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SA DRUG TRENDS 2010

FINDINGS FROM THE

ILLICIT DRUG REPORTING SYSTEM (IDRS)

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South Australian DRUG TRENDS 2010

Findings from the Illicit Drug Reporting System (IDRS)

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ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
AGDH&A	Australian Government Department of Health and Ageing
ADHA	Attention Deficit Hyperactivity Disorder
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AIHW	Australian Institute of Health and Welfare
AODTS-NMDS	Alcohol and Other Drug Treatment Services-National Minimum Dataset
AUDIT-C	Alcohol Use Disorders Identification Test-Consumption
BBVI	Blood-borne viral infection(s)
BMI	Body Mass Index
CI	Confidence Interval(s)
CNP	Clean Needle Program
CRUFAD	Clinical Research Unit for Anxiety and Depression
DASSA	Drug and Alcohol Service South Australia
EDRS	Ecstasy and related Drugs Reporting System
GP	General Practitioner
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
Hydro	Hydroponically grown cannabis
ICD-9	International Classification of Diseases, 9th Revision
ICD-10	International Classification of Diseases, 10th Revision
IDRS	Illicit Drug Reporting System
K10	Kessler Psychological Distress Scale
KE	Key expert(s); see *Method* section for further details
LSD	Lysergic acid diethylamide
MDMA	3,4-methylenedioxymethamphetamine
N (or n)	Number of participants
NCHECR	National Centre in HIV and Epidemiology Clinical Research
NCIS	National Coronial Information System
NDARC	National Drug and Alcohol Research Centre
NDSHS	National Drug Strategy Household Survey
NNDSS	National Notifiable Diseases Surveillance System
NSP	Needle and syringe program(s)
NSW	New South Wales
OST	Opioid substitution treatment
OTC	Over the counter
PDI	Party Drug Initiative
PWI	Personal Wellbeing Index
PWID	Person/people who inject drugs;
QLD	Queensland
RAH	Royal Adelaide Hospital
SA	South Australia
SAPOL	South Australia Police
SDS	Severity of Dependence Scale
SPSS	Statistical Package for the Social Sciences

STI	Sexually Transmitted Disease
WHO	World Health Organization

GLOSSARY OF TERMS

Cap	Small amount, typically enough for one injection.
Daily use	Use occurring on each day in the past six months, based on a maximum of 180 days.
Diverted/Diversion	Selling, trading, giving or sharing of one's medication to another person, including through voluntary, involuntary and accidental means.
Eightball	3.5 grams.
Halfweight	0.5 grams.
Illicit	Illicit obtainment refers to pharmaceuticals obtained from a prescription in someone else's name, e.g. through buying them from a dealer or obtaining them from a friend or partner. The definition does not distinguish between the inappropriate use of licitly obtained pharmaceuticals, such as the injection of methadone syrup or benzodiazepines, and appropriate use.
Licit	Licit obtainment of pharmaceuticals refers to pharmaceuticals (e.g. methadone, buprenorphine, morphine, oxycodone, benzodiazepines, antidepressants) obtained by a prescription in the user's name. This definition does not take account of 'doctor shopping' practices; however, it differentiates between prescriptions for self as opposed to pharmaceuticals bought on the street or those prescribed to a friend or partner.
Lifetime injection	Injection (typically intravenous) on at least one occasion in the participant's lifetime.
Lifetime use	Use on at least one occasion in the participant's lifetime via one or more of the following routes of administration: injecting, smoking, snorting and/or swallowing.
Point	0.1 grams.
Recent injection	Injection (typically intravenous) on at least one occasion in the last six months.
Recent use	Use in the last six months via one or more of the following routes of administration: injecting, smoking, snorting and/or swallowing.

EXECUTIVE SUMMARY

Demographic characteristics of IDRS participants

Sample characteristics for the Illicit Drug Reporting System (IDRS) in 2010 in South Australia (SA) were generally similar to previous years with a couple of exceptions. The median age of the 2010 sample was 37 years – younger than in 2009 (median=40 years), with half being male (56%). Two-thirds of the sample participants were unemployed and less than half (43%) had a history of previous imprisonment, both similar to that reported in 2009. The median number of years spent at school was 11, with around half reporting some kind of post-secondary qualification (primarily a trade or technical qualification). A third was currently undertaking some form of treatment for drug use, most commonly pharmacotherapy.

Patterns of drug use

The median age of first injection by the participants was 17 years, which was younger than 2009 (19 years). Methamphetamine was the drug most commonly first injected, followed by heroin. Heroin was nominated by almost half of the sample as the drug of choice, followed by methamphetamine. Both heroin and methamphetamine were reported as the drug most commonly injected by participants in the last month, with 8% nominating morphine.

Polydrug use was common among the participants in 2010, and has remained consistently so across the years of the IDRS.

Frequency of injecting in the last month was greater than weekly for around two-thirds, with approximately one-third reporting injecting at least once a day.

Heroin

In 2010, the proportion of SA participants who reported recent use of heroin was lower compared to 2009 participant reports, and the frequency of use of heroin also decreased. Heroin users continued to supplement or substitute their heroin use with other opioid substances such as morphine and methadone, and also methamphetamine.

The price of a gram of heroin at last purchase decreased in 2010 compared to the price reported in 2009. Despite this, the majority of participants reported the price of heroin remained stable over the six months prior to interview. According to participants, heroin purity was generally reported as 'low' in 2010 and was perceived by most as having decreased in the six months preceding interview.

Heroin was still considered easy or very easy to obtain by most participants, with availability reported as stable in the preceding six months.

Experience of recent heroin overdose among the participants in the sample increased compared to last years. Other available treatment services and hospital data indicate that, over the last few years, heroin-related numbers have been stable to decreasing, while other opioid numbers have been stable to increasing.

Methamphetamine

The proportion of participants reporting recent use of methamphetamine powder remained stable; however, there was an increase in the use of base and a significant increase in recent use of crystal methamphetamine. The frequency of use for powder decreased whilst the frequency of use of base increased and crystal use remained stable. The main route of administration for all forms of methamphetamine was injecting; however, the proportion of participants injecting powder and base decreased and the proportion injecting crystal increased compared to reports in 2009. There was also an increase in smoking as a route of administration for crystal methamphetamine from 9% in 2009 to 21% in 2010. Alcohol use was used by three-quarters of participants who used methamphetamine as well as cannabis.

In 2010, the last median price paid per point remained stable for powder but increased for base and crystal methamphetamine, with few participants able to report the current price of a gram for all forms. The purity of the powder form of methamphetamine as perceived by participants varied somewhat with a higher proportion reporting it as fluctuating. The purity of the base form of methamphetamine as perceived by participants was high, and the purity of the crystal form of methamphetamine was equivocal. Roughly half the participants reported the purity of all forms of methamphetamine as being stable. All forms of methamphetamine were considered easy or very easy to obtain in 2010, and availability was stable.

Fewer calls were received by the Alcohol and Drug Information Service (ADIS) in SA regarding methamphetamine, with the number of clients (with amphetamines as the primary drug of concern) to all Drug and Alcohol Services South Australia (DASSA) services also less. Moreover, the number of clients admitted to DASSA in-patient (detox) services with amphetamine as the primary drug of concern also decreased.

Cannabis

Cannabis, though generally not the drug of choice among the participants, was used commonly and while the percentage of participants who had recently used cannabis was slightly higher, the frequency of use of cannabis was lower. Almost all cannabis users reported they had used hydroponically grown cannabis (hydro) in the six months prior to interview, with a large majority reporting they mostly used hydro. Of interest was that half of the participants indicated that they were unable to distinguish between hydro and bush cannabis, suggesting that either participants use whatever cannabis is available, or are not specifically concerned which type of cannabis they use.

In 2010, the price of an ounce of hydro and the price of a bag (of either hydro or bush) remained stable and has continued to do so for many years. Most also perceived the potency of both hydro and bush cannabis as 'medium' and stable. Both hydro and bush cannabis were considered very easy or easy to obtain, and availability was stable.

The number of calls to ADIS concerning cannabis remained relatively stable; however, the total number of clients to DASSA treatment services decreased dramatically whilst the numbers of clients attending in-patient detox services of DASSA increased in 2009/10.

Overall, the cannabis market remains generally stable in Adelaide, and participant use remains common, but there are indications this may be changing.

Opioids

As in recent years, in 2010, the use of other illicit opioid substances by SA participants was common, with 39% reporting recent use of some type of illicit opioid substance, excluding heroin. Twenty-four percent of participants reported they had used illicit morphine in the six months prior to interview on a median of eight days (range=1-180) and were similar to those reported by participants in 2009. The price of illicit morphine increased, with the availability of illicit morphine reported by half those able to comment as difficult and the remaining participants reported morphine as easy to very easy to obtain. The availability over the previous six months was reported by two-thirds of those able to comment as stable; however, there was a higher proportion reporting it as more difficult compared to 2009. As in previous years, the majority of morphine users reported use by injecting and they mainly used illicit supplies of Kapanol® and MS Contin®.

There was slight change in the reported recent use of illicit methadone syrup (from 7% in 2009 to 12% in 2010) with frequency of recent use remaining relatively stable. This was also the case for physeptone tablets.

Whilst the number of participants reporting recent use of illicit buprenorphine remained stable, reported frequency of recent use was lower in 2010.

In 2010, a greater proportion of the sample reported recent illicit use of oxycodone; however, the frequency of use was lower compared to 2009. The majority of participants injected oxycodone. It is worth noting that the majority reported mainly illicit use of this substance.

Other drugs

Nineteen percent of IDRS participants had used ecstasy and seven percent had used some type of hallucinogen in the six months prior to interview, with both recent use and frequency of use remaining stable compared to 2009.

In 2010, a smaller proportion of participants (17%) reported recent use of illicit benzodiazepines compared to participant reports in 2009 (27%). The proportion of participants who reported recent use of cocaine compared to participant reports in 2009 remained stable, but the frequency of recent use was lower. Due to small numbers reporting, this and other findings should be interpreted with caution.

In 2010, 39% of participants reported ever using over the counter (OTC) codeine, with 22% reporting recent use on a median of six days compared to 30% in 2009 (median days=8).

The recent use of illicit pharmaceutical stimulants was stable in 2010, with 4% of the sample taking this drug. Participants generally reported swallowing or snorting as a route of administration.

In 2010, 22% of the sample reported recent use of OTC codeine on a median of six days. The main route of administration was swallowing. Of those who reported recent use of OTC codeine, 47% reported use of Nurofen Plus®, followed by Codapane® (16%), chemists own (15%) and Panadeine® (11%); one participant reported use of Mersyndol® and Panafen Plus®. Participants gave various reasons for using OTC codeine with the majority reporting acute/short-term pain.

Health-related issues

Compared to 2009, in 2010, a larger proportion of participants reported experiencing a mental health problem (other than drug dependence) in the six months preceding interview. The proportion of the sample that reported actually attending a professional was slightly lower than the proportion reporting having experienced a problem; this gap has decreased compared to 2009 and previous years. Depression and/or anxiety again predominated as the most commonly experienced mental health problem reported by participants.

The Kessler Psychological Distress Scale (K10) (Kessler & Mroczek, 1994) was incorporated into the participant survey to give a measure of levels of psychological distress among the participants. Half of the participants were assessed to be at a high or very high risk of psychological distress. There was consensus by many key experts (KE) that mental health problems related to methamphetamine use continued to increase in 2010.

From 2009, the Personal Wellbeing Index (PWI) was incorporated into the IDRS survey. Questions were asked to determine how satisfied participants were with various aspects of their lives. Questions included related to: standard of living, health, personal achievement, personal relationships, personal safety, feeling a part of the community, future security, and life as a whole. Participants scored lower than the general population for each domain of personal wellbeing. Moreover, participants were below the normal range for each domain. These findings indicate that participants are less than satisfied with all aspects of their lives and are at increased risk of developing depression (Cummin, 2007).

Risk behaviours

Participant reports of sharing injecting equipment (other than needles) first noted in 2004 increased in 2010, with a significant increase in the proportion of participants sharing water and tourniquets compared to 2009. One-tenth of the sample reported sharing needles and half had reused their own needle.

In 2010, 69% of the participants reported experiencing at least one type of injecting-related health problem in the month prior to interview. By far the most commonly experienced problem was difficulty injecting, followed by prominent scarring or bruising around the injection site. Notably there was a significant increase in the number of participants reporting a 'dirty hit' and this was most commonly attributed to heroin use.

In 2010, the median expenditure on illicit drugs remained stable compared to 2010, regardless of whether participants were primarily using heroin or methamphetamine.

Law enforcement

The prevalence of recent criminal involvement reported by participants remained stable in 2010; however, experience of arrest in the preceding 12 months increased, with drug dealing and property crime remaining the most common crimes. The proportion of participants who reported a prison history remained stable in 2010.

The majority (80%) of participants reported driving under the influence of an illicit drug, specifically 'any' methamphetamine and heroin.

Special topics of interest

Body Mass Index
The IDRS sample reported a higher BMI percentage as 'underweight' compared to the general population.

Alcohol Use Disorders Identification Test
In 2010, IDRS participants were asked to respond to the Alcohol Use Disorders Identification Test —Consumption (AUDIT-C). Over one-third (35%) of the sample scored five or over on the AUDIT-C, 36% of males and 35% females scored five or more indication the need for further assessment.

Stimulant and opioid dependence
In 2010, IDRS participants were asked to complete the severity of dependence (SDS) scale to measure the degree of dependence on a variety of drugs. Typically a score of five or above indicates the presence of opioid dependence. Of those who had recently used an opioid, the median SDS score was six and 61% of respondents scored five or above.

Personal Wellbeing Index
The Personal Wellbeing Index (PWI) is an index which asks participants how satisfied they are with various aspects of their life. The majority of participants scored lower than the general population on each domain of the PWI.

Sexual health
Over half the sample reported being tested for a sexually transmitted infection (STI)in the two years preceding interview and over half the female sample reported having had a pap smear in the same time period.

Social networks
A third of the sample reported contact with a family member nearly every day. A higher proportion reported contact with a friend, with the majority of participants reporting that they could rely on one or two family members or friends.

Service use – general practitioners
In 2010, 92% of the sample reported visiting a general practitioner (GP) for a physical or mental health problem, on a median of four occasions in the last 12 months. Forty percent of those who reported a GP visit in the past year reported visiting for problems with their mental health.

Implications

The findings from the 2010 SA IDRS have policy and research implications, and recommendations are outlined below. It is worth noting that several of these issues have already received attention and/or may be in the process of further investigation.

- The use of methamphetamine increased, particularly the use of crystal methamphetamine (ice/crystal), which is known to have very high purity and subsequently an increased risk of harm associated with its use.

- Development and implementation of strategies to reduce diversion of and non-adherence with prescribed pharmaceuticals (morphine, methadone, buprenorphine, and other opioid analgesics) are warranted.

- Investigation of strategies to expand access to sterile injecting equipment after normal business hours. For example, financial support for community CNP sites to trial needle and syringe vending machines in SA. In addition, as injection-related problems continue to be reported, information on the harms associated with use of non-sterile equipment, in addition to procedures for cleaning injection equipment when sterile equipment is unavailable, should continue to be actively provided to consumers through appropriate means. The proportion of participants sharing injecting equipment (e.g. spoons, mixing containers, water and swabs), re-used their own needles and lending used needles remains significant. These results show that continued emphasis on targeted strategies to reduce the rates of sharing of needles/syringes and other injection equipment (such as tourniquets, filters and mixing containers), and to improve awareness and adoption of safe injection practices and vein care among people who inject drugs, remains imperative.

- Development and implementation of strategies to enhance and provide existing support and training for doctors/healthcare providers (especially in the area of mental health) in working with substance users to gain positive outcomes.

- Over half the sample reported mental health issues, with fewer participants seeking help from a health professional. Therefore, strategies to address issues associated with drug misuse and dependence and mental health co-morbidity (particularly effective concurrent treatment) are needed.

- Participants reported greater use of illicit prescribed pharmaceuticals. Continued development and implementation of strategies to reduce their use would be advantageous.

- The development and implementation of services and strategies to cater for those with substance use and mental health appears warranted, especially considering the proportion of participants assessed as having high or very high psychological distress as measured by the K10 and low life satisfaction scores on the PWI compared to the general population.

1.0 INTRODUCTION

The Illicit Drug Reporting System (IDRS) was trialled in 1997 under the auspices of the National Drug and Alcohol Research Centre (NDARC) to examine drug trends in three Australian jurisdictions. This work was commissioned and supported by the Australian Government Department of Health and Ageing (AGDH&A). The trial consisted of conducting the complete IDRS in New South Wales, Victoria and South Australia (SA) (see Hando, Darke & Degenhardt et al., (1998) for a national comparison; and Cormack, Faulkner & Foster et al., (1998) for the SA findings). The 'core' IDRS incorporated a triangulated approach to data collection on drug trends, and consisted of a survey of injecting drug users, a semi-structured survey of key experts (KE), who had regular contact with injecting drug users, and secondary data sources or indicators relevant to drug use.

The IDRS process was repeated in 1998 in the same three jurisdictions, and in 1999 Western Australia, Northern Territory, Australian Capital Territory, Queensland (QLD) and Tasmania joined them. For a review of the history and progression of the IDRS nationally up to 2000, see Darke, Hall & Topp (2000). 2010 marks the 14th year in which the IDRS has been conducted in SA, and the 12th year it has included all states and territories (see Stafford & Burns, 2009 for a national comparison of 2009 findings).

The IDRS provides a co-ordinated and ongoing monitoring system predominantly focusing on heroin, methamphetamine, cocaine and cannabis, and contributes as an early warning system for emerging illicit drug problems. The IDRS is a sensitive and timely indicator of drug trends both nationally and by jurisdiction; it is simple to execute and cost effective. As well as drug trends, the findings highlight areas where further research is required, or where changes may need to be made in terms of education, health promotion, treatment services and policy. The IDRS provides direction for more detailed data collection on specific issues such as those listed above.

The 2010 South Australian Drug Trends Report summarises information collected by the SA component of the national IDRS. The information comes from three sources: a survey of people who inject drugs (the participants), KE interviews with professionals working in the drug and alcohol or related fields, and existing and up-to-date data indicators relating to drugs and drug use. The three sources complement each other, each having its own strengths and weaknesses. The results are summarised by drug type in tables designed to provide the reader with a 'snapshot' overview of drug trends in SA.

1.1 Study aims

The aim of the SA component of the 2010 IDRS is to provide information on drug trends in SA (specifically the Adelaide metropolitan area), particularly focusing on the 12 months between mid-2009 and mid-2010).

2.0 METHOD

A triangulated approach was utilised for this study, with information on drug trends coming from three primary sources. This approach is based on a procedure outlined by Hando & Darke (1998). The three sources were as follows:

- a survey of a sample of current regular illicit drug users who use injection as a route of administration and who represent a population likely to be aware of trends in illicit drug markets;
- a semi-structured survey of KE who work in the drug and alcohol area, or some related field, and who have regular contact with or knowledge of people who use drugs by injection; and
- an examination of existing and current indicators (other indicators) relating to drugs, drug use and drug-related issues.

2.1 Participants

The sample consisted of people who had regularly used illicit drugs and used injection as a route of administration (N=97) in the 12-months prior to interview. Participants were recruited through Clean Needle Program (CNP) sites across Adelaide. Clients of the service were invited to participate by a study flyer, displayed at CNP sites, providing information and details on how to arrange participation. Awareness of the study then spread via word of mouth and further recruitment occurred by snowballing. Informed consent was sought and gained from all participants, who were interviewed individually. Ethics approval was also granted prior to commencement of the study.

2.2 Procedure

Participants were interviewed in June and July 2010. Criteria for entry into the study were having injected drugs at least once a month in the previous six months, being over 16 years of age and living (not incarcerated) in the Adelaide metropolitan area for at least the 12 months prior to interview.

In order to be consistent with the IDRS data collection procedures in other jurisdictions, since 2001 trained research interviewers have conducted the interviews with participants. In 2010, five research interviewers with a sound working knowledge of issues related to illicit and injecting drug use were trained on administration of the survey instrument. The purpose and content of the survey was fully explained and informed consent was obtained from participants prior to the interviews being conducted. Interviews were conducted at a time convenient to the participant and generally in a room provided by the agency associated with the CNP or an agreed location nearby. Participants were compensated $40 for their time and travel.

2.3 Materials

2.3.1 Survey instrument

The structured interview was based on previous research conducted at NDARC (Darke, Hall & Ross et al., (1992) and Darke, Cohen & Ross et al., (1994). The survey consists of sections designed to collect information including participant demographic details; lifetime and recent drug use; knowledge of price, purity and availability of drugs (for

example, heroin, methamphetamine, cocaine, cannabis, morphine and methadone); criminal behaviour patterns; engagement in risk-taking behaviours; health-related issues; and general trends in drug use. In general, participants were asked to consider changes on the above parameters over the six to 12 months prior to interview (mid-2009 to mid-2010).

2.3.2 Kessler Psychological Distress Scale

The Kessler Psychological Distress Scale (K10) (Kessler & Mroczek, 1994) is utilised to give a measure of levels of psychological distress among the sample. The K10 was developed as a screening instrument to measure for negative emotional states, referred to as psychological distress. It is described as a simple, brief, valid and reliable instrument used to detect mental health conditions in the population. The scale consists of 10 questions on non-specific psychological distress and measures the level of anxiety and depressive symptoms a person may have experienced in the past four-weeks, so it asks specifically about recent levels of distress.

The cut-off scores for the K10 are taken from the method developed by the Clinical Research Unit for Anxiety and Depression (CRUFAD) at the School of Psychiatry, University of New South Wales. The items are totalled to give scores that range from eight to 50, with 50 indicating that the person has a high risk of having an anxiety or depressive disorder. The cut-off scores range from 10-15 for low or no distress, 16-22 for moderate distress, 22-29 for high distress and 30-50 for very high distress.

2.3.3 Personal WellBeing Index

The Personal Wellbeing Index (PWI) (Cummins, Woerner & Gibson et al., 2007) was incorporated into the IDRS survey. Questions asked how satisfied participants were with various aspects of their life. Questions included standard of living, health, personal achievement, personal relationships, personal safety, feeling a part of the community, future security and life as a whole. Participants were asked to respond on a scale of 0-10 where 0 was 'very unsatisfied' and 10 was 'very satisfied'

3.3 Survey of KE

The KE interview was semi-structured and took approximately 45 minutes to administer via telephone. The instrument used was based on previous research conducted at NDARC for the World Health Organization (WHO) (Hando & Flaherty, 1993) and included sections on demographics, drug use patterns, drug price, purity and availability, criminal behaviour, police activity and health issues. In general, KE were asked to consider changes on the above parameters over the six to 12 months prior to interview (mid-2009 to mid-2010). The responses to the semi-structured interview were transcribed and analysed for content and trends. Information gained from these interviews was largely qualitative in nature.

Entry criteria for the KE were at least weekly contact with illicit drug users in the previous six months, or contact with 10 or more illicit drug users in the previous six months, or specialist knowledge of drug markets in SA. All KE were paid or volunteer workers in drug treatment agencies, other health and community services, drug user advocacy groups, South Australia Police (SAPOL), or research organisations. KE were recruited based on their participation in previous IDRS surveys, and on recommendations made by existing KE and colleagues. Potential KE were contacted via telephone, and/or email and assessed for suitability according to the criteria. A mutually

convenient time was made via the telephone. Informed consent was sought and gained from all KE, who were interviewed individually.

In 2010, 15 KE were interviewed from September to late October 2010. KE comprised a range of persons from various professions: four health workers (youth workers, community drug and alcohol workers, psychologists, medical officers, nurses, mental health staff, and drug and alcohol counsellors); eight user representatives (peer educators, outreach and CNP workers, and dealers); and three law enforcement workers (police officers, forensic officers, and police intelligence analysts).

Methamphetamine continued to be the most identified drug used by the users whom KE had most contact with in 2010. Similar to 2009, in 2010 cocaine was not identified by any KE as the main illicit drug used by users they had most contact with. Similar to 2009, however, two KE identified cannabis as the main illicit drug used by users they had most contact with. Nevertheless, KE were asked to consider issues related to cocaine in particular, when their knowledge encompassed this drug as well as methamphetamine or heroin, in an effort to gather more information with regard to this drug.

2.5 Other indicators

To complement and validate data collected from the participants and KE surveys, a range of secondary data sources was utilised including population surveys and other health and law enforcement data. The pilot study for the IDRS (Hando, O'Brien & et al., 1997) recommended that secondary indicator data should:

- be available at least annually;
- include 50 or more cases;
- provide brief details of illicit drug use;
- be located in the main study site (Adelaide or SA for the present study); and
- include details of the four main illicit drugs under investigation.

Data sources that fulfilled the above criteria and were included in the report were:

- telephone advisory data provided by the Alcohol and Drug Information Service (ADIS) of South Australia;
- Australian Needle and Syringe Program (NSP) survey data;
- admissions data from Drug and Alcohol Services South Australia (DASSA);
- drug-related attendances to the Royal Adelaide Hospital Emergency Department;
- state-wide rates of drug-related arrests provided by SAPOL;
- number of clandestine laboratory detections in SA provided by SAPOL;
- state-wide and national rates of opioid-related fatalities provided by the Australian Bureau of Statistics (ABS), in Degenhardt et al. (2006a);
- national rates of methamphetamine-related and cocaine-related fatalities provided by the ABS, in Degenhardt, Roxburgh & Black (2006b);
- purity of drug seizures made by SAPOL and the Australian Federal Police (AFP) provided by the Australian Crime Commission (ACC);
- drug-related hospital admissions data (state and national) provided by the Australian Institute of Health and Welfare (AIHW) (2008); and
- National Notifiable Diseases Surveillance System (NNDSS) data, from the AGDH&A, was also included as an indicator of blood-borne viral infection (BBVI) rates. BBVI transmission is correlated to injecting drug use and despite

these data not having drug specific breakdowns they are a useful indicator of injecting-related trends.

2.6 Data analysis

Statistical analyses (descriptive and inferential) were performed using the Statistical Package for the Social Sciences (SPSS) for Windows, Version 18.0 (2009). Continuous, normally distributed variables were analysed using *t*-tests and means reported. Where continuous variables were skewed, medians were reported and the Mann-Whitney *U*-test, a non-parametric analogue of the *t*-test (Siegel and Castellan, 1988) was employed. Confidence intervals (CI) were calculated using an excel spreadsheet available at http://www.cebm.net/index.aspx?o=1023 (Tandberg). This calculation tool was an implementation of the optimal methods identified by Newcombe (1998).

2.7 Notes

2.7.1 Methamphetamine

Prior to 2001, IDRS reports used the overarching term 'amphetamines' to refer to both amphetamine and methamphetamine. Amphetamine is used to denote the sulphate of amphetamine, which throughout the 1980s was the form of illicit amphetamine most available in Australia (Chesher, 1993). Chemically, amphetamine and methamphetamine differ in molecular structure but are closely related. In Australia today, the powder traditionally known as 'speed' is almost exclusively methamphetamine rather than amphetamine. The more potent forms of this family of drugs – known by terms such as ice/crystal, shabu, crystal meth, base and paste – have been identified as becoming more widely available and used in all jurisdictions (Topp & Churchill, 2002). These forms are also methamphetamine. Therefore, the term methamphetamine was used from 2001 onward to refer to the drugs available that were previously termed amphetamines. The terms are used interchangeably within this report unless specifically noted within the text. For a further discussion of this issue see White, Breen & Degenhardt (2003).

2.7.2 Price, purity and availability

It should be noted that the price, purity and availability sections of the participant survey were not restricted to users of the particular drug but to those who feel confident of their knowledge of these parameters of the market. In addition, participants may answer any or all price, purity and availability sections, thereby the sample sizes (n) per section may fluctuate for any given drug. In addition, people who answered 'don't know' to the initial question for each of the price, purity and availability sections were eliminated from the sample for these sections to increase the validity of remaining categories. The sample sizes are therefore reported in each table. Furthermore, within the text of these sections, findings may also be expressed as percentage of entire sample to highlight the fact that the proportion answering was not equivalent to the whole IDRS participant sample. Care should be taken in interpreting category percentages that may be associated with small sample sizes.

3.0 DEMOGRAPHICS

Key findings

- The 2010 sample was younger than the 2009 participant sample, with approximately half being male.
- Two-thirds (63%) of the sample were unemployed, similar to that reported in 2009.
- Similar proportions of the sample reported a previous history of imprisonment to that in 2009 (43%).
- A third had completed Year 11 and/or 12. Half the sample had no tertiary qualifications and 8% had a university education.
- A third of the sample reported being in current drug treatment, primarily maintenance pharmaceutical treatment.
- Three-quarters of the sample received a government allowance/pension and the majority lived in rental accommodation.

3.1 Overview of the IDRS participant sample

The demographic characteristics of the 97 participants interviewed in 2010 are summarised in Table 1, with the 2009 sample characteristics provided for comparison.

There was some overlap of the 2010 participant sample with previous years' samples. Twenty-two percent of the 2010 sample stated that they had participated in the IDRS previously: 12% in 2009, 2% in 2008, and 6% in 2006, 4% in 2005, and 1% in each year from 1999-2004 (participants could nominate more than one year).

The median age of the sample was younger at 37 years (range=18-56 years), compared to the 2009 participant sample (40 years). Half the sample were male (56%), lower than in 2009 where 66% were male. Two-thirds (63%) of the sample were unemployed and 43% had a history of previous imprisonment, similar to participant reports in 2009 (40%). The median number of years spent at school was 11 (range=7-12 years), with a third (30%) reporting completion of years 11 and/or 12. Fifty-two percent of the sample reported having no tertiary qualifications, higher than reported in 2009 (38%). Of those who did report having a tertiary qualification, more had completed a technical or trade qualification (40%) than a university qualification (8%).

In 2010, a third of the sample (33%) was in drug treatment at the time of the interview, lower than in 2009 with the majority of participants in maintenance pharmacotherapy treatment. Specifically, 19% reported being on a methadone program (compared to 26% in 2009) and 16% reported being on a buprenorphine program, including those receiving suboxone treatment (compared to 14% in 2009).

As in previous years, in 2010 the majority of participants reported some form of government pension, allowance or benefit as their main source of income in the month prior to interview (74%). The remaining participants reported their main source of income was a wage (21%), or criminal activity (3%), with one participant reporting receiving income from child support and one from being a carer in the month prior to interview.

The majority of the participant sample resided in rental accommodation (71%). A further 19% of the sample reported living at their family/parent's home, followed by residing in their own house/flat (13%), a boarding house (7%), or shelter (1%). Two participants reported having no fixed address/homeless.

