J. Weekley, L. Simmonds and R. Ali

SA DRUG TRENDS 2005
Findings from the Illicit Drug Reporting System (IDRS)

NDARC Technical Report No. 250

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Josephine Weekley, Lynlea Simmonds and Robert Ali

Drug and Alcohol Services South Australia[1]

NDARC Technical Report No. 250

ISBN 0 7334 2353 1

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[1] Previously known as the Drug and Alcohol Services Council (DASC).

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ACKNOWLEDGEMENTS

In 2005, this research was funded by the Australian Government Department of Health and Ageing and the National Drug Law Enforcement Research Fund through the National Drug and Alcohol Research Centre. The authors would like to thank Ms Jennifer Stafford, Dr Louisa Degenhardt, Dr Richard Mattick, Ms Emma Black and Ms Amanda Roxburgh of NDARC for their support and assistance throughout this study. We would also similarly like to acknowledge and thank David Newcombe and Dr Sophie Pointer from DASSA.

The authors also wish to acknowledge and thank:

- Staff (mostly peer educators) at the Clean Needle Program sites around Adelaide who assisted in the recruitment of the injecting drug users, and who gave generously of their time and resources in facilitating this process.

- The four research interviewers who conducted the interviews with injecting drug users: Aylza Donald, Andrea Gordon, Elizabeth Hunt and Kate Morefield.

- The 26 key experts who willingly provided their time, efforts and experience to contribute to the IDRS in 2005.

- The organisations that generously provided us with indicator data or advice where indicator data were not available at the time of publication, including the Australian Bureau of Statistics, the Australian Crime Commission, the Australian Institute of Health and Welfare, the South Australian Police, the Royal Adelaide Hospital, the South Australian Alcohol and Drug Information Service, the National Drug and Alcohol Research Centre, and Drug and Alcohol Services South Australia.

Finally, the authors wish to thank the 101 injecting drug users who participated in the IDU survey in 2005, and shared their experiences with us.

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
CNP	Clean Needle Program
DASSA	Drug and Alcohol Services South Australia
IDRS	Illicit Drug Reporting System
IDU	Injecting drug users
KE(s)	Key expert (s)
NDARC	National Drug and Alcohol Research Centre
NNDSS	National Notifiable Diseases Surveillance System
NSP	Needle and syringe program
RAH	Royal Adelaide Hospital
SA	South Australia
SAPOL	South Australian Police
SSRI	Selective Serotonin Re-uptake Inhibitor (a class of anti-depressant medication)

EXECUTIVE SUMMARY

Demographic characteristics of injecting drug users (IDU)

Sample characteristics in 2005 were similar to previous years, with 101 IDU participating in the 2005 IDRS. The median age of the sample was 35 years and 64% of participants were male. Almost two-thirds (62%) of the sample was unemployed and almost half (46%) had a history of previous imprisonment. The median number of years spent at school was 10, but over half the sample (55%) reported having some kind of post-secondary school qualification (primarily a trade or technical qualification). Over half (53%) 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 (60%), followed by heroin (33%). Heroin was nominated by over half of the sample (57%) as the drug of choice, followed by methamphetamine (27%). However, methamphetamine remained the drug most commonly injected by IDU in the last month (by 47%), followed by heroin (by 34%) and morphine (by 10%). Therefore, in 2005 there is still a discrepancy between what people want to use and what they are using most, suggesting the current price, availability and quality of heroin, in particular, is impacting on frequency of use (see heroin section below).

Polydrug use was common among the IDU in 2005 and has remained consistently so across the years of the IDRS. Similar to 2004, in 2005 there was substantial crossover between heroin users and methamphetamine users in the IDU sample. Forty-three IDU (43%) 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, with 34% reporting injecting at least once a day.

Heroin

An increase in the price of heroin was noted in 2005, 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 to medium among IDU. The median purity of SAPOL heroin seizures appears to have remained relatively stable across the last four financial years, with median purity of 24% in 2004/05. Purity of SAPOL heroin seizures remains well below pre-shortage levels. There was an increase in the proportion of IDU obtaining heroin from a mobile dealer.

The proportion of IDU who reported recent use of heroin remained stable compared to 2004 (at 61%). There was, however, a decrease in the frequency of use of heroin for the second year in a row (following the substantial rise in frequency seen in 2003) to a median 28 days. Heroin users continue to supplement or substitute their heroin use with other opioid substances such as morphine and methadone.

Experience of recent heroin overdose among IDU in the sample remained low, though information from KE as well as the Royal Adelaide Hospital suggested a spike in non-fatal overdoses occurred in July/August of 2005. Other available treatment services &

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 increased price and continuing relatively poor quality of heroin was reflected in decreased frequency of use among IDU in 2005, despite the predominance of heroin as the drug of choice among this year's sample. 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

There were increases in the price, particularly of 'points' and gram amounts, of all three forms of methamphetamine from 2004 to 2005. Subsequently, in 2005, there was little difference in the median price paid for any amount of all three forms of methamphetamine, though crystal still tended toward being more expensive. All forms of methamphetamine were considered 'easy' or 'very easy' to obtain, though slightly larger proportions of IDU reported difficulty obtaining base and crystal forms in 2005. There was an increase in the proportion of IDU reporting that they usually obtained any form of methamphetamine from mobile dealers. The purity of base and crystal forms of methamphetamine, as perceived by IDU, had increased slightly, and remained as high or medium. Overall, the median purity of methamphetamine seized by SAPOL in SA for 2004/2005 was decreased (to 11.6%) compared to the previous year, and was the lowest seen in the past four years. 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%), and the frequency of use of *any* methamphetamine increased in 2005 (median 30 days), stabilising the dramatic decrease seen in 2004. Increased frequency of use was noted across all main forms of methamphetamine, particularly base, and this form remains the most used type of methamphetamine among IDU. There was no increase in the recent use of crystal methamphetamine (or 'ice') by smoking (10% of IDU in 2005).

Calls to 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 to DASSA inpatient (detox) services with amphetamine as the primary drug of concern continued to decline, and in 2005 was at the lowest since 2001/2002. In contrast, state (SA) hospital admissions data showed the number of amphetamine-related admissions was continuing to increase (as at 2003/04), though this data lags behind other indicators.

In general, an increase in the price of all forms of methamphetamine was noted in 2005, though availability and perceived purity remained relatively stable. Use of all forms among IDU returned to 2003 levels, following what seems to have been an anomalous decrease in 2004 (possibly due to sampling method). These parameters, along with other indicator and key expert data, suggest that the methamphetamine market remains strong and generally stable in Adelaide. However, over the longer-term, problems with use seem to have declined somewhat compared to earlier years.

Cocaine

Similar to 2004, 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 16). 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 2005 are again of limited value.

In 2005, an increase was seen in the number of IDU that reported recent use of cocaine (16 compared to 6 in 2004), but frequency of use remained low (at a median of 3.5 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. However, data from the ACC show an increase in the number of cocaine seizures by SAPOL in 2004/2005. 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*.,* 2005), which show a higher level of use and availability of cocaine among a sample of regular ecstasy users in Adelaide.

Cannabis

In 2005, the median price reported for cannabis was $200 an ounce and $25 a 'bag' for either hydro or bush. With the exception of an increase in price of an ounce of bush (up from $180 in 2004), 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 80%), and the percent of IDU that had recently used cannabis has been stable across all the years the IDRS has been conducted. However, frequency of use of cannabis decreased markedly in 2005 (to a median 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, as did the total number of clients to DASSA treatment services; however, the number of clients attending inpatient detox services of DASSA continues to increase gradually. Cannabis-related hospital admissions in SA have increased for three years to 2003/2004.

Overall, the cannabis market remains generally stable in Adelaide, and use among IDU remains common, despite a decrease in reported frequency of use among the 2005 sample.

Other opioids
As in recent years, in 2005 the use of other opioid substances by IDU was common, with 83% 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 2005 sample, as follows.

Morphine
Although the proportion of IDU reporting recent use of morphine remained relatively stable (at 37%), there was a continued decrease in the frequency of use of morphine (to a median 8 days), for the second year in a row. The price and availability of morphine was unchanged compared to 2004. 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 2005 there was an increase in the proportion of IDU that reported recent use of illicit methadone syrup (to 24%), while the proportion reporting use of illicit buprenorphine remained stable (at 14%). Frequency of illicit use of both pharmacotherapy medications remained stable and low in 2005 (a median of 3 days for each). The percentage of IDU reporting injecting of either licit or illicit methadone or buprenorphine remained stable compared to 2004, 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 (25%), there was a small increase in the proportion of IDU reporting *mainly* using an illicit supply of methadone (38%). It is worth noting, however, that the majority still report *mainly* licit (prescribed) use of these substances.

Oxycodone
For the first time, in 2005, IDU were asked about use of oxycodone specifically, and 11% of the SA sample reported illicit use of oxycodone at very low frequency (median one day in six months).

Other drugs
The proportion of IDU reporting recent use of ecstasy (25%) or hallucinogens (8%) was stable and frequency of use remained low in 2005.

Although there was a small increase overall in the percentage of IDU reporting recent use of benzodiazepines (63%) in 2005, there was a decrease in the percentage reporting recent illicit use, and a decrease in the frequency of use. Sixty-five percent of benzodiazepine users reported mainly licit use, primarily of Diazepam.

Anti-depressant use was also stable, both in terms of percent reporting recent use (22%) and frequency of use. Almost exclusively licit use was reported, primarily of a SSRI.

Associated harms
The high prevalence of sharing of injecting equipment (other than needles) first noted in 2004 was maintained in 2005, with 39% reporting having shared equipment such as tourniquets, water and spoons.

While the prevalence of injecting of morphine, methadone and buprenorphine remained stable compared to 2004, there were some decreases seen with regard to injecting-related problems associated with these substances in 2005, particularly morphine and buprenorphine. 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 was an increase in IDU-reported experience of anxiety and attendance to a GP for a mental health problem, in 2005. 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 2005.

While median expenditure on illicit drugs increased overall compared to 2004, IDU that used primarily heroin still spent a greater amount on average than primarily methamphetamine using IDU, though this difference was decreased in 2005.

There was an increase 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 2005 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 the crystal methamphetamine ('ice'), 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 amphetamines 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.

- Given the recent overdose deaths in Adelaide in which buprenorphine was implicated, along with indications that diversion and injection of buprenorphine is occurring:

- closer monitoring of the presence of buprenorphine in overdose is warranted, both in fatal and non-fatal cases (as per the Designer Drug Early Warning System), and
- development and dissemination of education resources is needed regarding the risks and harms of injecting buprenorphine.

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

1.0 INTRODUCTION

The Illicit Drug Reporting System (IDRS) was trialed 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 Commonwealth 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 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 they were joined by Western Australia, Northern Territory, Australian Capital Territory, Queensland and Tasmania. For a review of the history and progression of the IDRS nationally up to 2000, see Darke, Hall and Topp (2000). The year 2005 is the ninth year that the IDRS has been conducted in South Australia, and the seventh year that it has included all states and territories (see Stafford et al., 2005 for a national comparison of 2004 findings, and Weekley et al., 2005(a) 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 2005 South Australian Drug Trends Report summarises information collected by the South Australian component of the national IDRS from three sources: a survey of injecting drug users, key informant 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 their 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 2005 IDRS was to provide information on drug trends in South Australia, particularly focusing on the 12 months between mid-2004 and mid-2005.

2.0 METHOD

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

- A survey of 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;
- 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 101 injecting drug users was interviewed in June and July 2005. 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 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 2005, four 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 39 minutes (range: 20 to 90 minutes) *(data missing for one participant)* and subjects 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-2005). The largely quantitative data were analysed statistically using SPSS for Windows, Version 13.01 (SPSS, 2004).

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 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 2005, 26 KE were interviewed (12 males and 11 females) from August to late October 2005. Key experts comprised a range of persons from various professions: fifteen health workers (youth workers, community drug and alcohol workers, psychologists, medical officers, nurses, and drug & alcohol counsellors), six user representatives (peer educators, outreach and clean needle program workers) and three law enforcement officers and police intelligence analysts.

Key experts 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 KE had most contact with in 2005. Similar to 2004, in 2005, cocaine and cannabis were not identified by any KE as the main illicit drugs used by users they had most contact with. However, KE were asked to consider issues related to cannabis and cocaine in particular, when their knowledge encompassed these drug types as well as methamphetamine or heroin, in an effort to gather more information with regard to these drug types. In all, 13 interviews were completed with methamphetamine as the main focus, and 8 were completed with heroin (and other opiates) as the main focus. In addition, three KE provided 'double' interviews on both methamphetamine, and heroin and other opiate users. 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=24) and the remainder (n=2) were conducted by telephone. The instrument used was based on previous research conducted at NDARC for the World Health Organisation (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, in particular 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);

- 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;
- Purity of drug seizures made by South Australian Police (SAPOL) and the Australian Federal Police (AFP), provided by the Australian Crime Commission (ACC);
- 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 et al., (2004b);
- Drug-related hospital admissions data (state and national) provided by the Australian Institute of Health and Welfare (AIHW).

National Notifiable Diseases Surveillance System (NNDSS) data, from the Australian Government Department of Health and Ageing, was also included as an indicator of BBVI rates. BBVI transmission is correlated to injecting drug use, and, despite these data not having drug specific breakdowns, they are a useful indicator of injecting-related trends.

2.4 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 1980s was the form of illicit amphetamine most available in Australia (Chesher, 1993). Chemically, amphetamine and methamphetamine differ in molecular structure but are closely related. In Australia today, the powder traditionally known as 'speed' is almost exclusively methamphetamine rather than amphetamine. The more potent forms of this family of drugs – known by terms such as ice, 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 price, purity and availability section were eliminated from the sample for that section, to increase the validity of remaining categories. The sample sizes are therefore reported in each table (n=*x*). In addition, 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.

3.0 RESULTS

3.1 Overview of the IDU sample

The demographic characteristics of the 101 IDU interviewed in 2005 are summarised in Table 3.1, with the 2004 sample characteristics provided for comparison.

There was some overlap of the 2005 IDRS IDU sample with previous years' samples. Twenty seven percent of the 2005 sample stated that they had participated in the IDRS before; 17% in the year 2004, 10% in the year 2003, and fewer in earlier years.

Table 3.1: Demographic characteristics of IDU sample

Characteristic	2004 n = 101	2005 n = 101
Age (median in years)	32	35
Gender (% male)	61	64
Identify as A&TSI (%)	14	8
Employment (%)		
Not employed	63	62
Full-time	3	6
Part-time/casual	13	13
Student	6	5
Home duties	15	14
School education (median in years)	10	10
Tertiary education (%)		
None	46	45
Trade/technical	29	44
University/college	26	12
Currently in treatment (%)	48	53
Prison history (%)	41*	46
Area of Adelaide (%)		
Central/Eastern	24	24
Western	27	26
Southern	29	29
Northern	22	19
Non-metro**	-	1
No fixed address/missing	2	6

Source: IDRS IDU interviews

* data missing for one participant **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 35 years (range 16 to 57 years) and 64% of participants were male. Almost two-thirds (62%) of the sample was unemployed and almost half (46%) had a history of previous imprisonment. The median

number of years spent at school was 10 (range 3 to 12 years). Almost half of the sample (45%) reported having no tertiary qualifications. Of those that did report having a tertiary qualification, differences in the proportions per type of qualification were noted between 2005 and previous years. In particular, 44% of the current sample reported they had completed a trade or technical course (compared to 29% in 2004 and 32% in 2003) and 12% reporting they had completed a university or college course (compared to 26% and 16% of participants in 2004 and 2003, respectively).

In 2005, over half of the sample (53%) were in drug treatment at the time of the interview, the majority of whom were in maintenance pharmacotherapy treatment. Specifically, 27% reported being on a methadone program (compared to 30% in 2004) and 24% reported being on a buprenorphine program (an increase compared to 17% in 2004 and 7% in 2003).

As in previous years, in 2005 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 (82%). The remaining IDU reported their main source of income was a wage (11%), from criminal activity (5%), from sex work (1%) or from prior savings (1%).

In summary, compared to 2004, the 2005 sample characteristics were largely unchanged, with the most notable differences being a larger proportion reporting having a trade or technical qualification, a smaller proportion with a university or college qualification, and fewer who identified as Aboriginal and/or Torres Strait Islander.

The majority of KE reports of demographics of drug user populations they have contact with replicate those of the sample: majority male (~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). In addition, several KE, discussing clients that access Clean Needle Programs remarked that many clients to their service – who nominated amphetamines as their primary drug, and who were unlikely to be represented in the IDRS IDU sample – were employed and would be considered to be "socially well functioning".

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 3.4, respectively.

The median age of first injection by the IDU sample was 18 years (range 11 to 53). The drug most commonly first injected by the sample was amphetamine (60%), followed by heroin (33%).

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

Variable	2004 n=101	2005 n = 101
Age first injected (median in years)	18	18
First drug injected (%)		
Heroin	39	33
Amphetamine	53	60
Cocaine	1	4
Morphine	2	1
Other (see output file)	6	2
Drug of choice (%)		
Heroin	48	57
Methamphetamine	34*	27**
Cocaine	2	4
Cannabis	7	4
Morphine	3	1
Other	7	7
Drug injected most often in last month (%)		
Heroin	37	34
Methamphetamine	39	47**
Cocaine	1	-
Morphine	13	10
Methadone	6	6
Other	5	4
Most recent drug injected (%)		
Heroin	36	32
Methamphetamine	40	51**
Morphine	13	9
Methadone	5	6
Other	7	3
Frequency of injecting in last month (%)		
Weekly or less	32	25
More than weekly but less than daily	31	41
Once a day	14	13
2 - 3 times a day	19	16
>3 times a day	5	5
Polydrug use (median)		
Number of drug classes ever used	12 (4-16)	12 (5-16)
Number of drug classes used in last 6 months	6 (3-12)	6 (2-12)
Number of drug classes ever injected	5 (1-10)	5 (1 -10)
Number of drug classes injected in last 6 months	2 (1-7)	2 (1 - 7)

Source: IDRS IDU interviews

* collapsed categories: powder, base, crystal and 'ox blood' (a liquid form). **collapsed categories: powder, base and crystal

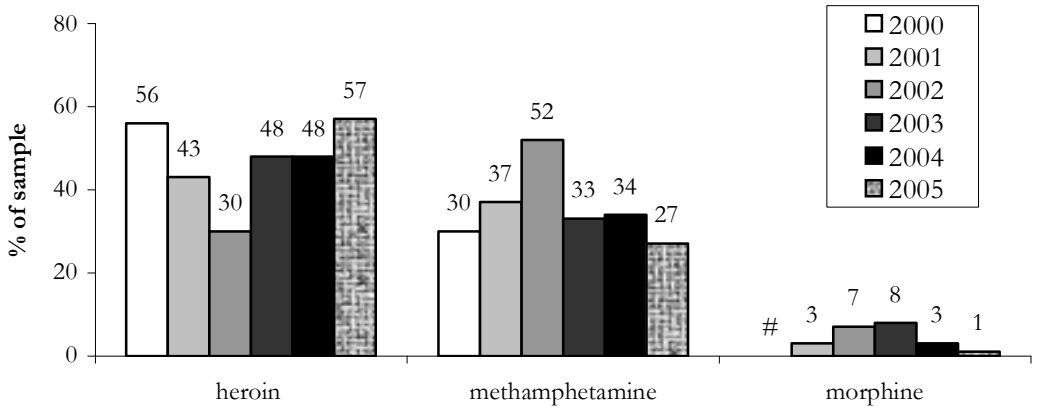
Compared to 2004, in 2005 there were changes in the proportions nominating heroin and methamphetamine as their preferred drug among the IDU sample. Specifically, 57% reported heroin as their drug of choice (compared to 48% in 2004) and 27% reported some form of methamphetamine as their drug of choice (a decrease from 34% in 2004). As can be seen in Figure 3.1, the pattern of preference seems to most closely resemble that seen in 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 stable in 2005 (at 34%), having increased from the low of 22% in 2002 (see Figure 3.2). In addition, the proportion of IDU reporting that heroin was the most recent drug they had injected (32% in 2005) was also stable compared to previous years (36% in 2004 and 35% in 2003)(see Table 3.2). With regard to methamphetamine, despite the small decrease in the proportion reporting methamphetamine as their drug of choice, there was a small increase in the proportion of IDU reporting methamphetamine as the drug most injected in the last month (from 39% in 2004 to 47% in 2005)(see Figure 3.2), and a larger increase in the proportion reporting methamphetamine as the drug most recently injected (from 40% in 2004 to 51% in 2005) (see Table 3.2).

Consistent with the past two years, therefore, despite heroin being the most commonly reported drug of choice among the IDU sample in 2005, 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.

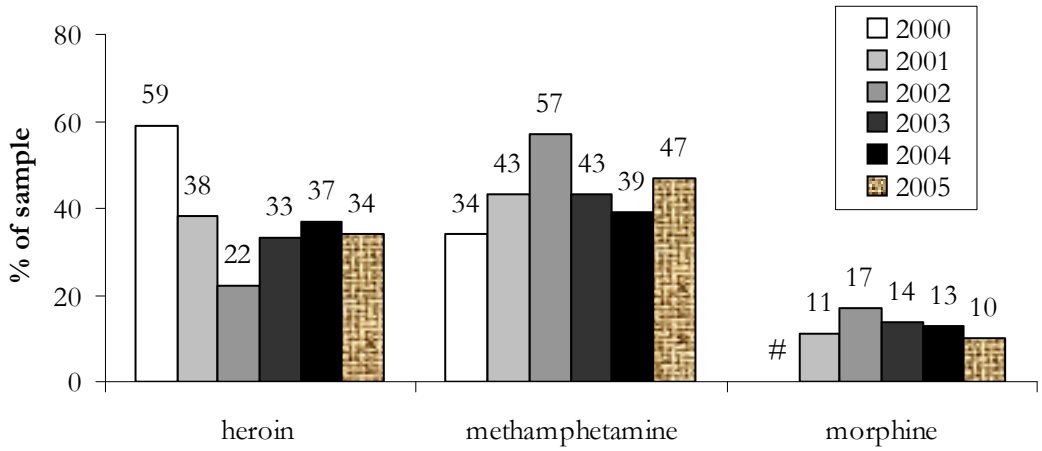
Frequency of injecting any drug in the last month was greater than weekly for 75% of the sample, with 34% reporting they had injected at least once a day during that period. Compared to 2004, frequency of injecting had remained relatively stable, with the largest change seen in the proportion of IDU reporting they had injected more than weekly but less than daily (increased from 31% in 2004 to 41% in 2005).

Figure 3.1: Trend for drug of choice, 2000 to 2005



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 to 2005



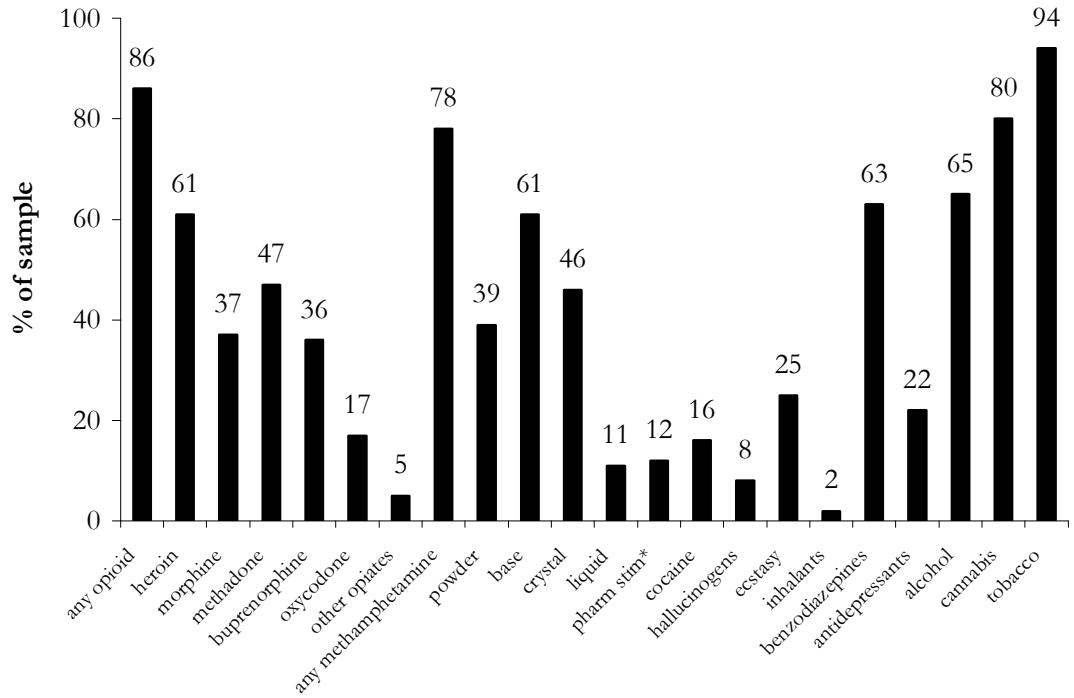
Source: IDRS IDU interviews
morphine was not separated from 'other opiates' in 2000

Polydrug use was common among IDU in 2005 and has remained consistently so across the years, with no real differences being reported from 2004 to 2005 (see Table 3.2). In 2005, participants were asked about their history of use of 23 separate substances that were collapsed according to drug type[1]. Although oxycodone was asked separately in 2005, this was collapsed into the 'other opiates' category to allow comparability of data across years. Therefore, in 2005, the total number of possible drug types used was 16, and the total number of possible injected drug types was 13. In 2005, IDU reported use of a median 12 (range 5 to 16) drug types across their lifetime and a median of 6 (range 2 to 12) during the six months prior to interview. The drugs most commonly used among the IDU across their lifetime were: alcohol, cannabis, tobacco, *any* methamphetamine, heroin and benzodiazepines (see Table 3.3). The drugs most commonly used among the

[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 and tobacco.

IDU in the last six months were: tobacco, cannabis, *any* methamphetamine, alcohol, benzodiazepines and heroin (Figure 3.3). This order of commonality was very similar to 2004.

Figure 3.3: Recent Drug Use: percentage of the IDU to have used each substance type in the last 6 months



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

Similar to 2004, in 2005 there was substantial crossover between heroin users and methamphetamine users in the IDU sample. Forty-three IDU (43%) had used both heroin and some form of methamphetamine, in the last six months. However, nineteen IDU (31% 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 fifty-eight IDU that nominated heroin as their drug of choice, 52 (90%) had used heroin in the previous six months, 25 (43%) had used morphine, 36 (62%) had used any methadone (licit or illicit), 24 (41%) had used any buprenorphine (licit or illicit) and 10 (17%) had used any Oxycodone (licit or illicit) during this period. In addition, 37 (64%) had used some form of methamphetamine. Similarly, there was overlap of drug classes used by those IDU who nominated methamphetamine as their preferred drug. Of the 27 IDU reporting methamphetamine as their drug of choice, all had used some form of methamphetamine in the last 6 months, 7 (26%) had used heroin during that period and 6 (22%) had used morphine

.

