

# Methamphetamine Use and Addiction



Edited by Justin Healey

**ISSUES**  
**IN SOCIETY**

# Methamphetamine Use and Addiction

Volume | 407

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**IN SOCIETY**

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# INTRODUCTION

**Methamphetamine Use and Addiction** is Volume 407 in the 'Issues in Society' series of educational resource books. The aim of this series is to offer current, diverse information about important issues in our world, from an Australian perspective.

## KEY ISSUES IN THIS TOPIC

Methamphetamine is a drug which can cause substantial harms; particularly the purest and most potent form of it, commonly known as 'ice'. What exactly does methamphetamine do to your body and mind?

This book explores current trends in methamphetamine use in Australia, and reveals the health and social impacts of the growing ice scourge, featuring information on related crime and violence, psychosis, addiction, withdrawal, treatment and recovery.

The book also explains the latest responses to tackling Australia's ice problem through government policy, law enforcement and public awareness initiatives.

The risks of using this drug are many, and the best approach is to never try it; how can young people be encouraged to avoid becoming victims of the 'ice epidemic'?

## SOURCES OF INFORMATION

Titles in the 'Issues in Society' series are individual resource books which provide an overview on a specific subject comprised of facts and opinions.

The information in this resource book is not from any single author, publication or organisation. The unique value of the 'Issues in Society' series lies in its diversity of content and perspectives.

**The content comes from a wide variety of sources and includes:**

- Newspaper reports and opinion pieces
- Website fact sheets
- Magazine and journal articles
- Statistics and surveys
- Government reports
- Literature from special interest groups

## CRITICAL EVALUATION

As the information reproduced in this book is from a number of different sources, readers should always be aware of the origin of the text and whether or not the source is likely to be expressing a particular bias or agenda.

It is hoped that, as you read about the many aspects of the issues explored in this book, you will critically evaluate the information presented. In some cases, it is important that you decide whether you are being presented with facts or opinions. Does the writer give a biased or an unbiased report? If an opinion is being expressed, do you agree with the writer?

## EXPLORING ISSUES

The 'Exploring issues' section at the back of this book features a range of ready-to-use worksheets relating to the articles and issues raised in this book. The activities and exercises in these worksheets are suitable for use by students at middle secondary school level and beyond.

## FURTHER RESEARCH

This title offers a useful starting point for those who need convenient access to information about the issues involved. However, it is only a starting point. The 'Web links' section at the back of this book contains a list of useful websites which you can access for more reading on the topic.

## ARE WE IN THE MIDST OF AN ICE EPIDEMIC? A SNAPSHOT OF METH USE IN AUSTRALIA

The number of people who use methamphetamine has not changed in at least the last ten years, observes **Nicole Lee** in this article first published by *The Conversation*

**P**rime Minister Tony Abbott today launched a taskforce to tackle the growing problem of ice. “As a citizen and as a parent I am appalled at what is happening on our streets and in our homes,” he said, adding that the taskforce will canvass the problems and report back with a strategy by mid-year.

But while Australia certainly has a problem with ice, it’s hardly an epidemic. Let’s consider the data on use and harms. But first, what is it?

Methamphetamine is a potent stimulant drug that comes in several forms: a powder, speed; a crystalline form, crystal meth or ice; and a base form, resulting from poor conversion of methamphetamine oil to crystalline form. While the chemical composition of these three forms is the same, the potency varies, with ice the strongest.

Illicit methamphetamine use is relatively high around the world, but South-East Asia in particular is a major hub for production. This impacts on Australia,

which has one of the highest rates of use in the world.

Yet, the prevalence of methamphetamine use in Australia has remained stable since 2001, at around 2% of the population. That is, the number of people who use methamphetamine has not changed in at least the last ten years.

However, there have been significant shifts recently in the way methamphetamine is used that have created significant issues for users and the community.

The number of people who use methamphetamine has not changed in at least the last ten years. However, there have been significant shifts recently in the way methamphetamine is used that have created significant issues for users and the community.





## CHANGING USE

First, the number of methamphetamine users who prefer ice over other types of methamphetamine has doubled, from 27% in 2007 and 22% in 2010, to 50% in 2013. The proportion of people using it at least weekly has grown, from 9.3% in 2010 to 15.5% in 2013.

There has also been a significant increase in smoking as the main route of administration, from around 20% of regular users to 40%.

Other data show an increasing purity of ice, from an annual average of 21% in 2009, to 64% in 2013. The purity of traditionally lower-grade speed has also been increasing, from 12% to 37% between 2009 and 2013.

The price of both crystal and powder methamphetamine, based on purity, is now more similar than in previous years, making ice a more economical purchase for users.

## GROWING HARMS

There has been a corresponding increase in people seeking treatment at drug and alcohol clinics. The proportion of treatment 'episodes' where methamphetamine was the principal drug of concern doubled from 7% in 2009-10, to 14% in 2012-13.

There has been an 88% increase in ambulance call-outs in metropolitan Victoria and a 198% increase in

call outs for methamphetamine-related incidents in some regional areas. People in regional areas are twice as likely to use methamphetamine as those in major cities (and are more likely to drink at risky levels and smoke cigarettes).

Hospital presentations for methamphetamine-related problems are the second-highest among the four major illicit drug types, with 182 'separations' per million people in 2010-11.

Finally, arrests for methamphetamine-related crimes have increased by 30% between 2010-11 and 2011-12. And a review of more than 80,000 Queensland roadside drug-tests between 2007 and 2012 found methamphetamine to be present in 41% of positive results.

## GETTING HELP

Data we are currently analysing from the government's *National Drug Strategy Household Survey* suggest these changes are driven primarily by those who use more than once a month. This group is more likely to experience harms from regular use, such as dependence, mental health problems and sleeping troubles, and would benefit from early treatment.

Irregular users are not at high risk of dependence but may experience acute harms, such as overdose, and require harm-reduction strategies.

Both of these groups are, in some ways, hidden populations. They may not disclose their use of methamphetamine to their GP or other health professionals unless asked, and may not present to tertiary treatment services until their problems are severe. There is a time lag of around five years between early methamphetamine-related problems and treatment.

While investment in policing and prevention is important, the bulk of the changes in use and the resulting harms are due to the small proportion who use more regularly and are at risk of dependence.

We know that for every dollar spent on drug treatment we save A\$7 to the community, compared with A\$2 for stronger policing. We need to ensure that treatment is a significant part of the solution to the problems created by changes in methamphetamine use.

**Nicole Lee is Associate Professor at the National Centre for Education and Training on Addiction, Flinders University.**

## THE CONVERSATION

Lee, N (8 April 2015). *Are we in the midst of an ice epidemic? A snapshot of meth use in Australia*. Retrieved from <http://theconversation.com> on 6 October 2015.

# WHAT IS THE ICE PROBLEM?

## THE AUSTRALIAN GOVERNMENT EXPLAINS WITH THIS BRIEF GUIDE

### What impact does ice have on individuals and the community?

The use of ice has psychological and medical consequences for users, disrupts families and communities, is linked to violence and property crime, and damages the environment.

Ice users are at increased risk of a range of health-related harms, most notably psychosis and mental illness. Long-term use can result in memory loss, aggression and increased risk of stroke and heart failure. As a consequence ice use places a long-term burden on the health care system.

In 2013, 8.3% of the population had been a victim of an illicit drug-related incident such as verbal and physical abuse.

The manufacturing of ice produces hazardous waste that poses immediate risks to partners and children of ice users and manufacturers, local residents and emergency personnel.

### How common is the use of ice?

In 2013, the use of methylamphetamine was reported at 2.1% of the population. The reported use of ice by methylamphetamine users has more than doubled – from 22% in 2010 to 50% in 2013.

Not only are more methylamphetamine users using ice, but they are also using it more frequently. In 2010, 9.3% of methylamphetamine users took ice daily or weekly – by 2013 that number increased to 15.5%.

### Why is ice a growing issue in Australia?

Ice is usually the most pure form of methylamphetamine and the purity of methamphetamine has tripled in some jurisdictions since 2010.

Australian illicit drug users pay a premium price for most illicit drugs compared to prices in key foreign

markets. This makes Australia an attractive marketplace for the manufacture and importation of ice.

Like other forms of methylamphetamine, the ice market is unique among Australian illicit drug markets because there is significant domestic manufacture and importation of the drug. More than 60% of Australia's most significant organised criminal groups are involved in the methylamphetamine market.

There appears to be an increase in the availability and use of methylamphetamine, in particular ice, in areas where the drug has not been previously prevalent particularly regional, rural and disadvantaged communities.

Law enforcement efforts indicate that the problem is only getting worse. Global seizures of methylamphetamine have grown each year since 2010. From 2011 to 2012, the weight of methylamphetamine seized by law enforcement increased by 15% to 144 tonnes. As the proceeds

### WHAT IS 'ICE'?

*Methylamphetamines is a term used to identify a group of powerful stimulant drugs that include speed, base and crystal also known as 'ice', with ice usually the purest form.*

*Ice can cause psychosis and long-term psychological issues and is linked to violent criminal attacks against innocent bystanders, risk-taking behaviour, road deaths, robberies and vicious assaults against frontline health workers and law enforcement responders.*

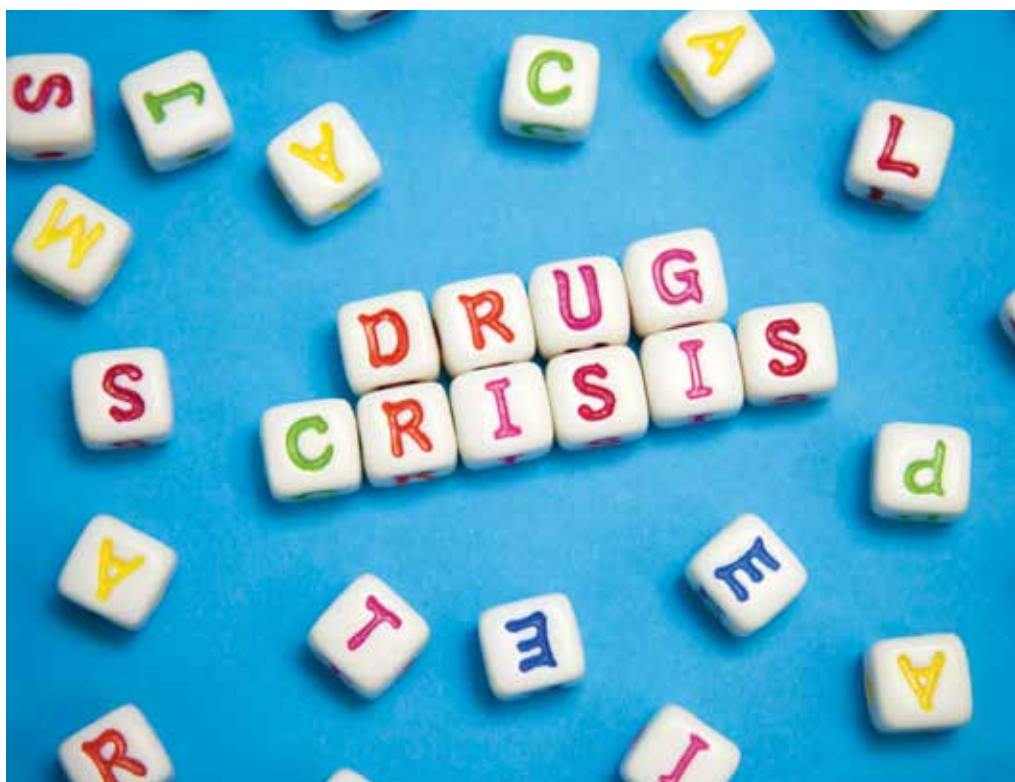
of the ice market continue to rise, the problem will continue to grow.

**Note:** Facts are sourced from the Australian Crime Commission's *The Australian Methylamphetamine Market: The National Picture* report of 2015 and the *National Drug Strategy Household Survey detailed report 2013*.

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© Commonwealth of Australia (2013). *What is the ice problem?* (Fact sheet). Retrieved from [www.dpmpc.gov.au](http://www.dpmpc.gov.au) on 7 October 2015.

*Not only are more methylamphetamine users using ice, but they are also using it more frequently.*





# METHAMPHETAMINE USE IN AUSTRALIA

There is growing concern about methamphetamine use in Australia, according to this **NCETA** report by Ann Roche, Alice McEntee, Jane Fischer and Victoria Kostadinov

## What is methamphetamine?

**M**ethamphetamine belongs to the 'stimulant' class of drugs, which also includes amphetamine, ecstasy, and cocaine. These drugs stimulate the brain and central nervous system, resulting in increased alertness and physical activity.

There are three main forms of methamphetamine: powder (speed), base, and crystal. Of particular concern is the crystalline form of methamphetamine, known as 'ice'. Ice (also known as crystal meth, meth, crystal, shabu, batu, d-meth, tina, glass, or shard) is the most potent form of methamphetamine, and is usually smoked or injected.

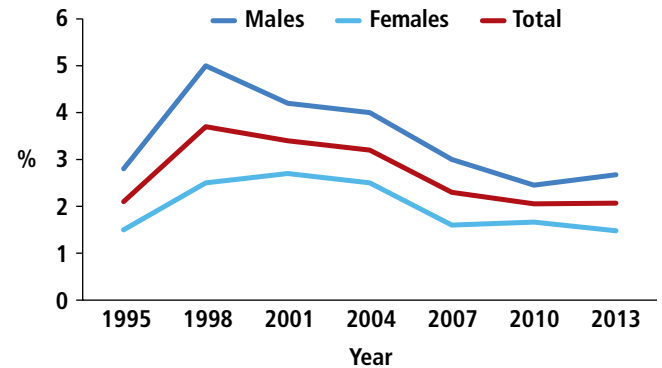
## Who uses methamphetamine?

In 2013, 7% of Australians reported that they had used methamphetamine in their lifetime, and 2% reported using in the past 12 months (including 0.8% and 0.4% using in the last month and week, respectively) (Fig 1). The highest prevalence of 12-month methamphetamine use was recorded in 1998 at 3.7% (Fig 2).

Since 2007 the proportion of Australians who have used methamphetamine in the past 12 months has remained relatively stable. However, several important changes have occurred that have increased risks and harms.

The proportion of weekly methamphetamine users significantly increased from 2010 to 2013 (Fig 3). The overall proportion of methamphetamine users has not

**Figure 2: Proportion of Australians (14+ years) who have used methamphetamine in the past 12 months**



Source: Australian Institute of Health and Welfare (AIHW). 2013 National Drug Strategy Household Survey.

changed over this period, and most still use less than monthly. However, the proportion of users who use more frequently (i.e. weekly) has increased. Frequent use increases risk of harm and dependence.

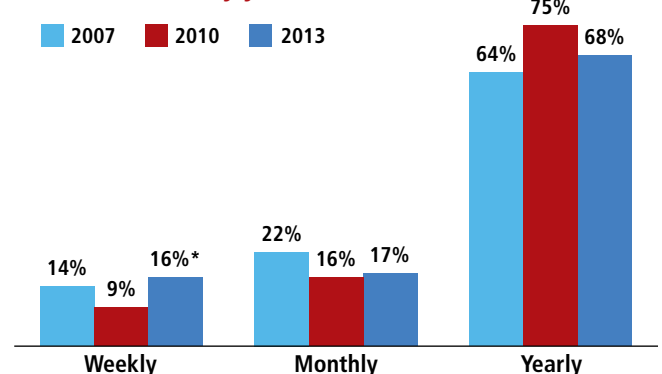
In 2013 the majority of monthly and yearly methamphetamine users were male (Fig 4), but weekly users were equally likely to be female. This gender difference was not apparent in 2010.

## Form and method of use

Speed (powder, tablets, capsules) was used by most methamphetamine users in 2007 and 2010 (Fig 5). In 2013, ice was the preferred form of methamphetamine. Ice use has more than doubled since 2010. The recent shift to ice is concerning, as it is a particularly potent form of methamphetamine, and may cause more harm.

Smoking has become the main method of administration. Since 2007, the proportion of users who usually smoked methamphetamine has doubled (Fig 6). This trend is likely to reflect greater use of ice. Among ice users, the majority (78%) prefer to smoke it.

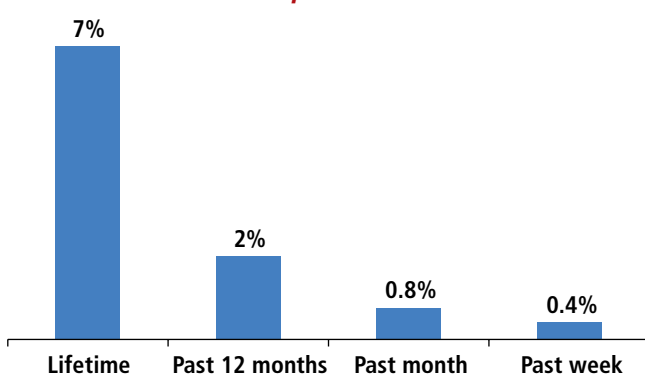
**Figure 3: Frequency of methamphetamine use in Australia by year**



Source: Australian Institute of Health and Welfare (AIHW). 2007, 2010, 2013 National Drug Strategy Household Survey (NCETA secondary analysis, 2015).

There are three main forms of methamphetamine: powder (speed), base, and crystal. Of particular concern is the crystalline form of methamphetamine, known as 'ice'.

**Figure 1: Proportion of Australians (14+ years) who have used methamphetamine**



Source: Australian Institute of Health and Welfare (AIHW). 2013 National Drug Strategy Household Survey (NCETA secondary analysis, 2015).



## User profiles

The demographic profile of methamphetamine users varies depending on the frequency and form of use.

Although the average age of methamphetamine users is increasing, the average age of ice users has significantly declined.

In 2007, ice users were, on average, older than users of other forms of methamphetamine. In 2013, the reverse was true with ice users significantly younger, on average, than methamphetamine users overall (Table 1).

**Table 1: Mean age of methamphetamine users by form of methamphetamine used, 2007-2013**

	2007	2010	2013	Trend
Ice users	29.5 years	28.9 years	28.8 years	↓
Other methamphetamine users	28.6 years	30.0 years	30.9 years	↑
All methamphetamine users	28.9 years	29.6 years	30.1 years	↑

Source: Australian Institute of Health and Welfare (AIHW). 2007, 2010, 2013 National Drug Strategy Household Survey (NCETA secondary analysis, 2015).

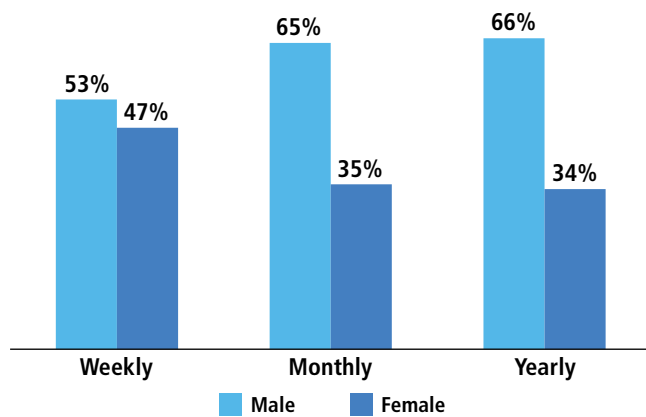
**Table 2: Weekly/monthly and yearly methamphetamine and ice use amongst Australians who used methamphetamine in the past 12 months**

	Weekly/monthly meth users (ice users) %	Yearly meth users (ice users) %
Male	60 (62)	66 (62)
Married	24 (20)	35 (31)
Employed	49 (46)	71 (69)
Heterosexual	81 (77)	91 (87)
Live in major cities	73 (76)	72 (74)
Psychologically distressed	41 (46)	28 (18)
Worked under the influence of drugs	60 (62)	24 (22)
Drove under the influence of drugs	63 (62)	34 (48)
Drink at risky levels	70 (78)	68 (59)
Smoke tobacco	72 (83)	59 (57)

Less frequent (yearly) users of methamphetamine, including ice users, tend to be employed, heterosexual, male, and have low levels of psychological distress. Frequent (weekly/monthly) methamphetamine users, including ice users, tend to comprise more females, and are less likely to be married or heterosexual. Frequent users are also more likely to be unemployed, psychologically distressed, and to engage in various risk-taking activities (Table 2).

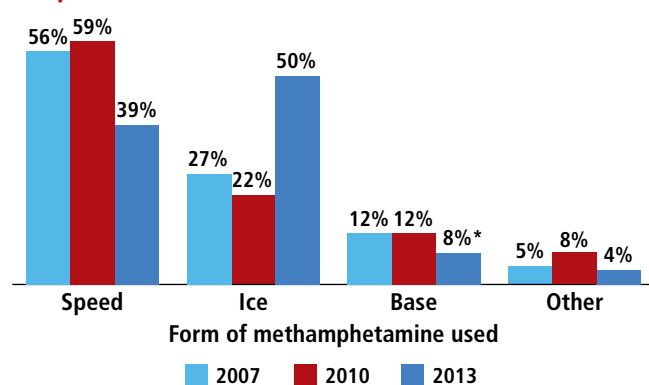
Source: Australian Institute of Health and Welfare (AIHW). 2013 National Drug Strategy Household Survey (NCETA secondary analysis, 2015).

**Figure 4: Gender of methamphetamine users in Australia**



Source: Australian Institute of Health and Welfare (AIHW). 2013 National Drug Strategy Household Survey.

**Figure 5: Main form of methamphetamine used by Australians who have used methamphetamine in the past 12 months**



Source: Australian Institute of Health and Welfare (AIHW). 2007, 2010, 2013 National Drug Strategy Household Survey (NCETA secondary analysis, 2015).

In 2013, ice was the preferred form of methamphetamine. Ice use has more than doubled since 2010. The recent shift to ice is concerning, as it is a particularly potent form of methamphetamine, and may cause more harm.

### Associated harms

The growing harms associated with changing patterns of methamphetamine use can be seen in:

- Episodes of specialist drug treatment for methamphetamine use
- Methamphetamine-related hospitalisations.

Increasing harms are likely to be due to greater frequency of use, preference for ice, and smoking as the main method of administration.

#### Methamphetamine specialist drug treatment

Methamphetamine-related treatment episodes increased significantly in recent years. In 2009/10, less than 1%<sup>2</sup> (1,240) of alcohol and drug treatment service episodes of care were for methamphetamine use, accounting for 12% of all amphetamine-related treatment episodes.

In 2012/13, there were 4,043 treatment episodes for methamphetamine use, representing 3% of all treatment episodes, and 18% of amphetamine-related treatment episodes.

Indigenous clients tended to be younger than non-indigenous clients (Fig 7).

#### Methamphetamine hospitalisations

Hospitalisations due to stimulants (including methamphetamine) have increased markedly since 2008/09. In 2012/13, 35% of stimulant-related hospital separations were due to methamphetamine, compared to 19% in 2008/09 (Fig 8).

