

NDARC Technical Report No. 88

## **SOUTH AUSTRALIAN DRUG TRENDS 1999**



### **Findings from the Illicit Drug Reporting System (IDRS)**

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## LIST OF ABBREVIATIONS

ABCI	Australian Bureau of Criminal Intelligence
ABS	Australian Bureau of Statistics
ADIS	Alcohol and Drug Information Service
AFDL	Australian Forensic Drug Laboratories
AFP	Australian Federal Police
AIC	Australian Institute of Criminology
ATSI	Aboriginal and Torres Strait Islander
CDHAC	Commonwealth Department of Health and Aged Care
ESB	English Speaking Background
GHB or GBH	Gamma hydroxybutyrate (fantasy)
IDRS	Illicit Drug Reporting System
IDU	Injecting Drug Users
KIS	Key Informant Survey
MDMA	3, 4-methylenedioxyamphetamine (ecstasy)
NDARC	National Drug and Alcohol Research Centre
NESB	Non-English Speaking Background
NSEP	Needle and Syringe Exchange Program
OTHER	Refers to other (secondary) indicators
PMA	para-methoxyamphetamine
SA	South Australia
SAPOL	South Australian Police

## EXECUTIVE SUMMARY

The 1999 IDRS detected several drug trends during the past 6 to 12 months (from around mid 1999) provided by analyses of the IDU survey, the key informant survey and other secondary indicators. Table 1 contains a summary of information on the price, purity, availability and use of each of the four main drug types monitored by the IDRS. A brief description of major drug trends is also discussed below.

**Table 1. Price, purity, availability and use of heroin, amphetamine, cocaine and cannabis.**

	<b>Heroin</b>	<b>Amphetamine</b>	<b>Cannabis</b>	<b>Cocaine</b>
<b>Price</b>				
<b>Cap</b>	\$50	NA	\$25 (2 gm bag)	\$80
<b>Gram</b>	\$400	\$50 (Street) \$200 (Pure)	\$220 (ounce)	\$250
<b>Change</b>	Stable	Stable	Stable	Stable
<b>Availability</b>	Very easy	Very easy	Very easy	Easy to difficult
<b>Change</b>	Stable to increasing	Stable to increasing	Stable	Fluctuating
<b>Purity<sup>a</sup></b>	61%	6%	High <sup>b</sup>	53%
<b>Change</b>	Small increase	Stable to increasing	Stable	Stable to increasing
<b>Use</b>	Increased	Increased (youth) Decreased (IDU)	Stable	Decreased (IDU)

<sup>a</sup>Based on the purity of AFP seizures (analysed at AFDL)

<sup>b</sup>Based on IDU and Key informant estimates

### HEROIN

Heroin appears to be highly available, of high purity, and had a price comparable with 1998. The use of heroin appears to have increased, particularly among young people. Rock heroin -a highly pure form of heroin, has increased in availability. There also appears to be an increase in the number of people selling heroin, particularly (young) Vietnamese people. In general, the heroin market appears to have become more open, strategic and more aggressive.



## AMPHETAMINE

Amphetamine appears to be highly available, and was comparable in price with 1998. The purity appears to be low, although there are increasing reports of more pure forms of amphetamine being available, particularly pseudoephedrine-based amphetamine and methamphetamine in crystal form. The use of amphetamine appears to have increased among young people. Amphetamine use among IDU appears to have decreased, but those who were using in 1999 appear to be doing so more frequently.

## CANNABIS

Cannabis is highly available, and was comparable in price with 1998, although price is dependent on growing season, availability, potency, and the dealer-buyer relationship. The purity appears to be high according to IDU and key informants, with increasing reports of more potent hydroponically-grown cultivars being available. However these reports remain unverified by forensic laboratory testing. The use of cannabis appears to be relatively stable.

## COCAINE

Cocaine appears to have fluctuated in availability during 1999, with some users saying it was easy to obtain, and others saying it was difficult. Cocaine was comparable in price with 1998, and was high in purity. However, the use of cocaine appears to have decreased compared with 1998, and only 6% of IDU gave information on cocaine in 1999 compared with around one third of IDU in 1998. Moreover, no key informants selected cocaine as the main drug of discussion in 1999, compared with two (6%) in 1998. It appears that cocaine use has decreased, or it may be that it has decreased, or become more secretive, in this particular population of drug users.

## OTHER DRUGS

The main trend observed with regards to other drug use was the continued high level use of benzodiazepines and the apparent decrease in 'other opiate' use among IDU. Methadone injection continues to be a trend, while illicit steroid use among IDU was minimal in 1999 (Table 2 Trends in other drug use).

**Table 2. Trends in other drug use**

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**Other Drug Trends**

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- Continued trend of methadone injection among IDU
  - Benzodiazepine use remains prevalent among IDU
  - Antidepressant use predominantly therapeutic
  - Increased availability of ecstasy
  - Ecstasy price \$50, purity 32%
  - Decreased use of ‘other opiates’ among IDU
  - Low prevalence of hallucinogen use among IDU
  - Low prevalence of inhalant use among IDU
  - Very low prevalence of anabolic steroid use among IDU
- 

**DRUG RELATED ISSUES**

Trends in drug-related issues included the high prevalence of injection related problems among IDU, although it appears that unsafe needle use is decreasing among IDU. The number of overdoses and ambulance callouts has also increased. Crime is high and stable, although there are reports of more frequent petty theft. Police are more visibly present, and the activities of middle and low-level dealers have been disrupted more frequently since the inception of Operation Mantle (Table 3).

**Table 3. Trends in drug related issues**

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**Drug related issues**

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- Injection-related problems remain prevalent among IDU
  - Increase in the number of overdoses and ambulance callouts
  - Decrease in unsafe needle use
  - Crime remains prevalent among IDU
  - Increase in petty theft
  - Increased police presence and disruption to dealers
-

## RESEARCH AND POLICY IMPLICATIONS

The findings from the 1999 IDRS have policy and research implications that are outlined below. It is worth noting that some of these issues may have already received attention to date.

- Implementation of education programs aimed specifically at people of school age concerning drug use and associated consequences of use.
- Implementation of interventions to reduce the frequency and likelihood of heroin overdose, for example, “*It’s rarely just the ‘h’*” intervention strategy as implemented in 1996 (see McGregor et al. 1999).
- Characterisation and potency testing of cannabis cultivars by AFDL or other laboratory analysis
- Continuation of research into factors influencing the current popularity of heroin use and its availability, and interventions to reduce the harms associated with heroin injection, such as injection-related health problems.
- Research into the demographic profile, patterns of heroin use, and heroin marketing among the Vietnamese community.
- Research into factors that would decrease the harms associated with intravenous methadone use.
- Determination of the relative availability of rock heroin (compared with the powder form) and consequences of use associated with this more potent form of heroin.
- Research into changes in the availability of heroin in Adelaide, including factors affecting this market.
- Research into factors associated with transition from amphetamine to heroin use, and development of early intervention strategies for susceptible individuals.
- Research into the chemical analysis of street amphetamine and designer drug formulations.
- Determination of the demographic profile of cocaine users in South Australia.

## **1.0 INTRODUCTION**

The national Illicit Drug Reporting System (IDRS) was trialed in 1997 under the auspices of the National Drug and Alcohol Research Centre (NDARC) to determine drug trends in three Australian jurisdictions, and comparisons between the three states. This work was commissioned and supported by the Commonwealth Department of Health and Aged Care. The national 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 perspective). The complete or “core” IDRS incorporated a triangulated approach to data collection on drug trends, and consisted of a survey of injecting drug users, a qualitative survey of key informants who had regular contact with drug users, and secondary data sources or indicators relevant to drug use.

The IDRS process was repeated in 1998 focussing on the same core jurisdictions (see McKetin et al. 1999 for a national comparison of 1998 findings, and Hayes et al., 1999 for the South Australian perspective). 1999 is the third year that the IDRS has been executed nationally, including the same core states, and also joined by Western Australia, Northern Territory, Australian Capital Territory, Queensland and Tasmania, who collected data from the same sources, excluding interview of an IDU sample.

The IDRS provides a coordinated and ongoing monitoring system predominantly focussing on heroin, amphetamine, 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 nation wide and by jurisdiction, and is representative, simple to execute, and is cost effective. As well as drug trends, the findings highlight areas where further research is required, or where changes may need to be made in terms of education, health promotion, treatment services and policy.

The 1999 South Australian Drug Trends Report summarises information collected by the South Australian component of the national IDRS using the three methods briefly mentioned above: a survey of intravenous drug users, key informant interviews with professionals working in the drug and alcohol or related fields, and existing and up-to-date indicators relating to drugs and drug use. The three sources complement and supplement 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 AIM**

The aim of the South Australian component of the IDRS was to provide information on illicit drug trends in South Australia, particularly focussing on the last 6 to 12 months (from mid 1999).

## **2.0 METHOD**

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

- A survey of injecting drug users (IDU)
- A qualitative survey of key informants (KIS) who work in the drug and alcohol, or some related field, or have regular contact with drug users
- An examination of existing and current indicators (OTHER) relating to drugs, drug use and drug-related issues.

### **2.1 INJECTING DRUG USER (IDU) SURVEY**

A sample of 100 injecting drug users (IDU) was interviewed during June and July 1999. Criteria for entry into the study were: having injected drugs at least once a month in the last 6 months, being over 16 years of age, and living in the Adelaide metropolitan area.

Participants were recruited through peer interviewers, using needle exchange sites and user networks to recruit subjects. There were ten peer interviewers, who had a sound working knowledge of issues related to illicit and injecting drug use. They were trained before data collection on how to use the survey instrument. Informed consent was obtained from the participant before proceeding, and the interview conducted at a location convenient to the person being interviewed. The interview took between 30 and 60 minutes to complete, and subjects were compensated for their time.

The structured interview schedule was based on previous research conducted at the National Drug and Alcohol Research Centre (see Darke et al., 1992, 1994). Sections on demographics, drug use, price, purity and availability of drugs (heroin, amphetamine, cocaine & cannabis), crime, risk-taking, health and general trends were included. In general, participants were asked to consider changes to the above parameters over the last 6 or 12 months. Descriptive and inferential statistics were collated and analysed using SPSS Version 8 for windows.

### **2.2 KEY INFORMANT STUDY (KIS)**

Key informants were interviewed during August and September 1999. Entry criteria for the KIS 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 last 6 months. All key informants were paid or volunteer workers in drug treatment agencies, other health services, community services, drug user groups, SA police, corrections, needle exchanges or research organisations. Key informants were recruited from previous IDRS surveys and recommendations made by existing key informants and colleagues. Potential key informants were contacted via telephone and assessed for suitability according to the criteria. A mutually convenient time was then made for a telephone interview, although a small proportion of key informants was interviewed face-to-face.

In total, 30 key informants were interviewed, including 16 females and 14 males. Key informants comprised a range of persons from varied professions including: drug treatment workers (4), medical officers (3), community health workers including a youth worker, social workers, a psychologist, and specific cultural group workers (7), a researcher (1),

workers from corrections including social workers and psychologists (4), CIB police officers working with Operation Mantle (5), a psychologist working at a psychiatric hospital (1), user representatives (3), an ambulance officer (1) and a DJ in the rave/dance party scene (1).

Key informants were asked to identify the main illicit drug used by the drug users they had the most contact with in the last 6 months. Sixteen key informants identified heroin (53.3%), 7 identified amphetamine (23.3%) and 7 identified cannabis (23.3%). No key informant identified cocaine, although several key informants gave some information on cocaine during the course of discussing other drugs. In addition, several key informants gave useful information on more than one drug. The majority of key informants reported their work brought them in contact with drug users (79.3%) and the remainder reported both their work and personal/social life brought them into contact with drug users.

The key informant interview took between 30 and 60 minutes to administer. The instrument used was based on previous research conducted at NDARC for the World Health Organisation (Hando & Flaherty, 1993). The instrument included sections on demographics, drug use patterns, drug price, purity and availability, criminal behaviour, police activity and health issues. In general, key informants were asked for information on the above parameters relevant to the last 6 or 12 months. The responses to the open ended questions were transcribed following interview and qualitatively analysed for content and trends using a word processor. Quantitative responses were analysed using SPSS.

### **2.3 OTHER SECONDARY INDICATORS (OTHER)**

To complement and validate data collected from the IDU and key informant surveys, a range of secondary data sources were utilised including survey, 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 on the four main illicit drugs under investigation.

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

- Purity of drug seizures made by the Australian Federal Police (AFP) provided by the Australian Forensic Drug Laboratory (AFDL)
- Price of illicit drugs courtesy of the ABCI
- Telephone advisory data, provided by the Alcohol and Drug Information Service (ADIS) in South Australia
- Statewide rates of opioid-related fatalities provided by the Australian Bureau of Statistics (ABS)
- Australian Needle and Syringe Program (NSEP) Survey, statewide responses to “last drug injected”
- Drug and Alcohol Services Council statistics on Needle and Syringe exchange services (excluding pharmacies) in South Australia
- National Drug Strategy Household Survey, statewide responses to lifetime and 12 month prevalence of drug use in the community

- Schoolchildren's Survey in South Australia provided by the Drug and Alcohol Services Council
- Operation Mantle outcomes from South Australian Police, courtesy of Australian Institute of Criminology (AIC)
- Statewide rates of drug-related arrests, courtesy of the ABCI
- South Australian rates of ambulance callouts collected by SAPOL provided courtesy of AIC

### 3.0 CURRENT DRUG SCENE AND RECENT TRENDS

#### 3.1 OVERVIEW OF THE IDU SAMPLE

##### 3.1.1 DEMOGRAPHIC PROFILE OF THE IDU SAMPLE

The demographic profile of the IDU sample is summarised in Table 3.1.

**Table 3.1 Demographic characteristics of the IDU sample (n=100)**

<b>Demographic</b>	<b>% of IDU</b>
<b>Gender</b> (male)	51
<b>Area</b>	
Central/Eastern	31
Western	26
Southern	22
Northern	17
Other*	3
<b>Ethnicity</b>	
ESB	87
NESB	5
ATSI	8
<b>Employment</b>	
Not employed	42
Full time	29
Part time/Casual	22
Student	0
Home duties	7
<b>Tertiary Education</b>	
None	37
Trade/technical	34
University/college	29
<b>Currently in treatment</b>	47
	<b>Years</b>
<b>Age</b> (median)	29
<b>School Education</b> (median)	11

\* No fixed address/transient



The gender spread of the IDU sample was even, in contrast with the 1998 sample in which 70% of the sample were male. The median age of subjects in the 1999 IDU sample was 29 years (range 17-47), which was similar to the 1998 sample of IDU. There was no significant difference between males and females in age in 1999, although males tended to be slightly older (median age: 28 vs. 31 years, ns). Of those subjects who were of 'Non English Speaking Background' (excluding Aboriginal and Torres Strait Islander), three spoke Greek, one spoke Italian and the other spoke German. The range of number of years of schooling completed fell between 8 and 12 years, and 90% of subjects had completed at least year 10. Around half of the sample were currently in drug treatment. The most common form of treatment was opioid maintenance pharmacotherapy. That is, 40% received daily methadone, while three subjects each received other maintenance therapies (buprenorphine, LAAM and Kapanol respectively). One subject was currently receiving Naltrexone as abstinence therapy, while 3% reported undergoing counselling for drug problems. Three subjects reported having used prescribed Naltrexone in the preceding six months, but none reported using diverted or street Naltrexone. Only 27% of the sample reported that they had ever spent time in prison.

