N. White, R. Vial and R. Ali

SA DRUG TRENDS 2009
Findings from the Illicit Drug Reporting System (IDRS)

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Findings from the Illicit Drug Reporting System (IDRS)

Nancy White, Robyn Vial and Robert Ali

Drug and Alcohol Services South Australia

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ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AGDH&A	Australian Government Department of Health and Ageing
A&TSI	Aboriginal and/or Torres Strait Islander
AIHW	Australian Institute of Health and Welfare
BPAQ-SF	Buss-Perry Aggression Questionnaire (Short Form)
BBVI	blood-borne viral infections
CDA – NNDSS	Communicable Diseases Australia – National Notifiable Diseases Surveillance System
CME-DIS	Client Management Engine – DASC Information System
CNP	Clean Needle Program
CRUFAD	Clinical Research Unit for Anxiety and Depression
DASSA	Drug and Alcohol Services South Australia
EDRS	Ecstasy and Related Drugs Reporting System
HCV	hepatitis C virus
ICD – 9; ICD – 10	International Classifications of Diseases, 9th Revision & 10th Revision
IDRS	Illicit Drug Reporting System
IDU	injecting drug users
KE	key expert
K10	Kessler Psychological Distress Scale
LSD	lysergic acid
MDMA	3,4 methylenedioxymethamphetamine (ecstasy)
NCHECR	National Centre in HIV Epidemiology and Clinical Research
NDARC	National Drug and Alcohol Research Centre
NMDS – AODTS	National Minimum Data Set for Alcohol and other Drug Treatment Services
NNDSS	National Notifiable Diseases Surveillance System
NSP	Needle and Syringe Program
OD	overdose
OTC	over the counter codeine

PDI	Party Drugs Initiative
PGSI	Problem Gambling Severity Index
PWI	Personal Well-being Index
PWID	people who inject drugs
RAH	Royal Adelaide Hospital
SA	South Australia
SAPOL	South Australian Police
THC	tetrahydrocannabinol

EXECUTIVE SUMMARY

Demographic characteristics of IDRS participants

Sample characteristics in 2009 were slightly different to previous years, with 100 participants in the 2009 IDRS sample. The median age was 40 years (older than in 2008 when participants were a median of 38 years), with the majority being male (66%). Two-thirds of the sample participants were unemployed and less than half had a history of previous imprisonment, both characteristics less than in 2008. The median number of years spent at school was eleven (higher than in previous years), with around two-thirds reporting some kind of post-secondary qualification (primarily a trade or technical qualification). Just under half were 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 19 years and amphetamine was the drug most commonly first injected, followed by heroin. Heroin was nominated by over half of the sample as the drug of choice, followed by methamphetamine. Heroin was reported as the drug most commonly injected by participants in the last month, with around 10% nominating morphine.

Polydrug use was common among the participants in 2009, and has remained consistently so across the years of the IDRS. In 2009, similar to 2008 there was less crossover between heroin users and methamphetamine users compared to previous years.

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 2009, the proportion of SA participants who reported recent use of heroin was significantly higher compared to 2008 participant reports, whereas the frequency of use of heroin 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 increased in 2009 compared to the price reported in 2008. Despite this the majority of participants reported the price of heroin remained stable from 2008 to 2009, and it was still considered 'easy' or 'very easy' to obtain by most participants, with availability reported as 'stable' in the preceding six months. KE reported that although the price of heroin appears to be stable, users are reporting having to buy larger quantities, for instance now buying a minimum of $100 compared to previous purchases of $50. According to participants, heroin purity remained at 'low' to 'medium' levels in 2009; however, fewer participants reported heroin purity as 'low', with the current levels of purity perceived as either 'stable' or 'fluctuating'.

Experience of recent heroin overdose among the participants in the sample decreased. 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.

In general, it seems that consistent with the ease of availability of heroin for most participants, and the predominance of heroin as the drug of choice among this year's sample, significantly more participants in 2009 had used heroin recently.

Methamphetamine

The proportion of participants reporting recent use of any methamphetamine decreased slightly in 2009 whereas the reported frequency of use was significantly higher in 2009. Increased frequency of use was noted for the powder and base forms of methamphetamine, particularly powder. In 2009, reported recent use of all forms of methamphetamine by participants was at the same level regardless of the form. Recent use of crystal methamphetamine (or 'ice'/ 'crystal') by smoking was slightly lower.

In 2009, the last median price paid per point remained stable for all forms of methamphetamine, with few participants able to report the current price of a gram for all forms. All forms of methamphetamine were considered 'easy' or 'very easy' to obtain in 2009, and stable, although more participants in 2009 reported that base methamphetamine was more difficult to obtain. The purity of the powder form of methamphetamine, as perceived by participants, was low or medium. The purity of the base form of methamphetamine, as perceived by participants, was equivocal. The purity of the crystal form of methamphetamine, as perceived by participants, remained 'medium' to 'high'. There was variability in reports from users regarding recent changes in purity of the various methamphetamine forms, suggesting overall recent fluctuation and variability in quality of methamphetamine.

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 inpatient (detox) services with amphetamine as the primary drug of concern also decreased. Drug-related attendances to the Emergency Department of the Royal Adelaide Hospital (RAH) also decreased for amphetamines.

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 significantly lower, this measure has been relatively stable across all the years the IDRS has been conducted. The frequency of use of cannabis was also lower in 2009. Almost all cannabis users reported they had used hydroponically grown cannabis in the six months prior to interview, with a large majority reporting they mostly used hydro. Of interest is that over 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, providing it is cannabis.

The majority of KE noted that cannabis use is decreasing with some long-term users (especially older males) approaching health services either to cut-down or stop using this substance. KE report this is a very unusual situation.

In 2009, the price of an ounce of hydro and the price of a 'bag' (of either hydro or bush) has remained stable and has continued to do so for many years. Both hydro and bush cannabis were considered 'very easy' or 'easy' to obtain, and stable. Most also perceived the potency of hydro as 'high' and bush as 'medium', and stable.

The number of calls to ADIS concerning cannabis decreased, with the total number of clients to DASSA treatment services and the numbers of clients attending inpatient detox services of DASSA also decreasing in 2008/09. Cannabis-related hospital admissions in SA increased slightly in 2008/09.

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 2009 the use of other illicit opioid substances by SA participants was common, with 41% reporting recent use of some type of illicit opioid substance, excluding heroin. There were some changes, however, in the use of other opioids by participants in the 2009 sample. Specifically, the proportion of participants reporting recent use of illicit morphine was lower in 2009 and there was a decrease in the frequency of use of illicit morphine. The price of illicit morphine increased, with the availability of illicit morphine reported as easy to very easy to obtain and stable compared to 2008. As in previous years, the majority of morphine users reported use by injecting and they mainly used illicit supplies of Kapanol® and MS Contin®.

In addition, in 2009 the proportion of participants who reported recent use of illicit methadone syrup was relatively stable, while the proportion reporting use of illicit buprenorphine also remained stable. The frequency of illicit use of methadone syrup remained stable, whereas the frequency of use of Physeptone® and illicit buprenorphine increased in 2009.

In 2009, a small and decreasing proportion of the sample reported illicit use of oxycodone at a greater frequency. It is worth noting that the majority reported mainly illicit use of this substance.

In 2009, the survey included questions enquiring about any problems associated with pharmaceutical opioids use. Seventeen percent of participants reported that they had been prescribed pharmaceutical opioids in the previous twelve months. Of participants who had been prescribed pharmaceutical opioids the most common brands were MS Contin® (29%) and Kapanol® (18%). All participants reported that the pharmaceutical opioids had been prescribed for pain which was described most commonly as 'chronic non-malignant pain' (which is associated with progressive, debilitating diseases such as arthritis). Of those who had been prescribed pharmaceutical opioids, 35% reported that they had shared, sold or traded their prescription.

Other drugs

Compared to 2008, significantly more participants in 2009 reported recent use of ecstasy. A slightly larger proportion of participants reported recent use of hallucinogens, although the frequency of use of both substances remained stable in 2009.

There was an increase in the percentage of participants reporting recent use of illicit benzodiazepines in 2009 compared to the previous year, and there was also an increase in the frequency of use.

In 2009 a larger proportion of participants reported recent use of cocaine compared to participant reports in 2008, with frequency of recent use also slightly higher; however, due to small numbers this and other findings should be interpreted with caution.

In 2009, participants were asked about their use of over the counter codeine (OTC). Forty-three percent of participants reported ever using OTC, with 30% reporting recent use for a median of 8 days (range 1 to 180 days), with one participant reporting daily use. The majority reported using licit OTC, as the form most used. Of those who reported recent use of OTC forty-six percent reported use of Panadeine Forte®, followed by Panadeine® (23%) and Nurofen Plus® (23%), with one participant reporting use of Mersyndol® and another codeine-based product.

Participants gave various reasons for using OTC, with some form of pain being the main reason for such use, including headache, back pain and teeth problems.

Health-related issues

Compared to 2008, in 2009 a lower 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 lower than the proportion reporting having experienced a problem, as has been the case in 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 for the second time, and used to give a measure of levels of psychological distress among the participants. Two-thirds of the participants were assessed to be at moderate to high/very high risk of psychological distress. There was consensus by many KE that mental health problems related to methamphetamine use continued to increase in 2009 compared to 2008.

In 2009, the Personal Wellbeing Index (PWI) was incorporated into the IDRS survey. Questions asked how satisfied participants were with various aspects of their life. 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 on each factor of personal wellbeing, with the exception of personal safety. Moreover, participants were below the normal range for each factor. These findings indicate that participants are less than satisfied with all aspects of their life with the exception of their personal safety.

Risk behaviours

Participant reports of sharing injecting equipment (other than needles) first noted in 2004 remained stable in 2009 in comparison to reports by participants in 2008, with one in five participants reporting having shared equipment such as tourniquets, water and spoons. Almost half of the participants reported reusing their own needles and of those 50% had reused their own needle three or more times.

In 2009, sixty-eight percent 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. Experience of other injecting-related health problems remained relatively stable across this time period. Of those reporting experiencing such problems, over half (60%) had experienced more than one problem related to their injecting in that period. Overall, the total proportion of injecting-related

problems participants had experienced in 2009 was relatively stable in comparison with 2008.

In 2009 the IDRS included a new module investigating the presence of trait aggression among the participants. This was in response to the increased government and media attention surrounding antisocial behaviour and drug use. Thus, the 2009 IDRS included the Buss-Perry Aggression Questionnaire (Short Form) (BPAQ-SF). This self-report measure addresses three major components of aggression: the motor components (physical and verbal aggression), the emotional component (anger) and the cognitive component (hostility). Half of the participants rated the cognitive component of 'hostility' as characteristic descriptor of their behaviour, followed by the motor components of physical and verbal aggression, with about a third rating the emotional component of 'anger' as descriptive of their behaviour. Around a quarter of the participants indicated that their answer would be different if they were under the influence of a drug.

Gambling behaviours were also examined, for the second year, with 41% of participants reporting gambling three times in the month prior to interview, and 'last' using poker/gaming machines. The median amount spent the last time participants gambled was $26 (range $1 to $5,000). A quarter of those who had gambled were assessed as gambling at problematic levels.

In 2009, the median amount spent on illicit drugs remained stable compared to 2008, regardless of whether participants were primarily heroin users or methamphetamine users.

Law enforcement
The prevalence of recent criminal involvement reported by participants remained stable in 2009, whereas experience of arrest in the preceding 12 months decreased slightly, with drug dealing and property crime remaining the most common. Fewer participants in 2009 reported ever having been in prison.

There was an increase in the proportion of participants reporting having driven under the influence of an illicit drug, specifically heroin, 'any' methamphetamine or cannabis.

Implications
The findings from the 2009 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.

- Harm reduction measures targeting those who continue to use methamphetamine regularly appear warranted. These include targeted education regarding the effects of prolonged use (e.g. agitation, aggression, paranoia and psychosis), practical strategies to reduce risk (e.g. rest periods between binges), skills training or counselling for users (e.g. recognising and dealing with anxiety, anger and low mood) and referral into treatment where appropriate.

- Continued close monitoring of indicators of use of crystal methamphetamine ('ice'/'crystal'), which is known to have very high purity and subsequently increased risk of harm associated with its use.

- Monitoring and characterisation of changes in purity and chemical structure of amphetamine and methamphetamine seizures through forensic analysis.

- With the ongoing use of heroin and other opioids among this group of users, the continued provision of opioid substitution therapies (OST) for the treatment of opioid dependence is essential. Increased access to OST is also required, along with ongoing evaluation of the needs of individuals engaging in these programs, to ensure they remain relevant and suitably flexible.

- 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 Clean Needle Program (CNP) sites to trial needle and syringe vending machines in South Australia. 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. 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.

- Development and implementation of strategies to address issues associated with drug misuse and dependence and mental health co-morbidity (particularly effective concurrent treatment).

- Continued development and implementation of strategies to reduce illicit use of prescribed pharmaceuticals.

- Investigation of strategies to reduce the combining of cannabis and tobacco, with the implementation of strategies to reduce such practices.

- Continued and ongoing communication between law enforcement and health services is recommended to ensure the goals of demand, supply and harm-reduction are, or continue to be, met as successfully as possible. Continued and appropriate consultation with stakeholders, including advocacy groups, is also recommended to achieve these aims.

- The development and implementation of strategies to cater for those with substance use, mental health and gambling problems appears warranted, especially considering the proportion of participants assessed as gambling at problematic levels.

- Considering the relatively high levels of aggression reported by participants strategies to reduce such aggression are needed.

1 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. The trial consisted of conducting the complete IDRS in New South Wales, Victoria and South Australia (see Hando et al. (1998) for a national comparison, and Cormack et al. (1998) for the South Australian 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 and Tasmania joined them. For a review of the history and progression of the IDRS nationally up to 2000, see Darke, Hall and Topp (2000). The year 2008 is the twelfth year in which the IDRS has been conducted in South Australia, and the tenth year it has included all states and territories (see Stafford et al. (2009) for a national comparison of 2007 findings, and White, Vial & Ali (2009) for the South Australian perspective).

The IDRS provides a coordinated 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 2009 South Australian Drug Trends Report summarises information collected by the South Australian component of the national IDRS. The information comes from three sources: a survey of people who inject drugs (the participants), key expert 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 South Australia.

1.1 Study aims

The aim of the South Australian component of the 2009 IDRS is to provide information on drug trends in South Australia (specifically the Adelaide metropolitan area), particularly focusing on the 12 months between mid-2008 and mid-2009).

2 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 and 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 key experts 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=100), in the 12 months prior to interview. The average age of participants was 40 years (range 20-60 years). 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.

The majority of the sample reported being unemployed and almost half had a history of previous imprisonment. Participants spent a median of 11 years at school, with half of the sample reporting involvement in treatment at the time of interview.

2.2 Procedure

Participants were interviewed in June and July 2009. 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.

Since 2001, to be consistent with the IDRS data collection procedures in other jurisdictions, trained research interviewers have conducted the interviews with participants. In 2009, 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. The average time to complete participant interviews was 35 minutes (range: 10 to 85 minutes), and participants were compensated $40 for their time and travel.

2.3 Materials

Survey instrument

The structured interview (survey instrument) was based on previous research conducted at NDARC (see Darke et al., 1992, 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 6 to 12 months prior to interview (mid-2008 to mid-2009). The largely quantitative data were analysed statistically using SPSS for Windows, Version 17.0 (SPSS, 2009).

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 Kessler Psychological Distress Scale 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 NSW. The items are totalled to give scores that range from ten 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.

Personal Well-being Index

In 2009, the Personal Well-being Index (PWI) was incorporated into the IDRS survey. Questions asked how satisfied participants were with various aspects of their life. 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 were asked to respond on a scale of 0-10 where 0 was 'very unsatisfied' and 10 was 'very satisfied'

Buss-Perry Aggression Questionnaire (Short form) (BPAQ-SF)

The 2009 IDRS included the Buss-Perry Aggression Questionnaire (Short Form) (BPAQ-SF). This self-report measure addresses three major components of aggression: the motor components (physical and verbal aggression), the emotional component (anger) and the cognitive component (hostility). This questionnaire provides a valid and reliable measure of 'dispositional aggression' which correlates well with the original 29-item Buss-Perry Aggression Questionnaire (Bryant & Smith 2001).

2.4 Survey of key experts (KE)

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, 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 then made for either an interview in person or over the telephone. Informed consent was sought and gained from all KE, who were interviewed individually.

KE were asked to identify the main illicit drug used by the people who use drugs that they had the most contact with in the previous six months, or (if they had limited or no contact with users) the main illicit drug they were most knowledgeable about. In 2009, KE were also asked to identify the drug(s) that was the most problematic. 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 practices; health-related issues; effects on service of problematic drugs and general trends in drug use. In general, KE were asked to consider changes in the above parameters over the 6 to 12 months prior to interview (mid-2008 to mid-2009).

In 2009, thirty-three KE were interviewed (17 males and 16 females) from September to late October 2009. KE comprised a range of persons from various professions: nineteen health workers (youth workers, community drug and alcohol workers, psychologists, medical officers, nurses, mental health staff, gambling and drug and alcohol counsellors); five user representatives (peer educators, outreach and Clean Needle Program workers, and dealers); and nine law enforcement workers (police officers, forensic officers, lawyers and police intelligence analysts).

Methamphetamine continued to be the most identified drug used by the users whom KE had most contact with in 2009. Similar to 2008, in 2009 cocaine was not identified by any KE as the main illicit drug used by users they had most contact with; however, unlike 2008, 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. In all, 21 interviews were completed with methamphetamine as the main focus, six were completed with heroin (and other opiates), two with cannabis and one with benzodiazepines as the main focus. In addition, two KE had broad knowledge and covered all drugs in their interviews. Most KE also provided useful information on at least one other illicit drug, or illicit drug-using group, additional to the main focus of their interview.

The KE interview was semi-structured and took approximately 60 minutes to administer. The majority of interviews were conducted face-to-face (n=32) and the remainder (n=1) was conducted by telephone. The instrument used was based on previous research conducted at NDARC for the World Health Organization (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 for information on the above parameters relevant to the previous 6 to 12 months and in particular for information on any changes to those parameters over that period. 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.

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 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 South Australia 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 South Australia provided by SAPOL;
- state-wide and national rates of opioid-related fatalities provided by the Australian Bureau of Statistics (ABS), in Roxburgh and Burns (2009);
- national rates of methamphetamine-related and cocaine-related fatalities provided by the Australian Bureau of Statistics (ABS), in Degenhardt, Roxburgh and Burns (2010, and in press);
- 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 Australian Government Department of Health and Ageing, 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 Notes

2.6.1 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 and Degenhardt (2003).

2.6.2 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.

2.6.3. Statistical analysis

It should be noted that in general all reported statistics relate to frequency numbers and medians. Categorical variables were analysed using χ^2. All data were analysed using the Statistical Package for the Social Sciences (SPSS) for Windows, Version 17.0 (SPSS inc, 2008). Confidence Intervals (CI) were calculated using an excel spreadsheet available at http://www.cebm.net/index.aspx?o=1023 (Tandberg). Higher and lower confidence interval results which crossed over the value of zero were not significant. This calculation tool was an implementation of the optimal methods identified by Newcombe (Newcombe, 1998).

3 RESULTS

Summary

- The 2009 sample was older than the 2008 participant sample, with the majority being male.
- The majority of the sample was unemployed, although a larger proportion reported engagement in either full-time or part-time employment than the sample in 2008.
- A smaller proportion of the sample reported a previous history of imprisonment compared to the 2008 sample.
- There was an increase in the proportion of the sample reporting heroin as the drug most often injected and most recently injected in the month prior to interview when compared to 2008 participant reports.

3.1 Overview of the sample

The demographic characteristics of the 100 participants interviewed in 2009 are summarised in Table 3.1, with the 2008 sample characteristics provided for comparison.

There was some overlap of the 2009 participant sample with previous years' samples. Twenty-eight percent of the 2009 sample stated that they had participated in the IDRS previously: 21% in the year 2008, 7% in the year 2007, and 1% in the year 2006, (participants could nominate more than one year).

Consistent with 2008 the median age of the sample was older at 40 years (range 20 to 60 years), with the 2008 participant sample being a median age of 38 years (over previous years median age was 36 years). The majority of participants were male (66%). Two-thirds (67%) of the sample were unemployed and 40% had a history of previous imprisonment, which is lower than participant reports in 2008 (at 52%). The median number of years spent at school was 11 (range 7 to 12 years), with half (50%) reporting completion of years 11 and/or 12. Thirty-eight percent of the sample reported having no tertiary qualifications. Of those who did report having a tertiary qualification, more had completed a technical or trade qualification (49%) than a university qualification (13%).

In 2009, less than half of the sample (45%) was in drug treatment at the time of the interview, with the majority of participants in maintenance pharmacotherapy treatment. Specifically, 26% reported being on a methadone program (compared to 22% in 2008) and 14% reported being on a buprenorphine program, including those receiving Suboxone® treatment (compared to 19% in 2008).

As in previous years, in 2009 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 (71%). The remaining participants reported their main source of income was a wage (25%), criminal activity (3%), or with one participant reporting they had received income from sex work in the month prior to interview.

In 2009, participants resided in the Northern areas of Adelaide (n=34), followed by Southern (n=28), Western (n=25), or Central/Eastern (n=13) areas. Readers should note that this is a result of targeted recruitment, with selection of Clean Needle Program sites at which participant interviews are conducted based on the comparative proportions of clients who attend particular sites. The majority of the participant sample resided in rental accommodation (80%). A further eight percent of the sample reported residing in their own house/flat, followed by living at their family/parent's home (6%), a boarding house (5%), or caravan (1%).

Table 3.1: Demographic characteristics of sample, 2008 & 2009

Characteristic	2008 (N = 100)	2009 (N = 100)
Median age in years (range)	38 (20-57)	**40 (20-60)**
Gender (% male)	65	**66**
Identify as A&TSI (%)	6	**3**
Employment (%)		
Not employed	76	**67**
Full-time	9	**9**
Part-time/casual	9	**21**
Student	0	**1**
Work and study	0	**1**
Home duties	**4**	1*
Median years of school education (range)	10 (5-12)	**11 (7-12)**
Tertiary education (%)		
None	34	**38**
Trade/technical	45	**49**
University/college	21	**13**
Currently in treatment (%)	44	**45**
Prison history (%)	52	**40**
Area of Adelaide (%)		
Central/Eastern	16	**13**
Western	36	**25**
Southern	19	**28**
Northern	26	**34**
Non-metro	0	**0**
No fixed address/missing	4	**0**

Source: IDRS participant interviews
* One participant reports being a full-time carer

In summary, compared to 2008, the 2009 sample characteristics were largely unchanged, with the most notable difference being that the reported median age of participants in 2009 was again older than in 2007 and 2008. The proportions of participants in 2008 who reported being unemployed or having a previous prison history were less in 2009

than proportions reported by participants in 2008, and participants in 2009 had completed a median of eleven years high school education compared to 10 years in 2008.

The majority of KE reports of the demographics of drug user populations they have contact with replicate those of the sample: majority male (median 66%), unemployed with approximately 10 years or less of school education, and many with 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 a median of 35 years (range 16 to 65 years). Current treatment status varies between heroin and methamphetamine users, with heroin users reportedly more likely to be in some form of treatment for their drug use, primarily pharmacotherapy. KE reported that many methamphetamine users were requesting treatment for methamphetamine but as yet there was nothing available, with many methamphetamine users currently using methadone or buprenorphine for previous or current heroin use.

3.2 Drug use history and current drug use

The injecting history, drug preferences and polydrug use of participants are summarised in Table 3.2, and drug use history and recent drug use of participants are summarised in Table 3.3 and Figure 3.3 respectively.

The median age of first injection by the participant sample was 19 years (range 11 to 59). The drug most commonly first injected by the sample was methamphetamine (50%), followed by heroin (44%). When first injection of methamphetamine is examined more closely, looking at methamphetamine powder, base and crystal individually, methamphetamine powder (43%) was by far the most commonly first injected drug, with smaller numbers reporting first injection of methamphetamine base (4%) and crystal/ice methamphetamine (3%).

In 2009 a similar proportion of the sample reported heroin as their drug of choice (55%) compared to 2008 (53%), and remained high at 55%. The proportion of the sample nominating some form of methamphetamine as their drug of choice (from 28% in 2008 to 32% in 2009) also remained stable.

The proportion of the sample who reported heroin as the drug most frequently injected in the last month was higher in 2009 (50%) compared to 2008 reports of use (39%) (see Figure 3.2). In addition, the proportion of participants reporting that heroin was the most recent drug they had injected was also higher (at 50%) compared to 2008 reports (36%) (see Table 3.2). With regard to methamphetamine, the proportion of participants reporting methamphetamine as the drug most injected in the last month was smaller (35% in 2009 from 40% in 2008) (see Figure 3.2), and a smaller proportion reported methamphetamine as the drug most recently injected (from 42% in 2008 to 34% in 2009) (see Table 3.2).

Table 3.2: Injecting history, drug preferences and polydrug use, 2008 & 2009

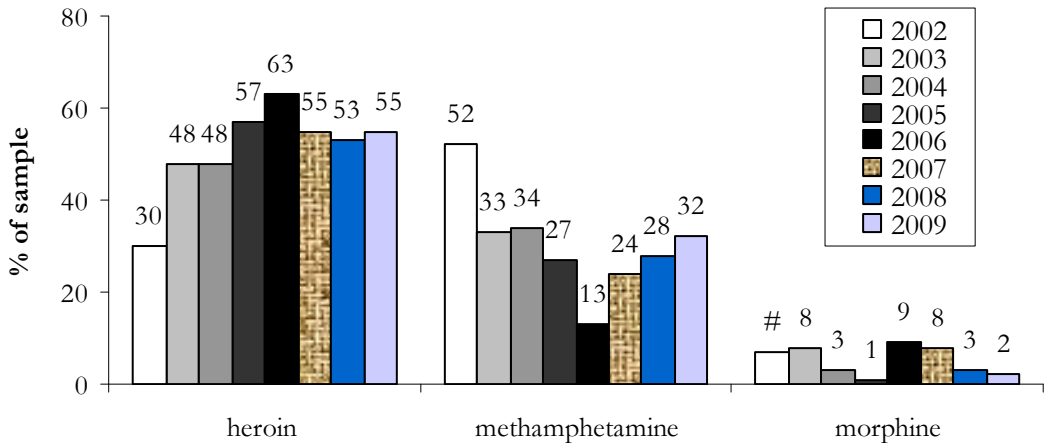
Variable	2008 (N = 100)	2009 (N=100)
Median age first injected in years (range)	19 (10-48)	**19 (11-59)**
First drug injected (%)		
Heroin	35	**44**
Methamphetamine**	54	**50**
Cocaine	1	**2**
Morphine	5	**1**
Other	5	**3**
Drug of choice (%)		
Heroin	53	**55**
Methamphetamine	28	**32**
Cocaine	5	**6**
Cannabis	7	**2**
Morphine	3	**2**
Other	4	**3**
Drug injected most often in last month (%)		
Heroin	39	**50**
Methamphetamine**	40	**35**
Cocaine	1	**2**
Morphine	13	**9**
Methadone	2	**2**
Buprenorphine	4	**1**
Other	1	**1**
Most recent drug injected (%)		
Heroin	36	**50**
Methamphetamine**	42	**34**
Morphine	13	**11**
Methadone	4	**2**
Buprenorphine	4	**1**
Other	1	**2**
Frequency of injecting in last month (%)		
Weekly or less	31	**30**
More than weekly but less than daily	38	**44**
Once a day	7	**15**
2-3 times a day	17	**7**
>3 times a day	6	**4**
Polydrug use (median)		
Number of drug classes ever used	11 (4-15)	**8 (3-15)**
Number of drug classes used in last 6 months	5 (2-11)	**5 (1-14)**
Number of drug classes ever injected	4 (1-10)	**3 (1-9)**
Number of drug classes injected in last 6 months	2 (1-6)	**2 (1-7)**

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

In 2009 heroin was reported as the main participant drug of choice, the drug participants had injected most in the month prior to interview, and the drug they had most recently injected, whereas, in 2008 methamphetamine and heroin were equally nominated as the drug participants had injected most in the last month, and a slightly higher proportion of the sample reported methamphetamine as the drug they had most recently injected.