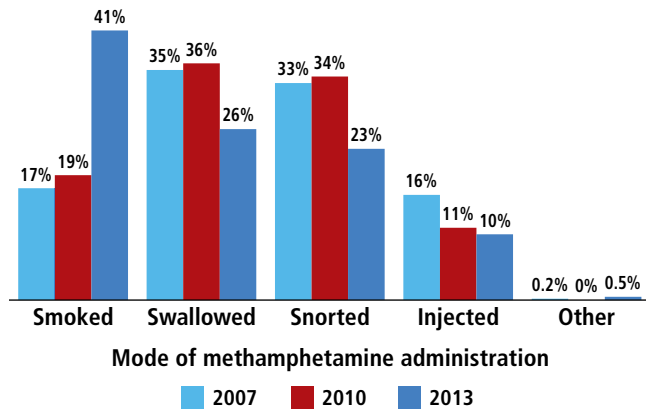
Between 2008/09 and 2012/13, hospital separations for:

- Stimulant use increased by 158% (Fig 9)
- Stimulant poisonings increased by 41% (Fig 10)
- Psychotic disorders due to methamphetamine increased by 312% (Fig 11).

The demographic profile of those admitted to hospital for methamphetamine-related causes also changed, with an increased proportion of males receiving treatment for psychotic disorders due to methamphetamine than for females from 2008/09 to

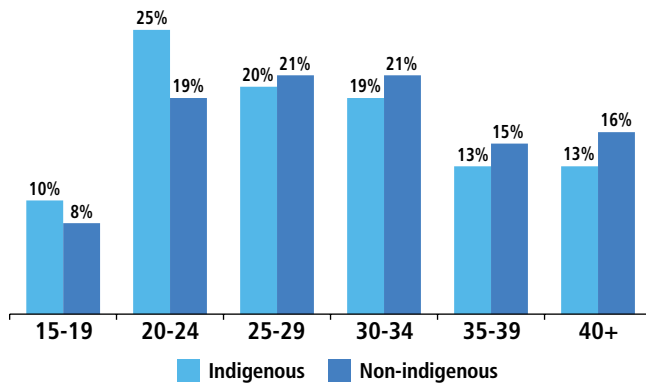


**Figure 6: Main mode of methamphetamine administration by Australians who have used methamphetamine in the past 12 months**



Source: Australian Institute of Health and Welfare (AIHW). 2007, 2010, 2013 National Drug Strategy Household Survey (NCETA secondary analysis, 2015).

**Figure 7: Treatment episodes for methamphetamine as the principal drug of concern by indigenous status and age, 2012/13**



Source: Australian Institute of Health and Welfare (AIHW). 2012/13 Alcohol and Other Drug Treatment Services National Minimum Data Set<sup>2</sup> (NCETA secondary analysis, 2015).

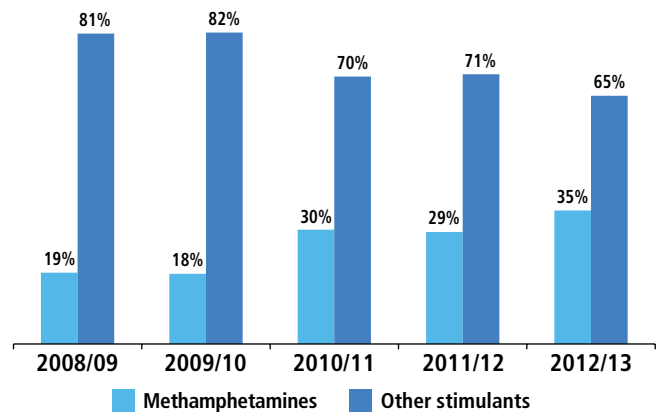
2012/13. The typical age of patients admitted to hospital for psychotic disorders due to methamphetamine also increased from 20-24 years to 25-34 years (Fig 12).

### DATASET NOTES

1. The National Drug Strategy Household Survey (NDSHS) is undertaken every three years and provides estimates of the proportion of Australians aged 12 years and older who are using alcohol, tobacco and illicit drugs. For selected illicit drugs, such as methamphetamine, only Australians aged 14 years and older are asked specific details about their usage. The most recent NDSHS survey was undertaken in 2013.
2. The proportion of treatment episodes for methamphetamine is likely to be under-reported due to inconsistent coding across jurisdictions. Victoria, for instance, codes methamphetamine as 3100 (amphetamine not further defined) rather than using the specific methamphetamine code (3103).
3. The Alcohol and Other Drug Treatment Services National Minimum Data Set (AODTS-NMDS) provides national Australian information regarding clients accessing alcohol and other drug treatment services. It contains information on treatment episodes which focus on an individual client and have an identifiable beginning and end date. The most recent data available are for 2012-13.
4. The National Hospital Morbidity Database (NHMD) contains

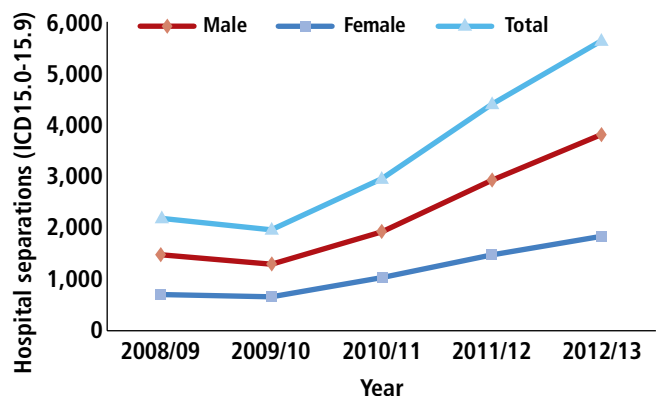


**Figure 8: Proportion of stimulant (excluding cocaine) hospital separations by year**



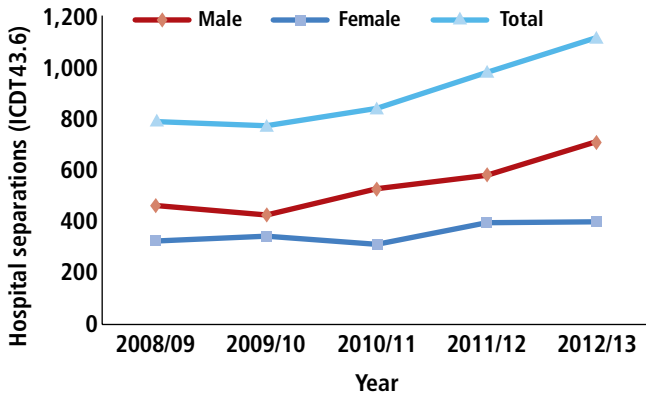
Source: Australian Institute of Health and Welfare (AIHW). 2008-2013 National Hospital Morbidity Database<sup>4</sup> (NCETA secondary analysis, 2015).

**Figure 9: Hospital separations due to stimulants other than cocaine (ICD F15.0-15.9) (15+ years) by gender and year**



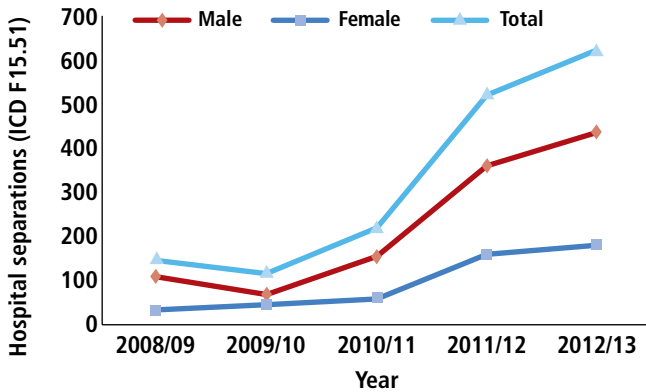
Source: Australian Institute of Health and Welfare (AIHW). 2008-2013 National Hospital Morbidity Database (NCETA secondary analysis, 2015).

**Figure 10: Hospital separations for poisonings due to psychostimulants (ICD143.6) (15+ years) by gender and year**



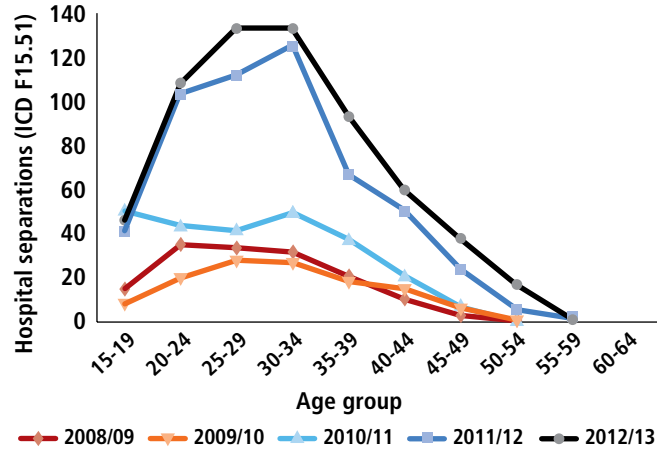
Source: Australian Institute of Health and Welfare (AIHW). 2008-2013 National Hospital Morbidity Database (NCETA secondary analysis, 2015).

**Figure 11: Hospital separations for psychotic disorders due to methamphetamine (ICD15.51) (15+ years) by gender and year**



Source: Australian Institute of Health and Welfare (AIHW). 2008-2013 National Hospital Morbidity Database (NCETA secondary analysis, 2015).

**Figure 12: Hospital separations for psychotic disorders due to methamphetamine (ICD15.51) (15+ years) by age and year**



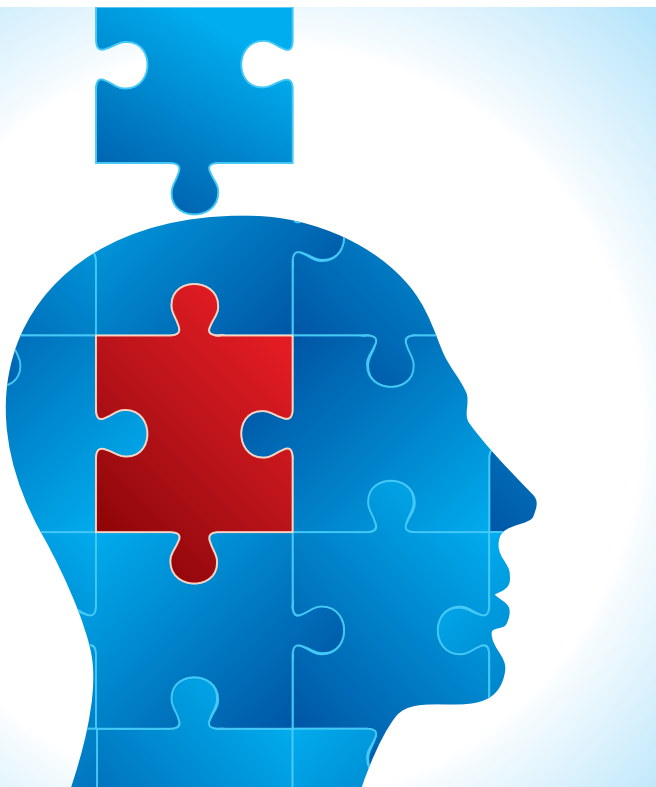
Source: Australian Institute of Health and Welfare (AIHW). 2008-2013 National Hospital Morbidity Database (NCETA secondary analysis, 2015).

confidential data regarding hospital separations (i.e. episodes of care) in almost all Australian hospitals. It includes diagnoses, procedures, and causes of injury, recorded using International Classification of Diseases (ICD) codes. The most recent data available are for 2012-13.

NCETA is a collaborative venture between Flinders University, the Australian Government Department of Health and Ageing and the South Australian Department of Health. It is located within the School of Medicine at Flinders University in South Australia.

© National Centre for Education and Training on Addiction (NCETA) 2015.

Roche, A, McEntee, A, Fischer, J and Kostadinov, V (2015). *Methamphetamine use in Australia*. Retrieved from <http://nceta.flinders.edu.au> on 7 October 2015.



# TRENDS IN METHYLAMPHETAMINE AVAILABILITY, USE AND TREATMENT

The summary from a report released by the **Australian Institute of Health and Welfare** featuring a decade's worth of data

**I**llicit drug use is associated with many risks of harm to the user and to their family and friends. The harms associated with methylamphetamine, especially its crystal (ice) form are particularly concerning, and can result in significantly harmful long-term psychological and physical effects. Changes in the use of methylamphetamine have been one area of increasing concern among health professionals and the Australian community.

Terminology for methylamphetamine – commonly referred to as methamphetamine or ‘meth’ – varies across data sources. Not all data sources collect data on methylamphetamine specifically; some use the broader classes of drugs, amphetamines, amphetamine-type stimulants, or ‘meth/amphetamines’, in which methylamphetamine belongs.

## ***Production and supply of amphetamine-type stimulants has been increasing.***

In recent years, arrest, seizure and detection data indicate that production and supply of amphetamine-type stimulants (ATS) is rapidly increasing, both in Australia and internationally.

Over the four years since 2009-10, detections (the identification of illicit drugs at the Australian border) increased by 86% between 2011-12 and 2012-13, and a further 18% in 2013-14, and the total weight of these detections in 2013-14 was 27 times as high as it was in 2009-10. The total number of arrests for ATS increased – accounting for 15% of all arrests in 2009-10 and 23% in 2013-14.

## ***Methylamphetamine is consistently reported as very accessible.***

As well as consistent prices, methylamphetamine purity has remained consistently high since 2008, particularly for crystal, and all forms of methylamphetamine have been consistently reported as ‘easy’ or ‘very easy’ to obtain since 2007.

## ***The form of methylamphetamine used has changed from powder to crystal in recent years.***

While the proportion of the population who used meth/amphetamines in the last 12 months declined between 2004 and 2013 (from 3.2% to 2.1%), more recently there has been substantial change in the form of methylamphetamine used – from powder to crystal (ice). More of those who recently used methylamphetamine in 2013 reported crystal as the main form used (50% of recent users) compared with powder (29% of recent users).



The harms associated with methylamphetamine, especially its crystal (ice) form are particularly concerning, and can result in significantly harmful long-term psychological and physical effects.

## ***Between 2010 and 2013, there has been an increase in new users of ‘meth/amphetamine’, especially crystal.***

In 2013, a larger proportion of recent users had first used ‘meth/amphetamines’ within the last 3 years (that is, they were ‘new users’ of the drug since the last data collection period) – 34%, compared with 27% in both 2007 and 2010. This cohort of new users is opting mainly for crystal rather than the powder form of ‘meth/amphetamines’.

# 'Ice' availability and use increasing; more seeking treatment

THE USE, TREATMENT AND AVAILABILITY OF 'ICE' HAVE INCREASED, ACCORDING TO A REPORT BY THE **AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE**

Ice is the crystal form of methylamphetamine, and is more commonly smoked, however can also be injected, snorted or swallowed. The report, *Trends in methylamphetamine availability, use and treatment 2003-04 to 2013-14*, shows that the number of new meth/amphetamine users (including methylamphetamine and amphetamine users) who mainly use 'ice' has increased. "The proportion of new meth/amphetamine users opting for 'ice', rather than other forms of the drug (for example powder), increased from 26% in 2007, to 43% in 2013," said AIHW spokesperson Geoff Neideck.

Treatment episodes for people who smoke amphetamines (including methylamphetamines) increased from 3.4% in 2003-04 to 41% in 2013-14. While over the same period, the proportion of clients who inject amphetamines has decreased, from 79% of episodes to 44%. This suggests an increase in the number of people receiving treatment for 'ice'.

Available information on those who inject 'ice' suggests that more users report the drug is easy to obtain. While 'ice' use is increasing, meth/amphetamine use in general has declined in recent years.

"In 2013, around 1.3 million people – or 7% of Australians – had used meth/amphetamine in their lifetime, and 2.1% had used them recently," Mr Neideck said.

"This is compared to in 2004, when recent users comprised 3.2% of Australians."

The report shows, however, that recent meth/amphetamine users are now using more frequently, especially when 'ice' is the main form used.

"In 2013, 25% of recent users whose main form was 'ice' reported using at least weekly, which was twice as many as 2010," Mr Neideck said.

Both users and clients receiving treatment are more likely to be male, and the largest age group overall was between 20 and 29. Higher proportions of Indigenous Australians are now using meth/amphetamines than other Australians, 3.1% compared with 2.0%. Law enforcement data for amphetamine-type stimulants (ATS) has shown a rapid increase in production and supply over recent years.

"For example, the identification of ATS at the Australian border increased by 86% between 2011-12 and 2012-13, and a further 18% in 2013-14," Mr Neideck said.

Australian Institute of Health and Welfare (2 October 2015). *'Ice' availability and use increasing; more seeking treatment*, Media release. Retrieved from [www.aihw.gov.au](http://www.aihw.gov.au) on 12 October 2015.

**Since 2004, there has been a shift in the pattern of recent 'meth/amphetamine' use by socioeconomic status, remoteness area and indigenous status.**

In 2013, recent users of 'meth/amphetamine' were more commonly aged 20-29 and most likely to be male.

In 2004, people living in the two most advantaged socioeconomic status (SES) quintiles were the more likely to be recent users of meth/amphetamine. However, by 2010 they were the least likely to be users. Since 2007, people living in remote and very remote areas and Aboriginal and Torres Strait Islander people (hereafter referred to as 'Indigenous Australians') were more likely to be recent 'meth/amphetamine' users.

**Since 2009-10 the number of episodes for clients injecting and smoking amphetamines has increased.**

Over the 5 years to 2013-14, the number of episodes for clients both injecting and smoking (clients who reported 'smoking' or 'inhaling') amphetamines increased, while use via other methods remained relatively stable. Clients who smoke amphetamines are most likely to have never injected drugs, indicating that these clients are a different type of user. While characteristically, injectors and smokers appear to be relatively similar, there are some noticeable differences – more young people smoke than inject and slightly more females and Indigenous Australians inject than smoke.

Australian Institute of Health and Welfare (2015). *Trends in methylamphetamine availability, use and treatment: 2003-04 to 2013-14*, Drug treatment series no. 26, p.vi. Retrieved from [www.aihw.gov.au](http://www.aihw.gov.au) on 12 October 2015.

Changes in the use of methylamphetamine have been one area of increasing concern among health professionals and the Australian community.



# ICE EPIDEMIC OR NOT, HEAVIER USE AND HIGHER PURITY IS INCREASING HARMS

Forms of methamphetamines that can be smoked or injected have greater risks, warn **Rebecca McKetin** and **Michael Farrell**



**M**uch media attention is being given to the rising toll of methamphetamine-related harm in Australia, fuelled by the increased availability and use of high purity crystalline methamphetamine (crystal meth or ice).

Unlike other forms of methamphetamine available in Australia (speed or base), ice (crystalline methamphetamine or crystal meth) can be smoked. This gives a rapid drug effect because it gets into both the bloodstream and the brain quite quickly.

Coupled with the already very high purity of the drug, this trend of smoking ice has been associated with a marked increase in methamphetamine-related health and social problems.

Available data show a trend toward people using the drug more frequently, with more people becoming dependent and needing treatment, ending up in hospital or dying from using methamphetamine.

## Laundry list of risks

Methamphetamine-related harms arise from both the pharmacological effects of the drug and from the linked behavioural and lifestyle factors. Most of the serious harms occur with injecting and smoking the drug, which are also associated with heavier use patterns and a higher likelihood of dependence.

Three serious harms related to the use of methamphetamine are the elevated risk of psychosis, violence, and cardiovascular problems.

**Psychosis:** heavy methamphetamine use increases the risk of psychotic symptoms beyond any family history of psychosis risk. These symptoms include hallucinations and paranoia, which are usually transient and subside when people stop taking the drug. But the risk of symptoms is made worse by use of other substances, and other risk factors for psychosis such as family history, cannabis and alcohol use.

**Violence:** three key factors underpin violent behaviour among people who use methamphetamine, including a personality predisposed to violence, contextual factors such as involvement in the illicit drug market, and the pharmacological effects of the drug itself. In terms of pharmacological effects, chronic heavy methamphetamine use can change the brain chemistry involved in controlling emotions. And this can increase the risk of aggression, while being high can produce a fight-or-flight type response, leading to violent behaviour in threatening situations.

**Cardiovascular risks:** methamphetamine increases heart rate and blood pressure, which increases the risk of stroke and heart attacks. The danger increases very significantly with age, but young people using the drug can also have a stroke and other cardiovascular problems that would not normally occur until later in life.

## The drug 'lifestyle'

Methamphetamine is also associated with a variety of other health and social concerns that usually result from a combination of the drug's pharmacological effects and linked lifestyle factors.

Acute methamphetamine intoxication staves off sleep and reduces hunger, for instance, meaning sleep deprivation and poor nutrition are common among people who use the drug. Similarly, poor dental hygiene among users combines with the effects of methamphetamine to increase the risk of dental carries and gum disease ('meth mouth').

These health effects are often compounded by the poverty and chaotic lifestyle that coincide with the development of dependence on the drug. People who use methamphetamine, particularly people who are dependent on the drug, often also have pre-existing mental health conditions, including major depression, anxiety and conditions associated with psychotic symptoms, such as bipolar disorder and schizophrenia. Heavy methamphetamine use can exacerbate or precipitate symptoms in people who are vulnerable to these mental health conditions.

The risk of dependence and other harms related to methamphetamine reflects a complex interplay of factors, including the vulnerability of the person who is using the drug, the qualities of the drug consumed, and the setting in which it's used. A comprehensive response to the use of this drugs needs to target individuals and situations in which these harms are most likely to occur.

**Rebecca McKetin** is Associate Professor, Australian National University.

**Michael Farrell** is Professor and Director of the National Drug and Alcohol Research Centre, UNSW Australia.

## THE CONVERSATION

McKetin, R and Farrell, M (10 June 2015). *Ice epidemic or not, heavier use and higher purity is increasing harms*. Retrieved from <http://theconversation.com> on 12 October 2015.



# ICE IN AUSTRALIA: OVERSEAS CRIME GANGS, NOT BIKIES, ARE THE THREAT

A variety of crime groups are playing a role in the methylamphetamine trade, observe **Terry Goldsworthy** and **Laura McGillivray**

The Australian Crime Commission (ACC) report into the methylamphetamine market in Australia makes for sombre reading. Released this week, it reveals that more drugs are coming into Australia and certain forms of drug usage are increasing. A variety of crime groups are playing a role in the drug trade.

Methylamphetamine, in particular crystal meth or 'ice', has been the subject of much scrutiny in recent times and concern is growing among Australian authorities. The Victorian parliament held an inquiry in 2013-14 into ice's impact in the state and the government recently released an 'Ice Action Plan' in response.

So, how does the ACC intelligence document help inform the debate around ice? What practical lessons can Australian society and law enforcement draw from it?

## The current Australian market

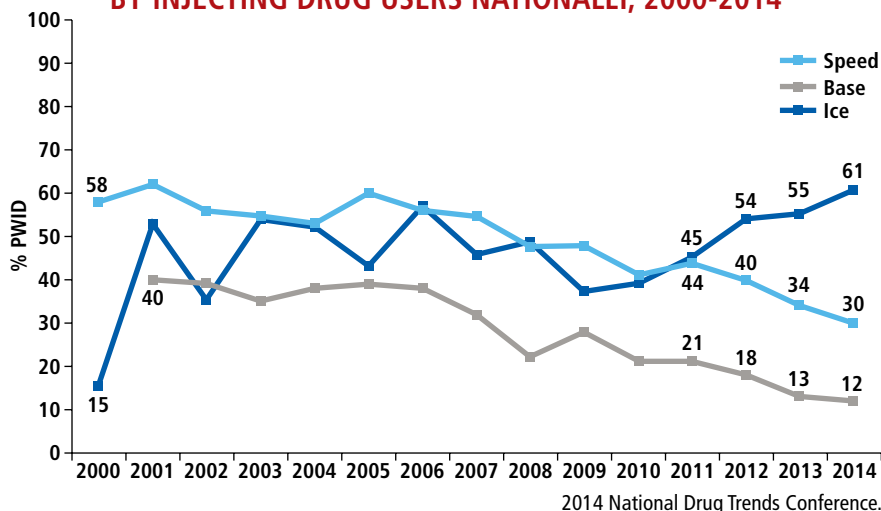
According to the 2013 *National Drug Strategy Household Survey* (NDSHS), 7% of Australians aged 14

*Transnational organised crime (TOC) groups are the most concerning threat to Australia when talking about organised and serious crime. They are clearly involved in the methylamphetamine market.*

and above reported using amphetamine or methylamphetamine at least once in their lifetime and 2.1% reported recent use. This has remained consistent with 2010 figures.