### 3.1.2 DRUG USE HISTORY OF THE IDU SAMPLE

The median age of first injection among IDU was 18 years (range 12 – 40 years). There was no significant difference in median age between males and females for this parameter, nor was there any significant difference between residential areas, although subjects from Central/Eastern and Southern areas tended to inject at a slightly earlier age than Western and Northern areas (Median age: Central/Eastern 18 years, Southern 18 years, Western 19 years, Northern 20 years). This is comparable with the findings from the 1998 IDRS survey, that IDU from Southern suburbs tended to report a younger age of first injection compared with IDU from Northern suburbs (Hayes et al., 1999).

The drug of first choice or favourite drug was heroin for the majority of the IDU sample (66%), followed by amphetamine (22%). The remaining subjects preferred cannabis (5%), ecstasy (3%), cocaine (1%), methadone (1%), other opiates (1%) and alcohol (1%). Heroin and amphetamines were also the predominant drugs of choice in the 1998 sample, although subjects from the 1998 appeared to be less likely to favour heroin (55%) and more likely to favour amphetamines (34%) compared with the 1999 sample of IDU. Consistent with drug of choice, 60% of the IDU reported that heroin was the last drug they had injected, followed by 30% reporting amphetamine. The remaining IDU reported that the last drug they had injected either was methadone (8%), other opiates (1%) or benzodiazepines (1%). Accordingly, heroin was the drug that had been injected most often by IDU in the last one month (61%), followed by amphetamine (30%), methadone (7%), other opiates (1%) and benzodiazepines (1%). There was no significant difference between drug of choice, last drug injected, and the residential area from which the subjects came.

While heroin followed by amphetamine was the major drug of choice and most likely to be the last drug injected, the first drug ever injected by IDU was more likely to be amphetamine (57%) followed by heroin (30%). The remaining IDU first injected other opiates (4%), ecstasy (4%), benzodiazepines (2%), crank (2%) and cocaine (1%). Thirty four percent of the IDU stated that heroin was now their first drug of choice, although amphetamine was the first drug they had ever injected. No subjects made a transition from heroin to amphetamine use, although 3% of the subjects reported that while heroin had been the first drug they injected, they now preferred 'another drug', that was neither amphetamine nor heroin.

Overall, 59% of persons for whom amphetamine was the first drug injected, now called heroin their drug of choice. This level of transition from amphetamine to heroin use is higher than in the 1998 IDU sample, in which 40% of persons who had injected amphetamine before any other drug, said that heroin was now their drug of choice. Whether this represents a difference in samples between years and/or an increase in transition from amphetamine to heroin use, is not clear.

Table 3.2 summarises drug use history of the IDU sample. The majority of the sample had used both licit and illicit drugs, confirming the polydrug using nature of the IDU population. In accordance with the 1998 IDU only steroids, anti-depressants and inhalants had been used by less than half the sample. The median number of drugs ever used by IDU was 10.5 (range: 4-14), while the median number of drugs that had been used in the previous six months was 6 (range: 2-12). Tobacco was the most regularly used drug in the last six months by 92 of the 100 IDU, followed by alcohol (85%) cannabis (80%), heroin (75%), benzodiazepines (59%), methadone (52%), amphetamine (47%), other opiates (27%), cocaine (27%), ecstasy (22%), antidepressants (17%), hallucinogens (16%), inhalants (9%) and steroids (1%).

The majority of the IDU were in a private home the last time they used a drug intravenously (66%). The remainder last injected while they were in a car (16.5%), a public toilet (9.3%), a street, park or beach (6%) or some other place (2.1%).

**Table 3.2 Drug use history of IDU sample (N=100)**

Drug Class	Ever used	Ever Injected	Injected last 6 mths	Ever smoked	Smoked last 6 mths	Ever snorted	Snorted last 6 mths	Ever Swallow	Swall. last 6 mths	No. days used last 6 mths*	
1. Heroin	90	87	75	43	3	30	3	18	3	60	
2. Methadone	68	33	17					67	53	180	
3. Other opiates	68	53	11	12	0	2	1	51	23	20	
4. Amphetamines	93	92	46	21	5	69	17	72	18	40	
5. Cocaine	75	66	18	10	4	43	14	7	0	2	
6. Hallucinogens	91	21	3	3	0	0	0	89	14	2.5	
7. Ecstasy	64	28	4	0	0	10	4	64	22	4	
8. Benzodiazepines	82	20	4	4	0	1	0	80	59	48	
9. Steroids	6	5	1					5	1	60	
10. Alcohol	96	3	0					94	85	30	
11. Cannabis	98										78
12. Anti-depressants	31										180
13. Inhalants	46										4
14. Tobacco	96										180

\* Median number of days used in the last six months by those IDU using the drug class in that period

## 3.2 HEROIN

Trends in heroin use were obtained from reports given by sixteen key informants and seventy four of the 100 IDU who felt confident to give information about price, purity and availability of heroin. This number of IDU is comparable with the number of IDU who gave information on heroin in the 1998 IDRS survey. The key informants who gave information about heroin consisted of three medical officers, one drug and alcohol counsellor, three community health workers, one researcher, two social workers from corrections, three police officers (detectives), two user group representatives and an ambulance officer. Key informants were familiar with heroin users from all of the four main residential areas, and some of them gave information about use in more than one area. In summary, heroin was most popular in the areas and suburbs shown below.

- *Northern suburbs* – Elizabeth area (postcodes 5112 & 5113) and Salisbury area (5108 & 5109)
- *Western suburbs* – inner city west out to Port Adelaide. That is: Bowden, Brompton, Croydon (5007 & 5008), Mile End, Torrensville (5031), Parks area (Renown Park, Devon Park, Dudley Park, Croydon Park (5008), Ferryden Park, Angle Park, Regency Park (5010)), Woodville area (5011 & 5012), Port Adelaide (5015).
- *Inner city and central east* – Adelaide (5000), Norwood area (5067), Walkerville area (5081), Prospect, Fitzroy, Ovingham (5082), Blair Athol, Kilburn (5084)
- *Rural areas* – Gawler, Victor Harbour, Pt. Augusta, Roxby Downs, Naracoorte, Blanchetown. This list is not exhaustive, however the IDRS did not specifically investigate drug use in rural South Australia.

The key informants gave information about persons from English speaking backgrounds (ESB), non-English speaking background (NESB) and Aboriginal Torres Strait Islander (ATSI) persons. Some key informants had information about users from more than one background, and information was supplied as follows; ESB n=11, NESB including Mediterranean, Romanian, Cambodian, Laos and particularly Vietnamese n=7, ATSI n=3.

### 3.2.1 PRICE

The median price of one gram, or weight, of heroin reported by 43 IDU in 1999 was \$400, which was identical to the median price reported in 1998. However, the price of a gram of heroin appeared to be more homogeneous in 1998 (range: \$350-\$400) compared with the range of prices of a gram of heroin in 1999 (range: \$200 to \$600). The range of prices reported for a gram of heroin by key informants (n=3) was also varied, but consistent with IDU reports that the current price for a gram of heroin appears to be widely variable (range: \$250-\$800). This variation may reflect recent changes in the heroin market (more people selling), and the wide variation in the purity of the heroin being sold. This will be discussed in more detail later. There was no significant difference between residential area in which the IDU lived, and the cost of a gram of heroin.

A substantial portion of IDU (n=22) also reported buying heroin in half-gram weights, the median price of which was \$237.50 (range: \$150-\$300). This is consistent with the information from one key informant who reported that half a gram of heroin cost \$300.

Other amounts of heroin were also purchased by IDU including a quarter of a gram of heroin (n=3, median = \$140, range: \$110-\$150), 5 grams of heroin (n=4, median = \$1300, range: \$1200-\$1400), a quarter of an ounce of heroin (~ 7 gm, n=1, price = \$1050) and 5 ounces of heroin (~ 140 gm, n=1, price = \$4200). Key informants also reported that half a gram of heroin could be purchased for \$300 (n=1) and that one quarter of a gram could be purchased for \$140 (n=2).

The most common means of heroin purchase among IDU (n=74) were as caps (a fraction of one gram). The median and modal price for a cap of heroin was \$50. The price for a cap of heroin was reported as being either \$50 or \$100, although from discussions with IDU it appears that a \$100 cap is twice the size of a \$50 cap. One IDU reported buying a cap for \$30. Nine key informants gave information concerning the price of a cap of heroin, stating it fell between \$25 and \$50 a cap, although \$50 was the most commonly reported.

These prices are comparable with the prices provided by the Australian Bureau of Criminal Intelligence for the period January to June 1999. The price for a cap of heroin (0.1-0.3 gm) was quoted at \$50, a half-weight (0.4-0.6 gm) was \$200, the cost of one gram ranged between \$350 to \$450, and one ounce (28 gm) ranged between \$6500 and \$8000.

The majority of the IDU who gave information about heroin (74/100) reported that in the last six months the price of heroin had been stable (83.8%). The remainder thought that in the last six months the price of heroin had increased (4.1%), decreased (4.1%), fluctuated (4.1%) or were not sure about price changes (4.1%). The majority of the key informants who gave information concerning heroin also thought that the price had remained stable (50%), although more key informants than IDU believed that the price of heroin had decreased in the last six months (37.5%). One key informant thought that the price of heroin had fluctuated (6.25%) and one was unsure (6.25%).

### 3.2.2 AVAILABILITY

Heroin was considered easy or very easy to obtain by most IDU (95.9%), while the availability of heroin over the last six months was considered stable (71.6%). Some key informants believed that heroin had been easier to obtain in the last six months than it had been previously (12.2%), while 16.2% believed it was either more difficult to obtain, or had fluctuated. Consistent with IDU reports, all key informants who gave information about heroin believed it was either easy or very easy to obtain. However, only four key informants believed that the availability of heroin had remained stable over the last 6 months (25%), while the majority believed it had become more available (n=7, 43.7%).

Approximately half of the key informants reported that changes had occurred in dealing or importing heroin in the last six months. Overall, it appears that more people were selling heroin, the availability of rock heroin had increased -particularly from Asian sources, and that the sale of heroin had become more open and obvious. There were also reports that the heroin market had become more aggressive, including the development of new marketing strategies in order to sell more heroin over the purchase of other drugs. Strategies reported included giving away free samples of heroin, promoting heroin smoking as a new trend, and marketing a cocaine/heroin mix as 'Crank' whereas this name was previously used to describe a mix of amphetamine and cocaine. Several key informants reported that more Vietnamese persons were involved in the importation and sale of heroin. One key informant in law enforcement reported that the older Vietnamese tend to supply to their own

community only, whereas the younger dealers supply to the wider community. Moreover, that these younger dealers are up to date with current policing practices, and have developed ways to make the sale of heroin harder to detect. These included the sale of rock heroin in small balloons that are kept in the mouth of the dealer that can be swallowed if apprehended, and the use of a tablet press to make heroin tablets disguised as paracetamol.

Of the IDU who gave information about where they usually scored their heroin, the majority reported purchasing from a mobile dealer (56.3%), which involved ringing the dealer on their (mobile) telephone, and arranging a place to meet. The remainder purchased from friends (22.5%), the dealer's home (12.7%) or a street dealer (8.5%).

### 3.2.3 PURITY

The majority of IDU reported that current heroin purity was 'medium' (44.6%), the remainder reporting it was either high (25.7%) or low (27.0%). However, the majority of the key informants believed that the purity of heroin was high (n=7, 43.7%), while only four of the sixteen reported it as medium (25%). Three key informants in law enforcement reported that heroin purity was currently between 60 and 87%. Concerning changes in purity of heroin over the last six months, the majority of IDU believed it to be stable (39.2%), although around one fifth believed that heroin purity had increased (21.6%) or had fluctuated (23.0%) over the last six months. Only 25% of the key informants (n=4) reported that heroin purity had remained stable over the previous six months, while five key informants (31.2%) believed purity had increased, or was fluctuating (n=4, 18.8%). Only 10 IDU (13.5%) and one key informant said that heroin purity had decreased in the last six months.

The Australian Forensic Drug Laboratory provided quarterly purity data on heroin seized in South Australia during the 1998/99 financial year. Mean purity over the 1998/99 financial year was 61% (range: <1-86%, n=463), slightly higher than 59% purity over 97/98, and markedly higher than 37% purity in 96/97. The 1998/99 purity is comparable with the gross estimates provided by IDU and key informants, particularly given the huge range of purity. Concerning changes in purity over the last six months, the actual purity values were ~57% (January to June 1999, n=303, range: 9-85%) compared with ~68.5% (July to December 1998, n=160, range: <1-86%). It is worth noting that these bi-annual average purity values are estimations based on averaging quarterly data, which itself is an average. While the AFDL provides data on two seizure quantities (less than 2 gm and greater than or equal to two grams), the above purity values are based on the culmination of the two seizure sizes, given that their average purity values were similar.

One key informant, a medical officer at an opiate treatment centre, reported that heroin purity availability and price have an effect on the number of persons presenting for treatment. Giving an example based on a recent observation, the key informant reported that when heroin purity and availability was high, and price low, less persons were coming in to treatment, presumably because they were 'hanging out' less, and less desperate for treatment.

### 3.2.4 USE

#### **Prevalence of use among different populations**

The National Drug Strategy National Household Survey 1998 findings revealed that, among the general population in South Australia, lifetime prevalence of heroin use was 1.8%, with 0.5% using in the last 12 months. While other drugs besides heroin were more prevalent among the general population, heroin was most frequently quoted as being the “last drug to be injected” among South Australian IDU in the 1998 Australian Needle and Syringe Program Survey (45%). Heroin use among schoolchildren appeared to be somewhat higher than the general population according to the 1996 South Australian Schoolchildren’s survey. Approximately four percent of schoolchildren aged 12 to 17 years old had ever tried heroin (3.9%) while 0.6% reported using heroin in the last week.

