



1,485

drowning deaths occurred in Australia between 2019/20 to 2023/24

Alcohol consumption is known to impair our cognitive functions, influencing behaviour and risk-perception. The Australian Water Safety Strategy 2030 identifies alcohol and drug consumption to be a major risk factor in drowning events, highlighting the need to understand more around the characteristics of these behaviours.

This brief report covers a 5-year period on all alcohol and drugs present at the time of the drowning event, broken down by demographics, and whether the alcohol and/or drugs consumed were found to contribute to the drowning event.



315 (21%)

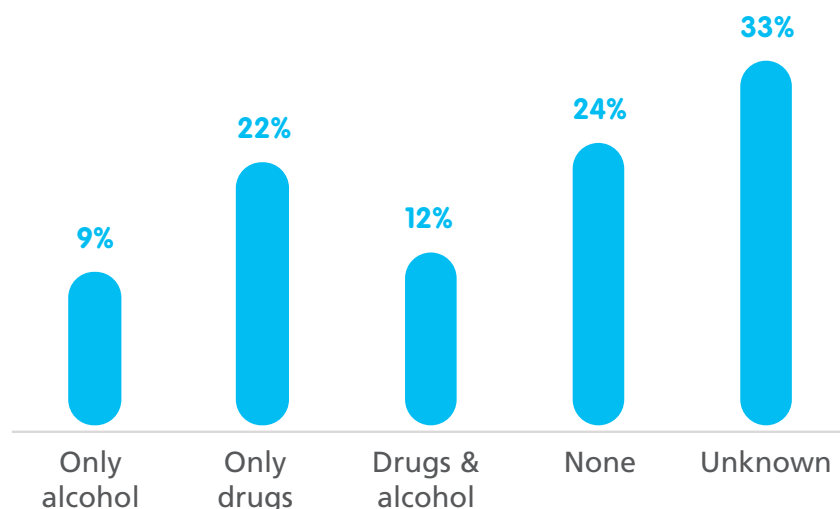
drowning cases that reported alcohol present



498 (34%)

of cases that reported drugs present

Drowning cases in the presence of alcohol and drugs
(2019/20-2023/24)



174 (12%)

drowning cases that reported both alcohol and drugs present

To extract the data presented, the following definitions were used:

Alcohol: beverages consumed that consist of the ingredient ethanol, which is known as a central nervous system depressant, affects mood, coordination and cognitive function.

Blood alcohol concentration (BAC): is the measurement of the amount of alcohol present in the blood and is expressed as a percentage indicating the number of grams of alcohol per 100 millilitres of blood (g/100mL). In Australia, the legal BAC limit for most drivers is 0.05%, therefore a BAC higher than 0.05% is considered above the legal driving limit.

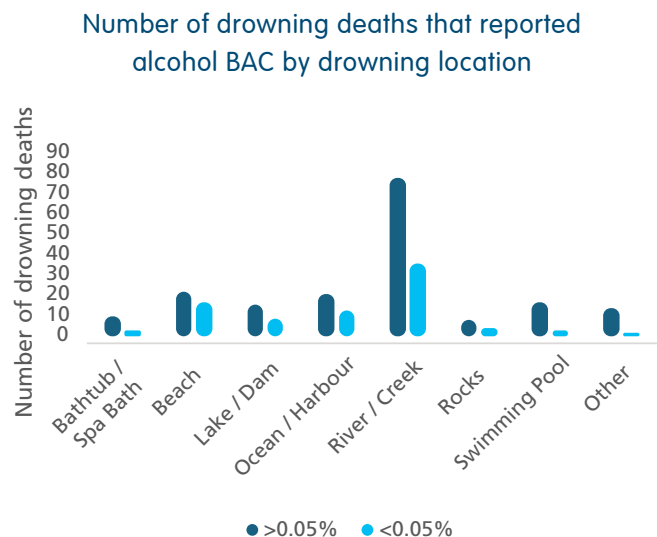
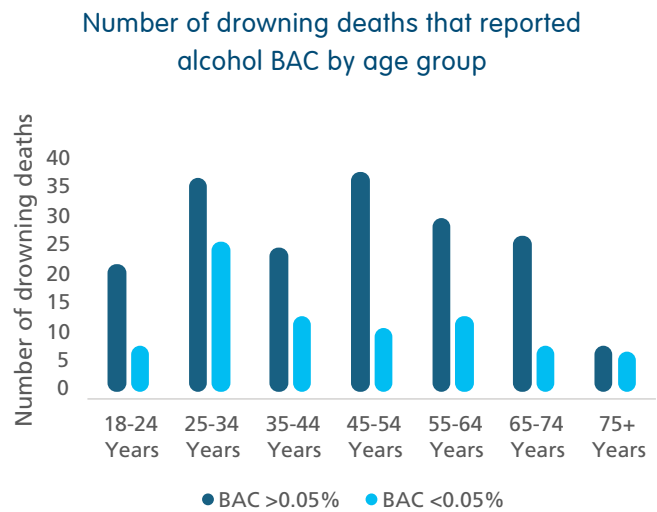
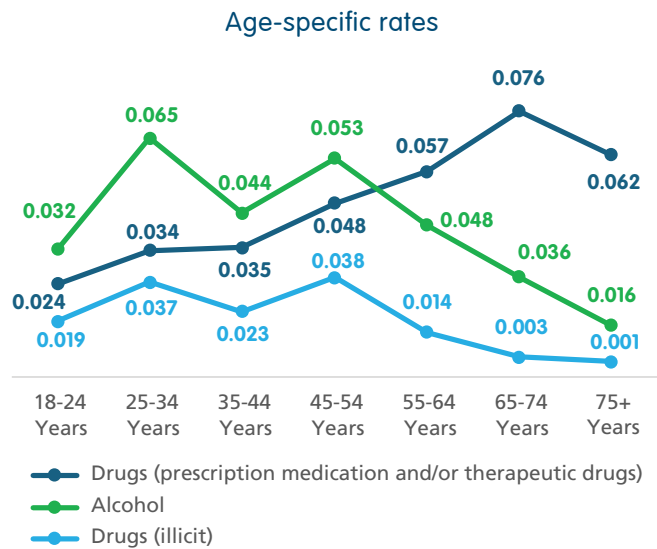
Illicit drugs: substances that are illegal to produce and distribute for consumption as they considered prohibited by law due to their harmful effects, potential for abuse and addiction. Types of illicit drugs include, but are not limited to, heroin, cocaine, methamphetamines, and cannabinoids (including cannabis or THC products).

