

RECREATIONAL BOATING FATALITIES - TASMANIA

January 2001 – December 2021



MAST

MARINE and SAFETY TASMANIA
making boating better

In January 2001, Tasmania became the first jurisdiction globally to introduce the compulsory wearing of life jackets on recreational vessels. The legislation introduced was that life jackets had to be worn on boats six metres and under whilst under power.

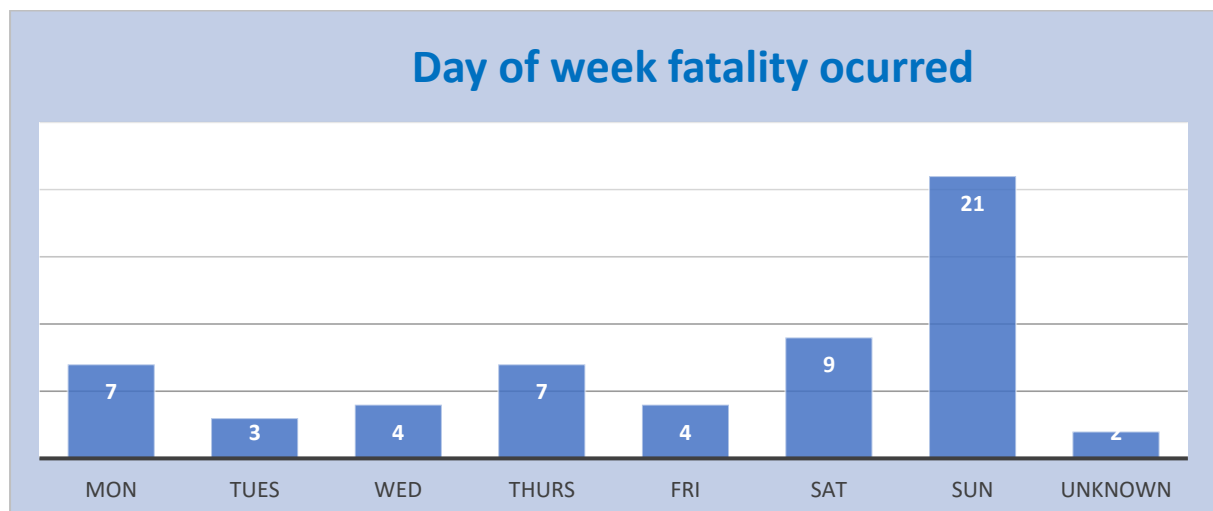
Since the legislation was introduced 21 years ago, 57 people have lost their lives in 44 recreational boat incidents. This is an average loss of life of 2.7 people per annum. In comparison, 146 people lost their lives in boating incidents in the preceding 23 years from 1978 to December 2000, an average of 6.34 people per annum. It should be noted the Tasmanian recreational fleet has almost doubled since 2000.

MAST used annual fatality figures from the Tasmanian Water Safety Unit from 1978 to 1986 however there was no other detail provided concerning the day of the week, age, type of boat etc. MAST conducted a safety review of Tasmanian Recreational Fatalities from 1987 to 2000, analysing Coronial reports. MAST also produced a fatality analysis up to December 2015.

The data in the following graphs are from Coronial reports, investigating Police and information MAST obtained from the incidents. The graphs have been updated by including fatalities from January 2016 to December 2021 since the last analysis in December 2015. There are currently eight fatalities still before the coroner. MAST has used information provided by Police and others with these eight fatalities. If required, data will be changed once the final coroner's report is received. There are also some graphs showing comparisons from 1987-2000 and January 2001-December 2021.

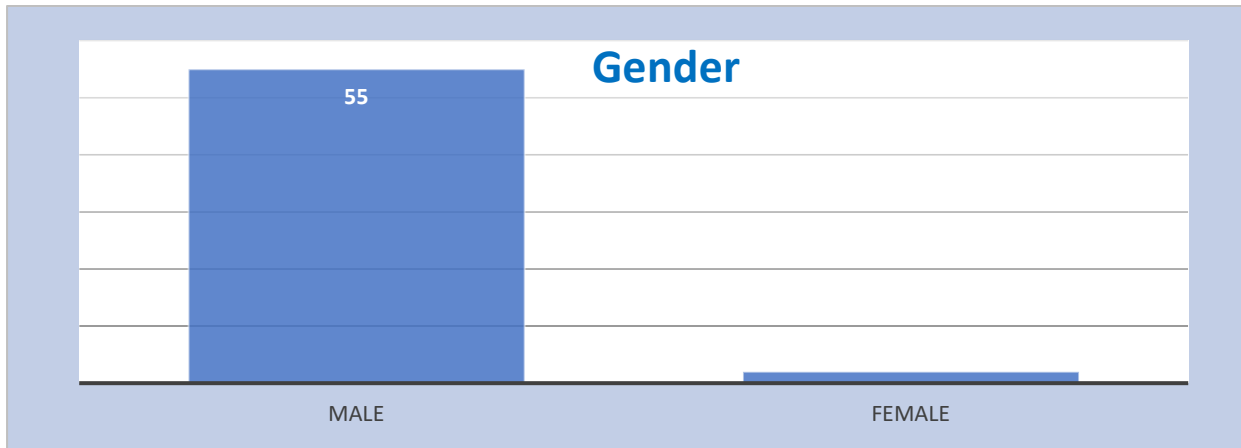
Day of Week

The weekends are the most common time a fatality will occur in Tasmania. Sundays accounted for 37% and Saturdays 16% of the total fatalities since 2001. Nearly 77% of these fatalities during weekends were people aged under 65.