What has changed, and significantly so, is the type of methylamphetamine Australians are using. Users now prefer crystal methylamphetamine. This produces more powerful physical and

## RECENT USE OF SPEED, BASE AND CRYSTAL/ICE BY INJECTING DRUG USERS NATIONALLY, 2000-2014

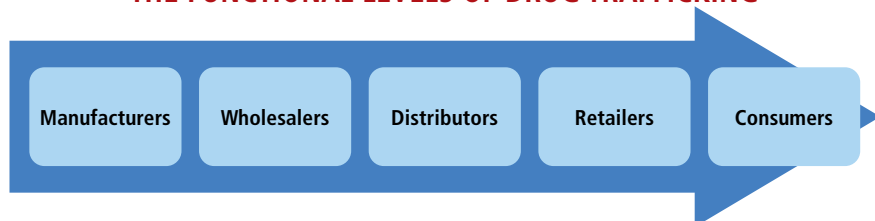


psychological reactions than powder forms of the drug. Users of powder forms decreased from 51% to 29% while ice use more than doubled from 22% to 50% between 2010 and 2013. National Drug and Alcohol Research Centre findings from 2014 support this conclusion.

The increased addiction/dependence potential for ice as the purest form of the drug is also evident. A great proportion – 25% of regular ice users – are using at least weekly. This is a much higher rate than the 2.2% of regular powder users who use weekly.

Increased demand for the higher purity of ice results in Australian users in particular being prepared to pay premium prices for this form

## THE FUNCTIONAL LEVELS OF DRUG TRAFFICKING



Terry Goldsworthy.

### MOST SIGNIFICANT BORDER DETECTION OF AMPHETAMINE-TYPE SUBSTANCES (ACC) ILLICIT DRUG DATA REPORT 2012-2013

Drug type	Weight kg	Embarkation – destination	Method
Crystal methylamphetamine	585	China – Sydney	Sea cargo
Liquid methylamphetamine	363.8	China – Melbourne	Sea cargo
Crystal methylamphetamine	306	Thailand – Sydney	Sea cargo
Crystal methylamphetamine	75	China – Sydney	Sea cargo
Liquid methylamphetamine	72.9	China – Sydney	Sea cargo

Australian Crime Commission.

of the drug. Figures suggest that the Australian price per kilogram of crystal methylamphetamine is A\$320,000, whereas in the United States it is A\$100,000. In China, a country flagged by the ACC report as a key player in transnational organised drug crime, the cost is as low as A\$7,000 per kilogram.

### The business of drugs

The business of illegal drugs shares some elements with the business of selling legal products. Common features include lots of working capital, a steady supply of raw materials, manufacturing facilities, reliable shipping and distribution and marketing networks. But it is knowing what criminal networks are operating at what level that is the key to an effective law enforcement response.

ACC data indicates that detections of clandestine laboratories decreased by approximately 6% in 2012-13. The weight of precursor material being detected at the border has also decreased, despite the number of detections increasing.

Conversely, the weight and amount of amphetamine-type substance (ATS) detections at the Australian border, in particular detections of ice, continue to increase. This suggests that the outstanding threat is increasingly coming from abroad. Small-time Australian players are growing reliant on transnational

crime groups.

The ACC's *Illicit Drug Data Report* flags increased seizures, border detections and associated arrests for ATS (excluding MDMA) at record

highs. This echoes the findings of the United Nations Office on Drugs and Crime 2014 *World Drug Report*, which identified global trends of record-high seizures of methamphetamine as compared with other ATS.

The ACC report indicates that transnational organised crime involvement in high-volume precursor importation and trafficking remains at high levels. Its concern about illicit importations concealed by legitimate markets is clear, particularly from a law enforcement perspective.

### Bikies are just part of the picture

Various governments in Australia have made much of the role of outlaw motorcycle gangs (OMCGs) and their involvement in the methylamphetamine trade.

Tellingly, in this week's report, they rate only two mentions. One is

### TRANSNATIONAL ORGANISED CRIME GROUP TYPOLOGIES

Type of TOC	Characteristics	Example of type
<b>Criminal network</b>	<ul style="list-style-type: none"> <li>Defined by the activities of the key members</li> <li>Prominence in the network determined by position and skills, personal loyalties</li> <li>Coalescence around criminal projects</li> <li>Low public profile</li> <li>Network reforms after exit of key individuals</li> </ul>	<i>Dutch and Nigerian drug syndicates</i>
<b>Standard rigid hierarchy</b>	<ul style="list-style-type: none"> <li>Single leader</li> <li>Defined hierarchy</li> <li>Strong system of internal discipline</li> <li>Often strong ethnic and social identity</li> <li>Violence essential to activities</li> <li>Influence or control over a defined territory</li> </ul>	<i>Crime gangs from Colombia and Eastern Europe</i>
<b>Regional hierarchy</b>	<ul style="list-style-type: none"> <li>Single leadership structure</li> <li>Line of command from centre</li> <li>Degree of autonomy at regional level</li> <li>Geographic regional distribution</li> <li>Multiple activities</li> <li>Often strong social or ethnic identity</li> <li>Violence essential to activities</li> </ul>	<i>Outlaw motorcycle gangs</i>
<b>Clustered hierarchy</b>	<ul style="list-style-type: none"> <li>Number of criminal groups</li> <li>Governing arrangement for the groups present</li> <li>Cluster has stronger identity than the groups that make it up</li> <li>Degree of autonomy from groups within</li> <li>Formation strongly linked to social/historical context</li> </ul>	<i>South African prison gangs</i>
<b>Core group</b>	<ul style="list-style-type: none"> <li>Core group surrounded by loose network</li> <li>Limited number of individuals</li> <li>Tightly organised flat structure</li> <li>Small size maintains internal discipline</li> <li>Seldom has ethical or social identity</li> </ul>	<i>Dutch people traffickers</i>

United Nations Office of Drugs and Crime.

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## AMPHETAMINE ARRESTS NEARLY DOUBLE IN PAST FIVE YEARS

- According to the 2013-14 *Illicit Drug Data Report*, the number of amphetamine arrests across Australia has almost doubled in the past five years, as crime authorities warn methylamphetamine was wreaking havoc in every state and territory, ruining lives, families and communities.
- Police made a record 26,269 amphetamine arrests in 2013-14, up from 13,914 in 2009-10.
- The report revealed more than 740 clandestine laboratories used to make amphetamines were detected around the country. The number of clandestine labs detected nationally had increased by 95 per cent over the past decade.
- Most labs were found in suburban areas, with increases in rural and vehicle detections. The majority of labs were run by addicts, but last year there was an increase in the proportion of small-scale, medium-sized and industrial-scale labs.
- Queensland recorded three times the number of clandestine laboratory detections than any other state or territory, with 340 labs found.
- Almost 60 per cent of all illicit drugs seized nationally were seized in Victoria.
- The Northern Territory recorded the highest street price for ice, with users willing to pay up to \$1,600 for one gram.
- The number of detections of amphetamines at the Australian border were the highest on record, with 2,367 detections in 2013-14.
- The *Illicit Drug Data Report* said there were more than 93,000 illicit drug seizures, 27 tonnes of drugs seized and more than 110,000 arrests in 2013-14. All figures are the highest on record.
- Cannabis continued to dominate the Australian drug market, with 66,684 arrests and 7,000 kilograms of the drug seized.
- The report said while the methylamphetamine market was the primary concern for authorities, there were also a number of records reported across other drug markets, including the number of cannabis and hallucinogen arrests, opioid seizures and cocaine and steroid arrests and seizures.

Source: Knowles, L and Armitage, R, *Amphetamine arrests nearly double in past five years, according to Crime Commission's Illicit Drug Data Report*.

as a part of the wider criminal gang picture; the other as a case study for involvement in the drug trade in a small rural Victorian town. Nowhere was the critical evidence of their dominance of this particular drug market put forward, despite what many law enforcement agencies have been claiming in recent years.

The report outlines the following crime groups as being active in the meth market:

*... members of Australian-based outlaw motorcycle gangs, Australian organised crime groups as well as persons of Middle Eastern, Eastern European and West African backgrounds, and*

*Vietnamese, Chinese, Canadian, US and Mexican serious and organised crime groups.*

As has been previously shown, while OMCs no doubt have some involvement in the drug trade, they are not the kingpins.

### What are transnational organised crime groups?

Transnational organised crime (TOC) groups are the most concerning threat to Australia when talking about organised and serious crime. They are clearly involved in the methylamphetamine market. More than 60% of Australia's highest-risk criminal targets, including transnational targets, are involved in the methylamphetamine market.

The UNODC looked at 40 TOC groups and identified a number of their typologies and characteristics.

Of these TOC groups, 70% carried out criminal activity in three or more countries. Most were involved in multiple criminal enterprises. They were actively involved in corruption and routinely employed violence and engaged in money laundering.

Unfortunately, the ACC's report has a broad base and lacks detailed or overly new evidence. One issue that does seem to bear consideration is the rising role of transnational crime groups. With so much focus on domestic gangs as the peak criminal threat, perhaps we have taken our eye off the ball of the real criminal threat outside Australia's borders.

**Terry Goldsworthy** is Assistant Professor in Criminology, Bond University.

**Laura McGillivray** is Adjunct Teaching Fellow, Faculty of Society and Design, Bond University.

## ICE DRIVING CRIME RATES HIGHER

- The latest *Drug Use Monitoring in Australia* (DUMA) report shows record levels of amphetamine use among people in police custody – proof that ice is driving crime rates higher, according to the Australian Institute of Criminology.
- The DUMA report shows 37 per cent of adult detainees nationwide tested positive to amphetamines – the highest in DUMA's history, and a 13 per cent jump since 2011-12.
- Increase in ice use in Australia is disproportionate to increases in other Western countries, despite the fact that ice cost more here than in most other nations.
- Kings Cross, in central Sydney, shows the highest figures.
- Half of those who tested positive have been charged in the previous 12 months.
- It is not certain why amphetamine is becoming the most prevalent of the illicit drugs, but certainly the harms that are attached to it such as increased psychosis, memory loss and aggression give rise to very serious crimes.

Source: McNally, L, *Ice driving crime rates higher, Australian Institute of Criminology says; record amphetamine use among people in custody, report shows*.

## THE CONVERSATION

Goldsworthy, T and McGillivray, L (30 March 2015). *Ice in Australia: overseas crime gangs, not bikies, are the threat*. Retrieved from <http://theconversation.com> on 12 October 2015.

## IMPACT OF ICE ON INDIVIDUALS

The increasing use of ice is creating a distinct problem for Australia. This extract from the final report of the **National Ice Taskforce** reveals the Australian Government's findings into the health impacts of methamphetamine use on individuals

**I**ce can have a major impact on the individuals who use it. Users can experience a wide range of serious physical, psychological and behavioural effects. But the impacts extend beyond the individual. When a person uses ice, it can cause substantial stress for the family – for children in particular. There are also broader costs to the community, including additional challenges for frontline workers and increased crime.

### IMPACT ON INDIVIDUALS

Ice use can result in immense damage to a user's physical health, occasionally resulting in death. It can have a range of psychological, cognitive and behavioural effects which researchers are only beginning to fully grasp. Darke and colleagues undertook a comprehensive review of the major health effects of methamphetamine use. They found that:

*“... methamphetamine use is associated with a number of extremely serious negative health effects. While high profile consequences, such as psychosis, are given prominence in the public debate, the sequelae [health consequences] extend far beyond this. This is a drug class that causes serious heart disease, has serious dependence liability and high rates of suicidal behaviours. The current public image of methamphetamine does not adequately portray the extensive, and in many cases insidious, harm it causes.”*<sup>239</sup>

Ice users can also experience less direct consequences, such as social exclusion, which further exacerbate the costs. A dependence on ice impedes the ability of a person to live a healthy and productive life.

### PHYSICAL EFFECTS

Ice can have serious consequences for an individual's physical wellbeing. As the research continues to develop, a clearer picture of these effects is emerging.

#### Physical health

Ice use can damage a user's health and, in certain instances, also result in death.<sup>240</sup> Methamphetamine use



places heavy demands on the cardiovascular system by increasing the heart rate and blood pressure.<sup>241, 242</sup>

Physical effects can include sweating, headache, hot and cold flushes, reduced appetite and teeth-grinding.<sup>243</sup> The physical indicators of a toxic dose include nausea and vomiting, chest pain, tremors, increased body temperature, increased heart rate, breathing irregularities and seizures.<sup>244</sup> Anyone can have a toxic reaction to ice. Darke and colleagues have pointed out that “toxic reactions can occur irrespective of dose, frequency of use or route of administration, and have been reported with small amounts and on the first occasion of use”.<sup>245</sup>

The use of methamphetamine in combination with other drugs can increase the physical effect. For example, the use of both methamphetamine and alcohol together results in a higher heart rate and blood pressure than the use of methamphetamine alone.<sup>246</sup>

In Australia, in 2011 there were 101 accidental drug deaths identified as involving methamphetamine.<sup>247</sup> Deaths caused by psychostimulants such as ice are usually caused by seizures, heart failure or respiratory failure, but can also be caused by brain haemorrhage, strokes or kidney failure.<sup>248</sup>

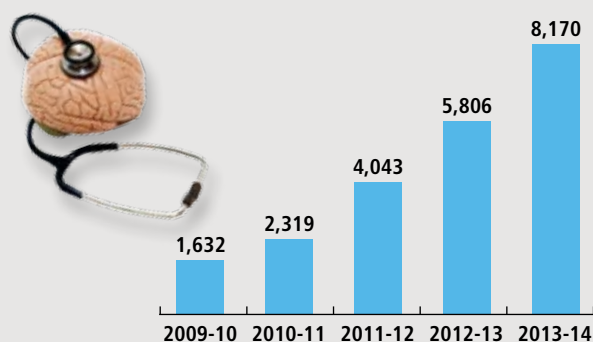
Death from methamphetamine use typically occurs among men in their mid-30s who are experienced drug users.<sup>249</sup> One explanation for this is that repeated use of psychostimulants such as ice leads to a cumulative risk of cardiac and coronary artery disease.<sup>250</sup> Therefore the health risks increase in people who have used for longer periods of time and who use more regularly.<sup>251</sup>

The Australian Medical Association has said that some of these acute and chronic medical conditions related to methamphetamine use can be particularly

difficult to manage due to poor compliance with medical advice, follow-up or treatment.<sup>252</sup>

The number of methamphetamine-related hospitalisations has increased rapidly, which provides some evidence of the escalating health impacts. In 2013-14, over 8,000 people left hospital after being treated for methamphetamine-related issues. This is an increase from around 1,600 in 2009-10 (see [Figure 3.1](#)).<sup>253</sup> There has similarly been a rapid rise in treatment for methamphetamine.

**FIGURE 3.1: ANNUAL NUMBER OF HOSPITAL SEPARATIONS WHERE THE PRINCIPAL OR ADDITIONAL DIAGNOSIS WAS METHAMPHETAMINE-RELATED<sup>254</sup>**



### Dependence

Dependence is commonly described as a pattern of substance use that leads to clinically significant impairment or distress. It includes behaviours such as a tolerance to the drug, a withdrawal reaction in the absence of the drug, and an inability to regulate use of the drug or separate use from other aspects of social

#### HOW DOES ICE WORK?

- The properties of ice mean it can readily be smoked or injected. These methods allow the drug to be rapidly absorbed into the bloodstream and move quickly into the brain.
- Ice increases chemicals in the brain called monoamines. Monoamines are the neurotransmitters dopamine, noradrenaline and serotonin. Their role is to transmit information. Dopamine, for example, is important for regulating movement and cognitive processes such as attention.
- The observed effects of ice include euphoria, increased alertness and improved physical performance. However, the drug can also result in symptoms such as panic, extreme anxiety and agitation, extreme paranoia, hallucinations and excited delirium.
- Methamphetamine use places heavy demands on the cardiovascular system by increasing the heart rate and blood pressure. A toxic dose of ice can cause seizures, heart failure or respiratory failure.
- Once a dose of ice leaves the system, there is often a corresponding crash in mood and energy as the effects of the drug wear off. This typically manifests as a deep exhaustion and can last for a few days.

and work life.<sup>255</sup> Dependence on drugs is influenced by a range of factors, but is also strongly related to patterns of drug use such as route of administration (the way the drug is taken) and duration of use.<sup>256</sup>

People who are dependent on methamphetamine are more likely to be tolerant to the drug and show stronger withdrawal reactions than non-dependent users. Increased tolerance can result in a preference for a more potent effect from the drug. This can result in a user transitioning to injecting, using higher doses, using more frequently and preferring higher purity methamphetamine.<sup>257</sup> The research and knowledge on methamphetamine withdrawal is limited.<sup>258</sup> However, methamphetamine withdrawal syndrome appears to be different from the withdrawal syndromes associated with other drugs, such as opioids and alcohol.

The symptoms of withdrawal experienced by methamphetamine users can include fatigue, sleep disturbances, appetite disturbances, depressed mood, irritability, slowed-down or agitated movement and thoughts, and strong cravings for the drug.<sup>259</sup>

In comparison to other drugs, methamphetamine is understood to have a more protracted withdrawal period.<sup>260</sup> For the first one to three days, users generally experience a 'crash period', which is characterised by extreme fatigue and lethargy (a 'hangover' effect).

The 'acute' phase lasts for around seven to 10 days, with recovering users often experiencing depression, fatigue, vivid unpleasant dreams, insomnia or hypersomnia, increased appetite, psychomotor retardation or agitation.<sup>261</sup>

This is followed by the subacute recovery phase, which lasts for a longer period of time.<sup>262</sup> In some cases, complete recovery from ice dependence can take many months (see [Figure 3.2](#)).<sup>263</sup>

A large proportion of users – around 40 per cent – take methamphetamine once or twice a year. However, around 25 per cent take the drug at least once a week or more. Dependence is common among those who use twice or more per week.<sup>264</sup>

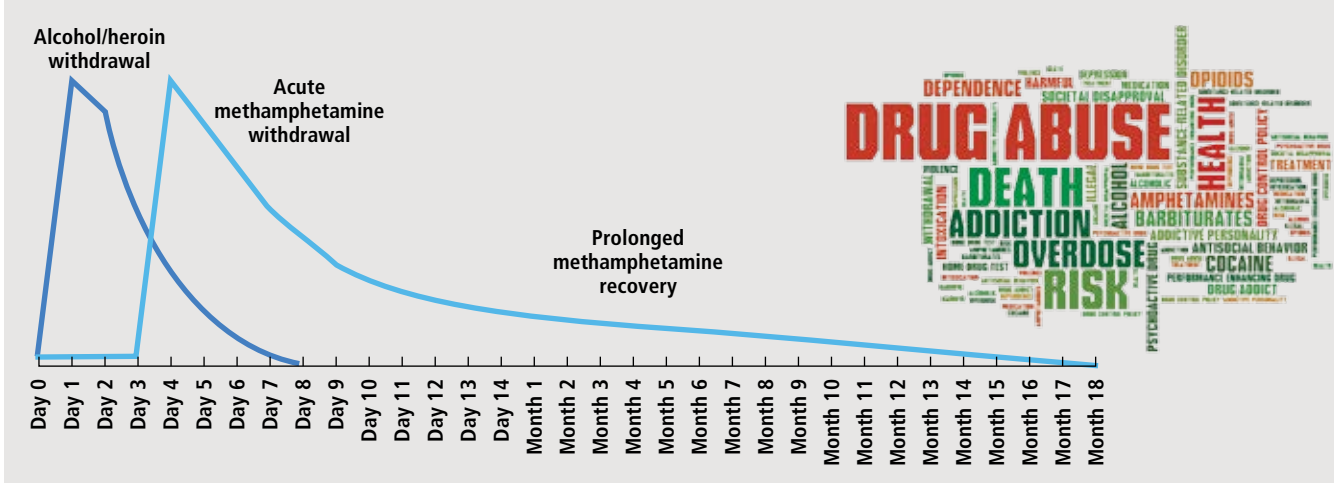
### PSYCHOLOGICAL AND COGNITIVE EFFECTS

Methamphetamine use is associated with psychosis, mood and anxiety disorders and cognitive deficits.<sup>265</sup> The Taskforce received multiple submissions from treatment providers detailing the effects of ice on their clients' behaviour.<sup>266, 267, 268</sup>

Ice, of course, has some sought after effects. These include euphoria, elevated mood, a sense of wellbeing, increased alertness and concentration, reduced fatigue, increased talkativeness and improved physical performance.<sup>269</sup> However, a toxic dose can result in psychological symptoms such as panic, extreme anxiety and agitation, extreme paranoia, hallucinations and excited delirium.<sup>270</sup>

The reported impacts are wide ranging:  
*Many Mission Australia staff provided stories of the devastating impacts ice use was having on their clients.*

**FIGURE 3.2: ESTIMATED INTENSITY OF WITHDRAWAL PERIODS FOR DRUG DEPENDENCE**<sup>271</sup>



Problematic behaviours induced by ice include violence, aggression, paranoia and erratic and irrational behaviour. Clients also present as desperate, depressed and exhausted by sleep deprivation when they are coming down.<sup>272</sup>

### Mental health

There is a strong correlation between use of ice and mental health issues.<sup>273, 274</sup> The most common mental health issues experienced by methamphetamine users are psychosis, depression and anxiety. In addition, in 2013, fewer than 60 per cent of users reported moderate, high or very high levels of psychological distress, compared with around 40 per cent of all illicit drug users and 30 per cent of the general population.<sup>275</sup>

While there is a strong correlation between drug use and mental health issues, the research is not definitive on the causal relationship.<sup>276, 277</sup> In some cases, drugs are used subsequently to experiencing mental health symptoms and in other cases, drug use may lead to the development of mental health issues. There may also be biological or environmental factors that lead to both mental health problems and drug use.<sup>278, 279</sup>

Some individuals do experience mental health issues subsequent to methamphetamine use. Lee and colleagues surveyed dependent methamphetamine users with mental health issues. They found that around 20 per cent of users said they had mental health issues before using the drug, and around 70 per cent said mental health issues appeared after they began using the drug. The mental health problems experienced by the users tended to coincide with problematic methamphetamine use.<sup>280</sup>

However, this study was not able to determine causation and in some cases the arising mental health issues may have been coincidental. In addition, not all mental health issues experienced by methamphetamine users are enduring. Many of the mental health symptoms experienced by users are due to the direct effect of the drug – or occur during withdrawal – and may resolve rapidly.<sup>281</sup> The types of issues most commonly experienced by methamphetamine users are discussed below.