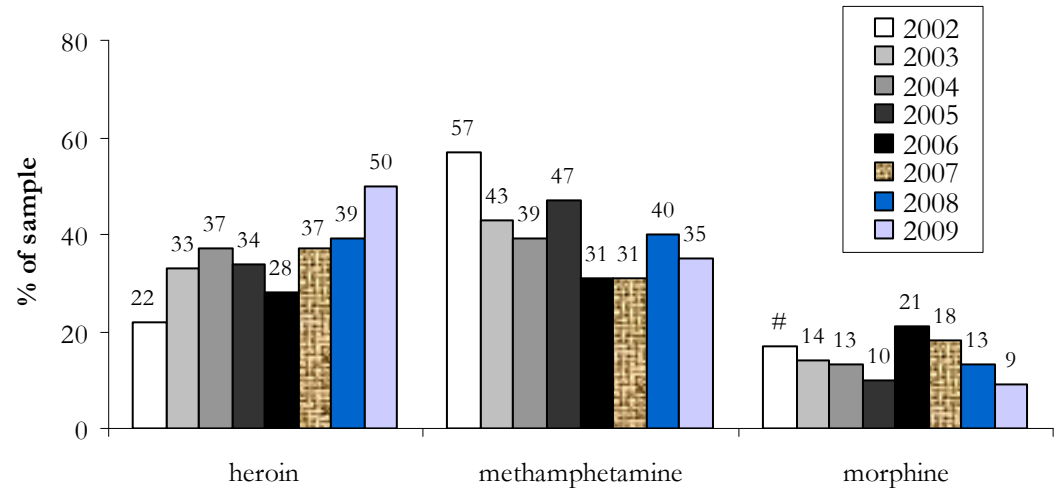
Frequency of injecting any drug in the last month was greater than weekly for 74% of the sample, with 26% reporting they had injected at least once a day during that period. Compared to 2008, frequency of injecting had remained relatively stable.

Figure 3.1: Trend for drug of choice, 2002 – 2009



Source: IDRS participant interviews

Figure 3.2: Trend for drug injected most in last month, 2002 – 2009

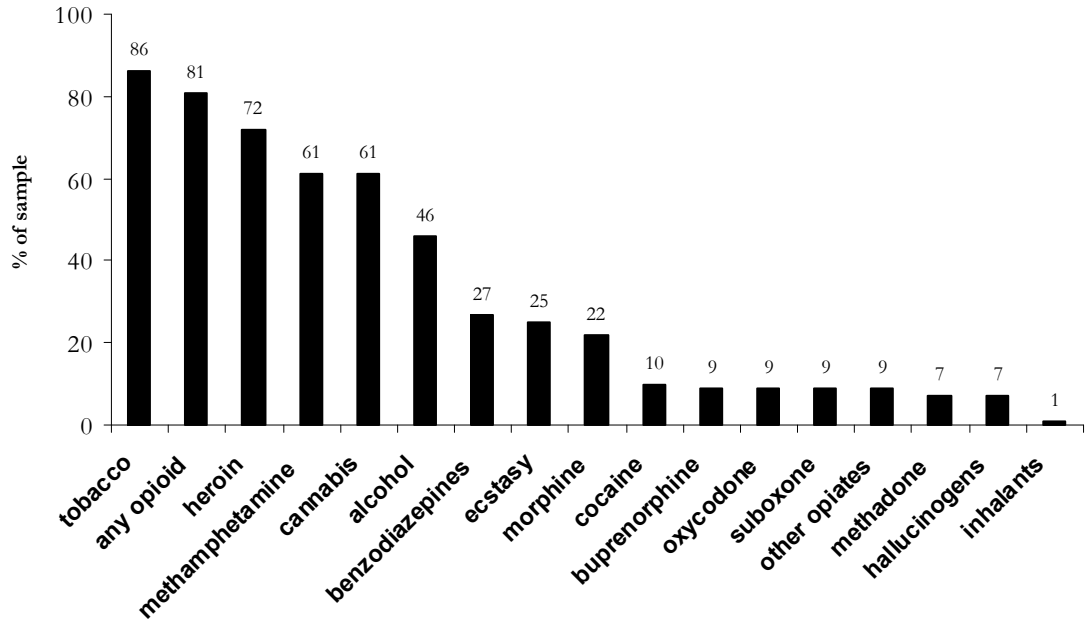


Source: IDRS participant interviews

Participant polydrug use was common in 2009 and has remained consistently so across the years, with no real differences being reported from 2008 to 2009 (see Table 3.2). In 2009, participants were asked about their history of use of 21 separate substances that

were collapsed according to drug type[1]. Although oxycodone was asked separately in 2008, this was collapsed into the 'other opiates' category to allow comparability of data across years. Therefore, in 2009, the total number of possible drug types used was 16, and the total number of possible injected drug types was 13. In 2009, participants reported use of a median 8 (range 3 - 15) drug types across their lifetime and a median of 5 (range 1-14) during the six months prior to interview. The drugs most commonly used among the participants across their lifetime were: tobacco, 'any' methamphetamine, alcohol, cannabis and heroin (see Table 3.3). The drugs most commonly used among the participants in the last six months were: tobacco, heroin, cannabis, 'any' methamphetamine, and benzodiazepines (Figure 3.3). This order of commonality was very similar to 2008.

Figure 3.3: Recent drug use^: percentage of the participants to have used each substance type in the last six months, 2009



Source: IDRS participant interviews
* Pharm stim = pharmaceutical stimulants (e.g. dexamphetamine)
^ All use relates to illicit use (e.g. of methadone, morphine etc)

Similar to 2008, where there was little crossover between heroin users and methamphetamine users in the participant sample (44% in 2008), in 2009 fewer participants (n=33, 33%) reported use of both heroin and some form of methamphetamine in the six months prior to interview. Thirty-nine participants (54% of heroin users) reported use of heroin, but no use of any form of methamphetamine, and twenty-eight participants (46% of methamphetamine users) reported use of some form of methamphetamine, but no use of heroin, in that time.

Of the fifty-five participants who nominated heroin as their drug of choice, all had used heroin in the previous six months, 31 had used cannabis (56%), 30 (55%) had used any benzodiazepines (licit or illicit), 27 (49%) had used any methadone (licit or illicit), 22 (40%) had used alcohol, and 19 (35%) had used any methamphetamine, during this

[1] Drug types were heroin, morphine, methadone (inc. Physeptone®), buprenorphine, homebake, other opioids (inc. oxycodone), amphetamines (any form of methamphetamine and pharmaceutical stimulants), cocaine, hallucinogens, ecstasy, inhalants, alcohol, cannabis, benzodiazepines, Suboxone® and tobacco.

period. In addition, the trend of fewer participants reporting that they had used some form of methamphetamine continued in 2009 with nineteen (35%) reporting such use from 28 (53%) in 2008, 36 (65%) in 2007 and 45 (71%) in 2006. Similarly, there was overlap of drug classes used by those participants who nominated methamphetamine as their preferred drug. Of the 28 participants reporting methamphetamine as their drug of choice, all had used some form of methamphetamine in the last six months, nineteen (76%) had used cannabis during that period, 13 (52%) had used alcohol, 11 (44%) had used ecstasy, and 10 (40%) had used any benzodiazepine (licit or illicit) during this period.

Table 3.3: Drug use history and routes of administration of the sample, 2009 (% of total sample; N=100)

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	80	80	72	36	8	15	3	14	5	72	30 (1-180)	30 (1-180)
Methadone - licit	43	15	5					41	25	26	180 (5-180)	50 (2-180)
Methadone - illicit	26	16	5					20	6	7	5 (1-48)	6 (1-48)
Physeptone - licit	5	4	0	0	0	0	0	4	1	1	21	-
Physeptone - illicit	17	13	2	0	0	0	0	11	3	5	5 (1-72)	7 (1-12)
Any methadone (inc. Physeptone)	***53***	***30***	***10***							***32***	***180 (1-180)***	***32 (1-180)***
Buprenorphine - licit	16	6	3	2	0	0	0	16	7	7	148 (1-18))	24 (12-90)
Buprenorphine - illicit	12	6	5	1	0	0	0	9	7	9	23 (2-180)	21 (2-180)
Any buprenorphine	***23***	***11***	***7***							***15***	***30 (1-180)***	***24 (5-180)***
Suboxone - licit	16	1	0	1	0	0	0	16	14	14	180 (14-180)	-
Suboxone - illicit	9	3	2	1	0	0	0	7	7	9	6 (1-45)	7 (2-12)
Oxycodone - licit	12	5	3	0	0	0	0	12	4	4	53 (1-180)	48 (4-72)
Oxycodone - illicit	23	18	9	0	0	0	0	9	1	9	11 (1-96)	6 (1-90)
Any Oxycodone	***29***	***21***	***11***							***11***	***8 (1-180)***	***6 (1-96)***
Morphine - licit	19	16	7	0	0	0	0	12	5	8	82 (6-180)	92 (6-180)
Morphine - illicit	42	40	20	0	0	0	0	11	5	22	9 (1-180)	11 (1-90)

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

Table 3.3: Drug use history and routes of administration of the sample, 2009 (% of total sample; N=100) (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	**48**	**45**	**22**							**24**	**12 (1-180)**	**14 (1-180)**
Homebake	21	21	1	1	0	0	0	0	0	1	2	2
Other opioids	16	2	0	3	0	0	0	12	9	9	5 (3-72)	-
Any opioids**	**90**	**87**	**76**							**81**		
OTC codeine	43	0	0	0	0	0	0	43	30	30	8 (1-180)	-
Speed powder	80	77	33	22	8	31	2	35	5	33	30 (1-180)	30 (1-140)
Base/point/wax	47	45	31	11	4	6	1	12	5	31	20 (1-180)	20 (1-180)
Ice/shabu/crystal	53	45	26	25	9	0	0	14	7	30	10 (1-180)	10 (1-180)
Amphetamine liquid	23	23	9					5	1	9	6 (2-48)	12 (2-48)
Any form methamphetamine #	***89***	***85***	***58***							***61***	***42 (1-180)***	***36 (1-180)***
Pharmaceutical stimulants - licit	2	1	0	0	0	0	0	2	0	0	-	-
Pharmaceutical stimulants - illicit	10	4	1	0	0	0	0	9	2	3	15 (3-20)	3
Cocaine	57	38	5	9	2	28	4	14	3	10	3 (1-24)	5 (1-24)
Hallucinogens	54	6	0	2	0	2	0	53	7	7	2 (1-5)	-
Ecstasy	57	22	8	0	0	8	1	50	20	25	3 (1-39)	3 (1-4)
Benzodiazepines - licit	44	5	3	0	0	0	0	42	33	34	54 (1-180)	1 (1-30)
Benzodiazepines - illicit	36	5	1	2	0	2	0	36	27	27	10 (1-180)	20
Any benzodiazepines	***61***	***10***	***4***							***51***	***24 (1-180)***	***11 (1-30)***
Alcohol	82	2	0					82	46	46	22 (1-180)	-
Cannabis	82									61	90 (1-180)	
Tobacco	89									86	180 (2-180)	
Inhalants	22									1	3	

^ 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 # Category includes speed powder, base, ice/crystal and amphetamine liquid (oxblood). Does not include pharmaceutical stimulant, ** Category includes heroin, homebake, oxycodone, methadone, buprenorphine, morphine and 'other opioids'.

4 HEROIN

Summary

- Significant increase in proportion of sample reporting recent use of heroin in 2009 compared to 2008 reports.
- Significant increase in proportion of sample reporting recent use of heroin by injection in 2009 compared to 2008 reports.
- Decrease in frequency of recent heroin use.
- Price of a gram of heroin increased in 2009 compared to 2008.

4.1 Use

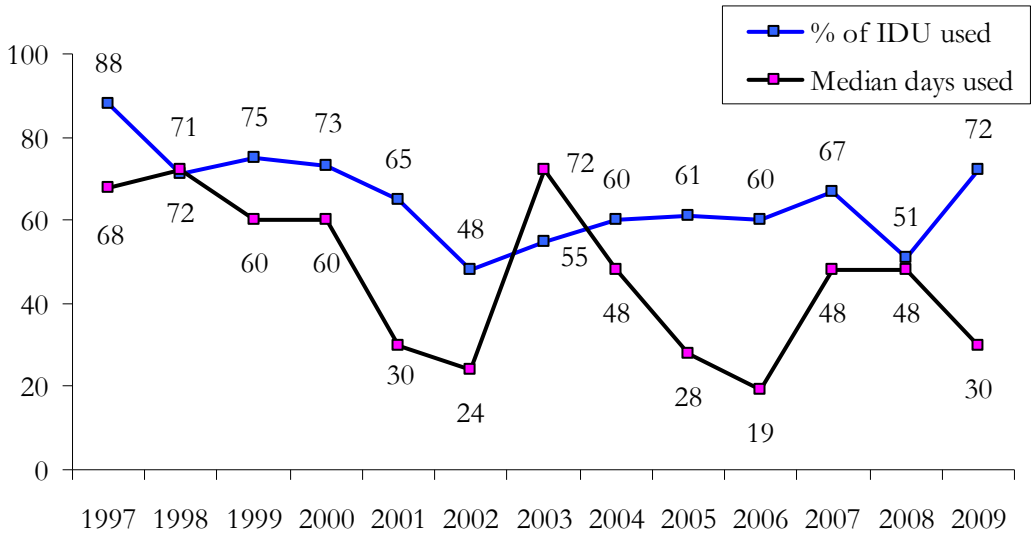
4.1.1 Heroin use among participants

Thirty-five percent of participants reported heroin as the first drug ever injected, 55% nominated heroin as their drug of choice, 39% reported heroin as the drug most often injected in the last month, and 36% reported that heroin was the last drug they had injected.

4.1.2 Current patterns of heroin use

Seventy-two percent of the IDRS participants interviewed in 2009 had used heroin in the six months prior to interview, and had done so for a median of 30 days. There was a significant difference in reported use of heroin in the six months prior to interview between participant reports in 2009 compared to participant reports of such use in 2008 (χ^2=8.45, p<0.05; 51% of the sample). Frequency of recent heroin use (median number of days used) was lower in 2009 (30 days) compared to use reported in 2008 (48 days) (see Figure 4.1).

Figure 4.1: Heroin – recent* use and median number of days used#, 1997 – 2009

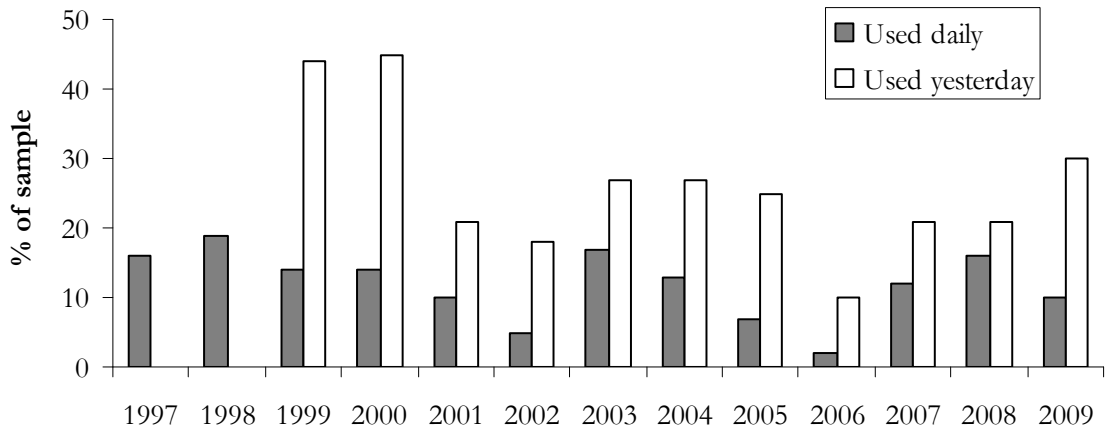


Source: IDRS participant interviews
***** In the previous six months
# By those reporting use in the previous six months

Of the 72 participants (or 72% of total sample) reporting recent use of heroin, all had injected heroin for a median of 30 days in the six months prior to interview (range 1 to 180). Compared to participant reports in 2008 (51%), the proportion of the participants who reported injection of heroin in the last six months was significantly higher in 2009 (χ^2=8.45, $p<0.05$), although the reported frequency of injection was lower, with the median number of days use in 2008 at 48 days compared to 30 days in 2009.

The proportion of participants reporting use of heroin on a daily basis was 10% in 2009, and was less than the use reported by participants in 2008 (16%), as depicted in Figure 4.2. Moreover, in 2009 thirty percent of participants reported using heroin the day prior to the interview, with this figure lower in 2008 (21%). Contrary to the declining trend in frequency of heroin use seen from 2003 to 2006, the reported median number of days of use continues to fluctuate in 2009 (see Figure 4.1).

Figure 4.2: Heroin – % of participants who used daily* and % used yesterday, 1997 – 2009



Source: IDRS participant interviews
***** In the previous six months

Of the 72 participants who had used heroin in the last six months, 69% (n=50) 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=11, 15%), morphine (11%, n=8), or another opioid (methadone 3%, n=2; buprenorphine 1%, n=1).

Of the 72 participants who had used heroin in the six months prior to interview, 27 (38%) reported use of a white/off-white powder form of heroin, and 12 (17%) reported using a brown powder. Thirty-nine (54%) reported using a white/off-white heroin rock, 15 (21%) reported use of a brown heroin rock, and one (1%) reported using 'home bake', a crude opioid substance derived from pharmaceutical preparations containing codeine (Reynolds et al., 1997). Compared to 2008, larger proportions of the sample reported recent use of a white/off-white rock form of heroin (from 35% in 2008 to 54% in 2009), whereas smaller proportions of the sample reported recent use of a white/off-white powder form of heroin (from 75% in 2008 to 38% in 2009). Moreover, a larger proportion of heroin users reported heroin rock as the form they had used most in 2009 (68%) compared to participant reports of such use in 2008 (35%).

Of the 55 participants who nominated heroin as their drug of choice in 2009, all had used heroin in the previous six months, 27 (49%) had used any methadone (licit or illicit), and 15 (27%) had used morphine (licit and illicit). In addition, 30 participants (55%) had used benzodiazepines (licit and illicit), and 19 (35%) had used some form of methamphetamine. Compared to 2008, more participants nominating heroin as their drug of choice in 2009 reported recent use of heroin (from 76% to 100%).

Nine 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, seven gave reasons of drug price or availability for not injecting mostly heroin, with two reporting peer influence as the reason for not injecting heroin. Six had mostly injected some

other opioid substance (morphine, or methadone) in that period. The remaining four participants had injected methamphetamine most in the month prior to interview. These data may indicate that people who inject drugs continue to supplement or replace their use of heroin with other opioid and non-opioid drugs.

In 2009, two KE commented that 'rock' was the form of heroin they had heard was available in Adelaide. All KE (n=31) 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 although two KE suggested that many Asian males are now moving to injecting as the most common form of administration.

There was a general consensus among the KE that PWID were polydrug users, with heroin users commonly using a range of other drugs, particularly methamphetamine, cannabis and other opiates, and to a lesser extent alcohol and benzodiazepines. The extent and regularity of use of these other drugs was reported as varying widely, but generally KE commented that other opiates would be commonly used among this group, in particular morphine and, to a lesser extent, illicit methadone, buprenorphine and codeine.

4.1.3 Heroin preparation method

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 4.1). Nearly half (47%) of recent heroin users reported the last time they used heroin they had used heat, with 8% reporting using acid in the preparation process. Participants reported use of heat or acid in the preparation process of white heroin (43%), beige heroin (13%), brown heroin (8%) and other colours (34%). The type of heroin, according to Ciccarone (2009), dictates the method of preparation needed depending on the intended route of administration.

4.2 Price

Sixty-seven percent of participants were able to provide answers on one or more aspects of the heroin market (price, purity and/or availability) in 2009, more participants than in 2008 (44%).

Participants reported the median price at 'last' purchase for a gram of heroin was $400 (n=8, range $150 to $400). The median price at 'last' purchase for a gram of heroin was considerably higher than that reported in 2008 ($250, n=6), although only small numbers reported the price for both years. The median price at 'last' purchase for a cap was reported as $100 (range $50 to $100, n=31), and was lower than in 2008 ($200).

Of those participants who were confident to report on the current price of heroin (n=67), eighty-eight percent (59% of entire sample) reported the price as stable over the last six months (see Table 4.1).

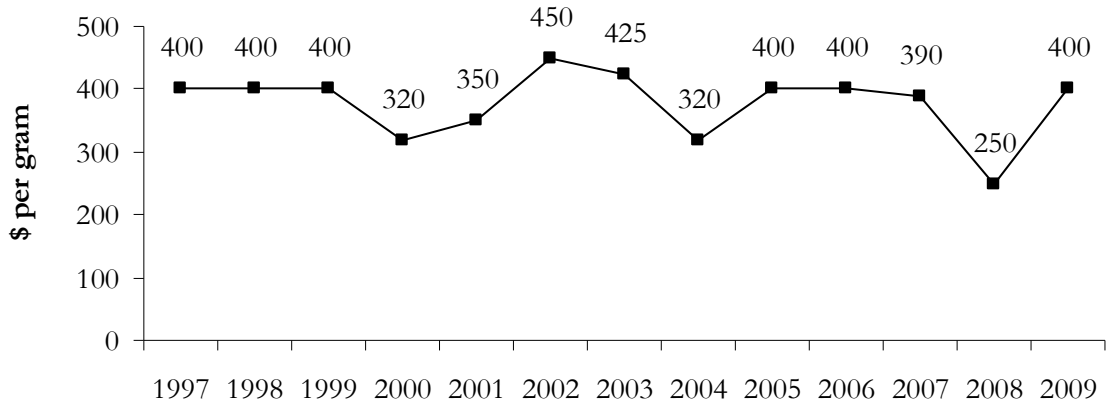
Table 4.1: Change in price of heroin over last six months, 2008 & 2009

Reported price status	% able to answer	
	2008 (n=44)	**2009 (n=67)**
Increasing	14	**8**
Stable	80	**88**
Decreasing	0	**0**
Fluctuating	7	**5**

Source: IDRS participant interviews

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 4.3). 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 fluctuates over the years at around $400/gram.

Figure 4.3: Median price ($) of a gram of heroin, last purchase, 1997 – 2009



Source: IDRS participant interviews

Of the four KE who were able to provide information on the price of heroin, all reported the price as $50 per 'cap', but qualified this statement by mentioning that it was very unusual now for users to buy less than $100 amounts and that many combine their money to buy a larger amount. Two KE reported that the price of a gram was around $300 to $400. The KE reports on the price of heroin were similar to those of participants. KE reports regarding recent changes in heroin prices, suggested that, rather than a price increase the minimum price of purchase had increased to $100 from $50 with a corresponding increase in quantity. Forensic KE (n=2) reported an increase in the number and size of seizures, and an increase in the purity of heroin. Of interest were the comments by a few KE that due to the crossover between those dealing in heroin and methamphetamine some users are describing heroin in terms of a 'point' rather than the usual heroin descriptions of 'cap' 'hit', 'taste' etc.

4.3 Availability

Tables 4.2 and 4.3 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 2009 reported it was either 'easy' or 'very easy' to obtain heroin (94%; 62% of entire sample), and that availability in the last six months had been 'stable' (85%; 55% of entire sample). The proportion reporting that availability of heroin had been stable, in the six months prior to interview, was consistent in 2009 (85%) with participant reports in 2008 (84%).

Table 4.2: Availability of heroin currently, 2008 & 2009

How easy is it to get heroin at the moment?	**% able to answer**	
	2008* (n=44)	**2009 (n=66)**
Very easy	46	**50**
Easy	46	**44**
Difficult	7	**6**
Very difficult	8	**-**

Source: IDRS participant interviews
* One participant answered 'do not know'

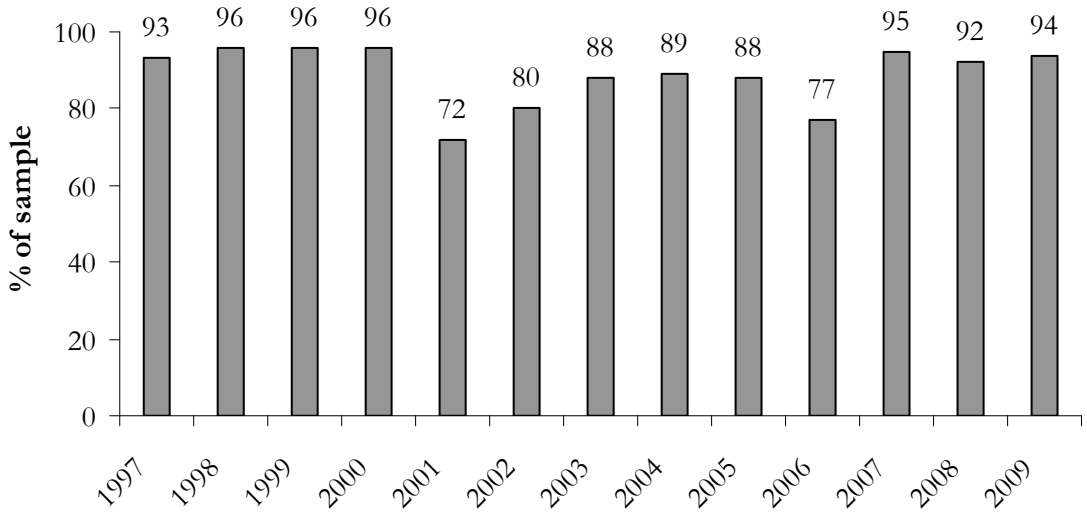
Table 4.3: Change in availability of heroin over the last six months, 2008 & 2009

Has [availability] changed in the last 6 months?	**% able to answer**	
	2008 (n=44)	**2009 (n=65)**
Don't know	2	**0**
More difficult	7	**9**
Stable	84	**85**
Easier	5	**6**
Fluctuates	2	**0**

Source: IDRS participant interviews

Long-term trend data for the availability of heroin, as reported by participants in all previous surveys, are presented in Figure 4.4 and show that the proportions indicating that heroin was 'very easy' or 'easy' to obtain, in the six months prior to interview, had remained stable over the years since 2002, but increased in 2007 to the levels seen prior to 2001, and stabilised in 2009.

