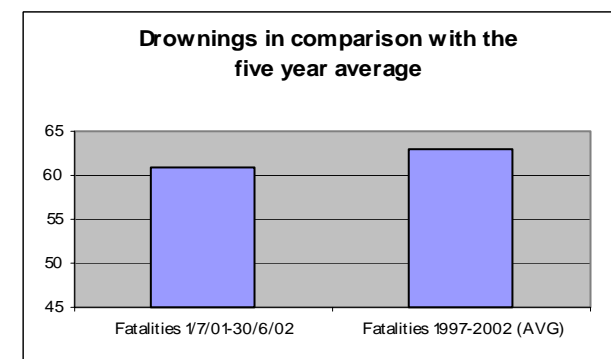


Figure 1

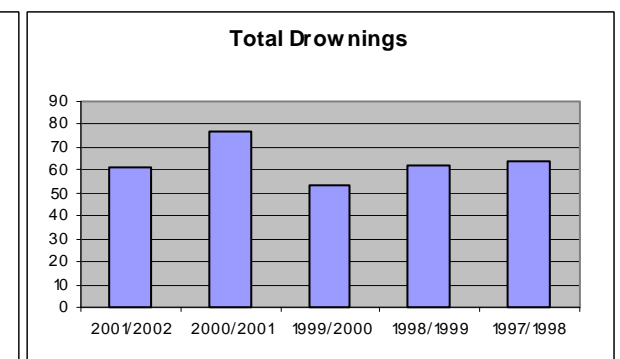


Figure 2

L o c a t i o n

State	Fatalities 1/7/01-30/6/02	Fatalities 1/7/00-30/6/01	Fatalities 1/7/99-30/6/00	Fatalities 1/7/98-30/6/99	Fatalities 1/7/97-30/6/98	Five year Average	Standard Deviation
New South Wales	27	26	23	33	16	25	6.2
Queensland	17	15	15	12	13	14	1.9
Victoria	2	8	4	9	18	8	6.2
South Australia	0	6	8	5	8	5	3.3
Western Australia	12	20	3	1	6	8	7.7
Tasmania	0	2	0	1	3	1	1.3
Northern Territory	3	0	0	1	0	1	1.3
Total	61	77	53	62	64	63	8.7

Table 1

The location (state or territory) is recorded for 100% (n=61) of coastal drownings in 2001/02 (Table 1). Nearly three-quarters of all drownings occurred in New South Wales (44%, n=27) and Queensland (28%, n=17). The rate of drowning is significantly higher in the Northern Territory and Western Australia, and significantly less in Victoria, South Australia and Tasmania than the Australian rate (Table 2). There is no significant difference in the rate of coastal drownings in New South Wales and Queensland compared to the Australian rate.

The New South Wales (n=27) and Queensland (n=17) drowning figures (Table 1) both represent a relatively steady increase in the number of water related deaths on the states' coastlines for the period 1/7/97 – 30/6/02. Victoria has recorded the most encouraging figures through this period, achieving a 75% reduction on both the previous season and the overall five year average. Several drownings did occur in South Australia in 2001/02, but the location (coastal or

inland) and other details are not known. For this reason South Australian data have not been included in this analysis. The other states have remained fairly consistent with low levels of coastal drownings over the period, with the exception of Western Australia. Whilst the figures in WA have fluctuated dramatically throughout this period (reflected in a high SD of 7.7), anecdotal evidence for this inconsistency suggests that the recent increase in statistics resulted from better methods of recording data in remote locations of the state.

With the inclusion of tourists as well as local residents in the drowning figures quoted (Table 2), in preference to using population figures for each state one would ideally express coastal drownings as a function of the opportunity to participate in surf-related activities, by using either total number of beach visits per state, or person hours spent at the beach, as the denominator. However, as beach visitation numbers are not being collected yet in each state, population figures, despite their limitations, must suffice.