Table 1: Demographic characteristics of IDRS sample, 2003-2010

Characteristic	2003 (N=120)	2004 (N=101)	2005 (N=101)	2006 (N=100)	2007 (N=100)	2008 (N=100)	2009 (N=100)	**2010 (N=97)**
Age (median in years)	34	32	35	37	36	38	40	**37**
(range)	(16-54)	(16-55)	(16-57)	(19-63)	(17-53)	(20-57)	(20-60)	**(18-56)**
Sex (% male)	53	61	64	53	66	65	66	**56**
A&TSI (%)	11	14	8	8	9	6	3	**4**
Employment[*] (%)								
Not employed	68	63	62	71	66	76	67	**63**
*Full-time**	3	3	6	6	7	9	9	**8**
Part-time/casual	15	13	13	13	12	9	21	**20**
Full-time student	3	6	5	2	1	0	1	**1**
Both studying & employed					1	4	1	**1**
Home duties	13	15	14	8	6	4	1[*]	**4* (3)**
School education (median in years)	10	10	10	10	11	10	11	**11**
(Range)	(3-12)	(5-12)	(3-12)	(7-12)	(7-12)	(5-12)	(7-12)	**(7-12)**
Tertiary education (%)								
None	53	46	45	40	43	34	38	**52**
Trade/technical	32	29	44	43	50	45	49	**40**
University/college	16	26	12	17	7	21	13	**8**
Prison history (%)	33	48	53	52	46	44	40	**43**
Current drug treatment (%)	33	41[*]	46	52	38	52	45	**37**

Source: IDRS participant interviews

[*] One participant reported being a full-time carer

In summary, compared to 2009, the 2010 sample characteristics were largely unchanged, with the most notable difference being that the reported median age of participants in 2010 was younger than in 2009 and there were slightly fewer male participants.

KE comments

- The majority of KE reports of the demographics of drug user populations they have contact with replicate those of the sample: KE reported a male/female ratio of 60:40 with participants either unemployed or working on a casual basis.
- KE reported a mixture of both Anglo, Asian and Aboriginal clients which is not mirrored in the participants interviewed.
- KE reported that many clients had a history of imprisonment or currently in treatment for drug use (generally a maintenance pharmacotherapy).
- According to KE, the average age of all these groups of users was approximately 35 years (range=15-60 years).

4.0 CONSUMPTION PATTERNS

Key findings

- The median age of first injection for the sample was 17 years. Methamphetamines were reported as the drug first injected.
- Half of the sample reported heroin as the drug of choice followed by methamphetamines.
- The drug injected most often in the last month was heroin closely followed by methamphetamines.
- Polydrug use over the last six months was common among the sample.

4.1 Current drug use

Patterns of lifetime (i.e. ever having used a drug) and recent (last six months) use by participants of all drugs monitored in the IDRS are shown in Table 5. Routes of administration, including injecting, swallowing, snorting and smoking/inhaling are also provided in some detail.

The median age of first injection by the participant sample was 17 years (range=11-39). The drug most commonly first injected by the sample was methamphetamine (62%), followed by heroin (32%). When first injection of methamphetamine is examined according to type, methamphetamine powder (44%) was by far the most commonly first injected drug, with smaller numbers reporting first injection of methamphetamine base (9%) and crystal/ice methamphetamine (6%) and 2% did not specify type of methamphetamine.

Table 2: Injecting drug history, 2010

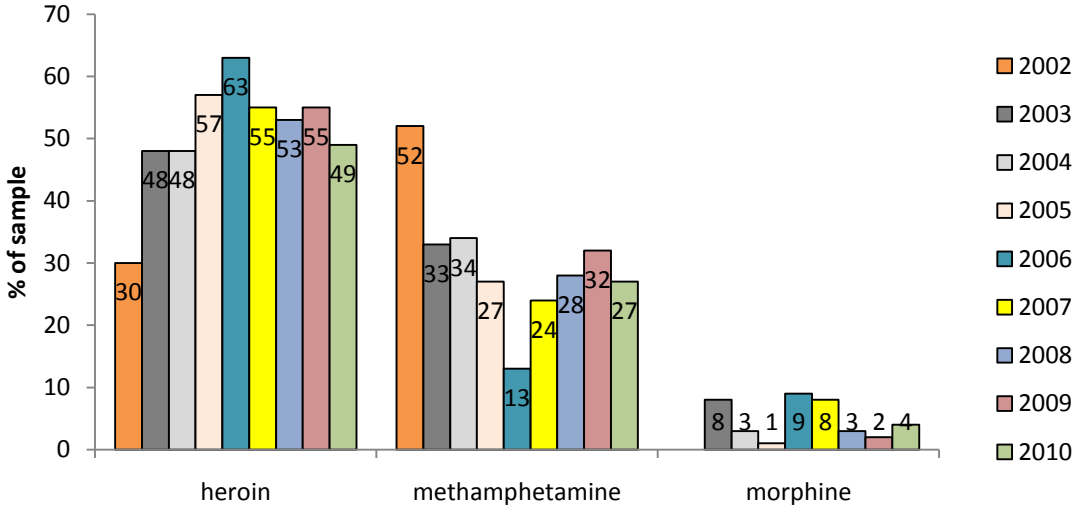
	2009 (N=100)	**2010 (N=97)**
Median age first injected in years (range)	19 (11-59)	**17 (11-39)**
First drug injected (%)		
Heroin	44	**32**
Methamphetamine**	50	**62**
Cocaine	2	**2**
Morphine	1	**0**
Other	3	**4**

Source: IDRS participant interviews

4.1.1 Drug of choice

In 2010, a similar proportion of the sample reported heroin as their drug of choice (49%) compared to 2009 (55%), and remained high. The proportion of the sample nominating some form of methamphetamine as their drug of choice (32% in 2009 to 27% in 2010) also remained stable.

Figure 1: Trend for drug of choice, 2002-2010



Source: IDRS Participant interviews

4.1.2 Drug last injected and injected most often in the last month

The proportion of the sample who reported heroin as the drug most frequently injected in the last month was lower in 2010 (42%) compared to 2009 (50%) (see Figure 2). In addition, the proportion of participants reporting heroin as the most recent drug injected also decreased from 50% in 2009 to 36% in 2010 (see Table 3). With regard to methamphetamine, the proportion of participants reporting methamphetamine as the drug most injected in the last month increased from 35% in 2009 to 41% in 2010. Furthermore, a larger proportion reported methamphetamine as the last drug injected: 39% in 2010 compared to 34% in 2009 (see Table 3).

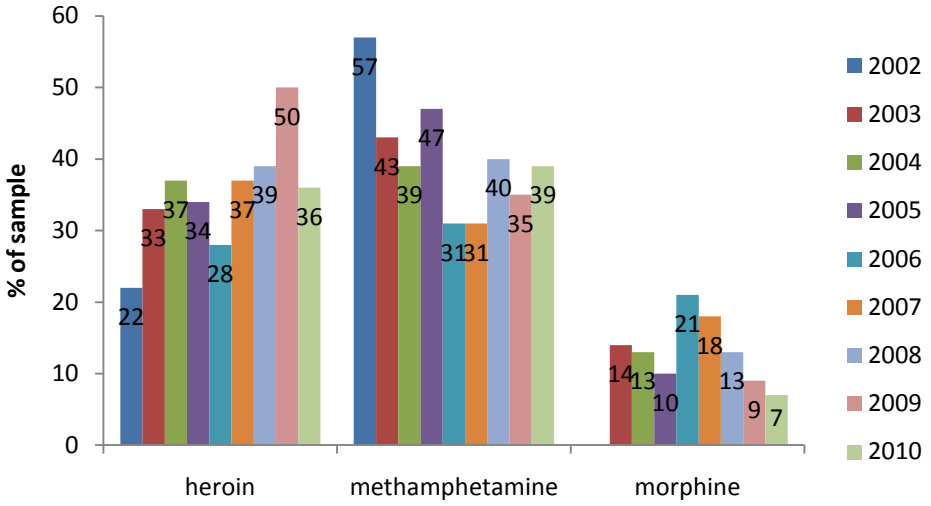
Table 3: Injecting drug preferences, 2009-2010

	2009 (N=100)	**2010 (N=97)**
Drug injected most often in last month (%)		
Heroin	50	**42**
Methamphetamine**	35	**41**
Cocaine	2	**0**
Morphine	9	**8**
Methadone	2	**3**
Buprenorphine	1	**4**
Other	1	**0**
Most recent drug injected (%)		
Heroin	50	**36**
Methamphetamine**	34	**39**
Morphine	11	**11**
Methadone	2	**4**
Buprenorphine	1	**7**
Oxycodone	0	**2**
Other	2	**1**
Frequency of injecting in last month (%)		
Weekly or less	30	**31**
More than weekly but less than daily	44	**39**
Once a day	15	**14**
2-3 times a day	7	**12**
>3 times a day	4	**2**

Source: IDRS participant interviews
** Collapsed categories: powder, base and crystal forms

Frequency of injecting any drug in the last month was greater than weekly for 67% of the sample, with 28% reporting they had injected at least once a day during that period. Compared to 2009, frequency of injecting remained relatively stable.

Figure 2: Trend for drug injected most in last month, 2002-2010



Source: IDRS participant interviews

Table 4: Polydrug use, 2010

	2009 (N=100)	**2010 (N=97)**
Polydrug use (median)		
Number of drug classes ever used	8 (3-15)	**10 (3-21)**
Number of drug classes used in last 6 months	5 (1-14)	**5 (1-13)**
Number of drug classes ever injected	3 (1-9)	**6 (1-14)**
Number of drug classes injected in last 6 months	2 (1-7)	**3 (1-9)**

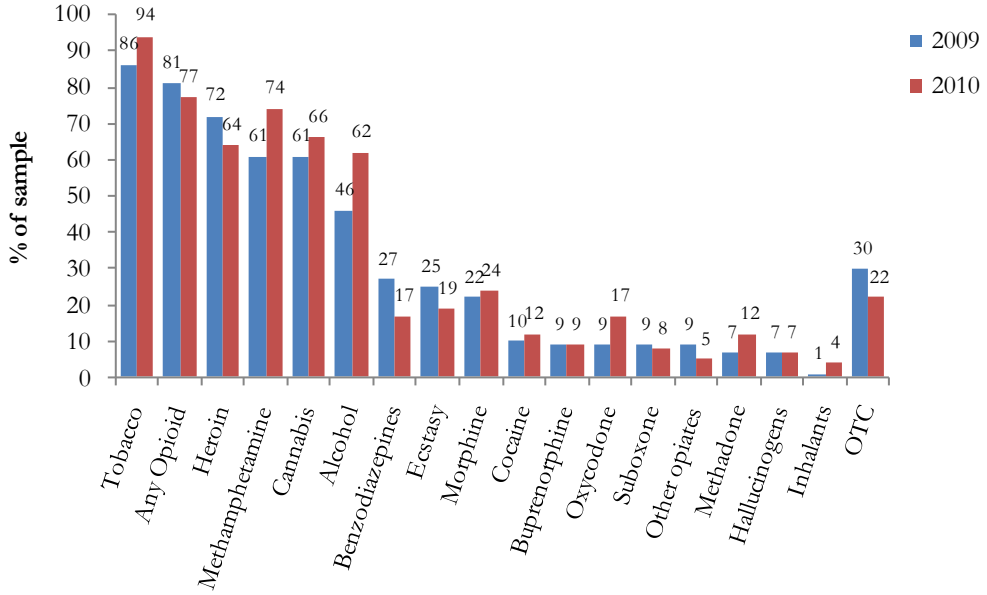
Source: IDRS participant interviews

Participant polydrug use was common in 2010 and has remained consistently so across the years, with no real differences being reported from 2008 to 2009 (see Table 4). In 2010, participants were asked about their history of use of 23 separate substances[1]. Only illicit use of a drug was analysed. The total number of possible injected drug types was 16. Due to new drugs being added to the survey, no comparisons were made with 2009 reports. In 2010, participants reported use of a median of 10 (range=3-21) drug types across their lifetime and a median of five (range=1-13) during the six months prior to interview.

The drugs most commonly used among the participants in the last six months were tobacco, heroin, cannabis, 'any' methamphetamine, and alcohol (Figure 3). This order of commonality was very similar to 2009.

[1] Drug types were heroin, illicit morphine, illicit methadone (including physeptone), illicit buprenorphine, homebake, other opioids, illicit oxycodone amphetamines (powder, base, crystal and liquid), pharmaceutical stimulants, cocaine, hallucinogens, ecstasy, inhalants, alcohol, cannabis, illicit benzodiazepines, illicit Suboxone®, tobacco and steroids.

Figure 3: Recent drug use, percentage of the participants to have used each substance type in the last six months, 2010



Source: IDRS participant interviews
Note: All use relates to illicit use (e.g. of methadone, morphine etc)

In 2010, 64% of recent heroin users also reported recent use of some form of methamphetamine, twice the number reported in 2009 (33%), and 55% of recent methamphetamine users had also reported using heroin in the six months prior to interview, the same proportion seen in 2009.

Of the 47 participants who nominated heroin as their drug of choice, all had used heroin in the previous six months; 29 had used cannabis (63%), 26 (57%) had used any benzodiazepines (licit or illicit), 26 (55%) had used any methadone (licit or illicit), 25 (56%) had used alcohol, and 28 (61%) had used any methamphetamine during this period. There was an increase in participants reporting that they had used some form of methamphetamine in 2010 compared 35% in 2009. Similarly, there was an overlap of drug classes used by those participants who nominated methamphetamine as their preferred drug. Of the 26 participants reporting methamphetamine as their drug of choice, all had used some form of methamphetamine in the last six months; 19 (73%) had used alcohol during that period, 17 (65%) had used cannabis, nine (35%) had used any benzodiazepine (licit or illicit), and five (19%) had used ecstasy during this period.

Table 5: Drug use history and routes of administration of the sample, 2010 (% of total sample; N=97)

Drug class	**Ever used %**	**Ever inject %**	**Inject last 6 mths %**	**Ever smoke %**	**Smoke last 6 mths %**	**Ever snort %**	**Snort last 6 mths %**	**Ever swallow %**	**Swallow last 6 mths+ %**	**Used^ last 6 mths %**	**Days used^ in last 6 mths***	**Days injected in last 6 mths***
Heroin	81	81	65	40	7	13	1	12	3	64	24 (1-180)	24 (1-180)
Methadone – licit	48	16	5					40	22	23	180 (28-180)	72 (14-180)
Methadone – illicit	30	15	10					17	5	12	6 (1-70)	5(2-70)
Physeptone – licit	9	7	6	0	0	0	0	2	0	0	-	-
Physeptone – illicit	31	19	4	0	0	0	0	14	3	7	2 (1-6)	1 (1-3)
Any methadone (inc. physeptone)	***65***	***36***	***18***							***36***	***174 (1-181)***	***7 (1-180)***
Buprenorphine – licit	30	12	8	1	0	0	0	26	12	14	180 (2-180)	50 (10-180)
Buprenorphine – illicit	18	11	9	3	2	0	0	10	3	9	15(5-86)	19 (5-86)
Any buprenorphine	***47***	***21***	***10***							***24***	***74 (2-180)***	***33(5-180)***
Suboxone – licit	23	7	5	3	2	0	0	20	12	14	180 (5-180)	24 (6-180)
Suboxone – illicit	14	10	7	1	1	0	0	10	4	8	6 (2-35)	6 (1-30)
Oxycodone – licit	11	3	3	0	0	0	0	4	3	6	2.50(1-24)	3 (2-24)
Oxycodone – illicit	31	26	16	0	0	0	0	11	4	17	5.5 (1-150)	6 (1-150)
Any Oxycodone	***37***	***28***	***18***							***21***	***6 (1-151)***	***6 (1-150)***
Morphine – licit	20	12	6	0	0	0	0	9	3	5	20 (3-180)	20(2-180)
Morphine – illicit	49	43	24	1	0	2	0	14	1	24	8 (1-180)	8 (1-180)

Table 5: Drug use history and routes of administration of the sample, 2010 (% of total sample; n=97) (continued)

Drug Class	Ever used %	Ever Inject %	Inject last 6 mths %	Ever Smoke %	Smoke last 6 mths %	Ever snort %	Snort last 6 mths %	Ever Swallow %	Swallow last 6 mths+ %	Used^ last 6 mths %	Days used^ in last 6 mths*	Days injected in last 6 mths*
Any Morphine	**56**	**48**	**26**							**25**	**5 (1-210)**	**5(1-210)**
Homebake	26	17	3	1	0	0	0	1	1	3	7 (3-20)	6 (3-20)
Other opioids	9	2	2	0	0	0	0	3	3	5	4 (1-90)	47 (4-90)
Any opioids**	**87**	**84**	**75**							**77**		
OTC Codeine	39	4	1	0	0	0	0	33	21	22	6 (1-90)	1
Speed powder	85	77	31	24	8	41	2	36	4	29	7(1-180)	8 (2-180)
Base/point/wax	63	60	43	24	14	11	2	22	10	43	35 (2-180)	24 (2-180)
Ice/shabu/crystal	77	74	63	34	21	7	1	14	5	60	9 (1-180)	7 (1-180)
Amphetamine liquid	29	21	7					7	0	6	6 (2-180)	6(2-180)
Any form methamphetamine#	***95***	***94***	***80***							***74***	***24 (1-720)***	***24 (1-720)***
Pharmaceutical stimulants - licit	9	3	1	0	0	1	0	4	1	2	180	180
Pharmaceutical stimulants - illicit	17	5	1	0	0	2	0	11	3	4	26 (1-60)	1
Cocaine	62	42	7	5	0	33	5	7	1	12	1 (1-6)	1 (1-6)
Hallucinogens	62	6	1	1	0	1	0	53	7	7	2 (1-50)	1
Ecstasy	69	35	8	0	0	7	3	58	14	19	3 (1-24)	2 (1-6)
Benzodiazepines - licit	49	4	2	0	0	0	0	47	39	39	150(3-180)	1
Benzodiazepines - illicit	29	6	2	0	0	0	0	24	16	17	10 (1-120)	40 (8-72)
Any Benzodiazepines	***62***	***8***	***3***							***49***	***48 (2-183)***	***8 (1-73)***
Alcohol	94	9	0					91	60	62	12 (1-180)	-
Cannabis	92									66	76(2-180)	
Tobacco	96									94	180 (24-180)	
Inhalants	23									4	1 (1-3)	
Steroids	4	3	0							0	0	0

Source: IDRS participant interviews

^ Refers to any route of administration, i.e. includes use via injection, smoking, swallowing, and snorting; + Refers to/includes sublingual administration of buprenorphine; * Among those who had used/injected; + Refers to/includes sublingual administration of Buprenorphine, # Category includes speed powder, base, ice/crystal and amphetamine liquid (oxblood), but does not include pharmaceutical stimulants; ** Category includes heroin, homebake, oxycodone, methadone, buprenorphine, morphine and 'other opioids'

4.2 Heroin use

Key findings

- There was a decrease in the proportion of participants reporting recent use of heroin in 2010 compared to 2009.
- A decrease in frequency of recent heroin use was observed, whilst daily use remained stable.
- There was an increase in the use of brown rock and powder heroin compared to 2009.

4.2.1 Use of heroin

Thirty-two percent of participants reported heroin as the first drug ever injected, 49% nominated heroin as their drug of choice, 42% reported heroin as the drug most often injected in the last month, and 36% reported that heroin was the last drug they had injected.

Sixty-four percent of the IDRS participants interviewed in 2010 had used heroin in the six months prior to interview, a lower proportion than reported in 2009 (72%). Frequency of recent heroin use (median number of days used) was lower in 2010 (24 days) compared to use reported in 2009 of 30 days (see Figure 4).

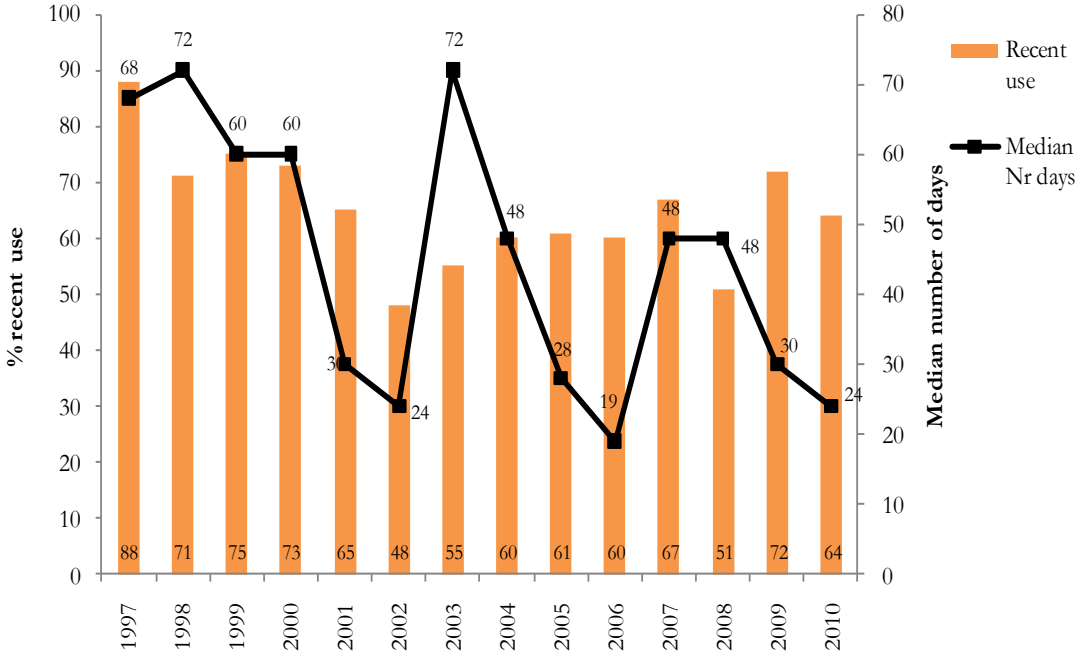
Table 6: Recent heroin use of IDRS participants, 2010

	2009	**2010**
Recent use (%)	72	**64**
Median days of use*	30	**24**
Daily use* (%)	10	**10**

Source: IDRS participant interviews

* Among those who had used. Maximum number of days, i.e. daily use is 180. See page xiii for guide to days of use/injection

Figure 4: Heroin, recent use and median number of days used, 1997-2010



Source: IDRS participant interviews
Note: Shows reports of those reporting recent use, i.e. in the previous six months

The proportion of participants reporting use of heroin on a daily basis was 10% in 2010 and remained stable. Moreover, in 2010, 18% of participants reported using heroin the day prior to the interview, with this figure lower than in 2009 (30%).

Of the 62 participants who had used heroin in the last six months, 56% (n=35) reported heroin as the last drug that they injected. The remaining heroin using participants reported the last drug they injected as some form of methamphetamine (n=9, 15%); morphine (n=9, 15%); or another opioid such as methadone (n=3, 5%), buprenorphine (n=4, 6%), or oxycodone (n=2, 3%).

Homebake is a form of heroin made from pharmaceutical products and involves the extraction of diamorphine from pharmaceutical opioids such as codeine and morphine. In 2010, a quarter (26%) of participants reported that they had used homebake heroin at least once in their lifetime. Three percent reported the use of homebake heroin in the six months preceding interview. All who reported recent use of homebake heroin had injected it; however, 1% also reported swallowing it in the six months preceding interview. In 2010, homebake heroin was used for a median of six days (range=3-20 days).

4.2.2 Heroin forms used

Of the 62 participants who had used heroin in the six months prior to interview, 77% reported use of a white/off-white powder or rock form of heroin, and 50% reported using a brown powder or rock. The forms most used in the last six months showed a similar pattern, with 67% using mostly white/off-white powder or rock and 29% using brown powder or rock most often. Four percent used heroin of another colour and no participants mentioned homebake as the most often used. Compared to 2009, a higher proportion of participants used brown powder or rock form in the preceding six months. The forms of heroin most used in the previous six months remained stable (see Table 7).

Table 7: Reports of heroin forms used in the last six months among those who had recently used heroin, 2010

	2009	2010
Used last 6 months (%)	(n=72)	**(n=62)**
White/off-white powder or rock	81	**77**
Brown powder or rock	36	**50**
Form most used last 6 months	(n=72)	**(n=55)**
White powder or rock	67	**67**
Brown powder or rock	21	**29**
Homebake	0	**0**
Other colour	12	**4**

Source: IDRS participant interviews

Of the 47 participants who nominated heroin as their drug of choice in 2010, 42 participants (89%) had used heroin in the previous six months, 25 (53%) had used any methadone (licit or illicit), and 18 (38%) had used morphine (licit and illicit). In addition, 28 participants (61%) had used benzodiazepines (licit and illicit), and 26 (55%) had used some form of methamphetamine. Compared to 2009, fewer participants nominating heroin as their drug of choice in 2010 reported recent use of heroin (from 100% to 89%).

Fifteen participants nominated heroin as their drug of choice, but reported that the drug they had injected most in the last month was something other than heroin. Of these participants, the reasons given for not injecting heroin were drug price (n=4), availability (n=4), health effects (n=3), purity (n=2); being in treatment (n=1) and other (n=1). Eight had mostly injected some form of methamphetamine, five injected an opioid substance (morphine, or methadone) and two injected Suboxone® in that period. These data may indicate that PWID continue to supplement or replace their use of heroin with other opioid and non-opioid drugs.

4.2.3 Heroin preparation method

The type of heroin, according to Ciccarone (2009), dictates the method of preparation needed depending on the intended route of administration. The use of different coloured heroin may require an additional step, involving citric acid or heating, in the preparation for injection. Therefore, participants were asked if they had used heat or acid last time they injected heroin and the colour of the heroin involved (see Table 8). Nearly half (48%) of recent heroin users reported the last time they used heroin they had used heat, with 9% reporting using acid in the preparation process. Participants reported use of heat or acid in the preparation process of white heroin (50%), brown heroin (46%), and other colours (4%). More participants reported the use of heat or acid in the preparation of another colour other than white or brown in 2009. The colours reported were beige (n=13), yellow (n=2), clear (n=1) and two did not specify a colour.

Table 8: Preparation of heroin, 2010

	2009	**2010**
Heated in the last injection (%)	(n=72) 47	**(n=56)** **48**
Acid in the last injection (%)	(n=72) 8	**(n=54)** **9**
Main colour*	(n=63)	**(n=24)**
White	43	**50**
Brown	8	**46**
Other	49	**4**

Source: IDRS participant interviews

KE comments

- Three KE reported that heroin use was decreasing and clients were using other drugs such as amphetamine and pharmaceuticals such as morphine and codeine.
- All KE agreed that injecting was still the most common practice. Some KE commented that younger users, especially young Asian males and females, tend to smoke heroin.
- KE reports suggested heroin users commonly used a range of other drugs, particularly methamphetamine, cannabis and other opiates.

4.3 Methamphetamine

Key findings

- Recent use of speed remained stable whilst recent use of base increased with a significant increase in use of crystal methamphetamine.
- Frequency of use mirrored the pattern of recent use. Speed was used less frequently and both base and crystal was used more frequently compared to 2009.
- Injecting of both speed and base decreased; however, the injecting of crystal increased in 2010.
- There was an increase in the proportion reporting smoking crystal methamphetamine compared to 2009.

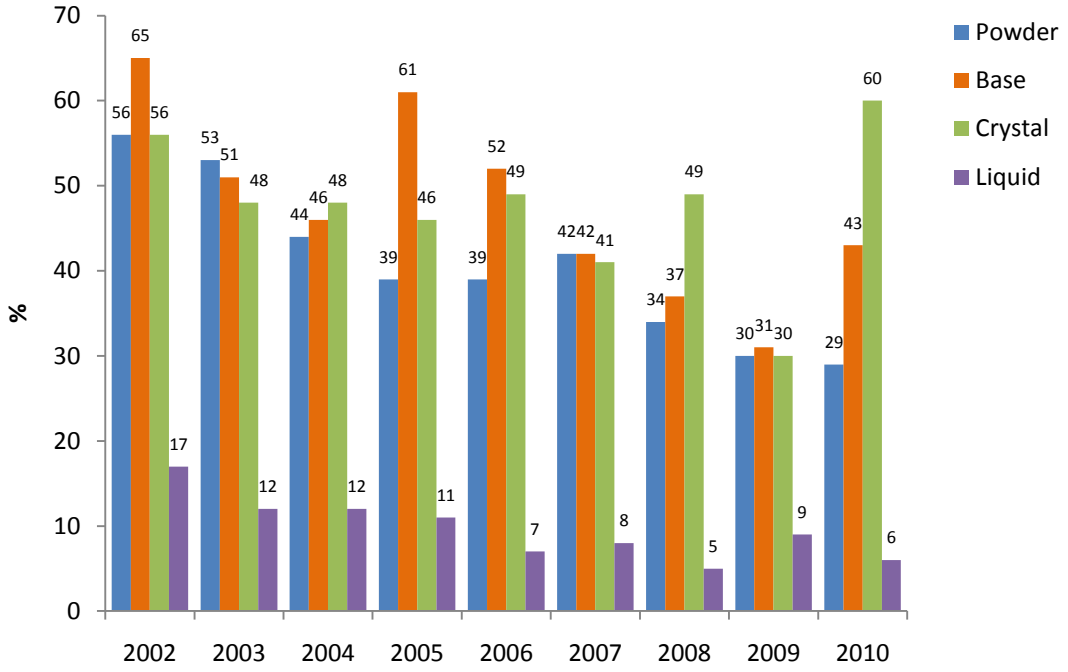
In 2002, the IDRS collected data on three different forms of methamphetamine in order to collect more comprehensive data on the use, purity and availability of each. Flashcards with colour photographs were introduced to clarify more precisely the characteristics of the different forms of methamphetamine that are marketed under a variety of names, but can be categorised into three main forms: 'speed/powder', 'base/paste', and 'crystal/ice' (see Breen et al., 2003). For ease of understanding and comparability with previous IDRS reports, these three main forms will be referred to as powder, base and crystal, respectively in the following sections. Also, due to this categorisation, price, purity and availability data prior to 2002 is not directly comparable to data collected in the years following the 2002 IDRS report and care should be taken when interpreting the changes in these parameters, as reported in the following sections.

4.3.1 Use of methamphetamines

Sixty-two percent of participants reported methamphetamine as the first drug ever injected, 27% nominated methamphetamine as their drug of choice, 41% reported methamphetamine as the drug most often injected in the last month and 39% reported methamphetamine was the last drug they injected (see section 4.2). It should be noted that a large proportion of participants who had first injected methamphetamine reported that it was the last drug injected (53%), the drug most often injected in the last month (57%), and nominated it as their drug of choice (41%) in 2010.

In 2010, a third (29%) of the participants reported recent use of powder and this remained stable. More participants had reported recent use of base (43%) and a significantly higher proportion of participants reported recent use of crystal (60%: $\chi^2 = 14.09$, df_1, $p<0.01$) than in 2009 (30%) (see Figure 5). Most participants recently used all forms of methamphetamine by injecting (see Table 5).