Figure 4.4: Availability of heroin in the last 6 months, 1997 – 2009



Source: IDRS participant interviews

In 2009, participants were asked about both the person from whom, and the location from where, they had 'last' obtained heroin (see Table 4.4). The majority of participants who provided information on the source of their heroin in the six months prior to interview (n=44) reported they usually obtained heroin from a known dealer (60%). More than half of the participants in 2009 who had recently used heroin bought their heroin at an agreed public location (54%), followed by home delivery (24%).

Table 4.4: Source person and source venue last time obtained heroin in the last six months, 2009

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

Source: IDRS participant interviews

4.4 Purity

Tables 4.5 and 4.6 summarise the current purity of heroin and the changes in heroin purity over the last six months, according to participants. In 2009, almost half of those able to answer reported the current purity of heroin as medium (49%). The largest proportion of participants (78%) reported recent purity as medium or low. Overall, participant reports of the current purity of heroin appear to be stable for some participants and fluctuating for others.

Table 4.5: Current purity/strength of heroin, 2008 & 2009

How pure would you say heroin is at the moment?	% able to answer	
	2008* (n=44)	**2009 (n=65)**
High	14	**14**
Medium	40	**49**
Low	33	**29**
Fluctuates	12	**8**

Source: IDRS participant interviews

* 2 participants answered 'did not know'

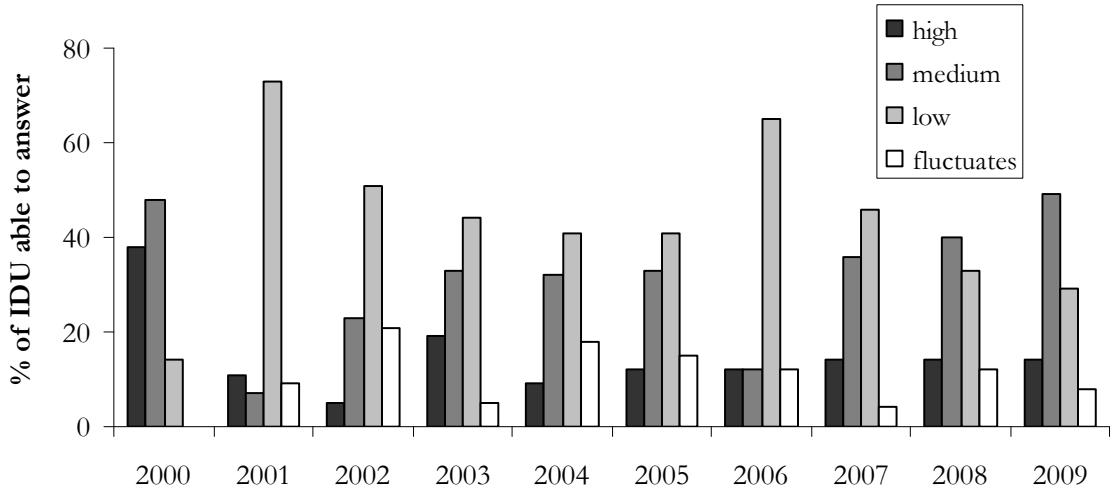
Table 4.6: Change in purity/strength of heroin in last six months, 2008 & 2009

Has the purity of heroin changed in the last 6 months?	% able to answer	
	2008 (n=44)	**2009 (n=64)**
Do not know	2	**0**
Increasing	16	**17**
Stable	34	**48**
Decreasing	16	**5**
Fluctuating	32	**30**

Source: IDRS participant interviews

Figure 4.5 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, but appears to be increasing.

Figure 4.5: Perception of current purity of heroin, 2000 – 2009



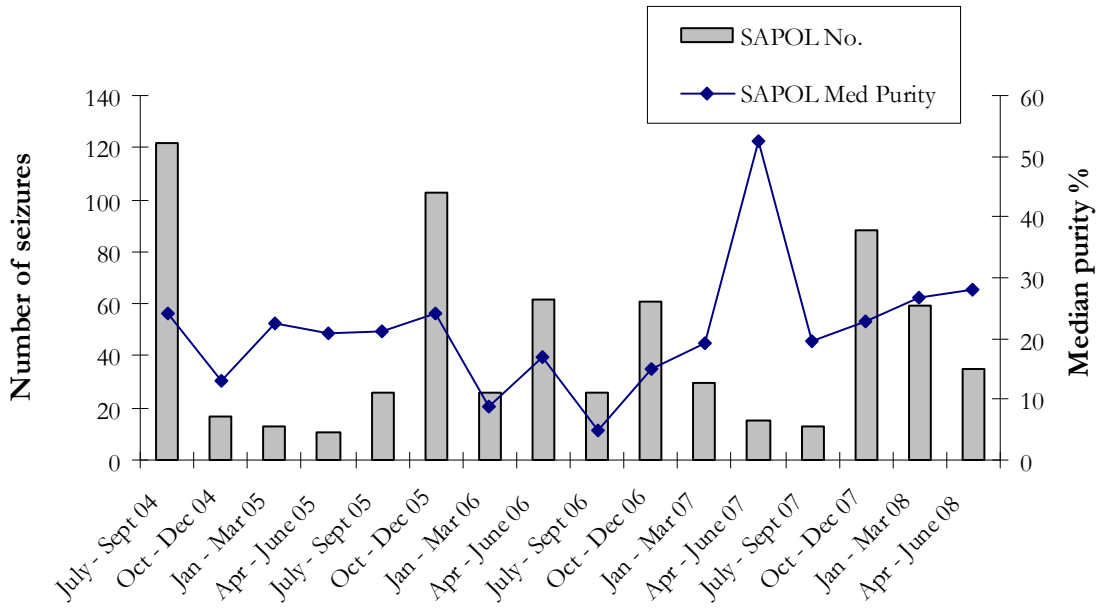
Source: IDRS participant interviews
Note: The category 'fluctuates' was not included in 2000

The Australian Crime Commission (ACC) data were unavailable for 2008/09 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 2007/08 (Australian Crime Commission, 2009). According to the ACC, in the period 2007/08 the number of seizures of heroin detected nationally has declined in the last decade. Figure 4.6 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 2007/08. The total number of SAPOL heroin seizures analysed in 2007/08 was 195 and the median purity was 25.1%. The vast majority of SAPOL seizures analysed (n=176) were less than two grams.

Despite quarterly variation, and variation in the number of seizures, the median purity of SAPOL heroin seizures has been steadily increasing since 2004. Consistent with this observation, in 2007/08 the median purity of heroin seizures was higher (25.1%) than that reported in 2006/07 (15.3%), and the number of seizures received and analysed was higher (from 132 in 2006/07 to 195 in 2007/08). The median purity for these years was considerably lower than that reported for SAPOL seizures in pre-shortage 1999/00 (48.3%, n=246).

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.

Figure 4.6: Number of heroin seizures analysed and median heroin purity in SA 2004/05 – 2007/08



Source: Australian Crime Commission (2005, 2006, 2007, 2008, 2009)

4.5 Trends in heroin use

In 2009 the participants' comments regarding general trends in heroin use were entwined with comments regarding amphetamine use. The majority of those participants commenting reported a shift from heroin to methamphetamine due to the lack of availability, and poor quality. Several participants reported a general decrease in the use of heroin, in terms of the proportion of users primarily, because of a move to methamphetamine, whereas the same number reported that many PWID were moving back to heroin from methamphetamine. A number of participants commented on the financial crisis affecting their own and friend's use of drugs in general, with less using overall.

5 METHAMPHETAMINE

Summary

- Recent use of all forms of methamphetamine was the lowest reported since data first collected.
- Significant increase in reported frequency of use of 'any' methamphetamine.
- Fewer participants in 2009 reported recent use of the base and crystal forms of methamphetamine compared to 2008 reports.
- Higher recent frequency of use for the powder and base forms of methamphetamine compared to 2008 participant reports.
- Majority of participants reported the price of the powder and base forms of methamphetamine as stable, and the price of the crystal form of methamphetamine as increasing in the six months prior to interview.
- Majority of participants reported the availability of all forms of methamphetamine as easy/very easy and stable in the six months prior to interview.
- KE report methamphetamine as the main drug of the users they have contact with.
- KE report methamphetamine as the drug they believe to be most problematic, often in combination with alcohol.

For further information regarding the methamphetamine market in Australia, see also Topp and Churchill (2002).

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.

5.1 Use

5.1.1 Methamphetamine use among participants

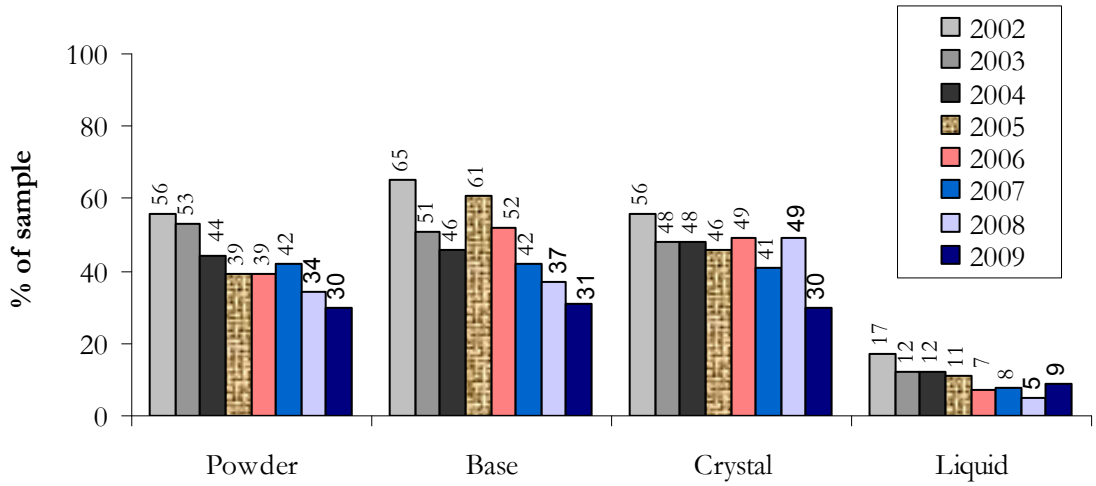
Fifty percent of participants reported methamphetamine as the first drug ever injected, 32% nominated methamphetamine as their drug of choice, 35% reported methamphetamine as the drug most often injected in the last month and 34% reported methamphetamine was the last drug they injected (see Table 3.2). It should be noted that a large proportion of participants who had first injected methamphetamine reported that it was the last drug injected (50%), the drug most often injected in the last month (52%), and nominated it as their drug of choice (52%) in 2009.

5.1.2 Current patterns of methamphetamine use

In 2009, around a third of the participants reported use of each of the three main forms of methamphetamine in the six months prior to interview, with most primarily having done so by injecting (see Table 3.3). Specifically, in the last six months, 33% of participants reported use of powder methamphetamine for a median of 30 days (range 1 to 180), 31% reported use of base methamphetamine for a median of 20 days (range 1 to 180), and 30% of participants reported use of crystal methamphetamine for a median of 10 days (range 1 to 180). In addition, nine percent of participants reported use of liquid methamphetamine for a median of six days (range 2 to 48), no participants reported use of licit pharmaceutical stimulants (such as dexamphetamine) in that period, but three participants reported use of illicit pharmaceuticals for 15 days (range 3 to 20) in the six months prior to interview.

As shown in Figure 5.1, in 2009 the proportions of the participant sample reporting recent use of the powder form of methamphetamine, base methamphetamine and crystal methamphetamine were the lowest prevalence of use reported since 2002. Compared to reported use by participants in 2008, the proportion reporting recent use of crystal methamphetamine was lower in 2009 (30% from 49% in 2008).

Figure 5.1: Methamphetamine – % of participants that used in the last six months, 2002 – 2009



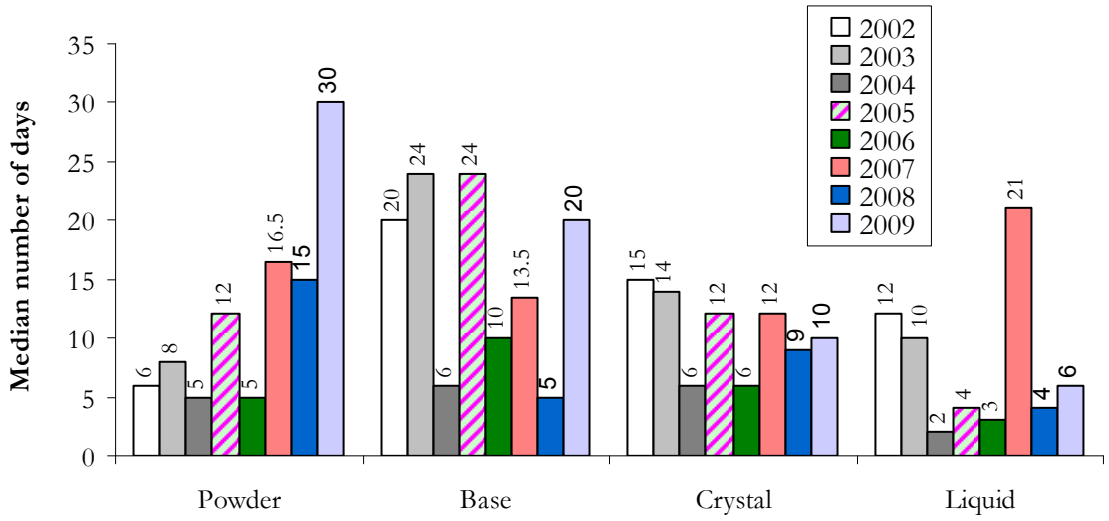
Source: IDRS participant interviews

More substantial was the higher reported frequency of use (as measured by median number of days used in the six months prior to interview) of the powder and base forms of methamphetamine in 2009 compared to 2008 (see Figure 5.2). The largest difference was seen in the median number of days powder methamphetamine was used, from 15 days to 30 days, among those reporting recent use of powder methamphetamine, with this level of use the highest reported since 2002. A difference was also noted for the median number of days base methamphetamine was used (from 5 days to 20 days) among those reporting recent use of base methamphetamine. The frequency of use of the crystal form of methamphetamine (from 9 days to 10 days) remained stable. Frequency of use of the liquid form of

methamphetamine remained relatively stable in 2009 (6 days) compared to participant reports of use in 2008 (4 days), but the proportion of participants reporting recent use was relatively small.

Overall, in 2009 sixty-one percent of participants had used some form of methamphetamine (powder, base, and crystal, liquid or pharmaceutical stimulants) for a median of 42 days (range 1 to 180) in the six months prior to the interview. Therefore, reported use of some form of methamphetamine in the six months prior to interview was slightly lower (61%) compared to the use reported by participants in 2008 (at 69%). However, there was a significant difference in the frequency of use reported by participants in 2009 (χ^2 (99, 1) =14.09, $p<0.01$) (median of 42 days) compared to the frequency of use reported by participants in 2008 (median of 15 days).

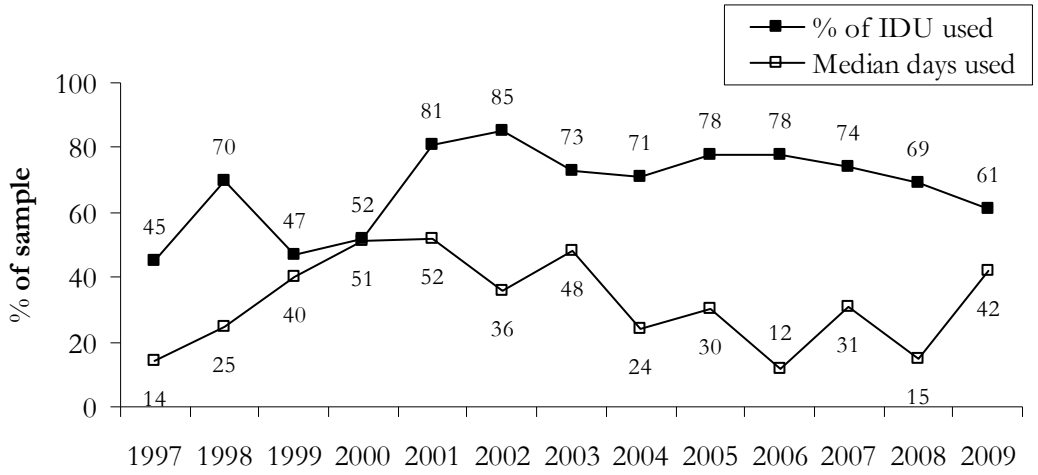
Figure 5.2: Methamphetamine – median number of days used in the last six months*, 2002 – 2009



Source: IDRS participant interviews
***** 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 5.3. As can be seen, the percentage of participants who reported recent use of any methamphetamine has been decreasing since a high of 85% in 2002, while frequency of use continues to fluctuate.

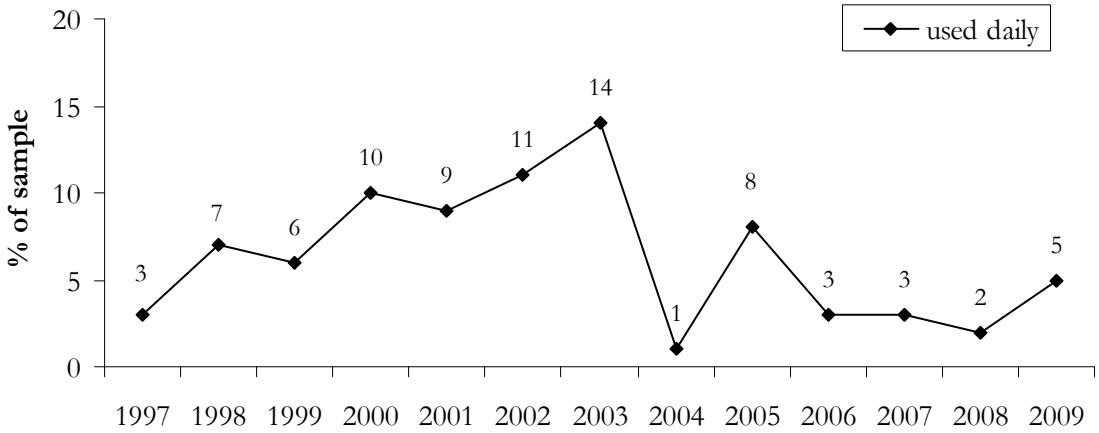
Figure 5.3: Methamphetamine – recent* use and median number of days used#, 1997 – 2009



Source: IDRS participant interviews
***** In the previous six months
# By those reporting use in the previous six months

Of the 61 participants who reported using some form of methamphetamine in the last six months, five participants reported daily use of the powder, base or crystal forms during that period. Compared to 2008, this was similar to the number of methamphetamine users reporting daily use of any methamphetamine (n=2). The long-term trend for percentage of participants using some form of methamphetamine daily is depicted in Figure 5.4. A small but steady increase in this parameter was observed prior to the drop in 2004, with small numbers reporting daily use.

Figure 5.4: Methamphetamine – % that used daily in the last six months, 1997 – 2009



Source: IDRS participant interviews

As would be expected of a sample of people who inject drugs, all of the participants using the powder and base forms of methamphetamine reported having done so by injecting in the six months prior to interview. However, of those who had used crystal methamphetamine fourteen percent had not injected this substance recently. Of those who had used some form of methamphetamine in that period, 55% had injected powder methamphetamine, followed by base (51%) and crystal methamphetamine (43%). The dramatic increase in the proportion of participants reporting recent injection of crystal methamphetamine to 72% in 2008 was not seen in 2009 with 43% reporting injection of crystal in 2009. From 8% to 9% of methamphetamine users had used the powder and crystal forms of the drug by smoking in the last six months, with fewer reporting use by snorting or swallowing all forms in that time. The increase in the proportion of participants reporting use by smoking crystal methamphetamine seen in 2006 (from 10% to 16%) stabilised in 2007 (15%) and 2008 (13%) with this decreasing slightly in 2009 (at 9%) (see Table 3.3).

Of the 32 participants reporting methamphetamine as their drug of choice, all had used some form of methamphetamine in the last six months, twenty-four (75%) had used cannabis, sixteen (50%) had used alcohol, fifteen (47%) had used ecstasy, fourteen (44%) had used benzodiazepines (licit or illicit), and eleven (34%) had used heroin during that period. Fifty-three percent (n=17) of participants reporting use of 'any' methamphetamine in the six months prior to interview also reported use of 'any' opioid substance during that period.

There was no particular form of methamphetamine that dominated as the form most used by the majority of methamphetamine users in the six months prior to interview, with participants reporting similar levels of recent use for all forms. Thirty-three percent reported recent use of powder methamphetamine, followed by base (31%) and crystal (30%). Powder methamphetamine was the form of methamphetamine most used by those who had used methamphetamine in the six months prior to interview (41%), followed by base methamphetamine (31%) and crystal methamphetamine (25%). Compared to 2008, the dominance of base methamphetamine stabilised after a trend downwards in the proportion of participants reporting base as the form most used in recent years (58% in 2005, 45% in 2006, 30% in 2007, and 23% in 2008). The proportion of participants reporting crystal as the form most used was lower in 2009 (from 39% in 2008 to 25% in 2009). The proportion of participants stating that powder methamphetamine was the form they used most remained stable in 2009 (at 41% compared to 39% in 2008).

KE reported that injecting use dominated (n=14 of 19, or 74% of those who commented), and two KE mentioned that users also swallow methamphetamine. Consistent with the previous three years, 42% of the KE (8 of 19) reported that many users were smoking through ice/crystal pipes. A number of KE in the health field commented that there appears to be a misconception among users that smoking methamphetamine is harmless use.

In 2009, consistent with the results, the majority of KE (n=15) noted a decrease in the use of methamphetamine in general and crystal methamphetamine in particular, whereas six KE indicated use had remained stable, and five KE noted an increase in use. Seven KE reported the majority of REU mentioned recent use of methamphetamine in general rather than a

specific form of the drug. Five KE reported crystal methamphetamine was the form most reported by REU, followed by the powder (n=4) and base (n=2) forms of methamphetamine. A small number of KE commented that younger users, females and older users seem to be coming to the attention of the police and health authorities regarding their use of methamphetamines.

5.2 Price

5.2.1 Methamphetamine – powder form

The last reported price paid for a gram or 'point' of powder methamphetamine was a median $400/gram ($200 to $450, n=4) or $50 per 'point' (range $50 to $100, n=19). The last price paid for a gram of powder was higher in 2009, with the median reported price in 2008 at $162.50, but it should be noted that only a small number of participants have commented on these prices.

5.2.2 Methamphetamine – base form

The last reported price paid for a gram or 'point' of base methamphetamine was a median $425/gram ($200 to $500, n=6), or $50 per 'point' (range $20 to $115, n=21). The last price paid for a point of base was stable in 2009. No comparisons are made with 2008, as too few participants were able to comment on the price of gram or point amounts in 2008.

5.2.3 Methamphetamine – crystal form

The last reported price paid for a gram or 'point' of crystal methamphetamine was a median of $600/gram (range: $200 to $650, n=3) or $50 per 'point' (range: $20 to $100, n=18). The last price paid for a gram of crystal was higher in 2009, with the median price reported as $600 (from $300 in 2008), but it should be noted that only a small number of participants have commented on these prices.

Table 5.1 summarises the participant reports of recent change in the price of the three main forms of methamphetamine. In 2009, the majority of participants answering this section reported the price of powder and base methamphetamine as stable, whereas the majority of participants reported the price of crystal methamphetamine as increasing. For crystal 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 2008.

Table 5.1: Change in price of methamphetamine over last six months, 2008 & 2009

Reported price status	Powder		Base		Crystal	
	% able to answer					
	2008 (n=21)	**2009 (n=25)**	2008 (n=14)	**2009 (n=28)**	2008 (n=23)	**2009 (n=22)**
Don't know	0	**4**	0	**4**	10	**0**
Increasing	10	**43**	29	**36**	10	**50**
Stable	81	**64**	64	**57**	77	**41**
Decreasing	0	**0**	0	**0**	0	**5**
Fluctuating	10	**0**	7	**4**	5	**5**

Source: IDRS participant interviews

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

Eight KE were able to provide information regarding price of methamphetamine, with all reporting a range of prices for a 'point' from $50 to $80. Several KE also commented that price was dependent on the closeness of the user to the manufacturing or supply source, whether the user was also dealing, and that the price decreased with an increase in the amount bought. KE reported that the price of a gram could range from $300 to $500/gram, again dependent on the form or purity of methamphetamine, closeness to the cook and whether it has been 'cut' with other adulterants. In agreement with participants, three KE (able to comment) reported that the price of methamphetamine had been stable recently; another suggested the price had increased, and another KE commented that the price was fluctuating.

5.3 Availability

Tables 5.2 and 5.3 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 2009, all three types of methamphetamine were reported as 'easy' or 'very easy' to obtain by 61% or more of participants able to answer these sections. Powder methamphetamine was considered the easiest to obtain (84% reported 'easy' or 'very easy'), followed by crystal methamphetamine (69% reported 'easy' or 'very easy', and base (61% reported 'easy' or 'very easy'). In 2009, fewer 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 (around 50% of those able to answer). However, a larger proportion of those participants in 2009 able to comment on the change in availability of crystal methamphetamine reported that this form had become more difficult

to obtain in the six months prior to interview (41%) compared to participant reports in 2008 (4%).

