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10 June 2015

Committee Secretary Parliamentary Joint Committee on Law Enforcement PO Box 6100 Parliament House Canberra ACT 2600

Dear Sir/Madam

Re: Inquiry into Crystal Methamphetamine

Thank you for the opportunity to provide a submission to the Parliamentary Joint Committee on Law Enforcement's Inquiry into crystal methamphetamine.

The National Centre for Education and Training on Addiction (NCETA) is an internationally recognised research centre that works as a catalyst for change in the alcohol and other drugs (AOD) field. The Centre's mission is to build the capacity of health, law enforcement, human services and related sectors to respond to AOD-related issues and problems, such as crystal methamphetamine. NCETA is one of three national centres of excellence focusing on AOD issues in Australia. Its key focus is on systems change and the implementation of best practice at policy and managerial levels through to frontline workers.

Please find attached NCETA's submission. A range of law enforcement issues related to methamphetamine is outlined. Similarities and differences between the characteristics of methamphetamine and other illicit drugs and their implications for law enforcement are also noted. NCETA's submission specifically addresses the Inquiry's following terms of reference:

- (e) The nature, prevalence and culture of methamphetamine use in Australia, including in Indigenous, regional and non-English speaking communities.
- (f) Strategies to reduce the high demand for methamphetamines in Australia.
- (g) Other related issues.

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I wish the Parliamentary Joint Committee well with its deliberations.

Please do not hesitate to contact me the Committee requires further information or detail.

Yours sincerely

Professor Ann Roche Director National Centre for Education and Training on Addiction (NCETA) Flinders University





NCETA Submission

Parliamentary Joint Committee on Law Enforcement:

Inquiry into crystal methamphetamine

The characteristics of methamphetamine¹, particularly in its crystalline form, present particular challenges for law enforcement. Foremost among these is that methamphetamine and its precursors can either originate locally or overseas. Key issues include that methamphetamine:

- As a synthetically manufactured product, does not rely on plant based sources (as in the case for cocaine, heroin and cannabis)
- As a synthetic product it is not dependent on climatic characteristics which can limit the number of potential source countries or require hydroponic cultivation
- Is able to be imported into Australia as either a finished product or in precursor forms
- Precursors are available from within Australia and from a multitude of other countries, many of which are geographically close to Australia
- Can be made via a diverse range of processes using several different precursors (many of which have their own precursors) which are not necessarily controlled chemicals
- Is not as pungent or bulky as some other illicit drugs (such as cannabis) making it easier to conceal during importation.

The key challenges for law enforcement are summarised in Table 1.

	Fully synthetic, and not reliant on climate / hydroponic cultivation	Production is possible in small mobile laboratories	Made Locally	Made overseas imported as final product	Can be imported as either precursor or final product	Able to be made from non- controlled chemicals	Not bulky / pungent / hard to import	Large number of suppliers / importers
Cannabis			\checkmark	$\sqrt{2}$				
Heroin							\checkmark	
Cocaine				\checkmark				
Ice	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	

Table 1: Summary of key drug-related challenges for law enforcement

The multitude of production and distribution options for methamphetamine presents unprecedented drug supply reduction difficulties for the law enforcement sector. This must also be seen in the context of Australia being viewed as an extremely lucrative target for drug smuggling and production syndicates. A previous inquiry by the Parliamentary Joint Committee on Law Enforcement in 2011 found that illicit drugs are substantially more expensive in Australia compared with other countries (Parliamentary Joint Committee on Law Enforcement, 2011). In a global illicit drug market, this price difference makes Australia a destination country of choice for organised

¹ The terms methamphetamine and Ice are used interchangeably throughout this document, but it is noted that Ice, the crystalline form of methamphetamine, is only one form in which it is available for use.

² While the weight (but not the number) of cannabis seizures at the border increased in 2013-14 the overwhelming majority of seizures were of cannabis seeds (Australian Crime Commission, 2015).

criminal syndicates, particularly those producing methamphetamine on an industrial scale in East and South-East Asia.

Given the lucrative nature of the Australian drug consumer market, law enforcement may not have the same capacity to influence the market for methamphetamine compared with other illicit drugs, such as heroin or cocaine. This in turn, highlights the need for the implementation of robust demand and harm reduction measures. As (then) Australian Federal Police Deputy Commissioner Phelan highlighted during the Committee's previous inquiry in 2011:

Drugs in particular [are] just like every other commodity in the world: whether we are talking about copper or gold, the price is driven by the standard economic equation of supply and demand. Demand in Australia is high. The price is not the driver; it is demand, which is high (Committee Hansard, 17 February 2011, p. 45).

Since 2009-10, the number of seizures of amphetamine type stimulants (ATS)³ nationally has continued to increase, with the 26,805 ATS seizures reported in 2013-14 the highest on record (Australian Crime Commission, 2015). While the weight of national ATS seizures decreased by 36.8% between 2012-13 and 2013-14, the 4,076 kilograms seized nationally in 2013-14 was the third highest on record (Australian Crime Commission, 2015).

There was a record 26,269 ATS arrests in 2013-14 nationally, an increase of 18.4% from 2012-13. Consumer arrests accounted for the greatest proportion of arrests, comprising 76% of national ATS arrests in 2013-14 (Australian Crime Commission, 2015).

NCETA's submission specifically addresses the Inquiry's following terms of reference:

- (e) The nature, prevalence and culture of methamphetamine use in Australia, including in Indigenous, regional and non-English speaking communities.
- (f) Strategies to reduce the high demand for methamphetamines in Australia.
- (g) Other related issues.