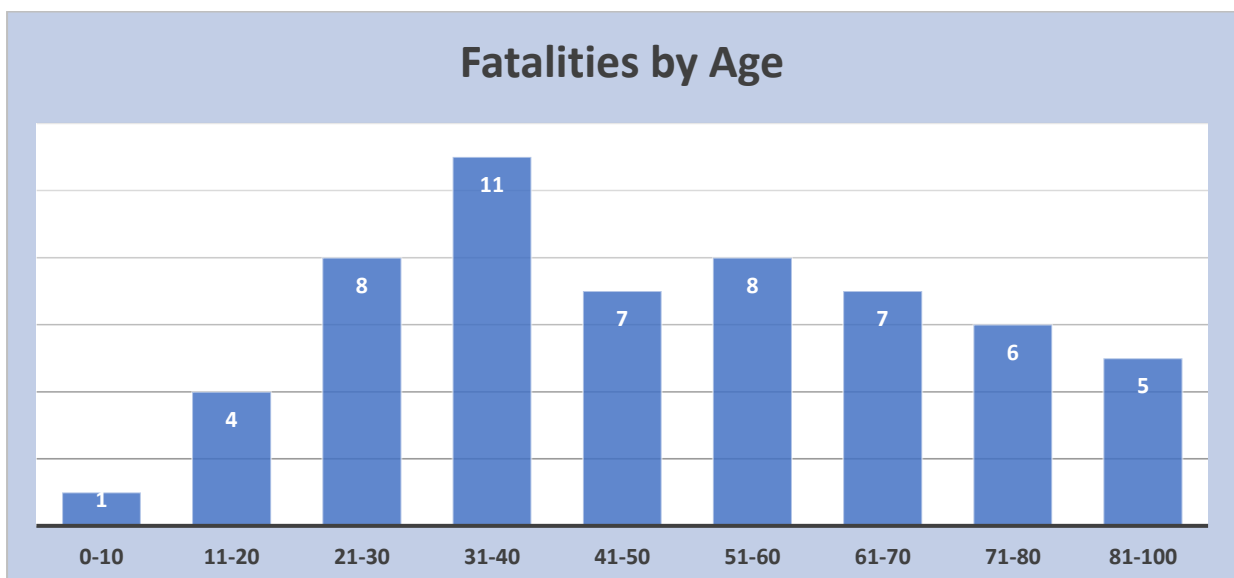
Gender

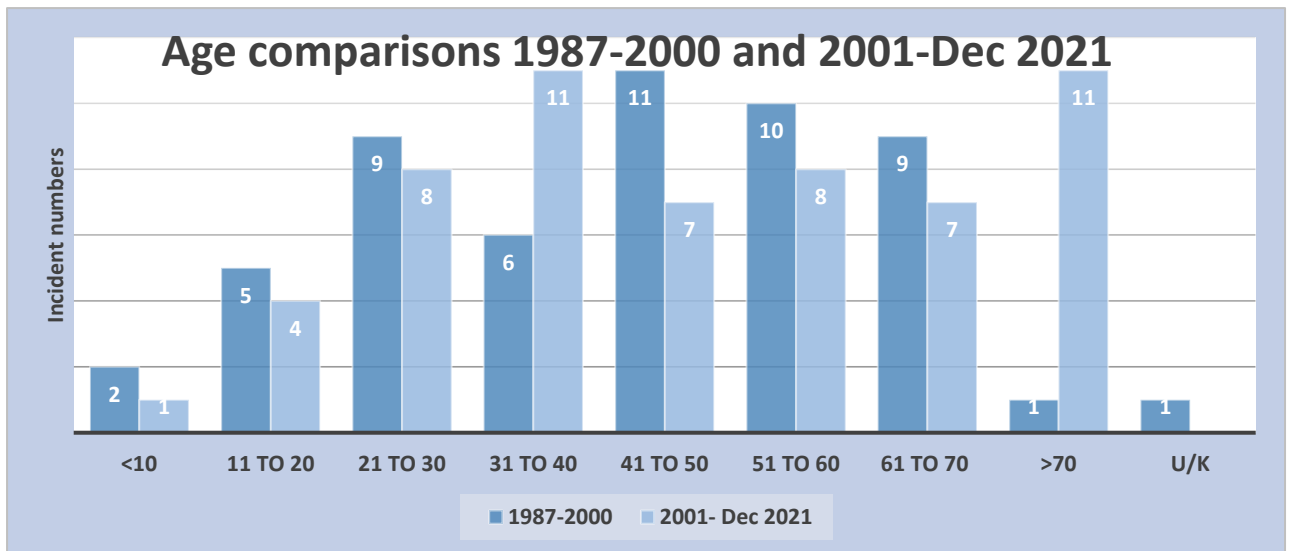
Males are more likely to be involved in a boating fatality. There have been 55 males and two females involved in boating fatalities since 2001. This trend is consistent worldwide.



Age

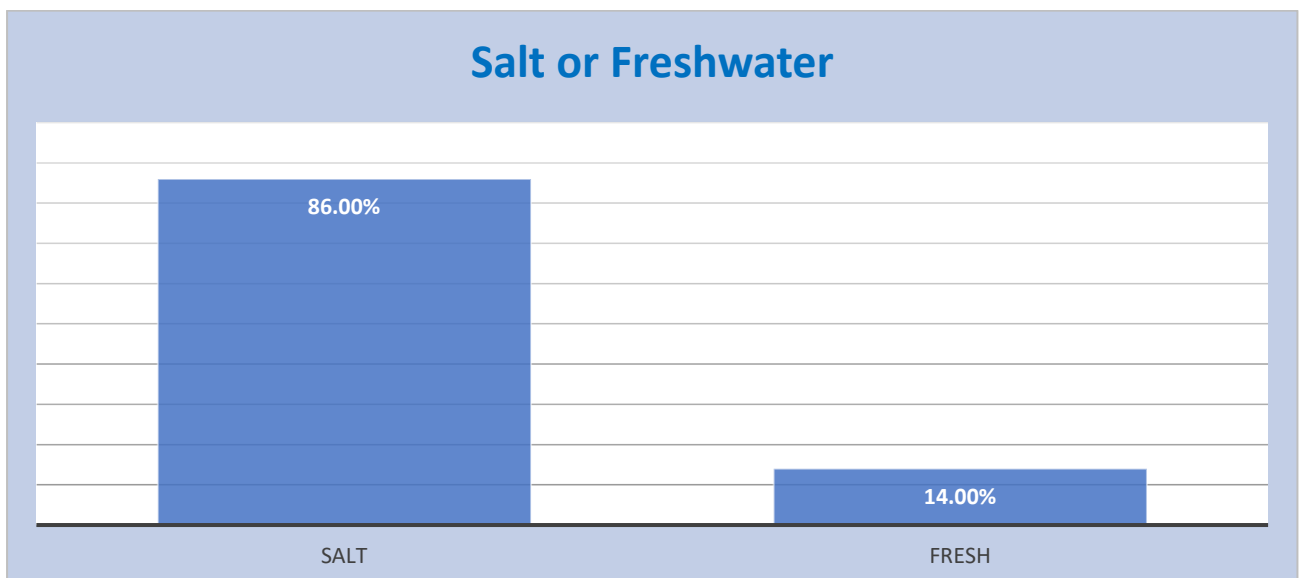
The average age of those involved in a fatality is 48 years. This has increased from 47 years since December 2015. This may be attributed to the fact that there have been an additional 24 fatalities of which six were over 70 years of age which is an increase of 10% from 2001 to 2015. The age group 31-60 accounted for 26 (45.5%) of the fatalities. There has been a large increase in fatalities in people over 70 years of age since the period 1987 to 2000. This age group has gone from one in the earlier period to eleven since 2001. This age group accounted for just 7% of the weekend fatalities.





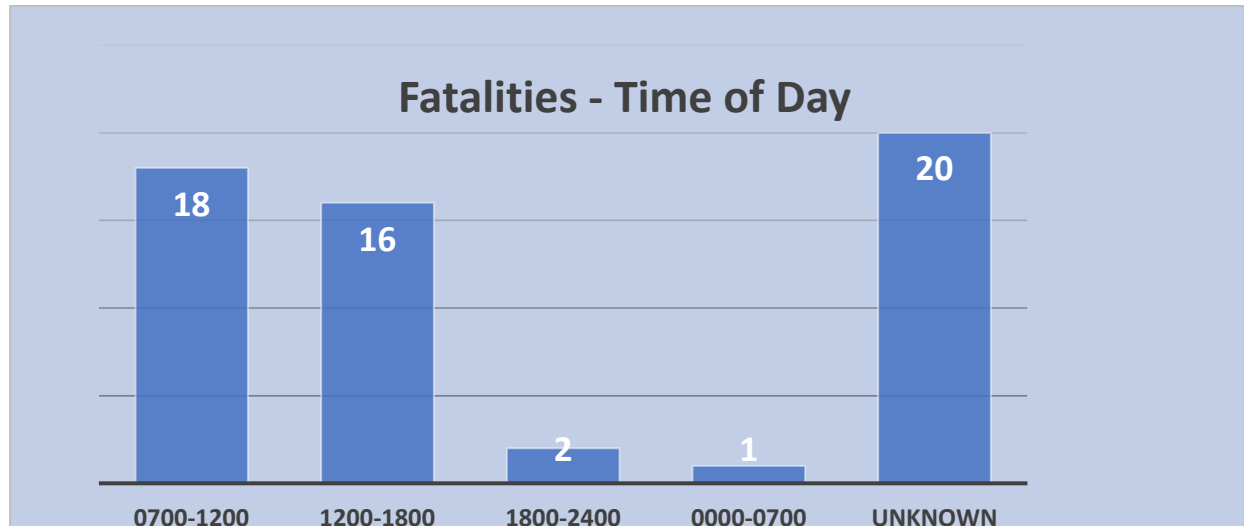
Salt or Freshwater

Those boating in saltwater account for 86% of the fatalities. Freshwater accounted for 14%. This is reasonably consistent with MAST surveys carried out over 10 years ago with respect to where people go boating.



Time of Day

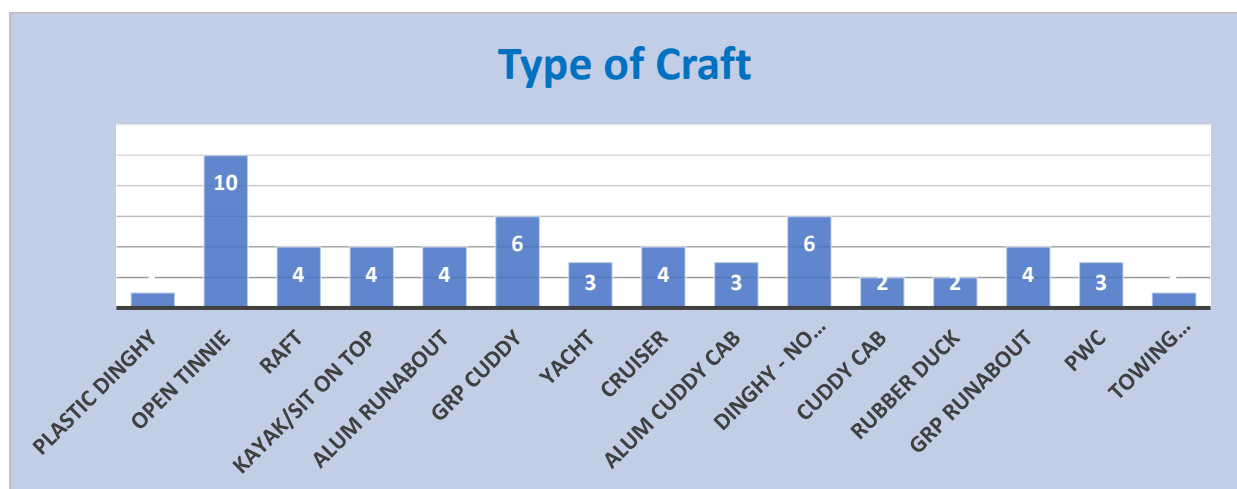
Of the 57 fatalities, nearly 60% occurred during daylight hours from 0700 to 1800. A large percentage (35%) is unknown.