Table 5.2: Availability of methamphetamine currently, 2008 & 2009

How easy is it to get [powder/base/crystal] at the moment?	Powder		Base		Crystal	
	% able to answer					
	2008*	**2009**	2008*	**2009**	2008	**2009**
	(n=20)	**(n=25)**	(n=13)	**(n=28)**	(n=23)	**(n=22)**
Very easy	25	**36**	31	**36**	39	**46**
Easy	60	**48**	69	**25**	48	**23**
Difficult	15	**16**	0	**32**	9	**18**
Very difficult	0	**0**	0	**7**	4	**14**

Source: IDRS participant interviews
***** One participant answered 'did not know'

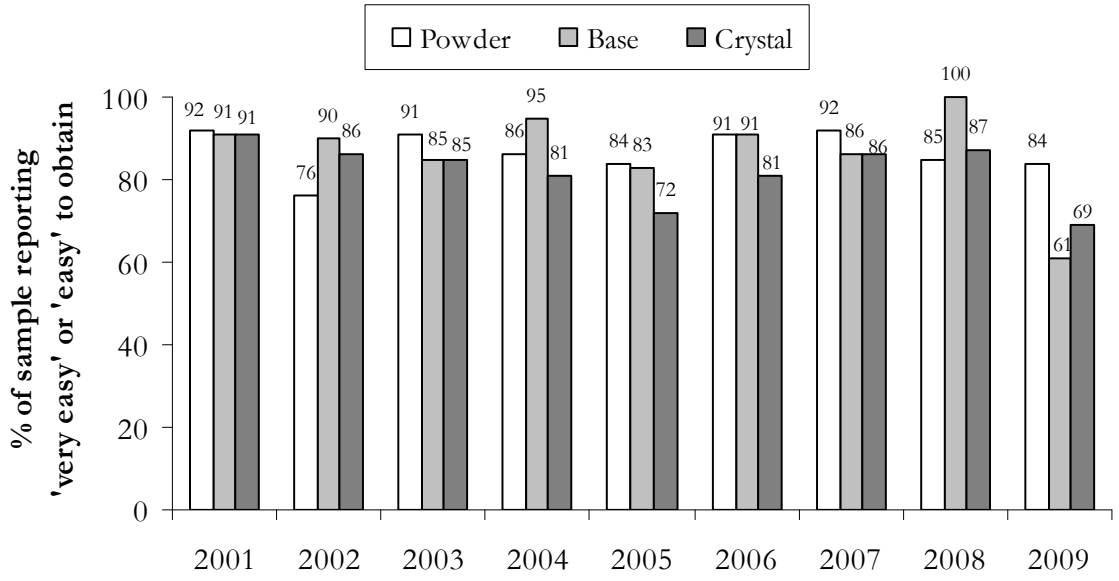
Table 5.3: Change in availability of methamphetamine over the last six months, 2008 & 2009

Has [availability] changed in the last 6 months?	Powder		Base		Crystal	
	% able to answer					
	2008 (n=21)	**2009 (n=25)**	2008 (n=14)	**2009 (n=28)**	2008 (n=23)	**2009 (n=22)**
Don't know	5	**4**	7	**7**	9	**0**
More difficult	24	**12**	36	**29**	4	**41**
Stable	57	**72**	57	**57**	52	**50**
Easier	0	**8**	0	**0**	22	**5**
Fluctuates	14	**4**	0	**7**	3	**5**

Source: IDRS participant interviews

Figure 5.5 shows the trend in availability of methamphetamine, as reported by participants, since 2001. As can be seen, 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 5.5: Availability of methamphetamine in the last six months, 2001 – 2009



Source: IDRS participant interviews

In 2009, participants were asked about both the person and location they obtained methamphetamine from the last time they had obtained the various forms. As can be seen in Table 5.4, in 2009 the majority of methamphetamine users reported obtaining the base and crystal forms of methamphetamine from friends and known dealers and then acquaintances. The powder form of methamphetamine was last obtained from either friends or known dealers by similar proportions of participants.

Table 5.4: Last usual source person and venue used for obtaining various forms of methamphetamine in the last six months, 2009

Usual source person and venue of those able to answer (%)		Powder (n=25)	Base (n=28)	Crystal (n=22)
Person	Street dealer	**8**	**4**	**5**
	Known dealer	**36**	**25**	**23**
	Friend	**32**	**61**	**55**
	Acquaintances	**8**	**4**	**9**
	Mobile dealer	**4**	**4**	**0**
	Other	**12**	**4**	**9**
Venue	Home delivery	**20**	**25**	**36**
	Dealer's home	**20**	**14**	**5**
	Friend's home	**20**	**39**	**18**
	Acquaintance's home	**8**	**0**	**0**
	Agreed public location	**28**	**14**	**27**
	Other	**4**	**7**	**14**

Source: IDRS participant interviews

The locations/venues that participants last obtained powder methamphetamine from in 2009 were from an agreed public location, followed by a dealer's home, a friend's home, or by home delivery. Friend's homes were the location most likely to be reported as the venue where participants last obtained base methamphetamine, followed by home delivery, whereas, those who last obtained crystal methamphetamine were likeier to have obtained this through home delivery, or at an agreed public location.

Fifteen KE commented that methamphetamine availability in general had decreased especially in relation to crystal methamphetamine, 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.

5.4 Purity

Tables 5.5 and 5.6 summarise the current purity of the three forms of methamphetamine and the changes in methamphetamine purity over the last six months, according to participants. As shown in Table 5.5, there were a few differences reported regarding the purity of the three different forms of methamphetamine in 2009, with the trend being an increase in purity from powder to base to crystal, as would be expected. Eighty-four percent of those able to comment in 2009 perceived the purity of powder methamphetamine as low/medium, which indicates a difference from the views of participants in 2008 (67%). For base, the perceived purity was mixed, with similar proportions reporting the purity as high, medium

and low. Crystal methamphetamine was reported as of high purity by a third of those able to comment, although in 2008 over half of those able to comment reported the purity as high. There was variability in reports from users regarding recent changes in purity of the various methamphetamine forms, suggesting overall fluctuation and variability in quality of methamphetamine recently.

Table 5.5: Purity/strength of methamphetamine currently, 2008 & 2009

How pure would you say [powder/base/ crystal] is at the moment?	Powder		Base		Crystal	
	% able to answer					
	2008 (n=21)	**2009 (n=25)**	2008** (n=13)	**2009* (n=28)**	2008 (n=23)	**2009* (n=22)**
High	14	**16**	38	**26**	52	**36**
Medium	19	**44**	15	**30**	22	**23**
Low	48	**40**	31	**33**	17	**18**
Fluctuates	19	**0**	15	**11**	9	**23**

Source: IDRS participant interviews
***** One participant answered 'do not know'
****** One participant answered 'do not know'

Almost half of the participants able to comment reported that the purity of both the powder and base forms of methamphetamine had decreased in the six months prior to interview. However, for crystal methamphetamine, around a third (36%) of those able to comment reported that the purity of this form of methamphetamine had fluctuated in the six months prior to interview.

Table 5.6: Change in purity/strength of methamphetamine in last six months, 2008 & 2009

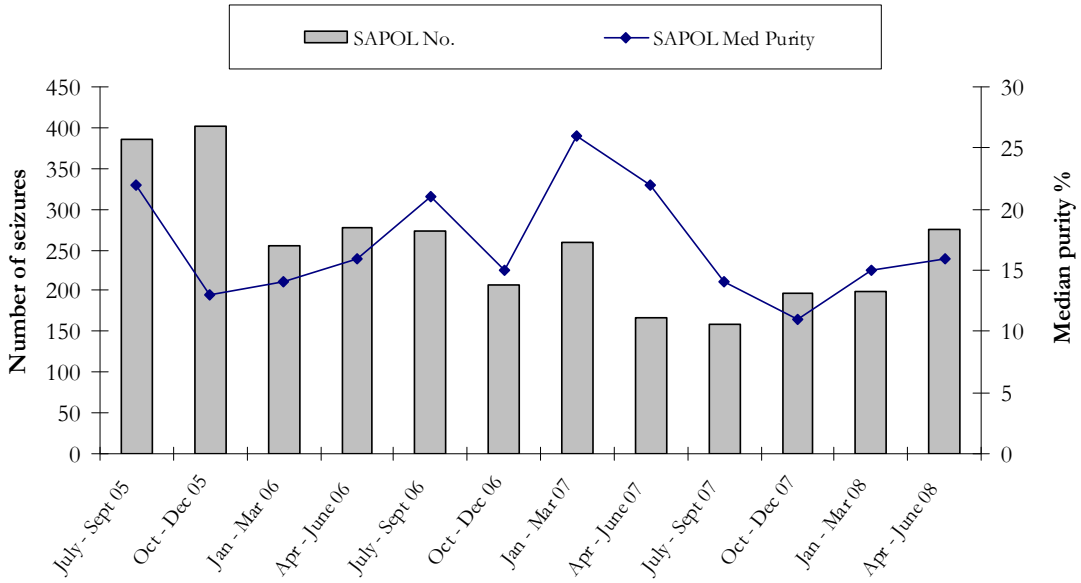
Has the purity of [powder /base/crystal] changed in the last 6 months?	Powder		Base		Crystal	
	% able to answer					
	2008 (n=21)	**2009 (n=25)**	2008 (n=14)	**2009 (n=28)**	2008 (n=23)	**2009 (n=22)**
Don't know	0	**0**	7	**4**	4	**0**
Increasing	0	**16**	14	**11**	30	**18**
Stable	29	**16**	7	**25**	13	**18**
Decreasing	38	**48**	36	**46**	22	**27**
Fluctuating	33	**20**	36	**14**	30	**36**

Source: IDRS participant interviews

Seven KE commented on purity of methamphetamine in 2009. Three KE reported the current purity of all forms of methamphetamine as low. Three KE commented that the purity of methamphetamine was decreasing, and smaller numbers mentioned the purity was stable (n=2), or fluctuating (n=1). 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.

The Australian Crime Commission (ACC) data were unavailable for 2008/09 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 2007/08 (Australian Crime Commission, 2009). Figure 5.6 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 2007/08. The total number of SAPOL methamphetamine seizures analysed from July 2007 to June 2008 was 829 and the median purity was 14.7%. The majority of seizures analysed (n=651) were less than or equal to 2 grams. Overall, the number of seizures and the median purity of methamphetamine seized by SAPOL in SA for 2007/08 decreased compared to the previous year. Specifically, median purity decreased from 21.6% in 2006/07 to 14.7% in 2007/08, and the number of seizures decreased in 2007/08 (829 seizures) compared to 2006/07 (907 seizures). No methamphetamine seizures were reported as analysed by the Australian Federal Police across this timeframe.

Figure 5.6: Number of methamphetamine seizures analysed and median methamphetamine purity in SA, 2005/06 – 2007/08



Source: Australian Crime Commission, 2006, 2007, 2008, 2009

5.5 Trends in methamphetamine use

5.5.1 Participants

When asked about recent general trends in drug use, 24% of those who commented held the view that more people in general were using methamphetamines, and some commented more specifically that younger people were using methamphetamines. Of those who commented, the majority noted a move to powder methamphetamine from crystal methamphetamine use, with the quality of crystal methamphetamine decreasing. Some commented that users are switching back to heroin due to the poor quality of crystal methamphetamine. One in five of those who commented mentioned a decrease in the use of drugs in general due to the financial crisis and an increase in cost commensurate with a decrease in quantity.

5.5.2 Key experts

In 2009, KE were asked not only to identify the main illicit drug used by the users they had the most contact with in the previous 6-months, but which drug or drugs (if any) would they identify as the most 'problematic' at the time of interview. KE were also asked to provide details regarding why the particular drug(s) they had identified was 'problematic'.

The majority of KE (21 of 27, or 78% of those who commented) identified methamphetamine as the main illicit drug used by the users they had the most contact with in the six months prior to interview. Of those who identified methamphetamine as the main illicit drug used, the majority (74%, n=14) identified methamphetamine as the main problematic drug either alone (21%, n=4) or in combination with another drug (53%, n=11). Alcohol was the drug most commonly mentioned in combination with methamphetamine (42%) or as the most problematic drug used by the methamphetamine users KE had contact with (21%).

The majority of KE identified mental health (n=14), general social problems (n=14) and violence/aggression (n=13) as the main problems associated with the methamphetamine users they had contact with. 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. Violence and aggression were often mentioned especially where methamphetamine use was combined with alcohol use, with some health KE expressing concern for their own safety in relation to client aggression, and a need for anger management for many of their methamphetamine using clients.

Many health KE (n=10), when asked '*what were the current health issues that they had noticed in terms of their clients' drug use*', mentioned mental health, including suicide, low self esteem and feelings of hopelessness in those using methamphetamine, whereas the majority (n=15) mentioned physical health issues including lack of dental hygiene, vein and wound care problems, respiratory problems and sleep problems. Many KE (n=12) noted that the complexity involved with the increase in presentations for methamphetamine, in many cases combined with alcohol use, had resulted in a change in service provision, including increasing and changing training for staff, introduction of increased safety measures (e.g. restraint, pharmacology) and working collaboratively with mental health professionals. Other

KE mentioned the increase in clients, the complexity of their problems especially where alcohol was concerned, and the increase in the workloads of staff concerned.

6 CANNABIS

Summary

- There was a significant difference (decrease) in proportion of sample reporting recent use of cannabis in 2009 compared to 2008 reports.
- Frequency of recent use was lower compared to reports of such use in 2008.
- The price of an ounce of hydro cannabis was higher compared to 2008 reports.
- Availability of both forms of cannabis was easy/very easy and stable.
- Potency was reported as stable.

The current legal approach to cannabis use in South Australia is one of 'prohibition with civil penalties'. Under this approach, the production, possession or use of cannabis is illegal in South Australia. 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 dependant 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, they 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.

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 South Australian cannabis market). A detailed investigation of the weight/content of a 'bag' of cannabis was undertaken in 2002 (Longo 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.

6.1 Use

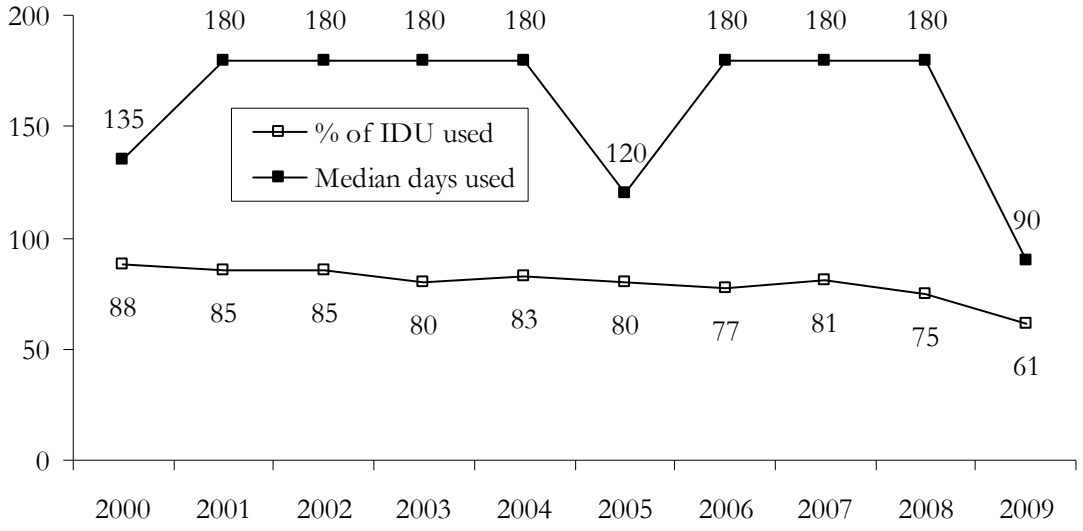
6.1.1 Cannabis use among participants

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.

6.1.2 Current patterns of cannabis use

Sixty-one percent of the participants reported having used cannabis a median of 90 days (range 1 to 180), during the last six months. Although, cannabis is generally not the drug of choice among the IDRS sample (see Table 3.2), the majority of participants (82%) reported using this substance in their lifetime. Fewer participants reported lifetime and recent use of cannabis in 2009 when compared to participant reports in 2008 (lifetime: 95%; recent: 75%). There was a significant difference in reported use of cannabis in the six months prior to interview between participant reports in 2009 compared to participant reports of such use in 2008 (χ^2 (99, 1) =3.88, $p<0.05$). 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 2008 (see Figure 6.1).

Figure 6.1: Cannabis – recent* use and median number of days used#, 2000 – 2009

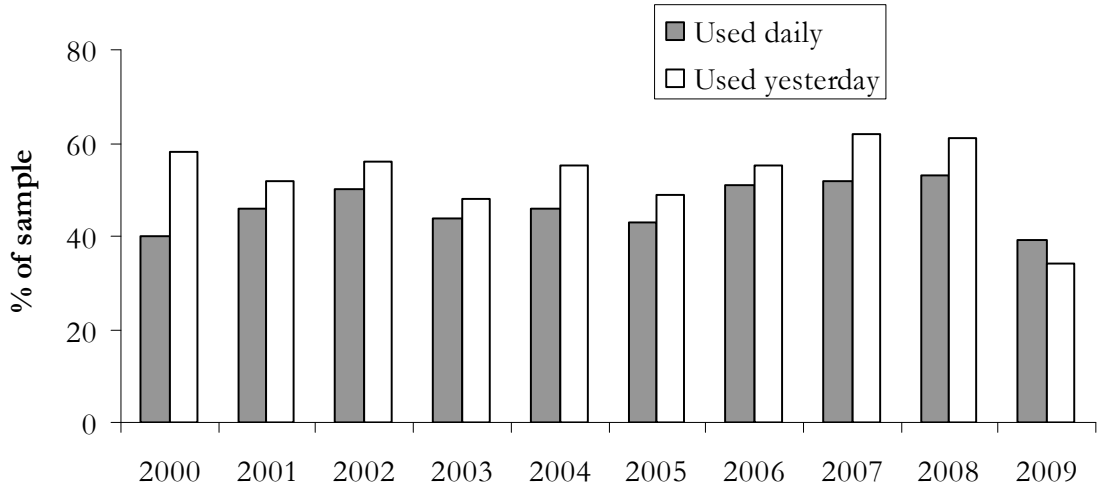


Source: IDRS participant interviews
***** In the previous six months;
# By those reporting use in the previous six months

Thirty-nine percent of recent cannabis users (n=24) stated they had used on a daily basis in the last six months, and 34% (n=21) reported they had used the drug on the day preceding the interview. These proportions are also lower than those reported in 2008, when 53% of cannabis users reported daily use and 61% 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 (see Figure 6.2).

In 2009, for the third time, 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 of 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 (including those who had used a 'cone' in a bong) reported smoking cannabis (82%, or n=49) in 'cones' a median of two times the last day they had used (range: 0.50 to 10 times), with eleven participants reporting use of joints (median = once, range 1 to 6 times).

Figure 6.2: Cannabis – % who used daily and used yesterday, 2000 – 2009



Source: IDRS participant interviews

Of the sixty-one participants who had used cannabis recently (in the 6 months prior to interview), 58 (95%) reported use of hydro and 28 (46%) reported use of bush, within that period. In addition, nine participants (15%) reported use of 'hash' (cannabis resin) and five (8%) 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 (89%, n=54); the remainder reported bush was the form they had 'used most'. It should be noted that included in these figures are the participants (62%, n=62) who stated that they were unable to distinguish between hydro and bush.

Nine KE (30% of those commenting) identified cannabis as the main drug used by the users they were in contact with in the six months prior to interview, and 44% KE (n=4) identified cannabis as the drug they considered most problematic at the time of interview. KE reported the problematic nature of cannabis related to its ease of availability and the interaction of cannabis with other medication. The majority of KE (52%, 14 of 27 who commented) mentioned that cannabis use is decreasing with some long-term users (especially older males) approaching health services either to cut-down or stop using this substance. KE report this

is a very unusual situation. A third of the KE reported cannabis use had remained stable amongst the users they had contact with, followed by fluctuating (n=3), or increasing (n=1).

6.2 Price

Thirty-two percent of the IDRS participants were able to provide information regarding the price of cannabis in 2009. Participants reported the price they obtained cannabis for the last time they purchased hydro cannabis to be a median $225/ounce for hydro (range $180 to $250, n=20) and $200/ounce (range $150 to $200, n=5) for bush. These prices for hydro are slightly higher than the price reported in 2008 by participants the last time they purchased hydro cannabis at $210 ($200 to $340, n=12) (see Table 6.1).

Table 6.1: Price of 'last' cannabis purchases, 2008* & 2009

Amount bought	Median price paid, $ (range)		Number of purchasers	
	Hydro	Bush	Hydro	Bush
'Bag'	25 (20-30) *25 (25)*	25 (20-50) *25 (25)*	26 *16*	12 *8*
¼ ounce	50 (50-100) #	# #	7 #	# #
½ ounce	120 (100-130) *125 (100-160)*	# #	5 *5*	# #
Ounce	225 (180-250) *210 (200-340)*	200 (150-200) #	20 *12*	5 #

Source: IDRS participant interviews
***** 2008 data in italics
# n<5 not reported

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 (n=26,

range $25 to $30) or bush (n=12, range $20 to $50). The next most commonly reported purchase was of an ounce of hydro. Three participants reported purchasing a cap of hash oil at last purchase for $25 (range $25 to $50), and one participant reported purchasing a gram of hash in the last six months for $400.

The price of both hydro and bush cannabis was reported as stable over the last six months by over 73% of participants who were able to comment (or by 37% and 18% of the entire sample, respectively) in 2009 (see Table 6.2).

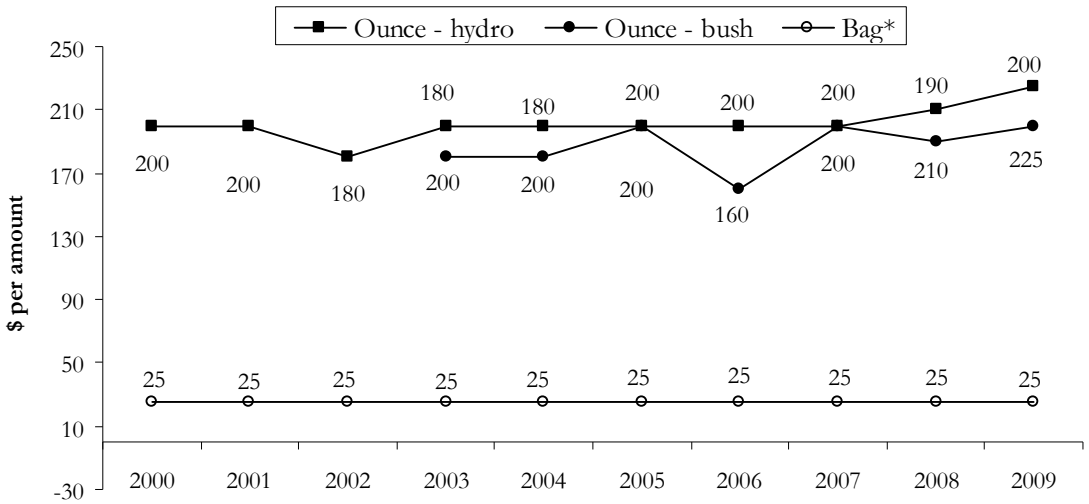
Table 6.2: Change in price of cannabis over the last six months, 2008 & 2009

Reported price status	% able to answer			
	2008		2009	
	Hydro (n=40)	Bush (n=22)	**Hydro (n=37)**	**Bush (n=18)**
Don't know	0	0	**0**	**0**
Increasing	25	10	**19**	**0**
Stable	68	86	**73**	**94**
Decreasing	0	0	**5**	**6**
Fluctuating	8	5	**3**	**0**

Source: IDRS participant interviews

The long-term trend in the price of a 'bag' or an ounce of cannabis is depicted graphically in Figure 6.3. It can be seen that the price of these amounts of cannabis has remained stable over the years.

Figure 6.3: Median price of a 'bag' or an ounce of cannabis, 2000 – 2009



Source: IDRS participant interviews
* Denotes either hydro or bush from 2003

Only one KE commented on the price of cannabis, and reported the price of cannabis is $25 for a 'bag' and $220 for an ounce, with the price stable.

6.3 Availability

Tables 6.3 and 6.4 summarise the current availability of cannabis and the changes in cannabis availability over the last six months, according to participant reports. In 2009 the majority of participants reported both types of cannabis as 'easy' or 'very easy' to obtain: 78% (29% of entire sample) for hydro and 58% (11% of entire sample) for bush. The majority of those able to answer (62%; 23% of entire sample) reported availability of hydro was stable in the last six months. Nearly three-quarters of the participants, who were able to answer, reported the availability of bush to be stable (68%; 13% of entire sample). More participants in 2009 (42%) reported that bush cannabis was difficult to obtain in the six months prior to interview than in 2008 (16%), with fewer participants in 2009 reporting bush cannabis was easy/very easy to obtain (2008: 71%; 2009: 58%) in that period.

Table 6.3: Availability of cannabis currently, 2008 & 2009

How easy is it to get cannabis at the moment?	% able to answer			
	2008		2009	
	Hydro (n=40)	Bush (n=22)	**Hydro (n=37)**	**Bush (n=19)**
Very easy	40	33	**32**	**37**
Easy	33	38	**46**	**21**
Difficult	28	24	**16**	**42**
Very difficult	0	5	**5**	**0**

Source: IDRS participant interviews

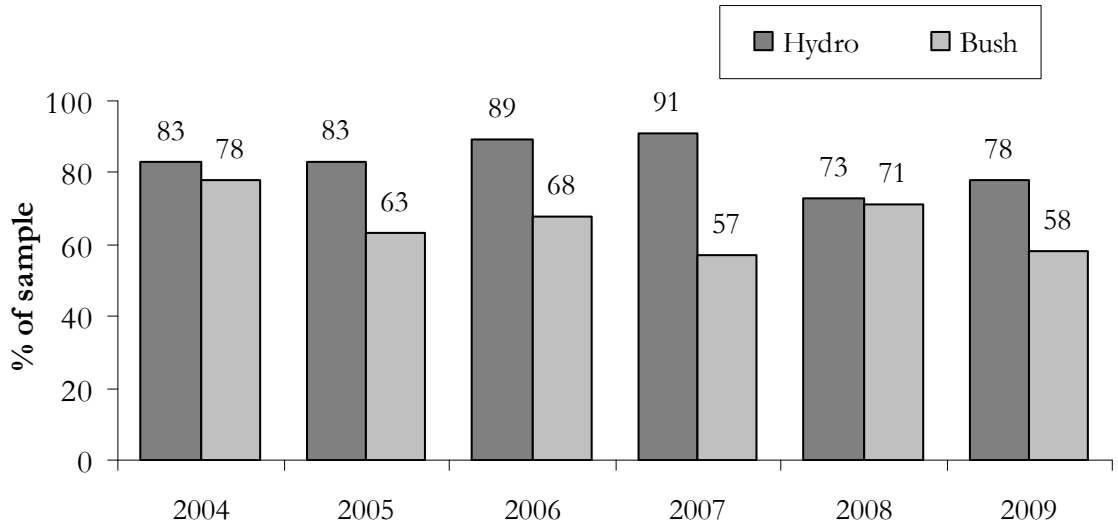
Table 6.4: Change in availability of cannabis over the last 6 months, 2008 & 2009

Has [availability] changed in the last 6 months?	% able to answer			
	2008		2009	
	Hydro (n=40)	Bush (n=22)	**Hydro (n=37)**	**Bush (n=19)**
Don't know	0	0	**0**	**0**
More difficult	18	14	**27**	**21**
Stable	65	81	**62**	**68**
Easier	3	0	**5**	**11**
Fluctuates	15	5	**5**	**0**

Source: IDRS participant interviews

Figure 6.4 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 which has stabilised in 2009 and the increase in the availability of bush seen in 2008, decreasing again in 2009. Three KE reported that the availability of cannabis was either decreasing or remained stable.

Figure 6.4: Availability of cannabis in the last six months, 2004 – 2009



Source: IDRS participant interviews
Note: Prior to 2004, availability of hydro and bush was combined

Table 6.5 presents information collected from participants on the source (both person and venue) from which participants had 'last' obtained the cannabis they had recently used. In 2009, the majority of participants who were able to comment reported that they had 'usually' obtained cannabis from a friend (54% for hydro and 58% for bush), in the six months prior to interview.

