Crystal clear:
The social determinants of gay men’s use of crystal methamphetamine in Victoria

William Leonard
Gary Dowsett
Sean Slavin
Anne Mitchell
Marian Pitts
Crystal Clear:
The social determinants of gay men's use of crystal methamphetamine in Victoria

William Leonard
Gary Dowsett
Sean Slavin
Anne Mitchell
Marian Pitts
CONTENTS

ACRONYMS 4
EXECUTIVE SUMMARY 5

1. Introduction 8
   1.1. Background 8
   1.2. Structure of the paper 10
   1.3. Methodology 10

2. Profiling crystal methamphetamine 13
   2.1. History 13
   2.2. Pharmacology and physiological effects 15
   2.3. Social and economic costs 18
   2.4. Health costs 20

3. Illicit drug use in mainstream communities 24
   3.1. Rates and trends 24
   3.2. Patterns 25

4. Crystal methamphetamine and gay men 28
   4.1. Epidemiological data 28
   4.2. Behavioural data 34
   4.3. Findings from the Delphi Scan 39

5. Treatment and prevention 41
   5.1. Treatment options 41
   5.2. Treatment for gay men 42
   5.3. Prevention and promotion 44

6. Framing policy 45
   6.1. Summarising the data 45
   6.2. Current approaches 47
   6.3. New policy frameworks 47

7. A coordinated response 50
   7.1. Policy and programs 50
   7.2. Treatment and prevention 51
   7.3. Research 52

Appendices
A. Literature review and Factiva search 53
B. Literature review – Search terms 54
C. Melbourne-based data 55
D. Delphi Scan – Questionnaire 66
E. Delphi Scan – Expert reference group 70
F. Delphi Scan – Stage 2 results in full 71
<table>
<thead>
<tr>
<th>ACRONYMS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT</td>
<td>Australian Capital Territory</td>
</tr>
<tr>
<td>AIHW</td>
<td>Australian Institute of Health and Welfare</td>
</tr>
<tr>
<td>ANCD</td>
<td>Australian National Council on Drugs</td>
</tr>
<tr>
<td>ARC</td>
<td>Australian Research Council</td>
</tr>
<tr>
<td>ARCSHS</td>
<td>Australian Research Centre in Sex, Health and Society</td>
</tr>
<tr>
<td>BBV</td>
<td>Blood Borne Viruses</td>
</tr>
<tr>
<td>CBT</td>
<td>Cognitive Behavioural Therapy</td>
</tr>
<tr>
<td>DHS</td>
<td>Victorian Department of Human Services</td>
</tr>
<tr>
<td>ED</td>
<td>Emergency Department</td>
</tr>
<tr>
<td>ERDRS</td>
<td>Victorian Ecstasy and Related Drugs Reporting System</td>
</tr>
<tr>
<td>GHG</td>
<td>Gamma Hydroxy Butyrate</td>
</tr>
<tr>
<td>GLHV</td>
<td>Gay and Lesbian Health Victoria</td>
</tr>
<tr>
<td>GLMA</td>
<td>Gay and Lesbian Medical Association (US)</td>
</tr>
<tr>
<td>HCV</td>
<td>Hepatitis C</td>
</tr>
<tr>
<td>IDRS</td>
<td>Illicit Drug Reporting System</td>
</tr>
<tr>
<td>MACS</td>
<td>Multicenter AIDS Cohort Study</td>
</tr>
<tr>
<td>MSM</td>
<td>Men Who have Sex with Men</td>
</tr>
<tr>
<td>NDARC</td>
<td>National Drug and Alcohol Research Centre</td>
</tr>
<tr>
<td>NSDUH</td>
<td>National Survey on Drug Use and Health (US)</td>
</tr>
<tr>
<td>PDI</td>
<td>Victorian Party Drugs Initiative</td>
</tr>
<tr>
<td>SOPV</td>
<td>Sex On Premises Venue</td>
</tr>
<tr>
<td>STD</td>
<td>Sexually Transmissible Disease</td>
</tr>
<tr>
<td>STI</td>
<td>Sexually Transmissible Infection</td>
</tr>
<tr>
<td>UAI</td>
<td>Unprotected Anal Intercourse</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

Background

*Crystal Clear* provides a comparative analysis of epidemiological, behavioural and social research on crystal methamphetamine use among gay men living in Melbourne and gay men living in other urban centres in Australia, the US, and the UK. The analysis focuses on the harms associated with gay men's use of the drug and in particular on research that indicates an association between crystal methamphetamine use and increased sexual risk-taking and rising rates of HIV and STIs. The paper reviews current crystal methamphetamine treatment and prevention options for gay men and provides a framework for the development of a coordinated research, policy and program response that will reduce the harms to gay men associated with the use of crystal methamphetamine and other illicit drugs.

The paper is based on a report on rates and patterns of crystal methamphetamine use among gay men living in Melbourne funded by Communicable Diseases Branch, Victorian Department of Human Services (DHS).

Key findings

Comparative data

Rates of illicit drug use, including crystal methamphetamine, among gay men in Australia, the UK and the US are higher than their respective national averages. Rates of crystal methamphetamine use among gay men living in Melbourne in 2006 have been estimated at between 8 and 15 per cent compared with 3.2 per cent for the population as a whole. Despite widespread media concerns of an impending “ice epidemic”, national Australian data show that rates of crystal methamphetamine use have stabilised since 2000 and have fallen slightly over the last two years. This is the case for young people, in particular. However, the limited data available suggest that over this same period rates of crystal methamphetamine use among gay men living in Melbourne have increased, with one survey reporting that rates have more than doubled from 6.3 per cent in 2000 to 15.1 per cent in 2006.

According to national Australian data, rates of illicit drug use are highest among 18 to 29 year olds, with 10 per cent of this age group having used crystal methamphetamine in the last 12 months. In contrast, national data show that rates of crystal methamphetamine are highest among gay men aged 30 to 39 years.

This research also shows that polydrug use is the norm in both mainstream and gay communities, with crystal methamphetamine usually taken in combination with one or more other illicit substances, including prescription drugs. In Australia, over 90 per cent of gay men who reported taking crystal methamphetamine in a 2006 national survey reported doing so in combination with one or more other drugs.

Physiological effects

Short term use of crystal methamphetamine may result in fever, sweating, erectile dysfunction (in men), headache, blurred vision and dizziness, and at high doses may lead to convulsions. Medium to longer-term use may result in neuronal damage, permanent memory loss and impaired motor coordination. Use of crystal methamphetamine is associated positively with feelings of euphoria, confidence, invincibility and increased libido, and negatively with severe mood changes, depressive episodes, sleep disorders, physical exhaustion and violent behaviour. Injecting crystal methamphetamine carries the greatest risk of dependency and ill effects, followed by smoking, snorting and ingesting.

---

Sources of data presented in the Executive Summary are referenced in full as a footnote when first used in the body of this report.
Social and health-related costs

Mainstream community

Mainstream studies and policies have focused on the personal, social and economic costs of crystal methamphetamine use, including its links to crime, violence and family breakdown. A national Australian survey of hospital emergency department admissions has shown an increase in the percentage of drug-induced psychosis separations due to amphetamine, from 41 per cent in 2000 to 55 per cent in 2004. However, it is not clear whether this signals an increase in the number of problematic users or more intense and frequent use among a relatively fixed population of users.

Gay men

In contrast, research and policy that address gay men’s use of crystal methamphetamine have focused almost exclusively on the links between drug use, sexual risk-taking and rising rates of HIV and STIs. Apart from a few ethnographic studies, no Australian research has looked at the personal, social and economic costs to gay men and the wider community associated with gay men’s use of crystal methamphetamine and other drugs. This narrow focus on infectious diseases may reflect an inability to consider gay men’s health—and well-being—outside the confines of HIV and AIDS.

» Personal, social and financial costs

There is little research on the extent of dependent and problematic crystal methamphetamine use among gay men in Melbourne. However, international research suggests that problematic use is restricted to a small percentage of gay male users. A US study of gay men living in Miami found that long-term use of crystal methamphetamine was linked to loss of friends, employment and committed relationships. A small ethnographic study of gay men resident in Sydney found that chronic, long-term use was associated with loss of employment, financial hardship, depression, loss of friends and social isolation.

» HIV and STIs

There is considerable disagreement among researchers over the nature of the association between gay men’s use of crystal methamphetamine and rising rates of HIV and STIs. A longitudinal US study demonstrates that methamphetamine use is associated with HIV seroconversion. Behavioural studies have documented increased sexual activity and sexual risk taking among gay men who use crystal methamphetamine, including increased rates of unprotected anal intercourse.

However, there is little evidence that gay men who use crystal methamphetamine change their sexual behaviours under the influence of the drug. US research shows that the association between methamphetamine and HIV infection is directly related to the frequency and intensity of the drug’s use. Australian and international research suggests that frequent and intense use of crystal methamphetamine is most common among a very small cohort of gay men engaged in what has been termed “adventurous sex”. Among this subpopulation of gay men, crystal methamphetamine is not the cause of risky sexual behaviours but rather its use is one of a number of ways of increasing the range and intensity of sexual experience (see below). The limited data available also suggest that injecting drug use, including crystal methamphetamine, is higher among this group, increasing the risk of hepatitis C transmission.
» HIV-positive gay men’s health

Research on the effects of crystal methamphetamine use on the health of HIV-positive gay men suggests that the drug may impair the functioning of the immune system, interfere with antiretroviral medications, reduce adherence to antiretroviral medications and treatments, and lead to physiological changes to the mucosa that may increase the risk of HIV transmission.

Problematic use among gay men

National and international research shows that most gay men who use crystal methamphetamine use the drug recreationally and manage their recreational drug use with few, if any, problems. Epidemiological, behavioural and social studies suggest that problematic use is restricted to two discrete but overlapping populations of gay men: dependent users, and those who take crystal methamphetamine primarily to enhance their sexual capacity. There is a growing body of research demonstrating that homophobic abuse and discrimination are risk factors for dependent drug use. Behavioural studies identify three groups of gay men who are potentially exposed to greater levels of homophobia and stigma and hence are at increased risk of problematic drug use: young gay men in the process of coming out; MSM who are uncomfortable with their sexuality; and HIV-positive men.

Recent national and international research suggests that many of the gay men who take crystal methamphetamine to enhance their sexual capacity are part of an emerging gay subculture formed at the intersection of the gay commercial scene and private sex parties. The gay men who are part of this subculture tend to be older (30 to 39 years), are more likely to be HIV-positive, are more likely to inject crystal methamphetamine, and often use crystal methamphetamine in combination with other sexual performance enhancing drugs, in particular Viagra™.

However, the research suggests there is significant overlap and movement between these different ways of using crystal methamphetamine. This includes movement from and between recreational and dependent use of the drug and the blurring of the distinction between recreational/social and sexual use of the drug in the highly sexualised social spaces of contemporary gay commercial culture.

Limitations of current data

It is impossible to measure the total number of gay men in Australia (or Victoria), accurately, nor the total number of gay men who use crystal methamphetamine and the percentage of these who are problematic users. Furthermore, epidemiological, behavioural and social studies of gay men, nationally and internationally, rely on convenience sampling and are weighted in favour of community-attached gay men. The findings of this report also suggest that there is a lack of expertise among academics, policy makers and health care workers regarding gay men’s use of crystal methamphetamine and the most appropriate and effective ways of minimising the harms associated with its use.

At the same time, there is little or no current Australian or Victorian research on the ways in which contemporary social and political processes are structuring gay identities, both collective and individual, and how new ways of being gay are affecting gay men’s social and sexual practices. Such research is vital to understanding the changing relationships between gay men’s drug use, including crystal methamphetamine, and sexual practices that carry an increased risk of HIV and STI transmission.
The notion that the world around us is continually evolving is a platitude; we rarely grasp its full implications. We do not ordinarily think, for example, of an epidemic disease changing its character as the epidemic spreads.2

1. Introduction

1.1. Background

Over the past two years in Australia, there has been an explosion of mainstream media interest in crystal methamphetamine, commonly known as “ice”.3 According to more sensational reports, Australia is in the grip of an “ice epidemic”, with increasing supply from markets in South East Asia matched by growing local demand.4,5 The drug’s ready availability, and research suggesting it may be more addictive than other illicit substances, have fuelled media images of a drug with near universal appeal that poses a particular threat to the vulnerable and the young.6 Use of crystal methamphetamine has been linked to increases in drug-related crime and random acts of violence (including violence in hospital emergency departments), loss of income and employment, and the destruction of “ordinary Australians’ lives”.7,8,9

Mainstream media hype over the social and economic costs of crystal methamphetamine use has been paralleled in the gay and lesbian press by concerns that crystal methamphetamine is feeding the collective libido of gay men, engendering a disregard for safe sex and with it a rise in HIV and sexually transmissible infections (STIs).10 “I think”, declared respected author and gay activist Edmund White, “that the biggest single enemy of the gay community is crystal methamphetamine”.11 As early as 2000, researchers in the US suggested that increased use of club drugs, and in particular methamphetamine, may be one of the major factors driving increased rates of HIV infection among gay men on the West Coast.12 Between 1999 and 2006, increasing rates of new HIV and STI diagnoses have been reported among urban gay men living in Western Europe, North America and other regions where the epidemic has a similar profile to that in Australia.13 Over this same period, Victoria has experienced a 99 per cent increase in newly diagnosed HIV infections, rising from 132 in 1999 to 263 in 2006, with the majority of new infections occurring among gay men living in Melbourne.14

---

2 See, for example, the Sunday Telegraph, 11 September 2005, “the ice-cold killer”; The Advertiser, 28 September 2006, “Enter a new Ice Age”; The Courier-Mail, 30 September 2006, “Facing up to the ice age”; and The Age, 14 October 2006, “Fear of the ice age”.
3 According to King, reporting of crystal methamphetamine in the US has “followed a generally formulaic approach...based on instilling fear about a substance through dramatised descriptions and images of the consequences coupled with a notion of treating people with harsh punishments out-of-step with the harm caused by the drug”. See King, R.S. (2006) “The Next Big Thing? Methamphetamine in the United States”. Washington, Sentencing Project, p. 16.
4 Sunday-Mail, 22 April 2007, “Squad fights spread of ‘Ice’”, which reports that “The federal Government is to establish an international ‘flying squad’ of elite police to target production of the killer drug crystal methamphetamine”.
5 See, for example, The Australian, 2 October 2006, “Police redesign drug tactics to break the rise of ‘Ice’”. The article reports that, “Police have recast their crime-fighting strategies to take on the proliferation of the illicit drug ice among the young”; Canberra Times, 26 September 2006, “Ice worse than heroin: Police”, which quotes NSW Police Commissioner Ken Moroney “Australia was at risk of losing a generation of young people to the drug ‘ice’ (which) could be a worse problem than heroin”.
6 Canberra Times, 10 May 2007, “Ice a huge challenge for society: Police”, which opens: “Police have confiscated knives, slingshots, batons, syringes and tasers from aggressive ice users on Canberra streets...”.
7 For the most recent examples, see The Sydney Morning Herald, 2 April 2007, “Hospitals bear brunt of raging ice addiction”; The Age, 2 April 2007, “Ice abuse leads to rise in psychotic episodes”; and The Australian, 1 February 2007, “Deadly ice scourge: Violence increases as 500,000 try drugs”.
8 See Herald-Sun, 7 April 2007, “Ice breaker”, which opens with “Brett Pascoe was spending up to $2000 a week on his ice habit. He broke his wife’s legs in a fit of rage... and that was before they lost the house and nearly each other”; Sunday-Age, 18 March 2007, “Did ice turn this man into a sadistic rapist?”; and Sunday Times (Perth), 19 November 2006, “On the slippery slide to hell”, which tells us that “Mark had a dream life before ice destroyed it”.
10 White goes on to claim “In America the rising rates of HIV among young gays are almost all associated with crystal methamphetamine”. “Life or Meth” at http://www.lifeormeth.com/australasia/pacific/4510297645
Despite fevered media interest, a great deal of confusion and disagreement exists among researchers, policy makers and health care workers regarding the scale, scope and consequences of crystal methamphetamine use within both mainstream and gay communities. In a recent report by the National Drug and Alcohol Research Centre (NDARC), senior health officials from all jurisdictions in Australia ranked methamphetamine as the top priority area in drug and alcohol policy. However, their call for more research was not formed in response to compelling evidence of a looming "ice epidemic", but rather to counter what they perceived as media beat-ups and misrepresentations.

Similar concerns were expressed by members of a reference group that provided expert comment, as part of this project, on the scale and scope of crystal methamphetamine use among gay men in Melbourne. All members noted the paucity of research and "hard data" on rates and patterns of crystal methamphetamine use in the gay male community. A number believed that media reports of increasing use among the general population were indicative of increasing use by gay men. However, a minority argued that talk of an ice epidemic is just "media hype" and that use in both mainstream and gay communities peaked in 2003 and was now declining.

There was also disagreement among members of the reference group regarding the types and levels of harm associated with gay men's use of crystal methamphetamine. This disagreement reflects divisions within the international research community and, in particular, diverging views regarding the nature of the association between crystal methamphetamine use among gay men and rising rates of HIV and STIs. While some researchers argue that rising rates of HIV and STIs are a direct result of increasing use of crystal methamphetamine, others suggest that increasing infection rates are the result of much broader and ongoing changes within the gay community over the last 10 to 15 years. These include changes to gay men's sexual practices, their use of drugs (including crystal methamphetamine) and the relationships between these two.

Clearly, there is a pressing need for more research on crystal methamphetamine use among mainstream and gay communities in Australia. In particular, there is a need to review and build on current research on gay men's use of crystal methamphetamine and on the relationship between drug use and changing sexual norms and practices within the gay male community. This will provide an evidence-based framework for developing effective, long-term policy, programs and services that reduce the harms to gay men associated with the use of crystal methamphetamine.

---

16 As the authors of the report put it, "In light of the extensive media interest and debate, respondents felt that we need to get it [crystal methamphetamine] back into perspective". A number also argued that there was little hard data on crystal methamphetamine use in Australia and that what research had been done was limited in scope and contradictory in its findings.
17 The reference group was convened as part this project. See Section 1.4 "Methodology: Delphi Scan" for details.
18 See Appendix F for details.
20 King argues that, "Misleading media reports of a methamphetamine "epidemic" have hindered the development of a rational policy response". Topp echoes King's concerns, arguing that in Australia sensational media reporting of the harms associated with crystal methamphetamine may have fed a perception that effective treatment is impossible and that the only options for tackling the drug are supply reduction and increased law enforcement and criminal penalties. King, R.S. (2006) op cit. and Topp, L. (2006) "Focusing on Methamphetamines". Of Substance: The national magazine on alcohol, tobacco and other drugs 4:3, p. 10.
1.2. Structure of the paper

The paper is divided into 7 sections:

Section 1 – Outlines the aims of the project and structure of the paper

Section 2 – Profiles crystal methamphetamine including recent media appearances, a history of the drug and its uses, an overview of its pharmacology and physiological effects, and the harms and costs associated with its use

Sections 3 and 4 – Provide a comparative analysis of epidemiological data on illicit and recreational drug use in mainstream versus gay male communities using US, UK and Australian sources and an analysis of epidemiological and behavioural data on gay men's use of crystal methamphetamine internationally and in Australia

Section 5 – Looks at treatment and prevention options for dealing with crystal methamphetamine use, and the need for and effectiveness of interventions that target gay men

Section 6 – Outlines a policy framework aimed at addressing gay men's illicit drug use including crystal methamphetamine

Section 7 – Suggests the development of a coordinated research, policy and service system response to gay men's use of illicit drugs consistent with the framework outlined in Section 6.

1.3. Methodology

The report has drawn on three data sources:

- A literature review of national and international epidemiological, behavioural and social research on illicit drug use, including crystal methamphetamine, among mainstream and gay male communities;
- Current survey data on crystal methamphetamine use among gay men living in Victoria; and
- A survey of expert opinion regarding the extent of problematic crystal methamphetamine use among gay men living in Melbourne and the capacity of current health-related services to meet their specific needs.

1.3.1. Literature review

Review process

A search of Australian newspapers was conducted using the Factiva database for articles on "crystal methamphetamine" or "ice" published between January 2000 and May 2007. The search was also used to determine the number of articles published in Victoria during this same period and the number of articles published after 2005 both nationally and in Victoria. At the same time a review of national and international research on illicit and recreational drug use among gay men and drug prevention and treatment options was conducted using: CINAHL; Ovid Medline (R); Current Contents; APAFT; and CSA Sociological Abstracts. Searches were conducted for articles published in English between January 2000 and May 2007 and covered the fields of sociology, anthropology, social policy, clinical studies and the biomedical sciences. A more detailed account of the search process is included as Appendix A. The search terms used are listed in Appendix B. An EndNote file consisting of 97 articles has been generated from the research literature review (including full abstracts wherever possible). The articles were grouped according to the key search terms.

---

21 News and Business Information (Factiva).
22 Cumulative Index to Nursing and Allied Health Literature (CINAHL), Australian Public Affairs Information Service Full Text (APAFT), Cambridge Scientifics Abstracts (CSA).
1.3.2. Melbourne data

Table 1 lists in full the four surveys that were used to mine unpublished data on crystal methamphetamine use among gay men living in Melbourne. It includes the name of the organisation and individual responsible for providing the data.

