

**RESPONDING TO METHAMPHETAMINE USE  
AND RELATED HARMS IN AUSTRALIA:  
A SUBMISSION TO PARLIAMENTARY JOINT  
COMMITTEE ON LAW ENFORCEMENT'S  
INQUIRY INTO CRYSTAL  
METHAMPHETAMINE (ICE).**

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*Note: This document has also been submitted to the National 'Ice' Taskforce.*



## EXECUTIVE SUMMARY

One of the largest centres of drug research and public health expertise in Australia, the National Drug Research Institute (NDRI) has a 30-year history of conducting research that results in positive outcomes for policy, practice and the community locally, nationally and internationally. A designated World Health Organization (WHO) Collaborating Centre for the Prevention of Alcohol and Drug Abuse, NDRI has conducted extensive research and completed many projects relating to methamphetamine use and related harm.

The *National Amphetamine-Type Stimulant Strategy 2008-2011* and the Parliament of Victoria Law Reform, Drugs and Crime Prevention Committee's 2014 *Inquiry into the supply and use of methamphetamines, particularly ice, in Victoria* both identify a range of law enforcement and public health and treatment responses. In this submission, NDRI has focussed on key challenges and key evidence-based public health and treatment strategies to address the use of methamphetamine, including 'ice', and responding to related problems.

These include the need to:

- review the *National Amphetamine-Type Stimulant Strategy 2008-2011* and the Parliament of Victoria Law Reform, Drugs and Crime Prevention Committee's 2014 *Inquiry into the supply and use of methamphetamines, particularly ice, in Victoria*, which both addressed many of the issues of concern to the 'Ice' Taskforce and, reviewing the evidence and broad consultation provided a thorough evidence-based set of recommendations and priorities;
- recognise the complex factors that contribute to drug use and related problems and the need for multifaceted responses;
- recognise that at a population level, drug policy interventions need to be dynamic and responsive and their impact might well vary across the unfolding cycle of challenges;
- identify the role that context of use can play in the experience of problems and incorporate this into responses;
- evaluate policy and associated strategies in this context to ensure unintended adverse consequences are avoided and effective interventions are implemented;
- avoid strategies and approaches that stigmatise and marginalise people affected by 'ice' use with consequent adverse impact on treatment engagement and retention;
- invest in multifaceted prevention strategies that prevent use in the first place and address the needs of those already using and those affected by that use, including parents/families and the broader community;

- recognise that in addition to addressing the needs of those who are dependent/with severe problems, there is also opportunity to provide lower intensity services to help prevent less dependent users developing more severe problems;
- address risk behaviours associated with methamphetamine users, not just for consumers but for others who might be affected, such as addressing the needs of parents, partners and families;
- identify effective responses and structures/procedures to those affected by co-existing mental health and drug problems;
- address the particular challenges and needs of rural and remote communities;
- address the particular challenges and needs of Aboriginal and Torres Strait Islander people and communities;
- build stronger connection to support and service provision for those affected by methamphetamine use. This might include:
  - organisational and workforce development for drug specialist and mainstream health services. This will include building strong referral and shared care pathways;
  - culturally safe Aboriginal health services and building capacity among these services;
  - establishing and evaluating programs such as online interventions, step-up/step-down withdrawal models (e.g. combinations of non-residential and residential withdrawal) and psychological and pharmacotherapy trials;
  - trialling and where indicated investing in strategies that address the particular challenges of methamphetamine use (e.g. protracted withdrawal; treatment retention; sexual risk taking/risk of BBV/STI);
  - investing in strategies to enhance access to care across Australia but particularly in rural and remote regions;
  - developing more effective and efficient strategies to manage methamphetamine intoxication and related problems; and,
  - reviewing and where indicated supporting enhanced strategies for first responders and emergency departments.

## INTRODUCTION

### *About NDRI*

The [National Drug Research Institute](#)'s (NDRI) mission is to conduct and disseminate high quality research that contributes to the primary prevention of harmful drug use and the reduction of drug-related harm in Australia. Since its inception in 1986, the Institute has grown to employ about 30 research staff, making it one of the largest centres of drug research and public health expertise in Australia. It is a designated World Health Organization (WHO) Collaborating Centre for Alcohol and Drug Abuse. It works in close collaboration with the National Drug Research Centre and the National Centre for Education and Training on Addiction, as well as with a range of government and non-government stakeholders across Australia.

NDRI's Key Result Areas are i) to conduct research that will contribute to the primary prevention of harmful drug use and the reduction of drug related harm, and ii) contribute to national capacity for research and disseminate research findings to key groups. Researchers have completed about 500 research projects, resulting in a range of positive outcomes for policy, practice and the community. For example, NDRI research has significantly informed and contributed to policy and evidence-based practice such as the National Amphetamine-Type Stimulants (ATS) Strategy, the National Drug Strategy and the National Alcohol Strategy; contributed to Australia's involvement in international strategies, such as WHO Global and Regional Strategy to Reduce Harmful Use of Alcohol; directly contributed to Australian and State government alcohol and illicit drug policy; informed liquor licensing decisions and government debate regarding cannabis policy; significantly contributed to international evidence-based school interventions; influenced NHMRC guidelines to reduce alcohol health risks; and been cited in the development of policy documents for Aboriginal Australians.

NDRI also received an 'A' ranking in the ATN Universities' trial of research impact, and the quantum, quality and impact of NDRI outputs were examined in the Research Quality Framework with the Institute's work described as:

*research considered truly internationally competitive and making a major contribution to the advancement of knowledge. Sustained contribution to setting and maintaining new directions within the international research community [and having] very high impact directly demonstrated from most research activities, research outcomes are able to be used and have been used by end-users, and a record of knowledge transfer at a high level.*

### ***Relevant expertise***

NDRI has an extensive track record of completing and disseminating research in the amphetamine-type stimulant area, particularly in relation to methamphetamine. By way of example:

- NDRI, in collaboration with the Australian Institute of Criminology, led the development of the [National Amphetamine-Type Stimulant \(ATS\) Strategy – 2008-2011](#) to enhance Australian responses to ATS use and to coordinate activities to prevent use and respond to harms at national and jurisdictional levels. Development of the National Strategy, which addresses supply, demand and harm reduction as well as both health and law enforcement issues, included a thorough review of the evidence and broad stakeholder consultation.
- NDRI Director Professor Steve Allsop and Adjunct Associate Professor Nicole Lee edited a book on the subject, [Perspectives on Amphetamine-Type Stimulants](#), published in 2012.

- NDRI's expertise and research has been regularly and extensively quoted in parliamentary inquiries, including Victorian Parliamentary inquiries into the [supply and use of Methamphetamines, particularly 'ice', in 2014](#) and its inquiry into amphetamine and "party drug" use a decade earlier.
- NDRI has received two major NHMRC research grants – 'Improving understanding of psychostimulant-related harms in Australia: An integrated ethno-epidemiological approach' (NHMRC Project Grant 323212: 2006-2011; \$604,000) and 'Understanding the barriers to improved access, engagement and retention of methamphetamine users in health services' (NHMRC Project Grant 479208: 2009-2014; \$756,000) – which have provided extensive qualitative and quantitative research on methamphetamine use and related harm.
- Led by Professor Dennis Gray and Associate Professor Edward Wilkes, NDRI has particular expertise in the area of alcohol and other drug interventions for Aboriginal Australians.

## **KEY ISSUES**

### *National strategy*

It is relevant to note at the outset that the *National Amphetamine-Type Stimulant Strategy 2008-2011* (Australian Government Department of Health and Ageing, 2008) is directly relevant to the current National 'Ice' Taskforce. The ATS strategy, developed through a review of the evidence and broad consultation with law enforcement, health, education and other services and key community stakeholders across Australia, addressed many of the issues of concern to the Taskforce and contained a thorough evidence-based set of recommendations and priorities. Unfortunately, there is no evaluation determining the extent to which the strategy was implemented. It is pertinent to note this comment in the document:

*While many of the activities described in the National ATS Strategy will demand additional resources, others will be realised through enhanced coordination of effort among stakeholders. Implementing the activities recommended in the National ATS Strategy should be undertaken in the context of building and maintaining coordinated responses. However, it is difficult to see how this will happen without specific agencies being tasked and funded to facilitate co-ordinated responses across the relevant sectors. (Australian Government Department of Health and Ageing, 2008, p. 40)*

It is proposed that the 2008 document is a useful starting point for the current Taskforce. It is recommended that, rather than 're-invent the wheel', the National ATS Strategy and the recent Victorian report provide useful starting points. It is noted that these two documents address both law enforcement and public health/treatment responses. In the current submission, we focus on public health and treatment responses.

