

An exploration of lifejacket use in four popular coastal activities

Mr Shane Daw ESM and Dr Jaz Lawes



INTRODUCTION

The Australian coast provides many opportunities to explore our environment, with coastal locations identified as the most attractive destinations. Tragically, being in and around water can increase the risk of drowning. It is widely accepted that correctly wearing a lifejacket (not just carrying one) can greatly reduce drowning risk by improving your chance of survival in the water.

Understanding lifejacket usage in Australia has become a priority for Surf Life Saving Australia (SLSA), who has monitored the lifejacket use in coastal deaths since 2004, and has explored behaviours, perceptions and barriers to lifejacket use in coastal activities through our annual National Coastal Safety Survey (NCSS2014-20).

In 2019/20, SLSA recorded an increase in fatalities in boating, PWC and rock fishing activities, which all strongly recommend lifejacket use. Boating, PWC, rock fishing and watercraft are recreational activities for which lifejacket use is recommended, and in some cases legislated. Here we explore lifejacket behaviour and fatalities for these popular coastal activities.

METHODS

National Coastal Safety Survey (NCSS)

The NCSS2020 is conducted in April each year and collected information about community swimming ability, behaviours and attitudes to coastal safety. The survey is conducted annually by Newspoll Market Research and Omnipoll and is run online over a four-day period each April among a national sample of approximately 1,600 respondents aged 16 and older. To reflect the population distribution, results were post-weighted (by age, gender, geographic strata and education) and projected to Australian Bureau of Statistics data. The study is carried out in compliance with ISO 20252 - Market, Social and Opinion Research.

SLSA's National Fatality Database

The National Fatality Database collates information on all deaths that have occurred around the Australian coast since July 1st 2004. The primary data source is the National Coronial Information System (NCIS) is an electronic database of deaths notified to Australian and New Zealand Coroners for which the Department of Justice and Community Safety is the source organisation of the data. Data on decedent and proximate circumstances were collated from the NCIS (including coroner's findings, police narrative of circumstances, autopsy and toxicology reports), media reports and Surf Life Saving Australia's SurfGuard Incident Report Database.

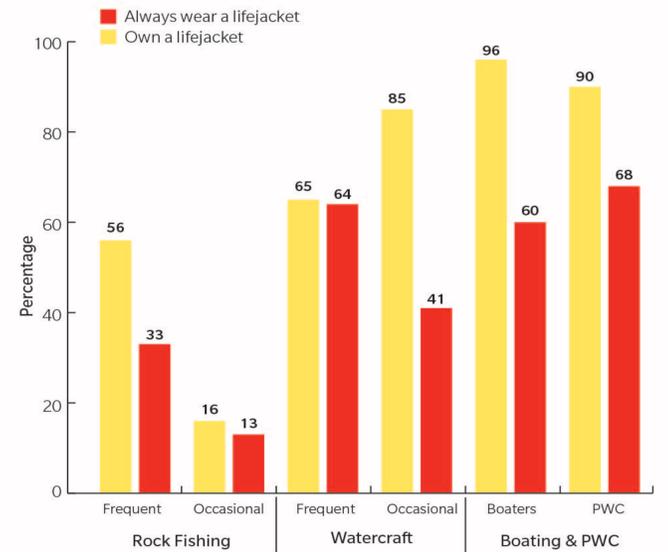


Fig. 1 Lifejacket use by rock fishing, watercraft and boating & PWC participants

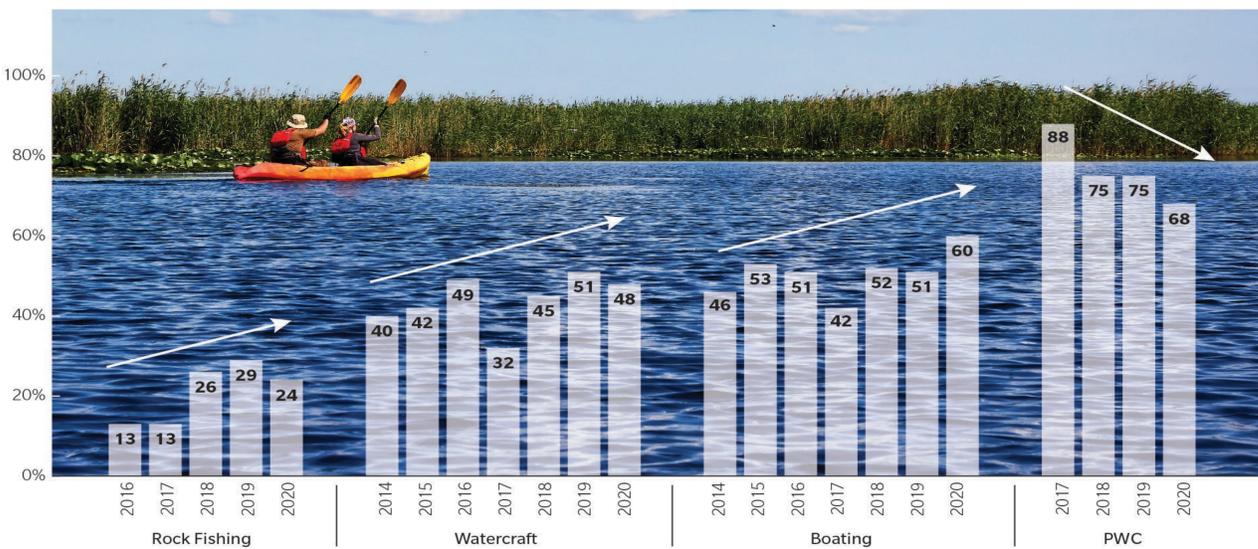


Fig. 2 Lifejacket use and behaviour by rock fishing, watercraft and boating & PWC participants over time. The percentage of survey respondents who report to *always* wear a life jacket or buoyancy aid when participating in these activities.