Table 1 - Melbourne Data Sources

<table>
<thead>
<tr>
<th>Name of survey</th>
<th>Responsible agency &amp; individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grierson, J. et al. (2006) HIV futures five: Life as we know it. Monograph series number 60. The Australian Research Centre in Sex, Health and Society, La Trobe University: Melbourne</td>
<td>The Australian Research Centre in Sex, Health and Society, La Trobe University (Dr Jeffrey Grierson)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Pitts, M. et al. (2006) Private Lives: A report on the health and well-being of GLBTI Australians. Gay and Lesbian Health Victoria and The Australian Research Centre in Sex, Health and Society, La Trobe University: Melbourne</td>
<td>The Australian Research Centre in Sex, Health and Society, La Trobe University (Professor Marian Pitts)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Pivotal, peripheral or positional: Understanding SOPVs for intervention (2007) final report pending.</td>
<td>The Australian Research Centre in Sex, Health and Society La Trobe University (Professor Anthony Smith)</td>
</tr>
</tbody>
</table>

Data

The four surveys all included questions related to illicit drug use, while the Sex on Premises Venues (SOPV) Survey included specific questions on crystal methamphetamine. Two are national surveys, one Victorian, and one is restricted to Melbourne. The Melbourne SOPV Survey results have yet to be published. The data provided for this project were restricted to males resident in Victoria who identified as men who have sex with men (MSM), gay, bisexual or queer.

The researchers listed in Table 1 were asked to analyse their respective databases for information and data relating to:

- Patterns of crystal methamphetamine use among gay men in Melbourne;
- Demographic variations in patterns of use among this population; and
- Health service usage for problematic gay male crystal methamphetamine users in Melbourne.

The data provided varied considerably in detail, depending on the respective survey's focus and range of questions. It was also presented in different formats. The results are presented in tabular form (with the exception of the Melbourne Periodic data) in Appendix C. The data provide a preliminary picture of crystal methamphetamine use among gay in Melbourne. They have been used throughout the report to compare rates and patterns of crystal methamphetamine use among gay men living in Melbourne with those of gay men living in other urban centres, both national and international.
1.3.3. Delphi Scan

What it is and what it is used for

The Delphi Scan is an iterative research tool aimed at clarifying areas of consensus and disagreement among expert informants regarding a critical issue or issues in their shared area of expertise in the absence of sufficient data from research and other published reports. It was developed by the RAND Corporation in the 1950s as a means to engage collective expert opinion in research and policy development.23 The method has undergone continued development, but retains three key elements:

- Repeated individual questioning of experts;
- Maintaining the anonymity of the expert group to minimise conflict and undue influence; and
- Controlled feedback to enable participants to comment on and reconsider their own responses and those of the other members.

A number of recent reviews have highlighted the strengths and potential methodological weaknesses of the Delphi Scan and its increasing popularity in social research and policy development over the last ten years.24

Generation of questionnaire and recruitment

The project management team assisted in the development of the Delphi Scan’s questionnaire, which included both open-ended and forced-choice questions. The questions reflected the issues raised in the literature review and the Melbourne data. A copy of materials sent to participants, including the full questionnaire consisting of 14 questions, appears as Appendix D.

Following extensive consultations with key stakeholders and DHS officers, a comprehensive list of expert informants was generated. These were contacted by telephone. Of the 34 people approached, 32 agreed to participate in the Delphi Scan. These respondents were drawn from a wide range of occupations and organisations, from health care workers and academics to Victoria Police. Appendix E lists the organisations represented. Two interstate researchers were included to provide comparative data and comment.

Results

Stage 1 – All 32 respondents were emailed a Word copy of the questionnaire on 19 June 2007, followed by reminder emails and a final phone call to those who had not replied by the due date, 29 June 2007. The due date was extended and 23 completed questionnaires were returned by 17 July 2007.25 The responses to each question were analysed in terms of key themes, areas of agreement and disagreement, and recommendations.

Stage 2 – All 23 respondents were sent a Word copy of the analysis of the collective responses to Stage 1 on 1 August 2007, followed by reminder emails and a final phone call to those who had not provided comments by the due date, 13 August 2007. The due date was extended but only 14 of the 23 respondents had provided comment by 17 August 2007. All agreed with the overall findings from Stage 1, with only minor changes.

A summary of the key findings from the Delphi Scan are presented in Section 4.3. The results of Stage 2 are presented in full in Appendix F. Findings from the Delphi Scan have been used throughout the paper to make comparisons between Melbourne and other jurisdictions, as appropriate.

25 The response rate for each question varied significantly, with over 50 per cent of respondents ruling themselves “not qualified” to answer some (in the most extreme case 9) of the 14 questions.
2. Profiling crystal methamphetamine

2.1. History

2.1.1. International/US

The "amphetamines" are a class of closely related drugs. They include amphetamine sulphate, dexamphetamine, and methamphetamine (also known as methylamphetamine). Amphetamine and methamphetamine are synthetic substances similar in structure and effect to the naturally occurring stimulant ephedrine and the hormone adrenalin. Crystal methamphetamine, also known as "ice" and "crystal meth", is a highly purified form of methamphetamine. It is generally defined as having a minimum purity of 80 per cent, making it four to eight times higher in average purity than other forms of the drug.

Methamphetamine was first synthesised from ephedrine in Japan in 1893 and crystallized in 1919. Methamphetamine appeared as a legal drug in nasal decongestant preparations during the 1930s and was used in World War II by Japanese, German and US military personnel to combat fatigue. In the 1950s, there was a rise in the legal prescription of methamphetamine. In the US, it was prescribed for, among other things, narcolepsy, certain depressive disorders, weight loss, and Parkinson's disease.

The 1960s witnessed a growth in the clandestine manufacture of crystal methamphetamine for personal and non-medical use. In the US, recreational use peaked in the late 1980s. In its 2 December 1989 edition, The Economist labelled San Diego the "methamphetamine capital of North America". In 1970, the US passed the Federal Controlled Substances Act in an effort to restrict the availability of methamphetamine. It has been argued, however, that this had the effect of driving methamphetamine production underground, increasing illegal production of crystal methamphetamine in basement laboratories and garages, and cementing the links between organised crime (including the Hells Angels) and the illicit drug market. In 1983, laws were passed in the US prohibiting the possession of the precursors and equipment needed to produce methamphetamine. Later that year, Canada passed similar legislation. In 2005, the US passed the Combat Methamphetamine Epidemic Act, which limited the amount of pseudoephedrine and ephedrine that a person may purchase in a specified time period.

---

26 A number of policy documents cast a wider net, defining meth/amphetamines as part of a larger group of chemically similar drugs termed "amphetamine-type substances" (ATS). This group of drugs "comprises amphetamines and related substances, cocaine, and ecstasy and related substance". See Joint Committee on the Australian Crime Commission (28 February 2007) Inquiry into the manufacture, importation and use of amphetamines and other synthetic drugs (AOSD) in Australia. "Chapter 2 – Amphetamines and other synthetic drugs in Australia". Commonwealth of Australia. At http://www.aph.gov.au/Senate/Committee/acc_ctte/aosd/report/c02.htm [accessed 30/08/07]
33 In 1967, there were 31 million prescriptions for methamphetamine written in the US. Vincent, K. B. (2005) The Ecstasy and Methamphetamine Drug Epidemics: Implications for Prevention and Control. Master of Arts, Faculty of the Graduate School of the University of Maryland, College Park, p.36.
2.1.2. Australia

_Compared to the US there has been little methamphetamine use in Australia._37

In Australia, as in the US, amphetamine and methamphetamine have been used by certain occupational groups to provide extra stamina and alertness. For example, there are reports of 30 to 45 per cent lifetime use of amphetamines among long-distance truck drivers.38 However, the emergence of an illicit, recreational methamphetamine market in Australia has lagged behind the US.

McKetin provides a brief history of meth/amphetamine use in Australia.39 She argues that methamphetamine was first signalled as an emerging problem among young people in the late 1980s. An article in The Australian Magazine in May 1990 warned readers of the potential effects of crystal methamphetamine based on reports from the US, including Hawaii.40 In 1991, Customs and the Australian Federal Police warned of the dangers posed by “ice” following the seizure of 80 kilograms of the drug in Hong Kong and Japan, believed to have been manufactured in China.41

According to McKetin, the majority of methamphetamine available in Australia is produced locally.42 However, production and use vary significantly between States, with higher rates of use reported in Queensland (especially the Gold Coast region), South Australia and Western Australia.43 McKetin argues that, in the mid 1990s, there was a shift from the manufacture and supply of amphetamine to its more potent analogue methamphetamine, with the latter now accounting for over 90 percent of the amphetamines seized in Australia.44 This was followed in the late 1990s by the introduction of imported high-purity crystal methamphetamine.45

A recent Senate inquiry found that use of crystal methamphetamine is increasing in social groups that traditionally have not been associated with hard drug or amphetamine use because it can be ingested in a number of ways.46 Unlike heroin, crystal methamphetamine use is not limited to the small proportion of the population who are willing to inject themselves (estimated at 0.5 per cent).47 The late 1990s also saw a shift in local production of methamphetamine to a high purity damp or oily powder form called “base.”48 McKetin also notes that many of the ecstasy pills on the Australian market contain methamphetamine, while injection of methamphetamine has been taken up amongst a proportion of heroin injectors following the 2001 heroin shortage.

---

44 In the year 2000-2001, 91 per cent of all seizures of amphetamines were methamphetamine. Australian Bureau of Criminal Intelligence (2002) _Australia illicit Drug Report 2000/01_. Canberra: Commonwealth of Australia.
45 Most shipments originate from China and to a lesser extent from other countries in the Asia Pacific region. See National Leadership Forum on Ice (December 2006) _ICE (Crystal Methamphetamine)._ Radisson Hotel, Sydney p.9. However, Drabsch, reporting on the findings of the Australian Crime Commission argues that “growing demand for crystal methamphetamine will lead to more attempts to import it as well as produce it locally.” The first crystal methamphetamine laboratory in Australia was detected in Queensland in February 2002. Drabsch, T. (2006) p.7 op cit.
47 The Australia Institute Submission to the Parliamentary Joint Committee on the Australian Crime Commission Inquiry into Amphetamines and Other Synthetic Drugs (AOSD), quoted in Joint Committee on the Australian Crime Commission (28 February 2007) op cit.
It is clear from this brief history that the market for methamphetamines in Australia is well established and diverse—diverse not only in terms of the different forms (and purity) of methamphetamine available, but also in terms of local (and subcultural) patterns of production and consumption (see below).49

**The commercial gay scene**

Little research has been done on how crystal methamphetamine entered gay communities in Melbourne and other Australian capital cities. This is indicative of the paucity of research on the history and changing patterns of drug use among gay men in Australia. Anecdotal reports suggest that crystal methamphetamine may have entered the Sydney gay scene in the late 1990s through gay male tourists from the US and, in particular, from its West Coast. As numerous researchers have noted, illicit drug use is a key—if not defining—feature of the gay commercial and sex scenes.50 To a degree, these are experimental scenes marking out in advance a space for new drugs. As gay men in major Australian cities became aware of and began to use crystal methamphetamine, gay commercial culture was linked into existing domestic networks of the drug’s supply. Insofar as these drug networks vary geographically, this history may explain differences in patterns of crystal methamphetamine use among gay men between cities and States.51 This history also highlights the importance of considering local conditions in the design and implementation of policy and programs targeting problematic crystal methamphetamine use among particular segments of the population, including gay communities.

**2.2. Pharmacology and physiological effects**

**2.2.1. Pharmacology**

Amphetamine and methamphetamine stimulate the release of various neurotransmitters including dopamine, noradrenalin, adrenaline and serotonin. Both boost central nervous system activity, leading to increases in physical activity, heart rate, blood pressure and body temperature, and decreased appetite and need for sleep. They also cause feelings of euphoria, well-being and confidence.52 Although amphetamine and methamphetamine have a similar chemical structure, at comparable doses much higher levels of methamphetamine enter the brain, making it a more potent stimulant.53 It also has longer lasting and more harmful effects on the central nervous system.54

**2.2.2. Mode of administration**

Methamphetamine is available in three main forms:

- **Powder** – Also known as "speed", which is around 10 per cent pure. Most people who use speed either snort (inhale through the nose) or inject it.


51 A report by British Columbia Ministry of Health Services suggests that in Canada crystal methamphetamine moved from the gay into the mainstream community. However, the history of the drug’s use in the US and the existence of local Australian supply networks in the 1980s suggest a more complex interaction between mainstream and gay communities in the gradual popularisation of crystal methamphetamine. British Columbia Ministry of Health Services (2004) Crystal Meth and Other Amphetamines: An Integrated BC Strategy. British Columbia Ministry of Health Services, British Columbia.

52 Illicit Drug Reporting System (June 2002) op cit.

53 The methyl group in crystal methamphetamine is responsible for its increased potency relative to amphetamine. It renders crystal methamphetamine more lipid soluble, easing transport across the blood-brain barrier (BBB), while also making it more resistant to enzymatic degradation. Rothman, R.B. et al. (2001) "Amphetamine-type central nervous system stimulants release norepinephrine more potently than they release dopamine and serotonin". Synapse 39, 32-41.

• Base – Also known as “paste”, “wax”, “point” or “pure”, which is a sticky, gluggy, waxy or oily damp powder, paste or crystal. It has a purity of about 20 per cent. Base is administered through a number of routes including swallowing, snorting, smoking and injecting.

• Ice – Also known as “shabu”, “crystal”, “Tina” or “crystal meth”, which is a crystalline form of high purity (80 per cent). Like base, crystal methamphetamine can be swallowed, snorted, smoked or injected.55

The risk of methamphetamine addiction is linked to the mode of the drug’s administration and the form of the drug used. Clearly, the risk of addiction or problematic use is greater with the crystallised form of the drug. The quicker the drug is absorbed into the blood stream, the quicker and more intense the effects and the greater the potential for addiction.56 The slowest rate of absorption occurs when crystal methamphetamine is taken orally, producing effects within 15 to 30 minutes. Snorting crystal provides a faster high, within three to five minutes, as the drug is absorbed through the blood vessels in the nose. The two most rapid absorption routes are smoking and injection, where effects are felt within seven to 15 seconds. Intravenous injection releases crystal methamphetamine directly into the blood stream, while smoking involves rapid absorption of vapours through the blood vessels lining the lungs; the vapours are then pumped throughout the body.57

Studies show that people who inject crystal methamphetamine are five times more likely to become dependent users than people who ingest or snort the drug.58 Higher rates of dependent use have also been noted for people who smoke the drug. McKetin and others have argued that this is of particular concern given Australian data showing a rapid increase in the popularity of smoking crystal methamphetamine among non-injecting drug users and young people aged 16 to 25 years and elevated levels of drug dependence among these groups.59

2.2.3. Physiological effects

Colfax and Guzman, and Maxwell provide current reviews of research on the physiological effects of crystal methamphetamine.60 The Journal Addiction has recently published a supplement focused on methamphetamine, which includes articles on the drug’s neurological, biochemical and physiological effects.61
Short and medium term

Studies show that a large percentage of recreational users manage their crystal methamphetamine use with few or no problems. However, the severity of any episode of use is related to the amount and purity of the drug taken and the mode of administration. The high experienced with a single dose of crystal methamphetamine may last anywhere from two to 48 hours and its physiological effects may include erectile dysfunction (among men), fever, severe sweating, headache, blurred vision and dizziness. At very high doses, it can lead to elevated body temperature and convulsions. The psychological effects include greater confidence and energy, an increased libido, and feelings of strength and invincibility. Users are also likely to be talkative and restless. Throughout the "comedown" or "crash", a person may become depressed, irritable, lethargic, anxious and paranoid, or find it difficult to sleep.

Occasional use increases the risk of drug overdose, psychosis, violent behaviour and dependency. People who have or are predisposed to particular mental health problems such as anxiety disorders are at increased risk from regular, even if occasional, use of the drug. McKetin estimates that the prevalence of psychosis is 11 times higher among regular methamphetamine users than among the general population, and that 23 per cent of regular users will experience symptoms of psychosis in a given year.

Occasional use is also associated with increased risk of sleep disorders, physical exhaustion and depressive episodes. Although there are few data on the number of occasional users who become dependent, the percentage appears to be small. The trajectory from occasional use to dependency maps onto changing modes of administration from snorting or swallowing, to smoking and injecting.

Long-term

Evidence suggests that prolonged methamphetamine use is associated with neuronal damage resulting in potentially permanent memory loss, attention deficits and mood changes, and impaired motor coordination. A US study of over 1,000 methamphetamine users in treatment found high levels of psychiatric problems such as depression, anxiety, suicide and attempted suicide, and violent behaviour. Residual symptoms include prolonged inability to experience pleasure, anxiety and psychotic episodes. Studies also suggest that long-term use may lead to severe and ongoing cardiac problems.

---

63 Taken from ACT Council of Social Services Inc (April 2007) Submission to the ACT Legislative Assembly Standing Committee on Health and Disability Inquiry into the Use of Crystalline Methamphetamine in the ACT. ACT Council of Social Services Inc: Reid, ACT, p.11.
66 "[A] proportion of people who try the drug move on to take methamphetamine regularly, often making the transition to the more efficient routes of smoking or injecting the drug" Australian National Council on Drugs (2007) p. 3 op cit.
2.3. Social and economic costs

The Australian National Council on Drugs (ANCD) reports that, "the major public health consequences related to methamphetamine use occur disproportionately among people who are dependent on the drug." The ANCD identifies a number of negative social and economic consequences related to the heavy use of crystal methamphetamine. These include:

- Crystal methamphetamine-related violent behaviour and crime and their effect on emergency services, the police, and the courts; and
- Relationship breakdown, unemployment and financial debt.

Maxwell offers a similar list in a recent US review of the social costs associated with methamphetamine.

2.3.1. Violence and crime

Shoptaw and Reback argue that, among US men, methamphetamine use compromises income earnings and is associated with psychological problems, both of which can lead to increased violence, criminality and incarceration. The ANCD notes that violent behaviour, and in particular violent crime, is most likely to occur among chronic methamphetamine users when they experience drug-induced paranoia. The ANCD makes a distinction between two types of crystal methamphetamine-related violent crime: economically motivated violent crime; and violent behaviour associated with chronic use and intoxication, which may lead to assault or homicide.

In New South Wales, crystal methamphetamine-related arrests rose from 18 per 100,000 population in 1995 to 46 per 100,000 population in 2005, an increase of 253 per cent. A review of the methamphetamine market in Sydney by McKetin et al. found that 45 per cent of the methamphetamine users surveyed had committed an offence in the past month, one quarter had been arrested in the past year, and one third had served a prison sentence during their lifetime. However, as McKetin notes, these statistics are similar to those for other illicit drug-using populations.

According to McKetin, methamphetamine users most likely to commit crime are younger, have a history of antisocial behaviour, and use purer forms of base or ice in combination with other drugs. This profile does not match that of dependent gay male users (see Section 4.1). Currently, there are few or no data on the percentage of gay male crystal methamphetamine users who have committed violent and/or criminal offences, or on the relationship between such offences and different rates and patterns of crystal methamphetamine use within the gay male community.

---


23 "Over time", writes King, "methamphetamine abuse can result in the deterioration of physical and mental capacities, the dissolving of family ties, diminished employment prospects, and a lifetime spent cycling through the criminal justice system". King, R.S. (2006) p. 1 op cit.


2.3.2. Emergency department admissions

Degenhardt, Roxburgh and McKetin report that, from 1999-2000 to 2003-2004, amphetamines accounted for the largest proportion of all drug-induced psychosis separations in Australia, increasing from 41 per cent in 1999-2000 to 55 per cent in 2003-2004.80 Fulde and Wodak note that very few Australian studies have looked at the profiles of people accessing hospital emergency departments (ED) for methamphetamine-related problems or the effect these presentations have on limited hospital resources.81

Gray et al. conducted a three-month study in 2005 of presentations at the Royal Perth Hospital ED.82 They found that, over that period, 1.2 per cent (156) of presentations was judged to be causally related to amphetamine use. Repeat attendance was common, with 45.5 per cent (58) of patients having previous amphetamine-related presentations to the Royal Perth Hospital ED. Over 50 per cent of patients were aged 20-29 and 38.5 per cent aged 30 years or more. The majority of patients reported taking the drug at home (48.3 per cent) followed by “at a friend’s place” or “at a public venue” (both 16.7 per cent). Over 70 per cent of patients reported injecting the drug, followed by ingesting (19.2 per cent) and smoking (10.3 per cent).

ED admissions do not routinely screen for drugs, so studies such as Gray’s have relied on clinical assessment and case note review. Furthermore, ED admissions for methamphetamine and other drugs are likely to vary significantly between inner-city and outer-metropolitan hospitals and between different cities. A study of methamphetamine-related ED admissions in an inner-city Sydney hospital reported rates of admission and patterns of use significantly different from those in Gray’s study and may reflect very different demographics and user groups.83

Again, sexuality is not routinely screened for in the collection of hospital emergency data. This lack of data is reflected in the responses from two hospital workers in the Delphi Scan. One respondent put the percentage of problematic gay male crystal methamphetamine users presenting at EDs at 30 per cent, while the other believed that few if any gay men were presenting at EDs with crystal methamphetamine related problems, including psychosis (Appendix F). Data from Private Lives show that gay male crystal methamphetamine users in Melbourne were “no more likely” than gay men who had never used the drug to report accessing hospital emergency rooms in 12 months prior to the survey, even when controlling for age (Appendix C). However, a review of case notes may provide some information on clients whose sexuality was a factor in the methamphetamine-related incident that led to their ED admission.

