SOUTH AUSTRALIAN DRUG TRENDS 2000
Findings from the Illicit Drug Reporting System (IDRS)

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TABLE OF CONTENTS

LOCATION OF TABLES AND FIGURES

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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
A&E	Accident and Emergency
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-methylenedioxymethamphetamine (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
RAH	Royal Adelaide Hospital
SA	South Australia
SAPOL	South Australian Police

EXECUTIVE SUMMARY

The 2000 IDRS detected several drug trends during the past 6 to 12 months (ie. between mid 1999 and mid 2000) 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.

HEROIN

Heroin appears to be highly available, and was cheaper to purchase than in 1999. While heroin purity is still considered high, purity appears to have decreased compared with 1999 and 1998. The use of heroin appears to have increased in the general population. Rock heroin appears to have increased in use and availability.

AMPHETAMINE

Amphetamine appears to be highly available, and the cost of one gram was comparable in price with 1999. Point amphetamine is increasingly available and cheap. Ice, shabu or crystal meth are high grade forms that have increased since 1999. Amphetamine purity has increased with the event of point amphetamine and crystal meth. The use of amphetamine appears to have increased among the general population.

CANNABIS

Cannabis appears to be highly available, and price was comparable with 1999, although the median price of one ounce had decreased by around $20. The purity appears to be high according to IDU and key informants, and there are reports of potent hydroponically-grown cultivars being available. The use of cannabis appears to be relatively stable.

COCAINE

Cocaine is difficult to obtain and appears to have fluctuated in availability. The price was comparable with 1999, but it is difficult to make any meaningful comparisons with such small sample sizes in 1999 and 2000. The purity appears to be medium, but was not confirmed by forensic laboratories given that there were no seizures in 2000 in SA. The use of cocaine appears small in South Australia.

Table 1. Price, purity, availability and use of heroin, amphetamine, cocaine and cannabis for 2000.

	Heroin	Amphetamine	Cannabis	Cocaine
Price				
Cap	$50	NA	$25 (2 gm bag)	$75
Gram	$310	$50 (Street)	$200 (ounce)	$300
Point	NA	$30 (Point/paste)	NA	NA
Change	Stable to decreasing	Stable	Stable	Stable
Availability	Very easy	Very easy	Very easy	Difficult
Change	Stable	Stable to fluctuating	Stable	Fluctuating
Purity[a]	47.7%	16.9%	High[b]	Medium[b]
Change	Fluctuating	Fluctuating to stable	Stable	Fluctuating
Use	Stable to increasing in general community	Increased use of point speed and crystal meth	Stable	Stable

[a]Based on the purity of AFP seizures (analysed at AFDL)
[b]Based on IDU and Key informant estimates

OTHER DRUG USE

Intravenous methadone use appears to have doubled over the last 5 years, and diverted methadone also continues to be used. Benzodiazepine use is widespread but stable among IDU and diazepam is the most popular and used by over half of those who use benzodiazepines. Ecstasy price appears to have slightly decreased, but use is low in this population. The use of antidepressants, hallucinogens and inhalants is stable and low in this population. Other opiate use is also stable and morphine is the most popular. Steroid use is negligible in this population. Table 2 shows a summary of trends of other illicit drug use.

Table 2. Summary of trends of other illicit drug use

Methadone	• ¼ of IDU who had used methadone in the last 6 months were not in methadone treatment • Injection of methadone syrup appears to have doubled over the last 5 years
Benzodiazepines	• Use remains widespread among IDU but stable • Diazepam was used by over half of IDU who used BZD
Antidepressants	• Prevalence of use is stable • Predominantly used for therapeutic purposes • SSRIs and SNRIs most popular
Ecstasy	• Price decreased, $25 - $50 • Purity 37% and stable • Not widely used among IDU
Other Opiates	• ¼ of IDU using (stable) – half were using once a week or more • Morphine is the most popular
Hallucinogens	• LSD price $20-$25 per tab • Low prevalence of regular use among IDU
Inhalants	• Low prevalence of regular use among IDU • Amyl nitrate most frequently used, if at all
Anabolic steroids	• Negligible steroid use among IDU in 2000

DRUG RELATED ISSUES

The main drug related issues evident in 2000 are summarised in Table 3. Injection related problems are highly prevalent among IDU, particularly among injectors of methadone syrup. There appears to be an increase in amphetamine related health effects of depression, paranoia, psychosis, aggressive behaviour and poor nutrition. Seventy five percent of IDU had not shared needles in the last month (around 90% in 1999), although fifty percent shared equipment. Around one half of IDU with a lifetime prevalence of heroin use had experienced at least one overdose at sometime in their life, and two thirds had viewed an overdose. Ambulance call-outs to drug-related emergencies had increased over the last 2.5 years, and amphetamine and heroin presentations at the Royal Adelaide Hospital accident and emergency had also increased. Around one half of IDU had committed a crime in the last month (two thirds in 1999) and thirty percent had been arrested in the last 12 months. Local amphetamine production and distribution was increased, and Asian persons are still heavily involved in the heroin market.

Table 3. Summary of trends in drug-related issues

General Health	• Sixty percent of IDU had experienced at least one injection-related problem in the last month • Methadone injectors more likely to experience difficulty injecting and bruising/scarring • Increase in amphetamine-related health and social effects
Needle sharing	• 25% of IDU shared needle at least once in last month (10% in 1999) but key informants report increased awareness • 50% of IDU sharing equipment
Overdose	• Around one half of heroin-using IDU ever experienced an heroin overdose • Increase in number of opioid-related fatalities over last 11 years in SA and Australia wide • Increase in number of drug-related ambulance call-outs over the last 2.5 years by 35%
Crime – Police activity	• Around one half of IDU committed crime in last month and 30% were arrested in the last 12 months • Increase in local amphetamine manufacturing businesses and distribution • Asians strongly involved in heroin market

RESEARCH AND POLICY IMPLICATIONS

The findings from the 2000 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.

- Preparation by agencies for an increase in amphetamine related problems (mental health, drug treatment, social health, law enforcement).
- Health promotion and eduction concerning the adverse effects of amphetamine use.
- Development of an instrument to screen for harmful and hazardous amphetamine use in primary health care settings.
- Development of improved treatment protocols for amphetamine abuse and dependence.
- Research into the chemical analysis of amphetamine, methylamphetamine and designer drug formulations.
- Supply reduction aimed at reducing the number of local amphetamine laboratories and distribution in South Australia.
- Development and 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.
- Development and implementation of strategies to reduce behaviour and harms associated with intravenous methadone syrup use.
- Development and implementation of strategies to increase safer use and disposal of needles.

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 and 1999 focussing on the same core jurisdictions, although in 1999 the core states were 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 (see McKetin et al. 2000 for a national comparison of 1999 findings, and Humeniuk, 2000 for the South Australian perspective). The year 2000 is the fourth year that the IDRS has been executed nationally, incorporating all states and territories.

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 2000 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 (between mid 1999 and mid 2000).

2.0 METHOD

A triangulated approach was utilised 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 area, or some related field, and 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 107 injecting drug users (IDU) was interviewed during June and July 2000. 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 2000. 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, drug use scenes (eg. rave parties) 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 (13 females and 17 males). Key informants comprised a range of persons from varied professions including: 11 drug treatment workers (medical officers, nurses, psychologists and telephone counsellors), 6 community health workers (youth workers, social workers, psychologists and specific cultural group workers),

2 workers from corrections (a social worker and a psychologist), 5 police officers working with Operation Mantle, 3 user representatives/peer educators, one ambulance officer, one drug courts case manager and one person familiar with the rave/dance party clubbing scene.

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. Twelve key informants identified heroin (40%), 11 identified amphetamine (36.7%), 6 identified cannabis (20%) and one key informant discussed cocaine (3.3%). It is worth noting that while this last key informant gave information about cocaine, it was not the main drug that they had contact with in the last 6 months. Rather, it was an opportunity to learn more about cocaine trends as there was a paucity of information in the area. In addition, several key informants gave useful information on more than one drug.

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 INDICTORS (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) of 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=107)

Demographic	**% of IDU**
Gender (male)	57.9
Area	
Central/Eastern	17.9
Western	25.5
Southern	45.3
Northern	11.3
Ethnicity	
ESB	87.9
NESB	3.7
ATSI	8.4
Employment	
Not employed	46.7
Full time	17.8
Part time/Casual	21.5
Student	3.7
Home duties	5.6
Sex Industry worker	4.7
Tertiary Education	
None	50.5
Trade/technical	27.1
University/college	22.4
Currently in treatment	34.6
	Years
Age (median)	29
School Education (median)	11

The gender spread of the IDU sample was relatively even, and similar to the 1999 sample. The median age of subjects in the 2000 IDU sample was 29 years (range 17-47 years), - similar to the 1999 and 1998 samples of IDU. Male IDU subjects were significantly more likely to be older than the female IDUs (median age: 32.5 vs. 27.8 years, $p<0.01$). Of those subjects who were of 'Non English Speaking Background' (excluding Aboriginal and Torres Strait Islander), two spoke Vietnamese, one spoke Italian and the other spoke Chinese. The range of number of years of schooling completed fell between 4 and 12 years, and 86% of subjects had completed at least year 10. Around one third of the sample were currently in drug treatment. The most common form of treatment was opioid maintenance pharmacotherapy. That is, 25.2% of IDU received methadone, 4.7% received naltrexone, while 4.7% of IDU subjects each received other therapies (diazepam, kapanol, doloxine or morphine). Almost half of the sample (43.9%) reported that they had 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 (mean: 19.4 years, range 9 – 42 years). There was no significant difference in median age between males and females for this parameter. However, subjects from northern, southern and western areas tended to inject at a significantly earlier age than subjects from the central/eastern area (Median age: Central/Eastern 21 years, Southern 18 years, Western 18 years, Northern 17.5 years).

The drug of first choice or favourite drug was heroin for the majority of the IDU sample (56.1%), followed by amphetamine (29.9%). The remaining subjects preferred cocaine (3.7%), cannabis (2.8%), other opiates (2.8%), heroin plus cocaine, or 'speedball' (2.8%), methadone (0.9%) or ecstasy (0.9%). Heroin and amphetamines were also the predominant drugs of choice in the 1999 and 1998 sample. Consistent with drug of choice, 56.1% of the IDU reported that heroin was the last drug they had injected, followed by 33.6% reporting amphetamine. The remaining IDU reported that the last drug they had injected either was methadone (7.8%), or other opiates (2.8%). Accordingly, heroin was the drug that had been injected most often by IDU in the last one month (58.9%), followed by amphetamine (33.6%), methadone (4.7%), and other opiates (2.8%).

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 most likely to be amphetamine (56.1%) followed by heroin (40.2%). The remaining IDU first injected other opiates (1.9%), ecstasy (0.9%) or cocaine (0.9%). Twenty six subjects (24%) of the IDU stated that heroin was now their first drug of choice, although amphetamine was the first drug they had ever injected. Three subjects made a transition from heroin to amphetamine use. Overall, 43.3% 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 lower than in the 1999 sample (59% transition), but comparable with 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 changes in transition from amphetamine to heroin use, is not clear. Some jurisdictions (eg. NSW) noted that the younger users in their IDU sample were more likely to have first injected heroin compared with older users who were more likely to have first injected amphetamine. This was not the case in South Australia. There was no significant difference concerning the type of drug that was first injected between IDU that were twenty five years old or less, and those who were twenty six years or older.