### *Understanding the multifaceted contributors to drug use and related problems and responding effectively*

Understanding and responding effectively to alcohol and other drug (AOD) use, and the related problems, requires an acknowledgment of the complex issues involved. This means that the issue of causation needs to be considered more carefully than is sometimes the case (Fraser & Moore, 2011). For example, in many policy documents a confusing range of terms are used to describe causation. In different policy texts and often within the same text, methamphetamine is described as 'related to', 'accompanied by', 'causing', 'associated with', 'inducing', 'leading to' or 'contributing to' various

forms of physical and psychological ‘results’, ‘consequences’ and ‘effects’ (e.g. Australian National Council on Drugs, 2007; Drugs and Crime Prevention Committee, 2004; Victorian Government Department of Human Services, 2007). Yet each of these terms implies a different model of causation. For example, describing methamphetamine as a ‘harmful drug’ defines the drug as harmful *per se* without consideration of factors such as context or individual risk. This differs from descriptions of ‘methamphetamine-related harm’ which implies a different form of causation – here the precise nature of the link remains relatively open, and a role of other factors in creating this harm is also allowed. Strong causation is also ascribed in comparisons of methamphetamine use with natural disasters such as floods, and the frequent description of methamphetamine use as an ‘epidemic’ (Ayres & Jewkes, 2012). These various notions of causation have important effects – some approaches allow stronger statements about causality to be made than are warranted by the relevant evidence and simplistic policy measures to be advocated, even if they are not warranted by the evidence. Clarity on the causal relationship between methamphetamine consumption and related problems, the role of other factors (e.g. context) and consistent use of accurate terms, is a basic requirement of good policy in this area.

It is now well established in the extensive international and Australian research that a multifactorial model of drug effects and related problems is the most accurate and effective. In one key model, often termed the ‘drug, set and setting’ approach, all three areas and the relationships among them, are treated as indispensable in shaping AOD use and related problems. The pharmacological properties of drugs; the individual characteristics and vulnerabilities, and the sociodemographic and perspectives of those who consume them; and the historical, social, legal, economic and cultural contexts shaping use and the context of that use, must all be taken into account in understanding and responding to AOD use and related problems. For example, complex issues of social and economic exclusion, poverty, marginalisation, racism and stigmatisation are key contributors to drug use and the experience of related problems. Good policy and effective responses would take this into account. Recognition of this complexity has given rise to a range of policy frameworks including, but not limited to, ‘risk’ and ‘enabling’ environments (Rhodes, 2001; Moore & Dietze, 2005) and the ‘health impact pyramid’ (Babor et al., 2010). Methamphetamine use and related problems are no different in that they should also be understood as shaped by a diverse range of pharmacological, individual and contextual factors (e.g., Armstrong, 2007; Boyd & Carter, 2010; Brown, 2010; Clatts, Welle & Goldsamt, 2001; Duff, 2005; Halkitis, Fischgrund & Parsons, 2005; Joe, 1996; Lende, Leonard, Sterk & Elifson, 2007; Slavin, 2004; Zule, 1999), and these contextual factors need to be taken into account if effective policy responses are to be developed and implemented. This overarching research and policy framework underpins and informs the material and recommendations set out in the sections below.

### ***Understanding cycles of use***

At a population level, there is some evidence that cycles or waves of use of stimulant and depressant drugs and associated problems seem to come and go. In recent memory, Australia experienced a wave of methamphetamine use during the early to mid-1990s (Burrows, Flaherty, & MacAvoy, 1993), which was replaced by the heroin ‘glut’ of the mid- to late 1990s (Dietze & Fitzgerald, 2002). Econometric modelling studies of drug use ‘epidemics’ have indicated that society’s present-orientation combined with an impaired ability to remember past cycles of drug use are likely to repeat them, rediscovering the adage that ‘those who forget the past are condemned to repeat it’ (Behrens et al., 2002). It has also been noted that much of the story of how these ‘epidemics’ unfold is largely due to intrinsic factors often outside common external policy levers. For example, Caulkins notes:

*Much variation stems instead from feedback among factors that are internal to the drug 'system'. For example, new drugs can spread rapidly via a positive feedback loop generated by current users introducing the drug to their non-using friends. When use reaches critical levels, the markets supplying that use 'tip' into more efficient and resilient forms [5]. Those denser markets achieve economies of scale that reduce prices [6,7]. Lower prices, in turn, stimulate greater initiation and use [8,9]. Over time, the ratio of longer-term users to recent initiates increases [10] which may lead the media and potential users to associate the drug with the problems of its chronic users. Musto [1], Kleiman [11] and Behrens et al.'s model [12,13] describe how this association can stifle initiation, which further skews the distribution of current users toward long-term users, triggering a negative feedback loop that can break an epidemic. Then, as users age, the nature of drug-related harms may shift away from violent crime and towards various health problems. (Caulkins, 2007, p. 4)*

Furthermore these studies also suggest that the relative effectiveness of drug prevention and treatment could depend on the stage in the 'epidemic' in which they are implemented. Thus, an emphasis on prevention is most appropriate early in an epidemic when there are fewer heavy users while treatment and harm reduction tend to be more effective later in the cycle (Behrens, et al., 2002; Caulkins, 2007). While these modelling studies have their limitations and assumptions, at a general level it is worth noting that drug policy interventions need to be dynamic and responsive recognising that at a population level their impact might well vary across the unfolding cycle of challenges.

Similarly, as drug use is affected by 'cycles', it is also worth noting that Australia is not unique in dealing with the challenges that crystal methamphetamine is posing. Other countries have faced/are facing similar challenges: just as it is worth looking back to remember the lessons of the past in facing current challenges, there is also an opportunity to look to other jurisdictions to replicate examples of successful outcomes and avoid actions that are ineffective or make the situation worse.

### ***Opportunities for early intervention***

Among regular methamphetamine users, the use of crystal methamphetamine seems to be more associated with dependence (61%) than use of the non-crystalline form of the drug (39%) (McKetin, Kelly, & McLaren, 2006). While any episode of drug use can lead to problems/harm, frequency and/or length of time using are factors that can increase risk. For example, the risk of dependence was roughly doubled by using methamphetamine more than once a week (68% versus 34%) or using for more than five years (61% versus 36%) (McKetin, et al., 2006). Lee and colleagues described six main forms of methamphetamine use – experimental, recreational, circumstantial, binge, regular use and polydrug use – and noted that dependence was more likely associated with regular use (Lee, et al., 2007). Of course, a range of factors beyond dependence influence decisions to use. For example, workplace factors have been associated with use (National ATS Strategy 2008-2011; Allsop and Lee 2012) and other research has reported that some people use methamphetamine to achieve feelings of 'normality', a sense of competence and community membership (Duff & Moore, 2014, 2015).

A key issue here is that methamphetamine use and related problems are found on a continuum and this continuum has relevance for interventions. While those with more severe dependence and related problems might need intensive interventions, there is an opportunity for early interventions for those with low level use/dependence/problems. This will include developing approaches that encourage those who would respond to early interventions to recognise subjectively relevant risks and to perceive the intervention options as attractive, accessible and relevant.

## **Taskforce Question 1:**

### **WHAT IS THE IMPACT OF PEOPLE USING 'ICE' ON OUR COMMUNITY?**

#### ***Introduction***

Consumption data and research evidence indicate that, in Australia, there have been recent changes in methamphetamine use and related problems. While overall methamphetamine prevalence appears to have remained stable, there seems to be more frequent use within populations that already use drugs and a rapid shift within specific drug-using populations towards use of methamphetamine in crystal form, with a related increase in harms. While this latter aspect is important, caution should be exercised in attributing methamphetamine-related problems *solely* to changes in drug type and purity. Such an analysis takes for granted that the pharmacology of the drug has effects on its own, tending to neglect individual and group characteristics and the wider contexts of use (Fraser, Moore & Keane, 2014; Moore & Fraser, 2015). For example, although methamphetamine use amongst gay men may contribute to 'risky' sexual behaviour, there is little evidence of the increases in violence or other public order problems commonly attributed to methamphetamine amongst gay communities. It is also important to note that different patterns of use can contribute to different levels of risk (e.g. Dwyer et al., 2012; Green & Moore, 2009, 2013; Pennay & Moore, 2010; Siokou & Moore, 2008; Siokou, Moore & Lee, 2010). Changes in access to the drug, for example in remote communities, can also have relevance for changes in risk. Recalling the research and policy framework set out earlier, these findings underline the importance of contexts in shaping patterns of use and related problems.

#### ***Prevalence data***

The latest National Drug Strategy Household Survey (NDSHS) indicated no apparent change in recent or lifetime population use rates in 'meth/amphetamine' since 2010. Rates of use by people aged 14 years or older in the past 12 months was stable at 2.1 per cent – the equal lowest figure recorded in more than two decades. However, while overall use remained stable, there have been statistically significant changes in the type and frequency of methamphetamine use. Recent use of powder decreased from 50.6 per cent in the 2010 survey to 28.5 per cent in the 2013 survey, and recent use of base dropped to 7.6 per cent from 11.8 per cent. Previous 12-month use of ice more than doubled however from 21.7 per cent to 50.4 per cent.

There is also some evidence that meth/amphetamines are also being used more often by those who use. The NDSHS reported a significant increase in the proportion of at least weekly use and a slight increase in monthly use. For respondents where 'ice' was the main form of methamphetamine used, those who used at least once a week doubled to 25.3 per cent and monthly use increased to 20.2 per cent from 17.5 per cent. Of course, evidence that the number of people who recently used any meth/amphetamine has gone down is not incompatible with evidence of an increase in related harm if the nature and patterns of use, and contexts of use among those who use contribute to an increase in related problems: irrespective of data on 'how many people use the drug' there is evidence of an increase in related problems.



