

DRUG TRENDS
1998



**A COMPARISON OF DRUG USE AND TRENDS
IN THREE AUSTRALIAN STATES:
FINDINGS FROM THE ILLICIT DRUG REPORTING SYSTEM
(IDRS)**

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ABBREVIATIONS

ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
CDHAC	Commonwealth Department of Health and Aged Care
DASC	Drug and Alcohol Services Council
IC	Inner city of Sydney
IDRS	Illicit Drug Reporting System
IDU	Injecting drug users
KIS	Key informant study
MDMA	Methylene-dioxymethamphetamine (ecstasy)
NDARC	National Drug and Alcohol Research Centre
NSEP	Needle and Syringe Exchange Program
NSMHWB	National Survey of Mental Health and Well-Being
NSW	New South Wales
OD	Overdose
OTHER	Refers to other (secondary) indicators
SA	South Australia
VIC	Victoria
WS	Western Sydney

EXECUTIVE SUMMARY

The drug trends reported in this monograph constitute the findings from the second year of the multi-state IDRS, which was conducted in 1998. These findings showed that the IDRS is able to track drug trends over time, and discriminate between drug trends in each state. Three major trends were found by the 1998 IDRS, which are noted below.

- There was a continuing increase in heroin use, accompanied by cheaper, readily available high purity heroin. This trend was much more apparent in Melbourne and Sydney than in Adelaide, with the former cities also experiencing an increase in harms associated with heroin use, particularly overdose.
- In Sydney, there was a dramatic increase in cocaine use in both the inner city and western regions, which was characterised by more IDU injecting cocaine. Cocaine using IDU had lower levels of psychosocial functioning relative to other IDU, and suffered more injection-related problems. The increase in cocaine use was restricted to Sydney, with no substantial evidence of increased cocaine use in Melbourne or Adelaide.
- In Adelaide, there was an increase in amphetamine use, particularly injection of amphetamine.

Other trends detected by the 1998 IDRS are noted below.

- Smoking of heroin continued to increase in Sydney and Melbourne, a trend that was not apparent in Adelaide.
- There was a continuing trend for more heroin use among cannabis users in Sydney.
- In Adelaide there was an increase in self-reported crime among IDU, and an increase in the use of hash and hash-oil by cannabis using IDU.
- Psychological problems were evident among cannabis users in all three states.
- The use of pharmaceuticals among IDU remained high, although the prevalence of injecting pills (benzodiazepines and prescription opiates) was lower in 1998 than 1997 in Sydney and Melbourne.
- Methadone injection was still a common practice among Sydney IDU.
- A substantial proportion of IDU in Sydney and Melbourne reported that there had been an increase in police activity and that police activity had made it harder to obtain drugs.

One issue that arose during the second year of the multi-state IDRS was that of sampling consistency between 1997 and 1998. The IDRS sampling procedure did not vary greatly between 1997 and 1998, or to an extent that could plausibly explain emergent drug trends. Furthermore, the three main drug trends detected by the IDRS were apparent in the IDU survey, the key informant survey and various indicator data on drug-related issues. Convergence of findings from these three sources enhances the validity of these drug trends.

In addition to the general drug trends noted above, the IDRS also obtained specific information on the price, purity, availability, and use of the four main illicit drugs monitored by the IDRS (heroin, amphetamine, cocaine and cannabis). Following is a summary of these trends.

HEROIN

Price: The price of heroin per gram as reported by IDU decreased substantially since 1997 in both Sydney and Melbourne, and was cheapest in Sydney (\$280). There was a similar decrease in the price of a cap in Melbourne (\$20-25 vs. \$30-40) and in the Western region of Sydney (\$25 vs. \$30). The price of heroin (grams and caps) remained stable in Adelaide and was higher than in the other two cities (\$400 per gram, \$50 per cap).