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. The median number of drugs ever used by IDU was 10 (range: 3-14), while the median number of drugs that had been used in the previous six months was 6 (range: 3-12). Alcohol and cannabis were the equally most regularly used drugs in the last six months by 87.9% of the IDU sample, followed by tobacco (83.2%), heroin (72.9%), benzodiazepines (64.5%), amphetamine (52.3%), methadone (39.3%), other opiates (23.4%), cocaine (19.6%), hallucinogens (19.6%), ecstasy (15.9%), antidepressants (11.2%), inhalants (1.9%) and steroids (0%).

The majority of the IDU were in a private home the last time they used a drug intravenously (71.0%). The remainder last injected while they were in a car (17.8%), a public toilet (9.3%), a street, park or beach (0.9%) or some other place (0.9%).

Table 3.2 Drug use history of IDU subjects as a percent of the total sample (N=107)

Drug Class	Ever used	Ever Injected	Injected last 6 mths	Ever smoked	Smoked last 6 mths	Ever snorted
1. Heroin	81.3	81.3	72.0	33.6	7.5	22.4
2. Methadone	58.9	30.8	21.5			
3. Other opiates	58.9	47.7	11.2	10.4	2.8	3.8
4. Amphetamines	89.7	86.0	50.5	32.7	5.6	69.2
5. Cocaine	73.8	65.4	16.8	12.1	3.7	50.5
6. Hallucinogens	77.6	16.8	3.7	4.7	0.9	0.0
7. Ecstasy	57.9	32.7	10.3	2.8	0.9	2.8
8. Benzodiazepines	77.6	15.9	4.7	8.4	2.8	1.9
9. Steroids	5.6	4.7	0.0			
10. Alcohol	95.3	6.7	1.0			
11. Cannabis	97.2					
12. Anti-depressants	25.2					
13. Inhalants	20.6					
14. Tobacco	85.0					

* 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 twelve key informants and seventy five of the 107 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 1999 and 1998 IDRS surveys. The key informants who gave information about heroin consisted of three user representatives/peer educators, three drug treatment workers, three community health workers, one drug courts manager, one police officer 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. It is worth noting that more heroin-using IDU in 2000 appeared to reside in southern suburbs than had in 1999. Moreover, in 1999, no southern suburbs were included as being popular areas for heroin-using IDU to reside. While these yearly differences may represent differences in sampling, it appears that there is a genuine shift as noted by both key informants and IDU. In summary, heroin was most popular in the areas and suburbs shown below.

- *Southern suburbs* – (51.9% of IDU) included many different southern suburbs including those closer to the city (Keswick, Ashford, Forestville 5035 and Eastwood, Parkside 5063) down to the Plympton area (5038), the Park Holme area and neighbouring suburbs (5043) and particularly those of the Sturt/Darlington area and neighbouring suburbs (5047).

- *Northern suburbs* – (9.1% of IDU) Elizabeth area (postcodes 5112 & 5113) and Salisbury area (5108 & 5109)

- *Western suburbs* – (20.8% of IDU) inner city west out to Port Adelaide. That is: Bowden, Brompton, Croydon (5007 & 5008), particularly Mile End, Torrensville and thebarton (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* – (18.2% of IDU) Adelaide (5000), Norwood area (5067), Walkerville area (5081), Prospect, Fitzroy, Ovingham (5082), Blair Athol, Kilburn (5084)

3.2.1 PRICE

The general median price of one gram, or weight, of heroin reported by 38 IDU (35.5%) in 2000 was $310, which was less than the median price reported in 1999 and 1998 of $400. The median price of one gram of heroin most recently purchased by 30 IDU was $320, and ranged in price from $180 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 between $250 and $450.

A substantial portion of IDU (n=49, 45.8%) also reported buying heroin in half-gram weights, the median price of which was $180 (range: $100-$390), less than the median price of a half weight of heroin in 1999 which was $237.50. IDU reports of the cost of half weights of heroin were consistent with the information from two key informants who

reported that half of one gram of heroin cost between $150 and $300. Other amounts of heroin were also purchased by IDU including a quarter of a gram of heroin (n=44, median = $100, range: $60-$200), a 'rock' of heroin (n=8, median = $80, range: $20-$120), 5 grams of heroin (n=7, median = $1000, range: $750-$1500), one ounce of heroin (~ 28 gm, n=3, median = $2500, range: $2000-$3000) and 10 ounces of heroin (~ 280 gm, n=1, price = $15000). Three key informants reported that one quarter gram of heroin cost between $90 and $110.

The most common means of heroin purchase among IDU (n=70, 65.4%) were as caps (generally 0.1 to 0.2 grams). The mean, median and modal price for a cap of heroin was $50, ranging from $25 in price to $100. However, it is worth noting that, according to IDU, a $100 cap is twice the size of a $50 cap. Five key informants gave information concerning the price of a cap of heroin, stating it fell between $50 and $60, although $50 was the most commonly reported price for a cap of heroin.

These prices are comparable with the prices provided by the Australian Bureau of Criminal Intelligence for the period January to June 2000. The price for one cap of heroin was quoted at $50, one half-weight (0.4-0.6 gm) ranged between $120 to $150, and the cost of one gram was $350. The ABCI also quoted that the price of one ounce of heroin was between $8000 and $10000, which was greater than the price quoted by IDU for one ounce of heroin. According to the ABCI, one kilogram of heroin sold for between $140 000 and $160 000, and half an Asian unit, or Catti sold for $53 000 to $60 000 (one Catti equals 700gm, half Catti equals 350gm). It is worth noting that police purchases of drugs may be somewhat overestimated compared with the prices paid by users, who have access to regular dealers, drug using friends and long-standing networks.

The majority of the IDU who gave information about heroin (n=75, 72.1%) reported that in the last six months the price of heroin had been stable (65.3%). The remainder thought that in the last six months the price of heroin had decreased (10.7%), fluctuated (21.3%) or were not sure about price changes (2.7%). The majority of the key informants who gave information concerning heroin also thought that the price had remained stable (50%). The remainder thought it had decreased (16.6%), fluctuated (16.6%), or were unsure (16.6%). It is interesting to note that while the majority of IDU and key informants believed the price of heroin had remained stable in the last six months, the price of heroin obtained from all three sources (IDU, KIS and ABCI) showed that the price of heroin had decreased compared with the previous year.

3.2.2 AVAILABILITY

Heroin was considered easy or very easy to obtain by most IDU (96%). IDU were asked how they thought availability of heroin had changed over the last 6 months, and most IDU considered it had remained stable (58.7%). The remaining IDU thought it was either easier to obtain (14.7%), more difficult (1.3%) or had that availability had fluctuated over the last 6 months (22.7%). Consistent with IDU reports, the majority of key informants also believed that heroin was either easy or very easy to obtain (83.3%), the remainder believing it was difficult to obtain (16.7%). Similarly, the majority of key informants believed that the availability of heroin had not changed over the last 6 months (50%), the remainder reporting that availability had increased (ie. become easier, 25%) or decreased (25%).

Of the IDU who gave information about where they usually scored their heroin, the majority reported purchasing from a mobile dealer (53.3%), which involved ringing the dealer on their (mobile) telephone, and arranging a place to meet. The remainder purchased from friends (13.3%), the dealer's home (17.3%) or a street dealer (10.7%).

3.2.3 PURITY

The majority of IDU reported that current heroin purity was 'medium' (42.7%), the remainder reporting it was either high (33.3%) or low (12.0%). The majority of the key informants believed also that the purity of heroin was medium (50%). One key informant thought that the current purity of heroin was high (8.3%), and the remainder were unsure of current purity levels (41.7%). Concerning changes in purity of heroin over the last six months, the majority of IDU believed it to be fluctuating (58.7%), or stable (22.7%). The remainder of IDU thought that over the last 6 months heroin purity had increased (8.0%) or decreased (5.3%). Key informants were diverse in their beliefs about changes in heroin purity over the last 6 months. Four reported heroin purity had remained stable (33.3%), three reported an increase (25%), three reported fluctuating purity (25%), and two were unsure (16.6%).

The Australian Bureau of Criminal Intelligence (ABCI) provided quarterly purity data on heroin seized in South Australia during the 1999/2000 financial year. Mean purity over the 1999/2000 financial year was 47.7% (range: 16.3% - 75.7%, n=251). This was lower than the average purity of heroin in 1998/1999 (61%) and 1997/1998 (59%). The 1999/2000 purity was comparable with the gross estimates provided by IDU and key informants, of the heroin currently being of 'medium' purity. While the ABCI provides data on two seizure quantities (< 2 grams and ≥ 2 grams), the above purity values are based on the culmination of the two seizure weights, given that their average purity values were similar. As in previous years, this average purity statistic represents the combination of seizures from the South Australian Police (SAPOL) and the Australian Federal Police (AFP). The mean purity of all heroin seized by SAPOL was 47.3%. The mean purity of all heroin seized by AFP was 70.3%. Presumably this heroin was of higher purity because it had been seized at the South Australian border and was further from being purchased by end users.

3.2.4 USE

Prevalence of use among the general population

The National Drug Strategy National Household Survey 1998 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 1999 Australian Needle and Syringe Program Survey (45.8%), followed closely by amphetamine. 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.

Current patterns and trends 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=78, 72.9%). Heroin users were similar in demographic profile to the overall IDU sample, most being in their early thirties (median age: 31 years), having 10 to 11 years of education, and around one half having a previous prison history. Gender breakdown was similar to that of all IDU with a relatively even spread of males to females (males: 57.7%), although key informants were more likely to report that heroin users were male. IDU heroin users were predominantly of English-speaking background, although key informants reported an increasing number of Asian persons. Breakdown of employment status was similar to the IDU sample as a whole, with 48.7% reporting being unemployed. Around 14% of IDU were full time employed, or part time/casual employment (21.8%), the remainder undertaking study, sex work or home duties. Key informants were more likely to report heroin users as unemployed in the range of 50 to 100%.

Both rock (85.9%) and powder (96%) 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. The use of rock heroin appears to have increased compared with 1999 where only 57% of IDU reported using rock heroin, and in 1998 where it was only mentioned briefly. Two key informants reported the use of rock heroin, while the remaining (majority) were more likely to report the use of powder or block heroin (compressed powder).

Injection was the most common route of administration among IDU, and 98.7% 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, although several key informants reported small groups smoking heroin. Key informants also reported that smoking was highly prevalent among Asian communities, although two key informants said that a transition to injecting heroin eventually occurs among smokers at around 25 years of age, or when the cost of smoking heroin starts to cut into their profit margin. In rough terms, the same 'high' can be reached from smoking one full gram of heroin as injecting one quarter gram of heroin.