State/Territory	Frequency of drowning	Percentage of total	Population	Crude all-age drowning rate per 10 ⁶ per year	Comparison with Australian rate; chi-square test (1,0.05) result
Northern Territory	3	5%	199 868	15.0	p<0.5
Western Australia	12	20%	1 918 805	6.3	p<0.5
Queensland	17	28%	3 670 459	4.6	p<0.5
New South Wales	27	44%	6 642 879	4.1	p<0.5
Victoria	2	3%	4 854 133	0.4	p<0.5
South Australia	0	0%	1 518 874	0.0	p<0.5
Tasmania	0	0%	473 252	0.0	p<0.5
Australia	61	100%	19 603 502	3.1	

Table 2

Lifesaving Statistics

Surf lifesavers performed 11,837 rescues and 207,596 preventions (actions that warn people of potential dangers) in the 2001/2002 season, as well as performing 30,347 first aid treatments (Table 4). Beyond this, SLSA, through its professional lifeguard services, conducted a further 1,550 rescues and 118,532 preventative actions throughout the year. Rescue numbers have remained relatively stable since 1997/98 (Figure 9). The number of preventative actions (Figure 10) and first aids (Figure 11) over the past 5 years has eased in the past season.

11 837 Rescues
207 596 Preventions
30 347 First Aids

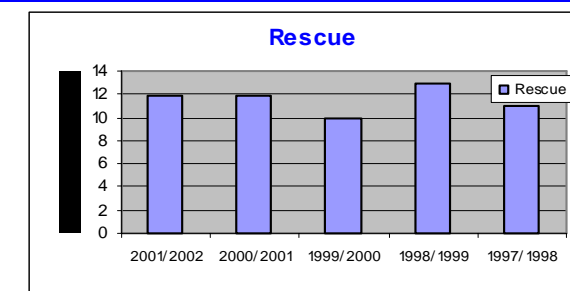


Figure 9

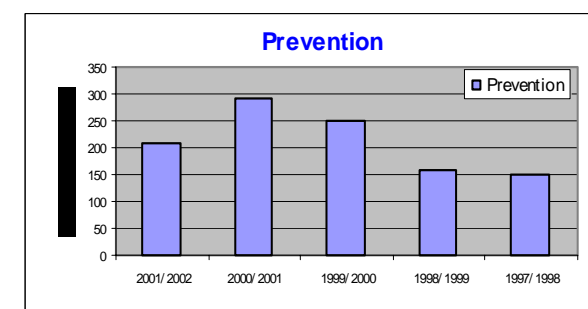


Figure 10

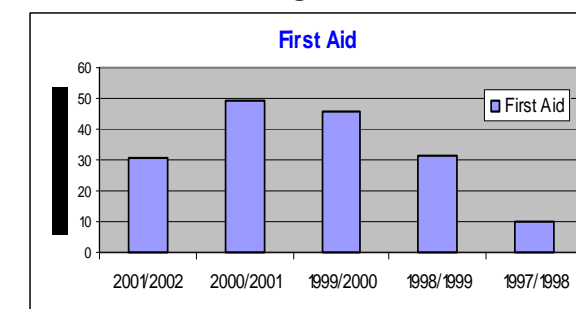


Figure 11

Surf Lifesaving Statistics			
States	Rescues	Preventions	First Aids
New South Wales	6104	83439	18229
Queensland	4291	69542	7953
Victoria	1000	44345	1821
South Australia	165	6679	681
Western Australia	200	2948	1468
Tasmania	40	146	64
Northern Territory	34	497	131
Total	11837	207596	30347

Table 4

Future Direction of Coastal Incident Research

There is an ever-increasing trend in water related research to expand from the narrow focus of a reduction in drowning to a holistic approach of a reduction in injury. In view of this, the Surf Life Saving Australia Coastal Incident Database (CID) will be superseded in the coming season by an Incident Report Database (IRD) which will expand the scope of research to include:

- First Aid
- Major Rescue
- Search & Rescue
- Member Injury
- Near Drowning

This increase of data will provide Surf Life Saving Australia with further information to better understand the who, where, why & how of all coastal incidents and better educate and service the community.

Temporal Data

Predictably, drowning rates varied with the season such that a positive correlation was evident with increasing average seasonal temperatures, with the summer months from December to February accounting for over one-third (34%, n=21) of all drownings. This relationship between general weather patterns and drowning figures is

consistent over the past 4 seasons (Figure 6), with the only shift from this trend occurring in the season ending 2002. Unlike previous seasons, 2001/2002 recorded its two highest drowning figures in months outside of summer, with October (n=13, 21%) and April (n=10, 16%), accounting for over a third of all drownings for the year (37%).