Figure 5: Methamphetamine, percentage of participants that used in the last six months, 2002-2010



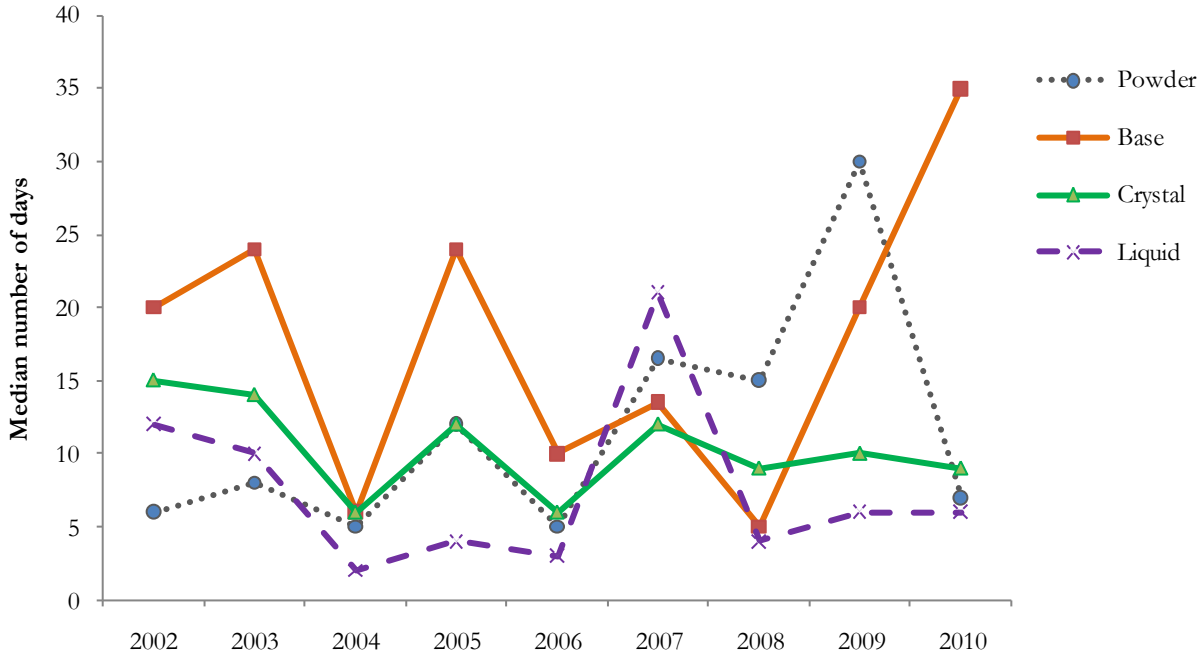
Source: IDRS participant interviews

4.3.2 Methamphetamine frequency of use

In the last six months, powder was reported as being used at a lower frequency than in 2009 (as measured by median number of days used in the six months prior to interview): seven days (range=1-180 days) compared to 30 days (range=1-180 days in 2009).

There was also a large difference reported in the median number of days base methamphetamine was used, 20 days in 2009 to 35 days in 2010, with the level of use the highest reported since 2002. The frequency of use of crystal remained stable (from 10 days in 2009 to nine days in 2010). Frequency of use of the liquid form of methamphetamine also remained stable in 2010 (see Figure 6).

Figure 6: Methamphetamine, median number of days used in the last six months, 2002-2010

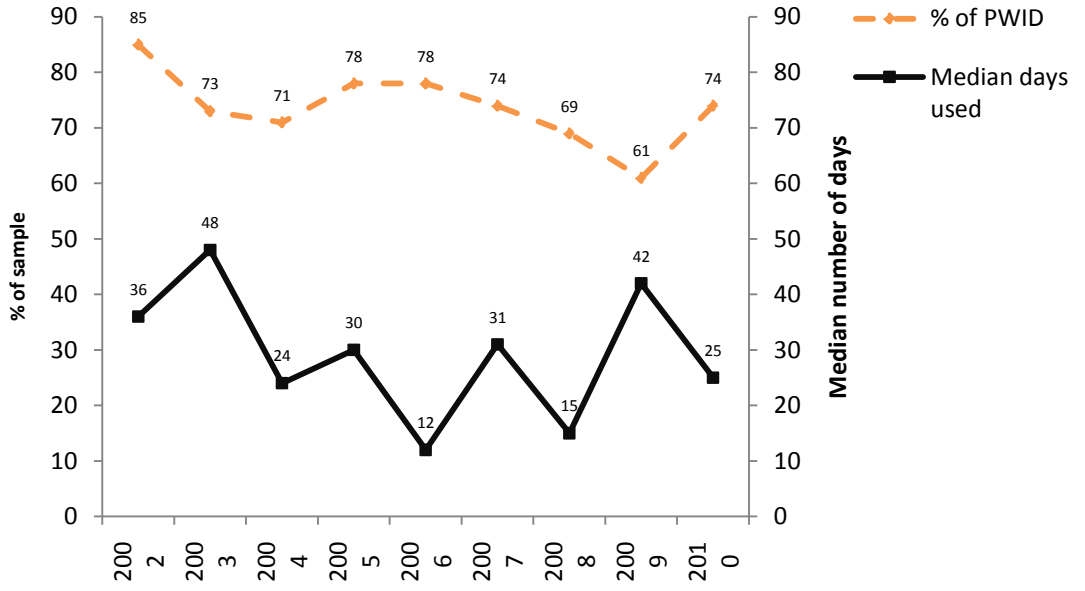


Source: IDRS participant interviews
Note: Used by those participants who reported use of each form in the six months prior to interview

The long-term trend in these parameters of use is depicted in Figure 7. Overall, in 2010 74% of participants had used some form of methamphetamine (powder, base, crystal, and liquid) for a median of 24.5 days (range=1-180) in the six months prior to interview. Reported use of some form of methamphetamine in the six months prior to interview was higher (74%) compared to 2009 (61%). However, there was an increase in the frequency of use reported by participants in 2010 (median of 24.5 days) compared to the frequency of use reported by participants in 2009 (median of 42 days).

Furthermore, the percentage of participants who reported recent use of any methamphetamine had been decreasing since a high of 85% in 2002 but in 2010, reports are similar to those reported in 2007 and preceding years, whilst the frequency of use continues to fluctuate.

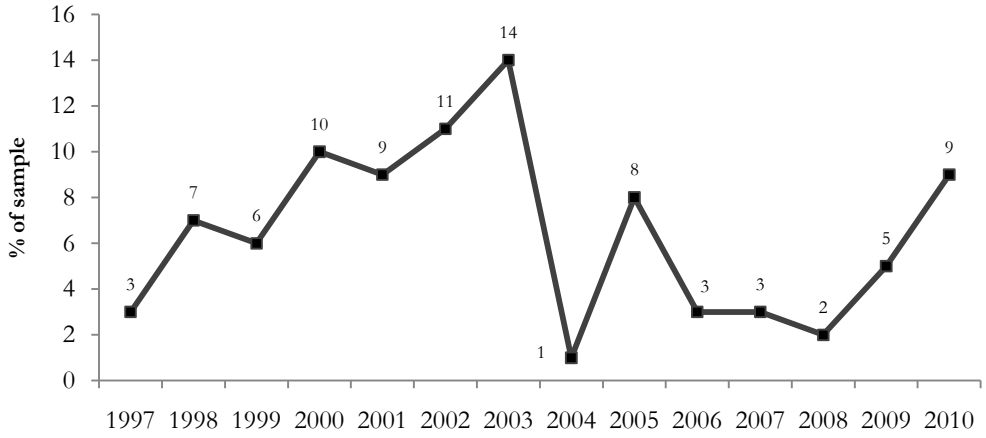
Figure 7: Methamphetamine, recent use and median number of days used, 1997-2010



Source: IDRS participant interviews
Note: Results of those reporting recent use in the previous six months

Of the 71 participants who reported using some form of methamphetamine in the last six months, six participants reported daily use of the powder, base, crystal or liquid forms during that period. This was similar to the number of methamphetamine users reporting daily use of any methamphetamine (n=5) in 2009. The long-term trend for percentage of participants using some form of methamphetamine daily is depicted in Figure 8. A small but steady increase in this parameter was observed prior to the drop in 2004, with small numbers reporting daily use.

Figure 8: Methamphetamine, percentage that used daily in the last six months, 1997-2010



Source: IDRS participant interviews

As would be expected of a sample of PWID, the majority of participants using all forms of methamphetamine reported having done so by injecting in the six months prior to interview. Of those who had used some form of methamphetamine in that period, 31% (55% in 2009) had injected powder, followed by base 43% (51% in 2009) and 63% had injected crystal (43% in 2009). Eight percent of participants reported smoking powder, 2% reported snorting and 4% swallowed; this remained stable compared to 2009. Fourteen percent of the recent base users reported smoking, an increase of 10% from 2009, followed by 10% swallowing and 2% snorting. Report of recent smoking of crystal increased from 9% in 2009 to 21% in 2010, both snorting and swallowing of crystal remained low (1% and 5% respectively) (see Table 5).

Of the 26 participants reporting methamphetamine as their drug of choice, all had used some form of methamphetamine in the last six months, 19 (73%) had used alcohol, 17 (65%) had used cannabis, 10 (38%) had used benzodiazepines (licit or illicit), five (19%) had used ecstasy, and three (11%) had used heroin during that period. Sixty-nine percent (n=49) of participants reporting use of any methamphetamine in the six months prior to interview also reported use of any opioid substance during that period.

Crystal and base were the forms most used by those who had used methamphetamine in the six months prior to interview (41% each). Powder was the form most used which was significant decrease (41% in 2009 vs. 18% in 2010; 95% CI 0.37-0.07). The proportion of participants reporting base and crystal as the form most used also increase (31% and 25% in 2009 respectively.

KE comments

- The majority of KE reported that methamphetamine was the most problematic drug they dealt with, especially crystal.
- Consistent with the results, the majority of KE (n=15) noted an increase in the use of methamphetamine, particularly crystal.
- KE reported that injecting use dominated (n=10) and three KE mentioned that users also smoked and two reported that users swallowed methamphetamine.
- A small number of KE commented that there was an increase in younger users, especially Asian males.

4.4 Cannabis

Key findings

- The proportion of participants who recently used cannabis increased; however, the frequency of use decreased compared to 2009.
- Thirty-three percent of recent cannabis users (n=18) stated they had used on a daily basis in the last six months.
- Of the 63 participants who had used cannabis recently, 54 (90%) reported use of hydro and 39 (65%) reported use of bush, within that period.

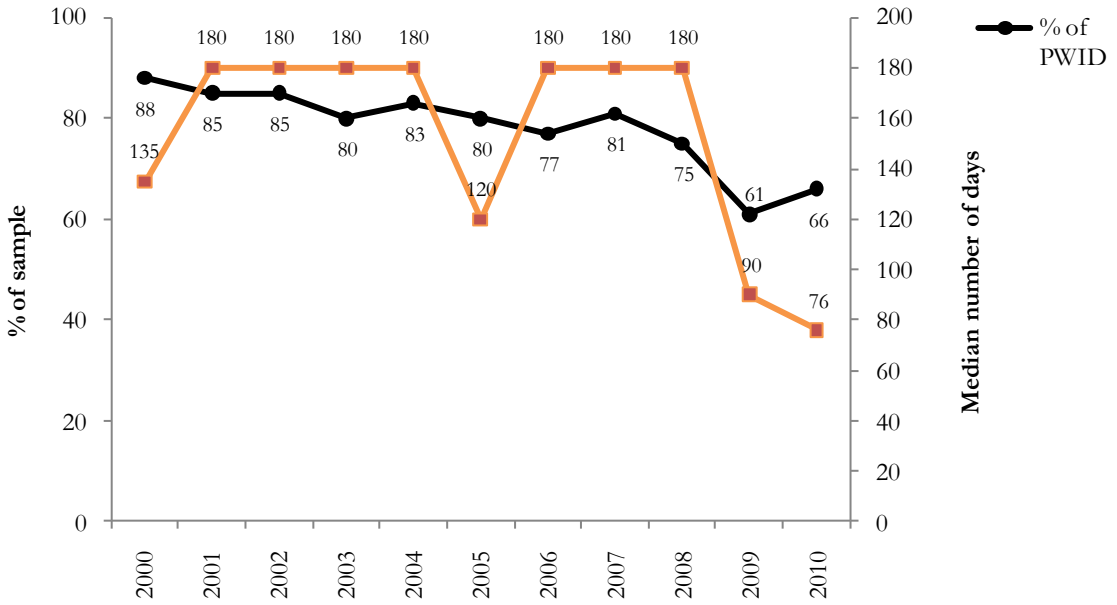
The current legal approach to cannabis use in SA is one of 'prohibition with civil penalties'. Under this approach, the production, possession or use of cannabis is illegal. Any cultivation of a cannabis plant by hydroponic means will result in the accused being arrested/reported and required to attend court. A single cannabis plant grown in the ground, i.e. not grown hydroponically, will attract an expiation fee. In cases where more than one cannabis plant is grown outdoors (bush cannabis), the accused is arrested and required to attend court. There are varying penalties for possession of cannabis offences and these penalties are dependent on the amount the person is located with. Under the Cannabis Expiation Notice Scheme, police issue the offender with an 'on-the-spot' fine notice. If the offender disagrees with any aspect of the charge, he or she can elect to go to court and defend the case rather than pay the expiation fee. Failure to pay the prescribed fee within the expiation period results in a summons being issued for the offender to appear in court. The original expiation fee becomes the fine, with the additional court costs. Changes to the legislation were introduced in 2007 codifying trafficking offences.

4.4.1 Current patterns of cannabis use

It is worth noting that because participants were recruited on the basis of their injecting drug use (rather than use of illicit drugs in general), the following data regarding patterns of cannabis use may not be typical of cannabis users in general, but specific to an injecting drug using population. The IDRS reports on cannabis use by a sample of PWID only.

Sixty-six percent of the participants reported having used cannabis a median of 76 days (range=2 to-180) during the last six months. Although cannabis is generally not the drug of choice among the IDRS sample, the majority of participants (92%) reported using this substance in their lifetime. There was an increase in reported use of cannabis in the six months prior to interview: 66% in 2010 compared to 61% in 2009. The median number of days cannabis was used by the participants in the previous six months was lower than the frequency of use reported by participants in 2009 (see Figure 9).

Figure 9: Cannabis, recent use and median number of days used, 2000-2010



Source: IDRS participant interviews
Note: Results from those reporting recent use in the previous six months

Thirty-three percent of recent cannabis users (n=18) stated they had used on a daily basis in the last six months, and 40% (n=25) reported they had used the drug on the day preceding the interview. These proportions differed slightly to those reported in 2009, when 39% of cannabis users reported daily use and 34% reported use of cannabis on the day preceding the interview. The trend for these parameters of cannabis use continues to be relatively stable over the long term.

Participants who had used cannabis in the six months prior to interview were asked to report the number of cones/joints/other they used on the last day they smoked. Readers should note: the term 'cone' refers to the indentation in a pipe/bong or a pipe/bong attachment in which cannabis is inserted to be ignited. The term 'cones', in the context of the question, refers to the number times the 'cone' was filled and the contents smoked on the last day the participant used. A 'bong' is a water-pipe apparatus which enables the filtering of cannabis smoke through a chamber. The majority of participants reported smoking cannabis (83%, or n=38) in 'cones' (median=one, range=0.25-60 cones) the last time they used and five participants reported smoking a median of one joint (range=1-2 joints) the last time they smoked cannabis.

Of the 63 participants who had used cannabis recently, 54 (90%) reported use of hydro and 39 (65%) reported use of bush, within that period. In addition, six participants (10%) reported use of 'hash' (cannabis resin) and four (7%) reported use of 'hash oil'. The majority

of the cannabis-using participants reported hydro as the form they had used most in the last six months (69%, n=40); the remainder reported bush was the form they had used most. It should be noted that included in these figures are the participants (49%, n=48) who stated that they were unable to distinguish between hydro and bush.

KE comments

- Seven KE identified cannabis as a problematic drug used by the users they were in contact with in the six months prior to interview.
- Cannabis was reported by all KE as being smoked.
- Most KE reports regarding regular ecstasy users' cannabis use stated use was common and ranged from casual to regular use, with daily use seen mainly in methamphetamine users.

4.5 Opioids

Key findings

- Twenty-four percent of participants reported they had used illicit morphine in the six months prior to interview on a median of eight days (range=1-180) and were similar to those reported by participants in 2009.
- The majority of morphine users (88%, n=21) also reported that the type they had used most during the last six months was illicit.
- There was slight change in the reported recent use (from 7% in 2009 to 12%) with frequency of recent use remaining relatively stable.
- Compared to 2009, the number of participants reporting recent use of illicit buprenorphine remained stable, whereas reported frequency of recent use was lower in 2010.
- The proportion of participants reporting recent use of illicit oxycodone in 2009 (n=16) was higher in 2010 compared to participant reports in 2009 (n=9); however, there was a decrease in the frequency of use reported by participants in 2010.

The IDRS investigates the use patterns, harms and market characteristics of a number of pharmaceutical opioids including methadone, buprenorphine, buprenorphine-naloxone, morphine and oxycodone. Use of these substances is broadly split into the following categories:

Use

1. Use of licitly obtained opioids, i.e. use of opioids obtained by a prescription in the user's name, through any route of administration (includes the use of these medications as prescribed).
2. Use of illicitly obtained opioids, i.e. those obtained from a prescription in someone else's name, through any route of administration ('illicit use').
3. Use of any opioids, i.e. does not distinguish between licitly and illicitly obtained opioids.

Injection

1. Injection of licitly obtained opioids.
2. Injection of illicitly obtained opioids.
3. Injection of any opioids.

Note on interpretation: the IDRS and the term 'diversion'

The IDRS documents the use of opioid medications, licitly obtained or otherwise, among a sentinel sample of PWID. These include opioids prescribed for opioid substitution treatment (OST) – i.e. methadone, buprenorphine and buprenorphine-naloxone maintenance treatments – in addition to opioids prescribed for pain relief (including morphine and oxycodone). With regard to OST, it is imperative to note that screening of participants ensured that those sampled had all been active in the illicit drug markets of the area and therefore were able to provide meaningful data on market indicators. However, whilst a proportion of those sampled in 2010 were engaged in such treatment at the time of

interview, responses presented are not representative of all clients engaged in drug treatment services.

4.5.1 Overview of opioid use among participants

Table 5 provides data on the history of use and route of administration of opioid substances for the 2010 participant sample. Opioid substances include heroin; morphine; 'homebake' (a crude opioid substance derived from codeine) (Reynolds, Lenton & Charlton et al., (1997); and other opioids (such as codeine, pethidine, oxycodone); as well as methadone/Physeptone® and buprenorphine.

Heroin was the opioid used by the largest proportion of the sample (64%) in the six months prior to interview, followed by either licit or illicit methadone (36%), licit or illicit morphine (25%), licit or illicit Suboxone® (20%), buprenorphine (licit or illicit) (24%), or either licit or illicit oxycodone (21%). Heroin use among participants is described in detail in section 4.2, with use of other opioids (illicit use only) described in the following sections of the current. It should be noted that sample sizes for these sections were relatively small and therefore should be interpreted with caution.

When all the opioid substance categories (heroin, morphine, homebake and other opioids, plus oxycodone, any methadone or buprenorphine) are collapsed, 77% (n=75) of participants had used some type of opioid substance (including licit and illicit use) in the six months prior to interview. When licit use (of methadone, morphine, buprenorphine, Suboxone® or oxycodone) is excluded, 71% (n=69) had used any of these substances in that time. Excluding heroin and licit use (of methadone, morphine, buprenorphine, Suboxone® or oxycodone), 39% (n=38) of participants had used some other opioid substance in the six months prior to interview.

4.5.2 Use of illicit morphine

Four participants (4%) nominated morphine as their drug of choice, 8% (n=8) reported morphine as the drug most often injected in the last month, and 11% (n=11) as the last drug they injected (see Tables 2 & 3).

Twenty-four percent of participants reported they had used illicit morphine in the six months prior to interview on a median of eight days (range=1-180); this was similar to 2009. Two participants reported daily use of illicit morphine in the six months prior to interview.

The majority of morphine users (88%, n=21) also reported that the type they had used most during the last six months was illicit. The main brands of illicit morphine used in that time were Kapanol® (by 63%, n=12), and MS Contin® (by 37%, n=7).

4.5.3 Use of illicit methadone

2010 was the eighth year that IDRS survey participants were asked to provide separate information on the use of licit and illicit methadone syrup and Physeptone® tablets.

Twelve of the participants reported having recently used illicit methadone syrup a median of six days (range=1-70) in the last six months. Of those, nine reported use of illicit methadone syrup by injecting a median of five days (range=2-70), and five participants reported use by swallowing during that period. This constituted a slight change in the reported recent use (from 7% in 2009 to 12%) with frequency of recent use remaining relatively stable (median=six days) compared to 2009 (median=five days).

Seven of the participants reported having used illicit Physeptone® tablets a median of two days (range=1-6) in the last six months. Of those, four reported use of illicit Physeptone® tablets by injecting a median of one day (range=1-3), and three reported use by swallowing during that period. This indicates an increase in the number of participants reporting recently using illicit Physeptone® tablets in 2010 when compared to 2009 (n=5), with frequency of use in 2010 slightly lower (two days) than participant use reported in 2009 (five days).

4.5.4 Use of illicit buprenorphine

IDRS survey participants were asked to provide separate information on the use of licit and illicit buprenorphine.

Nine participants reported having used illicit buprenorphine a median of 15 days (range=5-86) in the six months prior to interview. All participants who reported use of illicit bupreorphine did so by injection. Compared to 2009, the number of participants reporting recent use of illicit buprenorphine remained stable (n=9 in 2009), whereas reported frequency of recent use was lower in 2010 (median=15 days) compared to 2009 (median=23 days).

4.5.5 Use of illicit oxycodone

Sixteen participants reported recent use of illicit oxycodone on a median of 5.5 days (range=1-150) in the six months prior to interview. Of those, 15 reported use of illicit oxycodone by injecting on a median of six days (range=1-150) and four participants reported use by swallowing during that period. This indicates that the proportion of participants reporting recent use of illicit oxycodone in 2009 (n=16) was higher in 2010 compared to participant reports in 2009 (n=9); however, there was a decrease in the frequency of use reported by participants in 2010 compared to participant reports in 2009 (from a median of 11 days in 2009 to a median of five and a half days).

4.5.6 Use of illicit Suboxone®

Eight participants reported recent use of illicit Suboxone®, for a median of six days (range=2-35) in the six months prior to interview. Of those, seven reported use of illicit Suboxone® by injecting a median of six days (range=1-30), one reported smoking and four participants reported use by swallowing.

KE comments

- Nine KE reported clients were using more illicitly obtained prescription drugs such as Kaponal® (n=2) morphine (n=3) codeine (n=1), oxycontin (n-1). Buprenorphine was also mentioned by three KE and reflected a perception that they were used with mainly amphetamines or to supplement heroin. Three KE reported they had received more calls due to dependency on these opioids.
- Three KE reported an increase in trading of prescriptions.
- KE reported the main route of administration was crushed tablets which were then injected. Two KE reported use by smoking or swallowing.

4.6 Other drugs

Key findings

- Nineteen percent of IDRS participants had used ecstasy and 7% had used some type of hallucinogen in the six months prior to interview, with both recent use and frequency of use remaining stable.
- In 2010, a smaller proportion of participants (17%) reported recent use of illicit benzodiazepines compared to participant reports in 2009 (27%).
- The proportion of participants who reported recent use of cocaine compared to participant reports in 2009 remained stable; however, the frequency of recent use was lower.
- In 2010, 39% of participants reported ever using OTC codeine, with 22% reporting recent use on a median of six days.

4.6.1 Ecstasy

Use of ecstasy (MDMA) and hallucinogens, including lysergic acid (LSD) or 'trips', and naturally occurring compounds such as magic mushrooms, among the participant sample in the six months prior to interview is summarised in Table 5.

Nineteen percent of IDRS participants had used ecstasy (n=18) and 7% (n=7) had used some type of hallucinogen in the six months prior to interview, although neither had been consumed frequently, with a median of three days use of ecstasy (range=1-24) and two days (range=1-50) use of hallucinogens during that period. The use and frequency of both ecstasy and hallucinogens remained stable when compared to 2009. Both ecstasy and hallucinogens had mainly been used orally (ecstasy: 72%; hallucinogens: 100%), although 39% of participants also reported having used ecstasy by injecting during the six months prior to interview. In 2010, other parameters of use for these two drug classes were very similar to those reported in 2009.

Ecstasy and related drugs use has been examined annually in SA amongst a separate sample of primarily non-injecting drug users since 2000, previously as a module of the IDRS, but currently known as the Ecstasy and related Drugs Reporting System (EDRS) – formerly the Party Drugs Initiative (PDI). State and national reports are produced annually: see http://www.med.unsw.edu.au/ndarcweb.nsf/page/Drug%20Trends.

4.6.2 Illicit benzodiazepines

Sixteen participants reported use of illicit benzodiazepines on a median of 10 days (range=1-120) in the six months prior to interview. Fifteen participants reported use by swallowing, and two participants also reported use by injecting for a median of 40 days in that time. In 2010, a smaller proportion of participants (17%) reported recent use of illicit benzodiazepines compared to participant reports in 2009 (27%).

Nearly two-thirds (64%) of the users reported the main type of illicit benzodiazepine used in the six months prior to interview was diazepam (n=7).

4.6.3 Cocaine

Eleven participants reported use of cocaine on a median of one day (range=1-6) in the six months prior to interview. Fifty-five percent of these participants reported use by injecting on a median of one day (range=1-6) in that time. The proportion of participants who reported recent use of cocaine compared to participant reports in 2009 remained stable (from 10% to 11% respectively). However, the frequency of recent use was lower; however, due to small numbers this and other findings should be interpreted with caution. It should be noted that such results indicate that cocaine use by those who inject drugs in Adelaide is rare.

4.6.4 Pharmaceutical stimulants

Since 2004, participants have been asked to comment about their use of pharmaceutical stimulants. This includes drugs such as dexamphetamine and methylphenidate, which are medications most commonly prescribed for Attention Deficit Hyperactivity Disorder (ADHD). From 2006, the IDRS asked about licit and illicit forms of pharmaceutical stimulants. Seventeen percent reported using illicit pharmaceutical stimulants at least once in their lifetime (10% in 2009). Four percent reported using illicit pharmaceutical stimulants over the preceding six months (3% in 2009). The median days of use of illicit pharmaceutical stimulants increased in 2010 to 26 days (range=1-60 days) in the six months preceding interview (15 days, range=3-20 in 2009). Recent injection of illicit pharmaceuticals was reported by only 1% of the sample.

In 2010, four out of the five of the participants who reported recent use of pharmaceutical stimulants reported the use of illicitly obtained prescription amphetamines as the form most used. The most common form used was Dexamphetamine® (n=4), followed by Ritalin® (n=1). This suggests that the majority of participants are using pharmaceutical stimulants that are prescribed to another person.

4.6.5 Over the counter codeine

Codeine is a mild opioid. In Australia, over the counter (OTC) codeine is readily available in pharmacies. It is mainly used for the relief of mild to moderate pain. OTC codeine medications vary in codeine quantity and are only available in combinations (usually with analgesics or decongestants). There are associated health concerns with the prolonged use of codeine, most notably the risk of liver damage. There are also health risks associated with overdose of combination drugs such as paracetamol.

The following section has been included in the survey to investigate OTC codeine use amongst the sample of PWID. The questions aim to investigate the extra-medical use of OTC codeine, acute and chronic pain and pain management, frequency of use, main brands used, the reason for use, and the amount of tablets/capsules used per dose. For more

information on the harms associated with OTC codeine use, see Dutch (2008) and Dyer, Martin & Mitchell et al., (2004).

In 2010, 39% of participants reported ever using OTC codeine, with 22% reporting recent use on a median of six days (range=1-90 days). Twenty participants reported swallowing and a further one reported injecting as the route of administration of OTC codeine. Of those who reported recent use of OTC codeine, 47% reported use of Nurofen Plus®, followed by Codapane® (16%), chemists own (15%) and Panadeine® (11%), and one participant reported use of Mersyndol® and Panafen Plus®.

KE comments

- Three KE reported benzodiazapines as a problem drug used by the users who they had the most contact with in the six months prior to interview. KE reported that users mainly inject and tend to use this substance with amphetamines.
- Forensic KE reported an increase in bunk pills containing pharmaceuticals (paracetamol, caffeine, ibuprofen, codeine, tramadol etc). Other KE reported a decrease in ecstasy use in the users they have contact with.
- Three KE commented that cocaine was not generally seen but was thought to be on the increase.
- One KE mentioned the use of codeine with amphetamines.

5.0 PRICE, PURITY AND AVAILABILITY

Key findings

- The median price for a cap of heroin was reported to be $100 and $360 for a gram with the price reported as stable over the previous six months.
- The purity was perceived as low to medium and there were more reports that the purity had decreased compared to those in 2009.
- The majority of the participants reported that heroin was easy to obtain although there was an increase in the proportion reporting that it was difficult. The availability was perceived as stable.
- Roughly half the sample scored heroin from a dealer at an agreed location.
- KE reports generally supported the views of the participants.

5.1 Heroin

5.1.1 Price

Among those who could comment on the price of heroin, the majority of participants reported price per cap. The median price at last purchase for a cap of heroin was $100 (range=$50-$150, n=20) and was similar to reports in 2009 ($100, range=$50-$100, n=31), The median price at last purchase for a gram of heroin was $360 (range=$350-$400, n=3) and was similar to that reported in 2009 ($400, n=8), although only small numbers reported the price for both years.

Of those participants who were confident to report on the current price of heroin (n=52), 87% reported the price as stable over the last six months (see Table 9).

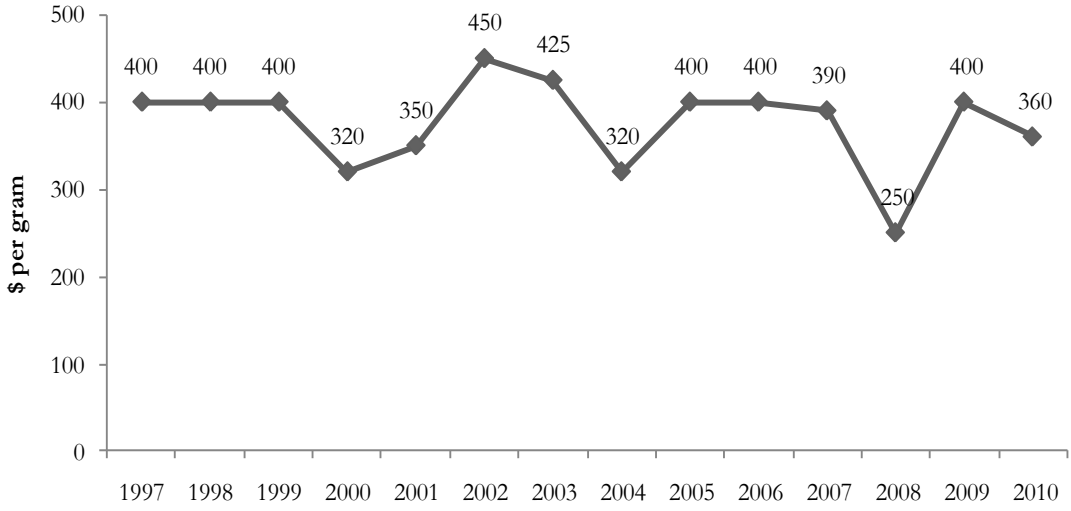
Table 9: Change in price of heroin over last six months, 2009-2010

Reported price status	% able to answer	
	2009 (n=67)	**2010 (n=52)**
Increasing	8	**12**
Stable	88	**87**
Decreasing	0	**2**
Fluctuating	5	**0**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

Despite a decrease in 2008, the median price paid for a gram of heroin at last purchase has continued to fluctuate over the years data has been collected (see Figure 11). It should be noted, however, that the median price of a gram of heroin has been based on small sample sizes (n<18) since 2001 and has fluctuated over the years at around $400 per gram.