Key informants reported varied frequency of heroin use. A significant proportion used heroin on a daily basis, between 1 and 6 times, although the most frequently reported was 2 to 3 times a day. One key informant discussed heroin smoking stating it occurred generally between three and four times per day. There were also reports of weekly and fortnightly use, or using once every few months. IDU also reported a wide variation in heroin use, with an average of 82.5 days of use in the last six months, and a median and modal use of 60 days and 180 days respectively. Around one third (34.6%) of persons that had used heroin in the last 6 months reported receiving treatment for opioid dependence, which may account for some of the less frequent users. Of the IDU who had mostly injected heroin over any other drug in the last month (n=63), 27% said they injected heroin weekly or less. The majority (41.3%) said they injected weekly but not daily, 14.3% said they injected once a day, 14.3% said they injected 2 to 3 times per day, and 1.9% reported injecting heroin more than three times a day in the last month.

From the analysis of the IDU survey and key informant data, it appears that use of heroin in the southern suburbs has increased. In previous years southern suburbs (particularly Noarlunga and Christies Beach) were predominantly associated with amphetamine use only

(excluding cannabis which is widespread). In 1999 it was noted that heroin had become popular in the western suburbs, presumably due to the high number of Asian and Vietnamese persons residing and working there. The findings from the 2000 surveys suggest that heroin use is becoming more widespread in South Australia, and less likely to be occurring in specific suburbs only. Furthermore, comparing heroin purity between 2000 and 1999, it appears that on average, purity has markedly decreased (61% in 1999 compared with 47.7 in 2000). However, this was not reported by either IDU or key informants. This drop in purity may reflect the concomitant price drop of heroin by gram.

Key informants generally reported that heroin use in the last 6 months had been stable, with no real trends emerging. Several reported that there had been an increased awareness of hepatitis among the IDU community, and also of the importance of using clean needles and equipment. A few mentioned the association between naltrexone and heroin overdose. IDU also commented on the relationship between heroin overdose and naltrexone. The major trend reported by IDU was increased heroin and other drug use by the community in general. That is, more people are using and a broader range of people are using. In addition those people already using heroin are using greater quantities and using more frequently. Several IDU also reported the increased number of youth initiating heroin use, although this was not consistent with reports from key informants. Finally, several IDU noted that numbers of people were making a transitions between drugs, either from heroin to amphetamine, or amphetamine to heroin. Neither group reported any major trends on the emergence of new drugs in this community.

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, and was cheaper to purchase than in 1999. While heroin purity is still considered high, purity appears to have decreased compared with 1999 and 1998. The use of heroin appears to have increased in the general population. Rock heroin appears to have increased in use and availability.

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

Price	
Gram	$310 ($180-$600); Stable to decreasing
Cap	$50; Stable
Availability	(very) easy; Stable
Purity	47.7% (ABCI); Fluctuating
Use	Increase in general community use Increase in availability and use of rock heroin Use is more geographically widespread

3.3 AMPHETAMINE

Trends in amphetamine use were obtained from reports given by eleven key informants and forty four of the 107 IDU (41.1%) interviewed who felt confident to give information about price, purity and availability of amphetamine. The key informants who gave information about amphetamine consisted of three drug treatment workers, two persons from corrections, three police officers, one user group representative and one person involved in Rave parties and clubbing. 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* – (12.5% of IDU) Elizabeth area (postcodes 5112 & 5113) and Salisbury area (5108 & 5109)

- *Southern suburbs* – (37.5% of IDU) Coastal areas, Noarlunga area (5167 & 5168) and Christies area (5164 & 5165), Parkholm, Morphettville (5043), Plympton (5038)

- *Central/Eastern suburbs* – (23.2% of IDU) inner city (5000), Norwood (5067), Prospect, Fitzroy (5082)

- *Western suburbs* – (37.5% of IDU) inner city west out to Pt. Adelaide and Largs bay (5007 to 5016), particularly Thebarton, Mile End, Torrensville (5031)

3.3.1 PRICE

The price of amphetamine was found to be highly variable depending upon the form or quality of the amphetamine purchased. The median and modal price of one gram of amphetamine, as commented on by 44 of the 107 IDU, was $50 (range $25-$200). This is comparable with the median price of amphetamine in 1999 and 1998, and also with the reports of key informants who gave a range of $40 to $50 for one gram of amphetamine. The above price for one gram of amphetamine refers to that substance (generally powder) which has been 'cut' with other additives to increase the bulk, and decrease the purity of the drug. However, several key informants and many IDU (n=18) also referred to purchasing amphetamine in 'point' form, which appears to be amphetamine with less of the additive and therefore is of higher purity, but lesser volume (also called 'base' or 'paste' in other jurisdictions). 'Point' amphetamine has a waxy consistency. One IDU remarked it was similar in consistency to peanut butter. Key informants from SAPOL suggested that slightly different techniques and chemicals were used to produce this form. One 'point' is thought to create an effect equivalent to one gram of 'street' amphetamine (or amphetamine powder with bulking agents added). Around half of the key informants reported that one point of amphetamine was priced between $20 and $50, but generally cost $50. IDU reported that the median price of one point of amphetamine was $30, ranging between $25 and $50 in price. Four IDU reported the median price of one gram of 'point' amphetamine was $300 (range: $180-$300), with half an ounce costing $4000 (n=1). It is worth noting that while 'point' speed is used to describe a form of amphetamine, one point also describes weight, in this case zero point one of one gram (0.1gm). The term 'point amphetamine' as a form appears to be typically South Australian, whereas it refers to weight only in other jurisdictions.

The median cost of one ounce of street amphetamine as reported by 9 IDU was $900 (range: $650-$1000). However, when four IDU quoted the price of the last ounce of amphetamine they had purchased, the price ranged between $900 and $5000, demonstrating the highly variable price and quality of amphetamine. Another popular way of buying street amphetamine, as reported by 13 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 eight ball was reported to be $150 (range: $100-$300). Two IDU gave costings for methylamphetamine in crystal form. These were $250 for one gram and $100 for one 'packet'.

These prices are comparable with the prices provided by the Australian Bureau of Criminal Intelligence for the period January to June 2000. The price of one street gram or weight of amphetamine was reported to be $50, one ounce (28 gm) was between $800 and $1200, and one pound (224 gm) was between $8000 and $10000.

The majority of the IDU who gave information about amphetamine (n=44, 41.1%) reported that in the last six months the price of amphetamine had been stable (63.6%). The remainder reported that in the last six months the price of amphetamine had increased (11.4%), had fluctuated (20.5%) or were not sure about price changes (4.5%). The majority of key informants were unsure about changes to the price of amphetamine over the last six months. Those who did reply gave varied responses.

3.3.2 AVAILABILITY

Amphetamine was considered easy or very easy to obtain by most IDU (90.9%), and all key informants. The remaining IDU stated it had been difficult to obtain over the last 6 months (9.1%). Availability of amphetamine over the last six months was considered stable (61.4%) or fluctuating (25%) by the majority of IDU. The remainder thought it had become easier to obtain (11.4%). All key informants believed that the availability of amphetamine had increased in the last 6 months, making amphetamine much easier to obtain.

Of the IDU who gave information about where they usually scored their amphetamine, the majority reported purchasing from a friend (38.1%), or dealer's home (33.3%). Around one fifth (21.4%) purchased from a mobile dealer, while 7.1% bought amphetamine from a street dealer.

3.3.3 PURITY

The majority of IDU reported that current amphetamine purity was either medium (47.7%) or high (34.1%). The remainder reported it as low (9.1%) or was unsure. The majority of key informants were unsure of the current purity of amphetamine, and those who did report gave a varied response. Concerning changes in purity of amphetamine over the last six months, the majority of IDU believed it had fluctuated (56.8%) or remained stable (25%). The remainder reported it had increased (6.8%), decreased (2.3%) or were unsure. Half of the IDU were unsure about changes in amphetamine purity over the last six months, the majority of the remaining half thought that the purity had increased, or that more pure forms of amphetamine were available.

The ABCI provided quarterly purity data on amphetamine and methylamphetamine seized in South Australia during the 1999/2000 financial year. Mean purity over the financial year for amphetamine and methylamphetamine combined was 16.9% (range: 0 – 80.1%, n=626),

markedly higher than 6% purity during 98/99 and 97/98, and 4% purity in 96/97. The AFDL provides data on two seizure quantities (< 2 grams and ≥ 2 grams), the above purity values are based on the culmination of the two seizure sizes, given that their average purity values were similar. The majority of all seizures were methamphetamine (n=523) while there were 103 amphetamine seizures. (In general, both forms are referred to as 'amphetamine').

The 1999/2000 ABCI purity statistics appear to be inconsistent with the gross estimates provided by IDU, the majority of whom reported amphetamine purity as medium or high. However, purity certainly appears to have increased compared with previous years. Indeed, investigations suggest that there is increased availability of 'point' amphetamine, and also crystal meth (or ice or shabu). The difference in IDU response and ABCI data may be a result of IDU sampling higher purity amphetamines.

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. Amphetamine use was more prevalent among the general population than heroin, but comparable to heroin use among injecting drug users. According to the1999 Australian Needle and Syringe Program Survey, (41.3%) of South Australian injecting users reported amphetamine was the last drug they had injected (compared with 45.8% reporting heroin). 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.

Current patterns and trends 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=56, 52.3%). Amphetamine users were similar in demographic profile to the overall IDU sample. Most were around thirty years of age, had 10 to 11 years of education, and were predominantly from an English speaking background. Around one half had a history of being in prison. Gender breakdown was similar to that of IDU with a relatively even spread of males to females (males: 58.9%). Key informants reported that the amphetamine users they had contact with were equally or more likely to be males, in the order of 50 to 100%. Breakdown of employment status was similar to the IDU sample as a whole, with around fifty percent being unemployed (48.2%), around 20% full time employed (19.6%) or part time/casual employed (17.9%), the remaining 14.3% involved in home duties, study or sex work. Key informants reported a wide variation of employment profiles of amphetamine users, in the range of 30% to 100% unemployed.

Amphetamine in powder form (96.4%), liquid form (14.3%), prescription amphetamine (12.5%) and ice or shabu or crystal meth (21.4%) 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. The use of ice/shabu/crystal meth appears to

have almost doubled in 2000 compared with 1999 where only 12.1% of IDU reported its use in the last 6 months. In 1998 and 1997, mention of these higher purity forms were negligible. Use of the more pure forms of amphetamine are associated with increased likelihood of adverse physical, psychiatric and social problems including depression, anxiety, paranoia, aggression, violent behaviour and psychosis in more severe cases. The use of other forms of amphetamine were similar to 1999.

Seven key informants commented on the most frequently used current form of amphetamine, and their reports were somewhat inconsistent with the reports of the IDU. Five of the seven key informants (71.4%) reported that crystal meth or rock, was the most common form of amphetamine currently being used, and that the majority were using it intravenously. Additionally, several colours of crystal meth were available (beige, pink, grey, blue, white, green, orange, purple) and that some particular colours were more sought after, ostensibly due to their increased potency and particular sensation that they produced. The next most common form reported by key informants was amphetamine in 'point' form, which generally has a wet powder or paste-like consistency. In 2000 both key informants and IDU reported on the minimal use of prescription amphetamine, presumably because more pure forms of amphetamine are available in crystal and point form.

