N. White, R. Vial and R. Ali

SA DRUG TRENDS 2006
Findings from the Illicit Drug Reporting System (IDRS)

NDARC Technical Report No. 267

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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
A&TSI	Aboriginal and/or Torres Strait Islander
AIHW	Australian Institute of Health and Welfare
BBVI	Blood-borne viral infections
CDA – NNDSS	Communicable Diseases Australia – National Notifiable Diseases Surveillance System
CNP	Clean Needle Program
DASSA	Drug and Alcohol Services South Australia
EDRS	Ecstasy and Related Drugs Reporting System
HBV	Hepatitis B virus
HCV	Hepatitis C virus
ICD – 9; ICD – 10	International Classification of Diseases, 9th Revision & 10th Revision
IDRS	Illicit Drug Reporting System
IDU	Injecting drug users
KE(s)	Key expert (s)
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
PDI	Party Drugs Initiative
RAH	Royal Adelaide Hospital
SA	South Australia
SAPOL	South Australian Police
SSRI	Selective Serotonin Re-uptake Inhibitor (a class of antidepressant medication)

EXECUTIVE SUMMARY

Demographic characteristics of injecting drug users (IDU)

Sample characteristics in 2006 were somewhat similar to previous years, with 100 IDU participating in the 2006 IDRS. The median age of the sample was 37 years, with slightly more male (53%) than female participants. Over two-thirds (71%) of the sample were unemployed and just over half (52%) had a history of previous imprisonment. The median number of years spent at school was ten, but over half (60%) reported having some kind of post-secondary qualification (primarily a trade or technical qualification). Over half (52%) were currently undertaking some form of treatment for drug use, most commonly pharmacotherapy.

Patterns of drug use among IDU

The median age of first injection by the IDU sample was 18 years, and the drug most commonly first injected was amphetamine (49%), followed by heroin (39%). Heroin was nominated by nearly two thirds of the sample (63%) as the drug of choice, followed by methamphetamine (13%). However, methamphetamine remained the drug most commonly injected by IDU in the last month (by 31%), followed closely by heroin (by 28%) and morphine (by 21%). Therefore, in 2006 there was still a discrepancy between what people wanted to use and what they are using most, suggesting the current price, availability and quality of heroin, in particular, was impacting on frequency of use (see heroin section below).

Polydrug use was common among the IDU in 2006 and has remained consistently so across the years of the IDRS. Similar to 2005, in 2006 there was substantial crossover between heroin users and methamphetamine users in the IDU sample. Forty-two IDU (42%) had used both heroin and some form of methamphetamine in the last six months.

Frequency of injecting in the last month was greater than weekly for three-quarters of the sample (73%), with 32% reporting injecting at least once a day.

Heroin

The price of heroin remained stable in 2006, with the median price reported as $400 per gram by IDU. Heroin was still considered 'easy' or 'very easy' to obtain, while perception of heroin purity remained low among IDU, with two-thirds of IDU reporting the purity of heroin as low (65%). Unlike 2005, where there was an increase in the proportion of IDU obtaining heroin from a mobile dealer, in 2006 more IDU reported obtaining heroin at an agreed public location (49%), or by home delivery (30%).

The proportion of IDU who reported recent use of heroin remained stable compared to 2005 (at 60%). There was, however, a decrease in the frequency of use of heroin for the third year in a row (following the substantial rise in frequency seen in 2003) to a median 19 days. Heroin users continued to supplement or substitute their heroin use with other opioid substances such as morphine and methadone, and also methamphetamine.

Experience of recent heroin overdose among IDU in the sample remained low. 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 despite the ease of availability of heroin for most IDU and the predominance of heroin as the drug of choice among this year's sample, the continuing

poor quality of heroin was reflected in decreased frequency of use among IDU in 2006. In addition, over the long-term, indicators (such as treatment services and hospital data, police offences and seizure data) suggest stability or decline in the heroin market, which has not returned to pre-shortage conditions in Adelaide.

Methamphetamine

In 2006, there was no increase in the median price paid per point of base methamphetamine, but the price per point for the powder form increased. The median price per gram decreased in 2006 for the powder form, with the base form remaining stable. All forms of methamphetamine were considered 'easy' or 'very easy' to obtain in 2006. There was a decrease in the proportion of IDU reporting that they usually obtained any form of methamphetamine from mobile dealers, with a subsequent increase in IDU reporting that they usually obtained any form of methamphetamine from a friend's home or an agreed public location. The purity of the base form of methamphetamine, as perceived by IDU, had increased slightly and remained as high. However, the purity of the crystal form of methamphetamine, as perceived by IDU, had decreased slightly, though it remained medium to high. SAPOL data on clandestine laboratory detections suggest that local manufacture of methamphetamine was still a contributor to the SA methamphetamine market.

The proportion of IDU reporting recent use of *any* methamphetamine remained stable (78%), but the frequency of use of *any* methamphetamine decreased in 2006 (from a median of 30 days in 2005 to a median of 12 days in 2006). Decreased frequency of use was noted across all main forms of methamphetamine, particularly base, although this form remains the most used type of methamphetamine among IDU. There was an increase in the recent use of crystal methamphetamine (or 'ice/crystal') by smoking (16% of IDU in 2006, with 10% in 2005).

Calls to the Alcohol and Drug Information Service (ADIS) in SA regarding methamphetamine remained stable, as have the number of clients (with amphetamines as the primary drug of concern) to all DASSA services. However, the number of clients admitted to DASSA inpatient (detox) services with amphetamine as the primary drug of concern continued to decline, and in 2006 was at the lowest since 2001/2002. In contrast, state (SA) hospital admissions data showed the number of amphetamine-related admissions remained stable (as at 2004/05), though this data lags behind other indicators.

In general, an increase in the price of a point of methamphetamine powder and a decrease in the price of a gram of methamphetamine powder was noted in 2006, though availability and perceived purity remained relatively stable. Use of all forms among IDU decreased. These parameters, along with other indicator and key expert (KE) data, suggest that the methamphetamine market remains strong and generally stable in Adelaide, although, over the longer-term, frequency of use and problems with use seem to have declined somewhat compared to earlier years.

Cocaine

Similar to 2005, only a very small number of IDU were able to supply information regarding the price, purity or availability of cocaine, which was reflective of the relatively low numbers of IDU who had used cocaine in the last six months (a total of eight). In addition, although several KE were able to provide some information on cocaine, this was limited and none could nominate cocaine as their main area of expertise. Consequently, the data for price, purity and availability of cocaine in 2006 are again of limited value.

In 2006, a decrease was seen in the number of IDU who reported recent use of cocaine (eight compared to 16 in 2005), but frequency of use decreased and remained low (at a median of two days in the last six months), and use of cocaine in general remained well below other illicit drug use among this sample.

The fact that only a small number of KE and IDU were able to provide information on cocaine use in itself indicates the lack of a sizeable and visible cocaine market in Adelaide, particularly amongst the IDU sampled by the IDRS. Indicator data – such as the number of cocaine possession and provision offences, calls to ADIS, DASSA treatment services data for cocaine, and SA hospital admissions data – also support this presumption. The possibility that a cocaine market exists beyond the scope of this survey should not be excluded, and readers are directed to the Ecstasy and Related Drugs System findings (formerly the PDI; Weekley, Pointer & Ali, 2005), which show a higher level of use and availability of cocaine among a sample of regular ecstasy users in Adelaide.

Cannabis

In 2006, the median price reported for cannabis was $200 an ounce for hydro, with the median price of bush decreasing slightly to $160 an ounce. The median price of a 'bag' remained stable at $25 for either 'hydro' (hydroponically grown) or bush (grown outdoors). With the exception of the decrease in price of an ounce of bush, the price of these quantities has remained stable for years. Both hydro and bush cannabis were considered 'very easy' or 'easy' to obtain, and most cannabis-using IDU reported scoring the cannabis from a friend. Most also perceived the potency of either hydro or bush as high or medium.

Cannabis, though generally not the drug of choice among the IDU sample, was used commonly (by 77%), and the percent of IDU who had recently used cannabis has been stable across all the years the IDRS has been conducted. However, frequency of use of cannabis again increased markedly in 2006 (to a median 180 days), after a decrease in 2005 where it had decreased to a median of 120 days following four years of stability (at a median 180 days). Almost all cannabis users reported they had used hydroponically grown cannabis in the last six months, with a large majority reporting they mostly used hydro. KE generally reported no changes in any parameter of the cannabis market, or use of cannabis among IDU.

The number of calls to ADIS concerning cannabis remained stable, but the total number of clients to DASSA treatment services increased; however, the numbers of clients attending inpatient detox services of DASSA decreased in 2005/06. Cannabis-related hospital admissions in SA remained stable in 2004/2005.

Overall, the cannabis market remains generally stable in Adelaide, and IDU use remains common, despite a decrease in reported recent use among the 2006 sample.

Other opioids

In 2006, as in recent years, the use of other opioid substances by IDU was common, with 90% reporting recent use of some type of opioid substance, excluding heroin. There were some changes, however, in the use of other opioids by IDU in the 2006 sample, as follows.

Morphine

In 2006, the prevalence of recent morphine use among IDU increased, and there was an increase in the frequency of use of morphine. The price of MS Contin – 100mg increased

slightly in 2006, but the availability of morphine was unchanged compared to 2005. As in previous years, the majority of morphine users reported use by injecting, and mainly used illicit supplies of Kapanol and MS Contin.

Methadone and Buprenorphine
In 2006 there was a slight decrease in the proportion of IDU that reported recent use of illicit methadone syrup, while the proportion reporting use of illicit buprenorphine remained stable. The frequency of illicit use of both pharmacotherapy medications increased in 2006. The percentage of IDU reporting injecting of either licit or illicit methadone or buprenorphine remained stable compared to 2005, at approximately a quarter of recent users of these substances. While there was no change in the proportion of IDU reporting mainly using an illicit supply of buprenorphine, there was a small increase in the proportion of IDU reporting mainly using an illicit supply of methadone. It is worth noting, however, that the majority still report mainly licit (prescribed) use of these substances.

Oxycodone
In 2006, for the second year, IDU were asked about use of oxycodone specifically, and a small proportion of the sample (20%) reported illicit use of oxycodone at very low frequency. During this year, there was an increase in the proportion of IDU that had used illicit oxycodone in the last 6 months, and there was also an increase in the frequency of that use.

Other drugs

The proportion of IDU reporting recent use of ecstasy or hallucinogens decreased and frequency of use remained low in 2006.

There was a small increase overall in the percentage of IDU reporting recent use of benzodiazepines in 2006, and there was a dramatic increase in the frequency of use. The majority of benzodiazepine users reported mainly licit use, primarily of diazepam.

Antidepressant use decreased slightly in 2006 in terms of percentage reporting recent use, but the frequency of use increased. Almost exclusively licit use was reported, primarily of a selective serotonin re-uptake inhibitor (SSRI).

Associated harms

The high prevalence of sharing of injecting equipment (other than needles) first noted in 2004 decreased slightly in 2006, with 27% (from 39% in 2005) reporting having shared equipment such as tourniquets, water and spoons.

While the prevalence of injecting of methadone and buprenorphine remained stable compared to 2005, there were some increases seen with regard to injecting-related problems associated with these substances in 2006. In 2006, the number of IDU who reported recent injecting of morphine had more than doubled (from 18 to 40), however the reported experience of injecting related problems showed a four-fold increase (from 7 in 2005 to 28 in 2006). However, a third or more of injectors of morphine, methadone and buprenorphine still reported experiencing injecting-related problems in the month prior to interview, such as substance dependence, scarring and bruising, difficulty finding veins and abscesses or infections. Several KE commented that these problems were exacerbated by lack of IDU access and/or proper (single) use of filters and other injecting equipment, primarily due to financial constraints.

There were increases in the number of IDU reporting that they had attended a GP, a psychiatrist, a psychologist, or a counsellor in response to mental health issues in 2006. Depression and/or anxiety again predominated as the most commonly experienced mental health problem reported by IDU. KE reported mental health issues as generally stable in 2006, although, there was consensus by all KE, who were able to comment, that mental health problems had increased in frequency in the last year primarily with regard to methamphetamine users.

The number of IDU who reported they had become verbally aggressive following use (under the influence) of a drug in the preceding six months had increased from 2005 to 2006. Overall, a greater proportion of IDU reported becoming verbally aggressive (particularly during withdrawal), rather than physically aggressive following drug use or during drug withdrawal. Alcohol and methamphetamine (particularly base) were most commonly associated with physical or verbal aggression, though the number of IDU per drug type was small.

In 2006, the median expenditure on illicit drugs decreased overall compared to 2005, with IDU who used primarily heroin or methamphetamine spending equivalent amounts on average in 2006.

There was a decrease in the prevalence of criminal involvement reported by IDU, and of experience of arrest in the preceding 12 months, with drug dealing and property crime remaining the most common. Most IDU perceived that police activity was either stable or increasing and the majority reported that police activity had not made it more difficult to obtain drugs recently.

Implications

The findings from the 2006 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.

- Development of improved treatment protocols for methamphetamine use and dependence (underway at DASSA).

- 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.

- Continued focus on reducing supply of amphetamine and methamphetamine from local clandestine laboratory manufacture.

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

- Development and implementation of strategies to reduce behaviour and harms associated with injecting of formulations not intended for injection, such as morphine, methadone and buprenorphine.

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

- Given the increase in use of benzodiazepines, development and implementation of strategies to reduce illicit use of prescribed pharmaceuticals.

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 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 2006 is the tenth year in which the IDRS has been conducted in South Australia, and the eighth year it has included all states and territories (see Stafford et al., 2005 for a national comparison of 2004 findings, and Weekley, Pointer, & Ali, 2005 for the 2004 South Australian perspective).

The IDRS provides a coordinated and ongoing monitoring system predominantly focusing on heroin, methamphetamine, cocaine and cannabis, and acts as a strategic early warning system for emerging illicit drug problems. The IDRS is a sensitive and timely indicator of drug trends both nationally and by jurisdiction is simple to execute and cost-effective. As well as drug trends, the findings highlight areas where further research is required, or where changes need to be made in terms of education, health promotion, treatment services and policy.

The 2006 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 injecting drug users, 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 2006 IDRS was to provide information on drug trends in South Australia, particularly focusing on the 12 months between mid-2005 and mid-2006.

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 injecting drug users;
- 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 drug users; and
- an examination of existing and current indicators (other indicators) relating to drugs, drug use and drug-related issues.

2.1 Survey of injecting drug users (IDU)

A sample of 100 injecting drug users was interviewed in June and July 2006. 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 in the Adelaide metropolitan area for at least the last 12 months.

Participants were recruited through Clean Needle Program (CNP) sites across Adelaide. Clients of the service were invited to participate by the CNP peer educator and/or the IDRS interviewer directly, or given a study flyer 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'.

Since 2001, to be consistent with the IDRS data collection procedures in other jurisdictions, trained research interviewers have conducted the interviews with the IDU. In 2006, 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 an IDU interview was 40 minutes (range: 25 to 120 minutes) and participants were compensated $30 for their time.

The structured interview (survey instrument) was based on previous research conducted at NDARC (see Darke et al. 1992, 1994). Sections on demographics, drug use, price, purity and availability of drugs (heroin, methamphetamine, cocaine, cannabis, morphine and methadone), crime, risk-taking, health, and general trends were included. In general, participants were asked to consider changes on the above parameters over the previous six to 12 months (mid-2005 to mid-2006). The largely quantitative data were analysed statistically using SPSS for Windows, Version 14.0 (SPSS 2006).

2.2 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, SA Police, Clean Needle Programs or research organisations. Key experts 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.

In 2006, twenty-nine KE were interviewed (13 males and 16 females) from August to early November 2006. KE comprised a range of persons from various professions: fourteen health workers (youth workers, community drug and alcohol workers, psychologists, medical officers, nurses, and drug & alcohol counsellors); eight user representatives (peer educators, outreach and clean needle program workers, and dealers); and seven law enforcement workers (police officers, forensic officers, lawyers and police intelligence analysts).

KE were asked to identify the main illicit drug used by the drug users 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. Methamphetamine continued to be the most identified drug used by the users that KE had most contact with in 2006. Similar to 2005, in 2006 cocaine was not identified by any KE as the main illicit drug used by users they had most contact with, however, unlike 2005, some KE did identify cannabis as the main illicit drug used by users they had most contact with. However, 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, 19 interviews were completed with methamphetamine as the main focus, five were completed with heroin (and other opiates), and five with cannabis as the main focus. In addition, two KE provided 'double' interviews on both methamphetamine and cannabis, and heroin and methamphetamine. 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=27) and the remainder (n=2) were 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 six 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.

2.3 Other indicators

To complement and validate data collected from the injecting drug user and key expert surveys, a range of secondary data sources were 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 Degenhardt et al., (2004a);
- national rates of methamphetamine-related, and cocaine-related, fatalities provided by the Australian Bureau of Statistics (ABS), in Degenhardt, Roxburgh and Black (2004b);
- drug-related hospital admissions data (State and National) provided by the Australian Institute of Health and Welfare (AIHW), 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.

Purity of drug seizures made by South Australian Police (SAPOL) and the Australian Federal Police (AFP) would have been included, but at the time of writing these data, which are usually provided by the Australian Crime Commission (ACC), were unavailable.

2.4 Notes

2.4.1 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 1980's 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), and are also methamphetamine. Therefore, the term methamphetamine was used from 2001 onward to refer to the drugs available that were previously termed 'amphetamines'. The terms are used interchangeably within this report unless specifically noted within the text. For a further discussion of this issue see White, Breen & Degenhardt (2003).

2.4.2 Price, purity and availability

It should be noted that the price, purity and availability sections of the IDU 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 % of entire sample to highlight the fact that the proportion answering was not equivalent to the whole IDRS IDU sample. Care should be taken in interpreting category percentages that may be associated with small sample sizes.

3 RESULTS

3.1 Overview of the IDU sample

The demographic characteristics of the 100 IDU interviewed in 2006 are summarised in Table 3.1, with the 2005 sample characteristics provided for comparison.

There was some overlap of the 2006 IDRS IDU sample with previous years' samples. Thirty percent of the 2006 sample stated that they had participated in the IDRS before; 15% in the year 2005, 13% in the year 2004, and fewer in earlier years.

Table 3.1: Demographic characteristics of IDU sample

Characteristic	2005 n = 101	2006 n = 100
Age (median in years)	35	37
Gender (% male)	64	53
Identify as A&TSI (%)	8	8
Employment (%)		
Not employed	62	71
Full-time	6	6
Part-time/casual	13	13
Student	5	2
Home duties	14	8
School education (median in years)	10	10
Tertiary education (%)		
None	45	40
Trade/technical	44	43
University/college	12	17
Currently in treatment (%)	53	52
Prison history (%)	46	52
Area of Adelaide (%)		
Central/Eastern	24	17
Western	26	30
Southern	29	25
Northern	19	25
Non-metro**	1	1
No fixed address/missing	6	2

Source: IDRS IDU interviews

**one participant included from non-metropolitan area, but they accessed the metropolitan drug-market

Similar to previous years, the median age of the sample was 37 years (range 19 to 63 years). Unlike previous years there were almost equal numbers of male and female participants, with slightly more male participants (53%). Almost two-thirds (62%) of the sample was unemployed and over half (52%) had a history of previous imprisonment. The median number of years spent at school was 10 (range seven to 12 years), with just under half completing years 11 and/or 12. Forty percent of the sample reported having

no tertiary qualifications. Of those that did report having a tertiary qualification, more had completed a technical or trade qualification (43%), than a university qualification (17%).

In 2006, over half of the sample (52%) were in drug treatment at the time of the interview, the majority of whom were in maintenance pharmacotherapy treatment. Specifically, 29% reported being on a methadone program (compared to 27% in 2005) and 21% reported being on a buprenorphine program (including those using Suboxone treatment).

As in previous years, in 2006 the majority of IDU reported some form of government pension, allowance or benefit as their main source of income in the month prior to interview (77%). The remaining IDU reported their main source of income was a wage (16%), from child or partner support (3%), criminal activity (1%), from sex work (2%) or from prior savings (1%).

In summary, compared to 2005, the 2006 sample characteristics were largely unchanged, with the most notable differences being a more even gender split than in previous years, and a larger proportion reporting being unemployed contrary to current South Australian employment levels.

The majority of KE reports of the demographics of drug user populations they have contact with replicate those of the sample: majority male (about two-thirds), unemployed with approximately 10 years of school education, and significant proportions with a history of imprisonment or currently in treatment for drug use (most likely a maintenance pharmacotherapy). There were, however, some differences reported between methamphetamine users and heroin or other opiate users in terms of average age (with methamphetamine users generally considered to be younger on the whole) and current treatment status (heroin users were reportedly more likely to be in some form of treatment for their drug use, primarily pharmacotherapy). Moreover, some KE reported that their clients were becoming younger, with some KE reporting that there had been a general increase in the number of clients, and more particularly in female clients and Asian clients accessing their service.

3.2 Drug use history and current drug use

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

The median age of first injection by the IDU sample was 18 years (range 11 - 46). The drug most commonly first injected by the sample was amphetamine (49%), followed by heroin (39%).

Table 3.2: Injecting history, drug preferences and polydrug use of IDU, 2005 & 2006

Variable	2005 n=101	2006 n = 100
Age first injected (median in years)	18	18
First drug injected (%)		
Heroin	33	39
Amphetamine	60	49
Cocaine	4	2
Morphine	1	2
Other	2	8
Drug of choice (%)		
Heroin	57	63
Methamphetamine	27**	13
Cocaine	4	6
Cannabis	4	5
Morphine	1	9
Other	7	4
Drug injected most often in last month (%)		
Heroin	34	28
Methamphetamine	47**	31
Cocaine	-	1
Morphine	10	21
Methadone	6	5
Buprenorphine	-	10
Other	4	4
Most recent drug injected (%)		
Heroin	32	24
Methamphetamine	51**	30
Morphine	9	21
Methadone	6	11
Buprenorphine	-	10
Other	3	4
Frequency of injecting in last month (%)		
Weekly or less	25	27
More than weekly but less than daily	41	41
Once a day	13	14
2 - 3 times a day	16	13
>3 times a day	5	5
Polydrug use (median)		
Number of drug classes ever used	12 (5-16)	12 (2-16)
Number of drug classes used in last 6 months	6 (2-12)	7 (1-13)
Number of drug classes ever injected	5 (1-10)	5 (1-10)
Number of drug classes injected in last 6 months	2 (1-7)	3 (1-8

Source: IDRS IDU interviews **collapsed categories: powder, base and crystal

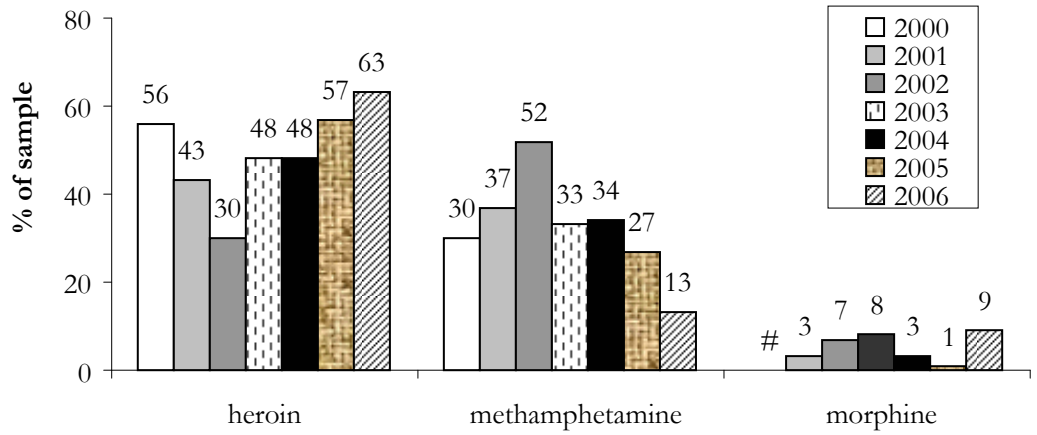
Compared to 2005, in 2006 there were changes in the proportions nominating heroin and methamphetamine as their preferred drug among the IDU sample. Specifically, there was an increase to 63% in the proportion of the sample that reported heroin as their drug of choice (compared to 57% in 2005, and 48% in 2004). Whereas, there was a decrease to 13% of the proportion of the sample nominating some form of methamphetamine as their drug of choice (from 27% in 2005, and 34% in 2004). As can be seen in Figure 3.1, this is the lowest proportion of the sample nominating methamphetamine as their drug of choice since 2000, with figures indicating a decreasing trend in SA since 2002, where the highest proportion of the sample indicated methamphetamine as their drug of choice (at 52%). However, the proportion of the sample that nominated heroin, as their drug of choice, was the highest reported since 2000.

Despite a greater proportion of IDU reporting heroin as their drug of choice, the proportion reporting heroin as the drug most frequently injected in the last month remains relatively stable in 2006 (at 28%), having decreased slightly from 2005 (34%) (see Figure 3.2). In addition, the proportion of IDU reporting that heroin was the most recent drug they had injected (24%) was also lower than in 2005 (32%), 2004 (36%), and 2003 (35%), and was almost at a level comparable to 2002, where only 22% of the sample reported that heroin was the most recent drug injected (see Table 3.2). With regard to methamphetamine, the decrease in the proportion reporting methamphetamine as their drug of choice, was also reflected in the proportion of IDU reporting methamphetamine as the drug most injected in the last month (from 47% in 2005, to 31% in 2006) (see Figure 3.2), and a larger decrease in the proportion reporting methamphetamine as the drug most recently injected (from 51% in 2005 to 30% in 2006) (see Table 3.2).

Consistent with the past three years, therefore, despite heroin being the most commonly reported drug of choice among the IDU sample in 2006, methamphetamine was most commonly reported as the drug they had injected most in the last month, and the drug they had most recently injected. This suggests there is still a discrepancy between what people want to use and what they are using most, which may depend on a variety of factors including price, availability and quality of what is available, particularly with regard to heroin.

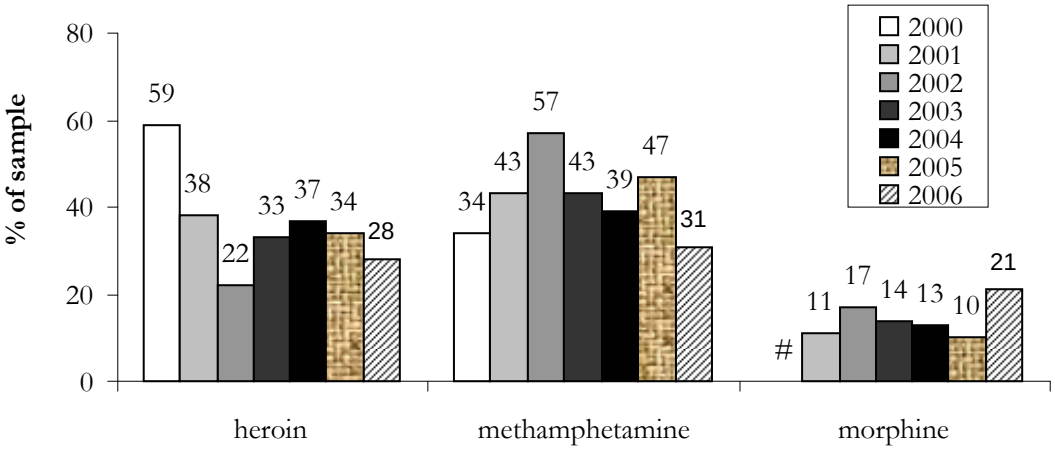
Frequency of injecting any drug in the last month was greater than weekly for 74% of the sample, with 32% reporting they had injected at least once a day during that period. Compared to 2005, frequency of injecting had remained relatively stable.

Figure 3.1: Trend for drug of choice, 2000 - 2006



Source: IDRS IDU interviews
Morphine was not separated from 'other opiates' in 2000

Figure 3.2: Trend for drug injected most in last month, 2000 - 2006



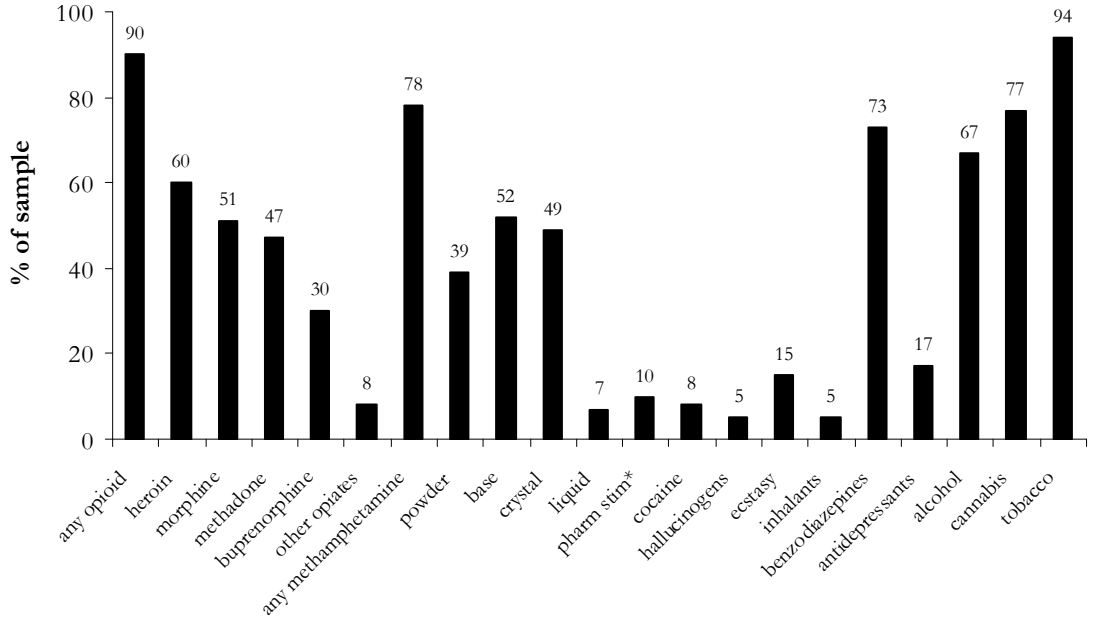
Source: IDRS IDU interviews
Morphine was not separated from 'other opiates' in 2000

IDU polydrug use was common in 2006 and has remained consistently so across the years, with no real differences being reported from 2005 to 2006 (see Table 3.2). In 2006, participants were asked about their history of use of 22 separate substances that were collapsed according to drug type[1]. Although oxycodone was asked separately in 2006, this was collapsed into the 'other opiates' category to allow comparability of data across years. Therefore, in 2006, the total number of possible drug types used was 17, and the total number of possible injected drug types was 14. In 2006, IDU reported use of a median 12 (range 2 - 16) drug types across their lifetime and a median of 7 (range 1 - 13) during the six months prior to interview. The drugs most commonly used among the IDU across their lifetime were: tobacco, alcohol, cannabis, *any* methamphetamine, heroin

[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, antidepressants, benzodiazepines, Suboxone, and tobacco.

and benzodiazepines (see Table 3.3). The drugs most commonly used among the IDU in the last six months were: tobacco, *any* methamphetamine, cannabis, benzodiazepines, alcohol, and heroin (Figure 3.3). This order of commonality was very similar to 2005.

Figure 3.3: Recent drug use: percentage of the IDU to have used each substance type in the last six months



Source: IDRS IDU interviews
* Pharm. stim = pharmaceutical stimulants (e.g. dexamphetamine)

Similar to 2005, in 2006 there was substantial crossover between heroin users and methamphetamine users in the IDU sample. Forty-two IDU (42%) had used both heroin and some form of methamphetamine, in the last six months. However, eighteen IDU (30% of heroin users) reported use of heroin but not use of any form of methamphetamine, and thirty-six IDU (46% of methamphetamine users) reported use of some form of methamphetamine, but not use of heroin, in that time.

Of the sixty-three IDU that nominated heroin as their drug of choice, 48 (76%) had used heroin in the previous six months, 34 (54%) had used morphine, 39 (60%) had used any methadone (licit or illicit), 23 (36%) had used any buprenorphine (licit or illicit) and 13 (21%) had used any Oxycodone (licit or illicit) during this period. In addition, there was an increase in the proportion of IDU reporting that they had used some form of methamphetamine from to 45 (71%). Similarly, there was overlap of drug classes used by those IDU who nominated methamphetamine as their preferred drug. Of the 13 IDU reporting methamphetamine as their drug of choice, all had used some form of methamphetamine in the last six months, three (23%) had used heroin during that period and two (17%) had used morphine

Table 3.3: Drug use history and routes of administration of the IDU sample, 2006 (% of total sample; n=100)

Drug Class	Ever used %	Ever injected %	Injected last 6 mths %	Ever smoked %	Smoked last 6 mths %	Ever snorted %	Snorted last 6 mths %	Ever swallowed %	Swallowed last 6 mths+ %	Used^ last 6 mths %	Days used^ in last 6 mths*	Days injected in last 6 mths*
Heroin	95	93	59	49	5	21	3	19	2	60	19 (1-180)	14 (1-180)
Methadone - licit	63	31	13					62	32	33	180 (42-180)	36 (1-180)
Methadone - illicit	58	36	12					50	15	21	6 (1-50)	6 (1-12)
Physeptone - licit	12	7	1	0	0	0	0	11	0	1	20	20
Physeptone - illicit	43	33	15	0	0	2	2	28	10	20	20.5 (1-180)	6 (1-115)
Any methadone (inc. Physeptone)	***86***	***52***	***26***							**47**	***160 (1-180)***	***25 (1-180)***
Buprenorphine -licit	40	26	15	6	1	1	1	40	19	21	156 (16-180)	60 (2-180)
Buprenorphine - illicit	32	24	10	7	3	1	0	19	6	14	7 (1-180)	10 (1-180)
Any buprenorphine	***53***	***35***	***22***							***30***	***180 (1-180)***	***46 (1-180)***
Suboxone - licit	8	3	3	1	1			8	8	8	36 (1-153)	12 (2-27)
Suboxone - illicit	1	0	0	0	0			1	1	1	2	0
Oxycodone - licit	13	8	4	0	0	1	0	11	2	5	120 (2-180)	105 (2-140)
Oxycodone - illicit	40	34	19	1	1	1	0	16	3	20	4 (1-80)	4 (1-80)
Any Oxycodone	***47***	***36***	***20***							***22***	***6 (1-180)***	***6 (1-180)***
Morphine - licit	27	22	9	1	0	1	1	19	6	10	180 (2-180)	50 (1-180)
Morphine - illicit	78	73	46	0	0	3	0	33	10	48	12 (1-180)	11 (1-180)
Any Morphine	***81***	***76***	***49***							***51***	***20 (1-180)***	***20 (1-180)***
Homebake	30	30	4	3	0	2	0	4	0	4	17 (1-72)	17 (1-72)
Other opioids	20	6	1	5	1	1	0	12	6	8	5 (2-180)	180
Any opioids	***99***	***97***	***86***							***90***		

Source: IDRS IDU 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 IDU sample, 2006 (% of total sample; n=100) **(continued)**

Drug Class	Ever used %	Ever Injected %	Injected last 6 mths %	Ever Smoked %	Smoked last 6 mths %	Ever snorted %	Snorted last 6 mths %	Ever Swallowed %	Swallowed last 6 mths+ %	Used^ last 6 mths %	Days used^ in last 6 mths*	Days injected in last 6 mths*
Speed powder	86	78	36	15	3	52	6	43	3	39	5 (1-180)	5 (1-180)
Base/point/wax	73	67	48	7	3	3	0	32	15	52	10 (1-180)	10 (1-180)
Ice/shabu/crystal	70	66	44	26	16	2	0	10	3	49	6 (1-120)	6 (1-120)
Amphetamine liquid	43	40	7					8	0	7	3 (1-48)	3 (1-48)
Any form methamphetamine#	***96***	***92***	***76***							***78***	***12 (1-180)***	***8 (1-180)***
Pharmaceutical stimulants - licit	5	1	0	0	0	0	0	5	2	2	3	-
Pharmaceutical stimulants - illicit	39	17	4	0	0	2	2	29	6	10	2 (1-28)	1
Cocaine	69	49	6	14	1	42	2	9	1	8	2 (1-180)	3 (1-180)
Hallucinogens	85	14	0	1	0	1	0	84	5	5	5 (1-24)	-
Ecstasy	71	33	8	2	0	5	0	63	10	15	3 (1-26)	3 (1-8)
Benzodiazepines	93	20	10	0	0	2	0	93	73	73	70 (1-180)	4 (1-70)
Anti Depressants	58	2	0					58	17	17	180 (21-180)	-
Alcohol	97	6	0					97	67	67	16 (1-180)	-
Cannabis	98									77	180 (1-180)	
Tobacco	99									94	180 (20-180)	
Inhalants	33									5	1 (1-180)	

Source: IDRS IDU 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.