Table 3.3: Drug use history and routes of administration of the IDU sample (% of total sample; n=101)

Drug Class	Ever used	Ever injected	Injected last 6 mths	Ever smoked	Smoked last 6 mths	Ever snorted	Snorted last 6 mths	Ever swallow	Swallow last 6 mths	Used last 6 mths	No. days used last 6 mths* (range)	No. days injected last 6 mths** (range)
Heroin	95	94	61	54	3	22	1	24	0	61	28 (1-180)	28 (1-180)
Methadone – licit	61	32	12					61	28	28	180 (14-180)	81 (1-180)
Methadone – illicit	47	26	11					35	17	24	2.5 (1-120)	12 (1-90)
Physeptone# – licit	9	2	0	0	0	0	0	9	1	1	180 (180)	-
Physeptone# – illicit	40	28	9	0	0	1	0	30	8	13	3 (2-60)	3 (1-60)
Any methadone	***78***	***51***	***24***							***47***	***123 (1-180)***	***50.5 (1-180)***
Buprenorphine – licit	42	27	17	0	0	0	0	41	23	27	180 (50-180)	90 (4-180)
Buprenorphine – illicit	28	18	8	1	1	1	0	19	6	14	3 (1-52)	2 (1-30)
Any buprenorphine	***52***	***36***	***22***							***36***	***180 (1-180)***	***46 (1-180)***
Oxycodone – licit	19	9	4	0	0	0	0	17	5	7	10 (1-20)	1.5 (1-10)
Oxycodone – illicit	35	29	9	0	0	0	0	12	3	11	1 (1-5)	3 (1-5)
Any Oxycodone	***48***	***33***	***12***							***17***	***3 (1-20)***	***1.5 (1-15)***
Morphine	76	73	34	2	0	1	0	41	16	37	8 (1-180)	6 (1-180)
Homebake	20	20	0	2	0	1	0	1	0	0	-	-
Other opioids	28	15	1	9	1	2	0	14	4	5	20 (2-72)	1 (1)
Any opioid§	***96***	***95***	***80***							***86***		

Source: IDRS IDU interviews. * Median number of days used by those IDU who had used the drug class in the last 6 months; ** Median number of days used by those IDU who had injected the drug class in the last 6 months; # Physeptone is a tablet form of methadone; § *Any opioid* includes all opioid substances (heroin, methadone/Physeptone, buprenorphine, Oxycodone, morphine, homebake and other opioids)

Table 3.3 (continued): Drug use history and routes of administration of the IDU sample (% of total sample; n=101)

Drug Class	Ever used	Ever Injected	Injected last 6 mths	Ever smoked	Smoked last 6 mths	Ever snorted	Snorted last 6 mths	Ever swallow	Swallow last 6 mths	Used last 6 mths	No. days used last 6 mths* (range)	No. days inj. last 6 mths** (range)
Methamphetamine: Powder form	91	86	38	19	3	58	4	53	10	39	12 (1-180)	12 (1-180)
Methamphetamine: Base/paste form	79	78	58	7	5	3	1	24	12	61	24 (1-180)	24 (1-180)
Methamphetamine: Crystal/ice form	69	63	44	14	10	1	0	10	3	46	12 (1-180)	12 (1-180)
Methamphetamine liquid	45	42	10					7	2	11	4 (1-48)	4 (1-24)
Pharmaceutical stimulants	45	18	3	1	0	0	0	37	10	12	3.5 (1-36)	2 (1-30)
Methamphetamine: any form[##]	***97***	***95***	***78***							***78***	***30 (1-180)***	***26 (1-180)***
Cocaine	69	55	12	17	1	40	9	10	1	16	3.5 (1-24)	3 (1-10)
Hallucinogens	92	25	2	3	0	2	1	91	7	8	3 (1-24)	3 (1-5)
Ecstasy	66	36	13	2	0	10	5	58	21	25	3 (1-48)	1 (1-5)
Benzodiazepines	91	26	2	5	0	2	0	90	62	63	24 (1-180)	7 (4-10)
Anti-depressants	56	0	0					56	22	22	158 (3-180)	-
Alcohol	100	7	0					100	65	65	10 (1-180)	-
Cannabis	100									81	120 (1-180)	
Tobacco[§§]	97									94	180 (180)	
Inhalants[§§]	43									2	1.5 (1-2)	

* Median number of days used by those IDU who had used the drug class in the last 6 months; ** Median number of days used by those IDU who had injected the drug class in the last 6 months; [##] *Methamphetamine: any form* includes powder, base/paste, crystal/ice, liquid and pharmaceutical stimulants; [§§] data missing for one participant

4.0 HEROIN

Sixty-three percent of IDU were able to provide answers on one or more aspects of the heroin market (price, purity and/or availability) in 2005, similar to the 62% able to do so in 2004.

4.1 Price

The *current* price of heroin was estimated by the IDU to be a median $400/gram (range $50-700, n=27) or $50/cap (range $30-100, n=45). 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=6). This is a substantial increase from 2004 when the median price *at last purchase* was $320/gram, but similar to the median price reported in 2003 ($425). The median price *at last purchase* for a half-weight was reported as $200 (n=27), also an increase from the 2004 median price of $180, but the same as the median last purchase price reported in 2003. 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, 2004* & 2005

Amount bought	Median price paid, $ (range)	Number of IDU purchasers
'cap'	50 (20-100) *50 (30-150)*	29 *27*
gram	400 (200-400) *320 (150-400)*	6 *10*
'half-weight' (½ gram)	200 (150-250) *180 (50-250)*	27 *25*
¼ gram	100 (100-150) *100 (50-150)*	18 *15*
⅛ gram	100 (50-100) *50 (50)*	4 *3*

Source: IDRS IDU interviews
* 2004 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=64), approximately two-thirds (70%; 45% of entire sample) reported the price as stable over the last six months (see Table 4.2).

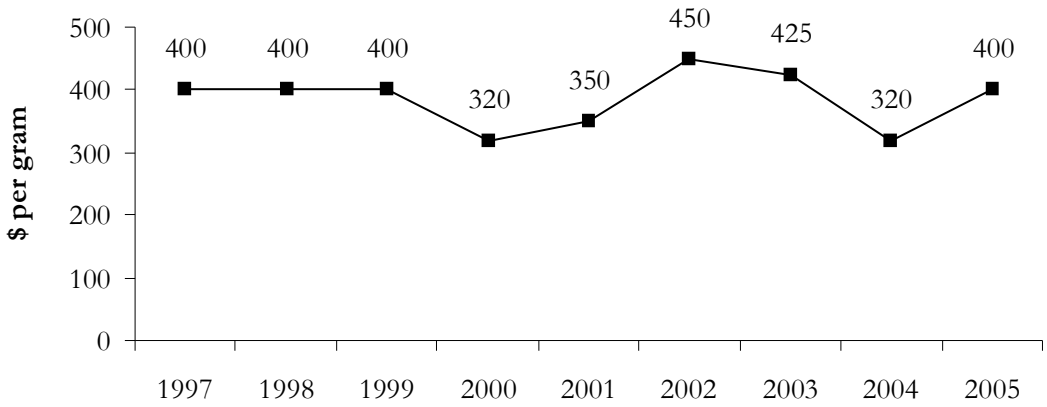
Table 4.2: Change in price of heroin over last 6 months, 2004 & 2005

Reported price status	% of IDU able to answer	
	2004 (n=62)	2005 (n=64)
don't know	8	5
increasing	13	14
stable	68	70
decreasing	7	3
fluctuating	5	8

Source: IDRS IDU interviews

The median price paid for a gram of heroin increased in 2005, following 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, 1997-2005



Source: IDRS IDU interviews

Of the nine health and peer educator KE that were able to provide information on the price of heroin, three reported the price as $50 per 'cap', whilst the remainder reported a range of prices for a 'cap' or 'deal' from $25 to $150. One health KE reported that a 'cap' was seldom talked of these days as half gram amounts were more common. KE reports of the price of a gram varied from $200 ("back to pre-2000") to $400 (median $350, n=6). Only one KE commented on the price of a half gram of heroin, which was reported as ranging from $150 to $200 normally, but had recently increased to $170 to $250 due to local dealers having difficulty with supply. 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, decrease and fluctuation in price.

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 2005 reported it was either 'easy' or 'very easy' to obtain heroin (88%; 55% of entire sample), and that availability in the last six months had been stable (72%; 46% of entire sample). Compared to 2004, the

proportions reporting availability of heroin as 'easy' or 'very easy' were relatively unchanged.

Table 4.3: Availability of heroin currently, 2004 & 2005

How easy is it to get heroin at the moment?	% of IDU able to answer	
	2004 (n=62)	2005 (n=64)
very easy	55	48
easy	34	39
difficult	11	9
very difficult	0	3

Source: IDRS IDU interviews

Table 4.4: Change in availability of heroin over the last 6 months, 2004 & 2005

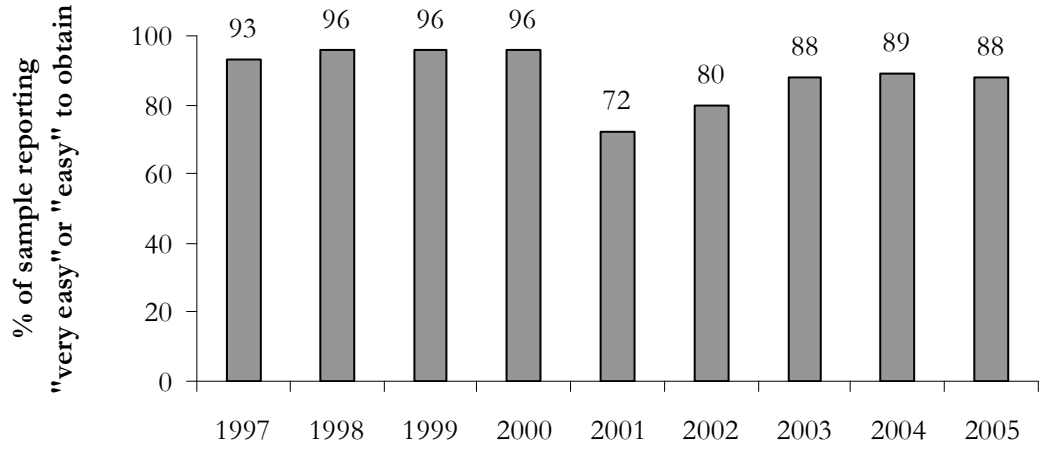
Has [availability] changed in the last 6 months?	% of IDU able to answer	
	2004 (n=62)	2005 (n=64)
don't know	3	3
more difficult	13	19
stable	57	72
easier	24	5
fluctuates	3	2

Source: IDRS IDU interviews

Similar to the IDU reports, the majority of KE able to comment (n=10) believed that heroin was easy or very easy to obtain and that this availability had remained stable or had become easier in the past six to twelve months. One KE did report, however, that there had been recent reports of difficulty with supply in the local area (western suburbs), while several others reported that some users may be able to access other opiates more easily. Two health KE and one peer educator KE reported a belief that it remained difficult to obtain heroin in the southern area of 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, 1997-2005



Source: IDRS IDU interviews

Table 4.5 shows the usual source or method of obtaining heroin, and the time taken to obtain it, for the last two years of the survey. In 2005, 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=61), reported they usually obtained heroin from a mobile dealer (51%). This constituted an increase from 14% in 2004, and was similar to the proportion reporting this source in 2003 (41%). There was a concomitant decrease in the proportion of IDU reporting usually obtaining heroin from a dealer's home (from 43% in 2004, to 14% in 2005). The median time taken to obtain heroin was reported by heroin users as 20 minutes in 2005, similar to the previous two years.

Table 4.5: Usual method, and time taken, to obtain heroin in the last 6 months, 2004 & 2005

Usual source *or* method of obtainment	**% of heroin users able to answer**	
	2004 (n=58)	**2005 (n=61)**
Street dealer	12	11
Dealer's home	43	14
Mobile dealer	14	51
Friend*	14	9
Home delivered	17	14
Usual time taken to obtain heroin, *median minutes (range)*	15 (1-1440)	20 (2-120)

Source: IDRS IDU interviews
* 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 2005, the current purity of heroin was reported by the majority of those able to answer as low or medium (74%; 45% of entire sample), with the change in purity over the last six months being somewhat equivocal, with the largest proportion (30%; 10% of entire sample) reporting recent purity as stable, but equally substantial proportions reporting purity as fluctuating or

decreasing, and only a slightly smaller proportion reporting increasing purity. In general, the current purity of heroin was unchanged compared to 2004.

Table 4.6: Current purity/strength of heroin, 2004 & 2005

How pure would you say heroin is at the moment?	% of IDU able to answer	
	2004 (n=56)	2005 (n=61)
high	9	12
medium	32	33
low	41	41
fluctuates	18	15

Source: IDRS IDU interviews

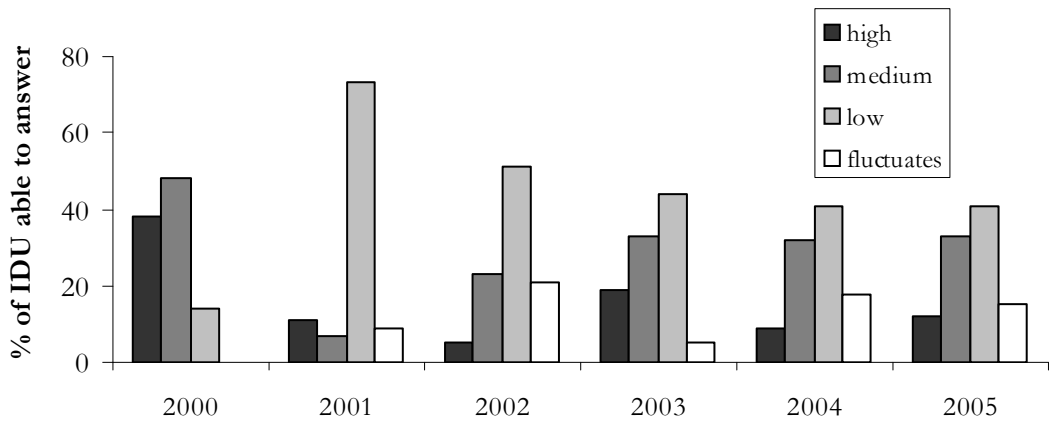
Table 4.7: Change in purity/strength of heroin in last 6 months, 2004 & 2005

Has the purity of heroin changed in the last 6 months?	% of IDU able to answer	
	2004 (n=56)	2005 (n=61)
increasing	23	16
stable	23	30
decreasing	25	23
fluctuating	27	25

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, despite an increase in perceived purity since the heroin shortage (post-2001), the perception remains that purity has not returned to pre-shortage levels.

Figure 4.3: Perception of current purity of heroin, among IDU, 2000-2005

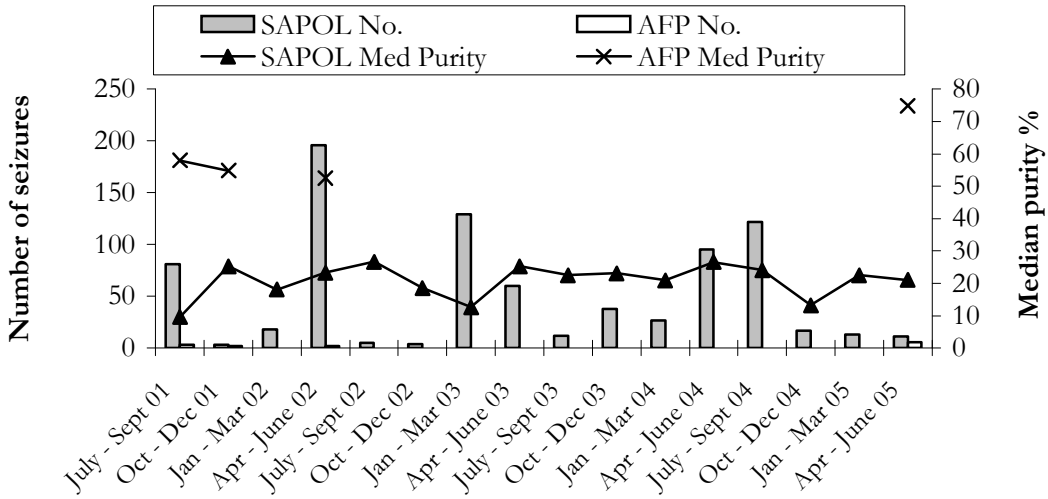


Source: IDRS IDU interviews
Note: the category 'fluctuates' was not included in 2000.

The Australian Crime Commission (ACC) provided purity data on heroin seized in SA during the last financial year 2004/2005 (ACC, *in press*). 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 2 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 2 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).

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



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

Few KE commented on the current purity of heroin, with two reporting that quality remained low, one that older users reported quality as "rubbish" while younger users (who had started use after the 2000/2001 heroin shortage) thought quality was good, and another that purity fluctuated. While no KE reported current purity as medium or high, two reported a belief that purity was increasing, though two others reported purity as unchanged recently.

4.4 Use

4.4.1 Heroin use among IDU

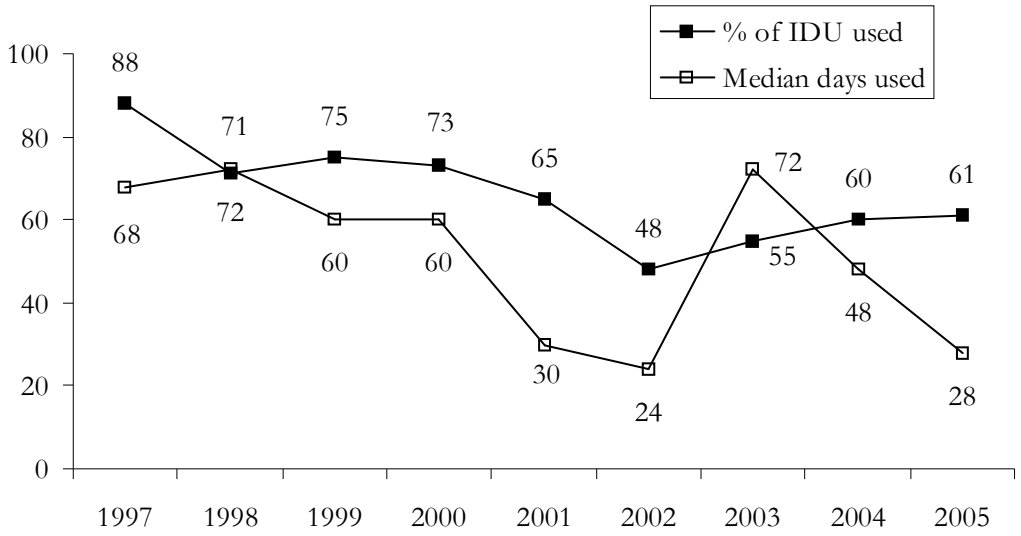
Thirty-three percent of IDU reported heroin as the first drug ever injected, 57% nominated heroin as their drug of choice, 34% reported heroin as the drug most often injected in the last month, and 32% reported heroin was the last drug they injected.

4.4.2 Current patterns of heroin use

Sixty-one percent of the participating IDU interviewed in 2005 had used heroin on a median of 28 days in the last six months (range 1 - 180), all of whom had injected heroin in that time. Compared to 2004, the proportion of the IDU that had used heroin in the last six months remained stable. However, a decrease in the median number of days heroin was used during that time was seen (48 days in 2004 to 28 days in 2005), continuing a decrease in frequency seen between 2003 and 2004 (see Figure 4.5). An

analysis of the median number of days used revealed that the difference between the years 2003, 2004 and 2005 was not statistically significant, most likely due to the wide frequency of use among heroin users.

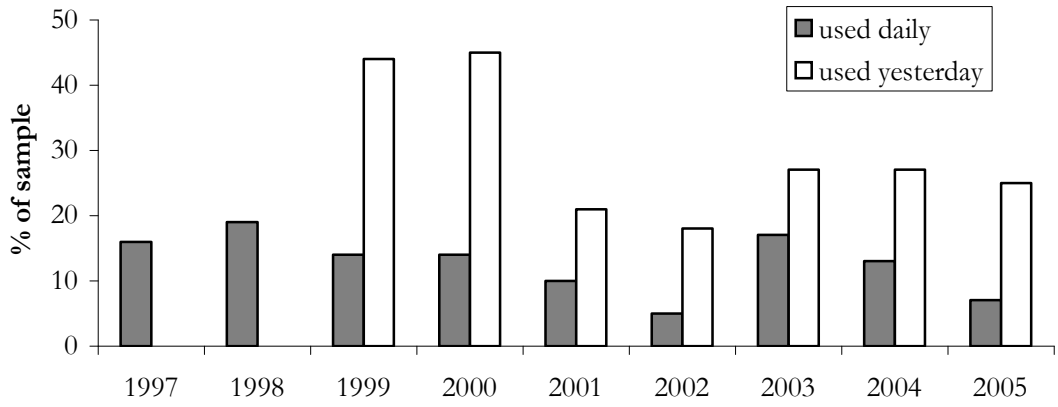
Figure 4.5: Heroin – Recent* use & median number of days used#, 1997-2005



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 7% in 2005, as depicted in Figure 4.6. Although the percentage of recent heroin users remains stable, the decrease in both parameters of frequency of use (median days used and % daily users) for the third 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, 1997-2005



Source: IDRS IDU interviews
* in the previous six months

Of the 62 IDU that had used heroin in the last six months, 52% (n=32) reported heroin as the last drug that they injected. The remaining heroin using IDU reported the last drug injected as morphine (7%, n=4), another opioid (methadone 5%, n=3; buprenorphine 3%, n=2), or some form of methamphetamine (powder 5%, n=3; base 15%, n=9; crystal 15%, n=9).

Of the fifty-eight IDU that nominated heroin as their drug of choice in 2005, 52 (90%) had used heroin in the previous six months, 25 (43%) had used morphine and 55 (95%) had used any methadone (licit or illicit). In addition, 55 (95%) had used some form of methamphetamine. Compared to 2004, there was an increase in the proportion reporting use of any methadone (from 52%), despite the number of IDU currently enrolled in a methadone treatment program remaining relatively stable since 2004.

Twenty-six 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, seventeen gave reasons of drug price, purity or availability for not injecting mostly heroin. Thirteen had mostly injected some other opioid substance (morphine, methadone or buprenorphine) in that period. The remaining thirteen IDU had injected methamphetamine most, the reasons for which were again given as due to the price or availability of the drug, by over one-third of these IDU (n=5). These data may indicate that IDU continue to supplement or replace their use of heroin with other opioid and non-opioid drugs.

Of the 62 IDU that had used heroin in the six months prior to interview, 51 (82%) reported use of a powder form of heroin, 57 (92%) reported using heroin rock, and no IDU reported using 'homebake', 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 (76% v. 24%, n=62). Compared to 2004, there was no change in the proportions of IDU reporting recent use of either powder or rock heroin. There was, however, an increase in the proportion reporting heroin rock as the form they had *used most* (from 59% in 2004).

Of the four KE able to comment on the form of heroin available in Adelaide, all reported heroin was powder, while two also reported rock was available ("some pink and white rocks about"). One KE reported the "compressed powder" that was around was "a lot cleaner than previously". All KE agreed that injecting was still the most common practice; however, one health KE reported smoking of heroin among young female clients to the health service, most being Asian and in their late teens. 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. No changes in patterns of use were reported by KE, though several reported an increase in the number of heroin users attending treatment services in the last year.

There was a general consensus among 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 and buprenorphine, and codeine. Three KE noted an increase in the prevalence of injecting of the opioid

substitution medication, buprenorphine, and one commented that this practice seemed more common among younger opiate users.

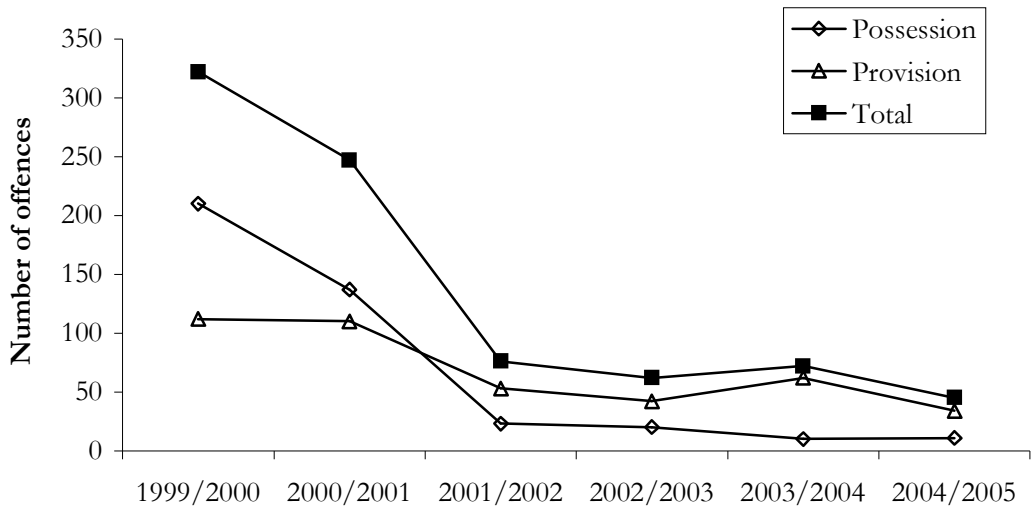
4.5 Heroin-related harms

4.5.1 Law enforcement

The total number of illicit drug-related possession and provision offences for 2004/2005 was 2,320, which continues a decline seen over the last couple of years (2,985 in 2003/2004, 3,131 in 2002/2003, 3,673 in 2001/2002 and 3,864 in 2000/2001) (SAPOL Annual Reports, 2000-2005). In 2005, this decline in total numbers was due to a decline in all categories of offences – 'possession/use', 'import/export', 'sell/trade' and 'produce/manufacture'. The 'possession/use' category would continue to be affected by the introduction of the Police Drug Diversion Initiative in 2001.

The number of heroin possession/use and provision (incorporating import/export drugs, sell/trade drugs, produce/manufacture drugs categories) offences, reported or becoming known to police from 1999/2000 to 2004/2005 (as reported by SAPOL), is presented in Figure 4.7. As can be seen, there was a decrease in the number of provision offences (from 62 to 34) for heroin from 2003/2004 to 2004/2005, while possession/use offence numbers remained the same (at 10). 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 2004/2005. Heroin possession and provision offences made up only 1.9% of the total number of illicit drug possession and provision offences in 2004/2005, 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, 1999/2000-2004/2005



Source: South Australian Police Annual Reports (2000-2001 to 2004-2005)

4.5.2 Health

Heroin overdose

Of the 96 IDU that reported having used heroin in their lifetime, 41 (43%) also reported lifetime experience of heroin overdose between one and 15 times (median=2 times). Ninety percent (n=37) had overdosed six times or less, and the majority (54%) had overdosed once (n=13, 32%) or twice (n=9, 22%). The number of overdoses experienced across lifetime was similar to that reported in previous years (see Table 4.8).

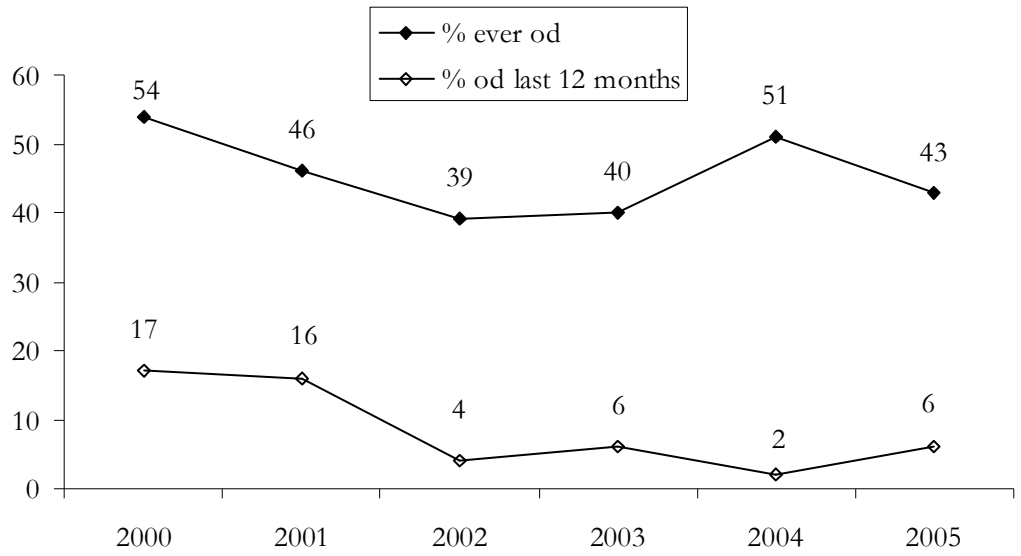
Table 4.8: Lifetime experience of heroin overdose among those IDU reporting ever used heroin, 2000 - 2005

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

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 lifetime experience of heroin overdose among heroin users in the IDU sample has fluctuated over the last few years, with 43% of the 2005 sample reporting lifetime experience of heroin overdose. In 2005, the median amount of time between interview and last overdose was 60 months (range 1 to 336, n=41), the same as reported in 2004 (60 months, range 6 to 240, n=42).