Injection was the most common route of administration among IDU surveyed, and 96.4% of IDU who had used amphetamine in the last 6 months, had injected in the last 6 months. This was consistent with key informant reports Other ways of administration among IDU that had used amphetamine in the last 6 months were snorting (30.3%), swallowing (32.1%) and smoking (10.7%). Likelihood of snorting and swallowing amphetamine was estimated by key informants to be between 5% and 20%.

Key informants reported variation in frequency of use, falling into two or three categories: daily users, who use 1 or 2 grams or 3 to 4 points per day; recreational users who use half to one point at parties or on weekends; and a third group who 'binge', using for several days at a time (usually Friday, Saturday, Sunday) and then 'crashing'. IDU reported using an average of 69.2 days in the last six months, with a median and modal use of 51 days and 180 in the last 6 months respectively. Key informant reports were comparable with frequency of injection over the last month by users who had mainly injected amphetamine (as opposed to any other kind of drug) over the last month. One quarter injected weekly or less (25%), 41.7% injected weekly but not daily, and the remaining third injected daily (33.3%, 1 per day 11.1%, 2-3 per day 13.9%, 3+ per day 8.3%).

Key informants identified several trends or main themes emerging from their contact with amphetamine users. The first was the increase in the use and availability of 'point' or 'paste' amphetamine, and crystal methylamphetamine (crystal meth). Key informants also reported that amphetamine users they had contact with, had an increased awareness of the importance of using clean needles and equipment, and also of the factors associated with contracting hepatitis. Finally, several key informants reported on the increasing emergence of amphetamine related mental health problems, including psychosis, depression, anxiety and violent behaviour. The increased frequency of adverse effects may be a result of increased use of higher grade amphetamine. The trends identified by IDU were that more people from the wider community were using amphetamine, particularly young people. Several IDU also reported an increase in quantity and frequency of use by amphetamine users.

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 the cost of one gram was comparable in price with 1999. 'Point' amphetamine is increasingly available and cheap. Ice, shabu or crystal meth are high grade forms that have increased in use and availability since 1999. Amphetamine purity has increased with the event of 'point' amphetamine and crystal meth. The use of amphetamine appears to have increased among the general population.

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

Price	
One gram (generally powder)	$50 ($25-200) Stable
One point (point/paste)	$30 Stable
Availability	(very) easy; Stable to fluctuating
Purity	16.9% (0-80.1%)% (ABCI); Fluctuating to stable Increase in purity compared with previous years
Use	Increase in general community use Increase in availability and use of crystal meth and point/paste amphetamine

3.4 CANNABIS

Trends in cannabis use were obtained from reports given by six key informants and ninety four of the 107 IDU interviewed (87.8%) 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 two community health workers, three drug treatment workers and an officer from SAPOL. 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.

3.4.1 PRICE

The median and modal price for one ounce of cannabis (~28 gm) as provided by 83 of the IDU (77.5%) was $200 (range: $25-$325). The distribution of cannabis cost per ounce was somewhat bimodal, with the two most frequently occurring costs being $200 (39.3%) and $250 (21.4%). The median price was comparable with 1999 ($220), albeit a little less. Key informant reports of the cost of one ounce of cannabis were consistent with IDU – between $200 and $300.

The most popular way to buy cannabis was in a 'bag' (sometimes called J-bag or money bag), as reported by 62 of the IDU, the median and modal price of which was $25 (range: $20-$50. NB one $50 bag is twice the size of a $25 bag). This price and range of a bag of cannabis was identical to the 1999 and 1998 findings, and has been a standard price for cannabis in South Australia for several years. All key informants who commented on cannabis price also quoted $25 per bag as the standard price. It is worth noting that in South Australia bags are sold containing around 2 grams of cannabis (range:1 – 3gm), 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, potency 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). As mentioned above, cannabis varies in strength or potency depending on the section of the plant used, and the way it was grown. Cannabis in leaf form is less potent than cannabis 'head' (the bud of the plant), and also cannabis grown hydroponically which appears to produce more buds and therefore is of higher strength. According to IDU and key informants (particularly users representatives), the majority of cannabis in South Australia is hydroponic and/or 'head' (even if grown outdoors).

Cannabis was also sold in other amounts. Buying cannabis in half ounces (~14 gm) was also commonly reported (n=31, median = $100, range: $80 - $150) and quarter ounces (~7 gm, n=21, median = $60, range: $10 - $80). Larger amounts include one pound (~ 448 gm, n=12, median = $2500, range: $2000-$3800) and three pounds (n=1) at $5250.

These prices provided by IDU and key informants are lower than the prices reported by the Australian Bureau of Criminal Intelligence (ABCI) for the period January to June 2000. 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 $20-$30, although the size of the deal was reported by ABCI to be1gm only. One ounce of head or hydroponically grown cannabis ranged in price between $300 to $500, while one pound of the same was priced between $3500 and $4500. One mature plant could be purchased for $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).

Two thirds of the IDU who gave information about cannabis (77.5%) reported that in the last six months the price of cannabis had been stable (67.5%). The remainder reported the price had fluctuated (19.3%), decreased (4.8%) or increased (7.2%). Key informants who gave information concerning cannabis price, purity and availability also thought that the price had remained stable, although two reported it had decreased in price.

3.4.2 AVAILABILITY

Cannabis was considered easy or very easy to obtain by most IDU (96.4%), while the availability of cannabis over the last six months was considered stable (77.1%) or easier to obtain (10.8%). Similarly, all key informants reported that cannabis was very easy to obtain, and thought it was relatively stable, if not easier to obtain than it had been previously.

The majority of IDU who had used cannabis scored their cannabis from a friend (34.9%) or dealer's home (34.9%). Around ten percent (9.6%) reported growing their own cannabis. The remainder reported scoring from a street dealer (10.8%), or had received it as a gift (9.6%) from friends.

3.4.3 PURITY

The majority of IDU reported that current cannabis purity, or potency, was high (77.1%). The remainder reported it as medium (20.5%) or was unsure. This is comparable with the beliefs about cannabis potency in the 1999 and 1998 IDU samples. All key informants reported that the current purity of cannabis was high. Concerning changes in potency of cannabis over the last six months, the majority of IDU believed it had remained stable (60.2%), the remainder stating it was increasing (16.9%) or had fluctuated (19.3%) over the last six months. Key informants believed cannabis potency had remained stable or increased over the last 6 months.

There are no data available on purity or actual %THC content of cannabis seizures. Forensic laboratories only provide identification of plant matter, as to whether the substance 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 Household Survey (1998) 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. While South Australia appears to be one of the cheaper jurisdictions to purchase cannabis, use is not increased in comparison with other states and territories. For example, in the Northern Territory in 2000, cannabis costs $300 for one ounce, yet lifetime prevalence was 58% and 12 month prevalence was 35%.

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 and trends 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=94). 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 half 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: 58.5%). Breakdown of employment status was similar to the IDU sample as a whole, with 50% reporting being unemployed, around 15% were full time employed, or part time/casually employed (20.2%), the remaining were involved in home duties, study or sex industry work. Key informants reported similar levels of unemployment.

Plant form was the most common form of cannabis used in the last six months (100%). All IDU who had used cannabis in the last 6 months reported using cannabis 'head' (100%), and 53% had also used 'leaf'. Around one third of 20 IDU had used hash (32.9%) or had used hash oil (8.5%) in the last 6 months. Similarly, cannabis head and hydroponically produced cannabis was the most common form used, as reported by key informants. It was also noted by key informants that a small number of users were accessing hash.

According to key informants, inhalation was the most common route of administration, with pipes and bongs more popular than joints. Cannabis was sometimes consumed orally, but this was not as common as inhalation, given that it is more difficult to titrate the effect of orally-consumed cannabis. One key informant mentioned that some people were now using vaporisers, available for purchase between $70 and $180.

Frequency of use was reported by key informants to be widely variable, ranging from occasional to weekly, to heavy use. Median days used in the last 6 months was 135 (mean 110.5 days, mode 180 days). Occasional users were the smallest group common in this sample, but used perhaps once a fortnight or on special occasions (Weekly or less, 20.2%). Another group tended to use on a weekly basis, one to three or four times per week (weekly, not daily, 30.9%). The largest group were daily users (48.9%). Key informants reported a range of quantities being used daily, from one cone per day, up to 20 to 50 cones per day. In terms of weight, the most extreme amounts range from one fraction of a gram (0.1gm), up to one ounce of cannabis per day (28gm). 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. Average use in this population would probably be about 3 or 4 cones a day (approximately one $25 bag per week).

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.

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 price was comparable with 1999, although the median price of one ounce had decreased by around $20. The purity appears to be high according to IDU and key informants, and there are reports of potent hydroponically-grown cultivars being available. The use of cannabis appears to be relatively stable.

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

Price	
Ounce	$200 ($25-325); Stable
Bag (~2 gm)	$25; Stable
Availability	(very) easy; Stable
Potency	High; Stable
Use	Stable and widespread

3.5 COCAINE

While 21 of IDU (19.6%) said they had used cocaine in the last six months, only 6 of the 107 IDU (5.6%) could comment on price, purity and availability of cocaine. This was similar to the number who gave information on cocaine in 1999, and markedly fewer than the number of IDU that gave information about cocaine in 1998 (around one third of IDU). Similarly, only one of the key informants gave information about cocaine, although it was not the major drug with whom the drug users they had most contact with had been using. The key informant who gave information about cocaine was a drug treatment worker. The key informant reported that there were no particular suburbs where cocaine was used more frequently, and that the majority of users were of English-speaking background. The key informant said that cocaine was particularly used by workers in the sex industry to maintain performance.

3.5.1 PRICE

The median price given by 5 IDU for one gram of cocaine was $300 (range: $200-$400). Five IDU reported that the median price for a cap of cocaine was $75 (range: $25-$100). Two IDU reported purchasing half a gram of cocaine for $180 - $200, and one IDU purchased a quarter gram for $60. One IDU also reported buying one quarter of an ounce of cocaine (~7gm) for $1800. The key informant reported that half of one gram of cocaine could be purchased for $100, and that the price of cocaine had decreased over the last 6 months. Four of the six IDU thought that the price of cocaine had remained stable over the last six months.

Prices for cocaine were not available from the Australian Bureau of Criminal Intelligence for the period January to June 1999, presumably because no 'buys' were made (due to a lack of availability).

3.5.2 AVAILABILITY

While 27% of IDU said they had used cocaine in the last six months, only 6% gave specific information, which was similar to the number that responded in 1999. Cocaine was considered difficult to obtain by four IDU and easy by the remaining two. There was a varied response by IDU in regard to change in cocaine availability over the previous six months with no real trends or patterns emerging. The key informant reported that cocaine was easy to obtain, because of its introduction into the 'mainstream' drug market (ie. not only available to the middle-class and those with contacts). It was also reported that cocaine had become more available, or easier to obtain over the last six months.

3.5.3 PURITY

Three of the six IDU reported cocaine purity was medium, two stated it was high and one said it was low. There was a varied response by IDU in regard to change in cocaine purity over the previous six months with no real trends or patterns emerging. The key informant also stated that the purity of cocaine was varied, and had fluctuated over the last 6 months.