Heroin use in the prison population was reported to be less frequent than in the wider IDU community, and average use was reported to be 2 or 3 times per week. Sale of heroin in prison is not necessarily for cash, but traded for goods such as cigarettes, or for sexual favours. Less than 20% of the prison population received methadone, and treatment was not readily sought among this population. There was an increase in needle risk behaviour in this population compared with the wider community, associated with the low availability of clean needles and bleach, and the hiding of needles in unusual places to avoid detection resulting in accidental needle stick injuries. Key informants also reported an increase in the frequency of cell searches and security during visits.

In the Asian community (Vietnamese and Cambodian) heroin was reported to be popular, although the extent of use could not be qualified. Reasons given for increased heroin use in these cultures mainly surround problems integrating into Australian culture including unemployment and early school drop-out, impoverished family situations and a general lack of support. Heroin use was reported to be two or more times daily, commencing with smoking in younger users proceeding to intravenous use when users reach their mid-twenties. Opium smoking is also reported to occur in the Cambodian community. Young people -as young as 14 years, also are reported to be involved in the sale of heroin. Mainstream treatment services and drug and education are not popular in these communities because they are culturally inappropriate. Support from family and cultural community is more popular, as are abstinence-based therapies such as naltrexone.

#### **Current patterns in heroin use**

The demographic characteristics of heroin users were estimated from key informant responses and the characteristics of IDU who had used heroin within the last 6 months (n=75). Heroin users were similar in demographic profile to the overall IDU sample, most being in their late twenties to early thirties, having 10 to 11 years of education, and around one quarter to one third having a previous prison history. The majority of heroin users were of an English Speaking Background, although several key informants reported the increase of Asians using and dealing in heroin. Gender breakdown was similar to that of IDU with a relatively even spread of males to females (males: 45.3%). However, many of the key informants reported that the heroin users they had contact with were more likely to be males, in the order of 60-80%. Breakdown of employment status was similar to the IDU sample as a whole, with 40% reporting being unemployed, around 30% were full time employed, the remaining 30% were involved in home duties or part time or casual employment. Key

informants were more likely to report heroin users as unemployed in the range of 40 to 100%.

Both rock (57%) and powder (99%) were reported as being used in the last six months by heroin-using IDU, although these statistics do not inform of frequency of use of these forms in the six month period. There was no significant difference between IDUs area of residence and form of heroin used in the last 6 months. Key informants reported both rock (n=4) and powder and one reported the use of opium among the Laos and Cambodian community. Three key informants also reported that rock heroin was being purchased from Asians by non-Asian dealers and being 'stamped' or ground down, filled out with additive, and sold to end users. Around one third of the heroin users had used other opiates in the last 6 months, the most popular being codeine in the form of codeine phosphate or Panadeine Forte. morphine and pethidine were also common forms of other opiate use.

Injection was the most common route of administration among IDU, and 100% of heroin users who had used in the last 6 months had injected in the last 6 months. Similarly, key informants reported predominantly IV use, except among Vietnamese, Cambodian and Laos communities where smoking heroin or opium was highly prevalent, particularly among younger users. It appears that between 20 and 25 years of age, a transition is made from smoking to IV use, although one key informant reported that more Vietnamese were using heroin intravenously than had previously.

Key informants reported that most heroin users used two or more times daily (2-5 times), although some used less frequently including recreational users and some of the methadone program patients who tended to use heroin less frequently. IDU reported a wide variation in heroin use, with an average of 78 days of use in the last six months, and a median and modal use of 60 days and 180 days respectively. Around fifty percent of persons that had used heroin in the last 6 months reported receiving methadone maintenance, which may account for some of the less frequent users. One key informant who was also a user representative said that there was a lot of variation in frequency and quantity of use in the heroin-using community. Higher level users used several times daily, were more likely to be heavy polydrug users, more likely to be unemployed and more likely to commit crime. In comparison, lower level users maintained their heroin habit on the minimum amount of heroin, using once every day or every second day, and were more likely to be employed, less likely to commit crime and more likely to be relatively stable and functional.

Polydrug use was common according to reports from both heroin-using IDU and key informants. Following alcohol tobacco and methadone, benzodiazepines and cannabis were the two most popular drugs used besides heroin, although many IDU reported that they used alcohol infrequently, on average once or twice a week. According to IDU reports, benzodiazepines and cannabis were used concomitant with heroin to enhance its effects, or during periods where heroin was not available. Amphetamine, cocaine and other opiates were also used by IDU, albeit to a much lesser degree.

### **Trends in heroin use**

Forty of the 66 IDU who nominated heroin as their drug of choice (60%) reported that there had been no change in the number or type of people using heroin in the last 6 months, as did 7 of the 16 key informants who commented on heroin (44%). Of the 26 IDU (40%) who said they had noticed a change in who was using, 10 (15%) reported that more people had



started using heroin, and 12 IDU reported that more young people were using heroin (18%). Some of the reasons given for the increase in young people using heroin included increased availability of heroin (including in schools), an increase in the social, welfare and health problems of youth, and a decrease in the stigma associated with heroin use. Six key informants (38%) reported more people were using heroin, and five out of the six nominated young people as the target group for increased use. Two key informants also reported the sale of heroin in schools, particularly by Vietnamese students who were reported to introduce heroin use to other students as a smokeable substance. The trend of smoking heroin was strongly believed to be an emerging trend by one key informant in law enforcement (CIB), in which heroin is smoked as part of a cigarette, making detection difficult. The types of schools reported included private schools, and those located in the inner city west. Three IDU reported an increase in minority groups using heroin (Asian and Aboriginal).

Fifty of the IDU (76%) reported that they had not noticed any change in amount or frequency of heroin used in the last 6 months. The remaining sixteen IDU (24%) said they had noticed that heroin was being used more frequently (n=11, 16.6%), and that greater amounts were being used (n=3, 4.5%). Frequency of use was explained by increased availability of heroin, and increase in dose was attributed to using more to achieve an effect because of the low quality of heroin. Key informants' reports on changes in heroin use revealed a similar picture. Nine of the 16 key informants who commented on heroin said that frequency and quantity of use had remained stable over the last six months (56%). Five key informants reported that heroin had decreased in price, and increased in availability and in purity, which was reported to be in the form of rock heroin. Two key informants reported that these changes have led to people using heroin more frequently, accompanied by a decrease in the likelihood to seek treatment for heroin dependence (because they are 'hanging out' less).

Sixty of the IDU (91%) had not noticed any recent change in the types of drugs their friends had been using. Similarly, the majority of the key informants had not noticed any new drugs being used by the heroin-using population, although two reported more ecstasy. Of the 6 IDU that had noticed recent change, two reported an increase in polydrug use and 'drug cocktails' to enhance the effect provided by the poor quality heroin they were using. Two IDU reported that cocaine use had increased, including the concomitant use of heroin and cocaine.

The 1998 IDRS also reports a trend towards increased heroin use and frequency of use, especially among youth, and also an increase in the number of Aboriginal and Asian persons using heroin. Only one key informant in 1998 commented on the availability of rock heroin. Thus it appears that the trends observed in 1999 may stem from changes commencing in 1998.

### 3.2.5 SUMMARY OF HEROIN TRENDS

Table 3.3 contains a summary of trends in the price, purity and availability and use of heroin in the last six to twelve months. Heroin appears to be highly available, of high purity, and was comparable in price to last year (1998). The use of heroin appears to have increased, particularly among young people. Rock heroin appears to have increased in availability.

**Table 3.3 Estimated trends in the price, availability, purity and use of heroin.**

<b>Price</b>	
Gram	\$400 (\$200-\$600); Stable
Cap	\$50; Stable
<b>Availability</b>	(very) easy; Stable to increasing
<b>Purity</b>	61% (AFDL); small increase
<b>Use</b>	Increase in number of (younger) users Increase in availability and use of rock heroin Increase in number of Asians using and dealing

### 3.3 AMPHETAMINE

Trends in amphetamine use were obtained from reports given by nine key informants and forty two of the 100 IDU interviewed who felt confident to give information about price, purity and availability of amphetamine. The number of IDU commenting in 1999 was fewer than the number of IDU who commented on the amphetamines in the 1998 IDRS (over two thirds of the 1998 sample). The key informants who gave information about amphetamine consisted of one medical officer, two drug and alcohol counsellors, one community health worker (social worker), one psychologist from corrections, two police officers (detectives), one user group representative and one DJ involved in Rave parties. Key informants were familiar with amphetamine users from all of the four main residential areas, and some of them gave information about use in more than one area. In summary, amphetamine was most popular in the areas and suburbs shown below.

- *Northern suburbs* – Elizabeth area (postcodes 5112 & 5113) and Salisbury area (5108 & 5109)
- *Southern suburbs* –Noarlunga area (5167 & 5168) and Christies area (5164 & 5165)
- Inner city (Adelaide 5000) and rural areas (as mentioned above in heroin section)

The key informants gave information about persons from English speaking backgrounds (ESB) and non-English speaking background (NESB). No key informant gave information concerning Aboriginal Torres Strait Islander (ATSI) persons and amphetamine use. Some key informants supplied information about users from more than one background, and information was supplied as follows; ESB n=9, NESB including Mediterranean, Romanian, Kosavar and Bosnian Refugees, and Asian, n=3.

#### 3.3.1 PRICE

The median and modal price of a gram of street level amphetamine, as commented on by 42 of the 100 IDU, was \$50 (range \$25-\$60). This is comparable with the median price of amphetamine in 1998, and also with the reports of key informants who gave a range of \$40 to \$60 for one gram of amphetamine. The above price for one gram of amphetamine refers to that substance which has been ‘cut’ with other additives to increase the bulk, and decrease the purity of the drug. However, reports are emerging of the availability of amphetamine in forms of much higher purity with less additive. These forms include ‘crystal meth’ or ‘ice’ (methamphetamine in crystal form), or a well made highly pure form of amphetamine derived from pseudoephedrine. Information given by five of the IDU states that one gram of this more pure form of amphetamine has a median price of \$200 (range: \$200-\$400). This is comparable with the report of a key informant quoting a price of \$280 - \$300 for one gram of ‘crystal meth’. The smallest quantity available of ‘crystal meth’ appears to be ‘one point’, which is approximately 0.2 of one gram, and reported to have a similar psychopharmacological effect to one gram of street amphetamine. ‘One point’ is available for a median price of \$50 (information from one IDU and one key informant). No detailed information was available on ‘crystal meth’ in 1998, excluding a general observation by two key informants who noticed that it had recently appeared on the market.

Twelve of the IDU also gave information concerning the cost of one ounce of street level amphetamine (~28 gm), which was one of the most popular ways to buy amphetamine. The

median price for one ounce was \$875 (range: \$400 to \$1200), which is comparable with the median price of amphetamine in 1998, although there was less variation in the range of prices in 1998 (range: \$800-\$1000). As with heroin, this may suggest that changes have occurred in the amphetamine market, and will be discussed later. None of the key informants gave information concerning the cost of one ounce of street amphetamine, although two key informants reported that one ounce of 'crystal meth' could be purchased for \$4000.

Another popular way of buying street amphetamine, as reported by 7 of the IDU, was as an '8 pack' or '8 ball', which is effectively one eighth of an ounce (~3.5 gm). The median price for an '8 pack' was reported to be \$140 (range: \$125-\$150). Reports from IDU state that amphetamine may also be purchased in other quantities including half an ounce (~14 gm, n=3, median = \$650, range: \$400-\$700), one quarter of an ounce (~7 gm, n=4, median = \$325, range:\$250-\$350) three ounces (~84 gm, n=1, price=\$2550) and various gram amounts (2, 5, 6, 7, 8 & 10 gm), the costs of which are in proportion to the other prices quoted above.

These prices are comparable with the prices provided by the Australian Bureau of Criminal Intelligence for the period January to June 1999. The price of one street gram or weight of amphetamine was reported to be \$50 to \$60, one ounce (28 gm) was between \$800 and \$1200, and half of one pound (224 gm) was \$10000.

The majority of the IDU who gave information about amphetamine (42/100) reported that in the last six months the price of amphetamine had been stable (78.6%). The remainder reported that in the last six months the price of amphetamine had increased (4.8%), decreased (4.8%), fluctuated (9.5%) or were not sure about price changes (2.4%). Six out of the seven key informants who gave information concerning amphetamine price, purity and availability also thought that the price had remained stable (85%) and one was unsure.

### 3.3.2 AVAILABILITY

Amphetamine was considered easy or very easy to obtain by most IDU (97.6%), while the availability of amphetamine over the last six months was considered stable (76.2%). Some key informants believed that amphetamine had been easier to obtain in the last six months than it had been previously (7.1%), while 14.3% believed it was either more difficult to obtain, or had fluctuated. Consistent with IDU reports, all key informants who gave information about amphetamine availability believed it was very easy to obtain. Five of the seven key informants believed that the availability of amphetamine had remained stable over the last 6 months (71%), while the remaining two believed it had become more available (29%). However, it is worth noting that these gross estimates of availability do not take into account the form of amphetamine available (eg. street level vs. crystal meth vs. prescription amphetamine) which are discussed in more detail below.

More than half of the key informants reported that changes had occurred in dealing or manufacturing amphetamine in the last six months. Key informants reported that more people were now involved in supply of amphetamine. These included persons of school age selling prescription amphetamine stolen from siblings with ADD, persons in biker gangs, young people selling for short term (2-4 weeks) as a quick way of making money, and more 'normal' people selling (ie not fitting the stereotype of a dealer). The majority of IDU reported scoring their amphetamine from a friend (45.2%). The remaining IDU reporting

they most commonly purchased from a dealer's home (26.2%), a mobile dealer (19%) or a street dealer (9.5%). Regarding manufacture, high purity methylamphetamine in crystal and paste form was reported to be more available, along with amphetamine manufactured from pseudoephedrine. The manufacture of amphetamine depends upon the availability of certain chemicals. However, changes in governmental laws concerning chemicals has meant that manufacturers of amphetamine have had to use alternative chemicals, resulting in the development of compounds whose effects are unknown, and potentially unsafe. The results are marketed as 'designer drugs' or as amphetamine, albeit of very low purity. Pseudoephedrine-based amphetamine is variable in purity, although if made correctly, can be of high purity. Two key informants reported that pseudoephedrine is obtained using buyers to purchase approximately \$500 worth of pseudoephedrine-based products from a range of chemists. For approximately two days of work the buyer gets paid \$300, although the same buyer can only be used once or twice, lest chemists become suspicious. The increased availability, sale and use of amphetamine, particularly in 1998, may have resulted in a more competitive and aggressive heroin market.