Figure 10: Median price of a gram of heroin, last purchase, 1997-2010



Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

5.1.2 Purity

Tables 10 and 11 summarise the current purity of heroin and the changes in heroin purity over the last six months, according to participants. In 2010, 42% of those able to answer reported the current purity of heroin as low, an increase from 2009 which was 29%. Reports indicating purity had decreased was also shown in the proportion who perceived heroin to be of medium purity (37%), a decrease from 2009. However, the largest proportion of participants reported recent purity as medium or low in both years. Participant reports of the current purity of heroin appear to be varied in 2010, with approximately a third reporting it as stable, decreasing or fluctuating.

Table 10: Current purity/strength of heroin, 2009-2010

How pure would you say heroin is at the moment?	% able to answer	
	2009 (n=65)	**2010 (n=52)**
High	14	**10**
Medium	49	**37**
Low	29	**42**
Fluctuates	8	**11**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

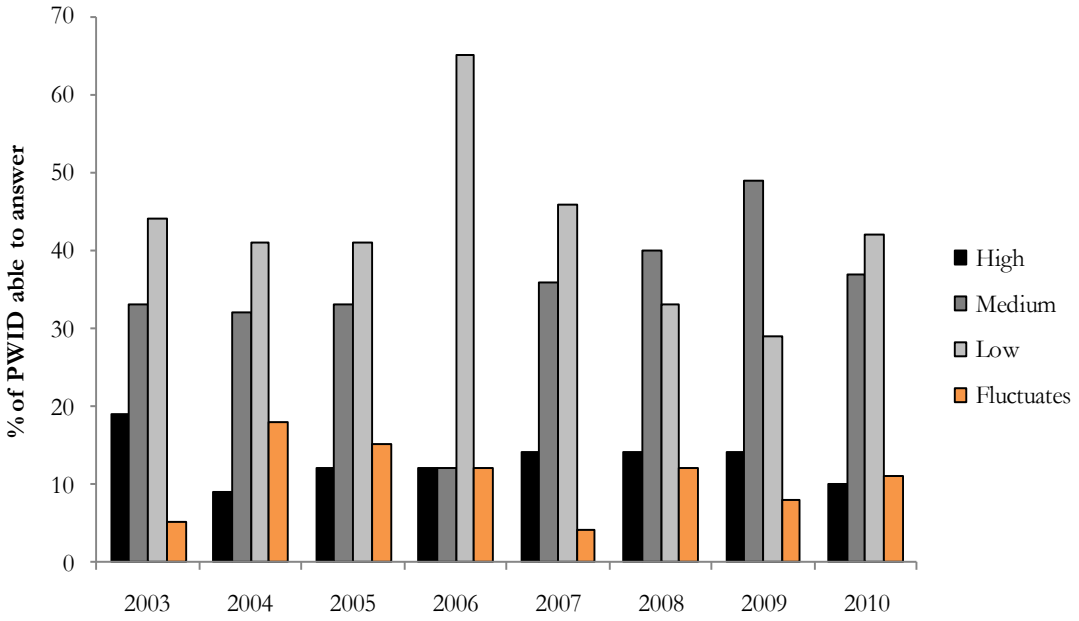
Table 11: Change in purity/strength of heroin in last six months, 2009-2010

Has the purity of heroin changed in the last 6 months?	% able to answer	
	2009 (n=64)	**2010 (n=50)**
Increasing	17	**6**
Stable	48	**38**
Decreasing	5	**30**
Fluctuating	30	**26**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

Figure 11 shows the trend in purity of heroin, as perceived by participants, from 2000 onward. It can be seen that the purity of heroin has not returned to pre-shortage levels, and although increasing over the past three years, it appears to have fallen again in 2010.

Figure 11: Perception of current purity of heroin, 2003-2010

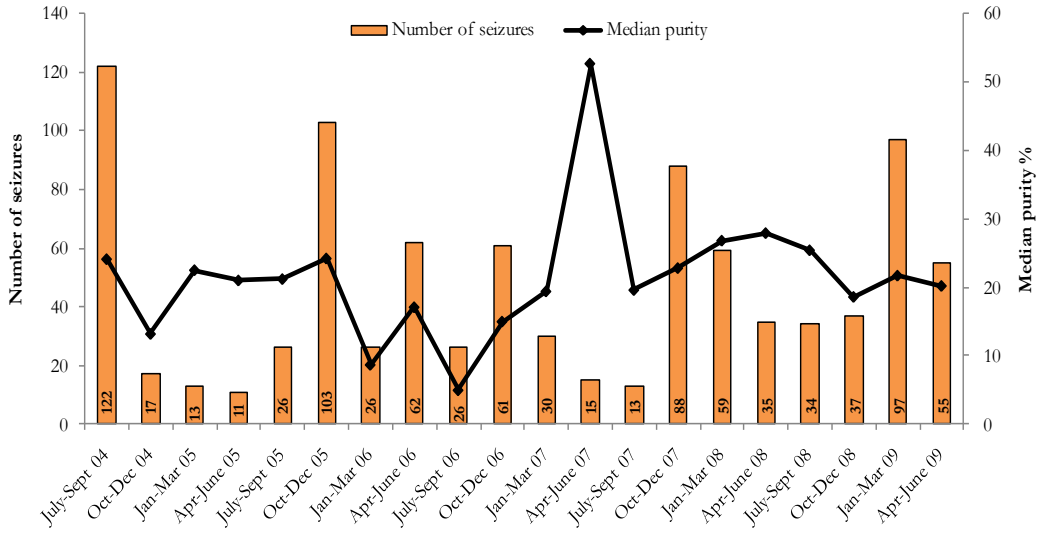


Source: IDRS participant interviews
Note: The category 'fluctuates' was not included in 2000; Note: 'Don't know' was excluded from 2009 onwards

ACC data were unavailable for 2009/10 at the time of publication. Hence, the data provided by the ACC only relates to the purity data on heroin seized in SA during the last financial year 2008/09 (ACC, 2010). Figure 12 shows the number of seizures received and analysed by the state forensic laboratory per quarter, and the median purity per quarter of those seizures, from 2004/05 to 2008/09. The total number of SAPOL heroin seizures analysed in 2008/09 was 223 and the median purity was 21.8%. The vast majority of SAPOL seizures analysed (n=212) were less than two grams.

Despite quarterly variation, and variation in the number of seizures, the median purity of SAPOL heroin seizures decreased in 2008/09 (21.8%) from 25.1% in 2007/08 and the number of seizures received and analysed was higher (from 195 in 2007/08 to 223 in 2008/09). The median purity for these years was considerably lower than that reported for SAPOL seizures in pre-shortage 1999/00 (48.3%, n=246).

Figure 12: Number of heroin seizures analysed and median heroin purity in SA 2004/05-2008/09



Source: ACC (2005-2010)

5.1.3 Availability

Tables 12 and 13 summarise the current availability of heroin and changes in heroin availability over the last six months, according to participants' reports. The majority of participants answering the section regarding availability of heroin in 2010 reported it was either easy or very easy to obtain heroin (77%), although there was an increase in reports of heroin being difficult to obtain (6% in 2009 vs. 21% in 2010). Just under three-quarters (69%) of the participants perceived heroin availability to be have been stable Reports that heroin was more difficult to obtain increased from 9% in 2009 to 21% in 2010, mirroring reports given for the availability.

Table 12: Availability of heroin currently, 2009-2010

How easy is it to get heroin at the moment?	**% able to answer**	
	2009 (n=66)	**2010 (n=53)**
Very easy	50	**30**
Easy	44	**47**
Difficult	6	**21**
Very difficult	0	**2**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

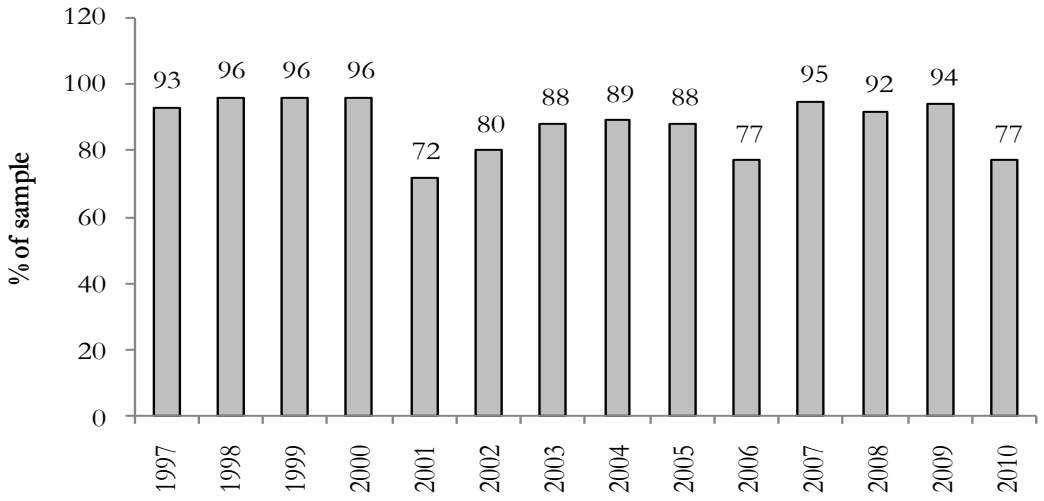
Table 13: Change in availability of heroin over the last six months, 2009-2010

Has [availability] changed in the last 6 months?	% able to answer	
	2009 (n=65)	**2010 (n=52)**
More difficult	9	**21**
Stable	85	**69**
Easier	6	**10**
Fluctuates	0	**0**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

Long-term trend data for the availability of heroin, as reported by participants in all previous surveys, are presented in Figure 13 and show that the proportions indicating that heroin was very easy or easy to obtain in the six months prior to interview has fluctuated somewhat over the years between 72% in 2001 and 96% in 2000. 2010 sees the proportion fall again to 77% from 94% in 2009.

Figure 13: Availability of heroin in the last six months, 1997-2010



Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

Participants were also asked about both the person from whom, and the location from where, they had last obtained heroin (see Table 14). The majority of participants who provided information on the source of their heroin in the six months prior to interview (n=52), reported they usually obtained heroin from a known dealer (46%). More than half of the participants in 2010 who had recently used heroin bought their heroin at an agreed public location (52%), followed by home delivery and dealer's home (15% each).

Table 14: Source person and source venue last time obtained heroin in the last six months, 2010

Last source person and venue	2009 (n=67)	**2010 (n=52)**
Person		
Street dealer	2	**14**
Known dealer	60	**46**
Friends	16	**23**
Acquaintances	10	**4**
Mobile dealer	9	**10**
Unknown dealer	3	**4**
Venue		
Home delivery	24	**15**
Dealer's home	8	**15**
Friend's home	6	**6**
Acquaintance's home	5	**6**
Agreed public location	54	**52**
Street market	2	**4**
Other		**2**

Source: IDRS participant interviews

5.1.4 Trends in heroin use

The general trend that emerged from participant comments were that heroin was perceived as harder to obtain and therefore prices had risen. However, reports were that the quality of heroin was poor and that people were moving away from heroin to other drugs, primarily crystal.

KE comments

- Of the six KE who were able to provide information on the price of heroin, all reported the price as $50 per cap, similar to participants' reports. One KE reported an increase in price due to availability.
- Six KE reported the purity of heroin as medium to low, with views of the purity either decreasing (n=4) or as stable (n=2).
- Two forensic KE reported differing views on availability: one saw it as easier to obtain due to changes in import routes and that it was coming straight into port rather than from Sydney. However, the other saw heroin as being harder to obtain due an increase in seizures.
- Forensic KE reported an increase in the number, purity and size of seizures. Of the four KE in the health field able to comment on the purity of heroin, two indicated that it was of medium level and the other two that it was of poor quality but fluctuating.

5.2 Methamphetamine

Key findings

- The cost of powder remained stable whilst the price for both base and crystal increased compared to 2009.
- Powder was reported to be predominantly fluctuating. Base and crystal amphetamines were reported to be higher than in 2009. The purity of all forms were perceived as stable over the preceding six months.
- The availability of all forms of methamphetamine was reported as easy or very easy to obtain and remained stable.
- Participants generally reported scoring from friends or a known dealer at a private residence for all forms of amphetamine.

5.2.1 Price

5.2.1.1 Methamphetamine – Powder

The last reported price paid for a gram or point of powder was a median of $400/gram (n=1) or $50 per point (range=$35-$100, n=11). The last price paid for a gram or point of powder remained stable. It should be noted that only a small number of participants commented on these prices.

5.2.1.2 Methamphetamine – Base

The last reported price paid for a gram or point of base was a median of $210/gram (range=$100-$900, n=4), or $100 per point (range=$40-$100, n=16). The last price paid for a point of base was double that reported in 2009 ($50).

5.2.1.3 Methamphetamine – Crystal

The last reported price paid for a gram or point of crystal was a median of $260/gram (range=$100-$900, n=4) or $75 per point (range=$50-$100, n=9). The last price paid for a gram of crystal was lower in 2010, whilst the price per point increased from $50 to $75. It should be noted that only a small number of participants commented on these prices.

Table 15: Reported price of all forms of methamphetamine, 2009-2010

	2009	2010
Price ($) SPEED		
Per point	50	50
Per gram	400^	400^
Price ($) BASE		
Per point	50	100
Per gram	425	210^
Price ($) ICE/CRYSTAL		
Per point	50	75
Per gram	600	260^

Source: IDRS participant interviews
^ Small numbers reporting (n<10); interpret with caution
Note: 'Don't know' was excluded from 2009 onwards

Table 16 summarises the participant reports of recent change in the price of the three main forms of methamphetamine. In 2010, the majority of participants answering this section reported the price of all forms of methamphetamine to be stable or increasing. For base in particular, more participants indicated the price was increasing, and fewer participants indicated the price was stable in the six months prior to interview, compared to 2009.

Table 16: Change in price of methamphetamine over last six months, 2009-2010

Reported price status	Powder		Base		Crystal	
	% able to answer					
	2009 (n=25)	**2010 (n=19)**	2009 (n=28)	**2010 (n=35)**	2009 (n=22)	**2010 (n=37)**
Increasing	43	**47**	36	**46**	50	**32**
Stable	64	**42**	57	**46**	41	**57**
Decreasing	0	**5**	0	**0**	5	**0**
Fluctuating	0	**5**	4	**9**	5	**11**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

Long-term changes in the last purchase price of a point or gram for the different forms of methamphetamine have been difficult to gauge in last few years, as few participants have been able to comment.

5.2.2 Purity

Tables 17 and 18 summarise the current purity of the three forms of methamphetamine and the changes in methamphetamine purity over the last six months according to participants. There were a few differences reported regarding the purity of the three different forms of methamphetamine in 2010. Thirty-seven percent of those able to comment in 2010

perceived the purity of powder as high, a difference from 2009 (16%) with a larger proportion also reporting that the purity fluctuates (16% from 0% in 2009). The purity of base was reported by over half (51%) to be higher and increased from reports in 2009. Crystal was reported as being of high purity by nearly half of those able to comment, also an increase from 2009.

Table 17: Purity/strength of methamphetamine currently, 2009-2010

How pure would you say [powder/base/crystal] is at the moment?	Powder		Base		Crystal	
	% able to answer					
	2009 (n=25)	**2010 (n=19)**	2009 (n=28)	**2010 (n=35)**	2009 (n=22)	**2010 (n=39)**
High	16	**37**	26	**51**	36	**46**
Medium	44	**26**	30	**20**	23	**21**
Low	40	**21**	33	**9**	18	**18**
Fluctuates	0	**16**	11	**20**	23	**15**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

Almost half of the participants able to comment reported that the purity of all forms methamphetamine had been stable in the six months prior to interview. This was a higher proportion than in 2009.

Table 18: Change in purity/strength of methamphetamine in last six months, 2009-2010

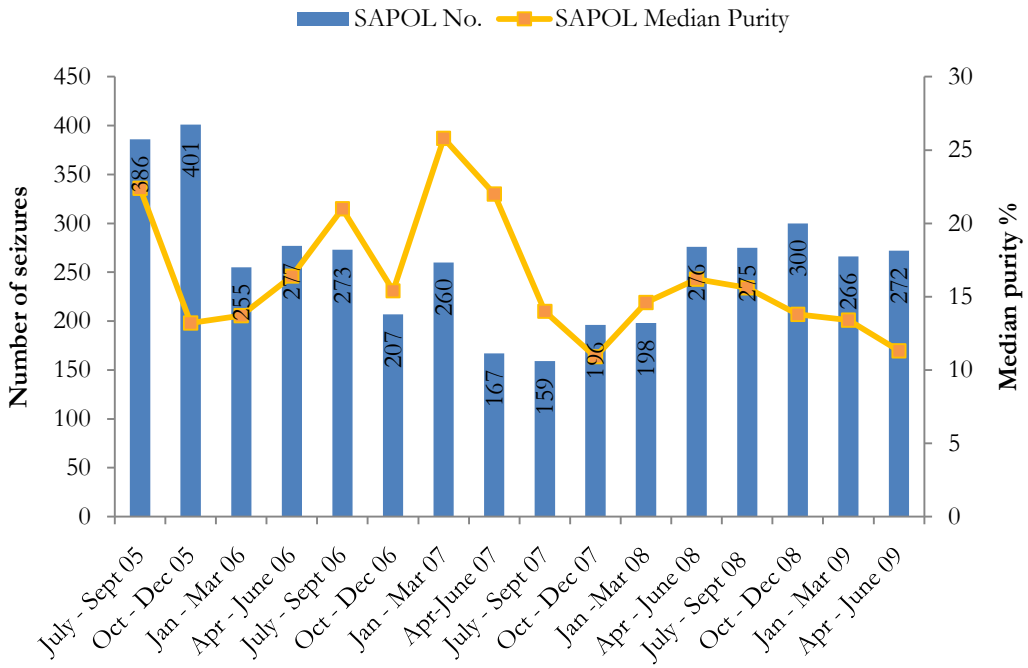
Has the purity of [powder /base/crystal] changed in the last 6 months?	Powder		Base		Crystal	
	% able to answer					
	2009 (n=25)	**2010 (n=19)**	2009 (n=28)	**2010 (n=34)**	2009 (n=22)	**2010 (n=39)**
Increasing	16	**16**	11	**24**	18	**10**
Stable	16	**42**	25	**44**	18	**44**
Decreasing	48	**21**	46	**3**	27	**26**
Fluctuating	20	**21**	14	**29**	36	**21**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

The Australian Crime Commission (ACC) data were unavailable for 2009/10 at the time of publication. As such, data provided by the ACC relates to the purity data on methamphetamine seized in SA during the last financial year 2008/09 (ACC, 2009). Figure 14 shows the number of methamphetamine seizures received and analysed by the state forensic laboratory (within the quarter depicted) and the median purity per quarter of those seizures from 2005/06 to 2008/09. The total number of SAPOL methamphetamine seizures

analysed from July 2008 to June 2009 was 1,113 and the median purity was 13.3%. The majority of seizures analysed (n=843) were less than or equal to two grams. Overall, the number of seizures of methamphetamine seized by SAPOL in SA for 2008/09 increased slightly compared to the previous year which reported 829. The median purity decreased from 14.7% % in 2007/08 to 13.3% in 2008/09.

Figure 14: Number of methamphetamine seizures analysed and median methamphetamine purity in SA, 2005/06-2008/09



Source: ACC, 2006-2010

5.2.3 Availability

Tables 19 and 20 summarise the current availability of the three main forms of methamphetamine and the changes in availability over the last six months according to participant reports. In 2010, all three types of methamphetamine were reported as easy or very easy to obtain by 82% or more of participants able to answer these sections. In 2010, more participants reported that the base and crystal forms were easy/very easy to obtain. The majority also reported that availability of all forms had been stable over the last six months.

Table 19: Availability of methamphetamine currently, 2009-2010

How easy is it to get [powder/base/crystal] at the moment?	Powder		Base		Crystal	
	% able to answer					
	2009 (n=25)	**2010 (n=21)**	2009 (n=28)	**2010 (n=34)**	2009 (n=22)	**2010 (n=38)**
Very easy	36	**38**	36	**35**	46	**32**
Easy	48	**48**	25	**47**	23	**53**
Difficult	16	**14**	32	**12**	18	**13**
Very difficult	0	**0**	7	**6**	14	**3**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

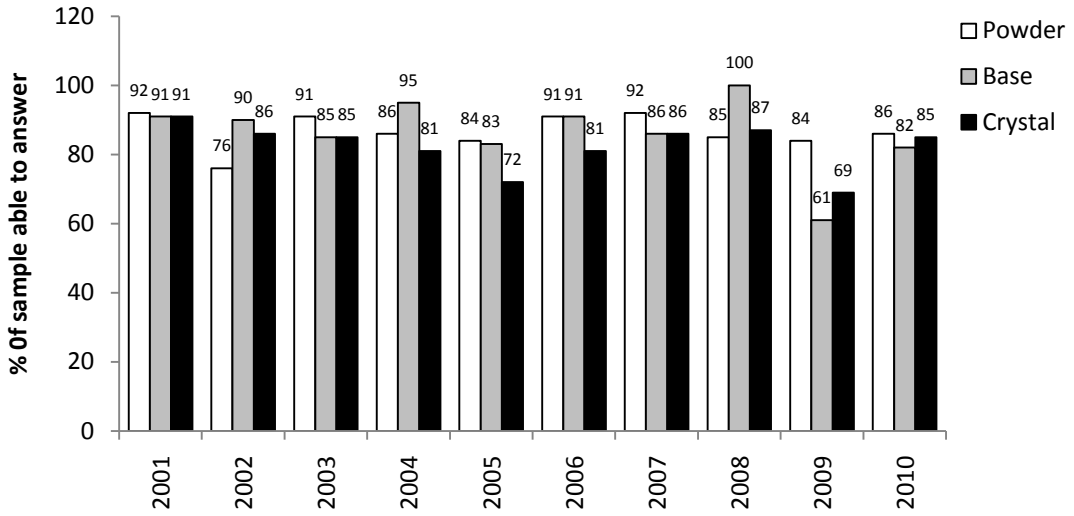
Table 20: Change in availability of methamphetamine over the last six months, 2009-2010

Has [availability] changed in the last 6 months?	Powder		Base		Crystal	
	% able to answer					
	2009 (n=25)	**2010 (n=21)**	2009 (n=28)	**2010 (n=34)**	2009 (n=22)	**2010 (n=38)**
More difficult	12	**5**	29	**21**	41	**11**
Stable	72	**81**	57	**71**	50	**74**
Easier	8	**5**	0	**6**	5	**16**
Fluctuates	4	**10**	7	**3**	5	**0**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

Figure 15 shows the trend in availability of methamphetamine as reported by participants since 2002. Methamphetamine has generally been considered easy or very easy to obtain across all years and for all forms (since differentiation was made in 2001; for figures prior to 2001, please see previous editions of the IDRS SA report).

Figure 15: Availability of methamphetamine in the last six months, easy or very easy, 2001-2010



Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

Participants were asked about both the person and location they obtained methamphetamine from the last time they had obtained the various forms. Table 21 shows the majority of methamphetamine users reported obtaining all forms of methamphetamine from friends followed by known dealers.

Table 21: Last usual source person and venue used for obtaining various forms of methamphetamine in the last six months, 2010

Usual source person and venue of those able to answer (%)		Powder (n=20)	Base (n=34)	Crystal (n=39)
Person	Street dealer	11	0	5
	Friend	55	50	41
	Known dealer	15	35	36
	Acquaintances	0	15	10
	Unknown dealer	10	0	0
	Other	10	0	8
Venue	Home delivery	20	24	10
	Dealer's home	15	18	28
	Friend's home	30	21	26
	Acquaintance's home	0	6	5
	Agreed public location	0	0	0
	Other	30	29	26

Source: IDRS participant interviews

The locations/venues that participants last obtained powder from were either from a friend's home followed by other venue. Base was commonly scored at a friend's or at home, with other venue also mentioned. Crystal was obtained from a dealer's or friend's home or other location.

5.2.4 Trends in methamphetamine use

When asked about recent general trends in drug use, most commented that more people in general were using methamphetamines, and particularly younger people. Participants reported that crystal was more readily available, with the quality and price high. However, the quality of speed and base were thought to be low or fluctuating.

KE comments

- Eight KE were able to provide information regarding price of methamphetamine, with all reporting a range of prices for a point from $50-$100. KE reported that the price of a gram could range from $400-$800 per gram depending on the form and purity of methamphetamine.
- In agreement with participants, six KE (able to comment) reported that the price of methamphetamine had increased and two suggested the price was stable.
- The majority of KE who could comment reported that the purity was high, especially for crystal. Two KE reported methamphetamine to be of medium purity and two as fluctuating. Reports on the change of purity over the previous six months varied.
- Six KE commented that methamphetamine availability in general had decreased especially in relation to crystal in the previous year.
- Forensic and law enforcement KE commented that seizures were shifting away from methamphetamine to amphetamine (around a third of seizures). The number of methamphetamine labs has increased in the last year.
- KE also commented that the introduction of pseudoephedrine controls appears to be affecting the quality of methamphetamine produced, with the 'cooks' experimenting with various precursors.

5.3 Cannabis

Key findings

- The price for both hydro and bush cannabis remained stable in 2010.
- A higher proportion of participants able to comment reported that the purity was medium with fewer reports of high potency compared to 2009.
- Availability was still perceived to be easy to very easy and was reported to be stable.
- Participants scored cannabis primarily from friends and in a friend's home.

To ensure more detailed information was collected on the different forms of cannabis, the cannabis section was separated, from 2003 onward, into hydro (hydroponically grown) and bush (grown outdoors).

The following sections refer to a bag as a standard measure (particular to the SA cannabis market). A detailed investigation of the weight/content of a bag of cannabis was undertaken in 2002 (Longo, Christie & Ali et al., 2003). Briefly, in the 2002 survey, 33 participants gave a single value of the average weight of cannabis bags sold in SA, with a median of two grams and a mean of 2.5 grams. A further 19 gave both a lower and upper weight range for cannabis bags. The median lower range was two grams (mean=2.1) and the median upper range was three grams (mean=2.9). It can be understood, therefore, that the amount of cannabis in a bag may fluctuate, but that a bag in SA generally conveys a weight of cannabis between two and three grams.

5.3.1 Price

Participants reported the price for their last purchase to be a median of $220/ounce for hydro (range=$150-$250, n=12) and $200/ounce (range=$150-$200, n=9) for bush. There was no difference in the reported prices of a bag of hydro compared to bush cannabis. The most common amount purchased in the last six months was a bag and the reported median price paid by participants at last purchase was $25, for either hydro (range=$15-$50, n=17) or bush (no range, n=11).

Table 22: Price of last cannabis purchases, 2009-2010

	2009	2010
Price ($) HYDRO		
Per gram	-	**25^**
Per quarter ounce	50 (50-100)	**60^**
Per ounce	225 (180-250)	**220**
Per bag	25 (20-30)	**25**
Price ($) BUSH		
Per gram	-	**25^**
Per quarter ounce	-	**-**
Per ounce	200 (150-200)	**200^**
Per bag	25 (20-50)	**25**

Source: IDRS participant interviews
^ Small numbers

The price of both hydro and bush cannabis was generally reported as stable over the last six months; however, more participants reported that prices were increasing compared to reports made in 2009 (see Table 23).

Table 23: Change in price of cannabis over the last six months, 2009-2010

Reported price status	% able to answer			
	2009		2010	
	Hydro (n=37)	Bush (n=18)	**Hydro (n=38)**	**Bush (n=27)**
Increasing	19	0	**37**	**15**
Stable	73	94	**58**	**82**
Decreasing	5	6	**3**	**4**
Fluctuating	3	0	**3**	**0**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

5.3.2 Purity

Tables 24 and 25 summarise the current potency of cannabis and the changes in cannabis potency over the last six months, according to participant reports. In 2010, the strength of hydro or bush cannabis was reported as medium by roughly half of the participants able to answer (hydro: 56%; bush: 46%) and largely stable in the last six months. Compared to 2009, fewer participants in 2010 reported the current potency of hydro and bush cannabis as high.

Table 24: Current potency/strength of cannabis, 2009-2010

How strong would you say cannabis is at the moment?	% able to answer			
	2009		2010	
	Hydro (n=37)	Bush (n=18)	**Hydro (n=41)**	**Bush (n=28)**
High	65	28	**63**	**39**
Medium	24	56	**34**	**46**
Low	3	17	**2**	**11**
Fluctuates	8	0	**0**	**4**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

Table 25: Change in potency/strength of cannabis in last six months, 2009-2010

Has the strength of cannabis changed in the last 6 months?	% able to answer			
	2009		2010	
	Hydro (n=36)	Bush (n=16)	**Hydro (n=40)**	**Bush (n=27)**
Increasing	0	6	**5**	**7**
Stable	81	88	**65**	**67**
Decreasing	6	6	**10**	**19**
Fluctuating	14	0	**20**	**7**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

5.3.3 Availability

Tables 26 and 27 summarise the current availability of cannabis and the changes in cannabis availability over the last six months, according to participant reports. In 2010, over half of participants reported both types of cannabis as easy or very easy to obtain, 58% for hydro and 77% for bush. Nearly three-quarters of those able to answer (68%) reported availability of hydro was stable in the last six months. The majority of the participants who were able to answer reported the availability of bush to be stable (85%). Fewer participants in 2010 (19%) reported that bush cannabis was difficult to obtain in the six months prior to interview than in 2009 (42%), with more participants in 2010 reporting bush cannabis was easy/very easy to obtain (2009: 58%; 2010: 77%) in that period.