Purity statistics for cocaine were not available from the Australian Bureau of Criminal Intelligence for the period January to June 2000 because no seizures were made either by AFP in South Australia or SAPOL. The purity of cocaine in 1999 in South Australia was

53%. The purity of cocaine in other jurisdictions in 2000 was similar. That is, NSW reported a purity of 47.7% (based on 155 seizures), Victoria 47.1% (93 seizures) and Queensland 51.3% (78 seizures).

3.5.4 USE

Prevalence of use among different populations

The National Drug Strategy Household Survey (1998) 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 1999 Australian Needle and Syringe Program Survey, with 1.4% of South Australian IDU reporting cocaine as being the last drug to be injected, and 2.0% reporting injecting cocaine with some other drug(s).

Current patterns and new trends 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=21). 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 42.9% 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: 57.1%). Around two thirds of those that used cocaine in the last six months were unemployed (61.9%) the remainder working full or part time or casual (19%). Two IDU were sex workers and two were involved in home duties. The key informant response to demographic profile was similar, although stated that users tended to be in their late teens to early twenties. Moreover, that the gender balance was weighted in favour of females who are more likely to be in the sex industry.

Of the 21 IDU that had used cocaine in the last 6 months, all reported using cocaine powder (100%) and one (4.7%) reported using crack cocaine. Intravenous use was the most commonly reported route of administration in the last 6 months (n=18, 85.7%) followed by snorting (n=9, 42.8%) and smoking (n=4, 19%). 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 7.2, while the median was 4 days (range:1 – 50). The majority of IDU used weekly or less (95.2%, n=20) while one person reported using on a weekly basis (4.8%, n=1).

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 is difficult to obtain and appears to have fluctuated in availability. The price was comparable with 1999, but it is difficult to make any meaningful comparisons with such small sample sizes in 1999 and 2000. The purity appears to be medium, but was not confirmed by forensic laboratories given that there were no seizures in 2000 in SA. The use of cocaine appears small in South Australia.

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

Price	
One gram	$300 ($200-$400); Stable
One cap	$75 ($25-$100); Stable
Availability	Difficult; Fluctuating
Purity	Medium; Fluctuating
Use	Small in SA No police seizures of cocaine in 2000

3.6 OTHER DRUGS

3.6.1 METHADONE

Around sixty percent of IDU had a lifetime prevalence of methadone use (58.9%) and 39.2% of IDU interviewed (n=42), reported using methadone in the last 6 months, predominantly in syrup form (n=40, 95.2%). Sixteen IDU reported using physeptone tablets (38%). 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% using in the last 12 months. Statistics provided by public and private methadone prescribers indicate that on the 30th June 1999, there were a total of 1,985 clients maintained on methadone in SA (801 public clients, 1,184 private clients). This figure does not represent clients who have dropped out of treatment or been treated for only part of the year. The majority of clients collected their methadone dose from pharmacies (1,853), the remainder collecting from public clinics (71), or correctional facilities (61).

Twenty five percent of IDU had received methadone maintenance treatment over the last 6 months of interview. Key informant estimates of frequency of methadone treatment by heroin users averaged between thirty and fifty percent of heroin users. The IDU who received methadone treatment (n=27) counted for around two thirds of IDU who had used methadone in the last 6 months (64.3%). The remaining third of IDU had used methadone outside of the realm of methadone maintenance treatment. Median days of methadone use in the last 6 months was 171 (mean: 117, mode: 180). This included all those who used methadone in the last 6 months. IDU who were in methadone maintenance treatment used between 60 and 180 days during the last 6 months (median 180 days, mean 162 days, mode 180 days, range: 60-180 days). Around one fifth of IDU used methadone weekly or less (21.4%), 23.8% used weekly and 54.8% used daily. It may be that those who were using methadone less than daily had been in methadone maintenance for only a portion of the 6 month period, or were diverting their methadone.

Almost one third of IDU reported a lifetime prevalence of methadone injection (30.8%) while one fifth (21.5%) had injected methadone in the last 6 months. Intravenous methadone use appears to have increased in South Australia over the last four years. In 1999 and 1998, 17% of IDU reported injecting methadone in the last 6 months, while only 11% injected methadone syrup in 1997 and 1996 (Cormack et al., 1998; Humeniuk et al. 2000). Methadone was the third most likely last drug to be injected (7.5% of IDU). This statistic is somewhat comparable with the findings of the 1999 (South) Australian Needle and Syringe Program Survey (ANSPS) in which methadone was the fourth most likely last drug to be injected (preceded by heroin, amphetamine and morphine).

3.6.2 BENZODIAZEPINES

The majority of IDU had a lifetime prevalence of benzodiazepine use (77.6%), with 64.5% using in the last 6 months. All of those who had used benzodiazepines in the last 6 months had used orally, and 4.7% had injected benzodiazepines in the last 6 months. The median number of days used in the last 6 months was 26 and the mean was 67 days. That is, half of IDU who had used benzodiazepines in the last 6 months had used at least once every week. However, there was wide variation in frequency of use ranging from 1 to 180 days. The most frequently occurring number of days of use (modes) was 2 (n=10), 20 (n=11) and 180

(n=11 days). Accordingly, half used weekly or less (49.3%), 27.5% used weekly but not daily, and 23.2% used almost on a daily basis.

Almost all key informants interviewed concerning heroin and amphetamine commented that benzodiazepines were used in the drug using community with whom they had contact. Prevalence of use was widely variable and was far more likely to be mentioned in association with heroin users than amphetamine users.. Key informants who predominantly described amphetamine use reported that benzodiazepines use was generally very small, but was 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 generally 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 number of heroin users also using benzodiazepines regularly ranged between 30% and 80%.

By far the most popular benzodiazepine used in the last 6 months was diazepam (55.9% of all benzodiazepine users), followed by flunitrazepam (13.2%). Preference for diazepam was also observed in 1999 (52.5%) and 1998 (50.5%). 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 increased since 1999 in which 6.8% of IDU reported using. This is an unusual finding given that flunitrazepam should have been more difficult to access than previously, 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

Benzodiazepine	Frequency	Percent
DIAZEPAM (eg. Valium, Ducene)	38	55.9%
OXAZEPAM (eg. Serapax)	6	8.8%
TEMAZEPAM (eg. Normison, Euhypnos)	8	11.7%
FLUNITRAZEPAM (eg. Rohypnol)	9	13.2%
NITRAZEPAM (eg. Mogadon)	2	2.9%
ALPRAZOLAM (eg. Xanax)	5	7.4%

3.6.3 ANTIDEPRESSANTS

Antidepressants were used by 12 of the IDU sample in the last 6 months for a median of 170 days. Prevalence of use was similar in 1999 and 1998. Seven of the 12 used on a daily or near daily basis (58%). It is not clear why the remainder were not using on a daily, and therefore therapeutic basis, particularly given that antidepressants generally do not have an immediate and psychoactive effect. Anecdotal reports from users of designer drugs suggest

that antidepressants are sometimes used in conjunction with ecstasy and other designer drugs to enhance the effect.

Among those who had used antidepressants in the last 6 months, the newer antidepressants were the most prevalent (n=11, 91.7%). These include the SSRIs (Selective Serotonin Reuptake Inhibitors) such as sertraline, fluoxetine, paroxetine and citalopram and the SNRIs (Serotonin Noradrenaline Reuptake Inhibitors) such as venlafaxine. One person reported using tricyclic antidepressants (doxepin) and one reported using the MAOI, moclobemide (Mono Amine Oxidase Inhibitor).

3.6.4 ECSTASY (MDMA) AND DESIGNER DRUGS

Among IDU interviewed, 57.9% had a lifetime prevalence of ecstasy use, and 15.8% reported using ecstasy in the last 6 months. One of the IDU interviewed said that ecstasy was their drug of choice. There was a lifetime prevalence of injecting ecstasy of 32.7%, and 10.3% reported injected ecstasy in the last 6 months. 1.9 Percent had snorted ecstasy in the last 6 months, and 12.1% had swallowed it. The median number of days used in last 6 months was 4, and the range of use was one to ten days. Ten days was the most frequently reported number of days used in the last 6 months by 5 IDU.

Ecstasy use among IDU was greater than among the general population. According to the 1998 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.

The price of one ecstasy tablet (ABCI data) was between $25 and $50 for the months January to June 2000. It appears that price may have decreased in 2000, given that the price for one ecstasy tablet in 1999 ranged between $40 and $60. The price is decreased to between $15 and $25 for purchases of greater than 25 tablets. The ABCI reports that the mean purity of AFP and SAPOL seizures of ecstasy (which includes MDMA, MDEA, MDA and PMA) for 1999/2000 was 37.1%. This is comparable with 32% purity of ecstasy in 1998/1999. The number of ecstasy seizures in 1999/2000 was 174 by SAPOL and 4 by AFP. The median purity (as determined by SAPOL seizures) was 33.8%. Given the small number of AFP seizures, the SAPOL median should be considered reasonably representative of all seizures in SA. Purity of ecstasy seized ranged from 10% to 64.4%. For more information about ecstasy price, purity, availability and use, see; Humeniuk et al (to be published in 2001) *NSW Drug Trends 2000, findings from the Illicit Drug Reporting System (IDRS) 'Party Drugs' Module*. Ecstasy and Other Party Drug Use in Adelaide, 2000. National Drug and Alcohol Research Centre Technical Report)

The key informants most likely to report on ecstasy use were those who were most familiar with amphetamine users (7 of 11 key informants). The number of users ranged from 2% up to 100% of users. Frequency of use varied between occasional to weekly use, mostly for dance parties or clubbing or on weekends. One key informant mentioned that it was popular among sex industry workers. Use was predominantly reported as being oral, but one key

informant reported that around one third of amphetamine users were injecting ecstasy. Two key informants spoke about the designer drug Fantasy (or GHB), used orally by younger users. Availability was reported to be sporadic, appearing for a few months at a time then disappearing. One informant reported that Fantasy was availably as a salty liquid, costing between $750 and $1000 for one litre.

3.6.5 OTHER OPIATES

There was a 58.9% lifetime prevalence of 'other opiate' use in the IDU population. These statistics cannot be compared with the 1998 National Household Survey data, which defines 'other opiate' use as inclusive of all pain killers/analgesics including pain relief medication such as Panadeine and Non Steroidal Anti Inflammatory Drugs. Approximately one quarter (23.4%) of IDU reported using other opiates in the last 6 months, which is comparable with 27% use in 1999 and less than the 42% who reported using in 1998. The majority of IDU in 2000 used other opiates orally (15%), but 11.2% said they had injected other opiates in the last 6 months. The median number of days used in the last 6 months was 20, (mean: 41.9 days) although use varied between 1 and 180 days. Only two IDU reported using other opiates daily (8%). The remainder used less than weekly (60%) or on a weekly basis (32%).

Key informants were most likely to report other opiate use in heroin users only. Four of the twelve key informants who gave information about heroin mentioned the use of other opiates. Panadeine forte was the most frequently mentioned other opiate, used orally on a variable basis when heroin was unavailable. Morphine, oxycodone and Kapanol were also reported as being used, both orally and intravenously, on a variable basis.