### ***Treatment and law enforcement data***

Information from the Illicit Drug Reporting System indicates that in 2011-12 the number of national amphetamine-related inpatient hospital admissions was 250 admissions per million persons, the highest number ever recorded. Meth/amphetamine ambulance call-outs and treatment presentation data are also indicating increases. In Victoria, for example, there was an 88 per cent increase (Lloyd 2013) in ice-related call-outs in metropolitan Melbourne in 2012-13 (1112 call-outs compared to 592 in 2011-12) and a 198 per cent increase in regional Victoria (231 compared to 77). By way of comparison, there were also large percentage increases in alcohol-related attendances. In metropolitan Melbourne, there were 11,159 alcohol-related call-outs in 2012-13, compared to 8,824 in 2011-12, an increase of 27 per cent. In regional Victoria, there was a 42 per cent increase in alcohol-related attendances, with 3692 in 2012-13 compared to 2594 in 2011-12.

It is also noted that the regions face special challenges in responding to methamphetamine use, including the geographical challenges of access to treatment and other services. While there is limited evidence about this, there are a number of indicators emerging, and significant community concern, suggesting that this is a growing challenge, at least in some communities.

Australian drug treatment episode figures show that amphetamine was the third most common principal drug of concern nationally in 2012-13, accounting for 1 in 7 (14 per cent) of treatment episodes, increasing from 7 per cent in 2009-10 (AIHW, 2014). The proportion of episodes with amphetamine as the principal drug was higher than the national average in South Australia and Western Australia. Again by way of comparison, alcohol was the principal drug of concern in 41 per cent of treatment episodes closed in 2012-13, with cannabis the next most common drug of concern, being the principal drug for almost one-quarter of treatment episodes.

Methamphetamine law enforcement seizures, both domestically and internationally, have increased. Global ATS seizures reached an all-time high in 2012, up 15 per cent from 2011 (United Nations 2014), and over the past five years, methamphetamine seizures have almost quadrupled. The number of detections of ATS (excluding MDMA) at the Australian border increased 18.4 per cent in 2013-14, to 2367, the highest number on record, while the total weight of ATS (excluding MDMA) detections decreased 15.2 per cent to 1812kg in 2013-14, the second highest weight on record. Within Australia, the number of national ATS seizures increased by 27.3 per cent in 2013-14 to a record 26,805 while the weight of ATS seized nationally decreased 36.8 per cent to 4076kg in 2013-14 (Australian Crime Commission, 2015).

### ***Purity and harm***

Research has indicated that the purity of crystal methamphetamine has increased from 21 per cent in 2009 to 64 per cent in 2013 with the complication of wide disparities between samples that makes it impossible for consumers to judge risks associated with particular doses, increasing risk. The increase in purity has also more than offset price rises, thus lowering the relative cost of crystal methamphetamine (Scott, 2015). When considering changes in purity, it is also important to consider the broad range of contextual factors that influence risk and harm, such as risk taking and use in risky contexts, and access to support/treatment and of course changes in access to the drug (for example in regional Australia).

Further analysis of existing datasets and new research is needed to identify the precise socio-economic locations of major methamphetamine-related harms. For example, is harm more likely to appear among those participating in violent and exploitative street drug markets? Is it more likely

among those already marginalised by unemployment, homelessness, racism and mental health issues? Is it more prevalent among men than women? What kind of problem and how extensive is the harm among Aboriginal and Torres Strait Islander communities, both in remote/rural and metropolitan locations?

### ***Aboriginal Australians and methamphetamine use***

There is a paucity of data on the use of amphetamine type stimulants (ATS) among Aboriginal and Torres Strait Islander people. The 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) reported that a little over 10 per cent reported ever using ATS and five per cent that they had done so in the previous 12 months (Australian Bureau of Statistics, 2010; Australian Institute of Health & Welfare, 2011). However, for methodological reasons, this is likely to have been an underestimate and there may be significant variation amongst different communities. A qualitative research project, conducted for the Australian Government Department of Health (AGDH) at about the same time as the 2008 NATSISS, found that:

*While the research is unclear with regards to the prevalence of methamphetamine use in Indigenous communities, especially remote and regional communities, it is clear that it is an issue of increasing significance (Blue Moon Research & Planning, 2008).*

A recent study which investigated the knowledge, risk practices and health service access of young Aboriginal people for sexually transmitted diseases and blood borne viruses (the GOANNA study), found that 9% of the participants aged between 16 and 29 years reported using methamphetamine in the previous year.

The report of a review of the Aboriginal and Torres Strait Islander alcohol, tobacco and other drugs (ATOD) treatment sector conducted by NDRI found that after alcohol and cannabis, methamphetamine use was of particular concern. Representatives from Aboriginal community-controlled organisations reported increasing use and injecting of methamphetamine and related harms, particularly in urban areas but also in rural and remote towns (Gray *et al.*, 2014). Here it is important to note that methamphetamine use is part of a pattern of poly-drug use and that high level users often have co-existing mental health problems.

Concern about observed increases in methamphetamine use prompted the National Aboriginal Community Controlled Health Organisation and the then National Indigenous Drug and Alcohol Committee to conduct a survey on ATS issues among workers in the ATOD field (NIDAC, 2014). The report cautioned that it was not a representative sample survey, but 88 per cent of respondents reported observing a recent increase in ATS use among their clients. A key issue for many Aboriginal and Torres Strait Islander service providers is that while ATOD service providers are skilled in treating alcohol related problems, fewer have the skills to address the issues arising from illicit drug use (Gray *et al.*, 2014).

### ***Related mental health problems***

As noted in a number of texts (e.g. Allsop and Lee 2012; National ATS Strategy 2008-2011) there is a link between mental health and ATS use, including methamphetamine. Clearly those with a pre-existing vulnerability are at higher risk, but evidence indicates that regular use has been associated with mental health problems even where no previous vulnerability existed. Co-existing mental health problems can contribute to management challenges for law enforcement services, emergency services,

mental health services and specialist drug and alcohol services. For example, the National ATS Strategy noted:

*Mental health problems can precede ATS use, can be exacerbated by ATS use and may compromise treatment (e.g., some medication is contraindicated if there is concurrent ATS use). Mental health problems can also emerge as a consequence of ATS use, in vulnerable individuals and/or in otherwise psychologically robust people who regularly use ATS. Thus, psychotic symptoms are more prevalent among ATS users compared to the general community and a large proportion of ATS users entering treatment for dependence experience depression and anxiety (Dyer & Cruickshank, 2005; Kosten et al., 1998). Such symptoms are associated with poorer treatment outcomes. p 26*

It will be important to address these issues in a variety of ways, including: better understanding of the links between 'ice' use and mental health, and the implications for effective interventions; ensuring those with vulnerabilities to mental health problems and those who use are more informed about the risks; enhancing the capability of first responders to manage co-existing methamphetamine and mental health related problems; and, addressing barriers to effective care, especially enhancing the connections among primary health care, drug specialist and mental health services.

## **Taskforce Question 2**

### **WHERE SHOULD FEDERAL, STATE AND TERRITORY GOVERNMENTS FOCUS THEIR EFFORTS TO COMBAT THE USE OF 'ICE'?**

A range of strategies, from supply reduction and education to workforce development and treatment are described in the National ATS Strategy 2008-2011, the recent Victorian Inquiry and the Allsop and Lee (2012) text. These are useful reference points. Below we highlight several domains.

#### ***Workforce and organisational development***

An Australian study of barriers to treatment and treatment utilisation found that rates of accessing treatment among methamphetamine users was low because many did not perceive their use to be a problem even though many were dependent and many used other illicit and licit drugs to manage their own detoxification. Methamphetamine users had limited confidence in their perception of the expertise of treatment services to address their use and believed treatment services were too tailored to treating users of opioid drugs such as heroin. Suggestions were made in terms of more flexible opening times and having amphetamine specific clinics (Kenny, Harney, Lee, & Pennay, 2011). A study of service providers regarding barriers to withdrawal treatment for methamphetamine users identified a number of factors and a treatment sector with differing levels of capacity to respond to these (Pennay & Lee, 2009). Main factors identified included impulsivity, agitation, aggression and other behavioural characteristics of users; uncertainty about best practice of withdrawal with this group; complexities regarding the psychopharmacological aspects of methamphetamine use; service co-ordination challenges associated with co-morbid mental health problems; lack of an effective pharmacotherapy treatment; unsuitability of the physical setting of some existing treatment services; limited availability of services; and a range of other issues (Pennay & Lee, 2009). Although a number of jurisdictions have invested in increasing access to treatment, and building the capacity of staff, no formal documentation of the changes and related impact across Australia is available, and it is possible that some of these challenges remain. It is noted that some historical evidence has indicated that many clinicians have felt less competent to respond to amphetamine dependent clients – even though many of the required skills and approaches are similar to those used with other drugs. On the one hand it is important to address these issues, but it is essential that this is done without undermining the perceived competence to intervene. It is noted that the *National Amphetamine-Type Stimulant Strategy 2008-2011* (Australian Government Department of Health and Ageing, 2008) included a comprehensive suite of interventions to address the workforce and organisational development needs of the general health and specific AOD sector in this regard. To provide just one example, the National Strategy recommended the development of a national ATS workforce development strategy for psychologists in the context of the COAG Mental Health Plan that enables Medicare-funded access to treatment provided by community and clinical psychologists. While this proposal is one that possibly still has merit, particularly for those who might not wish to attend drug specialist services and the comparatively large number of 'ice' users who are not yet experiencing significant problems related to dependence, to our knowledge, this has not been progressed.