Figure 4.8: Experience of heroin overdose ever and in the last 12 months, as a proportion of IDU that had ever used heroin, 2000-2005



Source: IDRS IDU interviews

Twenty-seven IDU (66% of those who had experienced heroin overdose) reported having ever had the opioid antagonist naloxone (Narcan®) administered for heroin overdose. Five IDU had received Narcan in the last twelve months. The median amount of time between interview and last Narcan administration was 72 months (range 2 to 360).

Seventy-eight participants reported having ever been present when someone else had overdosed, a median 5 times (range 1 to 60), the last time a median 36 months prior to interview (range 1 month to 20 years). Twenty-three of these IDU (29%) reported witnessing someone else's overdose within 12 months of interview.

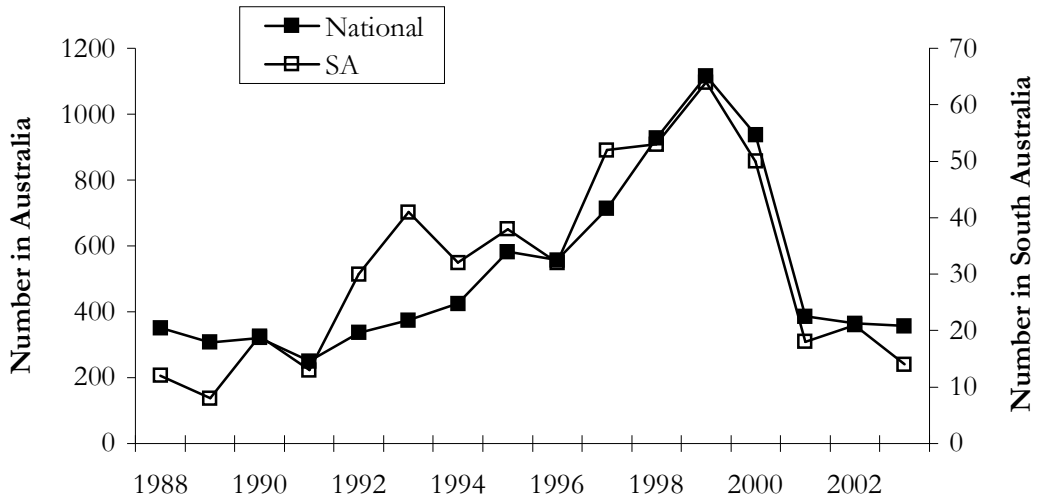
Two KE commented that no increase in heroin overdose had been noted over the past year, while one KE reported an increase in heroin overdose among his client group (some of which had been fatal). Another KE reported that whilst three overdose victims had been brought into the health centre within a two week period (which was very unusual and related to a "strong batch" of heroin in the area at the time), there seemed to be a lessening of overdose incidents overall in the last twelve months.

In addition, a study (the Designer Drug Early Warning System) being conducted at the Royal Adelaide Hospital Emergency Department – designed to monitor changes in drug use and related harms – released an alert in September of 2005 describing a doubling in the number of heroin overdose attendances during July and August, compared to previous months (DDEWS, 2005).

Opioid overdose

In the 2004 SA IDRS report, the investigation of Australian Bureau of Statistics data in relation to the number of opioid overdose deaths between 1997 and 2003, undertaken by Degenhardt et al. (2004a), were presented. Up-to-date data regarding opioid overdose deaths were unavailable at the time of preparing the current IDRS report, but SA and national data as presented previously are shown in Figure 4.9. These data show a plateau in opioid overdose deaths in both SA and nationally from 2001 to 2003. In SA, there were 14 deaths due to opioid overdose in 2003, a decrease from 21 in 2002. Opioid overdose deaths in SA in 2003 accounted for 3.9% of the national total, a decrease from 6% in 2002, and the lowest since 1989.

Figure 4.9: Number of accidental opioid deaths, among those aged 15-54 years, in SA compared to national figures, 1988-2003



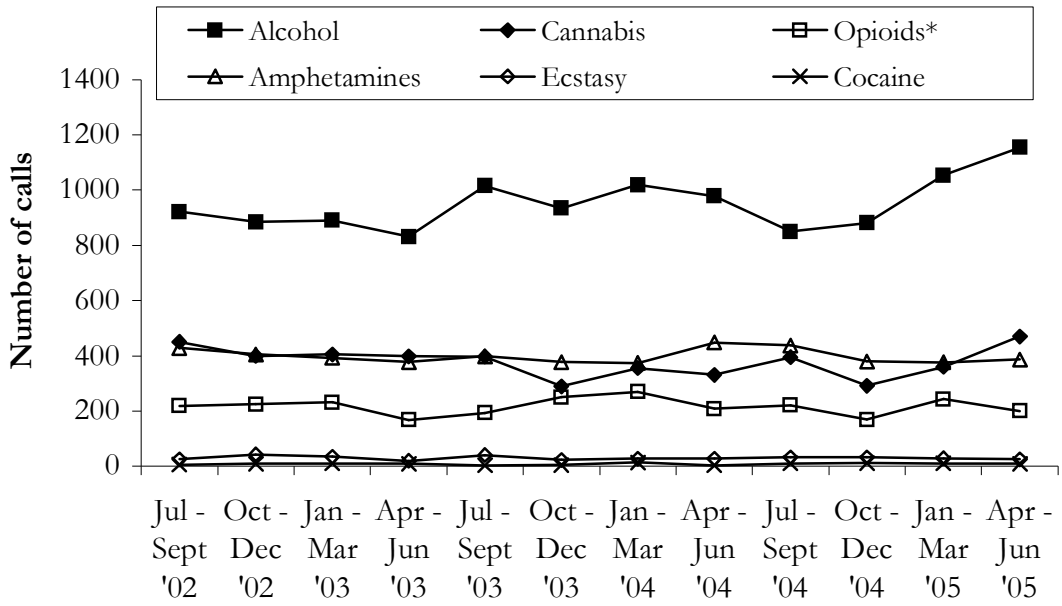
Source: Australian Bureau of Statistics morbidity database (Degenhardt et al, 2004a)

It is also worth noting here that three overdose deaths relating to the injecting of buprenorphine were confirmed in Adelaide during 2005.

Treatment Services – ADIS

Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding any opioid substances accounted for 6.6% of the total coded telephone contacts (drug-related) in the 2004/2005 financial year (n=12,639), a similar proportion compared to previous years: 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 1% 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 2002-June 2005



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 decreased for the last two years (from 18.5% to 12.3%), following the increase seen from 2001/2002 to 2002/2003 (see also Figure 4.11). In 2004/2005, the proportion of total clients of DASSA nominating heroin as their primary drug of concern was approximately equivalent to that for cannabis (12.8%), and substantially lower than that for alcohol (48.3%) or amphetamines (20%).

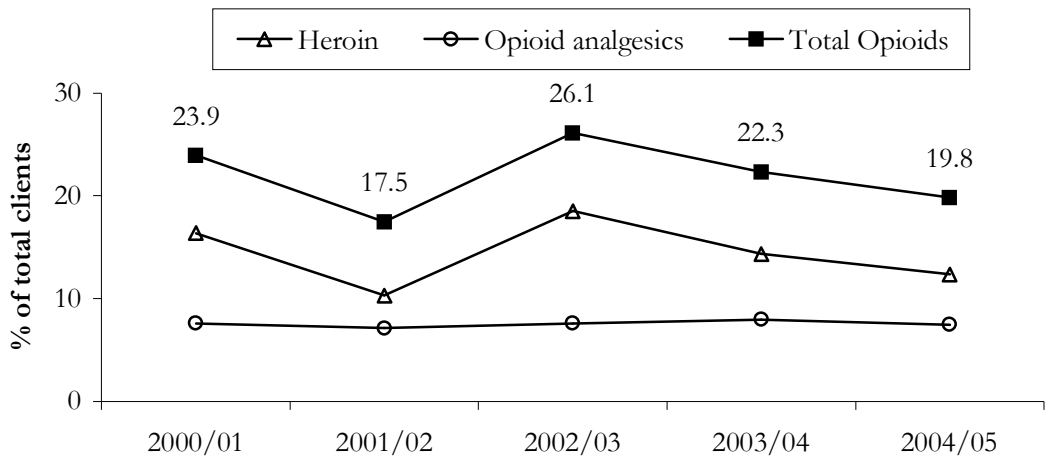
Table 4.9: Primary drug of concern nominated by clients of Drug and Alcohol Services South Australia, as a percentage of total number of clients*, 2000/2001 to 2004/2005

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

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 2004/2005, the proportion of clients nominating *any* type of opioid substance (including heroin) as their primary drug of concern was 19.8%, compared to the 'peak' of 26.1% in 2002/2003.

Figure 4.11: Percentage of total DASSA clients with opioids as the primary drug of concern, 2000/01-2004/05*



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 2004/2005, after alcohol, the greatest number of clients attended inpatient detox services for treatment related to amphetamines, followed by cannabis, opioid analgesics, heroin and benzodiazepines.

Table 4.10: Number of clients* to DASSA inpatient detoxification treatment services, by primary drug of concern, 2000/2001 to 2004/2005

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

Source: Drug and Alcohol Services South Australia

* number of clients = number of individuals

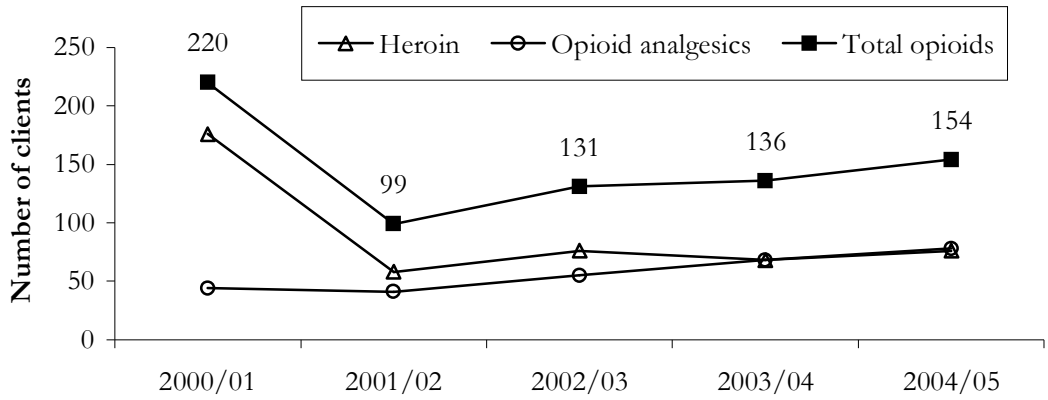
During this period a new data collection system (CME-DIS) was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS-AODTS).

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 2004/2005. 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 2004/2005, there were a total of 76 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, when 41 clients attended detox for opioids other than heroin, to 78 in 2004/2005.

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 (76) compared to amphetamines (130) during the 2004/2005 year. However, when the data were analysed in terms of whether the primary drug of concern for inpatient detox clients in 2004/2005 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 (154) exceeded the number for amphetamines (130) for the first time since 2000/2001.

Figure 4.12: Number of clients to DASSA inpatient detoxification treatment services per year, with heroin or other opioids as the primary drug of concern, 2000/01 to 2004/05*



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).

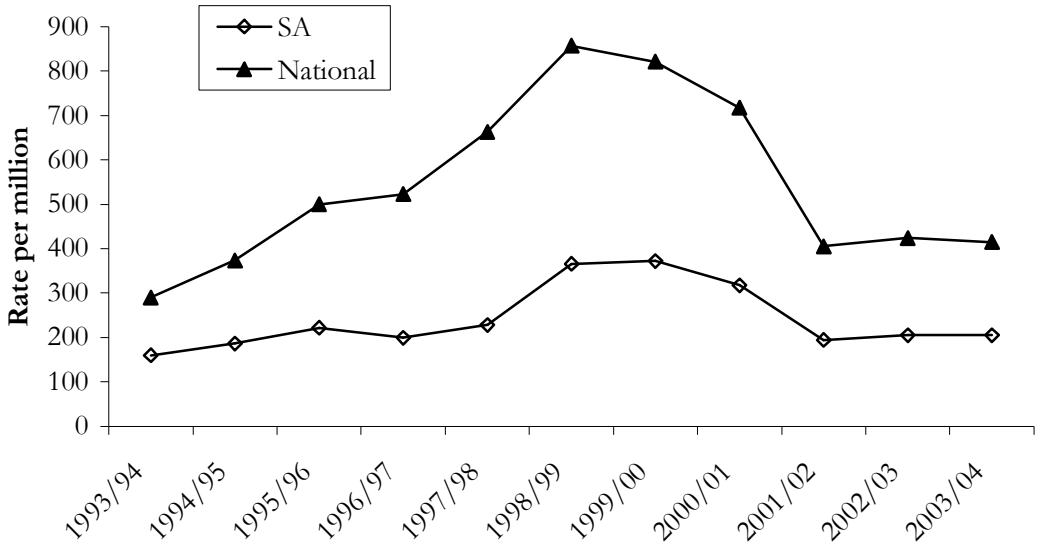
Opioid-related hospital admissions

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 2003/2004 (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 – Figure A). South Australian data followed a similar pattern to national data (see Appendix – 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 (49% v. 59%, and 0.5% v. 1.9%, respectively), and a larger percentage of amphetamine-related admissions (36% v. 24%)(as a proportion of the total number of admissions for all four drug types) than nationally.

Figure 4.13 shows that both the SA and national rates of admission to hospital for opioids (primary diagnosis) declined from 1999/00 to 2001/02, and have been relatively stable from 2001/02 to 2003/04. The total number of admissions to SA hospitals where opioid-related disorders were recorded as the primary diagnosis was 205 in 2003/04.

[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 4.13: Rate of opioid-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1993/1994 to 2003/2004



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 opioids 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 opioids, whereas, in the years since, attendances for other opioids have outnumbered those for heroin.

In addition, a study (the Designer Drug Early Warning System) being conducted at the Royal Adelaide Hospital Emergency Department – designed to monitor changes in drug use and related harms – released an alert in September of 2005 describing a doubling in the number of heroin overdose attendances during July and August, compared to previous months (DDEWS, 2005).

Table 4.11: Number of attendances* to the emergency department at the Royal Adelaide Hospital, SA, from 2000/2001 to 2003/2004 (per drug or diagnosis)

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

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, excluding alcohol

includes all other poisonings related to food, drug (medical & non-medical), chemical and other toxins

4.6 Trends in heroin use

As in 2004, in 2005 the IDU comments regarding general trends in heroin use were fewer than those regarding amphetamine use, and more variable. Several IDU reported a general increase in the use of heroin, in terms of quantity of use 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, there was an increase in the price of heroin from 2004 to 2005. Heroin was still considered 'easy' or 'very easy' to obtain by most IDU and availability was reported as stable to easier in the preceding six months. There was an increase in the proportion of IDU obtaining heroin from a mobile dealer, and a concomitant decrease in the proportion being supplied at the homes of dealers. According to the majority of IDU, heroin purity remained at low to medium levels in 2005, with the current levels of purity perceived as stable.

The median purity of SAPOL heroin seizures appears to have remained relatively stable across the last four financial years, with median purity of 24% in 2004/05. 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 2004. There was, however, a decrease in the frequency of use of heroin for the second 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 % daily users, in 2005. 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 total heroin-related possession and provision offences have remained stable since 2001/2002. KE provided little or no comment on street-level offending, unless to say that no change in type or level of crime had occurred recently.

Similarly, experience of recent heroin overdose among IDU remained low, though up to date ABS data regarding opioid overdose were not available at the time of writing. Information from KE as well as the Royal Adelaide Hospital suggested a spike in non-fatal overdoses occurred in July/August of 2005.

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. However, a small increase was apparent in the number of clients attending DASSA inpatient (detox) services nominating opioid analgesics as their primary drug of concern, though the number of clients attending for heroin remained stable. Similarly, SA hospital emergency department data show that heroin-related attendances have remained stable while attendances for other opioids continue to increase gradually. Both state (SA) and national hospital admissions data showed the number of opioid-related admissions were stable (as at 2003/04) 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 ($50-$700); increased since 2004, currently stable
Cap	$50; stable
Availability	'Very easy' to 'easy'; stable
Purity	23.7% (ACC); stable Remains below ACC reported pre-shortage level. Low to medium; recent change equivocal (IDU).
Use	Stable re % used recently, but continued decrease in frequency of use since 2003.
Other indicators	Number of heroin possession offences stable, but provision offences decreased since 2003/04 (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 stable, but increasing for opioid analgesics (DASSA). Hospital admissions stable and below pre-shortage levels in 2003/04 (AIHW).

5.0 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 $200/gram ($50-400, n=17) or $50/ 'point' (range $20-50, n=23) by IDU. The estimated price of a gram of powder was the same as the median price *paid* by IDU, *at last purchase*, but the estimated price of a point of powder was higher than the median price paid *at last purchase*, as listed in Table 5.1. The median price *paid* for a point of powder was $41.50, an increase from 2004 when the median last purchase price was $27.50. The increase in price of a gram of powder was more marked, with the median price *paid*, at last purchase, reported as $200 in 2005, compared to $50 in 2004.

Methamphetamine – base form
The *current* price of base methamphetamine was estimated to be a median $200/gram ($100-500, n=22) or $50/'point' ($20-120, n=39) 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 increased to $200 in 2005, from $180 in 2004, and the median price *paid* for a 'point' of base increased to $50, compared to $25 in 2004. However, the price of a 'half-weight' (half a gram) remained the same at $100, as did the less commonly purchased 'eightball' (3.5 grams) at $500.

Methamphetamine – crystal form
The *current* price of crystal methamphetamine was estimated to be a median $250/gram ($200-500, n=15) or $50/'point' ($25-75, n=20) by IDU. The median price *paid* by IDU, *at last purchase*, for a gram of crystal was slightly higher at $300 ($200-400, n = 10); however, the price *paid* at last purchase for a point of crystal was the same as the estimated median price (see Table 5.1). Compared to 2004, there was an increase in the median price *paid* for a gram of crystal (from $190 to $300), as well as an increase in the median price *paid* for a 'point' of crystal (from $30 to $50), in 2005.

Table 5.1: Price of most recent methamphetamine purchases by IDU, 2004* & 2005

Amount bought	Median price paid, $ (range)			Number of IDU purchasers		
	powder	base	crystal	powder	base	crystal
'point'	41.50 (25 - 50) *27.50* *(20 - 50)*	50 (20 - 100) *25* *(18 - 50)*	50 (25 - 75) *30* *(20 - 50)*	14 *10*	29 *21*	13 *13*
gram	200 (100 - 250) *50* *(40 - 200)*	200 (100 - 300) *180* *(10 - 220)*	300 (200 - 400) *190* *(10 - 400)*	11 *11*	14 *9*	10 *10*
'half-weight' (½ gram)	100 (75 - 100) *100* *(100)*	100 (75 - 200) *100* *(100)*	125 (100 - 250) *100* *(80 - 125)*	7 *7*	17 *11*	10 *8*
'eightball' (3.5 grams)	425 (150 - 500) -	500 (450 - 900) *500* *(140 – 750)*	500 (280 - 550) #	8 -	6 *6*	5 #

Source: IDRS IDU interviews
* 2004 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 2005, the price of all forms of methamphetamine was reported as stable or increasing by the majority of IDU answering this section. For base and crystal in particular, although the largest proportion of those able to comment reported the price as stable, sizeable proportions also reported a belief that prices had increased for these forms.

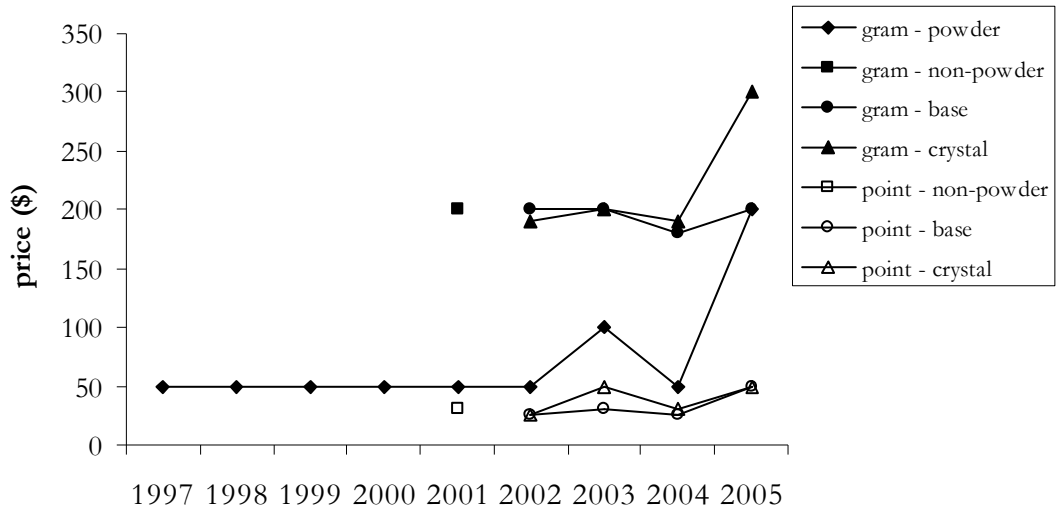
Table 5.2: Change in price of methamphetamine over last 6 months, 2004 & 2005

Reported price status	Powder		Base		Crystal	
	% of IDU able to answer					
	2004 (n=38)	2005 (n=31)	*2004 (n=40)*	2005 (n=54)	*2004 (n=41)*	2005 (n=33)
don't know	*21*	7	*8*	9	*27*	9
increasing	*0*	13	*5*	24	*5*	36
stable	*63*	65	*75*	61	*61*	49
decreasing	*11*	7	*8*	2	*7*	0
fluctuating	*5*	10	*5*	4	*0*	6

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, 1997-2005



Source: IDRS IDU interviews

Several health and peer educator KE were able to provide information regarding price of methamphetamine, with five 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' 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 price decreased with an increase in the amount bought. Three KE reported that price of a gram could range from $100 to $300 per gram, again dependent on the form, or purity, of methamphetamine. In agreement with IDU, those KE able to comment reported that the price of methamphetamine had been stable recently. 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 due to increased costs associated with 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 2005, 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 (70% or more). Base was considered easiest to obtain (51% reported 'very easy'; 27% of entire sample), followed by powder (47% reported 'very easy'; 14% of entire sample) and crystal (19% reported 'very easy'; 6% of entire sample). In 2005, however, there were slightly larger proportions reporting that base and crystal forms were difficult to obtain. The majority also reported that availability of all forms had been stable over the last six months (over 70% of those able to answer).

Table 5.3: Availability of methamphetamine currently, 2004 & 2005

How easy is it to get [powder/base/crystal] at the moment?	Powder		Base		Crystal	
	% of IDU able to answer					
	2004 (n=35)	2005 (n=30)	*2004 (n=40)*	2005 (n=53)	*2004 (n=36)*	2005 (n=32)
very easy	*54*	47	*63*	51	*36*	19
easy	*31*	37	*33*	32	*44*	53
difficult	*14*	17	*5*	17	*14*	25
very difficult	*0*	0	*0*	0	*6*	3

Source: IDRS IDU interviews

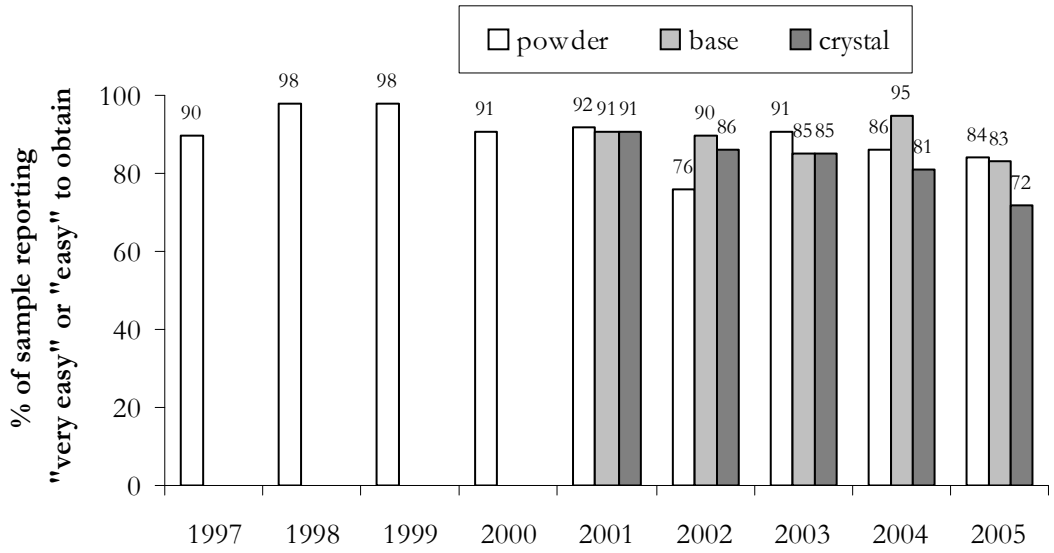
Table 5.4: Change in availability of methamphetamine over the last 6 months, 2004 & 2005

Has [availability] changed in the last 6 months?	Powder		Base		Crystal	
	% of IDU able to answer					
	2004 (n=35)	2005 (n=30)	*2004 (n=40)*	2005 (n=53)	*2004 (n=36)*	2005 (n=32)
don't know	*9*	7	*3*	2	*11*	0
more difficult	*14*	13	*8*	15	*17*	19
stable	*63*	50	*58*	65	*47*	59
easier	*6*	20	*28*	19	*22*	19
fluctuates	*9*	10	*5*	4	*3*	3

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 6 months, 1999-2005



Source: IDRS IDU interviews

As can be seen in Table 5.5, in 2005, methamphetamine users most commonly reported obtaining any form of methamphetamine from either a mobile dealer or from a dealer's home, followed by from a friend. Compared to 2004, there was an increase in the proportion reporting obtaining all forms of methamphetamine from a mobile dealer and a decrease in the proportion reporting obtaining any form of methamphetamine from a friend. There was also an increase in the proportion of methamphetamine users reporting obtaining the crystal form from a dealer's home. Very few IDU reported obtaining methamphetamine from a street dealer. The median time *usually* taken to score was 30 minutes for all types of methamphetamine in 2005.

