

## Fact sheets 2021

### What is alcohol?

Alcohol is an intoxicating substance made from fermented starches. It belongs to the depressant class of drugs. It is the most widely used recreational drug in Australia.

Alcohol is often mistakenly believed to be a stimulant because drinking a small amount may initially reduce tension or inhibitions, making a person feel more relaxed or excited. However, alcohol is a depressant of the central nervous system. Depressants work to slow down messages travelling between the brain and body.

### What are the effects?

Alcohol only takes a few minutes to reach the brain. It is absorbed directly into the bloodstream through the walls of the stomach and small intestine and is then quickly distributed to all parts of the body.

Food in the stomach slows down the rate at which alcohol is absorbed but does not prevent intoxication or drunkenness, as all alcohol consumed reaches the bloodstream.

Increasing alcohol concentrations in the body inhibits many of the brain's functions by dampening the motor and sensory centres, rapidly making judgement, coordination and balance more difficult, and slowing reflexes.

### Blood alcohol level/concentration

The level of alcohol in the blood is called, blood alcohol concentration (BAC). A BAC of 0.01 means there is one gram of alcohol in 100 millilitres of blood. In Australia, one standard drink contains 10 grams of alcohol. In an average healthy person one standard drink increases BAC by about 0.02 and takes approximately one hour to break down.

Drinking more alcohol will increase the BAC. The more alcohol is consumed, the higher the BAC (ADOH, 2019). Even after ceasing to drink, the BAC can keep rising. The only way to lower BAC is by giving the body time to break down the alcohol.

In Australia, it is an offence to drive a vehicle while the BAC is 0.05 or higher. To stay below this limit, men are advised to drink no more than two standard drinks in the first hour and one drink per hour after that. Women are advised to drink no more than one standard drink per hour. However, this is a general guide only and a person may still have a BAC of 0.05 or above after consuming this much alcohol. BAC after drinking can be influenced by a range of factors including body size, metabolism and how often alcohol is consumed (ADF, 2019).

# Alcohol

booze, grog, piss, liquor,  
charge, nip, sauce, poison,  
hooh, moonshine

## Australian Alcohol guidelines to reduce health risks from drinking alcohol

The National Health and Medical Research Council (NHMRC) provides advice to Australians to help them make informed choices about drinking alcohol. The NHMRC is currently revising the 2009 guidelines, with updated guidelines due to be released in late 2020. The current guidelines (NHMRC, 2009) are:

**Guideline 1** **Reducing the risk of alcohol-related harm over a lifetime**

The lifetime risk of harm from drinking alcohol increases with the amount consumed. For healthy men and women, drinking no more than two standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease or injury.

**Guideline 2** **Reducing the risk of injury on a single occasion of drinking**

On a single occasion of drinking, the risk of alcohol-related injury increases with the amount consumed. For healthy men and women, drinking no more than four standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion.

**Guideline 3** **Children and young people under 18 years of age**

For children and young people under 18 years of age, not drinking alcohol is the safest option.

A. Parents and carers should be advised that children under 15 years of age are at the greatest risk of harm from drinking and that for this age group, not drinking alcohol is especially important

B. For young people aged 15 to 17 years, the safest option is to delay the initiation of drinking for as long as possible

**Guideline 4** **Pregnancy and breastfeeding**

Maternal alcohol consumption can harm the developing fetus or breastfeeding baby.

A. For women who are pregnant or planning a pregnancy, not drinking is the safest option

B. For women who are breastfeeding, not drinking is the safest option

### Mixing alcohol with other drugs

The effects of drinking alcohol and taking other drugs, including over the counter or prescribed medications, can be unpredictable and dangerous (ADF, 2019).

As alcohol depresses brain activity it should not be used with other drugs or medications that have similar effects on the brain, particularly benzodiazepines and heroin. Mixing alcohol with other depressants can result in decreased heart rate, breathing difficulties and overdose (Saunders, 1986).



### What are the risks?

Alcohol is associated with a range of harms.

#### **Immediate risks:**

- > Increased risk of experiencing an accident or injury, for example through road traffic accidents, falls, fires and drowning (this risk is especially high among young people)
- > Increased risk of sexually transmitted infections (STIs) or unintended pregnancy
- > Increased chance of experiencing and/or perpetrating violence, for example getting into fights or being assaulted

#### **Longer-term risks:**

- > Alcohol dependence
- > Brain damage and problems with brain development
- > Malnutrition
- > Cardiovascular (heart) problems
- > Cancer – alcohol has been linked to a range of cancers, including mouth, oesophagus, liver and breast cancers
- > Liver problems
- > Increased risk of mental health problems such as anxiety and depression
- > Alcohol use may increase problems with diabetes and obesity
- > Alcohol use in pregnancy can lead to serious problems such as Fetal Alcohol Syndrome in the unborn child

## Toxicity and overdose

The day after consuming alcohol a person may experience a hangover. The effects of a hangover can include:

- > Headache
- > Diarrhoea and nausea
- > Tiredness and trembling
- > Increased heart rate and blood pressure
- > Dry mouth
- > Trouble concentrating
- > Anxiety
- > Poor or decreased sleep

Sobering up from alcohol takes time. The liver gets rid of about one standard drink an hour. Sweating it out with exercise, cold showers, coffee, fresh air or vomiting will not speed up the process (ADF, 2019).