### ***Workforce and organisational development and treatment***

Despite the worldwide use of amphetamine type stimulants, there is no approved pharmacotherapy in Australia and, currently, there are insufficient data to support the novel ('off label') application of pharmacotherapies such as fluoxetine, amlodipine, imipramine and desipramine in the treatment of stimulant related problems and dependence (Srisurapanont 2008). There are current studies underway and it is important these be monitored and where indicated and approved adopted in clinical services. A review of psychosocial treatments for methamphetamine dependence reported that the intensive application of psychological interventions (e.g., contingency management, cognitive behavior therapy (CBT), motivational interviewing) can result in a moderate reduction in stimulant use (Colfax, et al., 2010). Brief cognitive behavioral interventions, of up to four sessions duration, have also been shown to result in significant reductions in stimulant use and significantly greater likelihood of abstinence than controls (Baker 2005).

Depictions in the popular media show how difficult it can be to provide treatment to those methamphetamine users who are acutely intoxicated or experiencing a drug-induced psychosis and the level of resources required to safely manage these presentations. This may contribute to concerns in the service community about how to treat clients and doubts by staff as to their own capabilities. It may also undermine the perception of people, with varying patterns of use and related problems, that they might be at risk. Although Australian treatment guidelines have been developed specifically addressing the treatment of methamphetamine users, continued investment in workforce and organisational development is indicated to improve confidence, capability and processes to implement the approaches and ensure competence in dealing with specific meth/amphetamine issues and challenges (Lee, 2007; Jenner, 2008). Most of the skills and techniques required by clinicians and counsellors will be generic across drug types. However, the potential for agitation, impaired capacity to trust relationships, aggression or violent behaviour and the complicating factor of drug-induced psychosis may need specific training to ensure client and staff safety. It is also evident that people who are meth/amphetamine dependent may have a more tenuous connection to treatment, indicating the increased importance of effective treatment engagement and retention strategies.

In treating dependent users, withdrawal symptoms are unlikely to be life threatening, as in alcohol withdrawal, or severe, as in opiate withdrawal. Nevertheless, they do pose unique challenges including extended periods (e.g. 12 months) of 'crashes and craving' which require keeping clients engaged over prolonged periods. This will necessitate assertive outreach to maintain contact, sustain motivation and support the rebuilding of their ties to community.

For those with less entrenched methamphetamine related problems, a brief motivational and cognitive behavioural intervention has been developed and evaluated involving 2-4 sessions of face-to-face treatment with the recommendation that step-up interventions be evaluated for those who do not respond to initial treatment (Baker 2005).

Given the challenges of co-existing mental health and drug problems it will be important to ensure collaboration amongst drug specialist and mental health services to effectively respond. Also, as many people affected by problems will often seek advice and help from primary health care services (not only are these often the first point of contact, they are often the only local service, for example in remote communities) it will be important to identify strategies to enhance capacity and responses in primary health care and to facilitate referral and shared care amongst primary health care, drug specialist and mental health services. Similarly, because many people affected by methamphetamine intoxication are responded to by police, paramedics and emergency department staff, it will be

important to ensure effective interventions/practice protocols and referral pathways with primary health care, mental health and drug specialist services.

### ***Barriers to treatment***

As indicated above, in addition to staff possibly feeling hesitant in treating people affected by methamphetamine use, there is also reluctance by some consumers to approach conventional treatment settings. Treatment services might be perceived as catering for those with alcohol or opiate disorders, not for methamphetamine users (Lee, 2007). Previous evidence has indicated that, in general, compared to those with mental health problems, those with a drug use disorder are less likely to use treatment services for their disorder. Thus, in Australia, nearly 60% of those with an affective disorder and nearly 40% with an anxiety disorder reported using a treatment service in the previous year, but less than 25% of those with a drug use disorder had used a service. Among those with a more severe problem, that is a diagnosis of drug 'dependence', the use of services was greater, with 52% of those with drug dependence seeking treatment but among those dependent on methamphetamine, treatment seeking is lower, with about 30% receiving services (McKetin 2007). This indicates the need to consider enhancing access to and use of services for this largely untreated group.

The barriers to treatment identified above, along with what is known about the escalation of problems which is often associated with use escalating beyond once or twice a week, suggests that the best community benefit will be associated with having a range of treatment options available for users of 'ice'. As noted in 2008:

*The nature of interventions will be determined by the severity of problems. For example, the larger group of occasional users who experience comparatively lower level problems may respond to simple brief interventions, whereas regular and dependent users, who are also likely to be using a range of other drugs, may require more intensive interventions. While there is limited evidence about treatment strategies that are specific to ATS dependence, many approaches have been effectively used with other drugs and it is anticipated that these can be adapted and transferred to prevent and reduce ATS problems. (Australian Government Department of Health and Ageing, 2008)*

### ***Online interventions***

One means of providing early interventions or treatment to large numbers of people, including those outside capital cities, is via online interventions. Online or internet delivered interventions have been developed and evaluated for a range of mental health conditions and related problems (e.g. depression, anxiety and insomnia). This approach has also proven to be effective for problematic alcohol use and smoking (Rooke, Thorsteinsson et al., 2010; White, Kavanagh et al., 2010) and economic modelling suggests that online interventions for alcohol problems are cost effective, returning \$1.62 on every \$1.00 (Smit, Lokkerbol et al., 2011). There are also promising data for interventions targeting cannabis users and preventing the uptake of cannabis by young people (Tait, Spijkerman et al., 2013).

Based on the success of these online interventions and drawing on a proven face-to-face clinical program (Baker, Lee et al. 2005) a three module intervention for users of amphetamine type stimulants, including methamphetamine, was recently developed. The 'breakingtheice' trial received funding from the Australian Government. The six month outcomes of the subsequent randomized

control trial showed improvements in help-seeking behaviour and a reduction in the number of days 'out of role' for those who received the intervention. Under normal circumstances, increasing help-seeking behaviour would be regarded as an important change for those with either mental health or drug related problems. However, in this instance, the concern about the availability of treatment services even within capital cities, coupled with a higher prevalence of use in rural and remote areas, means that these people may remain under-resourced. Therefore, we would recommend building on these findings. The three module program was a fully automated or self-guided intervention with no human interaction. Guided interventions, where there is some interaction, such as text or email contact with a clinician, counsellor or technician, have improved the effectiveness of interventions compared with fully automated programs (Andersson and Titov 2014). Furthermore, while online interventions show significant promise as one strategy worth exploring to address drug related harm, it should always be kept in mind that no single strategy on its own is likely to be effective; coordinated multifaceted responses are required to address what are, as outlined, complex and diverse challenges (e.g. Colfax et al, 2010).

### ***Community education***

Although a mass media education campaign targeted at the general community is acknowledged as a key component of many responses to 'ice', there needs to be a recognition that *on its own*, such an intervention is unlikely to significantly impact on the prevalence of use of the drug or the harms associated with it, particularly at this stage of the unfolding 'epidemic' (see Behrens, et al., 2002; Caulkins, 2007). Consistent with previous strategies (Australian Government Department of Health and Ageing, 2008), mass media campaigns are most likely to have impact if complemented by: (i) other evidence based strategies that prevent drug problems emerging and developing; (ii) targeted strategies that aim to reach sub-populations most at risk, particularly early in the development of problems to encourage them to seek treatment; and, (iii) a range of appropriate treatment options from brief and early intervention, to upskilling community-based services (such as GPs and community clinical psychologists) to respond, as well as enhancement and development of specialist AOD services and mental health services for those experiencing more severe problems. Targeted interventions are important because there are diverse needs amongst: those who don't use; those who use occasionally; those with severe problems; families; those who use in connection with their employment; those who use in the context of sexual risk taking; those in Aboriginal and Torres Strait Islander communities etc.

For example, in relation to targeted responses, in the early 1990s, the Australian national amphetamine campaign funded under the National Campaign Against Drug Abuse (see Burrows, et al., 1993) utilised a 'tribes campaign' which recognised that there were particular distinct cultural sub-groups with their own identity and social features who were at high risk of amphetamine use and problems. At the time, these groups included: people in the rave scene; people in the trucking industry; injecting drug users; and working-class 'bogans'. Each of these groups was targeted in a postcard campaign and other specific interventions. While the strategies and target groups are likely to be different in the present situation, and with advances provided by new communication media, this may be an approach worth considering along with the mass media and other strategies.

There is also an indication that it may be useful to develop media guidelines that educate and inform discussions of methamphetamine and other drug issues in the public sphere, e.g. for journalists, politicians, policy makers and practitioners. There is a risk that some media coverage of

methamphetamine use, and the reactive assessments of the complex issues involved, can contribute to unnecessary fear and inflate the scale of the ‘problem’, and contribute to a perception that simple single strategies will be effective, or a sense of despair about the potential for effective responses. It may contribute to a reluctance to seek help and a low sense of competence, or willingness to intervene among clinicians. This can place governments and responders in an unenviable position. If consumers of methamphetamine are routinely depicted as irrational, violent and psychotic, this may contribute to stigmatisation and marginalisation, greater fear and anxiety (Dwyer & Moore, 2013) and they may be more reluctant to seek or receive effective help.

