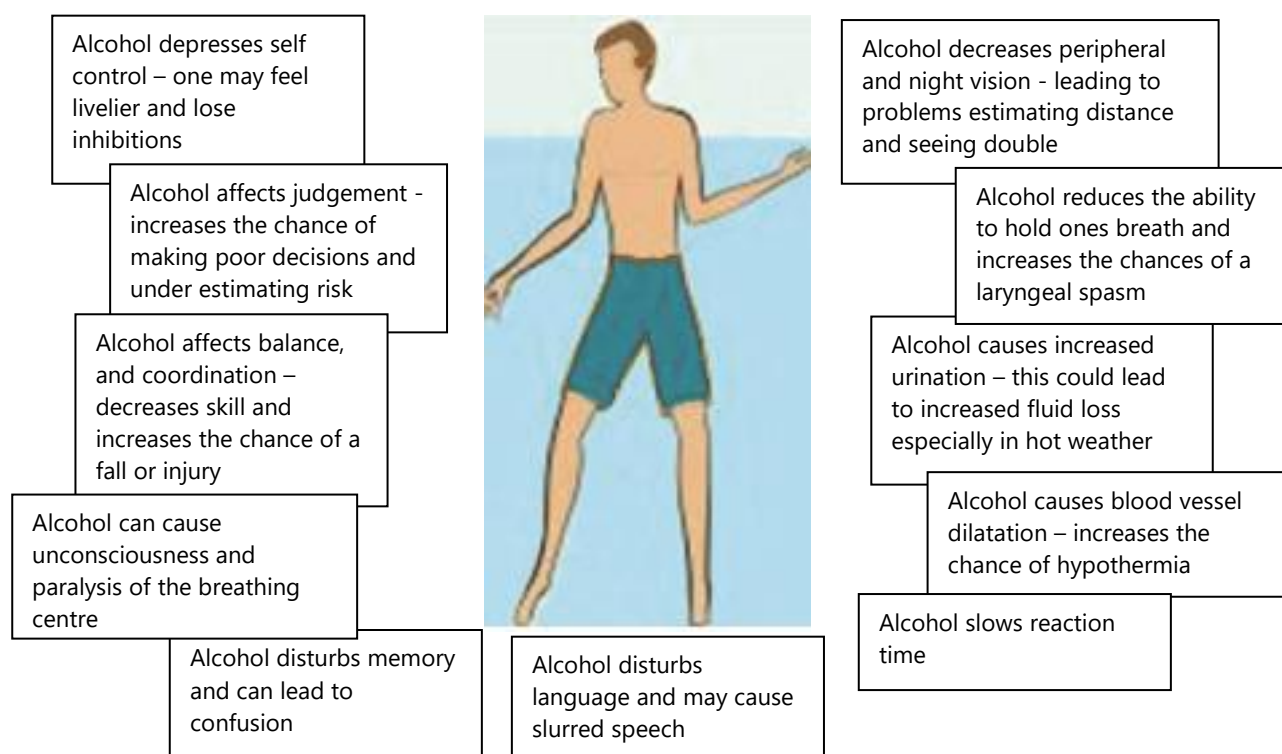




Alcohol affects people differently. The rate of absorption of the alcohol into the blood stream could depend on many factors, such as how much food is in the stomach, how fast the drink is taken, any medication the person is on, mood and fatigue. Drinking alcohol while recreating in or on the water will reduce the chances of survival after an accident and could lead to drowning. Between 1980 -2002 nearly 30% of drownings of those under 25 years of age involved alcohol (Alcohol Healthwatch).

## What Alcohol Will Do To You



Alcohol is water soluble and so it is quickly absorbed into the blood stream and transported around the body. It is diluted by body fluids.

Women absorb and metabolise alcohol differently to men. They have a higher blood alcohol concentration (BAC) after consuming the same amount of alcohol as men. This means their bodies are more susceptible to alcohol damage than men. This difference may be caused in part by the smaller bodies of women and their smaller amount of body fluid. This means the alcohol drunk is not diluted as much in a woman than in a man.