Table 6.5: Source person and source venue used to obtain hydro and bush cannabis last time purchased in the last six months, 2009

Usual source or method of obtainment		Hydro (n=37)	Bush (n=19)
Person	Street dealer	**3**	**0**
	Known dealer	**22**	**11**
	Friend	**54**	**58**
	Acquaintances	**14**	**11**
	Mobile dealer	**3**	**5**
	Other	**4**	**16**
Venue	Home delivery	**19**	**37**
	Dealer's home	**16**	**5**
	Friend's home	**38**	**37**
	Agreed public location	**14**	**21**
	Acquaintance's home	**0**	**0**
	Other	**8**	**0**
	Grew your own	**5**	**0**

Source: IDRS participant interviews (multiple responses allowed)

The remainder of the participants reported they had 'usually' scored cannabis from some type of dealer (hydro: 25%; bush: 16%). Around 37% of participants able to comment reported that the venue they had 'usually' obtained cannabis from was a friend's home (hydro: 38%; bush: 37%). Five percent of participants reported they had produced their own hydro, with none reporting that they had grown their own bush cannabis.

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 the cannabis market has either remained stable or is decreasing. Again KE reported the use of adulterants such as 'super bud' and 'rock in a bottle' to increase the yield substantially, giving a really tight appearance and fit it into a smaller half bag rather than the usual sized bag it is normally sold in. This use of adulterants may be contributing to the decrease in use of cannabis. Law enforcement KE mentioned a conversation with a dealer who stated that, "*When he took his cannabis to his dealer to sell it – the guy put it over a screen then shook it and he ended up with 2 ounces broken into bits which he has been unable to sell – this had never happened before*", with the KE suggesting dealers are getting more choosy and only want cannabis head not leaf.

6.4 Potency

Tables 6.6 and 6.7 summarise the current potency of cannabis and the changes in cannabis potency over the last six months, according to participant reports. In 2009, the strength of hydro or bush cannabis was reported as high or medium by 84% or more of the participants able to answer (hydro: 89%; bush: 84%), and largely stable, in the last six months. Compared to 2008, more participants in 2009 reported the current potency of hydro and bush cannabis as 'medium', with the majority of those able to comment reporting the strength of hydro and bush as medium. Three KE commented that the quality of cannabis in 2009 had decreased.

Table 6.6: Current potency/strength of cannabis, 2008 & 2009

How strong would you say cannabis is at the moment?	% able to answer			
	2008		2009	
	Hydro (n=40)	Bush (n=22)	**Hydro (n=37)**	**Bush (n=18)**
High	63	19	**65**	**28**
Medium	23	62	**24**	**56**
Low	3	14	**3**	**17**
Fluctuates	13	5	**8**	**0**

Source: IDRS participant interviews

Table 6.7: Change in potency/strength of cannabis in last six months, 2008 & 2009

Has the strength of cannabis changed in the last 6 months?	% able to answer			
	2008		2009	
	Hydro (n=40)	Bush (n=22)	**Hydro (n=36)**	**Bush (n=16)**
Don't know	0	0	**0**	**0**
Increasing	5	5	**0**	**6**
Stable	68	81	**81**	**88**
Decreasing	8	10	**6**	**6**
Fluctuating	13	5	**14**	**0**

Source: IDRS participant interviews

7 OPIOIDS

Summary

- Recent use and frequency of recent use of illicit morphine was reported to be lower in 2009 compared to 2008.
- Availability of illicit morphine was reported as easy/very easy to obtain and stable in the six months prior to interview.
- The price of 100 mg of MS Contin and Kapanol reported by participants in 2009 was higher than that reported by participants in 2008 (although small numbers reporting).

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; and
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 people who regularly inject drugs. 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 thus that they were able to provide meaningful data on market indicators. Therefore, while a proportion of those sampled in 2007 were engaged in such treatment at the time of interview, responses presented are not representative of all clients engaged in drug treatment services.

7.1 Overview of opioid use among participants

Table 3.3 provides data on the history of use and route of administration of opioid substances for the 2009 participant sample. Opioid substances include heroin, morphine, 'homebake' (a crude opioid substance derived from codeine; Reynolds 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 (72%) in the six months prior to interview, followed by either licit or illicit methadone (32%), either licit or illicit morphine (24%), either licit or illicit Suboxone® (21%), either licit or illicit buprenorphine (15%), or either licit or illicit oxycodone (11%). Heroin use among participants is described in detail in Section 4.1, with use of other opioids (illicit use only) described in the following sections of the current chapter: 7.2 (morphine), 7.3 (methadone, buprenorphine, oxycodone, and Suboxone®).

When all the opioid substance categories (heroin, morphine, homebake and other opioids, plus oxycodone, any methadone or buprenorphine) are collapsed, 81% (n=81) 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, 78% (n=78) had used any of these substances in that time. Excluding heroin and licit use (of methadone, morphine, buprenorphine, Suboxone® or oxycodone), 41% (n=41) of participants had used some other opioid substance in the six months prior to interview.

Three KE, who were able to comment on other opioid use, reflected a perception that users were continuing to use other opioids to substitute or supplement their heroin use. However, a number of KE observed that users were moving from methamphetamine to other opiates (including heroin and morphine), and that other users were combining buprenorphine with methamphetamine to increase the effects of the methamphetamine. Most KE commented that use of other opioids was common among this group, but a few commented that this use only occurred if heroin or methamphetamine were unavailable.

7.2 Morphine

2009 was the seventh year that IDRS survey participants were asked to provide information on the price and availability of illicit morphine.

7.2.1 Use of illicit morphine

One participant reported morphine as the first drug ever injected, two nominated morphine as their drug of choice, 9% (n=9) reported morphine as the drug most often injected in the last month, and 11% (n=11) as the last drug they injected (see Table 3.2).

Twenty-two percent of participants (n=22) reported they had used illicit morphine in the six months prior to interview on a median of 9 days (range 1 to 180). The proportion of participants reporting recent use of illicit morphine was lower in 2009 (from 35% in 2008 to

22%). Frequency of use of illicit morphine was also lower, from a median of 12 days in 2008 to 9 days in 2009 (range 1 to 180).

The majority (91%) of those participants who reported using illicit morphine in the six-months prior to interview reported having done so by injecting for a median of 11 days (range 1 to 90). The frequency of use of illicit morphine (by injecting) remained stable compared to participant reports in 2008, when the median days use by injecting was 12 (range 1 to 180). Twenty-three percent of illicit morphine users (n=5) also reported recent oral use of the drug in 2009. One participant reported daily use of illicit morphine in the six months prior to interview.

In 2009, the majority of morphine users (71%, n=17) 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 MS Contin® (by 55%, n=12), Kapanol® (by 27%, n=6), and MS Mono® (by 14%, n=3).

7.2.2 Price

Fewer participants could comment on the price of morphine in 2009 (n=6) compared to 2008 (n=19). In 2009, the median price paid by participants at last purchase of 100 mg of Kapanol® was higher ($60) than in 2008 ($40) The median price paid for 100 mg of MS Contin® at last purchase was $50, and again was slightly higher than the median price reportedly paid by participants at last purchase in 2008 (see Table 7.1). Readers should note the small number of participants commenting on prices.

Table 7.1: Price of morphine at last purchase by participants, 2008* & 2009

Amount bought	Median price paid, $ (range)	Number of purchasers
MS Contin® – 60 mg	#	#
	#	#
MS Contin®– 100 mg	50 (15-120)	6
	35 (20-45)	*5*
Kapanol® – 50 mg	#	#
	#	#
Kapanol®– 100 mg	60 (30-75)	6
	40 (30-50)	*12*

Source: IDRS participant interviews
***** 2008 data in italics
# n<5: not reported

In 2009, only 8 participants were able to comment on the change in price of morphine in the six months prior to interview and therefore this parameter is not presented.

7.2.3 Availability

Tables 7.2 and 7.3 summarise the current availability of morphine and the changes in its availability over the last six months, according to participant reports. In 2009, of those able to comment, 50% (5% of entire sample) reported illicit morphine as 'easy' or 'very easy' to obtain, with 64% (7% of entire sample) reporting this availability as stable, in the six months prior to interview. Due to small participant numbers commenting, no comparison is made with 2008.

Table 7.2: Availability of illicit morphine currently, 2008 & 2009

How easy is it to get morphine at the moment?	% able to answer	
	2008* (n=18)	**2009 (n=10)**
Very easy	39	**30**
Easy	17	**50**
Difficult	22	**20**
Very difficult	22	**0**

Source: IDRS participant interviews
***** One participant answered 'do not know'

Table 7.3: Change in availability of illicit morphine over the last six months, 2008 & 2009

Has [availability] changed in the last 6 months?	% able to answer	
	2008 (n=19)	**2009 (n=11)**
Don't know	5	**9**
More difficult	37	**18**
Stable	58	**64**
Easier	0	**0**
Fluctuates	0	**9**

Source: IDRS participant interviews

Table 7.4 presents information collected from participants on the person(s) from whom they had bought, and the venues they had normally obtained the morphine they had used in the six months prior to interview. Of those participants who reported use of morphine in the last six months and were able to answer (n=11), around a third stated that they had obtained morphine from a friend (55%; 6% of entire sample), which is higher than the proportion of participants who reported this source in 2008 (37%). In 2009, participant reports of the venue for obtaining morphine were equivocal.

Table 7.4: Usual source person and source venue used to obtain illicit morphine in the last six months, 2008 & 2009

Usual source person and venue	% able to answer	
	2008 (n=19)	**2009 (n=11)**
Person		
Street dealer	0	**0**
Known dealer	32	**18**
Friend	37	**55**
Acquaintance	26	**27**
Mobile dealer	0	**0**
Venue		
Home delivery	16	**27**
Dealer's home	16	**18**
Friend's home	26	**18**
Acquaintance's home	5	**9**
Agreed public location	26	**27**

Source: IDRS participant interviews
***** Includes obtained as a gift from friend

7.3 Other illicit opioids

Due to the small number of participants reporting use of illicit methadone, illicit buprenorphine, illicit Suboxone® and illicit oxycodone, all these substances will be reported in this section of the chapter. It should also be noted that sample sizes for these sections were relatively small and therefore should be interpreted with caution. Please note the category of methadone includes methadone syrup and methadone in a tablet form, known as Physeptone®.

7.3.1 Use of illicit methadone

2009 was the seventh year that IDRS survey participants were asked to provide separate information on the use of licit and illicit methadone syrup and Physeptone® tablets as per the categories in Table 3.3.

Seven of the participants reported having recently used illicit methadone syrup a median of 5 days (range 1 to 48) in the last six months. Of those, five (71%) reported use of illicit methadone syrup by injecting a median of six days (range 1 to 48), and six participants (86%) reported use by swallowing, during that period. This constituted a slight change in the

reported recent use (from 11% in 2008 to 7%) with frequency of recent use remaining relatively stable (median 5 days) compared to 2008 (median 6 days).

Five of the participants reported having used illicit Physeptone® tablets a median of five days (range 1 to 72) in the last six months. Of those, two reported use of illicit Physeptone® tablets by injecting a median 7 days (range 1 to 12), and three reported use by swallowing, during that period. This indicates a decrease in the number of participants reporting recently using illicit Physeptone® tablets in 2009 when compared to 2008 (10 participants), with frequency of use in 2009 slightly higher (five days) than participant use reported in 2008 (3 days).

7.3.2 Use of illicit buprenorphine

2009 was the seventh year that IDRS survey participants were asked to provide separate information on the use of licit and illicit buprenorphine as per the categories in Table 3.3.

Nine participants reported having used illicit buprenorphine a median of 23 days (range 2 to 180) in the six months prior to interview. Of those, five (56%) reported use of illicit buprenorphine by injecting a median of 21 days (range 2 to 180) and four (33%) reported use by swallowing, during that period. Compared to 2008, in 2009 the number of participants reporting recent use of illicit buprenorphine remained relatively stable (from 12 participants in 2008 to nine in 2009), whereas reported frequency of recent use was higher in 2009 (median 23 days) compared to 2008 (median 3 days). One participant reported use of illicit buprenorphine on a daily basis.

7.3.3 Use of illicit oxycodone

For the fifth year in a row, the IDRS survey included a separate section for the opioid oxycodone. In previous years, oxycodone was included in the 'other opioids' category.

Nine participants reported recent use of illicit oxycodone for a median of 11 days (range 1 to 96) in the six months prior to interview. Of those, all reported use of illicit oxycodone by injecting a median of six days (range 1 to 90) and one participant reported use by swallowing, during that period. This indicates that the proportion of participants reporting recent use of illicit oxycodone in 2009 (n=9) was lower in 2009 compared to participant reports in 2008 (15 participants); however, there was an increase in the frequency of use reported by participants in 2009 compared to participant reports in 2008 (from a median of four days in 2008 to a median of 11 days).

7.3.4 Use of illicit Suboxone®

For the past three years participants in the IDRS survey have been asked questions about their use of illicit Suboxone®, but due to very small numbers such use has not been previously reported.

Nine participants reported recent use of illicit Suboxone®, for a median of six days (range 1 to 45) in the six months prior to interview. Of those, all reported use of illicit oxycodone by

injecting a median of seven days (range 2 to 12), and seven participants (78%) reported use by swallowing.

7.3.5 Use of prescribed pharmaceutical opioids

Since the heroin shortage was first identified by the IDRS (Degenhardt et al., 2004) there has been growing evidence of increasing use of pharmaceutical opioids by people who inject drugs (PWID) in Australia (National Centre in HIV Epidemiology and Clinical Research, 2009; Stafford et al., 2009; Degenhardt et al., 2006). The aim of this module is to examine the association between injecting drug use and legitimate therapeutic goals of pharmaceutical opioids (e.g. pain management). Comparisons been PWID and the general population, both in Australia and internationally, have consistently shown excess mortality and morbidity (Hulse et al., 1999; English et al., 1995; Vlahov et al., 2004), yet there is no current evidence in Australia on the characteristics or the extent of which PWID obtain pharmaceutical opioids (licitly or illicitly) for the management of chronic non-malignant pain. Furthermore, there is growing evidence that prescribers are often reluctant to prescribe pharmaceutical opioids to people with a history of injecting drug use (Baldacchino et al., 2010). This module seeks to examine the complex interplay between injecting drug use, pain management and the extra-medical use of pharmaceutical opioids among a sample of PWID.

In 2009, the survey included questions enquiring about any problems associated with pharmaceutical opioids use. Seventeen percent of participants reported that they had been prescribed pharmaceutical opioids in the previous twelve months. Of participants who had been prescribed pharmaceutical opioids the most common brands were MS Contin® (29%) and Kapanol® (18%). All participants reported that the pharmaceutical opioids had been prescribed for pain which was described most commonly as 'chronic non-malignant pain' (which is associated with progressive, debilitating diseases such as arthritis). Of those who had been prescribed pharmaceutical opioids, 35% reported that they had shared, sold or traded their prescription. Five participants that had been prescribed pharmaceutical opioids reported that they had abscesses or infections from injecting, with four participants reporting difficulty injecting due to pharmaceutical opioid use. Fifty-nine percent (n=10) had used a filter last time they injected pharmaceutical opioids, with 29% reporting they did not inject their pain medication.

8 OTHER DRUGS

Summary

- Larger proportions of participants reported recent use of ecstasy and hallucinogens in the six months prior to interview compared to participant reports in 2008.
- There was a significant difference (increase) in proportion of sample reporting recent use of ecstasy in 2009 compared to 2008 reports.
- More participants reported recent use of illicit benzodiazepines in 2009 compared to 2008 reports.
- A larger proportion of participants reported recent use of cocaine compared to participant reports in 2008.

8.1 Ecstasy and hallucinogens

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 3.3.

Twenty-five percent of IDRS participants had used ecstasy (n=25) and seven percent (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 to 39) and two days (range 1 to 5) use of hallucinogens during that period. There was a significant difference in reported use of ecstasy in the six months prior to interview between participant reports in 2009 compared to participant reports of such use in 2008 (χ^2 (1, n=100) =3.93, $p<0.05$), with more participants reporting use of ecstasy in 2009 (n=25) compared to participant reports of such use in 2008 (n=13). More participants in 2009 (n=7) also reported recent use of hallucinogens when compared to 2008 (n=4). Both ecstasy and hallucinogens had mainly been used orally (ecstasy: 80%; hallucinogen: 100%), although 32% of participants also reported having used ecstasy by injecting during the six months prior to interview. In 2009, other parameters of use for these two drug classes were very similar to those reported in 2008.

Forensic KE reported seeing lots of pills, although they are seeing lots of 'bunk' pills containing pharmaceuticals (paracetamol, caffeine, ibuprofen, codeine, tramadol etc.), and seeing a variety of designs and colours in several different seizures and constituents. Other KE report a decrease in ecstasy use in the users they have contact with.

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 PDI). State and national reports are produced annually (e.g. White et al., 2008b and Black et al., 2008).

8.2 Illicit benzodiazepines

Twenty-seven participants reported use of illicit benzodiazepines a median of 10 days (range 1 to 180) in the six months prior to interview and, of those, one participant reported using benzodiazepines on a daily basis. All participants reported use by swallowing, and one also reported use by injecting for a median of 20 days in that time. In 2009, a larger proportion of participants (27%) reported recent use of illicit benzodiazepines compared to participant reports in 2008 (21%). One participant reported daily use of benzodiazepines in 2009.

Half of the users reported the main type of illicit benzodiazepine used in the six months prior to interview was diazepam (n=13).

One KE in 2009 mentioned benzodiazepines as the main drug used by the users who they had the most contact with in the six months prior to interview. The KE reported that users mainly inject and tend to use this substance to assist with sleep

8.3 Cocaine

Ten participants reported use of cocaine for a median of three days (range 1 to 24) in the six months prior to interview and, of those, none reported using cocaine on a daily basis. Fifty percent of these participants reported use by injecting, for a median of five days (range 1 to 24) in that time. In 2009 a larger proportion of participants reported recent use compared to participant reports in 2008 (from 4% to 10% respectively). In 2009 frequency of recent use was slightly higher; 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.

8.4 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 is 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, please see Dutch (2008) and Dyer, Martin, Mitchell, Sauven, & Gazzard (2004).

In 2009, participants were asked about their use of over the counter codeine (OTC). Forty-three percent of participants reported ever using OTC, with 30% reporting recent use for a median of 8 days (range 1 to 180 days), with one participant reporting daily use (see Table 3.2). All participants reported swallowing as the only route of administration of OTC. The majority reported using licit OTC as the form most used. Of those who reported recent use of OTC, forty-six percent reported use of Panadeine Forte®, followed by Panadeine® (23%) and Nurofen Plus® (23%), with one participant reporting use of Mersyndol® and another codeine-based product.

Participants gave various reasons for using OTC with some form of pain being the main reason for such use, including headache, back pain and teeth problems (see Table 8.1).

Table 8.1: Participants' reasons for use of OTC, 2009

Reasons given	2009 (n=30)
Headache	**43**
Other pain	**50**
To sleep	**3**
Relieve opioid withdrawal	**7**

Source: IDRS participant interviews

9 HEALTH-RELATED TRENDS ASSOCIATED WITH DRUG USE

9.1 Overdose and drug related fatalities

For the third year, the following section has been altered to improve ease of reading, with all health-related trends reported here rather than after each individual drug as in previous editions.

9.1.1 Heroin overdose

Of the 80 participants who reported having used heroin in their lifetime, 44 (55%) also reported lifetime experience of heroin overdose between one and 27 times (median=2). Eighty-six percent (n=38) had overdosed six times or less, and the majority had overdosed once (n=46%), twice (n=6, 14%), or three times (n=8, 18%). The number of overdoses experienced across lifetime was higher than reported in previous years, but with a slight decrease in the proportion of participants reporting having overdosed once, and an increase in the proportion of participants reporting having overdosed three times or more (see Table 9.1).

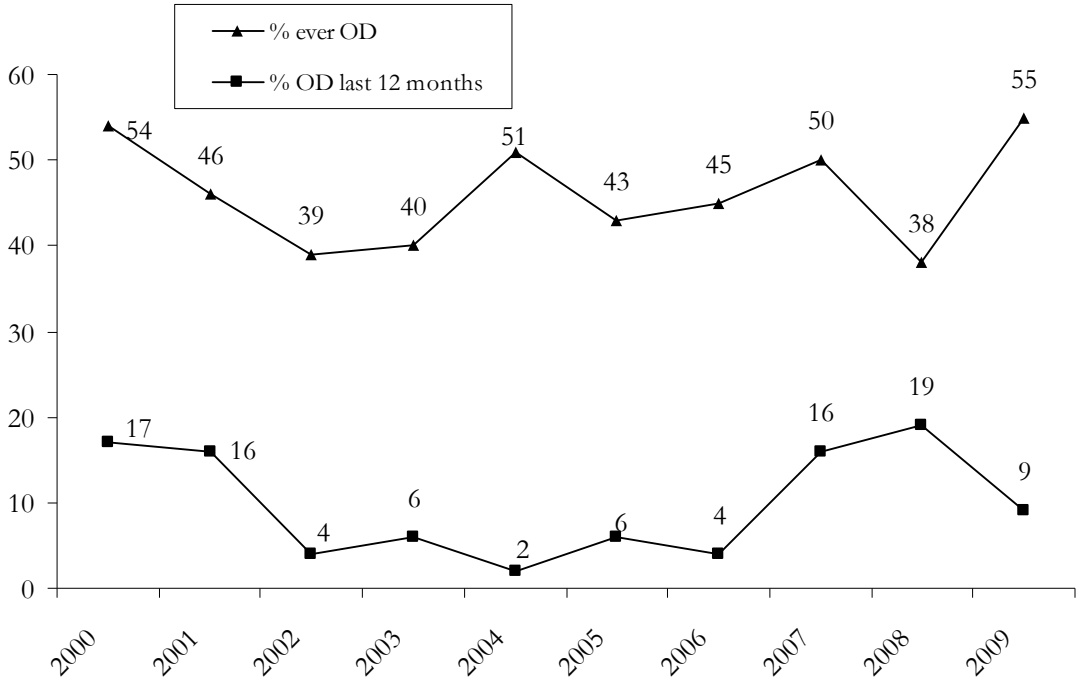
Table 9.1: Lifetime experience of heroin overdose reported by participants who had ever used heroin, 2002 – 2009

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)**
% Overdosed once	42	38	36	32	37	33	58	**46**
% Overdosed twice	21	14	21	22	19	16	15	**14**
% Overdosed 3 times or more	36	48	43	46	44	51	27	**40**

Source: IDRS participant interviews

The long-term trend in experience of overdose across lifetime (55%; n=44) and experience of overdose in the last twelve months (9%; n=4), among those who had ever used heroin, is depicted in Figure 9.1. As can be seen in the graph, the prevalence of recent heroin overdose had been increasing, returning to levels reported in 2000 and 2001, but was lower in 2009. 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 2009. In 2009, the median amount of time between interview and last overdose was 120 months (range 5 to 420 months, n=44); this length of time is longer than reported in 2008 (102 months, range 3 to 480, n=26).

Figure 9.1: Experience of heroin overdose ever and in the last 12 months, as a proportion of participants that had ever used heroin, 2000 – 2009



Source: IDRS participant interviews

In 2009, questions relating to the use of Narcan® again referred only to the 'last' time the participants overdosed. Twenty-three participants (52% of those who had ever experienced a heroin overdose) reported having been administered the opioid antagonist naloxone (Narcan®) for heroin.

The majority of KE commented that there had been an increase in heroin overdose over the past year. Three KE pointed to an increase in overdose relating to the use of heroin, with the increase in the purity of heroin given as a reason for increase.

9.1.2 Opioid overdose

At the time of printing, data regarding opioid overdose deaths up to 2008 were unavailable, so 2007 data are presented below. Readers should note: The Australian Bureau of Statistics (ABS) has changed the way they collate deaths data, making comparisons to earlier overdose bulletins published by the National Drug and Alcohol Research Centre (Degenhardt & Roxburgh, 2005 a & b) 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 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 2007 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 30 deaths due to accidental opioid overdose in 2007 (Roxburgh & Burns, 2010). Opioid overdose deaths in SA in 2007 accounted for 11% of the national total and indicate an increase since 2006 with 17 deaths (6.3% of total) recorded in 2006.

9.1.3 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. Thirteen participants reported that they had accidentally overdosed a median of once in their lifetime (range: 1 to 100 times). The majority who had accidentally overdosed did so once (54%), over a period of four years (range: <1 month to 20 years). Four participants had accidentally overdosed within 3-months of interview. Of those who reported accidentally overdosing in their lifetime, base methamphetamine (15%, n=2), alcohol (15%, n=2), and benzodiazepines (15%, n=2) were the most frequently mentioned drugs involved in accidental overdoses (45%, n=6).

9.1.4 Methamphetamine-related deaths

At the time of printing, data regarding methamphetamine-related deaths up to 2008 were unavailable; 2007 data are presented below. The following results relate to deaths where methamphetamine was determined to be either the underlying cause – 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 in 2007 was 49, with 20 deaths where methamphetamine was seen to be the underlying cause of death.

9.1.5 Cocaine-related deaths

At the time of printing, data regarding cocaine-related deaths up to 2008 were unavailable, 2007 data are presented below. The data below include deaths where cocaine was determined to be either the underlying cause – 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 eleven. Seven deaths were recorded as having cocaine as the underlying cause of death in 2007.

9.2 Drug treatment

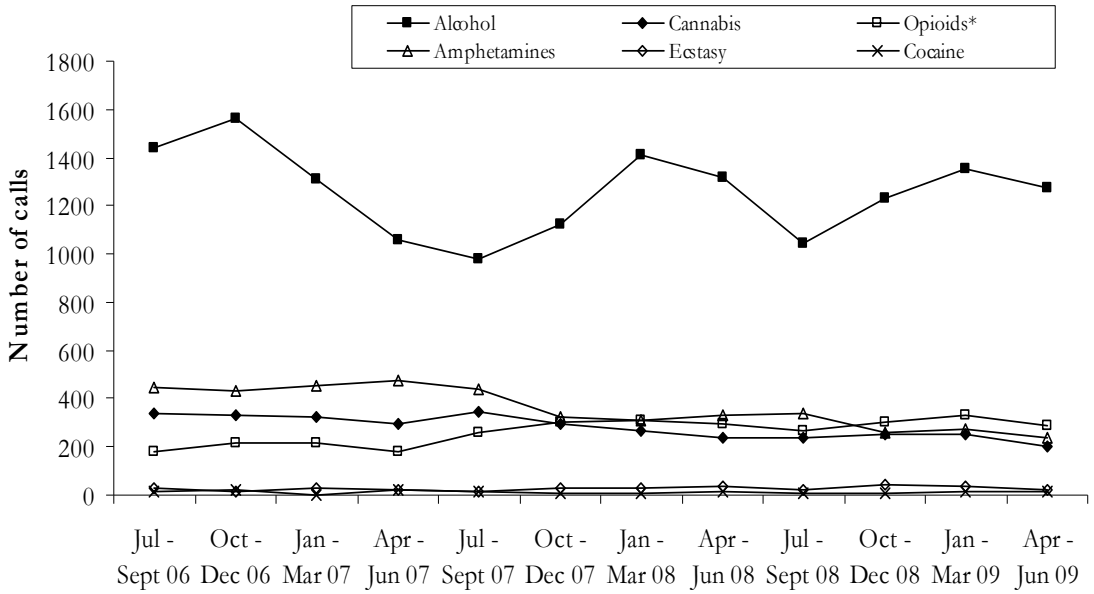
The following drug treatment data for SA comes from two sources: telephone calls to the SA Alcohol and Drug Information Service (ADIS), and Drug and Alcohol Services South Australia (DASSA). This and further 'Treatment Services – DASSA' sections below will present data in terms of clients (per drug type) 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.