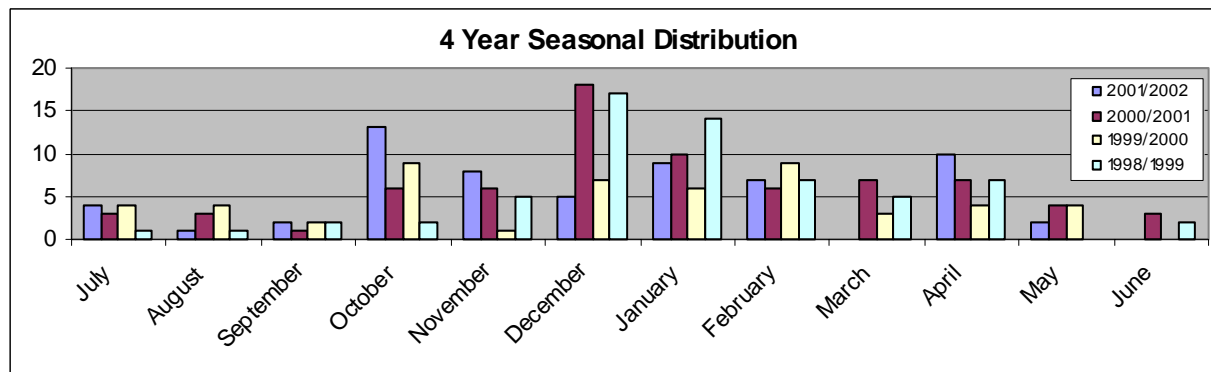


Figure 6

Day & Time

Data indicating the day of the week are recorded for 100% (n=61) of all cases, with almost one-quarter of all drownings occurring on Saturday (n=14, 23%). For the category of time, data was available for 70% (n=43) of cases. Over one-third (n=23, 38%) of drownings occurred in the afternoon, between 12pm and 6pm.

Comparing the relationship between time and day of drownings, available for 70% (n=43) of all cases, indicated that drownings occurred most frequently on Thursday (n=5) and Saturday (n=6) afternoons (12pm to 6pm)(Figure 7). Over three-quarters (81%, n=35) of all drownings occurred in daylight hours (6am to 6pm).

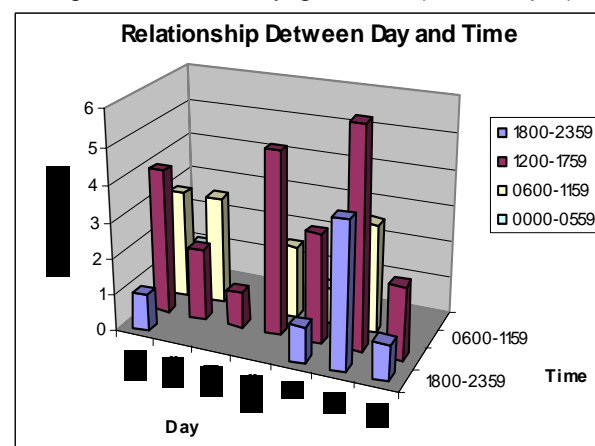


Figure 7

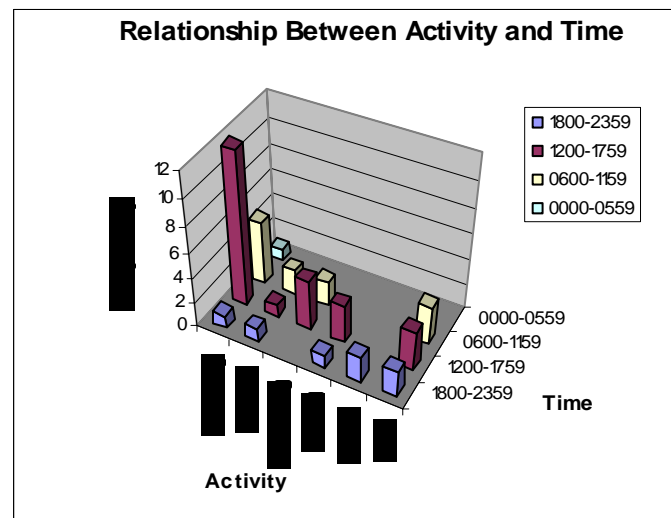


Figure 8

Time & Activity

Data indicating time and activity are available for 70% (n=43) of cases. For these incidents where the time was known, over half of all drownings where the subject was swimming (52%, n=12) occurred in the afternoon (12pm to 6pm), drownings while attempting rescue (n=2) occurred exclusively in the evening (6pm to 12am), recorded drownings of rock fishermen (n=7) occurred exclusively in daylight hours (6am to 6pm) and all boating related drownings (n=5) occurred after noon (12pm to 12am) (Figure 8).



