

Alcohol and Drug Cognitive Enhancement (ACE) Program

Cognitive impairment in alcohol and other drug treatment

This document is for people having treatment for alcohol and/or other drug use.

It is common for people accessing alcohol and other drug (AOD) treatment to experience cognitive impairment. In fact, it affects approximately 50%¹ of people in treatment.

This fact sheet explains cognitive impairment and its possible causes and symptoms.

What is cognitive impairment?

The term 'cognitive impairment' refers to a person's reduced ability to process thoughts.

This includes:

- learning new things
- memorising or remembering information
- concentrating
- making plans and following through on decisions
- controlling or regulating behaviour.

Studies show up to two out of three residents in AOD treatment facilities have a history of traumatic brain injury.²

- 1 Copersino M L, Fals-Stewart W, Fitzmaurice G, S, et al. Rapid cognitive screening of patients with substance use disorders. *Exp Clin Psychopharmacol.* 2009 Oct;17(5):337-44. doi: 10.1037/a0017260
- 2 Marceau EM, Lunn J, Berry J, et al. The Montreal Cognitive Assessment (MoCA) is sensitive to head injury and cognitive impairment in a residential alcohol and other drug therapeutic community. *J Subst Abuse Treat.* 2016;66:30-36. doi:10.1016/j.jsat.2016.03.002

What causes cognitive impairment?

There can be different causes of cognitive impairment, and there may be a combination of factors.

This list outlines possible causes of cognitive impairment. Not all people who have had these experiences will necessarily have cognitive impairment.

Alcohol and other drug use

Using alcohol and other drugs in harmful ways can change the structure and the functioning of the brain. Cutting back or stopping taking these substances may return the brain to normal functioning.

Traumatic brain injury (TBI)

This is when there is a physical injury to the brain after a blow to the head, such as a car or motorbike accident, assault or fall. This physical damage can result in bruising, stretching, tearing or bleeding of the brain.

Most brain injuries are mild and a full recovery is possible. However, experiencing more than one brain injury (even if mild) increases the chances of ongoing cognitive impairment.

Hypoxic brain injury (HBI)

This occurs when the brain does not get enough oxygen. HBI can be caused by near drowning incidents, choking or suffocating, heart attack or drug overdose. The brain needs oxygen for brain cells to work, and when there isn't enough, some of the cells can break down.

Developmental disorders

Developmental, learning and behavioural disorders, such as dyslexia and attention deficit hyperactivity disorder (ADHD), can cause a person to struggle with reading, writing, attention, memory and higher level thinking. Although these conditions are present from childhood, they are not always detected until later in adolescence or adulthood.

Being diagnosed with a developmental disorder can help you to access effective treatment and learn ways to address it – making life simpler and less stressful.

Other causes

There are many other causes of cognitive impairment, such as dementia and multiple sclerosis. These are relatively rare in people accessing AOD treatment.

Could I have cognitive impairment?

If you have ever experienced any of the problems listed on page one (for instance, you were hit on the head and lost consciousness, had a drug overdose, or had learning or behaviour difficulties at school), you could have cognitive impairment.

Day-to-day signs of cognitive impairment include:

- being easily distracted
- not understanding or remembering
- difficulty following simple instructions
- forgetfulness (e.g. missing appointments)
- speaking too much
- not keeping to the topic of conversation
- problems keeping up with work, study or daily tasks
- struggling to understand new ideas
- being disorganised
- acting impulsively
- difficulty making decisions or problem solving
- difficulty concentrating for a long time.

This can lead you and those around you to feelings of frustration, anxiety, irritability and sadness.

How can it impact AOD treatment?

The way your mind works plays an important role in making plans, taking action and managing emotions, so cognitive impairment can make it hard to fully participate in AOD treatment.

People in AOD treatment who have cognitive impairment may have trouble staying focused and remembering things. This makes it hard to use new knowledge to change habits and behaviours.

As a result, people in AOD treatment who have cognitive impairment are more likely to stop their treatment. This is a disadvantage, because positive treatment outcomes are linked to completing treatment.

Tips and strategies to help with cognitive impairment

The science of improving or managing cognitive impairment is more than 100 years old. There are many techniques to reduce the impact of cognitive impairment.

The strategies available are simple and practical, and they can work for anyone – even people who don't have cognitive impairment. Try strategies that you think may be helpful.

Note that some of the strategies require some practice. Don't be discouraged if a strategy doesn't work well the first time. Instead, change it so it suits you, and continue to practise the strategy in different environments and situations so it works better the next time. You will be sure to get better over time.

You may also want to suggest some of these strategies to your friends, colleagues or peers if you think it will help them get more out of their AOD treatment or in everyday life.