9.2.1 Heroin and other opioids

Treatment Services – ADIS

Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding any opioid substances accounted for 8.9% of the total coded telephone contacts (drug-related) in the 2008/09 financial year (n=13,375), a similar proportion compared to previous years: 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 9.2 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 one percent of the total coded calls to SA ADIS across all years depicted.

Figure 9.2: Number of drug-related calls to ADIS per quarter, by selected drug type, Jul 2006 – June 2009



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 9.2. In 2008/09, the proportion of total clients nominating heroin as their primary drug of concern (7.79%) decreased (from 8.20% in 2007/08), with an increase in 2007/08 following a decreasing trend over the previous four years (from 18.5% in 2002/03) (see also Figure 9.3). In 2008/09, the proportion of total clients of DASSA nominating heroin as their primary drug of concern continued to be lower than that for cannabis (10.30%), or amphetamines (15.15%), and substantially less than that for alcohol (57.46%).

Table 9.2: Primary drug of concern nominated by clients of DASSA as a percentage of total number of clients*, 2001/02 – 2008/09

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

Source: Drug and Alcohol Services South Australia

* Total number of clients = total number of individuals who started one or more new episodes of treatment during the period

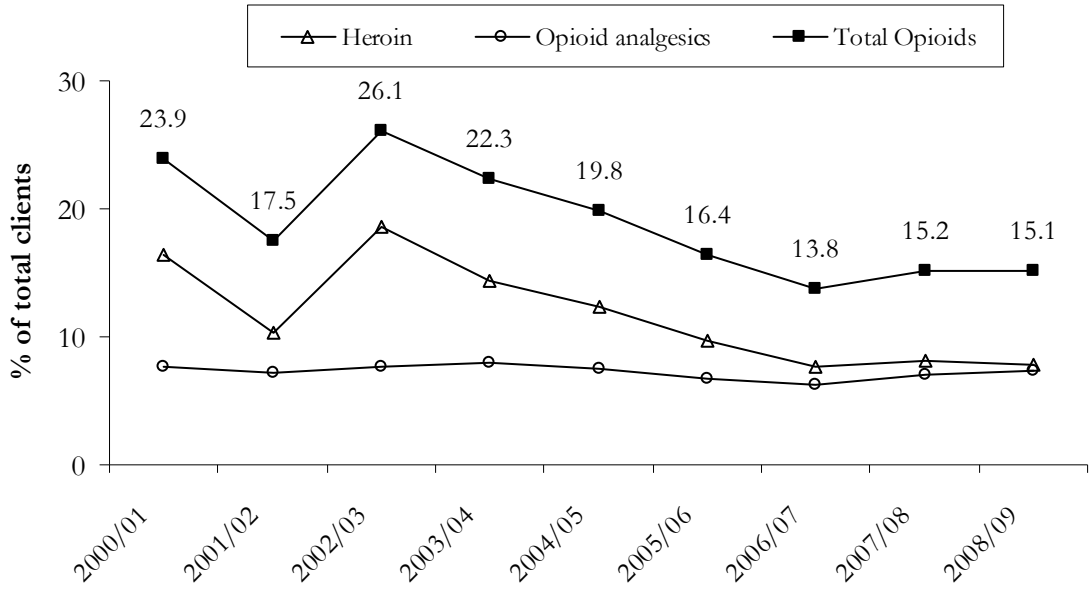
during this period a new data collection system (Client Management Engine – DASC Information System) was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS – AODTS)

Note: 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

As can be seen in Figure 9.3, the percentage of clients to DASSA nominating another opioid substance (opioid analgesics) as their primary drug of concern has remained stable over the years depicted, at between 7% and 8% of clients. In 2008/09, the proportion of clients nominating 'any' type of opioid substance (including heroin, but not buprenorphine) as their primary drug of concern was 15.1%, compared to the 'peak' of 26.1% in 2002/03, and has stabilised compared to 2007/08 (15.2%).

Long-term trend data indicates that, despite the stabilisation in the proportion of clients nominating heroin as their primary drug of concern, and in those who nominated 'any' type of opioid substance (including heroin, but not buprenorphine) as their primary drug of concern, this continues to decrease.

Figure 9.3: Percentage of total DASSA clients with opioid as the primary drug of concern, 2000/01 – 2008/09*



Source: Drug and Alcohol Services South Australia
***** During 2002/2003 a new data collection system was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS – AODTS)

Table 9.3 depicts the number of clients (individuals) to DASSA inpatient detoxification services over the last nine financial years. It can be seen that attendance at these services was by far most common for alcohol-related treatment, across all years, and this continues to increase. In 2008/09, after alcohol, the greatest number of clients attended inpatient detoxification services for treatment related to heroin/opioid analgesics, followed by cannabis, amphetamines and benzodiazepines.

Table 9.3: Number of clients* to DASSA inpatient detoxification treatment services, by primary drug of concern, 2000/01 – 2008/09

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

Source: Drug and Alcohol Services South Australia

***** Number of clients = number of individuals who started one or more new episodes of treatment during the period

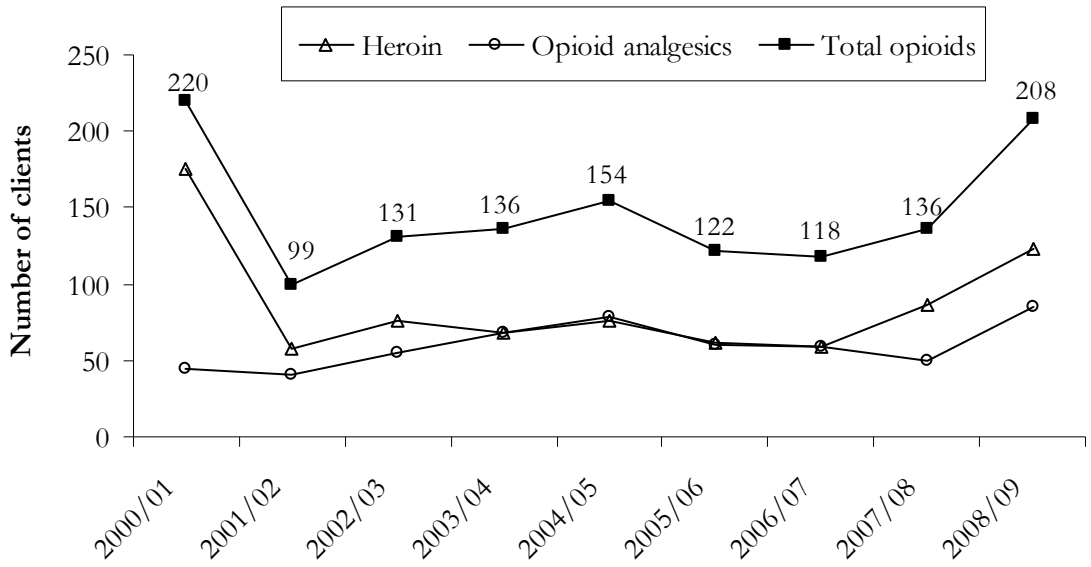
During this period a new data collection system (CME – DIS) was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS – AODTS).

****** 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

Figure 9.4 presents the number of clients to DASSA inpatient detoxification treatment services for heroin or opioid analgesics for the years 2000/01 to 2008/09. Despite an increase again 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 2008/09, there were a total of 123 clients to DASSA inpatient detoxification for heroin. The number of clients with other opioid analgesics as their primary drug increased in 2008/09 from 50 clients to 85 clients, and 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.

In the period 2008/09 the number of inpatient admissions for heroin exceeded that for amphetamines with more inpatient detox clients for heroin (123) compared to amphetamines (92) in that period. Moreover, when the data were analysed in terms of whether the primary drug of concern for inpatient detox clients in 2008/09 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 (208) was much higher than that for amphetamines (92). This sees a change from the 2007/08 period when the number of inpatient 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 9.4: Number of clients to DASSA inpatient detoxification treatment services per year, with heroin or other opioid as the primary drug of concern, 2000/01 – 2008/09*



Source: Drug and Alcohol Services South Australia
* During 2002/2003 a new data collection system (CME – DIS) was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS – AODTS)

9.2.2 Methamphetamine

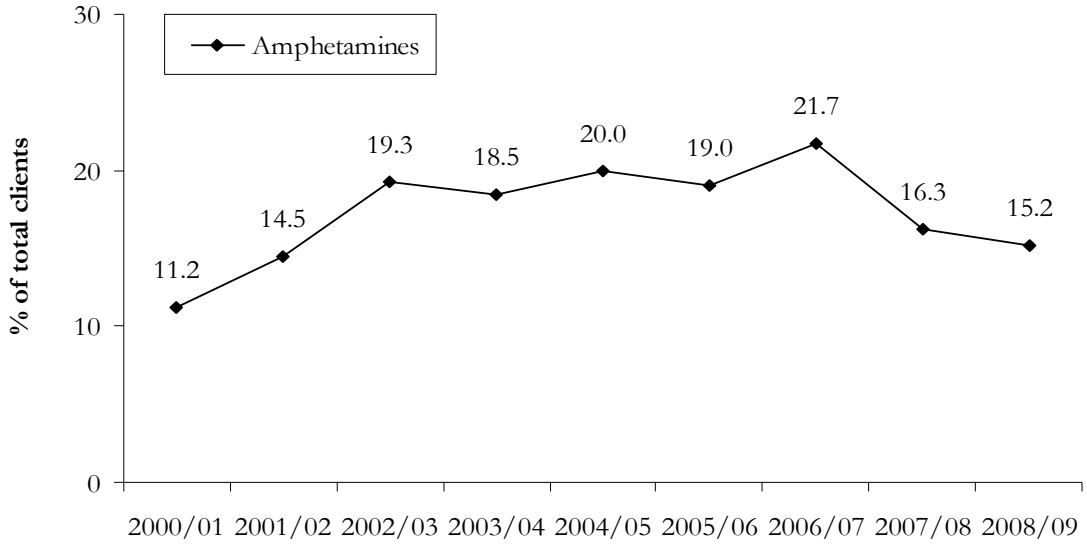
Treatment Services – ADIS

Telephone calls to ADIS regarding amphetamines accounted for 8.27% (n=1,107) of the 13,375 total coded telephone contacts (drug-related) in the 2008/09 financial year, lower than that for previous years: 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 9.2 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 9.2 and Figure 9.5), but decreased in 2008/09 to 15.15% (n=881 of 5,816 individuals) from 16.28% (n=983 of 6,037 individuals). This follows three consecutive years of increase in the proportion of clients nominating amphetamine as their primary drug of concern from 2000/01 to 2002/03. In 2008/09, amphetamines were the second most commonly nominated primary drug of concern by clients of DASSA after alcohol (57.46%), and dominated as the most common illicit drug of concern, well above heroin (7.79%).

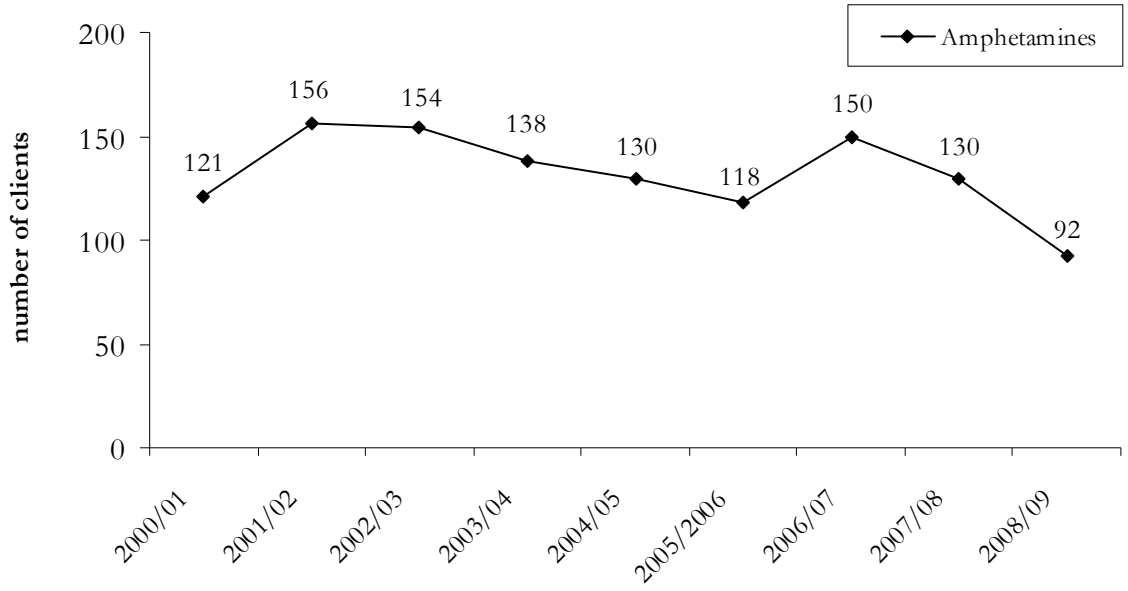
Figure 9.5: Percentage of total DASSA clients with amphetamines as the primary drug of concern, 2000/01 – 2008/09*



Source: Drug and Alcohol Services South Australia
***** During 2002/2003 a new data collection system was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS – AODTS)

Figure 9.6 presents the number of clients to DASSA inpatient detoxification treatment services for amphetamines for each year from 2000/2001 to 2008/09. Consistent with the decrease in the number of amphetamine-related clients to all DASSA services, the number of inpatient detox clients with amphetamines as the primary drug of concern decreased in 2008/09 (from 130 in 2007/08, to 92 in 2008/09.

Figure 9.6: Number of clients to DASSA inpatient detoxification treatment services, with amphetamines as the primary drug of concern, 2000/01 – 2008/09*



Source: Drug and Alcohol Services South Australia
* During 2002/03 a new data collection system was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS – AODTS)

9.2.3 Cocaine

Treatment Services – ADIS

Telephone calls to ADIS regarding cocaine accounted for only 0.28% (n=38) of the total coded telephone contacts (drug-related) in the 2008/09 financial year. Numbers of calls to SA ADIS concerning cocaine have been consistently low across the past few years, and remained stable in 2008/09; specifically, 0.24% (n=35) of coded drug-related calls 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) in 2003/04, 0.25% (n=35) in 2002/03, and 0.4% (n=50) in 2001/02. Figure 9.1 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 2008/09, 0.48% of clients to all DASSA treatment services (n=28 of 5,816 individuals) nominated cocaine as their primary drug of concern (see Table 9.3).

9.2.4 Cannabis

Treatment Services – ADIS

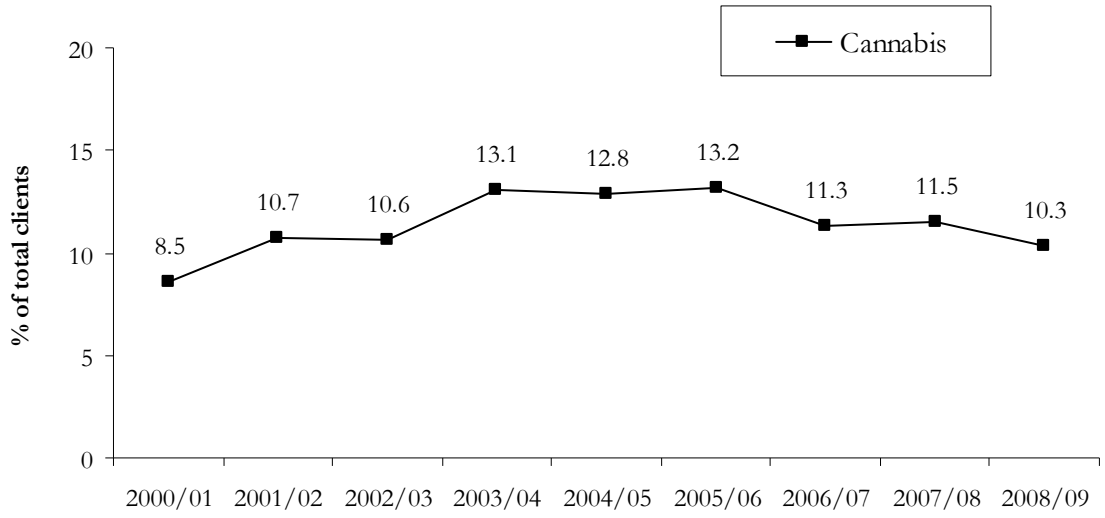
Telephone calls to ADIS regarding cannabis accounted for 7.03% (n=940) of the total coded telephone contacts (drug-related) in the 2008/09 financial year, and this is a decrease compared to previous years. Specifically, 7.03% (n=940) of the total coded telephone

contacts (drug-related) in the 2008/09 financial year were cannabis related, compared to 8.13% (n=1,145) in 2007/08, 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 (7.03% of total) was lower than for amphetamines (8.27% of total) and less than a quarter of the number of enquiries regarding alcohol (36.64% of total, or n=4,901 calls). Figure 9.1 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 2008/09 compared to the previous year (10.30% and 11.48%, respectively) (see Table 9.2 and Figure 9.7). However, the long-term trend shows a gradual increase since 2000/01, when 8.5% of all clients nominated cannabis as their primary drug of concern. In 2008/09, cannabis was the third most commonly nominated primary drug of concern (10.30% of all clients), behind alcohol (57.46%) and amphetamines (15.15%), but higher than for heroin (7.79%).

Figure 9.7: Percentage of total DASSA clients with cannabis as the primary drug of concern, 2000/01 – 2008/09*

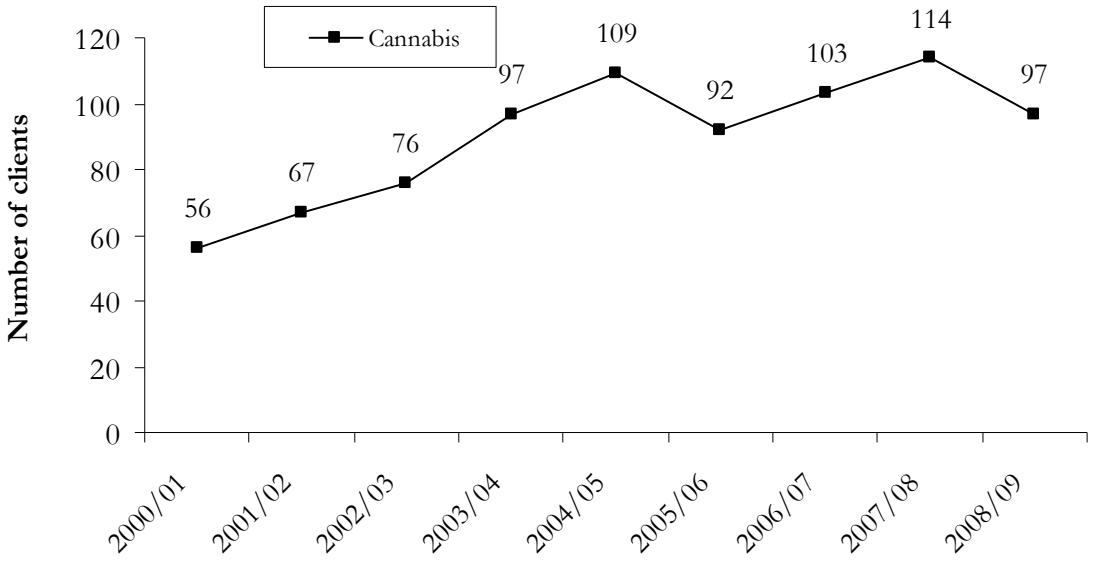


Source: Drug and Alcohol Services South Australia

***** During 2002/2003 a new data collection system was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS – AODTS)

Figure 9.8 presents the number of clients to DASSA inpatient detoxification treatment services for cannabis for each year from 2000/01 to 2008/09. In 2008/09, there was a decrease in the number of cannabis-related clients to all DASSA services, although despite this the numbers of inpatient detox clients with cannabis as the primary drug of concern has increased steadily over this time period, from 56 in 2000/01 to 97 in 2008/09. For the fifth year in a row, cannabis has been the third most common primary drug of concern for clients attending inpatient detox services of DASSA, after alcohol and heroin (see Table 9.3).

Figure 9.8: Number of admissions to DASSA inpatient detoxification treatment services, with cannabis as the primary drug of concern, 2000/01 – 2008/09*



Source: Drug and Alcohol Services South Australia
***** During 2002/2003 a new data collection system was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS – AODTS)

9.3 Hospital admissions

An analysis of data, provided by the Australian Institute of Health and Welfare from the National Hospital Morbidity Dataset, for the period 1997/98 to 2007/08 (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.

The substances most commonly involved in a primary diagnosis for South Australian drug-related hospital admissions were opioids (heroin, morphine, methadone etc), followed by amphetamines, cannabis and cocaine (see Figure 9.9). 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

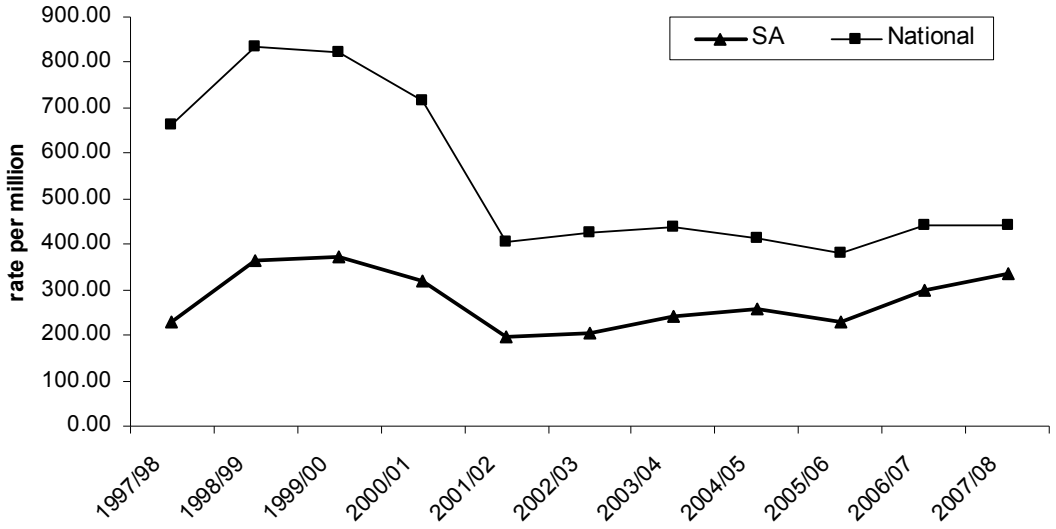
[1] The National Hospital Morbidity Dataset includes admissions data from public and private hospitals across metropolitan, regional and remote locations.
[2] ICD-9 coding for drug-related psychosis and withdrawal was non-specific for drug type, where ICD-10 coding is specific for drug type.

(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).

9.3.1 Opioid-related hospital admissions

Figure 9.9 (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 9.9: Rate of opioid-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1997/1998 – 2007/08

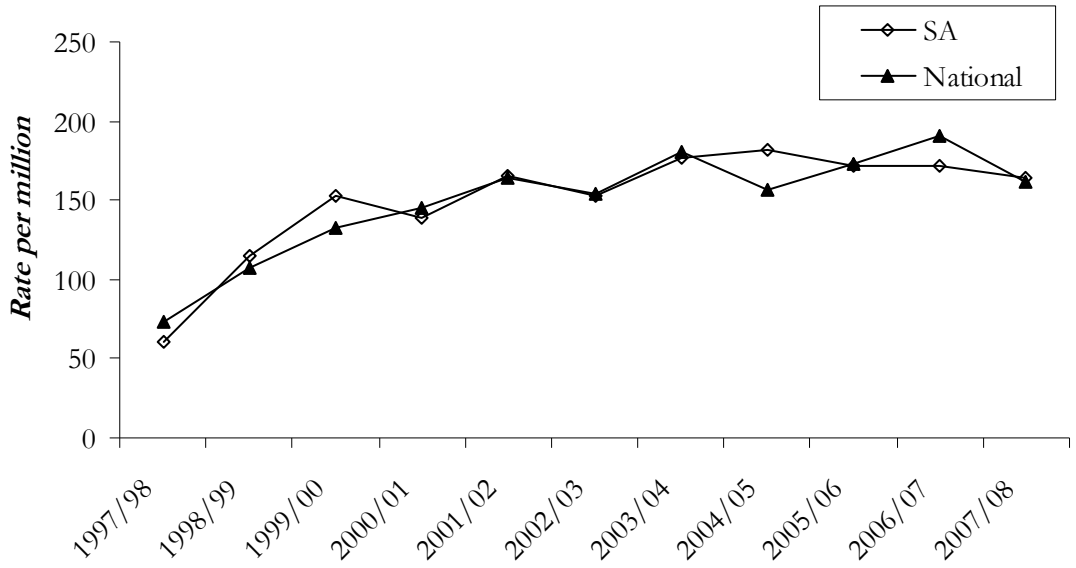


Source: Australian Institute of Health and Welfare
***** For persons aged between 15 and 54 years, excluding opioid withdrawal and psychosis admissions
Note: A 'primary diagnosis' was given when opioids were considered chiefly responsible for the patient's episode of care in hospital

9.3.2 Amphetamine-related hospital admissions

Figure 9.10 (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 9.10: Rate of amphetamine-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1997/98 – 2007/08

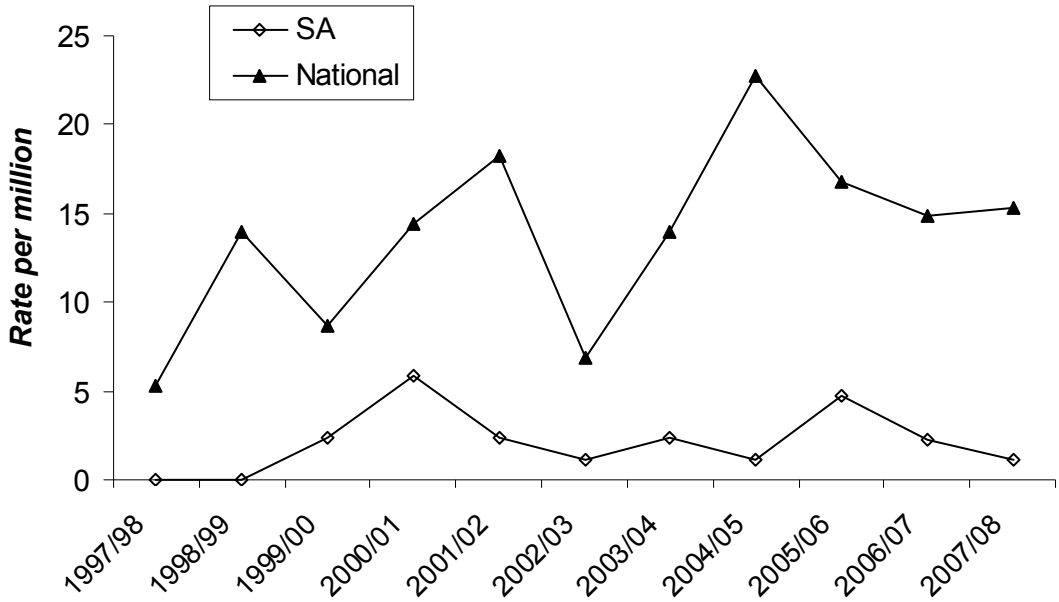


Source: Australian Institute of Health and Welfare
***** For persons aged between 15 and 54 years, excluding amphetamine withdrawal and psychosis admissions
Note: A 'primary diagnosis' was given when amphetamines were considered chiefly responsible for the patient's episode of care in hospital

9.3.3 Cocaine-related hospital admissions

Figure 9.11 (includes rates from 1997/98 onwards) shows that the rates of admissions to hospital in South Australia 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 was recorded over the time period depicted and in 2007/08 this rate per million was 1.14.