Prescription medication and/or therapeutic drugs: these include legal drugs that were either prescribed by a medical doctor or was retrieved over the counter such as paracetamol and ibuprofen. These drugs are prescribed or administered to treat or prevent diseases and/or medical conditions.

Age-specific rates

Age-specific drowning rates, in relation to alcohol and drugs involved, were calculated to identify the incidence of drowning within each age-group of the Australian population in the study period. These rates are calculated by dividing the number of drowning events in a specific age-group by the total population in that same age-group and is expressed per 100,000 people. The purpose of these rates is to provide insights into how different age groups are affected by drowning, where prevention strategies need to be targeted and to better understand drowning trends across the lifespan. In this brief report, alcohol and drugs were predominantly recorded in those over the age of 18-years and is presented as such.

Highest age-specific rates for alcohol and illicit drugs were in the 25-34-year age group and the 45-54-year age group. Age-specific rates for prescription medication and therapeutic drugs was the highest in the 65-74-year age group. Increase in prescribed medication and therapeutic drug use in those over the age of 45-years is seen to be linked to existing co-morbidities which include pre-existing medical conditions.



Alcohol breakdown

Out of 315 deaths that had alcohol present:



of cases reported alcohol to contribute to the drowning incident

- › 87% were in males
- › 87% of drowning cases that recorded alcohol present, had a BAC recorded; 69% of which recorded a BAC >0.05%
- › Alcohol was reported the highest among the 25-34-year age group
- › The highest BAC% was recorded in the 34-44-year age group

Location & activity:

- › Rivers/Creeks was the leading location for alcohol-related drowning deaths and was the most frequented location to record a BAC >0.05%
- › Leading activity prior to death was swimming (29%) followed by an unintentional fall into water (15%)

Drug breakdown

Out of 498 deaths that had drugs present:



of cases reported drugs to contribute to the drowning incident

- › 80% were in males
- › 65% of cases were legal prescription medication or therapeutic drugs
- › 18% of cases were illicit drugs
- › 11% of cases reported both legal prescription and illicit drugs in their system
- › 5% of cases were unknown on drug type
- › Drugs were reported most frequent in the 65-74-year age group (17%), the majority of which were prescription medication or therapeutic drugs (94%)

Location and activity:

- › Rivers/Creeks was the leading location of drug-related drowning incidents followed by beaches
- › 30% of drowning deaths occurred while swimming followed by boating (13%)

Alcohol and drugs combined

Out of 174 deaths that had both alcohol and drugs present:



of cases that involved both alcohol and drugs were found to contribute to the drowning event

- › 51% of cases reported prescribed medication and/or therapeutic drugs with alcohol
- › 27% of cases reported illicit drugs combined with alcohol
- › 13% involved all drug types in combination with alcohol
- › 11% of cases had unknown drug type in combination with alcohol

Suggested Citation:

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