Table 3.8 shows the main type of other opiate used by IDU in the last 6 months. Morphine was the most popular in contrast to previous years (1999 and 1998) in which Panadeine forte was the most popular. Interestingly, Buprenorphine and LAAM were reported by IDU in 1999, but not in 2000. Accordingly, none of the IDU reported receiving Buprenorphine or LAAM as maintenance treatment.

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

Opiate	Frequency	Percentage
Morphine	8	33.3%
Opium	3	12.5%
Panadeine forte	3	12.5%
Kapanol	3	12.5%
MS Contin	2	8.3%
Mersyndol	2	8.3%
Pethidine	1	4.2%
Codeine Phosphate	1	4.2%
Proladone	1	4.2%

3.6.6 HALLUCINOGENS

There was a high lifetime prevalence of hallucinogen use in the IDU population (77.6%), although only 19.6% 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 IDU population, 17.8% reported using LSD, while 13.1% reported using magic mushrooms.

Swallowing hallucinogens was the most common route of administration in the last 6 months (19.6%) while 3.7% of IDU reported injecting hallucinogens. The median number of days used in the last 6 months was 3 (mean 5.4 days), although frequency of use varied from between 1 and 20 days use in the last 6 months. One, two or three days was the most commonly reported frequency of use by 61.9% of the IDU.

Key informants who were familiar with amphetamine users and cannabis users were the most likely to report hallucinogen use. Among amphetamine users (8 of 11 key informants), LSD was the most frequently used hallucinogen (1% up to 50% of users), but overall appeared to be quite small in this population. Use tended to be occasional and on weekends, at parties or at dance clubs, and three informants said it was more popular among younger users. Three of the six cannabis key informants spoke about hallucinogen use among cannabis users. LSD, Daytura and mushrooms were reported, and younger users were also toted as being the most likely users. Users overcame the seasonal variation of mushroom availability by preserving them in oil or gel. LSD was reported by one key informant to enhance the effects of cannabis.

The price of LSD, as provided by the ABCI for the January to June 1999 period, was $20 to $25 for one tab of acid, and $10 for more than 25 tabs 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.

Key informants who largely had contact with cannabis users were most likely to report inhalant use (four of six key informants). The number of users was said to be small (less than ten percent) and that inhalants were used primarily by younger persons during short periods of experimentation with the drugs.

3.6.8 ANABOLIC STEROIDS

The use of steroids among IDU was small. Only 6 IDU (5.6%) had a lifetime prevalence of steroid use, five of which had a lifetime prevalence of injecting steroids (4.7%). No IDU had used steroids in the last 6 months. It appears that steroid use among this IDU sample is negligible, as has been in previous years, and probably not worth monitoring among this population in the future.

3.6.9 SUMMARY OF OTHER DRUG TRENDS

A summary of other drug trends can be found in Table 3.9. Intravenous methadone use appears to have doubled over the last 5 years, and diverted methadone also continues to be used. Benzodiazepine use is widespread but stable among IDU and diazepam is the most popular and used by over half of those who use benzodiazepines. Ecstasy price appears to have slightly decreased, but use is low in this population. The use of antidepressants, hallucinogens and inhalants is stable and low in this population. Other opiate use is also stable and morphine is the most popular. Steroid use is negligible in this population.

Table 3.9 Summary of trends of other illicit drugs

Methadone	• ¼ of IDU who had used methadone in the last 6 months were not in methadone treatment • Injection of methadone syrup appears to have doubled over the last 5 years
Benzodiazepines	• Use remains widespread among IDU but stable • Diazepam was used by over half of IDU who used BZD
Antidepressants	• Prevalence of use is stable • Predominantly used for therapeutic purposes • SSRIs and SNRIs most popular
Ecstasy	• Price decreased, $25 - $50 • Purity 37% and stable • Not widely used among IDU
Other Opiates	• ¼ of IDU using (stable) – half were using once a week or more • Morphine is the most popular
Hallucinogens	• LSD price $20-$25 per tab • Low prevalence of regular use among IDU
Inhalants	• Low prevalence of regular use among IDU • Amyl nitrate most frequently used, if at all
Anabolic steroids	• Negligible steroid use among IDU in 2000

4.0 DRUG RELATED ISSUES

4.1 GENERAL HEALTH

Of the IDU sample, 61.3% reported experiencing at least one injection-related health problem in the last one month, with a median of two problems in the last month (for those who did experience an injection-related problem). Most IDU reported experiencing either two (20.8%) or one (17.9%) injection-related health problems in the last one month. The remainder had experienced three (14.2%), four (7.5%) or six (0.9%) injection-related health problems in the last month.

The two most commonly reported injection-related health problems in the last month by IDU were difficulty injecting (49.1%) and scarring/bruising (49.1%). 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 (69.6% vs. 43.4%, p=0.05, Pearson Chi Square with Continuity Correction). 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 (65.2% vs. 44.6%, p=0.13, Pearson Chi Square with Continuity Correction). The increased prevalence of injecting problems among methadone injectors is presumably because methadone syrup is more viscous and potentially more toxic to veins than the injection of heroin. Other specific injection-related problems among IDU in the last month included experiencing thrombosis (17.9%) a dirty hit (and consequently felt sick) (15.1%), abscesses or infections (4.7%), and non-fatal overdose (2.8%).

The most frequently reported health change mentioned by heroin and amphetamine key informants was the increased awareness by users of the importance of using clean needles (12 of 23 key informants). Young people and persons from other cultures (particularly Asian) were less informed about the risks associated with needle use and what treatment and services were available to users.

Three of the key informants who had most contact with heroin users had noticed a reduction in heroin overdose in the last six months, although maintained that naltrexone use was associated with overdose. Four of the key informants who had most contact with amphetamine users identified an increase in amphetamine related health effects. Of particular concern were that mental health problems (depression, anxiety, paranoia, psychosis and aggression) had increased, and that treatment services for amphetamine related problems were scant. Poor nutrition, skin problems and compromised immunity were also noted to have increased among amphetamine users. Of the key informants who gave information about cannabis, two reported a relationship between cannabis use and health problems. Neither key informant could give a causational 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 5084 telephone contacts were made during the 1999/2000 financial year, predominantly from members of the general public

wishing to obtain information about specific drugs. Most contact calls were related to alcohol (n=1850, 36.4%) followed by cannabis (n=1249, 24.6%). There were 997 (19.6%) opiate related contacts (heroin n=602, 11.8%; methadone n=308, 6.1%; other opiates n=71, 1.4%), 892 amphetamine related contacts (17.5%), 44 cocaine contacts (0.9%), 46 ecstasy contacts (0.9%) and 6 other stimulant related contacts (0.1%). The proportion of contacts by drug type were similar to 1998/1999 and 1997/1998, although it appears that amphetamine related contacts may have increased.

Similarly, presentations to drug and alcohol treatment services of the South Australian Drug and Alcohol Services Council show that alcohol was mentioned most commonly as being problematic. Table 4.1 shows the number of mentions by clients at presentation to drug and alcohol services. These mentions include clients who report one or more problem substance. The number of females presenting was far less than the number of males (68.8%). Following alcohol (29.8%), the next most commonly mentioned substances were opiates (23%), cannabis (13.5%), tobacco (13.1%) and amphetamine (8.6%). Cocaine was the least likely substance to be mentioned (0.7%).

Table 4.1. Number of mentions by drug type by clients of the Drug and Alcohol Services Council for 1999/2000

Drug Type	**No. Males**	**No. Females**	**Total No.**
Alcohol	1890	606	2496
Opiates – including heroin	1158	792	1950
Amphetamine type stimulants	456	269	725
Cannabis	840	290	1130
Cocaine	38	18	56
Depressants* including benzodiazepines and barbiturates	311	254	565
Hallucinogens # and Inhalants	82	32	114
Antidepressants	35	27	62
Tobacco	849	249	1098
Other drugs	108	75	183
TOTAL	**5767**	**2612**	**8379**

NB* predominantly benzodiazepines (95.7%), # predominantly hallucinogens (78%)

4.2 NEEDLE SHARING BEHAVIOUR AND NSEP DATA

In the last one month, around three quarters of IDU reported not using needles that others had already used (75.7%). While key informants reported an increased awareness of risks associated with dirty needle use among users, the number of IDU who did not share was greater in 1999 (91%). In 2000, the remaining IDU said that in the last month, they had used a needle that someone else had already used one time only (12.1%), twice (5.6%), three to five times (2.8%) or more than 5 times (3.8%). Predominantly IDU said they had used a needle after one person only (n=25, 23.4%), and it was usually their regular sexual partner or a close friend. Similarly, 78.5% of IDU in 2000 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 (4.7%), twice (7.5%) or 3-5 times (8.4%) in the last month.

More IDU reported sharing injecting equipment than sharing needles. While 40.2% reported not sharing any equipment in the last 6 months, 56.1% had shared spoons, 54.2% had shared water, 54.2% had shared filters and 21.5% had shared tourniquets.

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 July 1999 and June 2000 it is estimated that 2.4 million syringes were dispensed, and 1.75 million used syringes were returned by IDU, resulting in a return rate of around 73%. This suggests that approximately three quarters of IDU were dispensing 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, between 1% and 2% of NSEP clients reported sharing, which is incongruent with reports of IDU from this study. While it is possible that the group of users sampled in this study were not within the population of NSEP clients, NSEP surveys may be underestimating of the actual percentage of users who share needles. Self reports from some users suggest that admission of needle and syringe sharing behaviour is embarrassing, and such behaviour is outside of the norms of the drug-using population.

4.3 OVERDOSE

Of the eighty seven IDU that had a lifetime prevalence of heroin use, 54% (n=47) had experienced overdosing on heroin between 1 and 100 times. The majority (56.5%) had overdosed once (n=15, 31%) or twice (n=12, 25.5%). This was comparable with the number of IDU overdosing once or twice in 1999 (65.3%), 1998 (50%) and 1997 (65%). In 2000, the remaining IDU reported a lifetime prevalence of heroin overdose three to four times (n= 14, 29%) or five times or greater (12.7%). The median amount of time between interview and the last overdose was 18 months (range 1 week to 180 months), and 24 months between interview and the last administration of naloxone, the opioid antagonist (Narcan). Thirty seven percent reported that they had overdosed within the last 12 months, and 26% had experienced an overdose within the last 6 months.

Of all IDU interviewed, 63.5% (n=68) had been present at another user's overdose (range 1 to 120 times). The median number of times that IDU had been present when someone else had overdosed was four (1-4 times, n=38, 55.8%; 5-10 times, n=19, 27.9%; 10-30 times, n=10, 14.7%; ≥ 31 times, n=4, 5.8%). The length of time between interview and last presence at an overdose ranged between one week and 120 months (median 12 months). Of the 68 who had observed an overdose, 59 (86.7%) had been present at a non-fatal overdose, and 22 had been present at a fatal overdose (32.3%). The total, or cumulative number of non-fatal overdoses that IDU in this sample had ever seen was 524. The cumulative number of fatal overdoses was 53. From these data it is possible to estimate that the ratio of fatal to non-fatal overdose was approximately 1:10 in this population.