Figure 9.11: Rate of cocaine-related admissions* (primary diagnosis) to hospital in SA and nationally, per million people, 1997/98 – 2007/08

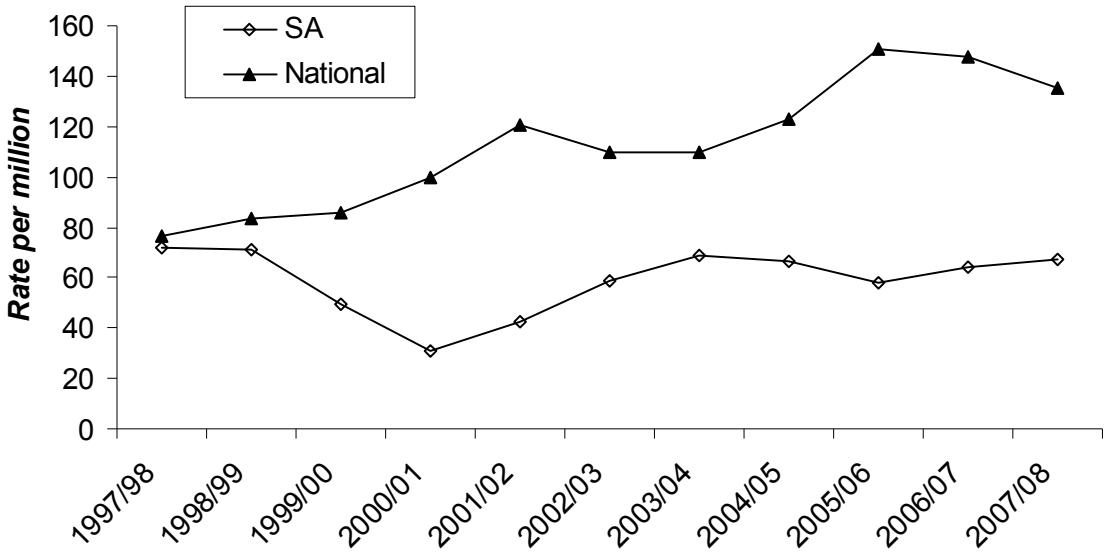


Source: Australian Institute of Health and Welfare
***** For persons aged between 15 and 54 years, excluding cocaine withdrawal and psychosis admissions
Note: A 'primary diagnosis' was given when cocaine was considered chiefly responsible for the patient's episode of care in hospital

9.3.4 Cannabis-related hospital admissions

Data in Figure 9.12 (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 sixty-seven 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 9.12: Rate of cannabis-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1997/98 – 2007/08



Source: Australian Institute of Health and Welfare
***** For persons aged between 15 and 54 years, excluding cannabis withdrawal and psychosis admissions
Note: A 'primary diagnosis' was given when cannabis was considered chiefly responsible for the patient's episode of care in hospital

9.4 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 9.4. 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.

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 9.4: Number of attendances* to the emergency department at the Royal Adelaide Hospital, 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: Royal Adelaide Hospital Emergency Department
***** 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

9.5 Mental and physical health problems and psychological distress

9.5.1 Self-reported mental health problems

In 2009, forty-one percent of participants reported experiencing a mental health problem (other than drug dependence) in the six months preceding interview (See Table 9.5). This is compared to 47% of participants reporting experiencing such problems in 2008. Consistent with previous years the proportion of IDRS participants who reported attending a professional (24%, or 59% of those experiencing a problem) was lower than the proportion reporting having experienced a problem (41%).

Table 9.5 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, although fewer participants reported accessing assistance for depression and anxiety in 2009 compared to 2008.

Table 9.5: Mental health problem reported by participants, 2008 & 2009

Mental health problem (%)	2008 (N=100)	**2009 (N=100)**
Depression	40	**28**
Mania	1	**0**
Manic depression	4	**1**
Anxiety	20	**15**
Phobias	3	**1**
Panic	4	**4**
Paranoia	5	**5**
Drug-induced psychosis	1	**2**
Schizophrenia	4	**3**
Other	7	**6**

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

9.5.2 Psychological distress

In 2009, the Kessler Psychological Distress Scale (K10) (Kessler & Mroczek, 1994) was incorporated into the IDRS participant survey for the second time, and used to give a measure of levels of psychological distress among the participants.

The Kessler Psychological Distress Scale 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 4-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 2004/05 National Health Survey (Australian Bureau of Statistics, 2006) provides the most recent Australian population norms available for the K10, and used four categories to describe degree of distress: scores from 10 to 15 were considered to be 'low', 16 to 21 as 'moderate', 22 to 29 as 'high' and 30 to 50 as 'very high'.

Thirty-two (32%) participants had scores between 10 and 15 on the K10 (low risk), 28 (28%) scored between 16 and 21 (moderate distress), 22 (22%) participants scored from 22 to 29 (high distress), and 18 (18%) scored from 30 to 50 or very high distress. The median total score for the sample was 18 (range 10 to 43) indicating that around two-thirds of the sample was at moderate or high/very high risk of psychological distress as measured by the K10.

The majority of KE (n=19) who commented confirmed participant reports that the most common problems seen by users generally were depression, anxiety, and bipolar disorder. Several KE (n=8) also reported that schizophrenia and psychosis were 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, and a whole range of other related problems (e.g. history of abuse, social isolation, unemployment, housing problems, child custody issues). Clients of these services, and therefore those with whom health KE have most contact with, will generally represent the extreme end of the user spectrum and may not be representative of the wider injecting drug user 'community'.

Depression and/or anxiety remained the most common mental health problems for heroin and other opiate users. With regard to mental health problems associated primarily with methamphetamine or polydrug users, KE reported that the most common mental health problems ranged from agitation, aggression (to friends and family members), anxiety and heightened paranoia to methamphetamine-induced psychosis, with a few KE commenting that methamphetamine-induced psychosis appears to have continued to increase in the last twelve months. Moreover, KE observed that methamphetamine users were more likely to be aggressive and that this too had increased in the previous 12-months. These problems continued to be an issue for service providers and staff of treatment agencies.

9.6 Personal Wellbeing Index (PWI)

In 2009, the Personal Wellbeing Index (PWI) was incorporated into the IDRS survey. Questions asked how satisfied participants were with various aspects of their life. 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 were asked to respond on a scale of 0-10 where 0 was 'very unsatisfied' and 10 was 'very satisfied'.

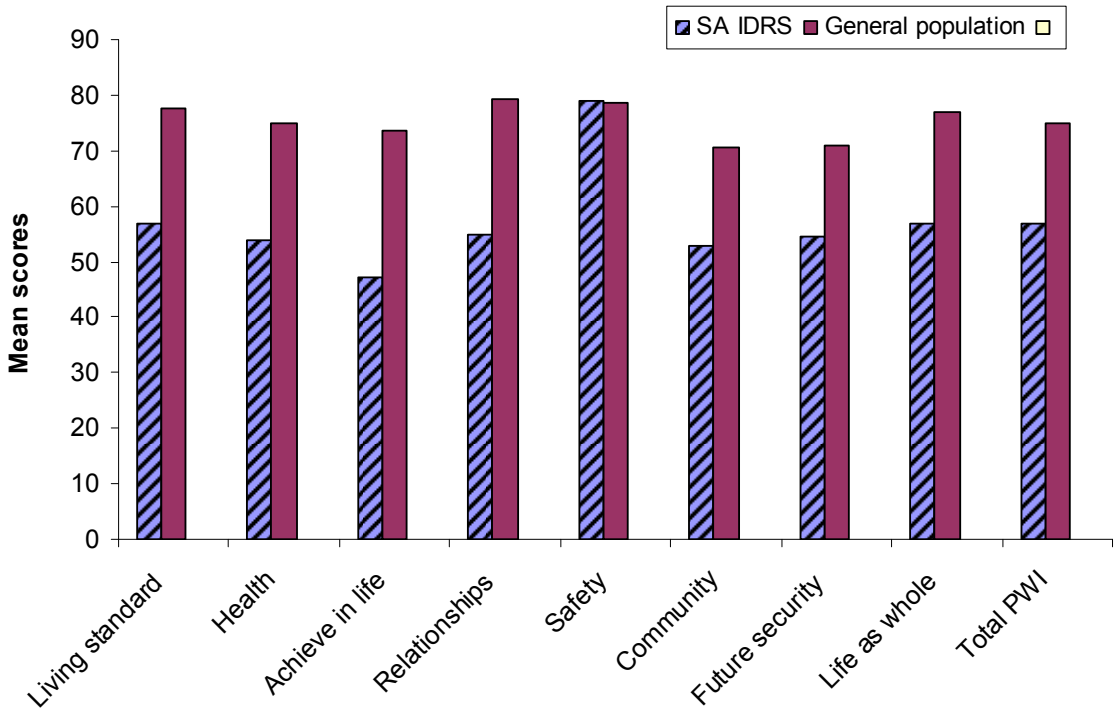
Table 9.6: Mean IDRS participant and Australian general population scores, with normative range scores for comparison on the PWI 2009

Mean scores	IDRS (n=86)	Population Norms
Standard of living	56.9	77.51
Health	54.0	74.89
Achievements in life	47.1	73.65
Personal Relationships	54.8	79.35
Safety	79.0	78.57
Part of community	53.0	70.64
Future security	54.4	70.79
Life as a whole	56.05	75.08
Total PWI score	57.0	77.51

Source: IDRS participant interviews, Cummins et al., 2009 (in press)

Table 9.6 (and Figure 9.13) shows the mean participant scores compared to the Australian general population. Participants scored lower than the general population on each factor of personal wellbeing, with the exception of personal safety. Moreover, for aspects of life, participants were below the normal range for each factor. These findings indicate that participants are less than satisfied with all aspects of their life with the exception of their personal safety. Personal wellbeing will be continued to be monitored in future IDRS surveys.

Figure 9.13: Mean SA IDRS participant and Australian general population scores on the Personal Wellbeing Index



Source: IDRS participant interviews, Cummins et al., 2007[1]

9.7 Dental Health

In 2009, among the participants who reported visiting a dentist in the last 12 months, a third (35%) reported visiting for an extraction, one-quarter (27%) for a filling and 17% for a check-up (Table 9.7). The median number of visits in the last year was one (range zero to 12 visits). Over half reported paying for the last visit (51%).

The median number of teeth lost was three ranging from zero to 28 (all teeth excluding wisdom teeth). Around half (49%) reported not visiting a dentist when required in the last year.

[1] Thanks to Robert Cummins for his personal communication regarding the PWI.

Table 9.7: Self-reported dental health issues in preceding 12 months, 2009

Characteristics	IDRS (N=100)
Reason for last dentist visit (%)	
Check up	17
Relief of pain	9
Fillings	27
Extraction	35
Other procedure	13
Paid for last visit (%)	51
Median # of teeth lost (range)	3 (0-28)
Did not attend a dentist when required in last 12 months (%)	49
Median # visits to dentist – last 12 months (range)	1 (0-12)

Source: IDRS participant interviews

9.8 Chronic Physical Health

In 2009, participants were asked whether they had ever been diagnosed with a range of physical conditions, how old they were when diagnosed and if they had received treatment in the previous 12 months. Table 9.8 displays the age of first diagnosis among those who had ever been diagnosed with the condition and commented on that condition. As well as the proportions who had recently received treatment for these chronic conditions.

Among the participants, around one in five reported a lifetime diagnosis (by a doctor) for asthma, followed by any heart/circulatory condition and gout/rheumatism or arthritis. Of those who commented (n=74), nearly half (43%) reported back/neck pain or problems, 42% reported liver disease (including Hepatitis), 30% vision problems, and 22% reported having migraines. As is obvious in Table 9.8 many participants are receiving ongoing medical treatment for current conditions.

Table 9.8: Lifetime diagnosed physical health conditions, age first diagnosed, treatment received in last 12 months, 2009

Condition	Lifetime diagnosis (%) (N=100)	Median age first diagnosed* (range)	Received tx last 12 months* (%)
Diagnosed conditions (%)			
Asthma	17	17 (1-39)	65
Any (other) heart or circulatory condition	9	32 (1-49)	22
Gout, rheumatism or arthritis	9	43 (10-55)	78
Cancer	4	24 (18-54)	25
Stroke (effects of a stroke)	2	23 (7-38)	0
Diabetes or high blood sugar levels	3	42 (15-46)	100
Other diagnosed conditions among those who commented (%)	n=74		
Back/neck pain or problems	43	30 (1-58)	47
Liver disease	42	30 (17-50)	13
Migraines	22	17 (9-38)	56
Vision problems	30	33 (3-46)	50
Skin problems	22	25 (2-58)	69
Joint/muscular skeletal	20	27 (7-58)	67
Bronchitis	12	14 (3-47)	44
Hay fever	15	10 (1-38)	46
Hearing problems	8	47 (5-50)	17
High blood pressure	8	27 (19-46)	50
Sinus/sinus allergy	10	11 (6-35)	43

Source: IDRS participant interviews

* of those who had ever been diagnosed and commented

10 RISK BEHAVIOURS

10.1 Injecting risk behaviour

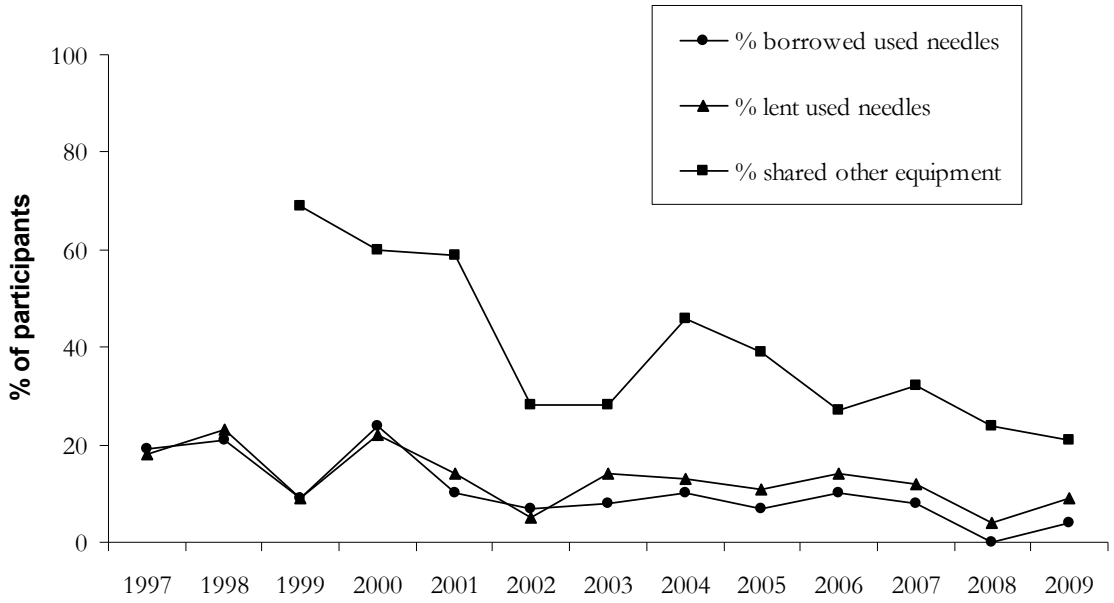
10.1.1 Sharing of injecting equipment

Four participants reported using a needle after someone else, with nine 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 0% in 2008 to 4%) and using a needle before someone else in 2009 (from 4% in 2008 to 9%). The IDRS usually identifies a small but persistent proportion of participants who are at high risk of blood-borne viral infections (BBVI) and re-infection through needle sharing. A higher proportion of sharing was reported by participants in the 2009 South Australian NSP survey, with 21% of NSP participants (N=196) reporting having re-used another's needle and syringe in the last month (National Centre in HIV Epidemiology and Clinical Research, 2009).

Of those who had used a needle 'after' someone else, one had done so once in the past month, two had done so twice, and one had done so over three times in the month prior to interview. Almost half (48%) of the participants reported reusing their own needles and of those 50% had reused their own needle three or more times.

A similar proportion of participants reported sharing injecting equipment other than needles in 2009 when compared to the rate seen in previous years (see Figure 10.1). Specifically, 21% of participants reported that they had shared one or more pieces of injecting equipment, other than needles, in the past six months, compared to 24% in 2008, 32% in 2007, 27% in 2006, 39% in 2005 and 46% in 2004. A larger proportion of NSP participants (37% of 196 participants) reported sharing injecting equipment in the month prior to interview when compared to IDRS participant reports (21% of 100) – specifically, larger proportions reported sharing water (23%), filters (10%) and tourniquets (11%) compared to IDRS participant reports.

Figure 10.1: Sharing of needles and injecting equipment by participants in the month preceding interview, 1997 – 2009



Source: IDRS participant interviews

As listed in Table 10.1, fewer participants reported sharing filters, tourniquets and water from 2008 to 2009. The reported sharing of spoons/mixing containers remained stable, whereas sharing of filters (from 15% in 2008 to 6%), tourniquets (from 11% in 2008 to 5%) and water (from 14% in 2008 to 9%) decreased in 2009.

Table 10.1: Sharing of injecting equipment (other than needles) among participants in the month preceding interview, 2008 & 2009

Injecting equipment	2008 (N=100) %	2009 (N=100) %
Spoons/mixing container	18	17
Filters	15	6
Tourniquet	11	5
Water	14	9

Source: IDRS participant interviews

There were again mixed reports from KE in 2009 regarding the awareness and injecting risk behaviour of drug users who inject, primarily relating to heroin or methamphetamine users. Most KE report (n=8) that users are re-using their own needles and this is possibly increasing, especially in young users who do not always get needles, or whose friends purchase in bulk to encourage safer use of needles. Moreover, KE report that when returning needles they often do so in bulk amounts indicating they are amassing large

amounts of used needles. KE also report seeing re-use by sporadic users and re-use of needles by younger people using steroids with little education in the use of needles.

10.1.2 Location of injecting

In 2009, the majority of participants reported the 'last' location when injecting drugs in the month prior to interview was a private home (85%), with small proportions reporting use in public locations (see Table 10.2). The 'last' location of injecting was unchanged compared to 2008.

Table 10.2: Usual location when 'last' injected in the month preceding interview, 2008 & 2009

Location when injecting	2008 (N=100) %	**2009 (N=100) %**
Private home	82	**85**
Street/car park/beach	1	**0**
Car	10	**11**
Public toilet	4	**2**
Other	3	**2**

Source: IDRS participant interviews

10.1.3 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 10.3). In 2009, sixty-eight percent 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 (54%), followed by prominent scarring or bruising around the injection site (46%). Experience of other injecting-related health problems remained relatively stable across this time period. Of those reporting experiencing such problems, over half (60%) had experienced more than one problem related to their injecting in that period. Overall, the total proportion of injecting-related problems participants had experienced in 2009 was relatively stable in comparison with 2008 (from 71% in 2008 to 68%).

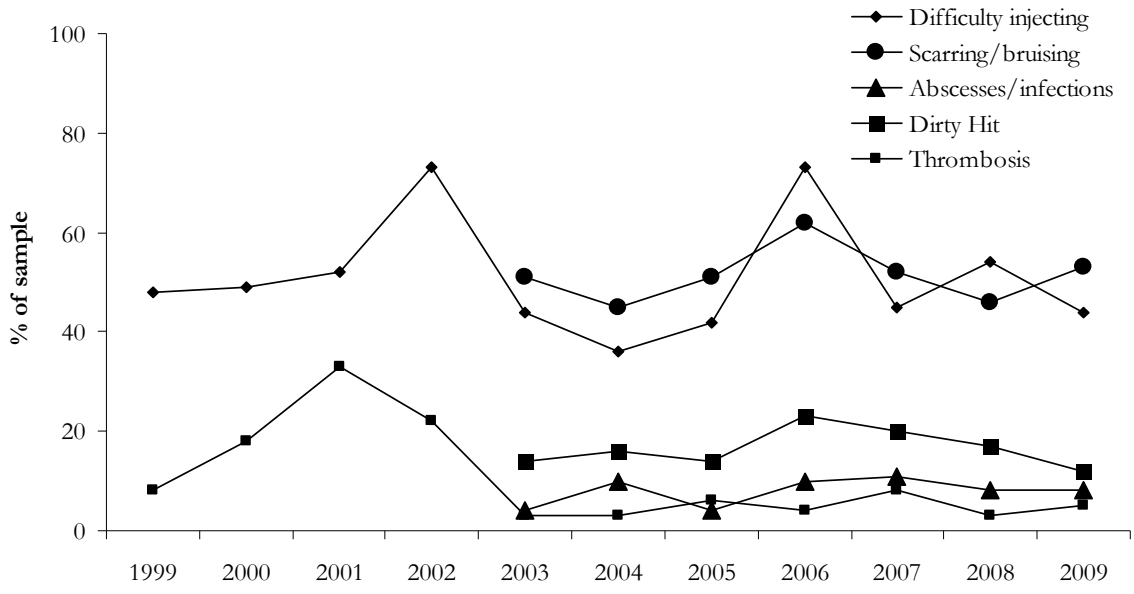
Table 10.3: Injecting-related health problems experienced in the month preceding interview, 2008 & 2009

Reported injection-related health problems	2008 (N=100) %	**2009 (N=100)** %
Overdose	0	**3**
Dirty hit	17	**12**
Abscesses/infections	8	**8**
Prominent scarring/bruising	46	**53**
Difficulty injecting	54	**44**
Thrombosis	3	**5**
Total problems (%)	71	**68**

Source: IDRS participant interviews

Figure 10.2 depicts the long-term trends for experience of injection-related problems since 1999. Experience of thrombosis remained stable and still remains relatively low compared to the level of incidence reported in earlier years (1998 to 2002). Reports of experience of difficulty injecting and prominent scarring and bruising resulting from injection practices have consistently remained high with 2009 reports similar to previous years.

Figure 10.2: Experience of injection-related problems by participants in the month preceding interview, 1999 – 2009



Source: IDRS participant interviews

Again in 2009, several KE commented on injecting-related health problems, primarily in reference to vein care and related problems such as infections and abscesses. 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 as injectable, particularly morphine, methadone or buprenorphine. Problems reported as associated with methamphetamine injecting included injecting in risky places, as well as infections arising from unhygienic practices (such as re-using 'sterile' water) and reusing their own needles. The point was again made by several KE that re-using, and sometimes sharing, of equipment meant for single use (e.g. filters, water, winged-infusions etc.) was a primary factor in injecting-related problems, especially over winter when less PWID are frequenting a clean needle program and in prison where inmates have no access to clean needles and equipment.

10.2 Aggression

In 2009 the IDRS included a new module investigating the presence of trait aggression among the participants. This was in response to the increased government and media attention surrounding antisocial behaviour and drug use. There are multiple other factors which may contribute toward an increased involvement in aggressive situations by injecting drug users. These include currently experiencing symptoms of depression and/or anxiety, being male, the use of other illicit substances such as stimulants, the high prevalence of cannabis use and the involvement in obtaining/using drugs and associated social contexts (Murray et al., 2008).

Thus, the 2009 IDRS included the Buss-Perry Aggression Questionnaire (Short Form) (BPAQ-SF). This self-report measure addresses three major components of aggression: the motor components (physical and verbal aggression), the emotional component (anger) and the cognitive component (hostility). This questionnaire provides a valid and reliable measure of 'dispositional aggression' which correlates well with the original 29-item Buss-Perry Aggression Questionnaire (Bryant & Smith, 2001).

The following results are based on participants choosing the alternative of '4, 5 or 6' (very characteristic of me) for all three questions in each component and therefore indicating that the particular component is descriptive of their behaviour. Half of the participants (50%) rated the cognitive component of 'hostility' as characteristic descriptor of their behaviour, followed by the motor components of physical (42%) and verbal aggression (41%), with 38% rating the emotional component of 'anger' as descriptive of their behaviour.

Twenty-eight percent of participants (n=27) indicated that their answer would be different if they were under the influence of a drug. Almost half (48%, n=13) indicated that the use of some form of methamphetamine would make a difference to their answer, with the majority (69%, n=9) indicating their level of aggression would be higher. A third of the participants (n=9) indicated that the use of heroin would make a difference to their answer, with all indicating their level of aggression would be lower.

Of the twenty-one KE who commented on methamphetamine as a problematic drug, 61% (n=13) mentioned the relationship between the use of methamphetamine and an increase in aggression and violence. Moreover, KE noted methamphetamine users in general are more violent than other users they have contact with, and that many need anger management counselling to control this behaviour. A few KE mentioned the level of violence concerned them when dealing with methamphetamine users. Again this behaviour is often noticed when methamphetamine is combined with alcohol use. Law enforcement KE noted an increase in assault linked to methamphetamine use, and DJs noted an increase in aggressive behaviours in public venues related to the combination of methamphetamine and alcohol.

10.3 Gambling practices

In 2009, for the second year, participants were asked about their gambling practices in the month prior to interview. To further investigate this topic, in 2009, those participants who had gambled four or more times in the month prior to interview were administered the Problem Gambling Severity Index (PGSI) to evaluate the proportion of participants gambling at problematic levels. Participants were also asked if they had been under the influence of alcohol the 'last' time they gambled, whether they continued to consume alcohol, and whether they had gambled under the influence of illicit drugs the 'last' time and the drugs involved.