Table 5.5: Usual method, and time taken, obtaining methamphetamine in the last 6 months, 2004 & 2005

Usual source *or* method of obtainment	**% of methamphetamine users able to answer**					
	Powder		**Base**		**Crystal**	
	2004 (n=32)	**2005 (n=29)**	***2004 (n=39)***	**2005 (n=54)**	***2004 (n=38)***	**2005 (n=31)**
Street dealer	*13*	3	*8*	4	*3*	3
Dealer's home	*22*	28	*31*	35	*21*	36
Mobile dealer	*16*	31	*13*	35	*16*	29
Friend*	*40*	24	*38*	15	*40*	13
Home delivered	*6*	10	*10*	4	*16*	13
Other	*3*	3	-	8	*5*	6
Usual time taken to obtain heroin, *median minutes (range)*	*15 (1-120)*	30 (1-2880)	*20 (1-300)*	30 (1-1440)	*30 (1-2880)*	30 (5-240)

Source: IDRS IDU interviews

* includes obtained as a gift from friend

Similar to IDU reports, the overwhelming majority of KE able to comment (n=10) reported that methamphetamine was 'easy' or 'very easy' to obtain, and that this had been generally stable recently. Two KE commented that the purer forms were not as easy to obtain, with crystal or ice "rare". 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 report a small number of ice seizures in 2005, as well as an increase in seizure of pipes used for smoking this purer form of methamphetamine.

Information supplied by the South Australian Police indicates that the detection of clandestine laboratories in South Australia has remained stable in the last two years, with 38 labs detected in 2005, compared to 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 2005, 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 fluctuating (32%; 9% of entire sample), and a substantial proportion reporting purity was low (25%; 7% of entire sample). For base, purity was reported as medium or high by the highest proportion of those able to answer (34% and 36%). Crystal was reported largely as high or medium purity (by 65% and 23%, 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 2004, there appears to have been an overall slight increase in the perceived purity of methamphetamine, particularly of the base and crystal forms. For the base form, there was an increase in the proportion reporting purity as high (23% to 36%). In addition, the proportion of IDU reporting crystal as high increased from 49% to 65%.

Table 5.6: Purity/strength of methamphetamine currently, 2004 & 2005

How pure would you say [powder/base/crystal] is at the moment?	Powder		Base		Crystal	
	% of IDU able to answer					
	2004 (n=35)	2005 (n=28)	*2004 (n=39)*	2005 (n=50)	*2004 (n=35)*	2005 (n=31)
high	*17*	21	*23*	36	*49*	65
medium	*34*	21	*51*	34	*34*	23
low	*26*	25	*13*	14	*9*	7
fluctuates	*23*	32	*13*	16	*9*	7

Source: IDRS IDU interviews

Table 5.7: Change in purity/strength of methamphetamine in last 6 months, 2004 & 2005

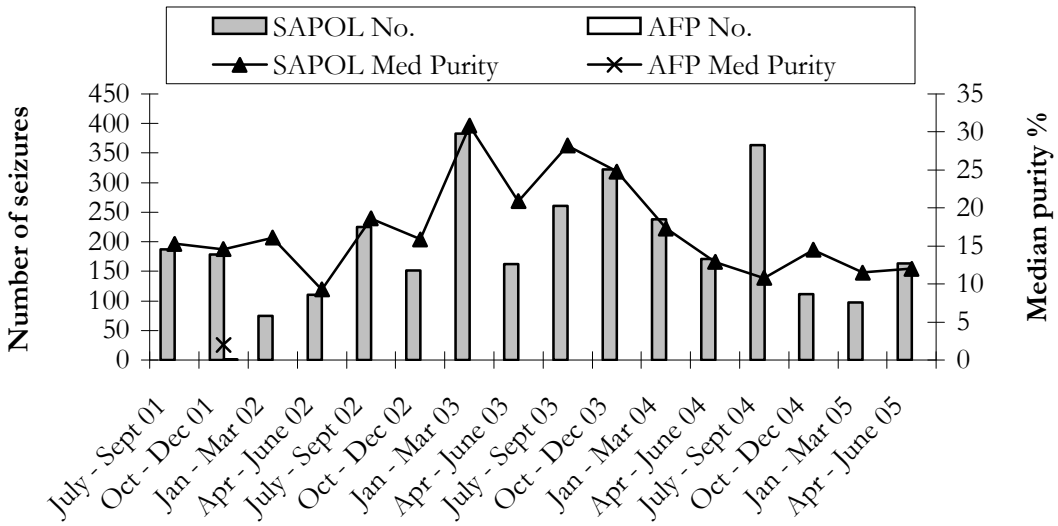
Has the purity of [powder/base/crystal] changed in the last 6 months?	Powder		Base		Crystal	
	% of IDU able to answer					
	2004 (n=35)	2005 (n=28)	*2004 (n=39)*	2005 (n=50)	*2004 (n=35)*	2005 (n=31)
don't know	*14*	4	*3*	2	*9*	10
increasing	*6*	14	*23*	14	*20*	10
stable	*46*	21	*36*	26	*40*	45
decreasing	*14*	21	*10*	24	*20*	10
fluctuating	*20*	39	*28*	34	*11*	26

Source: IDRS IDU interviews

Only a limited number of KE commented on purity of methamphetamine in 2005. Two KE reported purity as medium to high in general, with powder being lower purity. One health KE reported that they had heard increased complaints from users that quality of methamphetamine had decreased and that their use was much more dependent on the quality of product that was available. A peer educator KE commented that "everybody knows" that the quality of methamphetamine was poor and extremely variable due to production methods, and that filters were increasingly requested (for use prior to injecting) because of the "dirty meth". In contrast, another peer educator KE reported that purity was becoming much more consistent recently.

The Australian Crime Commission (ACC) provided quarterly data on methamphetamine seized in SA during the last financial year 2004/2005 (ACC, *in press*). 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 04 to June 05 was 735 and the median purity was 11.6%. The majority of seizures analysed (n=566) were less than or equal to 2 grams. Overall, the number of seizures and the median purity of methamphetamine seized by SAPOL in SA for 2004/2005 was 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), 21.5% in 2002/03 (n=921) and 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, 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 (ACC; 2003, 2004, 2005)

5.4 Use

5.4.1 Methamphetamine use among IDU

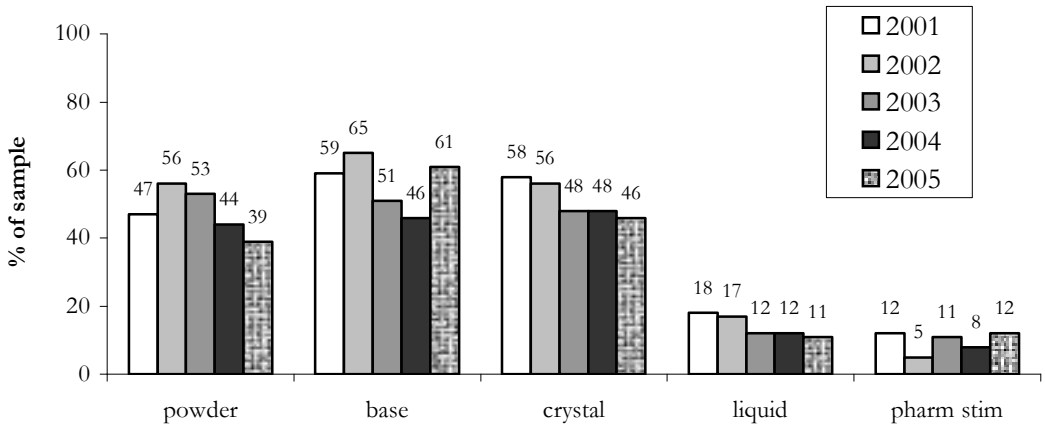
Sixty percent of IDU reported amphetamine as the first drug ever injected, 27% nominated methamphetamine as their drug of choice, 47% reported methamphetamine as the drug most often injected in the last month, and 51% reported methamphetamine was the last drug they injected (see Table 3.2).

5.4.2 Current patterns of methamphetamine use

In 2005, between 39% and 61% of the participating IDU reported use of the three main forms of methamphetamine in the six months prior to interview, most of whom 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 a median of 12 days (range 1-180), 61% reported use of base methamphetamine a median of 24 days (range 1-180), and 46% of IDU reported use of crystal methamphetamine a median of 12 days (range 1 -180). In addition, 12% of IDU reported use of liquid methamphetamine a median of 4 days (range 1-48) and 12% reported use of pharmaceutical stimulants (such as dexamphetamine) a median of 3.5 days (range 1-36), in the last six months.

As shown in Figure 5.4, in 2005, the proportions of the IDU sample reporting use of the powder form of methamphetamine continued to decline (to a low of 39%), while the proportion reporting recent use of crystal remained stable (at 46%). For the base form, however, there was a marked increase in the proportion reporting recent use in 2005 (to 61%), following the decreases seen between 2002 and 2004.

Figure 5.4: Methamphetamine – % of IDU that used in the last 6 months, 2001-2005

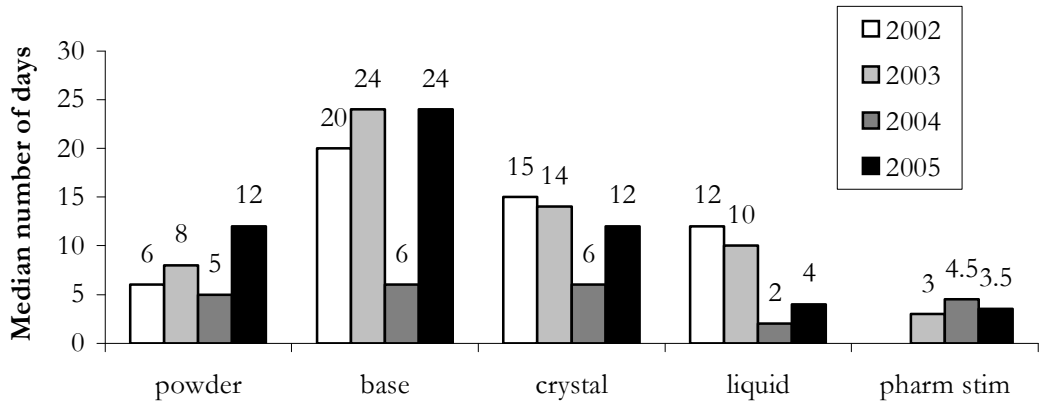


Source: IDRS IDU interviews

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 increase in the reported frequency of use (as measured by median number of days used) of either powder, base or crystal forms of methamphetamine in 2005 compared to 2004 (see Figure 5.5). The largest increase was seen in the median number of days use of base methamphetamine, from 6 to 24, among those reporting recent use of base. Increases were also noted for the median number of days both crystal methamphetamine (from 6 to 12) and powder (from 5 to 12) were used, among those reporting recent use of these forms of methamphetamine. There was also an increase 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.

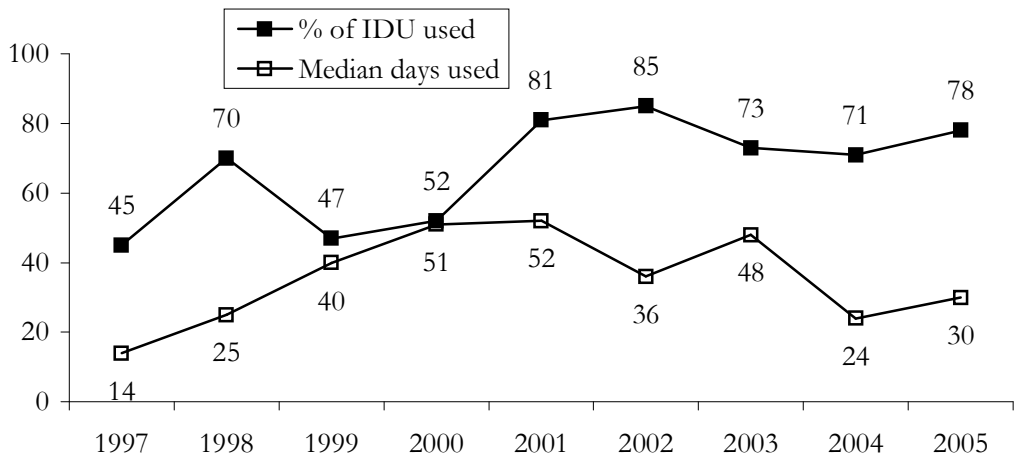
Figure 5.5: Methamphetamine – Median number of days used in the last 6 months*, 2002-2005



Source: IDRS IDU interviews
* used by those IDU that reported use of each form in the last 6 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 2005, 78% of the IDU sample had used some form of methamphetamine (powder, base, crystal, liquid or pharmaceutical stimulants) for a median of 30 days (range 1-180) in the six months prior to the interview. This compares with 71% of IDU reporting use of some form of methamphetamine a median of 24 days (range 1-180), in 2004. The long-term trend in these parameters of use are 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.

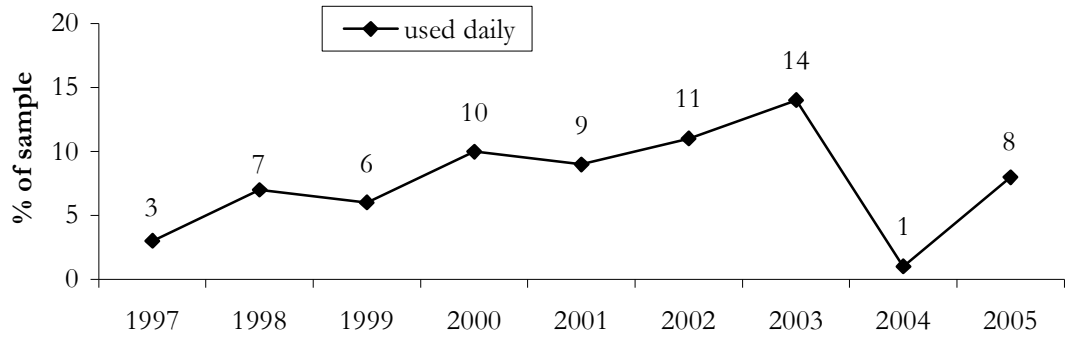
Figure 5.6: Methamphetamine – Recent* use & median number of days used#, 1997-2005**



Source: IDRS IDU interviews
* in the previous 6 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 2005 only).

Of the 79 IDU that reported using some form of methamphetamine in the last six months, eight reported daily use of either powder, base or crystal during that period. Compared to 2004, there was an increase in the proportion of methamphetamine users reporting daily use of any methamphetamine (from 1% to 8%). The long-term trend for percentage of IDU using some form of methamphetamine daily is depicted in Figure 5.7, and shows a small but steady increase in this parameter over past years, until the drop in 2004.

Figure 5.7: Methamphetamine – % of IDU that used daily in the last 6 months, 1997-2005



Source: IDRS IDU interviews

As would be expected of a primarily injecting drug user sample, over 94% of the IDU using each form of methamphetamine reported having done so by injecting in the last six months (more so for powder and crystal forms). From 2% to 12% 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 in that time (see Table 3.3).

Of the 27 IDU reporting methamphetamine as their drug of choice, all had used some form of methamphetamine in the last 6 months, 6 (22%) had used morphine and 7 (26%) had used heroin during that period. Eighty-two percent (n=65) 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 6 months (58%), followed by crystal (25%) and powder (15%). One IDU nominated pharmaceutical stimulants as the form they had *used most* in that period. Compared to 2004, there was an increase in the proportion of IDU reporting base as the form *most used* (36% in 2004 to 58%), and a corresponding decrease in the proportions who stated that crystal (34% to 25%) and powder (29% to 15%) were the forms *most used.*

Again, in 2005, there was a variety of names reported by users to describe the methamphetamine product they were using and that 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" 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 a particular form was not necessarily sought by users, just "whatever is available".

No KE reported smoking as a route of administration of methamphetamine by users they had contact with. Injecting use dominated, though several KE mentioned that users may also snort or swallow methamphetamine.

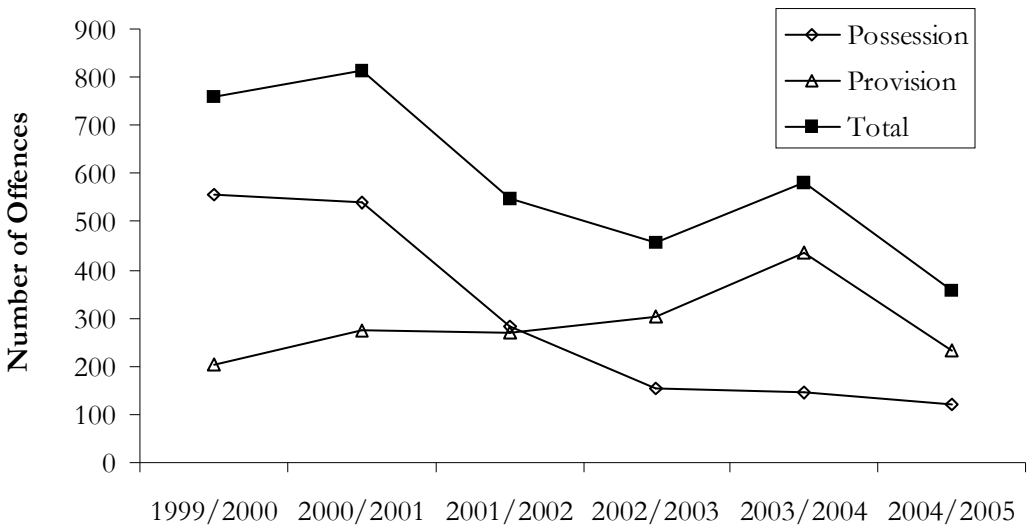
In 2005, the majority of KE either did not comment or reported no changes in the frequency of use of methamphetamine by the IDU they had come in contact with over the last year. A small number of KE commented that a few methamphetamine users seemed to be "going back to heroin", if that had been their drug of choice previously. Two KE, associated with recruitment of methamphetamine users into trial treatment, commented that frequency of use seemed to have declined, as reflected in a decreased number of presentations to treatment services, and a lower recruitment to the trial programs (users needed to meet criteria based on frequency of methamphetamine use).

5.5 Methamphetamine-related harms

5.5.1 Law enforcement

Figure 5.8 presents the number of amphetamine possession/use and provision (incorporating import/export drugs, sell/trade drugs, produce/manufacture drugs categories) offences reported or becoming known to police from 1999/2000 to 2004/2005 (SAPOL Annual Reports, 2000-2005). As can be seen, between 2003/2004 and 2004/2005, the number of amphetamine possession offences recorded declined slightly (from 147 to 122), but there was a substantial decrease in provision offences for amphetamines (from 434 to 234) following an increase in previous years. Amphetamine possession and provision offences made up 15.3% of the total number of illicit drug possession and provision offences in 2004/2005, compared to 19.5% in 2003/2004 and 14.6% in 2002/2003.

Figure 5.8: Number of amphetamine-related offences reported by SAPOL in South Australia, 1999/2001-2004/2005



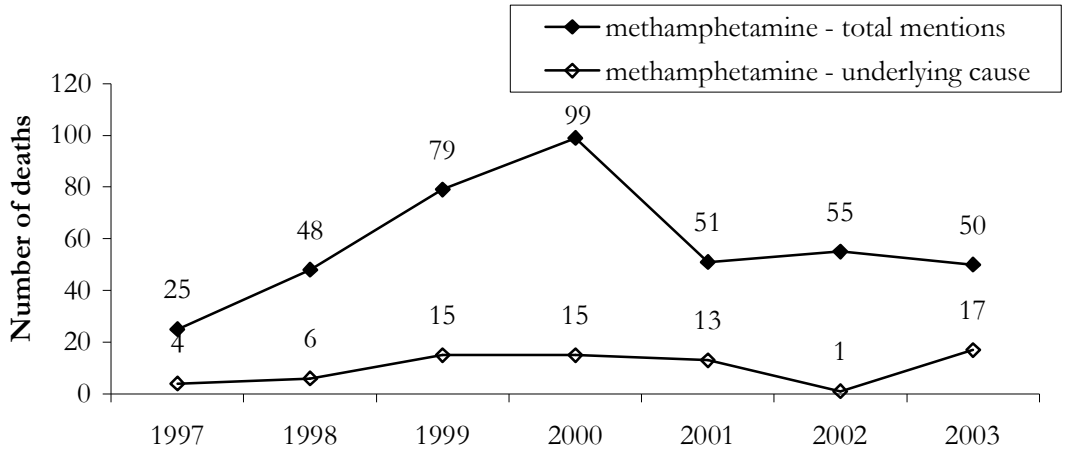
Source: South Australian Police Annual Reports (2000-2001 to 2004-2005)
Note: SAPOL Annual Reports only refer to amphetamines and does not distinguish between amphetamine and methamphetamine.

5.5.2 Health

Methamphetamine-related deaths

In the 2004 SA IDRS report, the investigation of Australian Bureau of Statistics data in relation to the number of accidental drug-induced deaths in which methamphetamine and cocaine were mentioned, undertaken by Degenhardt, Roxburgh and Black (2004b), were presented. These included 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. Up-to-date data regarding methamphetamine-related deaths were unavailable at the time of preparing the current IDRS report, but national data for 1997 to 2003 (as presented previously), are shown in Figure 5.9.

Figure 5.9: Number of accidental drug-induced deaths mentioning methamphetamine among those aged 15-54 years in Australia, 1997-2003



Source: Australian Bureau of Statistics morbidity database (Degenhardt et al, 2004b)

The total number of deaths Australia-wide in which methamphetamine was mentioned was relatively stable from 2001 to 2003. Of the fifty drug-induced deaths that mentioned methamphetamine in 2003, over half occurred in New South Wales (n=27), nine in Western Australia and eight in Victoria. Unfortunately, South Australian specific data were unavailable. Seventeen deaths were recorded as having methamphetamine as the underlying cause of death in 2003, an increase compared to 2002 (one death).

Treatment Services – ADIS

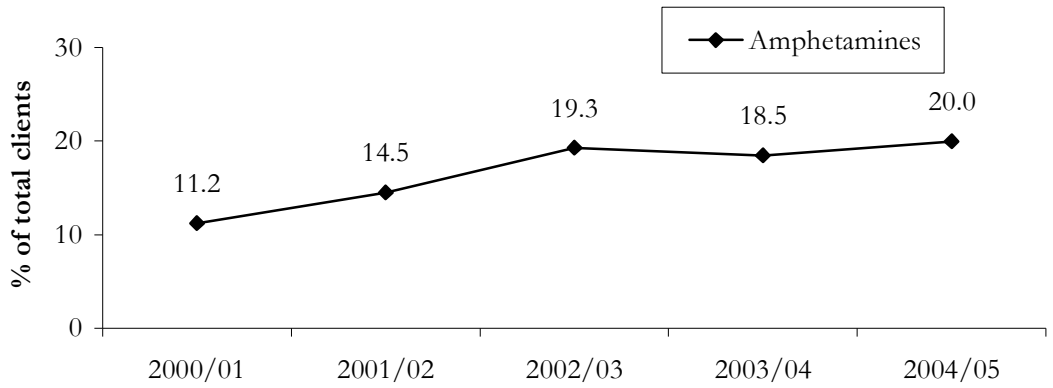
Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding amphetamines accounted for 12.5% of the total coded telephone contacts (drug-related) in the 2004/2005 financial year, similar to that of previous years: 12% in 2003/2004 (of a total 13,336 coded calls) and 11.6% in 2002/2003 (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 20% in 2004/2005. This follows two consecutive years of increase in the proportion of clients nominating amphetamine as their primary drug of concern. In 2004/2005, amphetamines were the second most commonly nominated primary drug of concern by clients of DASSA, after alcohol (48.3%), and dominated as the most common illicit drug of concern, well above heroin (12.3%).

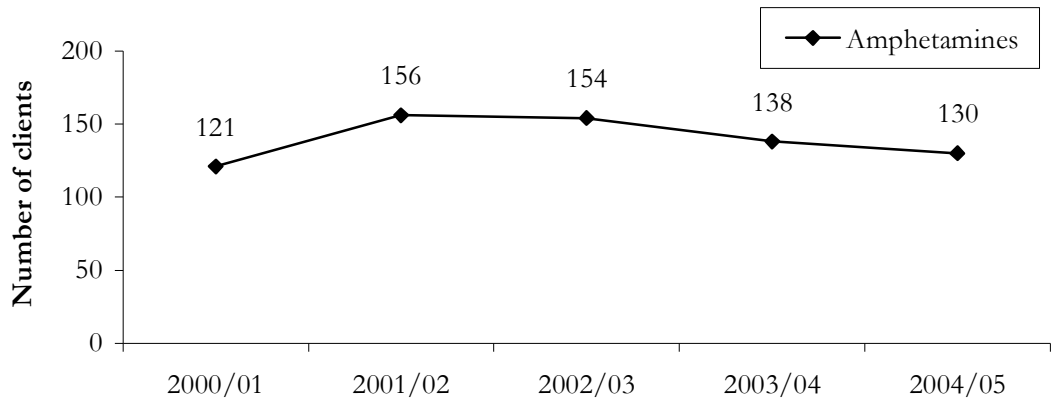
Figure 5.10: Percentage of total DASSA clients with amphetamines as the primary drug of concern, 2000/01-2004/05*



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 2004/2005. 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 130 in 2004/2005, from 156 in 2001/2002. While the number of clients to inpatient detox services with amphetamines as the primary drug of concern outnumbered heroin (alone) clients in 2004/2005, they were outnumbered by the total clients for heroin and other opioid substances (opioid analgesics) combined (see also page 27).

Figure 5.11: Number of clients to DASSA inpatient detoxification treatment services, with amphetamines as the primary drug of concern, 2000/01 to 2004/05*



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).

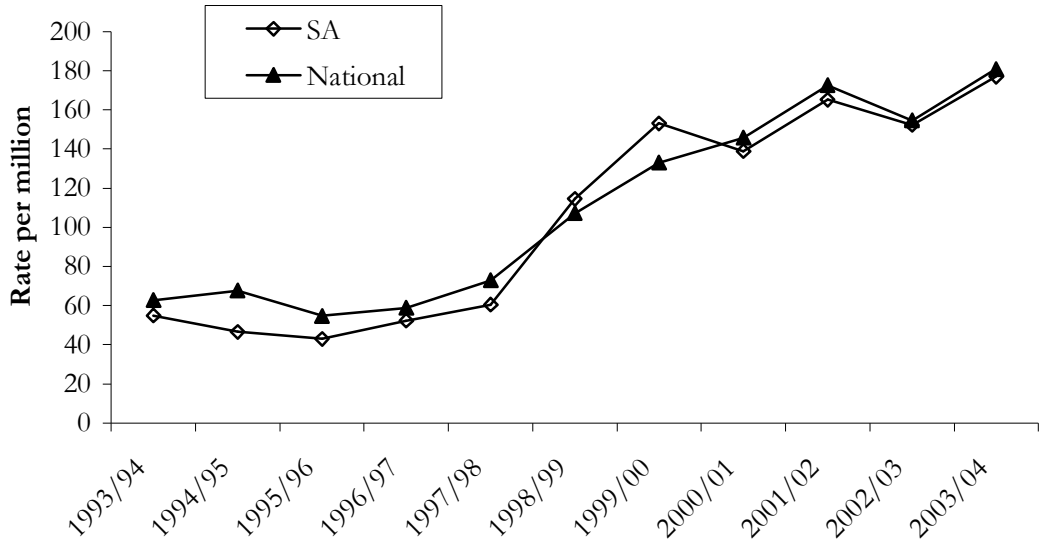
Amphetamine-related hospital admissions

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 2003/2004 (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) 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 both the SA and national rate of admissions to hospital for amphetamines (primary diagnosis) have increased in 2004/2005 compared to 2003/2004. The long-term trend shows that the rates of admissions to hospital in SA and nationally have steadily increased since 1997/1998, despite some fluctuation in the last few years. The total number of admissions to SA hospitals with a primary diagnosis involving amphetamines in 2005 was 150. 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 to 2003/2004



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. It can be seen that attendances regarding amphetamines have increased across the last three years depicted, with the number of attendances in 2004/2005 for amphetamines being higher than for any other illicit drug. In addition, if the diagnosis 'drug-induced psychosis' is examined, it can be seen that the number of attendances with this diagnosis has doubled in the last year, and amphetamine-induced psychosis attendances are likely to have contributed to this. However, it is unclear to what extent this has occurred, as more specific drug information was not available in the coding of these attendances.