(e) Nature, prevalence and culture of methamphetamine use in Australia

As with any illicit behaviour it is difficult to precisely ascertain the extent of methamphetamine use in Australia. Methamphetamine 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. Therefore the harms stemming from the use of this substance differ substantially from illicit drugs such as heroin, or cannabis, which have depressant effects. Since the crystalline form of methamphetamine, Ice, is the most potent form of methamphetamine, its use can be associated with a higher level of harm.

It is important to attempt to accurately estimate the extent and patterns of methamphetamine use. Australia has a number of well-established high quality, reliable data sets that provide information on patterns of use and trends over time. None of these data sets are complete in themselves.

³ The term amphetamine-type stimulants, encompasses drugs included under both the amphetamines and phenethylamines groupings.

Each provides an indication of drug use by different segments of the community and different aspects of use.

The most relevant data set available for estimating the population level of drug use is the National Drug Strategy Household Survey (NDSHS) conducted every three years from a national stratified random sample. The data are then weighted to ensure the most accurate depiction of levels and patterns of use across the country.

Population level methamphetamine use

Secondary analysis of NDSHS data undertaken by NCETA found that in 2013, 7% of Australians reported that they had used methamphetamine in their lifetime, and 2% reported using in the past 12 months (with 0.8% and 0.4% doing so in the past month and week respectively). The highest prevalence of 12 month methamphetamine use was recorded in 1998 at 3.7%. The NDSHS data indicate that since 2007 the proportion of Australians who have used methamphetamine in the past 12 months has remained relatively stable. However, it is noted that the NDSHS data is conservative even though it is a nationally representative sample. In addition, the situation may have changed since the data was collected two years ago.

Methamphetamine use among non-English speaking communities

The NDSHS data found that in 2013, approximately 0.8% of non-English speaking people reported using methamphetamine in the last 12 months⁴ (NCETA Secondary Data Analysis, 2015).

Methamphetamine use in Aboriginal communities

Anecdotal information suggests that methamphetamine use in Aboriginal communities is a major issue of concern. Recent research conducted among young Indigenous Australians aged 16-29 years supports this. The 2013 GOANNA Survey explored the behaviours and attitudes of Aboriginal and Torres Strait Islander young people towards sexually transmissible infections and blood borne viruses. Approximately 15% of the survey population reported that they had ever used methamphetamine while 9% reported that they had used methamphetamine in the last 12 months (Saulo, 2015). The survey also found that while 10% of users said that they only used methamphetamine, 65% reported using methamphetamine with three or more other drugs (e.g. cannabis, cocaine, ecstasy). In addition, young Indigenous methamphetamine users were more likely (than non-users) to have been in contact with the criminal justice system (Saulo, 2015).

Methamphetamine use among police detainees

The Drug Use Monitoring in Australia (DUMA) program investigates drug use among police detainees. This consists of an interviewer-assisted self-report survey and voluntary provision of a urine sample which is subjected to urinalysis to detect licit and illicit drug use. The proportion of detainees testing positive via urinalysis for amphetamines⁵ increased from 27.3% in 2012-13 to 35.8% per cent in 2013-14, the highest proportion reported in the last decade⁶.

⁴ Caution should be used in interpreting this figure due to the small sample size. It is likely that methamphetamine use may be higher among certain non-English speaking population groups.

⁵ This includes the results for all amphetamine-type stimulants including methamphetamine and ecstasy.

⁶ It should be noted that following administration, methamphetamine is metabolised into amphetamine, which could account for the high proportion of positive amphetamine results in urine testing.

During 2013-14 the proportion of detainees testing positive for methamphetamine⁷ was also the highest reported in the last decade, increasing from 25.9% in 2012-13 to 33.0% in 2013-14 (Australian Institute of Criminology, as cited in Australian Crime Commission [ACC], 2015).

In 2013-14, detainees were asked to self-report whether they had recently⁸ used methamphetamine, with 48.9% reporting recent use. Prior to 2013-14, detainees were only asked about their recent use of amphetamine (and not about methamphetamine use specifically). In 2012-13 the proportion of detainees self-reporting recent amphetamine (including amphetamine/speed/methamphetamine) use was 38.6%. Caution needs to be exercised in comparing self-reported recent methamphetamine use between 2013-14 and previous years due to the change in the self-reporting questions in 2013-14 (Australian Institute of Criminology, as cited in ACC, 2015). See Figure 1 for trends in amphetamine and methamphetamine use among police detainees over the past decade.



a. Urinalysis figures reported for 2013–14 reflect data collected in the third and fourth quarter of 2013 and the first quarter of 2014.

Figure 1: National proportion of detainees testing positive for methamphetamine or amphetamine compared with self-reported use, 2004–05 to 2013–14⁹

(Source: Australian Institute of Criminology, as cited in ACC, 2015)

Methamphetamine and other illicit drug use

According to the Ecstasy and Related Drugs Reporting System (EDRS), among regular ecstasy users, there has been a decline in recent (last six months) use of any form of methamphetamine from 84% in 2003 to 47% in 2014. Recent use of Ice also declined from 52% in 2003 to 20% in 2014 (Sindicich & Burns, 2014).

⁷ The DUMA urinalysis is able to separate the methamphetamine results from the broader grouping of amphetamine-type stimulants.

⁸ 'Recent use' in the DUMA program refers to reported use in the 12 months prior to arrest.

⁹ It is not possible to draw a conclusive comparison in self-reported use between 2012-13 and 2013-14 due to modifications in the self-reported questions in 2013-14.

Participants in the 2014 Illicit Drug Reporting System (IDRS)¹⁰ reported that while the recent¹¹ use of any methamphetamine (i.e. speed, base or Ice/crystal) remained stable, the recent use of Ice/crystal methamphetamine increased significantly from 55% in 2013 to 61% in 2014 (Stafford & Burns, 2014).