### 3.3.3 PURITY

The majority of IDU reported that current amphetamine purity was either 'medium' (42.9%) or high (40.5%). The remainder reported it as low (6.0%) or was unsure. More IDU in 1999 believed the purity of amphetamine was 'high' than in 1998 (28% vs. 40.5%), which may be due to the increased availability of 'crystal meth' in 1999, or the increasing availability of well made pseudoephedrine-based amphetamine. Four of the seven key informants believed that the purity of amphetamine was high or medium, while the remaining three said it was low, fluctuating, or unsure. Concerning changes in purity of amphetamine over the last six months, the majority of IDU believed it had remained stable (47.6%), although a significant proportion believed that amphetamine purity had increased (21.4%) or had fluctuated (26.2%) over the last six months. In the 1998 survey it appears that fewer IDU nominated that the purity of amphetamine was increasing than in 1999 (< 8% vs. 21.4%). There was a varied response among key informants in response to how amphetamine purity had changed in the last 6 months. Two of the seven reported it had remained stable, two reported that purity had fluctuated, one reported an increase in purity, and the remaining two were unsure of changes in purity. Neither IDU nor key informants reported that amphetamine purity had decreased in the last six months. When given a chance to comment about recent changes in drug types being used, three of the twenty two IDU nominated that 'pure' speed was now available.

The AFDL provided quarterly purity data on amphetamine and methamphetamine seized in South Australia during the 1998/99 financial year. Mean purity over the 1998/99 financial year for amphetamine and methamphetamine combined was 6% (range: <1-79%, n=836), comparable with 6% purity of amphetamine over 97/98, and 4% purity in 96/97. The 1998/99 average purity appears to be inconsistent with the gross estimates provided by IDU and key informants, the majority of whom reported amphetamine purity as medium or high. However, it should be noted that any statistical average is sensitive to extreme values, and given the wide range of seizure purities, it is possible that the IDU and key informants were reporting on amphetamine purity from the top end of the range. Concerning changes in purity over the last six months, the actual purity values were ~5.7% (January to June 1999, n=509, range: <1-79%) compared with ~6% (July to December 1998, n=327, range: <1-76%). It is worth noting that these bi-annual average purity values are estimations based on averaging quarterly data, which itself is an average. While the AFDL provides data on two

seizure quantities (less than 2 gm and greater than or equal to two grams), the above purity values are based on the culmination of the two seizure sizes, given that their average purity values were similar.

### 3.3.4 USE

#### **Prevalence of use among different populations**

The National Drug Strategy National Household Survey 1998 findings revealed that, among the general population in South Australia, lifetime prevalence of amphetamine use was 8.2%, with 3.5% using in the last 12 months. While amphetamine use was more prevalent among the general population than heroin, amphetamine was the second most frequently quoted as being the “last drug to be injected” following heroin, among South Australian IDUs in the 1998 Australian Needle and Syringe Program Survey (38%). Amphetamine use among schoolchildren appeared to be somewhat higher than the general population according to the 1996 South Australian Schoolchildren’s survey. Between five and six percent of schoolchildren aged 12 to 17 years old had ever tried amphetamine (5.6%) while 1.1% reported using amphetamine in the last week.

A few key informants noted that amphetamine use in youth was reported to be equally or more prevalent among young females as it was in young males -one of the reported reasons being the anorexic effects of amphetamine and the concern which young females may have with body image. Amphetamine use in younger people tended towards recreational use, or binges lasting several days. Designer drugs are also popular among some of the young amphetamine users including ecstasy, GBH, liquid acid, and other less-well known designer drugs.

#### **Current patterns in amphetamine use**

The demographic characteristics of amphetamine users were estimated from key informant responses and the characteristics of IDU who had used amphetamine within the last 6 months (n=47). Amphetamine users were similar in demographic profile to the overall IDU sample, most being in their twenties, having 10 to 11 years of education, and around one third having a previous prison history. The majority of amphetamine users were of an English Speaking Background, with some Europeans breaking into the amphetamine market. Gender breakdown was similar to that of IDU with a relatively even spread of males to females (males: 55.3%). However, some key informants reported that the amphetamine users they had contact with were more likely to be males, in the order of 60-70%. Breakdown of employment status was similar to the IDU sample as a whole, with around fifty percent being unemployed, around 30% full time employed, the remaining 20% involved in home duties or part time or casual employment. Key informants reported a wide variation of employment profiles of amphetamine users, in the range of 25 to 95% unemployed.

Amphetamine in powder form (100%), liquid form (10.6%), prescription amphetamine (27.6%) and Ice or Shabu (usually ‘crystal meth’) (12.7%) were reported as being used in the last six months by amphetamine using IDU, although these statistics do not inform of frequency of use of these forms in the six month period. Key informants reported the use of powder (n=5), crystal meth (n=4) and prescription amphetamine (n=1).

Injection was the most common route of administration among IDU surveyed, and 97% of IDU who had used amphetamine in the last 6 months, had injected in the last 6 months. Other ways of administration among those that had used in the last 6 months were snorting (36%), swallowing (38%) and smoking (11%). Similarly, key informants reported predominantly IV use, while one reported anal administration, or “shelving” among young females to get some respite from nose bleeds through intranasal use, and vein damage.

Key informants reported variation in frequency of use, falling into two or three categories: daily users, who use 1 or 2 grams or points per day and tend to be older; recreational users who use at parties or on weekends; and a third group who ‘binge’, using for several days at a time and then crashing, who tend to be younger. IDU reported using an average of 56 days in the last six months, with a median and modal use of 40 days and 180 in the last 6 months respectively.

Polydrug use among amphetamine users was more diverse and widespread than for heroin users according to reports from both amphetamine-using IDU and key informants. Alcohol and tobacco use was closely followed by cannabis and benzodiazepine use, particularly for ameliorating the side effects of amphetamine use. Around fifty percent of amphetamine IDU reported using heroin and ecstasy in the last six months, around one third reported cocaine, methadone and hallucinogen use, while around one fifth reported using other opiates and inhalants.

### **Trends in amphetamine use**

Fifteen of the 22 IDU who nominated amphetamine as their drug of choice (68%) reported that there had been no change in the number or type of people using amphetamine in the last 6 months, as did 4 of the 9 key informants who commented on amphetamine (44%). Of the 7 IDU (32%) who said they had noticed a change, four (18%) reported that more people had started using amphetamine, and 6 IDU reported that more young people were using amphetamine (27%). One IDU expanded that there were deleterious consequences of younger people using, because of their inexperience and irresponsibility towards drug use, and their willingness to take risks. Five key informants (55%) reported more people were using amphetamine, and two out of the five nominated young people as the target group for increased use. The general trend among key informants who had noticed a change, was an increase in the number of people moving from snorting to injecting amphetamine, transition from recreational to permanent use, and the increasing availability of amphetamine on the streets. While recreational and binge use may be increasing in young people, it appears that amphetamine use among the IDU population interviewed had decreased in 1999 compared with the IDU in 1998. That is, 47% of IDU reported using in the last 6 months in 1999, compared with 70% in 1998. However, frequency of use was increased in 1999, with users reporting a median of 40 days use, compared with 25 days median use in 1998. It may be that the sample interviewed in 1998 were a different sample to those IDU interviewed in 1999. Alternatively, it may be that less IDU are using amphetamine, but those that are using are doing so more frequently. The putative decrease in numbers of IDU using amphetamine may be a result of more activity in the heroin market.

Fifteen of the IDU (68%) reported that they had not noticed any change in amount or frequency of amphetamine used in the last 6 months. The remaining IDU said they had noticed that amphetamine was being used in greater quantities (n=3, 13.6%), and that more people, particularly teenagers, were injecting amphetamine rather than snorting it (n=3,

13.6%). Four of the nine key informants who commented on amphetamine said that frequency and quantity of use had remained stable over the last six months (44%). Four commented on the increasing trend towards use of different forms of amphetamine, particularly methylamphetamine in crystal form, and methylamphetamine in paste form. One key informant reported that safe injecting practices are slowly infiltrating into the amphetamine using community.

Twelve of the IDU (54.5%) had not noticed any new drugs or drug use behaviour, as was also reported by two of the key informants. Of the key informants that had noticed recent change, three had noticed an increase in the availability of Ecstasy. Four reported the increasing availability of a series of designer drugs and new trips including PMA, LSD, liquid acid, and various new types of designer drugs, thought to be manufacturing mistakes of people trying to make amphetamine. Three key informants reported the increasing availability of amphetamine manufactured from pseudoephedrine (from cold and 'flu' preparations), while two reported the increased use of prescription amphetamine (stolen from siblings who have ADD). Similarly, the ten IDU that had noticed change in new drug types reported increased polydrug use and experimentation with drugs including liquid acid, GBH and benzodiazepines for 'coming down'. Three IDU also noted that some amphetamine users had started to use heroin. Further, three IDU reported that more 'pure' amphetamine was available, and one reported the manufacture of amphetamine derived from pseudoephedrine.

The 1998 IDRS also reports a trend towards increased quantity and frequency of amphetamine use, particularly among youth, along with reports of transition from snorting to intravenous use. Two key informants in 1998 commented on the increase in methylamphetamine in crystal form. Thus, it appears that the trends observed in 1999 may have developed out of drug use behaviour noted in 1998, with particular emphasis on the increase of 'crystal meth', but also the newly emerging trend of the use of prescription amphetamine and pseudoephedrine-based amphetamine.



### 3.3.5 SUMMARY OF AMPHETAMINE TRENDS

Table 3.4 contains a summary of trends in the price, purity, availability and use of amphetamine in the last six to twelve months. Amphetamine appears to be highly available, and was comparable in price with last year (1998). The purity appears to be low, although there are increasing reports of more pure forms of amphetamine being available. The use of amphetamine appears to have increased, particularly among young people. Pseudoephedrine-based amphetamine and methylamphetamine in crystal form appears to have increased in availability.

**Table 3.4 Estimated trends in the price, availability, purity and use of amphetamine.**

<p><b>Price</b> Gram street quality Gram “pure”</p>	<p>\$50 (\$25-60) Stable \$200 (\$200-\$400); Stable</p>
<p><b>Availability</b></p>	<p>(very) easy; Stable to increasing</p>
<p><b>Purity</b></p>	<p>6% (&lt;1-79%)% (AFDL); Stable Increasing availability of more pure forms</p>
<p><b>Use</b></p>	<p>Increase in number of (younger) users Increase in availability and use of crystal meth and pseudoephedrine-based amphetamine</p>

### 3.4 CANNABIS

Trends in cannabis use were obtained from reports given by nine key informants and eighty two of the 100 IDU interviewed who felt confident to give information about price, purity and availability of cannabis. While heroin and amphetamine use were the predominant drugs of choice among IDU, cannabis use was highly prevalent among the IDU population. The key informants who gave information about cannabis consisted of one medical officer, one drug and alcohol counsellor, four community health workers (two social workers, a psychologist and a youth worker), two social workers from corrections, and one psychologist from a psychiatric hospital. Key informants were familiar with cannabis users from all of the four main residential areas, and some of them gave information about use in more than one area. In summary, cannabis is widely prevalent and popular in all of the areas that have been mentioned for both amphetamine and heroin use.

The key informants gave information about persons from English speaking backgrounds (ESB), non-English speaking background (NESB) and Aboriginal Torres Strait Islander (ATSI) persons. Some key informants had information about users from more than one background, and information was supplied as follows; ESB n=7, NESB including Mediterranean and Asian n=3, ATSI n=4.

#### 3.4.1 PRICE

The median price for one ounce of cannabis (~28 gm) as provided by 73 of the IDU was \$220 (range: \$150-\$400). The distribution of cannabis cost per ounce was somewhat bimodal, with the two most frequently occurring costs being \$200 (34.2%) and \$250 (28.8%). This range was identical to the range in purchase price of cannabis in the 1998 survey, and is comparable with the information given by one key informant quoting \$250 as the purchase price for one ounce of cannabis.

The most popular way to buy cannabis was in a 'bag' (sometimes called J-bag or money bag), as reported by 82 of the IDU, the median and modal price of which was \$25 (range: \$20-\$25). This price and range of a bag of cannabis was identical to the 1998 findings, and has been a standard price for cannabis in South Australia for several years. Three key informants who commented on cannabis price also quoted \$25 per bag as the standard price. However, in South Australia bags are sold containing between 1 and 3 grams of cannabis, compared with other states, such as New South Wales where a bag contains one gram of cannabis (McKetin et al., 1999). According to several key informants who were user representatives and involved in the cannabis market, the amount of cannabis purchased in the bag varies according to growing season, availability, and the relationship between the buyer and the supplier. A three-gram bag would be a very good deal, a one gram bag would be considered poor, while a standard amount would be two to two and a half grams. Given a 2.5 gm average, the price of one gram of cannabis in South Australia is \$10 as part of a \$25 bag (range: \$8.30-\$25).

Cannabis was also sold in other amounts. One popular way was to buy a \$50 bag containing twice as much cannabis as the \$25 bag (n=11). Buying cannabis in half ounces (~14 gm) was also commonly reported (n=17, median = \$100, range: \$100-\$130) and quarter ounces (~7 gm, n=9, median = \$60, range: \$50-\$75). Larger amounts include one pound (~ 448 gm, n=3, median = \$2600, range: \$2600-\$2800) and ten pounds (~4.5 kg, n=1, price = \$15000).

These prices are comparable with the prices provided by the Australian Bureau of Criminal Intelligence (ABCI) for the period January to June 1999. The ABCI provides two separate prices for cannabis, one for head and one for leaf. However, the general response from IDU in South Australia is that cannabis in the form of head, or a head and leaf mix, is far more frequently smoked than leaf alone, because head is readily accessible. Similarly, Humeniuk et al. (1999) reported that head (66.7%), or a head and leaf mix (14.4%) was the most likely form of cannabis to be seized following apprehension for possession of cannabis. Thus, only prices for cannabis head will be reported. The price of a bag ranged between \$25-\$35, one ounce ranged between \$350 to \$450, while one ounce of hydroponically grown cannabis was priced between \$450 and \$550. One pound of head cannabis was priced between \$3500 and \$5000, while one pound of hydroponically grown cannabis was priced between \$2800 and \$3000. The prices at which cannabis may be purchased by IDU are somewhat cheaper than those provided by the ABCI, presumably because of the nature of the relationship between the buyer and the person selling (ABCI prices are obtained through 'buys' made by plain clothes police officers).

Half of the IDU who gave information about cannabis (82/100) reported that in the last six months the price of cannabis had been stable (50%). A significant proportion thought that in the last six months the price of cannabis had decreased (32.9%), while the remainder reported the price had fluctuated (14.6%). One person believed that the price had increased (1.2%). Four out of the seven key informants who gave information concerning cannabis price, purity and availability also thought that the price had remained stable (57%) while one thought it had decreased. The two remaining key informants were unsure about changes to the price of cannabis.