Category includes speed powder, base, ice/crystal and amphetamine liquid (oxblood). Does not include pharmaceutical stimulants

4 HEROIN

Fifty-three percent of IDU were able to provide answers on one or more aspects of the heroin market (price, purity and/or availability) in 2006, this was less than in 2005 with 63% able to comment.

4.1 Price

The current price of heroin was estimated by the IDU to be a median $400/gram (range $200-450, n=15) or $50/cap (range $50-105, n=29). The estimations for a gram and a 'cap' were the same as the median price paid at last purchase by IDU, as listed in Table 4.1. The median price at last purchase for a gram of heroin was $400 (n=7). The price was consistent with 2005. The median price at last purchase for a half-weight was reported as $200 (n=18), and remained stable. The median price at last purchase of a 'cap' of heroin has remained unchanged since 2003 at $50.

Table 4.1: Price of most recent heroin purchases by IDU, 2005* & 2006

Amount bought	Median price paid, $ (range)	Number of IDU purchasers
'cap'	50 (45-105) *50 (20-100)*	21 *29*
gram	400 (240-500) *400 (200-400)*	7 *6*
'half-weight' (½ gram)	200 (120-220) *200 (150-250)*	18 *27*
¼ gram	100 (100) *100 (100-150)*	7 *18*
⅛ gram	- *100 (50-100)*	- *4*

Source: IDRS IDU interviews
***** 2005 data in italics
Note: All purchases were within six months of interview

Of those IDU who were confident to report on the current price of heroin (n=53), approximately two-thirds (68%; 36% of entire sample) reported the price as stable over the last six months (see Table 4.2).

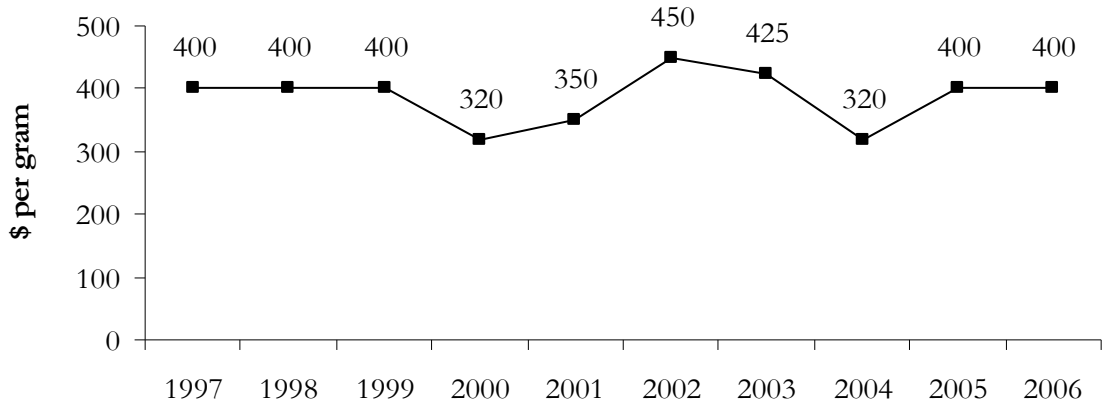
Table 4.2: Change in price of heroin over last six months, 2005 & 2006

Reported price status	% of IDU able to answer	
	2005 (n=64)	2006 (n=53)
Don't know	5	8
Increasing	14	15
Stable	70	68
Decreasing	3	2
Fluctuating	8	8

Source: IDRS IDU interviews

The median price paid for a gram of heroin remained stable in 2006 after an increase in 2005, which followed two years of decline from the peak price of $450/gram in 2002 (see Figure 4.1). It should be noted, however, that the median price of a gram of heroin has been based on small sample sizes (n<15) since 2001.

Figure 4.1: Median price of a gram of heroin, last purchase, 1997 - 2006



Source: IDRS IDU interviews

Of the five health and peer educator KE who were able to provide information on the price of heroin, all reported the price as $50 per 'cap'. Three KE reported that the price of a gram was $400. Three KE commented on the price of a half-gram of heroin, which was reported as ranging from $200 to $250. These KE reports on the price of heroin were similar to those from IDU; however, KE reports regarding recent change in heroin prices were variable, with two reporting recent stability and similar numbers reporting recent increase and fluctuation in price. Forensic KE commented that the purity of heroin is around three to five percent, which is extremely low (in 2004/2005 it was around 20%, and in 2000 it was 60%), and the numbers of seizures in 2005/2006 were low.

4.2 Availability

Tables 4.3 and 4.4 summarise the current availability of heroin and changes in heroin availability over the last six months, according to IDU reports. The majority of IDU answering the section regarding availability of heroin in 2006 reported it was either 'easy' or 'very easy' to obtain heroin (77%; 41% of entire sample), and that availability in the last six

months had been 'stable' (59%; 31% of entire sample). Compared to 2005, the proportions reporting availability of heroin as 'easy' or 'very easy' were relatively unchanged.

Table 4.3: Availability of heroin currently, 2005 & 2006

How easy is it to get heroin at the moment?	% of IDU able to answer	
	2005 (n=64)	2006 (n=52)
Very easy	48	37
Easy	39	40
Difficult	9	15
Very difficult	3	8

Source: IDRS IDU interviews

Table 4.4: Change in availability of heroin over the last six months, 2005 & 2006

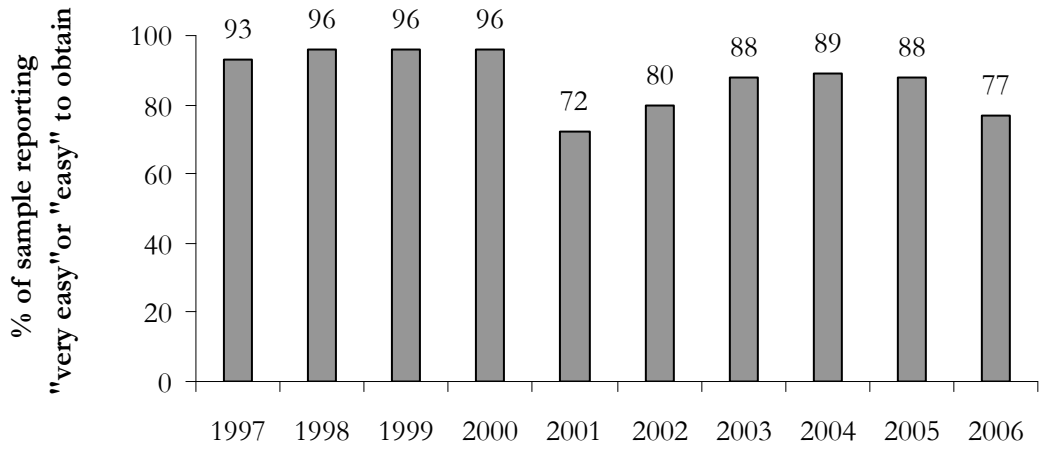
Has [availability] changed in the last 6 months?	% of IDU able to answer	
	2005 (n=64)	2006 (n=53)
Don't know	3	2
More difficult	19	23
Stable	72	59
Easier	5	13
Fluctuates	2	4

Source: IDRS IDU interviews

Similar to the IDU reports, the majority of KE able to comment (n=4) believed that heroin was 'easy' (n=3) or 'difficult' (n=1) to obtain and that this availability had remained stable or had become more difficult in the past six to twelve months. Eleven KE did report, however, that there had been recent reports of difficulty with supply and purity of heroin, and that many IDU are accessing methamphetamine and/or other opiates more easily, with some commenting that even the "*old hardened users are trying methamphetamine*". Four KE reported a belief that it remained difficult to obtain heroin in Adelaide.

Long-term trend data for the availability of heroin, as reported by IDU in all previous surveys, are presented in Figure 4.2 and show that the proportions indicating that heroin was 'very easy' or 'easy' to obtain, in the six months prior to interview, have remained stable over the past three years. Ease of obtainability has, however, remained below (albeit slightly) the levels seen prior to 2001, which coincides with the heroin shortage.

Figure 4.2: Availability of heroin in the last 6 months, 1997 - 2006



Source: IDRS IDU interviews

In 2006, IDU were asked about both the person and the location from where they had obtained heroin, which is different from 2005, therefore there are some figures missing for 2005 (marked as dash). Table 4.5 shows the usual source person and venue for obtaining heroin. In 2006, the majority of IDU that had recently used heroin, and who provided information on the source of their heroin in the six months prior to interview (n=53), reported they usually obtained heroin from a known dealer (70%). The majority of IDU that had recently used heroin bought their heroin at an agreed public location (49%), followed by home delivery (30%), or at their dealer's home (23%). There were slight increases in the proportion of IDU who obtained heroin from a dealer's home, or by home delivery from 2005, but a decrease in the proportion of IDU obtaining heroin from a mobile dealer.

Table 4.5: Usual source person and source venue used to obtain heroin in the last six months, 2005 & 2006

Usual source person and venue		% of IDU able to answer	
		2005 (n=61)	2006 (n=53)
Person	Street dealer	11	13
	Known dealer	-	70
	Friend*	9	11
	Acquaintances	-	6
Venue	Home delivery	14	30
	Dealer's home	14	23
	Friend's home	-	4
	Mobile dealer	51	6
	Acquaintance's home	-	4
	Agreed public location	-	49

Source: IDRS IDU interviews (multiple responses allowed)
***** Includes obtained as a gift from friend

4.3 Purity

Tables 4.6 and 4.7 summarise the current purity of heroin and the changes in heroin purity over the last six months, according to IDU. In 2006, the current purity of heroin was reported by the majority of those able to answer as low (65%; 35% of entire sample), with the change in purity over the last six months being somewhat equivocal. The largest proportion of IDU (37%; 20% of entire sample) reported recent purity as decreasing, but equally substantial proportions reporting purity as stable, with a smaller proportion reporting fluctuating or increasing purity. In general, the current purity of heroin was unchanged compared to 2005.

Table 4.6: Current purity/strength of heroin, 2005 & 2006

How pure would you say heroin is at the moment?	% of IDU able to answer	
	2005 (n=61)	2006 (n=52)
High	12	12
Medium	33	12
Low	41	65
Fluctuates	15	12

Source: IDRS IDU interviews

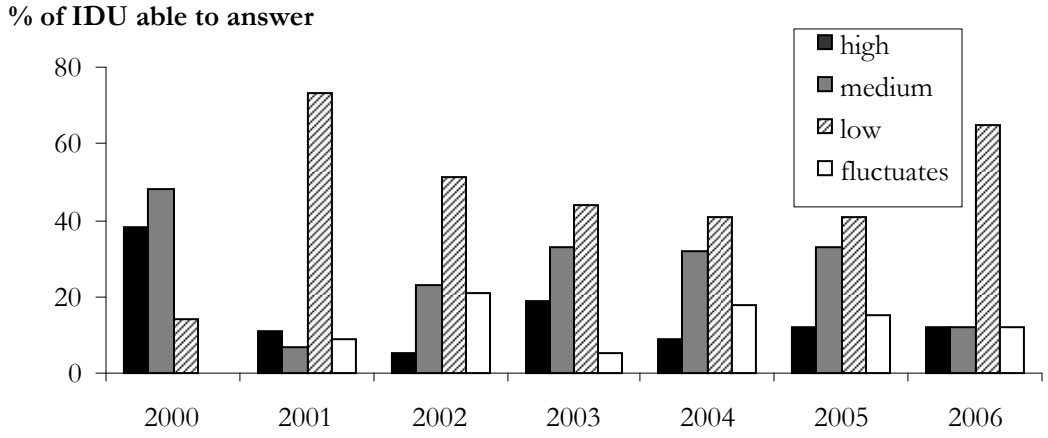
Table 4.7: Change in purity/strength of heroin in last six months, 2005 & 2006

Has the purity of heroin changed in the last 6 months?	% of IDU able to answer	
	2005 (n=61)	2006 (n=53)
Increasing	16	15
Stable	30	33
Decreasing	23	37
Fluctuating	25	15

Source: IDRS IDU interviews

Figure 4.3 shows the trend in purity of heroin, as perceived by IDU, from 2000 onward. It can be seen that the purity of heroin has not returned to pre-shortage levels, and is deteriorating.

Figure 4.3: Perception of current purity of heroin, by IDU, 2000 - 2006

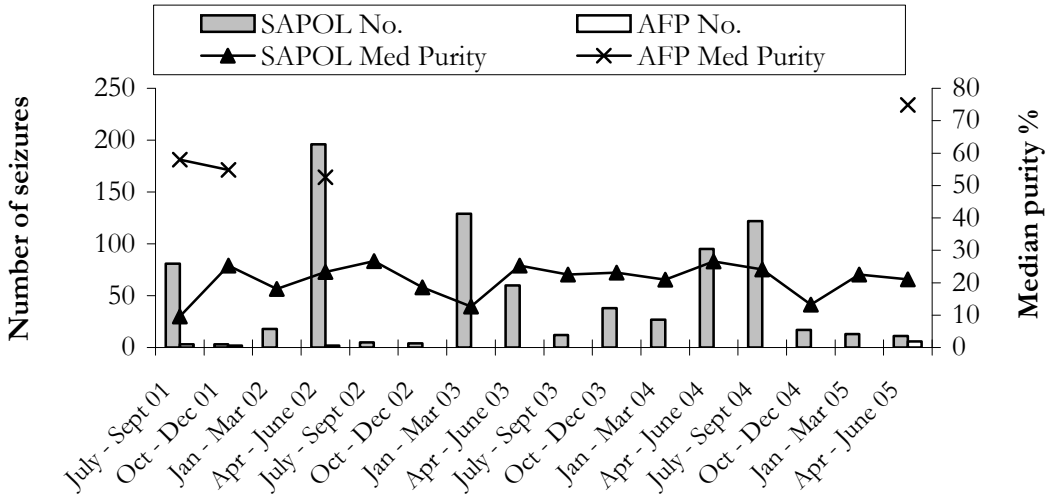


Source: IDRS IDU interviews
Note: the category 'fluctuates' was not included in 2000

The Australian Crime Commission (ACC) data were unavailable for 2005/06 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 2004/2005 (ACC, 2005). Figure 4.4 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 2001/02 to 2004/05. A small number of heroin seizures by the Australian Federal Police were analysed in 2004/2005, with a median purity of 74.9% (n=6). These seizures all weighed greater than two grams and were therefore likely to have been associated with a higher level of supply (and less 'cut') than smaller seizures. The total number of SAPOL heroin seizures analysed in 2004/05 was 163 and the median purity was 23.7%. The vast majority of SAPOL seizures analysed (n=139) were less than or equal to two grams. Despite quarterly variation, and variation in the number of seizures, the median purity of SAPOL heroin seizures has remained relatively stable across the four financial years depicted, with median purity of 22.4% in 2001/02 (n=298), 18.9% in 2002/03 (n=247), 25% in 2003/04 (n=172) and 23.7% in 2004/2005. The median purity for these years was considerably lower than that reported for SAPOL seizures in pre-shortage 1999/00 (48.3%, n=246).

The median purity of SAPOL heroin seizures in 2005/06, according to a forensic KE, appears to have decreased in the previous 12-months, with median purity of around 3 - 5% which is extremely low (lower than 2005 when it was at least 24%) Purity of SAPOL heroin seizures remains well below pre-shortage levels.

Figure 4.4: Number of heroin seizures analysed and median heroin purity in SA 2001/2002 - 2004/2005



Source: Australian Crime Commission (2003, 2004, 2005)

All KE who commented on the current purity of heroin reported that the quality remained low. One reported that the purity was so bad, "*that they are getting ripped off*", with another commenting that obtaining heroin is a "*hit and miss juggling act*". KE (n=4) reported that the quality of heroin was either medium to low, or very low. There were mixed responses regarding recent changes in purity, with two KE commenting that the purity had decreased, one believing it was stable and another that the purity had increased.

4.4 Use

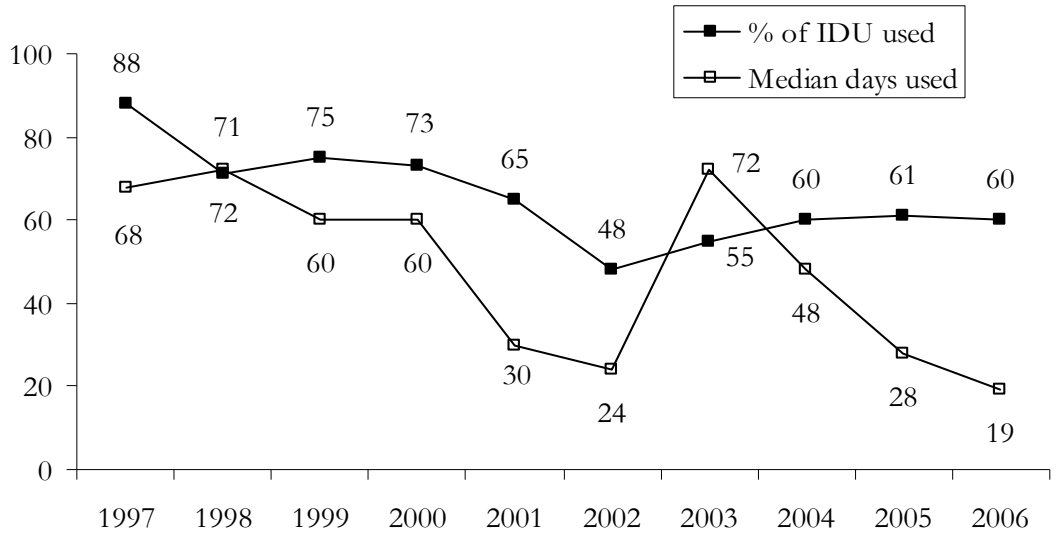
4.4.1 Heroin use among IDU

Thirty-nine percent of IDU reported heroin as the first drug ever injected, 63% nominated heroin as their drug of choice, 28% reported heroin as the drug most often injected in the last month, and 24% reported heroin was the last drug they had injected.

4.4.2 Current patterns of heroin use

Fifty-nine percent of the participating IDU interviewed in 2006 had injected heroin on a median of 14 days in the last six months (range 1–180). Compared to 2005, the proportion of the IDU that had used heroin in the last six months remained stable, at 60%. However, a decrease in the median number of days heroin was used during that time was seen (48 days in 2004, 28 days in 2005, and 19 days in 2006), continuing a decrease in frequency seen since 2003 (see Figure 4.5). This is the lowest frequency of heroin use reported since the IDRS was initiated.

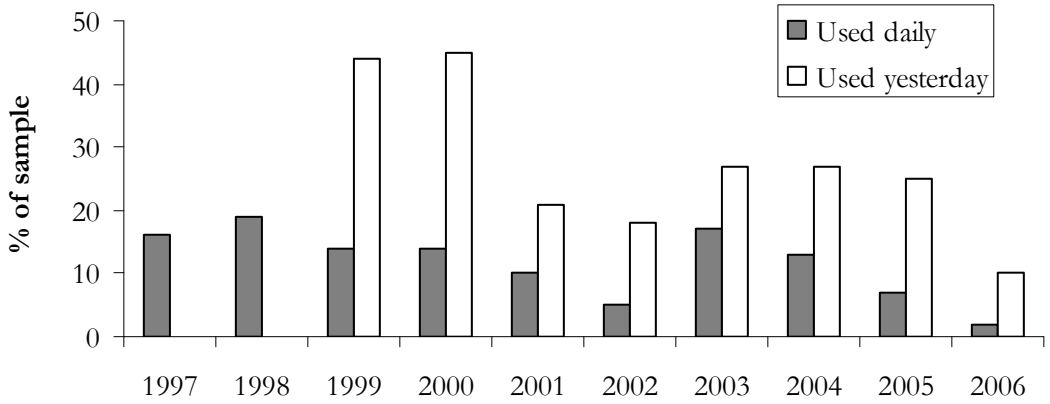
Figure 4.5: Heroin – recent* use & median number of days used#, 1997 - 2006



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

Contributing to the decrease in median number of days used was a continuing decrease in the proportion of IDU that reported use of heroin on a daily basis, from 17% in 2003 to two percent in 2006 as depicted in Figure 4.6. Although the percentage of recent heroin users remains stable (see Figure 4.5), the decrease in both parameters of frequency of use (median days used: see Figure 4.5) and % daily users: see figure 4.6) for the fourth year in a row indicates a declining trend in frequency of heroin use among this IDU population.

Figure 4.6: Heroin – % of IDU that used daily* & % used yesterday, 1997 - 2006



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

Of the 60 IDU who had used heroin in the last six months, 40% (n=24) reported heroin as the last drug that they injected. The remaining heroin using IDU reported the last drug they injected as morphine (17%, n=10), another opioid (methadone 10%, n=6; buprenorphine 12%, n=7), or some form of methamphetamine (powder 2%, n=1; base 7%, n=4; crystal 10%, n=6). These results indicate that there was an increase in 2006 in those IDU last injecting morphine (from 7% to 17%) or other opioid (methadone: from 5% to 10%; buprenorphine: from 3% to 12%). There was a decrease in those IDU last injecting some form of methamphetamine in 2006 (powder: from 5% to 2%; base: from 15% to 7%; crystal: from 15% to 10%)

Of the 63 IDU who nominated heroin as their drug of choice in 2006, 48 (76%) had used heroin in the previous six months, 34 (54%) had used morphine and 38 (60%) had used any methadone (licit or illicit). In addition, 45 IDU (71%) had used some form of methamphetamine. Compared to 2005, there was a decrease in the proportion of IDU reporting use of any methadone (from 95%), despite the number of IDU currently enrolled in a methadone treatment program remaining relatively stable since 2005.

Thirty-seven IDU 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 IDU, 18 gave reasons of drug price, purity or availability for not injecting mostly heroin. Twenty-four had mostly injected some other opioid substance (morphine, methadone or buprenorphine) in that period. The remaining twelve IDU had injected methamphetamine most, the reasons for which were mixed, with some reporting the reason as due to the price or availability of the drug (n=3), but the majority commenting on health effects or being in drug treatment (n=6). These data may indicate that IDU continue to supplement or replace their use of heroin with other opioid and non-opioid drugs.

Of the 60 IDU who had used heroin in the six months prior to interview, 37 (63%) reported use of a powder form of heroin, 50 (83%) reported using heroin rock, and three (5%) reported using 'home bake', a crude opioid substance derived from pharmaceutical preparations containing codeine (Reynolds et al. 1997). A higher proportion of heroin users reported heroin rock, compared to heroin powder, as the form they had used most in the last six months (63% v. 36%, n=58). Compared to 2005, there was no change in the proportions of IDU reporting recent use of either powder or rock heroin. There was, however, a decrease in the proportion reporting heroin rock as the form they had used most (from 76% in 2005).

Of the four KE able to comment on the form of heroin available in Adelaide, all reported heroin was rock and powder, while two also reported the rock that was available was probably, "*just powder where you cannot see the contaminants*". All KE agreed that injecting was still the most common practice, although some KE commented that users are getting younger, and those younger users, especially young Asian males and females tend to smoke heroin. Frequency and quantity of heroin use was considered to vary widely among users; however, not surprisingly, those attending treatment services were likely to be daily dependent users.

There was a general consensus among the KE that IDU were polydrug users, with heroin users commonly using a range of other drugs, particularly cannabis, tobacco and other opiates and to a lesser extent alcohol, methamphetamine 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.

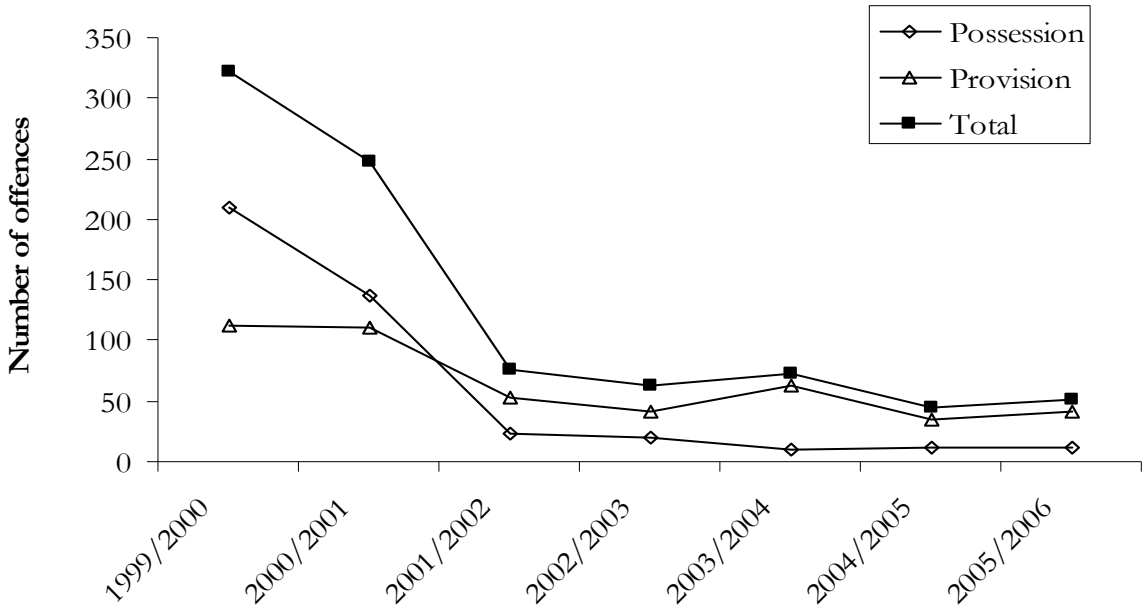
4.5 Heroin-related harms

4.5.1 Law enforcement

The total number of illicit drug-related possession and provision offences for 2005/2006 was 2,687, which is an increase since 2004/2005 (2,320 in 2004/2005, 2,985 in 2003/2004, 3,131 in 2002/2003, 3,673 in 2001/2002 and 3,864 in 2000/2001) (SAPOL Annual Reports, 2001, 2002, 2003, 2004, 2005 and 2006). In 2006, the increase in total numbers was due to an increase in all categories of offences – 'possession/use', 'import/export', 'sell/trade' and 'produce/manufacture'. 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 1999/2000 to 2005/2006 (as reported by SAPOL), is presented in Figure 4.7. As can be seen, there was an increase in the number of provision offences (from 34 to 41) for heroin from 2004/2005 to 2005/2006, while possession/use offence numbers remained the same (at 11). With regard to the trend over a longer period, however, total heroin-related possession and provision offences have remained relatively stable across the years from 2001/2002 to 2005/2006. Heroin possession and provision offences made up only 1.9% of the total number of illicit drug possession and provision offences in 2005/2006, which is the same as for 2004/2005 and similar to 2.4% in 2003/2004, and 2% in 2002/2003.

Figure 4.7: Number of heroin-related offences reported by SAPOL in South Australia, 1999/2000 - 2005/2006



Source: South Australian Police Annual Reports (SAPOL 2000 - 2006)

4.5.2 Health

Heroin overdose

Of the 95 IDU who reported having used heroin in their lifetime, 43 (45% of lifetime heroin IDU) also reported lifetime experience of heroin overdose between one and 20 times (median=2 times). Ninety-one percent (n=39) had overdosed six times or less, and the majority (56%) had overdosed once (n=16, 37%) or twice (n=8, 19%). The number of overdoses experienced across lifetime was similar to that reported in previous years (see Table 4.8).

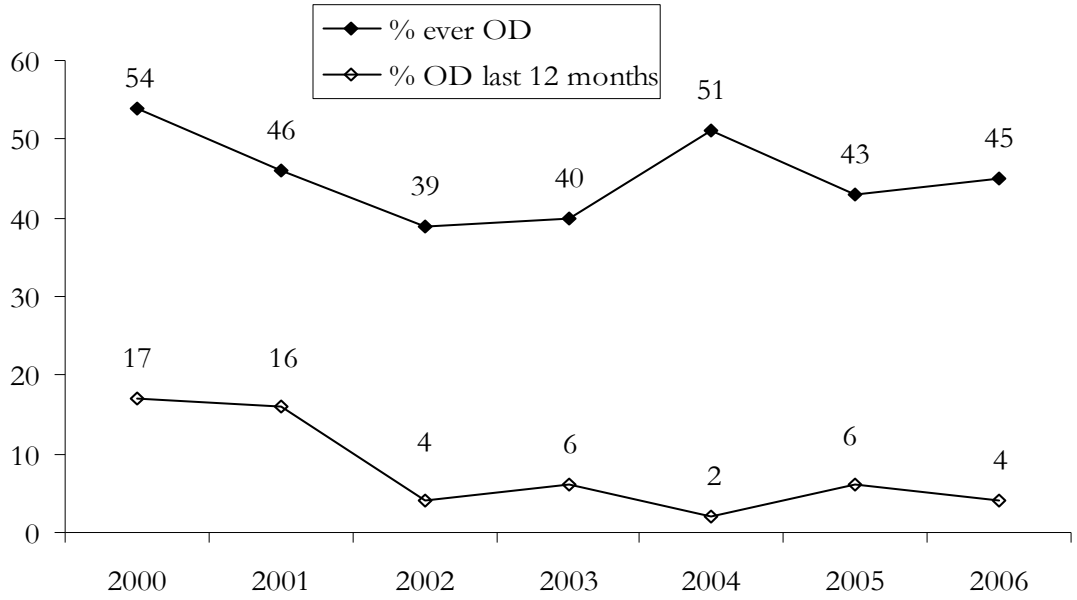
Table 4.8: Lifetime experience of heroin overdose by among the IDU reporting ever used heroin, 2000 - 2006

Heroin overdose variable	2000 (n=47)	2001 (n=40)	2002 (n=33)	2003 (n=42)	2004 (n=42)	2005 (n= 41)	2006 (n=43)
% Overdosed once	32	40	42	38	36	32	37
% Overdosed twice	26	20	21	14	21	22	19
% Overdosed 3 times or more	42	40	36	48	43	46	44

Source: IDRS IDU interviews

The long-term trend in experience of overdose across lifetime and experience of overdose in the last twelve months, among those who had ever used heroin, is depicted in Figure 4.8. As seen in the graph, prevalence of recent heroin overdose has remained stable and low since 2002, following a decrease from previous years. The prevalence of life-time experience of heroin overdose among heroin users in the IDU sample has fluctuated over the last few years, with 45% of the 2006 sample reporting lifetime experience of heroin overdose. In 2006, the median amount of time between interview and last overdose was 72 months (range 1 to 336, n=43); this length of time is longer than reported in 2005 (60 months, range 1 to 336, n=41).

Figure 4.8: Experience of heroin overdose ever and in the last 12 months, as a proportion of IDU that had ever used heroin, 2000 - 2006



Source: IDRS IDU interviews

Thirty IDU (70% of those who had experienced heroin overdose) reported having ever had the opioid antagonist naloxone (Narcan) administered for heroin overdose. Three IDU had received Narcan in the last twelve months. The median amount of time between interview and last Narcan administration was 72 months (range 6 to 336 months).

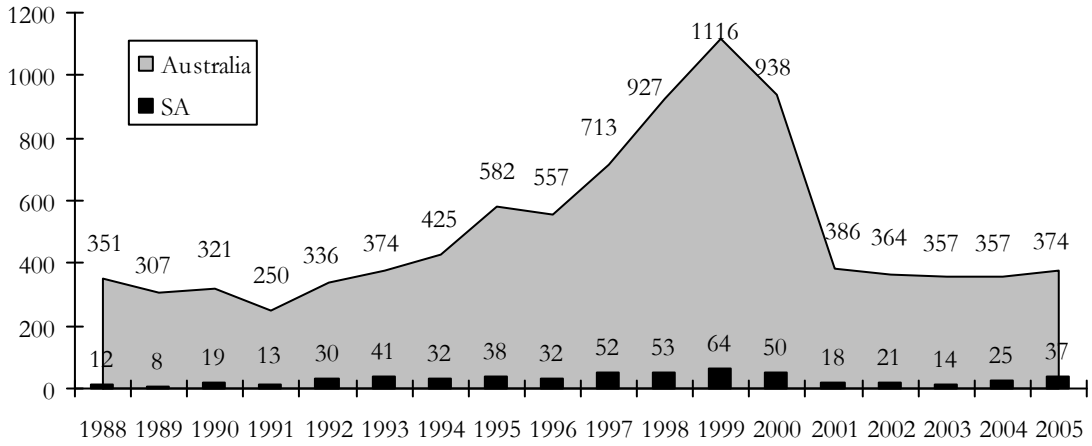
Seventy-one IDU reported having ever been present when someone else had overdosed, a median two times (range 1 - 60), the last time this occurred was a median 36 months prior to interview (range 2 months - 22 years). Twenty-four of these IDU (33%) reported witnessing someone else's overdose within 12 months of interview.

One KE commented that no increase in heroin overdose had been noted over the past year. Another KE reported that a couple of users had overdosed on a mixture of heroin and benzodiazepines.

Opioid overdose

Data regarding opioid overdose deaths upto 2005 are presented below. These data show a general plateau in opioid overdose deaths nationally from 2001 to 2005. In SA there were 37 deaths due to opioid overdose in 2005, an increase from 12 in 2004. Opioid overdose deaths in SA in 2005 accounted for 10% of the national total.