Type of Craft

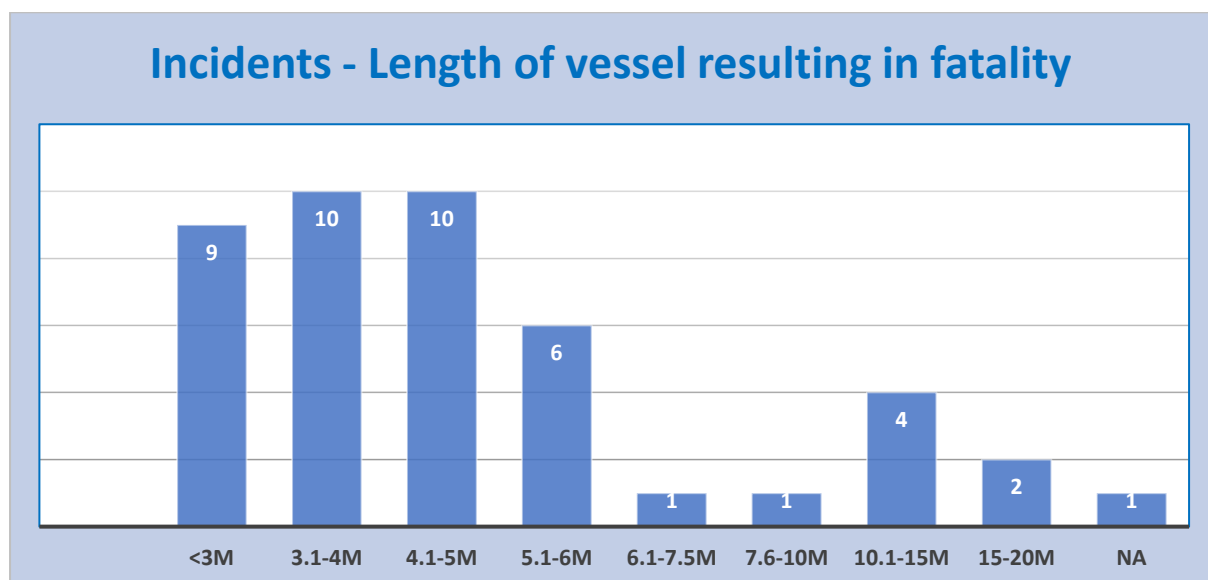
Different types of craft have been involved in incidents resulting in fatalities since 2001. Open tinnies, cuddy cabs and dinghies are the most common. More recently there have been three fatalities involving PWC. With the registration growth in PWC, this is concerning. The three fatalities involving PWC were not adhering to the law at the time of the incident. One was riding at night and had a Blood Alcohol Content of 0.163, another was unlicensed and did not have a life jacket on (and could not swim) and the third did not have a licence and was exceeding 5 knots in a designated zone.

Non-powered craft accounted for 26% of fatalities.



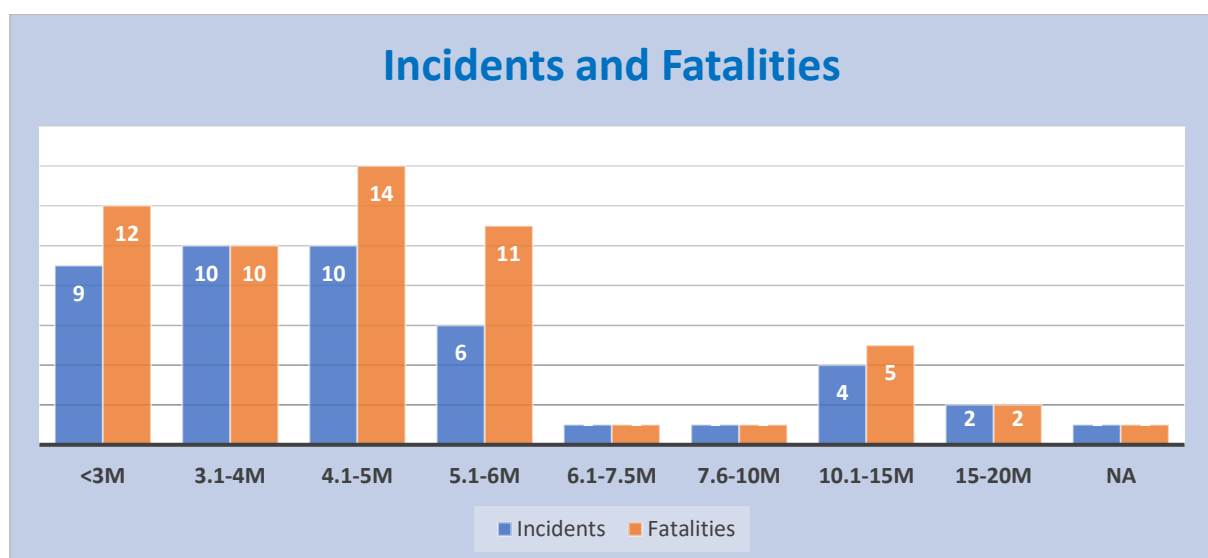
Length of Boat in an incident resulting in a fatality

Boats six metres and under, represent the greatest proportion of boats where fatalities occur – 82.5%. This is relatively consistent with the registration percentage for these sized boats in the Tasmanian fleet.



Comparison of boat length in incident and fatality numbers

Not surprisingly, boats six metres and under account for the majority of incidents resulting in multiple fatalities. 44 incidents resulted in a fatality.



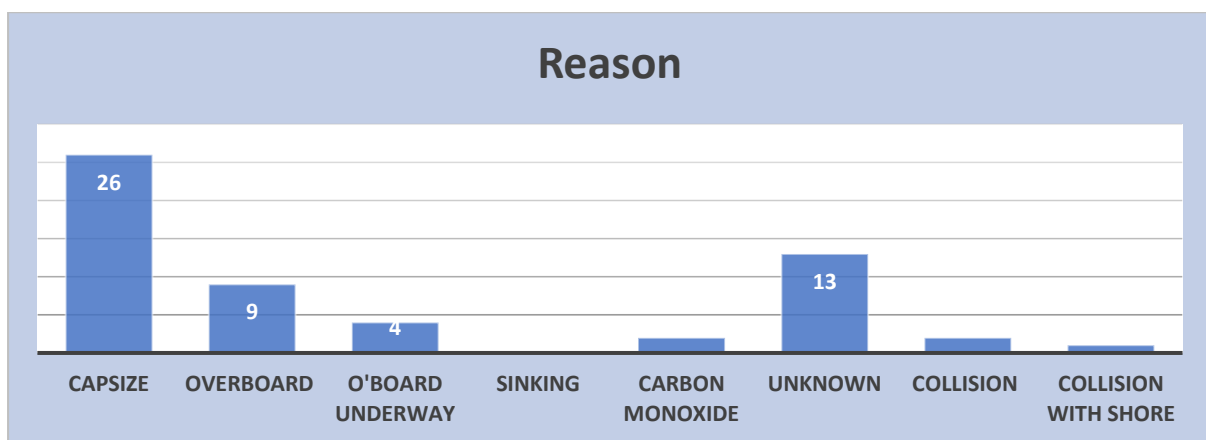
Reason for Fatality

Nearly 50% of the fatalities are a result of the boat capsizing or capsizing as a result of swamping. A person overboard, either stationary or underway, has resulted in 13 fatalities, mainly from larger boats.