### 3.4.2 AVAILABILITY

Cannabis was considered easy or very easy to obtain by most IDU (96.3%), while the availability of cannabis over the last six months was considered stable (59.8%) or easier to obtain (20.7%). Three of the seven key informants believed that cannabis had become easier to obtain in the last six months than it had been previously (42.8%), while the remaining four said availability had not changed (57.2%). Consistent with IDU reports, all of the key informants who gave information about cannabis availability believed it was very easy to obtain.

The majority of IDU who had used cannabis scored their cannabis from a friend (53.2%) or dealer's home (30.4%). The remainder reported scoring from a street dealer (5.1%), a mobile dealer (1.3%), or had received it as a gift (1.3%), or grew their own cannabis (8.9%).

Around two thirds of key informants reported on changes to dealing and importation/agriculture of cannabis. They reported that more people were now dealing cannabis, particularly people that were 'normal' (ie did not fit the stereotypical image of a dealer), and that more people were selling cannabis because it is an easy market to break into compared with some of the other 'harder' drugs. There were several reports on the availability of cultivars with increased potency, and one key informant mentioned the popularity of 'Amsterdam based' cannabis, which as the name suggests comes from the Netherlands, and is allegedly a highly potent cultivar. However, reports of high-potency cannabis remain unverified by laboratory analysis.

### 3.4.3 POTENCY

The majority of IDU reported that current cannabis potency, was high (81.7%). The remainder reported it as medium (14.6%) or was unsure. This is comparable with the beliefs about cannabis potency in the 1998 IDU sample. In 1999, three of the seven key informants believed that the purity of cannabis was high, while the remaining four were unsure about the potency of cannabis. Concerning changes in potency of cannabis over the last six months, the majority of IDU believed it had remained stable (57.3%), the remainder stating it was increasing (24.4%) or had fluctuated (12.2%) over the last six months. Two of the seven key informants reported cannabis potency had remained stable. The remainder did not know how potency had changed in the last six months. There were several reports from key informants on the availability of cultivars with increased potency and ‘designer’ styles, which are cannabis cultivars with specific properties. Names of these newer cultivars included ‘AK47’, ‘Super Skunk’, ‘Northern Lights’, ‘Shiva’ and ‘Purple Haze’.

There are no data available on actual %THC content of cannabis seizures. The AFDL only provides identification of plant matter, as to whether the plant matter is cannabis or some other plant. Presumably this is because cannabis has an extremely different appearance to say heroin, amphetamine and cocaine, which may only be identified by determining the active component (and hence the proportion of active component).

### 3.4.4 USE

#### **Prevalence of use among different populations**

The National Drug Strategy National Household Survey 1998 findings revealed that, among the general population in South Australia, cannabis was the most popular drug used. Lifetime prevalence of use of cannabis was 39.3%, with 17.6% using in the last 12 months. Cannabis use among schoolchildren appeared to be comparative with the general population according to the 1996 South Australian Schoolchildren’s survey. Thirty five percent of schoolchildren aged 12 to 17 years old had ever tried cannabis (35.5%) while 13.5% reported using cannabis in the last week.

Among IDU interviewed in this sample, polydrug use among cannabis users was high, and a significant percentage of people using cannabis were also using heroin or amphetamine. It is worth noting that there is a population of cannabis users for whom cannabis is their main drug of choice and who are less likely to use other ‘harder’ drugs. Humeniuk et al. (1999) interviewed 202 South Australian cannabis users in 1996 and found that around 15% had used heroin in the last month, around 20% had used amphetamine in the last month, and around 15% had used cocaine in the last month. In the current IDU population, cannabis appeared to be used secondary to other drugs, particularly heroin.

#### **Current patterns in cannabis use**

The demographic characteristics of cannabis users were estimated from key informant responses and the characteristics of IDU who had used cannabis within the last 6 months (n=80). Given that a significant proportion of IDU were also cannabis users, it is not surprising that cannabis users were demographically similar to the overall IDU sample. Most were in their late twenties to early thirties, had 10 to 11 years of education, and around one quarter to one third had a previous prison history. The majority of cannabis users were

of an English Speaking Background. Gender breakdown was similar to that of IDU with a relatively even spread of males to females (males: 53.8%). Breakdown of employment status was similar to the IDU sample as a whole, with 40% reporting being unemployed, around 30% were full time employed, the remaining 30% were involved in home duties or part time or casual employment. Key informants were more likely to report heroin users as unemployed in the range of 40 to 100%.

Plant form was the most common form of cannabis used in the last six months (97.5%) although 20 IDU reported using hash (25%) and 5 IDU said they had used hash oil (6.25%). As mentioned above, key informants reported the use of both cannabis grown outdoors and the more potent hydroponically-grown cannabis.

Inhalation was the most common route of administration, with pipes and bongs more popular than joints. Frequency of use was reported to be widely variable ranging from occasional to heavy use (up to 4 bags per week). The average amount of use in this sample was reported to be around 10 cones per day (a cone is the amount that fits in the receptacle of a small pipe). However, it is worth noting that there is huge variation in frequency and quantity, and the size of a cone varies from person to person, as does the potency of the cannabis consumed.

According to key informants, not many cannabis users were in treatment, or sought treatment. It was reported that cannabis users did not believe that they required treatment for cannabis use, and that they were unaware of the health affects of heavy cannabis use.

### **Trends in cannabis use**

The overwhelming response from both IDU and key informants was that cannabis use was stable, in regards to who was using and quantity and frequency of use. One IDU and one key informant suggested that people were using greater quantities of cannabis, and that more people were using cannabis, particularly young people whose parents had been desensitised to drug use during the 1960s and 1970s. The majority of both IDU and key informants reported stability as far as the use of 'new drugs' was concerned, although a few reported an increase in polydrug use and a willingness to experiment, particularly given the increasing availability of other drugs, such as amphetamine.

Thus, it appears that cannabis use remained stable in 1999, in comparison with the reports of more people using, particularly younger persons, in the 1998 IDRS sample. The general response from key informants and IDU in 1999 is that cannabis use is widespread, and 'the norm' among almost all drug users, and also within the general population.

### 3.4.5 SUMMARY OF CANNABIS TRENDS

Table 3.5 contains a summary of trends in the price, purity, availability and use of cannabis in the last six to twelve months. Cannabis appears to be highly available, and was comparable in price with last year (1998). The potency appears to be high according to IDU and key informants, although there are increasing reports of more potent hydroponically-grown cultivars being available. The use of cannabis appears to be relatively stable.

**Table 3.5 Estimated trends in the price, availability, potency and use of cannabis.**

<b>Price</b>	
Ounce	\$220 (\$150-\$400); Stable
Bag (~2 gm)	\$25; Stable
<b>Availability</b>	(very) easy; Stable
<b>Potency</b>	High; Stable
<b>Use</b>	Relatively stable number of users Increased use of hydroponically-grown cultivars Frequency of use is relatively stable

### 3.5 COCAINE

While 27% of IDU said they had used cocaine in the last six months, only 6 of the 100 IDU could comment on price, purity and availability of cocaine. This was markedly fewer than the number of IDU that gave information about cocaine in 1998 (around one third of IDU). Similarly, none of the key informants chose cocaine as the drug they were most confident to speak about, although six gave some, albeit small, information about cocaine. None gave information about price or purity. The six key informants who gave information about cannabis consisted of one drug and alcohol counsellor, two community health workers (one social worker) one police officer (a detective), one user representative and one ambulance officer. Since information about cocaine was limited, it is not known in which suburbs cocaine was the most available. Although one key informant, an ambulance officer, reported cocaine use was more likely to be in the more affluent suburbs and mentioned the Burnside/Beaumont area (post code 5066). Another key informant reported that cocaine had increased in availability, from inner city suburbs around night clubs, to suburbs where it has not been before -further north of the CBD. Accordingly, it is difficult to give information on the ethnicity of cocaine users, although it appears from informant reports that it is most prevalent among wealthier people from ESB, including business persons and the 'white collar' profession, clubbers and club 'wannabes' (youth speak for very young girls who are desperate to get into the club scene, and have to make do with occasional all-age dance parties). It is worth noting at this point that much of the following information about cocaine is based on scant reports, often from one of the three sources only, and so should be interpreted with caution.

#### 3.5.1 PRICE

The median price given by 6 IDU for one gram of cocaine was \$250 (range: \$250-\$280). Three IDU reported purchasing a cap of cocaine for a median price of \$80 (range: \$50-\$100). One IDU reported purchasing half a gram of cocaine for \$125. No key informants gave any information about the price of cocaine. Four of the six key informants reported that the price of cocaine had remained stable over the last six months, while the other two believed it had fluctuated, or had decreased.

The price for one gram of cocaine as reported by IDU was comparable with the price provided by the Australian Bureau of Criminal Intelligence (\$250) for the period January to June 1999.

#### 3.5.2 AVAILABILITY

Cocaine was considered easy or very easy to obtain by four IDU (66.6%), and difficult by the remaining two. Two IDU believed that availability of cocaine had not changed in the last six months, one believed it had become easier to obtain, and three said that availability had fluctuated over the last six months. While 27% of IDU said they had used cocaine in the last six months, only 6% gave specific information, which was significantly fewer than the number of IDU who gave information on cocaine in 1998 (~30%). It may be that the 1999 sample was somehow different to the 1998 sample, or that cocaine use has indeed decreased. However, it may be that the IDU interviewed in 1999 could not or would not disclose information about cocaine, possibly because of changes in cocaine distribution networks. This last notion was confirmed by a key informant who was directly involved in law enforcement. Further, several key informants reported on the distribution of cocaine by

organised crime groups, including biker groups. Accordingly, people who purchase cocaine tend to be wealthier persons who can afford the price, which may exclude many of the IDU interviewed here. Four of the six IDU reported that they scored their cocaine from friends, and two reported they had scored it from their dealer's home.

Regarding importation, several key informants reported that cocaine was brought into South Australia the same way as heroin -through waterways, although it was not clear if this was through commercial or private means. Allegedly drug packages are dumped by boats into the water at particular coordinates or "fishing spots", and retrieved later on. There were also reports that this cocaine may be taken across the border and sold in New South Wales.

### 3.5.3 PURITY

Three of the six IDU reported cocaine purity was high, two reported it was medium and one said it was low. In the last six months, three of the IDU said that the purity was stable, two said it was fluctuating, and one said it had decreased. While no key informant could formally comment on purity, one stated that most people had said that the quality of cocaine was 'really good', although suspected that it may sometimes have amphetamine as an additive.

The AFDL provided quarterly purity data on cocaine seized in South Australia during the 1998/99 financial year. Mean purity over the 1998/99 financial year for cocaine was 53% (range: 25-77%, n=18), an increase compared with 44% purity of cocaine over 97/98, and 35% purity in 96/97. The 1998/99 purity is comparable with the gross estimates provided by the majority of IDU and key informants, that purity is medium to high. Concerning changes in purity over the last six months, the actual purity values were ~41% (January to June 1999, n=1) compared with ~50.5% (July to December 1998, n=17, range: 36-77%). It is worth noting that these bi-annual average purity values are estimations based on averaging quarterly data, which itself is an average. While the AFDL provides data on two seizure quantities (less than 2 gm and greater than or equal to two grams), the above purity values are based on the culmination of the two seizure sizes, given that their average purity values were similar.

### 3.5.4 USE

#### **Prevalence of use among different populations**

The National Drug Strategy National Household Survey 1998 findings revealed that, among the general population in South Australia, lifetime prevalence of cocaine use was 2.3%, with 0.6% using in the last 12 months. Cocaine use among schoolchildren appeared to be comparative with the general population according to the 1996 South Australian Schoolchildren's survey. Of schoolchildren aged 12 to 17 years old, 2.4% had ever tried cocaine while 0.4% reported using cocaine in the last week. Cocaine was injected far less frequently than heroin and amphetamine according to the 1998 Australian Needle and Syringe Program Survey, with 3% of South Australian IDU reporting cocaine as being the "last drug to be injected".



## **Current patterns in cocaine use**

The demographic characteristics of cocaine users were estimated from the characteristics of IDU who had used cocaine within the last 6 months (n=27). Cocaine users were similar in demographics to the overall IDU sample, most being around thirty years of age, having around 11 years of education, and around one quarter to one third having a previous prison history. The majority of cocaine users were of an English Speaking Background. Use by gender was similar to that of the entire IDU sample, with a relatively even spread of males to females (males: 51.9%). Breakdown of employment status was similar to the IDU sample as a whole, with around forty percent being unemployed, around 40% full time employed, the remainder involved in home duties or part time or casual employment.

Of the 27 IDU that had used cocaine in the last 6 months, 24 reported using cocaine powder (89%) and 3 (11%) reported using crack cocaine. Intravenous use was the most commonly reported route of administration in the last 6 months (n=18, 66.7%) followed by snorting (n=14, 51.8%) and smoking (n=4, 14.8%). No IDU reported swallowing cocaine in the last 6 months.

Information on frequency of use was given only by IDU who had used in the last 6 months. The mean number of days used in the last 6 months was 5.4, while the median was 2 days. Of the 27 who had used in the last 6 months, most reported using only once (n=12) or twice (n=5). The remainder reported using a total of 3 days (n=2), 6 days (n=4) or 10, 12, 25 or 48 days (n=1 for each day respectively) in the last 6 months.

## **Trends in cocaine use**

While 24% of IDU reported using cocaine powder in the last 6 months and 3% reported using crack cocaine over the same period, only one IDU gave information about cocaine drug trends in the last 6 months. This IDU reported that there appeared to be more people using cocaine in Adelaide over recent months, and that it was standard practice for regular cocaine users to spend all their money on cocaine. One key informant reported that biker-gangs were getting increasingly involved in the use and distribution of cocaine. However, compared with the findings from the 1998 IDRS, 32% compared with only 18% in 1999, had injected cocaine in the last 6 months. Similarly, significantly fewer IDU could comment on cocaine in 1999, suggesting that cocaine use in South Australia may have decreased in 1999, at least among the IDU population.

### 3.5.5 SUMMARY OF COCAINE TRENDS

Table 3.6 contains a summary of trends in the price, purity, availability and use of cocaine in the last six to twelve months. Cocaine appears to have fluctuated in availability, and was comparable in price with last year (1998). The purity appears to be high. The use of cocaine appears to have decreased compared with 1998, or it may be that it has decreased in this particular population.