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 eleven years. Figure 4.1 shows a year by year total number of deaths between the years 1988 and 1999. There were 52 deaths in South Australia, and 958 deaths Australia wide in 1999. Figures are not yet available for the number of opioid-related fatalities in 2000.

Figure 4.1 Opioid related fatalities between 1988 and 1999 in South Australia and Australia respectively among those aged 15-44 years.

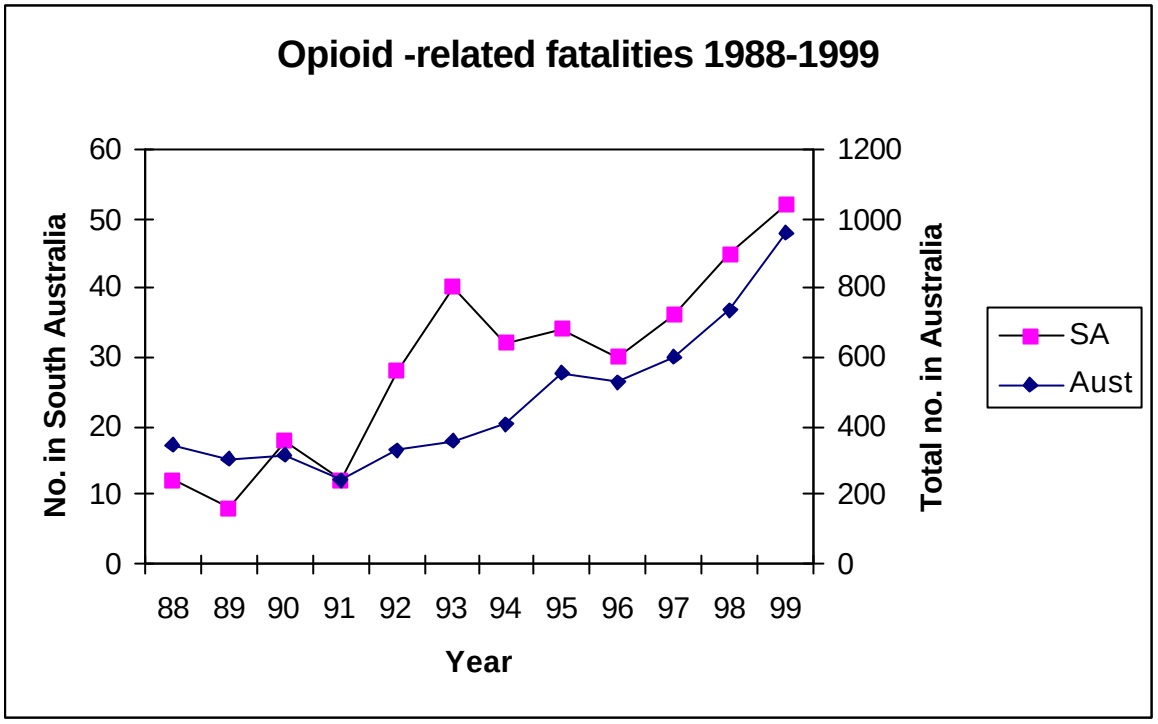


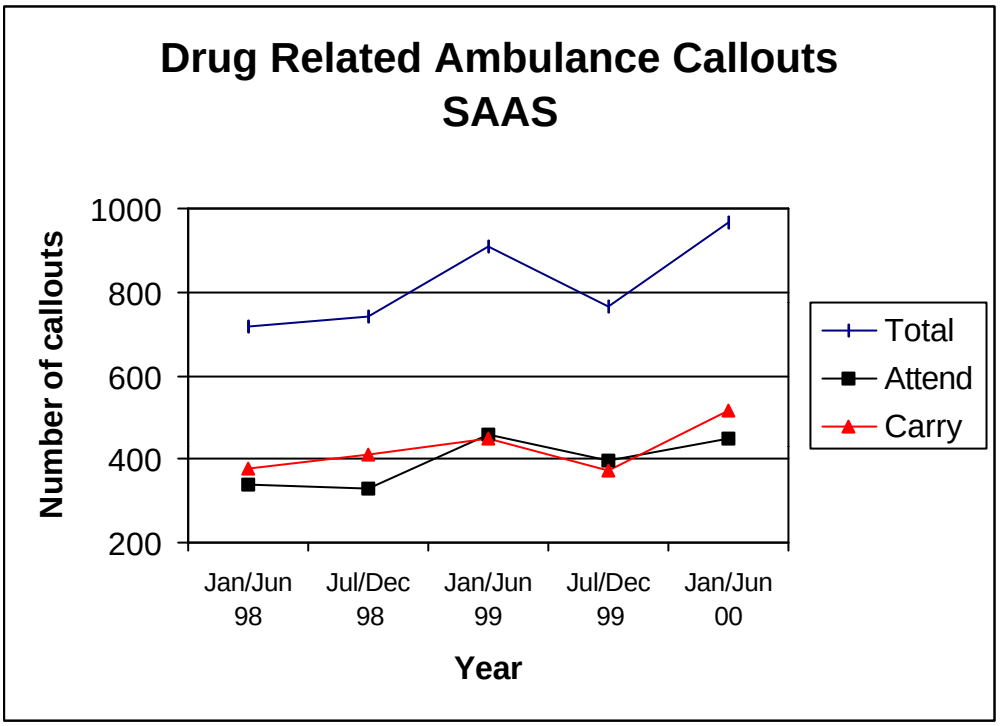
Table 4.2 shows the number of opioid overdose deaths and the rate per million population for each jurisdiction for 1999, and the rate percentage change between 1998 and 1999, among those aged 15 to 44 years.

Jurisdiction	Number of Deaths 1999	Rate per Million 1999	% Change in rate Between 1998 & 1999
New South Wales	401	140.6	- 11.2%
Victoria	347	163.4	- 64.0%
Queensland	70	44.2	- 54.7%
South Australia	52	80.9	- 16.0%
Western Australia	73	85.0	- 22.4%
Tasmania	3	15.1	– 56.3%
Northern Territory	4	39.6	– 60.3%
Australian Capital Territory	8	52.9	– 19.6%
Australia TOTAL	**958**	**112.5**	**- 29.2%**

Accordingly, there also has been an increase in the number of drug-related ambulance attendances in South Australia. During the period January 1998 to June 2000, statistics provided by the Australian Institute of Criminology show that the number of callouts to ambulance services related to drug use in the metropolitan area of Adelaide has increased by 34.9% over the last two years (Fig. 4.2). The number of callouts in the six month period

from January 1998 to June 1998 was 715 (339 attendances and 376 carries). From January 2000 to June 2000 the total number was 965 (447 attendances and 518 carries).

Figure 4.2 Number of South Australian Ambulance Service Drug Related callouts from January 1998 to June 2000.



The increase in ambulance related callouts is also reflected in the number of presentations to the Accident and Emergency Unit of the Royal Adelaide Hospital. Table 4.3 shows that heroin and amphetamine related attendances have increased between 1998/1999 and 1999/2000, and cocaine presentations have decreased. While changes from year to year do not necessarily indicate overall change over longer periods of time, these statistics are in keeping with reports from key informants and IDU survey data.

Table 4.3 Number of attendances at Royal Adelaide Hospital Accident and Emergency Unit during 1998/1999 and 1999/2000 by drug type.

Drug	1998/1999	1999/2000
Alcohol	1262	1236
Amphetamine	74	103
Heroin	139	221
Cocaine	7	1
Cannabis	20	18
Benzodiazepines	158	143
LSD	5	2
Opiates	6	-
Opium	5	3
Others*	729	673
Total	**2405**	**2404**

NB* Others include poisons, toxins, phenothiazines, paracetamol, antidepressants and anticholinergics.

4.4 CRIME AND POLICE ACTIVITY

The IDU were asked about criminal behaviour in regard to drug use. Around one half of the sample (48.9%) said they had committed at least one criminal act in the last month. Dealing and property crime were the most common crimes committed, and frequency of criminal activity by crime type over the last month is shown in Table 4.4.

Table 4.4 Frequency of criminal activity in the last month among IDU, by crime type.

Crime Type - Percentage	Property%	Dealing%	Fraud%	Violent%
No crime	79.2	58.9	85.0	94.4
Less than once a week	5.7	6.5	8.4	5.6
Once a week	2.8	6.5	3.7	0
More than once a week	9.4	15.9	2.8	0
Daily	2.8	12.1	0	0

Around one third of all IDU (30.8%) 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 (48.5%) followed by possession/use of a prohibited substance (33.3%). The remainder reported arrest for violent crime (9.0%), dealing (9.0%), fraud (6.0%), or another crime, including not appearing in court, unpaid fines and outstanding warrants (45%).

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. One quarter said they had not spent any money on drugs during the previous day. The majority of IDU reported spending between $50 and $99 yesterday (29.9%), between $20 and $49 (17.8%) or between $100 and $199 (16.8%). The remainder spent $200 or more (5.8%), or less than $20 (4.7%).

Key informants familiar with amphetamine and heroin users were more likely to report crime than those key informants familiar with cannabis users. Of the six cannabis key informants, crime was reported as being relatively small and stable. The main observation was an increase in persons growing cannabis as a 'cottage industry', and that hydroponic systems were become more sophisticated. One key informant reported that the hash that was being produced was of a higher quality than previously.

The main observation by amphetamine key informants was the increase in small business ventures of local laboratories manufacturing amphetamine (and hence local distribution) and the increase in the number of 'mobile' or 'suitcase' laboratories. These suitcase laboratories are set up in a variety of places and then moved on to reduce the likelihood of police detection. Accordingly, one key informant who was a police officer reported an increase in arrests, and seizing amphetamine from hotel rooms, caravans and cabins. Moreover, apprehension of persons during manufacture was likely to be more successful than attempting to target dealing. One key informant reported that chemicals were accessed through break and enters of pharmacies and chemical plants, and the black market. Overall, amphetamine users were most likely to be involved in dealing and manufacture, particularly at a local level, than any other crime (if any).

One heroin key informant also noted an increase in the number of small businesses set up to deal heroin. Generally these did not last longer than a few months based on business inexperience, or dealer use eating into profits. Heroin dealing was largely reported to be stable, although five key informants observed the strong presence of Asian dealers and couriers, and the recent formation of alliances between Asian and Western dealers. There were a few reports of increased numbers of arrests, and a subsequent decrease in the number of dealers on the streets, although it was suspected that dealers simply moved on to other areas as they became aware of police tactics. Dealing (as discussed above) and property crime were the two most frequently reported crimes by key informants. Property crime was reported as being stable by 7 of the 12 key informants. The remaining observed similar trends of increased shoplifting and break and enters. Stolen goods were swapped directly for drugs, or had their serial numbers swapped with those of property that was not stolen, and then sold on to second-hand dealers.

One third of IDU reported that police had become more active recently (33.6%), one third said activity had decreased or was stable (35.5%) and the remainder were unsure (30.8%). Only one quarter (25.5%) said police activity had made it more difficult to score drugs. Similarly, one quarter (26%) said more of their friends had been 'busted' by police recently (the rest said it was stable or had decreased).