5.6 Trends in methamphetamine use

When asked about recent general trends in drug use, the overwhelming majority of IDU commenting held the view that more, and younger, people were using 'speed', and that they were doing so more frequently and in larger quantities. Most did not differentiate between the different forms of methamphetamine, but several commented that this increased used referred to all forms.

As in 2004, in 2005 one KE commented that methamphetamine using clients of a large southern area CNP outnumbered heroin or other opiate using clients three to one, and no change in the prevalence or frequency of use was noticed in this community in the last year. In addition, a KE based in the north of Adelaide estimated that clients to the local CNP nominating amphetamine as their primary drug constituted three-quarters of

total clients to approximately one-quarter heroin or other opiate using clients. Similarly, a KE associated with the largest CNP in the state estimated amphetamine using clients constituted around 80% of all clients to the service.

5.7 Summary of methamphetamine trends

Table 5.8 contains a summary of current trends in the price, purity, availability and use of methamphetamine. Overall there have been increases in the price, particularly of 'points' and gram amounts, of all three forms of methamphetamine from 2004 to 2005. While prices increased across all forms, the largest increases were seen for powder, and subsequently there was little difference in the median price paid for any amount of all three forms of methamphetamine, though crystal still tended toward being more expensive. Again it was noticeable in 2005 that there were wide ranges in reported prices paid, across all types of methamphetamine. IDU reported the price of all forms of methamphetamine as stable or increasing. KE reports were in agreement with IDU information on price.

In 2005, all forms of methamphetamine were reported as 'easy' or 'very easy' to obtain by the majority of IDU able to comment, though slightly larger proportions of IDU reported difficulty obtaining base and crystal forms. The majority also reported that availability of all forms had recently been stable. The majority of KE also reported availability as 'easy ' or 'very easy' and stable. There was an increase in the proportion of IDU reporting that they usually obtained any form of methamphetamine from mobile dealers, and a decrease in the proportion scoring from a friend.

Since 2004, 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. Overall, the median purity of methamphetamine seized by SAPOL in SA for 2004/2005 was decreased (to 11.6%) compared to the previous year, and the lowest seen in the past four years.

The proportion of IDU reporting recent use of *any* methamphetamine remained stable, and the frequency of use of *any* methamphetamine increased in 2005, stabilising the dramatic decrease seen in 2004. Increased frequency of use was noted across all main forms of methamphetamine, particularly base, and this form remains the most used type of methamphetamine among IDU. KE report no significant changes in parameters of methamphetamine use.

SAPOL data revealed a decrease in both methamphetamine-related provision and possession/use offences compared to 2004. 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 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 to DASSA inpatient (detox) services with amphetamine as the primary drug of concern continued to decline, and in 2005 was at the lowest since 2001/2002. State (SA) hospital admissions data showed the number of amphetamine-related admissions was continuing to increase (as at 2003/04). Emergency Department (RAH) attendances with amphetamine-related diagnoses also continued to increase.

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

Price	
Powder (point)	$41.50 ($25-$55); increased since 2004
(gram)	$200 ($100-$250); increased since 2004
	currently stable or increasing
Base (point)	$50 ($20-$100); increased since 2004
(gram)	$200 ($100-$300); increased since 2004
	currently stable to increasing
Crystal (point)	$50 ($25-$75); increased since 2004
(gram)	$300 ($200-$400); increased since 2004
	currently stable to increasing
Availability	Very easy to easy for all forms; stable for all forms. Increase in % scoring from mobile dealers, and a decrease in % scoring from friends (IDU).
Purity	11.6% (ACC); decreased Slight increase in perceived purity of base & crystal (IDU). Powder: equivocal; recently fluctuating. Base: medium to high; recent change somewhat equivocal. Crystal: high to medium; mainly stable but recent change somewhat equivocal.
Use	% reporting recent use of *any* methamphetamine remained stable. Increased frequency of use of all forms, particularly base. Increase in % using daily. KE report no change in parameters of use.
Other indicators	Decrease in amphetamine possession/use and provision offences (SAPOL). No change 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). 2003/04 data showed amphetamine-related hospital admissions in SA continued to rise (AIHW).

6.0 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=5) 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 16, compared to 6 in 2004). In addition, nine KE were able to provide some information on cocaine, all as peripheral to their main interview. Despite efforts, no KE who could nominate cocaine as the main drug used by the users they had contact with, or who could nominate cocaine as their main area of expertise, were identified in Adelaide. Consequently, the data for price, purity and availability of cocaine in 2005 are of limited value and the following information should be viewed with caution.

6.1 Price

In 2005, the *current* price of cocaine was estimated by the IDU to be a median of $380 per gram (range $200 - 500, n = 5), $60 for a 'cap' (n=1), $200 for a 'half-weight' (n=1), and $1100 for an 'eightball' (3.5 grams, n=1). Six IDU (5% 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 $315 ($200 - 500, n=4). One IDU reported paying $60 for a 'cap' and another $200 for a 'half weight' *at last purchase*. Although these parameters of price are somewhat higher than those reported in 2004, the sample sizes in both years were too small to allow any conclusions to be drawn. In 2005, three IDU reported that the price of cocaine had remained stable over the last six months. No KE were able to provide specific information regarding price of cocaine, though two KE commented that cocaine was an "expensive" drug and that this factor limited use among IDU that they had contact with.

6.2 Availability

Seven IDU (7% of entire sample) were able to provide information on current ease of access to cocaine in 2005: two IDU reported cocaine was 'easy' or 'very easy' to obtain and five reported it was difficult to obtain. The majority of the IDU able to answer (n=4) reported that availability of cocaine remained stable in the last six months, two IDU reported it was more difficult to obtain and the remaining one IDU reported fluctuations in availability.

Eight IDU (8% of entire sample) able to comment on cocaine price, purity and availability parameters, reported that they usually obtained cocaine from the following sources; mobile dealer (n=4), friend (includes gift from friend) (n=2), dealer's home (n=1), or home delivery (n=1), and that it took a median 120 minutes to obtain (range 5 minutes to 1 day). Two KE reported that cocaine seemed to be somewhat more available in 2005, one health KE reported that "you just don't see it", while three law enforcement and forensic KE reported that there had been no changes in 2005 with regard to number (which remain low) or size of cocaine seizures in Adelaide.

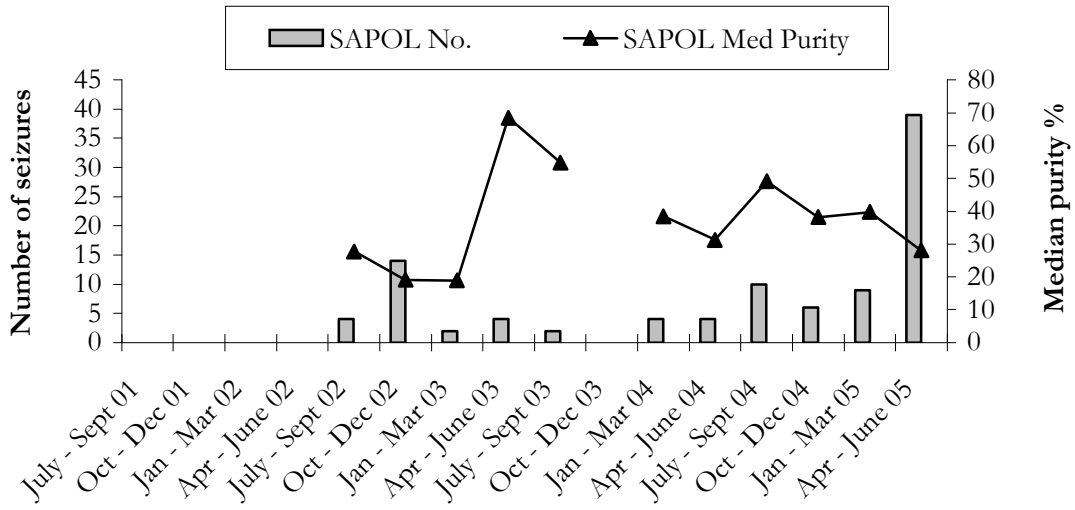
Given the relatively small sample sizes for this section in this and the previous year, no clear inference regarding trends in availability can be made. Although there was a slight increase in the number of IDU able to provide information, it is not known whether this was an indication of the increasing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

6.3 Purity

Of the seven IDU (or 7% on entire sample) able to provide information on the current purity of cocaine in 2005, four perceived the purity as low, two perceived it as medium and the remaining one IDU reported perceived purity as high. Five IDU reported that the purity of cocaine was decreasing, and two that it was fluctuating, during the past six months.

The Australian Crime Commission (ACC) provided quarterly data on methamphetamine seized in SA during the last financial year 2004/2005 (ACC, *in press*). 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 04 to June 05 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 make meaningful analysis difficult, but it seems that purity has 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 (ACC; 2003, 2004, 2005, *in press*)

6.4 Use

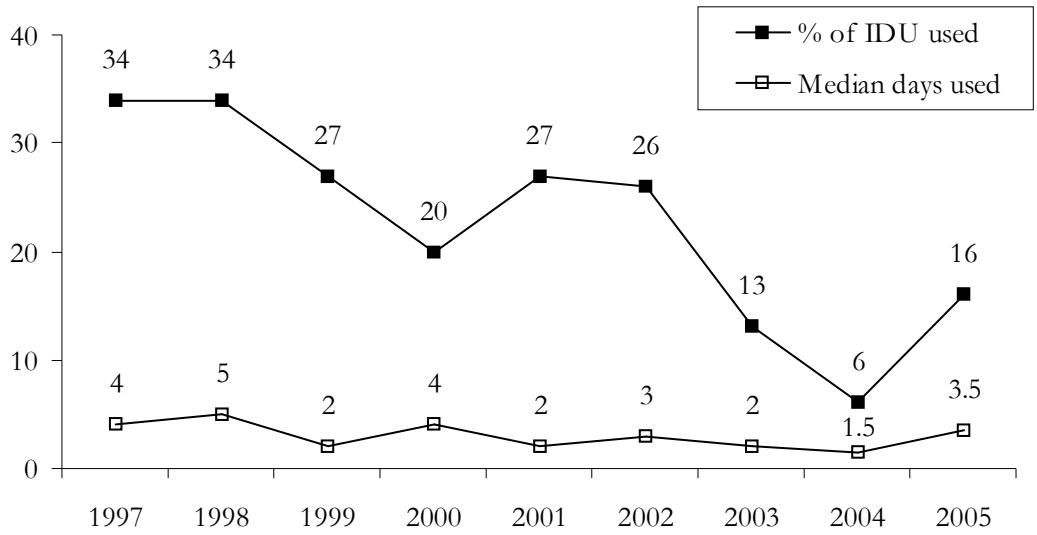
6.4.1 Cocaine use among IDU

In 2005, only four of the participating IDU nominated cocaine as their drug of choice and four reported cocaine as the first drug ever injected. No IDU reported that cocaine was the last drug they had injected or the drug most injected in the last month. However, 69% of IDU reported they had used cocaine in their lifetime, and 55% reported they had injected cocaine in their lifetime.

6.4.2 Current patterns of cocaine use

Sixteen IDU reported using cocaine a median of 3.5 days (range 1 - 24) in the last six months, twelve of whom had injected cocaine in that time. Compared to the previous year, there was an increase in the proportion of the sample that had used cocaine in the last six months (from 6% in 2004), 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, it is too early to tell whether this shows the beginning of an upward trend in cocaine use among IDU. The long-term trend regarding frequency of used has been stable an low across all years depicted.

Figure 6.2: Cocaine – Recent* use & median number of days used#, 1997-2005



Source: IDRS IDU interviews
* in the previous 6 months; # by those reporting use in the previous six months

Of the sixteen IDU that reported use of cocaine in the last six months, fourteen reported cocaine powder was the form they had used most during that time *(data missing for two participants)*. One KE commented that they had noticed a slight increase in the number of clients of their service reporting cocaine use in 2005, but that this was "just a few extra people" compared to last year. 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.

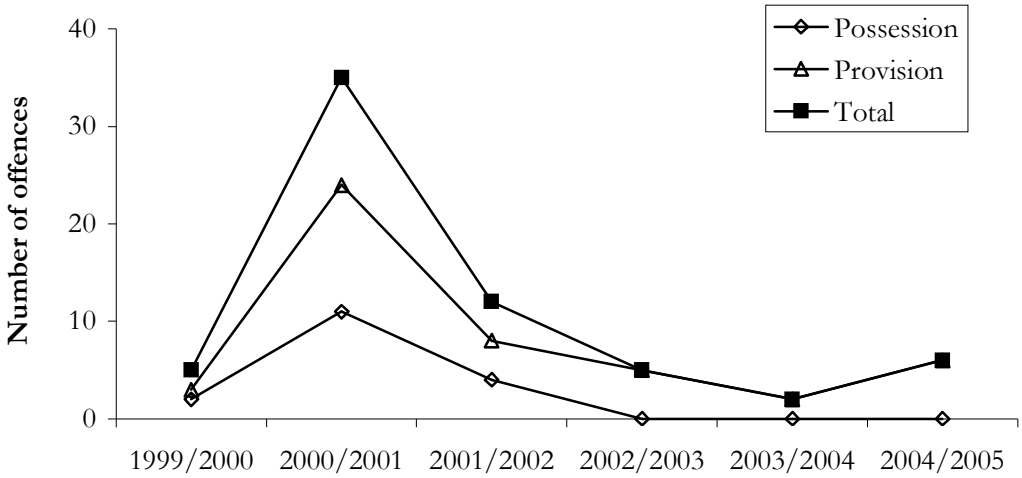
6.5 Cocaine-related harms

6.5.1 Law enforcement

Figure 6.3 presents the number of cocaine possession/use and provision (incorporating import/export drugs, sell/trade drugs, produce/manufacture drugs categories) offences reported or becoming known to police from 1999/2000 to 2004/2005 (SAPOL Annual Reports, 2000-2005). 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 remained low (at 6) in 2004/2005. Cocaine possession and provision offences continued to make

up less than 1% of the total number of illicit drug possession and provision offences in 2004/2005 (0.3%), 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, 1999/2001-2004/2005

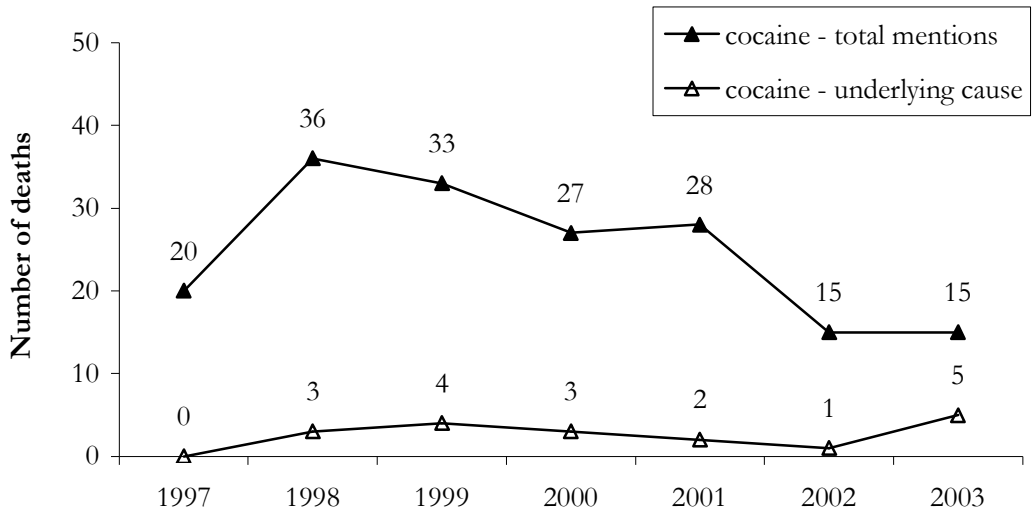


Source: South Australian Police Annual Reports (2000-2001 to 2004-2005)

6.5.2 Health

In the 2004 SA IDRS report, the investigation of Australian Bureau of Statistics data in relation to the number of accidental drug-induced deaths in which methamphetamine and cocaine were mentioned, undertaken by Degenhardt, Roxburgh and Black (2004b), was presented. This included 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. Up-to-date data regarding cocaine-related deaths were unavailable at the time of preparing the current IDRS report, but national data for 1997 to 2003 (as presented previously), 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, 1997-2003



Source: Australian Bureau of Statistics morbidity database

The total number of deaths Australia-wide in which cocaine was mentioned was stable from 2002 to 2003. All of the fifteen drug-induced deaths that mentioned cocaine in 2003 occurred in New South Wales. Five deaths were recorded as having cocaine as the underlying cause of death in 2003, 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=41) of the total coded telephone contacts (drug-related) in the 2004/2005 financial year. Numbers of calls to SA ADIS concerning cocaine have been consistently low across the past few years; specifically, 0.20% (n=27) of coded drug-related calls in the 2003/2004 financial year, 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 show that the proportion of clients nominating cocaine as their primary drug of concern has remained stable and low across all years reported. In 2004/2005, only 0.4% of clients to all DASSA treatment services nominated cocaine as their primary drug of concern. There were only two clients to DASSA inpatient detoxification treatment services in 2004/2005, similar to the low number of clients in previous years.

Cocaine-related hospital admissions

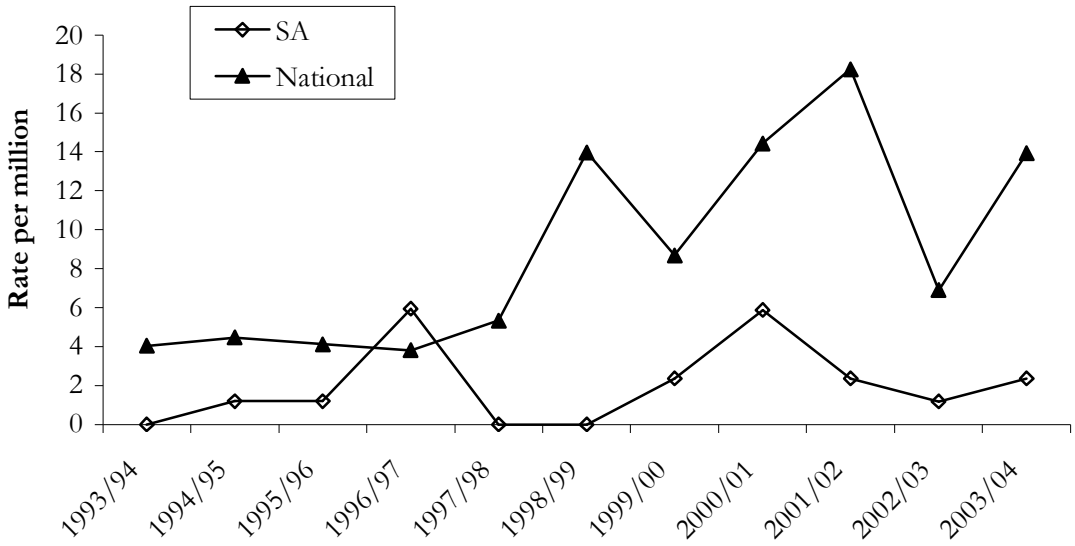
An analysis of data, provided by the Australian Institute of Health and Welfare from the National Hospital Morbidity Dataset, for the period 1993/1994 to 2003/2004 (financial years), was undertaken by NDARC. These data report on both state-specific and national drug-related hospital admissions[1] (for the four main illicit drug classes), adjusted so that

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

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[1]. Figures A and B (in Appendix) 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 two admissions in 2003/04.

Figure 6.5: Rate of cocaine-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1993/1994 to 2003/2004



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] 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 2004, 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 16). 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 2005 are again of limited value.

In 2005, an increase was seen in the number of IDU that reported recent use of cocaine (16 compared to 6 in 2004), but frequency of use remained low (at a median of 3.5 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. However, data from the ACC show an increase in the number of cocaine seizures by SAPOL in 2004/2005. 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.,* 2005), 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.

7.0 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 2 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 2 grams (mean 2.1) and the median upper range was 3 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 2 and 3 grams.

7.1 Price

Around 60% of the participating IDU were able to provide information regarding the price of cannabis in 2005. The *current* price of cannabis was estimated to be a median $200/ounce of hydro (range $100-250, n=42) or $200/ounce of bush (range $125-250, n=34) by IDU. These estimations were the same as the median prices *paid* by IDU for the different types of cannabis, *at last purchase*, 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=36) or bush (n=22). 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 prices reported for these amounts have been stable since 2002, apart from an increase in the median price paid, at last purchase, for an ounce of bush (from $180 in 2004 to $200 in 2005). Only one IDU reported purchasing a cap of 'hash' oil, and no IDU reported buying cannabis resin, in the last six months; therefore, no reliable data on prices were available.

As occurred in 2004, in 2005 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, 2004* & 2005

Amount bought	Median price paid, $ (range)		Number of IDU purchasers	
	hydro	bush	hydro	bush
'bag'	25 (20-50) *25* *(20-25)*	25 (15-50) *25* *(20-25)*	36 *45*	22 *25*
¼ ounce	52.50 (50-60) *60* *(50–60)*	50 (35-60) #	8 *7*	5 #
½ ounce	100 (75-110) *100* *(100-120)*	100 (70-110) *100* *(50-120)*	8 *16*	10 *10*
ounce	200 (100-250) *200* *(100-280)*	200 (50-250) *180* *(100-250)*	23 *28*	15 *18*

Source: IDRS IDU interviews
* 2004 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 70% of IDU able to comment (or by 48% and 38% of the entire sample, respectively) in 2005 (see Table 7.2).

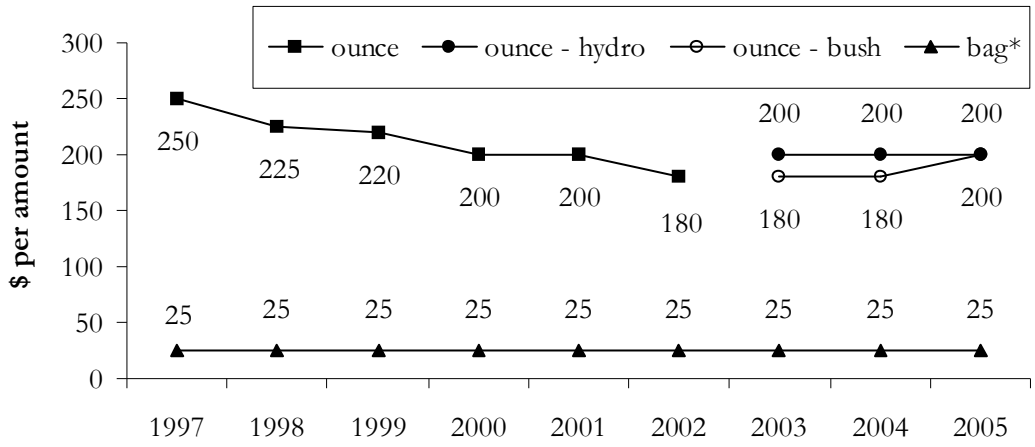
Table 7.2: Change in price of cannabis over the last 6 months, 2004 & 2005

Reported price status	% of IDU able to answer			
	2004		2005	
	hydro (n=79)	bush (n=69)	hydro (n=62)	bush (n=69)
don't know	13	23	3	6
increasing	15	15	8	8
stable	62	58	77	73
decreasing	5	1	3	4
fluctuating	5	3	1	10

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, although the price of an ounce of bush increased in 2005.

Figure 7.1: Median price of a 'bag' or an ounce of cannabis, 1997-2005



Source: IDRS IDU interviews
* denotes either hydro or bush in 2003, 2004 and 2005

Similar to IDU, the majority of KE who commented reported no change in the price of cannabis over the last twelve months. However, one peer educator KE stated the belief that cannabis had become a lot cheaper, and available in larger quantities than previously, with the price dropping from $180 - $250 per ounce to $120 - $150 per ounce. One law enforcement KE commented that the changes in legislation (of 2003) had had a small impact on the market in SA, though the price of cannabis was still lower than in other states, at around $2,300/pound.

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 2005 the majority of IDU reported both types of cannabis as 'easy' or 'very easy' to obtain, 83% (49% of entire sample) for hydro and 63% (32% of entire sample) for bush. The majority of those able to answer (64%; 38% of entire sample) reported availability of hydro was stable in the last six months. Almost half the IDU able to answer reported the availability of bush to be stable (49%; 25% of entire sample).

Table 7.3: Availability of cannabis currently, 2004 & 2005

How easy is it to get cannabis at the moment?	% of IDU able to answer			
	2004		2005	
	hydro (n=73)	bush (n=60)	hydro (n=59	bush (n=51)
very easy	47	37	48	41
easy	37	42	36	22
difficult	14	17	17	35
very difficult	3	5	0	2

Source: IDRS IDU interviews

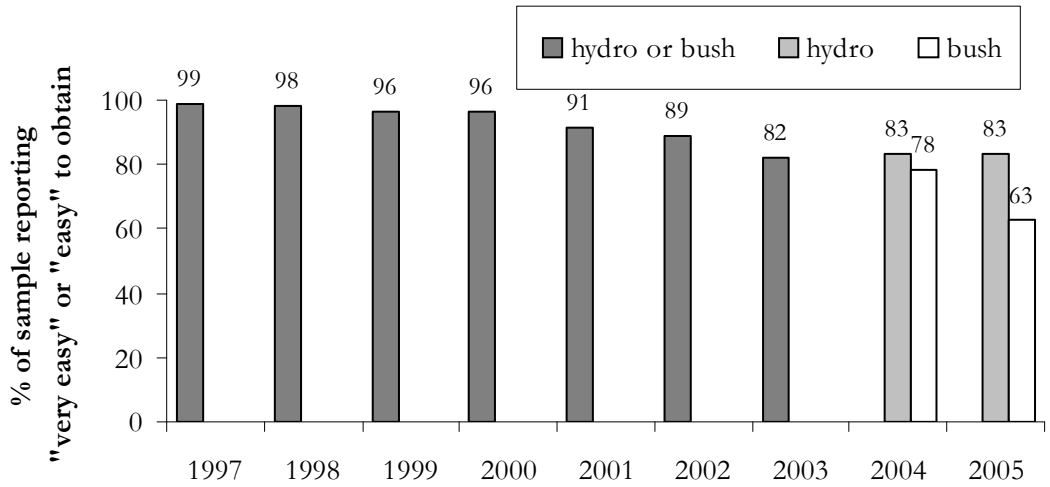
Table 7.4: Change in availability of cannabis over the last 6 months, 2004 & 2005

Has [availability] changed in the last 6 months?	% of IDU able to answer			
	2004		2005	
	hydro (n=73)	bush (n=60)	hydro (n=60)	bush (n=51)
don't know	1	3	0	0
more difficult	15	18	15	26
stable	66	65	64	49
easier	10	5	12	12
fluctuates	8	8	9	14

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. Overall, cannabis remains relatively easy to obtain in Adelaide. Of the KE providing comment on cannabis, none indicated any change in availability of cannabis among the IDU that they had contact with.