One of the key clinical differences between

psychostimulants – such as ice – and other illicit drugs is that psychostimulants can induce psychosis.<sup>282</sup> People experiencing psychosis are unable to distinguish what is real – they lose contact with reality.<sup>283</sup> Psychosis induced by methamphetamine is primarily characterised by persecutory delusions and hallucinations.<sup>284</sup> Users have reported that the persecutory delusions often take the form of a feeling that others wish to harm or threaten them.<sup>285</sup> Users have also said that the hallucinations often involve hearing voices that make insulting remarks or command them to do certain things.<sup>286</sup>

In a survey of people who use methamphetamine at least monthly, McKetin and colleagues found that around one in four had experienced psychosis in the past year. This prevalence of psychosis is 11 times higher than the general Australian population.<sup>287</sup> Methamphetamine-induced psychosis can last from a few hours to a few days and subsides when the drug is no longer in the body.<sup>288</sup> However, some people experience more chronic symptoms, especially those with a pre-existing psychotic disorder.<sup>289</sup>

Mood disorders and anxiety are also associated with methamphetamine use.<sup>290, 291, 292</sup> Darke and colleagues say that, compared with psychosis, depression and anxiety can be “more common, more chronic and potentially more debilitating”.<sup>293</sup> There is also some evidence of high rates of attempted suicide. A United States study by Zweben and colleagues found that almost 30 per cent of a cohort of 1,016 dependent methamphetamine users reported a suicide attempt in their lifetime.<sup>294</sup> This compares with around five per cent in the general population.<sup>295</sup>

As with other effects of ice, the likelihood of experiencing mental health issues varies between users. However, the aforementioned mental health issues are more likely to be experienced by people who have used methamphetamine for long periods, use more frequently, are dependent and inject the drug.<sup>296</sup> For example, dependent users have been found to be three times more likely to experience psychotic symptoms than non-dependent users, even after adjusting for a history of psychotic disorders.<sup>297</sup>

## Cognitive effects

There are links between chronic methamphetamine use and damage to the brain. In particular, chronic users of the drug have been found to have abnormalities in brain function, including depleted levels of the neurotransmitter dopamine.<sup>298</sup> Neurotransmitters are chemicals in the brain that transmit information. Dopamine is important in regulation of movement, cognitive processes such as attention, working memory and motivational behaviour.<sup>299</sup> However, it has not yet been established with certainty whether methamphetamine use specifically causes this damage. While studies of animals have shown that methamphetamine leads to the degeneration of nerves in the brain, this cannot be easily tested in humans.<sup>300</sup>

Nonetheless, there is evidence of cognitive deficits in regular users, such as impaired attention, memory and motor skills.<sup>301, 302</sup> However, as with other issues discussed, more research is required to establish whether methamphetamine is the direct cause of these conditions. As a chronic user recovers, attention problems can persist and reduce the effectiveness of treatment – such as cognitive-behavioural therapy – or opportunities for employment.<sup>303</sup>

## OTHER CONSEQUENCES

The impact of ice on individuals is not limited to the health effects. Ice use has also been linked to a range of harmful behaviours and can affect a user's social wellbeing.

### Violence and aggression

Many submissions to the Taskforce raised concerns about the violence of ice users. For example, the Townsville Community Ice Taskforce said in its submission:

*People are displaying extremely violent behaviour when they are coming down off ice. Domestic violence is rising due to ice. People are doing more break and enters due to ice. Ice doesn't discriminate, it affects everyone in the community.*<sup>304</sup>

There is an established correlation between methamphetamine use and violent or aggressive behaviour.<sup>305, 306</sup> However, there is not a substantial body of evidence that methamphetamine directly causes violence.<sup>307, 308</sup> The relationship between drug use and violence is complex. People who use ice may, for example, be predisposed to violence. Additionally, violence may arise in conjunction with a drug-using lifestyle, such as involvement in criminal drug networks or theft to fund drug use.<sup>309</sup>

That said, evidence of a causal link is emerging. A recent study by McKetin and colleagues found that people were around six times more likely to be violent when they were using methamphetamine than when the same people were not using the drug. The methamphetamine-related violence in this study was characterised by “interpersonal violence, ranging from altercations that led to fights to seemingly unprovoked physical attacks”.<sup>310</sup>

Further, the study found violent behaviour was much more likely among people who used methamphetamine frequently. Psychotic symptoms and heavy alcohol consumption increased the risk of violent behaviour. However, the increase in violence also occurred independently of psychotic symptoms and alcohol consumption, which suggests a direct relationship between methamphetamine dose and violent behaviour.<sup>311</sup>

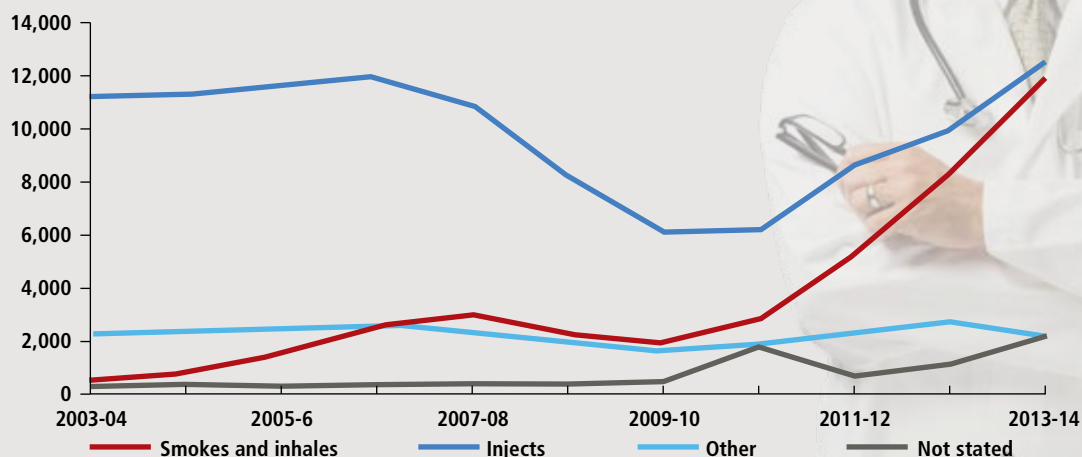
### Risk-taking behaviours

Methamphetamine use is also associated with a range of risk-taking behaviours, including unsafe injecting practices, sexual risk-taking and drug-driving.<sup>312</sup>

The two most common ways people use ice are smoking and injecting. In 2013, around 80 per cent of ice users reported smoking as the main method of use, and around nine per cent reported injecting.<sup>313</sup> However, users of meth/amphetamines who attend treatment are more likely to inject than smoke. In 2013-14, around 44 per cent of this group reported injecting and 41 per cent reported smoking.<sup>314</sup>

Unsafe injecting – such as sharing contaminated needles – carries the risk of infection and the transmission

**FIGURE 3.3: NUMBER OF COMPLETED TREATMENT EPISODES WHERE METH/AMPHETAMINE WAS THE PRINCIPAL DRUG OF CONCERN, BY MAIN METHOD OF USE<sup>316</sup>**



*'Other' includes ingesting and sniffing.*

of bloodborne viruses such as hepatitis C and HIV. In Australia, unsafe drug injecting is the most common way of contracting hepatitis C. Around 90 per cent of newly acquired cases of hepatitis C infection and 80 per cent of existing cases are a result of unsafe injection of drugs.<sup>315</sup>

In addition to the risks of injecting methamphetamine, experts are concerned about the risks of smoking methamphetamine. The proportion of ice users who smoke the drug increased from around 50 per cent of users in 2007 to around 80 per cent in 2013.<sup>317</sup> McKetin and colleagues said:

*“The smoking of ice among young recreational drug users is an important new trend that warrants urgent attention. Smoking is a highly accessible route of methamphetamine administration that provides an instant drug effect with very few immediate deterring side-effects; however, smoking ice has a high dependence liability and has been associated with a range of adverse consequences. The trend toward smoking ice also has the potential to introduce a younger, less drug involved population of people into a more risky pattern of drug use, and increase their risk of becoming dependent on methamphetamine.”<sup>318</sup>*

In a separate study, McKetin and colleagues found that people who smoked methamphetamine were less dependent on the drug than injectors. However, smokers took the drug as often as injectors and had similarly high levels of psychological distress, poor physical and mental health, psychotic symptoms, sexual risk behaviour and criminal involvement.<sup>319</sup>

Further, not only injecting drug users are at risk of transmitting bloodborne viruses – non-injecting drug users also have an increased risk of transmitting blood borne viruses compared with the general population. This increased risk is usually considered to be due to high levels of risky sexual behaviour among this group, such as unprotected sex or multiple sex partners.<sup>320, 321</sup> There is also some evidence that the molecular effects of methamphetamine increase susceptibility to infection with HIV-1.<sup>322</sup>

The reasons for the association between methamphetamine use and risky sexual behaviours are not well understood. However, there is some evidence it is because methamphetamine can reduce inhibitions and increase sexual desire.<sup>323</sup> In addition to increasing the risk of transmitting bloodborne risk of spreading other sexually transmitted infections.

This link between methamphetamine use and risky sexual behaviour has been most strongly established in relation to men who have sex with men – most studies have focused on this cohort.<sup>324</sup> There is also evidence of a link between methamphetamine use and risky sexual behaviour among heterosexual methamphetamine users.<sup>325</sup>

Several submissions to the Taskforce reported that some people are supporting their ice use with sex work.<sup>326</sup> <sup>327</sup> This group is at particular risk of contracting bloodborne viruses and other sexually transmitted infections,

as well as other harms. In a 2005 survey of 72 female street-based sex workers in greater Sydney, 40 per cent reported using ice in the previous year.<sup>328</sup> However, the use of heroin and cannabis was far more common. The current data on sex workers using ice in Australia is limited, so it is unclear how the picture has changed since 2005.

There is also some evidence of drug-driving. A 2007 survey reported that over half of methamphetamine users had driven within three hours of taking the drug.<sup>329</sup> Methamphetamine causes a number of driving impairments including lapses of attention, disorientation, lack of coordination, aggressive driving and risk taking.<sup>330</sup> There have also been numerous road deaths involving methamphetamine.<sup>331</sup> Driving while using ice poses serious risks to other road users and the community.

## Social consequences

Ice use can limit an individual’s ability to fully participate in society. Some of the most common social challenges that methamphetamine users report are social isolation, relationship problems and financial difficulties.<sup>332</sup> In a submission to the Taskforce, the Weave Youth and Community Services identified lost opportunities in relation to education and employment as one of the main impacts of ice use.<sup>333</sup>

There is some research showing that the social stigma experienced by methamphetamine users deters people from seeking or completing treatment programs.<sup>334</sup> The Taskforce heard this message frequently in the consultation process. In its submission to the Taskforce, the Australian Injecting and Illicit Drug Users League said negative representations of ice users in the media – such as reports that imply “they do not deserve help or that they are worthless” – can contribute to the stigma that users experience. The League told the Taskforce it believes “discrimination is a key reason why we are seeing increases in problematic behaviour associated with an extended period of use, as many will only seek help or come in contact with health services when experiencing a crisis”.<sup>335</sup>

Some indigenous people experience high barriers to accessing treatment and support services, in both remote and non-remote areas. In 2012-13, 30 per cent of Aboriginal and Torres Strait Islander peoples reported that they needed to, but didn’t, go to a health care provider in the past 12 months.<sup>336</sup> Commonly reported reasons include the cost and long waiting times. For people in remote areas in particular, transport and distance were also reported as common reasons for not attending health care.<sup>337</sup>

Cultural factors can also deter a user from seeking help. Of the 30 per cent of Aboriginal and Torres Strait Islander people who reported not seeking treatment when needed, commonly cited reasons for not accessing care included: dislikes the service or professional/embarassed/afraid (22 per cent); felt it would be inadequate (9 per cent); did not trust the service or provider (9 per cent); and discrimination/not culturally appropriate/language problems (4 per cent). These types of barriers were higher for counsellors than other health services.<sup>338</sup>



Submissions to the Taskforce from service providers supported these findings. For example, the Salvation Army told the Taskforce that some indigenous people experience severe negative effects if they need to be separated from family, community and country to access treatment.<sup>339</sup> The Taskforce also heard reports of indigenous youths avoiding treatment facilities because attending would be ‘shame’.<sup>340</sup> These reports are particularly concerning given that rates of methamphetamine use among indigenous people are higher than for the general population.

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# USE AND HARMS: AUSTRALIAN METHYLAMPHETAMINE USERS

An extract from a report by the **Australian Crime Commission**, which gives a national picture of the methylamphetamine market in Australia

Australian drug users now prefer crystal methylamphetamine over the powder form. Crystal methylamphetamine is perceived to be more desirable by users as it can be smoked rather than injected and perceived to be more potent or 'purer' than powder. Methylamphetamine is highly addictive and is used more often and for longer periods than other drugs.

There is also a greater tendency toward poly-drug use across Australia's illicit drug market, increasing the pool of methylamphetamine users. Organised crime groups are reflecting this trend by now dealing in multiple illicit drug types and mixing other illicit drugs into methylamphetamine in an attempt to increase addiction levels.

These factors, and the ready availability of methylamphetamine, have created new demand in areas where the drug has not previously been present. This includes regional, rural and remote communities.

## USER DATA

### THE NATIONAL DRUG STRATEGY HOUSEHOLD SURVEY

According to the 2013 *National Drug Strategy Household Survey* (NDSHS), 7 per cent of the Australian population aged 14 years or older reported using amphetamine or methylamphetamine at least once in their lifetime. In the same survey, 2.1 per cent reported recent<sup>9</sup> amphetamine or methylamphetamine use. These figures remain unchanged from those reported in 2010. The reported use of powder methylamphetamine decreased from 51 per cent in 2010 to 29 per cent in 2013, while the reported use of crystal methylamphetamine more than doubled, increasing from 22 per cent in 2010 to 50 per cent in 2013. There has also been an increase in the reported frequency of use, with the proportion of users reporting daily or weekly use of methylamphetamine increasing from 9.3 per cent in 2010 to 15.5 per cent in 2013. Of note was the reported increase in daily or monthly crystal methylamphetamine use, which more than doubled, increasing from 12.4 per cent in 2010 to 25.3 per cent in 2013.

### Harms associated with methylamphetamine

#### Personal harm

Psychological, medical and social consequences of methylamphetamine use are as devastating to the community as they are to the individual user. There are a number of key impacts to users and the community:

- Methylamphetamine users, particularly crystal methylamphetamine users, are at increased risk of a range of health-related harms, most

### THE LINK BETWEEN METHYLAMPHETAMINE USE AND PSYCHOSIS

Many studies have found a correlation between methylamphetamine use and psychosis. A recent Australian study concluded that users of crystal methylamphetamine are five times more likely to suffer psychotic symptoms while taking the drug than when they were abstinent.

The research studied 278 methylamphetamine users from Sydney and Brisbane between 2006 and 2010 and excluded anyone with existing psychotic tendencies. The incidence of psychosis increased sharply from 7 per cent to 48 per cent as a consequence of the quantity of methylamphetamine used by the subjects. The rate of psychosis reported by those who also reported frequent use of cannabis and/or alcohol ranged between 61 per cent and 69 per cent.<sup>11</sup>



notably increased risk of psychosis and mental illness. Long-term use can result in memory loss, aggression, increased risk of heart failure and stroke.

- Crystal methylamphetamine users are more likely to demonstrate violent behaviours, including assaults and sexual assaults. These harms have placed significant demands on the resources of the health care system which treats both users and victims of the violent behaviour. Crystal methylamphetamine also poses risks to front-line law enforcement and health care officers, as well as the family and friends of drug users or manufacturers.
- Children present in the homes of methylamphetamine users or manufacturers are particularly

## THE LINK BETWEEN METHYLAMPHETAMINE AND VIOLENCE

One of the most publicised psychological manifestations of regular methylamphetamine use is aggression, sometimes accompanied by violence.

A 2006 St Vincent's Hospital study of the characteristics of methylamphetamine-related and other non-methylamphetamine-related presentations to the Emergency department found that methylamphetamine users were more aggressive, violent and dangerous than persons not under the influence of methylamphetamine.<sup>13</sup> This poses a safety risk to hospital staff and other personnel. Extremely agitated and aggressive patients accounted for 18 per cent and violent and self-destructive patients accounted for 3 per cent of methylamphetamine-related presentations.

These figures were much higher compared with the non-methylamphetamine-related presentations, which recorded presentation rates of 2 per cent extremely agitated and aggressive patients and a figure of nil for recorded violent and self-destructive patients.

at risk of ingesting associated chemicals. Additionally, many methylamphetamine users are likely to neglect parenting responsibilities and expose children to additional illegal activities.

- Illicit drug use is of concern in indigenous communities throughout Australia, particularly so for methylamphetamine use. According to available data on self-reported use of illicit substances, methylamphetamine is the third most common illicit substance used in indigenous communities, with 5 per cent indicating amphetamines/speed use in the 12 months prior to survey.<sup>10</sup> Some of the adverse consequences stemming from drug use and dependency voiced in many indigenous communities included domestic violence, tensions from sourcing money for substance use, declining participation in community life, child neglect and sexual exploitation of young people.

### Manufacture

Operators of clandestine laboratories manufacturing methylamphetamine often have little concern for the environment, or for public safety. Methylamphetamine manufacture in clandestine laboratories has resulted in explosions which have severely damaged properties and resulted in serious injuries and death. These labs are often located in residential areas, therefore posing a risk to the surrounding community.

It is estimated that a clandestine laboratory manufacturing methylamphetamine generates up to 10 kilograms of hazardous and toxic waste for each kilogram of pure methylamphetamine produced. Toxic chemicals and residues have been found dumped into drains, rivers, public parks, on roadsides and in sewerage systems, posing immediate and long-term environmental health risks.

The chemicals and equipment used in clandestine

laboratories manufacturing methylamphetamine and the toxic gases produced are extremely dangerous and pose severe health risks, not only to the occupants of the premises, but also to local residents and emergency personnel. The greatest immediate risks are chemical burns and respiratory damage for persons exposed to the release of reagents<sup>12</sup> or the by-products from chemical fires and explosions at clandestine laboratory sites.

### Crime

A range of criminal activity is associated with methylamphetamine use and manufacture, including property offences, money laundering, firearms trafficking and violence. Intelligence also indicates that a number of crime groups represented in the methylamphetamine market are also involved in firearms trafficking, with some of these groups suspected of being involved in the ongoing supply of firearms and drugs in a number of states.

A number of organised crime groups in the methylamphetamine market have been linked to murders and violent assaults to protect or increase their market share, or for reasons unrelated to their drug manufacture and supply. Extortion is another potentially violent activity for which groups represented in the methylamphetamine market have regularly come to notice.

### NOTES

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# BREAKING THE BAD EFFECTS OF 'ICE'

## THE AUSTRALIAN MEDICAL ASSOCIATION HAS REVIEWED ITS POSITION ON DEALING WITH THE DANGERS OF THE 'ICE' PHENOMENON

Building on the formation of its very own Methamphetamine Working Group and growing community concern about the higher profile of methamphetamine ('ice') in the Australian community, the AMA has reviewed its position on dealing with the dangers of the 'ice' phenomenon.

The updated *AMA Position Statement on Methamphetamine* (2015), which was first drafted in 2008, acknowledges the increased use of 'ice' in Australia, and makes a number of recommendations, including improved resources – incorporating security – at hospitals and health services that deal with patients affected by 'ice'.

AMA President Professor Brian Owler said that 'ice' is having detrimental effects on the health of far too many Australians.

"Doctors have seen a significant increase in the number of people using 'ice', and a significant increase in the severity of the health conditions associated with methamphetamine use," Professor Owler said.

"Methamphetamine users are at significant risk of mental illness, but there is also a wide range of serious physical illnesses that can result from methamphetamine use.

"The impact is also being felt in emergency rooms across Australia.

"Affected patients can be difficult to treat, and are more likely to be aggressive, non-communicative, and non-cooperative.

"Methamphetamine-induced psychosis is particularly problematic, with many users requiring hospitalisation for their own safety or the safety of others."

Professor Owler said the AMA welcomes Government leadership through the establishment of the National Ice Taskforce and the impending National Ice Action Strategy.

"Swift action and an increased

"Methamphetamine users are at significant risk of mental illness, but there is also a wide range of serious physical illnesses that can result from methamphetamine use."

focus on the health implications is important," Professor Owler said.

"But it is critical that the National Ice Strategy is supported by a strong commitment to implementation from all levels of government.

"It is important that doctors and other healthcare workers are well supported to engage with methamphetamine users, many of whom may be reluctant to disclose their use.

"GPs should be encouraged and supported to screen for illicit drug use.

"There must be appropriate treatment and rehabilitation services for doctors to refer their patients on to.

"Treatment services must reflect the full range of methamphetamine users, including intensive inpatient support involving a number of medical specialists through to less intensive care and support provided in the community setting.

Recommendations of the position statement include:

- Education and training opportunities for all medical practitioners, as well as

inclusion in the medical curricula

- Appropriate security arrangements in all hospitals
- Quiet areas within emergency departments might be used to help settle and treat patients,
- Health financing systems to include specific funding for methamphetamine treatment, rehabilitation, and support, and
- The need for generic life skills programs to reduce the health and social consequences.

The AMA this year established a Methamphetamine Working Group, with expert members from across the medical profession, to provide ongoing policy direction for the AMA.

The *AMA Position Statement on Methamphetamine* (2015) is reproduced on the next page.

Flannery, J (8 September 2015). *Breaking the bad effects of 'ice'*. Retrieved from <https://ama.com.au> on 12 October 2015.



# AMA POSITION STATEMENT: METHAMPHETAMINE

This updated position statement from the **Australian Medical Association** provides an overview on the health impacts of methamphetamine use and makes a number of recommendations on how to deal with patients affected by 'ice'

1. There is clear medical evidence that methamphetamine, and particularly crystal methamphetamine ('ice') is a very harmful drug at the individual, community and societal levels.
2. Methamphetamine is not a 'recreational', 'soft' or 'party' drug and should never be referred to as such. Every effort must be made to avoid normalising methamphetamine use or minimising its harmful effects.
3. Acute methamphetamine psychosis is one of the most damaging health consequences of methamphetamine use. Acutely, it presents a major safety issue for health care staff and the intoxicated patient and his or her family.
4. There is significant evidence that in Australia there is increased use of methamphetamines and particularly crystal methamphetamine from 2008 onwards. The perception from medical practitioners is that this has driven a damaging increase in severe, acute and chronic severe mental and medical illness in users.
5. Health impacts are often severe with physical illnesses, particularly major cardiovascular diseases, major infections and significant injuries commonly seen. Patients are often neglectful of their problems and difficult to engage or maintain in treatment.
6. Drug-induced or exacerbated chronic psychotic illnesses are one of the most disabling features of methamphetamine use. The increasing prevalence related to increased crystal methamphetamine use places a severe strain on already overburdened and inadequately resourced acute and community psychiatry services.
7. Publicly funded programs are required to educate young people on the major problems with illicit drug use, including methamphetamines, and to promote resilience and increased confidence to reject peer pressure.
8. Education and training about amphetamine use and effects must be incorporated into the medical curricula, and should also be available to all practitioners as part of continuing professional development programs.
9. General practitioners are well placed to identify many early methamphetamine users. General practitioners should be supported and encouraged to screen for illicit drug use.
10. Treatment services should reflect the full range of methamphetamine users. This means services providing intensive inpatient support with collaboration between addiction medicine, psychiatric and other specialist oversight, through to less intensive support provided in the community via cognitive, behavioural and motivational interventions.
11. Emergency department staffing should include a specialist drug liaison officer, seven days a week with extended hours, to engage, support and intervene in patients with acute methamphetamine-related illness.
12. All hospitals should have appropriate, rapidly responsive security arrangements and appropriate infrastructure.
13. Many methamphetamine patients arrive at emergency departments restrained by police. Quiet areas within an emergency department might help settle methamphetamine patients, however, due to the likelihood of physical complications, intoxicated patients often need to be managed in monitored, critical care bays. Adaptive negotiated clinical processes, security and tailored approaches are required for each patient.
14. Research on causation, prevention strategies and the best methods of treatment and rehabilitation for methamphetamine dependency should be a priority for funding.
15. Law and order responses to the supply and demand of methamphetamine should be properly balanced with the need to reduce demand for the drug and provide appropriate health care including referral to treatment services and support for users.
16. Health financing must include specific and increased funding for treatment, rehabilitation and support services for drug-addicted patients. Any increase in funding must improve referral systems for methamphetamine-affected patients.
17. A comprehensive and sustained public health education program on the health and social consequences of methamphetamine use is needed to discourage experimentation, normalisation of use and induction of new users.