Table 26: Availability of cannabis currently, 2009-2010

How easy is it to get cannabis at the moment?	% able to answer			
	2009		2010	
	Hydro (n=37)	Bush (n=19)	**Hydro (n=40)**	**Bush (n=26)**
Very easy	32	37	**30**	**19**
Easy	46	21	**60**	**58**
Difficult	16	42	**10**	**19**
Very difficult	5	0	**0**	**4**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

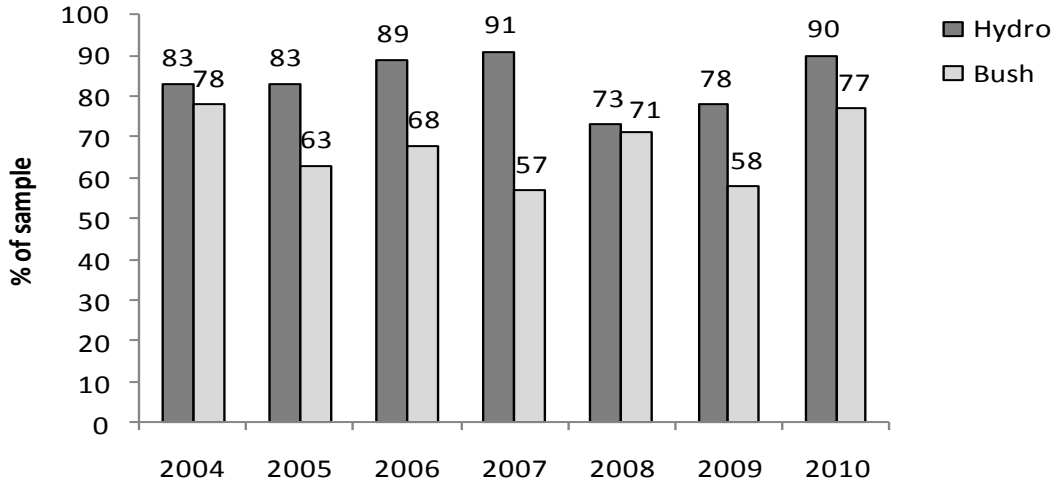
Table 27: Change in availability of cannabis over the last six months, 2009-2010

Has [availability] changed in the last 6 months?	% able to answer			
	2009		2010	
	Hydro (n=37)	Bush (n=19)	**Hydro (n=40)**	**Bush (n=26)**
More difficult	27	21	**18**	**12**
Stable	62	68	**70**	**73**
Easier	5	11	**8**	**0**
Fluctuates	5	0	**5**	**15**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

Figure 16 shows the long-term trend in the proportion of participants reporting availability of cannabis as easy or very easy since 2004. Reported ease of obtainability remained steady until 2008, particularly for hydro (which tends to dominate in the Adelaide market), with a decrease in availability of hydro seen in 2008 and 2009. In 2010, ease of availability has increased again. The ease of obtaining bush also increased in 2010.

Figure 16: Availability of cannabis in the last six months, 2004-2010



Source: IDRS participant interviews
Note: Prior to 2004, availability of hydro and bush was combined; 'Don't know' was excluded from 2009 onwards

Table 28 presents information collected from participants on the source (both person and venue) from which participants had last obtained cannabis. In 2010, the majority of participants who were able to comment reported that they usually obtained cannabis from a friend (78% for hydro and 70% for bush) in the six months prior to interview. The remainder of the participants reported they had usually scored cannabis from some type of dealer (hydro: 18%; bush: 26%). Participants reported that the venue they had usually obtained cannabis from was a friend's home (hydro: 50%; bush: 56%).

Table 28: Source person and source venue of last purchase of hydro and bush cannabis, 2010

Usual source or method of obtainment		Hydro (n=40)	Bush (n=27)
Person[#]	Street dealer	0	0
	Friend	78	70
	Known dealer	15	15
	Acquaintances	3	4
	Unknown Dealer	3	7
	Mobile dealer	0	4
	Other	2	0
Venue[#]	Home delivery	25	15
	Dealer's home	8	11
	Friend's home	50	56
	Acquaintance's home	3	7
	Street Market	0	0
	Agreed public location	13	7
	Other	2	4

Source: IDRS participant interviews
[#] Only one response allowed

KE comments

- Five KE commented on the price of cannabis, and reported the price of cannabis as being $25-$30 for a bag and $240-$400 for an ounce, with the price stable.
- Two KE commented that the quality of cannabis was high for hydro.
- Two KE reported that the availability of cannabis was either decreasing or remained stable.
- Law enforcement KE reported the predominant supply network still consists of individuals or small groups growing on a commercial scale (including doing transport 'runs' interstate), and criminal syndicates operating on a larger scale (more frequent and/or larger quantities) – a pyramid of selling. Law enforcement KE report middle level trafficking and said that the cannabis market has either remained stable or is decreasing.

5.4 Morphine

5.4.1 Price

In 2010, the median price paid by participants at last purchase of 100mg of Kapanol® was higher ($60) than in 2009 ($40). The median price paid for 100mg of MS Contin® at last purchase was $35, and again was lower than the median price reportedly paid by participants at last purchase in 2009 (see Table 29). Readers should note the small number of participants commenting on prices.

Table 29: Price of morphine at last purchase by participants, 2009-2010

Amount bought	Median price paid, $ (range)
MS Contin® – 60mg	30^ (not reported)
MS Contin®– 100mg	35^ (20-50) *50 (15-120)*
Kapanol® – 50mg	22.5 (15-25) (not reported)
Kapanol®– 100mg	50^ (30-50) *40 (30-50)*

Source: IDRS participant interviews
Note: 2009 data in italics
^ n<5

Thirteen participants were able to comment on the change in price of morphine in the six months prior to interview: three reported the price to be increasing, six commented that it was stable and one participant reported it was fluctuating. Comparisons were not made with 2009 due to small numbers.

5.4.2 Availability

Tables 30 and 31 summarise the current availability of morphine and the changes in its availability over the last six months, according to participant reports. Among those able to comment, 54% reported illicit morphine as difficult to obtain with the remaining participants (46%) reporting it as easy or very easy to obtain. Two-thirds reported the availability of morphine as stable with more participants reporting that it had become more difficult. Due to small participant numbers commenting, no comparison is made with 2009.

Table 30: Availability of illicit morphine currently, 2009-2010

How easy is it to get morphine at the moment?	% able to answer	
	2009 (n=10)	**2010 (n=13)**
Very easy	30	**15**
Easy	50	**31**
Difficult	20	**54**
Very difficult	0	**0**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

Table 31: Change in availability of illicit morphine over the last six months, 2009-2010

Has [availability] changed in the last 6 months?	% able to answer	
	2009 (n=11)	**2010 (n=13)**
More difficult	18	**23**
Stable	64	**62**
Easier	0	**0**
Fluctuates	9	**15**

Source: IDRS participant interviews
Note: 'Don't know' was excluded from 2009 onwards

Table 32 presents information collected from participants on the person(s) from whom they had bought, and the venues they had normally obtained the morphine at last purchase six months prior to interview. Of those participants who reported use of morphine in the last six months and were able to answer (n=13), nearly half (46%) stated that they had obtained morphine from a friend. More participants reported scoring from a known dealer compared to 2009 (39% in 2010 vs. 18% in 2009). Participant reports of the venue for obtaining morphine were equivocal to that reported in 2009.

Table 32: Usual source person and source venue used to obtain illicit morphine in the last six months, 2009-2010

Usual source person and venue	% able to answer	
	2009 (n=11)	**2010 (n=13)**
Person		
Street dealer	0	**0**
Friend	55	**46**
Known dealer	18	**39**
Acquaintance	27	**15**
Unknown dealer	0	**0**
Mobile dealer	0	**0**
Other	0	**0**
Venue		
Home delivery	16	**15**
Dealer's home	16	**23**
Friend's home	26	**23**
Acquaintance's home	5	**15**
Street market	0	**0**
Agreed public location	26	**23**
Other	0	**0**

Source: IDRS participant interviews

6.0 HEALTH RELATED TRENDS ASSOCIATED WITH DRUG USE

Key findings

- The proportion of participants reporting an overdose in the previous 12 months of interview increased in 2010, with half those reported this was due to the use of Narcan®.
- Sixteen participants reported that they had accidentally overdosed on another drug a median of once in their lifetime (range=1-7 times). Five participants had accidentally overdosed within 12 months of interview.
- Nearly half of the IDRS sample reported current treatment, mainly methadone, with a median of 36 months in treatment.
- Around half of the sample self reported experiencing a mental health problem in the last six months, mainly depression, followed by anxiety. Higher levels of psychological distress (as measured by the K10) were reported among the sample compared to the general population.

6.1 Overdose and drug-related fatalities

6.1.1 Heroin and other opioids

6.1.1.1 Non-fatal overdose

Of the 79 participants who reported having used heroin in their lifetime, 37 (47%) also reported lifetime experience of heroin overdose between one and 80 times (median=2). Eighty-six percent (n=32) had overdosed six times or less, and the majority had overdosed once (n=43%), twice (n=7, 19%), or three times (n=6, 16%). The number of overdoses experienced across lifetime was lower than reported in previous years, but with a slight increase in the proportion of participants reporting having overdosed twice (see Table 33).

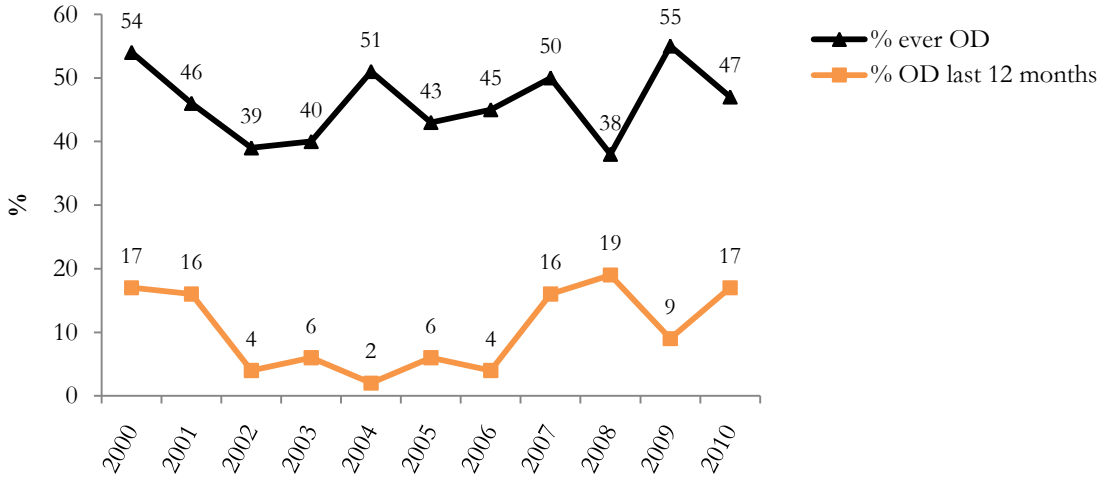
Table 33: Lifetime experience of heroin overdose reported by participants who had ever used heroin, 2002-2010

Heroin overdose variable	2002 (n=33)	2003 (n=42)	2004 (n=42)	2005 (n= 41)	2006 (n=43)	2007 (n=45)	2008 (n=33)	2009 (n=44)	**2010 (n=79)**
Overdosed once (%)	42	38	36	32	37	33	58	46	**43**
Overdosed twice (%)	21	14	21	22	19	16	15	14	**19**
Overdosed 3 times or more (%)	36	48	43	46	44	51	27	40	**38**

Source: IDRS participant interviews

The long-term trend in experience of overdose across lifetime (47%; n=37) and experience of overdose in the last 12 months (17%; n=6), among those who had ever used heroin, is depicted in Figure 17. As can be seen in the graph, the prevalence of recent heroin overdose increased in 2007 and 2008 before dipping in 2009; however, in 2010 numbers have again increased. The prevalence of lifetime experience of heroin overdose among heroin users in the IDRS participant sample has fluctuated over the last few years, with this trend continuing in 2010. In 2010, the median amount of time between interview and last overdose was 120 months (range=1.5-240 months, n=35); this length of time remained stable when compared to 2009 (120 months, range=5-420, n=44).

Figure 17: Experience of heroin overdose ever and in the last 12 months, as a proportion of participants that had ever used heroin, 2000-2010



Source: IDRS Participant interviews

In 2010, questions relating to the use of Narcan® again referred only to the last time the participants overdosed. Twenty participants (54% of those who had ever experienced a heroin overdose) reported having been administered the opioid antagonist naloxone (Narcan®) for heroin.

6.1.2 Opioid overdose

At the time of printing, data regarding opioid overdose deaths up to 2009 were unavailable; 2008 data are presented below. Readers should note: The ABS has changed the way it collates deaths data, making comparisons to earlier overdose bulletins published by the NDARC (Degenhardt & Roxburgh, 2005a) difficult. Since 2003, the ABS has progressively ceased visiting jurisdictional coronial offices to manually update causes of death that had not been loaded onto the computerised National Coronial Information System (NCIS). It was in 2006 that the ABS began to rely solely on data contained on NCIS at the time of closing the deaths data file. In addition, a number of jurisdictions, notably New South Wales (NSW) and QLD, reported backlogs in cases that *had* been finalised by the coroner (i.e. cases where the coroner has determined the cause of death) but not yet loaded onto NCIS. This is likely to have an impact on the number of opioid-related deaths recorded at a national level in 2006, given that NSW and QLD recorded the highest number of opioid-related deaths in Australia during the period 2000 to 2005. Accordingly, only drug-related deaths for 2008 are reported here. These data should be interpreted in conjunction with the ABS Technical Note 2: Coroner Certified Deaths, 3303.0 2006. Those readers interested in data from preceding years are directed to previous editions of Drug Trends.

In SA there were 34 deaths due to accidental opioid overdose in 2008 (Roxburgh & Burns, in press). Opioid overdose deaths in SA in 2008 accounted for 10% of the national total and is a small decrease since 2007 with 30 deaths (11% of total) recorded in 2006.

6.1.3 Accidental overdose (other drugs)

Participants were asked to specify how many times they had accidentally overdosed on any other drug (not heroin or morphine), how long since that had happened, and which drugs were involved. Sixteen participants reported that they had accidentally overdosed a median of once in their lifetime (range=1-7 times). The majority who had accidentally overdosed did so once (63%), over a period of four years (range=<1 month to 21 years). Five participants had accidentally overdosed within 12 months of interview. Of those who reported accidentally overdosing in their lifetime, benzodiazepines (19%, n=3), methadone (19%, n=3), base methamphetamine (13%, n=2), speed methamphetamine (13%, n=2) and alcohol (13%, n=2) were the most frequently mentioned drug involved in accidental overdoses (77%, n=12).

6.1.4 Methamphetamine-related deaths

The 2008 data includes deaths where methamphetamine was determined to be either the underlying cause (n=13) – the primary factor responsible for the person's death – as well as where methamphetamine was noted but another drug was thought to be primarily

responsible for the death (mentions). The underlying cause data are a subset of the total mentions data.

The total number of deaths Australia-wide in which methamphetamine was mentioned was 55. In 2007 the number was 69 and in 2006 it was 66.

6.1.5 Cocaine-related deaths

The data includes deaths where cocaine was determined to be either the underlying cause (n=2) – the primary factor responsible for the person's death – as well as where cocaine was noted but another drug was thought to be primarily responsible for the death (mentions). The underlying cause data are a subset of the total mentions data.

The total number of deaths Australia-wide in which cocaine was mentioned was 11 in 2008. In 2007 the number was 18 and in 2006 it was 13.

6.2 Drug treatment

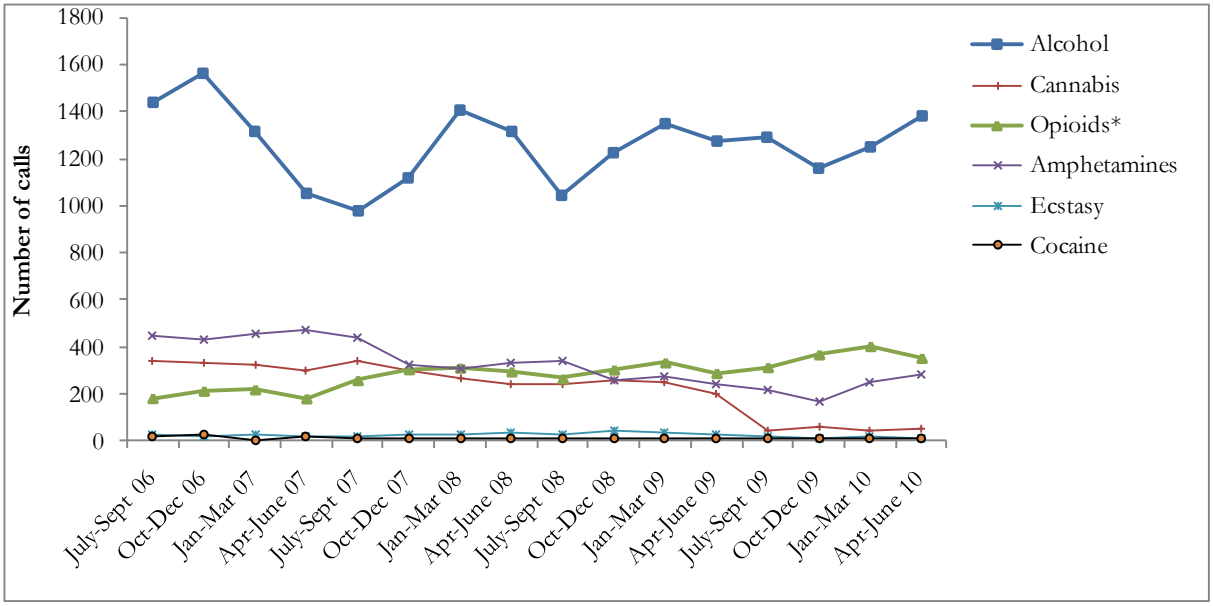
The following drug treatment data for SA comes from two sources: telephone calls to the SA ADIS, and DASSA. DASSA sections below will present data in terms of clients (per drug type) to these services to provide a clearer picture of the trends in the number of individuals seeking treatment for the various illicit substances. For information in terms of episodes of treatment (per drug type) that gives a more accurate measure of demand, or total load, on treatment services, the reader is directed to the Report on the National Minimum Data Set (AIHW, 2009), which details findings from DASSA and other non-government treatment agencies in SA.

6.2.1 Heroin and other opioids

Treatment services – ADIS

Telephone calls to the SA ADIS regarding any opioid substances accounted for 10.92% of the total coded telephone contacts (drug-related) in the 2009/10 financial year (n=13,120), a higher proportion compared to previous years: 8.9% in 2008/09 (of a total 13,375), 8.3% in 2007/08 (of a total 14,068), 5.5% in 2006/07 (of a total 14,349), 6.2% in 2005/06 (of a total 13,231), 6.6% in 2004/05 (of a total 12,639 coded calls) and 6.9% in 2003/04 of a total 13,336 coded calls. Since 2004, the breakdown of number of calls per opioid substance category (e.g. heroin, methadone) has been unavailable. Figure 18 depicts the number of opioid-related calls per quarter for the last three financial years compared to calls related to other drug types. As can be seen, the majority of drug-related calls to SA ADIS across the time period depicted have been alcohol-related, followed by opioids, then amphetamines and cannabis. In 2008/09, opioid-related calls increased slightly and surpassed methamphetamine- and cannabis-related calls. Calls relating to ecstasy or cocaine have constituted less than 1%of the total coded calls to SA ADIS across all years depicted.

Figure 18: Number of drug-related calls to ADIS per quarter, by selected drug type, Jul 2006-June 2010



Source: SA ADIS

* 'Opioids' includes all calls coded under the categories heroin, methadone, buprenorphine, naltrexone, opioid pharmacotherapies and other opioids

Treatment services – DASSA

The proportion of clients to 'all' treatment services of DASSA, by primary drug of concern, is presented in Table 34. In 2009/10, the proportion of total clients nominating heroin as their primary drug of concern (8.57%) increased from 2008/09 (7.79%). In 2009/10, the proportion of total clients of DASSA nominating heroin as their primary drug of concern continued to be higher than that for opioid analgesics (7.03%), lower than that for amphetamines (13.30%) and substantially less than that for alcohol (57.10%).

Table 34: Primary drug of concern nominated by clients of DASSA as a percentage of total number of clients, 2001/02-2009/10

Drug type (%)	2001/ 02	2002/ 03#	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08	2008/ 09	**2009/10**
Alcohol	42.0	44.6	47.7	48.3	51.8	52.09	55.91	57.46	**57.10**
Amphetamines	14.5	19.3	18.5	20.0	18.8	21.71	16.28	15.15	**13.30**
Heroin	10.3	18.5	14.3	12.3	9.7	7.58	8.20	7.79	**8.57**
Opioid analgesics	7.1	7.6	8.0	7.5	6.7	6.23	7.02	7.31	**7.03**
Cannabis	10.7	10.6	13.1	12.8	13.2	11.28	11.48	10.30	**10.81**
Benzodiazepines	1.9	2.6	2.3	2.4	2.3	2.02	2.25	2.01	**1.92**
Ecstasy	0.12	0.38	0.74	0.63	1.1	0.94	1.33	1.98	**1.61**
Cocaine	0.3	0.3	0.1	0.4	0.4	0.41	0.35	0.48	**0.42**
Tobacco	0.2	0	0.2	0.2	0.3	0.31	0.53	0.43	**0.63**
Unknown	6.1	0	0.1	0.2	0.2	0.39	0.30	0.17	**0.07**
Buprenorphine	-	0.4	1.2	1.0	1.06	1.21	1.34	1.10	**1.28**
Other	6.8	1.6	1.5	1.8	1.3	2.46	2.20	1.70	**2.48**

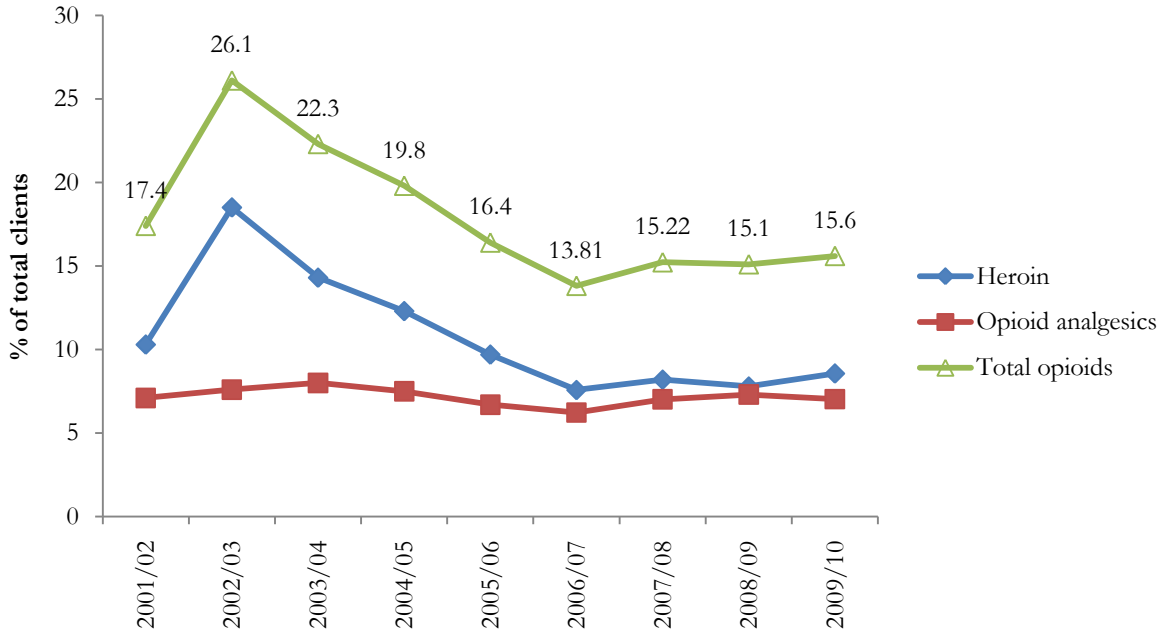
Source: DASSA

Note: Figures show the total number of clients, i.e. the total number of individuals who started one or more new episodes of treatment during the period; Total percentages for each year may not equal 100% as clients may have presented with more than one primary drug of concern within that time

During this period a new data collection system (Client Management Engine-DASC Information System) was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS-AODTS)

As can be seen in Figure 19, the percentage of clients to DASSA nominating another opioid substance (opioid analgesics) as their primary drug of concern has remained relatively stable over the years from 7.1% in 2001/02 to currently 7.03%. In 2009/10, the proportion of clients nominating 'any' type of opioid substance (including heroin, but not buprenorphine) as their primary drug of concern was 15.6%, compared to the 'peak' of 26.1% in 2002/03, and has increased slightly compared to 2008/09 (15.1%).

Figure 19: Percentage of total DASSA clients with opioid as the primary drug of concern, 2000/01-2009/10



Source: DASSA
Note: During 2002/2003 a new data collection system was employed to meet the requirements of the NMDS-AODTS

Table 35 depicts the number of clients (individuals) of DASSA's in-patient detoxification services over the last 10 financial years. It can be seen that attendance at these services was by far most common for alcohol-related treatment, across all years. In 2009/10, after alcohol, the greatest number of clients attended inpatient detoxification services for treatment related to heroin/opioid analgesics, followed by cannabis and amphetamines.

Table 35: Number of clients to DASSA inpatient detoxification treatment services, by primary drug of concern, 2000/01-2009/10

Drug type	2000/ 01	2001/ 02	2002/ 03#	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08	2008/ 09	**2009/ 10**
Alcohol	345	357	365	318	358	410	454	487	522	**503**
Amphetamines	121	156	154	138	130	118	150	130	92	**65**
Heroin	176	58	76	68	76	62	59	86	123	**102**
Opioid analgesics	44	41	55	68	78	60	59	50	85	**74**
Cannabis	56	67	76	97	109	92	103	114	97	**102**
Benzodiazepines	31	36	48	44	50	50	41	47	45	**30**
Cocaine	2	5	1	1	2	4	3	4	1	**2**
Tobacco	0	1	0	0	1	2	2	1	0	**0**
Buprenorphine	-	-	-	-	-	11	13	24	13	**16**
Unknown	32	37	0	0	0	-	2	0	0	**1**
Other	16	8	6	3	5	10	23	38	15	**15**
TOTAL	823	766	733	698	759	763	894	891	939	**854**

Source: **DASSA**

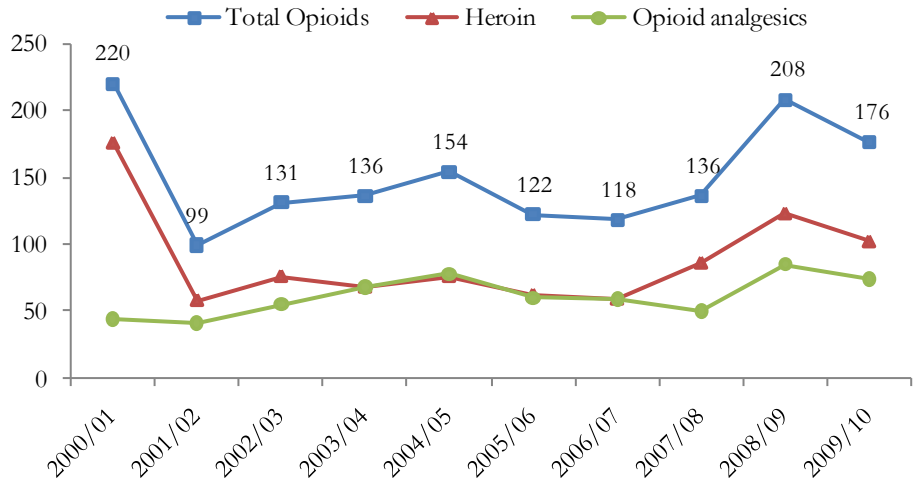
Note: Results show the number of clients, i.e. the number of individuals who started one or more new episodes of treatment during the period; Totals for each year may exceed the sum of clients per drug type as an individual client may have attended detox for more than one drug within the given year

During this period a new data collection system (CME-DIS) was employed to meet the requirements of the NMDS-AODTS

Figure 20 presents the number of clients of DASSA's in-patient detoxification treatment services for heroin or opioid analgesics for the years 2000/01 to 2009/10. Despite a decrease in number of clients with heroin as the primary drug of concern, the number of clients has remained relatively stable over the previous five years, following a sharp decline from 2000/01 to 2001/02. In 2009/10, there were a total of 102 clients of DASSA's in-patient detoxification for heroin. The number of clients with other opioid analgesics as their primary drug decreased in 2009/10 from 85 clients to 74 clients; however, overall there appears to be an increasing trend in the number of clients requiring inpatient detoxification services with opioid analgesics as the primary drug of concern from 2000/01.

In the period 2009/10 the number of in-patient admissions for heroin exceeded that for amphetamines with more in-patient detox clients for heroin (102) compared to amphetamines (65) in that period. Moreover, when the data were analysed in terms of whether the primary drug of concern for inpatient detox clients in 2009/10 was amphetamines or any opioid substance (heroin or other opioid analgesics), it was noted that the total number of clients to detox for any opioid substance (176) was much higher than that for amphetamines (65). This sees a change from the 2007/08 period when the number of in-patient admissions for amphetamines (130) was higher than that for heroin (86), with the total number of clients to detox for any opioid substance (136) slightly higher than that for amphetamines (130).

Figure 20: Number of clients to DASSA inpatient detoxification treatment services per year, with heroin or other opioid as the primary drug of concern, 2000/01-2009/10



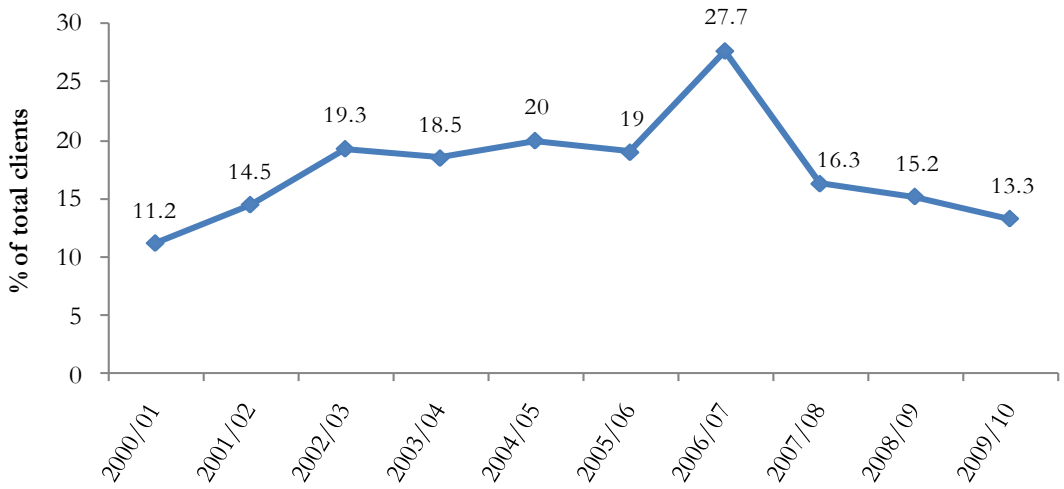
Source: DASSA
Note: During 2002/2003 a new data collection system (CME-DIS) was employed to meet the requirements of the NMDS-AODTS

6.2.2 Methamphetamine

Treatment services – ADIS
Telephone calls to ADIS regarding amphetamines accounted for 6.87% (n=902) of the 13,120 total coded telephone contacts (drug related) in the 2009/10 financial year, lower than that for previous years: 8.27% in 2008/09 (of a total 13,375), 9.5% in 2007/08 (of a total 14,068), 12.69% in 2006/07 (of a total 14,349), 10.7% in 2005/06 (of a total 13,231), 12.5% in 2004/05 (of a total 12,639), 12% in 2003/04 (of a total 13,336) and 11.6% in 2002/03 (of a total 13,825). Figure 18 depicts the number of amphetamine-related calls per quarter for the last three financial years compared to calls related to other drug types. As can be seen calls related to methamphetamine have overtaken those for cannabis.