2.3.3. Personal and financial costs

Kurtz, in a study of gay men living in Miami, found that long-term use of crystal methamphetamine was linked to the loss of friendships, employment and committed relationships.84 An in-depth ethnographic study of four gay male, recreational, crystal methamphetamine users in Sydney found that two of the respondents experienced severe emotional and financial problems as their use became more entrenched and problematic. By the conclusion of the two-year study early in 2002, one of the respondents was depressed and isolated, having lost both his job and friendship networks.85 It is significant that the majority of respondents to the Delphi Scan described problematic crystal methamphetamine use not only in health-related terms but also in terms of the level of disruption “to someone's everyday life”. As one respondent put it, “I would define crystal use as problematic when it impacts on the user’s ability to maintain their employment, their primary relationship, their friendship networks and their usual social activities...” (Appendix F).

2.4. Health costs

2.4.1. Public health costs

A report from the Australian Capital Territory (ACT) Council of Social Services lists the impact of crystal methamphetamine dependency on community sector organisations. The report notes that a number of service providers, from crisis accommodation to mental health and drug and alcohol services, said they needed to significantly alter their method of service delivery because they did not have the capacity to deal with a person [affected] by crystal methamphetamine. Similar concerns have been expressed by GPs, hospital emergency personnel and many of the experts in the Delphi Scan.

The US Gay and Lesbian Medical Association (GLMA) has argued that methamphetamine use is associated with increased use of already-strained health care resources. US studies show that methamphetamine use often results in unnecessary or avoidable admissions to trauma centres and emergency services. Sheridan et al. also offer a review of the research on the public health costs associated with crystal methamphetamine-related injury in the US.

2.4.2. Gay men’s health and well-being

Increased rates of HIV and STIs

HIV: It is now widely accepted among researchers that there is “a significant association between increased sexual risk behavior and methamphetamine… use”. Shoptaw and colleagues conclude that the US data “indicate the role of methamphetamine use in concomitant behaviors that increase risk of HIV transmission”. The most recently published data from the Multicenter AIDS Cohort Study (MACS), a longitudinal US study that has recruited thousands of gay men since it began in the mid-1980s, demonstrate that methamphetamine use is associated with HIV seroconversion. After adjusting for potential confounding factors, the investigators found that men who reported crystal methamphetamine use had a relative risk of HIV seroconversion of 1.46 compared with men who did not use the drug. Unsurprisingly, the relative risk of HIV seroconversion also increased with the number of male partners with whom a man had had unprotected receptive anal sex. Shoptaw, in a review of epidemiological data on methamphetamine use and HIV infection among US gay men, suggests that this association is directly related to the length and severity of methamphetamine use: “[[The longer or more heavily individuals are involved in using methamphetamine, the more likely they are to be HIV infected]]”.

---

87 ACT Council of Social Services Inc (April 2007) op cit, p. 25.
Other STIs: Recent studies have linked use of crystal methamphetamine with increased risk of contracting an STI.95 Wong et al., reporting on a study of 1,318 gay and bisexual men at a public health department clinic in San Francisco, found that gay men who used crystal meth were three times more likely than those who did not to have syphilis, and almost twice as likely to have chlamydia or gonorrhoea.96 US studies have also shown an association between HIV status, crystal methamphetamine use and STIs, with HIV-positive men seeking treatment for methamphetamine dependence more likely than their HIV-negative counterparts to have a history of gonorrhoea and STIs more generally.97,98 In Australia, Melbourne Periodic Survey data show that gay men living in Victoria who had used crystal methamphetamine in the past six months were more likely than those who had not to have reported a previous diagnosis of all STIs and both hepatitis B and C (Appendix C).

Confounding factors: Although there is now broad consensus among researchers that an association exists between gay men’s use of crystal methamphetamine and rising rates of HIV and STIs, there is substantial disagreement regarding the nature of that association. In their recent review article, Shoptaw and colleagues argue that the research literature does not demonstrate a causal connection between crystal methamphetamine use and HIV seroconversion.99 Rawstorne and colleagues in a recent review of Australian data conclude that “crystal use does not necessarily drive unsafe sexual behavior.”100

In an earlier article, Shoptaw and Frosch are critical of the assumption, common to research on MSM and drug use, that gay men “change their HIV-related sexual risk-behavior protocols when under the influence of alcohol and other substances”.101 As they and others have pointed out, it is difficult to distinguish between men who alter their sexual behaviours under the influence of illicit drugs, including crystal methamphetamine, and those who are committed to risky or adventurous sex regardless of the “performance-enhancing” substances they use.102 A number of participants in a Canadian interview-based survey of gay men exploring the relationship between drug use and sex commented that, “drugs and alcohol [were] an ‘excuse’ for, rather than a ‘cause’ of unsafe sex behaviors”.103 Furthermore, the association between crystal methamphetamine use, unsafe sex and HIV seroconversion may have more to do with contextual or contingent factors than with prior intent. As Coifax and Guzman note in a recent review of the epidemiological research literature, “Many studies do not control for other contextual factors [including] partner type, the location(s) where club drug use and sexual behavior occurred, and the presence of other co-morbid conditions”.104

---

100 Rawstorne, P., Digiusto, E. et al. (2007) "Associations between Crystal Methamphetamine Use and Potentially Unsafe Sexual Activity among Gay Men in Australia". Arch Sex Behav 36, 646.
103 Coifax, G. and Guzman, R. (2006) "Club Drugs and HIV Infection: A Review". Clinical Infectious Diseases 42, p. 1465. The authors also note a number of other difficulties with this research including: studies that have a cross-sectional design; difficulties in ascertaining whether club drug use in general preceded high-risk sexual behaviour; and polydrug use, which is common and makes it difficult to measure the effect of any single drug on outcomes, pp. 1463-1469.
Increased rates of hepatitis A, B and C

There are few data on the prevalence of viral hepatitis among gay men and even fewer on the relationship between crystal methamphetamine use and increased risk of viral transmission. Hepatitis B and C can both be transmitted through blood-to-blood contact. According to the ANCD, “Methamphetamine injection represents a serious risk factor for the transmission of hepatitis C and other blood-borne viruses in Australia because the majority of dependent methamphetamine users inject the drug.” Injection is also common among those gay men who use the drug primarily for sex. Melbourne Periodic Survey data suggest that these are older gay men, with over a third aged between 30 and 39 years, who attend the dance/sex party scene (Appendix C). There are few data on where and when these men inject (before, during or after an event?). However, data from HIV futures five show that HIV-positive men are over-represented in this population. This is reflected in higher rates of hepatitis C infection among HIV-positive compared with HIV-negative gay male crystal users, 19.5 per cent and 5.8 per cent respectively (Appendix C).

The overall level of dependent use among gay men is hard to gauge. Slavin’s interview-based study of gay male crystal methamphetamine users in Sydney found that these men tended to hide their problematic use.106 Interviewees reported using the drug at dance parties and for sex, but managed to hide the extent of their use and dependency from friends. The men in the study were relatively financially secure and able to plan in advance when, where and with whom they injected. This is not the case, however, for the small number of gay male injecting dependent users who are homeless. The likelihood of sharing needles in an “uncontrolled” environment is higher for this group, placing them at increased risk of hepatitis B, C and HIV infection.

Hepatitis B, like HIV, can also be transmitted through unprotected sex, while hepatitis A is transmitted primarily orally and through faecal matter. Unlike hepatitis C, both hepatitis A and B can be vaccinated against. HIV futures five data show that a larger percentage of gay men living in Melbourne who used crystal meth in the past 12 months reported having been vaccinated for hepatitis A and B compared with those who had not used the drug. These differences in rates of vaccination are reflected in the incidence figures with crystal methamphetamine users having lower rates of hepatitis A and B infection compared with non-users, 11.1 per cent and 5.6 per cent compared with 17.5 per cent and 17.1 per cent (Appendix C). These differences may indicate more self-protective behaviours amongst an informed group of drug users.

Compromising HIV-positive men’s health

Research suggests that chronic use of crystal methamphetamine may impair the immune system.107 This has health implications for HIV-positive gay men using the drug. At the same time, behavioural research has linked crystal methamphetamine use to reduced adherence to antiretroviral medication and treatments among this group.108 GLMA argues that non-adherence can lead to the development of medication-resistant viral strains.109

Reduced treatment uptakes: In a small US study, Reback and colleagues looked at medication adherence for HIV-positive methamphetamine users.110 They found that for some HIV-positive gay men methamphetamine use was linked to planned non-adherence during sexual activity and to fears of potential interactions between methamphetamine and HIV medications. The study found that un-planned non-adherence was linked to methamphetamine-related disruptions in food and sleep schedules.
**Interference with antiretrovirals:** There is a limited body of research indicating that methamphetamine may interact with HIV medications with serious clinical consequences.\(^{111}\) Hales et al. report that methamphetamine can interact with protease inhibitors, while Yu and colleagues reported that the drug can interact with HIV medications, leading to increased risk of cardiovascular disease.\(^{112,113}\)

**Increased infectivity:** Crystal methamphetamine has also been linked to increased susceptibility to HIV, syphilis and hepatitis C, and to increased sexual risk-taking and unsafe sex amongst a small subgroup of gay men who use the drug (See Sections 4.1.2 and 6.1.2 below). According to Shoptaw and Reback, the use of crystal methamphetamine “dries the mucosa and reduces the sensitivity of the rectal and genital areas”. This can “facilitate longer and rougher sexual episodes”, which, they conclude, “contribute[s] to increased likelihood of bruising and tearing...and increasing opportunities for transmission of infectious disease”.\(^{114}\)

---


\(^{112}\) Hales, G., Roth, N. et al. (2000) "Possible fatal interaction between protease inhibitors and methamphetamine". *Antivir Ther* 5:1, p. 19.


3. Illicit drug use in mainstream communities

Diagram 1 – Locating gay men’s use of crystal methamphetamine in relation to mainstream illicit drug use

3.1. Rates and trends

3.1.1. Rates

The US *National Survey on Drug Use and Health* (NSDUH) estimated that 20.4 million Americans, or 8.3 per cent of the population aged 12 years or older, had used an illicit drug in the month prior to the survey (described as “current users”). In the US, the illicit drugs most commonly used by persons 12 years and older in the past 12 months were: marijuana (14.8 million persons or 6.1 per cent of the population); cocaine (2.4 million or 1.0 per cent); methamphetamine (731,000 or 0.3 per cent); heroin (338,000 or 0.14 per cent of the population); and ecstasy (528,000 or 0.2 per cent). In Australia, the 2004 *National Drug and Alcohol Survey* estimated that 2.5 million Australians, or 15.3 per cent of the population aged 14 years or older, had used at least one illicit drug in the past 12 months. The illicit drugs most commonly used by Australians 14 years and older were: marijuana (11.3 per cent); ecstasy (3.4 per cent); meth/amphetamines (3.2 per cent); and heroin or another opiate (0.3 per cent).

---


116 The NSDUH notes that the methamphetamine figures are rough, as data on the drug has only recently been included in some but not all state-based surveys. Hunt et al. offer a much higher figure (2004) with 12 million Americans having ever used methamphetamine and 1.4 million, or 0.6 per cent of the population, having used the drug in the past month. See Hunt, H., Kuck, S and Truitt, L. (2006) op cit.

117 Substance Abuse and Mental Health Services Administration (2007) op cit.


119 Use of ketamine and GHB (what the Household Survey terms “designer drugs”) in the last twelve months was 0.3 per cent (45,000) and 0.1 per cent (20,200) respectively. Ketamine and GHB were included in the survey for the first time in 2004, Australian Institute of Health and Welfare (2005) op cit p. 68.
3.1.2. Trends

In the US, rates of illicit drug use would appear to have remained relatively stable since 2001. However, there are limited US population data on national trends in methamphetamine use. Researchers in the US have used other indicators as proxy measures. For example, Hunt et al. argue that increased seizure of crystal methamphetamine labs in Virginia, from one in 2000 to 61 in 2004, is indicative of increasing use of the drug. Similarly, Lineberry and Bostwick argue that a 500 per cent increase nationally in meth/amphetamine abuse and dependency treatment admissions between 1992 to 2002 indicates increasing rates of methamphetamine use and abuse in the US.

In Australia, rates of illicit drug use have fluctuated since data were first collected in 1991, starting at 15.3 percent in that year and returning to 15.3 per cent in 2004. However, the proportion of Australian people using illicit drugs has remained stable or declined since 1998. The prevalence of methamphetamine use increased in Australia during the 1990s. Between 1995 and 1998, prevalence nearly doubled from 2.1 per cent to 3.7 per cent. However, since 1998, there has been a slight decline in both lifetime and current prevalence of methamphetamine use. Use among secondary school students has shown a similar trend, peaking in 1999, followed by a slight overall but steady decline. Data from the Victorian Ecstasy and Related Drug Reporting System (ERDRS) in 2005, which surveys regular ecstasy users, and from the Illicit Drug Reporting System, which surveys injecting drug users, show that rates of crystal methamphetamine have decreased in both groups. Among ERDRS respondents, rates of reported use of crystal methamphetamine in the six months before the survey fell from 50 per cent in 2003 to 29 per cent in 2005.

3.2. Patterns

3.2.1. Age

In 2006, the highest rate of illicit drug use in the US was among people aged 18 to 20 years (22.2 per cent) followed by 21 to 25 years (18.3 per cent); the rate declined with increasing age for people 26 years and older. Between 2002 and 2006, rates of illicit drug use among 12 to 17 year-olds decreased from 11.6 per cent to 9.8 per cent. The average age of new amphetamine users aged 12 to 49 years has increased from 18.9 years in 2002 to 22.6 years in 2006. This is comparable to the average age of initiation of ecstasy of 20.6 years in 2006.

In Australia, in 2004 the average age of first use of methamphetamine was 20 years, and in 79 per cent of cases the drug was supplied by a friend or acquaintance. Indeed, Australians aged 18 to 29 years were more likely than those in other age groups to have used an illicit drug in the last 12 months; almost one in three (31 per cent) had used at least one illicit drug and one in four (26.0 per cent) had used marijuana. Approximately, one in eight people aged 20 to 29 had used ecstasy and around one in ten had used meth/amphetamine in the last 12 months. A report by the

---

123 2004 National Household Survey, p. 24. The proportion of the population aged 14 years and over using marijuana dropped to its lowest level in 2004 (11 per cent).
126 IDRS and ERDRS data reported in Jenkinson, R. and Johnston, J. (April 2006) "Methamphetamine Use in Melbourne. Australian's Drug Trend Monitoring System: The IDRS and PDI studies". Drug trends bulletin, p. 3. The ERDRS was previously known as the Victorian Party Drugs Initiative (PDI). Results from the ERDRS are also taken from Australian Institute of Health and Welfare (April 2007) op cit.
Australian Institute of Health and Welfare (AIHW), which reviewed the 2004 national data, found that 12 to 15 year olds were “significantly less likely to use any illicit drug...compared with persons in all other age groups between 19 and 39 years.”

The AIHW reports that the prevalence of “ever having used methamphetamine” and of “having used the drug in the past 12 months” increased with age for persons aged 14 to 29 years, with 4.4 per cent or 73,600 of 14 to 19 years olds having used methamphetamine in the last year. This percentage jumps to 10.7 per cent (295,300) for 20 to 29 year olds and drops to 4.1 per cent for 30 to 39 year olds. In Victoria, according to the 2004 National Household Survey, 2.8 per cent of the population 14 years and older had used methamphetamine within the past 12 months. Data from the 2004 Victorian Youth Alcohol and Drug Survey also found that 15 per cent of the 16 to 24 year olds surveyed reported having used methamphetamine in their lifetime and 10 per cent reported use in the previous 12 months.

3.2.2. Frequency and mode of use

According to the 2004 National Household Survey, the percentage of Australians who reported using an illicit drug in the past 12 months, and are regular users, varies significantly depending on the drug. One in nine (11.3 per cent) people who used marijuana in the last 12 months used the drug daily, compared with 45 per cent of people who reported using heroin or another opiate. The 2004 National Household Survey notes that the majority of people who reported using ecstasy in the past 12 months took the drug at dance or rave parties (63.3 per cent).

In Australia, most current methamphetamine users take the drug infrequently (89 per cent use the drug monthly or less often), although it has been estimated that there are approximately 73,000 dependent methamphetamine users in Australia, almost double the estimated number of heroin users. Dependent users typically inject or smoke the drug. Drabsch and McKetin, in separate articles, argue that there are two distinct groups of “regular Australian crystal methamphetamine users.” One group consists of older, more experienced users who prefer to inject the drug. They are more likely to be heavy polydrug users with a long history of contact with drug treatment services and the criminal justice system. The other group consists of younger, less experienced users (median age of 22 years versus 33 years for injectors), who prefer to smoke the drug. They have very limited contact with drug treatment services or the criminal justice system and their polydrug use consists primarily of ecstasy and marijuana. Almost two-thirds of regular crystal methamphetamine users inject the drug and a little less than one-third smoke it.
3.2.3. Place of use

Over 65 per cent of recent Australian users of crystal methamphetamine use the drug in their own home or at a friend’s house. A significant proportion of people also used the drug at private parties (50 per cent), at public establishments (46 per cent) and at raves/dance parties (46 per cent). Drabsch notes that a number of commentators have questioned the usefulness of characterising methamphetamine as a party drug, given that the majority of use occurs in private homes and not public establishments. However, a distinction needs to be made between where a drug is taken and where its effects are experienced.

3.2.4. Polydrug use

According to a report by the ACT Council of Social Services, available data show that most drug users “use a variety of substances either in combination or at different times”. Nonetheless, the document notes that, “there remains a paucity of research on...polydrug use, despite its being a common occurrence”. McKetin reports that, among regular crystal methamphetamine users, those who prefer to inject the drug are more likely to be heavy polydrug users, while those who prefer to smoke crystal methamphetamine are more likely to use marijuana and ecstasy (see Section 3.2.2 above). McKetin notes that only 3.8 per cent of regular crystal methamphetamine users report using the drug alone. The results of the 2004 National Household Survey show that nearly 28 per cent of regular marijuana users reported using meth/amphetamine at the same time as marijuana and that alcohol was the drug most commonly used concurrently with every illicit drug. Data for 2005 from the PDI, which samples regular ecstasy users, found that among this group 71 per cent had ever used crystal methamphetamine, with 42 per cent having used it in the last six months (this figure had risen to 49 per cent in 2006).

3.2.5. Other social demographic characteristics

In Australia, the highest proportion of recent illicit drug use across all populations was among people who were unemployed (one in three, 31.7 per cent). Paradoxically, a higher proportion of people who were most socioeconomically advantaged were recent users of illicit drugs (16.6 per cent), compared with the other socioeconomic groups. Males were more likely than females to have used an illicit drug in the last 12 months (one in five or 18.2 per cent and one in eight or 12.5 per cent respectively) and to have used methamphetamine (4.0 per cent or 321,600 and 2.5 per cent or 210,900 respectively). A greater proportion of people from remote and very remote regions used illicit drugs in the past 12 months (19.0 per cent), while Indigenous people were almost twice as likely as non-Indigenous people to be recent users of illicit drugs (26.9 per cent versus 15.0 per cent).

---

144 McKetin et al., in their report on patterns of crystal methamphetamine use in Sydney, noted that although methamphetamine users “would ... take the drug to simply enjoy its effects and would carry on their usual activities or pastimes...they would often take the drug before going out to socialise”. McKetin, R., McLaren, J., Kelly, E. (2005) op cit, Executive Summary (no page reference given).
145 ACT paper, p. 10.
146 2004 National Household Survey, p. 45.
149 Media release, National Drug and Alcohol Research Centre (November 2006) “Methamphetamine – The current state of play: New national research”.
4. Crystal methamphetamine and gay men

4.1. Epidemiological data

A comparison of drug and alcohol data from national population-based surveys and from convenience samples of gay men in Australia, the US and the UK have consistently shown higher rates of illicit drug use among gay male communities compared with the population as a whole.\textsuperscript{144} In both the US and Australia, gay men report higher rates of illicit drug use across all classes of drugs compared with the population as a whole. US and Australian data also show that rates of illicit drug use among gay men are highest for those living in "urban epicentres" and those reporting higher levels of "gay community attachment."\textsuperscript{155} US studies also suggest that gay men are more likely than "heterosexually active men" to report at least one symptom of dysfunctional drug use across all drug classes.\textsuperscript{156} These findings are consistent with previous US research comparing rates and effects of illicit drug use between exclusively heterosexually active and gay and bisexual men.\textsuperscript{157}

In Australia, unpublished data from the Melbourne Periodic Survey (2006), HIV futures five (2006), Private Lives (2006) and the Melbourne SOPV Survey (2007) provide more detailed demographic data on rates and patterns of crystal methamphetamine use among gay men in Melbourne. The data are presented below and compared with national and international data on gay men's use of illicit drugs, including crystal methamphetamine in Western urban centres with population profiles similar to Melbourne's.