There have been two fatalities where more elderly people have been unable to board the vessel from the tender.

There have been two that have died due to Carbon Monoxide poisoning on the same boat whilst alongside and one fatality likely as a result of hitting the shoreline at speed whilst being towed.

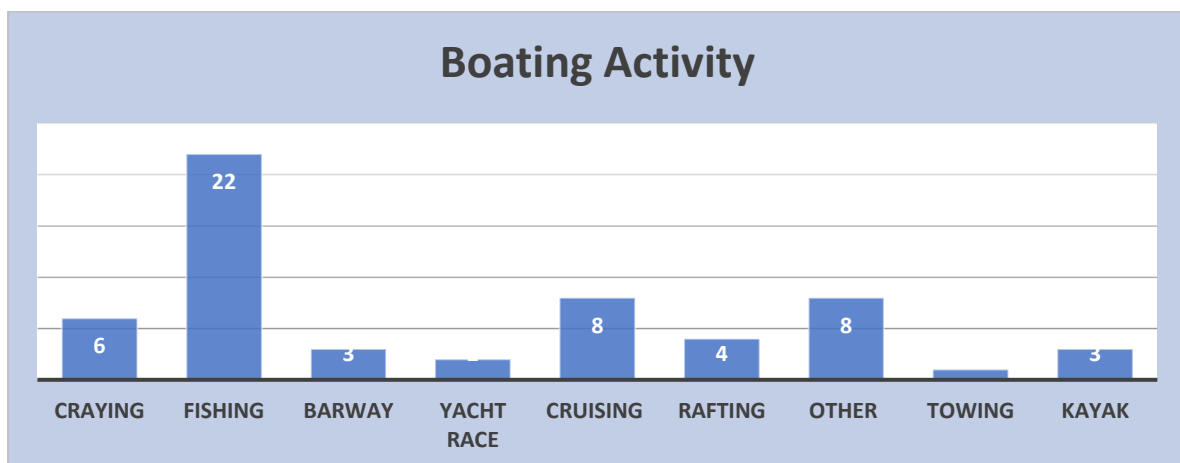
Nearly 95% of fatalities occurred because people entered the water. More than likely this occurred unexpectedly. The three fatalities described above are the only fatalities that occurred by not entering the water.



Boating Activity

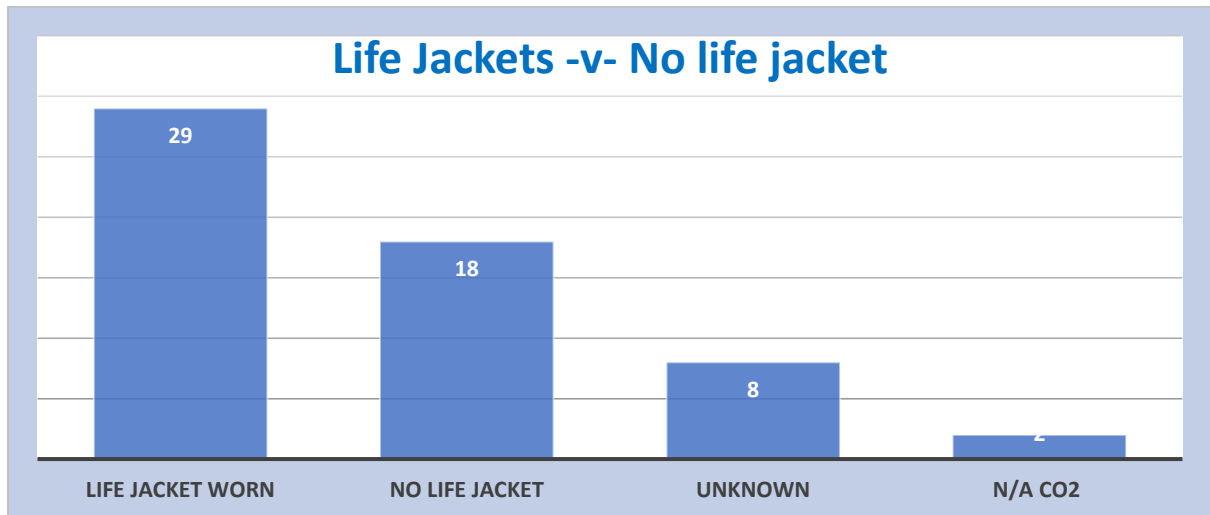
Nearly 50% of fatalities have occurred when people are going out or have been fishing. MAST surveys have previously indicated that over 75% of people use their boats for fishing.

Almost 20% of fatalities have been operating a raft or kayak. Kayak or paddling craft incidents from Tas Maritime notifications are increasing which coincides with sales reported from Boatsafe Partners.

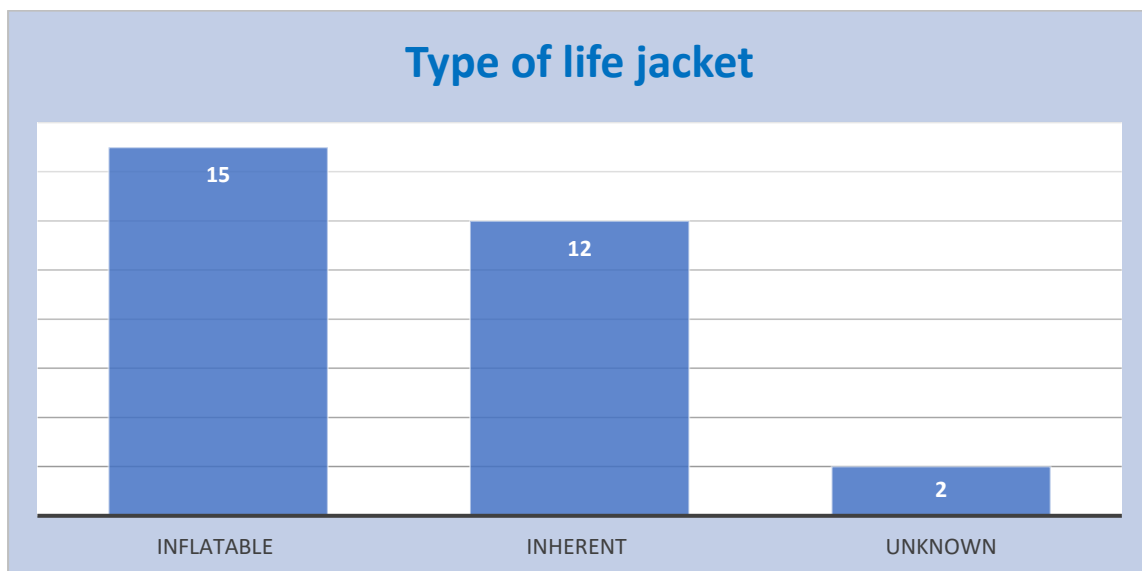


Wearing of Life Jackets

Over 50% of the deceased were wearing a life jacket when found. This indicates the high compliance rate (96%) with wearing life jackets in boats six metres and under. A life jacket was required to be worn in 67% of the fatalities.

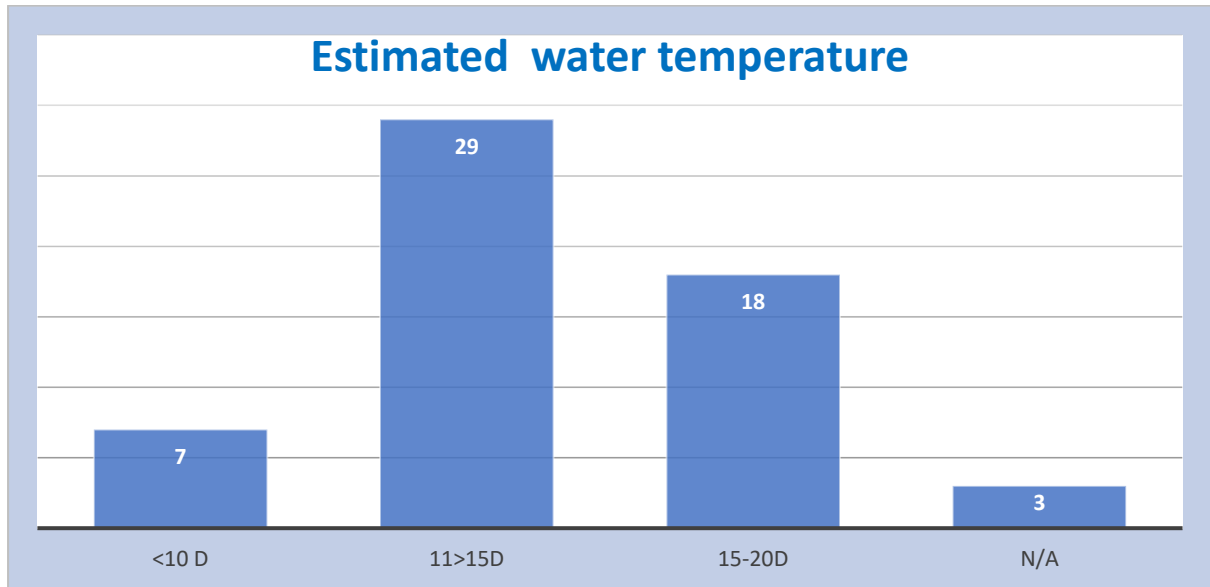


Inflatables accounted for 52% of the life jackets worn during a fatality. A number of these, when tested by MAST, were not operational at the time and only one inflatable was in "service date".