Purity: The purity of heroin increased in all three states, with the purity levels of SA and VIC converging with the high purity levels found in NSW (NSW 71%, based on AFP seizures; VIC 62%; SA 59%).

Availability: Heroin was rated as easy to obtain in all three states, but tended to be easier to obtain in Melbourne and Sydney than in Adelaide.

Use: Use of heroin among IDU was high in all cities, particularly Melbourne and Sydney where nine in ten IDU had used heroin in the last six months. The frequency of heroin use among IDU was higher in Sydney and Melbourne (approximately 6-7 days/week) than Adelaide (approximately 3 days/week). Frequency of heroin use among IDU also increased in Sydney and Melbourne since 1997, but remained the same in Adelaide. Smoking of heroin continued to be a common route of administration among IDU in Sydney and Melbourne.

Other trends: Key informants reported an increase in the number and types of heroin users in all states, particularly an increase in the number of young users, and an increase in the number of female users in Melbourne. There was also an increase in heroin-related inquiries to the Alcohol and Drug Information Service (ADIS) in NSW and SA, and an increase in DIRECT-Line calls regarding heroin in VIC. Indicator data showed that overdose continued to be a prevalent harm associated with heroin use in VIC and NSW.

AMPHETAMINE

Price: The price of amphetamine as reported by IDU was stable in all cities, and twice the price in Sydney (\$100 per gram) than in Melbourne or Adelaide (\$50 per gram).

Availability: Amphetamine was more available in Adelaide and Sydney than in Melbourne.

Purity: The purity of amphetamine was stable and low in all states (NSW 21%, based on AFP seizures; VIC 12%; SA 6%).

Use: Amphetamine use was stable and low in both Sydney and Melbourne, but appeared to have

increased in Adelaide with more IDU injecting amphetamine (70% vs. 45%) and more frequent amphetamine use among IDU (25 days vs. 17 days in last six months).

Other trends: Key informants from Adelaide reported increasing use of amphetamine and an increase in the number of youth using amphetamine. There was also an increase in the number of inquiries made to ADIS in South Australia regarding amphetamine.

COCAINE

Price: In Sydney the price of cocaine caps as reported by IDU had decreased (\$50 per cap) and caps had become the most common purchase unit. The median price of cocaine per gram in Sydney (\$200) had not changed since 1996-97. The price of cocaine reported by IDU in Melbourne had decreased since 1997 (\$200 vs. \$300 per gram), where cocaine was not available in caps. The price of cocaine reported by IDU in Adelaide had remained stable (\$250 per gram, \$50 per cap).

Purity: The purity of cocaine increased slightly in all states and was highest in NSW (NSW 64% based on AFP seizures; VIC 54%; SA 44%).

Availability: Cocaine was rated as easily available in Sydney, where availability had increased since 1997. In Melbourne and Adelaide cocaine was reported to be difficult to obtain.

Use: Use of cocaine had increased dramatically among IDU in Sydney and was higher than in both Melbourne and Adelaide. Cocaine use remained very low in Melbourne, while levels of use in Adelaide appeared comparable with those seen in Sydney in 1996-97.

Other trends: Key informants in Sydney reported more injecting of cocaine among heroin users, and poor health and psychosocial functioning among injecting cocaine users. Users injected cocaine frequently, and often used cocaine concomitantly with heroin. There was also an increase in the number of criminal incidents relating to cocaine in Sydney from 1996 to 1998.

CANNABIS

Price: The price of cannabis per ounce and per gram as reported by IDU decreased slightly in all states, and was cheapest in Adelaide (\$200-250 ounce).

Availability: Cannabis was easy to obtain in all three states.

Potency: IDU in all three states rated the potency of cannabis as high, a finding consistent with the 1997 IDRS.

Use: Use of cannabis among IDU decreased in Sydney and Melbourne, but remained stable in Adelaide.

