

# **Alcohol Abuse and Treatment**

# What is alcohol?

Alcohol is a drug that slows down the brain and nervous system. It is the most widely used drug in Australia.

Drinking a small amount is not harmful for most people, but regularly drinking significant amounts of alcohol can cause health, personal, and social problems.

These can include:

- poor diet
- stomach problems
- frequent infections
- skin problems
- liver and brain damage
- damage to reproductive organs

- memory loss/confusion
- heart and blood disorder
- depression
- relationship problems
- work problems
- money or legal troubles

Damage to some body organs can be permanent.

# Tolerance and dependence

Anyone can develop a 'tolerance' to alcohol. Tolerance means that you must drink more to feel the same effects you used to have with lower amounts.

'Dependence' on alcohol means that it takes up much of your thoughts, emotions and activities. Dependent people find it very difficult to stop or reduce drinking. This is because of withdrawal. Typical alcohol withdrawal symptoms last about five days and include:

- anxiety
- sweating
- shaking
- nausea and vomiting

- hallucinations (seeing or hearing things)
- depression
- headaches
- insomnia (may last several weeks)

Alcohol withdrawal can be very dangerous (e.g. seizures may occur). People drinking eight or more standard drinks a day are advised to discuss a decision to stop drinking with a doctor as medication may be needed to prevent withdrawal complications.



# Withdrawal medication

Any medications prescribed for managing alcohol withdrawal should be taken as directed. It is important not to take other medications without telling your doctor or to start drinking (or taking illegal drugs) while still taking the prescribed medication.

#### Diazepam (Valium, Antenex, Ducene)

Diazepam is a benzodiazepine. It has a similar action in the brain to that of alcohol so is good at relieving many of the symptoms of alcohol withdrawal. Clinical studies have shown that this group of drugs is the safest and most effective withdrawal medication available.

Diazepam is usually prescribed for the first few days (up to a week), often in reducing amounts. This ensures you do not develop benzodiazepine addiction. Higher doses may be safely used in an inpatient setting, rather than in the home. Diazepam is usually taken several times a day in the beginning.

Diazepam (and other benzodiazepines) should not be taken with alcohol and other sedatives so it is important not to drink while taking the medication. Benzodiazepines also affect ability to drive or operate machinery.

#### Thiamine

Thiamine is one of the group B vitamins (vitamin B1). It is important to the normal functioning of the nervous system. Chronic alcohol drinkers do not absorb it well from the gut and often have a poor diet. Some symptoms of thiamine deficiency include memory disturbance, confusion, double vision, poor coordination and unsteadiness.

Thiamine is better absorbed by injection and this is recommended at the start of treatment. Once a person has stopped drinking they may be given oral thiamine tablets.

# Remaining sober

Stopping drinking (and going through withdrawal) is just the first step in the process of giving up - it takes time to become dependent on alcohol and time to give up. Attending counselling, and/or using other supports such as <u>AA - Alcoholics Anonymous</u> or sober social groups such as <u>Untoxicated</u>, is very important in reducing the likelihood of a relapse.

In addition, there are a number of medications available that may help.

# Acamprosate (Campral)

How it works: Acamprosate works on the brain - it acts on some of the same receptors and transmitters (messengers) as alcohol. It can help to restore the chemical imbalance in brain cells



caused by long-term heavy alcohol use. Acamprosate can help to reduce cravings for alcohol, making it easier to resist drinking. Studies have shown it doubles the chances of staying abstinent.

Who can take it and who can't: A person must have alcohol dependence and want to stop drinking. It is recommended that acamprosate is started after a person has stopped drinking. It should not be taken by pregnant or breastfeeding women or people who have kidney disease or severe liver disease.

**How often, how long, and side effects:** Acamprosate tablets are taken three times daily (usually two tablets each time) at meal times (making it easier to remember). Most people do not experience any side effects from acamprosate. If they do occur, the most common ones are diarrhoea and nausea or a skin rash. It takes about a week for the drug to reach its full effect and it can be continued for as long as needed (usually up to 12 months). There is some evidence that the benefits may continue even after it is stopped.

#### Naltrexone (Revia)

**How it works:** Naltrexone also acts on the brain - it blocks the effects of alcohol on the opioid receptors that cause the high or lifting of mood experienced when drinking alcohol. As a result of taking naltrexone, craving for alcohol is reduced and drinking is much less pleasurable. There are some people who are particularly sensitive to the opioid effects of alcohol - they may have a strong family history of alcohol problems. Studies have shown that Naltrexone halves the chances of relapsing to heavy drinking.

Who can take it and who can't: A person must have alcohol dependence and want to stop drinking. It is recommended that Naltrexone is started after a person has stopped drinking. It should not be taken by pregnant or breastfeeding women (unless there are exceptional circumstances) or people who have significant liver disease. It cannot be taken by people who are regularly taking or are dependent on opioids (it blocks their effects and can cause withdrawal).

**How often, how long, and side effects:** Naltrexone tablets are taken once a day (one tablet). Most people do not experience side effects from Naltrexone, however, nausea and vomiting are the most common side effects. Naltrexone starts to work within an hour of taking it and wears off within 72 hours of stopping. It can be continued for as long as needed (usually up to 12 months).

#### Disulfiram (Antabuse)

**How it works:** Disulfiram is an aversive agent - it blocks the breakdown of alcohol. Usually when alcohol is consumed it is broken down by the liver through several steps eventually ending up as carbon dioxide and water. Part way through this process alcohol becomes a chemical called acetaldehyde that is quickly broken down further. A person taking disulfiram is unable to quickly break down acetaldehyde because it stops the liver from making the necessary enzyme. As a result, if the person drinks alcohol, acetaldehyde accumulates in the blood stream causing a very unpleasant



reaction (flushing, headache, nausea, difficulty breathing, chest pain, collapse). Studies have shown that disulfiram may assist a person to remain abstinent from alcohol.

Who can take it and who can't: A person must have alcohol dependence and want to stop drinking. Disulfiram must be started after a person has stopped drinking (at least 24-48 hours after the last drink so there is no alcohol in the bloodstream). Disulfiram cannot be taken by those with severe liver, kidney or heart disease, a psychotic illness, or who is pregnant. There are a number of other medical conditions that also pose a risk, so it is not usually prescribed as a first option.

**How often, how long and side effects:** Disulfiram tablets are taken once daily, dissolved in water. Side effects may occur and range from mild to severe. There can also be interactions with other medications and any foods containing alcohol. Disulfiram starts to work within 24 hours and the effects last for at least a week after stopping. It is continued for as long as needed (usually about 12 months).