4.1.1. Rates of use

According to the results of the Gay Urban Men's Health Study conducted in the US between 1996 and 1998, 50 per cent of MSM reported having used recreational drugs.\textsuperscript{158} Aggregated data from all Australian capital city Periodic Surveys show the figure considerably higher at about 70 per cent, a figure that has remained relatively stable between 2001 and 2005, even though rates of injecting illicit drugs during that period were higher among gay men than among the general population (but were much lower than overall rates of illicit drug use among gay men).\textsuperscript{159}

\textsuperscript{144} Grov, C., Bimbi, D.S., Nanin, J.E., Parsons, J.T. (2006) "Exploring Racial and Ethnic Differences in Recreational Drug Use Among Gay and Bisexual Men in New York City and Los Angeles". J Drug Education 36:2, pp. 105-123. Grov et al. describe some of the methodological problems of comparing data from city-based convenience surveys with data from nationwide representative surveys. Nonetheless, they argue that a review of available data demonstrates higher rates of drug use among samples of gay men compared with the general population. They compare 2003 data from the National Institute of Drug Abuse (NIDA) compiled from national US-based surveys with data from surveys targeting gay men. The surveys used included the National Household Survey on Drug Abuse, the Drug Abuse Warning Network, US Census and the National Longitudinal Survey of You th.


\textsuperscript{156} Cochran, S., Ackerman, D. et al. (2004) "Prevalence of non-medical drug use and dependence among homosexually active men and women in the US population". Addiction 99, p. 994. Cochran et al. analysed data from the 1996 US National Household Survey on Drug Abuse in which all respondents 18 years and over were asked supplemental questions about the genders of their sexual partners over the past 12 months. Their analysis found "elevated drug use in homosexually active individuals for life-time drug use but that these were greatly attenuated for recent drug use". This is the only time that a question relating to sexual orientation has been included in the National Survey.


\textsuperscript{158} Stall, R., Paul, R.J. et al. (2001) op cit.

\textsuperscript{159} National Centre in HIV Epidemiology and Clinical Research (2006) HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia: Annual surveillance report 2006. National Centre in HIV Epidemiology and Clinical Research, the University of New South Wales: Sydney, pp. 40 and 41 respectively.
According to the Gay Urban Men’s Health Study in the US, the most common illicit drugs used by gay men in the prior six months were marijuana (43.1 per cent), cocaine (21.3 per cent), nitrite inhalant (19.8 per cent), ecstasy (13.4 per cent), and methamphetamine (7.2 per cent). Similar patterns were observed in Los Angeles. While Ruf et al. argue that there are few national data on recreational drug use in the United Kingdom, London data from the 1999 National Gay Men's Sex Survey show that: 29.6 per cent of respondents reported using ecstasy in the past year; 28.1 per cent cocaine; 22.4 per cent speed; 11.0 per cent ketamine; 11.0 per cent LSD; 2.5 per cent Gamma hydroxy butyrate (GHB), and 2.5 per cent crack cocaine. In Australia, results to the 2006 Melbourne Gay Periodic Survey show that, among gay men living in Melbourne, the most common illicit drugs used in the prior six months were marijuana (40 per cent) followed by nitrite inhalant and ecstasy (both approximately 33 per cent), and crystal methamphetamine (15.1 per cent). Although few of the men in this sample had used “Special K” (ketamine) or GHB, the use of both drugs had almost doubled since 2000.

A review of data from US national and non-representative samples estimates prevalence rates of methamphetamine use in adult MSM at between 12 per cent and 30 per cent. However, the results of the US Urban Gay Men’s Drug Use and Health Study put the percentage of urban gay men who used crystal methamphetamine in the prior six months lower, at 7.2 per cent. The UK Gay Men’s Sex Survey in 2005 reported the percentage of gay men who took crystal methamphetamine in the past 12 months was considerably lower than in the US, at three per cent with 0.3 per cent reporting that they took the drug on a weekly basis. However, a London survey (which relied on three different sampling techniques) estimated that ten per cent of gay men living in London had taken crystal methamphetamine in the past 12 months. Most of these gay men who used the drug did so infrequently, only once or twice over a 12 month period. In Australia, aggregated data from all capital city Periodic Surveys show that rates of crystal methamphetamine use among gay men have increased over the last six years, with 6.3 per cent of respondents in 2000 reporting having used the drug compared with 15.1 per cent of respondents in 2006. According to the findings of the 2006 Melbourne Periodic Survey, 14.5 per cent of gay men in Victoria had used crystal methamphetamine in the past 12 months, with the majority living in inner suburban Melbourne (Appendix C). Private Lives, which surveyed use in the past six months, put the figure slightly lower at 10.7 per cent (Appendix C). In both surveys, the drug was used rarely, with the majority of users reporting having used the drug once in the nominated time period (up to a maximum of five times in the Private Lives data). Rates were lower still for gay men attending SOPV in Melbourne, with 7.7 per cent of those surveyed reporting having used crystal methamphetamine in the past six months (Appendix C). However, rates of use were significantly higher among HIV-positive men in Melbourne, with 23 per cent of respondents in HIV Futures five reporting having used crystal methamphetamine in the 12 months prior to the survey (Appendix C).

---

4.1.2. Patterns of use

Recreational use

During the past decade, methamphetamine use and risky sex, particularly within the context of specific, highly charged sexual environments (e.g., the internet, circuit parties, bathhouses, and sex clubs) have been reported in adult MSM in multiple urban centres.165 Studies show that rates of illicit drug use, including crystal methamphetamine use, are higher among gay men attending dance or circuit parties in cites across the US, Canada and Australia than for other groups of gay men and the population at large.166,167,168 Two recent US reviews of gay men’s use of club drugs argue that illicit drug use is normative in these settings.169,170 Lee et al. report on one circuit party at which 86 per cent of the gay men attending reported having used at least one illicit substance on the day.171 The study also found that polydrug use was common, with the majority of gay men reporting using two or three drugs on the same occasion and a small but significant minority reporting using seven.172 The little research on recreational or club drug use among gay men in Australia supports US findings. In an early study, Southgate and Hopwood argued that by the mid 1990s in Sydney illegal drug use had become normalised on the gay commercial scene.173

However, recent studies in Australia and the US suggest that the gay commercial scene is undergoing significant changes with a multiplication and diversification of gay male social spaces and that these changes are having a profound effect on gay men’s recreational drug use and in particular their use of crystal methamphetamine.174 Hurley and Prestage argue that, over the last few years, a new sexual subculture has begun to take shape at the intersection of the gay commercial and private sex-party scenes.175 This subculture represents a movement away from large, all-day events to a niche market of smaller dance and fetish parties that cater to a diversifying range of social and sexual tastes.176 These include barebacking (defined as intentional unprotected anal intercourse in a situation of appreciable known risk177), fisting, and the use of sexual prosthetics such as sex toys and performance enhancing drugs (what McInnes et al. have called “adventurous sex”).178 Hurley and Prestage have coined the term “intensive sex partying” to describe this subculture. Preliminary research suggests that this subculture is subject to serosorting (selecting sex
partners of the same HIV infection status), with an over-representation of HIV-positive and older gay men, and higher rates of crystal methamphetamine use.\textsuperscript{179}

However, a recent survey of recreational drug use among men aged 18 to 29 years attending dance clubs in New York suggests that a new generation of younger gay men may be using crystal methamphetamine more as a social lubricant than as a sexual stimulant.\textsuperscript{180} Less than half the sample of gay and bisexual men in the study said they used crystal methamphetamine for sex and only one in eight reported first use of the drug in a sexual setting.\textsuperscript{181} Only one of the men recruited to the study reported being HIV-positive. This transcontinental comparison suggests that different groups of gay men use crystal methamphetamine differently and for different effects, and that variation in usage maps onto differences in age, HIV-status and contexts of use. In turn, these differences map onto changes occurring within gay culture and the gay commercial scene.

**Regional variation**

In both the US and Australia, there were significant regional and city-based variations in rates and patterns of illicit drug use in both mainstream and gay communities. For example, the US *National Survey on Drug Use and Health* reported that in 2006 rates of reported methamphetamine in the past month were highest in the West at 1.6 per cent of the population aged 12 years and older, but fell to 0.3 per cent in the Northeast.\textsuperscript{182} Studies show that up until the late 1990s rates of use among gay men were also higher in the major urban centres on the West Coast, including San Francisco and Los Angeles.\textsuperscript{183} However, a more recent survey by Koblin and Chesney et al. shows little difference in rates of use between the East Coast, Midwest and the West Coast, estimating use by the gay male population at about 9 per cent.\textsuperscript{184}

Aggregated data from all Australian capital city Periodic Surveys showed that, between 2001 and 2005, there was more extensive illicit drug use among gay men living in Sydney than among gay men living in other capital cities. Rates of injecting drug use among gay men over the same period were higher in Sydney (varying between 7.0 per cent and 5.2 per cent) than in Melbourne (varying between 4.0 per cent and 4.7 per cent).

One of the respondents in the Delphi Scan residing in Perth argued that Perth’s proximity to South East Asian drug markets and its relative isolation from Australian drug distribution networks has led to rates and patterns of crystal methamphetamine use in both mainstream and gay communities that were significantly different to those in other Australian capital cities. McKetin makes a similar case regarding increased supply and use of methamphetamine in South-western Queensland (see Section 2.1.2).

**Place of use**

US and UK studies suggest that the majority of gay men who take crystal methamphetamine do so at home or at a friend's place—a view about gay men in Melbourne shared by over 60 per cent of the respondents to the Delphi Scan. However, over 70 per cent of those respondents believed that the drug was taken before attending a gay commercial venue (Appendix F).
Results from the *Melbourne SOPV Survey* showed that, of the 7.7 per cent of the sample (22 men) who had reported using crystal methamphetamine in the prior six months, 64 per cent had taken the drug at home. Only one interviewee had taken crystal methamphetamine at an SOPV. However, 36 per cent reported having taken the drug at a dance party, raising the possibility that some of this use may have preceded a visit to an SOPV (Appendix C).

Garofalo and colleagues offer a list of what they refer to as the “highly charged sexual environments” in the US where gay men are most likely to take recreational drugs for primarily sexual purposes, which includes “the internet, circuit parties, bathhouses, and sex clubs”. Little research has been done on how gay men use the internet to find sexual partners. However, one study has found that a significant proportion of gay men take methamphetamine before or while online in the expectation of hooking up with sexual partners while using. Anecdotal reports suggest that this practice, though not common, may be increasing among gay men in Sydney and Melbourne.

**Age/Youth**

The GLMA argues that rates of crystal methamphetamine use among young gay men in the US are high and have been increasing since the mid-1990s. Another US study of young gay men showed that rates of crystal methamphetamine use had increased significantly between 1994 and 1997. A more recent study by Thiede et al. of gay men between 15 and 22 years living in seven major urban centres in the US found that 28 per cent of respondents had ever used methamphetamine and 20 per cent reported use in the previous six months. Nearly six per cent of respondents reported using the drug at least once a week. Preliminary data from the US National HIV Behavioral Surveillance System show a 21 per cent annual prevalence of methamphetamine use among MSM aged 18 to 24 years compared with 12 per cent in the overall adult MSM sample.

In Australia, 2006 *Melbourne Periodic Survey* data show that the mean age of gay male crystal methamphetamine users in Victoria was 33 years. A third of those using crystal methamphetamine were aged between 30 and 39 years (34.1 per cent), with few gay men over 50 years using the drug (Appendix C). According to *Private Lives* data, 95 per cent of gay male crystal methamphetamine users in Melbourne are aged between 20 and 50 years, with less than 15 per cent under 25 years. The rate falls to less than 1.2 per cent for young men aged 16 to 19 years. It must be remembered that the overall numbers of crystal methamphetamine users is small in this study. According to *HIV futures five*, the average age of HIV-positive gay men who use crystal methamphetamine is significantly higher at 39.6 years (Appendix C).

**HIV status**

A number of US studies have shown that gay men who use methamphetamine have increased rates of HIV (and STIs) compared with gay men who do not use the drug. The association between HIV infection and methamphetamine is even more pronounced for gay men who are dependent users.

---

189 This is similar to an average age of 34.7 years for gay men attending SOPVs who report using crystal methamphetamine (see Appendix C).
In a recent study of gay men attending the Los Angeles Gay and Lesbian Center, nearly one third of the men newly diagnosed with HIV were using crystal meth. The 2006 preliminary data indicated that “gay men who used crystal methamphetamine in the previous 12 months were five times more likely to test positive for HIV than those who did not”. A study released in 2007, looking at drug use patterns among people seeking treatment at the Whitman-Walker’s Elizabeth Taylor Health Center in Washington DC between 2000 and 2006, found that, in 2006, 73 per cent of clients with methamphetamine use were HIV positive. Another more recent US study of MSM found that 6.3 per cent of methamphetamine users were HIV positive compared with 2.1 per cent of non-users. A Chicago-based study of young MSM aged between 16 and 24 years found higher rates of crystal methamphetamine use among HIV-positive men. Moreover, 23 per cent of the HIV-positive men reported using methamphetamine in the past year (2004-05) compared with 11 per cent of the HIV-negative men.

Bolding et al. surveyed crystal methamphetamine use among three different samples of gay men living in London: men attending gyms; men attending an HIV treatment clinic; and men seeking an HIV test at HIV testing clinics. The study showed greater use of crystal methamphetamine in the past year among HIV-positive than HIV-negative gay men, 12.6 per cent and 8.3 per cent respectively. However, rates of crystal methamphetamine use among HIV-positive men varied significantly between the gym and treatment clinic samples, 23 per cent versus 12.6 per cent respectively. Bolding et al. suggest that the gym sample is representative of gay men who attend dance or circuit parties, and that HIV-positive gay men who are part of this scene may take crystal methamphetamine at rates higher than HIV-positive gay men generally.

According to 2006 Melbourne Periodic Survey data, gay men using crystal methamphetamine were more likely to be HIV positive than gay men not using the drug, 17.9 per cent and 6.4 per cent respectively (Appendix C). Private Lives data show that 30.7 per cent of gay men who reported using crystal methamphetamine also reported a previous HIV-positive diagnosis compared with 4.9 per cent of users who reported a previous HIV-negative diagnosis (Appendix C). Results from the Melbourne SOPV Survey show that, of the gay men who reported using crystal methamphetamine, 31.8 per cent reported being HIV-positive compared with 8.3 per cent who reported being HIV-negative (Appendix C).

**Polydrug use**

US studies show that gay men who use methamphetamine rarely use the drug alone. Lee et al. report that, among gay men attending circuit parties, the majority of users used two or three drugs in combination, with a small percentage of respondents reporting that they used up to seven drugs on the same occasion. Halkitis et al. report that many gay male crystal methamphetamine users take the drug not only in combination with other illicit drugs but also with a range of prescription drugs.

In Australia, results from the Melbourne SOPV Survey show higher rates of polydrug use among gay men attending SOPVs who report using crystal methamphetamine in the past six months, compared with those attendees who report not using the drug over the same period. For example, of those gay men who reported having used crystal methamphetamine, 95.5 per cent indicated having also used ecstasy, 77.3 per cent speed, 77.3 per cent marijuana, 192 Ocamb, K. (2007) “Crystal Meth Epidemic Increasing”. IN Los Angeles Magazine 10:5 [no page numbers given] at http://www.inlamag.com/1005/special_reports/sprt1.html [accessed 30/08/07].


and 40.9 per cent Viagra™, compared with rates of use of 16.7 per cent, 6.1 per cent, 20.9 per cent, and 9.9 per cent respectively for those who reported not having used crystal methamphetamine. Eighty-six per cent of those who used crystal methamphetamine reported having used one or more other drugs at the same time (however, this figure drops to 70 per cent if we adjust for alcohol use) (Appendix C). According to the latest Melbourne Periodic Survey data, over 90 per cent of gay men who took crystal methamphetamine did so in combination with one or more other drugs, with 70 per cent of crystal methamphetamine users indicating using five or more drugs in the past 12 months (though not necessarily all on the same occasion) (Appendix C).

In a US study of HIV-positive men who used crystal methamphetamine, Patterson et al. found that only 5 per cent used the drug alone, while 31 per cent combined their use of crystal methamphetamine with poppers (amyl nitrite) and marijuana, and 64 per cent with “harder” drugs including cocaine, heroin, hallucinogens and ketamine. Results from HIV futures five show that polydrug use in Victoria is higher among HIV-positive gay men who report having used crystal methamphetamine in the past 12 months compared with HIV-positive men who have not used the drug over the same period. Also, HIV-positive gay men who report having used crystal methamphetamine are more likely than those who have not used the drug to report having used marijuana (78.4 versus 44.0 per cent), ecstasy (70.3 versus 18.4 per cent) and Viagra™ (56.8 versus 19.2 per cent). HIV-positive gay men who have used the drug are also more likely to report having injected speed (40.5 versus 4.0 per cent) (Appendix C). This suggests increased rates of injecting crystal methamphetamine among HIV-positive male users and increased risk of blood-borne viral transmission.

### 4.2. Behavioural data

Behavioural studies identify two discrete but overlapping motivations for gay men’s use of crystal methamphetamine. Psychological research has focused on the relationship between homophobia and increased rates of illicit drug use among gay men. It highlights gay men’s individualised use of illicit drugs and is part of a growing body of research that understands discrimination and abuse as key social determinants of mental health and as major risk factors for mental illness.201 A second and much larger body of ethnographic and epidemiological research focuses on gay men’s recreational and collective drug use, termed by Dowsett et al. as “gay ways of using.”202 According to this research, gay men take drugs communally either to increase their sociability or to enhance their sexual capacity.203 However, a number of researchers in this field argue that crystal methamphetamine is unique because, unlike other illicit substances, it acts both as a social lubricant and as a sexual stimulant.204 Crystal methamphetamine is seen to be particularly dangerous because it blurs the already fluid boundary between sociability and sex, which many argue is indicative of gay communal spaces.205

Halkitis et al. argue that this distinction between two different motivations for gay men’s illicit drug use—the one pathological and individualised, the other recreational and collective—is provisional, and that either one can overlap with or lead to the other.206 For example, gay men who are at risk of problematic or dependent drug use because of their particular experiences of homophobic abuse and discrimination may first begin using drugs recreationally as they enter the commercial gay scene. Over time, however, recreational use may give way to dependent, privatised use as a means of coping with homophobia and its effects.

---


203 As early as 1995, Lewis and Ross, in a study of what they called the “gay dance party phenomenon” in Sydney, identified these two major patterns of recreational drug use among gay men: the first associated with socialising; the second with having sex. Lewis, L. and Ross, M. (1995) op cit.


205 What Garofalo and colleagues refer to as “sexualised social spaces”. Garofalo, R., Mustanski, B.S. et al. (2007) op cit.

4.2.1. Coping with homophobia

To the extent that homosexual youth feel alienated from heterosexual families, churches, friendship networks, and the larger community they use drugs and alcohol as an anaesthetic agent to buffer anxiety, depression, and social isolation.207

Halkitis and colleagues, in a review of US data on crystal methamphetamine using gay men from Project BUMPS, a longitudinal study of club-drug-using gay men in New York City, concluded that a substantial proportion of gay men use the drug to cope with “the tensions of socialisation and the prejudice experienced for being gay.” Halkitis’s work is indicative of a range of US psychological studies that suggest many gay men use illicit drugs as a means of self-medication to deal with their experiences of homophobic abuse and discrimination.208

The GLMA argues that increased use of crystal methamphetamine by HIV-positive compared with HIV-negative gay men may be due to the added pressures “of dealing with fears and stigma surrounding the disease.”209 A number of participants in a study that looked at HIV-positive gay men’s motives for using crystal methamphetamine reported that it provided “a temporary escape from being positive” and helped them “manage negative self-perception and social rejection associated with being HIV-positive.”210 Studies have also linked increased illicit drug use among same-sex-attracted young people with their experiences of homophobia at home and at school, and with the fears and pressures associated with coming-out.211

However, there are a number of difficulties in interpreting these psychological studies. Peck and colleagues, in a survey of 263 gay male crystal methamphetamine users attending an outpatient treatment research clinic in Los Angeles between 1996 and 2001, concluded, “There was no evidence of the oft-heard claim that individuals use methamphetamine because they feel depressed.”212 Rather, they found that use of crystal methamphetamine led to depression with “those users who had recently abstained from the drug reporting feeling less depressed.” They also noted that current ratings of depression had no predictive association with future methamphetamine use.

It is also difficult to disentangle homophobia from other risk factors for problematic or dependent drug use among gay men. As the ANCD notes, drug dependence “is most likely to occur among individuals who have several risk factors [including] depression, academic failure, deviant peer bonding and who have few protective factors that guard against

---


209 Semple, S.J., Patterson, T.L. and Grant, I. (2002) “Motivations associated with methamphetamine use among HIV-positive men who have sex with men”. Journal of Substance Abuse Treatment 22:3, pp. 149-156. See also Halkitis, P.N., Green, K.A., and Mourgues, P. (2005) “Longitudinal investigation of methamphetamine use among gay and bisexual men in New York City: Findings from Project BUMPS”. J Urban Health 82: (Suppl) pp. i8-25. However, according to HIV futures five, a slightly higher percentage of HIV-positive gay men who had not used crystal methamphetamine in the past 12 months reported “ever having been diagnosed with a mental health condition” than HIV-positive men who had used the drug, 49 per cent and 42 per cent respectively (Appendix C).


drug use [italics added]. Furthermore, few if any studies have shown that gay men have a predilection for crystal methamphetamine over other illicit drugs in dealing with mental health problems related to their experiences of homophobia. Halkitis is alone in suggesting that crystal methamphetamine’s unique pharmacology may make it the anti-depressant of choice among gay men.