When small amounts of alcohol are consumed, the metabolism of the alcohol in the body can keep up with the rate of its entry into the blood stream. This means the blood alcohol concentration will not increase. However, if the intake increases to a point where the alcohol can not be metabolised quickly enough then the blood concentration will increase.

### Alcohol and Water Safety

Drinking alcohol when in, on, or around water can increase the likelihood of an accident and reduce survival time in the water if anything goes wrong.

#### The factors that increase risk include

- **LACK OF COORDINATION and IMPAIRED REACTION TIME**  
Alcohol numbs the senses, particularly sight, sound and touch. As a depressant, alcohol reduces the

rate the brain processes information. Ordinary reactions simply take longer. On the water, a quick response is vital.

- **IMPAIRED JUDGEMENT and GREATER RISK-TAKING BEHAVIOUR**

Alcohol distorts your perception of risk, and your own abilities. It removes inhibitions. With less accurate information pouring into the brain, you're not as well equipped to make the right decisions leaving you more likely to take greater risks, even life threatening risks, when swimming, jumping and diving in, fishing or boating.

#### **The factors that decrease survival time include:**

- **HYPOTHERMIA**

Alcohol increases blood flow to the arms and legs, even when the body would normally try to stop this to save heat loss. Fall into the water under the influence of alcohol, and hypothermia kicks in much earlier.

- Decreased judgement of when to swim to shore due to increased feeling of warmth (vasodilation).

- **SPASM OF THE VOCAL CHORDS**

Water in the windpipe triggers a reflex closure. Alcohol increases the chance that a spasm of the vocal chords will occur, snapping the airway closed. The combination of water and alcohol can lock the airway closed.

(See Figure 1, page 2; Chellew, C., Franklin, R.C, and Simmonds, E. (2009). *Swim Safe, Swim Sober: A study examining drowning in NSW and the influence of alcohol*. Sydney : The Royal Life Saving Society Australia, NSW Branch. (Sourced from <https://www.watersafe.org.nz/wp-content/uploads/2020/06/Swim-Safe-Swim-Sober-Report.pdf>)

#### **Youth drowning**

From 2015-2019 in New Zealand, 15 people aged 15-24 years drowned where alcohol and/or drugs were involved. All of them were male.

#### **Alcohol and Boating**

Drinking alcohol impairs the ability to operate a boat in much the same way as it reduces the ability to drive a vehicle safely.

What the research shows`

- Maritime NZ figures show 31 people died in recreational boating accidents in New Zealand waters in 2014-15 (June to June), 16 people in both 2015-16 and 2016-17, and 11 people in 2017-18.
- The NZ Safer Boating Forum has identified alcohol as one of the key risk factors in fatal and non-fatal accidents. It is considered to be underreported as a causal factor.
- The number of people reporting they avoid alcohol before/during a boating outing in 2019 was 85% (averaged across 6 boating activities, where jet skiers were 93% and dinghy/inflatables was 78%).

Currently in NZ there are no blood alcohol concentration (BAC) limits for skippers of boats. However regional council bylaws can put restrictions on alcohol use. "A person must not be in charge of a vessel while under the influence of alcohol or a drug, or both, to such an extent as to be incapable of having proper control of the vessel." ([Auckland Council Navigation Safety Bylaw 2014](#) Part 4).

#### **Drugs and Water Safety**

Going in, on, near or under the water when under the influence of drugs is unsafe. Different drugs have different effects on the body, but it can be useful to consider recreational drug use similarly to use of alcohol, with respect to impaired ability to be water safe.

#### **Keeping Safe**

- If you are in, or around water or a hot tub DO NOT DRINK ALCOHOL or use DRUGS
- If you are the skipper or paddler of a boat DO NOT DRINK ALCOHOL or use DRUGS
- Have non-alcoholic drinks on the beach, boat or spa pool.
- If you have had an alcoholic drink or have used drugs then DO NOT SWIM.