The majority of key informants had not noticed any recent change in police activity towards drug users, particularly those informing about the activity of cannabis and amphetamine users. One of the major changes noted by all groups was the increased awareness by police of the pharmacological/psychological and social issues associated with drug use, and an understanding that drug use was not just a law-enforcement problem. Of the key informants who did notice change, most noticed an increase in police activity resulting in disruption of low and middle level dealing. However, in turn dealers were changing their tactics in accordance with police movements. The key informant who was an ambulance officer reported a reduction in police presence at heroin overdose, which is a positive step in the reduction of heroin overdose.

In the 1999/2000 financial year there were a total of 4780 reported offences to South Australian police associated with either drug use/possession (n=1841, 38.5%) or provision of drugs including the import/export of drugs, sell/trade of drugs, production/manufacture of drugs and other drug related offences (n=2939, 61.5%) (SAPOL Annual Report 1999/2000). These include those arrests resulting from Operation Mantle. These figures are very similar to the number of reports to SAPOL in 1998/1999 (4,203 reports, possession 42.3%, provision 57.7%). Table 4.5 shows a breakdown of consumption and provision by drug type, and gender for arrests in South Australia during 1999-2000. Reportees were predominantly male (79%-100%), and report for possession was more prevalent than report for provision except in the case of cannabis and cocaine. Cannabis was most commonly the drug involved in drug related reports, followed by amphetamine and heroin. There were few reports of cocaine possession/provision during this period, which is further confirmation of the paucity of cocaine in South Australia.

Table 4.5 Number of arrests (possession and provision) by drug type and gender in South Australia during 1999/2000

Drug type	Possession	Provision*	% male	Total reports
Cannabis	962	1485	84.9%	2447
Heroin & other opioids	217	114	79.2%	331
Amphetamine & congeners	556	204	79.9%	760
Cocaine	2	3	100%	5
Hallucinogens	47	16	85.7%	63
Other/Unknown	57	44	82.2%	101

NB* provision includes import/export, sell/trade, production/manufacture and other drug related offences. Cannabis reports do not include CENs.

Another source of information about drug use, crime and police activity can be derived from a police contact survey executed as part of Operation Mantle. Operation Mantle commenced in October 1998 as a SAPOL initiative to disrupt the activity of low and middle level drug dealers in South Australia. The contact survey 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 (range15-51 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 2000 are summarised in Table 4.6. Injection related problems are highly prevalent among IDU, particularly among injectors of methadone syrup. There appears to be an increase in amphetamine related health effects of depression, paranoia, psychosis, aggressive behaviour and poor nutrition. Seventy five percent of IDU had not shared needles in the last month (around 90% in 1999), although fifty percent shared equipment. Around one half of IDU with a lifetime prevalence of heroin use had experienced at least one overdose at sometime in their life, and two thirds had viewed an overdose. Ambulance call-outs to drug-related emergencies had increased over the last 2.5 years, and amphetamine and heroin presentations at the Royal Adelaide Hospital accident and emergency had also increased. Around one half of IDU had committed a crime in the last month (two thirds in 1999) and thirty percent had been arrested in the last 12 months. Local amphetamine production and distribution was increased, and Asian persons are still heavily involved in the heroin market.

Table 4.6 Summary of drug-related issues

General Health	• Sixty percent of IDU had experienced at least one injection-related problem in the last month • Methadone injectors more likely to experience difficulty injecting and bruising/scarring • Increase in amphetamine-related health and social effects
Needle sharing	• 25% of IDU shared needle at least once in last month (10% in 1999) but key informants report increased awareness • 50% of IDU sharing equipment
Overdose	• Around one half of heroin-using IDU ever experienced an heroin overdose • Increase in number of opioid-related fatalities over last 11 years in SA and Australia wide • Increase in number of drug-related ambulance call-outs over the last 2.5 years by 35%
Crime – Police activity	• Around one half of IDU committed crime in last month and 30% were arrested in the last 12 months • Increase in local amphetamine manufacturing businesses and distribution • Asians strongly involved in heroin market

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 (✓) by Injecting Drug Users (IDU), Key Informants (KIS) and secondary indicator sources (OTHER).

Heroin Trends	IDU	KIS	OTHER
Price ($310/gm, $50/cap), stable to decreasing	✓	✓	✓
Availability stable and very easy	✓	✓	
Purity medium to high, 47.7%, fluctuating	✓	✓	✓
Increase in use by general community	✓	✓	
Increased availability of rock heroin	✓	✓	
Use more geographically widespread	✓	✓	
Asians heavily involved in market	✓	✓	

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

Amphetamine Trends	IDU	KIS	OTHER
Price ($50/ gm, $30/point), stable	✓	✓	✓
Availability stable to fluctuating and very easy	✓	✓	
Purity medium to high, and fluctuating	✓	✓	
Purity 17%, increased compared with 1999 (6%)			✓
Increased availability and use of crystal meth/ice/shabu	✓	✓	
Increased availability and use of 'point' or paste speed	✓	✓	
Increase in use by general community	✓	✓	
Use more geographically widespread	✓	✓	

Table 5.3 Trends in cannabis endorsed (✓) by Injecting Drug Users (IDU), Key Informants (KIS) and secondary indicator sources (OTHER).

Cannabis Trends	IDU	KIS	OTHER
Price ($25/bag, $200/ounce), stable	✓	✓	✓
Availability stable and very easy	✓	✓	
Potency high and stable (unverified by AFDL)	✓	✓	
Availability of new, more potent strains(unverified by AFDL)	✓	✓	
Number of users widespread and stable	✓	✓	
Frequency of use stable	✓	✓	
IDU are unaware of health complications of heavy use		✓	

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

Cocaine Trends	IDU	KIS	OTHER
Price ($300/gm, $75/cap), stable	✓	✓	✓
Availability difficult and fluctuating	✓	✓	
Purity medium and fluctuating	✓	✓	
Small use in South Australia	✓	✓	
No cocaine seizures made in South Australia			✓

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

Other Drug Trends	IDU	KIS	OTHER
Methadone syrup injection increased among IDU	✓	✓	
Benzodiazepine use remains prevalent among IDU (2/3), Diazepam most popular	✓	✓	
Antidepressant use predominantly therapeutic	✓		
Ecstasy use small among IDU	✓	✓	
Ecstasy price $25 -50, decreased; purity 37%, stable	✓		✓
¼ IDU using 'other opiates', morphine most popular	✓		
Low prevalence of hallucinogen use among IDU	✓	✓	
Price LSD $20 - $25			✓
Low prevalence of inhalant use among IDU	✓	✓	
Negligible presence of anabolic steroid use among IDU	✓	✓	

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

Drug related issues	IDU	KIS	OTHER
Injection related problems remain prevalent among IDU, (60% in last month)	✓		
Increase in the number of overdoses and ambulance callouts	✓		✓
25% shared needle at least once in last month (10% in 1999)	✓		
Increased awareness of needle risk problems		✓	
Half IDU committed at least one crime in last month	✓		
Dealing and property theft most common crimes	✓	✓	
Increase in local manufacturing and distribution of amphet.		✓	

6.0 DISCUSSION

Summary of main findings

The IDRS revealed several drug trends in illicit drug use in South Australia in 2000. While a relatively stable price for one cap of heroin was maintained, the mean price of one gram of heroin decreased from $400 in 1999 to $310 in 2000. This drop in price may reflect the finding that mean purity was also decreased from 61% in 1999 to 47.7% in 2000. the availability of heroin appears to have increased. Rock heroin was readily available, as noted in 1999, along with the observation that Asian persons were still strongly involved in the heroin market. Probably the most marked trend noticed in 2000 was the increased availability and use of different forms of amphetamine. Prior to 2000, amphetamine purity was around 5% (1999, 1998 &1997). Purity in 2000 was close to 17% in South Australia, and this increase in amphetamine purity was also observed in other jurisdictions of Australia. Frequency of amphetamine use has particularly increased over the last 4 years in South Australia compared with the jurisdictions of New South Wales and Victoria (see Darke et al., 2000, *p18*.). Of particular interest was the availability of new forms of amphetamine. One of these is 'point' amphetamine – a paste or waxy like substance that is generally purchased as one point of one gram (0.1 grams, hence the name, which is used to denote this form of amphetamine, even when purchased in larger amounts). 'Point' amphetamine is generally of a higher purity that powder form, because it has less additive. The other form is that of crystal methylamphetamine, street names for which are crystal meth, ice and shabu. This is a crystalline form of methylamphetamine and is believed to be potent. Almost twice as many IDU reported using this form in 2000 as in 1999 (22% vs. 12%). Use of high purity amphetamine is associated with serious mental health disorders and social problems including violent behaviour towards self and others. This emerging trend indicates that there may be increased numbers of persons requiring and accessing mental health, drug treatment, social health and law enforcement agencies.

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. The mean price for one ounce of cannabis may have dropped slightly. As in 1999, the prevalence and use of cocaine among this sample appears to be low, particularly in comparison with New South Wales. Accordingly, no SAPOL or AFP seizures of cocaine were made during 1999/2000. There was a continuing trend for use of benzodiazepines among two thirds of IDU, particularly diazepam. This is concerning considering that opioid overdoses have increased in 2000, and that polydrug use is associated with opioid overdose.

Around half of heroin-using IDU had ever experienced an opioid overdose, and drug-related ambulance callouts have increased by 35% over the last few years. Diversion of methadone remains an issue, and the practice of injecting methadone syrup appears to have increased over the last 5 years. Injection-related problems remain prevalent among IDU with around two thirds of IDU experiencing at least one injection-related health problem over the last month. Around one quarter of IDU reported sharing in 2000 compared with only one tenth of IDU in 1999. This is a worrying observation, suggesting that changes may need to be made to the current system.

Around one half of IDU reported committing at least one crime in the last month. Dealing was the most popular followed by property crime. It was observed by key informants who

were SAPOL officers that there was an increase in the number of local amphetamine manufacturing businesses and local distribution within South Australia. Mobile labs were more popular and were set up in motel rooms, caravans and cabins. The increase in local labs in south Australia may have resulted in the increased availability of 'point' or paste amphetamine which is particular to South Australia and a few other jurisdictions.

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 1996. Similarly the 1998 National Household Survey refers to population demographics during that time period. 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 2000 IDRS have clinical, policy and research implications that are outlined below. It is worth noting that some of these issues may have already received attention to date.

- Preparation by agencies for an increase in amphetamine related problems (mental health, drug treatment, social health, law enforcement).
- Health promotion and eduction concerning the adverse effects of amphetamine use.
- Development of an instrument to screen for harmful and hazardous amphetamine use in primary health care settings.
- Development of improved treatment protocols for amphetamine abuse and dependence.
- Research into the chemical analysis of amphetamine, methylamphetamine and designer drug formulations.
- Supply reduction aimed at reducing the number of local amphetamine laboratories and distribution in South Australia.
- Development and 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.
- Development and implementation of strategies to reduce behaviour and harms associated with intravenous methadone syrup use.
- Development and implementation of strategies to increase safer use and disposal of needles.

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