Treatment services – DASSA
The proportion of clients nominating amphetamines as their primary drug of concern had remained relatively stable for the last four years (see Table 34 and Figure 22), but decreased in 2009/10 to 13.3% (n=760 of 5,716 individuals) from 15.15% (n=881 of 5,816 individuals) in 2008/09. In 2009/10, amphetamines were the second most commonly nominated primary drug of concern by clients of DASSA after alcohol (57.10%), and dominated as the most common illicit drug of concern, well above heroin (7.03%).

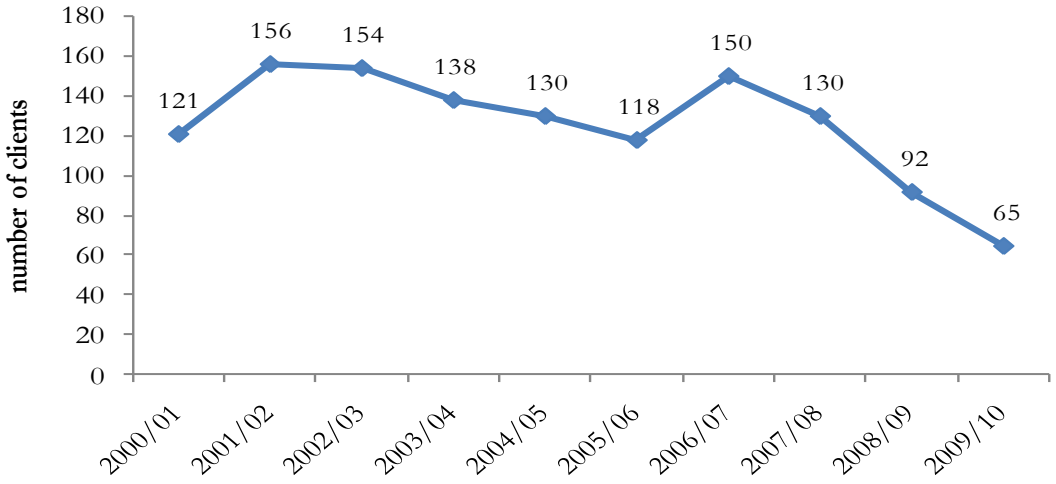
Figure 21: Percentage of total DASSA clients with amphetamines as the primary drug of concern, 2000/01-2009/10



Source: DASSA
Note: During 2002/2003 a new data collection system was employed to meet the requirements of the NMDS-AODTS

Figure 22 presents the number of clients of DASSA's in-patient detoxification treatment services for amphetamines for each year from 2000/2001 to 2009/10. Consistent with the decrease in the number of amphetamine-related clients to all DASSA services, the number of in-patient detox clients with amphetamines as the primary drug of concern decreased in 2009/10 from 92 in 2008/09 to 65 in 2009/10.

Figure 22: Number of clients to DASSA in-patient detoxification treatment services, with amphetamines as the primary drug of concern, 2000/01-2009/10



Source: DASSA
Note: During 2002/03 a new data collection system was employed to meet the requirements of the NMDS-AODTS

6.2.3 Cocaine

Treatment services – ADIS

Telephone calls to ADIS regarding cocaine accounted for only 0.25 (n=34) of total drug-related telephone calls in 2009/10. Numbers of calls to SA ADIS concerning cocaine have been consistently low across the past few years, and remained stable in 2009/10; specifically, 0.28% (n=38) of coded drug-related calls in 2008/09, 0.24% (n=35) in the 2007/08 financial year, 0.45% (n=64) in 2006/07; 0.32% (n=43) in 2005/06, 0.32% (n=41) in 2004/05, 0.20% (n=27) 2003/04, 0.25% (n=35) in 2002/03, and 0.4% (n=50) in 2001/02. Figure 18 depicts the number of cocaine-related calls per quarter for the last three financial years compared to calls related to other drug types.

Treatment services – DASSA

The proportion of clients nominating cocaine as their primary drug of concern has remained relatively stable and low across all years reported. In 2009/10, 0.63% of clients to all DASSA treatment services (n=36 of 5,716 individuals) nominated cocaine as their primary drug of concern (see Table 35).

6.2.4 Cannabis

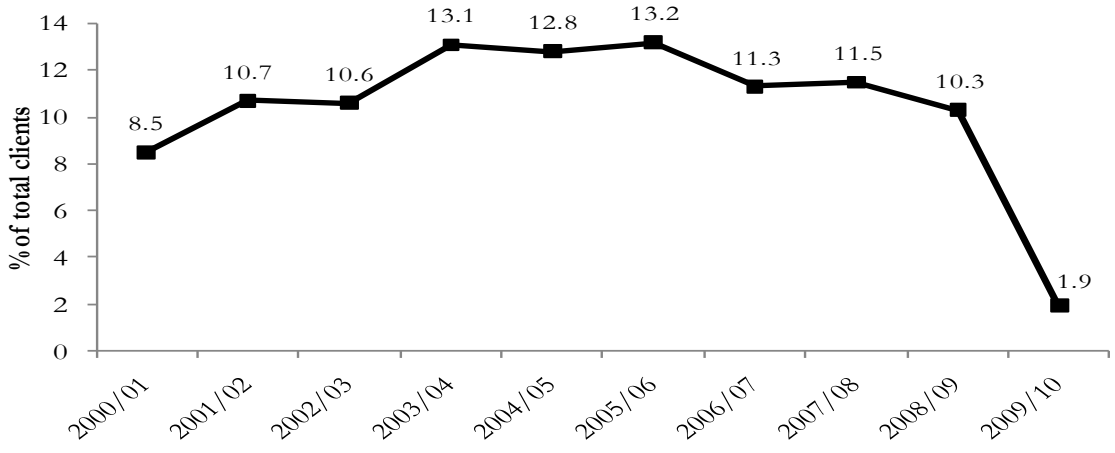
Treatment services – ADIS

Telephone calls to ADIS regarding cannabis accounted for 7.26 (n=953) of the total coded telephone contacts (drug-related) in the 2009/10 financial year, and this is relatively stable compared to calls coded in 2008/09 (7.03% (n=940) and is still lower compared to previous years. Specifically, the total coded telephone contacts (drug-related) in the 2007/08 financial year was 8.13% (n=1,145), 9% in 2006/07, 11.7% in 2005/06, 12% in 2004/05, 10.3% in 2003/04, 12% in 2002/03 and 14% in 2001/02. In 2008/09, the number of enquiries regarding cannabis (7.26% of total) was higher than for amphetamines (6.87% of total) and less than a quarter of the number of enquiries regarding alcohol (38.74% of total, or n=5,083 calls). Figure 18 depicts the number of cannabis-related calls per quarter for the last three financial years compared to calls related to other drug types.

Treatment services – DASSA

The proportion of clients nominating cannabis as their primary drug of concern decreased in 2009/10 compared to the previous year (1.92% and 10.3%, respectively) (see Table 35and Figure 23). The long-term trend shows that the proportions of clients nominating cannabis as a drug of concern has hovered around 10%-13%; however, from 2009 it has decreased dramatically. In 2009/10, cannabis was the eighth most commonly nominated primary drug of concern, compared to third in 2008/09 (10.3%).

Figure 23: Percentage of total DASSA clients with cannabis as the primary drug of concern, 2000/01-2009/10

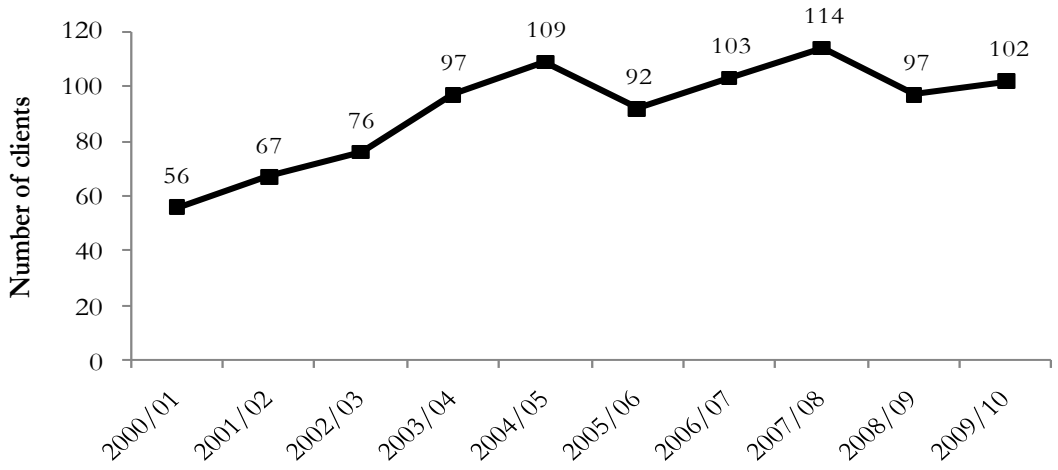


Source: DASSA

Note: During 2002/2003 a new data collection system was employed to meet the requirements of the NMDS-AODTS

Figure 24 presents the number of clients of DASSA's in-patient detoxification treatment services for cannabis for each year from 2000/01 to 2009/10. In 2009/10, there was a decrease in the number of cannabis-related clients to all DASSA services, although despite this the numbers of in-patient detox clients with cannabis as the primary drug of concern has increased steadily over this time period, from 56 in 2000/01 to 102 in 2009/10. For the sixth year in a row, cannabis has been the third most common primary drug of concern for clients attending in-patient detox services of DASSA, after alcohol and heroin (see Table 35).

Figure 24: Number of admissions to DASSA in-patient detoxification treatment services, with cannabis as the primary drug of concern, 2000/01-2009/10*



Source: DASSA

Note: During 2002/2003 a new data collection system was employed to meet the requirements of the NMDS-AODTS

6.3.1 Hospital admissions

An analysis of data, provided by the AIHW from the National Hospital Morbidity Dataset, for the period 1997/98 to 2008/09 (financial years) was undertaken by NDARC. These data report on both state-specific and national drug-related hospital admissions[1] for the four main illicit drug classes (see Appendix 2 for National data), adjusted so that all years reflect International Classification of Diseases, 9th Revision (ICD-9) classifications for comparability across this time period. Readers should note that the major impact of this adjustment is the exclusion of admissions for drug-related psychosis and withdrawal, due to incomparability between ICD-9 and International Classification of Diseases, 10th Revision (ICD-10) coding for these conditions[2]. It should also be noted that these data lag behind other indicators by one year. At the time of printing, data was not available for 2008/2009.

[1] The National Hospital Morbidity Dataset includes admissions data from public and private hospitals across metropolitan, regional and remote locations.

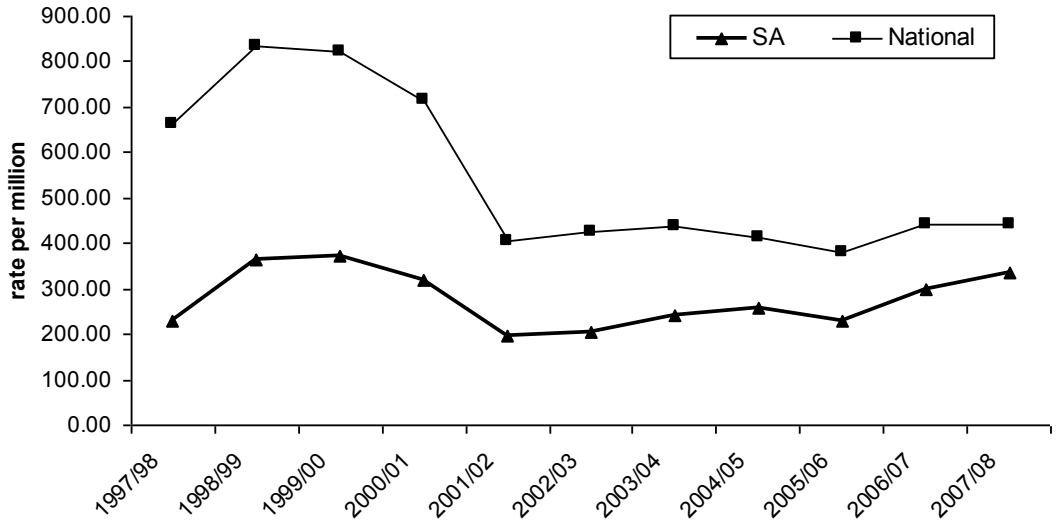
[2] ICD-9 coding for drug-related psychosis and withdrawal was non-specific for drug type, where ICD-10 coding is specific for drug type.

The substances most commonly involved in a primary diagnosis for SA drug-related hospital admissions were opioids (heroin, morphine, methadone etc), followed by amphetamines, cannabis and cocaine. Ecstasy-related admissions are not specifically coded. South Australian data followed a similar pattern to national data (see Appendix 1), but differed in the rates of admissions per drug type. In particular, SA, in comparison to the national figure, had a lower rate per million for opioid-related admissions (SA: 333.92 v. National 440.73), cocaine–related admissions (SA: 1.14 v. National: 15.34), and cannabis-related admissions (SA: 67.47 v. National: 134.89). Amphetamine-related admissions were at a similar rate per million (SA: 164.67 v. National: 161.09).

6.3 Opioid-related hospital admissions

Figure 25 (includes rates from 1997/98 onwards, and indicates that there was a decline in the SA and national rates of admission to hospital for opioids (primary diagnosis) from 1999/00 to 2001/02, and has been relatively stable from 2001/02 to 2007/08. The rate of admissions per million people to SA hospitals where opioid-related disorders were recorded as the primary diagnosis was 333.92 in 2007/08.

Figure 25: Rate of opioid-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 1997/1998-2007/08



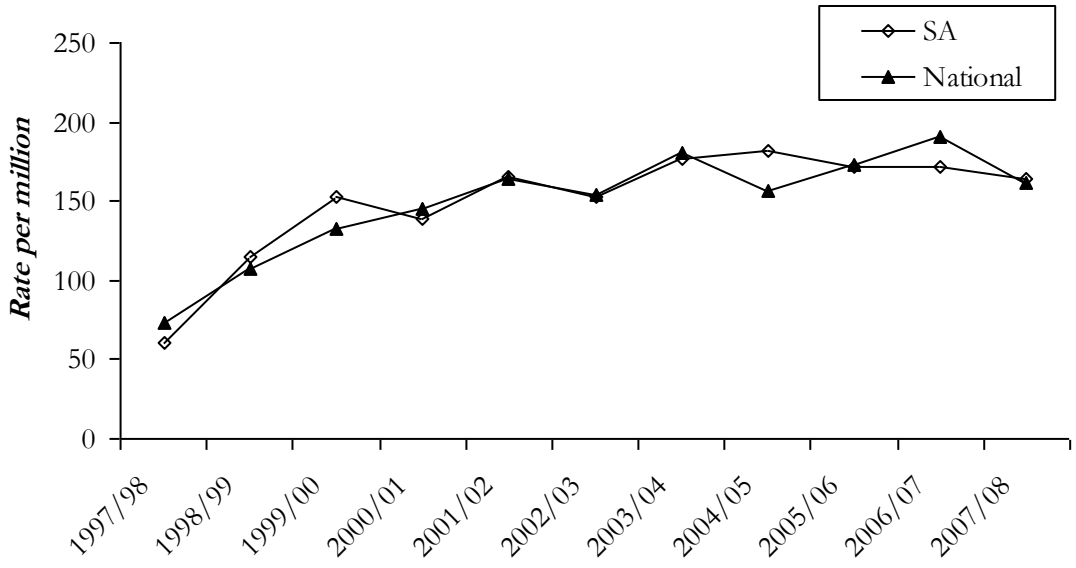
Source: **AIHW**

Note: Results are for persons aged between 15 and 54 years, excluding opioid withdrawal and psychosis admissions; A 'primary diagnosis' was given when opioids were considered chiefly responsible for the patient's episode of care in hospital

6.3.1 Amphetamine-related hospital admissions

Figure 26 (includes rates from 1997/98 onwards) shows the long-term trend and indicates that the rates of admissions to hospital for amphetamines (primary diagnosis) per million people in SA have been increasing. However, it should be noted that there has been some stabilisation in the rates of admission in SA since 2004/05 (182 per million), 2005/06 (172 per million), 2006/07 (172 per million), which continued in 2007/08 (165 per million), whereas nationally these figures increased in the same period, with a decrease in 2007/08. Readers are reminded that this figure does not include amphetamine-related psychosis or withdrawal admissions.

Figure 26: Rate of amphetamine-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 1997/98-2007/08



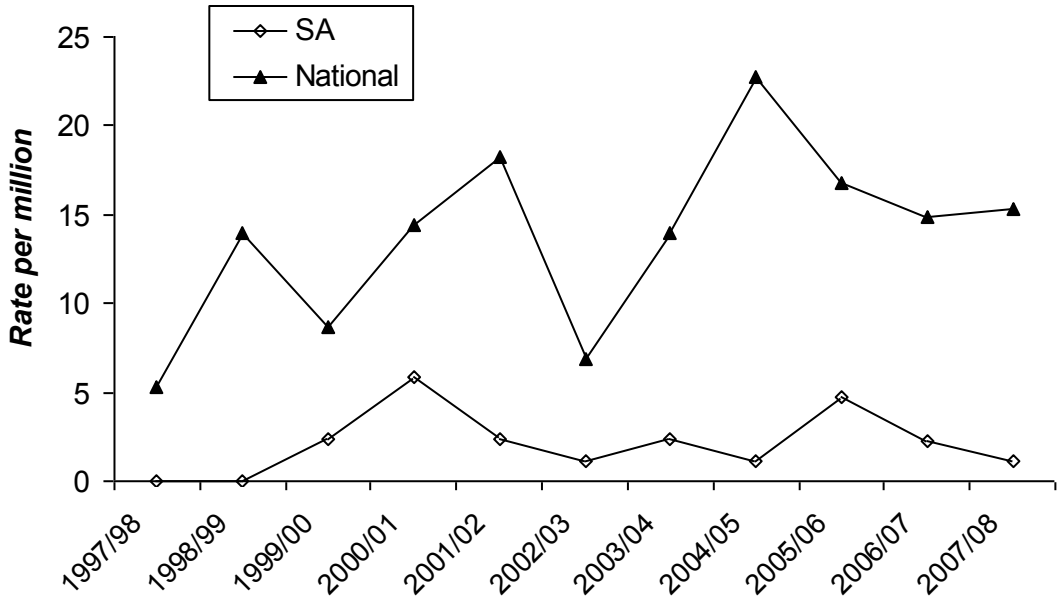
Source: AIHW

Note: Results are for persons aged between 15 and 54 years, excluding amphetamine withdrawal and psychosis admissions; A 'primary diagnosis' was given when amphetamines were considered chiefly responsible for the patient's episode of care in hospital

6.3.2 Cocaine-related hospital admissions

Figure 27 (includes rates from 1997/98 onwards) shows that the rates of admissions to hospital in SA and nationally have fluctuated over the years, but that the national rate has been consistently higher than the SA rate since 1997/1998. In SA the rate of admissions to hospital per million people with a cocaine-related primary diagnosis were recorded over the time period depicted and in 2007/08 this rate per million was 1.14.

Figure 27 Rate of cocaine-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 1997/98-2007/08



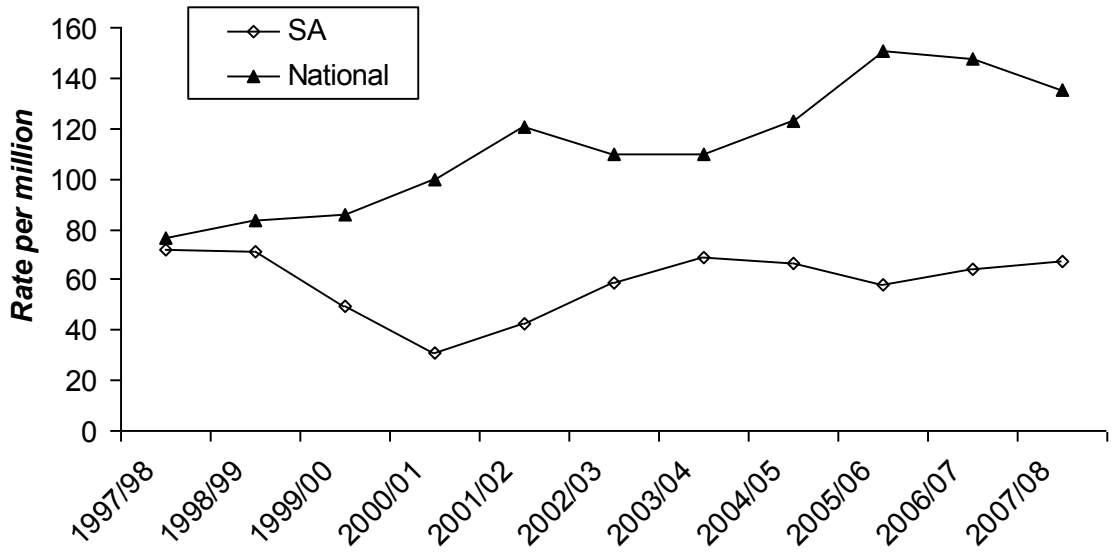
Source: AIHW

Note: For persons aged between 15 and 54 years, excluding cocaine withdrawal and psychosis admissions; A 'primary diagnosis' was given when cocaine was considered chiefly responsible for the patient's episode of care in hospital

6.2.3 Cannabis-related hospital admissions

Data in Figure 28 (includes rates from 1997/98 onwards) shows the long-term trend in rate of cannabis-related admissions (primary diagnosis) to hospitals in SA differs from the national trend over the years from 1997/98 to 2007/08. Both SA and national rates were similar until a divergence in 1999/00, with the national rate continuing to rise and the SA rate declining for two years. However, the SA rate of cannabis-related admissions per million people to hospital increased for the three years to 2003/04, but has remained relatively stable since that period. The admission rate per million was 67 to SA hospitals with a cannabis-related primary diagnosis in 2007/08 in comparison to 2003/04 (68 per million). Readers are reminded that this figure does not include cannabis-related psychosis or withdrawal admissions.

Figure 28: Rate of cannabis-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 1997/98-2007/08



Source: AIHW

Note: Results include persons aged between 15 and 54 years, excluding cannabis withdrawal and psychosis admissions; A 'primary diagnosis' was given when cannabis was considered chiefly responsible for the patient's episode of care in hospital

7.4 Emergency department attendances

Information on drug-related attendances to the emergency department was provided by the Royal Adelaide Hospital (RAH), the largest central public hospital in Adelaide, and is presented in Table 36 Readers are warned that these are 'uncleaned' data and should be interpreted with caution; however, they are included here to give a picture of trends over time, rather than to provide precise numbers. At the time of printing, data was not available for 2009/2010.

It can be seen that attendances regarding heroin have continued to rise somewhat across the years depicted, and in 2008/09 attendances for heroin-related issues increased from 44 to 66 attendances. Heroin accounts for the most common illicit drug-related attendances, with amphetamines now the second most common illicit drug-related attendances at the RAH. In addition, if the diagnosis 'drug-induced psychosis' (which includes amphetamine-induced psychosis) is examined, it can be seen that the number of attendances with this diagnosis had decreased in 2005/06 (from 89 to 31), increased slightly in 2006/07 to 37, and again decreased in 2007/08 with no attendances recorded for 2008/09. The number of attendances in relation to cannabis have remained stable and low across the years depicted. Overall, in 2008/09 there were fewer overall attendances to the emergency department from 2,514 to 2,469.

Table 36: Number of attendances to the emergency department at the RAH, SA, from 2001/02-2008/09 (per drug or diagnosis)

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Amphetamines	76	65	81	91	61	82	67	**58**
Cocaine	2	0	1	4	6	4	1	**4**
LSD	2	1	2	6	3	2	3	**7**
GHB	48	28	28	48	38	14	15	**15**
Alcohol	1,118	994	1,106	1,465	1,409	1,559	1,554	**1,585**
Cannabis	16	9	11	15	13	15	15	**13**
Heroin	30	38	25	30	32	39	44	**66**
Other opioid**	45	64	57	70	68	59	28	**38**
Benzodiazepines	170	138	138	141	122	174	145	**151**
Antidepressants	104	79	80	87	55	74	78	**67**
Drug addiction#	27	38	20	37	28	17	8	**1**
Drug-induced psychosis#	67	52	44	89	31	37	28	**0**
Drug withdrawal#	35	26	24	26	19	20	0	**0**
Other##	533	434	442	434	360	579	528	**464**
TOTAL	*2,273*	*1,966*	*2,059*	*2,543*	*2,245*	*2,675*	*2,514*	**2,469**

Source: RAH Emergency Department
Noted: Results show attendances coded as drug- or poisoning-related
** Includes opium, methadone, other narcotics (morphine, codeine, pethidine etc.) and opioid withdrawal
# Not otherwise specified
Includes all other poisonings related to food, drug (medical and non-medical), chemical and other toxins

6.5 Mental and physical health problems and psychological distress

6.5.1. Self-reported mental health problems

In 2010, 60% of participants reported experiencing a mental health problem (other than drug dependence) in the six months preceding interview (see Table 37). This is compared to 41% of participants reporting experiencing such problems in 2009. Consistent with previous years the proportion of IDRS participants who reported attending a professional (58%, or 71% of those experiencing a problem) was lower than the proportion reporting having experienced a problem (60%). Although, this gap has decreased from 2009 where only 59% of those experience a problem sought help.

Table 37 reports the proportion of participants, per mental health problem, who sought professional help for that problem in the six months prior to interview. As can be seen, depression and anxiety were the most commonly reported problems, and more participants reported accessing assistance for both depression and anxiety in 2010 compared to 2009.

Table 37: Mental health problem reported by participants, 2009-2010

Mental health problem (%)	2009^ (n=100)	**2010 (n=97)**
Depression	28	**38**
Mania	0	**0**
Manic depression	1	**7**
Anxiety	15	**25**
Phobias	1	**2**
Panic	4	**3**
Paranoia	5	**2**
Drug-induced psychosis	2	**0**
Schizophrenia	3	**6**

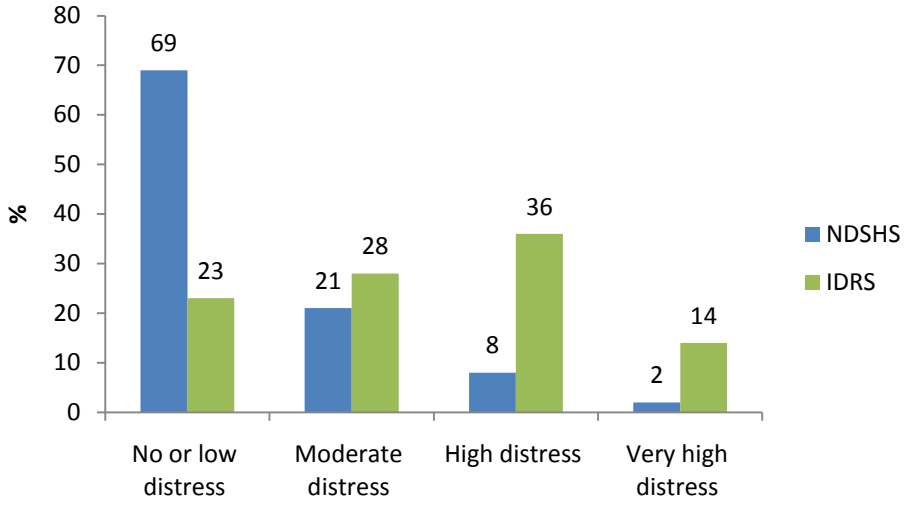
Source: IDRS participant interviews
^ Six participants answered 'other'
Note: Percentages in each column do not total 100% as participants could report more than one mental health problem

6.5.2 Psychological distress

The K10 (Kessler & Mroczek, 1994) was incorporated into the IDRS participant survey for the third time. It was developed as a screening instrument to measure for negative emotional states, referred to as psychological distress. It is described as a simple, brief, valid and reliable instrument used to detect mental health conditions in the population. The scale consists of 10 questions on non-specific psychological distress and measures the level of anxiety and depressive symptoms a person may have experienced in the past four weeks, so it asks specifically about recent levels of distress. It should be noted that the K10 does not require that individuals give reasons for the psychological distress reported in the previous month, nor whether this was an unusual or 'normal' month for the individual.

The 2007 National Drug Strategy Household Survey (NDSHS) (AIHW, 2008) provided the most recent Australian population norms available for the K10, and used four categories to describe degree of distress: scores from 10-15 were considered to be low, 16-21 as moderate, 22-29 as high and 30-50 as very high. Using these categories, IDRS participants reported greater levels of high and very high distress compared to the NDSHS (Figure 29).

Figure 29: **K10 scores in the NDSHS (2006) and the SA IDRS interviews, 2010**



Source: IDRS participant interviews; AIHW, 2008
Note: The extent to which cut-offs derived from population samples can be applied to the IDRS population is yet to be established and therefore these findings should be taken as a guide only

Twenty (23%) participants had scores between 10 and 15 on the K10 (low risk), 25 (28%) scored between 16 and 21 (moderate distress), and 32 (36%) participants scored from 22 to 29 (high distress), and 12 (14%) scored from 30-50 or very high distress. The median total score for the sample was 21 (10 to 44) indicating that half of the sample was at high or very high risk of psychological distress as measured by the K10.

KE comments

- The majority of KE (n=11) who commented, confirmed participant reports that the most common problems seen by users generally were depression, anxiety, personality disorders, bipolar disorder and post traumatic stress disorder (PTSD). Several KE (n=6) also reported that paranoid psychosis was also seen amongst users. It was also generally noted, and well understood by drug and alcohol treatment service providers universally, that drug and alcohol problems are seen 'hand-in-hand' with mental health problems.
- Moreover, KE observed that methamphetamine users were more likely to be violent and aggressive, have mental health problems and social problems and that this too had increased in the previous 12 months. Mental health issues included psychotic behaviours, depression and paranoia. Social problems included such factors as homelessness, unemployment and a general lack of ability to function effectively.
- These problems continued to be an issue for service providers and staff of treatment agencies.
- KE reported that overdose was more common in those who had been released from prison and was more common in female users.
- The majority of KE reported that it was difficult for clients to get treatment as services were full up.