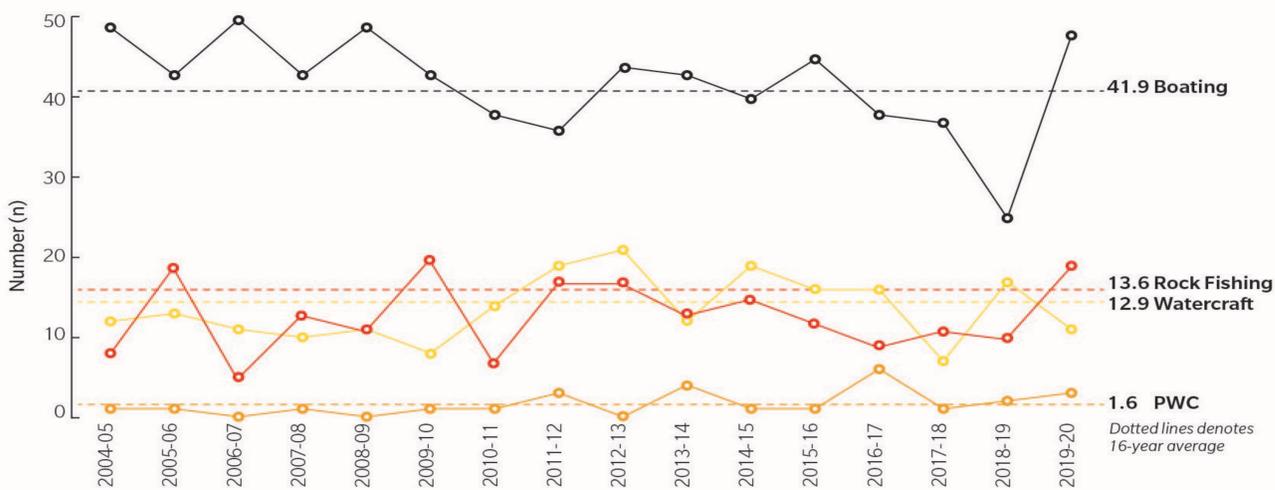


Fig. 3 Fatal coastal incidents (both drowning and non-drowning) recorded for rock fishing, watercraft, boating and PWC activities between 2004/05-2019/20 compared to the 16-year annual average. NB: Dotted line denotes 16-year average.

RESULTS

The NCSS showed that most boaters (96%) and PWC users (90%) own a lifejacket and a significant proportion always wear it (60% and 68% respectively; Fig. 1). While not all participants *always* wear their lifejacket (Fig. 1 and Fig. 2), this number is increasing, except for PWC users, who have decreased by 20% (Fig. 2).

Frequent watercraft and rock fishers are more safety-conscious than occasional users, with higher proportions of participants wearing lifejackets (Fig. 1).

The 2019/20 reporting period recorded an increase in boating, PWC and rock fishing deaths (Figure 3), which all strongly recommend lifejacket use.

The majority of fatal rock fishing (80%) and watercraft (87%) incidents were not wearing a lifejacket (Figure 4), with this number potentially much higher with lifejacket use unknown for many cases.

Half of all PWC-related deaths (50%) were wearing a lifejacket (Figure 4) at the time of death.

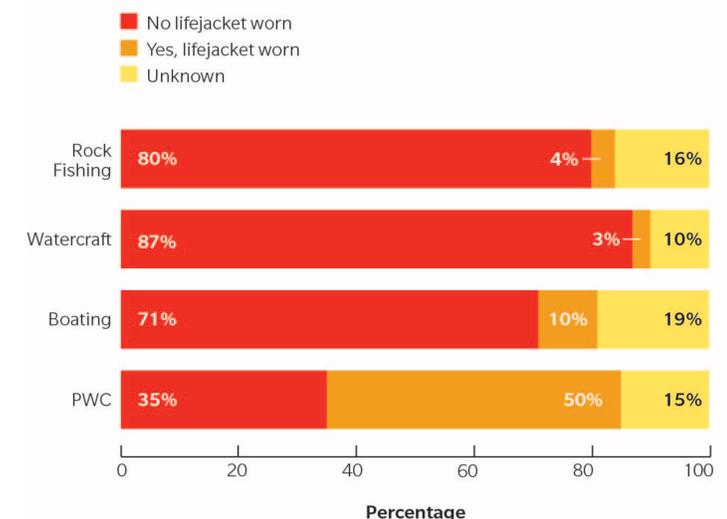


Fig. 4 Proportional lifejacket use in fatal incidents recorded for rock fishing, watercraft, boating and PWC activities between 2004/05-2019/20.

IMPLICATIONS AND FINDINGS

- Boating, PWC, rock fishing and watercraft are recreational activities for which lifejacket use is recommended
- PWC users, occasional rock fishers and watercraft users are identified as high-risk user groups
- Fatality statistics suggest (especially for PWC-related deaths) that lifejackets may have been fitted improperly, incorrectly sized or poorly maintained, but may also indicate the involvement of other factors such as alcohol or drugs, or dangerous behaviours e.g. operation of operation at high speeds
- Our results emphasise the importance (and effectiveness) of wearing lifejackets while participating in these activities and confirm the need for further research into messaging and understanding perceptions to continue to increase lifejacket awareness and, ultimately, their regular use