Other Trends: Key informants in Adelaide reported more cannabis users, particularly more young users. Key informants in Sydney reported more young cannabis users, and a continuing trend for heroin use (particularly smoking heroin) among cannabis users. There was a continuing trend in all states for

psychological problems, such as depression, among cannabis users.

Implications

The findings from the 1998 IDRS suggest the following areas require attention from the view of public health, law enforcement and further research.

- Continuing investigation into factors that may limit the current heroin market and reduce initiation to heroin injecting.
- Continuing research into factors that may reduce harms associated with heroin use, particularly overdose.
- Research on the prevention of harms associated with cocaine use in Sydney, particularly the potential spread of blood-borne viruses.
- Documentation of factors associated with the rapid expansion of the cocaine market in Sydney, and an investigation of factors affecting this market.
- Continued close monitoring of cocaine use in Sydney and other jurisdictions, particularly Melbourne.
- Investigation of factors responsible for increasing crime among IDU in Adelaide.
- Continued close monitoring of the use of more potent forms of cannabis (i.e., hash and hash-oil) in Adelaide and any associated harms.
- Further research into factors affecting initiation into amphetamine injecting in Adelaide.

PREFACE

The IDRS is intended to provide a coordinated approach to the monitoring of drug trend data relating to the main illicit drug types. It is also intended that information from the IDRS should act as a strategic early warning system for emerging drug trends. Data collected by the IDRS needs to be sensitive to emerging drug problems of national importance rather than describe phenomenon in detail. The findings of the IDRS also need to direct research toward relevant areas, be timely, and be nationally comparable. The IDRS itself needs to be simple to operate, be linked to a mechanism that can commission the collection of more in-depth data, and be cost effective.

The IDRS focuses on drug trends regarding the four main illicit drug types: heroin, cocaine, amphetamines and cannabis. IDRS drugs trends are established through a survey of injecting drug users, a survey of key informants who have had extensive exposure to drug users, and the collection of other indicators from police, health and research sources. Information from these three sources complement and supplement each other in establishing drug trends.

This report documents the findings from the third year of the IDRS in NSW, which constituted the second year of a multi-state IDRS that was conducted in Victoria, New South Wales and South Australia. During 1998 planning also occurred to conduct a “core” IDRS in the remaining states and territories of Australia. The core IDRS will consist of a key informant survey and collection of other indicator data. Data collection for the core IDRS will begin in 1999.

1.0 INTRODUCTION

In 1998, the National Drug and Alcohol Research Centre was commissioned by the Commonwealth Department of Health and Aged Care to conduct a national trial of the Illicit Drug Reporting System (IDRS), following a successful pilot study of the methods in Sydney in 1996 (Hando et al., 1997) and a multi-state trial of the IDRS in 1997.

The national trial of the IDRS was implemented in three states: NSW, SA and VIC. The following three methods, which were intended to complement and supplement each other, were used to collect data in each state: (1) key informant interviews with professionals working in the drug field; (2) a survey of IDUs; and (3) an examination of existing indicator data. The feasibility of conducting core IDRS, which consisted of key informant interviews and collection of other indicator data, was established in the remaining states and territories.

This report presents the findings of the IDRS in NSW, SA and VIC over the two years (1997-1998) that the multi-state IDRS has been conducted. The report presents a summary of major drug trends from each state, compares state findings, and follows drug trends from 1997 to 1998. Further detail can be found in Appendix 1, which contains statistics for each jurisdiction by year, and in the separate state IDRS reports (Hayes et al., 1999; Rumbold and Fry, 1999; McKetin et al., 1999). The findings of the IDRS from previous years can be found in Hando et al. (1997, 1998), Hando and Darke, (1998a), Cormack et al. (1998) and Rumbold et al. (1998). (Hando et al., 1998).

1.1 STUDY AIMS

The main aims of this project were:

1. to collect information on strategically important drug trends in three states;
2. monitor trends in drug use patterns from 1997 to 1998; and
3. to assess and disseminate information on emerging drug issues that require further attention.