## BACKGROUND

### Methamphetamine

**M**ethamphetamine is a synthetic stimulant drug that comes in a number of forms. The powder form,

traditionally known as 'speed', is usually of relatively low purity and can be snorted, injected or taken orally. Methamphetamine base is a damp oily substance, is of higher purity and is typically injected. Crystalline methamphetamine,

commonly referred to as 'ice', is methamphetamine in its purest form and is usually smoked or injected.

In Australia, crystal methamphetamine is currently the favoured form of methamphetamine, followed by the powder form.<sup>1</sup>

Methamphetamine use often produces an initial sense of well-being and euphoria, increased feelings of alertness and decreased appetite. It can also heighten confidence but increasing doses often leads to agitation and paranoid beliefs.

Methamphetamine is a more potent form of the drug amphetamine. Dexamphetamine is a type of amphetamine that is prescribed for some illnesses, including Attention Deficient Hyperactivity Disorder and other learning related conditions, where it may improve a patient's ability to focus. However, in individuals without a prescription, there is potential for this medicine to be misused and there is an illegal market for it.

### Use

While a recent change in preference to crystal methamphetamine has been observed, self-reported use of methamphetamine is relatively stable, with 2.1% of the population saying that they have used in the last 12 months. Users are however reporting more regular and frequent consumption.<sup>2</sup> The incidence of methamphetamine harms, particularly psychosis, increases sharply as a consequence of the quantity consumed.<sup>3</sup>

The national data on methamphetamine use is likely to under represent use because many heavy users are living chaotic lives, are suspicious of authorities and may be unable or unwilling to participate in surveys.

There was a 204% increase in methamphetamine abuse within the Aboriginal and Torres Strait Islander population in the 1994 to 2004 decade.<sup>4</sup> Aboriginal and Torres Strait Islander people suffering from substance-related psychosis are admitted to hospital inpatient units at 3.7 times the rate expected of the overall population.<sup>5</sup>

In summary, more people are using more potent forms of methamphetamine more often, increasing the likelihood of associated health problems. The experience of emergency department physicians is that

users represent all walks of life and that smoking or injecting crystal methamphetamine appears to be associated with a significant likelihood of extreme and harmful usage and addiction.

## Health

### *Mental illness*

Methamphetamine users are at significantly increased risk of mental illness. Rates of mental illness in stimulant users have increased significantly and are likely associated with the increasing use of crystal methamphetamine.<sup>6</sup> Mental health problems from methamphetamine can occur from first usage but are more common in recurrent users. Over three quarters of dependent methamphetamine users experience significant mental health issues.<sup>7</sup>

The most common features are agitation or aggression, depression and anxiety, impaired concentration, emotional lability and psychosis. Users present with psychotic episodes featuring agitation and paranoid delusions. Others often have severe fixed delusions about insect and parasite infestations leading to significant skin lesions and infections.

Users of crystal methamphetamine are five times more likely to experience psychotic symptoms when using compared with periods of abstinence.<sup>8</sup> Approximately 30% of dependent users experience psychotic episodes each year. Psychotic episodes are probably more likely in those with pre-existing vulnerabilities,<sup>9</sup> but also occur in people who are psychologically robust. Repeated methamphetamine use can change the brain's chemical systems resulting in permanent brain damage.<sup>10</sup>

### *Physical illness*

Physical illnesses are commonly seen in methamphetamine users. Physical illnesses are driven by direct consequences of the drug's actions, harms from drug routes (particularly intravenous use), effects from an addicted lifestyle and the consequences of social isolation, poor decision making or executive



functioning, and loss of income and work.

Illness from crystal methamphetamine can affect any body system, but direct effects are mainly cardiovascular and neurological. Cardiac issues are particularly seen as tachyarrhythmias, coronary ischaemia due to vessel spasm or dissection, hypertensive crises and cardiomyopathies or heart failure. Acute effects on the central nervous system include the expected agitation, hyper-arousal and anxiety, but also intracranial haemorrhages and seizures. Later issues in heavy users include accelerated atherosclerosis and increased risk of strokes, poor executive functioning, early onset dementia and structural abnormalities in the brain.

Liver and kidney problems have also been associated with both acute ingestion and longer term use. Regular users, particularly intravenous users, are prone to many infections due to poor skin hygiene (skin abscesses, infective endocarditis, osteomyelitis, and cerebral abscesses), bloodborne viruses due to needle sharing, as well as sexually transmitted diseases from high risk behaviours and promiscuity.

Severe skin infections also occur due to delusion induced skin picking and injection of particulate substances (such as crushed tablets and cotton wool fibres).

Dental problems occur due

to accelerated tooth decay and bruxism (tooth grinding) induced by amphetamines, poor surveillance and dental hygiene and reduced salivation.

These acute and chronic medical conditions, related or not to drug use, can be difficult to manage due to poor compliance with medical advice, follow-up or treatments.

### **Societal impact**

There are likely to be a number of drivers for increased crystal methamphetamine consumption, including increased availability, competition, decreased price and normalisation in some groups. As methamphetamine is excreted quickly it may also appear to be an incentive for use, particularly for those who may encounter drug screening as part of their employment.

Due to the agitated behaviours, psychosis, poor decision making and high risk lifestyles associated with methamphetamine consumption, users can experience a range of social and legal problems. For example, amphetamine users are strongly over-represented as perpetrators and victims of trauma, particularly interpersonal and road trauma.

Some methamphetamine users may represent particular management challenges due to social marginalisation or geographically remote habitation. However the widespread use, particularly in some well paid employee groups, and normalisation of methamphetamine use means that presentations for medical treatment reflect all backgrounds.<sup>11</sup>

Due to its potential role as a precursor, all pseudoephedrine-based medication should continue to be scheduled to a minimum S3 (available from the pharmacist only), with strict control on quantities supplied, in accordance with therapeutic standards and professional guidelines.

Law and order responses to the supply and demand of methamphetamine should be properly balanced with the need to reduce demand for the drug and provide

appropriate health care including referral to treatment services and support for users.

### **Impact on healthcare system**

Data from the Victorian ambulance service confirms a recent dramatic increase in call outs relating to methamphetamine use, with a high proportion resulting in hospital admissions.<sup>12</sup> Hospital separations for methamphetamine-related problems are the second highest among the four major illicit drug types (2,895 separations in 2011/12).<sup>13</sup> While the number of patients presenting to emergency departments for methamphetamine-related problems is modest in terms of overall numbers (1-3% of attendances), the resulting impact is very significant with users having high acuity psychiatric and or medical issues requiring very high resource usage.<sup>14</sup>

Methamphetamine-induced psychosis is of particular concern to the medical profession, given the impact it has on emergency departments and psychiatric services across Australia. Symptoms of acute drug induced psychosis are often very severe and or prolonged requiring restraint, sedation and prolonged observation or admission.<sup>15</sup> These problems are multiplied significantly when methamphetamine is combined with other substances including alcohol, which is a common occurrence.

Medical illnesses in these patients are often severe: users present late in the course of the illness and generally require prolonged treatments. Due to the underlying dysfunction in these patients' lives and their poor coping skills, relapse and non-compliance are common, increasing health care costs and resource use.

Treating staff are at high risk of injury from these patients who can require major use of security personnel and both physical and chemical restraints. An Australian study comparing the characteristics of individuals presenting to hospital emergency departments confirms that methamphetamine users are more aggressive, violent

and dangerous than other patients.<sup>16</sup> The impact is felt in all emergency departments and psychiatric units, but aggressive amphetamine intoxicated patients pose a significant problem for regional hospitals with fewer clinical staff and poor access to security personnel.

In addition to the impacts on the health system, it is increasingly recognised that crimes and acts of violence are strongly associated with methamphetamine use and lifestyles. According to the Australian Crime Commission, crystal methamphetamine poses the highest current risk of harm to the Australian community.<sup>17</sup>

There were 26,269 national consumer arrests for amphetamine-type substances in 2013-14, an increase of over 18% on the previous year.<sup>18</sup> The number of police detainees testing positive for methamphetamine has also been steadily increasing in recent years (from 13% in 2009 to 26% in 2013).<sup>19</sup> Many dependent methamphetamine users will therefore spend periods of time in prison.

### **Treatment**

Treatment episodes for injecting, smoking or inhaling of methamphetamine have increased significantly.<sup>20</sup> Long and intensive treatment is required to treat the addiction and associated mental and physical illnesses. This is not particularly suited to current treatment facilities available in emergency departments, general practices or even acute hospital admissions.

It has been estimated that there is currently a five year lag between problem use and treatment.<sup>21</sup> This occurs because methamphetamine-related presentations with sleeping difficulties, anxiety, loss of appetite, mood disturbance, and relationship problems are often hidden from general practitioners and other clinicians. When methamphetamine users do present it can be quite late in the course of their illness which increases the likelihood of complications and difficulties in ensuring follow up or compliance.

Appropriate treatment and

support services are grossly inadequate for methamphetamine users. Acute withdrawals may take significant resources and support with benzodiazepines. However there are currently no therapeutic agents that support methamphetamine abstinence, which is characterised by prolonged periods of symptoms and high rates of relapse.<sup>22</sup>

There should be a sustained investment in the training and support for all practitioners, but particularly general practitioners, to better identify and engage with methamphetamine users, provide brief interventions and increase referrals to community treatment or rehabilitation services. It is essential that adequate numbers of quality treatment and support services are available for practitioners who identify users to refer on to. Issues relating to methamphetamine use must be incorporated into the curriculum for medical students.

Due to severe complications and poor compliance with medical advice, methamphetamine users are often frequent attenders to emergency departments. It is essential that emergency departments are appropriately supported by acute drug and alcohol services who can provide brief interventions when patients are most receptive and guide them to appropriate treatment services. This means extended hours, seven days a week.<sup>23</sup>

Community-based addiction, rehabilitation and mental health services are limited. Liaison with drug and alcohol services is often fragmented and methamphetamine users may not be considered a priority.

Treatment and rehabilitation services must reflect the spectrum of users via a 'step-up step-down' model. For severely dependent users with complex needs, treatment may initially be provided in an inpatient setting with intensive levels of support particularly through the initial withdrawal period. Given the likelihood of coexisting mental health problems, collaboration between drug and mental health specialists and services is

important. These users may also require extended periods of assertive outreach and support. There is also a need to provide lower intensity treatment options for those who are less dependent or occasional users. Treatment may include sessions provided within the community that involve motivational, cognitive and behavioural interventions. A 'step-up step-down' model recognises that such sessions may not be sufficient for some users, so provision of support may need to be escalated.

The health financing system must include very specific funding for treatment, rehabilitation and support, if we are going to properly address the health and social consequences of methamphetamine use in Australia.

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# Forcing ice users into rehab won't solve the problem – here's what we need instead

There is no evidence to suggest mandatory treatment outside of the criminal justice system would work, writes **Nicole Lee**, Associate Professor at the National Centre for Education and Training on Addiction, Flinders University

**T**asmanian Independent Senator Jackie Lambie this week revealed her 21-year-old son's problem with ice. She plans to introduce a private member's bill to enable parents to force their drug-dependent children into treatment. Unused immigration detention centres, Lambie suggests, could be turned into detox facilities.

Assistant health minister Fiona Nash said the Coalition would wait for the National Ice Taskforce to release its final report later this year before deciding whether to support the proposal.

But Australia already has a number of effective options to divert dependent users from prison and into treatment. And there is no evidence to suggest mandatory treatment outside of the criminal justice system would work. Instead, we need to increase funding for

treatment, including early intervention programs and 'aftercare' services to reduce the rate of relapse.

## How big is the problem?

Ice is the crystalline form of methamphetamine. Speed is the powder form of methamphetamine and base is a paste form of the drug. But they vary in potency, with ice being the strongest. It's like comparing light beer and extra-strength rum: it's all alcohol, but the latter is much stronger, so you don't need as much to get the same effect. Or if you use the same amount, you're more likely to be intoxicated and become dependent.

Around 2% of Australians use methamphetamine, with half of those preferring ice over speed or base. It's hard to know how many people are dependent on methamphetamine but around 15% of those

who took the drug in the past year used weekly, which is much more likely to cause dependence.

Long-term methamphetamine use can significantly change the structure and function of the brain, which takes a long time to recover. So, although the rate of dependence is relatively low, once users get hooked, it can be really hard to get off, and the relapse rate back to drug use is very high: more than 70%. This can be very frustrating for users and the people close to them.

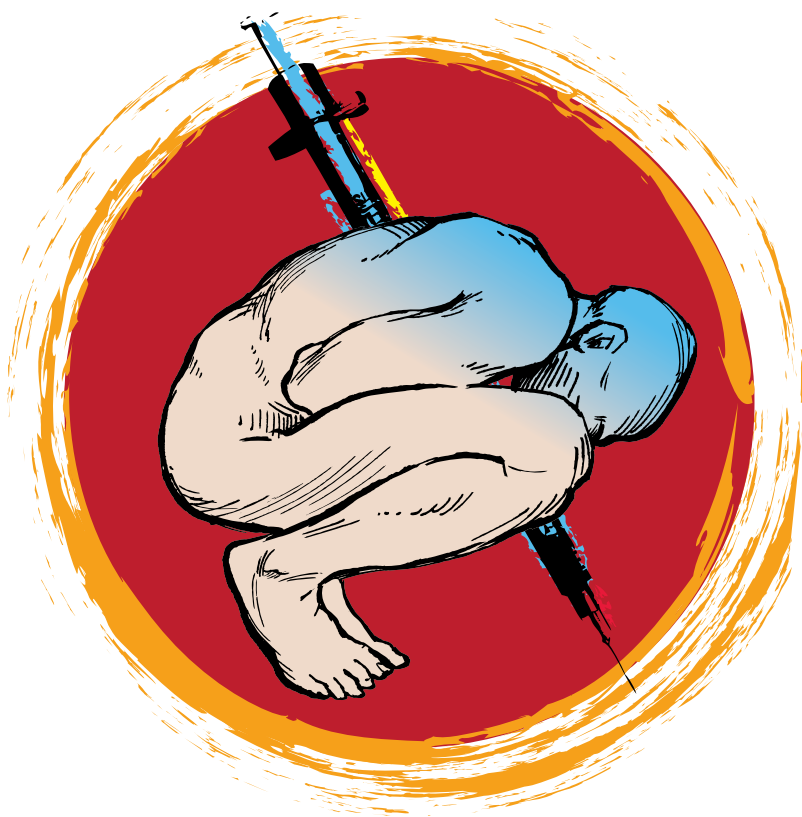
## Drug diversion programs

Australia already has a number of types of mandated treatment. These all operate through the police and justice systems. The main aim is to reduce reoffending through reductions in drug use.

Police can refer people into treatment as an alternative to the justice system. All states have some kind of 'police diversion' initiative, most commonly for cannabis. In South Australia, police are required to refer people who are arrested for simple possession of any drug to treatment as a first-line option instead of to the justice system. Police diversion to treatment has been shown to be effective in reducing crime.

Drug courts are special courts where users who have committed non-violent crimes can opt for an intensive treatment program if they plead guilty. Similar to police diversion, courts divert users to treatment instead of the justice system. Drug courts operate in most states and have been found to be effective.

Police and court diversion all still have an element of choice: the main incentive to choose treatment is to avoid prison or criminal justice system. These programs have shown good results and treatment



mandated through the courts can be as effective as voluntary treatment when the practitioners are skilled and well-trained. Our study of voluntary methamphetamine users showed that even when people were not very motivated for treatment they could still achieve good outcomes.

There is one compulsory treatment centre in Australia in New South Wales for drug users who repeatedly commit crimes. The program has undergone evaluation and shown good health outcomes for participants but we do not know what impact it has on reoffending.

We do not have any treatment facilities in Australia that make treatment compulsory for drug users without criminal charges. There is no evidence that compulsory treatment outside the criminal justice system is effective.

In some countries, including in East and South-East Asia, people who are suspected of using drugs can be placed in compulsory drug treatment centres, which are essentially prisons for drug users. They may not have committed any other crimes.

These facilities are internationally opposed on ethical and human rights grounds. They have been criticised for lack of both due judicial process and medical or health assessment prior to a person entering compulsory treatment.

### **Why mandatory treatment isn't the answer**

Drug use is complex and different things work for different people. But not everyone who uses drugs needs treatment. If someone is a danger to themselves or others as a result of their drug use, there may be an argument for forced treatment. The problem is that a person can be ordered to a treatment facility but they still have to want to take in the information once they are there.

Drug dependence is a chronic health condition and qualified medical and health practitioners are best placed to make recommendations about treatment options, in conjunction with the user.

There are a range of effective



*Drug dependence is a chronic health condition and qualified medical and health practitioners are best placed to make recommendations about treatment options, in conjunction with the user.*

treatment options for methamphetamine dependence, including residential rehabilitation and cognitive behaviour therapy (a type of counselling), which, even in small doses, can have an impact.

But the relapse rate is high. One study showed that after three years, people who had been through residential rehabilitation reported similar levels of use to those who had not had treatment: more than 70% were no longer abstinent. However, relapse rates are likely to be lower when people receive ongoing support.

Withdrawal on its own, either at home or in a treatment facility, is not considered effective as a way to reduce drug use in the long term without further treatment.

In Australia, a large percentage of methamphetamine users use less than once a week and are not likely to be dependent but may experience problems with their use, such as mental health issues and other harms, that would benefit from early treatment.

There is a gap in funding for early intervention programs to help methamphetamine users before they

become heavily dependent and also for aftercare support services to assist in relapse-prevention in the long recovery time post treatment.

Families and friends can be significantly affected by a person's drug use and may need support themselves. Family support services can assist parents, partners and other family members and friends to understand how to respond and help methamphetamine users cut down, quit or get professional help. Family support services can help families and friends set boundaries, learn how to provide support and find effective treatment options.

In emergency situations, if you or other family members feel threatened, call the police or if someone is showing symptoms of psychosis or overdose, call an ambulance.

Nicole Lee is Associate Professor at the National Centre for Education and Training on Addiction, Flinders University.

## **THE CONVERSATION**

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# ICE: FAMILY AND FRIENDS SUPPORT GUIDE

## A BRIEF GUIDE FROM THE AUSTRALIAN DRUG FOUNDATION



### KNOW THE FACTS

#### What is ice?

**I**ce – properly known as crystal methamphetamine – is a stimulant drug. Stimulants speed up the messages travelling between the brain and the body. The drug usually comes as small, chunky clear crystals that look like ice. It can also come as white or brownish crystal-like powder with a strong smell and bitter taste.

#### Understanding the effects

The effects of ice commonly include:

- Increased alertness, energy, excitability, talkativeness and hyperactivity
- Significant feelings of pleasure and increased confidence
- Rapid heart rate

- Increased anxiety with reduced appetite
- Teeth grinding and excessive sweating
- Increase in aggressive or anti-social behaviours.

#### Overdose

An overdose is an amount or dose of a drug that is more than the body can tolerate. Ice overdose can cause:

- Breathing problems
- Fits or uncontrolled jerking
- Extreme agitation, confusion, clumsiness
- Sudden, severe headache
- Unconsciousness
- Stroke, heart attack and in some cases, death.

#### After taking ice

It can take several days for your child, sibling or friend to come down from ice. In that time, they may experience:

- Difficulty sleeping
- Twitching arms and legs during sleep
- Paranoia, hallucinations and confusion
- Irritation or depression
- Short-term memory loss.

Physical withdrawal symptoms will generally settle down after a week, but emotional symptoms and the psychological craving for the 'high' may last for several months.

### WHAT TO DO WHEN SOMEONE IS HAVING A BAD REACTION TO ICE?

1. Stay CALM
2. Reassure and be supportive
3. Dial 000 if you are concerned about their safety or your own.

### WHAT YOU CAN DO TO HELP A LOVED ONE WHO USES ICE

Many of the most effective ways of helping a loved one who uses ice seem to go against natural reactions.

Condemning people, offering advice or trying to 'rescue' them are not productive. It can be challenging to fight your natural responses, so the following are helpful approaches to take:

#### It helps just to listen

If your family member or friend wants to talk to you about their experiences with ice or explain why they use it, try to listen without interrupting, passing judgement or becoming upset.

When they've finished talking, repeat what they've said back to them in a calm voice. This

demonstrates that you listened and helps clarify any misunderstandings.

Avoid offering advice or trying to solve their problems. Genuine, long-lasting change can only occur when people accept responsibility for their actions and take steps to deal with their use of ice.

### Encourage change

A person must decide for themselves when they want to stop or reduce their ice use. However, you may consider promoting and encouraging change by raising some of the following points when they are not affected by the drug and are feeling responsive:

- You've noticed they are using less ice and admire the effort and commitment this shows
- You value the time spent together when they aren't on ice.

### Establish boundaries

Clearly communicate your own house rules and stand by them when tested. This isn't easy but change comes with consistency and safe boundaries for everyone.

## SEEK HELP

While there are many treatment options available to support users of ice, your child, sibling or friend must first be ready to seek help. Differing approaches can prove effective for people at different stages in the recovery process, so a focus on reducing consumption and harm is important.

Encourage your family to access the services listed below for advice and guidance.

## SUPPORT, COUNSELLING AND REFERRAL

- DirectLine  
1800 888 236
- Counselling Online  
[www.counsellingonline.org.au](http://www.counsellingonline.org.au)
- Australian Drug Foundation  
1300 85 85 84

For more information on ice facts:

[www.adin.com.au/help-support-services](http://www.adin.com.au/help-support-services)

***Having a family member or friend who uses ice places families under enormous strain. However, it's important to realise that you are not alone and that help is available.***

## YOU ARE NOT ALONE

It's very important to seek support for yourself, your family and friendship circle whilst on the road to recovery.

Take steps to look after your own physical and emotional wellbeing:

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- Talk with a friend
- Talk to a counsellor or GP
- Join a support group
- Meditation and mindfulness practice does help
- Make sure that your life does not focus exclusively on your family member's/friend's use of ice – try to cultivate a life outside of that.

Australian Drug Foundation (2015). *Ice – family & friends support guide*. Retrieved from <http://druginfo.adf.org.au> on 6 October 2015.

