Background Facts – N-ICE Trial



What is methamphetamine?

Methamphetamine is a potent illicit synthetic stimulant drug. Street names include "ice", "crystal", "skates" and "tina".

Methamphetamine increases chemicals in the brain called monoamines, particularly the brain's feelgood chemical dopamine.

Long term use can alter the balance of these chemicals, producing cravings and dependence.

How many people use methamphetamine?

Despite a steady decline in the use of amphetamines in Australia over the past decade (in 2016 it was estimated that 1.4% of Australians aged 14 years or older had used amphetamines in the past year), there has an increase in the use of high purity crystalline methamphetamine ("crystal meth" or "ice"). Currently around 1% of Australians aged 14 years or over are estimated to have used crystalline methamphetamine in the past year. This figure has increased over the past decade and has recently stabilised.

Addiction to crystal methamphetamine

Crystalline methamphetamine conveys a higher risk of dependence (addiction) than other amphetamines.

Dependence is associated with cravings for the drug, compulsive frequent use, and an inability to refrain from using despite health and psychological problems.

There are an estimated 160,000 Australians dependent on methamphetamine.

Treatment for methamphetamine use

In the 2016-17 financial year, there were 49,670 presentations to treatment services for amphetamines (most of which would be for methamphetamine), representing an almost five-fold increase on figures from 2009-2010 (10,027 presentations).

Treatment for methamphetamine use currently includes providing counselling, detoxification, residential rehabilitation and similar psychosocial treatment options.

There are currently no approved medications to help people who are dependent on methamphetamine to reduce their use.

N-Acetyl-Cysteine (NAC) as a promising medication to help people who use crystal meth

N-Acetyl-Cysteine (NAC) is one of a new generation of medications for addiction.

NAC restores balance to brain changes that occur with addiction. It has been found to reduce craving for methamphetamine and other drugs. NAC also reduces the toxic effects of methamphetamine on the brain.

NAC is a safe medication, which can be prescribed as a take-home medication, making it a potentially convenient and cost-effective treatment option to help people who want to reduce their methamphetamine use.

The N-ICE Trial

The N-ICE trial is a randomised controlled trial of N-Acetyl-Cysteine (NAC) for methamphetamine ("ice") dependence. The aim of the trial is to see whether NAC can help people reduce their methamphetamine use.

We will enrol 180 people who are dependent on methamphetamine to take NAC for 12 weeks. Recruitment for the trial has begun, and we will be recruiting participants to join the trial over the next 12 months.

The N-ICE trial is being run out of frontline clinical services in three locations: Geelong, Wollongong and Melbourne. Information on how to take part in the trial can be found at <u>www.nicetrial.info</u>