Forty-one percent of the participants (n=41) reported gambling a median of three times (range 1 to 20 times) in the month prior to interview, with the majority reporting 'usually' using poker/gaming machines to gamble (81%, n=33). Fewer participants reported gambling on keno/lotteries (15%, n=6), horse/dog racing (7%, n=3), or gambling at the casino (7%, n=3). The majority of participants reported that the number of days they reported gambling in the month prior to interview was the number of days they 'usually' gambled in a month (68%, n=28), whereas 22% (n=9) reported the number of days reported were less than usual, with 10% (n=4) reporting that this was more than usual.

The form of gambling participants engaged in 'last' time participants gambled follows a similar pattern, with the majority reporting 'last' gambling on poker/gaming machines (73%, n=30), followed by keno/lotteries (15%, n=6), horse/dog racing (7%, n=3) and at the casino (5%, n=2). Ten percent of participants (n=4) reported gambling under the influence of alcohol the 'last' time they gambled, with the majority of those (75%, n=3) reporting that they continued to consume alcohol while gambling. Seventy-six percent of participants reported gambling under the influence of illicit drugs the 'last' time they gambled (n=31), with most reporting use of some form of methamphetamine (72%, n=22), some form of opioid including heroin (32%, n=10), or cannabis (19%, n=6). The median amount spent by participants the 'last' time they gambled was $26 (range $1 to $5,000).

Thirty-seven percent (n=15) of those who had gambled in the month prior to interview completed the PGSI, with 13% (n=2) assessed as engaging in recreational gambling only, 7% (n=1) assessed as gambling at a level of low risk, 53% (n=8) assessed as gambling at moderate levels of risk, and 27% assessed as gambling at problematic levels of risk.

In 2009, KE were asked to comment on the gambling practices of those users they had contact with in the 12-months prior to interview, with 47% (n=14 of 30) able to comment on such practices. Five KE linked the use of methamphetamine and gambling, suggesting this was part of the 'pub' culture and not unusual. Law enforcement KE (n=2) suggested gambling was sometimes used to 'launder' money and often involved dealers. Health KE suggested that those they have contact with, especially older women, acknowledge gambling but did not see that this was a problem, despite in some cases being addicted to gambling.

11.0 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH DRUG USE

11.1 Reports of criminal activity among participants

In 2009, a similar proportion of the participants reported involvement in any type of crime during the last month (28% compared to 26% in 2008); although the proportion who reported having been arrested in the twelve months prior to interview was lower (20% from 37% in 2008) (see Table 11.1). The most commonly reported types of crime were the same as for 2008, with participants primarily reporting involvement in drug dealing (20%), followed by property crime (10%) and, to a lesser extent, fraud (1%) and violent crime (1%). The median number of times those who had engaged in some crime in the month prior to interview was twice (range: 2 to 5 times).

Table 11.1: Criminal activity as reported by participants, 2008 & 2009

Criminal behaviour (%)	2008 (N=100)	**2009 (N=100)**
Criminal activity in last month		
Property crime	10	**10**
Drug dealing	15	**20**
Fraud	3	**1**
Violent crime	4	**1**
Any crime	*26*	***28***
Arrested in last 12 months	37	**20**
Ever in prison	52	**40***

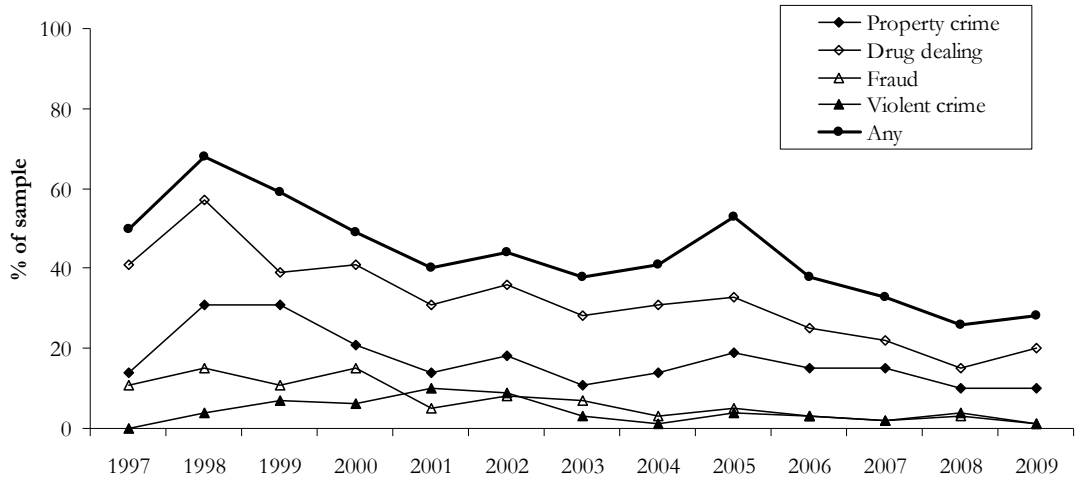
Source: IDRS participant interviews
* data missing for one participant

Fewer participants in 2009 (40%) reported having ever been in prison compared to 2008 participant reports (52%). Participants in 2009 were asked if they had injected drugs while in prison, with only 12 participants commenting and half of them reporting injecting during their incarceration. Of those participants who reported injecting in prison, two reported doing so on a daily basis. The median length of time participants were incarcerated was 8.5 months (range 1 to 78 months).

Of the 20 participants who had been arrested in the preceding twelve months, the most common reasons for arrest were a property crime (18%, n=5) and a driving offence (11%, n=3). There were also one arrest each for use or possession of a prohibited substance, and a violent offence. No participants reported being arrested for a drug driving offence.

Figure 11.1 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 ten years of reporting.

Figure 11.1: Self-reported involvement in crime, by offence type, in the month prior to interview, 1997 – 2009



Source: IDRS participant interviews

11.1.1 Heroin

Eighteen percent of those participants who reported recent use of heroin (n=72) reported being arrested in the 12-months prior to interview. Fifteen percent of those recently using heroin reported engaging in dealing for cash profit, followed by property offence (13%), and a violent crime (1%) in the month prior to interview.

11.1.2 Methamphetamine

Twenty-six percent of those participants (n=61) who reported recent use of methamphetamine also reported being arrested in the 12-months prior to interview. Twenty-seven percent of those recently using heroin reported engaging in dealing for cash profit, followed by property offence (7%), and fraud (2%) in the month prior to interview. Nine KE commented on the criminal activity associated with the PWID they had contact with in 2009. Law enforcement KE suggested more females and those who would be described as 'users' were getting into dealing and therefore there appears to be an increase in 'smaller' methamphetamine cooks – users get enough for themselves and enough to recoup their costs. Law enforcement KE also suggested there had been an increase in the amount of

pseudoephedrine importation because of the restrictions on pseudoephedrine in medications, resulting in cooks trying different adulterants in the production method.

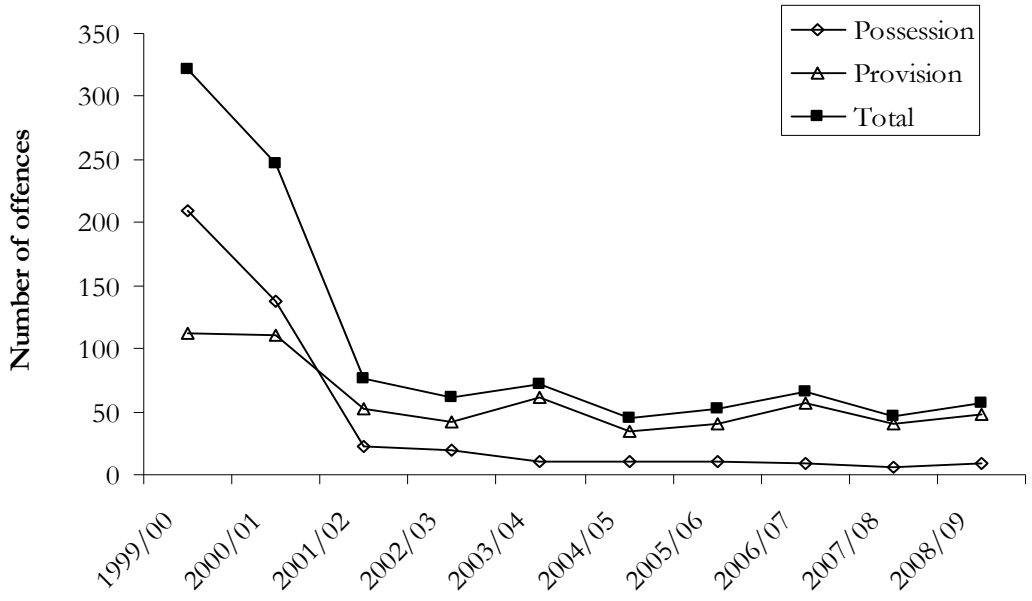
11.2 Arrests

11.2.1 Heroin

The total number of illicit drug-related possession and provision offences for 2008/09 was 2,830, which is an increase since 2007/08 (total 2,493) (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). In 2008/09, the increase in total numbers was due to an increase in the 'sell/trade' category, specifically, the number of sell/trade offences for amphetamines increased from 381 reported offences in 2007/08 to 591 offences in 2008/09. 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 2008/09 (as reported by SAPOL), is presented in Figure 11.2. As can be seen, there was a slight increase in the number of provision offences (from 41 to 48 offences) for heroin from 2007/08 to 2008/09, while possession/use offence numbers remained relatively similar (at 9 from 6). With regard to the trend over a longer period, however, total heroin-related possession and provision offences have decreased across the years from 1999/00 to 2008/09. Heroin possession and provision offences made up 2% of the total number of illicit drug possession and provision offences in 2008/09, which indicates an increase compared to 2007/08 at 1.85%.

Figure 11.2: Number of heroin-related offences reported by SAPOL in South Australia, 1999/00 – 2008/09

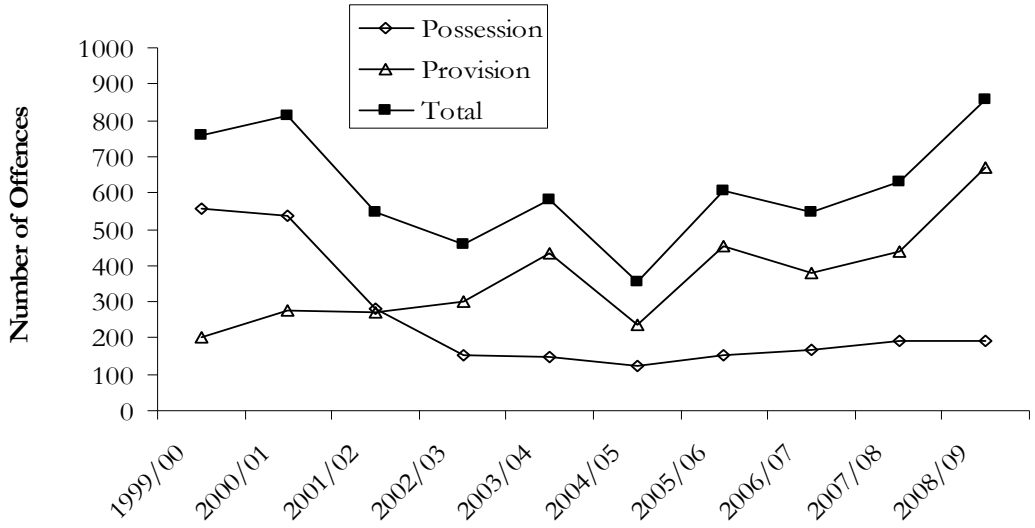


Source: South Australian Police Annual Reports (SAPOL 2000 - 2010)

11.2.2 Methamphetamine

Figure 11.3 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 1999/00 to 2008/09 (SAPOL Annual Reports 2000-2010). As can be seen, in 2008/09 the number of amphetamine possession offences recorded (190 offences) remained stable compared to 2007/08 (191 offences); however, there was an increase in provision offences for amphetamines (from 440 in 2007/08 to 680 offences in 2008/09). Amphetamine possession and provision offences made up 30% of the total number of illicit drug possession and provision offences in 2008/09, compared to 25.31% in 2007/08, 22.85% in 2006/07, 23% in 2005/06 and 15.3% in 2004/05.

Figure 11.3: Number of amphetamine-related offences reported by SAPOL in South Australia, 1999/01 – 2008/09

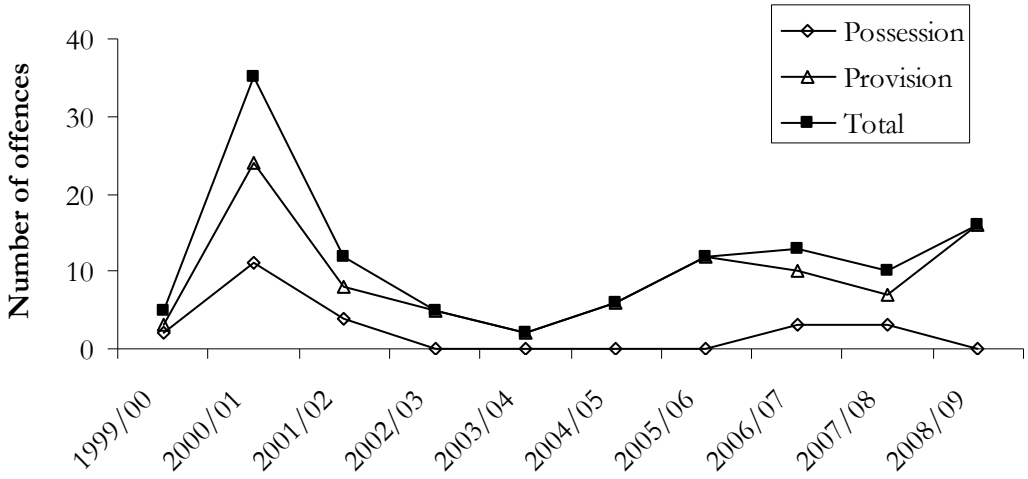


Source: South Australian Police Annual Reports (2000 – 2010)
Note: SAPOL Annual Reports only refer to amphetamines and do not distinguish between amphetamine and methamphetamine.

11.2.3 Cocaine

Figure 11.4 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 1999/00 to 2008/09 (SAPOL Annual Reports, 2000-2010). As can be seen, the number of cocaine possession offences decreased with no offences recorded while the number of provision offences increased slightly but remained low in 2008/09, with 16 such offences compared to 7 in 2007/08). Cocaine possession and provision offences continued to make up less than 0.6% of the total number of illicit drug possession and provision offences in 2008/09, as they have in all years depicted, despite a 'spike' in 2000/01 (when cocaine-related offences contributed 0.9% of the total illicit drug-related offences for that year).

Figure 11.4: Number of cocaine-related offences reported by SAPOL in South Australia, 1999/01 – 2008/09

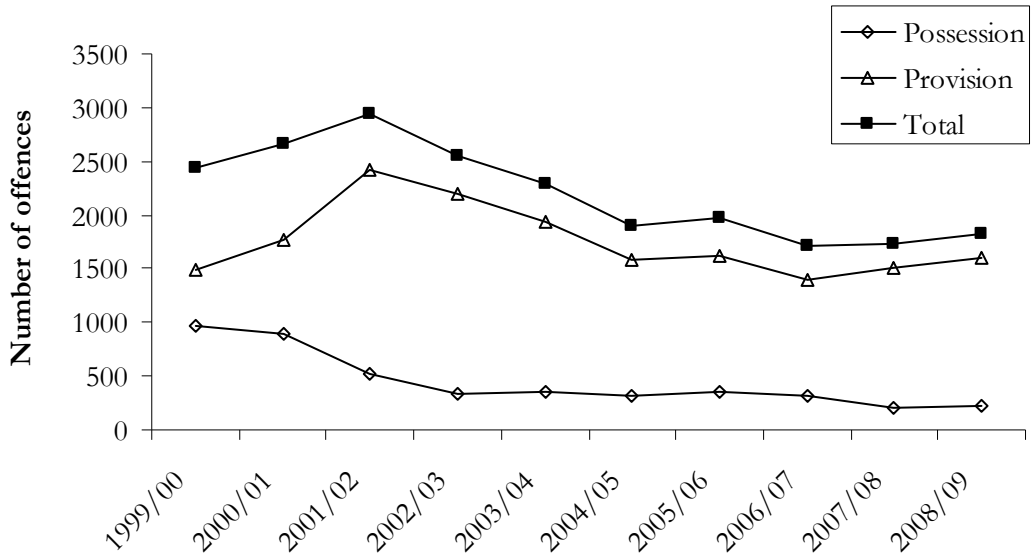


Source: South Australian Police Annual Reports (2000–2010)

11.2.4 Cannabis

Figure 11.5 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 1999/00 to 2008/09 (South Australian Police Annual Reports, 2000-2010). As can be seen, the number of cannabis possession offences increased slightly in 2008/09 (at 218 from 210 in 2007/08) and the number of provision offences also increased, from 1,515 offences in 2007/08 to 1,604 offences in 2008/09. Historically, cannabis-related offences have made up the majority of illicit drug possession and provision offences and they continued to do so in 2008/09 when 64% of the total number of such offences was cannabis-related. This proportion 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 11.5: Number of cannabis-related offences reported by SAPOL in South Australia, 1999/01 – 2008/09



Source: South Australian Police Annual Reports (2000-2010)

11.3 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 to $1,500; n=56). This is the same as the median amount of money spent on illicit drugs as reported by participants in 2008 ($100: range $4 to $1,000; n=38).

Table 11.2 presents the breakdown of the amounts spent on illicit drugs (that is, 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. It can be seen that 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 11.2: Expenditure on illicit drugs on the day preceding the interview, 2008 & 2009

Amount	% of whole sample (2009 N=100^) (*2008 N=100*)	% who injected heroin most in last month (2009 n=50) (*2008 n=38*)	% who injected methamphetamine* most in last month (2009 n=34) (*2008 n=29*)
Nothing	43 (*39*)	36 (*42*)	50 (*59*)
Less than $20	0 (*4*)	0 (8)	0 (*0*)
$20 - $49	5 (*7*)	0 (*11*)	6 (*10*)
$50 - $99	15 (*7*)	16 (11)	35 (*10*)
$100 - $199	24 (*16*)	34 (*26*)	35 (*10*)
$200 - $399	7 (*3*)	12 (*0*)	6 (10)
$400 or more	5 (*1*)	2 (*3*)	18 (*0*)
Median $ expenditure**	**$100.00** (*$100*)	**$100.00** (n=32) (*$82.50 (n=22*)	**$100.00** (n=17) *$75.00 (n=12*)

Source: IDRS participant interviews
2008 figures in brackets and italics
***** Powder, base or crystal methamphetamine
****** Of those that reported spending money on illicit drugs on the day preceding interview
^ data missing for one participant

11.4 Driving risk behaviour

This section reports data provided by the South Australian Police (SAPOL) and self-report data provided by participants. On July 1st 2006 roadside drug testing was introduced in SA, and as a result we are able to report results provided by the South Australian Police (SAPOL).

11.4.1 Roadside saliva drug testing

In 2008/09 888 drivers have been reported for a drug driving offence after having been detected by the Driver Drug Testing Group, recorded on expiation notice and Apprehension Report (communication with SAPOL). In the 2008/09 period 39,510 screening tests were conducted (up to June 30th 2009), with 888 positives being confirmed for driving while impaired (drug driving detection rate 2.25%). Methamphetamine was the most prevalent illicit drug found, with 305 drivers confirmed as having this drug present in their saliva, followed by THC (tetrahydrocannabinol, n=278), and MDMA (3,4-methylenedioxy-N-methylamphetamine, n=29). Poly-drug use was also apparent, with 276 drivers testing positive to the presence of a combination of drugs. Of these, 190 had a combination of methamphetamine and THC, 31 had a combination of methamphetamine and MDMA, 23 had a combination of THC and MDMA, and 32 were found to be driving with a combination of all three drugs. These results indicate that 2.25% of the drivers tested were

detected for the presence of either methamphetamine, THC or MDMA, with 8% of drivers detected as driving with methamphetamine only present, and 14% detected for methamphetamine only or a combination of methamphetamine and another drug.

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

Seventy-three 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, 11% (n=8) reported driving under the influence of alcohol, with 63% of those (n=5) driving over the limit of alcohol, for a median of two times (range 1 to 24 times).

Ninety percent of participants who had driven (n=66) reported driving taking illicit drugs in the six months prior to interview, a median of 44 times (range 1 to 180). Fifteen percent (n=10) of those who reported driving after taking illicit drugs in that period reported doing so on a daily basis. The majority of those who had driven under the influence of an illicit drug (65%, n=43), in the six months prior to interview, had driven under the influence of 'any' opioid, followed by driving under the influence of heroin (56%, n=37), or 'any' methamphetamine (44%, n=29), or more specifically: powder (23%; n=15), base (21%; n=14), and crystal (15%; n=10) methamphetamine, followed by cannabis (30%; n=20). Smaller proportions of participants reported driving under the influence of other substances, as listed in Table 11.3.

The last time participants drove under the influence of any illicit drug, 'any' opioid was most commonly used by half the participants (59%, n=39), followed by heroin (46%, n=30), 'any' methamphetamine (33%, n=22), and cannabis (21%, n=14). The median amount of time after participants had used an illicit drug the last time prior to driving was 30 minutes (range 0.10 minutes to 720 minutes), with the majority (64%, n=42) reporting that the use of illicit drugs had no impact on their ability to drive. Around a quarter (24%, n=16) reported that when driving under the influence of drugs they felt their driving ability was impaired, with 12% (n=8) reporting their driving had improved as a result of using illicit drugs.

Table 11.3: Recent* occurrence of driving soon after taking an illicit drug, 2008 & 2009

DRUG (%)	2008 (n=52)	**2009 (n=66)**
Any drug	79	**90**
Cannabis	52	**30**
Heroin	40	**56**
Methadone**	12	**7**
Buprenorphine**	2	**3**
Morphine**	12	**12**
Any opioid#	58	**65**
Benzodiazepines**	8	**6**
Methamphetamine – powder	25	**23**
Methamphetamine – base	10	**21**
Methamphetamine – crystal	35	**15**
Any methamphetamine^	50	**44**
Cocaine	2	**2**
LSD	0	**0**
Ecstasy	0	**0**

Source: IDRS participant interviews
***** 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

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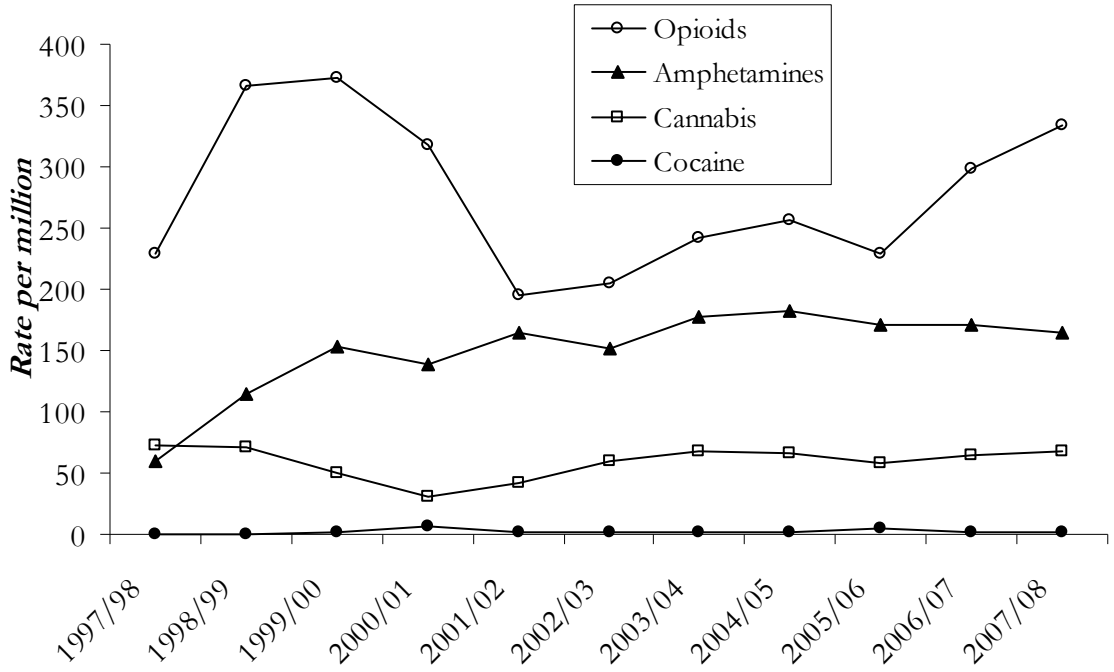
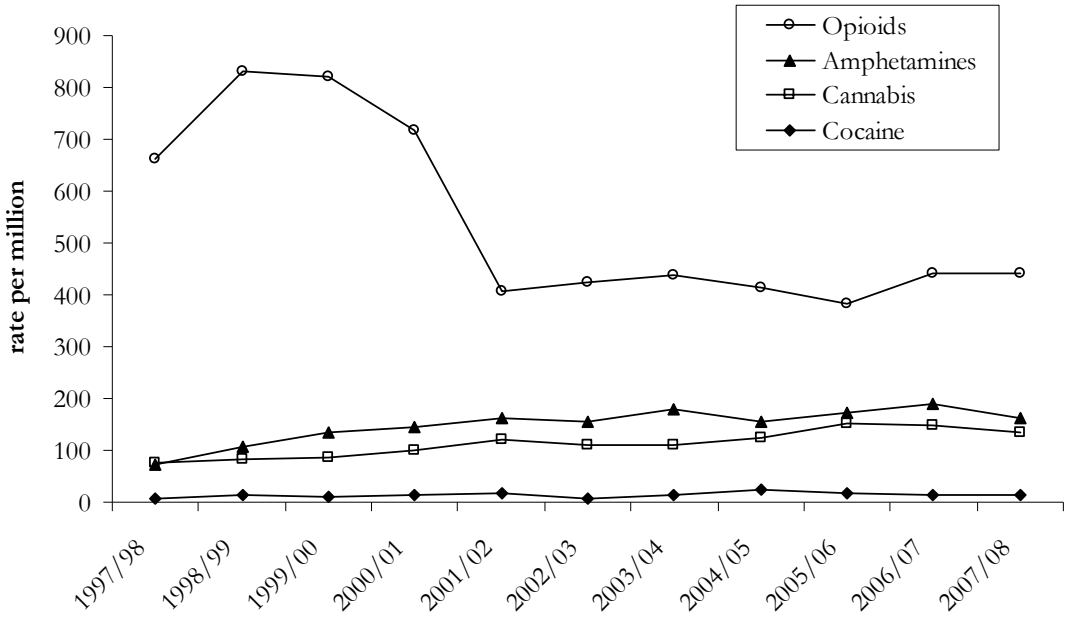
APPENDIX 1: SUBSTANCE-RELATED ADMISSIONS TO HOSPITALS IN SOUTH AUSTRALIA AND AUSTRALIA

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



Source: Australian Institute of Health and Welfare
***** For persons aged between 15 and 54 years
Note: '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: Australian Institute of Health and Welfare
For persons aged between 15 and 54 years
Note: 'Primary diagnosis' was given to those admissions where the substance was considered the primary reason for the patient's episode of care.