**Table 3.6 Estimated trends in the price, availability, purity and use of cocaine.**

<b>Price</b>	
Gram street quality	\$250 (\$250-\$280); Stable
Cap	\$80 (\$50-\$100); Stable
<b>Availability</b>	Easy to difficult; Fluctuating
<b>Purity</b>	53% (25-77%) (AFDL); Stable to increasing
<b>Use</b>	Decreased use in this population Decrease in number of IDU disclosing information about cocaine

## 3.6 OTHER DRUGS

### 3.6.1 METHADONE

Approximately half of the IDU interviewed (53%) reported using methadone in the last 6 months, predominantly in syrup form (n=50, 94.3%), although 10 IDU reported using physeptone tablets (18.8%). Methadone use was markedly less prevalent in the general population, with 1998 National Household Survey results showing that 0.1% of persons had ever tried methadone, and 0% had used in the last 12 months.

Forty percent of the IDU sample reported receiving methadone maintenance treatment, slightly higher than in 1998 (34%). The prevalence of methadone treatment among IDU is comparable with estimates of methadone treatment among heroin users by key informants. While there was a large variation in estimates, most key informants reported that the prevalence of methadone treatment was between 30% and 60%. However, prevalence of methadone treatment was less prevalent in prisons (15-20%) and also in Asian communities who were more likely to be involved in abstinence-based therapies.

The IDU who received methadone treatment counted for a significant proportion of IDU who had used methadone in the last 6 months (75.4%). However, there were other IDU who were not in treatment (20.7%), or were receiving some other kind of treatment (3.7%) who had also used methadone in the last 6 months. The IDU currently receiving methadone treatment reported using methadone every day, ie. a median of 180 days during the last 6 months (range: 178-180 days). This sample also reported using heroin for a median of 62 days, or around once every three days, during the last six months (range: 1-180 days). This frequency of heroin use is similar to the frequency reported by the entire sample of heroin-using IDU.

Seventeen IDU (17%) reported injecting methadone in the last 6 months, which is comparable with the prevalence of methadone injecting in 1998. These levels are slightly higher than estimates of methadone injecting in 1996/1997 in South Australia. Humeniuk et al. (2000) found that during this time, 11% of heroin users had reported injecting methadone in the last 6 months. However, prevalence during this time appears to be lower than in NSW, where a prevalence of 29% during the last 6 months was reported (Darke et al. 1996). In 1999, around one third of the persons who had injected methadone in the last 6 months were in methadone treatment. That is, 14 of those 40 in treatment (35%) reported injecting their methadone in the last 6 months, although this study does not inform about frequency of methadone injecting over the previous six month period. Eight percent of IDU said that methadone was the last drug they had injected. This statistic is comparable with the findings of the 1998 (South) Australian Needle and Syringe Program Survey (ANSPS) that 3% of intravenous drug users had said that methadone was the last drug they had injected. Both the IDRS and ANSPS found that methadone was the third most likely to be the last drug injected following heroin and amphetamine. All IDU who reported using methadone in the last 6 months had used methadone orally.

### 3.6.2 BENZODIAZEPINES

The majority of IDU had a lifetime prevalence of benzodiazepine use (82%), with 59% reporting using in the last 6 months. All of those who had used benzodiazepines in the last 6 months had used orally, and 4% had injected benzodiazepines in the last 6 months. The

median number of days used in the last 6 months was 48. That is, half of IDU who had used benzodiazepines in the last 6 months had used at least once every four days. However, there was wide variation in frequency of use ranging from 1 to 180 days, and modal use was 180 days as reported by 13 IDU.

Around two thirds of all key informants interviewed commented that benzodiazepines were prevalent in the drug using community with whom they had contact. Prevalence of use was widely variable, ranging from 15% to 100% prevalence. Key informants who predominantly described amphetamine use reported that benzodiazepines were used to help speed users ‘come down’ or to cope with the ‘crash’ following amphetamine binges. Key informants who predominantly described heroin use said that benzodiazepines were predominantly either used concomitant with heroin to enhance the effects of heroin, or were used when heroin was not available when they were ‘hanging out’ (experiencing withdrawal and/or craving for heroin).

The most popular benzodiazepine used in the last 6 months was diazepam, followed by oxazepam. Preference for Valium (diazepam) and Serapax (oxazepam) were also the most popular benzodiazepines in 1998 (prevalence of 50.5% and 19.1% respectively). The prevalence of the main type of benzodiazepine used by IDU is shown in Table 3.7. It is worth noting that flunitrazepam use has decreased over the last three years, with 15% prevalence reported in 1997, 13.5% in 1998 and 6.8% in 1999. Presumably this is because flunitrazepam has been more difficult to access since being rescheduled to an S8 drug in the middle of 1998.

The widespread use of benzodiazepines was also demonstrated by the toxicology of fatal heroin overdoses. Benzodiazepines were the most common drug found in heroin overdose fatalities (46%) in a study of heroin overdose in South Australia between January 1994 and June 1997 (McGregor et al., 1999). Interestingly, the prevalence of type of benzodiazepine involved was similar to the prevalence found among IDU in 1999. That is, among heroin overdose victims, diazepam was the most commonly found benzodiazepine (57.6%) followed by oxazepam (18.2%).

**Table 3.7 Benzodiazepine use by main type used by IDU in the last 6 months**

<b>Benzodiazepine</b>	<b>Frequency</b>	<b>Percent</b>
DIAZEPAM (eg. Valium, Ducene)	31	52.5%
OXAZEPAM (eg. Serapax)	12	20.3%
TEMAZEPAM (eg. Normison, Euhypnos)	5	8.5%
FLUNITRAZEPAM (eg. Rohypnol)	4	6.8%
NITRAZEPAM (eg. Mogadon)	3	5.1%
ALPRAZOLAM (eg. Xanax)	3	5.1%
CLONAZEPAM (eg. Rivotril)	1	1.7%

#### 4.6.3 ANTIDEPRESSANTS

Antidepressants were used by 17 of the IDU sample in the last 6 months for a median of 180 days. Fourteen of these used daily suggesting that antidepressants were used predominantly for therapeutic purposes in this population. This finding should not be unexpected, given that from a pharmacological perspective, antidepressants have little or no dependence

liability. The prevalence of use in 1999 was similar to 1998, with 16% reporting using in the last 6 months.

Among those who had used antidepressants in the last 6 months, the newer antidepressants were the most prevalent (n=15, 88%). These include the SSRIs (Selective Serotonin Reuptake Inhibitors) (66%) such as sertraline (Zoloft) and fluoxetine (Prozac) and SNRIs (Serotonin Noradrenaline Reuptake Inhibitors) (33%) such as venlafaxine (Effexor) and nefazadone (Serzone). Only two people reported using tricyclic antidepressants (Prothiaden, Amitriptyline).

#### 4.6.4 ECSTASY (MDMA) AND DESIGNER DRUGS

Among IDU interviewed, 64% had a lifetime prevalence of ecstasy use, and 22% reported using ecstasy in the last 6 months. Three percent of the IDU interviewed said that ecstasy was their drug of choice and ecstasy was the third most likely (along with other opiates) to be the first drug ever injected in this population (4%). There was a lifetime prevalence of injecting ecstasy of 28%, and 4% reported injected ecstasy in the last 6 months. Four percent had snorted ecstasy in the last 6 months, and all those who had used ecstasy in the last 6 months had swallowed it (22%). The median number of days used in last 6 months was 4, although there was wide variation in use ranging from 1 day up to 90 days of use in the last 6 months. One or two days were the most frequently reported number of days used in the last 6 months.

Ecstasy use among IDU was greater than among the general population. According to the 1996 National Household Survey, 2.8% of persons interviewed had a lifetime prevalence of ecstasy, and 1% had used in last 12 months. Among the general population, ecstasy had greater lifetime and 12 month prevalence than heroin and cocaine. Ecstasy use among schoolchildren was greater than that in the general population. The 1996 SA Schoolchildren's Survey reported that 2.6% of schoolchildren had ever tried ecstasy, and 0.4% used in last week, which was comparable to the weekly prevalence of heroin and cocaine in this population.

Several key informants reported on ecstasy use. Prevalence ranged from 1% up to 50%. Interestingly, the highest prevalence reported was among the Cambodian/Laos community as described by one Cambodian key informant who worked closely with that population. Five key informants reported that ecstasy use was increasing, and two reported the increased availability of two other designer drugs, PMA and GBH (fantasy). It was also reported that errors of amphetamine manufacturing were sometimes marketed as designer drugs, but the safety and efficacy of such drugs was largely unknown. The three IDU who nominated ecstasy as their drug of choice also reported that more people were using ecstasy, and that frequency of use was increasing. Fantasy or GBH were also reported as being used in the last 6 months by four of the IDU.

The price of Ecstasy, as provided by the ABCI, was between \$40 and \$60 for one pill or tablet. The AFDL provided quarterly purity data on ecstasy (MDMA), seized in South Australia during the 1998/99 financial year. Mean purity over the 1998/99 financial year for MDMA was 32% (range: <1-64%, n=94), comparable with 30% purity of MDMA over 97/98, and slightly lower than the 40% purity observed in 96/97. Concerning changes in purity over the last six months, the actual purity values were ~35% (January to June 1999, n=38) compared with ~36% (July to December 1998, n=56, range: 19-64%). It is worth

noting that these bi-annual average purity values are estimations based on averaging quarterly data, which itself is an average.

#### 4.6.5 OTHER OPIATES

There was a 68% lifetime prevalence of ‘other opiate’ use in the IDU population. These statistics cannot be compared with National Household Survey data, since ‘other opiate’ use was covered under analgesics which includes all pain relief medication including Panadiene and Non Steroidal Anti Inflammatory Drugs (paracetamol, Aspirin etc.). Approximately one quarter (27%) of IDU reported using other opiates in the last 6 months, which appears to be less than the number who reported use in 1998 (42%). The majority of IDU in 1999 used other opiates orally (n=23), but 11 said they had injected other opiates. The median number of days used in the last 6 months was 20, although variance of use ranged between 2 and 180 days. Six days in the last 6 months was the most commonly reported frequency of use.

Key informants gave little information on ‘other opiate’ use. One reported that young Cambodian persons were smoking opium or ‘Chasing the Dragon’. Another reported that some heroin users were concomitantly injecting heroin and morphine sulphate because it gave the user the feeling of a ‘warm glow’.

Table 3.8 shows the main type of other opiate used by IDU in the last 6 months. Panadeine forte was the most popular, as was the case in 1998. Buprenorphine, Kapanol and LAAM were used by three IDU respectively as maintenance therapy for opioid dependence.

**Table 3.8 Main type of other opiate used in the last 6 months by IDU**

Opiate	Frequency	Percentage
Panadeine Forte	8	30.8%
Codeine Phosphate	6	23.1%
Morphine	4	15.4%
Pethidine	4	15.4%
MS Contin	1	3.8%
Buprenorphine	1	3.8%
Kapanol	1	3.8%
LAAM	1	3.8%

#### 3.6.6 HALLUCINOGENS

There was a high lifetime prevalence of hallucinogen use in the IDU population (91%), although only 16% reported using in the last 6 months. Hallucinogens include naturally occurring hallucinogens such as ‘magic mushrooms’ (a specific cultivar of mushroom with hallucinogenic properties), or synthetically derived compounds such as LSD (‘acid’ or ‘trips’). The 1998 National Household Survey reported a 9% prevalence of LSD use in the general population in South Australia, and a 3.1% prevalence of use in the last 12 months. Lifetime prevalence among schoolchildren was similar, with 8.8% reporting they had ever used *any* hallucinogen, and 1.3% saying they had used in the last week (1996 SA Schoolchildren’s Survey). In this population, 12 reported using LSD, while 5 reported using magic mushrooms.

Swallowing hallucinogens was the most common route of administration in the last 6 months (14%) while 3% of IDU reported injecting hallucinogens. The median number of days used in the last 6 months was 2.5, although frequency of use varied from between one and 51 days use in the last 6 months. One day was the most commonly reported frequency of use by 6 of the 16 IDU.

Key informants gave little information on hallucinogen use, except to report that prevalence was quite low. Two key informants mentioned the recent availability of acid in liquid form, and the manufacture of hallucinogens by 'backyard chemists'. One key informant, an ambulance officer, believed that the number of LSD-related callouts had recently increased.

The price of LSD, as provided by the ABCI for the January to June 1999 period, was \$20 to \$30 for one tab of acid.

### 3.6.7 INHALANTS

The IDU had a 46% lifetime prevalence of inhalant use, with only 9 using in the last 6 months. The 1998 National Household Survey results for South Australia described a lifetime prevalence of 4.2% for the general population, with 0.7% prevalence of use in the last 12 months. Indeed, persons of school age appear to have a much higher prevalence of inhalant use than the general population, with a lifetime prevalence of 26.1% and a weekly prevalence of 5.6% (1996 SA Schoolchildren's Survey).

The most common form of inhalant used by IDU was amyl nitrate ('rush', 'poppers', 'nitrous'), with a median of 4 days use in the last 6 months. Most of the IDU interviewed had used inhalants between one and four times in the last 6 months. Two IDU said they had used 30 times in the last 6 months.

Only three of the key informants had noticed inhalant use, including glue, petrol and butane, but did not report frequency or prevalence of use. The use of inhalants was reported by informants who worked predominantly with persons of youth age.

### 3.6.8 ANABOLIC STEROIDS

The use of steroids among IDU was small. Only 6 had a lifetime prevalence of steroid use, five of which had a lifetime prevalence of injecting steroids. Only one IDU had used steroids (Prednisolone) in the last 6 months, using a total of 60 days in the last 6 months. This IDU used steroids both intravenously and orally.

### 3.6.9 SUMMARY OF OTHER DRUG TRENDS

A summary of other drug trends can be found in Table 3.9. A major trend was the continued use of methadone for treatment purposes, and a high level of benzodiazepine use among IDU, particularly those using heroin and amphetamine. Illicit methadone use was also a continuing trend, including the intravenous use of methadone. Other trends are a small decrease in ‘other opiate use’, and the increased availability of ecstasy. Levels of hallucinogen, inhalant and steroid use remain low and stable.

**Table 3.9 Summary of trends of other illicit drugs**

<b>Methadone</b>	Methadone remains most common form of treatment for heroin Continuing trend for injection of methadone
<b>Benzodiazepines</b>	Use remains widespread among IDU Diazepam (eg. Valium) most popular benzodiazepine used
<b>Antidepressants</b>	Prevalence of use is stable Predominant use is for therapeutic purposes SSRIs and SNRIs most popular
<b>Ecstasy</b>	Stable price \$40 - \$60 Purity 32%; stable to decreasing Increased availability
<b>Other Opiates</b>	Decreased use of ‘other opiates’ among IDU Panadeine forte and Codeine phosphate most popular
<b>Hallucinogens</b>	LSD price \$20-\$30 per tab Low prevalence of regular use among IDU
<b>Inhalants</b>	Low prevalence of regular use among IDU Amyl nitrate most popular
<b>Anabolic steroids</b>	Very little steroid use among IDU in 1999



## 4.0 DRUG RELATED ISSUES

### 4.1 GENERAL HEALTH

Of the IDU sample, 66% reported experiencing at least one injection-related health problem in the last one month (mean  $\pm$  SEM =  $1.4 \pm 1.3$ , which includes those that had not experienced any health consequences of injecting). Most IDU reported experiencing either one (23%) or two (20%) injection-related health problems in the last one month. The remainder had experienced three (15%), four (7%) or five (1%) injection-related health problems in the last month.