Changes to frequency and patterns of use

While the evidence suggests that Ice is not being widely used in the Australian community several important changes have occurred that have increased risks and harms.

While NCETA's secondary analysis of NDSHS data found that between 2010 and 2013 the proportion of Australians using methamphetamine users did not change, there were statistically significant changes to patterns of use. In 2013, the majority of monthly and yearly methamphetamine users were male, but weekly users were equally likely to be female. This gender difference was not apparent in 2010. Most users used the drug less than monthly, but the proportion of weekly users significantly increased from 9% in 2010 to 16% in 2013. Frequent use increases risk of dependence and other harms (NCETA Secondary Data Analysis, 2015). From a geographical perspective, NCETA's secondary analysis found that in 2013, 2.6% of the population living in outer regional/remote/very remote areas reported that they had used methamphetamine in the past 12 months. This compared to 1.6% in inner regional areas and 2.1% in major cities (NCETA Secondary Data Analysis, 2015). Given the smaller population bases in outer regional/remote/very remote, areas, the impact of methamphetamine use on those communities is likely to be more visible. This has important implications for addressing community concerns and the provision of appropriate law enforcement and other service responses.

Form and method of use

In 2007 and 2010, speed (powder, tablets, and capsules) was the form of methamphetamine most commonly in use. By 2013, Ice was the preferred form of methamphetamine with the use of Ice more than doubling since 2010 (from 22% in 2010 to 50% in 2013). The recent shift to Ice is concerning, as it is a particularly potent form of methamphetamine and can increase harms particularly when coupled with more frequent use (Roche, McEntee, Fischer & Kostadinov, 2015).

This finding is consistent with the purity of methamphetamine seizures by law enforcement agencies over the past decade. This shows a consistent increase across all jurisdictions after 2009-10 (ACC, 2015) (see Figure 2).

¹⁰ The IDRS is an annual survey of injecting drug users.

¹¹ The IDRS defines recent use as the six months preceding the interview.



Figure 2: Annual median purity of methamphetamine samples, 2004-05 to 2013-14 Source: ACC (2015)

There have also been changes in the mode of use of methamphetamine with smoking becoming the main mode of administration. Since 2007, the proportion of users who usually smoked methamphetamine has doubled (from 17% in 2007 to 41% in 2013) likely reflecting greater preference for Ice. In 2013, among Ice users who had used in the past 12 months, the majority (78%) preferred to smoke it (Roche, McEntee, Fischer & Kostadinov, 2015).

Data from users of Australia's needle and syringe program indicate that the proportion of respondents reporting methamphetamine as the last drug injected increased from 24% in 2009 to 29% in 2013. This trend may, in part, be due to a decline in heroin injection. In 2013, methamphetamine was the most commonly reported drug last injected in New South Wales (32%), Queensland (29%), South Australia (38%) and Western Australia (36%) (Iversen & Maher, 2014). The IDRS also reported a statistically significant increase in Ice as the drug injected most often in the last month from 15% in 2013 to 21% in 2014 (Stafford & Burns, 2014).

Harms

Harms associated with using Ice can result from:

- Mode of administration (e.g. if smoked there is a risk of respiratory disease, excessive ingestion and overdose; if injected there is a risk of blood borne diseases and injection site diseases)
- Level of purity (purity and concentration can vary greatly and higher purity is associated with risk of greater harms)
- Intoxication (implications for management by police, paramedics and hospital staff)
- Withdrawal (compared to alcohol and heroin withdrawal, acute methamphetamine withdrawal can be protracted)

• Chronic long term use (associated with impaired memory, regulation and executive function e.g. poor self-control).

Harms resulting from methamphetamine use including mental health and physical health issues are likely to increase with:

- Using more frequently
- Increasing purity and potency
- Concurrent use of multiple drugs, including alcohol.

The growing harms associated with changing patterns of methamphetamine use are reflected in significant increases in methamphetamine-related hospitalisations since 2008/09. In 2012/13, 35% of stimulant-related hospital separations were due to methamphetamine, compared to 19% in 2008/09 (Roche, McEntee, Fischer & Kostadinov, 2015).

Research suggests that although methamphetamine does not directly increase violent behaviour, it increases threat sensitivity and therefore increases the risk of aggression and violence (McKetin, Lubman, Najman, Dawe, Butterworth & Baker, 2014). This has important implications for ensuring that law enforcement personnel and other frontline workers are trained to respond sensitively and effectively to methamphetamine users who have used high doses and/or who may be experiencing low level psychotic symptoms (e.g. hallucinations, paranoia). A key behavioural management strategy is the use of verbal de-escalation by responding to the person in a calm and confident manner and reducing loud noises and sudden movements where possible (Jenner, Spain, Whyte, Baker, Carr & Crilly, 2006).

On occasions, Ice users will need to be physically restrained to protect themselves and others from harm. If restraint is required this must occur in a way that does not exacerbate risks of seizure, stroke, hyperthermia, hypertension or cardiac arrest. There are well established techniques to avoid these problems.

(f) Strategies to reduce the high demand for methamphetamine in Australia

It is important that a balanced approach, involving a range of supply, demand and harm reduction initiatives are used to address methamphetamine use in Australia. While supply reduction efforts are primarily the responsibility of law enforcement there is an imperative from the law enforcement, health and community services sectors to explore options for the implementation of effective demand reduction and harm reduction strategies.

Demand reduction and prevention

Demand reduction includes prevention and treatment with an emphasis on strategies that focus on preventing the uptake of drug use, delaying the first use of drugs, and reducing problematic use. Prevention activities are most likely to be effective when targeted to high risk groups, especially for low prevalence issues such as methamphetamine use, rather than the general population.