Figure 7.2: Availability of cannabis in the last six months, 1997-2005



Source: IDRS IDU interviews
Note: in 2004 and 2005, availability of hydro and bush was asked separately

Table 7.5 presents information collected from IDU on the usual source and time taken to obtain the cannabis they had used recently. Similar to 2004, in 2005 the majority of IDU able to comment reported that they had *usually* obtained cannabis from a friend (53% for hydro, 32% of entire sample; and 55% for bush, 28% of entire sample), in the six months prior to interview. A further 32% or 24% (hydro and bush, respectively) reported they had *usually* scored cannabis at a dealer's home and 10% reported they grew their own bush supply during that period. Very few reported having obtained either type of cannabis from any other source. The median time *usually* taken to score cannabis was 20 minutes, for either hydro or bush.

Table 7.5: Usual method, and time taken, obtaining cannabis in the last 6 months, 2004 & 2005

Usual source *or* method of obtainment	% of cannabis users able to answer			
	2004		2005	
	hydro (n=75)	bush (n=61)	hydro (n=60)	bush (n=51)
Street dealer	4	7	3	4
Dealer's home	19	15	32	24
Mobile dealer	7	3	5	2
Friend*	55	59	53	55
Home delivered	4	3	2	2
Grow your own	11	11	3	10
other	1	2	2	4
Usual time taken to obtain heroin, *median minutes (range)*	20 (1-1440)	13 (1-360)	20 (1-3660)	20 (1-43200)

Source: IDRS IDU interviews
* includes obtained as a gift from friend

Perceived source of cannabis used by IDU

IDU that 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 in 2005 participants were asked to consider hydro and bush separately. As presented in Table 7.6, of 59 IDU who reported using hydro, the majority (58%; 34% of entire sample) reported the source as a small-time 'backyard' user/grower, 10% (6% of entire sample) reported the source as a large-scale cultivator or supplier, while 25% (15% or entire sample) reported they didn't 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 51 IDU who reported having used bush, the majority (61%; 31% of entire sample) also reported that they believed the source was a small-time 'backyard' user/grower, 16% (8% of entire sample) reported that they grew their own supply, and 2% (one person) reported the bush they had used came from a large-scale cultivator / supplier. Twenty percent (10% of entire sample) did not know the source of the bush they had last used. Ninety five percent of IDU (39% of entire sample) that commented on the production source of bush used were 'very sure' of the source.

Table 7.6: Perceived production source of cannabis, 2004* & 2005**

Perceived source	% of cannabis users able to answer		
	2004 (n=69)	2005	
		hydro (n=59)	bush (n=51)
Don't know	26	25	20
Grew my own	16	5	16
Small-time 'backyard' user/ grower	48	58	61
Large-scale cultivator/supplier	10	10	2
Both backyard / large-scale	-	2	2
"Very sure" of source***	86	93	95

Source: IDRS IDU interviews
*IDU were asked: "Last time you used cannabis, as far as you know, what was the original source of that cannabis?"
**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 2005, the strength of both hydro and bush cannabis was reported as high or medium by 85% or more of IDU able to answer (approximately half of the entire sample), and largely stable, in the last six months. Compared to 2004, there was a decrease in the percentage of IDU reporting the current potency of bush cannabis as 'high' in 2005, but the majority of those able to comment still reported the strength of bush as medium or high. No comment regarding potency of cannabis was made by any KE in 2005.

Table 7.7: Current potency/strength of cannabis, 2004 & 2005

How strong would you say cannabis is at the moment?	% of IDU able to answer			
	2004		2005	
	hydro (n=72)	bush (n=62)	hydro (n=60)	bush (n=49)
high	56	48	58	29
medium	29	39	30	57
low	7	7	7	6
fluctuates	8	7	5	8

Source: IDRS IDU interviews

Table 7.8: Change in potency/strength of cannabis in last 6 months, 2004 & 2005

Has the strength of cannabis changed in the last 6 months?	% of IDU able to answer			
	2004		2005	
	hydro (n=72)	bush (n=62)	hydro (n=60)	bush (n=49)
don't know	0	2	3	2
increasing	14	8	17	6
stable	69	73	52	61
decreasing	7	7	12	8
fluctuating	10	11	17	22

Source: IDRS IDU interviews

7.4 Use

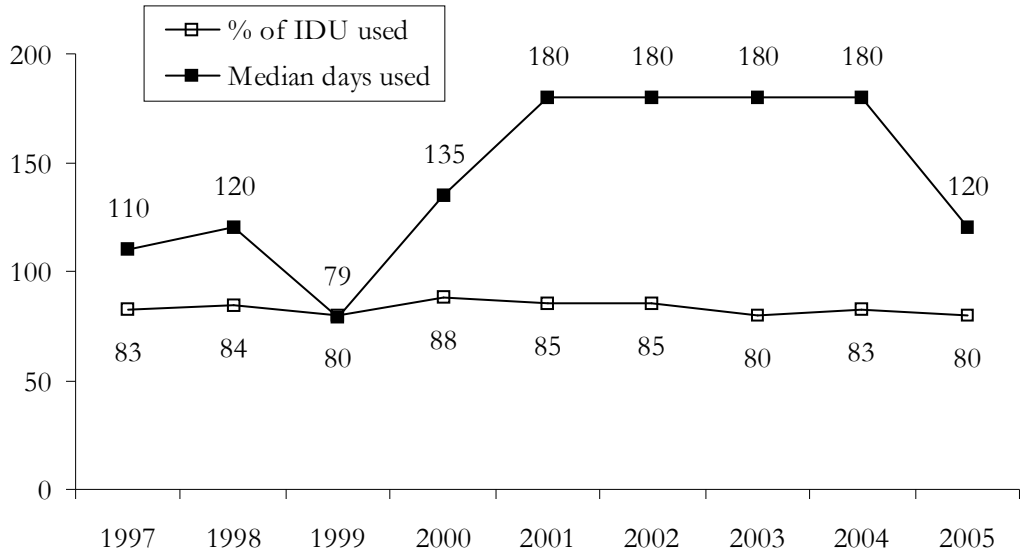
7.4.1 Cannabis use among IDU

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

Eighty percent of the IDU sample reported having used cannabis a median of 120 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 one IDU reporting use of cannabis in their lifetime. This pattern of use has remained unchanged from that reported in 2004. The proportions of IDU that had recently used cannabis has remained stable across all the years the IDRS has been conducted. The median number of days cannabis was used by the IDU in the previous six months had been stable since 2001, but decreased markedly in 2005 (see Figure 7.3).

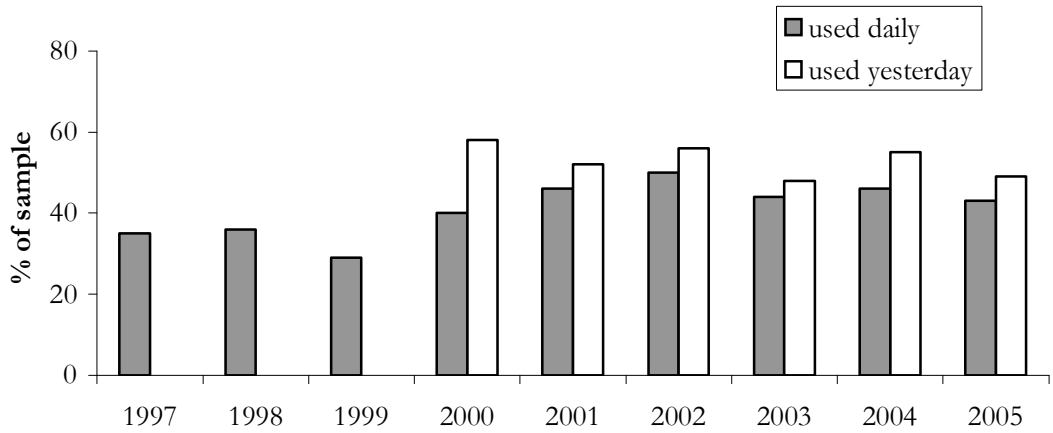
Figure 7.3: Cannabis – Recent* use & median number of days used#, 1997-2005



Source: IDRS IDU interviews
* in the previous 6 months; # by those reporting use in the previous six months

Forty-three percent of recent cannabis users (n=43) stated they had used on a daily basis in the last six months, and 49% (n=49) reported they had used the drug on the day preceding the interview. These proportions were similar to those reported in 2004, when 46% of cannabis users reported daily use and 55% 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, 1997-2005*



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

Of the 81 IDU that had used cannabis recently (in the last 6 months), 74 (94%) reported use of hydro, and 62 (79%) reported use of bush, within that period. In addition, 24 (30%) reported use of 'hash' (cannabis resin) and 18 (23%) 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 (85%, n=66). Fourteen percent (n=11) reported bush was the form they had *used most*, and one IDU reported 'hash' was the form *used most* in the last six

months *(data missing for 3 cannabis users)*. Apart from a small increase in the proportions reporting they had recently used 'hash oil' (from 15% (n=13) to 23% (n=18) in 2005), these patterns of cannabis use were similar to those reported in 2004.

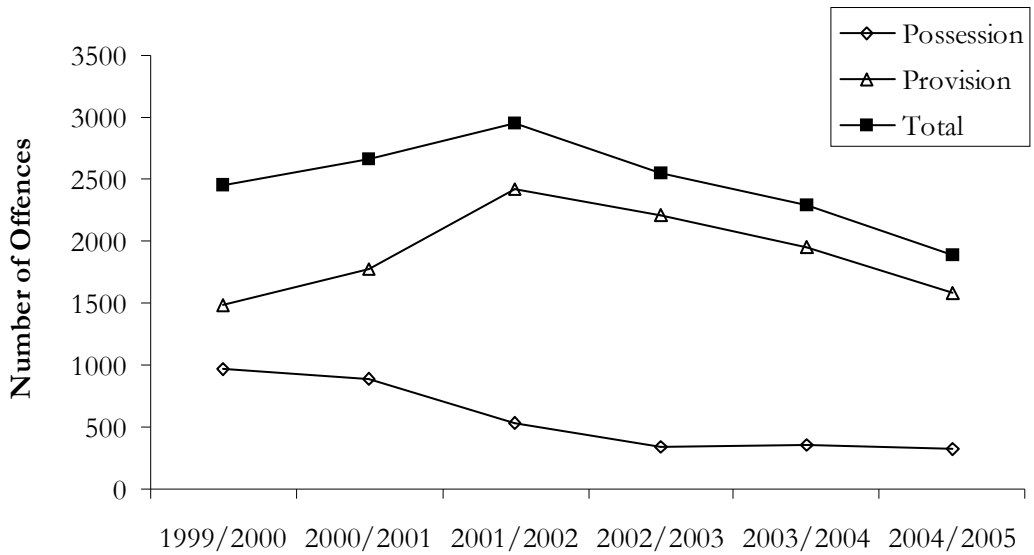
KE reported no change in the patterns of cannabis use among IDU over the previous six to twelve months, which varied from being "ubiquitous" and a drug used almost as commonly as tobacco, to one used particularly at comedown or as a relaxant, among amphetamine users. All KE agreed that cannabis was generally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

7.5 Cannabis-related harms

7.5.1 Law enforcement

Figure 7.5 presents the number of cannabis possession/use and provision (incorporating import/export drugs, sell/trade drugs, produce/manufacture drugs categories) offences reported or becoming known to police from 1999/2000 to 2004/2005 (SAPOL Annual Reports, 2000-2005). As can be seen, the number of cannabis possession offences remained stable, and the number of provision offences for cannabis continued to decline compared to previous years. Historically, cannabis-related offences have made up the majority of illicit drug possession and provision offences, and continued to do so in 2004/2005 when 81.5% of the total number of such offences were cannabis-related. This proportion is similar to that seen in previous years; for example, 76.8% in 2003/2004 and 81.3% in 2002/2003.

Figure 7.5: Number of cannabis-related offences reported by SAPOL in South Australia, 1999/2001-2004/2005



Source: South Australian Police Annual Reports (2000-2001 to 2004-2005)

7.5.2 Health

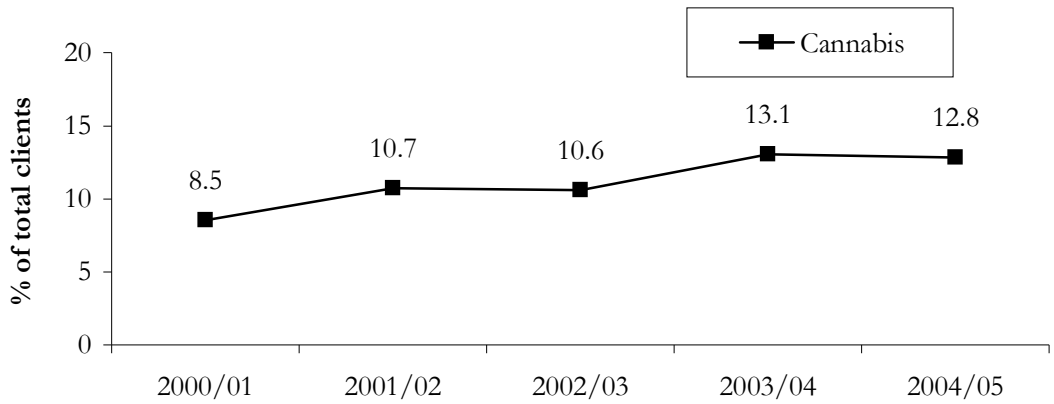
Treatment Services – ADIS

Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding cannabis accounted for 12% of the total coded telephone contacts (drug-related) in the 2004/2005 financial year, similar to previous years despite some small fluctuations. Specifically, 10.3% of the total coded telephone contacts (drug-related) in the 2003/2004 financial year were cannabis-related, compared to 12% in 2002/2003 and 14% in 2001/2002. In 2004/2005, the number of enquiries regarding cannabis (12% of total) was similar to that for amphetamines (12.5% of total) and less than half the number of enquiries regarding alcohol (29.6% 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 show that the proportion of clients nominating cannabis as their primary drug of concern remained stable in 2004/2005 compared to the previous year (12.8% and 13.1%, 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 2004/2005, cannabis was the third most commonly nominated primary drug of concern (at 12.8% of all clients), a similar proportion of clients as for heroin (12.3%), behind alcohol (48.3%) and amphetamines (20%).

Figure 7.6: Percentage of total DASSA clients with cannabis as the primary drug of concern, 2000/01-2004/05*



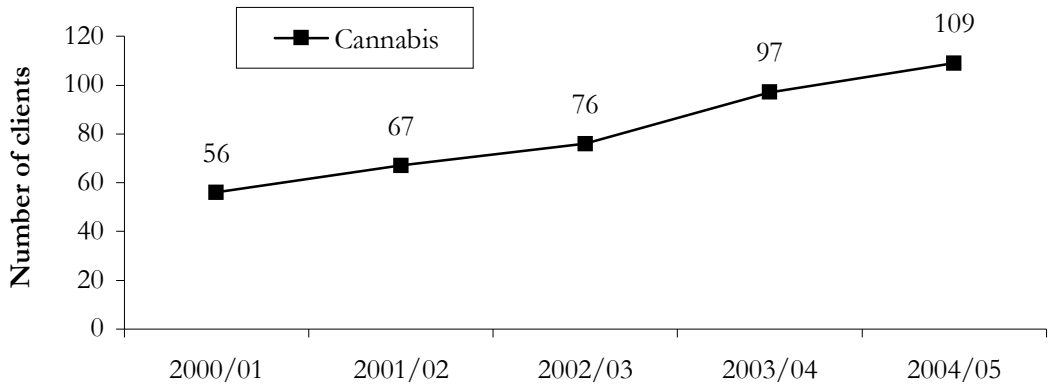
Source: Drug and Alcohol Services South Australia

* 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 2004/2005. Similar to the gradual increase seen regarding the number of cannabis-related clients to all DASSA services (see Figure 7.6), 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. For the second 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 to 2004/05*



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).

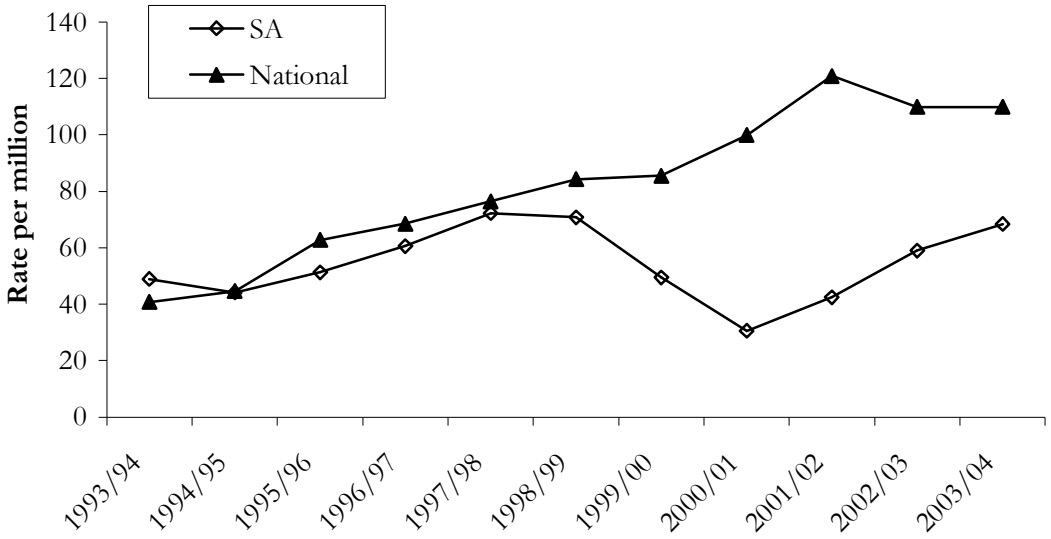
Cannabis-related hospital admissions

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 2003/2004 (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) 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 2003/04. 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 has increased for the last three years to 2003/2004. There were a total of 58 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 to 2003/2004



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

Four IDU commented that there was a perceived increase in the number of young people using cannabis. One IDU reported that there were more people using cannabis generally, and that there was a perception that cannabis use was 'socially acceptable'.
All KE agreed that cannabis use was common among IDU, 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 had been little change in these parameters since 2004.

In 2005, the median price paid for cannabis was $200 an ounce and $25 a 'bag' for either hydro or bush. With the exception of an increase in price of an ounce of bush (up from $180 in 2004), the price of these quantities has remained stable since 2004, 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 60%) perceived both hydro or bush cannabis as 'very easy' or 'easy' to obtain, and around half reported that availability had been stable in the previous six months. The majority reported scoring the cannabis they had used last from a friend and that they believed the source had been a small-time 'backyard' user/grower. Eighty-five percent or more also perceived the potency of either hydro or bush 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 one IDU reporting use of cannabis in their lifetime. The proportions 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 decreased

markedly in 2005 (to a median 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, in 2005 compared to 2004.

A continuing decline in the number of provision offences related to cannabis was recorded by SAPOL in 2005, but possession offences remained the same as for 2004.

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 continues to increase gradually. Cannabis-related hospital admissions in SA have increased for the past three years (to 2003/2004).

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

Price	
Hydro (ounce)	$200 ($100 - 250); no change since 2004
(bag)	$25 ($20 - $50); no change since 2004
	currently stable
Bush (ounce)	$200 ($50 - 250); increase since 2004
(bag)	$25 ($15 - $50); no change since 2004
	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 remained high. Frequency of recent use (median days used last 6 months) decreased. Hydro remained the most used by large majority.
Other indicators	Possession offences remained stable, and the number of provision offences for cannabis continued to decline 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 increased as at 2003/04 (AIHW).

8.0 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 2005 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.

Heroin was the opioid used by the largest proportion of the IDU sample (61%) in the last six months, followed by either licit or illicit methadone (47%), morphine (37%) and either licit or illcit buprenorphine (36%). 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 86% (n=87) 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, 78% (n=79) had used any of these substances in that time. Excluding heroin, 83% (n=84) 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. Two 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). Two KE from the western area of Adelaide reported that heroin was generally used exclusively, and that use of other opiates was rare among IDU they had contact with. Several KE commented on the use of Oxycontin® (Oxycodone) and illicit methadone, and the increased illicit use and injecting of buprenorphine, particularly among younger IDU (n=1).

8.2 Morphine

2005 was the third year that IDRS survey participants were asked to provide information on the price and availability of illicit morphine.

8.2.1 Price

Slightly fewer IDU could comment on the price of morphine in 2005 compared to 2004. In 2005, 20 IDU estimated that the *current* price of morphine was a median $30 per 100mg (range $10-80 per 100mg). This was the same as had been reported in 2004, 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 $25, a decrease from 2004 (see Table 8.1). In addition, 100mg (in tablet form) was the most commonly purchased amount and Kapanol® was the most commonly purchased brand of morphine, for both years. In 2005, 44% of those able to comment (10% of entire sample) reported price of morphine as stable, but a further 30% (7% of entire sample) reported price as fluctuating recently (see Table 8.2).

Table 8.1: Price of most recent morphine purchases by IDU, 2004* & 2005

Amount bought	Median price paid, $ (range)	Number of IDU purchasers
MS Contin® – 60mg	#	#
	#	#
MS Contin® – 100mg	25 (20-35)	9
	30 (20-40)	*13*
Kapanol® – 50mg	#	#
	#	#
Kapanol® – 100mg	30 (20-80)	17
	30 (10-50)	*18*

Source: IDRS IDU interviews
* 2004 data in italics, # n<5: not reported

Table 8.2: Change in price of morphine over the last 6 months, 2004 & 2005

Reported price status	% of IDU able to answer	
	2004 (n=26)	2005 (n=23)
don't know	12	4
increasing	19	17
stable	62	44
decreasing	8	4
fluctuating	0	30

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 2005, of those able to comment, 78% (18% of entire sample) reported morphine as 'easy' or 'very easy' to obtain, with around 60% (14% of entire sample) reporting this availability as stable, in the six months prior to interview. Compared to 2004, a smaller proportion perceived that it was 'very easy' to obtain morphine. The proportion of IDU reporting morphine was 'difficult' or 'very difficult' to access remained relatively stable between 2004 and 2005.

Table 8.3: Availability of morphine currently, 2004 & 2005

How easy is it to get morphine at the moment?	% of IDU able to answer	
	2004 (n=25)	2005 (n=23)
very easy	36	22
easy	36	57
difficult	24	22
very difficult	4	0

Source: IDRS IDU interviews

Table 8.4: Change in availability of morphine over the last 6 months, 2004 & 2005

Has [availability] changed in the last 6 months?	% of IDU able to answer	
	2004 (n=25)	2005 (n=23)
don't know	4	0
more difficult	12	22
stable	76	61
easier	4	13
fluctuates	4	4

Source: IDRS IDU interviews

Table 8.5 presents information collected from IDU on the usual source and time taken to obtain the morphine they had used recently. Most of the IDU that reported use of morphine in the last 6 months and were able to answer (n=21) stated that they *usually* obtained morphine from a friend (43%; 9% of entire sample), which was lower than the proportion of IDU that reported this source in 2004 (57%). In 2005 there was a substantial drop in the percentage of IDU reporting that they *usually* obtained morphine from a street dealer (26% to 0%), and a concomitant rise in the percentage reporting they usually scored from a dealer's home (4% to 24%) or a mobile dealer (4% to19%). The *usual* length of time taken to score morphine was unchanged, at a median 30 minutes.

Table 8.5: Usual method, and time taken, obtaining morphine in the last 6 months, 2004 & 2005

Usual source *or* method of obtainment	% of morphine users able to answer	
	2004 (n=23)	2005 (n=21)
Street dealer	26	0
Dealer's home	4	24
Mobile dealer	4	19
Friend*	57	43
Home delivered	4	5
other	4	10
Usual time taken to obtain heroin, *median minutes (range)*	30 (5-180)	30 (5-1440)

Source: IDRS IDU interviews

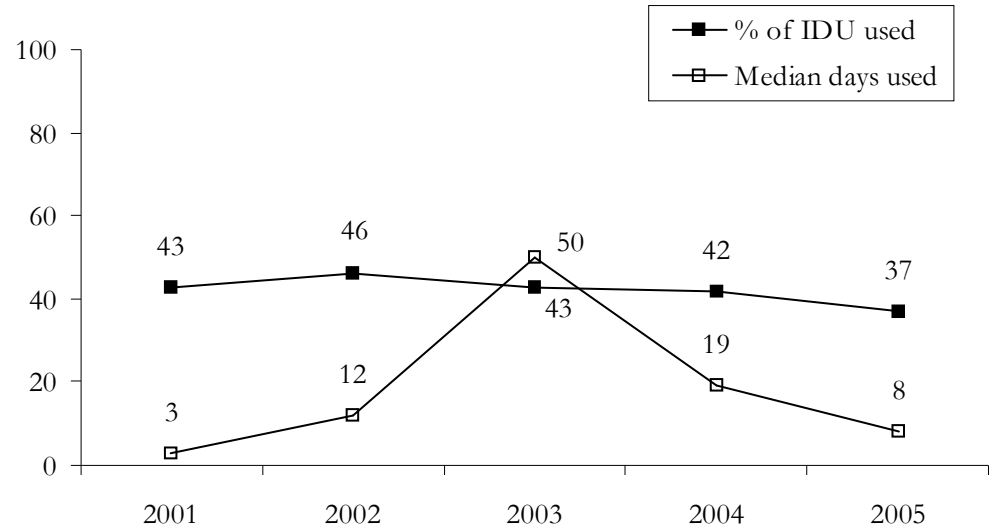
* includes obtained as a gift from friend

8.2.3 Use of morphine among IDU

One IDU reported morphine as the first drug ever injected, one nominated morphine as their drug of choice and 10% (n=10) reported morphine as the drug most often injected in the last month or as the last drug they injected (see Table 3.2).

Thirty-seven percent of IDU (n=37) reported they had used morphine in the last six months a median of 8 days (range 1 to 180). With regard to long-term trends (see Figure 8.1), the proportion of IDU reporting recent use of morphine has remained stable since 2001. Frequency of use, however, has declined for the second year in a row in 2005, following 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#, 2001-2005



Source: IDRS IDU interviews

* in the previous 6 months; # by those reporting use in the previous six months

All but three of the IDU that had used morphine (92%) reported having done so by injecting, a median of 6 days (range 1 to 180) during the last six months. Again, this constitutes a decrease in frequency of use of morphine (by injecting) compared to 2004, when the median days use by injecting was 12 (range 1 to 180). Forty-three percent of morphine users (n=16) also reported recent oral use of the drug in 2005 and 19% (n=7) reported daily use of morphine, the majority (n=6) by injecting. Compared to 2004, in 2005 similar proportions of morphine users reported recent injecting use, oral use, or daily use of morphine.

Twenty-seven percent of recent morphine users (n=10) reported use of *licit* morphine and 84% (n=31) reported use of *illicit* morphine in the last six months. These proportions were similar to those reported by morphine-using IDU in previous years (29% and 81% in 2004; 27% and 78% in 2003, respectively). In 2005, the majority of morphine users (73%, n=27) 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 46%, n=17), MS Contin® (by 19%, n=7), or both (by 14%, n=5). Similar proportions reported the use of these brands of morphine in both 2004 and 2005.

Morphine overdose

Similar to 2004, few people reported experience of morphine overdose. In 2005, only six IDU reported having ever overdosed on morphine, three reporting that they had overdosed on morphine only once in their life, and three reporting that they had overdosed twice. Only one 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

2005 is the third 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 5mg/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 2005.