4.2.2. Sexual and social practices

Sociability versus sex

A number of studies have compared gay men’s recreational use of crystal methamphetamine with their use of other illicit drugs to determine the degree to which the use of any given drug is more strongly associated with increased sociability or with enhanced sexual interest or capacity. Schilder and colleagues, in a 2001 study, compared the use of ecstasy and crystal methamphetamine among 24 gay men recruited as part of a study of the life histories of a cohort of gay and bisexual men living in Vancouver. While both drugs were used to increase sociability and staying power (“to keep partying on”), crystal methamphetamine use was more strongly associated with increased sexual desire, activity and stamina. Respondents described ecstasy as “inducing emotional intimacy and a physical, generally non-sexual arousal”, while crystal methamphetamine was associated with “erotic arousal, including anonymous...and group sex.”

Ross et al., in a survey of 1,169 gay men attending three different circuit parties in the US in 1999, reported on their motives for attending the parties and the drugs they used. They found two discrete but “significantly...correlated dimensions”, one social, the other sensation-seeking. While regression analysis indicated that alcohol, ecstasy and GHB use were significantly associated with both sociability and sensation-seeking, methamphetamine and multiple drug use were more strongly associated with sensation-seeking and having had sex on club drugs. However, the researchers concluded that, for those who attend parties for social reasons, there is little or no association between club drug use and sex. They also note that younger respondents were “significantly more likely to report social reasons for attendance”. These findings suggest that individual behaviours are determined less by the pharmacology of particular drugs and more by the social contexts in which those drugs are used.

Sexual practice

“The popularity of methamphetamine among gay men”, writes Garofalo, “seems to stem from its association with sexual activity and its strategic use by gay and bisexual men in negotiating sexual encounters and increasing sexual pleasure [emphasis added].” Or, as Halkitis and Green put it more ominously, “What holds across research on methamphetamine use among urban gay and bisexual men is the strong association between the drug, heightened libido, sexual adventurism and sexual endurance [emphasis added].” Determining the nature of this association has become the focus of a growing body of research and, in particular, the relationship between gay men’s use of

---

215 Halkitis argues that the association between gay men’s illicit drug use and homophobia “may be particularly true for methamphetamine because the drug gives users a feeling of acceptance and attractiveness and diminishes any pre-existing fears, anxieties and depression”. Halkitis, P.N., Mukherjee, P.P. and Palamar, J.J. (2007) “Multi-level modeling to explain methamphetamine use among gay and bisexual men”; Addiction 102 (Suppl. 1), p.77.
crystal methamphetamine and increased sexual risk taking, and rising rates of HIV and STI transmission among subpopulations of gay men.\textsuperscript{223,224}

**Increased sexual activity:** Data suggest that gay men who use crystal methamphetamine are more sexually active than gay men who do not use the drug: they report sex with more partners over a given period and are more likely to have multiple sexual partners. Halkitis and colleagues, in a preliminary study of situational factors related to methamphetamine use among gay and bisexual men resident in New York City, found that an individual’s number of sexual encounters was highly related to his overall frequency of crystal methamphetamine use \( r = .548, p < .001 \). A study of 2,991 MSM attending HIV testing clinics in San Francisco between 2000 and 2002 found that, compared with non-methamphetamine users, gay men who used the drug were more likely to report ten or more sex partners in the past year.\textsuperscript{225} Schilder et al., in an interview-based study of 24 young gay and bisexual men living in Vancouver, found that use of crystal methamphetamine was associated with group sex.\textsuperscript{226}

In a US study of 4,295 HIV-negative men, Koblin et al. found that drug use, including methamphetamine use, was independently associated with unprotected anal sex with casual partners. Koblin, B.A., Husnik, M.J. et al. (2006) "Risk factors for HIV infection among men who have sex with men". AIDS 20:5, pp. 731-739.

In Australia, according to the findings of the latest Melbourne Periodic Survey, 39 per cent of gay men who had used crystal methamphetamine reported having had ten or more sexual partners in the past 12 months compared with 23.5 per cent of non-users. Users were more likely than non-users to have had casual sex in this period (78.1 per cent versus 64.7 per cent) (Appendix C). Data from the Melbourne SOPV Survey show that men who had attended SOPVs and used crystal methamphetamine in the past six months were more likely than men who had not used the drug to report having had 11 or more casual partners in the last year, 63.6 per cent versus 28.0 per cent. Only 13.6 per cent of men who had used crystal methamphetamine reported no casual partners in the last 12 months compared with nearly 30 per cent of men who had not used the drug. Just over 45 per cent of the men who had used crystal methamphetamine in the last 12 months reported having used the drug when they last had sex. Of these, 20 per cent reported having sex with one other person while using crystal methamphetamine, while 80 per cent reported having sex with between two and ten people. (Appendix C).

**Melbourne Periodic Survey** data show that HIV-positive gay men who use crystal methamphetamine are more sexually active than HIV-positive men who do not. HIV-positive users are more likely than HIV-positive non-users to report having any casual sex (80.8 per cent versus 33.6 per cent), while HIV-positive users in a regular relationship are less likely than HIV-positive non-users in a regular relationship to have sex only with their regular partner (11.5 per cent versus 21.2 per cent) (Appendix C).

**Increased rates of unprotected anal intercourse (UAI):** In a US study of 4,295 HIV-negative men, Koblin et al. found that drug use, including methamphetamine use, was independently associated with unprotected anal sex with individuals of discordant HIV status.\textsuperscript{226} According to the results of the latest Melbourne Periodic Survey, among those men who reported having had casual sex in the past 12 months, users of crystal methamphetamine were more likely than non-users to report having engaged in UAI with casual partners (hereafter UAIC), both insertive and receptive (44.8 per cent versus 26.1 per cent). That said, data from the latest Melbourne Periodic Survey also show that HIV-

---


positive gay men who use crystal methamphetamine are more likely to know the HIV status of their casual partners and more likely to report having sex with other HIV-positive men than HIV-positive men who do not use the drugs (Appendix C). The data also suggest that there is no significant variation in rates of condom use with casual partners between HIV-positive gay men who use crystal methamphetamine and HIV-positive men who do not use the drug (Appendix C).

However, US studies present a very different picture. A study of 261 HIV-positive gay male methamphetamine users in San Diego found that heavy users (64 per cent of the sample) reported more unprotected sex with more partners of seronegative or unknown status. Ruf et al., in a review of US data, conclude that, “these studies have shown the use of ‘party drugs’ including crystal methamphetamine, to be independently associated with unprotected anal intercourse with casual partners of unknown HIV serostatus, particularly among HIV-positive men.” Drumright and co-researchers, reporting on the results of a computer-based questionnaire of 194 MSM recently infected with HIV, found that methamphetamine was the strongest predictor of UAI before or after recent infection. This includes sex with both “main” partner and casual partners. These studies are representative of a growing body or research that Drumright et al. claim demonstrates, “that the use of methamphetamine just before or during sexual activity increases the likelihood of UAI among MSM.”

In a US study of 310 young MSM aged 16 to 24 years, Garofalo and associates report that those who had used crystal methamphetamine in the past 12 months (13 per cent of the sample) reported more unintended risky sex than those who had used other illicit substances. A community-based survey of 496 ethnically diverse young MSM living in Chicago found that those who used methamphetamine were “more than six times more likely than their peers to report unprotected anal intercourse in the past 12 months, more than four times more likely to report multiple anal sex partners in the past three months, and substantially more likely to report sex in a bath house or sex club, with a partner met via the Internet, in exchange for resources with older partners.”

No comparable Australian data on young gay men were found through the literature review.

**Impotence and “erectile dysfunction medications”:** A small number of studies suggest that higher doses of crystal methamphetamine may lead to erectile dysfunction. According to these studies, some gay male users who experience crystal meth-induced impotence (colloquially termed “crystal dick”) take erectile dysfunction medications such as ViagraTM. Others choose instead to move from being the insertive to the receptive partner during anal sex. Both of these reactions to impotence can increase the risk of HIV transmission: the use of erectile dysfunction drugs may prolong sex and increase the chances of tissue damage, while being the receptive partner in anal sex increases the chances of being exposed to blood or semen. A cross-sectional random telephone survey of 1,976 gay men living in San Francisco found that ViagraTM used with methamphetamine was independently associated with a higher risk of serodiscordant unprotected insertive and receptive intercourse and a recent diagnosis of a sexually transmitted disease. Data from the Melbourne SOPV Survey show that, among gay men who had attended an SOPV in the past six months, 40.9 per cent of the men who had used crystal methamphetamine had also used ViagraTM, compared with 9.9 per cent of the men who had not used crystal methamphetamine (Appendix C). Data from HIV futures five show that HIV-positive men who use crystal methamphetamine are more likely than HIV-positive men who do not also to use ViagraTM, 56.8 per cent versus 19.2 per cent (Appendix C).

---

231. The other drugs predicted for were volatile nitrites, GHB, marijuana and erectile dysfunction medication (such as Viagra). Drumright, L.N., Little, S.J. et al. (2006) “Unprotected Anal Intercourse and Substance Use Among Men Who Have Sex With Men With Recent HIV Infection”. J Acquir Immune Defic Syndr 43:3, pp. 344-350.
4.3. Findings from the Delphi Scan

4.3.1. General impressions

The results of the Delphi Scan showed considerable disagreement among experts regarding the scale and scope of crystal methamphetamine use in both mainstream and gay communities (see Appendix F for details). All respondents noted the lack of detailed research on rates and patterns of crystal methamphetamine use in Australia and many argued that public policy was driven more by anecdote and media hype than by population-based epidemiological and behavioural data. Nonetheless, the majority believed that media reports of increasing rates of use among the general population were indicative of increasing rates of use among gay men in Victoria over the last two years. However, a significant minority believed that use in mainstream and gay communities in Australia had peaked in 2002/03 and was now declining.

4.3.2. Crystal methamphetamine use among gay men

There was broad agreement among respondents that use of crystal methamphetamine among gay men in Melbourne was only slightly higher than among the general population. The majority believed that gay men used crystal methamphetamine for similar reasons as other non-gay recreational drug users: to enhance sociability and to heighten sexual experiences. However, a majority also argued that illicit drug use had become normalised within gay male culture and that this increased the pressure on men entering the gay commercial scene (and in particular young gay men) to take drugs recreationally.

There was broad agreement that a significant percentage of gay male users managed their crystal methamphetamine use with minimum disruption to their lives. The majority of the expert group believed that most gay male users took the drug at home or at a friend's place before attending a gay commercial or sex venue. They believed that smoking was the most common mode of administering the drug among this group, followed by ingesting and snorting.

4.3.3. Problematic crystal methamphetamine use among gay men

There was consensus among respondents that problematic use of crystal methamphetamine was associated with serious disruptions to a user's everyday life which may include a negative effect on their health. All but two respondents agreed that only a very small percentage of gay men who used crystal methamphetamine were problematic users.

A large number of respondents associated problematic use with a hard core group of gay men who used the drug primarily for sex. They believed that among this group or subpopulation there was an overrepresentation of HIV-positive gay men and that injecting was the preferred mode of administering the drug.

The majority of respondents believed that the normalisation of illicit drug use in the gay male community made it not only very difficult to discuss the negatives associated with drug use, including crystal methamphetamine, but also acted as a disincentive for gay men experiencing problematic use to seek professional help. Almost all respondents argued that policy addressing the harms associated with gay men's use of crystal methamphetamine should be developed as part of a comprehensive approach to gay men's use of illicit drugs more broadly.
4.3.4. Minimising the harms to gay men associated with their use of crystal methamphetamine

Half of the respondents were not aware of any crystal methamphetamine prevention campaigns or resources targeting gay men. While a number suggested that such resources were needed, others argued that crystal methamphetamine use among gay men was not a major problem and that targeted prevention may be counterproductive, fuelling misperceptions concerning the scope and effects of its use. However, there was broad consensus regarding the need for resources and information that tackled the normalisation of illicit drug use in the gay male community and that enabled a more open discussion of problematic use and encouraged gay men to seek professional assistance.

There was considerable disagreement among respondents regarding the capacity of mainstream health services, including drug and alcohol treatment services, to meet the needs of problematic and dependent gay male crystal methamphetamine users. While a number of respondents believed that mainstream services were aware of and able to deal with issues specific to gay men, an equal number identified the lack of such sensitivities as a major gap in existing services. Similarly, there was disagreement over whether or not there was a need for gay specialist drug and alcohol services or programs to deal with gay men’s problematic drug use, including crystal methamphetamine.

The level of disagreement among respondents on a number of key issues, including the scale and scope of crystal methamphetamine use among gay men and appropriate prevention and treatment options for this group, highlight the lack of Melbourne-based information in this area.
5. Treatment and prevention

5.1. Treatment options

It is only recently that drug and alcohol services have begun to develop and implement strategies for tackling methamphetamine dependence and abuse. These fall into two broad approaches: pharmacological interventions and behavioural therapies. However, the ANCD notes that, to date, few treatment approaches to methamphetamine dependency have been comprehensively evaluated.

5.1.1. Pharmacotherapy

In the US, no pharmacological treatments have been approved by the FDA for the treatment of methamphetamine dependence. In some jurisdictions, dexamphetamine has been used as a substitute pharmacotherapy modelled on drug substitution therapies for the treatment of heroin and cocaine addiction. However, evaluations undertaken in the UK suggest that whatever effects dexamphetamine has in reducing methamphetamine dependence are offset by increased risk of psychosis, continued illicit use of the drug, and diversion of prescribed dexamphetamine. In Australia, substitution therapies for the treatment of methamphetamine dependence are not routinely available.

A number of clinical trials are being undertaken in the US to develop alternative pharmacotherapies for the treatment of methamphetamine abuse. The National Institute on Drug Abuse Medications Program has been evaluating a range of medications for their ability to reduce methamphetamine use, with bupropin, an anti-depressant, providing promising results. In Australia the National Drug and Alcohol Research Centre is currently managing a randomised control trial of modafinil, a central nervous system stimulant, for methamphetamine and cocaine users. The results suggest that modafinil can significantly reduce heavy users’ cravings for crystal methamphetamine. However, it has been argued that drug substitution based on models for treating opioid addiction may be neither appropriate nor effective when treating stimulant abuse and addiction. Researchers at Turning Point Alcohol and Drug Centre argue that, whatever the success of methamphetamine substitution pharmacotherapies, the most effective approaches to treatment will include substitution “as part of a range of treatment options available to problematic methamphetamine users.”

5.1.2. Behavioural interventions

Current evidence suggests that the most effective approaches to reducing methamphetamine dependence are psychosocial ones. Cognitive Behavioural Therapy (CBT) has been the mainstay of behavioural interventions to date. However, recent trials suggest that Contingency Management (providing incentives or rewards including monetary payment for abstinence) may also be effective.
Cognitive Behavioural Therapy

CBT is fundamental to the treatment of all substance dependencies and to other addictive behaviours such as gambling.250 It aims to provide individuals with insights into the motivations and structures underpinning their dependent behaviours, information on the science of addiction, and techniques to recognise and cope with their personal addictive triggers and abstain from substance use.251 Numerous studies have shown the effectiveness of CBT in reducing methamphetamine dependence. CBT-based interventions trialled in Australia significantly reduced levels of methamphetamine use, increased abstinence rates, and alleviated methamphetamine-related harms.252 Lee, in a recent presentation at The University of Melbourne, cited studies showing that as few as two CBT sessions could increase abstinence among dependent crystal methamphetamine users.253 In 2003, the Australian Government published guidelines on how to conduct a brief CBT-based intervention for methamphetamine users.254

Contingency management

Contingency management works by providing incentives and rewards for continued abstinence. In the US, a common form of reward are vouchers that can be exchanged for goods and services of increasing value for each consecutive demonstration of abstinence.255 A comparative US study of the effectiveness of Contingency Management compared with CBT in reducing methamphetamine dependence found that clients receiving Contingency Management, or Contingency Management in combination with CBT, performed better than those receiving CBT alone.256 Lee, however, has argued that Contingency Management may be more effective in reducing dependent methamphetamine use while clients are receiving treatment, but that CBT may prove more effective in maintaining reduced methamphetamine use in the longer term for this group.257

5.2. Treatment for gay men

Shoptaw and colleagues, in a review of the research literature on treatment options for gay male methamphetamine users, argue that while Contingency Management and CBT have been shown to reduce crystal methamphetamine use among this population in the US, the most effective treatment strategies may involve a combination of both.258 However, a number of studies suggest that in order to achieve sustained reductions in methamphetamine use among dependent gay male users (including abstinence), these psychosocial interventions need to be part of broader community support or reinforcement strategies.259 In a separate study, Shoptaw et al. report on a contingency management program for gay men experiencing problematic crystal methamphetamine use in San Francisco. The results of the program, they argue, suggest that contingency management for this population is most effective when delivered within a community setting with appropriate community supports and follow-up.259

256 Shoptaw, S., Reback, C.J. et al. (2005) op cit.
258 Shoptaw, S., Reback, C.J. et al. (2005) op cit.
Peck and colleagues evaluated the effectiveness of different treatment regimes in reducing both methamphetamine use and depression among a sample of 263 gay male crystal methamphetamine users attending an outpatient treatment research clinic in Los Angeles between 1996 and 2001. Participants were randomly assigned to one of four treatment conditions: CBT; Contingency Management; CBT plus Contingency Management; and a gay-specific CBT. They found that all four treatment conditions were effective in reducing methamphetamine use and depressive symptoms for up to one year follow-up. They conclude that, “the specific type of...treatment may be of little consequence over the long term. Data indicate that it is more important that individuals enter a structured treatment program where they are actively confronting and addressing their substance abuse”.

A number of researchers have called for the development of methamphetamine treatment services specific to gay men. In a survey of 174 methamphetamine-using gay men visiting STI clinics in Seattle and San Francisco, 62 per cent reported a strong desire to decrease or stop their use of the drug and 70 per cent had attempted to do so. Nonetheless, only 12 per cent had ever engaged in drug treatment. The GLMA argues that the report’s findings demonstrate a “severe lack of appropriate treatment services to serve [the] needs [of this population]”. Although the Melbourne SOPV Survey did not ask questions about problematic drug use, it is significant that only nine per cent of the gay men who reported using crystal methamphetamine in the past six months had sought assistance for their drug use in general, while only one per cent had sought assistance for problems related to crystal methamphetamine use in particular (Appendix C).

The Australian reported that fewer than half of Australia’s 73,000 “methamphetamine addicts” are currently accessing treatment. Lee argues that this underutilisation of existing services is due to the widely held misperception that there are no effective treatments for methamphetamine dependence and a greater unwillingness among dependent users to consider or admit that their use is problematic. Those who advocate for gay-specific methamphetamine treatment services acknowledge that these generic barriers are also true for gay men. However, they argue that gay men face a number of additional barriers or disincentives when considering seeking professional assistance for problematic crystal methamphetamine use.

Ethnographic and social research has highlighted the importance of recreational drug use in the formation of individual and collective gay male identities (see Section 6.3). It has also highlighted certain gay men’s over-investment in recreational drug use as a consequence. Commentators have argued that only the pleasurable aspects of recreational drug use are publicly acknowledged within the gay community, and that there is a prohibition on discussing problematic use. Dowsett et al., and Slavin have separately argued that there is a moral hierarchy of drug use among gay men in Australia and that injecting and dependent users are seen as failing to manage their drug use and are often ostracised from gay networks and events.

---

270 Slavin points out, however, that despite the pejorative distinction that gay male crystal meth users make between “recreational use” and “junkies”, the distinction can work to minimise drug-related harm. The distinction may pressure some gay men, who might otherwise become dependent users, to keep their use “functional”. Slavin (2004) pp. 455 - 56 op cit.
At the same time, many gay men do not believe that mainstream drug and alcohol treatment services are sensitive to, aware of and able to meet their specific needs. Rawson and colleagues argue that given the synergies between gay men’s methamphetamine use and their social and sexual behaviours, they are unlikely to use treatment services that involve discussions with mixed client groups that include heterosexuals. Others have argued that, in the light of the strong association between methamphetamine use and high-risk sexual behaviour among gay men, these issues should be addressed as part of a single program or service. It is not surprising, then, that treatment of problematic crystal methamphetamine use among gay men is increasingly being developed and funded under the rubric of HIV prevention.

There was considerable disagreement among respondents in the Delphi Scan on whether there was a need for specialist gay male crystal methamphetamine drug and alcohol services (Appendix F). However, there was broad agreement that mainstream services lacked gay-sensitive models of service delivery and drug and alcohol treatment options. A majority of respondents argued that there is a pressing need for mainstream services to develop gay-sensitive policy and programs and professional training that includes: material on gay cultural norms and practices; sex positive attitudes to gay male sex; and an understanding of the links between sexual health, including HIV and STI transmission, and drug and alcohol use for this client group.

5.3. Prevention and promotion

Over the last five years, crystal methamphetamine prevention campaigns targeting gay men have been run in New York, San Francisco and Sydney. The campaigns have used a range of social marketing techniques, from scare tactics showing before and after pictures of meth-ravaged bodies (“Meth=Death” in New York, and “Crystal Mess” and “Life or Meth” in San Francisco, all run in 2004), to booklets and posters providing information on the effects of crystal meth and where to go for help (“CRYSTAL: Effects.Health.Sex.Help” run by ACON in Sydney, launched in December 2005). It is notoriously difficult to assess the effectiveness of public health campaigns and their impact on individual behaviours. The crystal methamphetamine campaign run in San Francisco has been credited with having had a major effect in reversing rising rates of HIV and STI transmission in that city over the past two years. However, no detailed evaluation of the campaign has been reported in the research literature.