Age and Sex

The age and sex category is recorded for 80% (n=49) of the coastal drownings in 2001/02. Males (82%,n=40) account for the majority, a statistic that is consistent with previous years' figures (Table 3), with males accounting for 86% and 78% of coastal drownings in 2000/01 and 1999/00 respectively, where gender was recorded.

The largest number of drownings occurred in the 16-30 years age bracket, which accounted for 31% (n=15) of drownings where age was recorded (Figure 3). The majority of other drownings occurred in the 46-60 years age group, which accounted for 24% (n=12) of available data, and the 31-45 years age group with 20% (n=10) of available data.

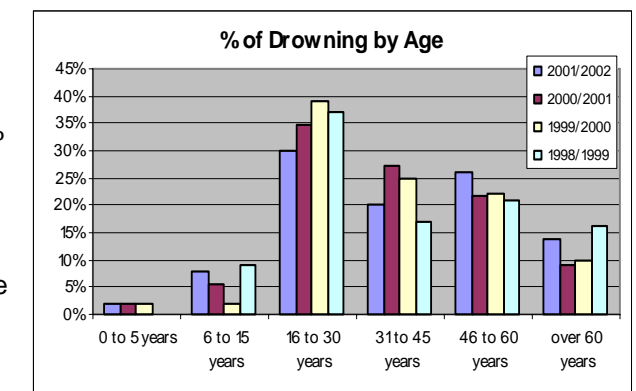


Figure 3

AGE RANGE	2001/2002 Number (%)		2000/2001 Number (%)		1999/2000 Number (%)	
	Male	Female	Male	Female	Male	Female
0-5 years	0 (0%)	1 (100%)	0 (0%)	1 (100%)	0 (0%)	1 (100%)
6-15 years	3 (75%)	1 (25%)	3 (100%)	0 (0%)	1 (100%)	0 (0%)
16-30 years	14 (93%)	1 (7%)	18 (90%)	2 (10%)	13 (65%)	7 (35%)
31-45 years	9 (90%)	1 (10%)	13 (81%)	3 (19%)	12 (92%)	1 (8%)
46-60 years	10 (83%)	2 (17%)	10 (91%)	1 (9%)	9 (82%)	2 (12%)
>60 years	4 (57%)	3 (43%)	5 (83%)	1 (17%)	5 (100%)	0 (0%)
Total	40 (82%)	9 (18%)	49 (86%)	8 (14%)	40 (78%)	11 (22%)

Table 3

Place of Residence

Data indicating the place of residence are recorded for 70% (n=43) of all coastal drownings. Of these, more international tourists drowned (33%, n=14) along the Australian coast than in any other category, while 30% (n=13) lived less than 10 km from the place of drowning, 28% (n=12) lived more than 50 km away from the place of drowning and 9% (n=4) drowned between 10 and 50 km of where they lived.

In previous seasons (Figure 4), the highest risk group comprised those who lived less than 10 km or more than 50 km from where they drowned. Whilst international tourists have had considerable numbers of drownings in previous years, accounting for 15% of drownings in 2000/2001 and 22% of drownings in 1999/2000, the increase for the 2001/2002 season to become the highest risk group for the year (33%) is of great concern.