### ***Aboriginal Australians***

Strategies to address methamphetamine use among Aboriginal Australians should be focussed on three areas: the underlying social determinants of harmful AOD use; general AOD interventions common to all AOD use; and methamphetamine-specific interventions (Gray & Wilkes, 2010; Victorian Government Department of Human Services, 2008).

Aboriginal community controlled health services (ACCHS), should be a primary focus for delivery of preventive and treatment services to address methamphetamine use among Aboriginal people. There are several reasons for this: there are more ACCHS than there are specialist AOD service providers (to which ACCHS can provide referrals); Aboriginal people are more likely to use Aboriginal than mainstream service providers; methamphetamine and other drug users are more likely to present to ACCHS even if it is not for issues related to their methamphetamine use; and once they have presented they can be screened and provided with appropriate services (Gray *et al.*, 2014).

Approaches to treatment for methamphetamine use and evidence for their effectiveness have been summarised in various publications (Allsop & Lee, 2012; Baker *et al.*, 2004; Baker *et al.*, 2005; Jenner & Lee, 2008; MacLean *et al.*, 2015). These note that there is limited evidence for the effectiveness of Indigenous-specific treatment interventions. While the search for such interventions should not be discouraged, the best short-term strategy is to adapt to Aboriginal contexts interventions that have been demonstrated to work in other populations (Gray & Wilkes, 2010). While there appears to be general agreement on this approach, it is important to note that this is not a simple matter. Work conducted as part of the Drug and Alcohol Clinical Care Packages project (New South Wales Ministry of Health, 2013) and for the modification of those care packages for Aboriginal populations (Gomez *et al.*, 2014) highlights the additional resources that are needed to ensure cultural security and/or safety and to ensure access to both services *per se* and appropriate service providers.

It was noted by the Parliament of Victoria’s Drugs and Crime Prevention Committee (2004) that there was ‘... not enough good quality culturally relevant materials’ available to support amphetamine interventions among Aboriginal people; and this remains the case. There is a need to support Aboriginal communities to develop both health promotional and clinical resources that are: tailored to their specific needs; provide accessible, practical and accurate information; and are targeted at the general community, users, the families of users and health care providers themselves.

Provision of appropriate services also requires addressing a number of AOD workforce issues. These present a significant challenge to the culturally appropriate provision of services to Aboriginal people and care of the workforce is critical for effective treatment. Two studies conducted by NDRI have identified concerns among many Aboriginal AOD workers that they do not have the skills to address illicit drug use (Gray *et al.*, 2010; Gray *et al.*, 2014) and a survey of frontline workers conducted by



the National Indigenous Drug and Alcohol Committee (NIDAC) and the National Aboriginal Community Controlled Health Organisation (NACCHO) found that:

*More than half of respondents in urban areas indicated they needed more resources, knowledge or guidance, and linkages to other services to respond to ATS use. Around two-thirds of respondents from rural areas, and just under 90 per cent of respondents from remote areas, also indicated such needs (NIDAC & NACCHO, 2013 p.2).*

Addressing this need includes providing the skills and training related to methamphetamine presentations (this should be done in an ongoing not one-off training manner) and helping staff overcome other barriers to working with methamphetamine clients such as self efficacy, role validity and comfort (Butt *et al.*, 2011).

In addressing workforce issues it is important to recognise the high turnover of staff in the Aboriginal AOD field and combating this is an ongoing challenge which requires greater attention to opportunities for advancement, increased pay, improved supervision and debriefing opportunities, and opportunities for ongoing professional development (Gray *et al.*, 2010; Gray *et al.*, 2014; Duraisingam *et al.*, 2010).

### **Taskforce Question 3**

#### **ARE THERE ANY CURRENT EFFORTS TO COMBAT THE USE OF 'ICE' THAT ARE PARTICULARLY EFFECTIVE OR THAT COULD BE IMPROVED?**

##### *National strategy*

As outlined, the *National Amphetamine-Type Stimulant Strategy 2008-2011* (Australian Government Department of Health and Ageing, 2008) and the Parliament of Victoria Law Reform, Drugs and Crime Prevention Committee's 2014 *Inquiry into the supply and use of methamphetamines, particularly ice, in Victoria* are very relevant to the current taskforce. The existing strategy and the Victorian report address many of the issues of concern to the Taskforce and contain a thorough evidence-based set of recommendations and priorities covering a range of areas, from tackling supply and educating the community to a workforce development strategy and law enforcement approaches.

##### *Public health responses*

There are a range of public health responses that have been used for drug related problems but only a limited number of evaluations of programs have focussed specifically on methamphetamine. While responses to our more prevalent drugs (e.g. alcohol, tobacco, cannabis) *may* have relevance to methamphetamine we also need to be cautious in making this assumption and note specific challenges of methamphetamine (e.g. more tenuous connection to treatment; perception of risk; sexual risk taking, etc.). Allsop (2012) has reviewed the evidence and noted that the range of options might include: mass media campaigns; community mobilisation approaches; school-based prevention activities which extend beyond just drug education; peer-based interventions; addressing associated risk taking behaviours and contexts; workplace interventions; reducing the effects of ATS use on others (including families, but also for example first responders to medical emergencies, or law enforcement or local government staff who respond to clandestine laboratories). Allsop concluded that while we need interventions tailored to different contexts and settings of use and multifaceted responses, evidence specific to methamphetamine is scant.

##### *Treatment*

As indicated, development and enhancement of a range of appropriate treatment options from brief and early intervention, to upskilling community-based services (such as GPs and community clinical psychologists) to respond to 'ice' users are crucial. In addition, enhancement and development of specialist AOD services and mental health services for those experiencing more severe related problems should be another significant focus. Across a number of jurisdictions, over the past decade, there has been enhancement of strategies to better engage people affected by meth/amphetamine use and retain them in treatment. Increased access to treatment is an important strategy to maintain.

Given the challenges of access in rural and remote regions, there will need to be some particular focus here. For example, in the development of the National ATS Strategy, across Australia stakeholders noted the challenges of managing those who were intoxicated on ATS, especially those who were severely agitated and/or with more significant mental health problems. Often these challenges

occurred at the very times when drug specialist services were not accessible, i.e. at night, and so the only available options were police lock-ups or emergency departments, not the most appropriate or cost efficient options. While this was an issue across the country, it was particularly keenly felt in rural and remote areas.

There has been investment in strategies to increase the competence and confidence of clinicians to respond. While we need more evidence about the impact of the various approaches, this effort should be acknowledged and maintained. Several studies in Australia and overseas have indicated that GPs might be the favoured first point of contact for people affected by meth/amphetamine related problems. Initial contact might be in relation to mental health problems, sleep disorders, nutritional deficiency and issues such as relationship breakdown (a commonly cited reason for people to initially seek assistance). Acknowledging the broad range of demands placed on GPs it is nevertheless important to consider strategies to better equip GPs. This might include developing skills in screening/identification, brief interventions and referral/case management of meth/amphetamine problems. Given the significant impact on parents/families, it may also be useful to develop strategies to address the needs of this broader group affected by meth/amphetamine.

A number of key reviews (e.g. Colfax et al., 2010) identify that those affected by methamphetamine related problems might engage in a range of risk behaviours (e.g. drug impaired driving; sexual risk taking). Colfax and colleagues particularly noted the role meth/amphetamine might have in sexual risk taking, concluding that it will be critical to address the risk of STI and BBV among consumers *and* their partners.

It is worthwhile considering some context to the debate about treatment. Existing methamphetamine policy texts often refer to 'gaps in the evidence base'. It is worth keeping in mind that this phrase could be taken to portray existing research knowledge as consensual and cumulative rather than sometimes contested, operating within a range of different paradigms, and influenced by factors such as the politics of funding and public opinion. It also implies that much is already known about methamphetamine and with further research the remaining discrete gaps can simply be filled. These texts often simultaneously acknowledge the thinness of the research, making clear that the areas about which little or nothing is known are instead significant, and often crucial to the recommendations being made. This problem is especially evident in some of the treatment options sometimes presented for methamphetamine. Repeated calls are made to increase treatment coverage (e.g. Australian National Council on Drugs, 2007; Department of Health and Ageing, 2007) but the (relatively small number of) evaluations conducted to date are, at best, inconclusive. Some researchers note that some of the treatments for other drugs, with many years of research and evaluation behind them, offer only moderate success rates (Ritter & Lintzeris, 2004). It is also important to ensure the development of a considered and comprehensive approach as opposed to focussing on a single current 'favourite', to the exclusion of others. One illustration has been the heavy investment in neuroscience, in some countries, that has, so far, delivered little in the way of treatment options (Hall, Carter & Forlini, 2014). For example, the notion of drug use and dependence as a 'brain disease' has gained much momentum in some countries, becoming prominent in research, while investment in the role of broader socio-cultural factors has diminished. Australia needs to avoid such a narrow focus in its response.