These campaigns have all focused on individuals and individual behaviours, and they have not engaged, to any significant degree, with gay community attitudes toward crystal methamphetamine and illicit drug use in general. Although a number of the campaigns have highlighted drug-related harm, including the physical and mental health consequences of problematic use, most have focused on the links between crystal methamphetamine use and increased risk of HIV transmission. It is no coincidence that these campaigns have been developed in cities with relatively large gay male populations and where rates of HIV infection among these populations have been on the rise over the last five years. In this respect, these campaigns are of one piece with the individualistic approaches to treating gay men’s problematic drug use outlined in Section 5.2 above.

All campaigns in Australia so far have been managed by community sector organisations with varying levels of government financial support. A recent study canvassing the opinions of senior drug policy health officials from all Australian States/Territories and the Commonwealth identified the lack of a clear conceptual framework for prevention as the second priority area in drug and alcohol policy. Given this lack, it is not surprising that governments at all levels in Australia have only just begun to consider ways of reducing crystal methamphetamine-related harm. It is even less surprising that they have yet to turn their attention to the needs of specific populations or “at-risk groups.”

---

276 ACON has managed the Sydney campaigns, with funding from NSW Health.
6. Framing policy

6.1. Summarising the data

6.1.1. Mainstream versus gay community data

The data show that rates of illicit drug use, including crystal methamphetamine use, among gay men in Australia, the UK and the US are higher than their respective national averages. In Melbourne, rates of crystal methamphetamine use among gay men have been estimated at between 8 and 15 per cent compared with 3.2 per cent for the population as a whole. National Australian surveys show that, since 2000, rates of illicit drug use in the Australian population, including crystal methamphetamine use, have stabilised if not dropped slightly. This is also true for rates of use among young people. However, at the same time, according to Melbourne Periodic Survey data, rates of crystal methamphetamine use among gay men living in Melbourne have increased from 6.3 per cent in 2000 to 15.1 per cent in 2006.

National data show that illicit drug use is highest among 18 to 29 year olds, with 31 per cent having used an illicit drug in the past 12 months and 10 per cent of 20 to 29 year olds having used methamphetamine in the same period. In contrast, combined data from the Melbourne Periodic and Private Lives surveys suggest that, among gay men, rates of crystal methamphetamine use are highest among older men, i.e. those aged 30 to 39 years with an average age of use of 33 years.

Despite increasing rates of crystal methamphetamine use among gay men in Melbourne, most gay men who use the drug do so infrequently and experience few if any problems. Problematic use is confined to the small number of gay men who become dependent users and to a cohort of older gay men who use illicit drugs, including crystal methamphetamine, to facilitate adventurous sex (see Section 6.1.2 below).

Mainstream analyses of the harms associated with the use of crystal methamphetamine have focused on the social, economic and personal costs, including increases in drug-related violence and crime. Little research has been done in Australia on the relationship between heterosexual use of the drug and increased sexual risk-taking and HIV and STI transmission. In contrast, almost all the studies of the harms associated with gay men’s use of the drug have focused on gay men’s sexual health within the narrow confines of HIV. Apart from a few ethnographic studies, there has been no Australian research that addresses the economic and social (and personal) costs to gay men and to the mainstream community associated with gay men’s use of the drug.

6.1.2. Crystal methamphetamine use among gay men

Rates of crystal methamphetamine use among gay men in Australia are comparable to those reported in the US but considerably higher than in the UK. However, rates of use among urban gay men are similar in all three jurisdictions, with estimates of 10 per cent in London, between 8 and 15 per cent in Melbourne, and between 8 and 30 per cent in the US depending on the city and the survey method used.\textsuperscript{278}

\textsuperscript{278} The greater variation in rates of use among urban gay men in the US reflects a home-grown market for the production of crystal methamphetamine there that varies significantly from state to state, as well as different histories of use within both mainstream and gay communities across the country.
National and international data also show similar patterns of crystal methamphetamine use among urban gay men in Australia, the US and the UK (and Canada), and, more importantly, these patterns reveal similarities in the relationship between gay men’s illicit drug use, sexual practices and rising rates of HIV and STIs. Broadly speaking, the epidemiological and behavioural data identify two discrete but overlapping populations of gay men who are regular users of illicit drugs, including crystal methamphetamine.

The first population consists of gay men whose illicit drug use shows a strong association with their experiences of homophobic abuse and discrimination. This group includes:

- MSM and same-sex-attracted young people who are grappling with the social pressures of “coming-out”;
- Gay men who are uncomfortable with their sexuality;
- HIV-positive men who experience the added pressures of HIV-related discrimination and dealing with complex treatments and their side effects.

The second population includes gay men who take drugs recreationally on the gay commercial scene. Current data suggest that these recreational users can be divided into two subpopulations: those whose primary motive for using drugs is to increase their sociability; and those whose primary motive is to increase their sexual interest and capacity. However, the boundary between these two subpopulations (and their motives) is fluid.

**Increased sociability**: This subpopulation of recreational gay male drug users:

- Are young, aged 20 to 29 years;
- Attend dance parties and the club scene;
- Use crystal methamphetamine rarely;
- Prefer to ingest crystal methamphetamine;
- Use crystal methamphetamine as a social lubricant and for its added “staying power”; and
- Use crystal methamphetamine in combination with other “social performance” enhancing drugs.

**Enhanced sexual capacity**: This subpopulation of recreational gay male drug users:

- Are older, aged 30 to 39 years;
- Are more likely to be HIV-positive;
- Are more likely to use crystal methamphetamine;
- Prefer to inject crystal methamphetamine;
- Use crystal methamphetamine to reduce social and sexual inhibitions and to increase sexual interest and capacity; and
- Use crystal methamphetamine in combination with other sexual performance enhancing drugs and, in particular, Viagra™.

This subpopulation also includes a small but possibly increasing number of gay men who take crystal methamphetamine while looking for potential sexual partners online.
6.2. Current approaches

It is clear from the research that gay men’s use of illicit drugs and the relationship between illicit drug use and sexual practices within the gay male community have undergone significant changes over the last ten years. These changes reflect broader social and political processes that include:

- Greater recognition and social visibility of gay men and lesbians;279
- The blurring of the boundary between mainstream and gay commercial cultures and, in particular, youth cultures; and
- Changes to the HIV epidemic, including improved treatments and improvements in the health of HIV-positive gay men.280

These processes have driven the diversification and fragmentation of gay culture, the emergence of new social and sexual subcultures, and new ways of socialising, using drugs and having sex. They signal new patterns of drug use within the gay community, with different subpopulations of gay men using the same drugs in very different ways.

Current approaches to addressing gay men’s use of illicit drugs, including crystal methamphetamine, and the harms associated with their use are narrow in focus and assume a fixed notion of gay community and culture. They continue to:

- Define gay men’s health through an HIV lens;
- Focus exclusively on the harms associated with gay men’s use of drugs and, in particular, the relationship to sexual risk-taking and HIV and STI transmission;281
- Fail to recognise the personal, social and sexual pleasures associated with drug use;
- Pathologise not only gay men’s use of drugs, but also their sexual practices and gay cultural norms and values;282
- Focus on individual behaviours in isolation and fail to engage with the broader social determinants of gay men’s health; and
- Focus on individual drugs rather than broader cultures of drug use.

6.3. New policy frameworks

There has been a move within the social sciences to rethink the use of drugs by gay men as a shared cultural practice.283 Rather than only viewing gay men’s drug use as a sign of individual pathology or as a vector for HIV transmission, drug use on the gay commercial scene is understood as one of a number of social practices or shared rituals through which homosexually active men can generate a personal and collective gay identity.284 As Green puts it, recreational drug use “facilitates community” and is one way in which gay men form “solid social ties to gay friendship networks and institutions”.285 This framework shifts the focus from the individual to the broader social and cultural determinants of gay men’s social and sexual practices. It also implies that health policy needs to understand and respond to gay men’s use of illicit drugs in the context of gay men’s lives as a whole.

---

279 Health and sexual diversity (2003), pp. 3-9 op cit.
Diagram 2 (p. 49) presents the epidemiological and behavioural data on crystal methamphetamine use among gay men in Melbourne within this framework. It suggests that gay men’s drug use and sexual practices, and the relationship between the two, are structured by social processes within and outside the gay community, including gay cultural norms and homophobia. These processes have lead to different ways of using crystal methamphetamine among different sub/populations of gay men (see Section 6.1). The framework describes how these different ways of using crystal methamphetamine reflect the different social contexts in which drugs are used and the degree to which they are associated with sexual practices that carry an increased risk of HIV and STI transmission. However, the framework also suggests that there is significant overlap and movement between the different contexts in which different sub/populations of gay men use crystal methamphetamine and the different motivations behind their drug use. For example, a proportion of gay men who first use crystal methamphetamine recreationally on the commercial gay scene may, over time, become dependent, private users as a means of dealing with homophobic abuse and discrimination.

This framework demonstrates that an effective response to gay men’s use of crystal methamphetamine and other drugs needs to be developed as part of a comprehensive gay men’s health and well-being strategy, and not within the narrow confines of HIV prevention, illicit drug use, or gay men’s sexual health. It also suggests that an effective response needs to work across a number of levels, from health policy and service system development, to whole-of-government reforms aimed at reducing discrimination of all types, including homophobia.
Diagram 2 – Addressing gay men's use of crystal methamphetamine within a social determinants of health and well-being framework
7. A coordinated response

The following suggestions are directed at the development of a coordinated policy and program response aimed at minimising the harms to gay men associated with the use of crystal methamphetamine. The suggestions are consistent with the framework developed in Section 6 and are divided into three areas:

- Gay men’s health and well-being policy and program development;
- Treatment and prevention that is sensitive to and reflects the lives of different populations of gay men; and
- Research that will provide a better understanding of contemporary gay culture and a solid evidence base on which to develop effective future gay men’s health and well-being policy and programs.

7.1. Policy and programs

7.1.1. Broad policy and program development

This report’s findings suggest that an effective policy and program response to gay men’s use of crystal methamphetamine should be developed in the broader contexts of gay men’s health and well-being promotion and of whole-of-government initiatives aimed at eliminating the discrimination and prejudice that structure many of gay men’s problematic health-related behaviours. Such a response should include:

- The development of crystal methamphetamine-related policy and programs as part of a comprehensive approach to gay men’s illicit drug use;\(^\text{289}\)
- An understanding both the harms and pleasures associated with gay men’s recreational drug use;\(^\text{290,291}\)
- An understanding how gay community attachment works as a protective factor against mental health problems and problematic drug use among gay men;
- An acknowledgement of the social, economic and personal costs to gay men of problematic crystal methamphetamine use and not only the risks of HIV and STI transmission;
- Closer links between drug and alcohol, sexual health and mental health as key issues in the development of gay men’s health and well-being policy, programs and services;
- An understanding how gay men’s drug use and the harms associated with the use of specific drugs are related to the social contexts in which the drugs are used; and
- A focus on how gay men’s drug use, their sexual practices and the relationships between the two are structured by social and political processes within and outside the gay community, including homophobic abuse and discrimination.

\(^{289}\) Currently a separate strategy is developed for each new drug as it appears.

\(^{290}\) In its 2000 study of drug and alcohol use among GLBT communities in Victoria, the Australian Drug Foundation reported that gay culture has developed knowledge-ble approaches to drug and alcohol use, or what the report calls “folk pharmacologies.” Ireland and colleagues argue that gay men in Sydney have developed sophisticated ways of managing drug use that rely on different forms of social connectedness. See Murnane, A. et al. (2000) op cit. and Ireland, K., Southgate, E. at al. (1999) Using and “the scene”: patterns and contexts of drug use among Sydney gay men. National Centre in HIV Social Research: University of New South Wales, Sydney.

7.1.2. Targeted policy and programs

The research shows that crystal methamphetamine is used differently by different sub/populations of gay men. They include:

- Older gay men who are part of the adventurous sex/party scene;
- Young gay men on the commercial gay scene; and
- MSM and gay men who use illicit drugs privately as a form of self-medication.

There is a pressing need for the development of targeted health policy, programs and resources that address the different ways of using crystal methamphetamine and the different harms associated with its use for each of these populations. For example, young gay men on the commercial gay scene who take recreational drugs for primarily social reasons may be more responsive to information on crystal methamphetamine and the harms associated with its use that is packaged in a harm minimisation and responsible drug use framework. In contrast, older gay men on the adventurous sex scene may be more responsive to material on crystal methamphetamine that is framed in terms of minimising HIV and STI transmission (see Diagram 2).\[^{292}\]

7.2. Prevention and treatment

The findings of the report suggest the need for mainstream drug and alcohol, sexual health and mental health services to be more sensitive to, aware of and better able to deal with gay men who are experiencing problems related to their use of crystal methamphetamine. This involves service providers having an understanding of what is specific to "gay ways of using drugs" and, in particular, how gay male social and sexual practices are structured by wider socio-political forces.

7.2.1. Resource development and workforce training

There is a need to improve the quality and effectiveness of mainstream treatment services for gay men experiencing problematic crystal methamphetamine use. The research also suggests that there may be a need, in some instances, for the provision of specialist services directed toward gay men. A guarantee of service quality and diversity will increase the likelihood that problematic gay male users or gay men who may be moving towards problematic use will seek professional assistance.

7.2.2. Gay community preventions campaigns

Very few crystal methamphetamine prevention campaigns have been run in the gay community. Those that have been run have relied on scare tactics and failed to engage with the different ways gay men use drugs or with the range of harms associated with problematic crystal methamphetamine use. The research also suggests the need for targeted resource development and professional training that address key "pressure points" including:

- The initiation of young gay men onto the commercial scene, including gay cultures of drug use;
- The transition from recreational to dependent crystal methamphetamine use;
- The transition from mono to polydrug use; and
- The normalisation of illicit drug use in the gay male community.

\[^{292}\] Rawstorne et al. make a similar point about not reducing crystal methamphetamine prevention to matters of HIV and sexual health when they argue "Crystal use and unsafe sexual behavior can, and should, be considered and addressed separately in health promotion and community education." Rawstorne, P. et al. (2007) p. 646 op cit.
7.3. Research

Current approaches to gay men's health policy, including those concerned with gay men's use of drugs, are wedded to a 1980s model of gay community. This is a model of a homogeneous, static community dominated by HIV/AIDS. However, as the research suggests, gay community and identity have undergone dramatic changes over the last 15 years. There has been a diversification of gay social and sexual practices and ways of being gay. Gay male community is no longer centred on HIV/AIDS, but on an increasing range of social, sexual, cultural and political issues and interests. These vary across different segments or subpopulations of Melbourne's gay male community and do so according to differences in age, HIV serostatus, socio-economic status, race/ethnicity, and geographic location. At best a model of gay men's health that fails to acknowledge these changes is unhelpful in tackling emerging health and well-being issues, such as those posed by the arrival of the latest drug. At worst, it may prove dangerous by reinforcing outdated and unusable stereotypes of gay community and identity.

7.3.1. Investigating the contemporary gay social scene

There is a lack of reliable and up-to-date information on how Melbourne's gay male community is changing, and of the different ways of being gay and relating to, and being part of, an increasingly diverse and fragmented gay commercial scene. In particular, there is a need for more accurate and up-to-date information and data on:

- The relationship between gay identity and drug use, sociability, and sex in contemporary gay culture;
- The changing social and sexual contexts in which different populations of gay men in Melbourne use crystal methamphetamine and other drugs;
- The potential harms to gay men associated with the use of crystal methamphetamine and other drugs in these different contexts; and
- Changing attitudes to recreational and problematic drug use in the gay male community.

7.3.2. New and emerging sexual subcultures

International and Melbourne data suggest that the major risk of HIV transmission associated with gay men's use of crystal methamphetamine is among a small but significant subpopulation of older gay men involved in the adventurous sex party scene. This scene is relatively new and little is known about its social and sexual dynamics. There is a need for more epidemiological, behavioural and social data on:

- Who attends these events;
- How serostatus and sexual practices are negotiated (particularly given preliminary data showing an overrepresentation of HIV-positive gay men);
- The role of drug use and, in particular, of injecting drug use, including crystal methamphetamine; and
- How the adventurous sex scene intersects or overlaps with the broader gay commercial scene.

7.3.3. Homophobia, depression and illicit drugs use

There are few Australian or Melbourne data on the relationship between homophobia, mental health problems, and illicit drug use among gay men. Most studies are US-based and the relatively high rates of depression they report may reflect more conservative attitudes towards sexual and gender identity minorities in the US compared with Australia. Researchers in Australia have also been critical of the indicators and depression scales used in many US-based studies of the mental health of gay men and lesbians. Finally, little is known about the relationship between depression, crystal methamphetamine use and sexual risk-taking among gay men.

294 Personal communication, Dr Garrett Prestage.
Appendix A

Literature review and Factiva search

A search of Factiva shows that between 2000 and 2007 there were approximately 350 separate articles on crystal methamphetamine in the national print media. However, 254 or 74 per cent of these have been published in the last two years (since April 2005). The Victorian figures are similar, with over 60 articles published since 2000, 90 per cent (55 articles) of these appearing in the last two years.

A comparison of biomedical and sociological research publications with popular press reports over the same period is revealing. From 2000 to 2007 there has been a steady stream of biomedical research on the physiological effects and, to a lesser extent, pharmacology of crystal methamphetamine. Using a combination of CINAHL, Ovid Medline and Cambridge Scientific Abstracts (CSA), a total of 88 articles have been published during this period. Of these, 49 articles (56 per cent) were published since 2005. A search of Current Contents, which includes both social science and sociological abstracts, shows that 50 articles on crystal methamphetamine were published between 2000 and 2007, with 35 articles or 70 per cent published in the last two and half years (since January 2005). According to APAFT\textsuperscript{295}, only five articles have appeared on crystal methamphetamine since 2000 (three prior to 2005).\textsuperscript{296, 297} Although there has been a growing interest in crystal methamphetamine in the biomedical and sociological research literature since 2000, it does not match the fevered media interest post 2005.

\textsuperscript{295} See footnote 22.

\textsuperscript{296} Bibliographic database that indexes articles from published material on Australian political, economic, legal, social and cultural affairs. Source documents include periodicals, newspapers, scholarly journals, conference papers, and books.

\textsuperscript{297} If we use “Ice” as the search term, another five articles appear for this period.
### Appendix B

**Literature Review: Search terms**

<table>
<thead>
<tr>
<th>Search term</th>
<th>Number of articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gay men, HIV, risk</td>
<td>0</td>
</tr>
<tr>
<td>HIV risk</td>
<td>0</td>
</tr>
<tr>
<td>Risk behaviour</td>
<td>21</td>
</tr>
<tr>
<td>Dance party</td>
<td>1</td>
</tr>
<tr>
<td>Circuit party</td>
<td>5</td>
</tr>
<tr>
<td>Recreational drug use</td>
<td>3</td>
</tr>
<tr>
<td>Polydrug</td>
<td>4</td>
</tr>
<tr>
<td>Treatment</td>
<td>29</td>
</tr>
<tr>
<td>Policy</td>
<td>11</td>
</tr>
<tr>
<td>Patterns of drug use</td>
<td>3</td>
</tr>
<tr>
<td>Patterns</td>
<td>20</td>
</tr>
<tr>
<td>Prevalence</td>
<td>17</td>
</tr>
<tr>
<td>Effects</td>
<td>23</td>
</tr>
<tr>
<td>Education</td>
<td>12</td>
</tr>
<tr>
<td>Media</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>97</strong></td>
</tr>
</tbody>
</table>
Appendix C

Melbourne-based data

Results from the Melbourne Periodic Survey

The following results use 2006-2007 data. The survey is a cross-sectional survey of 1,988 gay and other homosexually active men living in Victoria, recruited through a range of gay community sites in Melbourne. Unpublished data kindly provided by Dr. Garrett Prestage.

Demographics

The mean age of crystal users in Victoria was 32.7 years compared with 35.3 years for non-users. A third of those using crystal meth were between 30 and 39 years (34.1 per cent), with few gay men over 50 years using the drug. The majority of gay men using crystal meth lived in inner suburban Melbourne (55 per cent compared with 41 per cent of non-users). Few of the gay men surveyed lived outside Melbourne, but the percentage of crystal meth users who did was lower than the percentage of non-users. There was little difference in employment status between users and non-users of crystal meth, although gay men using the drug were less likely to be in professional and managerial occupations (34.8 per cent compared with 45.5 per cent). Gay men using crystal meth were also less likely to have had a university education compared with non-users, 46.2 per cent and 55.1 per cent respectively.

Rates of use of crystal methamphetamine

Only 14.5 per cent of respondents in 2006-2007 reported having used crystal methamphetamine in the 12 months prior to the survey. The majority of these had only used the drug once, with very few reporting having used crystal more than a couple of times during this period.

Other drug use

Almost all crystal meth users reported taking crystal in combination with one or more other drugs, with 70 per cent indicating they used five or more types of drugs.