The most commonly reported injection-related health problem in the last month by IDU was difficulty injecting (48%). The IDU who had injected methadone in the last 6 months were significantly more likely to have experienced difficulty injecting in the last month than those who had not injected methadone in the last 6 months (42.2% vs. 76.5%,  $p=0.02$ , Pearson Chi Square with Continuity Correction). The experience of scarring or bruising in the last month due to injection was reported by 42% of IDU. Once again, the IDU who had injected methadone in the last 6 months appeared to be more likely to have experienced scarring or bruising in the last month in comparison with IDU who had not injected methadone in the last 6 months, although this difference was not quite statistically significant (37.3% vs. 64.7%,  $p=0.07$ , Pearson Chi Square with Continuity Correction). Other specific injection-related problems among IDU in the last month included experiencing a dirty hit (and consequently felt sick) (29%), abscesses or infections (12%), thrombosis (8%) and non-fatal overdose (2%).

Key informants reported that the number of fatal and non-fatal overdoses appeared to have increased over the last 6 months. The contributing factors alleged to be involved in the increase in the number of overdoses was an increase in the purity and particularly availability of heroin, and a decrease in opioid tolerance among IDU due to the recent availability of naltrexone. The safe use and dispensing of needles appeared to be stable to increasing, particularly among heroin users. However, some groups were reported to be more vulnerable to risky needle-use behaviour including people in prisons, Aboriginal persons, Asian persons and persons of school age. Some key informants also reported that amphetamine users were less likely to be educated about safe needle use. Psychiatric disturbances and aggression, including domestic violence, were also reported to be possible health-related consequences of amphetamine use.

It is worth noting that three key informants mentioned the recent emergence of un-supervised naltrexone detoxifications. One key informant who was a user representative provided the following detailed report (edited version) of an un-supervised naltrexone detoxification procedure (ie “un-supervised” meaning executed by persons who do not have legal or other permission to administer drugs and carry out such a procedure).

*“The procedure, termed “microdosing”[by the drug using community], allows heroin users to rapidly decrease their tolerance to opioids, thereby decreasing the amount and cost of heroin required to experience an effect. “Microdosing” involves sedation of the subject with Rohypnol (sedative), followed by administration of clonidine, Stematil (anti-nauseant), Finapres (anti-hypertensive), Codeine Linctus and naltrexone. Naltrexone is delivered in “microdoses” every fifteen minutes to subjects. Naltrexone tablets are divided into quarters and dissolved in water. Subjects are “woken” or roused out of their sleep*

*every fifteen minutes, and receive the quarter tablet dose of naltrexone sub-lingually through an eye dropper. Subjects are administered a total of 5 full tablets in this way resulting in a total of 250 mg of naltrexone (5 x 50mg tablets). The whole procedure from induction to end takes around 6 hours. If withdrawal symptoms are deemed too great, more Rohypnol is administered. Subjects still experience some withdrawal when the procedure is over, thought to be equivalent to day 3 of heroin withdrawal, although there is much variation between subjects. However, subjects who are withdrawing at the end of the procedure are informed by the person who executes the “microdosing” procedure that they are not withdrawing so much as “getting all the drugs out of their system”. Subjects are severely dehydrated following the procedure, and can loose up to 5 kg of body weight. It takes around a week to recover and re-hydrate. The cost of the procedure ranges from between \$200 and \$500, and is usually done at the user’s own home. There are reports that some users are going through this procedure as often as monthly, considering it a worthwhile purchase since they will save more than the amount that the procedure costs in reduced drug intake over the following two weeks, until their tolerance re-develops.”*

It is important to note that the prevalence or frequency of this type of procedure is not known. At this stage, the details of this report have not been verified, although there is scope for further investigation in the IDRS in 2000.

Of the key informants who gave information about cannabis, two reported a relationship between cannabis use and mental health problems. Neither key informant could give a causal direction of effect and agreed that while heavy cannabis use could compound psychiatric problems, cannabis was often used by the mental health population to alleviate symptoms associated with psychiatric illness.

Another indicator of general health and treatment seeking behaviour can be derived from the Alcohol and Drug Information Service (ADIS) run by the Drug and Alcohol Services Council in South Australia. An estimated total of 8498 telephone contacts were made during the 1998/1999 financial year, predominantly from members of the general public wishing to obtain information about specific drugs. Most contact calls were related to alcohol (n=1888, 22.2%). There were 976 opiate related contacts (11.4%), 632 stimulant related contacts, including amphetamine, cocaine and ecstasy (7.4%) and 1140 cannabis related contacts (13.4%). The percentage of contacts by drug type was similar in frequency to the 1997/1998 financial year.

## **4.2 NEEDLE SHARING BEHAVIOUR AND NSEP DATA**

In the last one month, the majority of the IDU population reported not using needles that others had already used (91%). The remainder said that, in the last month, they had used a needle that someone else had already used one time only (3%), twice (4%) or more than 10 times (2%). Predominantly IDU said they had used a needle after one person only (8%), and it was usually their regular sexual partner or close friend. These data suggest that education concerning safe needle use and the availability of clean needles and disposal sites have resulted in a decrease in unsafe needle use. In comparison, around one quarter of IDU in 1998 reported using a needle after someone else had already use it. Accordingly, 91% of IDU in 1999 reported that, in the last month, they had not lent their needle to anyone else after they had used it. The remainder reported they had lent their used needles once (4%), twice (4%) or 3-5 times (1%) in the last month.

More IDU reported sharing injecting equipment than sharing needles. While 31% reported not sharing any equipment in the last 6 months, 20.5% had shared spoons, 17.5% had shared water, 15.8% had shared filters, 8.8% had shared tourniquets and 6.4% had shared their fits (syringes containing drug).

The Drug and Alcohol Services Council collects statistics from all Needle and Syringe Exchange Programs (NSEPs) in South Australia, excluding needles dispensed from pharmacies. Between January 1999 and June 1999, 998280 syringes were dispensed, and 638071 used syringes were returned by IDU, resulting in a return rate of 63.9%. This suggests that a minimum of around 64% of IDU were dispensing of their syringes safely, although this statistic does not include people who safely dispense used syringes using other measures (eg. public syringe deposit boxes etc.). The persons who utilised NSEPs in South Australia (excluding pharmacies) were also asked if they shared needles and syringes. During the time period mentioned above, only 0.7% reported sharing. This may be an underestimate of the actual percentage of IDUs who share needles, and there is anecdotal evidence to suggest that IDUs may feel embarrassed to admit they share their needles and syringes.

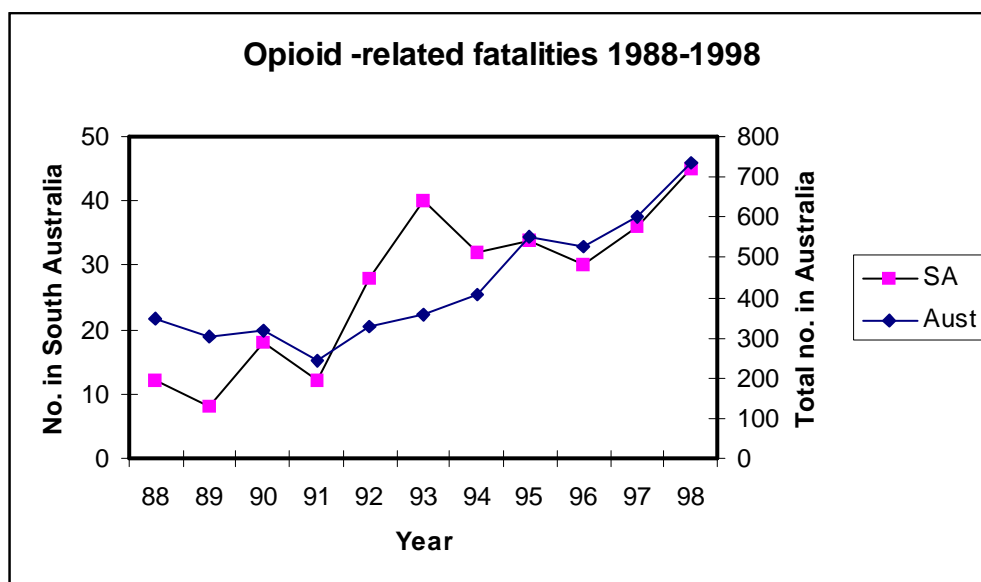
### **4.3 HEROIN OVERDOSE**

Of the ninety IDU that had a lifetime prevalence of heroin use, 44.3% had never experienced heroin overdose. Of those that had ever experienced an overdose, 65.3% had done so either once or twice. In comparison, 50% of IDU in 1998 and 65% of IDU in 1997 had experienced one or two overdoses in their lifetime. In 1999, the remaining IDU reported a lifetime prevalence of heroin overdose three to four times (16.4%) or between five and ten times (18.3%). The median amount of time between interview and the last overdose was 24 months (range 1 to 120 months), as was the amount of time between interview and the last administration of naloxone, the opioid antagonist (Narcan). Around 40% reported that they had overdosed within the last 12 months, and 14.6% had experienced an overdose within the last 6 months.

The majority of the IDU had been present at least once when someone else had overdosed (72.4%). The median number of times that IDU had been present when someone else had overdosed was three (range: 1-75), and the last time was 12 months ago for 50% of the IDU (range:1-120 months).

There has been an increase in the number of opioid-related fatalities, including those relating to heroin, in South Australia, and in Australia as a whole over the last ten years. Figure 4.1 shows a year by year total number of deaths between the years 1988 and 1998. While actual figures are not yet available for the number of opioid-related fatalities in 1999, it is estimated that the number of deaths in South Australia during this time is comparable with the number in 1998.

**Figure 4.1 Opioid related fatalities between 1988 and 1998 in South Australia and Australia respectively**



Accordingly, there has also been an increase in the number of drug-related ambulance attendances in South Australia, which include the recorded statistics on the number of fatal and non-fatal heroin overdoses. During the period October 1997 to September 1998, statistics provided by the Australian Institute of Criminology show that there was a total of 1412 callouts to ambulance services related to drug use in the metropolitan area of Adelaide (662 attendances only and 750 carries). During the period October 1998 to September 1999, the number of drug related attendances increased to 1642, -an increase of 16.3% (806 attendances only and 836 carries).

#### 4.4 CRIME AND POLICE ACTIVITY

The IDU were asked about criminal behaviour in regard to drug use. Over one half of the sample (59%) said they had committed at least one criminal act in the last month, compared with 68% in the 1998 IDU sample and 50% in the 1997 sample of IDU. Dealing and property crime was the most common crimes committed, and frequency of criminal activity by crime type over the last month is shown in Table 4.1.

**Table 4.1 Frequency of criminal activity in the last month among IDU, by crime type.**

Crime Type - Percentage	Property	Dealing	Fraud	Violent
No crime	69	61	89	93
Less than once a week	17	11	10	4
Once a week	4	2	0	0
More than once a week	9	14	1	3
Daily	1	12	0	0

Twenty three percent of all IDU said they had been arrested in the last 12 months, and some had been arrested for more than one offence. Property crime was the most common reason given for arrest (7.7%) followed by possession/use of a prohibited substance (6.7%). The

remainder reported arrest for violent crime (4.8%), dealing (1.9%), fraud (1.0%) or another crime, including unpaid fines (4.8%).

IDU were also asked how much they had spent on illicit drugs yesterday, as a reflection of whether or not it may be necessary to commit crime in order to raise money to obtain drugs. Thirty four percent said they had not spent any money on drugs during the previous day. The majority of IDU reported spending between \$50 and \$99 yesterday (29%), between \$100 and \$199 (19%) or between \$20 and \$49 (12%). The remainder spent \$200 or more (6%).

Key informants reported that property crime was the most common form of crime among drug users, including break and enter, vehicle larceny, shoplifting and ATM money grabs. Several key informants reported on the increased frequency of petty larceny and shoplifting, explaining that stealing more items, albeit of a lesser value, was less risky than stealing large items less often. Another way of reducing the likelihood of penalisation was involving young people under 16 years to steal on behalf of the drug user, given that persons of school age would not receive a criminal conviction if apprehended. There were also reports that property crime was becoming more 'item specific' in which specific goods were stolen and swapped directly for drugs rather than cash. Crime appeared to be more associated with heroin and amphetamine use, and several key informants specifically mentioned that in general the only crime associated with cannabis was dealing. Violent crime was not discussed by many key informants, although one informant in corrections had noticed an increase in the number of prisoners remanded for violent robbery. Three key informants reported on amphetamine-related aggression and violence, but as a direct result of amphetamine use, and not necessarily associated with robbery.

A significant proportion of IDU reported that police had become more active recently (44%), although 64% said that the recent activity by police had not made it any more difficult than usual to purchase drugs (compared with 28% who said it had become more difficult). Approximately one third of IDU reported that more of their friends had been 'busted' by police lately, although the majority (61%) said police activity was stable in this area.

The majority of key informants had not noticed any recent change in police activity towards drug users (n=14), however 7 key informants reported that police activity had changed recently. One of the proposed reasons for change was the commencement of Operation Mantle by South Australian Police (SAPOL) in October 1998, aimed specifically at disrupting the activity of middle and low level drug dealers. Outcomes of Operation Mantle will be discussed in more detail below. Key informants also noted that police had changed their strategy in the management of drug users, incorporating harm reduction, information about treatment services, and education about drug effects in their approach.