Figure 4.9: Number of accidental opioid deaths, among those aged 15 - 54 years, in SA compared to national figures, 1988 - 2005

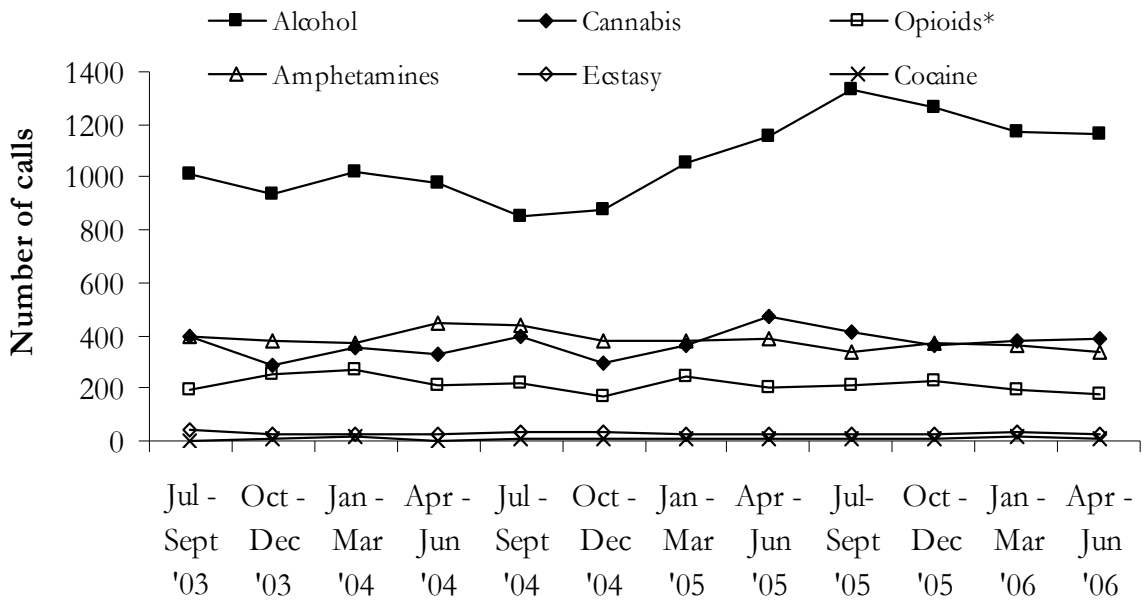


Source: Accidental drug-induced deaths due to opioids in Australia (Degenhardt & Roxburgh, 2007)

Treatment Services – ADIS

Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding any opioid substances accounted for 6.2% of the total coded telephone contacts (drug-related) in the 2005/2006 financial year (n=13,231), a similar proportion compared to previous years: 6.6% in 2004/05 (of a total 12,639), 6.9% in 2003/2004 (of a total 13,336 coded calls) and 6.3% in 2002/2003 (of a total 13,825 coded calls). Since 2004, the breakdown of number of calls per opioid substance category (e.g. heroin, methadone) has been unavailable. Figure 4.10 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 cannabis and amphetamines (in approximately equal numbers), then opioids. 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 4.10: Number of drug-related calls to ADIS per quarter, by selected drug type, Jul 2003 - June 2006



Source: SA ADIS

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

Treatment Services – DASSA

This and further 'Treatment Services – DASSA' sections in this report will present Drug and Alcohol Services South Australia (DASSA) 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, 2005), which details findings from DASSA and other non-government treatment agencies in SA.

The proportion of clients to all treatment services of DASSA, by primary drug of concern, is presented in Table 4.9 and shows that the proportion of total clients nominating heroin as their primary drug of concern has continued to decrease for the last three years (from 14.3% to 9.7%), following the increase seen from 2001/2002 to 2002/2003 (see also Figure 4.11). In 2005/2006, the proportion of total clients of DASSA nominating heroin as their primary drug of concern was lower than that for cannabis (13.2%), or amphetamines (18.8%), and substantially less than that for alcohol (51.8%).

Table 4.9: Primary drug of concern nominated by clients of DASSA as a percentage of total number of clients*, 2000/2001 - 2005/2006

Drug type	2000/2001	2001/2002	2002/2003#	2003/2004	2004/2005	2005/2006
Alcohol	40.2	42.0	44.6	47.7	48.3	**51.8**
Amphetamines	11.2	14.5	19.3	18.5	20.0	**18.8**
Heroin	16.4	10.3	18.5	14.3	12.3	**9.7**
Opioid analgesics	7.6	7.1	7.6	8.0	7.5	**6.7**
Cannabis	8.5	10.7	10.6	13.1	12.8	**13.2**
Benzodiazepines	2.0	1.9	2.6	2.3	2.4	**2.3**
Cocaine	0.2	0.3	0.3	0.1	0.4	**0.4**
Tobacco	0.1	0.2	0	0.2	0.2	**0.3**
Unknown	5.9	6.1	0	0.1	0.2	**0.2**
Buprenorphine	-	-	0.4	1.2	1.0	**1.06**
Other	7.9	6.8	1.6	1.5	1.8	**1.3**

Source: Drug and Alcohol Services South Australia

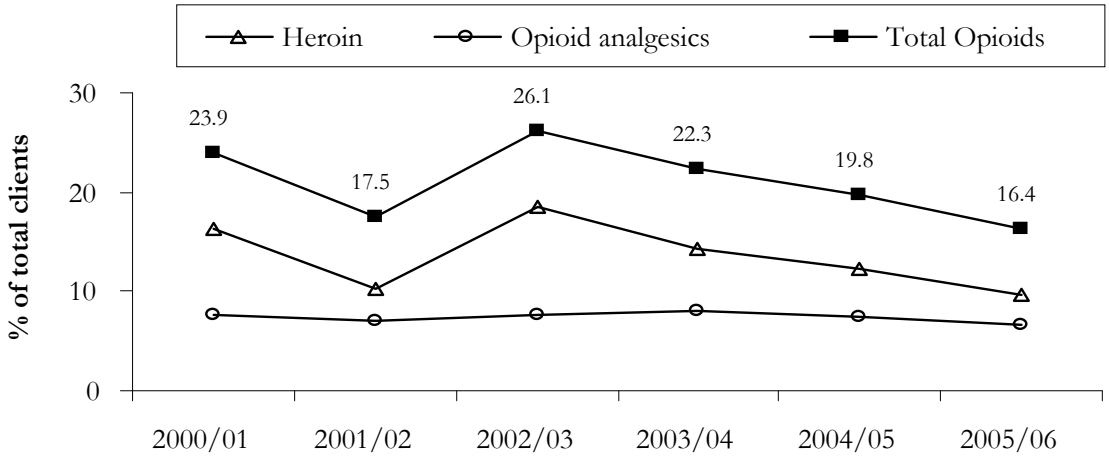
***** Total number of clients = total number of individuals

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).

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 4.11, 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 2005/2006, the proportion of clients nominating any type of opioid substance (including heroin) as their primary drug of concern was 16.4%, compared to the 'peak' of 26.1% in 2002/2003, and a decrease compared to 2004/2005.

Figure 4.11: Percentage of total DASSA clients with opioid as the primary drug of concern, 2000/01 - 2005/06*



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 4.10 depicts the number of clients (individuals) to DASSA inpatient detoxification services over the last five financial years. It can be seen that attendance to these services was by far most common for alcohol-related treatment, across all years. In 2005/2006, after alcohol, the greatest number of clients attended inpatient detox services for treatment related to amphetamines, followed by cannabis, heroin, opioid analgesics, and benzodiazepines.

Table 4.10: Number of clients* to DASSA inpatient detoxification treatment services, by primary drug of concern, 2000/2001 - 2005/2006

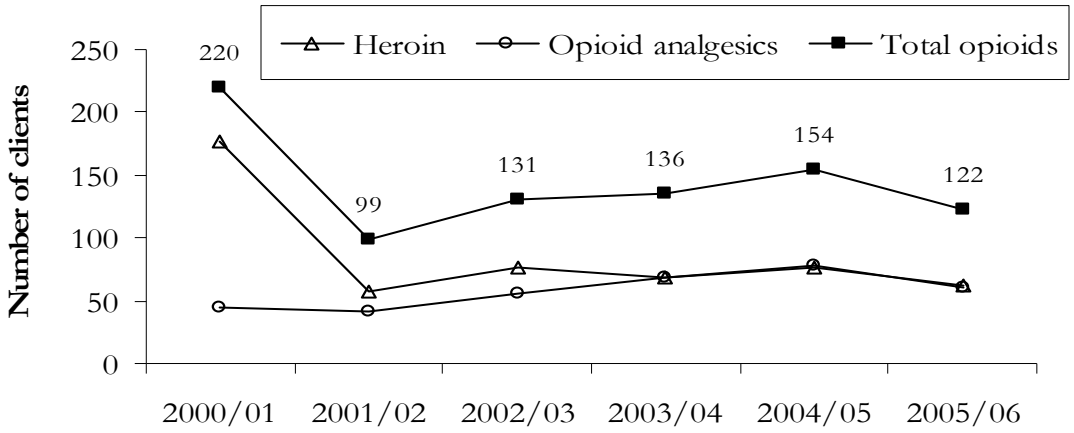
Drug type	2000/2001	2001/2002	2002/2003#	2003/2004	2004/2005	2005/2006
Alcohol	345	357	365	318	358	410
Amphetamines	121	156	154	138	130	118
Heroin	176	58	76	68	76	62
Opioid analgesics	44	41	55	68	78	60
Cannabis	56	67	76	97	109	92
Benzodiazepines	31	36	48	44	50	50
Cocaine	2	5	1	1	2	4
Tobacco	0	1	0	0	1	2
Unknown	32	37	0	0	0	-
Other	16	8	6	3	5	10
TOTAL	823	766	733	698	759	763

Source: Drug and Alcohol Services South Australia
***** Number of clients = number of individuals
# 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).
Note: 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 4.12 presents the number of clients to DASSA inpatient detoxification treatment services for heroin or opioid analgesics for the years 2000/2001 to 2005/2006. The number of clients with heroin as the primary drug of concern has remained relatively stable over the past three years, following a sharp decline from 2000/2001 to 2001/2002. In 2005/2006, there were a total of 62 clients to DASSA inpatient detoxification for heroin. The number of clients with other opioid analgesics as their primary drug, however, has increased slightly each year since 2002/2003, however, in 2006 the number of clients decreased from 78 to 60.

Though the gap between the number of inpatient admissions for heroin and amphetamines continues to narrow compared to the previous three years, there were still considerably fewer inpatient detox clients for heroin (62) compared to amphetamines (118) during the 2005/2006 year. However, when the data were analysed in terms of whether the primary drug of concern for inpatient detox clients in 2005/2006 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 (122) was similar to that for amphetamines (118) for the first time since 2003/2004.

Figure 4.12: Number of clients to DASSA inpatient detoxification treatment services per year, with heroin or other opioid as the primary drug of concern, 2000/01 - 2005/06*



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).

Opioid-related hospital admissions

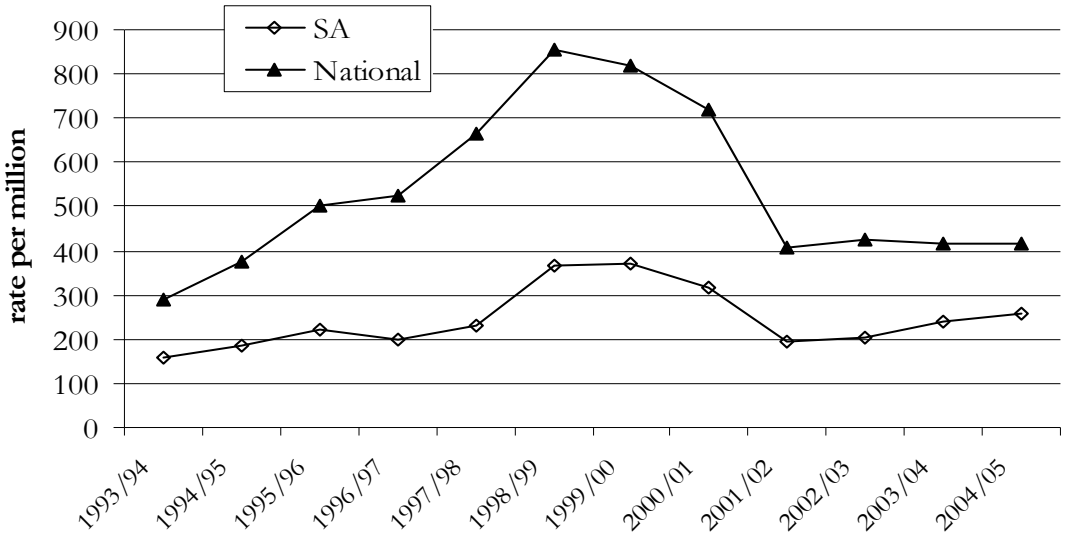
An analysis of data, provided by the Australian Institute of Health and Welfare from the National Hospital Morbidity Dataset, for the period 1993/1994 to 2004/2005 (financial years), was undertaken by NDARC. These data report on both state-specific and national drug-related hospital admissions[1] (for the four main illicit drug classes), adjusted so that all years reflect 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 ICD-10 coding for these conditions[2]. It should also be noted that this data lags behind other indicators by one year. The illicit 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 Appendix 1 – Figure A). South Australian data followed a similar pattern to national data (see Appendix 1 – Figure B), but differed in the proportions of admissions per drug type. In particular, SA had a smaller percentage of opioid- and cocaine - related admissions (51% v. 58%, and 0.2% v. 3%, respectively), and a larger percentage of amphetamine-related admissions (35% v. 22%)(as a proportion of the total number of admissions for all four drug types) than nationally.

Figure 4.13 shows 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

[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.

stable from 2001/02 to 2004/05. The total number of admissions to SA hospitals where opioid-related disorders were recorded as the primary diagnosis was 217 in 2004/05.

Figure 4.13: Rate of opioid-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1993/1994 - 2004/2005



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

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 4.11. 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 is noteworthy that alcohol accounted for by far the most attendances across all years. Attendances for heroin declined rapidly from 1999/2000 (data not shown) to 2001/2002 (at the height of the heroin shortage), with numbers remaining low and relatively stable in the years following. For other opioid there was a similar, but less dramatic, decline in the number of attendances from 1999/2000 (data not shown) to 2001/2002, which has since been reversed somewhat, so that attendances in 2004/2005 were similar to 2000/2001 levels. Interestingly, in the year prior to the heroin shortage (1999/2000), attendances for heroin were more than double those for other opioid, whereas, in the years since, attendances for other opioid have outnumbered those for heroin.

In 2006, there was a decrease in the number of attendances to the Emergency Department of RAH for amphetamines (from 91 in 2005 to 61), GHB (from 48 in 2005 to 38), benzodiazepines (from 141 to 122), and in drug-induced psychosis (from 89 to 31). Overall, in 2006 there were less total attendances to the Emergency Department (from 2,543 to 2,245).

Table 4.11: Number of attendances* to the emergency department at the Royal Adelaide Hospital, SA, from 2000/2001 - 2005/2006 (per drug or diagnosis)

	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006
Amphetamines	88	76	65	81	91	**61**
Cocaine	2	2	0	1	4	**6**
LSD	1	2	1	2	6	**3**
GHB	0	48	28	28	48	**38**
Alcohol	1,066	1,118	994	1,106	1,465	**1,409**
Cannabis	12	16	9	11	15	**13**
Heroin	121	30	38	25	30	**32**
Other opioid**	79	45	64	57	70	**68**
Benzodiazepines	201	170	138	138	141	**122**
Antidepressants	117	104	79	80	87	**55**
Drug addiction#	32	27	38	20	37	**28**
Drug-induced psychosis#	34	67	52	44	89	**31**
Drug withdrawal#	35	35	26	24	26	**19**
Other##	640	533	434	442	434	**360**
TOTAL	*2,428*	*2,273*	*1,966*	*2,059*	*2,543*	***2,245***

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 & non-medical), chemical and other toxins

4.6 Trends in heroin use

As in 2005, in 2006 the IDU comments regarding general trends in heroin use were fewer than those regarding amphetamine use, and more variable. Several IDU reported a general decrease in the use of heroin, in terms of the proportion of users primarily. A greater number reported that many IDU were moving away from heroin (and other opiates) in favour of methamphetamine.

4.7 Summary of heroin trends

Table 4.12 contains a summary of current trends in the price, purity, availability and use of heroin. Overall, the price of heroin remained stable from 2005 to 2006. Heroin was still considered 'easy' or 'very easy' to obtain by most IDU and availability was reported as stable in the preceding six months. Unlike 2005, in 2006 there was a decrease in the proportion of IDU obtaining heroin from a mobile dealer, and a concomitant increase in the proportion being supplied at the homes of dealers, or by home delivery. According to the majority of IDU, heroin purity was mainly low in 2006, with the current levels of purity perceived as stable.

The median purity of SAPOL heroin seizures, according to a forensic KE, appears to have decreased in the previous 12-months, with median purity of around 3 - 5% which is extremely low (lower than 2005 when it was at least 24%). Purity of SAPOL heroin seizures remains well below pre-shortage levels.

The proportion of IDU who reported recent use of heroin remained stable compared to 2005. There was, however, a decrease in the frequency of use of heroin for the third year in a row, following the dramatic rise in frequency seen in 2003, as indicated both by a drop in median number of days used, as well as the percentage of daily users, in 2006. Analysis of IDU that nominated heroin as their drug of choice indicated users continue to supplement or substitute their heroin use with other opioid substances such as morphine and methadone.

SAPOL data revealed that the total heroin-related possession and provision offences have increased since 2004/2005. KE provided little or no comment on street-level offending, except to say that no change in type or level of crime had occurred recently.

Similarly, experience of recent heroin overdose by IDU remained low, though up to date ABS data regarding opioid overdose were not available at the time of writing.

The proportion of opioid-related calls to ADIS remained stable. An analysis of the number of individual clients to all DASSA treatment services for heroin or opioid analgesics revealed a decrease in numbers for heroin, though opioid analgesics numbers have remained stable. A decrease was apparent in the number of clients attending DASSA inpatient (detox) services nominating opioid analgesics as their primary drug of concern, and in the number of clients attending for heroin. SA hospital emergency department data show that heroin-related attendances have remained stable while attendances for other opioid also remained stable. Both state (SA) and national hospital admissions data showed the number of opioid-related admissions were stable (as at 2004/05) and still below pre-heroin shortage levels.

Table 4.12: Summary of trends in the price, availability, purity and use of heroin

Price	
Gram	$400 ($240-$500); currently stable
Cap	$50; stable
Availability	'Very easy' to 'easy'; stable
Purity	Low; stable to decreasing (IDU)
Use	Stable re % used recently, but decrease in % of daily users, and continued decrease in frequency of use since 2003
Other indicators	Number of heroin possession and provision offences increased (SAPOL)
	No change in opioid-related calls to ADIS (ADIS)
	Trend: decrease in % total clients to DASSA services for heroin. Inpatient (detox) clients for heroin and opioid analgesics decreased (DASSA)
	Hospital admissions stable and below pre-shortage levels in 2004/05 (AIHW)

5 METHAMPHETAMINE

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 methamphetamines 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 Price

Methamphetamine – powder form

The current price of powder methamphetamine was estimated to be a median $125/gram ($50 - 200, n=8) or $50 per 'point' (range $25 - 50, n=10) by IDU. The estimated price of a gram of powder was lower than the median price paid by IDU, at last purchase ($150), but the estimated price of a point of powder was stable at last purchase, as listed in Table 5.1. The median price paid for a point of powder was $50, an increase from 2005 when the median last purchase price was $41.50 and 2004 when the price of last purchase was $27.50. The price of a gram of powder decreased in 2006, with the median price paid, at last purchase reported as $150 (from $200 in 2005, and $50 in 2004).

Methamphetamine – base form

The current price of base methamphetamine was estimated to be a median $200/gram ($100 - 450, n=15) or $50 per 'point' ($20 - 50, n=30) by IDU. The estimated price of a point of base and a gram of base was the same as the median price paid by IDU at last purchase for both these quantities (see Table 5.1). The median price paid by IDU for a gram of base was stable at $200 in 2006, and the median price paid for a 'point' of base was also stable at $50.

Methamphetamine – crystal form

The current price of crystal methamphetamine was estimated to be a median $250/gram ($200 - 900, n=10) or $50 per 'point' ($20 - 50, n=21) by IDU. The median price paid by IDU, at last purchase, for a gram of crystal was slightly lower at $215 ($150 - 250, n = 4); and, the price paid at last purchase for a point of crystal was the same as the estimated median price at $50.

Table 5.1: Price of most recent methamphetamine purchases by IDU, 2005* & 2006

Amount bought	Median price paid, $ (range)			Number of IDU purchasers		
	Powder	Base	Crystal	Powder	Base	Crystal
'Point'	50 (25 - 50) *41.50* *(25 - 50)*	50 (20 - 50) *50* *(20 -100)*	50 (25 –50) *50* *(25 - 75)*	11 *14*	11 *29*	14 *13*
Gram	150 (50 - 200) *200* *(100 - 250)*	200 (100 - 400) *200* *(100 - 300)*	# *300* *(200 - 400)*	7 *11*	11 *14*	# *10*
'Half-weight' (½ gram)	125 (50 - 200) *100* *(75 - 100)*	120 (100 - 200) *100* *(75 - 200)*	150 (100 - 250) *125* *(100 - 250)*	6 *7*	10 *17*	7 *10*
'Eightball' (3.5 grams)	# *425* *(150 – 500)*	850 (360 - 900) *500* *(450 – 900)*	# *500* *(280 – 550)*	# *8*	6 *6*	# *5*

Source: IDRS IDU interviews
* 2005 data in italics
# n<5: not reported
Note: All purchases were within six months of interview

Table 5.2 summarises the IDU reports of recent change in the price of the three main forms of methamphetamine. In 2006, the majority of IDU answering this section reported the price of all forms of methamphetamine as stable. For crystal in particular, although the largest proportion of those able to comment reported the price as stable, less IDU reported a belief that the price had increased for this form compared to 2005, with a larger majority reporting the price as stable.

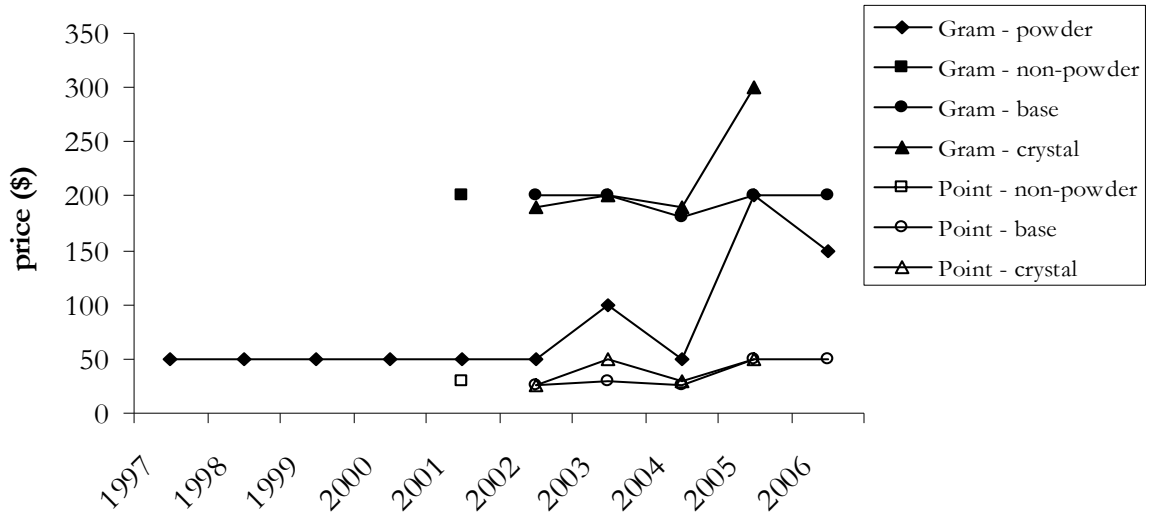
Table 5.2: Change in price of methamphetamine over last six months, 2005 & 2006

Reported price status	Powder		Base		Crystal	
	% of IDU able to answer					
	2005 (n=31)	2006 (n=25)	*2005 (n=54)*	2006 (n=45)	*2005 (n=33)*	2006 (n=29)
Don't know	7	4	9	2	9	7
Increasing	13	16	24	16	36	14
Stable	65	72	61	71	49	76
Decreasing	7	4	2	4	0	0
Fluctuating	10	4	4	7	6	3

Source: IDRS IDU interviews

Longer-term changes in the last purchase price of a 'point' or gram for the different forms of methamphetamine are depicted graphically in Figure 5.1.

Figure 5.1: Median price of methamphetamine, at last purchase, 1997 - 2006



Source: IDRS IDU interviews

Fifteen health and peer educator KE were able to provide information regarding price of methamphetamine, with ten reporting a range of prices for a 'point' from $20 to $50, and two commenting that price is also dependent on what type is bought: 'pure' or 'ice/crystal' was considered more expensive. 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. Another KE also commented that changes in price vary with whom you know (the cook), or wholesale versus retail prices. Five KE reported that price of a gram could range from $50 to $300 per gram, again dependent on the form or purity of methamphetamine. One KE reported that users are buying more by the dollar value rather than the weight, because there are weight disparities now. In agreement with IDU, nine KE (able to comment) reported that the price of methamphetamine had been stable recently, with two KE suggesting the price had increased. One law enforcement KE reported that prices seemed to have remained steady at the street level across all forms, but that there was disparity in prices of different forms at

higher level dealing and that prices had also increased at that level recently. This was reportedly due to increased costs associated with the supply of precursor chemicals.

5.2 Availability

Tables 5.3 and 5.4 summarise the current availability of the three main forms of methamphetamine and the changes in availability over the last six months, according to IDU reports. In 2006, availability of all three types of methamphetamine was reported as 'easy' or 'very easy' to obtain by the majority of IDU able to answer these sections (80% or more). Powder was considered easiest to obtain (65% reported 'very easy'; 15% of entire sample), followed by base (44% reported 'very easy'; 20% of entire sample) and crystal (37% reported 'very easy'; 10% of entire sample). In 2006, there were slightly larger proportions reporting that powder and crystal forms were very easy to obtain, and slightly smaller proportions reporting that all forms of methamphetamine were difficult to obtain. The majority also reported that availability of all forms had been stable over the last six months (around 60% of those able to answer). However, less IDU reported that powder and crystal were more difficult to obtain in comparison to 2005.

Table 5.3: Availability of methamphetamine currently, 2005 & 2006

How easy is it to get [powder/base/crystal] at the moment?	Powder		Base		Crystal	
	% of IDU able to answer					
	2005 (n=30)	2006 (n=23)	*2005 (n=53)*	2006 (n=45)	*2005 (n=32)*	2006 (n=27)
Very easy	47	65	51	44	19	37
Easy	37	26	32	47	53	44
Difficult	17	9	17	4	25	15
Very difficult	0	0	0	4	3	4

Source: IDRS IDU interviews

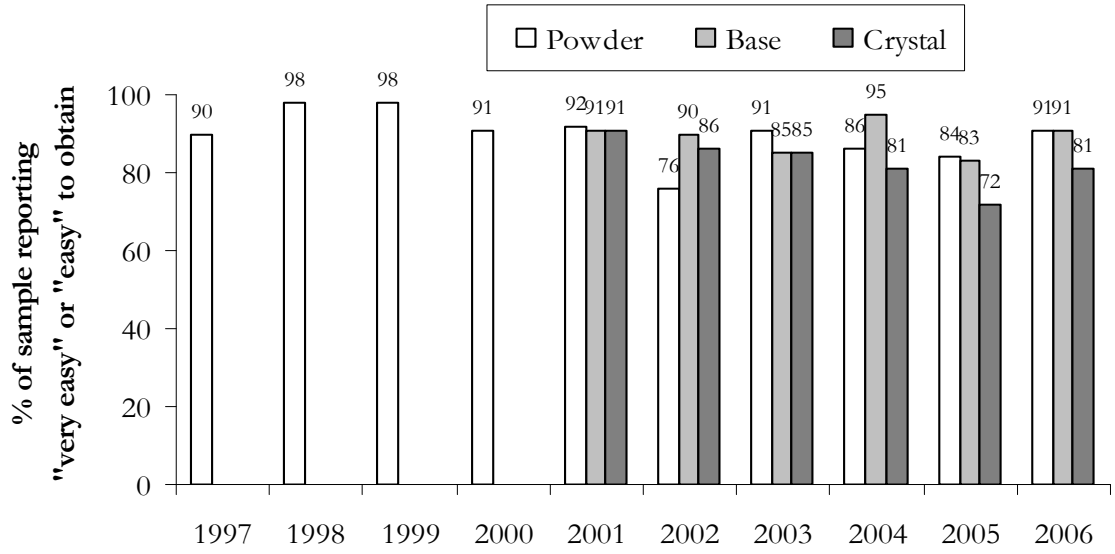
Table 5.4: Change in availability of methamphetamine over the last six months, 2005 & 2006

Has [availability] changed in the last 6 months?	Powder		Base		Crystal	
	% of IDU able to answer					
	2005 (n=30)	2006 (n=25)	*2005 (n=53)*	2006 (n=45)	*2005 (n=32)*	2006 (n=29)
Don't know	7	8	2	0	0	10
More difficult	13	8	15	20	19	7
Stable	50	64	65	58	59	62
Easier	20	16	19	11	19	14
Fluctuates	10	4	4	11	3	7

Source: IDRS IDU interviews

Figure 5.2 shows the trend in availability of methamphetamine, as reported by IDU, since 1997. 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).

Figure 5.2: Availability of methamphetamine in the last six months, 1999 - 2006



Source: IDRS IDU interviews

In 2006, IDU were asked about both the person and location that they had obtained methamphetamine which is different from 2005, therefore there are some figures missing for 2005. As can be seen in Table 5.5, in 2006, the majority of methamphetamine users reported obtaining any form of methamphetamine from friends, followed by known dealers and then acquaintances. The locations that IDU obtained methamphetamine in 2006 were either from an agreed public location or a dealer's home, followed by a friend's home. There was an increase in 2006 in the proportion reporting obtaining all forms of methamphetamine from friends and street dealers. However, there was a decrease in obtaining methamphetamine from a mobile dealer for all forms of methamphetamine.

Table 5.5: Usual source person and venue for obtaining methamphetamine in the last six months, 2005 & 2006

Usual source person and venue		Powder		Base		Crystal	
		% of IDU able to answer					
		2005 (n=29)	2006 (n=22)	*2005 (n=54)*	2006 (n=43)	*2005 (n=31)*	2006 (n=29)
Person	Street dealer	3	23	4	19	3	7
	Known dealer	-	41	-	51	-	48
	Friend*	24	50	15	58	13	55
	Acquaintances	-	36	-	19	-	28
Venue	Home delivery	10	12	4	20	13	17
	Dealer's home	28	32	35	42	36	38
	Friend's home	-	32	-	27	-	31
	Mobile dealer	31	8	35	7	29	7
	Acquaintance's home	-	20	-	9	-	14
	Agreed public location	-	40	-	40	-	38

Source: IDRS IDU interviews (multiple responses allowed)
***** Includes obtained as a gift from friend

Similar to IDU reports, the overwhelming majority of KE able to comment (n=14) reported that methamphetamine was 'easy' or 'very easy' to obtain, and that this had been generally stable recently. One KE commented that methamphetamine powder was easier to obtain than purer forms of methamphetamine (crystal). Law enforcement and forensic KE again commented on the continuing predominance of the base form of methamphetamine in the Adelaide IDU market, however; they also reported a small number of ice/crystal seizures in 2006, as well as a consistent increase in seizure of pipes used for smoking this purer form of methamphetamine. One law enforcement KE suggested that, although many IDU report using 'ice/crystal', a good 'cook' can make powder forms look like crystal, suggesting that many IDU believe they are using crystal methamphetamine where they may be actually using the powder form. This coincides with the small number of ice/crystal seizures made by SAPOL. Forensic KE commented that crystal methamphetamine had not taken off as was expected.

Information supplied by the South Australian Police indicates that the detection of clandestine laboratories in South Australia increased in 2005/06 to 48 after remaining stable for the last two years, with 38 labs detected in 2005, and 39 labs detected in 2004. Please note that these figures incorporate those laboratories that may not have been processed under South Australian legislation, but which are defined as clandestine laboratories under the guidelines for national reporting. They may, therefore, differ from figures released in the South Australian Police Annual Report.

5.3 Purity

Tables 5.6 and 5.7 summarise the current purity of the three forms of methamphetamine and the changes in methamphetamine purity over the last six months, according to IDU. As shown in Table 5.6, there were some differences reported regarding the purity of the three different forms of methamphetamine in 2006, with the trend being an increase in purity from powder to base to crystal, as would be expected. Perceived purity of powder was

mixed, with the largest proportion reporting that purity was medium (29%; 7% of entire sample), and a substantial proportion reporting purity was low or high (25%; 6% of entire sample). For base, the perceived purity was reported as high by the largest proportion of those able to answer (51%; 22% of entire sample). Crystal was reported largely as high or medium purity (by 46% and 32%, respectively). 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.

However, since 2005, there appears to have been an overall slight increase in the perceived purity of base methamphetamine. For the base form, there was an increase in the proportion reporting purity as high (from 23% in 2004 to 36% in 2005 to 51% in 2006). However, the proportion of IDU reporting crystal as high decreased from 65% in 2005 to 46% in 2006.

Table 5.6: Purity/strength of methamphetamine currently, 2005 & 2006

How pure would you say [powder/base/crystal] is at the moment?	Powder		Base		Crystal	
	% of IDU able to answer					
	2005 (n=28)	2006 (n=23)	*2005 (n=50)*	2006 (n=43)	*2005 (n=31)*	2006 (n=28)
High	21	25	36	51	65	46
Medium	21	29	34	16	23	32
Low	25	25	14	5	7	0
Fluctuates	32	21	16	28	7	21

Source: IDRS IDU interviews

Table 5.7: Change in purity/strength of methamphetamine in last six months, 2005 & 2006

Has the purity of [powder/base/crystal] changed in the last 6 months?	Powder		Base		Crystal	
	% of IDU able to answer					
	2005 (n=28)	2006 (n=25)	*2005 (n=50)*	2006 (n=45)	*2005 (n=31)*	2006 (n=29)
Don't know	4	8	2	7	10	10
Increasing	14	24	14	20	10	17
Stable	21	24	26	22	45	31
Decreasing	21	20	24	9	10	3
Fluctuating	39	24	34	42	26	38

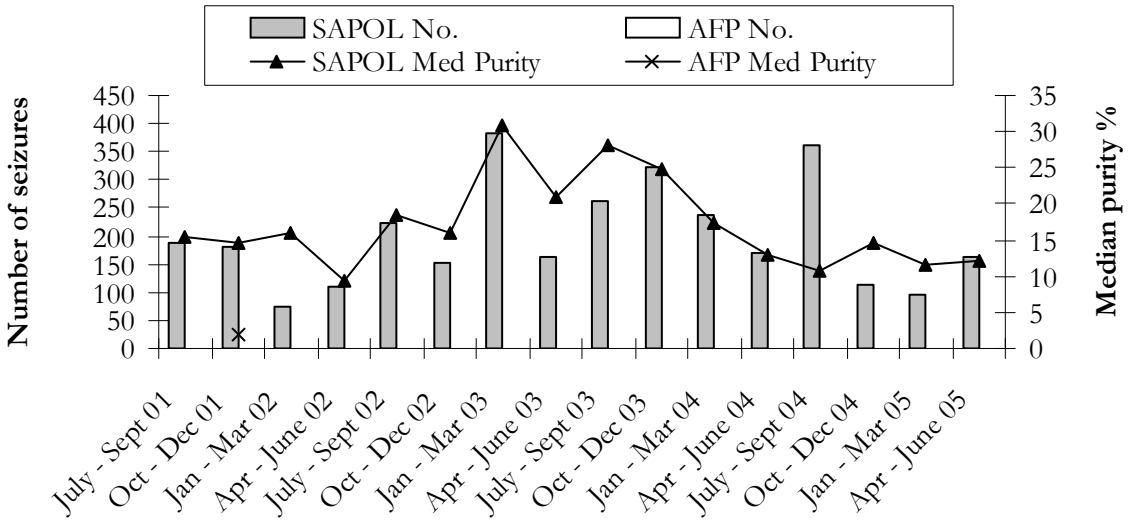
Source: IDRS IDU interviews

Twelve KE commented on purity of methamphetamine in 2006. Eight KE reported purity as high in general, with powder being lower purity, and four KE commenting that 'ice/crystal' was high quality. Three KE commented that the purity of methamphetamine was fluctuating. A peer educator KE commented that methamphetamine was fluctuating "*with some nasty side effects in some batches*", and another noted that the quality of methamphetamine was "*poor quality in the weeks following drug seizures*".