HIV status

Gay men using crystal methamphetamine were more likely to be HIV-positive than gay men not using the drug, 17.9 per cent and 6.4 per cent respectively. Among men who were not HIV-positive, those using crystal meth were more likely to have had an HIV test in the previous 12 months than those not using the drug, 72.6 per cent compared with 56.1 per cent. Gay men using crystal meth were also more likely than non-users to have been tested for STIs in the 12 months prior to survey, 81.6 per cent and 64.8 per cent respectively, and to have more comprehensive tests. HIV-positive gay male crystal methamphetamine users had similar rates of undetectable viral load as non-users and were at least as likely to be on treatments.298

298 However, the numbers for this group are small and the results may not be reliable. Personal communication, Garrett Prestage.
Relationship status

There was no significant difference in relationship status between gay men using and not using crystal methamphetamine, with 61.5 per cent compared with 59.9 per cent in a regular relationship. However, those using crystal meth were more likely to have an open relationship, 40.3 per cent of users compared with 28.7 per cent of non-users.

Sexual activity

Just over 70 per cent of gay men who had used crystal meth in the past 12 months said they had used drugs to have sex in the past six months (though not necessarily crystal meth). Thirty-nine per cent of gay men who had used crystal methamphetamine reported having had ten or more sexual partners in the 12 months prior to survey. This compared with 23.5 per cent of non-users. Users were more likely to have had casual sex in this period than non-users (78.1 per cent compared with 64.7 per cent). Among those gay men who reported having had casual sex in the past 12 months, those who had used crystal meth were more likely than those who had not to have engaged in UAIC, both insertive and receptive (44.8 per cent compared with 26.1 per cent).

Gay community attachment

Gay men who reported crystal use in the 12 months prior the survey reported having more gay friends that non-users and were also more likely to use gay social venues such as bars, gyms and dance parties. However, they were no more likely to identify as gay.
Results from *Private Lives*

*Private Lives* is a national online survey of the health and well-being of GLBTI Australians conducted in early 2005. The data reported on here are for Victoria and include all respondents who identified as male and as gay, bisexual, queer or other (822 in total). Of the men who reported having used crystal methamphetamine in the past six months, 99 per cent identified as gay and one per cent as bisexual. This compares with the total sample, in which 91.2 per cent identified as gay and 8.8 per cent identified as bisexual.

Demographics

The majority of crystal meth users among gay men in metropolitan Melbourne were aged between 20 and 50 years (over 95 per cent). However, over three quarters of these were aged between 25 and 44 years, with less than 15 per cent under 25 years. The results suggest that among gay men in Victoria crystal methamphetamine users tend to be older, with less than 35 per cent under 30 years. The rate of use falls to less than 1.2 per cent for gay men aged 16 to 19 years.


**Table 1** – Age breakdown of crystal methamphetamine use among gay men in metropolitan Melbourne

<table>
<thead>
<tr>
<th>Age range</th>
<th>16-19</th>
<th>20-24</th>
<th>25-29</th>
<th>30-34</th>
<th>35-39</th>
<th>40-44</th>
<th>45-49</th>
<th>50+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystal meth use – %</td>
<td>1.2</td>
<td>11.9</td>
<td>20.2</td>
<td>20.2</td>
<td>16.7</td>
<td>16.7</td>
<td>10.7</td>
<td>2.4</td>
</tr>
</tbody>
</table>

There were no reported differences in education levels between the two groups.


**Table 2** - Rates of crystal methamphetamine use among gay men in Victoria

<table>
<thead>
<tr>
<th>Rates of crystal methamphetamine use</th>
<th>Percentage n = 822</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of times used</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>86.6</td>
</tr>
<tr>
<td>1-5</td>
<td>8.0</td>
</tr>
<tr>
<td>6-10</td>
<td>1.2</td>
</tr>
<tr>
<td>10 plus</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Eighty-eight men (10.7 per cent of respondents) had used crystal methamphetamine in the past six months. The majority of users had used the drug one to five times in that period. The figures were fractionally (but not significantly) higher across all groupings for gay men living in metropolitan Melbourne.
Gay men living in Victoria, who had used crystal methamphetamine in the previous six months, were more likely than those who had not to report a previous diagnosis of all STIs and both hepatitis B and C.

Gay men who had used crystal meth were more likely to have had an STI check-up in the past year than those who had not used crystal meth (71.6 per cent compared with 55.7 per cent). Gay men who had used crystal meth were also more likely than those who had never used the drug to have had an HIV test (95.4 per cent compared with 79.0 per cent) and more likely to have been tested in the past 12 months (68.7 per cent compared with 62.2 per cent). Of those respondents who had had an HIV test, gay men who had used crystal meth were more likely than those who had not to have engaged in sex that carried a risk of HIV transmission since their last HIV test, 37.8 per cent and 26.7 per cent respectively.

Those gay men who had used crystal meth in the past six months were more likely than those who had not to have been told by a medical practitioner that they had one of a number of mental health problems including depression, anxiety disorder, and other psychiatric disorders. At the time of completing the survey, they were also more likely to report “currently feeling depressed”.

<table>
<thead>
<tr>
<th>Particular STI</th>
<th>Crystal methamphetamine use (% reporting previous diagnosis)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>HIV</td>
<td>30.7% (27)</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>10.2% (9)</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>9.1% (8)</td>
</tr>
<tr>
<td>Gonorrhoea</td>
<td>36.5% (31)</td>
</tr>
<tr>
<td>Syphilis</td>
<td>7% (6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mental health problem/illness</th>
<th>Crystal methamphetamine use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Major depressive episode</td>
<td>37.5% (33)</td>
</tr>
<tr>
<td>Depression</td>
<td>47.7% (42)</td>
</tr>
<tr>
<td>Anxiety</td>
<td>29.5% (26)</td>
</tr>
<tr>
<td>Other psychiatric disorder</td>
<td>10.2% (9)</td>
</tr>
</tbody>
</table>

Table 3 - Sexual health and HIV status

Table 4 - Mental health
Service use

Crystal meth users who lived in Melbourne were no more likely to report accessing hospital emergency rooms than those who had never used the drug, even when controlling for age. There were no differences between these two populations in terms of having a regular doctor, although users report that their doctor was more likely to be aware of their sexuality. This may be due to the larger percentage of men who identify as gay among users.

Gay community attachment

Gay men who had used crystal meth in the six months prior to the survey reported higher levels of gay community attachment on a number of indicators than those gay men who had not used the drug. Fifty-three percent of men who had used crystal methamphetamine in the past six months reported that most of their friends were GLBTI compared with 39 per cent of gay men who had not used the drug. Similarly, users report contacting their GLBTI friends more often than do non-users (48.9 per cent of users seeing their GLBTI friends daily, compared with 30.5 per cent of non-users). Users also reported higher levels of feeling attached to GLBTI community than non-users, 37.5 per cent feeling “very” or “mostly attached” compared with 27.3 per cent. However, no differences were found in utilising the GLBTI media between the two groups.
Results from the *Melbourne SOPV Survey*

We report here on unpublished data from *Pivotal, peripheral or positional: Understanding SOPVs for intervention* (2007), a survey of men who attend sex-on-premises venues (SOPVs) to have sex with other men. The survey was conducted early in 2007 with a total of 285 respondents. The average age of crystal meth users among this population was 34.7 years. Of the total sample, 22 (7.7 per cent) had used crystal methamphetamine in the previous six months.

Table 1 – HIV status

<table>
<thead>
<tr>
<th>Have used crystal methamphetamine</th>
<th>HIV status</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>+ ve</td>
<td>- ve</td>
<td>Unknown</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>31.8% (7)</td>
<td>63.6% (14)</td>
<td>4.6% (1)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>8.3% (17)</td>
<td>84.5% (174)</td>
<td>7.3% (15)</td>
<td></td>
</tr>
</tbody>
</table>

Rates of HIV infection among those men who attended SOPVs and used crystal methamphetamine were almost four times that of men who had not used the drug, 31.8 per cent compared with 8.3 per cent. Men who had used crystal were more likely to have had an HIV test and to have been tested for an STI in the past 12 months than men who had not, 90.5% (19) compared with 54.7 per cent (127) and 27.2 per cent (6) and 7.83 per cent (18) respectively.

**Other drugs used**

Table 2 – Other drugs used

<table>
<thead>
<tr>
<th>Other drugs used</th>
<th>Crystal methamphetamine use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes (n=22)</td>
</tr>
<tr>
<td>Alcohol</td>
<td>90.9% (20)</td>
</tr>
<tr>
<td>Marijuana</td>
<td>77.3% (17)</td>
</tr>
<tr>
<td>Speed</td>
<td>77.3% (17)</td>
</tr>
<tr>
<td>Heroin</td>
<td>9.1% (2)</td>
</tr>
<tr>
<td>Cocaine</td>
<td>31.8% (7)</td>
</tr>
<tr>
<td>Ecstasy</td>
<td>95.5% (21)</td>
</tr>
<tr>
<td>LSD/trips</td>
<td>27.3% (6)</td>
</tr>
<tr>
<td>Amyl</td>
<td>68.2% (15)</td>
</tr>
<tr>
<td>Steroids</td>
<td>0.0% (0)</td>
</tr>
<tr>
<td>Viagra</td>
<td>40.9% (9)</td>
</tr>
<tr>
<td>GHB(GBH/Fantasy)</td>
<td>31.8% (7)</td>
</tr>
</tbody>
</table>

Men who attend SOPVs who have used crystal in the past six months are more likely to have used one or more of the drugs listed above, with the exception of steroids.
Table 3 – Other drugs taken in combination with crystal methamphetamine

<table>
<thead>
<tr>
<th>Other drug/s taken</th>
<th>(n=19)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>3</td>
<td>15.8</td>
</tr>
<tr>
<td>Alcohol &amp; Ecstasy</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>Alcohol, Marijuana &amp; Ecstasy</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>Amyl</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>Ecstasy</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>Ecstasy &amp; GHB</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>GHB, Ecstasy &amp; Marijuana</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>LSD</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>LSD, Ecstasy &amp; GHB</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>Marijuana</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>Marijuana, LSD &amp; Ecstasy</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>Speed</td>
<td>1</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Of the men who attended SOPVs and took crystal methamphetamine in the past six months, the most common drug taken at the same time was alcohol (15.8 per cent), followed in equal measure by marijuana, ecstasy, LSD, and alcohol and ecstasy together (all at 10.5 per cent). However, these percentages are based on small numbers and are not statistically significant.

Table 4 – Place where crystal methamphetamine administered

<table>
<thead>
<tr>
<th>Place where crystal methamphetamine administered</th>
<th>Number (n=22)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>14</td>
<td>63.6</td>
</tr>
<tr>
<td>Beat</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Sauna/sex club</td>
<td>1</td>
<td>4.6</td>
</tr>
<tr>
<td>Private sex party</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bar/club</td>
<td>3</td>
<td>13.6</td>
</tr>
<tr>
<td>Dance party</td>
<td>8</td>
<td>36.4</td>
</tr>
</tbody>
</table>

Of those men who had attended an SOPV and used crystal methamphetamine in the past six months, the most common location for administering the drug was at home (63.6 per cent), followed by at a dance party (36.4 per cent). It is important to note that only a tiny proportion of these men took crystal meth at an SOPV.
Relationship status and casual partners

Men who attended SOPVs and had used crystal were less likely to be in a regular relationship than those men who had not used the drug, 31.8 per cent (7) versus 51.5 per cent (135).

*Pivotal, peripheral or positional: Understanding SOPVs for intervention* (2007)

Table 5 – Number of casual partners

<table>
<thead>
<tr>
<th>Crystal meth use in past 12 months</th>
<th>Number of casual partners</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
</tr>
<tr>
<td>Yes (n=22)</td>
<td>13.6% (3)</td>
</tr>
<tr>
<td>No (n=261)</td>
<td>29.5% (77)</td>
</tr>
</tbody>
</table>

Men who attended SOPVs and had used crystal meth in the past six months reported more casual partners than men who had not used the drug, 63.6 per cent with 11 or more casual partners in the last year compared with 28.0 per cent. Only 13.6 per cent of men who had used the drug reported no casual partners in the last 12 months, compared with nearly 30 per cent of men who had not used crystal meth.

Sexual activity

Just over 45 per cent of men who had used crystal meth in the last 12 months reported having used the drug when they last had sex. Of these, 20 per cent reported having sex with one other person while using crystal meth, and 80 per cent reported having sex with between two and ten people.

Use of drug and alcohol-related health services

Only nine per cent of those men who attended SOPVs and had used crystal meth in the past six months had sought assistance for their drug use. An even smaller number (one per cent) had sought assistance for problems related to their crystal methamphetamine use.
Results from *HIV futures five*

*HIV futures five: Life as we know it* (2006) is a national survey of the experiences of HIV-positive Australians. The sample includes 161 HIV-positive men who were resident in Victoria at the time they completed the survey. Of the total sample, 37 (23 per cent) reported having used crystal methamphetamine in the 12 months prior to the survey, while 124 (77 per cent) reported no use of crystal methamphetamine in the same period. Of those who reported no use of crystal meth over the past 12 months, the average number of years of being HIV-positive was 11.4, while for those who had used crystal over this same period the average number of years of being HIV-positive was 9.2.

**Demographic data**

The mean age of crystal methamphetamine use among HIV-positive gay men in Melbourne was approximately 40 years (39.6 years). Of those who had used crystal meth in past 12 months, 34 (91.9 per cent) lived in inner-suburban Melbourne, two (5.4 per cent) lived in outer-suburban Melbourne, and one (2.7 per cent) lived in rural Victoria. There were only minor variations in country-of-birth between the two groups, with approximately 85 per cent of both groups born in Australia. Almost 65 per cent of HIV-positive men who had used crystal in the past 12 months were employed, compared with 57.9 per cent of men who had not used the drug. Men who used the drug tended to have higher educational qualifications than those who had not used crystal meth: 8.3 per cent of users compared with 19.5 per cent of non-users had completed year 10 or lower, while 61.0 per cent of non-users compared with 77.8 per cent of users had a trade or university qualification.

**Other drug use**

*HIV futures five: Life as we know it* (2006)

**Table 1 – Other drug use**

<table>
<thead>
<tr>
<th>Other drugs used</th>
<th>Crystal methamphetamine use</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes (n=37)</td>
<td>No (n=124)</td>
</tr>
<tr>
<td>Prescription drugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antidepressants</td>
<td>25% (9)</td>
<td>30.9% (38)</td>
</tr>
<tr>
<td>Anxiety medication</td>
<td>27% (10)</td>
<td>23.5% (28)</td>
</tr>
<tr>
<td>Non-prescription and/or illicit drugs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marijuana</td>
<td>78.4% (29)</td>
<td>44.0% (55)</td>
</tr>
<tr>
<td>Speed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Injected</td>
<td>40.5% (15)</td>
<td>4.0% (5)</td>
</tr>
<tr>
<td>• Not injected</td>
<td>43.2% (16)</td>
<td>8.8% (11)</td>
</tr>
<tr>
<td>Ecstasy</td>
<td>70.3% (26)</td>
<td>18.4% (23)</td>
</tr>
<tr>
<td>Inhalants (Amyl nitrite)</td>
<td>75.0% (27)</td>
<td>42.9% (54)</td>
</tr>
<tr>
<td>Viagra</td>
<td>56.8% (21)</td>
<td>19.2% (24)</td>
</tr>
</tbody>
</table>
Relationship status

There were no significant differences between the two populations in terms of the percentage in a regular relationship or the percentage of those relationships that are seroconcordant and serodiscordant. Just over 40 per cent of gay men (15) who had used crystal in the past 12 months were currently in a regular relationship. Of those, 57.1 per cent had a regular partner who was HIV-positive, while 42.9 per cent had a regular partner who was HIV-negative. In comparison, 45 per cent of those who had not used crystal meth over the same period (56) were in a regular relationship, while 55.4 per cent were in a seroconcordant relationship and 42.9 per cent in a serodiscordant relationship.

*HIV futures five: Life as we know it* (2006)

Table 2 – Relationship status

<table>
<thead>
<tr>
<th>Relationship type</th>
<th>Crystal methamphetamine use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>No sex</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.4% (2)</td>
</tr>
<tr>
<td>Sex within regular relationship only</td>
<td>11.5% (3)</td>
</tr>
<tr>
<td>Any casual sex</td>
<td>80.8% (21)</td>
</tr>
<tr>
<td>In a regular relationship and also having casual sex</td>
<td></td>
</tr>
<tr>
<td>• One regular partner</td>
<td>27.0% (10)</td>
</tr>
<tr>
<td>• More than one regular partner</td>
<td>8.1% (3)</td>
</tr>
<tr>
<td>Casual sex only</td>
<td>51.4% (19)</td>
</tr>
</tbody>
</table>

The data suggest that HIV-positive men who use crystal meth are more sexually active than HIV-positive men who do not use. This pertains to all the relationship permutations listed above.

HIV-positive men who use crystal are more likely to report sex with casual male partners who are also HIV-positive than are HIV-positive men who do not use the drug. While nearly 68 per cent of crystal meth users report that “all” or “some” of their casual partners are also HIV-positive, the figure falls to 46 per cent for those who have not used the drug in the past 12 months. Those who have used the drug are also less likely to be unsure of the HIV status of their casual partner/s (29.4 per cent of men who use crystal meth reporting “not sure” compared with 49.3 percent of men who do not use the drug).

Condom use

*HIV futures five: Life as we know it* (2006)

Table 3 - Condom use according to partner status (regular and casual)

<table>
<thead>
<tr>
<th>Crystal meth use in past 12 months</th>
<th>Condom use with regular partner/s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Yes (n=18)</td>
<td>38.9% (7)</td>
</tr>
<tr>
<td>No (n=53)</td>
<td>45.3% (24)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Condom use with casual partner/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (n=32)</td>
</tr>
<tr>
<td>No (n=58)</td>
</tr>
</tbody>
</table>
General health

There was little difference between HIV-positive men who had used crystal meth and those who had not in self-reported health and well-being. Twenty-five per cent of users reported "poor" to "fair" health and 75 per cent "good" to "excellent", compared with 29.8 per cent and 70 per cent of non-users respectively. Forty-nine per cent (61) of HIV-positive gay men who had not used crystal in the past 12 months reported ever having been diagnosed with a mental health condition, compared with 42 per cent (15) of users.

Rates of co-infection with HCV were higher among HIV-positive men who had used crystal methamphetamine in the past 12 months compared with HIV-positive gay men who had not, 19.5 per cent (7) and 5.8 per cent (7) respectively. A larger percentage of men who had used crystal meth reported having been vaccinated for hepatitis A and B (72.2 per cent and 80.6 per cent respectively) compared with those who had not used the drug (56.7 per cent and 66.7 per cent respectively). These variations in rates of vaccination were reflected in the incidence figures, with meth users having lower rates of hepatitis A and B infection (11.1 per cent and 5.6 per cent respectively) compared with non-users (17.5 per cent and 17.1 per cent respectively).

Again, there was little difference in the percentages of HIV-positive men using crystal meth and those not using the drug in reporting having had an AIDS-defining illness, 18.9 per cent and 19.2 per cent respectively. However, men who had used crystal were less likely than those who had not to report having had an HIV-related illness, 19.4 per cent versus 27.9 per cent respectively. There were slight variations in the use of antiretrovirals (ARV) between the two groups, with men who had not used crystal more likely to be currently taking ARV (72.8 per cent compared with 66.7 per cent), and less likely to have never taken ARV (17.6 per cent compared with 25.0 per cent). There were only minor variations in viral load and CD4 counts between the two groups.

Gay community attachment

A higher proportion of HIV-positive men who have used crystal meth, compared with those who have not used the drug, reported that gay community was "essential" (22.9 per cent versus 14.5 per cent). However, a similar proportion of both groups (approximately 50 per cent) reported that gay community was "important". A much higher proportion of men who had used crystal meth reported that their sexual identity was "essential", 50.0 per cent of users compared with 26.4 per cent of non-users.
Appendix D

Delphi Scan: Questionnaire

Crystal Methamphetamine use among gay men in Melbourne

Information for participants in the Delphi Scan

1. Background

The Delphi Scan is part of a study looking at Crystal Methamphetamine use among gay men in Melbourne. The study is managed by Associate Professor Anne Mitchell, Professor Gary Dowsett and Liam Leonard of the Australian Research Centre in Sex, Health and Society and is funded by the Victorian Department of Human Services.

The Delphi Scan is an iterative research tool aimed at clarifying areas of consensus and disagreement among a group of experts regarding a critical issue or issues in their shared area of expertise. In this project, the Scan is being used to gauge expert opinion on the scope and scale of crystal methamphetamine use among gay men in Melbourne and the range and quality of health services available to this group.

The Scan is divided into three Stages:

Stage 1 - Distribution of an online questionnaire to suitably qualified experts
Stage 2 – Results of the questionnaire are analysed and fed back to participants. Each participant has the opportunity to compare and reconsider their responses in relation to those of the other experts in the group.
Stage 3 – A final analysis of the results is sent out to participants for confirmation

2. Doing the Delphi Scan

2.1. Stage 1 – Filling out the questionnaire

The questionnaire consists of both qualitative and quantitative questions. The qualitative questions are open-ended and discursive. When answering these questions:

• Remember we are asking for your professional opinion and not simply factual evidence
• Please do not restrict your answers to “Yes”, “No” or “Don’t know”
• Provide as much information and detail as you think appropriate

You are free to consider the opinions of work colleagues with relevant expertise in answering the questionnaire. However, it is important to the integrity of the Scan that you do not discuss or seek input from other key informants who are part of the expert group.