### ***Aboriginal Australians***

Research conducted by NDRI has emphasised: the lack of coordination, planning and uneven distribution of AOD services for Aboriginal people; the fragmentation of service delivery; and the uncertainties resulting from current funding arrangements (Gray *et al.*, 2010; Gray *et al.*, 2014). To improve the capacity of Aboriginal community-controlled organisations to deliver services which address methamphetamine related problems, it is necessary to address these structural issues. As part of this, it is also necessary to address the full spectrum of associated harms (drug dependence, social welfare, health, mental health, legal issues) and for pathways through these services to be clear and client-centred (Gray *et al.*, 2014).

#### **Taskforce Question 4**

### **WHAT ARE THE TOP ISSUES THAT THE NATIONAL 'ICE' TASKFORCE SHOULD CONSIDER WHEN DEVELOPING THE NATIONAL 'ICE' ACTION STRATEGY?**

#### ***Addressing stigma***

A key issue not yet receiving enough attention relates to the terms in which public debate about methamphetamine is being conducted. Because of heightened public concern, great care needs to be taken when discussing methamphetamine use and its impact on the community (Moore & Fraser, 2015), which varies according to the very diverse patterns and contexts of its use and related problems. Recalling our comments in response to Question 2, there is therefore an indication of the need to develop media guidelines that educate and inform discussions of methamphetamine and other drug issues in the public sphere, e.g. for journalists, policy makers and practitioners. This is important, because, notwithstanding the human rights issues, stigma and marginalisation can contribute to a low perception of risk (“I’m not like that”), reduced likelihood of treatment seeking and disinclination to offer support by clinicians. Standards of reporting, such as those in place in Australia for reporting suicide or depression, could be developed to reduce the risk that media commentary and indeed prevention strategies unintentionally contribute to stigma and discrimination that in turn result in poorer public health outcomes.

#### ***The importance of context on use and related problems***

Recalling this submission’s introductory comments, methamphetamine use and related harms arise from a range of factors. In addition to considering the impact of methamphetamine use on the community, effective policy needs also to attend to the community structures – such as educational engagement, community engagement, labour market/access to employment and welfare structures – that can influence marginalisation, and increased risk, of specific groups of people (e.g. Aboriginal and Torres Strait Islander people, homeless people, etc.) who may be more likely to use methamphetamine and more likely to have more severe adverse events. This suggests that tackling issues of social and economic exclusion, gender, poverty, marginalisation and racism, all key contributors to AOD use and related problems, should be included in any policy response (e.g. Boeri, 2013; Brown, 2010; Hart, 2013; Pine, 2010).

#### ***Prevention and reducing related problems***

While there is limited specific evidence that can guide effective prevention and public health responses to amphetamine use and related problems, there is evidence that can be drawn from other areas of drug use (Allsop 2012). These might include:

- peer-based strategies to prevent uptake of use and providing information and assistance to current consumers at events that might be associated with an increased risk of use were a key recommendation from the Parliament of Victoria’s Drugs and Crime Prevention Committee (2004). Such approaches are particularly relevant as many people affected by methamphetamine related problems remain disconnected from traditional interventions/services;
- mass media campaigns would need to be a part of a broader strategy, for example highlighting treatment options (such as gambling advertising campaigns have done). It will

be useful to include information campaigns that are targeted to at risk users or current users at locations they frequent and sometimes target specific risk behaviours, e.g. sexual risk taking (Colfax et al 2010);

- careful consideration given regarding including methamphetamine in school drug education. Methamphetamine use in school aged children is low prevalence and any approaches will need to avoid the risk of inadvertently increasing interest and/or use. It is noted that most of the evidence base about effective school based interventions have been with more prevalent drugs (e.g. cannabis, alcohol, tobacco) with much more limited evidence about impact/unintended adverse outcomes with other drugs. There are very few studies about school based education on methamphetamine, suggesting careful consideration and evaluation is required;
- as noted earlier, methamphetamine use has been associated with a number of risk taking behaviours such as impaired driving and sexual risk taking. The evidence suggests that risk taking behaviours be considered in prevention and other responses to 'ice' use;
- as noted in the evidence and much of the recent commentary about 'ice' use, problems can affect a broad range of people. Parents, children, 'first responders' (paramedics; police; emergency department staff) and broader communities can be significantly affected. It will be important to consider and develop responses that include this broader group – what advice and support do parents need; how do we better support police and emergency staff to respond effectively and safely, etc.;
- the evidence and debate clearly indicate that multifaceted prevention strategies and strategies to reduce problems are required. Various past and current reviews and inquiries suggest these could include:
  - a range of youth media to communicate information and advice to young people;
  - using the internet to communicate information and advice to young people, parents, club owners, licensees, people working in the entertainment industry and school staff;
  - information specifically targeting the needs of parents/carers/families and for professionals who respond to ATS use; and,
  - interventions tailored to meet the needs of specific populations such as Aboriginal and Torres Strait Islander people, or high-risk groups such as people in the gay community.

As the Background Paper to the *National Amphetamine-Type Stimulant Strategy 2008-2011* noted:

*Evidence suggests peer education is particularly suited to younger persons and in accessing populations that would not otherwise present to health or drug specialist services...With regard to ATS, campaigns are needed that specifically target young people; certain workplaces; Aboriginal and Torres Strait Islander people and CALD populations; parents and families; and the general community.*

*Harm reduction strategies generally target risks and harms of drug use associated with particular routes of administration, intoxication, regularity of use and dependence. Within these categories, strategies may be aimed at developmental effects, physical or health outcomes, personal safety issues, mental health consequences or impacts on social wellbeing. As with prevention strategies, particular groups and/or behaviours are associated with higher risks and harms [and] the development of campaigns must anticipate outcomes which are evidence based. Strategies need to be targeted to particular populations (e.g., injecting users, professionals, long distance drivers), regions (e.g.,*

*urban, rural and remote), contexts of use (e.g., nightclub scene, home use) and specific types of ATS (e.g., campaigns will be different for ecstasy than for methamphetamine). They need to be informed by theories of attitudinal and behavioural change, and may benefit from the involvement of current or ex-ATS users in developing campaigns.*

### ***AOD workforce and organisational development***

As noted above, a related issue is the need to build the capacity of the workforce and organisations to engage in and successfully implement prevention, treatment and strategies to reduce problems for consumers and the broader community. Again, this is complicated by the absence of contact many meth/amphetamine users have with specialist drug services, and the broad range of services where they may seek help and advice (emergency departments; GPs; youth services; criminal justice; police).

It is important that we ensure practitioners and frontline workers, including police and ambulance workers, understand how methamphetamine can have impact, the risks and problems, for the consumer, their significant others and indeed the responders, and how to safely and effectively respond. It is important to extend efforts to families and peer networks.

### ***Treatment***

As noted, there is limited evidence about effective pharmacological interventions to treat meth/amphetamine dependence or withdrawal. This means that the consensus is that psychological interventions remain the key intervention for methamphetamine use and related problems – as well as underlying mental health problems – with treatment predominantly provided through community-based drug treatment services. With specific reference to methamphetamine treatment, it is important to recognise and consider the long withdrawal and recovery period, and the high relapse rate, for methamphetamine users, especially ‘ice’. Services need to be supported to develop strategies and responses that reflect the longer withdrawal (compared to many other drugs) cycle, and the need to provide effective longer term support. This will include some focus on key challenges for those affected by meth/amphetamine related problems – such as sleep disorders, mental health disorders, dental health problems, significantly damaged relationships and, for some, cognitive impairment. Given the tentative connection some meth/amphetamine consumers have to treatment it is worth exploring the particular role of assertive follow-up/aftercare.

As already noted, while it is important to address the needs of those who are dependent/experiencing severe problems, there is also the need to provide broader access to others who might respond to lower intensity services: step up care approaches, brief/opportunistic interventions, online interventions.

### **Summary**

A number of key issues have been identified. These include the need to:

- review the *National Amphetamine-Type Stimulant Strategy 2008-2011* and the Parliament of Victoria Law Reform, Drugs and Crime Prevention Committee’s 2014 *Inquiry into the supply and use of methamphetamines, particularly ice, in Victoria*, which both addressed many of the issues of concern to the ‘Ice’ Taskforce and, reviewing the evidence and

broad consultation provided a thorough evidence-based set of recommendations and priorities;

- recognise the complex factors that contribute to drug use and related problems and the need for multifaceted responses;
- recognise that at a population level, drug policy interventions need to be dynamic and responsive and their impact might well vary across the unfolding cycle of challenges;
- identify the role that context of use can play in the experience of problems and incorporate this into responses;
- evaluate policy and associated strategies in this context to ensure unintended adverse consequences are avoided and effective interventions are implemented;
- avoid strategies and approaches that stigmatise and marginalise people affected by 'ice' use with consequent adverse impact on treatment engagement and retention;
- invest in multifaceted prevention strategies that prevent use in the first place and address the needs of those already using and those affected by that use, including parents/families and the broader community;
- recognise that in addition to addressing the needs of those who are dependent/with severe problems, there is also opportunity to provide lower intensity services to help prevent less dependent users developing more severe problems;
- address risk behaviours associated with methamphetamine users, not just for consumers but for others who might be affected, such as addressing the needs of parents, partners and families;
- identify effective responses and structures/procedures to those affected by co-existing mental health and drug problems;
- address the particular challenges and needs of rural and remote communities;
- address the particular challenges and needs of Aboriginal and Torres Strait Islander people and communities;
- build stronger connection to support and service provision for those affected by methamphetamine use. This might include:
  - organisational and workforce development for drug specialist and mainstream health services. This will include building strong referral and shared care pathways;
  - culturally safe Aboriginal health services and building capacity among these services;
  - establishing and evaluating programs such as online interventions, step-up/step-down withdrawal models (e.g. combinations of non-residential and residential withdrawal) and psychological and pharmacotherapy trials;
  - trialling and where indicated investing in strategies that address the particular challenges of methamphetamine use (e.g. protracted withdrawal; treatment retention; sexual risk taking/risk of BBV/STI);
  - investing in strategies to enhance access to care across Australia but particularly in rural and remote regions;
  - developing more effective and efficient strategies to manage methamphetamine intoxication and related problems; and,
  - reviewing and where indicated supporting enhanced strategies for first responders and emergency departments.