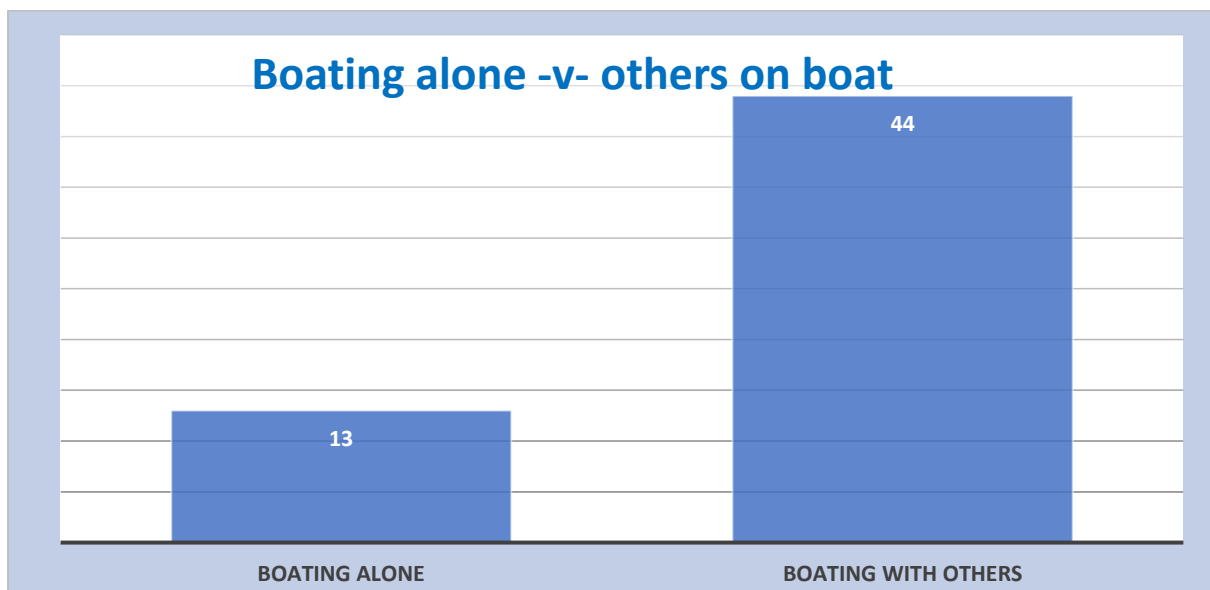
Estimated water temperature

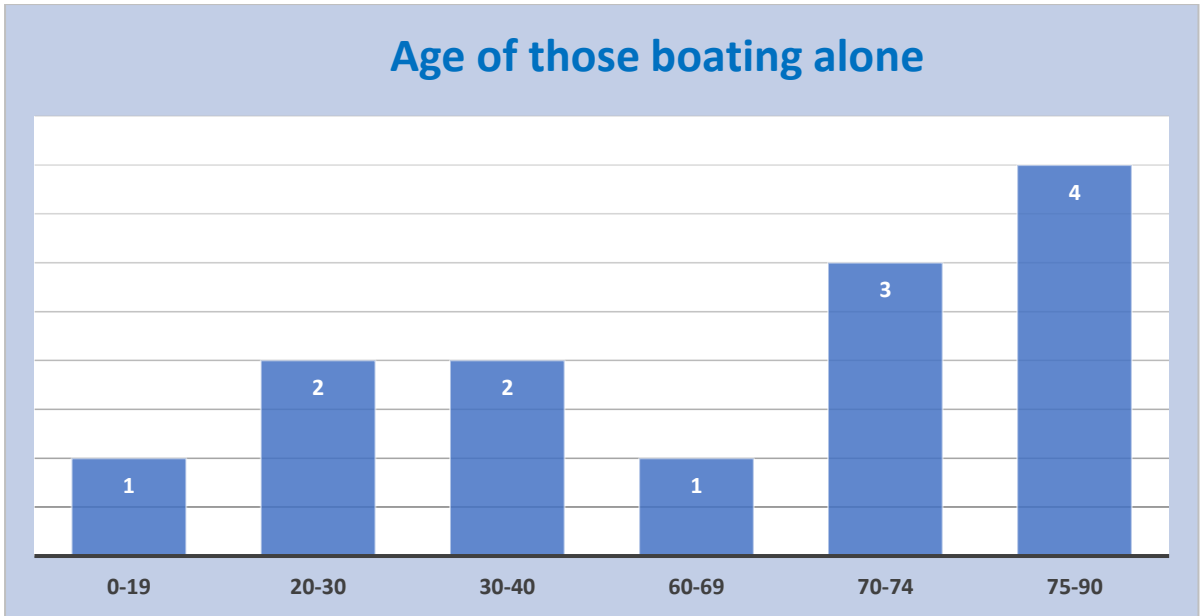
Of the 54 fatalities that ended up in the water, 67% occurred in water temperatures estimated or logged at 15 degrees or below. The significance of this may be the effect of cold-water immersion or cold-water shock which professionals have concluded is when the water temperature is 15 degrees or less.



How many boating alone and age

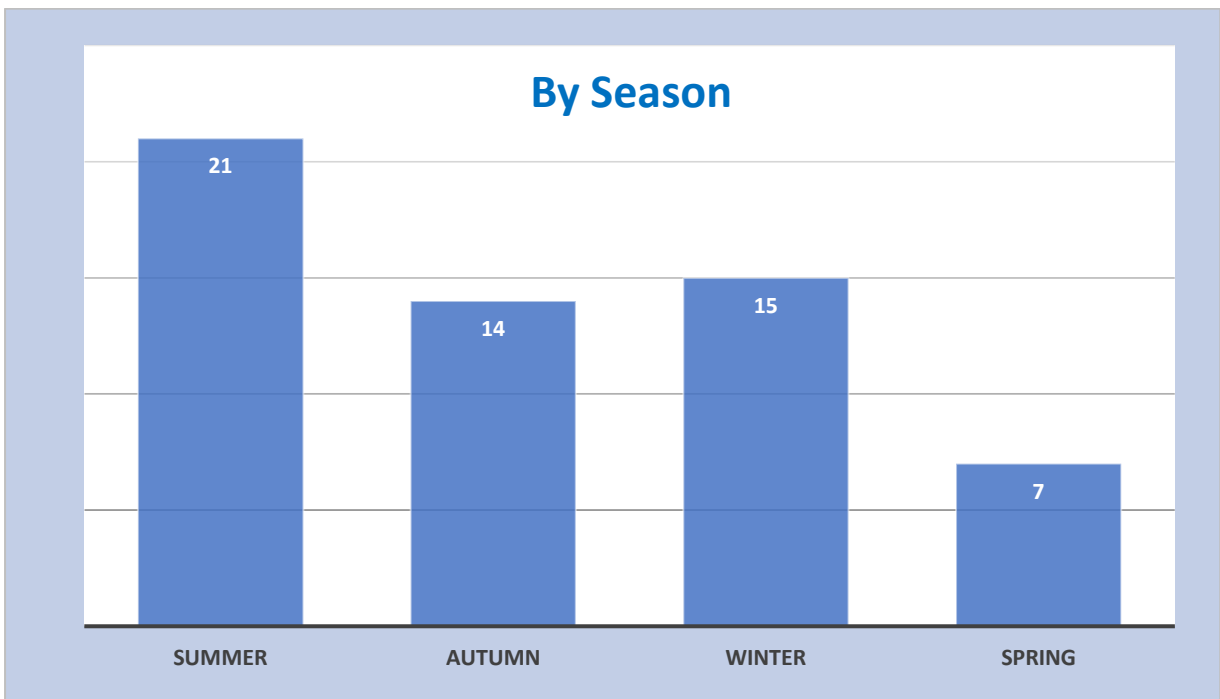
Almost 23% (13) of the fatalities involved people boating alone. Of these eight were over 65 years of age, seven were over 70 and six occurred on a weekday as opposed to a weekend.