7.0 INJECTING RISK BEHAVIOUR

Key findings

- Receptive sharing (borrowing) of needles/syringes was reported by 10% of participants in the month preceding interview, typically after a partner or close friend. Sharing of injecting equipment such as filters, water and mixing containers (e.g. spoons) was more common.
- Over half of the participants re-used their own needle in the last month. Sterile needles and syringes were predominantly obtained from NSP, although a range of other sources were also used. The majority of IDRS participants reported injecting last in a private home.
- Over half of the sample reported experiencing an injection-related problem in the preceding month, most commonly significant scarring or bruising and difficulty injecting (e.g. in finding a vein).
- In Australia, hepatitis C (HCV) continued to be more commonly notified than hepatitis B (HBV). The prevalence of human immunodeficiency virus (HIV) among PWID in Australia remained stable at relatively low rates, with HCV more commonly reported.

7.1.1 Access to needles and syringes

NSP were by far the most common source of needles and syringes in the preceding six months (91%), followed by a friend (15%). Proportions reporting NSP vending machines, partners and/or dealers, hospitals and outreach/peer workers were also accessed.

Table 38: Main sources of needles and syringes in the preceding six months, 2010

Accessing from (%)	2010 (N=97)
NSP	**91**
NSP vending machine*	**7**
Chemist	**4**
Partner	**2**
Friend	**15**
Dealer	**9**
Hospital	**2**
Outreach/peer worker	**1**

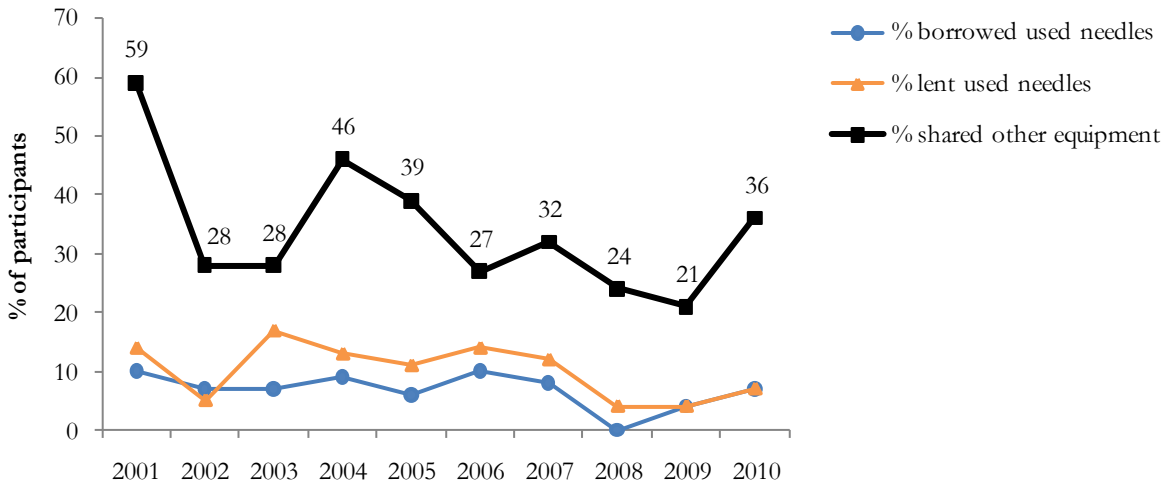
Source: IDRS participant interviews
* Vending machines not available in all jurisdictions
Note: Multiple responses allowed

7.1.2 Sharing of injecting equipment

Seven participants reported using a needle after someone else, with seven participants using a needle before someone else in the month prior to interview. These parameters of injecting-related risk, as measured by the IDRS, have remained relatively stable over the years, despite a few more participants using a needle after someone else (from 4% in 2009 to 7%) and the using a needle before someone else in 2009 (from 9% in 2008 to 7%). The IDRS usually identifies a small but persistent proportion of participants who are at high risk of BBVI and re-infection through needle sharing. A significantly higher proportion of participants reported sharing equipment, other than needles, in the past six months preceding interview (21% in 2009 vs. 36% in 2010; CI 95% -0.025 to -0.271) (see Figure 30)

Of those who had used a needle after someone else, three had done so once in the past month, three had done so twice, and one had done so over three times in the month prior to interview. Just over half (53%) of the participants reported reusing their own needles and of those 38% had reused their own needle three or more times.

Figure 30: Sharing of needles and injecting equipment by participants in the month preceding interview, 2001-2010



Source: IDRS participant interviews

As listed in Table 39, the sharing spoons/mixing containers and filters remained relatively stable. However, there was a significantly higher proportion of participants who reported sharing tourniquets (5% in 2009 vs. 22% in 2010; CI 95% -0.73 to -0.262) and water (9% in 2009 vs. 21% in 2010; CI 95: -0.017 to -0.217).

Table 39: Sharing of injecting equipment (other than needles) among participants in the month preceding interview, 2009-2010

Injecting equipment	2009 (N=100) %	**2010 (N=97) %**
Spoons/mixing container	17	**19**
Filters	6	**9**
Tourniquet	5	**22**
Water	9	**21**

Source: IDRS participant interviews

7.1.3 Location of injecting

In 2010, the majority of participants reported the last location when injecting drugs in the month prior to interview was a private home (83%), with small proportions reporting use in public locations (see Table 40). The last location of injecting was unchanged compared to 2009.

Table 40: Usual location when last injected in the month preceding interview, 2009-2010

Location when injecting	2009 (n=100) %	**2010 (n=96) %**
Private home	85	**83**
Street/car park/beach	0	**2**
Car	11	**10**
Public toilet	2	**4**
Other	2	**0**

Source: IDRS participant interviews

7.1.4 Self-reported injecting-related health problems

Participants were asked if they had experienced six different injecting-related health problems in the last month (as listed in Table 41). In 2010, 69% of the participants reported experiencing at least one type of injecting-related health problem in the month prior to interview. By far the most commonly experienced problems were prominent scarring or bruising around the injection site (49%) and difficulty injecting (43%), followed by prominent scarring or bruising around the injection site (46%). Participant reports of experience a dirty hit was significantly higher than in 2009 (12% in 2009 vs. 35% in 2010; 95% CI -0.104 to -0.331).

Table 41: Injecting-related health problems experienced in the month preceding interview, 2009-2010

Reported injection related health problems	2009 (n=100) %	2010 (n=94) %
Overdose	3	**1**
Dirty hit	12	**35**
Abscesses/infections	8	**12**
Prominent scarring/bruising	53	**49**
Difficulty injecting	44	**43**
Thrombosis	5	**4**
Total problems (%)	68	**69**
Total median score*	2	**2**

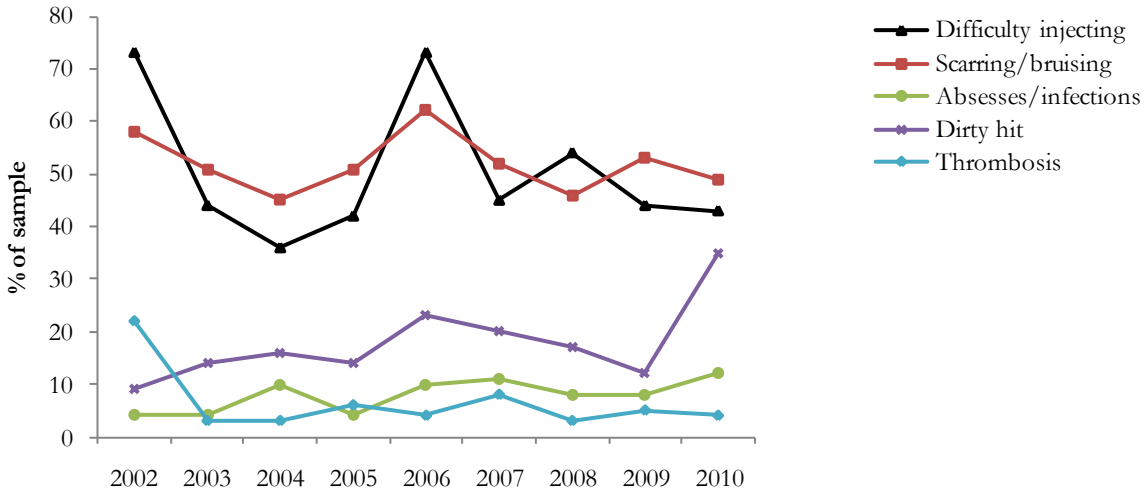
Source: IDRS participant interviews

* Among those who reported an injection-related problem

Among those who had overdosed in the last month (n=26), heroin was most commonly reported as the main drug overdosed on (38%), followed by methamphetamine (15%) and morphine (12%). Those experiencing a dirty hit (n=155) most commonly attributed it to the injection of heroin (35%), followed by morphine (20%) and methamphetamine (14%).

Figure 31 depicts the long-term trends for experience of injection-related problems since 2002. Experience of thrombosis remained stable and still remains relatively low compared to the level of incidence reported in 2002. Reports of experience of difficulty injecting and prominent scarring and bruising resulting from injection practices have consistently remained high with 2010 reports similar to previous years. Reports of a dirty hit increased in 2010 and are the highest reported since 2002.

Figure 31: Experience of injection-related problems by participants in the month preceding interview, 2002-2010



Source: IDRS participant interviews

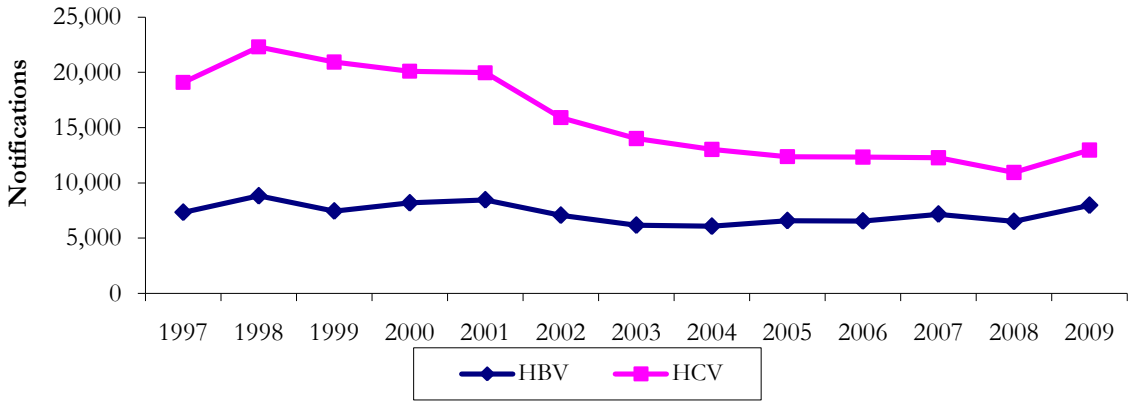
7.1.5 BBVI

PWID are at significantly greater risk of acquiring HBV, HCV[1] and HIV because BBVI can be transmitted via the sharing of needles, syringes and equipment.

Figure 32 presents the total number of notifications for HBV and HCV in Australia from the Communicable Diseases Network –NNDSS. Incident or newly acquired infections, and unspecified infections (i.e. where the timing of the disease acquisition is unknown) are presented. In 2009, the number of HBV and HCV notifications recorded was higher than previous years (HBV: 6,503 in 2008 and 7,967 in 2009 and HCV: 10,945 in 2008 and 12,980 in 2009). HCV continued to be more commonly notified than HBV.

[1] HCV antibody testing has only been available since 1990.

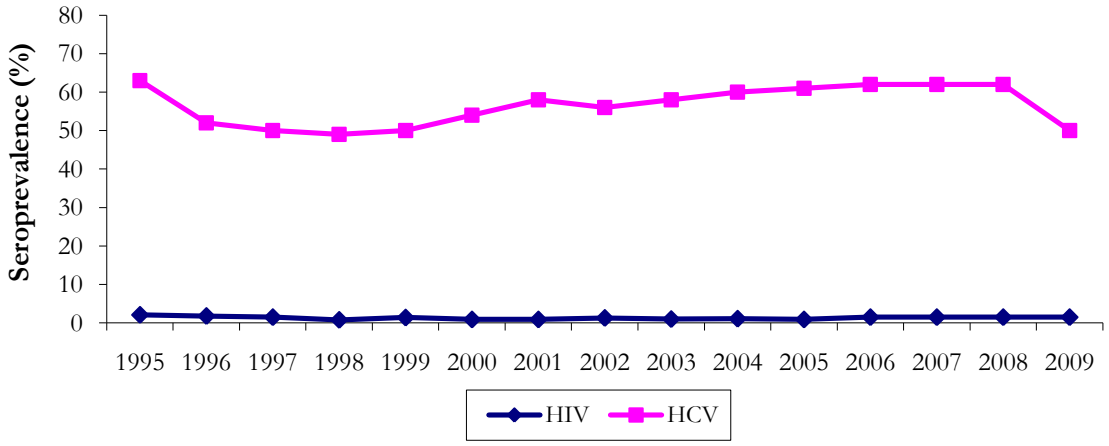
Figure 32: Total notifications for HBV and HCV (unspecified and incident) infections, Australia, 1997-2009



Source: Communicable Diseases Network – Australia – NNDSS[1]
Note: Data accessed on 28 January 2010. Figures are updated on an ongoing basis

The prevalence of HIV among PWID in Australia also remained stable at relatively low rates, between 0.9% in 2001 and 1.5% in 2009 (Figure 34). HCV prevalence among this group was much higher at 61% to 62% from 2005 to 2008; however, this figure dropped to 50% in 2009 (see Figure 33 for data taken from the National Centre in HIV Epidemiology and Clinical Research (NCHECR) (2010).

Figure 33: HIV and HCV seroprevalence among participants recruited for the Australian NSP Survey, 1995-2009



Source: Australian NSP survey (NCHECR, 2002, 2005, 2009-2010)[1]

[1] Notes on interpretation: There are several caveats to the NNDSS data that need to be considered. As no personal identifiers are collected, duplication in reporting may occur if patients move from one jurisdiction to another and are notified in both. In addition, notified cases are likely to only represent a proportion of the total number of cases that occur, and this proportion may vary between diseases, between jurisdictions, and over time.

KE comments

- KE reported (n=4) that they were seeing less vein care issues and generally needle risk had decreased thanks to promotions and education.
- Although most reported no change in prevalence of such problems, all remarked that injecting-related problems for users continued to be an issue with regard to both methamphetamine use and to injecting of substances not designed to be injected, particularly morphine, methadone or buprenorphine.
- KE also report that when returning needles users often do so in bulk amounts indicating they are amassing large amounts of used needles.
- KE reported that there was an increasing need for education of HCV.

[1] Respective sample sizes for the NSP Survey were: 2000: 2,694; 2001: 2,454; 2002: 2,445; 2003: 2,495; 2004: 2,035; 2005: 1,800; 2006: 1,961; 2007: 1,912; 2008: 2,270; 2009: 2,697.

8.0 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH DRUG USE

Key findings

- Self reported of criminal activity remained stable, with drug dealing the most commonly reported.
- The proportion of the sample who had been arrested in the preceding 12 months increased from 20% in 2009 to 32% in 2010.
- The median expenditure on illicit drugs for the day before interviews was $100.
- Driving a car while under the influence of alcohol was reported by 15% of participants who had driven in the preceding six months. Eighty-two percent reported driving under the influence of an illicit drug during that time, mainly cannabis, heroin and methamphetamines.

8.1 Reports of criminal activity among participants

In 2010, a similar proportion of the participants reported involvement in any type of crime during the last month (29% compared to 28% in 2009); although the proportion who reported having been arrested in the 12 months prior to interview was higher (32% from 20% in 2009) (see Table 42). The most commonly reported types of crime were the same as for 2009, with participants primarily reporting involvement in drug dealing (18%), followed by property crime (14%) and, to a lesser extent, fraud (7%) and violent crime (4%). The median number of times those who had engaged in some crime in the month prior to interview was twice (range=2 -7 times). The number of participants who reported having ever been in prison remained stable compared to 2009 (43% and 40% respectively).

Table 42: Criminal activity as reported by participants, 2009-2010

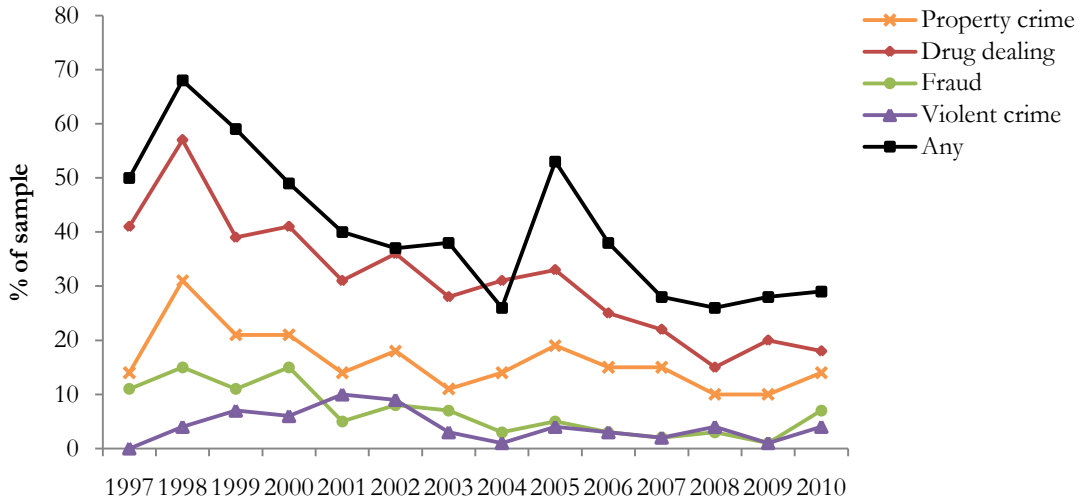
Criminal behaviour (%)	2009 (n=100)	**2010 (n=95)**
Criminal activity in last month		
Property crime	10	**14**
Drug dealing	20	**18**
Fraud	1	**7**
Violent crime	1	**4**
Any crime	*28*	***29***
Arrested in last 12 months	20	**32**
Ever in prison	40*	**43**

Source: IDRS participant interviews
* Data missing for one participant

Of the 31 participants who had been arrested in the preceding 12 months, the most common reasons for arrest were violent crime (32%, n=16), theft (19%, n=6), property crime (16%, n=5), and driving offences (10%, n=3). There were also two arrests for use or possession of a prohibited substance, and one arrest for dealing/trafficking.

Figure 34 shows the long-term trends regarding involvement in any criminal activity by type of criminal activity measured among IDRS participant samples since 1997. It can be seen that there was a steady decline in any criminal activity from 1998 to 2001, from which time the prevalence of criminal involvement has been fairly stable, except for the increase seen in 2005 and subsequent decreases since 2006. The two most prominent types of criminal activity across all years are drug dealing followed by property crime. Prevalence of all types of criminal activity among the IDRS participant samples has been generally stable over the past four years of reporting.

Figure 34: Self-reported involvement in crime, by offence type, in the month prior to interview, 1997-2010



Source: IDRS participant interviews

8.1.1 Heroin

Thirty percent of those participants who reported recent use of heroin (n=62) reported being arrested in the 12 months prior to interview. Twenty-two percent of those recently using heroin reported engaging in dealing for cash profit, followed by property offence (15%), fraud (5%) and a violent crime (3%) in the month prior to interview.

8.1.2 Methamphetamine

Thirty-nine percent of those participants (n=71) who reported recent use of methamphetamine also reported being arrested in the 12 months prior to interview. Nineteen percent of those recently using methamphetamine reported engaging in dealing for cash profit, followed by property offence (19%), fraud (10%) and violent crime (6%) in the month prior to interview.

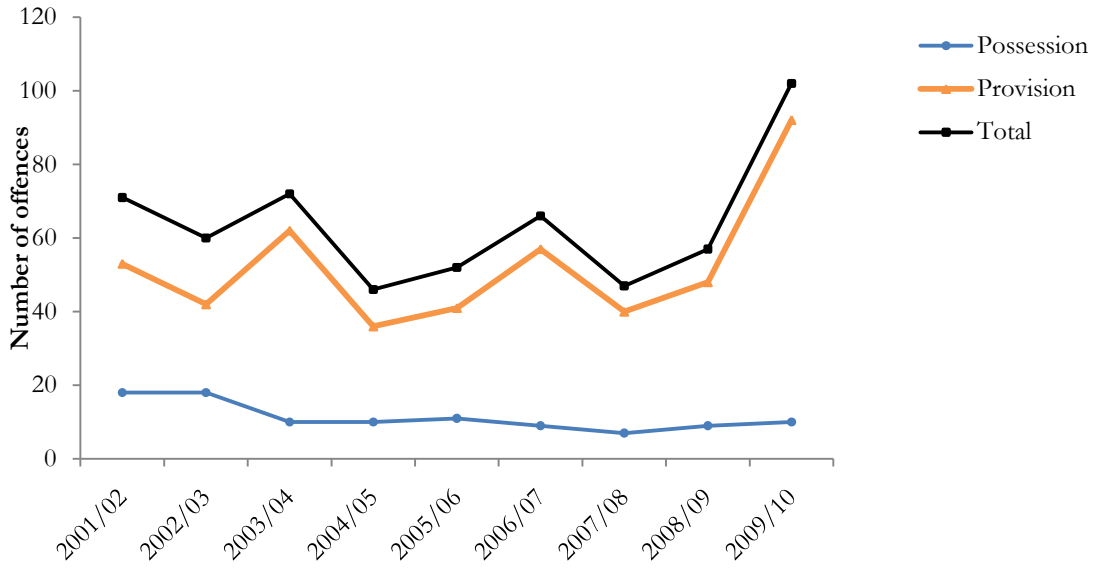
9.2 Arrests

8.2.1 Heroin

The total number of illicit drug-related possession and provision offences for 2009/2010 was 2,869 which is an increase since 2008/09 (total 2,830), (2,493 in 2007/08; (2,394 in 2006/07; 2,687 in 2005/06; 2,320 in 2004/05; 2,985 in 2003/04) (SAPOL Annual Reports, 2005, 2006, 2007, 2008, 2009 and 2010). The 'possession/use' category will continue to be affected by the introduction of SAPOL's Police Drug Diversion Initiative in 2001.

The number of heroin possession/use and provision offences (incorporating import/export drugs, sell/trade drugs, produce/manufacture drugs categories), reported or becoming known to police from 1999/00 to 2009/10 (as reported by SAPOL) is presented in Figure 36. As can be seen, there was a slight increase in the number of provision offences (from 48 to 92 offences) for heroin from 2008/09 to 2009/10, while possession/use offence numbers remained relatively similar (at 10 from 9). With regard to the trend over a longer period, total heroin-related possession and provision offences has increased across the years from 2001/02 to 2009/10. Heroin possession and provision offences made up 3.5% of the total number of illicit drug possession and provision offences in 2009/10, which indicates an increase compared to 2008/09 at 2%.

Figure 35: Number of heroin-related offences reported by SAPOL, 2001/02-2009/10

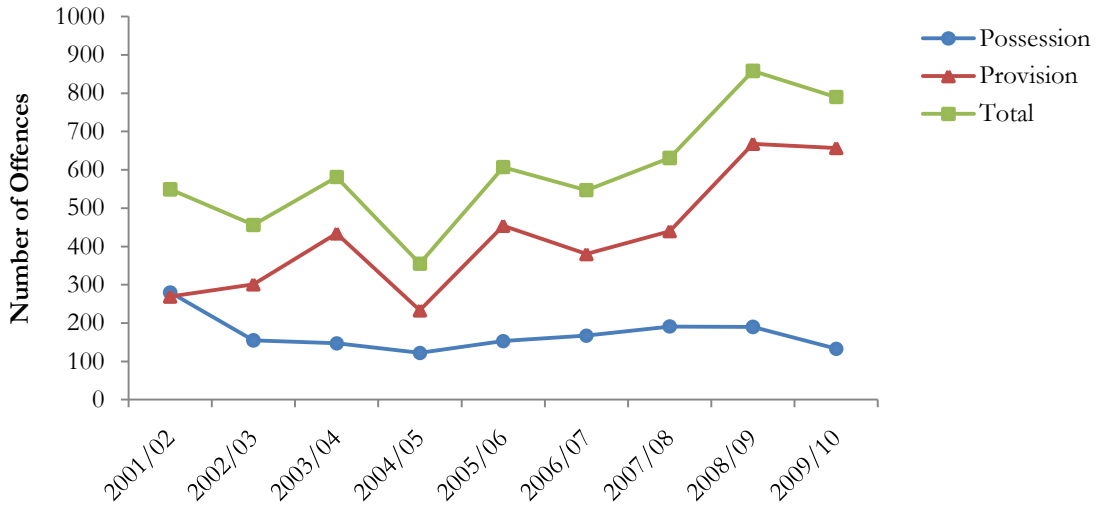


Source: SAPOL Reports, 2002-2010

8.2.2 Methamphetamine

Figure 36 presents the number of amphetamine possession/use and provision (incorporating the categories of import/export drugs, sell/trade drugs, and produce/manufacture drugs) offences reported or becoming known to police from 2001/02 to 2009/10 (SAPOL Annual Reports, 2001-2010). As can be seen, in 2009/10 the number of amphetamine possession offences recorded (133 offences) decreased compared to 2008/09 (190 offences), there was also a decrease in provision offences for amphetamines (from 668 in 2008/09 to 657 offences in 2009/10). Amphetamine possession and provision offences made up 27% of the total number of illicit drug possession and provision offences in 2009/10, compared to 30% in 2008/09, 25% in 2007/08, 23% in 2006/07, 23% in 2005/06 and 15% in 2004/05.

Figure 36: Number of amphetamine-related offences reported by SAPOL, 2001/02-2009/10

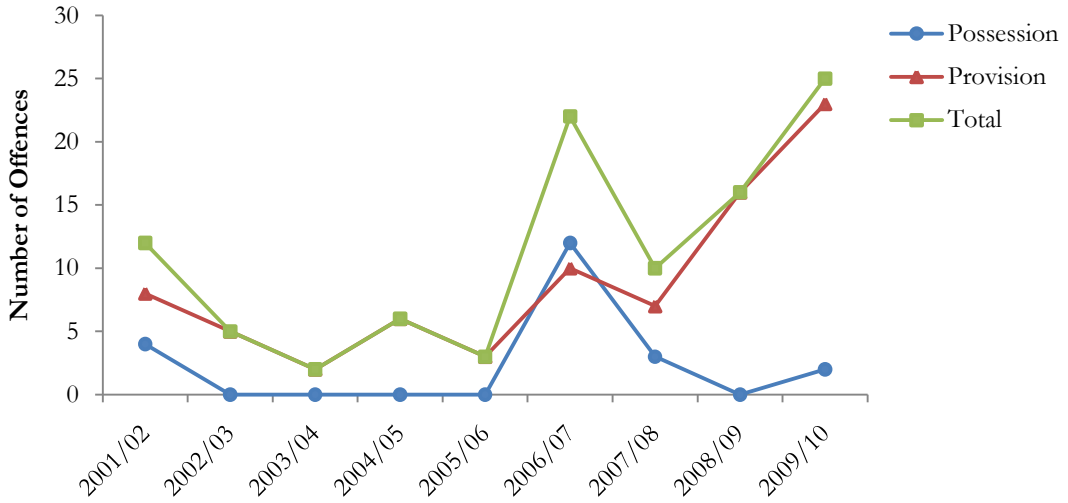


Source: SAPOL Reports, 2002-2010
Note: SAPOL Annual Reports only refer to amphetamines and does not distinguish between amphetamine and methamphetamine

8.2.3 Cocaine

Figure 37 presents the number of cocaine possession/use and provision (incorporating the categories of import/export drugs, sell/trade drugs, produce/manufacture drugs) offences reported or becoming known to police from 2001/02 to 2009/10 (SAPOL Annual Reports, 2001-2010). As can be seen, the number of cocaine possession offences increased from 0 to two in 2009/10. The number of provision offences increased with 23 such offences compared to 16 in 2008/09. Cocaine possession and provision offences in 2009/10 again reached the numbers seen in 2000/01; however, cocaine continued to make up less than 0.9% as they have in all years depicted.

Figure 37: Number of cocaine-related offences reported by SAPOL, 2001/02-2009/10

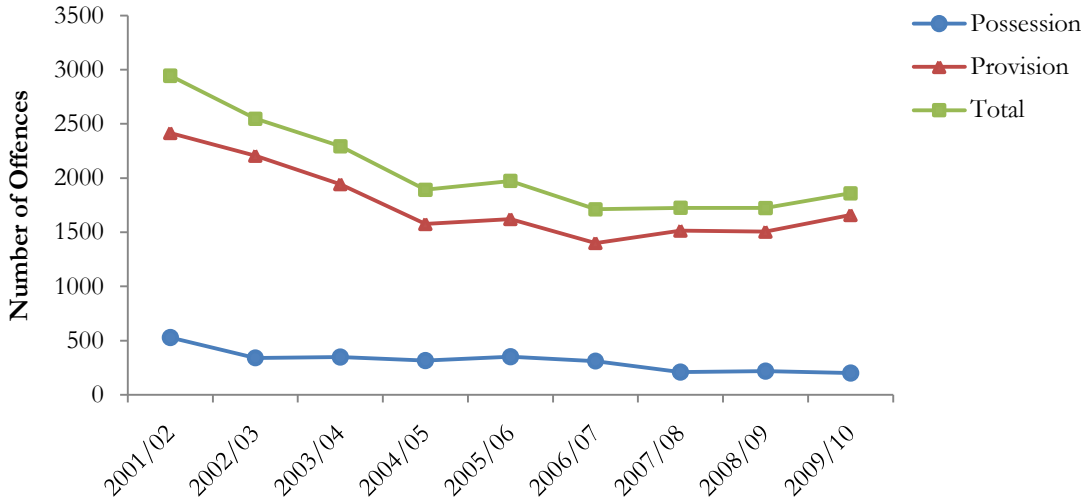


Source: SAPOL Reports, 2002-2010

8.2.4 Cannabis

Figure 38 presents the number of cannabis possession/use offences and provision offences (incorporating import/export drugs, sell/trade drugs, produce/manufacture drugs categories) offences reported or becoming known to police from 2001/02 to 2009/10 (SAPOL Annual Reports, 2001-2010). As can be seen, the number of cannabis possession offences decreased slightly in 2009/10 (at 200 from 218 in 2008/09) however, the number of provision offences increased, from 1505 offences in 2008/09 to 1659 offences in 2009/10. Historically, cannabis-related offences have made up the majority of illicit drug possession and provision offences and they continued to do so in 2009/10 when 65% of the total number of such offences was cannabis-related. This proportion remains stable compared to 2008/09 (64%) and is slightly lower than that seen in previous years; for example, 69% in 2007/08, 71.5% in 2006/07, 73% in 2005/06, 81.5% in 2004/05 and 76.8% in 2003/04.