Reducing availability, supply and access are key prevention strategies. Australia is currently experiencing low price, ready availability and high levels of drug purity and these factors are likely to contribute to increased use and greater harm (Roche, 2015).

Ensuring that potential methamphetamine users are aware of the short and long term harms is an important prevention approach. This will ensure that the consequences of methamphetamine use are communicated more consistently and hence better understood.

At the same time, raising awareness of potential harms should not come at the cost of increasing stigma, or giving problem users a pessimistic view of the potential benefits of for treatment.

Harm reduction

There are a number of ways in which harm reduction measures can be used to address methamphetamine use for occasional and chronic or dependent users. Peer education and support are important and effective prevention and harm reduction strategies. Due to the unpredictable nature of drug effects, users should be encouraged not to use in isolation and to ensure that friends will provide care and support and seek help if needed. This has important implications for police attending drug overdoses.

In addition, education about the range of possible adverse consequences of use such as mood disturbances, paranoid ideation, irritability and health consequences can be used to encourage early intervention by users if adverse consequences arise.

Harm reduction measures can also be tailored for specific groups such as women, young people and Indigenous people.

(g) Other related issues

Workforce development

Law enforcement responses to methamphetamine users involve behavioural management strategies including de-escalation, and protecting the individual and others from the impacts of their behaviour.

In developing appropriate responses, a focus on workforce development is needed, including the professional development of frontline workers, to ensure that law enforcement, emergency services and drug and alcohol treatment services can respond more effectively to methamphetamine users.

A study conducted by NCETA in 2008 examined the workforce development needs of police in relation to responding to alcohol and other drug-related issues. It found that the most demanding incidents attended by police involved responding to methamphetamine-related issues (Roche, Duraisingam, Trifonoff & Nicholas, 2009). The study also highlighted the importance of adequate training for police personnel to assist them respond to methamphetamine-related behaviour (Roche, Duraisingam, Trifonoff & Nicholas, 2009).

A set of guidelines to assist police effectively and safely manage people with psychostimulant (i.e. amphetamine, methamphetamine, ecstasy, cocaine) toxicity were developed in 2004 with significant input from police (Jenner, Baker, Whyte & Carr, 2004). The guidelines reinforced that psychostimulant toxicity (resulting in irrational, impulsive, aggressive and/or violent behaviour) is primarily a medical emergency requiring appropriate responses. The guidelines were designed to

be used in conjunction with existing police policies and procedures and highlighted the importance of a collaborative approach between police, ambulance and other emergency personnel.

There is a need to ensure that law enforcement personnel are provided with appropriate and up-todate information and resources. It is therefore timely for the existing guidelines for police services to be reviewed and revised to incorporate contemporary and evidence-based advice and responses.

Treatment initiatives

Treatment for methamphetamine use can be effective and is especially important when someone using methamphetamine or their family/friends/associates becomes concerned about changes in their behaviour and/or ability to function normally (Roche, 2015).

In addition, treatment may need to be continued for prolonged periods before significant improvement is achieved. To date, relapse prevention (cognitive behavioural therapy) and motivational interviewing show most evidence of treatment effectiveness (Lee, 2015).

Strong supportive messages are needed that highlight that treatment is effective and can be provided in various forms.

Methamphetamine use and driving

There is increasing evidence that the recent use of methamphetamine, at least in high doses, can increase the risk of involvement in a road traffic crash as a driver (Victoria Police, 2007; Wilson, Stimpson, & Pagan, 2014). All Australian jurisdictions, as well as many others worldwide, have adopted the use of oral fluid testing to detect the presence of methamphetamine and other illicit drugs among drivers. This relatively non-invasive and simple roadside approach greatly increases the likelihood of determining the prevalence of drug driving (Davey & Freeman, 2009).

Oral fluid testing data from two jurisdictions highlight recent substantial increases in the proportion of drivers testing positive for the presence of methamphetamine compared with other illicit drugs.¹² In South Australia, in 2011-2012 there was a 108% increase in the detection of methamphetamine in all roadside driver screenings from the previous year (Thompson, 2012) (see Figure 3).

 12 Caution should be exercised when interpreting data about the prevalence of different illicit drugs detected in roadside testing. Under current technology, methamphetamine has a longer window of detection than delta 9 – Tetrahydrocannabinol. Therefore, the higher proportion of methamphetamine detections may not reflect broader community usage in any one year, but rather the ability to better detect methamphetamine, as compared to THC at roadside testing. Nevertheless, this factor would not influence the trend in methamphetamine detections over several years.



Figure 3. Proportion of drivers tested who returned a positive result for methamphetamine (MA), delta 9 – Tetrahydrocannabinol (THC), and methylenedioxymethamphetamine (MDMA) 2006/07 to 2011/12 in South Australia. Source: Thompson (2012).

Data from Queensland also highlight a recent increase in methamphetamine detections at roadside drug testing. Aggregated across all years between 2007-12¹³, methamphetamine was the drug most commonly detected followed by THC and methamphetamine/THC combined (see Figure 4) (Davey, Armstrong, & Martin, 2014).

There was, however, some variation in drug detection trends between 2008 when the rate of methamphetamine detections was twice that of THC detections, and in 2009 when the situation reversed and there were twice as many THC detections as methamphetamine detections. From 2010 onwards, methamphetamine was once again the dominant drug detected at roadside driver testing.

¹³ Note data from 2007 and 2012 were not from complete calendar years.



Figure 4: Number of drivers tested who returned a positive result for methamphetamine (MA), delta 9 – Tetrahydrocannabinol (THC), and methylenedioxymethamphetamine (MDMA), combinations thereof 2007-12 to in Queensland. Source: Davey et al. (2014).

The workplace as an intervention setting

There is a number of key intervention settings where drug and alcohol issues may be addressed. The workplace is a pivotal setting to address methamphetamine use and related harms but is often overlooked.