Data from the Australian Crime Commission (ACC) were unavailable for 2005/06 at the time of publication. Such data provided by the ACC relates to quarterly data on methamphetamine seizures in SA during the financial year 2004/2005 (ACC, 2005). Figure 5.3 shows the number of seizures received and analysed by the state forensic laboratory

(within the quarter depicted), and the median purity per quarter of those seizures, from 2001/02 to 2004/05. The total number of SAPOL methamphetamine seizures analysed for July 2004 to June 2005 was 735 and the median purity was 11.6%. The majority of seizures analysed (n=566) were less than or equal to two grams. Overall, the number of seizures and the median purity of methamphetamine seized by SAPOL in SA for 2004/2005 had decreased compared to the previous year, and the median purity was the lowest seen in the past four years. Specifically, median purity had decreased from 19.8% in 2003/04 (n=992), to 21.5% in 2002/03 (n=921) and to 15% in 2001/2002 (n=551). This decline in median purity began in the last three quarters of 2003/04, and may indicate the start of a trend of lower purity. Only one methamphetamine seizure by the Australian Federal Police was analysed across this timeframe and that was in 2001/2002.

Figure 5.3: Number of methamphetamine seizures analysed and median methamphetamine purity in SA 2001/2002 - 2004/2005



Source: Australian Crime Commission (2003, 2004, 2005)

5.4 Use

5.4.1 Methamphetamine use among IDU

Forty-nine percent of IDU reported amphetamine as the first drug ever injected, 13% nominated methamphetamine as their drug of choice, 31% reported methamphetamine as the drug most often injected in the last month and 30% reported methamphetamine was the last drug they injected (see Table 3.2). It should be noted that a smaller proportion of IDU first injected methamphetamine, injected methamphetamine in the last month, and reported that it was the last drug injected and nominated it as their drug of choice in 2006, when compared to 2005.

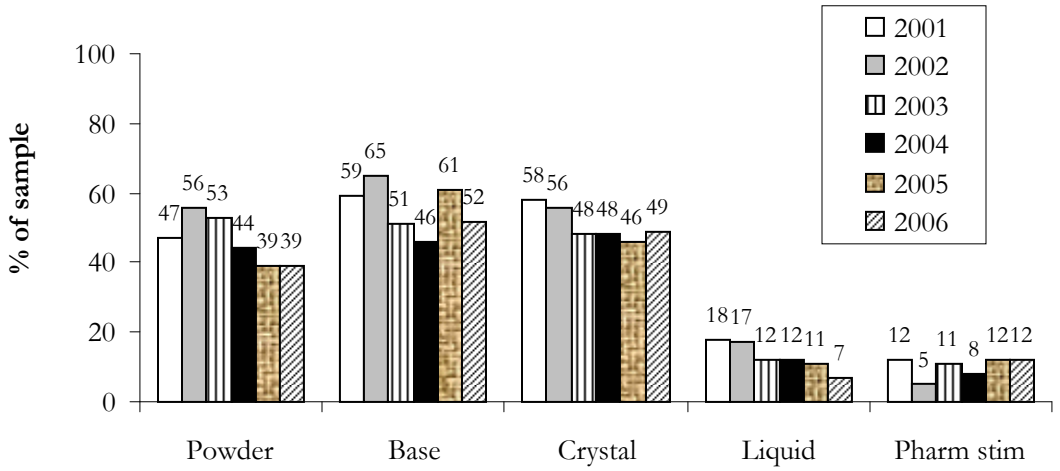
5.4.2 Current patterns of methamphetamine use

In 2006, between 39% and 52% of the participating IDU reported use of the three main forms of methamphetamine in the six months prior to interview, most reported having done so primarily by injecting (see Table 3.3). Specifically, in the last six months 39% of IDU

reported use of powder methamphetamine for a median of five days (range 1 - 180), 52% reported use of base methamphetamine for a median of ten days (range 1 - 180), and 49% of IDU reported use of crystal methamphetamine for a median of six days (range 1 -120). In addition, 7% of IDU reported use of liquid methamphetamine for a median of three days (range 1 - 48) and 12% reported use of pharmaceutical stimulants (such as dexamphetamine) for a median of 2.5 days (range 1 - 28) in the last six months.

As shown in Figure 5.4, in 2006, the proportions of the IDU sample reporting use of the powder form of methamphetamine stabilised (to a low of 39%), while the proportion reporting recent use of crystal increased slightly (from 46% to 49%). For the base form, however, there was a marked decrease in the proportion reporting recent use in 2006 (52%), following the increase seen in 2005 (from 46% in 2004 to 61%).

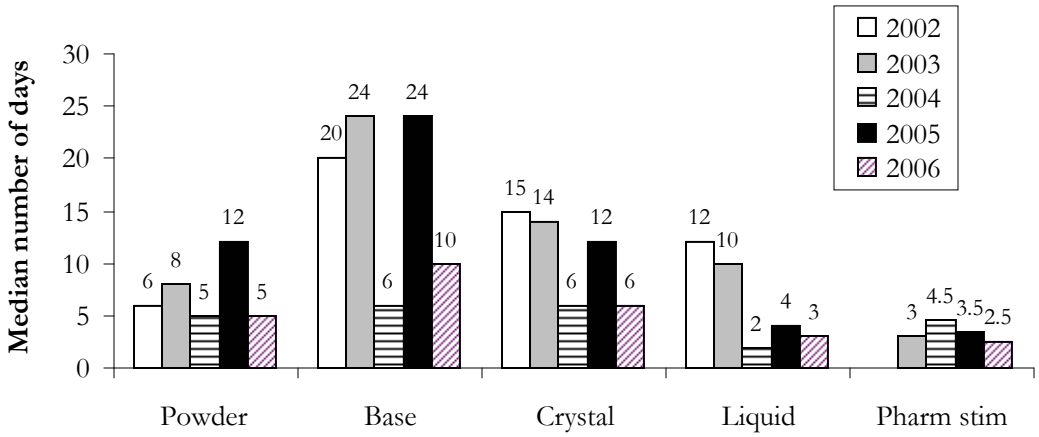
Figure 5.4: Methamphetamine – % of IDU that used in the last six months, 2001 - 2006



Source: IDRS IDU interviews
Note: 2001 was the first year to collect data on % IDU to have used each of the separate powder, base, crystal and liquid forms and pharmaceutical stimulants.

More substantial was the decrease in the reported frequency of use (as measured by median number of days used) of either powder, base or crystal forms of methamphetamine in 2006 compared to 2005 (see Figure 5.5). The largest decrease was seen in the median number of days base methamphetamine was used, from 24 to 10, among those reporting recent use of base. Decreases were also noted for the median number of days both crystal methamphetamine (from 12 to 6) and powder (from 12 to 5) were used among those reporting recent use of these forms of methamphetamine. There was also a decrease in the frequency of use of liquid methamphetamine, and a small decrease in frequency of use of any pharmaceutical stimulants (e.g. dexamphetamine), but the percentages of IDU reporting recent use of these forms was relatively small.

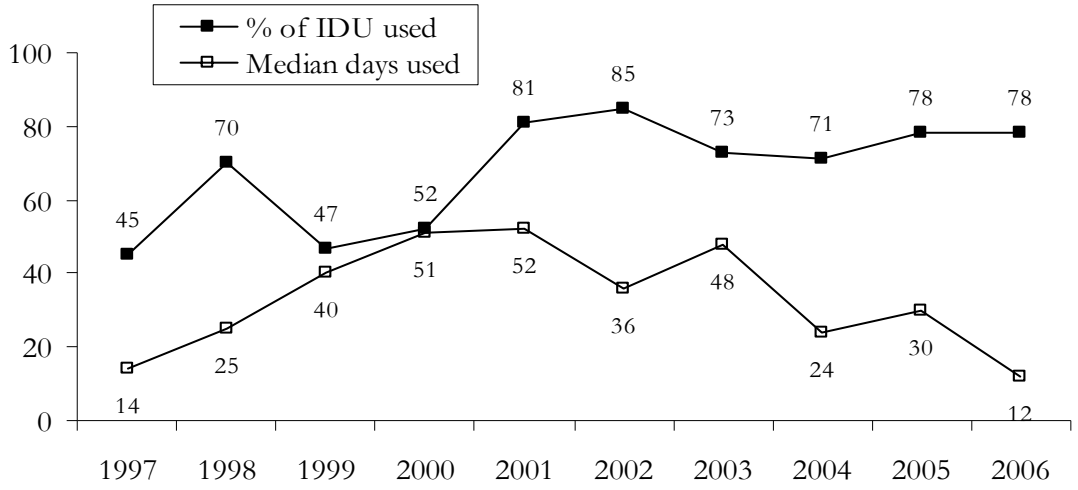
Figure 5.5: Methamphetamine – median number of days used in the last six months*, 2002 - 2006



Source: IDRS IDU interviews
***** Used by those IDU that reported use of each form in the last six months
Note: 2002 was the first year to collect data on number of days used for the separate powder, base, crystal and liquid forms, 2003 was the first year to collect data on number of days used pharmaceutical stimulants.

Overall, in 2006 eighty percent of the IDU sample had used some form of methamphetamine (powder, base, crystal, liquid or pharmaceutical stimulants) for a median of 12 days (range 1 - 180) in the six months prior to the interview. This compares with 78% of IDU reporting use of some form of methamphetamine in 2005. However, there was a marked decrease in the median number of days from 30 days (range 1 - 180) in 2005. The long-term trend in these parameters of use is depicted in Figure 5.6. As can be seen, the percentage of IDU that reported recent use of any methamphetamine has stabilised since 2001, while there was an apparent overall decline in frequency of use, despite fluctuations, during the same period.

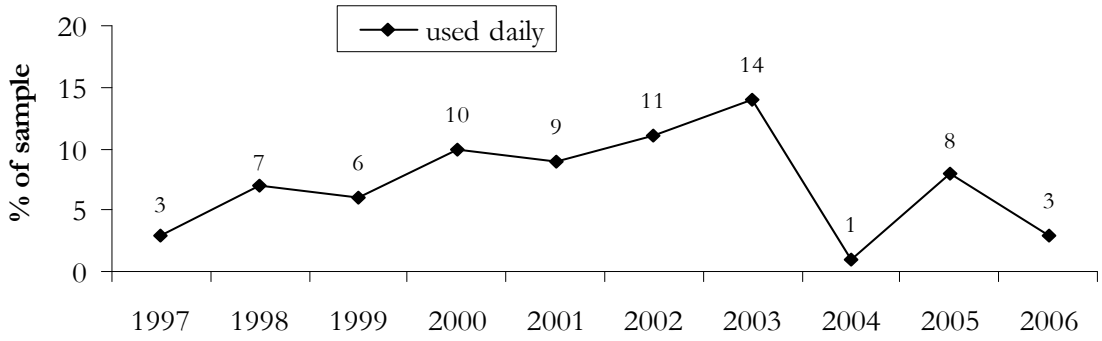
Figure 5.6: Methamphetamine – recent* use & median number of days used#, 1997 - 2006**



Source: IDRS IDU interviews
* In the previous six months;
# By those reporting use in the previous six months
****** From 1997 to 2001 refers to reported use of any amphetamine/methamphetamine; from 2002 refers to collapsed reported use of powder, base, crystal and liquid forms, and pharmaceutical stimulants (2003 to 2006 only).

Of the 80 IDU that reported using some form of methamphetamine in the last six months, only three IDU reported daily use of powder, base or crystal during that period. Compared to 2005, there was a decrease in the proportion of methamphetamine users reporting daily use of any methamphetamine (from 8% to 3%). The long-term trend for percentage of IDU using some form of methamphetamine daily is depicted in Figure 5.7, shows a small but steady increase in this parameter over past years, until the drop in 2004, with another decrease in 2006 following the increase in 2005.

Figure 5.7: Methamphetamine – % of IDU that used daily in the last six months, 1997 - 2006



Source: IDRS IDU interviews

As would be expected of an injecting drug user sample, over 76% of the IDU using each form of methamphetamine reported having done so by injecting in the last six months (more so for base and crystal forms). From 3% to 15% of methamphetamine users had used each form of the drug by swallowing in the last six months, with fewer reporting use by snorting or smoking powder and base in that time. However, there was an increase in the proportion of IDU reporting use by smoking crystal methamphetamine in 2006 (from 10% to 16%) (see Table 3.3).

Of the 13 IDU reporting methamphetamine as their drug of choice, all had used some form of methamphetamine in the last six months, two (15%) had used morphine and three (23%) had used heroin during that period. Eighty-seven percent (n=68) of IDU reporting use of *any* methamphetamine in the last six months also reported use of any opioid substance during that period.

The majority of methamphetamine users reported base as the form most used in the last six months (45%), followed by crystal (37%) and powder (17%). Compared to 2005, there was an decrease in the proportion of IDU reporting base as the form most used (58% in 2005 to 45%), and a corresponding increase in the proportions who stated that crystal (25% to 37%) was the form they used most, with powder as the form most used remaining stable (15% to 17%).

Again, in 2006 there were a variety of names reported by users to describe the methamphetamine product they were using and there was no real clarity regarding which names corresponded to which forms. That is, the terms speed, meth and crystal meth would be used interchangeably by users and could refer to any and all forms of methamphetamine. The term that was an exception to this was ice/crystal which was only used to refer to the pure crystalline form, and generally referred to a lot less frequently. Those who provided any description of what methamphetamine looked like described various forms and colours from a powder, wax, paste or crystalline substance in predominantly white, brown or clear. Several KE commented that users did not necessarily seek a particular form, just "*whatever is available*". The majority of KE commented that ice/crystal is what IDU are mainly talking about.

Injecting use dominated, though several KE mentioned that users might also snort or swallow methamphetamine. Unlike 2005, when no KE reported smoking as a route of administration of methamphetamine by users they had contact with, in 2006 nine KE reported an increase in the number of IDU smoking through ice/crystal pipes. Two KE commented that Asian IDU tended to smoke methamphetamine rather than inject.

In 2006, the majority of KE either did not comment, or reported no changes, in the frequency of use of methamphetamine by the IDU they had come in contact with over the last year. A small number of KE commented that a few heroin users seemed to be using crystal methamphetamine, rather than in 2005 where a small number of methamphetamine users were returning to heroin.

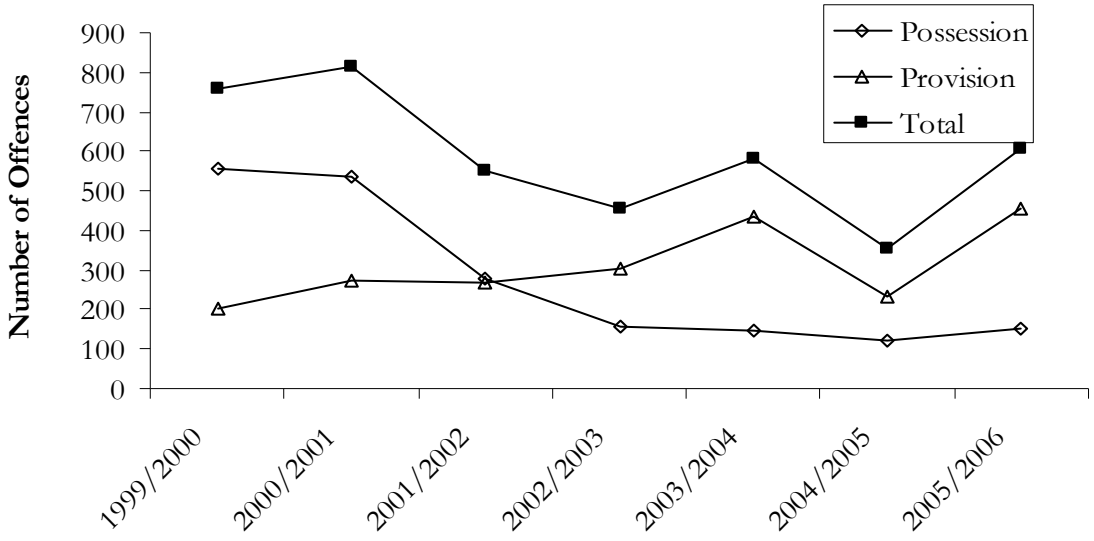
5.5 Methamphetamine-related harms

5.5.1 Law enforcement

Figure 5.8 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 1999/2000 to 2005/2006 (SAPOL Annual Reports 2000/2001 – 2005/2006). As can be seen, in 2005/2006 the number of amphetamine possession offences recorded increased from 122 to 153, and there was also a substantial increase in provision offences for amphetamines (from 234 to 454) following a decrease in 2004/2005. Amphetamine possession and provision offences made up 23% of the total number of illicit drug possession and provision offences in 2005/2006, compared to 15.3% in 2004/2005 and 19.5% in 2003/2004.

Figure 5.8: Number of amphetamine-related offences reported by SAPOL in South Australia, 1999/2001 - 2005/2006



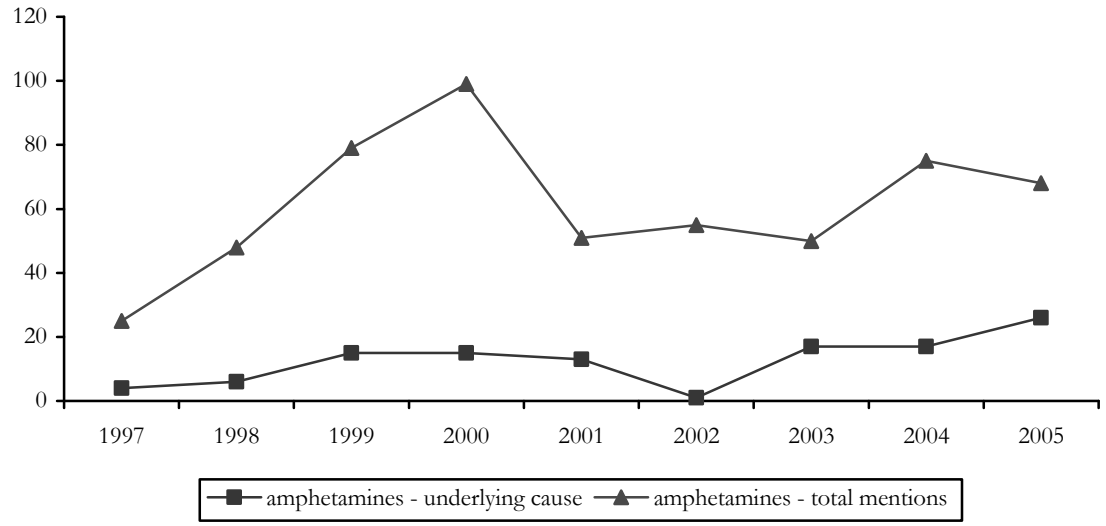
Source: South Australian Police Annual Reports (2000/2001 – 2005/2006)
Note: SAPOL Annual Reports only refer to amphetamines and does not distinguish between amphetamine and methamphetamine.

5.5.2 Health

Methamphetamine-related deaths

The figure below includes 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.

Figure 5.9: Number of accidental drug-induced deaths mentioning methamphetamine among those aged 15 - 54 years in Australia, 1997 - 2005



Source: Australian Bureau of Statistics morbidity database (Degenhardt & Roxburgh, 2007)
NB. ICD-10 uses the terminology "amphetamine" to refer to the drug class "methamphetamine". Since the vast majority of "amphetamine" in Australia is actually methamphetamine this is the term that will be used in this report.

The total number of deaths Australia-wide in which methamphetamine was mentioned was relatively stable from 2001 to 2003 with a slight decrease from 2004 (n = 75) to 2005 (n= 68).

Treatment Services – ADIS

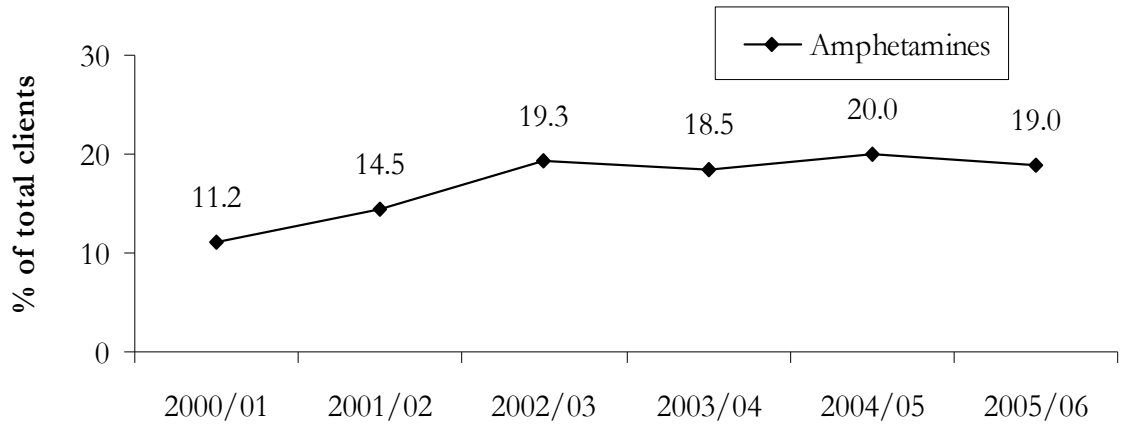
Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding amphetamines accounted for 10.7% of the 13,231 total coded telephone contacts (drug-related) in the 2004/2005 financial year, slightly lower than that for previous years: 12.5% in 2004/05 (of a total 12,639), 12% in 2003/2004 (of a total 13,336 coded calls) and 11.6% in 2002/2003 (of a total 13,825 coded calls). Figure 4.10 depicts the number of amphetamine-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 to all treatment services of DASSA, by primary drug of concern, is presented in Table 4.9 and shows that the proportion of clients nominating amphetamines as

their primary drug of concern has remained relatively stable for the last three years (see also Figure 5.10), and was 19% in 2005/2006. This follows three consecutive years of increase in the proportion of clients nominating amphetamine as their primary drug of concern. In 2005/2006, amphetamines were the second most commonly nominated primary drug of concern by clients of DASSA after alcohol (51.8%), and dominated as the most common illicit drug of concern, well above heroin (9.7%).

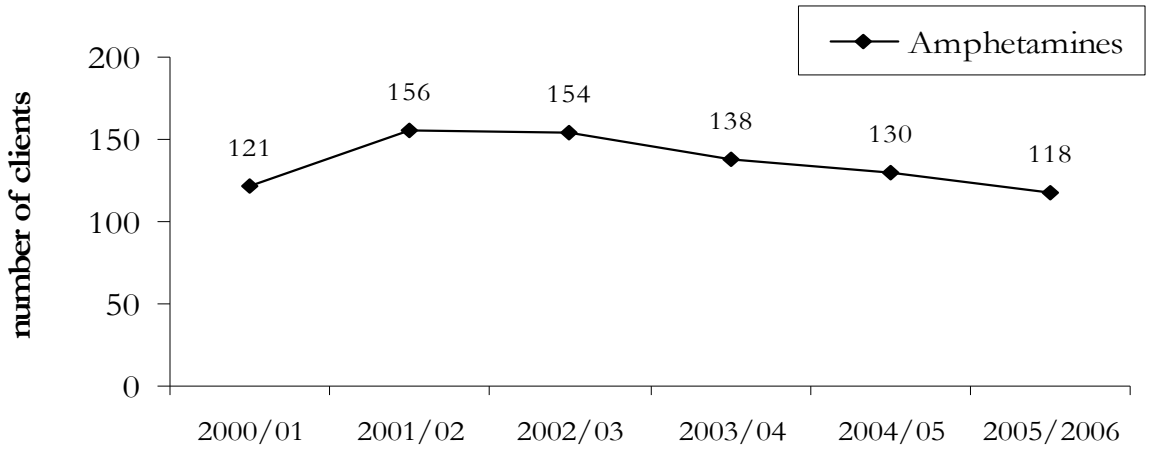
Figure 5.10: Percentage of total DASSA clients with amphetamines as the primary drug of concern, 2000/01 - 2005/06*



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 5.11 presents the number of clients to DASSA inpatient detoxification treatment services for amphetamines for each year from 2000/2001 to 2005/2006. In contrast to the stability seen regarding the number of amphetamine-related clients to all DASSA services, the number of inpatient detox clients with amphetamines as the primary drug of concern continued to decline, albeit slightly, to 118 in 2005/2006, from 130 in 2004/2005, and 156 in 2001/2002. While the numbers of clients to inpatient detox services with amphetamines as the primary drug of concern outnumbered heroin (alone) clients in 2005/2006, the combined number of total clients for heroin and other opioid substances (opioid analgesics) outnumbered them (see Section 4.1.2).

Figure 5.11: Number of clients to DASSA inpatient detoxification treatment services, with amphetamines as the primary drug of concern, 2000/01 - 2005/06*



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).

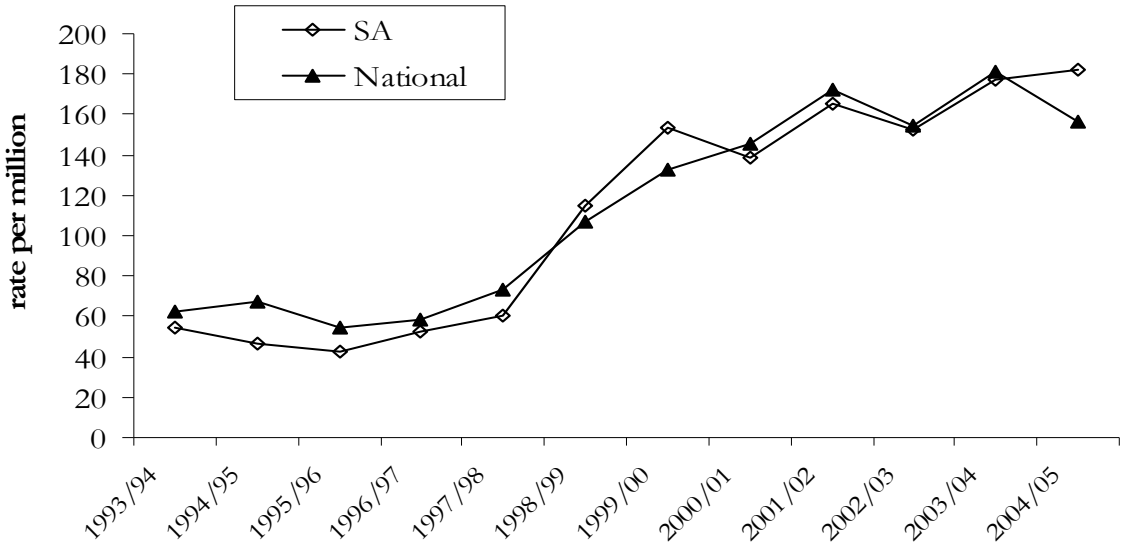
Amphetamine-related hospital admissions

An analysis of data, provided by the Australian Institute of Health and Welfare from the National Hospital Morbidity Dataset, for the period 1993/1994 to 2004/2005 (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), adjusted so that all years reflect 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 ICD-10 coding for these conditions.[2] Figures A and B (in Appendix 1) show the rates of admission to hospital in South Australia and nationally with opioids, amphetamines, cannabis or cocaine as the primary diagnosis (i.e. the drug was found (after study) to be chiefly responsible for the patient's episode of care in hospital).

Figure 5.12 shows that the long-term trend indicates that the rates of admissions to hospital in SA are increasing and in 2004/2005 this continued albeit slightly (from 150 in 2003/2004 to 154 in 2004/2005), however, nationally they decreased in 2004/2005. Readers are reminded that this figure does not include amphetamine-related psychosis or withdrawal 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.

Figure 5.12: Rate of amphetamine-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1993/1994 - 2004/2005



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

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 4.11. 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. In 2006 it can be seen that attendances regarding amphetamines have decreased (from 91 in 2005 to 61), unlike the increasing trend in the last three years. In addition, if the diagnosis 'drug-induced psychosis' is examined, it can be seen that the number of attendances with this diagnosis has decreased dramatically in the last year (from 89 to 31), with amphetamine-induced psychosis attendances likely to have contributed to this. Contrary to this, three KE working in the health field commented that there had been an increase in methamphetamine-induced psychosis, specifically relating to the use of crystal methamphetamine.

5.6 Trends in methamphetamine use

When asked about recent general trends in drug use, the overwhelming majority of IDU commenting (55% 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. A majority of IDU also commented that the frequency and quantity of use had also increased (68% of those who commented) for all forms of methamphetamine. Most did not differentiate between the different forms of methamphetamine, but several commented that this increased use referred to all forms.

In 2006 two law enforcement KE (one in CBD and one from the south) commented that there was lots of crystal methamphetamine around, with one KE commenting that such IDU "*keep an ice/crystal pipe in their mouth all day, and that their behaviour suggests this is the case*". The majority of KE (63%) commented that that IDU use of crystal methamphetamine led to an increase in aggression, and violence (even to friends of the user), and that mental health problems including psychosis resulted from constant use. As in 2005, more than one KE commented that methamphetamine use was more popular than heroin use, and that heroin users were moving to methamphetamine as an alternative.

5.7 Summary of methamphetamine trends

Table 5.8 contains a summary of current trends in the price, purity, availability and use of methamphetamine. In 2006, there has been an increase in the price of methamphetamine powder for a 'point', and a decrease in the price of the gram amount, whereas base methamphetamine prices remained stable in 2006. The price of a 'point' of crystal methamphetamine remained stable in 2006. Unfortunately, few IDU were able to comment on the price of a gram of crystal methamphetamine, and as a result figures given are suggestive rather than indicative of price. Again it was noticeable in 2006 that there were wide ranges in reported prices paid across all types of methamphetamine. KE reports were in agreement with IDU information on price.

In 2006, all forms of methamphetamine were reported as 'easy' or 'very easy' to obtain by the majority of IDU able to comment. The majority also reported that availability of all forms had recently been fluctuating. The majority of KE also reported availability as 'easy' or 'very easy' and stable. There was an increase in 2006 in the proportion reporting obtaining all forms of methamphetamine from friends and street dealers. However, there was a decrease in obtaining methamphetamine from a mobile dealer for all forms of methamphetamine.

Since 2005, there has been a slight increase in the perceived purity of base, and crystal forms of methamphetamine, though perceptions of recent change in purity have been variable. However, the base and crystal forms were still perceived as high or medium purity by the majority of those IDU able to comment. Forensic KE report that the median purity of methamphetamine seized by SAPOL in SA for 2005/2006 was around 30% (range 20 - 30%) with some as low as 10%.

The proportion of IDU reporting recent use of *any* methamphetamine remained stable, but the frequency of use of *any* methamphetamine decreased in 2006. Decreased frequency of use was noted across all main forms of methamphetamine, particularly base, although this form remains the most used type of methamphetamine by IDU. KE report that IDU are moving to smoking crystal rather than injecting, and that many IDU that are using crystal are increasing use and frequency of use.

SAPOL data revealed an increase in both methamphetamine-related provision and possession/use offences compared to 2005. There was also evidence from SAPOL data on clandestine laboratory detections that local manufacture of methamphetamine was still a contributor to the SA methamphetamine market.

Calls to ADIS in SA regarding methamphetamine were slightly less, whereas the number of clients (with amphetamines as the primary drug of concern) to all DASSA services remained stable. However, the number of clients to DASSA inpatient (detox) services with amphetamine as the primary drug of concern continued to decline, and in 2006 was at the

lowest since 2000/2001. State (SA) hospital admissions data showed the number of amphetamine-related admissions was stable (as at 2004/05). Emergency Department (RAH) attendances with amphetamine-related diagnoses decreased in 2005/06.

Table 5.8: Summary of trends in the price, availability, purity and use of methamphetamine

Price	
Powder (point)	\$50 (\$25-\$50); increased since 2005
(gram)	\$150 (\$50-\$200); decreased since 2005 Currently stable
Base (point)	\$50 (\$20-\$50); stable
(gram)	\$200 (\$100-\$400); stable since 2005 Currently stable
Crystal (point)	\$50 (\$25-\$50), stable
(gram)	(Less than five IDU commented on a gram)
Availability	Very easy to easy for all forms; stable for all forms 11.6% (ACC); decreased
Purity	Slight increase in perceived purity of base, slight decrease in the purity of crystal (IDU) Powder: equivocal; recently fluctuating Base: high; recent change fluctuating Crystal: high to medium; mainly stable but recent change fluctuating
Use	% Reporting recent use of *any* methamphetamine remained stable Decreased frequency of use of all forms, particularly base KE report that IDU are moving to smoking crystal rather than injecting, and that many IDU that are using crystal are increasing use and frequency of use
Other indicators	Increase in amphetamine possession/use and provision offences (SAPOL) Decrease in amphetamine-related calls to ADIS (ADIS) Total number of clients to DASSA treatment services for amphetamines stable, but number of clients to inpatient (detox) services continues to decline (DASSA) 2004/05 data showed amphetamine-related hospital admissions in SA remained stable (AIHW). Emergency Department (RAH) attendances decreased

6 COCAINE

Historically, relatively small numbers of IDRS IDU participants have been able to provide information with regard to the cocaine market in Adelaide. Similar to previous years, only a very small number of IDU (n=3) were able to supply information regarding the price, purity or availability of cocaine, which was reflective of the relatively low numbers of IDU that had used cocaine in the last six months (a total of eight, compared to 16 in 2005). In addition, seven KE were able to provide some information on cocaine, all as peripheral to their main interview. Despite efforts, no KE were identified in Adelaide who could nominate cocaine as the main drug used by the users they had contact with, or could nominate cocaine as their main area of expertise. Consequently, the data for price, purity and availability of cocaine in 2006 are of limited value and the following information should be viewed with caution.