# Address other life problems to get at-risk young people off methamphetamines

There's no 'ice epidemic' but there is a sharp increase in use among young drug users. If we want to make a difference in the longer term, we need to address the broader context of these young people's lives, not just their drug use, according to this article from *The Conversation* co-authored by **Sally Nathan, Andrew Hayen, Patrick Rawstone and Ranmalie Jayasinha**

**W**hile the level of methamphetamine use (including ice) has remained stable in population studies of young people at 2%, new research has found use of methamphetamines has increased significantly in young people already at risk of other drug- and alcohol-related dependence and harm.

'Tough on drugs' approaches to getting young people off methamphetamine and ice don't work, and temporary rehabilitative measures don't last. The problems affecting the rest of these youths' lives have to be addressed long-term if we're to have any hope of keeping them away from methamphetamines for good.

"Tough on drugs" approaches to getting young people off methamphetamine and ice don't work, and temporary rehabilitative measures don't last. The problems affecting the rest of these youths' lives have to be addressed long-term if we're to have any hope of keeping them away from methamphetamines for good.



## METH USE ON THE RISE AMONG ALREADY AT-RISK YOUTH

Our study was based on 865 adolescents, aged 14-18 years, admitted to a drug and alcohol rehabilitation program in NSW and the ACT. The number of young people in this program reporting methamphetamine use doubled from 2009 to 2014.

Young people admitted for treatment not only report the drugs they use, but also the drug that is of greatest concern to them at the time. Methamphetamines were the only drug to show a significant upward trend over time, from 10% in 2009 to almost 50% in 2014. Some 64% also reported they currently used alcohol, 85% cannabis and 73% tobacco in 2014.

Those reporting methamphetamine use were more likely to have unstable living arrangements and more police contact. This may mean these young people are already in precarious positions in their lives which leads them into problematic methamphetamine use. The reverse may also be true.

Population surveys show no rise in young people's use of methamphetamines. The best sources of adolescent drug and alcohol use in Australia are the *Australian Secondary Students' Alcohol and Drug Survey* and the *National Drug Strategy Household Survey* which includes 12- to 19-year-olds.

These surveys show that alcohol, cannabis and tobacco were the most commonly currently and recently used drugs among adolescents. These surveys also show use of methamphetamine among adolescents has remained very low (around 2%) and stable over the last few years. However, some adolescents may be missed in these surveys due to school suspension or expulsion, homelessness, or being in custody – the very young people our study includes.

## ADDRESSING HARM

Our data from young people admitted to treatment show clearly that methamphetamine use is on the rise in this group, but other data provide no evidence for an 'epidemic' among young people.

Early intervention and treatment for young people, including residential treatment programs, is what is needed, not more arrests by police. The program in the recent study was run as a therapeutic community which involves residents living in a drug-free setting for up to three months to address underlying causes of addictive behaviour.

The program aims to build young people's skills to manage their lives effectively addressing employment, training, relationship building, mood management, and teaches relapse prevention skills.

There have been some robust studies focused on the outcomes of residential treatment for young people,

which have found positive effects in the first 12 months after treatment.

However, one study found positive effects on substance use and psychological functioning were not maintained longer-term. Continuing support after treatment is critical to prevent the erosion of short term program effects and includes ongoing counselling, employment assistance and interventions with families. The current study findings suggest stable and affordable housing is also crucial.

If we want to make a difference in the longer term, we need to address the broader context of these young people's lives, not just their drug use.

There is also a clear imperative not to forget the harms of other drugs commonly used by young people, such as cannabis, tobacco, as well as alcohol, in the hysteria generated about ice.

Mr Mark Ferry, Chief Operating Officer at the Ted Noffs Foundation and Ms Anna Bethmont, former Master of Public Health student at UNSW Australia contributed to the study in the *MJA*.

**Sally Nathan** is Senior Lecturer, UNSW Australia.

**Andrew Hayen** is Associate Professor of Biostatistics, UNSW Australia.

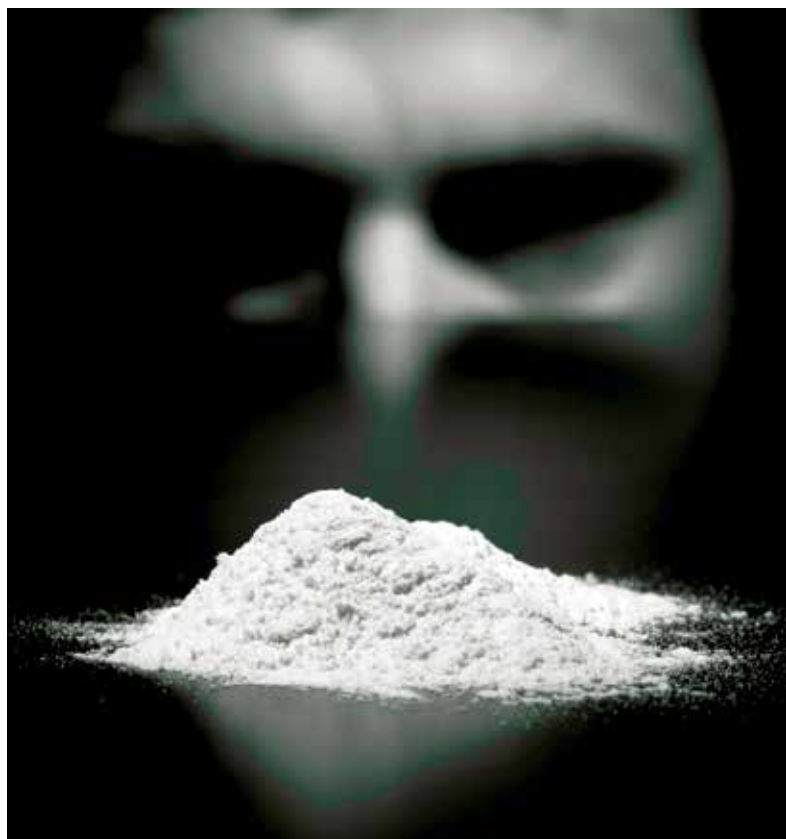
**Patrick Rawstorne** is Senior Lecturer in International Health, UNSW Australia.

**Ranmalie Jayasinha** is Research Associate, UNSW Australia.

## THE CONVERSATION

Nathan, S, Hayen, A, Rawstorne, P, and Jayasinha, R (7 March 2016). *Address other life problems to get at-risk young people off methamphetamines*. Retrieved from <http://theconversation.com> on 8 March 2016.

There is also a clear imperative not to forget the harms of other drugs commonly used by young people, such as cannabis, tobacco, as well as alcohol, in the hysteria generated about ice.



## Methamphetamine use among troubled teens doubles

**M**ethamphetamine use among troubled teens doubled in the five years to 2014, according to research published in *The Medical Journal of Australia*. This is an alarming trend that population-wide surveys like the *National Drug Strategy Household Survey* have failed to capture, according to lead researcher Sally Nathan from the School of Public Health and Community Medicine at UNSW.

Methamphetamine use among teenagers in the general population remains stable and very low, at 2%, according to the *National Drug Strategy Household Survey*. By contrast, nearly 60% of teenagers entering Ted Noffs Foundation treatment programs in 2014 reported using methamphetamine, up from 30% in 2009, the *MJA* research shows.

The study, based on nearly 900 teenagers aged 14 to 18, covers "a large proportion" of adolescents in residential rehab programs in NSW and the ACT.

Nearly 85% of survey participants had been expelled or suspended from school and close to 70% had been arrested in the previous three months; 40% had lived in more than three places in the previous six months.

The study also found that the number of teenagers smoking methamphetamine had surged seven-fold to almost 85% in 2014, compared with 12 per cent in 2009, indicating that users had shifted from powder to crystal methamphetamine or ice.

### OTHER FINDINGS IN THE REPORT:

- During 2013-14 there were 268,000 regular methamphetamine users and 160,000 dependent users aged 15-54 years in Australia. This equated to population rates of 2.09% for regular and 1.24% for dependent use.
- The rate of dependent use had increased since 2009-10 (when the rate was estimated to be 0.74%), and was higher than the previous peak (1.22% in 2006-07).
- The highest rates were consistently among those aged 25-34 years, in whom the rate of dependent use during 2012-2013 was estimated to be 1.50%. There had also been an increase in the rate of dependent use among those aged 15-24 years (in 2012-13 reaching 1.14%).

Source(s): *MJA* 204 (4), 7 March 2016; Ting, I, *SMH*, 7 March 2016.

# FIVE THINGS PARENTS CAN DO TO HELP YOUNG PEOPLE ESCAPE ICE

The police must play a role in addressing many of these issues, but families worried about their loved ones and the community must also play their part to fight this scourge, offers **Professor David Penington**

**R**ecent news of former NSW premier's daughter Harriet Wran being charged with murder is another illustration of Australia's growing problem with the drug ice.

Wran, who is said to have been battling an ice addiction, has been charged with murder, attempted murder, and breaking and entering while armed with a knife, along with Michael Lee. Another man Lloyd Haines has been charged with murder, attempted murder, and aggravated break and enter.

Ice or crystal methamphetamine is becoming a problem in both rural and urban communities across Australia. There's growing concern

about the effects of ice addiction, crime, and violence, and people are at a loss for answers.

Of course, the police must play a role in addressing many of these issues, but families worried about their loved ones and the community must also play their part to fight this scourge.

## **A downward spiral**

Crystal meth is more pure, cheaper, and more potent than other forms of methamphetamine. A flood of precursor chemical imports to feed local drug production in the last two years has been accompanied by increased local use and manufacturing.

*After prolonged heavy use, ice can badly damage the brain and precipitate aggressive psychotic behaviour, characterised by feelings of persecution that can lead to attacks on others.*

And much overseas-produced (predominantly South-East Asia) crystal meth inevitably evades customs and police. Despite huge seizures of the drug and precursors, it remains readily available and the price is little affected.

Alcohol, particularly binge drinking, causes many more deaths than ice. But there's a bigger problem with illicit drugs: the market is controlled by criminals recruiting dependent users to act as their agents, who recruit yet more users to keep feeding their own addiction.

This brings huge pressure for expansion. And then there's the threat of physical violence by users, or against their families if they cannot repay debts to ruthless suppliers.

The main problem, of course, is addiction. In the days after taking meth, with its hugely exciting sense of ecstasy, users become deeply depressed, desiring more of the drug. Some manage to control this desire, but many cannot and find themselves, over time, losing control of their lives. They need more and more of the drug as relief from the 'low' dwindles.

Frequent users find themselves associating all the time with other users, usually dropping out of employment, education or normal social activities. Older people with depression may take ice to relieve their misery.

After prolonged heavy use, ice can badly damage the brain and precipitate aggressive psychotic behaviour, characterised by feelings of persecution that can lead to attacks on others.

## **Escaping ice**

So what can families do to stop the rise and rise of meth use in Australia?





1. Reduce initiation into drugs by talking openly about them with children – in terms of health. Young people will always want to test the limits of authority. They need to see the drug as something that matters for their health and future lives, rather than giving in to something that will damage their brains.
2. If your children have already tried the drug, urge them to see a doctor who can explain what is happening to their brain and offer options to get over the ‘low’ that comes after use, which can be so devastating. Early help for sleeping can make a big difference.
3. If they are under too much pressure to resist using and in trouble with mounting debt (if they’re stealing money from home, for instance) try to find out who is putting pressure on them. Confidentially contact the police, who will handle it with tact and anonymity.
4. The police can rescue your child from ice’s downward spiral by tackling criminal

*Drugs are fundamentally a health issue, akin to alcohol addiction and binge drinking. Drug users need help, and treatment is available if accessed before the brain becomes seriously damaged. Both police and the community must play a part.*

pushers. If he or she has become heavily involved in trafficking, police intervention may save them before it is too late.

5. Outstanding drug withdrawal services are available in each state of this country. They accept people referred by police or the courts. And they can arrange longer periods of rehabilitation, which may be vital. Family support is essential as people go through this process, and as they then try to rebuild their lives in the community.

State drug services are badly stretched, but we also have very capable doctors who are able to give advice. Many high schools have very sensible education programs encouraging young people to take care of their health.

Many people cling to the view

that as drugs are illegal, everything should be fixed by the police arresting all users. But the police are fully aware that this approach has failed for over 50 years. In Australia, as in other countries, prisoners still use drugs.

Drugs are fundamentally a health issue, akin to alcohol addiction and binge drinking. Drug users need help, and treatment is available if accessed before the brain becomes seriously damaged. Both police and the community must play a part.

**David Penington is Emeritus Professor, University of Melbourne.**

## THE CONVERSATION

Penington, D (19 August 2014). *Five things parents can do to help young people escape ice*. Retrieved from <http://theconversation.com> on 6 October 2015.



## CHAPTER 3

# Tackling Australia's ice problem

## Report of the National Ice Taskforce

Following is the executive summary from the **National Ice Taskforce Final Report**, a thorough analysis of Australia's ice problem. Upon release of the report in December 2015, the federal government responded to all 38 of its recommendations by providing a clear direction for both the Government's response and the National Ice Action Strategy, setting out a comprehensive package to reduce the demand for ice and reduce the harm it causes, while continuing efforts to disrupt supply.

### *Ice use in Australia is at high levels and is increasing*

Proportionally, Australia uses more methamphetamine than almost any other country, and the number of users continues to grow. More than 200,000 Australians reported using the crystalline form of methamphetamine (commonly known as 'ice') in 2013, compared with fewer than 100,000 in 2007.

These figures are conservative and already dated. Today, evidence suggests there are well over 200,000 users.

### *Its use creates a distinct problem for society*

Unlike cannabis and heroin, ice is an extremely powerful stimulant. For some people, it can trigger psychological disturbances or violent and aggressive behaviour. Long-term use may damage the brain and cause impaired attention, memory and motor skills. The distress ice causes for individuals, families, communities and frontline workers is disproportionate to that caused by other drugs.

### *Law enforcement agencies have responded strongly to disrupt the supply of the drug*

The quantity of ice seized at the Australian border has increased dramatically in recent years. In 2014,

## How are governments combatting ice?

### What are governments doing to address the problem of ice?

The federal, state and territory governments work together to: prevent methylamphetamines including ice from being manufactured in or imported to Australia; provide treatment and support to ice users and their families; and educate the population about the consequences of using ice. Governments also support evidence and research efforts into the extent of the ice problem.

### Law enforcement

Ice is increasingly a major attraction for organised crime and the illicit drug market. Australian governments work together to stop this trend by tightening existing laws and detecting and disrupting criminals who profit from the use of ice. This often means targeting large criminal organisations and gangs.

To decrease the amount of ice available on Australia's streets, law enforcement and regulatory agencies also scrutinise the importation and sale of precursor chemicals which could be turned into illicit drugs, in partnership with industry.

As the problem of ice is not restricted to Australia, our governments work with international partners to combat the drug trade and prevent ice from crossing borders.

### Health services

The use of ice has severe health and welfare consequences for both the user and people around them. Australian governments provide a number of treatment and support options, including counselling, outreach, rehabilitation and withdrawal services. The increased risk of health problems and the link between ice users and aggressive and violent behaviour puts a heavy burden on frontline treatment staff as well as hospital and ambulance staff.

### Education

Australian governments currently provide school-based and general prevention initiatives designed to combat the use of illicit drugs and improve awareness of the risks associated with illicit drug use. These programs provide factual information about drugs and their effects through targeted education and media campaigns.

Source: Licensed from the Commonwealth of Australia under Creative Commons Attribution 4.0 International Licence. © Commonwealth of Australia (2013). *How are governments combatting ice?* (Fact sheet), extract. Retrieved from [www.dpmc.gov.au](http://www.dpmc.gov.au) on 7 October 2015.

customs intercepted more than 50 times as much ice by weight than in 2010. In 2013-14 there were over 26,000 arrests related to the distribution or possession of amphetamine-type stimulants, including ice.

### ***But the market remains strong***

Despite the efforts of law enforcement agencies, the market for ice remains strong. Ice is still easy to get and its price remains stable.

The lack of any discernible market response to the efforts by Australian law enforcement agencies to prevent the supply of ice is greatly concerning. In most markets – legal or not – the significant shock to supply caused by a large seizure of product, should at the very least push up prices, particularly when demand is so strong. It is remarkable that despite very large seizures there has been no increase in the street price of the drug.

### ***The resilience of the market for ice reflects the drug's unique nature***

There are factors that, in combination, make ice unlike other illicit drugs that have commonly been used in Australia:

- Ice is manufactured from chemicals, not produced from plants, and can be mass produced in industrial scale labs offshore for export into Australia, so any seized product can be quickly replaced.
- Methamphetamines, including ice, are the only illicit drug that is both imported and locally manufactured in significant quantities, increasing complexity of the required response from law enforcement agencies.
- Ice is easily concealed and trafficked. For example it can be dissolved in oil and reconstituted as crystals.
- Ice is also a dangerous drug for new users, offering the promise of euphoria, confidence and enhanced sexual pleasure at a relatively cheap price. At \$50 per dose in some parts of Australia, it can be cheaper than a night out drinking alcohol.
- The effects of ice can be achieved through smoking, not just through injecting, making its use appear safer and more socially acceptable.
- Ice is more likely to cause dependence than other drugs, and has a very long withdrawal and recovery phase. Prolonged heavy use can impair cognitive functioning for months after giving up the drug. Relapse is understandably common.

Ice's unique factors have created a perfect opportunity for organised crime – a growing demand for a highly attractive and addictive substance, which can be sold at a high price in Australia.

### ***The market's resiliency must shape our response***

Australia's response must be designed to address the uniquely complex characteristics of the problem we face.

The demonstrated buoyancy of the ice market suggests this is not a problem that can be solved overnight.

### ***Our first priority must be supporting families, workers and communities to better respond to people affected by ice***

Families, frontline workers and communities are struggling to respond to the growing number of dependent ice users around the country. Our immediate priority must be to support those Australians who are most affected by ice use.

Families need advice on how to help their relatives who are struggling as a consequence of their ice use.

Frontline workers need guidance on how to engage with ice users, and those in crisis, in particular where aggressive behaviour or violence is present.

### ***We need to enable communities to play their part***

Communities also need help to take action. Communities are key to sending strong messages against ice use, supporting users who want to get off the drug, and working with police and other services to keep local communities safe from ice.

### ***Efforts to reduce demand for ice must be strengthened***

We must balance our efforts in law enforcement with action to curtail the demand for ice.

This means reducing the number of ice users by providing effective support to help current users quit and preventing people from starting to use the drug through well-designed and targeted prevention activities.

### ***Ice users need treatment and support services that cater to their needs***

While giving up ice is difficult, it is achievable. Many accomplish it without formal treatment or support. For others, well designed treatment services, including detoxification, counselling, rehabilitation and follow-up services can be effective.

Yet Australia's current treatment and support system





is not particularly well-designed to respond to ice use. Many services are designed for other types of drugs – for example, some detoxification services don't cater well for the comedown associated with stimulants, and some services lack appropriate follow-up for the extended withdrawal period associated with ice.

Residential services should give priority to those with significant social disadvantage or other coexisting health issues. There needs to be more accessible and cost-effective counselling services available to ice users when they need it.

Planning for treatment and support services to help people get off ice needs to take account of local needs. Local communities need to be involved in determining the right mix of services for their area.

### ***And we must take steps to prevent people using in the first place***

Young people experimenting with ice tend to be exposed to drugs through networks of their trusted peers. Education and information about ice needs to be broadly disseminated, including through schools, but we must also design credible prevention messages that resonate with particular at-risk groups.

### ***Efforts to disrupt supply must be more coordinated and targeted***

Disrupting the ice supply chain through seizures and arrests of key players in importing and trafficking networks remains a critical part of the response to ice.

There are maturing collaboration and coordination arrangements between Commonwealth, state and territory law enforcement agencies. Despite these, challenges remain in ensuring a unified response and the timely exchange of intelligence in relation to ice. An enhanced focus on the supply chain is required, particularly offshore. International cooperation and improved intelligence offer the best opportunities to tackle the supply of ice.

Domestically, there is an opportunity to make precursor controls more comprehensive and responsive, so they keep pace with changes in supply and production methods. It is also necessary to remove any potential for infiltration of air and sea ports by organised crime. And the growing use of ice in regional Australia must be recognised and appropriately addressed.

### ***And better data, more research and regular reporting will strengthen Australia's response and keep it on track***

The unique complexities of the ice problem and the current gaps in our understanding of the market for the drug highlight the critical need for better data, more research and regular nationally consistent reporting. Enhanced up-to-date data needs to be accessible to all stakeholders. Better data on illicit drug use will enable emerging trends to be identified and help governments to direct resources to priority areas. Further research can strengthen responses across all services.

There should also be regular reporting on progress to ensure all efforts remain on track.

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Department of the Prime Minister and Cabinet (2015).  
*Final Report of the National Ice Taskforce*, pp. iii-v.  
Retrieved from [www.dpmc.gov.au](http://www.dpmc.gov.au) in October 2015.

# TAKING ACTION TO COMBAT ICE

## A FACT SHEET FROM THE AUSTRALIAN GOVERNMENT

In April 2015, the Commonwealth Government established a National Ice Taskforce to provide advice to Government on the impacts of ice in Australia and actions needed to address this growing problem. The Taskforce found that law enforcement agencies have responded strongly to disrupt the supply of ice, but despite these efforts, the market for the drug remains strong. It recommended that governments focus action on reducing the demand for ice and reducing the harm it causes, while enhancing efforts to disrupt supply in key areas.

In response to the findings of the Taskforce, and in consultation with the Australian National Advisory Council on Alcohol and Drugs, the Commonwealth Government has developed a comprehensive package of action across five key areas to tackle this problem head on.

This package is supported by almost \$300 million in new funding. This includes an additional \$285.2 million to reduce the demand for ice and the harm it is causing through the delivery of locally-based and targeted solutions. This also includes an additional \$13 million to introduce new Medicare Benefits Schedule (MBS) items for Addiction Medicine Specialists. The measures from this package will form part of the new National Ice Action Strategy, and are in addition to the current funding allocation of up to \$310 million for treatment services.

### 1. Empower local communities and more support for families

Provide an additional \$24.9 million to help families and communities by providing the resources, information and support they need to respond to ice and develop solutions tailored to their local needs:

- Establishing a new online portal of information for parents, students, teachers and community organisations ([www.positivechoices.org.au](http://www.positivechoices.org.au)).
- Funding up to 220 new Community Drug Action Teams that bring together community groups to reduce drug-related harms, including through local grant projects.
- Providing support to more than 1,200 community sporting clubs to deliver prevention messages about ice with a focus on rural, regional, remote and indigenous communities.
- Delivering evidence-based interactive online resources to support families and carers of those using ice and other drugs.

### 2. Target prevention and education to those most at risk

Enhance prevention activities and target populations known to be at risk of ice use under the existing National Drugs Campaign:

- Developing new evidence-based, targeted communication activities through the National Drugs Campaign to help to prevent the uptake of ice and encourage individuals and families to seek support and treatment.
- Enhancing school education programmes to include ice-related information to help prevent the uptake of ice.

### 3. Further investment in treatment and workforce support

Improve access to treatment, especially for rural, regional, remote and indigenous communities, and ensure our workforce is supported to deliver effective and flexible treatment approaches:

- Providing a significant investment of \$241.5 million for the delivery of further treatment services, with commissioning of these services undertaken by Primary Health Networks at the regional level to ensure local coordination and better patient management. This includes funding to support the delivery of indigenous-specific treatment services.
- Focusing efforts on expanding early intervention and support through online counselling and information.
- Providing an additional \$13 million to introduce new MBS items for Addiction Medicine Specialists to increase the availability of treatment.