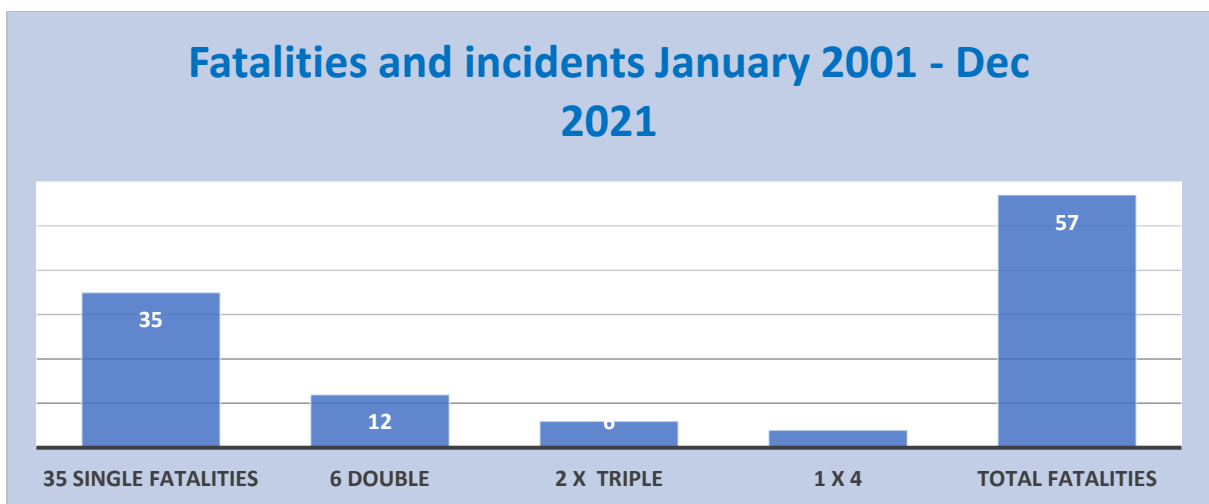
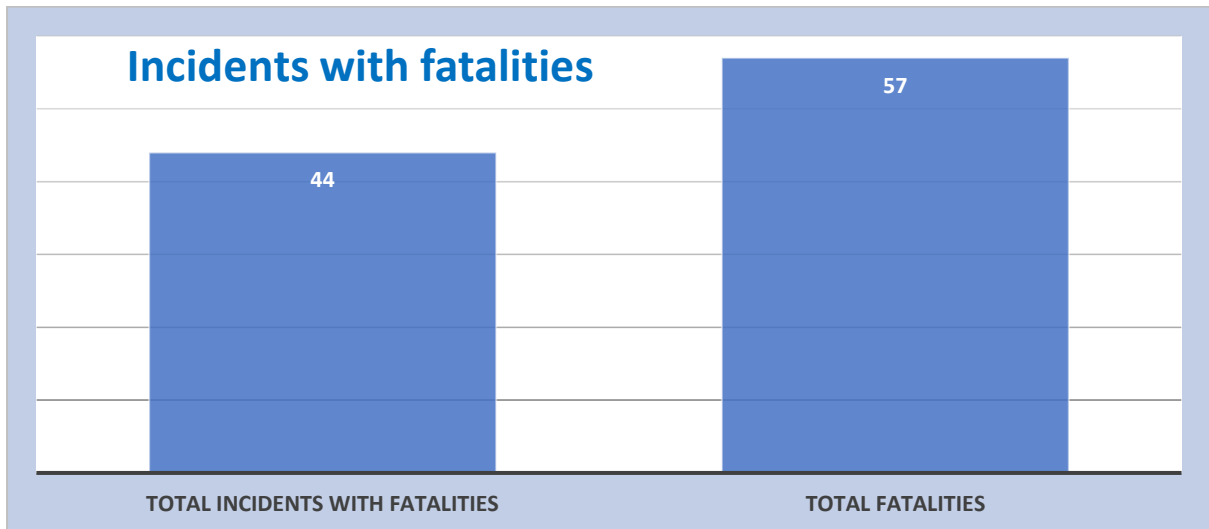
By Season

Summer accounts for nearly 37% of fatalities. The percentage of those occurring in autumn, winter and spring correlate with the percentage calculated for when the water temperature is 15 degrees or less. Six of the seven fatalities in people over 70 occurred when the water was 15 degrees or less.



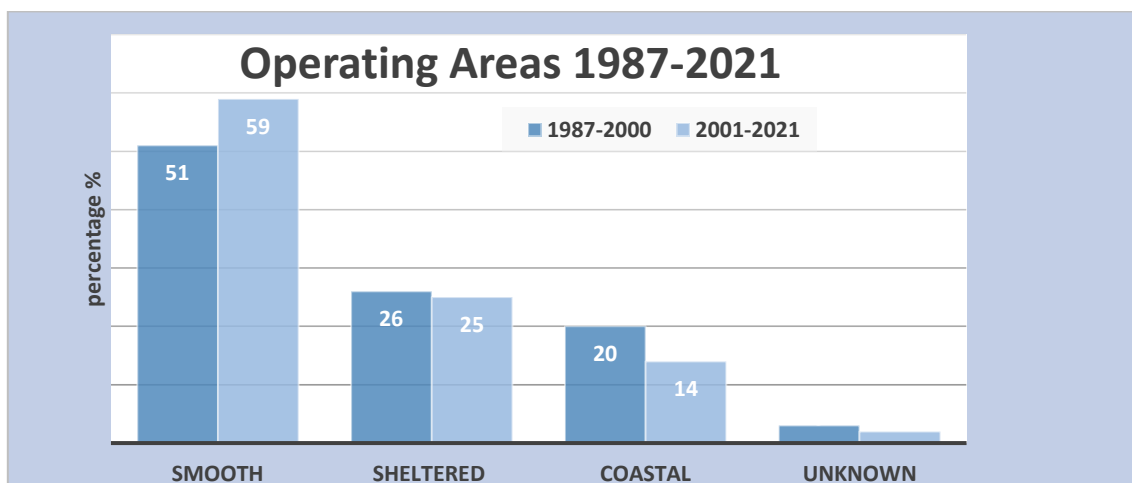
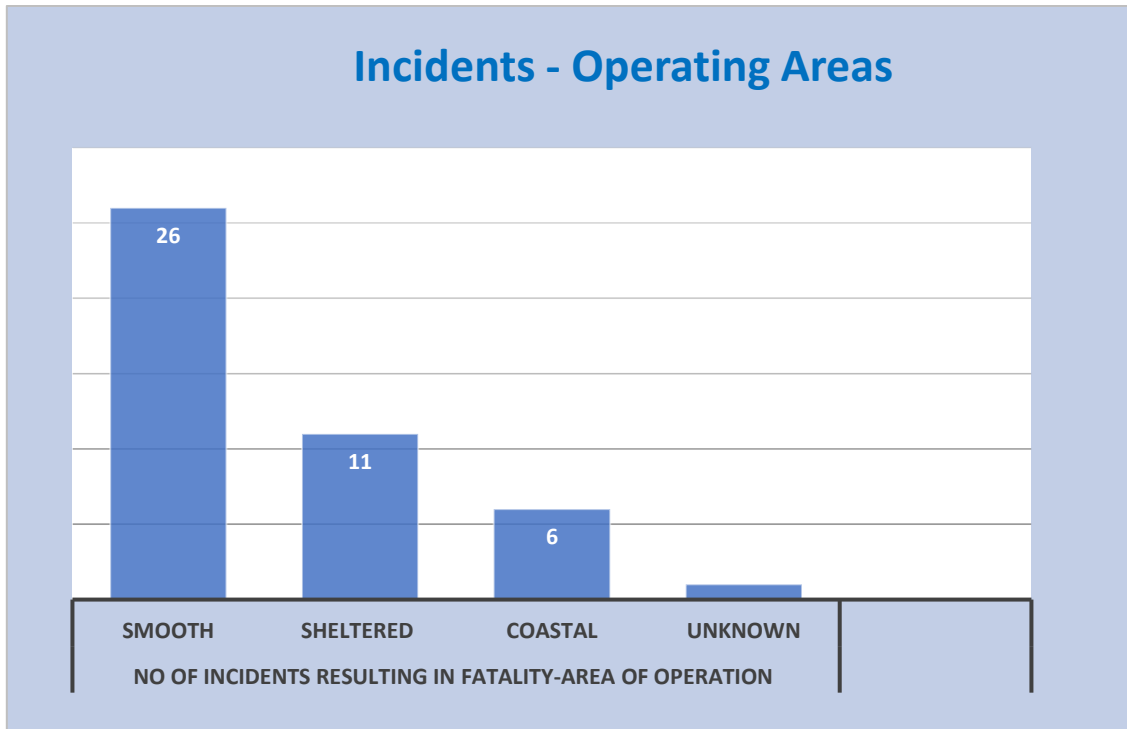
Incidents involving a Fatality

44 separate incidents involved a fatality. Of these, there were 35 incidents resulting in a single fatality. Six incidents resulted in a double fatality, two incidents involving three fatalities and one incident where there were four fatalities.