6.1 Price

In 2006, the current price of cocaine was estimated by the IDU to be a median of $550 per gram (range $300 - 600, n=3). Two IDU (2% of entire sample) were able to provide information on the price of cocaine at last purchase. The median price paid for a gram of cocaine at last purchase was $400 ($300 - 600, n=2). Although these parameters of price are somewhat higher than those reported in 2005, the sample sizes in both years were too small to allow any conclusions to be drawn. In 2006, two IDU reported that the price of cocaine had remained stable over the last six months. No KE was able to provide specific information regarding price of cocaine, though three KE commented that the price of cocaine was good, with another suggesting that the price fluctuates.

6.2 Availability

Three IDU (3% of entire sample) were able to provide information on current ease of access to cocaine in 2005: two IDU reported cocaine was difficult to obtain and one reported it was easy to obtain. All of the IDU who were able to answer (n=3) reported that availability of cocaine remained stable in the last six months.

Three IDU (3% of entire sample) able to comment on cocaine price, purity and availability parameters, reported that they usually obtained cocaine from the following persons; friends (n=1), and known dealers (n=1). In relation to the location from which they obtained cocaine, one IDU reported that they usually obtained cocaine from a friend's home, and another reported the location was an agreed public location. Five KE reported that cocaine seemed to be somewhat more available in 2006, with more of it around.

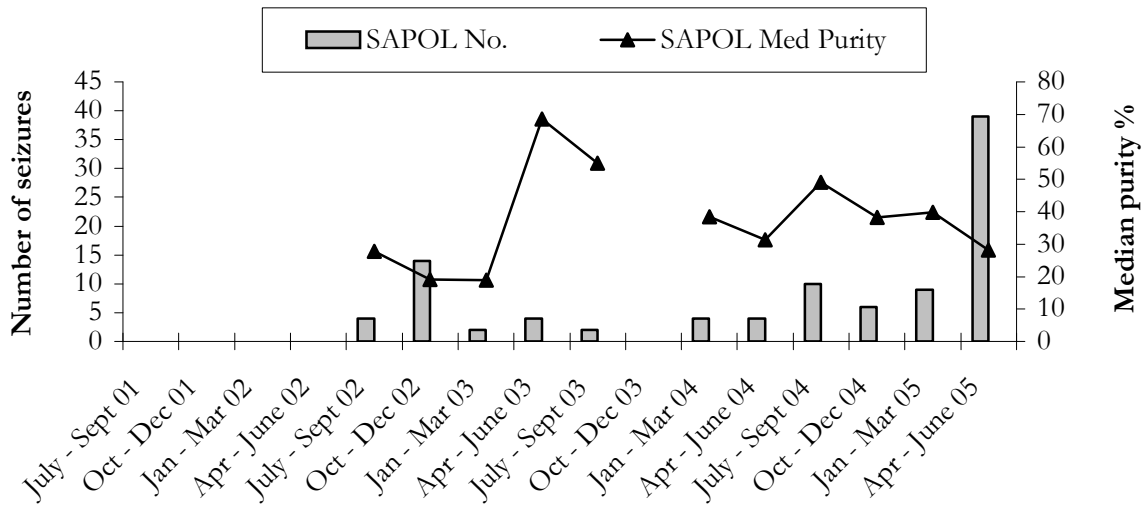
Given the relatively small sample sizes for this section in this and the previous year, no clear inference regarding trends in availability can be made. Although there was a slight decrease in the number of IDU able to provide information, it is not known whether this was an indication of the decreasing availability of cocaine to the IDU population in particular, or to the Adelaide market in general.

6.3 Purity

Of the three IDU (or 3% of entire sample) who were able to provide information on the current purity of cocaine in 2006, two perceived it as medium and the remaining one IDU reported perceived purity as low. Two IDU reported that the purity of cocaine was decreasing and one that it was fluctuating, during the past six months. Two KE reported that the purity of cocaine had increased recently and that the quality was good.

Data from the Australian Crime Commission (ACC) were unavailable for 2005/06 at the time of publication. As such data provided by the ACC relates to quarterly data on methamphetamine seized in SA during the financial year 2004/2005 (ACC, 2005). Figure 6.1 shows the number of seizures received and analysed by the state forensic laboratory (within the quarter depicted) and the median purity per quarter of those seizures, from 2001/02 to 2004/05. There were no seizures by the AFP and analysed for the time period depicted. There was an increase in the number of SAPOL seizures analysed in 2004/2005 compared to previous years. The total number of SAPOL cocaine seizures analysed for July 2004 to June 2005 was 64 (compared to 10 in 2003/2004) and the median purity was 30.7% (compared to 38.5% in 2003/04). The lack of comparable data from previous years makes meaningful analysis difficult, but it seems that purity had been stable and the number of seizures had increased in the last year.

Figure 6.1: Number of cocaine seizures analysed and median cocaine purity in SA 2001/2002 - 2004/2005



Source: Australian Crime Commission (2003, 2004, 2005)

6.4 Use

6.4.1 Cocaine use among IDU

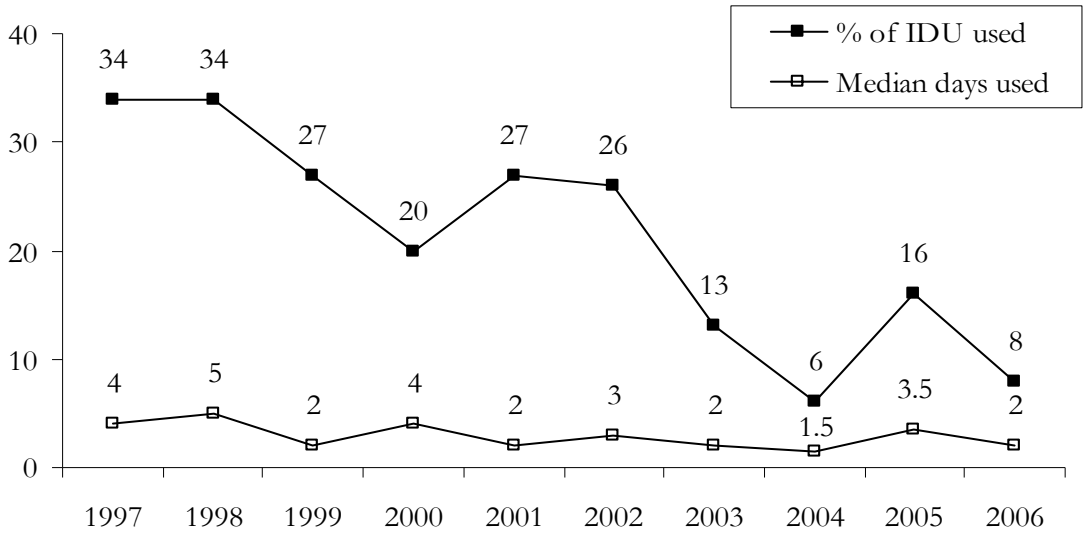
In 2006, only six of the participating IDU nominated cocaine as their drug of choice and two reported cocaine as the first drug ever injected. One IDU reported that cocaine was the last drug they had injected and the drug most injected in the last month. However, 69% of IDU

reported they had used cocaine in their lifetime and 49% reported they had injected cocaine in their lifetime.

6.4.2 Current patterns of cocaine use

Eight IDU reported using cocaine a median of two days (range 1 - 180) in the last six months, six of whom had injected cocaine in that time (median three days, range 1 - 180). Compared to the previous year, there was a decrease in the proportion of the sample that had used cocaine in the last six months (from 16% in 2005), but this number was still comparatively low compared to earlier years and low compared to other illicit drugs recently used. Over the longer-term (see Figure 6.2) the proportions of the IDU samples reporting recent cocaine use showed a steep downward trend from 1998 to a low point in 2004. While an increase was seen in 2005, the 2006 sample had returned to 2004 levels. The long-term trend regarding frequency of use has been stable and low across all years depicted.

Figure 6.2: Cocaine – Recent* use & median number of days used#, 1997 - 2006



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

Of the eight IDU that reported use of cocaine in the last six months, seven reported cocaine powder was the form they had used most during that time *(data missing for one participant)*. Two PE and a health worker commented that they had noticed a slight increase in the number of clients of their service reporting cocaine use in 2006. Several KE reported that use of cocaine among the IDU that they had contact with was generally rare and tended to be occasional and opportunistic.

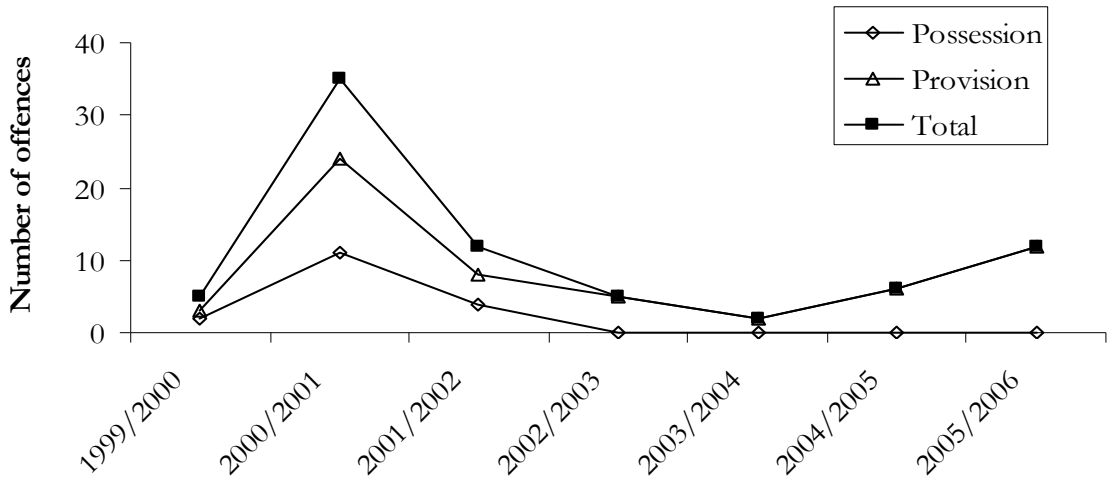
6.5 Cocaine-related harms

6.5.1 Law enforcement

Figure 6.3 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 1999/2000 to 2005/2006 (SAPOL Annual

Reports, 2000/2001 – 2005/2006). As can be seen in Figure 6.3, the number of cocaine possession offences remained at zero and the number of provision offences for cocaine doubled, although remained low (at 12 from 6 in 2004/2005) in 2005/2006. Cocaine possession and provision offences continued to make up less than 1% of the total number of illicit drug possession and provision offences in 2005/2006 (0.5%), as they have in all years depicted, despite a 'spike' in 2000/2001 (when cocaine-related offences contributed 0.9% of the total illicit drug-related offences for that year).

Figure 6.3: Number of cocaine-related offences reported by SAPOL in South Australia, 1999/2001 - 2005/2006

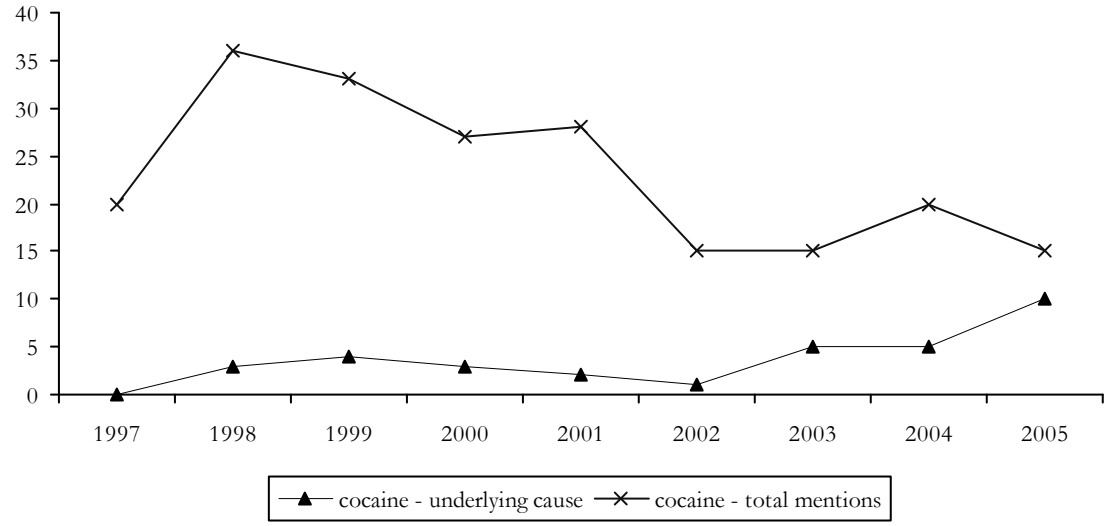


Source: South Australian Police Annual Reports (2000-2001 - 2005-2006)

6.5.2 Health

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 National data for 1997 to 2005, and are shown in Figure 6.4.

Figure 6.4: Number of accidental drug-induced deaths mentioning cocaine among those aged 15 - 54 years in Australia, 1997 - 2005



Source: Australian Bureau of Statistics morbidity database

There was a slight decrease in the total number of deaths Australia-wide in which cocaine was mentioned from 2004 (n=20) to 2005 (n=15). Ten deaths were recorded as having cocaine as the underlying cause of death in 2005, the most recorded since 1997.

Treatment Services – ADIS

Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding cocaine accounted for only 0.32% (n=43) of the total coded telephone contacts (drug-related) in the 2005/2006 financial year. Numbers of calls to SA ADIS concerning cocaine have been consistently low across the past few years; specifically, 0.32% (n=41) of coded drug-related calls in the 2004/05 financial year, 0.20% (n=27) 2003/2004, 0.25% (n=35) in 2002/2003, and 0.4% (n=50) in 2001/2002. Figure 4.10 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 to all treatment services of DASSA, by primary drug of concern, is presented in Table 4.9 and this shows that the proportion of clients nominating cocaine as their primary drug of concern has remained stable and low across all years reported. In 2005/2006 only 0.4% of clients to all DASSA treatment services nominated cocaine as their primary drug of concern. There were only four clients to DASSA inpatient detoxification treatment services in 2005/2006, similar to the low number of clients in previous years.

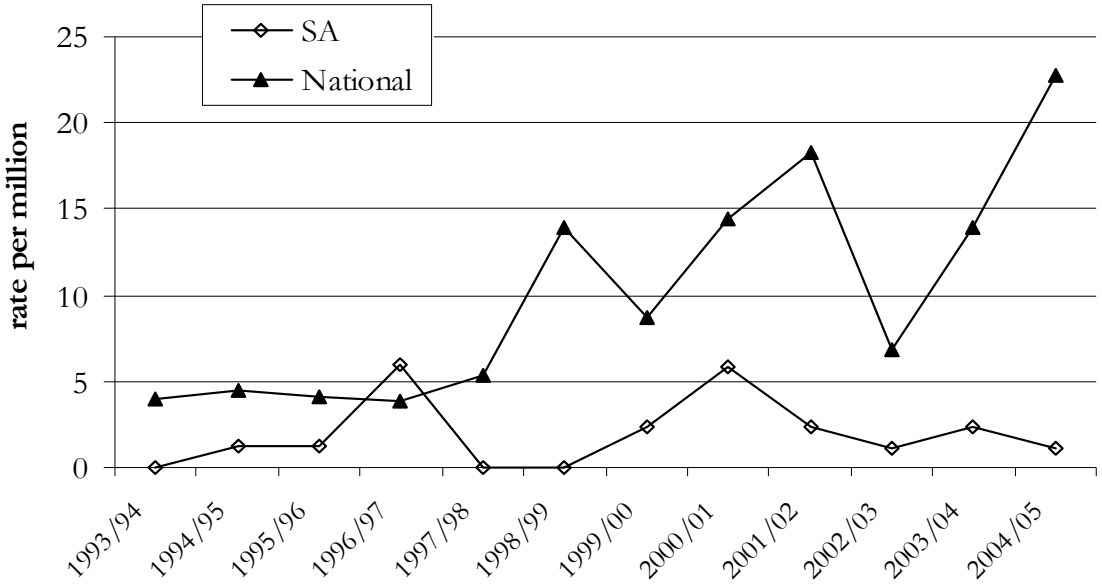
Cocaine-related hospital admissions

An analysis of data, provided by the Australian Institute of Health and Welfare from the National Hospital Morbidity Dataset, for the period 1993/1994 to 2004/2005 (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), adjusted so that all years reflect 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 ICD-10 coding for these conditions.[2] Figures A and B (in Appendix 1) show the rates of admission to hospital in South Australia and nationally with opioids, amphetamines, cannabis or cocaine as the primary diagnosis (i.e. the drug was found (after study) to be chiefly responsible for the patient's episode of care in hospital).

Figure 6.5 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 only very small numbers of admissions to hospital with a cocaine-related primary diagnosis were recorded over the time period depicted, with only one admission in 2004/05.

Figure 6.5: Rate of cocaine-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1993/1994 - 2004/2005



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

6.6 Trends in cocaine use

No IDU commented on changes in the number or type of people using cocaine or the frequency or quantity of cocaine use.

[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.

6.7 Summary of cocaine trends

Similar to 2005, only a very small number of IDU were able to supply information regarding the price, purity or availability of cocaine, which was reflective of the relatively low numbers of IDU that had used cocaine in the last six months (a total of 8). In addition, although several KE were able to provide some information on cocaine, this was limited and none could nominate cocaine as their main area of expertise. Consequently, the data for price, purity and availability of cocaine in 2006 are again of limited value.

In 2006, a decrease was seen in the number of IDU that reported recent use of cocaine (8 compared to 16 in 2005), and the frequency of use remained low (at a median of two days in the last six months), and use of cocaine in general remained well below other illicit drug use among this sample.

The small number of IDU and KE either using cocaine or able to provide information in itself indicates the lack of a sizeable and visible cocaine market in Adelaide, particularly amongst the IDU sampled by the IDRS. Indicator data, such as the number of cocaine possession and provision offences, calls to ADIS, DASSA treatment services data for cocaine, and SA hospital admissions data, also support this presumption. Data from the Australian Crime Commission (ACC) were unavailable for 2005/06 at the time of publication. The possibility that a cocaine market exists beyond the scope of this survey should not be excluded, and readers are directed to the Party Drugs Initiative findings (Weekley *et al.,* 2005b), which show a higher level of use and availability of cocaine among a sample of regular ecstasy users in Adelaide.

Due to the limited information available, a summary table of cocaine trends will not be presented and readers are again advised to view the results presented in this section with caution.

7 CANNABIS

Readers should note that in March 2003 the law in South Australia changed, introducing a prohibition on the growing (for personal use) of 'any' hydroponically grown cannabis plants and restricting the number of 'outdoor' grown plants allowable for 'personal use'.

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). IDU were therefore asked to consider these two types of cannabis separately for all questions.

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 IDU gave a single value of the average weight of cannabis bags sold in South Australia, 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.

7.1 Price

Around 62% of the participating IDU were able to provide information regarding the price of cannabis in 2006. The current price of cannabis was estimated to be a median $200/ounce of hydro (range $130 - 250, n=22) or $160/ounce of bush (range $100 - 310, n=9) by IDU. These estimations for hydro were the same as the median prices paid by IDU, at last purchase, but for bush the estimated price was slightly higher than current price as listed in Table 7.1.

There was very little difference in the reported prices 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 IDU at last purchase was $25, for either hydro (n=37) or bush (n=20). The next most commonly reported purchase was of an ounce. There was no difference in the median price paid, at last purchase, for a 'bag', half-ounce or ounce of hydro or bush cannabis. The current price for an ounce of bush cannabis was reported to have decreased in 2006 (from $200 in 2005 to $160 in 2006), with a corresponding decrease in the price of half-ounce at $90 (from $100 in 2005). Four IDU reported purchasing a cap of 'hash' oil for $25 in the last six months.

As occurred in 2005, in 2006 IDU provided more information on last purchase of hydro than of bush, indicating that IDU had purchased more hydro than bush in the last six months.

Table 7.1: Price of most recent cannabis purchases by IDU, 2005* & 2006

Amount bought	Median price paid, $ (range)		Number of IDU purchasers	
	Hydro	Bush	Hydro	Bush
'bag'	25 (25-50) *25* *(20-50)*	25 (20-25) *25* *(15-50)*	37 *36*	20 *22*
¼ ounce	50.00 (40-60) *52.50* *(50–60)*	# *50* *(35-60)*	8 *8*	# *5*
½ ounce	100 (70-160) *100* *(75-110)*	90 (50-150) *100* *(70-110)*	16 *8*	10 *10*
ounce	200 (130-250) *200* *(100-250)*	160 (100-310) *180* *(50-250)*	22 *23*	9 *15*

Source: IDRS IDU interviews
* 2005 data in italics
# n<5 not reported

The price of both hydro and bush cannabis was reported as stable over the last six months by over 66% of IDU who were able to comment (or by 48% and 26% of the entire sample, respectively) in 2006 (see Table 7.2).

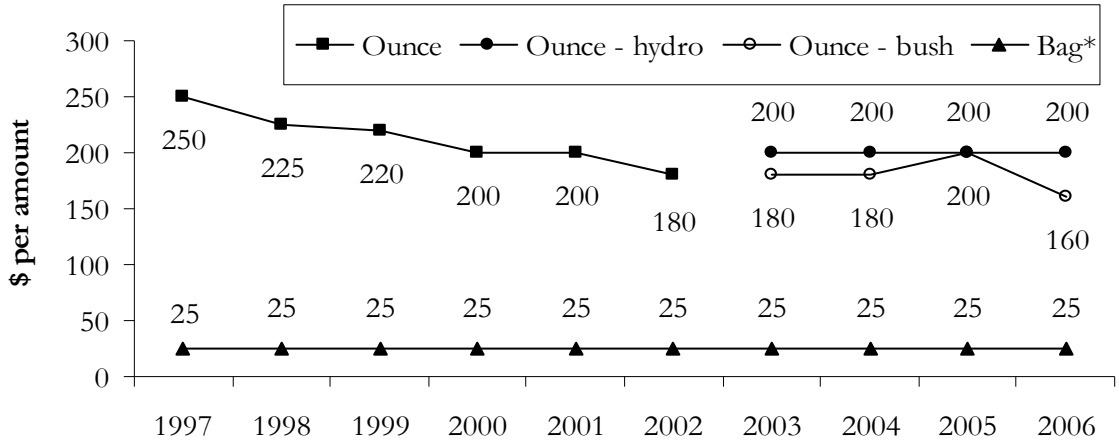
Table 7.2: Change in price of cannabis over the last six months, 2005 & 2006

Reported price status	% of IDU able to answer			
	2005		2006	
	Hydro (n=62)	Bush (n=69)	Hydro (n=62)	Bush (n=39)
Don't know	3	6	2	5
Increasing	8	8	8	3
Stable	77	73	77	67
Decreasing	3	4	2	21
Fluctuating	1	10	11	5

Source: IDRS IDU interviews

The long-term trend in the price of a 'bag' or an ounce of cannabis is depicted graphically in Figure 7.1. It can be seen that the price of these amounts of cannabis has remained very stable over the years, particularly since 2000, and although the price of an ounce of bush increased in 2005, it has subsequently decreased in 2006 to the lowest price since the IDRS was first reported.

Figure 7.1: Median price of a 'bag' or an ounce of cannabis, 1997 - 2006



Source: IDRS IDU interviews
***** Denotes either hydro or bush from 2003 to 2006

Those KE who commented reported variability in the price of cannabis, with half reporting the price of a 'bag' as $20 and the other half reporting the price as $25 over the last twelve months. However, two KE stated the belief that cannabis had become a lot cheaper and available in larger quantities than previously, with one KE commenting that the price had dropped for a pound of cannabis from $4,800 ten years ago to only $2,400 in 2006.

7.2 Availability

Tables 7.3 and 7.4 summarise the current availability of cannabis and the changes in cannabis availability over the last six months, according to IDU reports. In 2006 the majority of IDU reported both types of cannabis as 'easy' or 'very easy' to obtain, 89% (54% of entire sample) for hydro and 68% (36% of entire sample) for bush. The majority of those able to answer (77%; 48% of entire sample) reported availability of hydro was stable in the last six months. More than half of the IDU who were able to answer reported the availability of bush to be stable (54%; 21% of entire sample).

Table 7.3: Availability of cannabis currently, 2005 & 2006

How easy is it to get cannabis at the moment?	% of IDU able to answer			
	2005		2006	
	Hydro (n=59)	Bush (n=51)	Hydro (n=61)	Bush (n=38)
Very easy	48	41	38	26
Easy	36	22	51	42
Difficult	17	35	11	26
Very difficult	0	2	0	5

Source: IDRS IDU interviews

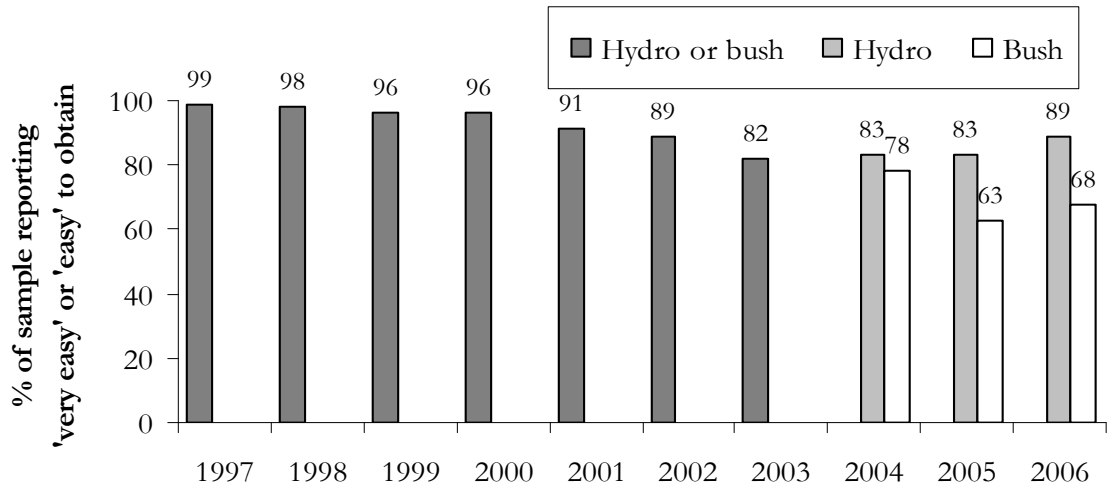
Table 7.4: Change in availability of cannabis over the last 6 months, 2005 & 2006

Has [availability] changed in the last 6 months?	% of IDU able to answer			
	2005		2006	
	Hydro (n=60)	Bush (n=51)	Hydro (n=62)	Bush (n=39)
Don't know	0	0	0	3
More difficult	15	26	10	26
Stable	64	49	77	54
Easier	12	12	8	5
Fluctuates	9	14	5	13

Source: IDRS IDU interviews

Figure 7.2 shows the long-term trend in the proportion of IDU reporting availability of cannabis as 'easy' or 'very easy', since 1997. Despite a small but steady decline to 2003, reported ease of obtainability has remained steady for the last three years, particularly for hydro (which tends to dominate in the Adelaide market), though a decrease in availability of bush can be seen in the last two years. However, one legal KE commented that some "*outdoors crops are increasing, because of the change in the law making hydroponic growers attend court, but not those who grow bush*". Of the KE providing comment on cannabis, some indicated that the availability of cannabis among the IDU that they had contact with is becoming easier. Overall, cannabis remains relatively easy to obtain in Adelaide.

Figure 7.2: Availability of cannabis in the last six months, 1997 - 2006



Source: IDRS IDU interviews
Note: From 2004 onwards, availability of hydro and bush was asked separately

Table 7.5 presents information collected from IDU on the usual source (both person and venue) from which IDU had obtained the cannabis they had recently used. In 2006 the majority of IDU able to comment reported that they had 'usually' obtained cannabis from a friend (68% for hydro, 42% of entire sample; and 77% for bush, 30% of entire sample), in the six months prior to interview.

Table 7.5: Usual source person and source venue used to obtain hydro and bush cannabis in the last six months, 2006

		% of cannabis users able to answer			
		2005		2006	
Usual source or method of obtainment		Hydro (n=60)	Bush (n=51)	Hydro (n=62)	Bush (n=39)
Person	Street dealer	3	4	10	10
	Known dealer	-	-	36	23
	Friend*	53	55	68	77
	Acquaintances	-	-	21	15
Venue	Home delivery	2	2	24	33
	Dealer's home	32	24	24	15
	Friend's home	-	-	50	54
	Mobile dealer	5	2	7	5
	Agreed public location	-	-	18	15
	Acquaintance's home	-	-	23	10
	Grew your own	3	10	5	16

Source: IDRS IDU interviews (multiple responses allowed)
* Includes obtained as a gift from friend

The remainder of the IDU reported they had 'usually' scored cannabis from some form of dealer (hydro: 61% or 38% of the entire sample; bush: 41% or 16% of entire sample). The majority of IDU able to comment reported that the venue they had 'usually' obtained

cannabis from was a friend's home (hydro: 50% or 31% of entire sample; bush: 54%, or 21% of entire sample), home delivery (hydro: 24%, or 15% of entire sample; bush: 33%, or 13% of entire sample), or a dealer's home (hydro: 24%, or 15% of entire sample; bush: 15%, or 6% of entire sample). Five percent of IDU reported they had produced their own hydro, with 16% reporting that they had grown their own bush cannabis.

Perceived source of cannabis used by IDU

IDU who had used cannabis in the past six months (and were confident to answer questions on availability of cannabis) were asked if they knew the original source of the cannabis they had used the last time they had used it. In previous years, this question did not differentiate between the two types of cannabis, but since 2005 participants have been asked to consider hydro and bush separately. As presented in Table 7.6, of the 60 IDU who reported using hydro, the majority (50%; 30% of entire sample) reported the source as a small-time 'backyard' user/grower, 13% (8% of entire sample) reported the source as a large-scale cultivator or supplier, while 30% (18% or entire sample) reported they did not know the source of the cannabis they had last used. The majority of those reporting the source of the hydro they had last used stated they were 'very sure' of this source.

Of the 37 IDU who reported having used bush, the majority (57%, 37% of entire sample) also reported that they believed the source was a small-time 'backyard' user/grower, 16% (6% of entire sample) reported that they grew their own supply, and 8% (n=3) reported the bush they had used came from a large-scale cultivator/supplier. Sixty-two percent of IDU (26% of entire sample) who commented on the production source of bush used were 'very sure' of the source.

Table 7.6: Perceived production source of cannabis (%), 2005* & 2006

	2005		2006	
	Hydro (n=59)	**Bush (n=51)**	**Hydro (n=60)**	**Bush (n=37)**
Don't know	25	20	30	19
Grew my own	5	16	5	16
Small-time 'backyard' user/ grower	58	61	50	57
Large-scale cultivator/supplier	10	2	13	8
' Very sure' of source**	93	95	97	62

Source: IDRS IDU interviews
***IDU were asked: "*Last time you used hydro/bush, as far as you know, what was the original source of that hydro/bush*?"
**** Of those who were able to state the source

Law enforcement KE reported no change in the pattern of supply of cannabis in the previous year. 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).

7.3 Potency

Tables 7.7 and 7.8 summarise the current potency of cannabis and the changes in cannabis potency over the last six months, according to IDU reports. In 2006, the strength of both hydro and bush cannabis was reported as high or medium by 84% or more of the IDU able to answer (hydro: 50% of entire sample; bush: 33% of entire sample), and largely stable, in the last six months. Compared to 2005, there was an increase in the percentage of IDU reporting the current potency of hydro and bush cannabis as 'high' in 2006, with the majority of those able to comment still reporting the strength of bush as medium or high. KE who commented agreed that the quality of hydro was high and one KE reported that the quality of hydro is increasing in strength.

Table 7.7: Current potency/strength of cannabis, 2005 & 2006

How strong would you say cannabis is at the moment?	% of IDU able to answer			
	2005		2006	
	Hydro (n=60)	Bush (n=49)	Hydro (n=61)	Bush (n=38)
High	58	29	67	39
Medium	30	57	17	46
Low	7	6	2	10
Fluctuates	5	8	15	5

Source: IDRS IDU interviews

Table 7.8: Change in potency/strength of cannabis in last six months, 2005 & 2006

Has the strength of cannabis changed in the last 6 months?	% of IDU able to answer			
	2005		2006	
	Hydro (n=60)	Bush (n=49)	Hydro (n=62)	Bush (n=39)
Don't know	3	2	7	0
Increasing	17	6	11	5
Stable	52	61	57	72
Decreasing	12	8	3	8
Fluctuating	17	22	23	15

Source: IDRS IDU interviews

7.4 Use

7.4.1 Cannabis use among IDU

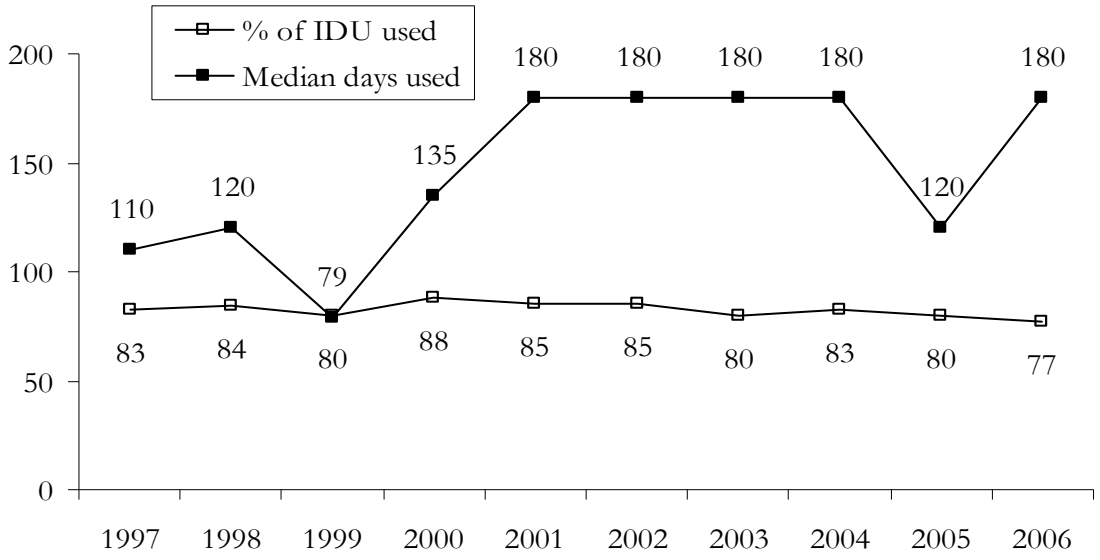
It is worth noting that because participants were recruited on the basis of their injecting drug use (rather than use of illicit drugs in general) the following data regarding patterns of cannabis use may not be typical of cannabis users in general, but specific to an IDU population. The IDRS reports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

7.4.2 Current patterns of cannabis use

Seventy-seven percent of the IDU sample reported having used cannabis a median of 180 days (range 1 - 180), during the last six months. Cannabis, though generally not the drug of choice among the IDU sample (see Table 3.2), was used commonly, with all but two IDU

reporting use of cannabis in their lifetime. This pattern of use has remained unchanged from that reported in 2005. The proportions of IDU who had recently used cannabis has remained stable across all the years that the IDRS has been conducted. Although in 2006 this was the lowest proportion of IDU reporting recent use of cannabis since the IDRS has been reported. The median number of days cannabis was used by the IDU, in the previous six months, had been stable since 2001, but although it decreased markedly in 2005 in 2006 the frequency of use returned to previous levels (see Figure 7.3).