### 4. Focused law enforcement

Enhance existing efforts to disrupt the supply of ice through better use of intelligence and international engagement, and targeting organised crime groups involved in the ice trade:

- Strengthening cooperation with key source and transit countries through developing a new international supply disruption strategy for ice and its precursor chemicals and:
  - Investing \$5 million in the Australian Crime Commission to deploy officers internationally to strengthen our ability to stop the supply of ice at its source
  - And increasing cooperation with China through a joint AFP-Chinese National Narcotics Control Commission taskforce focused on investigating organised criminal syndicates responsible for the exportation of ice to Australia.
- Strengthening the eligibility criteria of the Aviation Security Identification Card and Maritime Security Identification Card schemes to target serious and organised crime.
- Investing \$10 million from the proceeds of crime account – money taken from criminals to develop a pilot infrastructure platform that will inform the



design and development of a National Criminal Intelligence System and enhance our ability to share intelligence with state and territory partners.

- Continuing work with participating states and territories to pursue a national cooperative scheme on unexplained wealth.
- Investing \$1 million to roll out a national Dob in a Dealer campaign to encourage the public to report information on drug manufacture and distribution in their community.
- Disrupting the supply of ice into our regional and remote communities by exploiting existing capabilities through the Government's \$74 million National Anti-Gangs Squad.

## 5. Better research, evidence and guidelines

Provide an additional \$18.8 million to enhance our evidence base, deliver new guidelines and improve the quality of data and research on ice and other illicit drugs:

- Establishing a Centre for Clinical Excellence for Emerging Drugs of Concern to build the evidence base for what works.
- Developing evidence-based guidelines to support frontline workers to respond to ice and expanding training to better support doctors, nurses and other health and community workers to provide screening and brief interventions.
- Increasing the quality of population data on illicit drugs.
- Improving our data to better understand our demand for alcohol and drug treatment.
- Expanding data collections that monitor alcohol and other drug misuse and overdoses to assist in the detection of emerging drug trends.

This extensive package builds on the Commonwealth's current efforts to combat ice and other illicit drug use in Australia.

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The Department of Health (December 2015). *Taking action to combat ice*. Retrieved from [www.health.gov.au](http://www.health.gov.au) on 27 January 2016.

# Ice report marks a welcome shift in thinking towards prevention and treatment

## NICOLE LEE REVIEWS THE FEDERAL GOVERNMENT'S PROPOSED RESPONSE TO AUSTRALIA'S METHAMPHETAMINE PROBLEM

The federal government on Sunday released the final report of, and its response to, the taskforce established in response to growing community concern around crystal methamphetamine, or ice. The government has announced a significant funding injection of nearly A\$300 million over four years – mostly reportedly new funding – for improved treatment services and community awareness.

The report and the government's response to it mark a shift in focus towards support for better health responses. Will it be effective?

### METHAMPHETAMINE USE IN AUSTRALIA

Methamphetamine comes in several forms – mainly powder ('speed'), paste ('base') and crystal ('ice'). They are all the same drug but vary in potency, purity and strength. Ice is by far the strongest.

Australia has one of the highest rates of methamphetamine use in

the world. However, the rate of use has declined over the past 15 years and currently sits at around 2% of the population.

What has changed in the past few years is the rise in the preference for ice. Around half of regular methamphetamine users prefer ice. There has also been an increase in people using weekly (which is associated with dependence), increased purity and a decrease in price.

This created a perfect storm for significant problems.

While not an epidemic by any definition, the increase in ice use has resulted in a significant increase in problems and more users needing health services – including emergency departments, ambulances and specialist drug treatment services. This has created

significant distress for users, their families, and health professionals.

### PREVENTION AND TREATMENT

Prevention will always be a crucial part of the picture. The report recommended some new investment in prevention activities. This is largely through the Australian Drug Foundation's Good Sports Program. But expanding treatment is of higher priority than prevention activities, given that new uptake of methamphetamine appears relatively limited.

Despite more than two decades of research, no medicines have strong evidence for their effectiveness in treating methamphetamine dependence. Only a handful show promise. This leaves a gap in treatment options.

The report and the government's response to it mark a shift in focus towards support for better health responses. Will it be effective?





What Australia needs is a flexible, well-funded treatment system and an agile, confident workforce that can respond to any emerging trends in drug use as they arise.

However, there are effective psychological interventions. The taskforce recommended strengthening these.

They include:

- Two to four sessions of two well established psychological therapies – motivational interviewing and cognitive behaviour therapy (CBT). This helps heavily dependent methamphetamine users cut down or stay off the drug and also reduces depression.
- Twelve weeks of acceptance and commitment therapy, a type of CBT combined with mindfulness, a meditative technique to focus people on the present, is effective in reducing use. However, about 70% of people drop out before treatment is completed.
- Short- and long-term residential rehabilitation is also effective, but the dropout and relapse is high.

Research also shows methamphetamine users have the most successful treatment outcomes of all drug users when they receive quality, evidence-based treatment.

Together, these results indicate that a number of treatment options are effective – and that longer treatment is not necessarily better.

Treatment experts generally recommend a stepped care model.

Stepped care involves starting with the least intensive intervention that is likely to be effective and stepping up or down in intensity from there.

Most people who access methamphetamine treatment choose outpatient counselling, so it is important to ensure that programs are easily accessible and staff offering these services are well supported.

The taskforce report also recommended expanding online treatment options, and research into low-intensity methods.

There is a high risk of relapse after treatment. Stopping is one thing. Staying stopped over time is more difficult. Around 80% of people have relapsed one year after residential rehabilitation.

Well-funded post-treatment support – such as outreach, follow-up support and low-intensity intervention – is needed to help people stay off ice. The report's recommendations are relatively limited in this area, but have highlighted the importance of service linkage with social, educational and vocational long-term supports.

## TARGETING SPECIFIC POPULATIONS

There is a dearth of services in regional areas, which will receive a much-needed boost.

The report also contained

important recommendations about boosting services for indigenous people, young people, and people in correctional facilities.

Families are particularly affected by methamphetamine use and often receive mixed messages about how they should respond. The report highlighted the struggle families face and its first recommendation is the development of information and resources to support families and communities. The government also announced funds to support this.

The report also highlights the need to address ice and other drug use in workplaces.

The report recommends ensuring health workers are able to respond more effectively to methamphetamine. This includes updating existing guidelines, most of which are more than ten years old.

## SO, WHAT NOW?

Ultimately, drug trends come and go. The switch among users from speed to ice, and the increase in problems as a consequence, has highlighted the gaps in Australia's health system and its ability to respond quickly to unexpected changes in treatment presentations.

The proof of the pudding will be in the eating, especially as it looks as though the bulk of the funding will go through the Primary Health Networks tied to mental health delivery, rather than the specialist alcohol and drug treatment system. In the past, linking mental health and alcohol and drug treatment services has not been advantageous to the drug treatment sector. Good implementation is going to be key.

What Australia needs is a flexible, well-funded treatment system and an agile, confident workforce that can respond to any emerging trends in drug use as they arise.

Nicole Lee is Associate Professor at the National Drug Research Institute, Curtin University.

## THE CONVERSATION

Lee, N (6 December 2015). *Ice report marks a welcome shift in thinking towards prevention and treatment*. Retrieved from <http://theconversation.com> on 7 December 2015.

# Will Australia's response to ice be effective?

The Australian Crime Commission has identified crystal methamphetamine, or ice, as the highest risk of all illicit drugs available in Australia. But will the government's response to the issues set out in the National Ice Taskforce's final report be effective in tackling the problem? Terry Goldsworthy and Laura McGillivray observe that the national taskforce has presented a framework for tackling the multiple issues ice presents for Australian society. It is now in government's hands to take this framework and implement real initiatives to have any chance of success.

## AUSTRALIA'S ICE PROBLEM

The report presents a comprehensive picture of ice in Australia. It draws on mounting evidence in an attempt to justify a full-bodied response to the problem.

The report suggests there are more than 200,000 ice users in Australia – but it notes that this figure is likely conservative.

According to the *National Drug Strategy Household Survey*, levels of methamphetamine use have remained stable since 2010. However, new evidence presented to the taskforce from the National Drug and Alcohol Research Centre (NDARC) suggests the use of ice by regular and dependent users has increased each year from 2009 through to 2014.

The taskforce observed higher levels of use in young people, the unemployed and LGBTI people. The taskforce suggests the integral role of social networks in supply and distribution are leading to ice's 'normalisation' within user groups. It has also been flagged as an emergent issue for indigenous, regional and remote communities, and possibly inmate populations.

Other notable trend changes include a 22% decrease in use of methamphetamine's powder forms since 2010. This was associated with a doubling in ice use to more than 50% of the 2.1% reporting use in the general population in 2013.

A Melbourne study corroborated these findings. It indicated that users reported a transition from powder to crystal forms. Weekly or more frequent ice use increased by 10%. Consumption frequency of powder forms declined.

NDARC reported that injecting behaviours have also become more prevalent nationally. Ice use among injecting drug users has increased by 52% in the past decade. The most common routes of administration are smoking and injecting – both of which are closely linked with developing dependence and other health risks.

Dependent ice users have complex physical and mental health needs, which the health sector is meeting at the coalface. The Australian Medical Association has called for resources to better support and equip health workers who are experiencing the increased severity

of ice-related health conditions. The need to improve supports for frontline services is a recurrent theme in the taskforce's report.

Ice has proven itself to be a challenging opponent in the face of amplified law enforcement efforts. Attempts to disrupt its supply have helped to reveal the nature of the problem. ACC data shows that, excluding MDMA, the number of amphetamine-type substances (ATS) detected at the border reached record heights in 2013-14, as did national ATS seizures and arrests in the same period.

Within this data, ice emerged as a standout. The number and weight of detections grew at a considerably greater rate than other ATS detections.

In tackling this problem, the prevailing message from across sectors has been that the government must learn from experience and avoid adopting a blinkered law enforcement approach. Rather, the response must be measured, multifaceted and generate substantive policy through a fair allocation of resources.

*The taskforce acknowledges that this war will not be won overnight and will not be won by law enforcement alone. It recognises that practical programs and supportive funding need to be put in place to address those already using ice and those susceptible to using it.*

## WHAT THE TASKFORCE RECOMMENDED

The taskforce is just one of many recent Australian governmental responses to ice. Others include a Victorian parliamentary inquiry in 2014 and a current federal joint parliamentary committee inquiry.

These other inquiries have primarily focused on law enforcement efforts. The taskforce, however, focused on opportunities to improve education, health, law enforcement and other policies across all levels of government.

In its final report, the taskforce identifies five areas of priority, and it makes 38 recommendations to address these. The five areas are:

- Prioritising support for families, workers and communities to better respond to people affected by ice
- Increasing efforts to reduce demand for ice through prevention activities
- Recognising that ice users need treatment and support services that cater to their needs
- Disrupting drug trafficking and supply networks through a more co-ordinated and targeted approach, and
- A more rigorous approach to research and regular





reporting is needed to strengthen Australia's response and keep it on track.

*Having identified where the stakeholders are failing, the challenge will be to get them to recognise these failings and move forward in a spirit of co-operation.*

The report echoes the comments of senior police officers from Queensland, Tasmania and the Australian Federal Police that Australia cannot just arrest its way out of the war on ice.

The taskforce notes that the ice market has been extraordinarily resilient due to manufacturing processes, ease of transport, the dichotomy of local crime syndicates as producers and the influence of transnational crime groups as importers.

Additionally, the taskforce recognises the lack of mature collaboration and co-ordination arrangements between Commonwealth, state and territory law enforcement agencies. Its report observes that challenges remain in ensuring a unified response and the timely exchange of intelligence in relation to ice.

## WILL IT WORK?

The taskforce acknowledges that this war will not be won overnight and will not be won by law enforcement

alone. It recognises that practical programs and supportive funding need to be put in place to address those already using ice and those susceptible to using it.

Having identified where the stakeholders are failing, the challenge will be to get them to recognise these failings and move forward in a spirit of co-operation.

The report argues that the Australian government needs to:

*... introduce a simplified governance model to support greater cohesion and coordination of law enforcement, health, education and other responses to drug misuse in Australia, with a direct line of authority to relevant ministers responsible for contributing to a national approach.*

The taskforce has presented a framework for tackling the multiple issues ice presents for Australian society. It is now in government's hands to take this framework and implement real initiatives to have any chance of success.

**Terry Goldsworthy** is Assistant Professor in Criminology, Bond University.

**Laura McGillivray** is Adjunct Teaching Fellow, Faculty of Society and Design, Bond University.

## THE CONVERSATION

Goldsworthy, T and McGillivray, L (8 December 2015). *Ice report marks a welcome shift in thinking towards prevention and treatment.* Retrieved from <http://theconversation.com> on 8 December 2015.

# IT'S TIME TO CHANGE: A NEW NATIONAL ICE STRATEGY

An opinion piece by **John Coyne** and **Vernon White** of the Australian Strategic Policy Institute in support of their report on the direction of the nation's methamphetamine strategy

**T**omorrow, ASPI's Border Security Program will launch its new Special Report on crystal methamphetamine ('ice'): *Methamphetamine: focusing Australia's national ice strategy on the problem, not the symptoms.*

Australia's seemingly unquenchable thirst for ice has created major social, health and law enforcement challenges for all levels of government and the bureaucracy.

The problem, although complex, can be summarised simply. A large proportion of Australians (by global standards) use ice – and they do so frequently. Despite law enforcement agencies' record seizures, the price of ice for Australian users is statistically stable, and the drug's availability is spreading from capital cities to bush towns. From street dealers to global organised crime syndicates, there are big profits to be made in Australia's ice market. Australia's families and communities are feeling the impacts of this problem daily.

There's no evidence or indication that current strategies are decreasing the demand, supply or harm from the drug. The traditional programmatic approach to counter illicit drugs – with its multipronged health, education and law enforcement strategies – has failed to prevent the problem or address it in a meaningful way.

As is often the case in Australian policy circles, extraordinary challenges result in extraordinary policy measures – in this case, the establishment of the National Ice Task Force.

To be fair, Australia's National Drug Strategy has a range of innovative and highly successful components. But, as in any large system, if the strategic software for integrating the various subprograms has too many bugs, there'll be a lot of error messages. While neither arrests nor rehabilitation on their own will fix the ice challenge, that fact doesn't necessarily support the adoption of extraordinary powers or policies.

To address this problem, the National Ice Task Force must do more than recommend new policy initiatives to target supply, demand and harm reduction.

There are no simple solutions for Australian policymakers trying to address the 'ice epidemic'. In our report, we outline and discuss an alternative strategic framework to respond to the Australian ice challenge. Contrasting with more traditional responses to drug problems, we argue that Australia needs a paradigm shift in its design and delivery of an ice strategy.

We argue strongly that Australia's drug policymakers ought to take a principled approach to the development

of an ice strategy. This approach needs to be strategically focused on reducing harm to Australian communities, not on seizing drugs or making arrests. With this focus, strategists and policymakers will be able to develop surgical interventions to disrupt the factors that contribute to harm, and not merely the symptoms of the problem.

In our proposed strategy, law enforcement isn't focused on arrests, prosecutions, custodial offences or seizures, as none of those will have a guaranteed impact on the problem. The focus is on means to reduce the availability of drugs, the disruption of user behaviour and the integration of education and health initiatives.

We don't advocate the decriminalisation of ice or ice use. Instead, we urge the government to underpin its National Ice Strategy with three key principles: integration, innovation and disruption.

Developing an integrated National Ice Strategy will involve substantially more than a series of good ideas linked under the banner of a single title. Reducing drug harm at the national level requires an array of activities. The policy challenge involves more than the management of a complex system of measures. Rather, genuine strategic harm reduction will require networks of systems that have operational and managerial independence. The

Australia's seemingly unquenchable thirst for ice has created major social, health and law enforcement challenges for all levels of government and the bureaucracy.



# Methamphetamine: focusing Australia's National Ice Strategy on the problem, not the symptoms

## Executive summary from an **Australian Strategic Policy Institute** report

Australia's seemingly unquenchable thirst for crystal methamphetamine (or 'ice') has created a major social, health and law enforcement challenge for all levels of government and the bureaucracy. The traditional programmatic approach to counter illicit drugs – with its multipronged health, education and law enforcement strategies – has failed to prevent the problem or address it in any meaningful way. The formation of the National Ice Task Force in 2015 arguably shows that existing policy initiatives are at best holding some ground in the crisis.

The problem, although complex, can be summarised very simply:

- A significantly large proportion of Australians (by global standards) use ice, and they do so frequently.
- Despite law enforcement agencies' record seizures, the price of ice for Australian users is statistically stable, and the drug's availability is spreading from capital cities to bush towns.
- From street dealers to global organised crime syndicates, there are big profits to be made in Australia's ice market.
- Australia's families and communities are feeling the impacts of this problem daily.

To address this problem, the National Ice Task Force is going to have to do more than recommend a few new policy initiatives to target supply, demand and harm reduction.

In contrast with more traditional responses to drug problems, this report argues that Australia needs a paradigm shift in its design and delivery of an ice strategy. Case studies of Australia's response to its 1990s heroin epidemic and Ottawa's strategy since 2009 to deal with crack cocaine reveal a number of valuable lessons for policymakers. While this report doesn't advocate the wholesale adoption of the 'heroin strategy' or the 'Ottawa approach', it argues strongly to take a principled approach in the development of an ice strategy that's strategically focused on reducing harm to Australian communities, not on seizing drugs or making arrests. With this focus, strategists and policymakers will be able to develop surgical interventions to disrupt the factors that contribute to harm, and not merely the symptoms of the problem.

In this strategy, law enforcement isn't focused on arrests, prosecutions, custodial offences or seizures, as none of those will have a guaranteed impact on the problem. The focus is on means to reduce the availability of drugs, the disruption of user behaviour and the integration of education and health initiatives.

The report doesn't advocate the decriminalisation of ice or ice use. Instead, it argues that the National Ice Strategy should consider three key points:

- **Integration:** Drug strategies have a better chance of being successful when all of their initiatives are integrated into a strategically focused harm reduction strategy.
- **Innovation:** Education, health and law enforcement stakeholders should be free from the limitations of wholly quantitative performance measures.
- **Disruption:** Initiatives to tackle the ice problem should be focused on the disruption of the problem, rather than the treatment of symptoms of the problem.

Coyne, J, White, V and Alvarez, C (October 2015). *Special Report: Methamphetamine – Focusing Australia's National Ice Strategy on the problem, not the symptoms*, p.6. Retrieved from [www.aspi.org.au](http://www.aspi.org.au) on 5 November 2015.

education, health and law enforcement systems involved haven't been developed as a single system. In this 'system of systems' environment, the National Ice Strategy will need to link and integrate the various systems so that the whole is more than the sum of its parts.

Current law enforcement decision-making, from strategic to tactical levels, is focused on achieving higher seizure rates as opposed to harm reduction. Although those mightn't always be mutually exclusive goals, higher seizure rates won't always result in the most efficient harm or supply reduction. From a performance measurement perspective, the performance outcomes of more innovative enforcement actions, such as offshore disruption are often less tangible than direct seizures. While drug seizure rates remain an important performance measure for law and border enforcement agencies, pressure from governments to increase those rates should be reduced. Policymakers should review

the impact that the use of drug seizure rates as a police performance measure has on innovation.

Our current strategies' lack of success highlights the possibility that traditional programmatic or functional approaches to the problem might not be efficient or effective. In part, this could be because the adversarial model doesn't recognise that the focus of the activity at the strategic level is not on defeating a drug or those who sell or use it. Arguably, the strategic intent of programs such as Australia's National Ice Action Plan is concerned with reducing the harm to the community that ice creates.

**John Coyne** is a senior analyst at ASPI.

**Vernon White** is a visiting fellow at ASPI.

Coyne, J and White, V (12 October 2015). 'It's time to change: a new national ice strategy', *The Strategist*. Retrieved from [www.aspi.org.au](http://www.aspi.org.au) on 5 November 2015.

# Sickness or scourge, Australia's ice problem can't be summed up in soundbites

Mixed messages reflect a longstanding tension in public policy and legal debates about drug use, observe academics **Jarryd Bartle**, **Adrian Carter** and **Kate Seear**

Over the past week, we've seen two conflicting messages about the use of crystal methamphetamine, commonly known as 'ice'.

On the one hand, Independent Tasmanian Senator Jacquie Lambie has spoken about her son's struggle with ice addiction: "I refuse to watch, helpless, as ice seizes my child and turns him into a stranger," she said. Lambie claims her son is no longer himself, and that she is dealing with the drug, and no longer a person.

Lambie has also called for "addicts" to undergo involuntary treatment for their addiction, a stance that has been criticised by some experts.

In contrast, the federal government announced a new policy priority that would toughen punishments for people on ice who attack health workers as well as a new "Dob in the Dealer" campaign designed to reduce drug supply.

Herein lies the central policy dilemma. Are addicts sick and helpless victims with little control over their own behaviour, or brazen criminals who deserve to be punished accordingly?

These mixed messages reflect a longstanding tension in public policy and legal debates about drug use. How we respond to this dilemma depends in part on how we understand drug 'addiction'.

## Ice addiction as a 'brain disease'

The view that 'ice addicts' are hijacked by a drug that overwhelms their behaviour is supported by neuroscience research that suggests addiction is a 'brain disease'.

The brain disease model of addiction is most prominently advocated by the United States National Institute on Drug Abuse which funds around 85% of addiction

research worldwide. According to the brain disease model, addiction is a chronic medical illness. This model commonly cites differences between the brains of addicts and non-addicts to explain the compulsive and involuntary nature of addiction.

Senator Lambie's stance is consistent with the brain disease model of addiction, in that she understands drug use to be compulsive and involuntary.

But if ice addicts are hijacked by changes in their brain due to chronic ice use, should they be held responsible for their behaviour? Wouldn't their addiction, on this view, make them less – not more – culpable? This is where some of the tensions in how politicians speak about drug use become most obvious.

## But ice users have some control

Not everyone agrees addiction is a real condition, nor that it's a brain disease. Critics come from a variety of sources, but commonly centre on different conceptualisations of 'addiction'.

Libertarian critics see drug addiction as the hedonistic pursuit of pleasurable substances, no different than other pleasures we engage in, such as sex or food. For these critics, problems arise only when people who use drugs make poor choices, prioritising immediate desires over longer-term needs.

Others, including one of us, have argued that neuroscience research does not prove that drug addiction is a 'brain disease'. At best, neuroscience shows that some

Herein lies the central policy dilemma. Are addicts sick and helpless victims with little control over their own behaviour, or brazen criminals who deserve to be punished accordingly?



individuals have developed changes in brain function and structure that make decisions not to use drugs such as ice more difficult.

The view that individuals are unable to control their drug use is inconsistent with other sorts of evidence. Even seemingly severely addicted people are able to control, reduce or stop their drug use following changes in their life, such as marriage or the birth of a child. In fact, if people didn't maintain some control over their drug use, it's hard to imagine how anyone would recover, as the vast majority do.

Drug use is also sensitive to changes in the cost of drugs in ways that are hard to reconcile with the view that people who use drugs are suffering from a disease that robs them of control over their behaviour.