The *current* price of methadone was estimated by IDU to be a median $1/ml of syrup (range $0.50-$2.50, n=16), a median $0.60/mg dose of syrup (range $0.50-$0.70, n=2), or a median $1/mg tablet (range $0.50-$10.00, n=5). The median prices *paid* by IDU at *last purchase* for methadone syrup was 75 cents/ml of syrup (range $0.5-$1.00, n=4), or 50 cents/mg dose of syrup (range $0.25-$0.70, n=5), or $5/10mg Physeptone tablet (range $5-$7, n=4). Despite the small number of IDU able to provide information on the price of the different formulations of methadone in 2005 and previous years, reported prices have been similar across the last three years. Eighty-six percent of IDU able to answer (18% 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 2005 the majority of IDU able to answer (79%; 17% of entire sample) reported methadone as 'easy' or 'very easy' to obtain, with almost all of those able to answer reporting recent availability as stable (74%; 14% of entire sample).

Table 8.6: Availability of illicit methadone currently, 2004 & 2005

How easy is it to get methadone at the moment?	% of IDU able to answer	
	2004 (n=25)	2005 (n=19)
very easy	20	32
easy	52	58
difficult	28	11
very difficult	0	0

Source: IDRS IDU interviews

Table 8.7: Change in availability of illicit methadone over the last 6 months, 2004 & 2005

Has [availability] changed in the last 6 months?	% of IDU able to answer	
	2004 (n=25)	2005 (n=19)
don't know	0	5
more difficult	4	11
stable	88	74
easier	4	11
fluctuates	4	0

Source: IDRS IDU interviews

Only 15 IDU that had used methadone illicitly in the last 6 months were able to provide information on where they obtained the drug. Thirteen reported that they *usually* obtained the drug from a friend (includes gift from friend), one from a dealer's home and one from a mobile dealer. The *usual* time taken to score methadone was a median 30 minutes (range 5-60 minutes, n=13) *(data missing for 2 participants)*. Of the 15 IDU able to comment, twelve stated the source of their *last* illicit methadone purchase as a 'take-away' (i.e. somebody else's prescribed 'take-away' dose), one stated that it was a 'daily dose' (to be swallowed) and two didn't know the source.

All parameters of availability were similar to those reported in 2004.

8.3.3 Use of illicit methadone

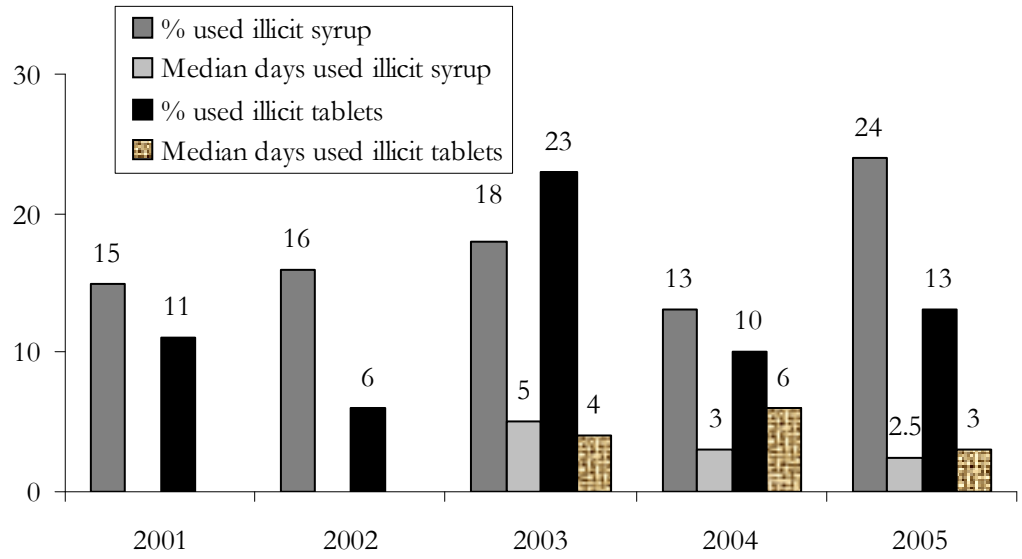
2005 was the third year that IDRS survey participants were asked to provide separate information on the use of licit and illicit methadone syrup and Physeptone tablets as per the categories in Table 3.3.

Twenty-four of the participating IDU reported having used illicit methadone syrup a median of 2.5 days (range 1 to 120) in the last six months. Of those, 11 (46%) reported use of illicit methadone syrup by injecting a median of 12 days (range 1 to 90), and 17 (71%) reported use by swallowing, during that period. This constituted a change compared to 2004, when 85% (n=11) reported use by injecting a median of 3 days (range 1 to 24), and 54% reported recent use by swallowing. No IDU reported use of illicit methadone syrup on a daily basis in either year.

Thirteen of the participating IDU reported having used illicit Physeptone tablets a median of 3 days (range 2 to 60) in the last six months. Of those, 9 (69%) reported use of illicit Physeptone tablets by injecting a median 3 days (range 1 to 60), and 8 (62%) reported use by swallowing, during that period. This was similar to 2004, when 10 IDU reported recent use of illicit Physeptone tablets a median of 6 days (range 1 to 20), 6 (60%) by injecting a median 4.5 days (range 1 to 6), and 7 (70%) reported use by swallowing. No IDU reported use of illicit Physeptone tablets on a daily basis in either year.

Figure 8.2 depicts the trend in recent use of illicit methadone since 2001. The most notable feature is the fluctuation in the percentage of IDU that had recently used methadone syrup over this time period, which increased from 13% to 24% between 2004 and 2005.

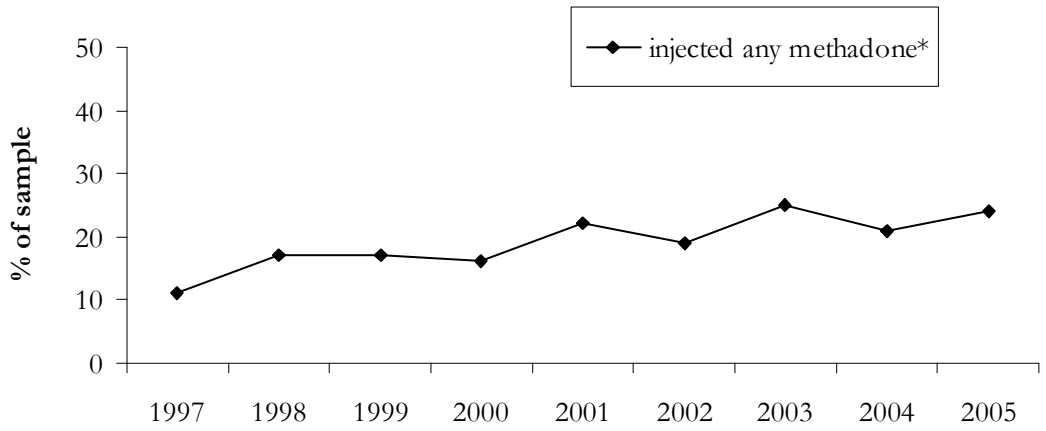
Figure 8.2: Illicit Methadone – Recent* use & median number of days used#, 2001-2005



Source: IDRS IDU interviews
* in the previous 6 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 6 months, 1997-2005



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

The total proportion of IDU that reported use of *any* methadone (syrup or tablets, licit or illicit) in the last six months had increased from 38% in 2004 to 47% in 2005. Of the 47 IDU that reported use of *any* methadone in 2005, 60% (n=28) reported licit methadone syrup as the form *used most* and 2% (n=1) reported licit Physeptone tablets as the form *used most*, in the six months prior to interview. Therefore, almost two-thirds (62%) of the methadone-using IDU reported predominantly using methadone from a licit source. This compares to 79% of methadone users reporting using *mainly* licit methadone in 2004.

In 2005, the number of IDU that reported being currently enrolled in a methadone treatment program, at the time of the interview, was stable compared to 2004 (27% and 30%, respectively). In 2005, of the 27 IDU that were currently on a methadone program, 23 had been on the program for at least the last six months and ten of these (43%) also reported use of either illicit methadone syrup (n=6) or illicit Physeptone tablets (n=4) during the six months prior to interview.

8.4 Buprenorphine

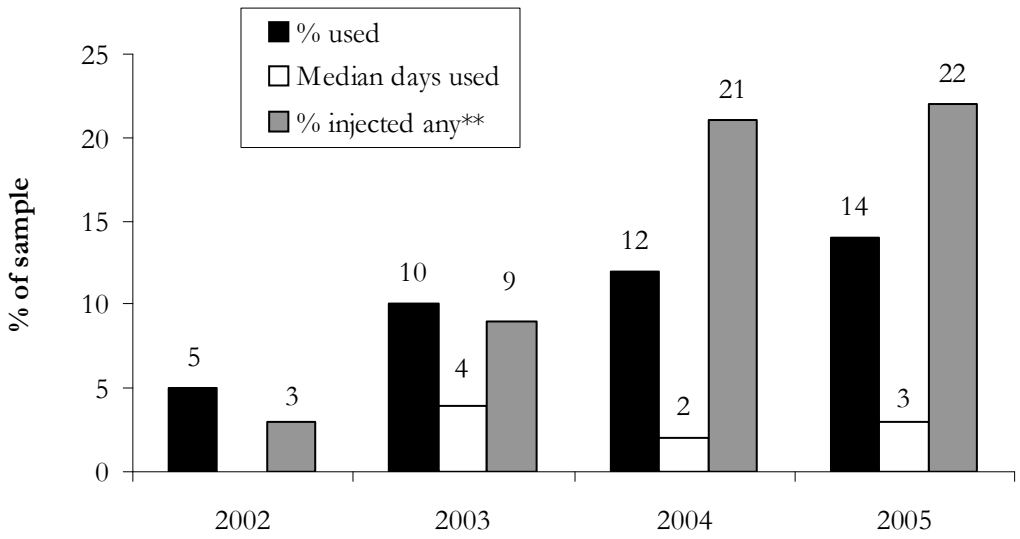
8.4.1 Use of illicit buprenorphine

2005 was the third 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 3 days (range 1 to 52) in the last six months. Of those, eight (57%) reported use of illicit buprenorphine by injecting a median of 2 days (range 1 to 30) and 6 (43%) reported use by swallowing, during that period. No 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 also remained stable. 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 2004.

Figure 8.4: Illicit Buprenorphine – Recent* use and injecting & median number of days used#, 2002 - 2005



Source: IDRS IDU interviews
* in the previous 6 months; # by those reporting use in the previous six months
** includes licitly or illicitly sourced buprenorphine

The total proportion of IDU that reported recent use of *any* buprenorphine (licit or illicit) remained stable between 2004 and 2005. Of the 36 IDU reporting use of any buprenorphine (licit or illicit) in 2005, 27 (75%) reported licit buprenorphine as the form they *used most*, with the remainder (25%, n=9) reporting that illicit buprenorphine was the

form they *used most*, in the six months prior to interview. Compared to 2004, similar proportions reported the form *used most* recently as licit buprenorphine (74% v. 75%).

In 2005, 24% of IDU were enrolled in a buprenorphine treatment program at the time of the interview, an increase compared to previous years (17% in 2004 and 7% in 2003).

8.5 Oxycodone

For the first time, in 2005, the IDRS survey included a separate section for the opioid substance, Oxycodone. In previous years, Oxycodone was included in the 'other opiates' category. For this reason, comparison of the data with previous years was not possible.

The total proportion of IDU that reported recent use of *any* Oxycodone (licit or illicit) was 17% (n=17). Of the IDU reporting use of any Oxycodone, 59% (n=10) reported illicit Oxycodone as the form they *used most*, with the remainder (41%, n=7) reporting that licit Oxycodone was the form they *used most*, in the six months prior to the interview. The main brands used were OxyContin® (n=4) and Endone® (n=2)*(data missing for 11 participants)*.

Eleven IDU reported having used illicit Oxycodone a median 1 day (range 1 to 5) in the last six months. Of those, nine (82%) reported the use of illicit Oxycodone by injecting a median of 3 days (range 1 to 5) and 3 (27%) reported use by swallowing during that period. No IDU reported use of illicit Oxycodone on a daily basis.

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 2005 the 'other opioids' category did not include Oxycodone (as it has in previous years), and so data from this year were not comparable to previous years for this category.

Five (5%) of the participating IDU reported use of other opioids a median of 20 days (range 2 to 72). Only one other opioid user had used these substances by injecting, with 4 IDU reporting use by swallowing, and one by smoking in the last 6 months. Two IDU reported *licit* use and 4 reported *illicit* use during the six months prior to interview. The majority of other opioid users (n=3) reported *mainly* illicit use in that time, and the main type used was Panadeine Forte® (n=3).

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 2004, currently stable or fluctuating (IDU).
Availability	'Easy' to 'very easy'; stable (IDU).
Use	% used recently stable, but decrease 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 (IDU).
Use	Increase in % recently used methadone syrup. Frequency of use stable and low. Oral use common; % injecting *any* methadone stable at ~25% of recent methadone users. % reporting mainly illicit use increased (to ~33% in 2005)
Illicit Buprenorphine	% used recently stable. Frequency of use stable and low. Illicit use by injecting common; % injecting *any* buprenorphine stable at ~20% of recent buprenorphine users. No change in % reporting mainly illicit use (25% in 2005).
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 Panadiene Forte®.

9.0 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 sizeable proportion of the IDU sample had used ecstasy (25%), only 8% had used some type of hallucinogen in the last six months, and neither had been consumed frequently in that time, with a median of 3 days use of either drug type during that period. Both ecstasy and hallucinogens had been used mainly orally, although 13% of IDU also reported having used ecstasy by injecting during the last six months. In 2005, other parameters of use for these two drug classes were very similar to those reported in 2004.

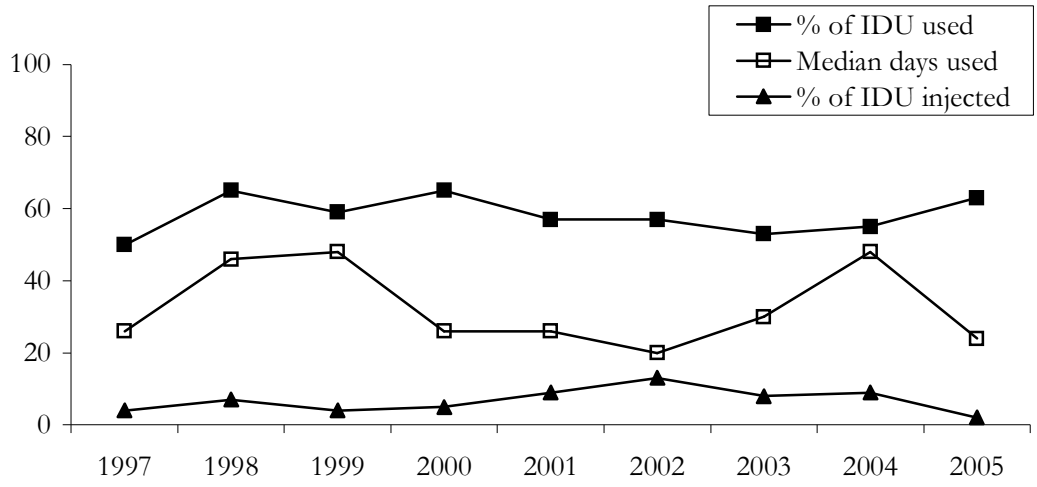
Ecstasy and related drugs use has been examined annually in SA among a separate sample of primarily non-injecting drug users since 2000, previously as a module of the IDRS, but currently known as the Party Drugs Initiative. State and national reports are produced annually (e.g. Weekley et al., 2005(b),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

9.2 Benzodiazepines

Sixty-three percent of IDU reported use of benzodiazepines a median of 24 days (range 1 to180) in the last six months, 20% (n=13) of whom reported using benzodiazepines on a daily basis. All but one IDU reported use by swallowing, and 2% (n=2) reported use by injecting a median of 7 days (range 4 to 10), in that time. Compared to 2004, in 2005 a larger proportion of IDU reported recent use, but less IDU reported recent injecting of benzodiazepines. There was also a substantial decrease in the frequency of recent use, with the median number of days benzodiazepines were used decreasing, from 48 in 2004 to 24 in 2005.

With regard to long-term trends (as shown in Figure 9.1), both the prevalence of use, and use by injecting, among IDU, seem to be relatively stable, though use by injecting was the lowest it has been for years in 2005. The frequency of use of benzodiazepines was also returned to a lower level than it has been for two years, following a peak in 2004.

Figure 9.1: Benzodiazepines - Recent* use and injection, & median number of days used#, 1997-2005



Source: IDRS IDU interviews
* in the previous 6 months; # by those reporting use in the previous six months

Of the 63 IDU that reported recent use of benzodiazepines, 70% (n=44) reported use of licit benzodiazepines and 44% (n=28) reported use of illicit benzodiazepines, in the six months prior to interview. The majority of benzodiazepine users (65%, n=41) also reported that they had used *mainly* licit benzodiazepines in that time. It should be remembered, however, that a so-called *licit* supply may be achieved by the practice of "doctor shopping". These parameters of use were very similar to those reported in 2004, though a lower proportion of users reported use of illicit benzodiazepines in 2005 (44% v. 60% in 2004).

As was the case in previous years, in 2005 the majority of users reported the *main* type of benzodiazepine used in the six months prior to interview was diazepam (by 77%, n=48). Others reported the main types used as oxazepam (11%, n=7), temazepam (6%, n=4) and alprazolam (3%, n=2).

KE in 2005 again reported that benzodiazepines are commonly used by heroin IDU, but that frequency of use varies from irregular and opportunistic to regular and dependent use. One KE believed that use of benzodiazepines prior to or with heroin, as a means to prolong the effects, was still being practiced by a minority of heroin users (but not by injecting). Others commented that benzodiazepines (particularly Valium® or Xanax®) may be used when they had difficult accessing their drug of choice (and to allay withdrawal symptoms), or to help with sleep and comedown from amphetamine use.

9.3 Anti-depressants

Twenty-two percent of IDU reported use of anti-depressants a median 158 days (range 3 to 180), 46% (n=10) 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 a decline in the frequency of use (median number of days used in the last 6 months), from 180 days in 2004.

Similar to 2004, anti-depressant use among the IDU sample in 2005 was primarily licit, with 91% (n=20) of recent users reporting *mainly* licit use, with only two IDU reporting

any illicit use of anti-depressants, within the past six months. The main type of anti-depressant used (by 9 IDU) was a selective serotonin re-uptake inhibitor (SSRI), in particular: fluoxetine (n=3), venlafaxine (n=3), sertraline (n=2) or citalopram (n=1). A further 5 IDU reported mainly using a tricyclic anti-depressant: either mirtazapine (n=3), amitriptyline (n=1) or doxepin (n=1). One IDU reported mainly using lithium and data were missing for the remaining anti-depressant users. Similar numbers reported use of SSRIs and tricyclics in 2004.

As in previous years, primarily licit use (as prescribed) of anti-depressants 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 (25%) and hallucinogens (8%) stable, and frequency of use low and unchanged since 2004.
Benzodiazepines	Increased % recently used, but decreased % recently injected. Decreased frequency of use. 65% reported mainly licit use, primarily diazepam. Decrease in % reporting recent illicit benzodiazepine use.
Anti-depressants	No change in % recently used or frequency of use. Almost exclusively licit use reported; most common type used was an SSRI, similar to 2004.

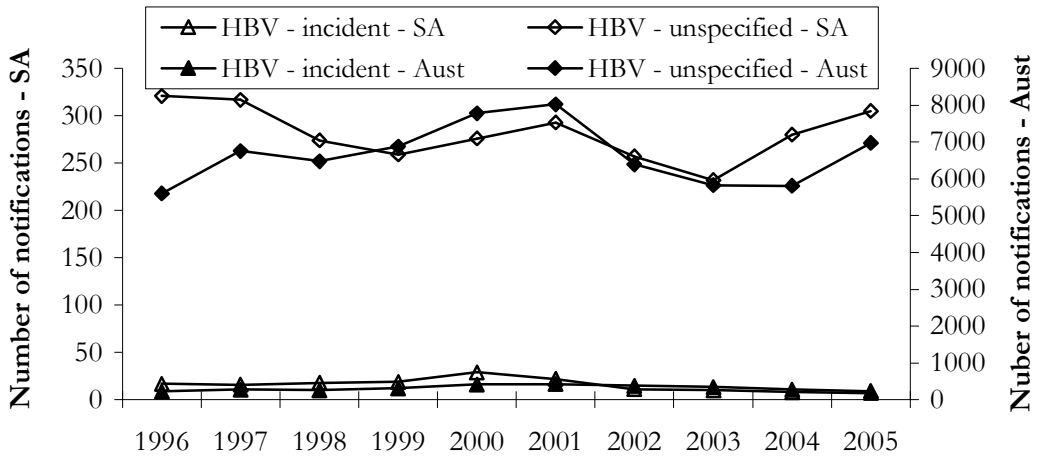
10.0 ASSOCIATED HARMS

10.1 Blood-borne viral infections

The risks of acquiring hepatitis B (HBV) and C (HCV) are greatly increased in IDU populations. Blood-borne viral infections (BBVI) can be transmitted by the 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. Readers should also note that the CDA-NNDSS made adjustments to their data for previous years, so numbers reported here may differ to earlier reports (CDA-NNDSS web-site, accessed 13th January 2006).

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 7 in 2005. Incidence notifications have been stable in SA for the last three 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 2005, the number of unspecified HBV notifications in SA reported to CDA-NNDSS was 305, continuing an upturn since 2003. 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 2005.

Figure 10.1: Number of HBV incident and unspecified notifications in SA and nationally, 1996 to 2005

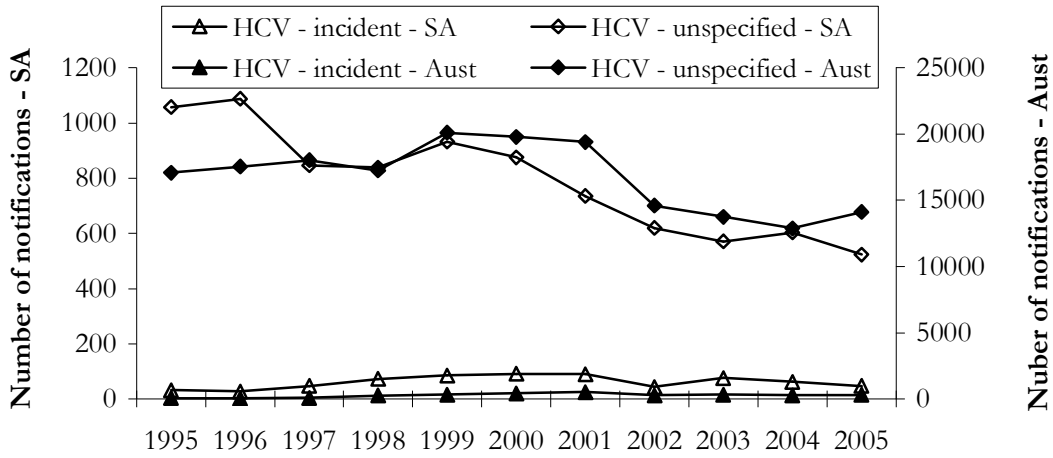


Source: Australian Government Department of Health and Ageing; CDA-NNDSS

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 three years, from 76 in 2003 to 48 in 2005. The numbers of HCV notifications nationally have remained relatively stable for the past four years, following a drop from 2001 (538 notifications) to 2002 (295 notifications), with 314 notifications recorded for 2005. The number of unspecified notifications of HCV in SA declined slightly in 2005 (to 523), so that over the longer-term the trend in unspecified

HCV notifications seems stable to decreasing. National data for unspecified HCV notifications showed a slight upturn in 2005, but over the longer-term (that is, the last four years) the trend seems relatively stable.

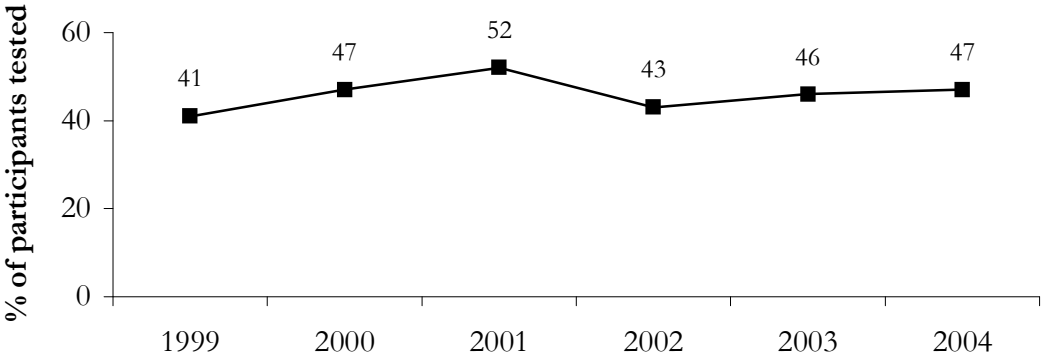
Figure 10.2: Number of HCV incident and unspecified notifications in SA and nationally, 1995 to 2005



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

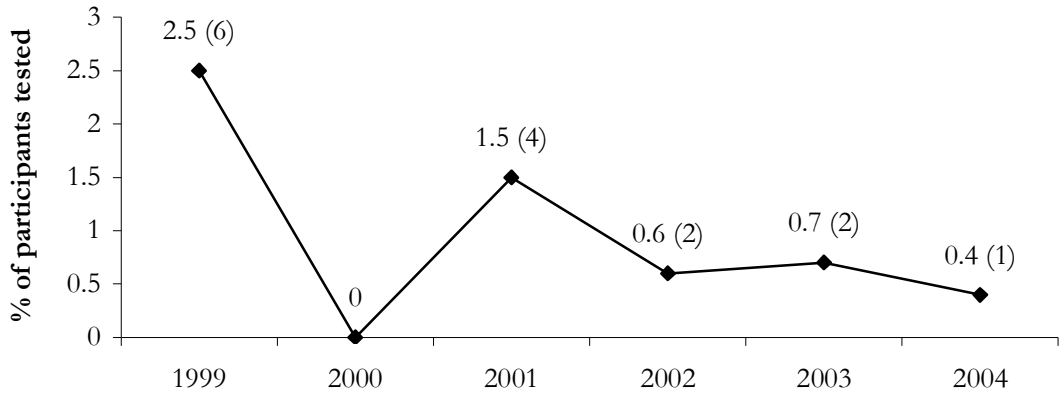
The annual needle and syringe program (NSP) survey conducted in South Australia in 2004 revealed HCV prevalence of 47% among injecting drug users participating in the survey, similar to that seen in previous years (see Figure 10.3)(NCHECR, 2004). The NSP survey results also showed a low prevalence of HIV among those participants tested in 2004 (0.4%, or one person), similar to the low rate for previous years (see Figure 10.4) (NCHECR, 2004).