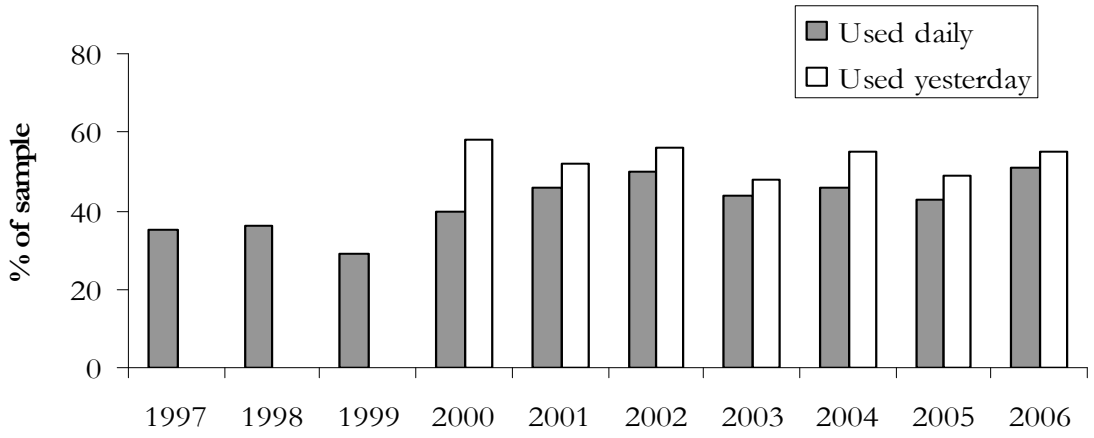
Figure 7.3: Cannabis – Recent* use & median number of days used#, 1997 - 2006



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

Fifty-one percent of recent cannabis users (n=39) stated they had used on a daily basis in the last six months and 55% (n=42) reported they had used the drug on the day preceding the interview. These proportions were similar to those reported in 2005, when 43% of cannabis users reported daily use and 49% 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 7.4).

Figure 7.4: Cannabis – % of IDU that used daily & used yesterday, 1997 - 2006*



Source: IDRS IDU interviews
***** Data for '% used yesterday' were not collected in 1997 to 1999 inclusive.

Of the 77 IDU who had used cannabis recently (in the last 6 months), 70 (91%) reported use of hydro and 57 (74%) reported use of bush, within that period. In addition, 13 IDU (17%) reported use of 'hash' (cannabis resin) and 13 (17%) reported use of 'hash oil'. A large majority of the cannabis-using IDU reported hydro as the form they had 'used most' in the last six months (83%, n=63). Sixteen percent (n=12) reported bush was the form they had 'used most', and one IDU reported that 'hash oil' was the form 'used most' in the last six months (data missing for 1 cannabis user). Apart from a small decrease in the proportions reporting they had recently used 'hash' (from 30% (n=24) in 2005 to 17%), and 'hash oil' (from 23% (n=18) in 2005 to 17%), these patterns of cannabis use were similar to those reported in 2005.

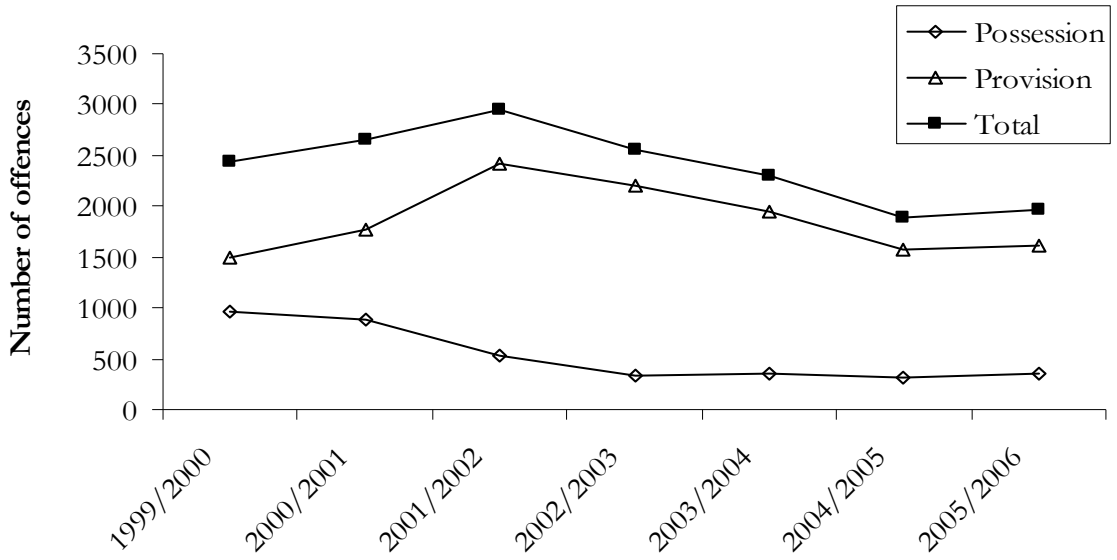
KE reported no change in the patterns of cannabis use among IDU over the previous six to twelve months, which varied from being ubiquitous and a drug used almost as commonly as tobacco, to one used particularly at comedown or as a relaxant among amphetamine users. All KE agreed that cannabis was generally commonly used among the IDU with whom they had contact.

7.5 Cannabis-related harms

7.5.1 Law enforcement

Figure 7.5 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 1999/2000 to 2005/2006 (South Australian Police Annual Reports, 20001/2002 – 2005/2006). As can be seen, the number of cannabis possession offences increased slightly, but the number of provision offences for cannabis remained stable compared to previous years. Historically, cannabis-related offences have made up the majority of illicit drug possession and provision offences and they continued to do so in 2005/2006 when 73% of the total number of such offences was cannabis-related. This proportion is similar to that seen in previous years; for example, 81.5% in 2004/2005 and 76.8% in 2003/2004.

Figure 7.5: Number of cannabis-related offences reported by SAPOL in South Australia, 1999/2001 - 2005/2006



Source: South Australian Police Annual Reports (2000-2001 - 2005/2006)

7.5.2 Health

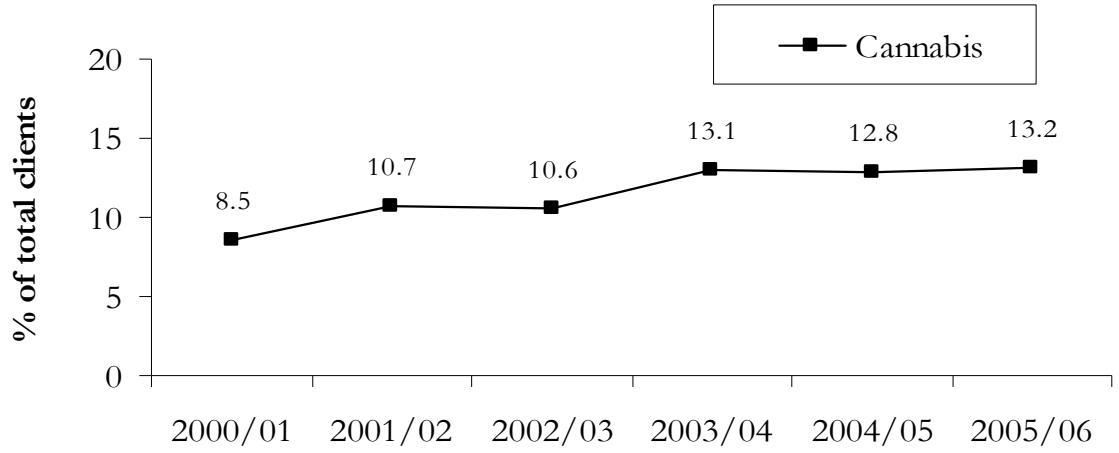
Treatment Services – ADIS

Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding cannabis accounted for 11.7% of the total coded telephone contacts (drug-related) in the 2005/2006 financial year, similar to previous years despite some small fluctuations. Specifically, 12% of the total coded telephone contacts (drug-related) in the 2004/05 financial year were cannabis related, compared to 10.3% in 2003/2004, 12% in 2002/2003 and 14% in 2001/2002. In 2005/06, the number of enquiries regarding cannabis (11.7% of total) was similar to that for amphetamines (10.7% of total) and less than a third of the number of enquiries regarding alcohol (37.3% of total). Figure 4.10 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 to all treatment services of DASSA, by primary drug of concern, is presented in Table 4.9 and Figure 7.6 and shows that the proportion of clients nominating cannabis as their primary drug of concern remained stable in 2005/2006 compared to the previous year (13.2% and 12.8%, respectively). However, the long-term trend shows a gradual increase since 2000/2001, when 8.5% of all clients nominated cannabis as their primary drug of concern. In 2005/2006, cannabis was the third most commonly nominated primary drug of concern (at 13.2% of all clients), behind alcohol (51.8%) and amphetamines (18.8%), but higher than for heroin (9.7%).

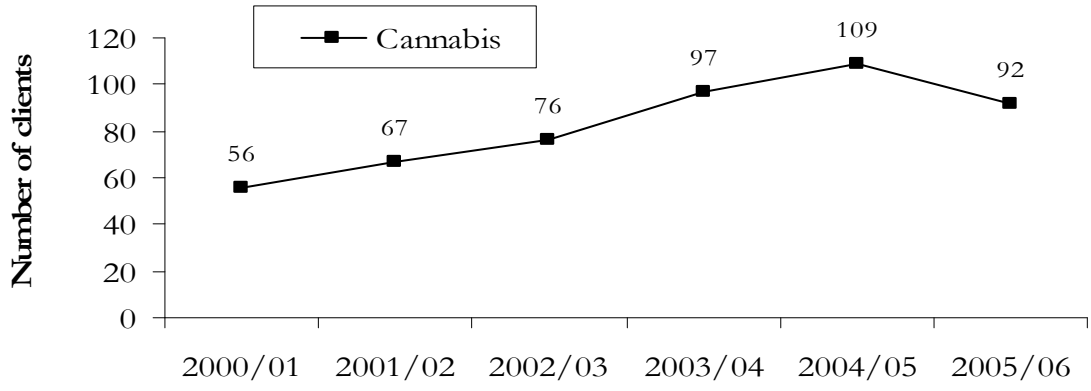
Figure 7.6: Percentage of total DASSA clients with cannabis as the primary drug of concern, 2000/01 - 2005/06*



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 7.7 presents the number of clients to DASSA inpatient detoxification treatment services for cannabis for each year from 2000/2001 to 2005/2006. In 2006, there was a decrease in the number of cannabis-related clients to all DASSA services, the number of inpatient detox clients with cannabis as the primary drug of concern has increased steadily over this time period, from 56 in 2000/2001 to 109 in 2004/2005, but decreased slightly in 2006 to ninety-two. For the third 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 amphetamines (see Table 4.11).

Figure 7.7: Number of admissions to DASSA inpatient detoxification treatment services, with cannabis as the primary drug of concern, 2000/01 - 2005/06*



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)

Cannabis-related hospital admissions

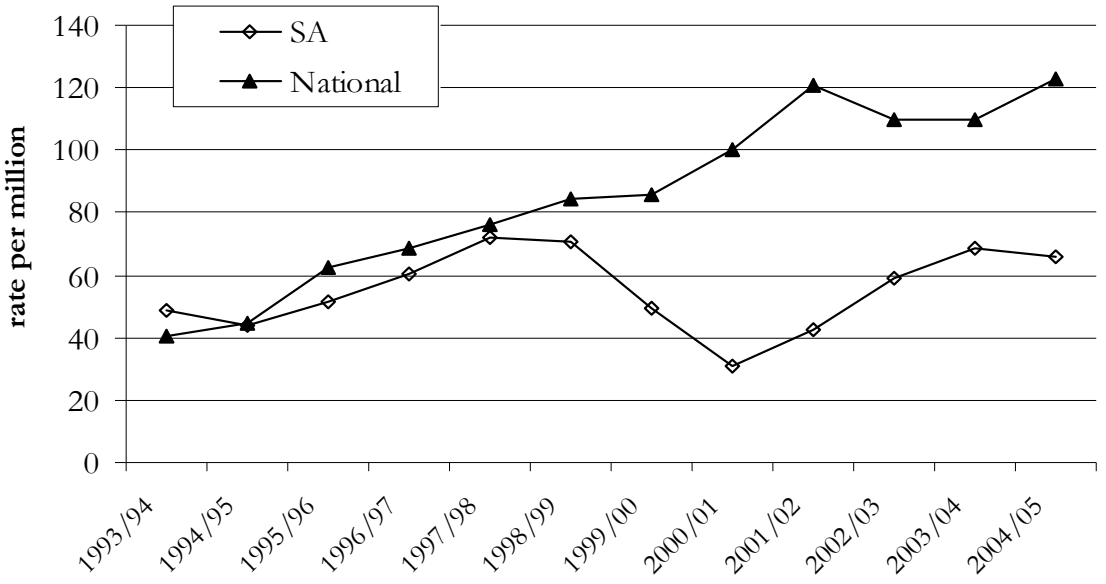
An analysis of data, provided by the Australian Institute of Health and Welfare from the National Hospital Morbidity Dataset, for the period 1993/1994 to 2004/2005 (financial years), was undertaken by NDARC. These data report on both state-specific and national drug-related hospital admissions[1] (for the four main illicit drug classes), adjusted so that all years reflect 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 ICD-10 coding for these conditions.[2] Figures A and B (in Appendix 1) show the rates of admission to hospital in South Australia and nationally with opioids, amphetamines, cannabis or cocaine as the primary diagnosis (i.e. the drug was found – after study – to be chiefly responsible for the patient's episode of care in hospital).

Figure 7.8 shows that 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 1993/1994 to 2004/05. Both SA and national rates were similar until a divergence in 1999/2000, with the national rate continuing to rise and the SA rate declining for two years. However, the SA rate of cannabis-related admissions to hospital had increased for the last three years to 2003/2004, but remained stable in 2004/2005. There were a total of 56 admissions to SA hospitals with a cannabis-related primary diagnosis in that year. Readers are reminded that this figure does not include cannabis-related psychosis or withdrawal 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.

Figure 7.8: Rate of cannabis-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1993/1994 - 2004/2005



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

7.6 Trends in cannabis use

One IDU commented that there was a perceived increase in the number of older people using cannabis, and an increase in the amount of cannabis used. One IDU reported that IDU are moving from cannabis to methamphetamines.

All KE agreed that IDU cannabis use was common and for many was considered a staple or "*part of life*".

7.7 Summary of cannabis trends

Table 7.9 contains a summary of current trends in the price, purity, availability and use of cannabis. Overall, there has been little change in these parameters since 2005.

In 2006, the median price paid for hydro cannabis was $200 an ounce and bush cannabis was $160 an ounce, and $25 a 'bag' for either hydro or bush. With the exception of a decrease in price of an ounce of bush (down from $200 in 2005), the price of these quantities has remained stable since 2005, with the majority of IDU reporting that the price of cannabis had remained stable in the past six months. Among the IDU able to comment, the majority (over 67%) perceived both hydro (89%) or bush (68%) cannabis as 'very easy' or 'easy' to obtain, and half or more (hydro: 77%; bush: 54%) reported that availability had been stable in the previous six months. The majority reported scoring the cannabis they had used last from a friend, the venue they had scored from was a friend's home and that they believed the source had been a small-time 'backyard' user/grower. Eighty-three percent or more also

perceived the potency of either hydro (84%) or bush (85%) as high or medium and over half reported that the potency had been stable recently.

Cannabis, though generally not the drug of choice among the IDU sample, was used commonly, with all but two IDU reporting use of cannabis in their lifetime. The proportions of IDU who had recently used cannabis had actually decreased in 2006, despite being stable across all the years the IDRS has been conducted. However, frequency of use of cannabis increased to similar levels in 2006, despite decreasing markedly in 2005 (to a median 120 days), following four years of stability (at a median 180 days). Seventy percent of cannabis users reported they had used hydroponically grown cannabis in the last six months, with 57% reporting use of bush in the same period.

The number of cannabis possession offences recorded by SAPOL in 2006 increased slightly, but the number of provision offences for cannabis remained stable compared to previous years.

The number of calls to ADIS concerning cannabis remained stable, as did the total number of clients to DASSA treatment services; however, the number of clients attending inpatient detox services of DASSA decreased in 2005/2006. Cannabis-related hospital admissions in 2005/2006 remained relatively stable at 13 compared with 15 admissions in 2004/2005 (see Table 4.11).

Table 7.9: Summary of trends in the price, availability, purity and use of cannabis

Price	
Hydro (ounce)	$200 ($130 - 250); no change since 2005
(bag)	$25 ($25 - $50); no change since 2005
	Currently stable
Bush (ounce)	$160 ($100 - 310); decrease since 2005
(bag)	$25 ($20 - 25); no change since 2005
	Currently stable
Availability	'Very easy' to 'easy'; stable (both hydro and bush)
	Majority reported scoring from friends (IDU)
Potency	High to medium (both hydro and bush); stable (IDU)
Use	% reporting recent use decreased
	Frequency of recent use (median days used last 6 months) increased
	Hydro remained the most used by large majority
Other indicators	Possession offences increased slightly, and the number of provision offences for cannabis remained stable compared to previous years (SAPOL)
	Calls to ADIS stable (ADIS)
	Total clients to DASSA treatment services stable, but inpatient detox client numbers increased (DASSA)
	Hospital admissions remained stable at about 2004/05 levels (AIHW)

8 OPIOIDS

It should be noted that, in the following sections, the terms 'licit' and 'illicit' refer to the source of supply of the drug, not the way in which it was used. That is, obtainment or use of a drug was considered 'licit' when the supply was from a person's own prescription only, and 'illicit' if the supply was from any other source (e.g. a friend's prescription supply or a black-market supply).

8.1 Overview of opioid use among IDU

Table 3.3 provides data on the history of use and route of administration of opioid substances for the 2006 IDU 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. In 2006 IDU were also asked about their use of Suboxone, but as no IDU had used this drug illicitly this will not be discussed

Heroin was the opioid used by the largest proportion of the IDU sample (60%) in the last six months, followed by morphine (51%) either licit or illicit methadone (47%), either licit or illicit buprenorphine (30%), and either licit or illicit oxycodone (22%). Heroin use among IDU is described in detail in Section 4.4, with use of other opioids described in Sections 8.2 (morphine), 8.3 (methadone), 8.4 (buprenorphine), 8.5 (oxycodone) and 8.6 (other opioids), following.

When all the opioid substance categories (heroin, morphine, homebake and other opioids, plus oxycodone, any methadone or buprenorphine) were collapsed, it was evident that 90% (n=90) of IDU had used some type of opioid substance (including licit and illicit use) in the six months prior to interview. When licit use (of methadone, buprenorphine or oxycodone) was excluded, 86% (n=86) had used any of these substances in that time. Excluding heroin, 87% (n=87) of IDU had used some other opioid substance in the six months prior to interview.

KE reports of other opioid use were primarily within the context of heroin-using IDU and reflected a perception that users were continuing to use other opioids to substitute or supplement their heroin use. Most KE commented that use of other opioids was common among this group, but a few commented that this use only occurred if heroin was unavailable. One KE reported that use of opiates other than heroin (particularly morphine) was common in southern Adelaide (where they believed heroin was still difficult to access), whereas another KE in the south commented that the use of heroin had increased in the past year. One KE from the western area of Adelaide reported that heroin was generally used exclusively by IDU and its use was increasing, with another KE commenting that the use of other opiates was common by the IDU they had contact with. Several KE from the eastern area of Adelaide commented that there had been a decrease in the number of heroin users among the IDU they had contact with and that many were moving to other drugs (for example, ice/crystal).

8.2 Morphine

2006 was the fourth year that IDRS survey participants were asked to provide information on the price and availability of illicit morphine and the first year that IDU were asked to provide information on licit morphine.

8.2.1 Price

Slightly more IDU could comment on the price of morphine in 2006 (n=33) compared to 2005 (n=20). In 2006, 33 IDU estimated that the 'current' price of morphine was a median $30 per 100mg (range $7.50-50 per 100mg). This was the same as had been reported in 2005, and was the same as the median price paid by IDU at last purchase of 100mg of Kapanol®. The median price paid for 100mg of MS Contin at last purchase was $30, an increase from 2005 (see Table 8.1). In addition, 100mg (in tablet form) was the most commonly purchased amount. In 2006, MS Contin was the most commonly purchased brand of morphine, unlike 2004 and 2005 when Kapanol was the most commonly purchased brand of morphine. In 2006, 63% of those able to comment (25% of entire sample) reported price of morphine as stable, but a further 13% (7% of entire sample) reported price as increasing recently (see Table 8.2).

Table 8.1: Price of most recent morphine purchases by IDU, 2005* & 2006

Amount bought	Median price paid, $ (range)	Number of IDU purchasers
MS Contin® – 60mg	15 (10-30)	9
	#	#
MS Contin® – 100mg	30 (15-50)	16
	25 (20-35)	*9*
Kapanol® – 50mg	#	#
	#	#
Kapanol® – 100mg	30 (20-50)	28
	30 (20-80)	*17*

Source: IDRS IDU interviews
* 2005 data in italics
# n<5: not reported

Table 8.2: Change in price of morphine over the last six months, 2005 & 2006

Reported price status	% of IDU able to answer	
	2005 (n=23)	2006 (n=40)
Don't know	4	5
Increasing	17	13
Stable	44	63
Decreasing	4	5
Fluctuating	30	15

Source: IDRS IDU interviews

8.2.2 Availability

Tables 8.3 and 8.4 summarise the current availability of morphine and the changes in morphine availability over the last six months, according to IDU reports. In 2006, of those able to comment, 69% (27% of entire sample) reported illicit morphine as 'easy' or 'very easy' to obtain, with 58% (23% of entire sample) reporting this availability as stable, in the six months prior to interview. Compared to 2005, a smaller proportion of IDU perceived that it was 'very easy' to obtain illicit morphine, and a larger proportion of IDU reported illicit morphine was 'difficult' to access in 2006 (n=31), compared to 2005 (n=22).

Table 8.3: Availability of illicit morphine currently, 2005 & 2006

How easy is it to get morphine at the moment?	% of IDU able to answer	
	2005 (n=23)	2006 (n=39)
Very easy	22	10
Easy	57	59
Difficult	22	31
Very difficult	0	0

Source: IDRS IDU interviews

Table 8.4: Change in availability of illicit morphine over the last six months, 2005 & 2006

Has [availability] changed in the last 6 months?	% of IDU able to answer	
	2005 (n=23)	2006 (n=40)
Don't know	0	5
More difficult	22	25
Stable	61	58
Easier	13	8
Fluctuates	4	5

Source: IDRS IDU interviews

Table 8.5 presents information collected from IDU on the usual person and venue sourced to obtain the morphine they had used recently. Most of the IDU that reported use of morphine in the last six months, and were able to answer (n=40), stated that they 'usually' obtained morphine from a friend (65%; 26% of entire sample), which was higher than the proportion of IDU that reported this source in 2005 (43%). Moreover, the majority of IDU reported that they had obtained the illicit morphine they had used recently from a friend's home (50%, 20% of entire sample), followed by an agreed public location (35%, 14% of entire sample). In 2006, there was an increase in the percentage of IDU reporting that they 'usually' obtained morphine from a street dealer (0% to 15%), by home delivery (5% to 15% respectively), with a decrease in the percentage of IDU reporting that they had obtained morphine from a mobile dealer (from 19% to 3%).

Table 8.5: Usual source person and source venue used to obtain illicit morphine in the last six months, 2005 & 2006

Usual source person and venue		% of IDU able to answer	
		2005 (n=21)	2006 (n=40)
Person	Street dealer	0	15
	Known dealer	-	35
	Friend*	43	65
	Acquaintances	-	15
Venue	Home delivery	5	15
	Dealer's home	24	20
	Friend's home	-	50
	Mobile dealer	19	3
	Acquaintance's home	-	13
	Agreed public location	-	35

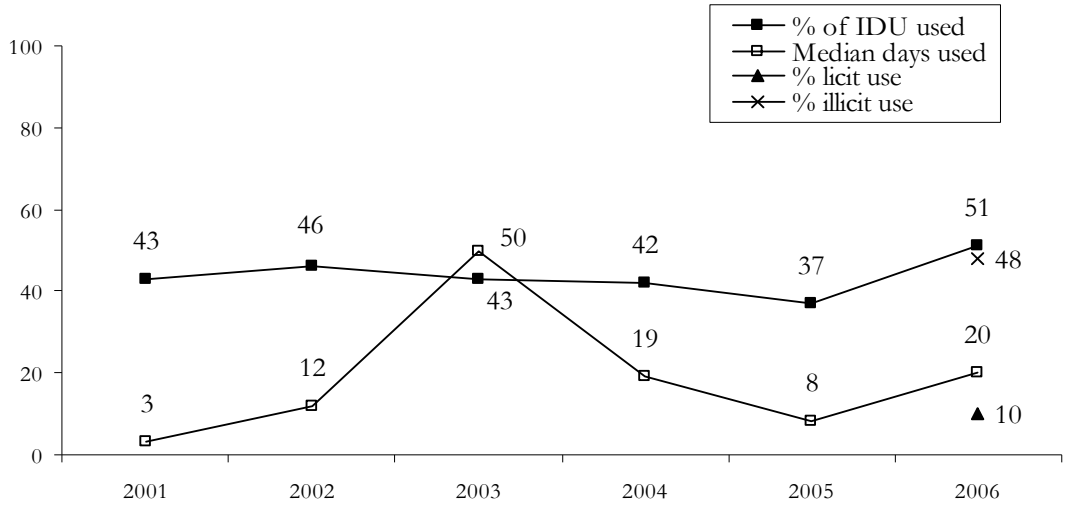
Source: IDRS IDU interviews (multiple responses allowed)
***** includes obtained as a gift from friend

8.2.3 Use of morphine among IDU

Two IDU reported morphine as the first drug ever injected, nine nominated morphine as their drug of choice and 21% (n=21) reported morphine as the drug most often injected in the last month or as the last drug they injected (see Table 3.2).

Fifty-one percent of IDU (n=51) reported they had used either licit (10%) or illicit morphine (48%) in the last six months on a median of 20 days (range 1 - 180). In the last six-months IDU used licit morphine for a median of 180 days (n=10, range 2 - 180), or illicit morphine for a median of 12 days (n=48, range 1 - 180). With regard to long-term trends, 2006 is the first year where morphine use has included both licit and illicit use patterns (see Figure 8.1). The proportion of IDU reporting recent use of illicit morphine increased slightly in 2006 (from 37% in 2005 to 48%). Frequency of use of illicit morphine also increased slightly in 2006 from a median of 8 days in 2005 to a median 12 (range 1 - 180), but is nowhere near the peak seen in 2003 when the median number of days use of morphine, among morphine users, was 50.

Figure 8.1: Morphine – Recent* use & median days used licit & illicit #, 2001-2006



Source: IDRS IDU interviews
***** in the previous six months; **#** by those reporting use in the previous six months

All but one of the IDU that had used licit morphine (90%, n=10) reported having done so by injecting a median of 50 days (range 1 - 180) during the last six months. Those IDU who reported using illicit morphine in the last six-months, reported having done so by injecting for a median of 11 days (range 1 -180). Again, this constitutes an increase in frequency of use of morphine (by injecting) compared to 2005, when the median days use by injecting was six (range 1 - 180). Sixty percent of licit morphine users (n=6) also reported recent oral use of the drug in 2006, with 21% of illicit morphine users (n=10) also reporting recent oral use of morphine. Eight percent reported daily use of licit morphine (n=4), and one person reported daily use of illicit morphine in the last six months, with the majority injecting. Compared to 2005, in 2006 larger proportions of morphine users reported recent injecting use, but decreasing oral use and decreasing daily use of morphine.

Twenty percent of recent morphine users (n=10) reported use of licit morphine and 94% (n=48) reported use of illicit morphine in the last six months. These proportions indicate that there has been a decrease in the use of licit morphine (from 27% in 2005 to 20%), and an increase in the proportion of IDU using illicit morphine (from 84% in 2005 to 94%) in 2006. In 2006, the majority of morphine users (82%, n=40) also reported that the type they had used most during the last six months was illicit. The main brands of morphine used in that time were Kapanol (by 44%, n=20), and MS Contin (by 42%, n=19). An increase can be seen in the use of MS Contin in 2006 in comparison to 2005 (from 19% to 47%) in the last six-months.

Similar to 2005, few people reported experience of morphine overdose. In 2006, only six IDU reported having ever overdosed on morphine, five reporting that they had overdosed on morphine only once in their life, and one reporting that they had overdosed twice. Only two had done so within the last 12 months.

8.3 Methadone

Please note, the category of methadone includes methadone syrup and methadone in a tablet form, known as Physeptone. It should also be noted that sample sizes for these sections were relatively small and, therefore, should be interpreted with caution.

8.3.1 Price of illicit methadone

2006 is the fourth year that IDRS survey participants were asked to provide information regarding the price and availability of illicit methadone. Methadone syrup in SA is generally prescribed as a five-mg/ml solution but it cannot be assumed that this is the dosage of black-market supplies, as the syrup may have been further diluted. Therefore, users may know the amount of methadone syrup bought in terms of the 'ml' amount or the 'mg' dosage a total volume contains; hence the breakdown of prices given below. Only a small number of IDU were able to provide information on the price of illicit methadone in 2006.

The current price of methadone was estimated by IDU to be a median $1/ml of syrup (n=8), a median $1.00/mg dose of syrup (n=8), or a median $0.75/mg tablet (range $0.50-$5.00, n=9). The median prices paid by IDU at 'last purchase' for methadone syrup was $0.50 cents/ml of syrup (range $0.50 - $3.00, n=6), or $0.50/mg dose of syrup (range $0.50 - $1.00, n=6), or $6.50/10mg Physeptone tablet (range $5 - $10, n=9). Despite the small number of IDU able to provide information on the price of the different formulations of methadone in 2006 and previous years, reported prices have been similar across the last three years. Seventy-two percent of IDU able to answer (13% of entire sample) reported that the price of illicit methadone had been stable in the six months prior to interview.

8.3.2 Availability of illicit methadone

Tables 8.6 and 8.7 summarise the current availability of illicit methadone and the changes in methadone availability over the last six months, according to IDU reports. In 2006 the majority of IDU able to answer (78%; 14% of entire sample) reported methadone as 'easy' or 'very easy' to obtain, with the majority of those able to answer reporting recent availability as stable (58%; 11% of entire sample). An increase was seen in the proportion of IDU reporting that availability of methadone had become 'more difficult' in 2006 (from 11% in 2005 to 26%).

Table 8.6: Availability of illicit methadone currently, 2005 & 2006

How easy is it to get methadone at the moment?	% of IDU able to answer	
	2005 (n=18)	2006 (n=18)
Very easy	32	17
Easy	58	61
Difficult	11	22
Very difficult	0	0

Source: IDRS IDU interviews

Table 8.7: Change in availability of illicit methadone over the last six months, 2005 & 2006

Has [availability] changed in the last 6 months?	% of IDU able to answer	
	2005 (n=19)	2006 (n=19)
Don't know	5	11
More difficult	11	26
Stable	74	58
Easier	11	5
Fluctuates	0	0

Source: IDRS IDU interviews

Only 22 of the IDU who had used methadone illicitly in the last six months were able to provide information on where they obtained the drug. Twenty (91%) reported that they 'usually' obtained the drug from a friend (includes acquaintances and gift from friend), and four from some form of dealer (street dealer, unknown and known). Of the 14 IDU able to comment, twelve (86%) stated the source of their 'last' illicit methadone purchase as a '*take-away*' (i.e. somebody else's prescribed 'take-away' dose), and two stated that it was a '*daily dose*' (to be swallowed). One KE commented that there are those "*who wait outside the chemist to get others' methadone, which is not swallowed and sold after leaving the chemist*".

All parameters of availability were similar to those reported in 2005.

8.3.3 Use of illicit methadone

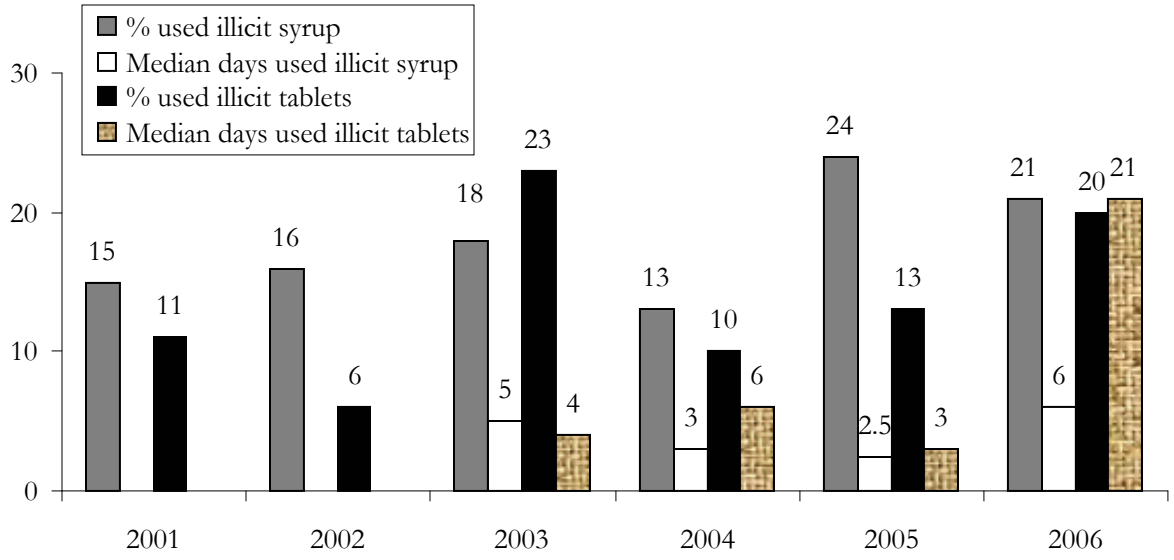
2006 was the fourth year that IDRS survey participants were asked to provide separate information on the use of licit and illicit methadone syrup and Physeptone tablets as per the categories in Table 3.3.

Twenty-one of the participating IDU reported having used illicit methadone syrup a median of six days (range 1 - 50) in the last six months. Of those, 12 (57%) reported use of illicit methadone syrup by injecting a median of six days (range 1 - 12), and 15 (71%) reported use by swallowing, during that period. This constituted a change in proportion of IDU injecting methadone and their frequency of use compared to 2005, when 46% (n=11) reported use by injecting a median of 12 days (range 1 - 90). No IDU reported use of illicit methadone syrup on a daily basis in either year.