Other scholars question the push to conceptualise certain behaviours as 'pathological' or 'compulsive', on the basis that it undermines an individual's agency. For these scholars, models of addiction that portray individuals as 'sick' and

in need of state protection can be hugely damaging, creating and reinforcing the stigma often associated with drug use. It also does not account for the fact that people who use drugs are a diverse group with a range of experiences.

### **The need for informed, rational policy**

Over the coming months the federal government's National Ice Taskforce will develop a National Action Strategy to tackle the harms associated with ice. But so far the debates about policy priorities have been hampered by inconsistent messages about drug use, drug effects, drug addiction and the characteristics of people who use drugs.

Attributing ice addiction to a 'brain disease' is not helpful to our understanding of ice use, and grossly distorts the scientific evidence. But while we're sceptical of the 'brain disease' account of addiction, the alternatives are multifaceted and complex.

Policymakers and politicians

must go beyond simplistic accounts of drug use and addiction, ideally in ways that exceed notions of addicts as either sick or criminal. The emphasis should instead be on proven harm-reduction approaches, including increased access and funding to treatment and other support programs that respect the dignity and humanity of people who use drugs.

**Jarryd Bartle** is Lecturer at Deakin University.

**Adrian Carter** is Senior Research Fellow at Monash University.

**Kate Seear** is Academic Director of Springvale Monash Legal Service and Senior Lecturer in Law at Monash University.

## **THE CONVERSATION**

Bartle, J, Carter, A and Seear, K (19 August 2015). *Sickness or scourge, Australia's ice problem can't be summed up in soundbites*. Retrieved from <http://theconversation.com> on 12 October 2015.

These mixed messages reflect a longstanding tension in public policy and legal debates about drug use. How we respond to this dilemma depends in part on how we understand drug 'addiction'.



# AWARENESS CAMPAIGNS NEED TO TARGET THE REAL VICTIMS OF ICE

“Awareness” campaigns are not the most appropriate way to address harmful methamphetamine use. In fact, fear-based approaches can increase stigma which possibly drives people away from, rather than towards, treatment, write **Brendan Quinn** and **Paul Dietze**

This week the federal government launched a television advertising campaign to warn young people and their families about the harms of using crystal methamphetamine, also known as “ice”. The first ad in the A\$9 million campaign, depicting ice-fuelled violence in the home and a hospital emergency department, will run for four weeks on television and six weeks online.

The government also set aside A\$20 million in Tuesday’s budget for ice awareness campaigns over the next two years. This comes as the Commonwealth government prepares its interim National Ice Taskforce report, which aims to develop a collaborative federal-state response to the drug.

But international evidence suggests such “awareness” campaigns are not the most appropriate way to address harmful methamphetamine use. In fact, fear-based approaches can increase stigma which possibly drives people away from, rather than towards, treatment.

## No methamphetamine epidemic

Australian media outlets and politicians claim we’re facing a nationwide “ice epidemic”. But ice is just one – albeit typically very pure – form of methamphetamine and the most up-to-date research estimates that the proportion of Australians who have used any type of methamphetamine (ice, “speed” powder) in the previous year has remained relatively stable for at least the last decade.

Nevertheless, the government and media’s continued use of hyperbolic language – in addition to a tendency to ignore and sometimes dismiss public health experts’ advice on ice – has the potential to incite unnecessary fear and misinform the public about this supposed “menace”.

Victorian premier Daniel Andrews, for instance, recently claimed 80,000 Victorians had used the “evil” drug ice in the previous year. *ABC Fact Check* subsequently investigated the accuracy of this figure and, based on the most recent *National Drug Strategy Household Survey* (NDSHS) and expert advice, concluded that the statement was not supported by data.

## Use and harm

According to the NDSHS, in 2013 around 2% of the



*The government and media’s continued use of hyperbolic language – in addition to a tendency to ignore and sometimes dismiss public health experts’ advice on ice – has the potential to incite unnecessary fear and misinform the public about this supposed “menace”.*

Australian population used any methamphetamine (speed powder, ice or “base”) in the previous 12 months. Only about 16% of these “recent” methamphetamine users reported using the drug once a week or more.

Regardless, using methamphetamine – particularly frequent and heavy use – is associated with serious psychological, physical, social and financial harms.

The risk of experiencing such effects is likely to have increased due to the dramatic rise in purity of methamphetamine in recent years. The average purity of speed powder and crystal methamphetamine seizures in Victoria increased from 12% to 37% and 21% to 64% respectively in the four years up to 2013.

It’s therefore crucial we that don’t undermine the experiences of individuals, families and communities impacted by the harmful use of the drug.

Rather, we need to accurately define the issue, including the nature and extent of methamphetamine use and related harms in rural and regional areas, to allow the development and implementation of cost-effective, evidence-based and timely responses.

## Awareness campaigns

Numerous studies have indicated “what works” with regard to public awareness, education and prevention strategies which aim to reduce harms related to licit substances, such as tobacco use and drink driving. But there is little evidence that similar initiatives targeting illegal drugs are effective.

The limited available research suggests that the well-known, graphic Montana Meth Project and Faces of Meth advertising campaigns in the United States are costly, ineffective and possibly even counterproductive.

The findings of one study suggest that the Montana Meth Project might actually increase acceptability and decrease perceptions of risk relating to using methamphetamine.

Another noted that:

*“When accounting for a pre-existing downward trend in meth use ... [the campaign’s] effects on meth use are statistically indistinguishable from zero.”*

Concerns about the efficacy of such initiatives are reflected in the HIV literature, which suggests that fear-based approaches can lead to stigma and poor health outcomes, such as from reduced treatment-seeking.

*Because people will choose to engage in drug use (both licit and illicit) regardless of the policies and programs in place, we need to encourage them to do so as safely as possible. We also must continue to inform the public about options for managing drug-related consequences and appropriate and available means for professional support.*

## Reducing the harms from meth use

Many of the evidence-based suggestions put forward by leading experts are not – at least currently – politically palatable and are therefore unlikely to be implemented anytime soon.

Extensive international research, for example, shows safe-injecting facilities such as the one in Sydney’s Kings Cross can have enormous public health benefits. These include preventing blood-borne virus transmission, freeing-up health-care resources and improving drug treatment pathways. However, we are yet to see a comparable service implemented in any of Australia’s other drug use “hot spots”.

It is also unlikely that Australia will soon follow the lead of nations and jurisdictions that have decriminalised, legalised or “controlled” previously illicit substances. These include Portugal and the United States, with Ecuador’s government currently debating the issue.

As many have said before, drug policies in Australia need to ubiquitously incorporate the proven approach

of harm-minimisation.

Although our National Drug Strategic Framework is underpinned by this principle, failure to adopt evidence-based techniques that reduce drug-related harms, such as more safe-injecting facilities and prison-based needle exchanges, indicates a discrepancy between policy and practice.

Because people will choose to engage in drug use (both licit and illicit) regardless of the policies and programs in place, we need to encourage them to do so as safely as possible. We also must continue to inform the public about options for managing drug-related consequences and appropriate and available means for professional support, such as telephone and internet counselling DirectLine and Counselling Online.

Addressing barriers to drug treatment and ensuring that such services are adequately resourced is vital to meeting the needs of methamphetamine and other drug users at the “pointy end” of the spectrum.

But providing targeted and relevant harm reduction education and ensuring that support is available to individuals who aren’t yet ready – or who don’t see a need – to use drug treatment is just as important for preventing the transition to more harmful use patterns.

**Brendan Quinn** is Research Officer (drug and alcohol epidemiology), Burnet Institute.

**Paul Dietze** is Head of Alcohol and other Drug Research, Centre for Population Health; Burnet Principal for Alcohol, other drugs and harm reduction, Burnet Institute.

## THE CONVERSATION

Quinn, B and Dietze, P (13 May 2015). *Awareness campaigns need to target the real victims of ice*. Retrieved from <http://theconversation.com> on 6 October 2015.

# EXPLORING ISSUES

## WORKSHEETS AND ACTIVITIES

The Exploring Issues section comprises a range of ready-to-use worksheets featuring activities which relate to facts and views raised in this book.

The exercises presented in these worksheets are suitable for use by students at middle secondary school level and beyond. Some of the activities may be explored either individually or as a group.

As the information in this book is compiled from a number of different sources, readers are prompted to consider the origin of the text and to critically evaluate the questions presented.

Is the information cited from a primary or secondary source? Are you being presented with facts or opinions?

Is there any evidence of a particular bias or agenda? What are your own views after having explored the issues?

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Brainstorm, individually or as a group, to find out what you know about methamphetamine use and addiction.

**1. What is methamphetamine, and what are its most common forms?**

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**2. What exactly is the drug commonly known as 'ice', and what are some of the ways it is used?**

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**3. What is the powdered form of methamphetamine commonly known as, and what are some of the negative effects of its use?**

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**4. What is psychosis, and is there any risk of psychosis associated with methamphetamine use?**

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## WRITTEN ACTIVITIES

Complete the following activity on a separate sheet of paper if more space is required.

*“The impact of ice on individuals is not limited to the health effects. Ice use has also been linked to a range of harmful behaviours and can affect a user’s social wellbeing.”*

*Department of the Prime Minister and Cabinet.*

Consider the above statement. Write a few paragraphs discussing the effects ‘ice’ can have on an individual’s wellbeing and the harmful behaviours its use can cause. Include detailed descriptions, and cite examples to back up your findings.

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Complete the following activity on a separate sheet of paper if more space is required.

*International evidence suggests fear-based “awareness” campaigns are not the most appropriate way to address harmful methamphetamine use. In fact, fear-based approaches can increase stigma which possibly drives people away from, rather than towards, treatment.*

Quinn, B and Dietze, P, *Awareness campaigns need to target the real victims of ice.*

Consider the above statement. Are you for or against fear-based awareness campaigns to reduce drug use? Form into two or more groups in your class and compile a list of points with which to discuss your arguments for or against the use of fear-based awareness campaigns, and include examples to back up your arguments. Share your thoughts and arguments with the other groups, and take a final vote to reflect the overall views of the class.

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## MULTIPLE CHOICE

Complete the following multiple choice questionnaire by circling or matching your preferred responses. The answers are at the end of the next page.

- 1. Crystal methamphetamine is considered to be in which category of drug?**
  - a. Depressant
  - b. Relaxant
  - c. Stimulant
  - d. Hallucinogen
  - e. Sedative
  - f. Anaesthetic
  
- 2. Crystal methamphetamine, also known as 'ice', is manufactured from which of the following?**
  - a. Plant-based products
  - b. Water
  - c. Opium
  - d. Cannabis
  - e. Chemicals
  - f. Crystals
  - g. Soil
  
- 3. What is the name given to the poor dental hygiene condition associated with the use of methamphetamine?**
  - a. Meth stink
  - b. Ice gums
  - c. Meth rot
  - d. Meth mouth
  - e. Black tooth
  - f. Ice mouth
  - g. Ice rot
  
- 4. Which of the following are alternate names used to describe 'ice'? (select all that apply)**
  - a. Meth
  - b. Shabu
  - c. Crystal meth
  - d. Glass
  - e. Weed
  - f. Shard
  - g. Pot
  - h. Smack
  - i. Hash
  
- 5. An 'ice' overdose can cause which of the following? (select all that apply)**
  - a. Fits
  - b. Breathing problems
  - c. Confusion
  - d. Clarity
  - e. Severe headaches
  - f. Calmness
  - g. Unconsciousness
  - h. Productivity
  - i. Heart attack



## MULTIPLE CHOICE

**6. Respond to the following statements by circling either 'True' or 'False':**

- a. Proportionally, Australia uses more methamphetamine than almost any other country. **True / False**
- b. The highest street price for 'ice' has been recorded in the Northern Territory with users willing to pay up to \$1,600 for one gram. **True / False**
- c. 'Ice' has a very short withdrawal and a quick recovery time. **True / False**
- d. The number of clandestine labs detected nationally reduced by 95% over the past decade. **True / False**
- e. In Australia, crystal methamphetamine is currently the favoured form of methamphetamine. **True / False**
- f. 'Ice' is easily concealed and trafficked, as it can be dissolved in oil and reconstituted as crystals. **True / False**
- g. A review of more than 80,000 Queensland roadside drug-tests between 2007 and 2012 found methamphetamine to be present in 41% of positive results. **True / False**

### MULTIPLE CHOICE ANSWERS

1 = c; 2 = e; 3 = d; 4 = a, b, c, d, f; 5 = a, b, c, e, g; 6 = a = T, b = T, c = F, ('ice' is more likely to cause dependence than other drugs, and has a very long withdrawal and recovery phase), d = F (the number of clandestine labs detected nationally has increased by 95% over the past decade), e = T, f = T, g = T.

- Illicit methamphetamine use is relatively high around the world, but South-East Asia in particular is a major hub for production (Lee, N, *Are we in the midst of an ice epidemic? A snapshot of meth use in Australia*). (p.1)
- The prevalence of methamphetamine use in Australia has remained stable since 2001, at around 2% of the population (*ibid*). (p.1)
- The number of methamphetamine users who prefer ice over other types of methamphetamine has doubled from 22% in 2010 to 50% in 2013 (*ibid*). (p.2)
- People in regional areas are twice as likely to use methamphetamine as those in major cities (*ibid*). (p.2)
- In 2013, 8.3% of the population had been a victim of an illicit drug-related incident such as verbal and physical abuse (Commonwealth of Australia, *What is the ice problem?*). (p.3)
- The manufacturing of ice produces hazardous waste that poses immediate risks to partners and children of ice users and manufacturers, local residents and emergency personnel (*ibid*). (p.3)
- More than 60% of Australia's most significant organised criminal groups are involved in the methylamphetamine market (*ibid*). (p.3)
- In 2013, the majority of monthly and yearly methamphetamine users were male, but weekly users were equally likely to be female (Roche, A, McEntee, A, Fischer, J and Kostadinov, V, *Methamphetamine use in Australia*). (p.4)
- Since 2007, the proportion of users who usually smoked methamphetamine has doubled (*ibid*). (p.4)
- From 2008/09 to 2012/13, the typical age of patients admitted to hospital for psychotic disorders due to methamphetamine increased from 20-24 years to 25-34 years (*ibid*). (p.7)
- More of those who recently used methylamphetamine in 2013 reported crystal as the main form used (50% of recent users) compared with powder (29% of recent users) (AIHW, *Trends in methylamphetamine availability, use and treatment: 2003-04 to 2013-14*). (p.9)
- More young people smoke than inject amphetamines and slightly more females and Indigenous Australians inject than smoke (*ibid*). (p.10)
- The proportion of new meth/amphetamine users opting for 'ice', rather than other forms of the drug, increased from 26% in 2007, to 43% in 2013 (AIHW, *'Ice' availability and use increasing; more seeking treatment*). (p.10)
- Treatment episodes for people who smoke amphetamines (including methylamphetamines) increased from 3.4% in 2003-04 to 41% in 2013-14 (*ibid*). (p.10)
- In 2013, around 1.3 million people – or 7% of Australians – had used meth/amphetamine in their lifetime (*ibid*). (p.10)
- Three serious harms related to the use of methamphetamine are the elevated risk of psychosis, violence, and cardiovascular problems (McKetin, R and Farrell, M, *Ice epidemic or not, heavier use and higher purity is increasing harms*). (p.11)
- The number of clandestine labs detected nationally has increased by 95% over the past decade (Knowles, L and Armitage, R, *Amphetamine arrests nearly double in past five years, according to Crime Commission's Illicit Drug Data Report*). (p.14)
- The *Illicit Drug Data Report* said there were more than 93,000 illicit drug seizures, 27 tonnes of drugs seized and more than 110,000 arrests in 2013-14. All figures are the highest on record (*ibid*). (p.14)
- In Australia, in 2011 there were 101 accidental drug deaths identified as involving methamphetamine (Department of the Prime Minister and Cabinet, *Final Report of the National Ice Taskforce*). (p.15)
- A large proportion of users – around 40% – take methamphetamine once or twice a year. However, around 25% take the drug at least once a week or more (*ibid*). (p.16)
- In 2013, fewer than 60% of users reported moderate, high or very high levels of psychological distress, compared with around 40% of all illicit drug users and 30 per cent of the general population (*ibid*). (p.17)
- Methamphetamine-induced psychosis can last from a few hours to a few days and subsides when the drug is no longer in the body (*ibid*). (p.17)
- In 2013, around 80% of ice users reported smoking as the main method of use, and around 9% reported injecting (*ibid*). (p.18)
- According to available data on self-reported use of illicit substances, methylamphetamine is the third most common illicit substance used in indigenous communities (Australian Crime Commission, *The Australian methylamphetamine market: The national picture*). (p.22)
- It is estimated that a clandestine laboratory manufacturing methylamphetamine generates up to 10kg of hazardous and toxic waste for each kilogram of pure methylamphetamine produced (*ibid*). (p.22)
- There was a 204% increase in methamphetamine abuse within the Aboriginal and Torres Strait Islander population in the 1994 to 2004 decade (AMA, *AMA Position Statement: Methamphetamine*). (p.25)
- Approximately 30% of dependent crystal methamphetamine users experience psychotic episodes each year (*ibid*). (p.25)
- Although the rate of dependence is relatively low, once users get hooked, it can be really hard to get off, and the relapse rate back to drug use is very high: more than 70% (Lee, N, *Forcing ice users into rehab won't solve the problem – here's what we need instead*). (p.28)
- In 2014, customs intercepted more than 50 times as much ice by weight than in 2010 (Department of the Prime Minister and Cabinet, *Final Report of the National Ice Taskforce*). (pp. 36-37)
- Ice use among injecting drug users has increased by 52% in the past decade (Goldsworthy, T and McGillivray, L, *Ice report marks a welcome shift in thinking towards prevention and treatment*). (p.43)

## **Amphetamine**

A psychostimulant drug that speeds up the messages going from the brain to the body. Common amphetamines are speed, ice, and crystal meth.

## **Amphetamine-type stimulants**

The amphetamine-type stimulant market is a large illicit drug market in Australia, with high levels of organised crime involvement in the importation, manufacture and distribution of amphetamine-type stimulants throughout Australia. The term covers a range of drugs from amphetamine, methylamphetamine (methamphetamine) and phenethylamine (a class of drug that includes MDMA, 'ecstasy'). These drugs increase dopamine levels in the brain, producing intense euphoria.

## **Base**

A form of methamphetamine supplied as a sticky paste.

## **Clandestine laboratories**

Also known as a 'clan lab'. Refers to any operation in which illicit drugs are covertly manufactured. They range from crude, improvised operations to dedicated operations using complex processes and equipment capable of producing large amounts of methylamphetamine.

## **Crystal methamphetamine**

A highly purified form of methamphetamine that is crystalline in appearance. It is often referred to as 'ice'.

## **Dependence**

Commonly described as a pattern of substance use that leads to clinically significant impairment or distress. It includes behaviours such as a tolerance to the drug, a withdrawal reaction in the absence of the drug, and an inability to regulate use of the drug or separate use from other aspects of social and work life. Dependence on drugs is influenced by a range of factors, but is also strongly related to patterns of drug use such as route of administration (the way the drug is taken) and duration of use.

## **Drug**

A substance that affects the processes of the mind or body and changes the way they normally function. Legal drugs include alcohol, tobacco, caffeine and prescription medicines. Illegal drugs taken for recreational purposes include meth/amphetamine, cannabis, cocaine and ecstasy.

## **Drug use/abuse**

The use of any substance under international control for purposes other than medical and scientific, including use without prescription, in excessive doses, or over an unjustified period of time. Abuse includes the continued consumption of a substance despite persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance.

## **Ice**

Also known as crystal meth, meth, crystal, shabu, batu, d-meth, tina, glass, or shard. It is the most potent form of methamphetamine, and is usually smoked or injected.

## **Illicit drug**

An illegal drug; a drug whose production, sale or possession is prohibited.

## **Licit drug**

A legal drug, whose production, sale or possession is not prohibited.

## **Methamphetamine**

Also called methylamphetamine. It is a stimulant drug available in a number of different forms. It is most commonly a colourless crystalline solid, and called a variety of names, such as crystal meth, crystal or ice. It can also be in the form of a paste, known as 'base'. In its powder form it is most commonly known as 'speed'.

## **Overdose**

An overdose is an amount or dose of a drug that is more than the body can tolerate.

## **Phenethylamines**

The most common form is MDMA (often referred to as 'ecstasy'). MDMA is most commonly in tablet form, but MDMA can also be sold as capsules, powders or crystals.

## **Possession**

Having control or custody of a drug. Possession applies both to drugs found on the person or their property, unless it is proven the drugs do not belong to that person.

## **Psychosis**

Heavy methamphetamine use increases the risk of psychotic symptoms beyond any family history of psychosis risk. These symptoms include hallucinations and paranoia, which are usually transient and subside when people stop taking the drug. But the risk of symptoms is made worse by use of other substances, and other risk factors for psychosis such as family history, cannabis and alcohol use.

## **Purity**

The amount of an illegal substance contained in a drug sample, determined by a quantitative analysis.

## **Seizure**

The confiscation by a law enforcement agency of a quantity of an illicit drug or regulated drug being used or possessed unlawfully.

## **Speed**

A powder form of methylamphetamine, usually of relatively low purity which can be snorted, injected or taken orally.

## **Stimulants**

They stimulate certain chemicals in the brain and increase alertness, heart rate, blood pressure and breathing rate.

## **Trafficking**

The selling, exchanging, agreeing to sell, offering for sale or having in possession for sale, a drug of dependence. If this is done in commercial quantities, the penalties are extremely severe.

## Websites with further information on the topic

Australian Crime Commission [www.crimecommission.gov.au](http://www.crimecommission.gov.au)  
 Australian Drug Foundation [www.adf.org.au](http://www.adf.org.au)  
 Australian Drug Information Network [www.adin.com.au](http://www.adin.com.au)  
 Australian Drug Law Reform Foundation <http://adlrf.org.au>  
 Australian Institute of Criminology [www.aic.gov.au](http://www.aic.gov.au)  
 Australian Institute of Health and Welfare [www.aihw.gov.au](http://www.aihw.gov.au)  
 Australian Medical Association [www.ama.com.au](http://www.ama.com.au)  
 Crystal Meth Anonymous [www.crystalmeth.org.au](http://www.crystalmeth.org.au)  
 Drug ARM Australasia [www.drugarm.com.au](http://www.drugarm.com.au)  
 Drug Aware <http://drugaware.com.au>  
 druginfo @ your library [www.druginfo.sl.nsw.gov.au](http://www.druginfo.sl.nsw.gov.au)  
 Families and Friends for Drug Law Reform [www.ffdlr.org.au](http://www.ffdlr.org.au)  
 Family Drug Support [www.fds.org.au](http://www.fds.org.au)  
 National Centre for Education and Training on Addiction <http://nceta.flinders.edu.au>  
 National Drug and Alcohol Research Centre <http://ndarc.med.unsw.edu.au>  
 National Drug Research Institute <http://ndri.curtin.edu.au>  
 National Drug Strategy [www.nationaldrugstrategy.gov.au](http://www.nationaldrugstrategy.gov.au)  
 National Drugs Campaign [www.drugs.health.gov.au](http://www.drugs.health.gov.au)  
 Somazone [www.somazone.com.au](http://www.somazone.com.au)  
 Turning Point [www.turningpoint.org.au](http://www.turningpoint.org.au)  
 Your Room <http://yourroom.com.au>

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