If drinking continues for an extended period, bodily functions can shut down and a person may lose consciousness. This is called alcohol poisoning. Alcohol poisoning can lead to death. This can happen if an individual stops breathing, or by suffocation if a person vomits while unconscious. Death can also occur due to interactions with other drugs.

## Dependence and withdrawal

Sudden withdrawal from long-term, heavy alcohol use can be life threatening. Withdrawal symptoms can start within a few hours after the last drinks and can continue for between two and seven days. Symptoms include:

- > Sweating
- > Tremors (delirium tremens)
- > Nausea
- > Anxiety, irritability, difficulty sleeping
- > Seizures or fits
- > Delusions and hallucinations
- > Death (ADF, 2019)

## Mental health

There are strong associations between alcohol problems and affective disorders such as depression, bipolar disorder and anxiety disorders. The use of alcohol can make the symptoms and prognosis of mental illnesses worse (Quick Guide to Drugs and Alcohol, 2017).

In 2019, compared with people who had not been diagnosed or treated for a mental health condition in the previous 12 months, people with a mental health condition were about 1.2 times as likely to drink alcohol at levels that exceed the lifetime risk (21 percent compared with 17.1 percent) and single occasion risk guidelines at least monthly (31 percent compared with 25 percent) (AIHW, 2020).



## Alcohol trends in Australia

According to the Australian Institute of Health and Welfare, between 2016 and 2019, the proportion of ex-drinkers rose from 7.6 percent to 8.9 percent. There was also a rise in the number of people cutting back on alcohol, with 31 percent of people saying they had reduced the number of alcoholic drinks they consumed at any one time, up from 28 percent in 2016. The main reason people gave for reducing their intake was 'health reasons' (such as weight loss or avoiding hangovers).

Despite this, there has been little change in the proportion of people drinking at risky levels. In 2019, one in four (25 percent) people drank at a risky level on a single occasion at least monthly, while about one in six (16.8 percent) exceeded the lifetime risk guideline (AIHW, 2020).

## Treatment

There are a number of options to treat dependent use of alcohol. Simply 'detoxing' does not constitute adequate treatment. Other measures are required to avoid relapse.

Treatment options include:

### **Detoxification**

The primary aim of alcohol detoxification is to manage withdrawal syndrome and interrupt the pattern of chronic and heavy use. Detoxification may be aided by pharmacotherapy. Withdrawal can be life-threatening, so appropriate medical supervision and monitoring is required.

### **Residential rehabilitation and 12 step programs (Alcoholics Anonymous)**

Residential rehabilitation (RR) is frequently used for the treatment of alcohol dependence. RR may be for a period of one to 12 months and can include vocational rehabilitation and other onsite support services such as legal, medical and mental health. Many RRs are based on the 12-step model. Therapeutic communities (TCs) are also based on the 12-step model and are a sub-class of RR. They are often associated with support groups like Alcoholics Anonymous (AA).

### **Psychological interventions**

There are four main clinically effective psychological interventions: cognitive behavioural therapy, motivational enhancement, contingency management, and social and family support services.

### **Pharmacotherapy**

Several medications are used to treat alcohol addiction: naltrexone (see naltrexone fact sheet), disulfiram and acamprostate.

## Emergency information

If you, or someone around you, is experiencing undesired or distressing psychological or physical symptoms from the intake of alcohol or other drugs please seek immediate medical attention.

If you need urgent help from ambulance services call Triple Zero (000). If a person has been mixing drugs with alcohol or other drugs, tell the paramedic exactly what has been taken.

## Services

For free and confidential advice about alcohol and other drugs, call the National Alcohol and Other Drug hotline on **1800 250 015**.

The hotline will automatically direct you to the Alcohol and Drug Information Service in your state or territory.

## More resources

The Illicit Drug Reporting System is an Australian monitoring system that identifies emerging trends of local and national interest in illicit drug markets.

The Ecstasy and Related Drugs Reporting System is an Australian monitoring system for ecstasy and related drugs that identifies emerging trends of local and national interest.

The Clinician's Guide to Illicit Drugs and Health examines the health effects of each of the major illicit drugs.

The Australian Institute of Health and Welfare collects information on alcohol and tobacco consumption, and illicit drug use among the general population in Australia.

The Australian Bureau of Statistics is Australia's national statistical agency, providing official statistics on a range of economic, social, population and environmental matters of importance to Australia.

## Sources

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