Twenty of the participating IDU reported having used illicit Physeptone tablets a median of 21 days (range 1 - 180) in the last six months. Of those, 15 (75%) reported use of illicit Physeptone tablets by injecting a median six days (range 1 - 115), and ten (50%) reported use by swallowing, during that period. This indicates an increase in the number of IDU recently using illicit Physeptone tablets in 2006 when compared to 2005 (from 13 - 20 respectively) and an increase in frequency of use in 2006 (from 2.5 days (range 2 - 60) to 6 days). The number of IDU reporting injecting recently also increased in 2006 (from 9 in 2005 - 15 in 2006) and the frequency of injecting also increased from a median of three days in 2005 to a median of six days in 2006. One IDU reported use of illicit Physeptone tablets on a daily basis in 2006, whereas no IDU had reported using Physeptone daily in either 2004 or 2005.

Figure 8.2 depicts the trend in recent use of illicit methadone since 2001. The most notable feature is the increase in the percentage of IDU that had recently used Physeptone tablets over this time period, which increased from 13% to 20% between 2005 and 2006, and the increased frequency of recent use (last 6 months) for Physeptone tablets from a median of three days to a median of 21 days.

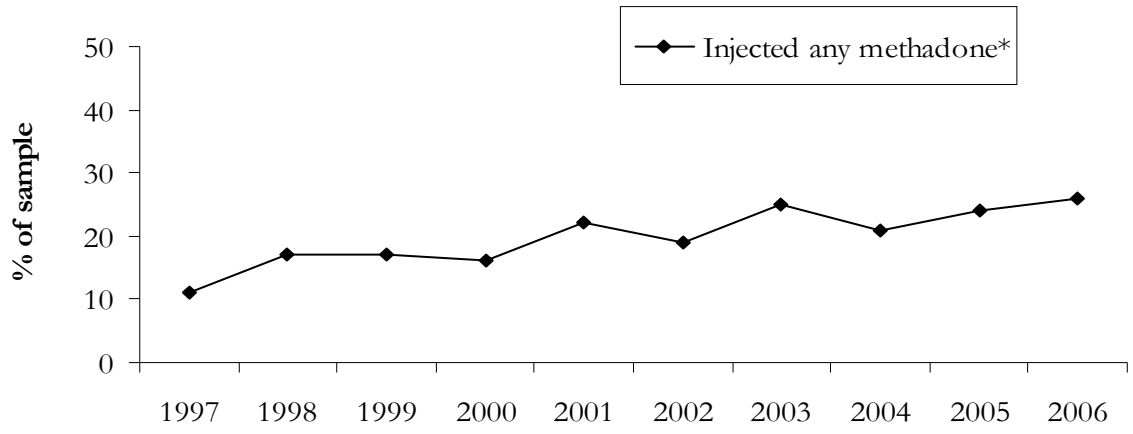
Figure 8.2: Illicit Methadone – Recent* use & median number of days used#, 2001 - 2006



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

Figure 8.3 shows that the proportion reporting injecting of any methadone (either from a licit or illicit source) has been relatively stable since 2001.

Figure 8.3: Injecting of methadone by IDU in the last six months, 1997 - 2006



Source: IDRS IDU interviews
***** Includes licitly or illicitly sourced methadone syrup and Physeptone

The total proportion of IDU who reported use of *any* methadone (syrup or tablets, licit or illicit) in the last six months was 47% in 2006, the same as in 2005. Of the 47 IDU who reported use of *any* methadone in 2006, 67% (n=30) reported licit methadone syrup as the form 'used most', followed by illicit Physeptone tablets (18%, n=8), in the six months prior to interview. Therefore, two-thirds (67%) of the methadone-using IDU reported predominantly using methadone from a licit source. This compares to 62% of methadone users reporting using mainly licit methadone in 2005.

In 2006, the number of IDU who reported being currently enrolled in a methadone treatment program, at the time of the interview, was stable compared to 2005 (29% and 30% respectively). In 2006, of the 29 IDU who were currently on a methadone program, 23 had been on the program for at least the last six months and nine of these (31%) also reported use of either illicit methadone syrup or illicit Physeptone tablets (n=11, or 38%) during the six months prior to interview. Several KE confirmed that some IDU who were on the methadone program were using both licit and illicit doses of methadone, and that even IDU on licit methadone often used their dose illicitly.

8.4 Buprenorphine

8.4.1 Use of illicit buprenorphine

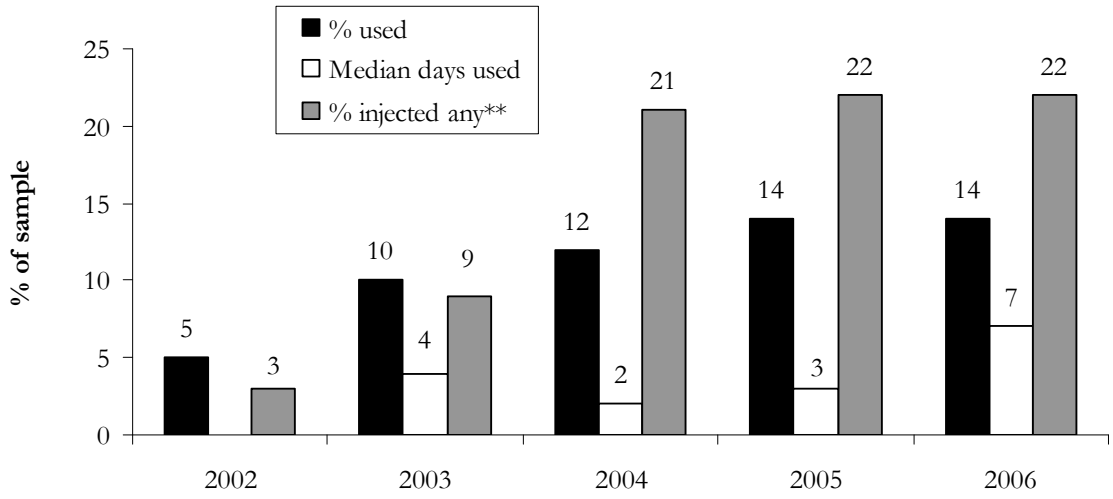
2006 was the fourth year that IDRS survey participants were asked to provide separate information on the use of licit and illicit buprenorphine as per the categories in Table 3.3.

Fourteen participating IDU reported having used illicit buprenorphine a median of seven days (range 1 - 180) in the last six months. Of those, ten (71%) reported use of illicit buprenorphine by injecting a median of ten days (range 1 - 180) and six (43%) reported use

by swallowing, during that period. One IDU reported use of illicit buprenorphine on a daily basis.

Figure 8.4 shows that the proportion reporting recent use of illicit buprenorphine has remained stable since last year. Frequency of use in terms of median days used increased in 2006 after remaining stable since 2003 (around a median of two to four days use to seven days use in 2006). The proportion of the sample that reported recent injecting of *any* buprenorphine – that is, their licit (prescribed) dose or an illicit supply – remained stable compared to 2005.

Figure 8.4: Illicit Buprenorphine – recent* use and injecting & median number of days used#, 2002 - 2006



Source: IDRS IDU interviews
***** In the previous six months;
# By those reporting use in the previous six months
****** Includes licit or illicit sources of buprenorphine

The total proportion of IDU who reported recent use of *any* buprenorphine (licit or illicit) decreased slightly in 2006 (n=30) when compared to 2005 (n=36). Of the 30 IDU reporting use of *any* buprenorphine (licit or illicit) in 2006, 21 (72%) reported licit buprenorphine as the form they used most, with the remainder (28%, n=8) reporting that illicit buprenorphine was the form they used most, in the six months prior to interview (data from one IDU missing). Compared to 2005, similar proportions reported the form used most recently as licit buprenorphine (75% v. 72%).

In 2006, 14% of IDU were enrolled in a buprenorphine treatment program at the time of the interview, a decrease compared to previous years (24% in 2005 and 17% in 2004). Contrary to the reports of IDU, several KE (n=4) commented that the use of illicit buprenorphine was increasing in 2006.

8.5 Oxycodone

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

The total proportion of IDU that reported recent use of *any* oxycodone (licit or illicit) was 22% (n=22), which is an increase when compared to 2005 (17%, n=17). Of the IDU reporting use of any oxycodone, 81% (n=17) reported illicit oxycodone as the form they used most, with the remainder (19%, n=4) reporting that licit oxycodone was the form they used most, in the six months prior to the interview. This indicates an increase in the proportion of IDU reporting illicit oxycodone as the form they used most in 2006 when compared to 2005 (59%, n=10), and a subsequent decrease in use of licit oxycodone (41%, n=7) in 2006. The main brand used was OxyContin® (n=12) (data missing for seven participants).

Twenty IDU reported having used illicit oxycodone a median four days (range 1 - 80) in the last six months. Of those, nineteen (95%) reported the use of illicit oxycodone by injecting a median of four days (range 1 - 80) and 3 (14%) reported use by swallowing during that period. Two IDU reported use of illicit oxycodone on a daily basis and one IDU reported injecting on a daily basis. This indicates an increase in the proportion of IDU reporting recent use of illicit oxycodone in 2006 (from 82%, n=9 in 2005), and a slight increase in the frequency of use (from a median of three days to a median of four days).

8.6 Other opioids

The category 'other opioids' includes any other opiates (such as opium) or opioid analgesic substances such as codeine, pethidine and the like. In 2006, this is the second year where the 'other opioids' category did not include oxycodone (as it has in previous years).

Eight (8%) of the participating IDU reported recent use (in the last six-months) of other opioids for a median of five days (range 2 - 180). Only one other opioid user had used these substances by injecting, with six IDU reporting use by swallowing, and one by smoking in the last six months. Five IDU reported licit use and two reported illicit use during the six months prior to interview. The majority of other opioid users (n=5) reported mainly licit use in that time, and the main type used was Panadeine Forte (n=5) (data missing for one IDU).

8.7 Summary of opioids

A summary of trends for opioids other than heroin is presented in Table 8.8.

Table 8.8: Summary of trends in the price, availability and use of opioids

Morphine ***Price***	$30/100mg ($20-80) Kapanol; no change since 2005, currently stable (IDU)
Availability	'Easy' to 'very easy'; stable, but a third reporting difficult (IDU)
Use	% used recently increased, and increase in frequency of use Majority report recent use by injecting; stable Recent oral use also common Mainly used illicit supply; primarily Kapanol and MS Contin
Illicit Methadone ***Price***	Limited information due to small sample
Availability	'Easy' to 'very easy'; stable to increase in difficult (IDU)
Use	Slight increase in % recently used methadone syrup Frequency of use increased but low Oral use common; % injecting any methadone stable at ~25% of recent methadone users % reporting mainly illicit use decreased (from 33% in 2005 to 18% in 2006)
Illicit Buprenorphine	% used recently stable Frequency of use increased but low Illicit use by injecting common; % injecting any buprenorphine stable at about 20% of recent buprenorphine users Slight increase in the % reporting mainly illicit use (25% in 2005 to 28% in 2006)
Illicit oxycodone	Small % used recently and low frequency of use Most commonly used by injecting IDU mainly used illicit supply; primarily OxyContin
Other opioids	Use by swallowing most common IDU mainly used illicit supply; primarily Panadeine Forte

9 OTHER DRUGS

9.1 Ecstasy and hallucinogens

Use of ecstasy (MDMA) and hallucinogens (including LSD or 'trips', and naturally occurring compounds such as 'magic mushrooms') among the IDU sample in the last six months is summarised in Table 3.3.

Although a small proportion of the IDU sample had used ecstasy (15%), only five percent had used some type of hallucinogen in the last six months, and neither had been consumed frequently in that time, with a median of three days use of ecstasy (range 1 - 26) and five days (range 1 - 24) of hallucinogens during that period. Both ecstasy and hallucinogens had been used mainly orally (ecstasy: 10%; hallucinogen: 5%), although 10% of IDU also reported having used ecstasy by injecting during the last six months. In 2006, other parameters of use for these two drug classes were very similar to those reported in 2005.

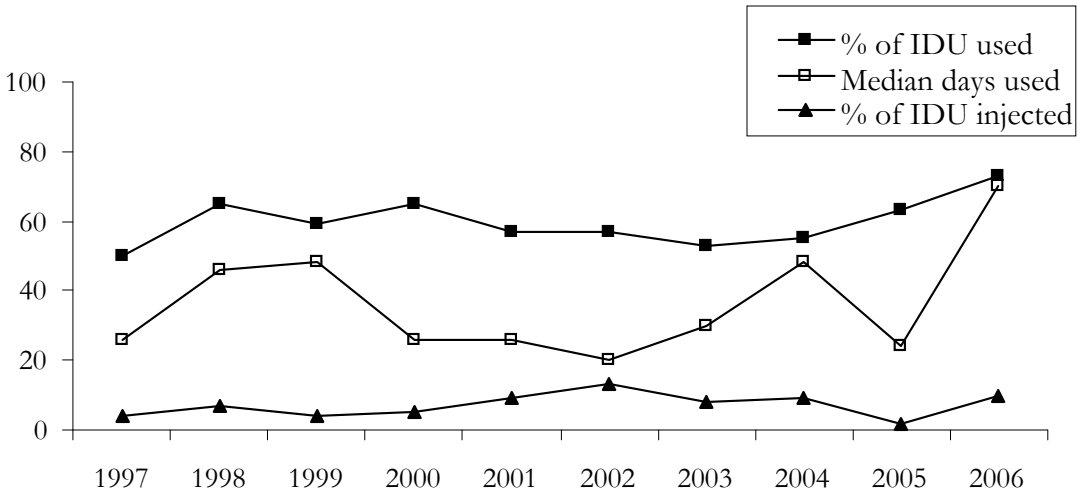
Ecstasy and related drugs use has been examined annually in SA amongst a separate sample of primarily non-injecting drug users since 2000, previously as a module of the IDRS, but currently known as the Ecstasy and Related Drugs Reporting System (EDRS: formerly the PDI). State and national reports are produced annually (e.g. Weekley et al. 2005(b) and Stafford et al. 2005).

9.2 Benzodiazepines

Seventy-three IDU reported use of benzodiazepines a median of 70 days (range 1 - 180) in the last six months, 26% (n=19) of who reported using benzodiazepines on a daily basis. All IDU reported use by swallowing, and 14% (n=10) also reported use by injecting a median of four days (range 1 - 70) in that time. Compared to 2005, in 2006 a larger proportion of IDU reported recent use (from 63% - 73% respectively), and more IDU reported recent injecting of benzodiazepines (from 2% - 14% respectively). There was also a substantial increase in the frequency of recent use, with the median number of days benzodiazepines were used increasing from a median of 48 in 2004 to 24 in 2005 and 70 days in 2006. Nineteen IDU reported daily use of benzodiazepines in 2006.

With regard to long-term trends (as shown in Figure 9.1), it can be seen that the prevalence of use increased slightly in 2006, and that there has been a dramatic increase in the frequency of use in 2006 (from a median of 24 days to 70 days). Injecting use by the IDU also increased in 2006 (from 2% in 2005 to 10% in 2006), though use by injecting was the lowest it had been for years in 2005.

Figure 9.1: Benzodiazepines - Recent* use and injection, & median number of days used#, 1997 - 2006



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

Of the 63 IDU who reported recent use of benzodiazepines, 76% (n=55) reported use of licit benzodiazepines and 44% (n=32) reported use of illicit benzodiazepines, in the six months prior to interview. The majority of benzodiazepine users (69%, n=50) also reported that they had used mainly licit benzodiazepines in that time. It should be remembered, however, that a so-called licit supply might be achieved by the practice of prescription shopping. These parameters of use were comparable to those reported in 2005, with an equal proportion of users reporting use of illicit benzodiazepines in 2006 (at 44%).

As was the case in previous years, in 2006 the majority of users reported the main type of benzodiazepine used in the six months prior to interview was diazepam (by 69%, n=50). Others reported the main types used as oxazepam (9%, n=6), and alprazolam (6%, n=4) (data missing for one IDU).

The majority of 2006 KE reported that benzodiazepines are commonly used by heroin, methamphetamine and cannabis using IDU, but that frequency of use varies from irregular and opportunistic to regular and dependent use. Five KE commented that use of benzodiazepines prior to or with heroin, and as a means to prolong the effects, was still being practiced by a minority of heroin users. Most KE commented that benzodiazepines (particularly Valium or Xanax) might be used by IDU when they had difficultly accessing their drug of choice (and to allay withdrawal symptoms), or to help with sleep and comedown from amphetamine use, or to avoid psychosis. One KE commented, "*a lot of users are intoxicated on this*".

9.3 Antidepressants

Seventeen percent of IDU reported use of antidepressants on a median of 180 days (range 21 - 180), 65% (n=11) of those on a daily basis, in the last six months. All reported use by swallowing. These parameters of use remain largely unchanged since 2002, with the

exception of an increase in the frequency of use (median number of days used in the last six months), from 158 days in 2005 to 180 days in 2006.

Similar to 2005, antidepressant use among the IDU sample in 2006 was primarily licit, with 94% (n=16) of recent users reporting mainly licit use, with only one IDU reporting any illicit use of antidepressants, within the past six months. The main type if antidepressant used (by 4 IDU) was a selective serotonin re-uptake inhibitor (SSRI), in particular sertraline (n=2), escitalopram (n=1) and paroxetine (n=1). One IDU reported mainly using amitriptyline (n=1) a tricyclic antidepressant. Other antidepressants reported as being used were venlafaxine (n=3) and mirtazapine (n=2).

As in previous years, primarily licit use (as prescribed) of antidepressants by IDU was confirmed by KE reports that no illicit use had been noted, and that it was not uncommon for heroin users in particular to be prescribed such medication, particularly following stabilisation on a pharmacotherapy.

9.4 Summary of other drugs

A summary of trends in the use of other drugs is found in Table 9.1.

Table 9.1: Summary of trends in the use of other drugs

Ecstasy and hallucinogens	% recently used ecstasy (15%) and hallucinogens (5%) stable, and frequency of use low and unchanged since 2005
Benzodiazepines	Increased % recently used, and increase in % recently injected Dramatic increase in frequency of use (from a median of 24 to 70 days) 69% reported mainly licit use, primarily diazepam Decrease in % reporting recent illicit benzodiazepine use
Antidepressants	No change in % recently used or frequency of use Almost exclusively licit use reported; most common type used was an SSRI, similar to 2005

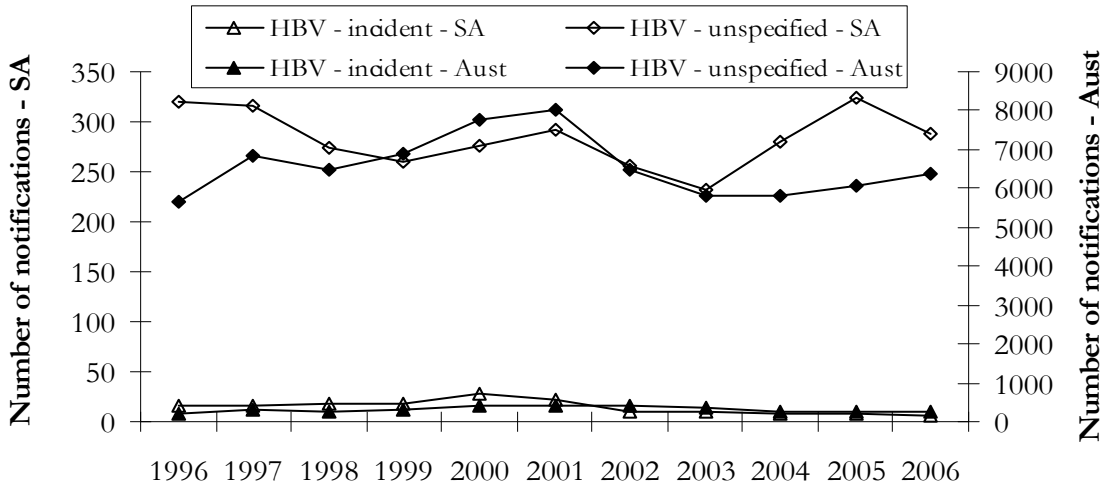
10 ASSOCIATED HARMS

10.1 Blood-borne viral infections

The risks of acquiring hepatitis B virus (HBV) and C virus (HCV) are greatly increased in IDU populations. Blood-borne viral infections (BBVI) can be transmitted through sharing of needles, syringes and other injecting equipment. State and Territory health departments report viral hepatitis notifications to the Communicable Diseases Australia-National Notifiable Diseases Surveillance System (CDA-NNDSS). The CDA-NNDSS differentiates between incident infections (i.e. newly acquired) and unspecified infections (i.e. those where the timing of disease acquisition is unknown). Readers should note that the data reported cannot be directly attributed to IDU specific cases.

The number of incident and unspecified notifications for HBV in SA, compared to nationally, are presented in Figure 10.1. The number of incident notifications of HBV in SA was recorded as seven in 2006. Incidence notifications have been stable in SA for the last five years following a decline from a 'peak' of 29 in 2000. The number of incident notifications of HBV nationally has also shown a decline since 2001. In 2006, the number of unspecified HBV notifications in SA reported to CDA-NNDSS was 288, decreasing since 2005 (from 325). The pattern was similar to the national unspecified HBV notifications where a decrease in number occurred from 2001 to 2004, followed by an upturn in 2006 (to 6375).

Figure 10.1: Number of HBV incident and unspecified notifications in SA and nationally, 1996 - 2006

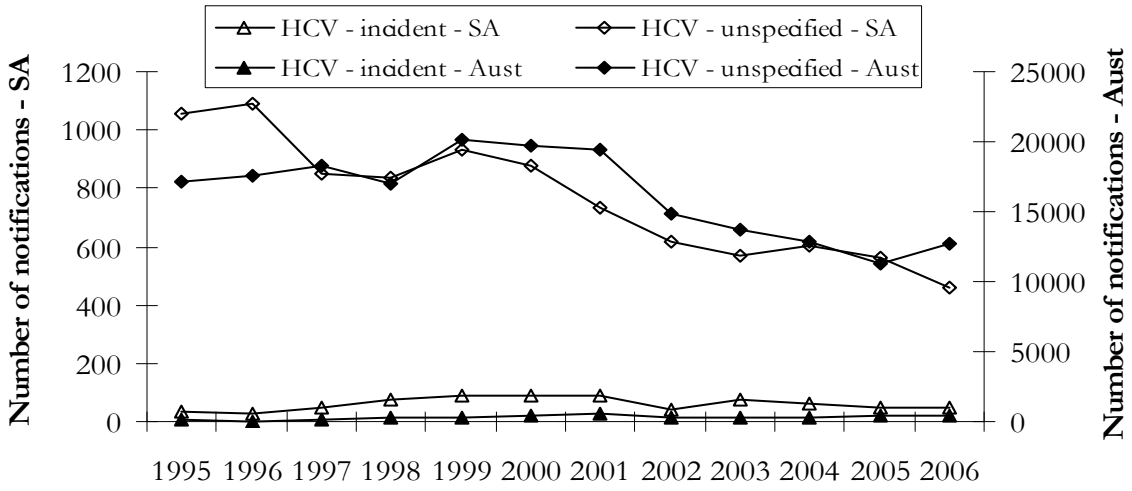


Source: Australian Government Department of Health and Ageing; CDA-NNDSS

The number of incident and unspecified notifications for HCV in SA, compared to nationally, are presented in Figure 10.2. The numbers of incident notifications of HCV in SA declined over the past four years, from 76 in 2003 to 50 in 2006. The numbers of HCV notifications nationally have remained relatively stable for the past five years, following a drop from 2001 (540 notifications) to 2002 (310 notifications), with 372 notifications recorded for 2006. The number of unspecified notifications of HCV in SA declined slightly

in 2006 (to 523), so that over the longer-term the trend in unspecified HCV notifications continues to decrease. National data for unspecified HCV notifications showed a slight upturn in 2006, but over the longer-term (that is, the last five years) the trend seems relatively stable.

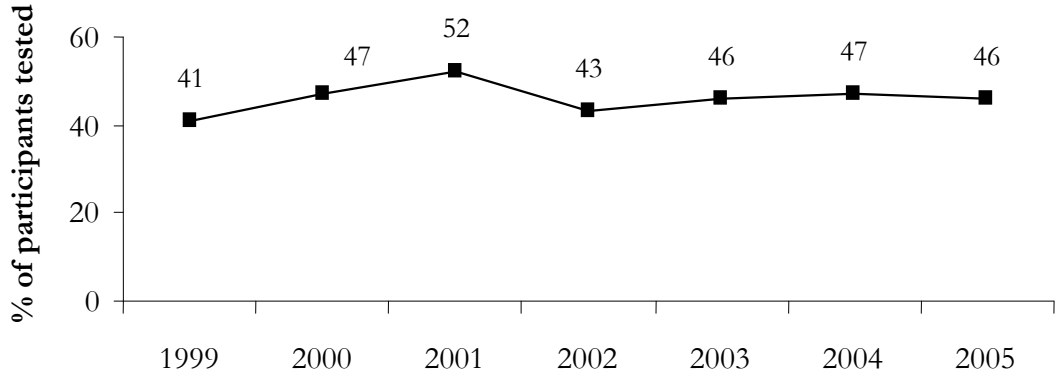
Figure 10.2: Number of HCV incident and unspecified notifications in SA and nationally, 1995 - 2006



Source: Australian Government Department of Health and Ageing; CDA-NNDSS

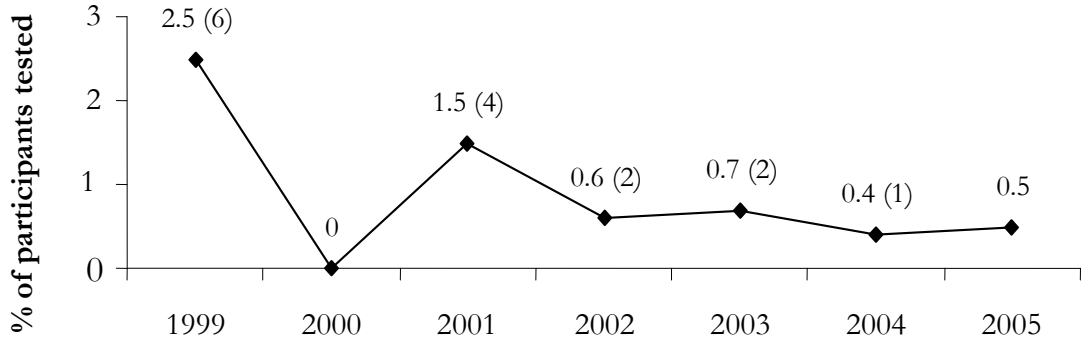
The annual needle and syringe program (NSP) survey conducted in South Australia in 2005 revealed HCV prevalence of 46% among injecting drug users participating in the survey, similar to that seen in previous years (see Figure 10.3)(National Centre in HIV Epidemiology and Clinical Research, 2006). The NSP survey results also showed a low prevalence of HIV among those participants tested in 2004 (0.50%, or one person), similar to the low rate for previous years (see Figure 10.4)(National Centre in HIV Epidemiology and Clinical Research, 2006).

Figure 10.3: HCV antibody prevalence among NSP survey participants in South Australia, 1997 - 2005



Source: Australian NSP Survey National Data Report 1999 - 2005 (NCHECR, 2006)

Figure 10.4: HIV antibody prevalence among NSP survey participants in South Australia, 1997 - 2005



Source: Australian NSP Survey National Data Report 1999 - 2005 (NCHECR, 2006)

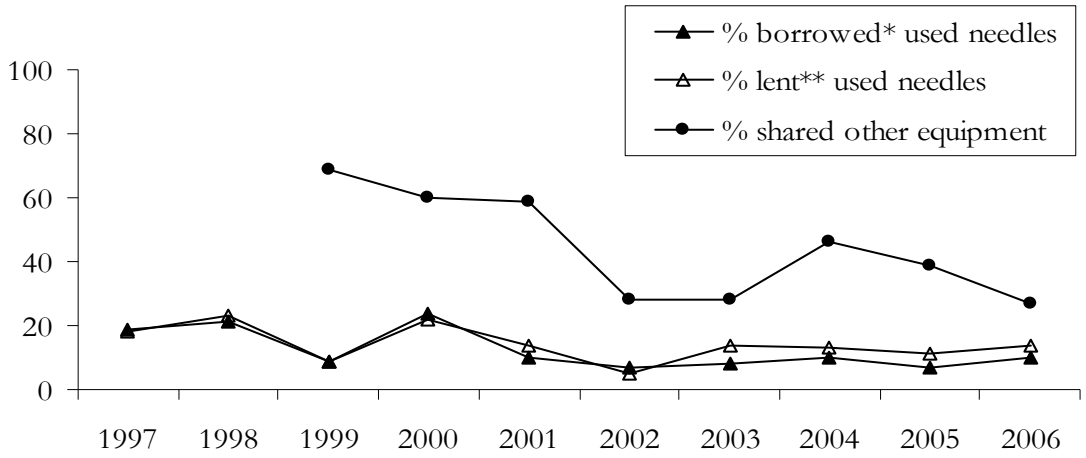
10.2 Sharing of injecting equipment among IDU

The majority of IDU reported that they had not used a needle after someone else (90%) or before someone else (86%) in the month prior to interview. These parameters of injecting-related risk, as measured by the IDRS, have remained stable for the past five years, but in 2006 indicate an increase in the number of IDU using a needle after someone else (from 6% in 2005 to 10% in 2006) and indicate an increase in the small but persistent proportion (around 14%) of IDU who are at high risk of BBVI and re-infection through needle sharing. A higher proportion of sharing was reported by IDU participating in the 2005 NSP survey, with 15% of participants reporting having re-used another's needle and syringe in the last month (NCHECR, 2006).

In the 2006 IDRS, of those that had used a needle 'after' someone else, the majority had done so after one other person only, the majority after their regular sex partner (n=5), five after close friends and one IDU with a close friend and an acquaintance. With regard to the frequency of needle sharing in the last month, one person had used a needle 'after' someone else once, one had done so twice, and one had done so more than 3 - 5 times. Of those who had used a needle 'before' someone else, three had done so once in the past month.

A slightly smaller proportion of IDU reported sharing of injecting equipment other than needles in 2006 when compared to the rate seen in previous years (see Figure 10.5). Specifically, 27% of IDU reported that they had shared one or more pieces of injecting equipment, other than needles, in the past six months, compared to 39% in 2005 and 46% in 2004.

Figure 10.5: Sharing of needles and injecting equipment by IDU in the month preceding interview, 1997 - 2006



Source: IDRS IDU interviews
***** Borrowed means to have used a needle after someone else had already used it
****** Lent means to have used a needle before someone else used it

As listed in Table 10.1, there were decreases in the proportions reporting sharing of spoons, filters and water, from 2005 to 2006. There was a decrease in the reported sharing of tourniquets, from 17% in 2005 to 14% in 2006, and water with a smaller proportion of IDU reporting having done this in 2006 (12%) than in 2005 (22%).

Table 10.1: Sharing of injecting equipment (other than needles) among IDU in the month preceding interview, 2005 & 2006

Injecting equipment	2005 (n=101) % of IDU	2006 (n=100) % of IDU
Spoons/mixing container	23	15
Filters	18	7
Tourniquet	17	14
Water	22	12

Source: IDRS IDU interviews

There were again mixed reports from KE in 2006 regarding the awareness and injecting risk behaviour of IDU, primarily across both heroin or methamphetamine users. Most KE report no significant change regarding users' behaviour, except a few who reported an increased impulsivity of injecting (and so increased risky behaviour) among the methamphetamine clients they saw. Seven KE reported an increase in the levels of HCV, with several commenting that "*Hep C is a given among this population, because needle sharing has not really changed*". Another KE commented that the Asian clients that they have contact with are still increasingly sharing equipment. The South Australian Hepatitis C Council confirms that HCV is increasing amongst the injecting drug using population. Several KE reported they always had clients who lacked awareness and foresight (e.g. do not get enough filters for the whole week and therefore run out) and displayed risky behaviour and a lack of concern regarding this risk. Contrary to this, several (n=3) KE commented that safe practices had been well established within the communities they had contact with. Unsurprisingly, there seems to be a correlation between the level of risk among users and other life circumstances, with decreased social functioning associated with higher risk-taking.

10.3 Location of injecting

In 2006, the majority of IDU reported the 'usual' location when injecting drugs in the last month was a private home (93%), with small proportions reporting use in public locations (see Table 10.2). The usual location of injecting was relatively unchanged compared to 2005, except for a decrease in the percentage of IDU reporting usually injecting in a car (from 11% in 2005 to 5% in 2006). Similar proportions per location were reported for location when last injected, with slightly less IDU reporting injecting drugs in a private home (87%), and slightly more IDU reporting injecting 'last' in a car (7%).

Table 10.2: Usual location when injecting in the month preceding interview, 2005 & 2006

Location when injecting	2005 (n=101) % of IDU	2006 (n=100) % of IDU
Private home	85	93
Street/car park/beach	0	1
Car	11	5
Public toilet	4	1

Source: IDRS IDU interviews

10.4 Injecting-related health problems

IDU were asked if they had experienced six different injecting-related health problems in the last month (as listed in Table 10.3). In 2006, 69% of the IDU sample reported experiencing at least one type of injecting-related health problem in the month prior to interview. Of these IDU, two-thirds (67%) had experienced more than one problem related to their injecting in that period. By far the most commonly experienced problem was difficulty injecting (73%), followed by prominent scarring or bruising around the injection site (62%). Compared to 2005, there were slight increases in experience of both these problems. However, there was also a small increase in the proportion reporting abscesses or infections related to injecting in the last month, from 4% in 2005 to 10% in 2006, and an increase in the proportion of IDU reporting having used a dirty hit (from 14% in 2005 to 23% in 2006).

Experience of other injecting-related health problems remained relatively stable across this time period. Overall, the total proportion of injecting related problems IDU had experienced in 2006 had increased in comparison with 2005 (from 118 to 173).

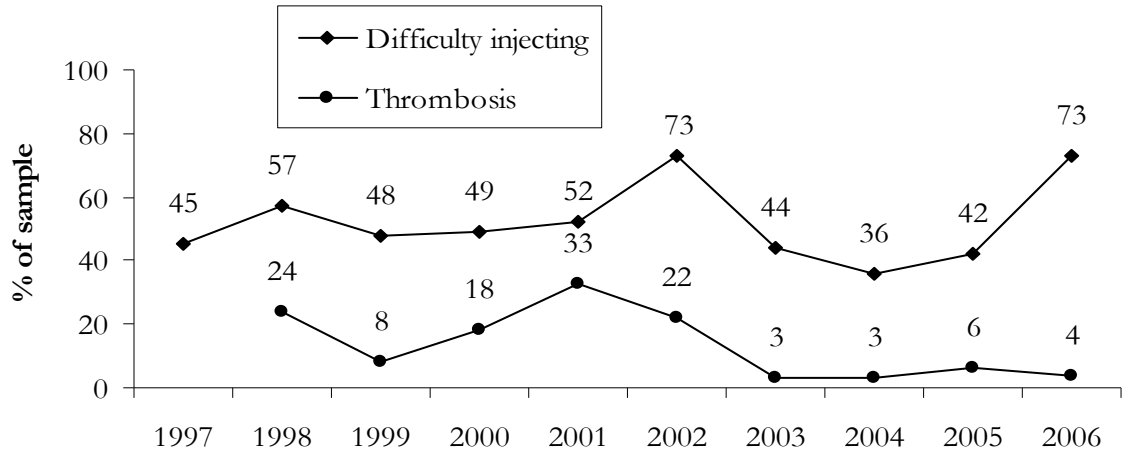
Table 10.3: Injecting-related health problems experienced in the month preceding interview, 2005 & 2006

	2005 (n=101) % of IDU	2006 (n=100) % of IDU
Overdose	1	1
Dirty hit	14	23
Abscesses/infections	4	10
Prominent scarring/bruising	51	62
Difficulty injecting	42	73
Thrombosis	6	4
Total problems	118	173

Source: IDRS IDU interviews

Figure 10.6 depicts the long-term trends for experience of difficulty injecting and thrombosis since 1997. Experience of thrombosis remained stable and still remains relatively low compared to the level of incidence reported in earlier years (1998 to 2002). The experience of difficulty injecting has returned to the same level as was reported in 2002, when there was a similar spike in the level of injecting related problems reported by IDU.