Figure 10.3: HCV antibody prevalence among NSP survey participants in South Australia, 1997-2004



Source: Australian NSP Survey National Data Report 1999 - 2004 (NCHECR, 2005)

Figure 10.4: HIV antibody prevalence among NSP survey participants in South Australia, 1997-2004



Source: Australian NSP Survey National Data Report 1999 - 2004 (NCHECR, 2005)

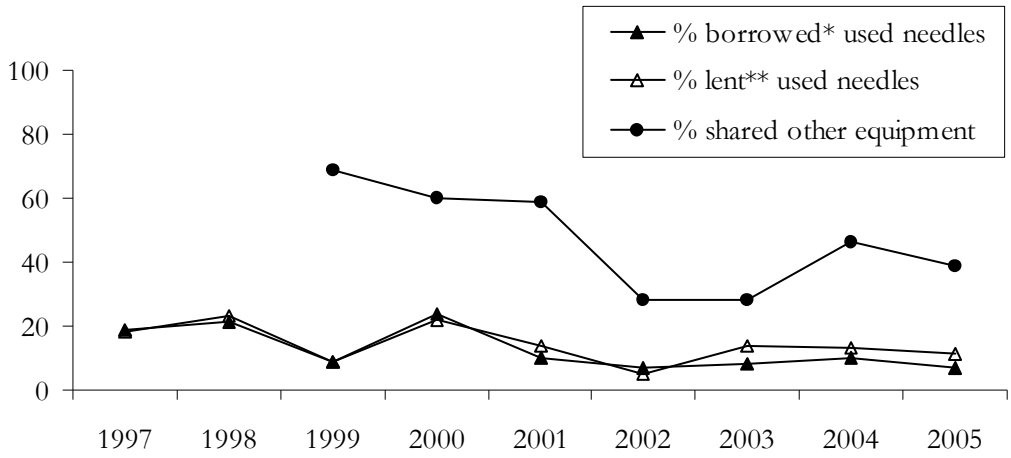
10.2 Sharing of injecting equipment among IDU

The majority of IDU reported that they had not used a needle after someone else (94%) or before someone else (89%) 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 and indicate a small but persistent proportion (around 10%) of IDU that are at high risk of BBVI and re-infection through needle sharing. A higher proportion of sharing was reported by IDU participating in the 2004 NSP survey, with 22% of participants reporting having re-used another's needle and syringe in the last month (NCHECR, 2005).

In the 2005 IDRS, of those that had used a needle *after* someone else, all had done so after one other person only, the majority after their regular sex partner (n=5) and two after close friends. With regard to the frequency of needle sharing, five people had used a needle *after* someone else twice, one had done so 3 to 5 times and one had done so more than 10 times, in the last month. Of those that had used a needle *before* someone else, three had done so once, three had done so twice, and four had done so 3 to 5 times, and one had done so more than 10 times, in the past month.

Sharing of injecting equipment other than needles was reported by a similar percentage of IDU as in 2004, remaining above the rate seen in previous years (see Figure 10.5). Specifically, 39% of IDU reported that they had shared one or more pieces of injecting equipment, other than needles, in the past six months, compared to 46% in 2004 and 28% in both 2002 and 2003.

Figure 10.5: Sharing of needles and injecting equipment by IDU in the month preceding interview, 1997-2005



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 2004 to 2005. There was an increase in the reported sharing of tourniquets, from 12% in 2004 to 17% in 2005.

Table 10.1: Sharing of injecting equipment (other than needles) among IDU in the month preceding interview, 2004 & 2005

Injecting equipment	2004 (n=101) % of IDU	2005 (n=101) % of IDU
Spoons/mixing container	34	23
Filters	29	18
Tourniquet	12	17
Water	34	22

Source: IDRS IDU interviews

There were again mixed reports from KE in 2005 regarding the awareness and injecting risk behaviour of IDU, across both primarily heroin or methamphetamine users. Most KE report no significant change regarding users' behaviour, except one reporting an increased impulsivity of injecting (and so increased risky behaviour) among the primarily young and homeless clients they saw. A couple of KE commented that safe practices had been well established within the communities they had contact with, while a couple of other KE reported they always had clients who lacked awareness and displayed risky behaviour and a lack of concern regarding this risk. 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 2005, the majority of IDU reported the *usual* location when injecting drugs in the last month was a private home (85%), with small proportions reporting use in public locations (see Table 10.2). The *usual* location of injecting was relatively unchanged compared to 2004, except for an increase in the percentage of IDU reporting usually injecting in a car (from 5% to 11% in 2005). Similar proportions per location were reported for location when *last* injected, with the exception of two IDU who reported injecting in the street/carpark/beach.

Table 10.2: Usual location when injecting in the month preceding interview, 2004 & 2005

Location when injecting	2004 (n=101) % of IDU	2005 (n=101) % of IDU
Private home	89	85
Street/car park/beach	4	0
Car	5	11
Public toilet	2	4

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 one month (as listed in Table 10.3). In 2005, 64% of the IDU sample reported experiencing at least one type of injecting-related health problem in the month prior to interview. Of these IDU, 60% had experienced more than one problem related to their injecting in that period. By far the most commonly experienced problems were prominent scarring or bruising around the injection site (51%), followed by difficulty injecting (42%). Compared to 2004, there were slight increases in experience of both these problems. However, there was a small decrease in the proportion reporting abscesses or infections related to injecting in the last month, from 10% in 2004 to 4% in 2005. Experience of other injecting-related health problems remained relatively stable across this time period.

Table 10.3: Injecting-related health problems experienced in the month preceding interview, 2004 & 2005

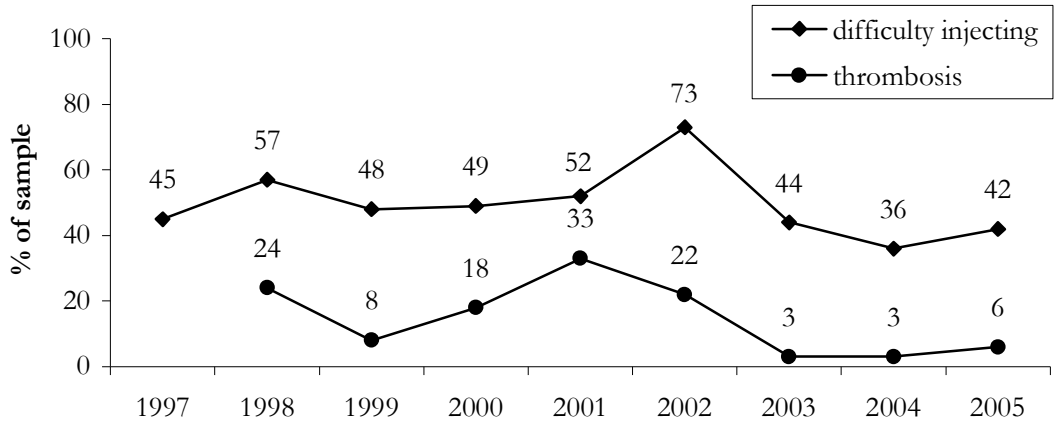
	2004 (n=101) % of IDU	2005 (n=101) % of IDU
Overdose	1	1
Dirty hit	16	14
Abscesses/infections	10	4
Prominent scarring/bruising	45	51
Difficulty injecting	36	42
Thrombosis	3	6

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 maintained a return to previous levels following a spike in 2002.

Figure 10.6: Experience of difficulty injecting and thrombosis among IDU in the month preceding interview, 1997-2005



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 – no IDU reported injecting benzodiazepines in the month prior to the interview.

- Methadone – 6 of 18 injectors (33%) experienced one or more of the following problems: scarring/bruising (56%, n=10); difficulty finding veins (56%, n=10); self-reported methadone dependence (39%, n=7); dirty hit (22%, n=4); swelling of arm (17%, n=3); swelling of hand (6%, n=1); swelling of feet (6%, n=1); hospitalisation (6%, n=1); thrombosis (6%, n=1); abscesses/infections (6%, n=1); "lump in arm" (6%, n=1) and "joint pain in hand/fingers" (6%, n=1).

- Buprenorphine – 7 of 20 injectors (35%) experienced one or more of the following problems: scarring/bruising (45%, n=9); difficulty finding veins (40%, n=8); self-reported buprenorphine dependence (35%, n=7), swelling of hand (20%, n=4); swelling of arm (15%, n=3); dirty hit (5%, n=1), thrombosis (5%, n=1); abscesses/infections (5%, n=1); "collapsed vein" (5%, n=1) and "lumps in arms/wrist area" (5%, n=1).

- Morphine – 7 of 21 injectors (33%) experienced one or more of the following problems: scarring/bruising (38%, n=8); self-reported morphine dependence (29%, n=6); difficulty finding veins (24%, n=5); dirty hit (19%, n=4); thrombosis (10%, n=2); swelling of hand (10%, n=2); swelling of arm (10%, n=2); overdose (5%, n=1) or 'pins & needles' in arms (5%, n=1).

Compared to 2004, in 2005 there was a decrease in the number of IDU who reported injecting benzodiazepines in the month prior to the interview (5 to 0). In 2005, more IDU reported recent injecting of methadone (15 to 18); however, there was a decrease in the number of IDU reporting problems from this (12 to 6). There was also an increase in the proportion of IDU who injected buprenorphine in the month prior to the interview (13 to 20), though no change was found in number who experienced any injecting-related problems. Compared with 2004, in 2005 there was a decrease in IDU who recently injected morphine (28 to 21) and also a decrease in the number of problems associated with this practice (14 to 7). The most commonly reported problems among injectors of these four drug types in the last month were similar for both years.

Again in 2005, 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 to be injected, 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). 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), and include 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, and was often directly related to the prohibitive cost of obtaining such equipment.

10.5 Expenditure on illicit drugs

Forty-one 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 $100 (range $10 - $400; n=41). This compares to a median amount of $50 (range $5 - $500; n=53) reported in 2004.

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 that 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 that reported having bought illicit drugs that day. It can be seen that a larger number of primarily heroin-using IDU (n=22) had spent money on illicit drugs on the day before interview, and had spent a greater amount than their primarily methamphetamine-using counterparts (n=14).

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

Amount	% of whole sample (n=101)	% of IDU who injected heroin most in last month (n=33)	% of IDU who injected methamphetamine* most in last month (n=47)
Nothing	59	33	70
Less than $20	1	-	6
$20 - $49	5	3	6
$50 - $99	9	12	6
$100 - $199	15	27	8
$200 - $399	9	18	6
$400 or more	2	6	0
Median $ expenditure**	100 *(n=41)*	125 *(n=22)*	100 *(n=14)*

Source: IDRS IDU interviews

* powder, base or crystal methamphetamine

** of those that reported spending money on illicit drugs on the day preceding interview

10.6 Mental health problems

In 2005, 58% of IDU reported experiencing a mental health problem (other than drug dependence) in the six months preceding interview. This is compared to 46% in 2004.

Table 10.5 shows that the proportions of the sample that reported actually attending a professional was lower (44%) than the proportion reporting having experienced a problem (58%), as has been the case in previous years. The percentages per different category of professional were very similar across the three years depicted, with the exception of an increase in the number of IDU reporting that they attended a GP in response to mental health issues in 2005. Two IDU also reported receiving psychological or counselling support from a probation officer and a Personal Support Program worker.

Table 10.5: IDU attendance of a health professional, for a mental health problem, in the last 6 months, 2003 - 2005

Type of health professional	2003 (n=120) % of IDU	2004 (n=101) % of IDU	2005 (n=101) % of IDU
General Practitioner	17	23	37
Psychiatrist	13	15	9
Psychologist	8	6	7
Counsellor	10	9	4
Social worker	6	9	8
Mental health nurse	4	3	0
Community health nurse	2	2	0
Hospital emergency department	6	3	2
Psychiatric ward	2	3	2
Any	**32**	**32**	**44**

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, that 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 in particular had increased in 2005 compared to previous years.

Table 10.6: Mental health problem for which IDU sought help when attending a health professional in the last 6 months, 2003 - 2005

Mental health problem	2003 (n=120) % of IDU	2004 (n=101) % of IDU	2005 (n=101) % of IDU
Depression	21	22	29
Mania	2	0	3
Manic depression	3	2	4
Anxiety	15	13	29
Phobias	4	0	3
Panic	8	1	9
Paranoia	4	0	2
Drug-induced psychosis	1	3	2
Schizophrenia	1	3	3

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 comment that the most common problems seen among IDU generally were depression, anxiety and personality disorders (particularly borderline personality disorder and antisocial personality disorder). Several KE also reported that smaller percentages suffered bipolar disorder or psychosis, and a smaller percentage again would have a diagnosis of schizophrenia. 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 among IDU generally.

There was consensus among all KE able to comment that mental health problems had not changed in nature or frequency, with regard to both primarily methamphetamine and heroin or other opiate users, in the last year. 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, anxiety and heightened paranoia to methampetamine-induced psychosis. These problems continued to be an issue for service providers and staff of treatment agencies.

10.7 Substance-related aggression

For the first time in 2005, the IDRS survey included questions pertaining to whether IDU had themselves 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, showed that 24% of IDU reported they had become verbally aggressive following use (under the influence) of a drug in the preceding six months, and 15% reported that they had become physically aggressive following use of a drug in that time. Thirty-three percent of IDU reported becoming verbally aggressive during withdrawal and 12% reported physical aggression during withdrawal.

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

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

Source: IDRS IDU interviews

10.8 Criminal and police activity

In 2005, there was an increase in the proportion of IDU that reported involvement in any type of crime during the last month (53%) or had been arrested in the twelve months prior to interview (46%), compared to 2004 (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 (33%) followed by property crime (19%) and, to a lesser extent, fraud (5%) and violent crime (4%).

Table 10.8: Criminal and police activity as reported by IDU, 2004 & 2005

	2004 (n=101) % of IDU	2005 (n=101) % of IDU
Criminal activity in last month		
Property crime	14	19
Drug dealing	31	33
Fraud	3	5
Violent crime	1	4
Any crime	*41*	*53*
Arrested in last 12 months	26	46
Perception of police activity in last 6 months		
More activity	35	30
Stable	49	56
Less activity	2	3
Don't know	15	11
More difficult to obtain drugs recently		
Yes	28	14
No	71	81

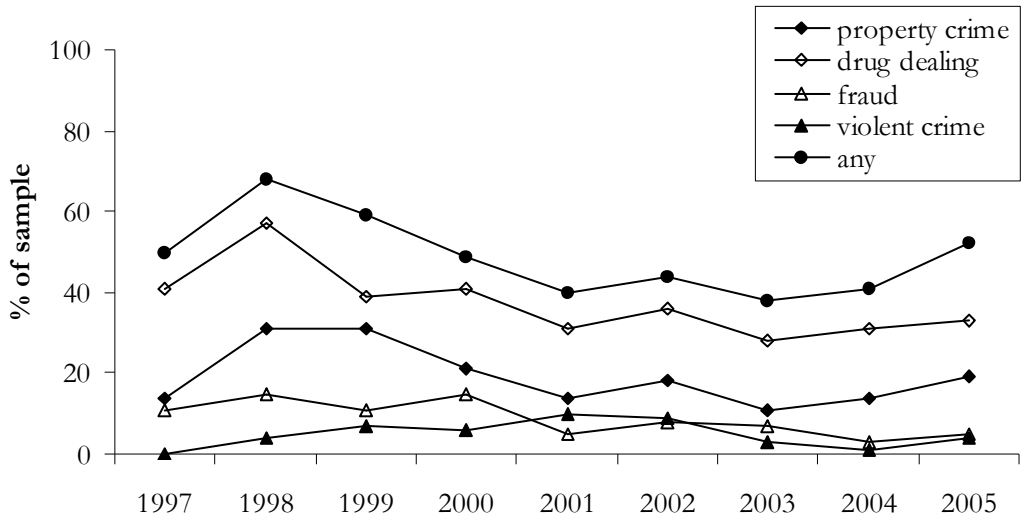
Source: IDRS IDU interviews

Of the 46 IDU that had been arrested in the preceding twelve months, the most common reasons for arrest were a property crime (37%, n=17), driving offence (26%, n=12; includes one for driving under the influence of alcohol), or violent crime (20%, n=9). There were also two arrests for fraud and one for use/possession of a prohibited substance. A further 12 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 (56%) or increasing (30%), similar to 2004. As in 2004, the majority of IDU in 2005 (81%) believed that police activity had not made it more difficult to obtain drugs recently.

Figure 10.7 shows the long-term trends regarding involvement in any criminal activity, and per each 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. The two most prominent types of criminal activity, across all years, were 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, 1997-2005



Source: IDRS IDU interviews

Only a limited number of KE commented on the criminal activity of IDU they had contact with in 2005. Very few changes were reported in the pattern of criminal activity associated with heroin users, with property crime and drug dealing (particularly to support their own use) still thought to dominate, along with prostitution (particularly among young women). However, two KE commented that they believed crime perpetrated by methamphetamine users had become increasingly violent (i.e. more assaults or bashings, and an increase in sexual assaults). As in previous years, a few KE reported substantial prevalence of domestic violence and assaults against women, primarily associated with methamphetamines.

10.9 Driving risk behaviour

In 2005, the IDRS survey included additional questions pertaining to driving under the influence of *illicit* drugs. The results are detailed in Table 10.9. Fifty-eight percent (n=59) of IDU reported driving within 1 hour of taking illicit drugs in the last 6 months. The majority had driven under the influence of cannabis (54%; n=32), followed by heroin (49%; n=29) or some form of methamphetamine – base (39%; n=23), powder (24%; n=14) and crystal (22%; n=13). 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

Drug	% of IDU that reported driving within an hour of use (n=101)
Any drug	**58**
Cannabis	54
Heroin	49
Methadone**	20
Buprenorphine**	9
Morphine**	19
Benzodiazepines**	15
Methamphetamine – powder	24
Methamphetamine – base	39
Methamphetamine – crystal	22
Pharmaceutical stimulants	1
Cocaine	3
LSD	2
Ecstasy	3

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 among 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, but unspecified notifications continue to increase both in SA and nationally (NNDSS). The number of both incident and unspecified notifications for HCV decreased in SA (NNDSS). HCV & HIV prevalence among IDU in SA was stable (NCHECR).
Injecting-related issues	% reporting sharing equipment stable but high (IDU). Usual location of injecting relatively unchanged (IDU). Decreased reporting of injecting problems associated with morphine or buprenorphine, in last month (IDU).
Expenditure on illicit drugs	Median expenditure increased compared to 2004. Primarily heroin users' expenditure remains greater than methamphetamine users' but this difference was decreased in 2005.
Mental health issues	Some increase in % seeking help for anxiety & depression (IDU). KE report no change.
Substance-related aggression	Alcohol & methamphetamine most commonly associated with (self-reported) aggression following drug use (IDU).
Criminal & police issues	Increase in prevalence of any criminal involvement and arrest, in the last year (IDU). Drug dealing or property crime remain most common (IDU). IDU perceptions of police activity stable.

11.0 DISCUSSION

While the focus of the IDRS is the four main illicit drugs (heroin, methamphetamine, cocaine and cannabis), in 2005 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, among IDU in South Australia. 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

An increase in the price of heroin was noted in 2005, though it was still considered easily obtainable, and perception of purity remained low to medium, among IDU. The median purity of SAPOL heroin seizures appears to have remained relatively stable across the last four financial years, with median purity of 24% in 2004/05. Purity of SAPOL heroin seizures remains well below pre-shortage levels. Based on reports from opiate users from the area, and on clients accessing a large local CNP, several KE considered that heroin remained difficult to obtain in the southern areas of Adelaide.

Although the prevalence of recent use of heroin among IDU remained stable (at 61%), a decrease in frequency of use was seen for the second 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 and methadone.

Experience of recent heroin overdose among IDU in the sample remained low, though information from KE as well as from the RAH suggested a spike in non-fatal overdoses occurred in July/August of 2005. Other available treatment services & 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 increased price and continuing relatively poor quality of heroin was reflected in decreased frequency of use among IDU in 2005, 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, and the spike in heroin overdose attendances at the RAH in July and August, suggest there was instability in the heroin market in Adelaide in 2005, 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 2005, compared to 2004. Specifically, there were increases in the price of all three forms of methamphetamine, and subsequently in 2005 there was little difference in the price paid for any form of methamphetamine, though crystal still tended toward being more expensive. Despite some reports of increased difficulty in obtaining base and crystal forms by IDU in 2005, all forms of methamphetamine were generally considered easily obtainable. Perception of purity of base and crystal forms had increased slightly,

and remained as high or medium. Overall, the median purity of methamphetamine seized by SAPOL in SA for 2004/2005 was decreased (to 11.6%) compared to the previous year, and the lowest seen in the past four years. 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 among IDU remained stable (78%), and the frequency of use of *any* methamphetamine increased in 2005 (median 30 days), stabilising the dramatic decrease seen in 2004. Increased frequency of use was noted across all main forms of methamphetamine, particularly base, and this form remains the most used type of methamphetamine among IDU. There was no increase in the recent use of crystal methamphetamine (or 'ice') by smoking (10% of IDU in 2005). 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 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 to DASSA inpatient (detox) services with amphetamine as the primary drug of concern continued to decline, and in 2005 was at the lowest since 2001/2002. In contrast, the RAH emergency department attendances data, and state (SA) hospital admissions data, showed the number of amphetamine-related admissions was continuing to increase, though data for the latter lag behind other indicators.

In general, an increase in the price of all forms of methamphetamine was noted in 2005, though availability and perceived purity remained relatively stable. Use of all forms among IDU returned to 2003 levels, following what seems to have been an anomalous decrease in 2004 (possibly due to sampling method). 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 2004, 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 16). 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 2005 are again of limited value.

In 2005, an increase was seen in the number of IDU that reported recent use of cocaine (16 compared to 6 in 2004), but frequency of use remained low (at a median of 3.5 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. However, data from the ACC show an increase in the number of cocaine seizures by SAPOL in 2004/2005. 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.,* 2005), 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 an increase 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.

Cannabis, though generally not the drug of choice among the IDU sample, was used commonly (by 80%), and the prevalence of recent cannabis use among IDU has been stable across all the years the IDRS has been conducted. However, frequency of use of cannabis decreased markedly in 2005, following 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 among 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 continues to increase gradually. Cannabis-related hospital admissions in SA have increased for three years to 2003/2004.

Overall, the cannabis market remains generally stable in Adelaide, and use among IDU remains common, despite a decrease in reported frequency of use among the 2005 sample.

11.5 Other opioids

As in recent years, in 2005 the use of other opioid substances by IDU was common, with 83% 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 2005 sample, as follows.

Morphine

Although the prevalence of recent morphine use among IDU remained relatively stable, there was a continued decrease in the frequency of use of morphine, for the second year in a row. The price and availability of morphine was unchanged compared to 2004. 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 2005 there was an increase in the proportion of IDU that reported recent use of illicit methadone syrup, while the proportion reporting use of illicit buprenorphine remained stable. Frequency of illicit use of both pharmacotherapy medications remained stable and low in 2005. The percentage of IDU reporting injecting of either licit or illicit methadone or buprenorphine remained stable compared to 2004, 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
For the first time, in 2005, IDU were asked about use of Oxycodone specifically, and a small proportion of the sample (11%) reported illicit use of Oxycodone at very low frequency.

11.6 Other drugs

The proportion of IDU reporting recent use of ecstasy or hallucinogens was stable and frequency of use remained low in 2005.

Although there was a small increase overall in the percentage of IDU reporting recent use of benzodiazepines in 2005, there was a decrease in the percentage reporting recent illicit use, and a decrease in the frequency of use. The majority of benzodiazepine users reported mainly licit use, primarily of diazepam.

Anti-depressant use was also stable, both in terms of percentage reporting recent use and frequency of use. Almost exclusively licit use was reported, primarily of a SSRI.

11.7 Associated harms

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

While the prevalence of injecting of morphine, methadone and buprenorphine remained stable compared to 2004, there were some decreases seen with regard to injecting-related problems associated with these substances in 2005, particularly morphine and buprenorphine. 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 was an increase in IDU-reported experience of anxiety and attendance to a GP for a mental health problem, in 2005. 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 2005.

While median expenditure on illicit drugs increased overall compared to 2004, IDU that used primarily heroin still spent a greater amount on average than primarily methamphetamine-using IDU, though this difference was decreased in 2005.

There was an increase 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.

12.0 IMPLICATIONS

The findings from the 2005 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'), 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 amphetamines 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.

- Given the recent overdose deaths in Adelaide in which buprenorphine was implicated, along with indications that diversion and injection of buprenorphine is occurring:
    - closer monitoring of the presence of buprenorphine in overdose is warranted, both in fatal and non-fatal cases (as per the Designer Drug Early Warning System), and
    - development and dissemination of education resources is needed regarding the risks and harms of injecting buprenorphine.

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

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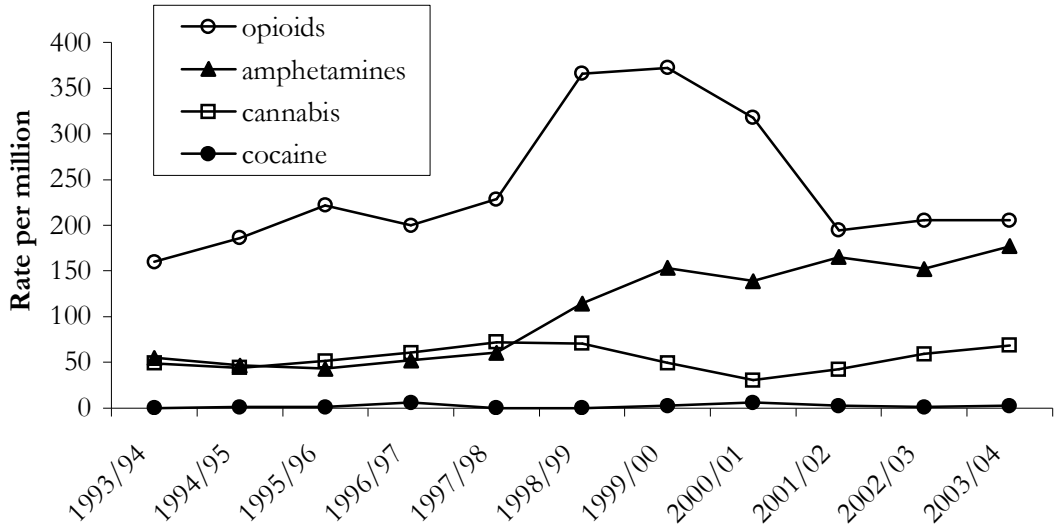
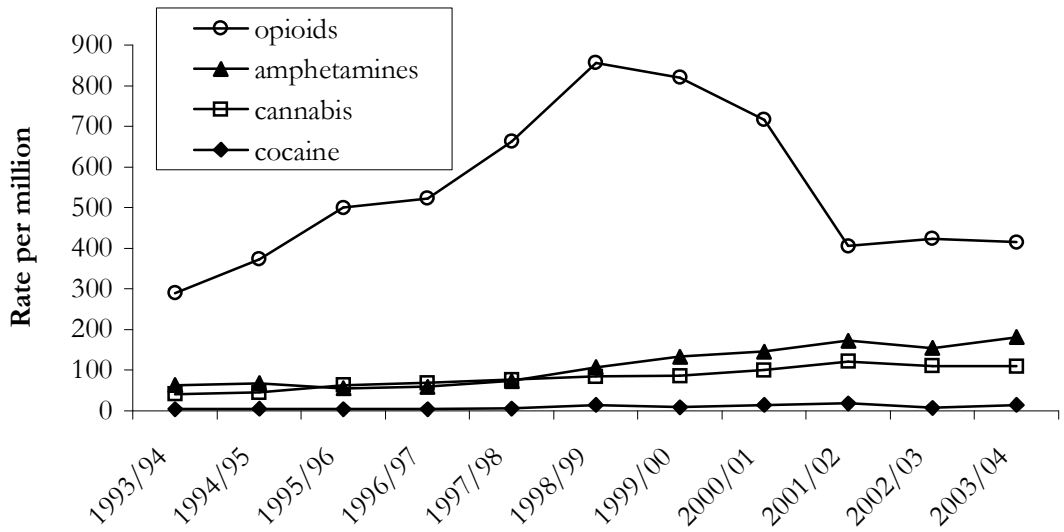
APPENDIX

Figure A: Rate of substance-related admissions* (primary diagnosis) to hospital in South Australia, 1993/1994 to 2003/2004



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 to 2003/2004



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.