2.0 METHOD

A summary of each of the three components of the IDRS is provided below. Each site received the IDRS procedure manual (Hando & Darke, 1998b) prior to the study, and participated in a training workshop. Comparable methods were followed in each site. Any differences in methods have been highlighted.

2.1 SURVEY OF INJECTING DRUG USERS

Injecting drug users (IDU) were targeted in the survey as they are a sentinel group for drug trends. Research continues to show the polydrug using nature of IDUs (e.g. Darke and Hall, 1995). As such, they provide an excellent window into drug use patterns and trends.

IDU were interviewed between June and October, 1998. The sample sizes were 140 in Adelaide, 176 in Sydney and 293 in Melbourne. IDU from the Sydney sample are sometimes distinguished according to region, namely the western region of Sydney (WS, $n = 76$) or the inner city of Sydney (IC, $n = 100$).

Entry criteria for the IDU study were having injected at least monthly during the previous six months, and residence in the particular study state during the past six months. Subjects were recruited using multiple methods which included advertisements in rock magazines, newspapers, needle exchanges and peer referral. They were interviewed in places convenient to them, such as coffee shops and hotels. Interviews took between 30 to 45 minutes to complete. The interview schedule was administered by research assistants in Sydney and by trained peer interviewers in Adelaide and Melbourne. Subjects were reimbursed up to \$20 for out-of-pocket expenses and time. Subjects were assured of the confidentiality of their responses and their anonymity in the study.

The structured interview schedule that was administered to participants was based on previous NDARC research (Darke et al., 1992, 1994). The structured interview schedule included both open and closed-ended questions and consisted of seven main sections: demographics; drug use patterns; price, purity and availability of drugs; criminal activity; risk-taking behaviour; general health status; and general trends. Data analyses were conducted using SYSTAT (Wilkinson, 1990) and SPSS (SPSS, 1993, 1996).

2.2 KEY INFORMANT STUDY

Key informants were interviewed mostly by telephone between June and October 1998. The criteria for entry were at least weekly contact with illicit drug users in the past six months or contact with 10 or more illicit drug users in the last 6 months. Participants were generally referred by colleagues or supervisors, former key informants, or had participated in the previous IDRS key informant study conducted in Sydney. Potential participants were screened for inclusion prior to the interview. They were informed about the nature of the study and ethical requirements.

The Melbourne study recruited a total of 31 key informants (15 male, 16 female), the Adelaide study a total of 31 key informants (16 male, 15 female), and the Sydney study recruited 42 key informants (17 male, 25 female). The groups included paid or volunteer workers in drug treatment agencies, health services, community services, law enforcement, drug user groups, needle exchanges, research organisations, counselling services and ambulance officers.

All key informants were asked to nominate the main drug used by the drug users with whom they had most contact. Heroin was the most often cited drug in all cities, with nominations from 60% of Sydney key informants, 87% of Melbourne key informants, and 35% of Adelaide key informants. There were differences between cities in the proportion of key informants reporting on each of the other drug types. In Sydney, 7% reported on amphetamine, 10% reported on cocaine, and 14% reported on cannabis. In Adelaide, 26% of key informants nominated amphetamine as the main drug used by the users with whom they had contact, with 6% citing cocaine and 32% cannabis. In Melbourne, 10% of key informants nominated cannabis, and one key informant nominated amphetamine.

Key informant interviews took between 20 and 60 minutes to administer. The schedule was an instrument based on previous research conducted at NDARC for the World Health Organization (Hando and Flaherty, 1993; Hando, Flaherty and Rutter, 1997). It included sections on drug use patterns, drug availability, criminal behaviour and health issues. The interviewer took notes during the interview, which were later transcribed as fully as possible. Open-ended questions were analysed using a word processor by grouping responses to each question and examining the responses for themes. Closed-ended questions were analysed using SPSS (SPSS Inc., 1993, 1996).