The workplace is an important setting for a number of reasons:

- Recent NDSHS data (i.e. 2013) analysed by NCETA indicate that 2.3% of the Australian workforce (approx. 232,000 employees) had used methamphetamine in the previous 12 months.
- Most methamphetamine users are employed.
- In general, those who are young (18-30 years old), male, and employed as tradespersons or technicians are most likely to use methamphetamine.
- Specific workforce groups have comparatively higher methamphetamine use prevalence:
 - o Wholesale trade employees
 - o Construction industry employees
 - o Mining industry employees
 - Hospitality industry employees
 - o Tradespersons
 - Male workers aged 20-29 years.
- Factors that contribute to differences in prevalence rates include:
 - o The demographic profile of workforce groups
 - o Availability/ease of access

• Workplace factors that cause fatigue such as long hours, fast paced work, shift work, fly in/fly out work or drive in/drive out work (Pidd, 2015).

The workplace offers a unique opportunity for early intervention and prevention strategies. Such strategies are likely to be particularly effective because:

- Employees spend a substantial amount of time at work, maximising exposure to early intervention and prevention strategies
- Methamphetamine (and other drug use) can negatively affect workplace safety, productivity and worker health, and employers are likely to support strategies to improve safety, productivity and worker wellbeing
- Workplace health and safety and industrial relations frameworks exist that can incorporate early intervention and prevention strategies in a cost effective manner that does not affect the workplace production process
- Prevention and harm reduction messages delivered in the workplace are likely to extend to the wider community (Pidd & Roche, 2015).

The workplace can also provide an effective pathway to treatment for employees as it can overcome major barriers to treatment such as individuals failing to recognise their use is a problem and lack of motivation to address their use. Detection of employee drug use by the employer is a tangible example for the employee that they do have a problem. The threat of job loss can be an effective motivator to seek treatment, and the promise of a job to return to following treatment can be an effective motivator to complete treatment.

Given the importance of the workplace setting workplaces can use a number of strategies to address methamphetamine use and related harms including:

- Training for supervisors and managers to:
 - o Identify signs and symptoms of use
 - Refer and support affected employees
 - Address factors that contribute to use
- Employee awareness/information on:
 - o Physical & mental health risks of use
 - Factors that contribute to use
 - Seeking assistance

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• Enhancing treatment pathways by linking/networking workplaces with community AOD (and other) service providers.

Reducing stigma

In order to minimise potential harms from methamphetamine use, it is important to encourage people into treatment, and ensure the provision of appropriate evidenced based care. It is crucially important to not stigmatise drug use. Stigmatising users reduces the prospect that those who need care will actually seek it (Roche, 2015).

Options for reducing stigma and discrimination of users include greater collaboration between law enforcement, health, community and emergency services.

Recommendations

NCETA recommends that:

- 1. A balanced approach involving supply, demand and harm reduction initiatives with a focus in prevention and early intervention is needed to address methamphetamine use in Australia.
- 2. There is an enhanced focus on workforce development particularly addressing systems and organisational issues as well as the needs of law enforcement personnel.
- 3. Law enforcement personnel are provided with relevant training to assist them to respond appropriately to methamphetamine-related incidents.

Please find attached the following recent NCETA publications to assist the Committee in its deliberations:

- *Methamphetamine use in Australia* an overview of current patterns and trends in methamphetamine use and associated harms.
- *'Ice' and the workplace* information on methamphetamine use and its implications for workplaces.
- *Methamphetamine: Effects and responses* information about current patterns of use, changes in frequency and mode of use along with emergent effects, negative consequences and intervention options.

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Methamphetamine use in Australia

Ann Roche, Alice McEntee, Jane Fischer, & Victoria Kostadinov

There is growing concern about methamphetamine use in Australia.

This document provides an overview of current patterns and trends in methamphetamine use and associated harms in Australia, with a particular focus on ice.

For more information and resources visit the NCETA website: http://nceta.flinders.edu.au/



National Centre for Education and Training on Addiction (NCETA), Flinders University

What is methamphetamine?

Methamphetamine 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 same proportion of Australians use methamphetamine now as in 2007. However, the frequency, form, and method of administration has changed. These changes are likely to result in greater harms.



Figure 1: Proportion of Australians (14+ years) Who Have Used Methamphetamine. Source: Australian Institute of Health and Welfare (AIHW)¹. 2013 National Drug Strategy Household Survey (NCETA secondary analysis, 2015).



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



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).

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.



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).

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.



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).

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 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).

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

	2007	2010	2013	Trend
loo lisore	29.5	28.9	28.8	J
	years	years	years	
Other Methamphetamine Users	28.6 years	30.0 years	30.9 years	1
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).

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%² (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).



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 Set³ (NCETA secondary analysis, 2015).



Figure 8: Proportion of Stimulant (excluding cocaine) Hospital Separations by Year. Source: Australian Institute of Health and Welfare (AIHW). 2008-2013 National Hospital Morbidity Database⁴ (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)		

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

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). 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).



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 (ICDT43.6) (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).

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 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).



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).

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 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.

Contact Us

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Australia's National Research Centre on AOD Workforce Development



Ken Pidd & Ann Roche

There is increasing concern about methamphetamine use in the community and among workers.

This document provides information on methamphetamine use and its implications for workplaces. For more information and resources visit the NCETA website at: http://nceta.flinders.edu.au/

National Centre for Education and Training on Addiction (NCETA), Flinders University

1. What is ice? Is it any different from other drugs?

'Ice' is crystal methamphetamine, a form of methamphetamine that is also known as crystal meth, meth, crystal, shabu, batu, d-meth, tina, glass, or shard. Ice is usually smoked or injected. Other forms of methamphetamine include powder (speed) and base.