## References and Further information

- Allsop, S. (2012). Prevention and public health approaches to amphetamine-type stimulant use and related harm. In Allsop, S and Lee, N (eds). *Perspectives on Amphetamine-Type Stimulants*. IP Communications, Melbourne. pp. 172-189.
- Andersson G and Titov N. (2014). Advantages and limitations of Internet-based interventions for common mental disorders. *World Psychiatry*, 13(1): pp. 4-11
- Armstrong, E. (2007). Moral panic over meth. *Contemporary Justice Review*, 10 (4), 427-442.
- Australian Bureau of Statistics. National Aboriginal and Torres Strait Islander Social Survey 2008. Canberra: Australian Bureau of Statistics, 2010.
- Australian Crime Commission. (2014). 2013-14 Illicit Drug Data Report. Australian Crime Commission, Canberra.
- Australian Government Department of Health and Ageing. (2008). National Amphetamine-Type Stimulant Strategy 2008-2011. Canberra: Australian Government Department of Health and Ageing.
- Australian Institute of Health and Welfare (2014a). 2013 National Drug Strategy Household Survey Key Findings. AIHW, Canberra.
- Australian Institute of Health and Welfare (2014b). Alcohol and other drug treatment services in Australia 2012-13. Drug treatment series 24. Cat. no. HSE 150. AIHW, Canberra.
- Australian Institute of Health and Welfare. (2011) Substance Use Among Aboriginal and Torres Strait Islander People. Cat. no. IHW 40. Canberra: Australian Institute of Health and Welfare.
- Ayres, T.C. and Jewkes, Y. (2012). The haunting spectacle of crystal meth: A media-created mythology? *Crime Media Culture*, 8 (3), pp. 315-332.
- Babor, T, Caulkins, J, Edwards, G et al. (2010). *Drug Policy and the Public Good*. Oxford: Oxford University Press.
- Baker, A., Lee, N.K., Claire, M., Lewin, T.J., Grant, T, Pohlman, S., et al. (2005) Brief cognitive behavioural interventions for regular amphetamine users: A step in the right direction. *Addiction*, 100 (3), pp. 367-78.
- Baker, A., Lee, N.K., and Jenner, L. (eds). (2004). Models of intervention and care for psychostimulant users (2nd Edition). National Drug Strategy Monograph Series No. 51. Canberra: Australian Government Department of Health and Ageing.
- Behrens, D. A., Caulkins, J. P., Tragler, G. and Feichtinger, G. (2002). Why present-oriented societies undergo cycles of drug epidemics. *Journal of Economic Dynamics and Control*, 26, pp. 919-936.
- Blue Moon Research and Planning. (2008). Patterns of use and harms associated with specific populations of methamphetamine users in Australia: exploratory research. Sydney: Blue Moon Research and Planning.
- Boeri, M. (2013). *Women on ice: Methamphetamine use among suburban women*. Brunswick, NJ: Rutgers University Press.
- Boyd, S. and Carter, C. (2010). Methamphetamine discourse: Media, law, and policy. *Canadian Journal of Communication*, 35, pp.219-237.
- Brown, R.A. (2010). Crystal methamphetamine use among American Indian and white youth in Appalachia: Social context, masculinity, and desistance. *Addiction Research and Theory*, 18(3), pp. 250-269.

- Burrows, D., Flaherty, B. and MacAvoy, M. (1993). *Illicit Psychostimulant use in Australia*. Canberra: Commonwealth of Australia.
- Butt, J., Wilkes, E.T. and Gray, D. (2011). The preliminary validity and utility of assessing staff attitudes to working with cannabis related harms in Indigenous primary health care settings. *Drug and Alcohol Review* 30 (S.1), pp. 16-17.
- Caulkins, J. P. (2007). The need for dynamic drug policy. *Addiction*, 102, pp. 4-7.
- Clatts, M.C., Welle, D.L., and Goldsamt, L.A. (2001). Reconceptualizing the interaction of drug and sexual risk among MSM speed users: Notes toward an ethno-epidemiology. *AIDS and Behavior*, 5 (2), pp.115-130.
- Colfax, G., Santos, G. M., Chu, P., Vittinghoff , E., Pluddemann, A., Kumar. S., et al. (2010) Amphetamine-group substances and HIV. *Lancet*, 376 (9739), 458-74.
- Dietze, P. and Fitzgerald, J. (2002). Interpreting changes in heroin supply in Melbourne: droughts, gluts or cycles? *Drug and Alcohol Review*, 21, pp. 295-303.
- Duff, C. (2005). Party drugs and party people: Examining the ‘normalization’ of recreational drug use in Melbourne, Australia. *International Journal of Drug Policy*, 16 (3), pp.161-170.
- Duff, C. and Moore, D. (2015). Evading and embracing normality: Estrangement and ambivalence in the accounts of methamphetamine consumers. *Critical Public Health*. DOI: 10.1080/09581596.2014.913785.
- Duff, C. and Moore, D. (2014). Counterpublic health and the design of drug services for methamphetamine consumers in Melbourne. *Health*, 19 (1), pp. 51-66.
- Duraisingam, V., Roche, A.M., Trifonoff, A., and Tovell, A. (2010). Indigenous AOD Workers’ Wellbeing, Stress, and Burnout: Findings from an online survey. Adelaide: National Centre for Education and Training on Addiction (NCETA), Flinders University.
- Dwyer, R. and Moore, D. (2013). Enacting multiple methamphetamines: The ontological politics of public discourse and consumer accounts of a drug and its effects. *International Journal of Drug Policy*, 24 (3), pp. 203-211. DOI: 10.1016/j.drugpo.2013.03.003
- Dwyer, R., Pennay, A., Green, R., Siokou, C., Barratt, M.J., Thomson, N. and Moore, D. (2012). The social contexts and cultural meanings of amphetamine-type stimulant use and their implications for policy and practice. In Allsop, S. and Lee, N. (eds.) *Perspectives on Amphetamine-Type Stimulants*. I.P. Communications, Melbourne. pp. 56-68.
- Dyer, K.R. and Cruickshank, C. (2005.) Depression and other psychological health problems among methamphetamine dependent patients in treatment: implications for assessment and treatment outcome. *Australian Psychologist* 40 (2), pp.96-108.
- Fraser, S. and Moore, D. (2011). Governing through problems: The formulation of policy on amphetamine-type stimulants (ATS) in Australia. *International Journal of Drug Policy*, 22 (6), pp. 498-506.
- Fraser, S., Moore, D. and Keane, H. (2014). *Habits: Remaking addiction*. Palgrave Macmillan, Basingstoke, UK.
- Gomez, M., Ritter, A., Gray, D., Gilchrist, D., Harrison, K., Freeburn, B. and Wilson, S. (2014). Adapting DA-CCP for Aboriginal and Torres Strait Islander people receiving alcohol, tobacco and other drug services: components of care and a resource estimation tool. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- Gray, D., Stearne, A., Bonson, M., Wilkes, E.T., Butt, J. and Wilson, M. (2014). Review of the Aboriginal and Torres Strait Islander alcohol, tobacco and other drugs treatment service sector:

harnessing good intentions. (Awaiting release by the Department of the Prime Minister and Cabinet). Perth: National Drug Research Institute, Curtin University.