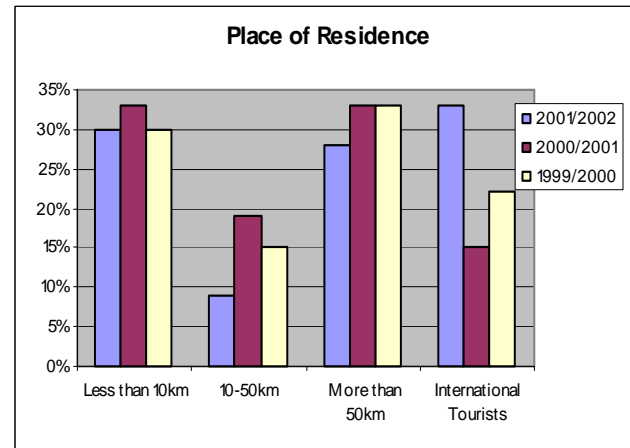
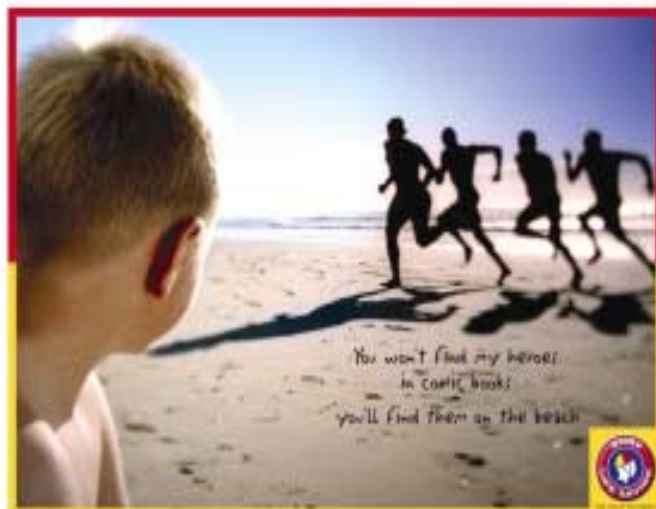


Figure 4



Activity and Mechanism

Data on the activity being undertaken at the time of drowning was recorded in 100% of cases. The subject drowned whilst swimming in 45% (n=28) of cases (Figure 5). This is comparable to previous seasons' statistics, where swimming accounted for 50% of all coastal drownings in 2000/01 and 44% in 1999/00. Other activities recorded for drowning incidents are rock fishing (15%, n=9), riding surfcraft (11%, n=7) and in-shore boating (11%, n=7). The remaining drownings were recorded as 'other' activities (16%, n=10) of which 3% (n=2) involved the subject attempting a rescue.

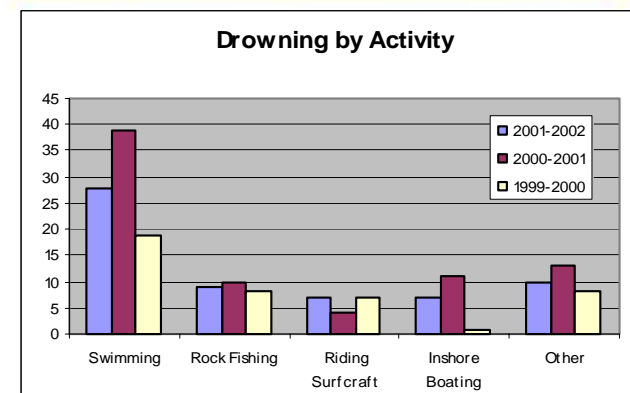


Figure 5

Drowning Factors

Alcohol & Drug Consumption

Information on alcohol and drug consumption was only available for 46% (n=28) of all coastal drownings. From the data collected on alcohol & drug consumption, 21% (n=6) of victims had been identified by surf lifesaving services as being under the influence of alcohol or drugs, 29% (n=8) were unknown and 50% (n=14) were identified as not being under the influence of drugs or alcohol at the time of drowning.

Information on the consumption of alcohol & drugs by the drowning subject is difficult to obtain. The acquisition of this data relies on the surf lifesaving officer observing &/or identifying the subject as having consumed drugs or alcohol prior to the event. Whilst the accuracy of the data is hard to determine, there is consistent evidence indicating drugs & alcohol have an influence on coastal drowning numbers.



Swimming Ability and Use of Flotation Devices

Information was recorded on the use of a flotation device for 23% (n=14) of all coastal drownings in 2001/2002. Of these, 57% (n=8) of bathers had no flotation device at the time of drowning, with a further 29% (n=4) unknown. Swimming ability was reported for 39% (n=24) of all cases in the season. Of these, 25% (n=6) were known to be able to swim, while only one subject (4%) was recorded as being a known non-swimmer. The remaining cases reported the swimming ability of the patient as unknown.

Due to inconclusive evidence it is hard to draw any clear conclusions from these variables, other than in the majority of cases recorded, the subject was a capable swimmer and was more likely to drown if they did not have a flotation device.



Rips

Data was collected on the influence of rips for 26% (n=16) of all coastal drownings in 2001/2002. From the information recorded, 63% (n=10) were known to have drowned after being caught in a rip. Despite insufficient information on this variable, it's fair to assume that rips remain one of the greatest dangers to swimmers around the coast, with 16% (n=10) of all drownings known to have been caused by a rip current in the past year.