Figure 10.6: Experience of difficulty injecting and thrombosis by IDU in the month preceding interview, 1997 - 2006



Source: IDRS IDU interviews

IDU were also asked about their experience of injecting-related health problems specific to injecting of benzodiazepines, methadone, buprenorphine and morphine, if they had injected these drugs in the month prior to interview.

An analysis of the number of IDU experiencing problems due to injecting these substances in the last one month revealed the following:

- Benzodiazepines – three of four injectors (75%) experienced the following problems: difficulty finding veins (75%, n=3), and swelling of the arm (25%, n=1).

- Methadone – 14 of 18 injectors (78%) experienced one or more of the following problems: scarring/bruising (33%, n=6); difficulty finding veins (39%, n=7); self-reported methadone dependence (33%, n=6); dirty hit (33%, n=6); swelling of arm (6%, n=1); swelling of hand (11%, n=2); hospitalisation (6%, n=1); an ambulance (6%, n=1); abscesses/infections (6%, n=1).

- Buprenorphine – 16 of 20 injectors (84%) experienced one or more of the following problems: scarring/bruising (58%, n=11); difficulty finding veins (42%, n=8); self-reported buprenorphine dependence (58%, n=11); swelling of arm (11%, n=2); swelling of leg (11%, n=2); dirty hit (37%, n=7); abscesses/infections (11%, n=2); 'pain in arm after injecting' (5%, n=1).

- Morphine – 28 of 40 injectors (70%) experienced one or more of the following problems: scarring/bruising (30%, n=12); abscesses/infections (3%, n=1); self-reported morphine dependence (18%, n=7); difficulty finding veins (48%, n=19); dirty hit (3%, n=1); swelling of hand (23%, n=9); swelling of arm (23%, n=9); swelling of leg (5%, n=2); swelling of feet (5%, n=2); ambulance (3%, n=1); police (3%, n=1); 'pins & needles' in head straight after a shot (3%, n=1).

Compared to 2005, in 2006 there was an increase in the number of IDU who reported injecting benzodiazepines in the month prior to the interview (from 0 to 4). In 2006, the number of IDU who reported recent injection of morphine had more than doubled (from 18 to 40), however, the reported experience of injecting related problems showed a four-fold increase (from 7 in 2005 to 28 in 2006). The number of IDU who reported recent injection of methadone and buprenorphine remained unchanged, although there were increases in the number of reported problems from this behaviour (methadone: from 6 to 14; buprenorphine: from 7 to 16). The most commonly reported problems among injectors of these four drug types in the last month were similar for both years.

Again in 2006, 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 vein damage due to the quality of the product (often considered 'dirty' or corrosive) and frequency of injecting, as well as infections arising from unhygienic practices (such as re-using 'sterile' water) and reusing their own needles. Problems associated with injecting of morphine were primarily thought to be the result of users not filtering out the non-soluble 'chalk' contained in tablet preparations or re-use (against recommendation) of filters (therefore non-sterile as well as inefficient). These problems included infections, abscesses, ulcers and difficulty with injecting and collapsed veins. Similar problems were associated with the injecting of methadone and buprenorphine, both of which are preparations designed for oral administration and are likely to cause vein health problems when injected. 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. These problems were often directly related to the prohibitive cost of obtaining such equipment and a lack of planning and foresight by some IDU.

10.5 Expenditure on illicit drugs

Forty-two IDU 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 that reported purchasing illicit drugs on that day, was $77.50 (range $1 - $450; n=42). This compares to a median amount of $100 (range $10 - $400; n=41) reported in 2005.

Table 10.4 presents the breakdown of the amounts spent on illicit drugs (that is, excluding alcohol, tobacco and licit supplies of prescription medications), on the day before interview, by the whole sample, by those IDU who reported heroin as the drug they injected most in the last month, and by those that reported methamphetamine as the drug they injected most in the last month. The median amount spent on the day prior to interview is also given for those who reported having bought illicit drugs that day. It can be seen that slightly more of the primarily heroin-using IDU (n=15) had spent money on illicit drugs on the day before interview, however, they had spent the same amount as their primarily methamphetamine-using counterparts (n=13).

Table 10.4: Expenditure on illicit drugs on the day preceding the interview, 2005# & 2006

Amount	% of whole sample (2006 n=100) (*2005 n=101*)	% of IDU who injected heroin most in last month (2006 n=28) (*2005 n=33*)	% of IDU who injected methamphetamine* most in last month (2006 n=31) (*2005 n=47*)
Nothing	58 (*59*)	46 (*33*)	58 (*70*)
Less than $20	4 (*1*)	7 (-)	3 (*6*)
$20 - $49	9 (*5*)	7 (*3*)	6 (*6*)
$50 - $99	9 (*9*)	7 (*12*)	6 (*6*)
$100 - $199	16 (*15*)	29 (*27*)	19 (*8*)
$200 - $399	3 (*9*)	4 (*18*)	6 (*6*)
$400 or more	1 (*2*)	0 (*6*)	0 (*0*)
Median $ expenditure**	77.50 (*100:00, n=41*)	100.00 (n=15) (*125:00, n=22*)	100.00 (n=13) *100:00 (n=14*)

Source: IDRS IDU interviews
2005 figures in brackets and italics
***** Powder, base or crystal methamphetamine
****** Of those that reported spending money on illicit drugs on the day preceding inter**view**

10.6 Mental health problems

In 2006, 43% of IDU reported experiencing a mental health problem (other than drug dependence) in the six months preceding interview. This is compared to 58% in 2005.

Table 10.5 shows that the proportion of the sample who reported actually attending a professional was lower than the proportion reporting having experienced a problem (30% and 43%), as has been the case in previous years. The percentages per different category of

professional were slightly different in 2006 in comparison to the previous two years. There were increases in the number of IDU reporting that they had attended a GP (from 23% in 2004 to 37% in 2005 to 51% in 2006), a psychiatrist (from 15% in 2004 to 9% in 2005 to 21% in 2006), or a counsellor (from 9% in 2004 to 4% in 2005 to 21% in 2006) in response to mental health issues. There was also a slight increase in the number of IDU reporting that they had attended a psychologist in 2006 (12%) compared to 2005 (7%) in response to mental health issues.

Table 10.5: IDU attendance of a health professional, for a mental health problem, in the last six months, 2004 - 2006

Type of health professional	2004 (n=101) % of IDU	2005 (n=101) % of IDU	2006 (n=100) % of IDU
General Practitioner	23	37	51
Psychiatrist	15	9	21
Psychologist	6	7	12
Counsellor	9	4	21
Social worker	9	8	2
Mental health nurse	3	0	2
Community health nurse	2	0	0
Hospital emergency department	3	2	2
Psychiatric ward	3	2	5
Any	**32**	**44**	**43**

Source: IDRS IDU interviews

Note: Percentages in each column do not total 100% as IDU could report attendance of more than one mental health professional

Table 10.6 reports the proportions of IDU, per mental health problem, who sought professional help for a mental health problem in the six months prior to interview. As can be seen, depression and anxiety were the most commonly reported problems and the number of IDU accessing assistance for anxiety and depression had decreased in 2006 compared to 2005.

Table 10.6: Mental health problem for which IDU sought help when attending a health professional in the last six months, 2004 - 2006

Mental health problem	2004 (n=120) % of IDU	2005 (n=101) % of IDU	2006 (n=100) % of IDU
Depression	22	29	17
Mania	0	3	0
Manic depression	2	4	4
Anxiety	13	29	14
Phobias	0	3	1
Panic	1	9	2
Paranoia	0	2	1
Drug-induced psychosis	3	2	0
Schizophrenia	3	3	0

Source: IDRS IDU interviews

Note: Percentages in each column do not total 100% as IDU could report more than one mental health problem

These IDU reports were confirmed by KE who commented that the most common problems seen by the IDU generally were depression, anxiety and personality disorders (particularly borderline personality disorder and antisocial personality disorder). Several KE (n=6) also reported that schizophrenia and psychosis were also seen amongst IDU. 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). 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 IDU 'community'. However, reports from peer educator KE, who on the whole had contact with a larger population and wider variety of IDU, agreed with health KE in what they perceived the most common mental health problems to be between IDU generally.

There was consensus by all KE, who were able to comment, that mental health problems had increased in frequency in the last year, primarily with regard to methamphetamine users. 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 psychosis appearing to have increased in the last six months. Several KE reported that many methamphetamine users (particularly those using 'ice/crystal') were involved in family violence against their partners and their children, with many having to deal with child custody issues. These problems continued to be an issue for service providers and staff of treatment agencies.

10.7 Substance-related aggression

In 2006, for the second year, the IDRS survey included questions pertaining to whether IDU had become verbally or physically aggressive following drug use or during withdrawal from a drug, and, if so, after use of which drugs had this occurred in the preceding six months. The results, presented in Table 10.7, show that the number of IDU who reported they had

become verbally aggressive following use (under the influence) of a drug in the preceding six months had increased from 2005 to 2006 (24% to 29% respectively). Fifteen percent of IDU in 2005 and 2006 reported that they had become physically aggressive following use of a drug in that time. In 2006, less IDU reported becoming verbally aggressive during withdrawal (25%) than in 2005 (33%), and less IDU also reported physical aggression during withdrawal in 2006 (9% from 12% in 2005).

Overall, a greater proportion of IDU reported becoming verbally aggressive (particularly during withdrawal), than physically aggressive following drug use or during drug withdrawal. Alcohol and methamphetamine (particularly base) were most commonly associated with physical or verbal aggression, though the number of IDU per drug type was small.

Table 10.7: Self-report of substance-related aggression among IDU, 2005* & 2006

Drug	Physical aggression (% IDU, n=100 (*101*)		Verbal aggression (%IDU, n=100 (*101*)	
	Under influence	During withdrawal	Under influence	During withdrawal
Alcohol	5 (*9*)	1 (*2*)	9 (*10*)	2 (*3*)
Cannabis	1 (*2*)	1 (*1*)	1 (*3*)	4 (*4*)
Heroin	3 (*1*)	2 (*1*)	5 (*4*)	5 (*4*)
Morphine	0 (*1*)	0 (*1*)	2 (*2*)	3 (*6*)
Methamphetamine - powder	1 (*3*)	1 (*4*)	1 (*4*)	4 (*7*)
Methamphetamine – base	4 (*4*)	4 (*5*)	9 (*9*)	10 (*14*)
Methamphetamine – crystal	1 (*5*)	2 (*3*)	3 (*7*)	5 (*9*)
Any	**15 (*15*)**	**9 (*12*)**	**29 (*24*)**	**25 (*33*)**

Source: IDRS IDU interviews
***** 2005 data italics and in brackets

As mentioned in the previous section, these IDU reports were confirmed by KE who commented that aggression by the drug users they had contact with had increased, especially towards family members and friends.

10.8 Criminal and police activity

In 2006, there was a decrease in the proportion of IDU who reported involvement in any type of crime during the last month (38% from 53% in 2005) or had been arrested in the twelve months prior to interview (30% from 46% in 2005) (see Table 10.8). The most commonly reported types of crime were the same as for 2004, with IDU primarily reporting involvement in drug dealing (25%), followed by property crime (15%) and, to a lesser extent, fraud (3%) and violent crime (3%).

Table 10.8: Criminal and police activity as reported by IDU, 2005 & 2006

	2005 (n=101) % of IDU	2006 (n=100) % of IDU
Criminal activity in last month		
Property crime	19	15
Drug dealing	33	25
Fraud	5	3
Violent crime	4	3
Any crime	*53*	*38*
Arrested in last 12 months	46	30
Perception of police activity in last 6 months		
More activity	30	40
Stable	56	48
Less activity	3	1
Don't know	11	11
More difficult to obtain drugs recently		
Yes	14	19
No	81	80

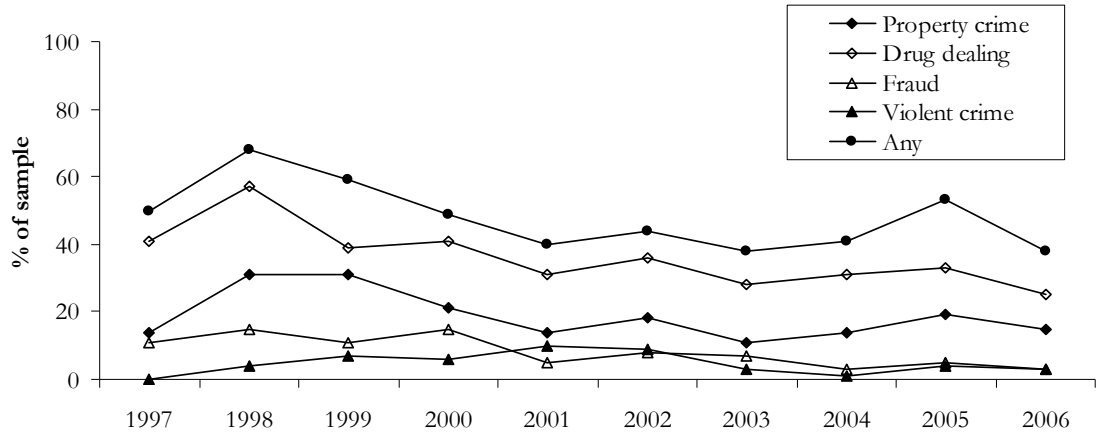
Source: IDRS IDU interviews

Of the 30 IDU who had been arrested in the preceding twelve months, the most common reasons for arrest were a property crime (43%, n=13), driving offence (23%, n=7), use or possession of a prohibited substance (13%, n=4), or violent crime (10%, n=3). There was also one arrest for fraud. A further four arrests were reported for various other offences.

For those able to comment, most IDU perceived that police activity in the last six months was either stable (48%) or increasing (40%), similar to 2005. As in 2005, the majority of IDU in 2006 (80%) believed that police activity had not made it more difficult to obtain drugs recently (one IDU did not know). When asked about recent general trends in drug use, the overwhelming majority of IDU who commented indicated that they believed that there were more uniformed and undercover police at raves, in the suburbs, outside chemists and generally where IDU congregated. IDU also indicated that police were harassing more users, with more drug busts occurring and more users being charged by police.

Figure 10.7 shows the long-term trends regarding involvement in any criminal activity by type of criminal activity measured among IDRS IDU 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 decrease in 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 IDU samples has been generally stable over the past five years of reporting.

Figure 10.7: IDU reported involvement in crime, by offence type, in the month prior to interview, 1997 - 2006



Source: IDRS IDU interviews

Half of the KE commented on the criminal activity of IDU they had contact with in 2006. Few changes were reported in the pattern of criminal activity associated with heroin users, with an increase in property crime reported, and a reported increase in those dealing to support their own use. One KE commented that there had been an increase in female involvement in crime and younger people doing violent home invasions. Two KE commented that cannabis users were increasingly being caught for drug dealing. Nine KE commented that they believed the crimes perpetrated by methamphetamine users had become increasingly violent (i.e. more assaults and bashings). This is an increase in comparison to 2005 where only two KE reported that violent behaviour by methamphetamine users had increased. Several KE commented that some methamphetamine users go on 'crime benders', where the user engages in violent home invasions and does not know they are doing so. As in previous years, a few KE reported substantial prevalence of domestic violence and assaults against women and children primarily associated with the use of methamphetamines. Four KE also reported that there had been an increase in user dealers and an increase in female methamphetamine dealers to counteract the aggressive behaviours of male dealers. Three KE commented that there had also been an increase in property crime involving methamphetamine users in 2006, especially theft and robbery. One law enforcement KE reported that there had been an increase in high level trafficking, especially regarding importation of large amounts of precursor chemicals used to manufacture methamphetamine.

10.9 Driving risk behaviour

In 2006 the IDRS survey included, for the second year, additional questions pertaining to driving under the influence of illicit drugs. In July 2006 drug-driving legislation was implemented in SA. It should be noted that as all IDU interviews were conducted prior to the introduction of the drug driving legislation in South Australia no data is reported in 2006 in relation to this issue.

Sixty-two percent of IDU (n=62) reported driving within one hour of taking illicit drugs in the last six months. The results are detailed in Table 10.9. The majority had driven under the influence of cannabis (50%; n=31), followed by heroin (40%; n=25) or some form of

methamphetamine – base (29%; n=18), powder (16%; n=10) and crystal (15%; n=9). Smaller proportions of IDU reported driving under the influence of other substances, as listed in Table 10.9.

Table 10.9: Recent* occurrence of driving soon after taking an illicit drug, 2005 & 2006

	% of IDU that reported driving within an hour of use	
DRUG	**2005 (n=101) % of IDU**	**2006 (n=100) % of IDU**
Any drug	**58**	62
Cannabis	54	50
Heroin	49	40
Methadone**	20	24
Buprenorphine**	9	16
Morphine**	19	24
Benzodiazepines**	15	10
Methamphetamine – powder	24	16
Methamphetamine – base	39	29
Methamphetamine – crystal	22	15
Cocaine	3	2
LSD	2	0
Ecstasy	3	2

Source: IDRS IDU interviews
***** In the six months preceding interview
****** Refers to illicit use of these substances

10.10 Summary of associated harms

A summary of current trends in harms associated with illicit drug use by the IDU is found in Table 10.10.

Table 10.10: Summary of trends in associated harms

Blood-borne viral infections	The numbers of incident notifications for HBV were stable, and unspecified notifications also decreased in SA, but are increasing nationally (NNDSS) The number of incident notifications for HCV remained stable, but the number of unspecified notifications for HCV decreased in SA (NNDSS) HCV & HIV prevalence among IDU in SA was stable (NCHECR)
Injecting-related issues	% reporting sharing equipment decreased but high (IDU) Usual location of injecting relatively unchanged (IDU) Increase reporting of injecting problems associated with morphine or buprenorphine, in last month (IDU)
Expenditure on illicit drugs	Median expenditure decreased compared to 2005. Primarily heroin users' expenditure was equivalent to that of methamphetamine users' in 2005
Mental health issues	Decrease in % seeking help for mental health, especially for anxiety & depression (IDU) KE reports contradict IDU reports suggesting an increase in mental health issues
Substance-related aggression	Alcohol & methamphetamine most commonly associated with (self-reported) aggression following drug use (IDU)
Criminal & police issues	Decrease in prevalence of any criminal involvement and arrest, in the last year (IDU) Drug dealing or property crimes remain most common (IDU) IDU perceptions of police activity stable or increasing

11 DISCUSSION

While the focus of the IDRS is the four main illicit drugs (heroin, methamphetamine, cocaine and cannabis), in 2006 the IDRS continued to capture information about the use of a number of pharmaceutical substances (morphine, methadone and buprenorphine) that had previously been flagged as potential areas of concern. The results provide the most up-to-date picture of substance use, and the harms associated with use, by the South Australian IDU. This information is vital in order to assist policy makers and health professionals to better service clients of treatment agencies and to help in the formulation and implementation of harm minimisation strategies.

11.1 Heroin

The price of heroin remained stable in 2006, though it was still considered easily obtainable, and the perception of purity by IDU, was low. The median purity of SAPOL heroin seizures appears to have remained relatively stable across the last four financial years (2000/2001 – 2003/2004), but in 2005/06 the median purity had dropped to around three to five percent, which is extremely low. Purity of SAPOL heroin seizures remained well below pre-shortage levels. Based on reports from opiate users in the area, and on clients accessing a large local CNP, several KE considered that heroin purity remained low and heroin remained difficult to obtain in Adelaide.

Although the prevalence of recent IDU use of heroin remained stable (at 60%), a decrease in frequency of use was seen for the third year in a row (following the substantial rise in frequency seen in 2003). Heroin users also continued to supplement or substitute their heroin use with other opioid substances such as morphine, methadone and methamphetamines (particularly 'ice/crystal').

Experience of recent IDU heroin overdose in the sample remained low. 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 despite the ease of availability of heroin for most IDU, the continuing relatively poor quality of heroin was reflected in decreased frequency of use by IDU in 2006. This was despite the predominance of heroin as the drug of choice among this year's sample. These indicators, as well as mixed reports of quality and availability from KE suggest there was instability in the heroin market in Adelaide in 2006, and that pre-shortage conditions have not been re-established as yet. Over the long-term, indicators (such as treatment services and hospital data, police offences and seizure data) suggest stability or decline in the heroin market in Adelaide.

11.2 Methamphetamine

Some changes were noted in the indicators of the methamphetamine market in Adelaide in 2006 compared to 2005. Specifically, there was an increase in the price of a point of methamphetamine powder, but a decrease in the price of a gram of powder. The price of base methamphetamine remained stable in 2006, with the price of crystal methamphetamine not reported because too few IDU could comment. All forms of methamphetamine were generally considered easily obtainable. Perception of purity of base had increased slightly, but the purity of the crystal form had decreased slightly, yet the purity overall remained as high

or medium. Overall, the median purity of methamphetamine seized by SAPOL in SA for 2005/2006 was around 30%. SAPOL data on clandestine laboratory detections suggest that local manufacture of methamphetamine was still a contributor to the SA methamphetamine market. It is worth noting that many users, as well as KE, regarded the distinction of methamphetamine into the different forms somewhat artificial, as these distinctions were not generally made when purchasing – it was more often a case of getting whatever was available.

The prevalence of recent use of *any* methamphetamine by IDU remained stable (78%), but the frequency of use of *any* methamphetamine decreased in 2006 (median 12 days), after the increase seen in 2005 (median of 30 days). Decreased frequency of use was noted across all main forms of methamphetamine, particularly base, and this form remains the most used type of methamphetamine by IDU. There was an increase in the recent use of crystal methamphetamine (or 'ice/crystal') by smoking (10% of IDU in 2005 to 16%). Despite fluctuations, over the long-term, a gradual decline in frequency of use of any methamphetamine has been the trend since 2001.

Calls to ADIS in SA regarding methamphetamine decreased, whereas the number of clients (with amphetamines as the primary drug of concern) to all DASSA services remained stable. Moreover, the number of clients to DASSA inpatient (detox) services with amphetamine as the primary drug of concern continued to decline, and in 2006 was at the lowest since 2001/2002. In addition, the RAH emergency department attendances data showed the number of amphetamine-related admissions had decreased, however, the state (SA) hospital admissions data showed the number of amphetamine-related admissions had remained stable, though data for the latter lag behind other indicators.

In general, an increase in the price of a point of methamphetamine powder and a decrease in the price of a gram of methamphetamine powder were noted in 2006, though availability and perceived purity remained relatively stable. Use of all forms by IDU decreased. These parameters, along with other indicator and key expert data, suggest that the methamphetamine market remains strong and generally stable in Adelaide, though, over the longer-term, frequency of use and problems with use seem to have declined somewhat compared to earlier years.

11.3 Cocaine

Similar to 2005, only a very small number of IDU were able to supply information regarding the price, purity or availability of cocaine which was reflective of the relatively low numbers of IDU that had used cocaine in the last six months (a total of eight). In addition, although several KE were able to provide some information on cocaine, this was limited and none could nominate cocaine as their main area of expertise. Consequently, the data for price, purity and availability of cocaine in 2006 are again of limited value.

In 2006, a decrease was seen in the number of IDU who reported recent use of cocaine (8 compared to 16 in 2005), and frequency of use decreased and remained low (at a median of two days in the last six months), and use of cocaine in general remained well below other illicit drug use among this sample.

The small number of KE and IDU either using cocaine or able to provide information, in itself, indicates the lack of a sizeable and visible cocaine market in Adelaide, particularly amongst the IDU sampled by the IDRS. Indicator data – such as the number of cocaine

possession and provision offences, calls to ADIS, DASSA treatment services data for cocaine and SA hospital admissions data – also support this presumption. Data from the Australian Crime Commission (ACC) were unavailable for 2005/06 at the time of publication. The possibility that a cocaine market exists beyond the scope of this survey should not be excluded, and readers are directed to the Ecstasy and Related Drugs System findings (formerly the PDI; Weekley *et al.,* 2005b) which show a higher level of use and availability of cocaine among a sample of regular ecstasy users in Adelaide.

11.4 Cannabis

With the exception of a decrease in price of an ounce of bush, the price of cannabis has remained stable for years. Both hydro and bush cannabis were considered readily obtainable, and most cannabis-using IDU reported scoring cannabis from a friend, believing the source had been a small-time 'backyard' user/grower. Most also perceived the potency of either hydro or bush as high or medium, and stable.

Cannabis, though generally not the drug of choice among the IDU sample, was used commonly (by 77% in the last six months), and the prevalence of recent IDU cannabis use has been stable across all the years the IDRS has been conducted. However, the frequency of use of cannabis increased markedly in 2006, following a decrease in 2005 after four years of stability (at median daily use). Hydroponically grown cannabis continues to dominate in the Adelaide cannabis market. KE generally reported no changes in any parameter of the cannabis market or use of cannabis by IDU.

The number of calls to ADIS concerning cannabis remained stable, as did the total number of clients to DASSA treatment services; however, the number of clients attending inpatient detox services of DASSA decreased slightly in 2005/2006 (from 109 in 2004/05 to 92). Cannabis-related hospital admissions in SA remained stable in 2004/05.

Overall, the cannabis market remains generally stable in Adelaide, and use by IDU remains common, despite an increase in reported frequency of use among the 2006 sample.

11.5 Other opioids

As in recent years, in 2006 the use of other opioid substances by IDU was common, with 90% reporting recent use of some type of opioid substance, excluding heroin. There were some changes, however, in the use of other opioids by IDU in the 2006 sample, as follows.

Morphine

In 2006, the prevalence of recent morphine use among IDU increased, and there was an increase in the frequency of use of morphine. The price of MS Contin – 100mg increased slightly in 2006, but the availability of morphine was unchanged compared to 2005. As in previous years, the majority of morphine users reported use by injecting and mainly used illicit supplies of Kapanol and MS Contin.

Methadone and buprenorphine

In 2006 there was a slight decrease in the proportion of IDU that reported recent use of illicit methadone syrup, while the proportion reporting use of illicit buprenorphine remained stable. The frequency of illicit use of both pharmacotherapy medications increased in 2006. The percentage of IDU reporting injection of either licit or illicit methadone or

buprenorphine remained stable compared to 2005 (at approximately a quarter of recent users of these substances). While there was no change in the proportion of IDU reporting mainly using an illicit supply of buprenorphine, there was a small increase in the proportion of IDU reporting mainly using an illicit supply of methadone. It is worth noting, however, that the majority still report mainly licit (prescribed) use of these substances.

Oxycodone

In 2006, for the second year, IDU were asked about their use of oxycodone specifically, and a small proportion of the sample (20%) reported illicit use of oxycodone at very low frequency. In 2006, there was an increase in the proportion of IDU that had used illicit oxycodone in the last six months, and there was also an increase in the frequency of that use.

11.6 Other drugs

The proportion of IDU reporting recent use of ecstasy or hallucinogens decreased and frequency of use remained low in 2006.

There was a small increase overall in the percentage of IDU reporting recent use of benzodiazepines in 2006, but there was a dramatic increase in the frequency of use. The majority of benzodiazepine users reported mainly licit use, primarily of diazepam.

Anti depressant use decreased slightly in 2006 in terms of percentage reporting recent use, but the frequency of use increased. Almost exclusively licit use was reported and the most common type used was an SSRI.

11.7 Associated harms

The high prevalence of sharing of injecting equipment (other than needles) first noted in 2004 decreased slightly in 2006 with 27% (from 39% in 2005) reporting having shared equipment such as tourniquets, water and spoons.

While the prevalence of injecting of methadone and buprenorphine remained stable compared to 2005, there were some increases seen with regard to injecting-related problems associated with these substances in 2006. The number of IDU who reported recent injecting of morphine in 2006 had more than doubled (from 18 to 40), and the reported experience of injecting related problems showed a four-fold increase (from 7 in 2005 to 28 in 2006). A third or more of injectors of morphine, methadone and buprenorphine still reported experiencing injecting-related problems in the month prior to interview, such as substance dependence, scarring and bruising, difficulty finding veins, and abscesses or infections. Several KE commented that these problems were exacerbated by lack of IDU access to needles and other equipment, and/or proper (single) use of filters and other injecting equipment, primarily due to financial constraints.

There were increases in the number of IDU reporting that they had attended a GP, a psychiatrist, a psychologist or a counsellor in response to mental health issues in 2006. Depression and/or anxiety again predominated as the most commonly experienced mental health problem reported by IDU. KE reported mental health issues as generally stable in 2006, although there was consensus among all KE who were able to comment that mental health problems had increased in frequency in the last year, primarily with regard to methamphetamine users.

The number of IDU who reported they had become verbally aggressive following use (under the influence) of a drug in the preceding six months increased from 2005 to 2006. Overall, a greater proportion of IDU reported becoming verbally aggressive (particularly during withdrawal), rather than physically aggressive following drug use or during drug withdrawal. Alcohol and methamphetamine (particularly base) were most commonly associated with physical or verbal aggression, though the number of IDU per drug type was small.

In 2006, the median expenditure on illicit drugs decreased overall compared to 2005, with IDU who used primarily heroin or methamphetamine spending equivalent amounts on average in 2006.

There was a decrease in the prevalence of criminal involvement and of experience of arrest reported by IDU in the preceding 12 months. Drug dealing and property crime remained the most common criminal involvement amongst IDU. Most IDU perceived that police activity was either stable or increasing and the majority reported that police activity had not made it more difficult to obtain drugs recently.

12 IMPLICATIONS

The findings from the 2006 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.

- Development of improved treatment protocols for methamphetamine use and dependence (underway at DASSA).

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

- Continued close monitoring is required of the prevalence of injecting among IDU and development and implementation of strategies to reduce harms associated with injecting among this group of illicit drug users.

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

- Continued focus on reducing supply of amphetamines and methamphetamine from local clandestine laboratory manufacture.

- Development of improved treatment protocols for benzodiazepine use and dependence.

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

- Development and implementation of strategies to reduce behaviour and harms associated with injecting of formulations not intended for injection, such as morphine, methadone and buprenorphine.

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

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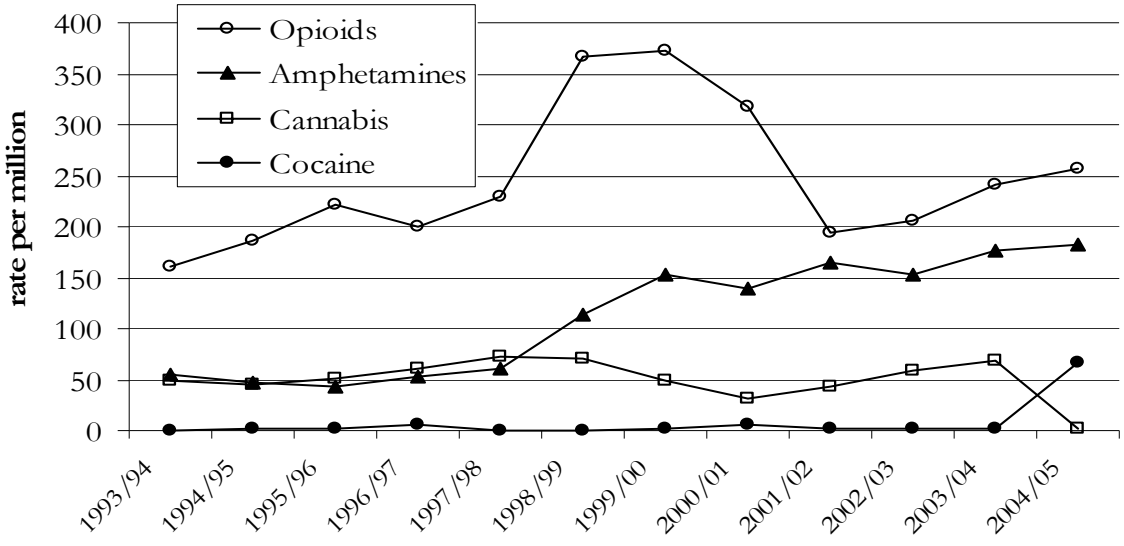
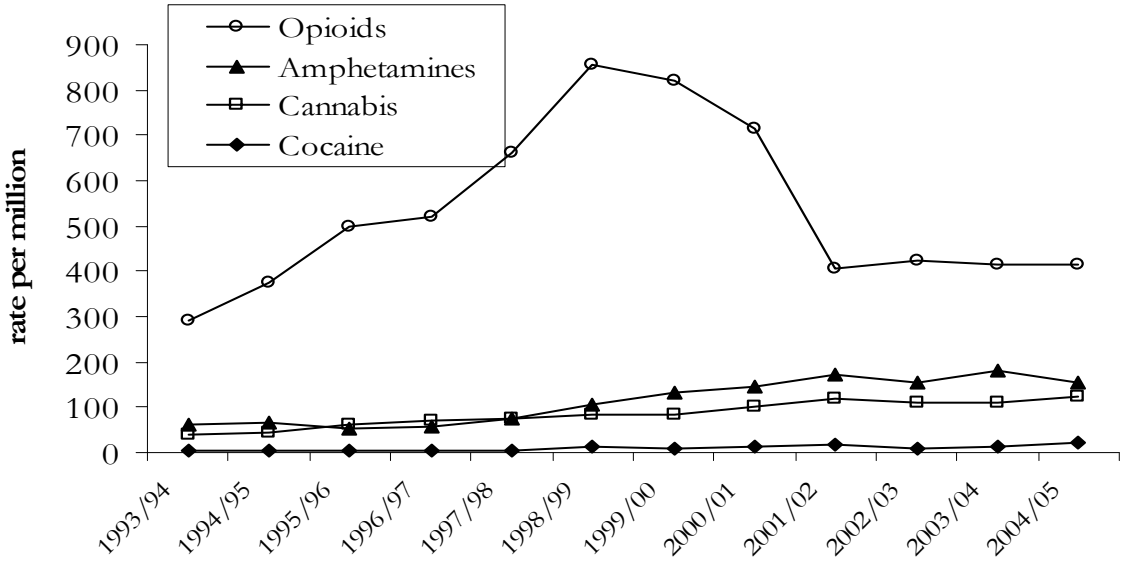
APPENDIX 1: SUBSTANCE RELATED ADMISSIONS TO HOSPITALS IN SOUTH AUSTRALIA AND AUSTRALIA

Figure A: Rate of substance-related admissions* (primary diagnosis) to hospital in South Australia, 1993/1994 - 2004/2005



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, 1993/1994 - 2004/2005



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.