Figure 38: Number of cannabis-related offences reported by SAPOL, 2001/02-2009/10



Source: SAPOL Annual Reports, 2002-2010

8.3 Expenditure on illicit drugs

Fifty-six participants had purchased illicit drugs on the day prior to the interview. The median amount spent on illicit drugs on the day prior to interview, by those who reported purchasing illicit drugs on that day, was $100 (range=$20-$1,500; n=56). This is the same as the median amount of money spent on illicit drugs as reported by participants in 2008 (range=$4-$1,000; n=38).

Table 43 presents the breakdown of the amounts spent on illicit drugs (i.e., excluding alcohol, tobacco and licit supplies of prescription medications) by the whole sample on the day before interview, by those participants who reported heroin as the drug they injected most in the last month, and by those who reported methamphetamine as the drug they injected most in the last month. Regardless of whether participants were primarily heroin-using participants or methamphetamine-using participants, they had spent the same amount of money purchasing drugs on the day prior to interview ($100).

Table 43: Expenditure on illicit drugs on the day preceding the interview, 2008-2009

Expenditure (%)	2009^	**2010**
	(n=100)	**(n=91)**
Nothing	43	**48**
Less than $20	0	**6**
$20-$49	5	**7**
$50-$99	15	**10**
$100-$199	24	**22**
$200-$399	7	**7**
$400 or more	5	**1**
Median expenditure ($)	$100	**$100**

Source: IDRS participant interviews
^ Data missing for one participant

8.4 Driving risk behaviour

8.4.1 Self-report data for driving under the influence of alcohol and illicit drugs

Seventy-six participants reported that they had driven a vehicle in the six months prior to interview. Of those participants who had driven in the six months prior to interview, 15% (n=11) reported driving under the influence of alcohol, with 36% of those (n=4) driving over the limit of alcohol on a median of two times (range=1-3 times).

Table 44: **Driving behaviour by jurisdiction, 2010**

	2009 (N=100)	**2010 (N=97)**
Driven in the last six months (n)	73	**76 (n=74)**
Driven under the influence of alcohol last six months* (%)	11	**15**
Driven while over the limit of alcohol# (%)	63	**36**
Driven soon after using an illicit drug(s) last six months* (%)	90	**82**
Drug(s) taken (%)**	(n=66)	**(n=61)**
Heroin	56	**43**
Methadone	5	**7**
Buprenorphine	3	**7**
Bup-naloxone	2	**5**
Morphine	12	**13**
Oxycodone	3	**10**
Speed	23	**15**
Base	21	**23**
Ice/crystal	15	**26**
Any methamphetamine	*44*	**49**
Cocaine	2	**2**
Benzodiazepines	6	**10**
Cannabis	30	**41**

Source: IDRS participant interviews

* Among those who had driven a car in the last six months

Among those who had driven while under the influence of alcohol

** Among those who had driven soon after taking a drug. Refers to the last occasion of driving under the influence of an illicit drug

Eighty-two percent of participants who had driven (n=61) reported driving taking illicit drugs in the six months prior to interview on a median of 48 times (range=1-180). Twenty-eight percent (n=17) of those who reported driving after taking illicit drugs in that period reported doing so on a daily basis. Over half of those who had driven under the influence of an illicit drug in the six months prior to interview had driven under the influence of heroin (43%, n=26), or 'any' methamphetamine (49%, n=39), or more specifically: powder (15%; n=9), base (23%; n=14), and crystal (26%; n=16), followed by cannabis (41%; n=25). Smaller proportions of participants reported driving under the influence of other substances, as listed in Table 44.

The last time participants drove under the influence of any illicit drug, cannabis was used by a third of the participants (34% n=21), followed by heroin (33%, n=20) and any methamphetamine (49%, n=39). The median amount of time after participants had used an illicit drug the last time prior to driving was 20 minutes (range=1-300 minutes) with the majority (66%, n=40) reporting that the use of illicit drugs had no impact on their ability to drive. Around a quarter (25%, n=15) reported that when driving under the influence of

drugs they felt their driving ability was impaired, with 10% (n=6) reporting their driving had improved as a result of using illicit drugs.

Table 45: Recent occurrence of driving soon after taking an illicit drug, 2009-2010

DRUG (%)	2009 (n=66)	**2010**
Any drug	90	**82**
Cannabis	30	**34**
Heroin	56	**33**
Methadone**	7	**5**
Buprenorphine**	3	**3**
Morphine**	12	***8***
Benzodiazepines**	6	***3***
Methamphetamine – powder	23	***7***
Methamphetamine – base	21	***18***
Methamphetamine – crystal	15	***11***
Any methamphetamine^	44	**49**
Cocaine	2	***0***
LSD	0	***0***
Ecstasy	0	***0***

Source: IDRS participant interviews
Note: Recent use means in the six months preceding interview
** Refers to illicit use of these substances
# Includes heroin, methadone, buprenorphine, suboxone, oxycodone, other opiates and morphine
^ Includes powder, base and crystal forms

KE comments

- The majority of KE reported that the clients they saw had a prison history or were involved in some kind of criminal activity.
- Law enforcement KE suggested that there appears to be an increase in 'smaller' methamphetamine cooks. Law enforcement KE also suggested there had been an increase in the amount of pseudoephedrine importation because of the restrictions on pseudoephedrine in medications, and therefore they are trying different methods.

9.0 SPECIAL TOPICS OF INTEREST

Key findings

- Among the IDRS participants, the mean height was 1.73 metres, mean weight 74.5 kilograms and mean Body Mass Index (BMI) 25. The IDRS sample reported a higher BMI percentage as being 'underweight' compared to the general population aged 18-64 years.
- Over one-third (35%) of the sample scored five or over on the Alcohol Use Disorders Identification Test – Consumption (AUDIT-C), 36% of males and 35% females scored five or more indication the need for further assessment.
- Of those who had recently used a stimulant, the median SDS score was three (range=0-13), with 44% scoring four or above. Of those who had recently used an opioid, the median SDS score was six (range=0-15), with 61% scoring five or above. There were no significant differences regarding gender and median stimulant SDS score,
- Participants scored lower than the general population on each domain of the PWI. The PWI is an index which asks participants how satisfied they are with various aspects of their life.
- Over half (58%) of the national sample reported been tested in the last two years for a sexually transmitted infection (STI). The main reason for test was that their health provider suggested the test.
- Over half (59%) of the female sample reported a pap smear test in the last two years. The main reason for 'no' pap smear was 'didn't think of it'. The main reason for a pap smear test was 'due for a test'.
- The majority (80%) of the sample reported visiting a general practitioner (GP) in the last 12 months for a physical or mental health problem on a median of six occasions. Nearly half (44%) of these visited were for a mental health problem.
- Around one-third (31%) reported contact with a family member nearly every day, while over half (51%) reported contact with a friend nearly every day. The majority reported that they could rely on one or two family members or friends.

9.1 Height, weight and BMI

Eating disorders and drug use disorders are significant public health problems. However, epidemiologic research examining their associations yields ambiguous results. Evidence on a relationship between obesity and alcohol use is found in some studies (Wannamethee, Shaper & Whincup 2005). As to the relationships between overweight/obesity and nicotine dependence, some studies have found overweight and obese men, but not women, were more likely to be former daily smokers than non-smokers (John Meyer, & Rumpf, et al,. 2006; Zimlichman, Kochba, & Mimouni, et al., 2005). In a nationally representative sample, overweight, obesity and extreme obesity were associated with lower risk for past-year nicotine dependence in men but not in women (Pickering, Grant, & Chou, et al., 2007).

The relationship between BMI and illicit drug use is unclear. For instance, marijuana can stimulate appetite whereas cocaine is a stimulant and appetite suppressant, but one study found similar prevalence of overweight in individuals with illicit drug use disorders as that found in the general population (Rajs, Petersson & Thiblin et al., 2004) and another study found both positive and negative associations of BMI with various substance use disorders, and significant gender differences in those relationships (Barry & Petry, 2009). Finally, BMI and drug use are both associated with mental health problems (Kemp, Gao, & Ganocy, et al., 2009).

For the first time in 2010 participants were asked their height and weight. With this information BMI was calculated among the national sample to determine the relationship between BMI, drug use and the risk of disease. BMI is calculated from height and weight information, using the formula weight (kilograms) divided by the square of height (metres). BMI is divided into four groups: (1) underweight, less than 18.5; (2) normal weight, 18.5 to less than 25; (3) overweight, 25 to less than 30; or (4) obesity, 30 and greater, in adults to measure prevalence. BMI values are grouped according to the groups reported by the World Health Organization (WHO) (see http://apps.who.int/bmi/index.jsp?introPage=intro_3.html).

Among the national IDRS sample the mean height was 1.74 metres and weight 72.6 kilograms. The mean BMI for the national sample was 24.1. Of those who commented nationally, 8.8% had a BMI which was considered underweight (BMI<18.5), this compares to 2.6% of the general population aged 18-64 years (ABS, 2009). Females in the national sample were more likely to be underweight compared to males (16.8% versus 5%). Both genders reported a higher percentage as underweight and a smaller percentage as obese compared to the general population (Table 46). Jurisdictional differences were noted.

Table 46: Self-reported height, weight and BMI by jurisdiction, 2010

	National Health Survey 2007-2008	2010
Mean height (metres)	-	(n=91) 1.73
Mean weight (kilograms)	-	(n=86) 74.5
Mean BMI	-	(n=86) 25.0
BMI – males (%)		(n=50)
Underweight	1.4	4.0
Normal range	35.8	64.0
Overweight	40.2	16.0
Obese	22.6	16.0
BMI – females (%)		(n=36)
Underweight	3.7	8.3
Normal range	49.1	50.0
Overweight	27.2	16.7
Obese	20.0	25.0

Table 46: Self-reported height, weight and BMI by jurisdiction, 2010

	National Health Survey 2007-2008	2010
BMI – all (%)		(n=86)
Underweight	2.6	5.8
Normal range	42.2	58.1
Overweight	33.9	16.3
Obese	21.3	19.8

Source: IDRS participant interviews; (ABS, 2009)

9.2 Alcohol Use Disorders Identification Test

Recently a lot of media attention has focused on young people and alcohol. However, there has been less focus on alcohol use amongst PWID, despite the fact that they are particularly at risk for alcohol-related harms due to a high prevalence of HCV. Half of the participants interviewed in the Australian NSP Survey 2009 (n=2,697) were found to have HCV antibodies (NCHECR, 2010). Given that the consumption of alcohol has been found to exacerbate HCV infection and to increase the risk of both non-fatal and fatal opioid overdose and depressant overdose (Coffin et al., 2007; Schiff & Ozden, 2004; Darke et al., 1996) it is important to monitor risky drinking among PWID.

The information on alcohol consumption currently available in the IDRS includes the prevalence of lifetime and recent use, number of days of use over the preceding six months. In 2010, participants in the IDRS were asked the AUDIT-C as a valid measure of identifying heavy drinking (Bush et al., 1998). The AUDIT-C is a three item measure, derived from the first three consumption questions in the AUDIT. Dawson et al (2005) reported on the validity of the AUDIT-C finding that it was a good indicator of alcohol dependence, alcohol use disorder and risk drinking.

Among the sample, the overall mean score on the AUDIT-C was 3.4 (SD=3.5, range=0-12). There was no significant difference between male and female scores. According to Dawson et al (2005) and the AGDH&A's Guidelines for the Treatment of Alcohol Problems (Haber et al., 2009) and a cut-off score of five or more indicated that further assessment is required.

Over one-third (35%) of the sample scored five or over on the AUDIT-C, 36% of males and 35% females scored five or more indication the need for further assessment (Table 47).

Table 47: AUDIT-C among PWID, by jurisdiction, 2010

	2010 (n=96)
Mean AUDIT-C score, SD (range)	3.4, 3.5 (0-12)
Score of 5 or more (%)	35
Males (%, n=53)	36
Females (%, n=43)	35

Source: IDRS participant interviews

9.3 Stimulant and opioid dependence

Understanding whether participants are dependent is an important predictor of harm, and typically demonstrates stronger relationships than simple frequency of use measures.

In 2010, the participants in the IDRS were asked questions from the SDS for the use of stimulants and opioids.

The SDS is a five-item questionnaire designed to measure the degree of dependence on a variety of drugs. The SDS focuses on the psychological aspects of dependence, including impaired control of drug use, and preoccupation with and anxiety about use. The SDS appears to be a reliable measure of the dependence construct. It has demonstrated good psychometric properties with heroin, cocaine, amphetamine, and methadone maintenance patients across five samples in Sydney and London (Dawe et al., 2002).

Previous research has suggested that a cut-off of four is indicative of dependence for methamphetamine users (Topp & Mattick, 1997) and a cut-off value of three for cocaine (Kaye & Darke, 2002). No validated cut-off for opioid dependence exists; however, researchers typically use a cut-off value of five for the presence of dependence.

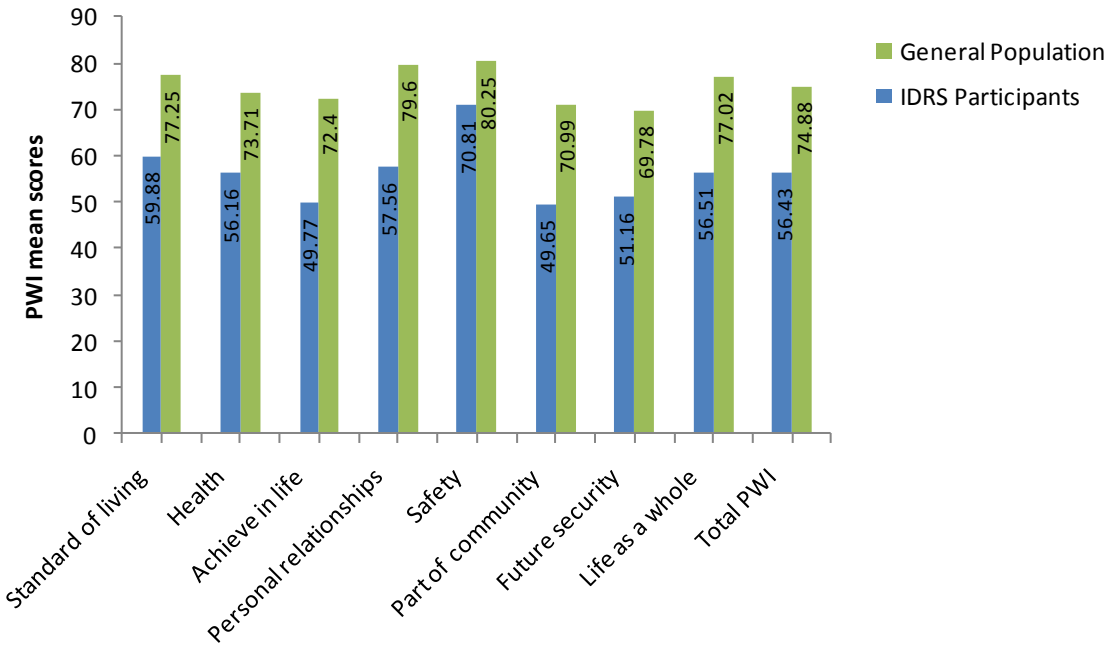
Of those who had recently used a stimulant, the median SDS score was three (range=0-13), with 44% scoring four or above. There were no significant differences regarding gender and median stimulant SDS score, or regarding gender and those who scored four or above. Of those who scored four or above, 93% reported specifically attributing responses to methamphetamines, with 7% not attributing a specific drug.

Of those who had recently used an opioid, the median SDS score was six (range=0-15), with 61% scoring five or above. There were no significant differences regarding gender and median stimulant SDS score, or regarding gender and those who scored five or above. Of those who scored five or above, 67% reported specifically attributing responses to heroin, 18% morphine, 13% methadone, 5% buprenorphine, 5% oxycodone and 3% other.

9.4 PWI

The PWI was included in the IDRS survey to monitor the personal wellbeing of participants in the IDRS. Questions asked participants how satisfied they were with various aspects of their life, including standard of living, health, personal achievement, personal relationships, personal safety, feeling a part of the community, future security and life as a whole. Participants were asked to answer on a 0-10 scale of satisfaction (0=very unsatisfied and 10=very satisfied). Scores were then combined across the seven domains to produce an overall index score and adjusted to have a range between 0-100 points (Cummins et al, 2007). Figure 40 shows the mean national IDRS scores compared to the Australian general population. Nationally, participants scored lower than the general population on each domain of PWI. Participants were also below the expected range (between 60 and 90 percentage points) of wellbeing scores for each domain except safety.

Figure 39: PWI, IDRS and Australian general population mean scores, 2010



Source: IDRS participant interviews; Cummins et al., 2007

Figure 40 shows the mean participant scores compared to the Australian general population. Participants scored lower than the general population on each domain. At normal levels of wellbeing (average scores lies between 70-80 points), people often feel good about themselves, are motivated to conduct their lives, and have a strong sense of optimism. In

comparison individuals with scores below 50 points are at a higher risk of depression (Cummins et al., 2007).

9.5 Sexual health

Population studies have shown that younger age groups had engaged in sexual relationships with more partners in their lifetime than older age groups (Johnson et al., 2001). Amongst the REU sample participants of a younger age have been found to be more likely to engage in risky behaviours (Cogger & Kinner, 2008). Furthermore, studies have shown that younger individuals who frequent night clubs are likely to report multiple sexual partners and incidence of STI (Wells et al., 2010).

In Australia, approximately 10% of young women and 3% of young men (aged under 30 years) report having been tested for chlamydia (Kong et al., in press). The issues surrounding sexual health prompted questions to be developed for the IDRS survey to investigate reasons why or why not participants choose to have STI screening. The responses to these questions were formulated by considering results of previous research (Dixon-Woods et al., 2001; Tilson et al., 2004; Balfe & Brugha, 2009).

Participants in the IDRS were first asked if they had been tested for a STI in the last two years. Among the national sample who commented, over half (58%) reported that they had been tested in the last two years for a STI by means of a blood test, urine sample or swab, while one-quarter reported that they didn't think about been tested (Table 48).

Among those who were tested, the main reasons given for testing were: health provider suggested it, due to unprotected sex, and part of a general check-up. The majority of participants (51%) were tested by a GP (Table 48).

Over half (59%) of the female sample reported a pap smear test in the last two years. The main reasons given for not having a pap smear test were 'didn't think of it', 'don't like them' and 'wasn't sexually active', 'pregnant' and 'hysterectomy'. The main reasons for having a pap smear test were 'due for a test', 'general check-up' and 'health provider suggested it'. The majority of participants (62%) were tested by a GP (Table 48).

Table 48: Sexual health by jurisdiction, 2010

	2010 N=97
Tested for a STI last two years? (%)	
No, don't think about it	**14**
No, I didn't want to be tested	**3**
No, another reason	**21**
Yes, I was tested by means of a blood test, urine sample or swab	**61**

Table 48: Sexual health by jurisdiction, 2010, Cont.

	2010 N=97
Reason for test[*] (%)	**n=55**
Clear of infection after relationship	**11**
Clear of infection before starting relationship	**2**
Unprotected sex	**11**
Symptoms of infection	**4**
Health provider suggested	**9**
Friend suggested	**2**
Partner suggested	**0**
Partner had symptoms	**4**
Ex-partner told me to get tested	**0**
Clinic access was easy	**7**
Other@	**62**
Place last tested for STI[*] (%)	**n=55**
Sexual health clinic	**29**
GP	**64**
Hospital	**2**
Other	**6**
Had a pap smear test last two years[**] (%)	**n=36** **64**
Reasons for no pap smear test[#] (%)	**n=13**
Wasn't sexually active	**8**
No symptoms	**0**
Don't like them	**8**
Didn't think of it	**0**
Embarrassed/uncomfortable	**15**
Financial cost	**0**
Other[†]	**77**
Reasons for having a pap smear test[##] (%)	**n=23**
Symptoms	**0**
Reminder letters	**30**
Health provider suggested	**4**
Friend suggested	**0**
Due for a test	**35**
Family history of cervical cancer	**0**
Other@	**35**
Place last tested for pap smear[##] (%)	**n=23**
Sexual health clinic	**13**
GP	**83**
Hospital	**4**
Other	**0**

Source: IDRS participant interviews

[*] Among those who were tested for a STI in the last two years

[**] Among females only

[#] Among those who had not had a pap smear test in the last two years

[##] Among those who had a pap smear test in the last two years

@ 'Other' – most reported for a 'general check-up'

[†] 'Other' – most reported for 'did not want to have the procedure', 'forgot', 'hysterectomy' and 'pregnant'

9.6 Service use – GP

Literature has shown that the regular PWID population is a group that experience a variety of physical and mental health problems. However, due to the marginalised status and concealed nature of this group, it can be difficult to ensure that this group obtain the public health care access they require and that targeted health care strategies reach them. This group also experience barriers to treatment due to a lack of knowledge regarding available services, long wait times and limited operating hours (Neale et al., 2007). Also due to the nature of the addiction, the time spent obtaining and consuming drugs may cause delays in seeking treatment (McCoy et al., 2001; Drumm et al., 2005) which often lead to over dependence on acute crisis and emergency interventions (Kerr et al., 2004).

The IDRS sought to investigate this issue of access to services further and identify the services which PWID have utilised most often offering a resource for treatment providers and policy initiatives. This section focused on GPs or doctors and not their opiate prescribers.

Ninety-two percent reported visiting a GP in the last 12 months for a physical or mental health problem, on a median of four occasions in the last 12 months. Among those who reported visiting a GP in the last 12 months, nearly one-fifth (23%) of participants reported visiting a GP in a hospital outpatient or emergency department, while 10% reported a visit from the GP at home (Table 49).

Forty percent of those who reported a GP visit in the past year, reported visiting for problems with their mental health, on an average of four occasions. This compares to 25% of the general population with a 12-month mental disorder in the National Survey of Mental Health and Wellbeing (ABS, 2007). Of those who commented, the majority (77%) reported visiting the 'same' GP for a problem with their mental health. Of those who saw a 'different' GP (n=7), six participants reported seeing a 'different' GP at a 'different' practice, with a median of two 'different' practices (range=2-3) visited in the past 12 months. Of those who visited a GP for a problem with their mental health, 9% were referred to a GP by another GP. The mean age first visited a GP for a problem with their mental health was 24 years (range=6-45 years), (Table 49).

Table 49: GP visits among participants by jurisdiction, 2010

	2010
Visited a GP last 12 months (%)	92
Median number of GP visits last 12 months*	n=874
Visited GP at home* (%)	10
GP visits in hospital OP or ED* (%)	23
GP visit for mental health problem* (%)	40
Visited the same GP for mental health** (%)	n=3477
Referred to GP by another GP for mental health problem** (%)	9
Mean age first visited GP for mental health problem** (%)	n=3424

Source: IDRS participant interviews
* Among those who had visited a GP in the last 12 months
** Among those who visited a GP for mental health

9.7 Social networks

Interaction with other people is vital to human development. Social relationships and networks can act as protective factors against the onset or reoccurrence of mental illness and enhance recovery of mental disorders (WHO, 2003; WHO, 2005). For example marital status has been shown to be related to a person's physical and mental health, with results indicating married people experience less negative effects associated with these areas. Regular drug users, particularly regular injectors, are a group that tend to be marginalised by society and experience many hardships including homelessness, social and financial disadvantage and physical health problems all of which may contribute to a mental health condition therefore implying social networks would be a vital area of support for this group.

Results from the 2007 National Survey of Mental Health and Wellbeing demonstrated that the prevalence of a 12-month mental health disorder was very similar for people who did and did not have contact with family members; however, results differed for those who had contact and who did not have contact with friends. Of the 15.7 million people who had contact with their friends one in five (20%) had a 12-month mental disorder but for the 352,500 who had no contact with friends or no friends, 38% had a 12-month mental health disorder (ABS, 2007).

In 2010, the IDRS asked participants questions in relation to social networks. Of the sample around two-fifths (41%) reported contact with a family member nearly every day, while 6% reported no contact with family. The majority (70%) were able to rely on one or two family members (Table 50).

Just under half (46%) reported contact with friends nearly every day. Over half (56%) were able to rely on one or two friends. Around one-third (30%) reported that they could rely on their partner/spouse 'a lot'. Over half of the sample was single (Table 50).

Table 50: Social networks among participants by jurisdiction, 2010

	2010 (N=97)
How often are you in contact with any family member?	
Nearly every day (%)	**41**
3-4 days a week (%)	**4**
1-2 days a week (%)	**21**
1-3 days a month (%)	**12**
< once a month (%)	**16**
Never (%)	**5**
No family (%)	**1**
How many family members can you rely on*?	**n=70**
1-2 family members (%)	**70**
3-4 family members (%)	**19**
5 or more family members (%)	**11**
How often are you in contact with any of your friends?	
Nearly every day (%)	**46**
3-4 days a week (%)	**15**
1-2 days a week (%)	**15**
1-3 days a month (%)	**8**
< once a month (%)	**7**
Never (%)	**2**
No friends (%)	**6**
How many friends can you rely on?**	**n=65**
1-2 friends (%)	**56**
3-4 friends (%)	**30**
5 or more friends (%)	**12**
How much can you rely of your spouse/partner for help (for a serious problem)?	
A lot (%)	**30**
Some (%)	**3**
A little (%)	**7**
Not at all (%)	**5**
Don't know (%)	**2**
Currently single (%)	**52**

Source: IDRS participant interviews

* Among those in contact with a family member

** Among those in contact with friends

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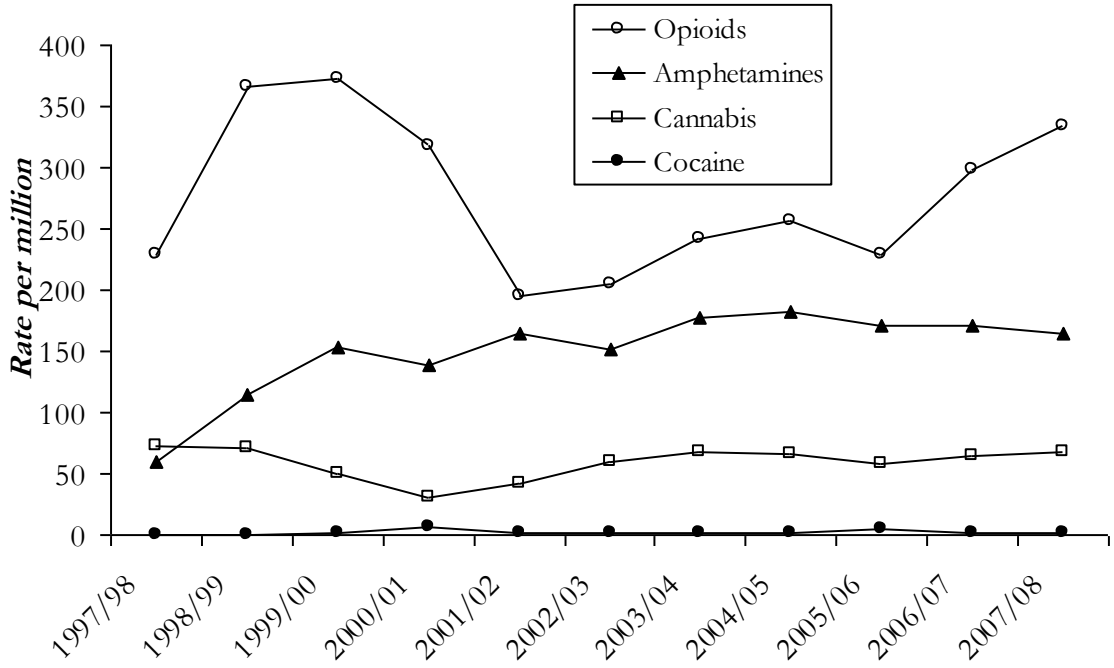
APPENDIX 1: SUBSTANCE-RELATED ADMISSIONS TO HOSPITALS IN SOUTH AUSTRALIA AND AUSTRALIA

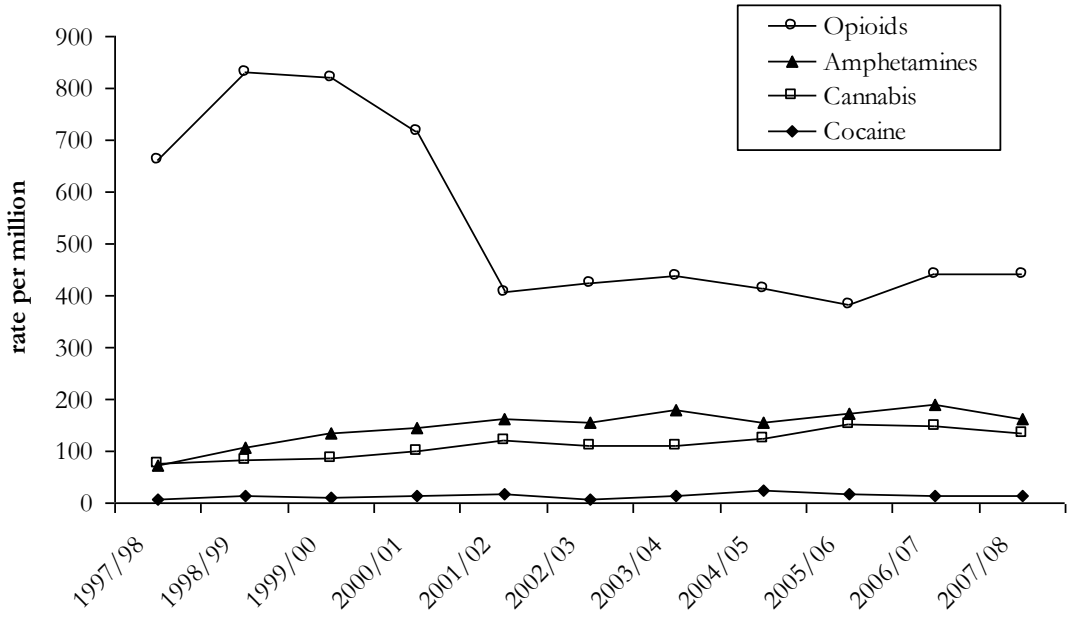
Figure A: Rate of substance-related admissions (primary diagnosis) to hospital in South Australia, 1997/98-2007/08



Source: AIHW

Note: Result relate to persons aged between 15 and 54 years; 'Primary diagnosis' was given to those admissions where the substance was considered the primary reason for the patient's episode of care

Figure B: Rate of substance-related admissions (primary diagnosis) to hospital in Australia, 1997/98-2007/08



Source: AIHW

Note: Results relate to persons aged between 15 and 54 years; 'Primary diagnosis' was given to those admissions where the substance was considered the primary reason for the patient's episode of care