Please fill out the questionnaire in the Word format provided.
Email your completed questionnaire to Liam Leonard
W.Leonard@latrobe.edu.au
By Friday 29 June 2007
2.2 Stage 2 – Responding to the findings of the questionnaire

You will be provided with a preliminary summary of the questionnaire’s findings for comment. The summary will include a thematic analysis of the open ended or qualitative questions and a separate presentation of quantitative data. Please feel free to comment on any or all of the preliminary findings and to review and revise your initial responses in light of the opinions of the other experts in the group.

Please email any comments or revisions to the preliminary summary of the questionnaire’s findings to: W.Leonard@latrobe.edu.au by Wednesday 13 July 2007

Organisations that have participated in the Delphi Scan will be noted in an Appendix to the final report. However, individuals will not be quoted or named in the body of the report.

If you have any queries regarding filling out the questionnaire or the Delphi Scan please contact Liam Leonard on: (03) 9285 5262 or W.Leonard@latrobe.edu.au

Thank you for participating in the Delphi Scan.
Stage 1 – Questionnaire

Section A – Scale of use

1. How widespread is crystal methamphetamine use among gay men in Victoria?

2. What distinguishes problematic from non-problematic crystal methamphetamine use among gay men?

3. What proportion of gay men who use crystal methamphetamine are problematic users?

4. Over the last 2 years has there been an increase in the number of gay men in Victoria for whom crystal methamphetamine use is a problem?

Section B – Patterns of use

5. Among which age group of gay men is use of crystal methamphetamine in Victoria most prevalent (tick one only)?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Under 18 years</td>
</tr>
<tr>
<td>b.</td>
<td>19 to 25 years</td>
</tr>
<tr>
<td>c.</td>
<td>26 to 30 years</td>
</tr>
<tr>
<td>d.</td>
<td>31 to 35 years</td>
</tr>
<tr>
<td>e.</td>
<td>36 to 40 years</td>
</tr>
<tr>
<td>f.</td>
<td>41 to 45 years</td>
</tr>
<tr>
<td>g.</td>
<td>Over 45 years</td>
</tr>
<tr>
<td>h.</td>
<td>Don’t know</td>
</tr>
</tbody>
</table>

6. What are the two most common methods of crystal methamphetamine administration among gay men in Victoria (1 most common, 2 second most common)?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Ingest (swallow)</td>
</tr>
<tr>
<td>b.</td>
<td>Snort</td>
</tr>
<tr>
<td>c.</td>
<td>Smoke</td>
</tr>
<tr>
<td>d.</td>
<td>Inject</td>
</tr>
<tr>
<td>e.</td>
<td>Don’t know</td>
</tr>
</tbody>
</table>

7. Where are gay men most likely to use crystal methamphetamine?

8. What role does illicit drug use play in gay male culture in Victoria?

9. Why do gay men use crystal methamphetamine?

10. Do gay men use crystal methamphetamine for different reasons to other illicit drugs (such as marijuana or ecstasy)?
Section C – Prevention, treatment and service delivery

11. Where are gay men most likely to present seeking help for their crystal methamphetamine use (please tick only one service for each of the different reasons for seeking help)?

<table>
<thead>
<tr>
<th>Why seeking help</th>
<th>Hospital Emergency Department</th>
<th>Local GP</th>
<th>Gay and Lesbian GP or Health Service</th>
<th>Drug &amp; Alcohol and/or Mental Health Services</th>
<th>Don’t seek professional help</th>
<th>Other (please specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreational use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problematic use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low level dependence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychotic episode</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detox</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehab</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Are mainstream health services able to provide appropriate and effective advice and/or treatment to gay male crystal methamphetamine users?

13. Are you aware of any crystal methamphetamine prevention initiatives targeting gay men?

14. What do you think needs to be done to reduce the harm associated with crystal methamphetamine use among gay men in Victoria?

Please email your completed questionnaire to:
Liam Leonard W.Leonard@latrobe.edu.au
By Friday 29 June 2007 5.00 pm
## Appendix E

### Delphi Scan: Expert reference group (Stage 1)

| Area of expertise                          | Organisation                                                        | No. of respondents |
|--------------------------------------------|                                                                    |                   |
| DHS – Drug & alcohol/mental health         | DHS, Drug and Alcohol Policy                                        | 1                 |
| Drug & alcohol lead agencies               | Turning Point                                                      | 3                 |
|                                            | Australian Drug Foundation                                         | 1                 |
|                                            | VIVAIDS                                                             | 2                 |
|                                            | Odyssey House                                                      | 1                 |
|                                            | Youth Substance Abuse Service                                       | 1                 |
| Drug & alcohol services                    | Anex                                                                | 1                 |
|                                            | Turning Point (see above)                                           |                   |
| Mental health services                     | Orygen                                                              | 1                 |
|                                            | Youth service                                                       | 1                 |
|                                            | Adult service                                                       | 1                 |
| Gay & lesbian medical clinics              | Carlton Clinic                                                      | 1                 |
|                                            | Prahran Market Clinic                                               | 1                 |
|                                            | HIV Clinic, Alfred Hospital                                         | 1                 |
|                                            | Melbourne Sexual Health Centre                                      | 2                 |
| Researchers                                | National Centre in HIV Epidemiology and Clinical Research, UNSW     | 1                 |
|                                            | National Centre in HIV Social Research UNSW                         | 1                 |
|                                            | ARCSHS, La Trobe University                                          | 2                 |
|                                            | The University of Melbourne                                         | 1                 |
| National Drug & Alcohol Research Centres   | National Drug and Alcohol Research Centre                           | 1                 |
|                                            | National Drug Research Institute                                    | 1                 |
|                                            | Curtin University                                                   |                   |
| Accident & emergency services              | Alfred Hospital                                                     | 1                 |
|                                            | St Vincent’s Hospital                                               | 1                 |
|                                            | Metropolitan Ambulance Service                                      | 1                 |
|                                            | Victoria Police                                                     | 1                 |
| Gay & Lesbian community organisations      | PLWHA, Vic                                                          | 1                 |
|                                            | VAC/GMHC                                                            | 1                 |
|                                            | ALSO Foundation                                                     | 1                 |
Appendix F

Delphi Scan: Stage 2 results in full

Crystal Methamphetamine use among gay men in Melbourne

Delphi Scan: Stage 2 – Responding to the findings of the questionnaire

1. How widespread is crystal methamphetamine use among gay men in Victoria?

...men who play hard and dirty, and to whom risk is not something that's likely to stop them from doing something they enjoy.

...low prevalence...high impact.

There was broad agreement that use of crystal methamphetamine among gay men was similar to or only slightly higher than the population as whole. Rates cited by respondents varied between 5 and 20 per cent of the population/gay men having used crystal methamphetamine in the previous 12 months.

A number of respondents distinguished between prevalence and frequency of use. Frequency of use was seen to be much higher among people on the dance party scene, gay and straight. However, about a quarter of respondents said that frequency of use was greatest amongst a “hard core” group of gay men and was associated with partying and sex.

One respondent noted that use of crystal methamphetamine was higher among HIV-positive than HIV-negative gay men (citing 40 per cent of HIV-positive gay men compared with 15 per cent of gay men in an overall sample). Another noted that anecdotally one in ten men gay men accessing a NPEP (Non-occupational Post Exposure Prophylaxis) service report some form of crystal methamphetamine use (though it is not necessarily the driver for their presenting).

2. What distinguishes problematic from non-problematic crystal methamphetamine use among gay men?

It seems to me that it is problematic if individual gay men believe that they must use drugs, including crystal, in order to function socially within their own gay networks.

...I would define crystal use as problematic when it impacts on the users’ ability to maintain their employment, their primary relationship, their friendship networks and their usual social activities and when it requires them to seek professional assistance for the physical or psychological or financial consequences of their crystal use.

There was consensus among respondents that problematic use consisted of serious disruptions to someone’s everyday life (from intimate to work relations) and/or negative health-related effects. However, a number of respondents noted that a significant percentage of regular gay male users managed their crystal methamphetamine use with minimum disruption to their lives.
A smaller but important number of respondents also associated problematic use with:

- Normalisation of drug use in gay culture and pressure for gay men, and in particular younger gay men, to take drugs as part of “being gay”;
- Increased frequency of use (although one respondent said that all crystal methamphetamine use is problematic, while another that even a single, isolated use of the drug could result in a psychotic episode), the amount taken, and the mode of administration (with two respondents associating injecting with addiction);
- Increased unsafe sex and HIV transmission; and
- Polydrug use (arguing crystal methamphetamine was rarely taken alone but often in combination with other illicit drugs).

Two respondents noted that it was often the friends of users and not users themselves who reported problematic use.

3. What proportion of gay men who use crystal methamphetamine are problematic users?

* I suspect the proportion is reasonably small—perhaps 10-20% who are in some way problematic users; however, I also suspect there is a smaller proportion (5 to 10%) where the acuity of the problems is much higher... *

All but two respondents agreed that only a very small percentage of gay male users were problematic users. A number of respondents put the figure at 5 to 25 per cent of gay male users (which corresponds to between 1 and 2.5 per cent of gay men). However, a number of participants argued that a higher percentage of friends would categorise use as problematic compared with users themselves. However, one respondent argued that all gay men who use crystal methamphetamine are problematic users, while another cited 60 per cent of all gay male users as problematic.

A number of respondents suggested an association between injecting and problematic crystal methamphetamine use, citing between 5 and 10 per cent of gay male users as injecting users. A similar number noted an association between problematic use among gay men and increased rates of unsafe sexual practices.

There was disagreement over the prevalence and significance of crystal methamphetamine use among gay men presenting at hospital EDs. One respondent put the figure at 30 per cent of all gay men (arguing that crystal methamphetamine use was usually a secondary and not the primary reason for the presentation), while another said that very few if any gay men were presenting with crystal methamphetamine-related problems or psychosis.

4. Over the last 2 years has there been an increase in the number of gay men in Victoria for whom crystal methamphetamine use is a problem?

* Not aware of any systematic evidence on this...What is clear is that media reports of individual negative events appear to be driving a research and policy agenda and feeding into scare campaigns. *

A majority of respondents had a strong sense that crystal methamphetamine use had increased in the general population over the last two years and argued that, by extension, rates must also have increased among gay men. All noted the paucity of research and hard data on patterns and rates of use among gay men. However, two respondents argued that there was no evidence for an increase in the rate of crystal methamphetamine use among gay men (and in the population as a whole) since 2005. One argued that rates had peaked before 2003 and that current speculation of increasing rates was "media hype"; the other suggested that rates had plateaued since 2005. One respondent suggested that, while there had not been an increase in crystal meth use among gay men generally, there had been a slight increase among gay men aged 18 to 30 years. Another respondent said there had been an increase in injection of crystal methamphetamine among "hard core" gay male users over this period.
Two respondents noted anecdotal reports from workers in the field that the number of gay men presenting with crystal methamphetamine-related problems in EDs has increased over the last two years. Another noted a slight increase in the number of gay men presenting at drug rehabilitation services with crystal methamphetamine-related problems.

5. Among which age group of gay men is use of crystal methamphetamine in Victoria most prevalent (tick one only)?

Thirty-five per cent of respondents identified gay men between 31 and 35 years as the major users of crystal methamphetamine. Fifty per cent of respondents believed that gay men between 31 and 40 years were the major user group (adding the results for 31 to 35 years to 36 to 40 years). Twenty per cent of respondents identified younger gay men between 19 and 25 years as the major age group using crystal methamphetamine.

6. What are the two most common methods of crystal methamphetamine administration among gay men in Victoria (1 most common, 2 second most common)?

Forty-seven per cent of respondents believed that smoking was the most common form of administering crystal methamphetamine among gay men, followed by 26 percent who believed that ingesting was the most common route, snorting (16 per cent) and injecting (11 per cent). Eleven per cent reported “Don’t know”. Of the 47 per cent who reported smoking as the most common form of administration, 44 per cent listed snorting as the second most common route of administration, 33 per cent listed injecting and 11.5 per cent ingesting (11.5 per cent failed to record a second option).

7. Where are gay men most likely to use crystal methamphetamine?

The most common location for being under the influence of crystal methamphetamine would be nightclubs or dance parties, but I would think that the most common location for consumption of crystal methamphetamine would be in one’s own home or the homes of friends prior to heading out to the nightclub or party.

Over 60 per cent of respondents nominated “home” or “a friend’s place” as the site where gay men were most likely to take crystal methamphetamine. However, nearly 70 per cent of these respondents said that the drug was taken prior to going to a dance and/or sex party. A small number of these respondents argued that drug taking was timed so that its effects would be felt at after parties (at SOPVs or private houses). Thirty-seven per cent of respondents nominated dance/sex parties and SOPVs as the sites where gay men are most likely to take crystal methamphetamine. A small number of respondents linked method of administration and location, arguing that ingesting was more common in public spaces and inhalation or smoking in private ones.

8. What role does illicit drug use play in gay male culture in Victoria?

Illicit drugs use is normative in gay culture generally...This means that there is great potential for problematic use to be concealed and for the negative consequences to go unrecognised...young gay men are rapidly introduced to drug use and there is an expectation that they will participate in this activity.

Nearly 60 per cent of participants said that illicit drug taking had become normalised (and some included “ritualised”) in the gay community and was important to individual gay men’s sense of community belonging and gay identity. Two of these respondents gave this a critical twist, suggesting that drug use provides a common sense of gay identity by excluding many of those (family, religious groups) who have discriminated against gay men and lesbians.
Nearly 40 per cent argued that drug taking was linked to enhanced experiences, whether these are social (sense of belonging and fitting in), sexual (length and intensity of sexual experiences) or a more generalised sense of "pleasure" and "fun". In these respects, respondents argued that gay men took illicit drugs for "the same reasons as everyone else". A number of respondents were critical of the normalisation of drug use and the emphasis on its pleasurable and social aspects. They argued that this not only pressured gay men into taking drugs (one respondent describing illicit drug taking as "a rite of passage"), but this positive spin made it very difficult for gay men to be open about problematic use and to seek professional help. A number of respondents stressed that while illicit drug taking was an integral part of the commercial gay scene (the party/sex scenes) it was "totally irrelevant" to gay men outside this scene.

9. Why do gay men use crystal methamphetamine?

To party and play longer and because it's available and expected.

With so many other substance options I find the use of crystal methamphetamine counter intuitive.

There was consensus that gay men used crystal methamphetamine for two major reasons: "to party and play harder and longer" and "as a social lubricant". A number of respondents made a distinction between these two uses, arguing that a minority of gay men used the drug on the party scene, primarily to assist them in finding sexual partners and enhancing their sexual experiences. For these gay men, the socially disinhibiting effects of crystal methamphetamine (and other illicit drugs) were not an end in themselves but a means to increased, prolonged and heightened sexual activity. Two respondents associated the sexual use of the drug with a specific "adventurous sex" subculture. Two respondents also said that a small percentage of gay men used crystal methamphetamine to enhance weight loss and facilitate longer gym sessions.

10. Do gay men use crystal methamphetamine for different reasons to other illicit drugs (such as marijuana or ecstasy)?

It's a harder core group who use crystal as the effect is longer and stronger.

The difference is always about pharmacology and sometimes about availability.

Over 80 per cent of respondents argued that gay men used different illicit drugs for different reasons because of their specific pharmacological effects. They argued that there was a "knowingness" within the gay male community about the effect of different illicit drugs and which ones to use for which effects. The majority of respondents noted that crystal (unlike marijuana, ecstasy and alcohol) was a stimulant that kept you alert and energetic, made users feel confident and enabled them to "party longer". As one respondent put it, "crystal is well suited to [the] gay lifestyle, especially as it applies to clubbing and the dance scene". A number of respondents noted that these same pharmacological effects also made crystal methamphetamine the drug of choice for gay men on the sex-party scene. To paraphrase one respondent, crystal "doesn't mellow you out" the way ecstasy and marijuana do or "make you incoherent" the way alcohol does. It makes people feel wired, confident and "enables a certain sort of sex", including drawn-out anal sex and fisting sessions. A number of participants also suggested that cost and availability were factors that influenced drug choice among gay men.

11. Where are gay men most likely to present seeking help for their crystal methamphetamine use (please tick only one service for each of the different reasons for seeking help)?

There was considerable agreement regarding the types of services gay men are likely to access for different issues relating to their crystal methamphetamine use. Eighty-four per cent of respondents said that gay men do not seek help for recreational use; 64 per cent believed gay men would seek assistance from a gay and lesbian GP or health service for problematic use; 21 per cent believed they would seek assistance from a drug and alcohol or mental health service; 93 per cent agreed that gay men experiencing a crystal-related psychotic episode would front up at an ED; and 75 per
cent believed that gay men seeking rehabilitation would go to a drug and alcohol or mental health service.

However, there was some disagreement over where gay men with low-level dependence issues would seek assistance, 47 per cent selecting a gay and lesbian GP or health service and 26 per cent selecting "don’t seek professional help". There was a similar level of disagreement regarding where gay men would go for detoxification, with 47 per cent selecting drug and alcohol or mental health services and 29 per cent selecting gay and lesbian GPs or health services.

12. Are mainstream health services able to provide appropriate and effective advice and/or treatment to gay male crystal methamphetamine users?

*When we try to refer anyone to addiction services, the response is usually “they don’t withdraw, we don’t provide detox for meth”. We can refer for counselling, but there really does appear to be a gap in service for people who use meth.*

*Gay-related medical practices would have a higher index of suspicion.*

There was considerable disagreement among respondents regarding the capacity of mainstream health services to address the needs of gay male crystal methamphetamine users: 50 per cent said "yes" and 50 per cent said "no". Of those who said "no", however, about 30 per cent said that mainstream drug and alcohol services could not deal with issues relating to crystal methamphetamine use regardless of the sexuality (or sex and gender) of the user. As one respondent put it, “they don’t have the skills to deal with people who use methamphetamines appropriately, as historically they service heroin users”. Or as another said, “Mainstream drug and alcohol services consider their client group to be mainly poor, heterosexual and male”.

Among those who said "yes", there were also some qualifications. One respondent said that service providers were skilled, aware of, and able to deal with issues specific to gay male users, but that other clients may be homophobic, thus creating a service or organisational culture that may put gay men off accessing these services. Another said that, regardless of whether health services were gay aware and friendly, gay men could use the argument that mainstream drug and alcohol services are homophobic as an excuse for not facing up to their drug-related problems and/or not seeking help. One respondent suggested that it was "hit or miss" whether any individual drug and alcohol service was aware of and able to meet the needs of gay men seeking assistance for crystal methamphetamine-related problems.

Of those who reported "no", a number said this highlighted both a major gap in mainstream drug and alcohol services and the need for sensitivity and awareness training regarding: gay male culture, sex-positive attitudes to gay male sex, and an understanding of the links between sexual health, including HIV and STI transmission and drug and alcohol use for this client group.

13. Are you aware of any crystal methamphetamine prevention initiatives targeting gay men?

Fifty per cent of respondents were not aware of any crystal methamphetamine prevention initiatives targeting gay men. Of the 50 per cent who were, 50 per cent knew of resources produced by the AIDS Council of NSW, 60 per cent knew of resources produced by the Victorian AIDS Council, including a fact sheet on crystal methamphetamine use and some advertising material, one respondent mentioned Turning Point’s online survey on crystal methamphetamine use, and another a 1994 generic drug campaign. One respondent “was not convinced” there was a need for crystal methamphetamine prevention materials targeting the gay male community, while another bemoaned the lack of such targeted resources.
14. What do you think needs to be done to reduce the harm associated with crystal methamphetamine use among gay men in Victoria?

*The crystal meth epidemic is a fiction.*

*We need to challenge the assumptions around drug use in general, and its normalisation within gay life. Crystal is the current problem but there will always be another problematic drug.*

*Increase gay-aware treatment and rehab services and promote less judgmental public discourse about gay sex, HIV and drugs that enables people to access care when needed.*

There were a variety of responses to this question. Twenty-seven per cent said there was a need for service system reforms including:

- Training GPs, drug and alcohol and mental health workers, and allied health professionals in issues relating to gay cultural norms and values, and the relationship between these and drug and alcohol use;
- Promotion of a non-judgemental, if not positive, attitude to gay male sex among health professionals;
- Increased numbers of workers addressing these issues;
- Increased links between sexual health and drug and alcohol workers, including working with HIV-positive crystal users and understanding the links between increased risk of HIV transmission and drug and alcohol use; and
- Increased training, resources and treatment models for crystal users generally.

There was general support for using a harm minimisation approach to tackling crystal methamphetamine-related problems among gay men. This included campaigns targeting the gay community and increased resources for peer education and outreach. However, 18 per cent said there is a need to tackle the normalisation of illicit drug use in gay culture. This involved an open discussion within the gay community of ways of acknowledging the negative effects of drug use, including crystal methamphetamine use, and encouraging gay men to seek help when needed. One respondent advocated for the popularisation of "non-commercial outlets not based on drug and alcohol use".

Three respondents called for the development of a stronger evidence base including:

- More research on patterns of crystal methamphetamine use among gay men;
- Targeted research on high risk groups, including the adventurous and sex/party scenes; and
- The development of a gay-specific Ravesafe resource.

Only one respondent argued that the crystal methamphetamine epidemic is a fiction and hence "not much" needed to be done.