Ice is more potent and more likely to cause dependence (addiction) than other forms of methamphetamine.

Ice and other forms of methamphetamine belong 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. Other classes of illicit drugs include:

- depressants (which slow brain and nervous system activity, resulting in relaxation and feelings of calmness) and
- hallucinogens (which interfere with the brain and central nervous system to distort perceptions of reality).

Ice is considered to be the most potent form of methamphetamine and the 'high' experienced from it is more intense than other types of methamphetamine. Approximately half of those who use ice do so weekly or monthly.

Ice use results in an intense 'rush' (especially when smoked or injected). This effect can last between four and twelve hours.

The high potency of ice and frequency of use can increase physical and mental problems and risk of dependence.

2. Why do people use ice?

Methamphetamine use (including ice) increases levels of serotonin, a neurotransmitter that regulates sleep, mood and appetite.

Its use results in feelings of intense euphoria, exhilaration and increased arousal and activity. This can result in the user feeling alert, energised, talkative, happy, confident and powerful.

Some people use methamphetamine socially at events such as parties or clubs. Others use it to combat fatigue or suppress their appetite.

3. What are the risks?

Ice use is associated with a range of physical and mental health risks. In the short-term, ice (and other forms of methamphetamine) can result in increased heart rate, hypertension and constricted blood vessels.

Long-term use can result in increased risk of stroke, ruptured blood vessels in the brain, decreased lung function, exposure to blood borne viruses (if injected), and poor dental health.

Regular use can also negatively affect eating patterns and dietary intake resulting in poor physical health.

Ice use can also result in poor cognitive function, depression, anxiety, and psychosis. Regular ice users can get stressed easily and their moods can fluctuate quickly. Longer-term problems with anxiety and depression can develop.

Ice use can cause paranoia and hallucinations and some users may also become aggressive and violent. Using ice regularly can also lead to social and financial problems and family and social breakdown.

Many regular users develop tolerance and need to take more of the drug to get the same effect. As a result, the user needs to increase their dosage. Some users need the drug to feel 'normal' and the urge to use the drug can become more important than other activities in their lives.

While only a minority of users become dependent, if a person who is dependent on ice suddenly stops taking it they will experience withdrawal symptoms that may last for several weeks.

4. What are the risks and concerns for workplaces?

Ice (and other methamphetamine) use among the workforce has implications for workplace safety. Use can impair concentration, the ability to gauge speed and distance, judgment and coordination. It is not safe to drive, operate machinery, or work in safety sensitive situations when affected by ice.

While the intoxicating effects of ice generally last around 6 hours, workplace safety may be compromised for much longer. The immediate after effects of ice use can include drowsiness, and users may find it difficult to sleep for several days following use. This can result in increased levels of fatigue, poor concentration, and impaired judgement.

Withdrawal symptoms include:

- disorientation and poor concentration
- decreased energy and apathy
- depression, anxiety, panic and paranoia
- extreme fatigue and exhaustion
- headaches and general aches and pains
- hunger and increased appetite
- disturbed and restless sleep.

Longer-term physical and mental health problems associated with regular ice use may also negatively impact on workplace safety and productivity.

NCETA research has identified that, compared to other employees, those using methamphetamine are more likely to:

- report high levels of psychological distress
- be absent from work
- attend work under the influence of drugs
- drive or operate hazardous machinery while affected
- verbally or physically abuse someone while affected.

Anti-social and risk-taking behaviours associated with methamphetamine use may extend to workplace violence, harassment and bullying, and impact negatively on workplace morale.



5. Are any workplaces or working populations at particular risk?

NCETA research has identified workforce groups with comparatively higher prevalence levels of methamphetamine use. In general, those who are young (18-30 years old), male, and employed as tradespersons or technicians are the workforce groups most likely to use methamphetamine. However, particular industry groups such as hospitality, construction, mining, and manufacturing also have elevated levels of methamphetamine use.

Workplaces at elevated risk are those where:

- ice (and/or other methamphetamine) is readily available
- young males (18-30 years old) are employed
- working conditions facilitate use (e.g., high levels of work stress, long hours, shift work).

6. What should workplaces do?

There has been a shift towards ice as the preferred form of methamphetamine. While the use of ice appears to be increasing, use among the workforce remains relatively low and use at work is even lower. Nonetheless, workplaces need to remain vigilant in order to detect and manage drug related risk to safety and productivity.

Those who use ice are likely to be experiencing risks and harms (such as mental health problems) but may not consider their problems severe enough to contact a treatment service. While not all employees exhibiting the behaviours listed below will be using methamphetamine, observations of such behaviour can be used as a trigger for performance or safety related discussions with the employee or referral to an EAP or counselling service. Such referrals may increase pathways to treatment.

Signs a worker may be using ice (or other forms of methamphetamine)

- Extreme tiredness at the beginning of the working week
- Unexplained irritability, agitation or mood swings
- Difficulty concentrating, poor work or study performance
- Unexplained patterns of absenteeism/lateness
- Mental issues such as paranoia, depression, moodiness
- Apparent unconcern about otherwise serious matters
- Heath problems, such as poor appetite, palpitations, infected injection sites or lesions.

7. Recommended workplace policies and strategies

The workplace is increasingly recognised as a prevention and intervention setting for dealing with drug use and related harms.

The majority of methamphetamine users are employed, and the workplace offers an opportunity to access drug users in order to minimise harm and prevent further use and/or dependence. The workplace also offers an opportunity to intervene or refer regular or dependent users to treatment.