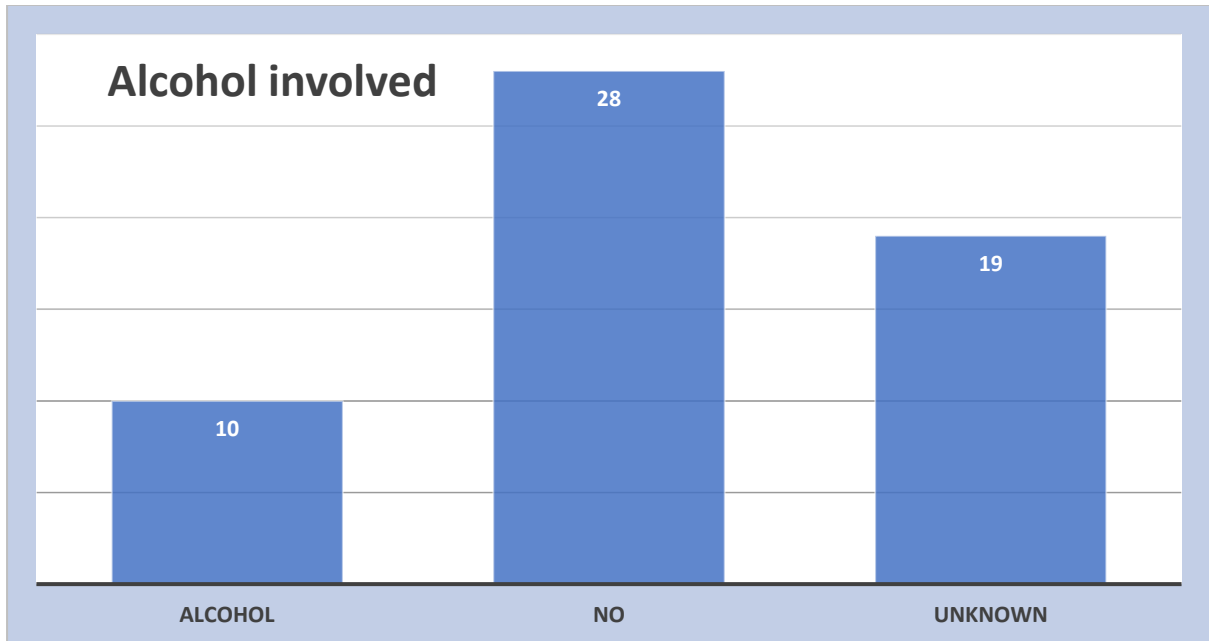
Operating Area for incidents

As per the Peter O'Connor reports prepared for the NMSC years ago, most incidents are relatively close to shore, with nearly 60% in smooth waters.



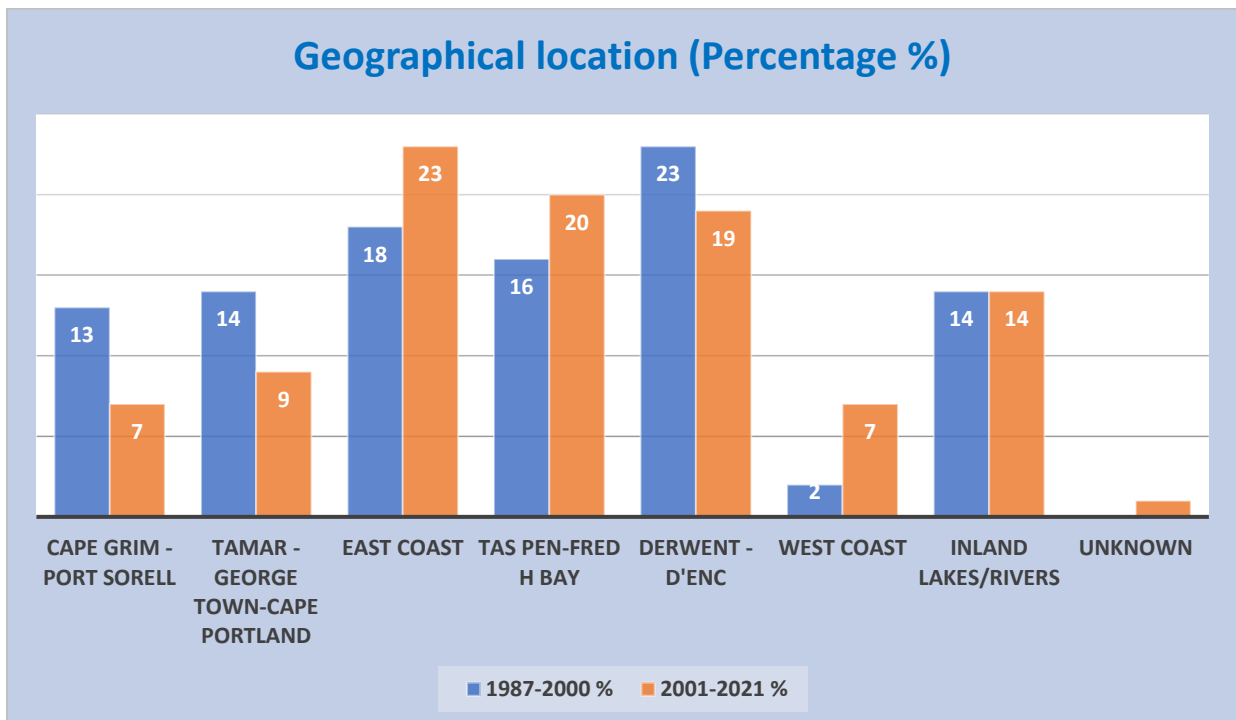
Alcohol

Out of the 57 fatalities, 10 or 17.5% had an alcohol reading. No alcohol was recorded in 49% (28) and 19 were unknown. Included in the 19 are eight that are still before the coroner.