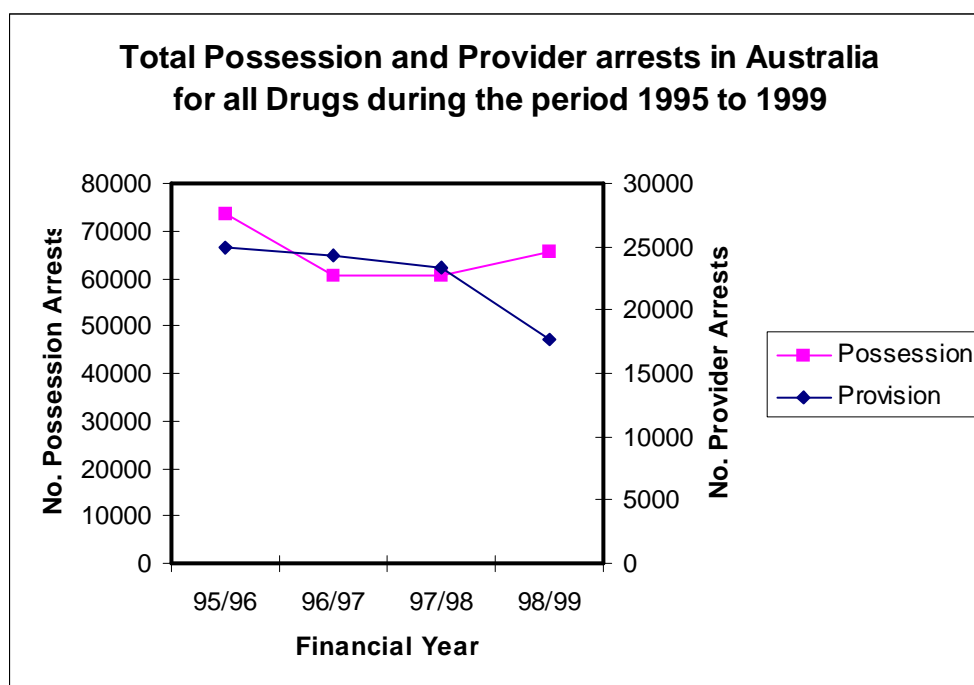
Between the 1998/1999 financial year there were a total of 13,367 arrests in South Australia associated with either drug use/possession (n=10139, 75.8%) or provision of drugs including the import/export of drugs, sell/trade of drugs, production/manufacture of drugs, deal/production of drugs (n=3228, 24.2% Australian Bureau of Criminal Intelligence, Local Arrest Data 1998-1999). These include those arrests resulting from Operation Mantle. Table 4.2 shows a breakdown of consumption and provision by drug type, and gender for arrests in South Australia during 1998-1999. Arrestees were predominantly male (60%-90%), and arrest for possession was more prevalent than arrest for provision. Cannabis was

most commonly the drug involved in drug related arrests, followed by amphetamine and heroin. There were no arrests for cocaine during this period, which is further confirmation of the paucity of cocaine in South Australia. Taking a national perspective, the number of arrests for possession and provision for all drugs appears to have remained stable over the last four years (Figure 4.2).

**Table 4.2 Arrests (possession and provision) by drug type and gender in South Australia during 1998/1999**

Drug type	Possession	Provision	% male	Total arrests
Cannabis	9055	2913	86%	11968
Heroin & other opioids	205	135	74%	340
Amphetamine & congeners	490	133	78%	623
Cocaine	4	6	90%	10
Hallucinogens	230	17	85%	247
Anabolic Steroids	0	0	0%	0
Other/Unknown	155	24	60%	179

**Figure 4.2 Total numbers of provision and provider arrests in Australia for all drugs during the period 1995 to 1999**



There were five CIB police officers that were directly involved in Operation Mantle and were interviewed as key informants. In general, it was reported that the number of arrests, especially those involving amphetamine possession and provision, had significantly increased since the inception of Operation Mantle. Accordingly, the number of drug seizures had also increased, although this did not necessarily correspond with an increase in

seizure size. Some officers reported that seizure sizes had decreased as dealers were keeping smaller quantities of drug on their person in order to avoid heavy penalisation.

A police contact survey was also executed as part of Operation Mantle which involved questioning users about their use of illicit drugs, perceptions of recent changes in the price, purity, availability and in the policing of illicit drugs, and experience of and views on drug treatment (Teece, 1999). A total of 312 respondents were interviewed between October 1998 and March 1999. The median age of respondents was 29 (range 15-51 years) and 62.5% were male. Respondents were more likely to be unemployed (85.8%) and had English speaking backgrounds (69.6%) Asian (13.3%) or Aboriginal backgrounds (5.6%). The majority had used heroin in the last six months (75%) followed by the use of cannabis (44.2%) and amphetamine (30.8%). A smaller proportion had used cocaine (2.6%), LSD (6.4%) and ecstasy (2.6%) in the last 6 months. The most preferred drug among respondents was heroin (65.7%) followed by amphetamine (18.9%) and cannabis (18.3%). The median amount spent per week on drugs by respondents was \$150 (range: \$0 to \$3000) and around half of the respondents claimed to that social security was their source of finance for these purchases (56.7%), followed by bonafide employment (16.6%) and dealing (5.4%). Overall, the majority of respondents said that the price, quality, quantity and availability of illicit drugs had not changed in the last six months. Around 40% had noticed changes in policing procedures in that the police were more visible than had been previously, and applied more pressure to drug users. Around half of the respondents had sought treatment for their drug use, predominantly methadone maintenance or a residential program.

#### 4.5 SUMMARY OF DRUG RELATED ISSUES

The main drug related issues evident in 1999 are summarised in Table 4.3. Injection related problems are highly prevalent among IDU, and the incidence of fatal and non-fatal overdose appears to be increasing. However, it appears that the needle sharing and the use of un-clean needles is decreasing. Crime is stable and high, and the frequency of petty larceny appears to have increased. The inception of Operation Mantle has led to disruption of low and middle levels dealers, and an increase in the number of arrests and seizures. While police are making a more visible presence in South Australia, harm minimisation and provision of information about drug effects and treatment services are being incorporated into police procedure.

**Table 4.3 Summary of drug-related issues**

<p><b>General Health</b></p>	<p>Two thirds of IDU had experienced at least one injection-related problem in the last month</p> <p>Increase in the number of fatal and non-fatal heroin overdoses</p> <p>ADIS enquires stable regarding frequency and drug type</p>
<p><b>Needle sharing</b></p>	<p>Majority of IDU using clean needles</p> <p>Decrease in unsafe needle sharing behaviour</p>
<p><b>Heroin Overdose</b></p>	<p>Around one half of IDU ever experienced a heroin overdose</p> <p>Increase in number of opioid-related fatalities over last ten years</p> <p>Increase in number of drug-related ambulance attendances over last 12 months</p>
<p><b>Crime – Police activity</b></p>	<p>Around two thirds of IDU committed crime in last month - stable</p> <p>Increase in the frequency of petty larceny</p> <p>Operation Mantle led to increased disruption of low and middle level dealers, and increase in the number of seizures and arrests</p> <p>Harm minimisation and education part of police approach</p>



## 5.0 COMPARISON OF DATA FROM DIFFERENT SOURCES

Tables 5.1 to 5.6 summarise the key findings and the triangulation of the data from the three sources: Injecting Drug Users (IDU), Key Informants (KIS) and Secondary Indicator data (OTHER). Data are presented separately for each of the four main drug classes, other drugs, and drug related issues.

There was congruency of information between the three sources, and most findings were confirmed by at least two of the sources. The lower number of trends supported by OTHER, secondary indicator data is a reflection of the limited availability of the indicator data.

**Table 5.1 Trends in heroin endorsed (3) by Injecting Drug Users (IDU), Key Informants (KIS) and secondary indicator sources (OTHER).**

<b>Heroin Trends</b>	<b>IDU</b>	<b>KIS</b>	<b>OTHER</b>
Price stable (\$400/gm, \$50/cap)	3	3	3
Availability stable to increasing and very easy	3	3	
Purity medium to high, stable to increasing	3	3	3
Increase in the number of (younger) users	3	3	
Increased availability of rock heroin	3	3	
Increase in the number of Vietnamese using/dealing	3	3	
Smoking as an introduction to heroin in youth		3	

**Table 5.2 Trends in amphetamine endorsed (3) by Injecting Drug Users (IDU), Key Informants (KIS) and secondary indicator sources (OTHER)**

<b>Amphetamine Trends</b>	<b>IDU</b>	<b>KIS</b>	<b>OTHER</b>
Price stable (\$50/'street' gm, \$200/'pure' gram)	3	3	3
Availability stable to increasing and very easy	3	3	
Purity low & stable, average 6%			3
Purity medium to high and increasing availability of high purity forms including crystal meth and pseudoephedrine-based amphetamine	3	3	
Increase in number of (younger) users	3	3	
Increased frequency of use (IDU)	3		
Increase in transition to heroin injection	3	3	

Decrease in number of IDU using	3
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**Table 5.3 Trends in cannabis endorsed (3) by Injecting Drug Users (IDU), Key Informants (KIS) and secondary indicator sources (OTHER).**

<b>Cannabis Trends</b>	<b>IDU</b>	<b>KIS</b>	<b>OTHER</b>
Price stable (\$25/bag, \$220/ounce)	3	3	3
Availability stable and very easy	3	3	
Potency high and stable (unverified by AFDL)	3	3	
Availability of new, more potent strains(unverified by AFDL)	3	3	
Number of users stable	3	3	
Frequency of use stable	3	3	
IDU are unaware of health complications of heavy use		3	
More people selling – easy market to break into		3	

**Table 5.4 Trends in cocaine endorsed (3) by Injecting Drug Users (IDU), Key Informants (KIS) and secondary indicator sources (OTHER).**

<b>Cocaine Trends</b>	<b>IDU</b>	<b>KIS</b>	<b>OTHER</b>
Price stable (\$250/gm, \$80/cap)	3	3	3
Availability easy to difficult and fluctuating	3	3	
Purity 53%, low to high, decreasing to increasing	3	3	3
Number of users decreased in IDU population	3		
Change in cocaine market/more secretive/organised crime		3	
More likely to be used by affluent persons		3	

**Table 5.5 Trends in other drugs endorsed (3) by Injecting Drug Users (IDU), Key Informants (KIS) and secondary indicator sources (OTHER).**

<b>Other Drug Trends</b>	<b>IDU</b>	<b>KIS</b>	<b>OTHER</b>
Continued trend of methadone injection among IDU	3	3	
Benzodiazepine use remains prevalent among IDU	3	3	
Antidepressant use predominantly therapeutic	3		
Increased availability of ecstasy		3	
Ecstasy price \$50, purity 32%			3
Decreased use of ‘other opiates’ among IDU	3		
Low prevalence of hallucinogen use among IDU	3		
Low prevalence of inhalant use among IDU	3		
Very low prevalence of anabolic steroid use among IDU	3		

**Table 5.6 Trends in drug related issues endorsed (3) by Injecting Drug Users (IDU), Key Informants (KIS) and secondary indicator sources (OTHER).**

<b>Drug related issues</b>	<b>IDU</b>	<b>KIS</b>	<b>OTHER</b>
Injection – related problems remain prevalent among IDU	3		
Increase in the number of overdoses and ambulance callouts	3		3
Decrease in unsafe needle use			
Crime remains prevalent among IDU	3	3	3
Increase in petty theft		3	
Increased police presence and disruption to dealers	3	3	3

## **6.0 DISCUSSION**

### **Summary of main findings**

The IDRS revealed several drug trends in illicit drug use in South Australia in 1999. While maintaining a relatively stable price, the availability of heroin appears to have increased. Purity increases were also noted, and this may be associated with the increased availability of rock heroin. Concomitant with increased heroin availability was the observation that more Vietnamese persons were involved in the sale of heroin, particularly those of a younger age. Amphetamine also was reported to have increased in purity, particularly the availability of methylamphetamine in crystal form, and pseudoephedrine based amphetamine. The availability of cocaine in this population appears to have decreased in comparison with previous years, as has any reported use of anabolic steroids. A small decrease was also noted concerning the use of other opiates. Trends in drug related issues included an increase in the number of heroin overdoses and ambulance callouts. In addition, the inception of Operation Mantle has resulted in increased disruption to low and middle level dealers in South Australia.

The IDRS also found a continuation of drug trends from previous years. Cannabis use and price, purity and availability of cannabis were stable, although there were reports of new, more potent forms of cannabis being available, but as yet have been unverified by AFDL. There was a continuing trend for use of pharmaceuticals among IDU, particularly benzodiazepines and methadone. Injection-related problems remain prevalent among IDU, despite the apparent decrease in unsafe needle use. Criminal behaviour also remains high and stable among this population, although increased petty theft was reported by key informants involved in law enforcement.

### **Study limitations**

It is worth noting that while attempts were made to substantiate the reports made by key informants, these reports are still a subjective assessment of drug use and drug users, made by separate individuals. This is particularly relevant for the findings on cocaine, given that much of the information was provided only by key informants, and should be interpreted with some caution. However, overall key informant reports played an important role in providing depth and detail to the more objective data provided by the IDU survey and secondary indicators. The combination of the three methods seems to provide an efficient and complementary way to monitor drug trends in illicit drug use over time.

The IDRS is also limited by the type of secondary indicator data available. While the AFDL provide the range and average drug purity for each of the main drug types, it may be more fitting to observe the data as a frequency distribution, with median and modal statistics also available. Another limitation is the timeliness of the data, and some of the data sets used for the IDRS were not available for any part of 1999. For example, the South Australian Schoolchildren's Survey was based on 1996 findings, and really is only an estimate of drug use among schoolchildren in 1999. Finally, it would be beneficial to obtain data sets other than the ones used for the 1999 IDRS to further bolster the findings. In the first instance this could include objective data on the potency of cannabis, which would allow confirmation of subjective reports of cannabis potency. The IDRS could be further enhanced by data sets of specialist studies of illicit drug users, and prevalence of drug use among specific populations (eg. schoolchildren, Vietnamese community, Aboriginal community, prison etc.).

## **Implications for policy change and research**

The findings from the 1999 IDRS have policy and research implications that are outlined below. It is worth noting that some of these issues may have already received attention to date.

- Implementation of education programs aimed specifically at people of school age concerning drug use and associated consequences of use.
- Implementation of interventions to reduce the frequency and likelihood of heroin overdose, for example, “*It’s rarely just the ‘h’*” intervention strategy as implemented in 1996 (see McGregor et al. 1999).
- Characterisation and potency testing of cannabis cultivars by AFDL or other laboratories.
- Continuation of research into factors influencing the current popularity of heroin use and its availability, and interventions to reduce the harms associated with heroin injection, such as injection-related health problems.
- Research into demographic profile, patterns of heroin use, and heroin marketing among the Vietnamese community.
- Research into factors that would decrease the harms associated with intravenous methadone use.
- Determination of the relative availability of rock heroin (compared with powder) and consequences of use associated with this more potent form of heroin.
- Research into changes in the availability of heroin in Adelaide, including factors affecting this market.
- Research into factors associated with transition from amphetamine to heroin use, and development of early intervention strategies for susceptible individuals.
- Research into the chemical analysis of street amphetamine and designer drug formulations.
- Determination of the demographic profile of cocaine users in South Australia.

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