Workplace strategies to address methamphetamine risks to safety and wellbeing include:

• Supervisor/manager training: It is important that supervisors and others responsible for the management and implementation of workplace alcohol and drug policies are aware that symptoms such as negative mood states, cognitive dysfunction, and fatigue can be associated with methamphetamine use. Employee awareness: Workplace education and training programs need to highlight the potential link between methamphetamine use and poor physical and mental health. Raising awareness of health risks is an important preventative strategy.

Workplace education and training programs also need to include harms associated with methamphetamine use such as needle stick injury and infection control. Injecting drug use increases risk of blood borne viruses among users, and infection risk to non-drug users.

 Health promotion: Workplace health promotion programs can address the health risks associated with methamphetamine (and other drug) use. These include the negative impact methamphetamine use can have on sleep, mood, and eating, which in turn can affect performance and safety at work. Addressing employee health can serve as a 'trigger' for discussions with employees about the ways in which drug use can impact their health and work performance.

- EAP: NCETA research indicates that risky behaviours such as polydrug use, risky alcohol use and high levels of psychological distress are more prevalent among employed methamphetamine users than other workers. Access to EAP and/or other counselling services is therefore important.
- Related workplace policies: NCETA research has identified an association between methamphetamine use and verbal and/or physical abuse in the workplace. This indicates that workplace bullying/harassment policies may be required.

8. Other tips

Workplace drug testing is one strategy that has attracted attention. While this strategy can be useful for identifying drug use, its ability to detect the full extent of drug use and associated problems is limited unless blanket testing of an entire workforce is regularly undertaken.

Recent NCETA research has found that drug testing alone has limited effectiveness in reducing workforce drug use or improving workplace safety.

A large proportion of methamphetamine use occurs recreationally. Methamphetamine has a saliva/ urinalysis detection period of approximately 24 hours after use. Since most workplace testing occurs during normal working hours, weekend use may be undetectable. In addition, drug testing cannot detect psychological factors associated with regular use, such as anxiety, depression, paranoia, and aggressive behaviour that can impact workplace productivity, safety and worker wellbeing.

Workplace drug testing can be an effective strategy if combined with a comprehensive policy approach that incorporates additional strategies such as education and training. To be effective these additional strategies cannot be 'off the shelf' generic education and training programs. Rather, they need to be designed for the specific working environment, working conditions, and demographic profile of each workforce.

Details of the NCETA research referred to in this resource are available from the authors.

Please feel free to contact NCETA for further information about ice and/or other drug and alcohol use in the workplace.

Contact Us

NCETA has extensive experience in providing consultancy and advice concerning the management of alcohol and drug related risk to workplace safety and productivity.

NCETA can offer assistance with:

- Reviewing and developing workplace alcohol and drug and employee wellbeing policies
- Developing and implementing workplace alcohol and drug interventions and employee wellbeing strategies
- Developing and implementing tailored employee awareness and education programs
- Developing and implementing tailored manager and supervisor training programs
- Evaluating existing education, training, and intervention strategies
- Conducting workplace alcohol and drug risk assessments and employee wellbeing needs analyses.

For more information about NCETA's workplace alcohol and other drug policies and research, visit or contact:

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Inquiry into crystal methamphetamine Submission 27 Methamphetamine: Effects & Responses

Ann M Roche

There is increasing concern about the use of methamphetamine in Australia. In particular, growing attention has focused on the use of the crystalline form of methamphetamine known as 'ice'.

There is currently a lack of understanding about who uses methamphetamine, whether more people are using now than in the past, and what risks and harms are associated with use.

This paper details current patterns of methamphetamine use, changes in frequency and mode of use, emergent effects and negative consequences, and intervention options.

National Centre for Education and Training on Addiction (NCETA), Flinders University

What is methamphetamine?

Methamphetamine 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.

What is ice?

There are three main forms of methamphetamine: powder (speed); base; crystal (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.

Between 2010 and 2013¹ preference for ice increased significantly, and ice is now the preferred form of methamphetamine for most users. During this period there has also been an increase in the preference for smoking as the main mode of administration.

Since 2010 the price of ice in Australia has decreased, while average purity has increased.

Who uses methamphetamine?²

A diverse range of people use methamphetamine. Two broadly different demographic profiles can be identified, characterised by different patterns of use and levels of risk.³

Infrequent users (less than monthly)

Less frequent users of methamphetamine (including ice) tend to be employed, heterosexual, male, and have low levels of psychological distress.

Frequent users

Frequent (weekly/monthly) methamphetamine users (including ice) tend to comprise more females, and are less likely to be married or heterosexual.

Frequent users are more likely to be:

- Unemployed
- Psychologically distressed
- Engaged in risk taking activities.

Approximately 70% of methamphetamine users are infrequent users.¹

Approximately 30% of methamphetamine users are frequent users. Of these users, 16% use weekly or daily.¹



Immediate effects

A range of psychological, physiological, emotional, cognitive and neural effects can be experienced when using methamphetamine.

A number of adverse health effects can also arise from methamphetamine use, including:

- 1. Acute toxic effects/overdose
- 2. Acute intoxication effects (injury, violence)
- 3. Sudden unexplained death
- 4. Chronic use effects: e.g., chronic disease, infections, mental disorders.

Toxic reactions can occur regardless of dose, frequency of use, route of administration, or amount used.

Toxic reactions can occur even with small doses.

There is no established dose/response relationship for methamphetamine.

Coming down

When 'coming down' from methamphetamine, users may experience:

- Impaired decision-making ability
- Poor concentration
- Difficulty planning
- Headaches, blurred vision, hunger
- Flat affect, depression, anxiety
- Exhaustion
- Interrrupted sleep
- Irritability
- Mild psychotic symptoms, paranoia, hallucinations
- Symptoms of withdrawal (if they are dependent).