- Gray, D., Stearne, A., Wilson, M. and Doyle, M.F. (2010). Indigenous-specific alcohol and other drug interventions: continuities, changes and areas of greatest need. ANCD Research Paper 20. Australian National Council on Drugs, Canberra.
- Gray, D. and Wilkes, E.T. (2010). Reducing alcohol and other drug related harm. Closing the Gap Clearing House. Resource Sheet 3.
- Gray, D., Stearne, A., Bonson, M., Wilkes, E., Butt, J. and Wilson, M. Review of the Aboriginal and Torres Strait Islander Alcohol, Tobacco and Other Drugs Treatment Service Sector: Harnessing Good Intentions (Revised Version). National Drug Research Institute, Curtin University: Perth, 2014.
- Green, R. and Moore, D. (2009). 'Kiddie drugs' and controlled pleasure: Recreational use of dexamphetamine in a social network of young Australians. *International Journal of Drug Policy*, 20 (5), pp. 402-408.
- Green, R. and Moore, D. (2013). 'Meth circles' and 'pipe pirates': Crystal methamphetamine smoking and identity management among a social network of young adults. *Substance Use and Misuse*, 48 (9), pp. 691-701.
- Halkitis, P.N., Fischgrund, B.N., and Parsons, J.T. (2005). Explanations for methamphetamine use among gay and bisexual men in New York City. *Substance Use and Misuse*, 40 (9-10), pp. 1331-1345.
- Hall, W., Carter, A., and Forlini, C. (2014). The brain disease model of addiction: Is it supported by the evidence and has it delivered on its promises? *The Lancet Psychiatry*, 2 (1), pp. 105-110.
- Hart, C.L., Marvin, C.B., Silver, R., and Smith, E.E. (2012). Is cognitive functioning impaired in methamphetamine users? A critical review. *Neuropsychopharmacology*, 37 (3), pp.586–608.
- Heilbronn, C., Gao, C., Lloyd, B., Smith, K., Best, D. and Lubman, D. (2013). Trends in amphetamine-related harms in Victoria. *Medical Journal of Australia*, 199 (6), p. 395.
- Jenner, L. and Lee, N. (2008) Treatment Approaches for Users of Methamphetamine: A Practical Guide for Frontline Workers. Canberra: Australian Government Department of Health and Ageing.
- Joe, K.A. (1996). Lives and times of Asian-Pacific American women drug users: An ethnographic study of their methamphetamine use. *Journal of Drug Issues*, 26 (1), pp. 199-218.
- Kenny, P., Harney, A., Lee, N. K., and Pennay, A. (2011). Treatment utilization and barriers to treatment: Results of a survey of dependent methamphetamine users. *Substance Abuse: Treatment, Prevention, and Policy*, 6.
- Kosten, T.R., Markou, A. and Koob, G.F. (1998). Depression and stimulant dependence: Neurobiology and pharmacotherapy. *Journal of Nervous and Mental Disease*, 186 (12), pp. 737-745.
- Law Reform, Drugs and Crime Prevention Committee (2014). Inquiry into the supply and use of methamphetamines, particularly 'Ice', in Victoria – final report. Parliament of Victoria.
- Lee, N., Johns, L., Jenkinson, R., Johnston, J., Connolly, K., Hall, K., and Cash, R. (2007). Clinical treatment guidelines for alcohol and drug clinicians No. 14: Methamphetamine dependence and treatment. Fitzroy, Victoria: Turning Point Alcohol and Drug Centre.
- Lee, N. and Rawson, R. (2008). A systematic review of cognitive and behavioural therapies for methamphetamine dependence. *Drug Alcohol Review*, 27, pp.309-317.

- Lee, N., Johns, L., Jenkinson, R., Johnston, J., Connolly, K., Hall, K., et al. (2007). Methamphetamine dependence and treatment. Fitzroy, Victoria: Turning Point Alcohol and Drug Centre Inc.
- LeeJenn Health Consultants 2014. Medication treatment options for amphetamine-type stimulant users. Australian National Council on Drugs, Canberra.
- Lende, D.H., Leonard, T., Sterk, C.E. and Elifson, K. (2007). Functional methamphetamine use: the insider's perspective. *Addiction Research and Theory*, 15 (5), pp. 465–477.
- Lloyd, B. (2013). Trends in alcohol and drug related ambulance attendances in Victoria: 2011/12. Turning Point Alcohol and Drug Centre, Victoria.
- MacLean, S., Harney, A. and Arabena, K. (2015). Primary health care responses to methamphetamine use in Australian Indigenous communities. *Australian Journal of Primary Health*. <http://dx.doi.org/10.1071/PY14126>
- McKetin, R., Dunlop, A., Holland, R., Sutherland, R., Baker, A., Salmon, A. and Hudson S. (2013). Treatment outcomes for methamphetamine users receiving outpatient counselling from the Stimulant Treatment Program in Australia. *Drug and Alcohol Review*, 32, pp. 80-87. doi: 10.1111/j.1465-3362.2012.00471.x.
- McKetin, R., Najman, J., Baker, A., Lubman, D., Dawe, S., Ali, R., Lee, N., Mattick, R. and Mamun, A. (2012). Evaluating the impact of community-based treatment options on methamphetamine use: findings from the Methamphetamine Treatment Evaluation Study (MATES). *Addiction*, 107 (11), pp. 1998-2008. doi: 10.1111/j.1360-0443.2012.03933.x.
- McKetin, R. and Kelly, E. (2007) Socio-demographic factors associated with methamphetamine treatment contact among dependent methamphetamine users in Sydney, Australia. *Drug Alcohol Review*, 26 (2), pp. 161-8
- McKetin, R., Kelly, E. and McLaren, J. (2006). The relationship between crystalline methamphetamine use and methamphetamine dependence. *Drug and Alcohol Dependence*, 85, pp. 198-204.
- Moore, D. and Dietze, P. (2005). Enabling environments and the reduction of drug-related harm: Re-framing Australian policy and practice. *Drug and Alcohol Review*, 24, (3), pp. 275-284.
- Moore, D. and Fraser, S. (2015). Causation, knowledge and politics: Greater precision and rigour needed in methamphetamine research and policy-making to avoid problem inflation. *Addiction Research and Theory*, 23, (2), pp. 89-92.
- National Indigenous Drug and Alcohol Committee. (2014) National Indigenous Drug and Alcohol Committee and National Community Controlled Health Organisation Survey on Amphetamine Type Stimulants Use. Canberra: National Drug and Alcohol Committee.
- New South Wales Ministry of Health. (2013). Drug and Alcohol Service Planning Model: Final Report to the Intergovernmental Committee on Drugs (IGCD) on the Development of a Population Based Planning Tool for Australia. Sydney: New South Wales Ministry of Health.
- Pennay, A. E. and Lee, N. K. (2009). Barriers to methamphetamine withdrawal treatment in Australia: Findings from a survey of AOD service providers. *Drug and Alcohol Review*, 28, pp. 636-640.
- Pennay, A. and Moore, D. (2010). Exploring the micro-politics of normalisation: Narratives of pleasure, self-control and desire in a sample of young Australian 'party drug' users. *Addiction Research and Theory*, 18, (5), pp. 557-571.

- Pine, J. (2010). Embodied capitalism and the meth economy. In L.J. Moore and M. Kosut (Eds), *The body reader: Essential social and cultural readings*. New York: New York University Press, (pp. 164-183).
- Rhodes, T. (2002). The 'risk environment': A framework for understanding and reducing drug-related harm. *International Journal of Drug Policy*, 13: pp. 85-94.
- Ritter, A. and Lintzeris, N. (2004). Specialist interventions in treating clients with alcohol and drug problems. In M. Hamilton, T. King., and A. Ritter (Eds.), *Drug use in Australia: Preventing harm*. South Melbourne: Oxford University Press, pp. 221-235.
- Scott, N., Caulkins, J.P., Ritter, A., Quinn, C. and Dietze, P. (2015) High-frequency drug purity and price series as tools for explaining drug trends and harms in Victoria, Australia. *Addiction*, 110 (1), pp.120-8.
- Siokou, C. and Moore, D. (2008). 'This is not a rave!': Changes in the commercialised Melbourne rave/dance party scene. *Youth Studies Australia*, 27, (3), pp. 50-57.
- Siokou, C. Moore, D. and Lee, H. (2010). 'Muzzas' and 'Old Skool Ravers': Ethnicity, drugs and the changing face of Melbourne's dance party/club scene. *Health Sociology Review*, 19 (2), pp. 192-204.
- Slavin, S. (2004). Crystal methamphetamine use among gay men in Sydney. *Contemporary Drug Problems*, 31 (3), 425–465.
- Srisurapanont, M., Jarusuraisin, N. and Kittirattanapaiboon, P. (2001) Treatment for amphetamine dependence and abuse. *Cochrane Database Systematic Review*. (3), pp.1-15.
- Stafford, J. and Burns, L. (2014). Australian Drug Trends 2013. Findings from the Illicit Drug Reporting System (IDRS). Australian Drug Trend Series No. 109. National Drug and Alcohol Research Centre, Sydney.
- Tait, R.J., McKetin, R., Kay-Lambkin, F., Carron-Arthur, B., Bennett, A., Bennett, K., et al. (2015). Six month outcomes of a web-based intervention for users of amphetamine-type stimulants: Randomized controlled trial. *Journal of Medical Internet Research*.17 (4), e105.
- Thomson, N. and Moore, D. (2014). Methamphetamine 'facts': The production of a 'destructive' drug in Australian scientific texts. *Addiction Research and Theory*, 22 (6), pp. 451-462.
- United Nations Office on Drugs and Crime. (2014). World Drug Report 2014. United Nations publication, Sales No. E.14.XI.7.
- UnitingCare ReGen. (2013). Inquiry into Supply and Use of Methamphetamines Briefing Paper. Law Reform, Drugs and Crime Prevention Committee, Parliament of Victoria. UnitingCare ReGen, Victoria.
- UnitingCare ReGen. (2014). Methamphetamine treatment: Building on successful strategies to enhance outcomes. UnitingCare ReGen, Victoria.
- Victorian Government Department of Human Services. (2008). Victorian amphetamine-type stimulant (ATS) and related drugs strategy 2009–2012. Melbourne: Victorian Government Department of Human Services.
- Zule, W.A. and Desmond, D.P. (1999). An ethnographic comparison of HIV risk behaviors among heroin and methamphetamine injectors. *The American Journal of Drug and Alcohol Abuse*, 25 (1), 1-23.