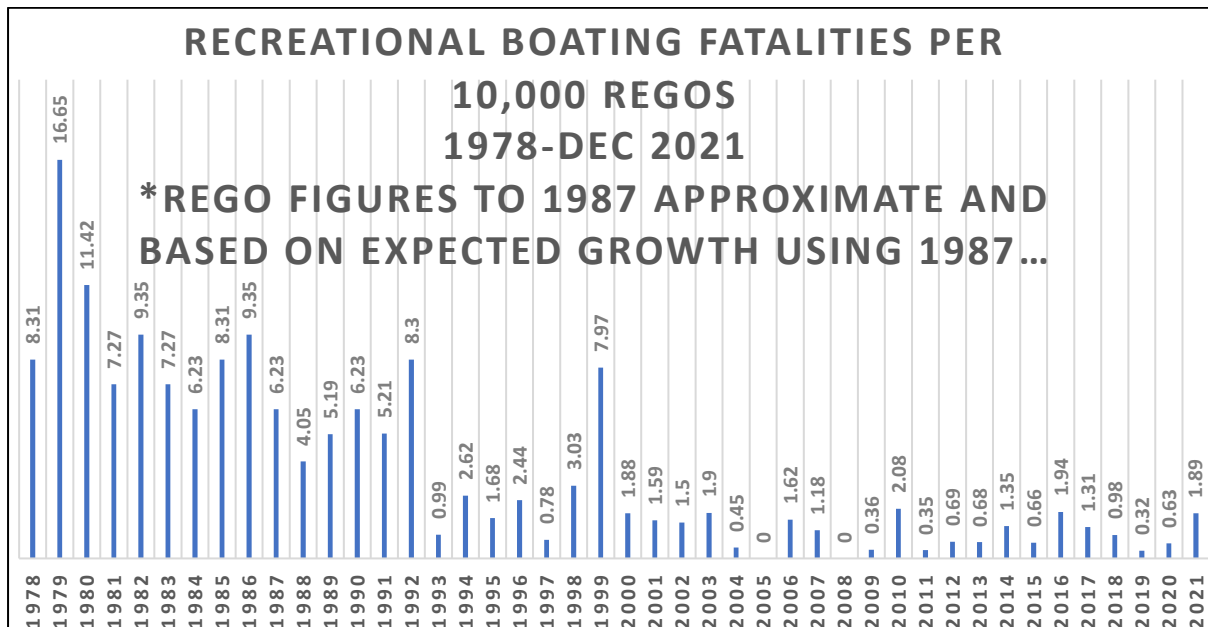
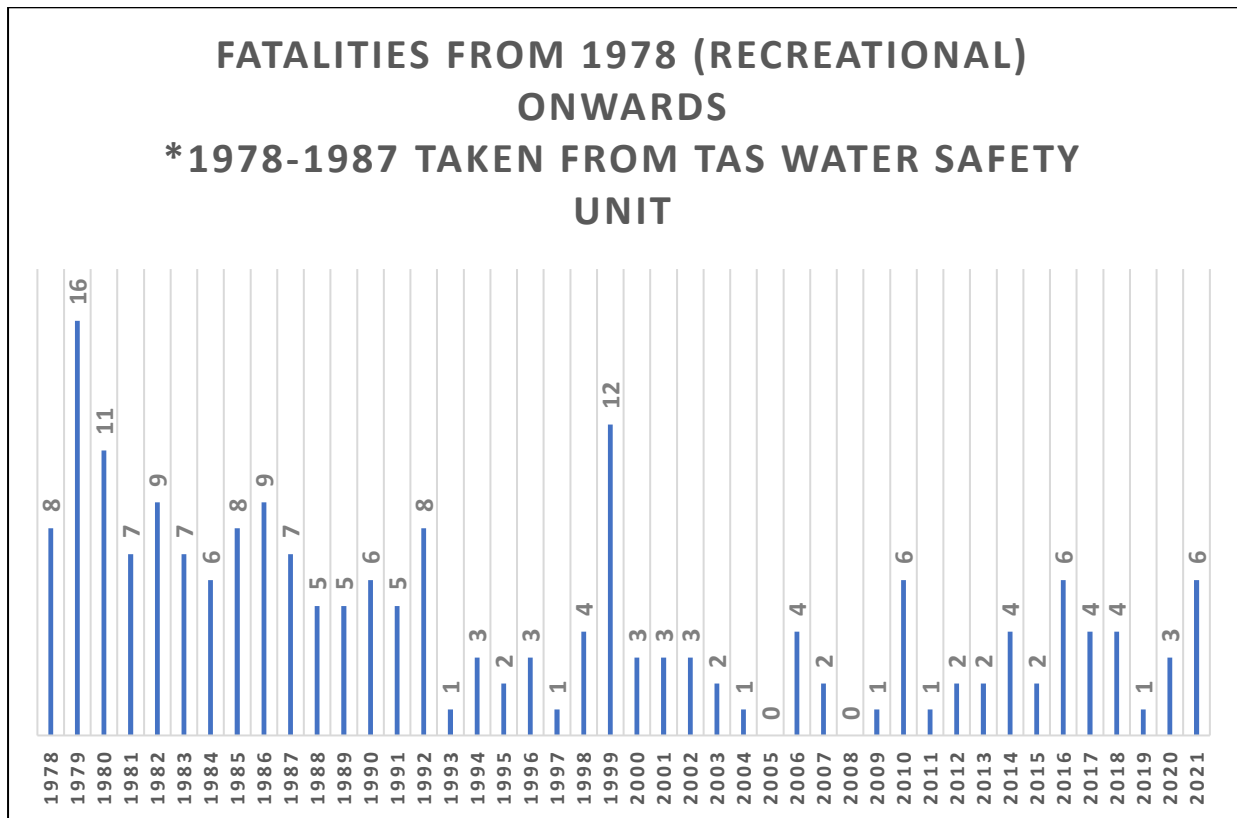


Geographical location

There have been some changes in locations where fatalities are occurring over the last 21 years compared to the preceding period in coastal areas. The inland lakes and rivers have the same percentage total.



Fatalities 1987 - Dec 2021



Observations

- 44 recreational boating incidents resulting in 57 fatalities since January 2001
- 46% of fatalities occur on a weekend – typically on a Sunday
- 77% of weekend fatalities are people under 65 years of age
- Males accounted for 55 of the 57 fatalities – 96.5%
- Average age is 48 – increased from 47 since 2015
- Significant increase in fatalities with people over the age of 70 since 2001
- Fatalities with people over 70 more likely on a weekday
- 86% of fatalities in saltwater – as per previous MAST surveys where people go boating
- 92% of the known time of the fatality have occurred in daylight hours
- 82.5% of fatalities occur in vessels six metres or under – this size range account for 81% of the fleet
- Multiple fatalities are more likely to occur on boats six metres and under
- Cuddy Cab, tinnies, open dinghies, PWC. Kayak, Rafts
- Common cause is capsizing and capsizing as a result of swamping
- 26% or 13 were boating alone – 8 were over 65 years of age – 7 of these over 70
- 37% of fatalities during summer
- Cold water immersion – shock may be a large contributor to fatalities beyond the summer season
- 7 fatalities over 70 years of age occurred in cold water
- 84% in smooth or sheltered waters
- Alcohol detected in 17.5% of fatalities – some remain unknown – before the coroner
- Over 50% were wearing a life jacket
- 52% were inflatables
- Life jackets were required in 67% of fatalities
- Percentage changes in coastal areas where the fatality occurred
- 39.6% during holiday long weekends, Christmas and New Year and Easter.

What should be MAST's Aim?

Ensuring people still have fun boating recreationally but are being responsible at the same time in an endeavour to take the fatality rate towards zero.

What is MAST doing to reduce the fatality rate?

Education and Legislation.

MAST continues to educate the recreational boating public through various means. These include social media, e-news, Boatwise, AGFEST, ramp checks, Boatsafe partners, and PR campaigns.

Previously MAST has held numerous public events, however, those attending at various locations are the same each year. The primary reason the PR summer safety campaign was introduced a few years ago was in an endeavour to reach those people who would not normally attend a MAST event and those who MAST is unable to speak to at boat ramps checks.

The introduction of the compulsory wearing of life jackets in 2001 through legislation has no doubt contributed to a marked decline in fatalities, even with registrations almost doubling in the last 21 years. Upcoming changes to legislation in relation to unsafe vessels may also help in a reduction of fatalities.

What can MAST do?

- Extend PR Campaigns into colder months. Observations show that boating does slow during colder months, however, the fatality rate in autumn and winter is greater than in summer; this could be attributed to Cold Water immersion.
- Ramp checks year-round - staffing issues during weekends and public holidays are difficult as existing staff work a five-day week, Monday to Friday. Consider change to employment contracts of staff to include weekend work with appropriate penalty rates. Resourcing appropriately trained people is expensive for weekend work. It is important the “right” people are representing MAST. Other states have Boating Safety Officers (BSO).
- Continue work on refining safety equipment options to better reflect new technology – eg. Life jacket standards and EVDS.
- Identify new trends in watercraft usage which may contribute to increased fatality rate, paddlers, SUPs, foilers, PWC and other related craft.
- Live weather sites so people can compare forecasts.
- Continue school education program to Independent and Catholic system. Needs appropriate funding.
- Use emails to invite people to education nights – important older boaters are re-educated.
- Compulsory re-training – difficult and would not be publicly well received
- Greater interaction with the boating public and be proactive, knowledgeable and approachable.

Educating the boating public is the key to taking the fatality rate toward zero. The legislation does have a role to play, however, it is always important to remember that recreational boating is an activity many Tasmanians enjoy and use as their release from the pressure of everyday life.

Peter Hopkins
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Recreational Boating Safety and Facilities

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