2.3 OTHER INDICATORS

A range of secondary data sources were examined to complement and validate data collected from IDU and key informant surveys. These included data from survey, health, research and law enforcement sources. The pilot study for the IDRS (Hando et al., 1997) recommended that such data should:

- ⌚ be available at least annually;
- ⌚ include 50 or more cases;
- ⌚ provide brief details of illicit drug use;
- ⌚ be collected in the main study site (i.e. in the city or state of the study); and
- ⌚ include details on the four main illicit drugs under investigation.

Data sources which fulfilled at least four of these criteria and were available for most states, or all of Australia, included:

- ⌚ telephone advisory data from the Alcohol and Drug Information Service (NSW, SA) and DIRECT-Line (VIC);
- ⌚ the price of covert drug purchases provided by the Australian Bureau of Criminal Intelligence;
- ⌚ drug purity data provided by the Australian Bureau of Criminal Intelligence;

- ☐ data from the National Survey of Mental Health and Well Being;
- ☐ data from the National Household Survey;
- ☐ drug seizure data from the Australian Customs Service;
- ☐ drug use prevalence data from the annual National Needle and Syringe Exchange Survey;
- ☐ treatment admission data from the National Minimum Data Set – Project for Alcohol and Other Drug Treatment Services; and
- ☐ opioid-related overdose fatalities from the Australian Bureau of Statistics.

Some additional indicators were unavailable at the time of writing this report, or did not meet the above criteria. These included data from the National Household Survey, HIV incidence and prevalence data, ambulance and emergency room data, police arrest data and urinalysis data from arrestees. Police arrest data was available for some jurisdictions, but this data was not comparable between states. It should also be noted that purity data was not comparable for all states. Attempts are currently being made by some states to set up systematic collection of these indicators and improve comparability of existing indicators.

2.4 DATA ANALYSIS

A selection of the key indicators which represent the "best" indicators of trends in illicit drug use have been included in the present report. Demographic characteristics of injecting drug users, patterns of drug use, forms of drugs used, price and availability of drugs, crime, health, overdose, needle sharing practices and the impact of police activity were best measured by asking samples of IDU who represent a sentinel group of illicit drug users familiar with most illicit drugs, including cannabis. Purity figures were based on laboratory analysis of drug seizures, which are more accurate than IDU or key informant reports. Key informants provided more contextual details about trends in illicit drug use from a wide variety of perspectives. Other indicators, such as population survey data and telephone advisory data, were used to supplement other information on drug trends. Note that while key informant and IDU reports focus on trends found in the capital city of each state, some additional indicators (i.e., purity) are reported by state.

Descriptive analyses of state/city differences are presented in this report. Where possible, 1998 IDRS data was compared with the 1997 IDRS findings for NSW, VIC and SA (Cormack et al., 1998; Hando & Darke, 1998a; Hando et al., 1998; Rumbold and Fry, 1998) and 1996 IDRS findings for NSW (Hando et al., 1997).

The drug trends presented in this report are not an exhaustive account of the IDRS findings in each state. Please refer to the individual state reports for further details (Hayes et al., 1999; McKetin et al., 1999; Rumbold & Fry, 1999).

3.0 CURRENT DRUG SCENE AND RECENT TRENDS

An overview of the demographic and drug use findings from the IDU survey in each city is presented first, followed by findings by drug type (heroin, amphetamine, cocaine, cannabis, and other drugs) in each state, and a summary of results on drug-related issues and problems.

3.1 AN OVERVIEW OF THE IDU SURVEY

3.1.1 Demographic characteristics of the IDU

The demographic characteristics of the IDU samples from each city are presented in Table 3.1.1. The average age of IDU was 27 to 29 years depending on the city, and over half were male. Sydney IDU were more likely to be male than IDU from Adelaide or Melbourne. The trend found in previous years for more female IDU in Sydney was still found among the younger IDU, with only 56% of IDU under 25 years being male compared with 76% of older IDU ($\chi^2_{df 1} = 7.6, p < .01$).