Potential harms

Methamphetamine-related harms can result from:

- Mode of administration and level of purity
- Intoxication
- Withdrawal
- Chronic long term use.

If methamphetamine is injected, there is risk of transmission of blood borne diseases (including HIV/AIDs, Hep A, B, C), as well as risk of injection site infections. If smoked, there is a risk of respiratory disease, excessive ingestion and overdose.

Psychological effects

Euphoria, increased energy, enhanced mood, increased self-esteem, alleviation of fatigue, increased attention.

Physiological effects

Activation of the adrenergic system: increased heart rate and respiration, hypertension, decreased appetite, psychomotor stimulation, increased body temperature.

Emotional effects

Dysphoria, nervousness, irritability, agitation, hallucinations, delirium, psychosis.

Cognitive and neural effects

Altered brain function, impaired frontal lobe executive function (i.e., disinhibited/poor self control and decision making (biased towards immediate desires)), impaired judgement, poor verbal memory, slowed cognitive processing speed, cognitive inflexibility (difficulty switching between different activities).

Impairment is not related to frequency, duration or quantity of the drug used. Impairment seems to be greater in older users, men, and where comorbidities exist.⁴

Users never know exactly what a drug contains, and it may be more concentrated than expected. Higher purity is associated with risk of greater harms.

Minimising harms

There is a range of well-established harm minimisation strategies that can reduce potential risks and harms associated with methamphetamine use.

Because drug effects can be unpredictable, it is important not to use while alone and to ensure that friends will provide care and support and immediately seek help if needed.

Stimulants suppress appetite. It is therefore very important that good nutrition is maintained. It is also important to ensure adequate hydration by drinking plenty of water.

Like all illicit drugs, content, purity and concentration of methamphetamine can vary substantially.

Stimulants also interrupt sleep patterns and can result in extended periods of wakefulness. Getting sufficient sleep is essential.

Poor diet, lack of hydration and insufficient sleep can cause health and performance problems for anyone, even without drug use.

When is treatment needed?

Treatment can be effective and is strongly encouraged. Treatment is especially important when someone using methamphetamine, or their family/friends/associates, becomes concerned about changes in their behaviour and/or ability to function normally.

If someone's use of methamphetamine is impairing their ability to carry out their usual daily roles (e.g., work, parenting) then treatment is appropriate.

If someone's use has substantially and/or rapidly escalated, then treatment is warranted. Increased levels and/or frequency of use is associated with several potential harms, including dependence.

If someone has difficulty controlling the amount of methamphetamine they are using then treatment is definitely required.

How is treatment and recovery for methamphetamine different to other drugs?

Stimulant drugs, including methamphetamine, alter brain functions in ways that have important implications for treatment. Memory, regulation and executive function may be impaired, requiring:

- More frequent but shorter treatment sessions
- Reminders
- Memory aids
- Assertive followup
- Written instructions from treatment providers.

Physically detoxing from methamphetamine can take almost twice as long as other drugs (i.e., between 10-14 days).

Treatment may need to be continued for many months before significant improvement is achieved. Full recovery of all cognitive functions may take 12-18 months.⁴

Early and brief intervention

Common negative effects of methamphetamine use include anxiety and depression. Primary care providers are well placed to ensure that any client/ patient presenting with symptoms of anxiety and/or depression is always screened for drug use.

ASSIST⁵ Standard Screening Questions

In the past 3 months:	YES [1]	NO [0]		
 Did you use an amphetamine-type stimulant, or cocaine, or a stimulant medication not as prescribed? 				
If YES: 4				
2. Did you use a stimulant at least once each week or more often?				
3. Has anyone expressed concern about your use of a stimulant?				

A score of 2+ indicates that the person is positive for a stimulant use disorder and treatment is warranted.

Reducing stigma

In order to minimise potential harms from methamphetamine use, encourage people into treatment, and ensure the provision of appropriate evidence based care, it is crucially important to not stigmatise drug use.

Stigmatising users reduces the prospect that those who need care will seek it.

Strong supportive messages are needed that highlight that treatment is effective and can be provided in various forms.

What can be done to prevent use?

Ensuring that potential methamphetamine users are aware of the short and long term harms associated with use is important.

Some consequences of methamphetamine use are not well understood; others may be exaggerated or over emphasised.

Peer education and support are also important and effective strategies.

Implementing workplace strategies that reduce risk factors associated with use is recommended. This includes:

- Ensuring that appropriate policies and mechanisms for early detection and referral to supportive treatment services are in place
- Avoiding workplace practices that may be conducive to stimulant drug use or exacerbate use.

Reducing availability, supply and access are key prevention strategies. Australia is currently experiencing:

- Low price
- Ready availability
- High levels of drug purity.

These factors are likely to contribute to increased use and greater harm from methamphetamine use.



Other resources available in this series include:

Pidd, K., & Roche, A. (2015). '<u>Ice' and the workplace</u>. Adelaide, South Australia: National Centre for Education and Training on Addiction (NCETA), Flinders University.

Roche, A., McEntee, A., Fischer, J., & Kostadinov, V. (2015). *Methamphetamine use in Australia*. Adelaide, South Australia: National Centre for Education and Training on Addiction (NCETA), Flinders University.



Contact Us

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- 1. AIHW National Drug Strategy Household Survey data.
- For further details about patterns and trends in use see the accompanying NCETA information sheet <u>'Methamphetamine use in Australia'</u> Roche et al., 2015.
- The data cited here are derived from NCETA secondary analyses of the AIHW 2013 National Drug Strategy Household Survey.
- 4. See further detail in A/Professor Rob Hester's NCETA <u>Methamphetamine Symposium presentation available on</u> <u>the NCETA website</u>.
- 5. Ali R., et al., 2013 Drug and Alcohol Dependence; 132: 352-361.