A substantial proportion of IDU from each state were unemployed, with many having a previous prison history. Overall, IDU from Adelaide were better educated, less likely to be unemployed, less likely to have a prison history and more likely to be in treatment, than IDU in the other cities. Conversely, the Sydney IDU sample had the lowest average level of education, and were the most likely to have a prison history (53%).

Table 3.1.1 Demographic characteristics of IDU in the three cities

	SYDNEY n=176	ADELAIDE n=140	MELBOURNE n=293
Age (mean years)	29	29	27
Male %	70	57	61
Unemployed %	83	45	66
School education (mean years)	9.9	11.0	10.6
Tertiary education %	31	56	44
Prison history %	53	24	33
Currently in treatment %	26	42	33

3.1.2 Drug use history of the IDU

The drug use history of IDU from each city can be seen in Table 3.1.2. The median age of first injection was similar to that found in 1997 (17-19 years).

Amphetamine was still the first drug injected by most IDU in Adelaide and Melbourne. The majority of Sydney IDU reported heroin to be the first drug injected, a continuing trend from 1997. In terms of drugs ever injected, IDU in Sydney and Melbourne were less likely to have injected amphetamine than in 1997. There was also a shift away from IDU in Sydney reporting that amphetamine was their drug of choice (5% vs. 15%), whereas more reported cocaine was their drug of choice (7% vs. 1%). Conversely, more Adelaide IDU reported ever injecting amphetamine or that it was their drug of choice than in 1997.

Polydrug use was still a salient feature of all the IDU samples. The median number of drug classes used in the last six months was five for IDU in Sydney and Adelaide and six for IDU in Melbourne.

Table 3.1.2 Patterns of drug use among IDU in the three cities.

	SYDNEY	ADELAIDE	MELBOURNE
Median age of first injection	19	18	17
First drug injected %:			
Heroin	66	37	41
Amphetamine	28	59	57
Ever injected %:			
Heroin	99	84	97
Amphetamine	64	98	85
Drug of choice %:			
Heroin	82	55	78
Amphetamine	5	34	5
Cocaine	7	6	0
Cannabis	1	2	14
Median no. drug classes used:			
Lifetime	9	11	10
Past 6 months	5	5	6
Median no. drug classes injected:			
Lifetime	3	4	3
Past 6 months	2	2	2

3.2 HEROIN

This section contains a summary of trends in the price, purity, availability and use of heroin the three states for 1997 and 1998. Information provided is based on IDU reports unless otherwise specified. More comprehensive information on heroin trends can be found in Appendix 1.

3.2.1 Price

The median price of heroin grams and caps reported by IDU in each city can be found in Table 3.2.1. Table 3.2.1 also shows the modal price range of heroin caps¹ in Sydney and Melbourne, where there was not a unimodal price distribution.

The price of heroin per gram had decreased substantially since 1997 in both Sydney and Melbourne, and was cheapest in Sydney (median price \$280). There was a similar decrease in the median price of a cap in Melbourne (\$30-40 vs. \$20-25) and in the Western region of Sydney (\$30 vs. \$25). The price of heroin grams and caps remained stable in Adelaide (\$400), where heroin caps cost more than in the other two cities (\$50).

The Australian Bureau of Criminal Intelligence provides quarterly figures on the price of covert drug purchases in each Australian jurisdiction. According to covert purchases of heroin made in the 1997/98 financial year, one gram (or street weight) of heroin costs \$300-500 in NSW, \$200-700 in VIC, and \$350-450 in SA. The price of a heroin cap was reported to cost \$30-80 in NSW, \$35-100 in VIC, and \$50 cap in SA. These prices are similar to those reported by IDU in Adelaide, but slightly higher than those reported by IDU in Sydney and Melbourne.

Table 3.2.1 IDU estimates of heroin price in 1997 and 1998 by city.

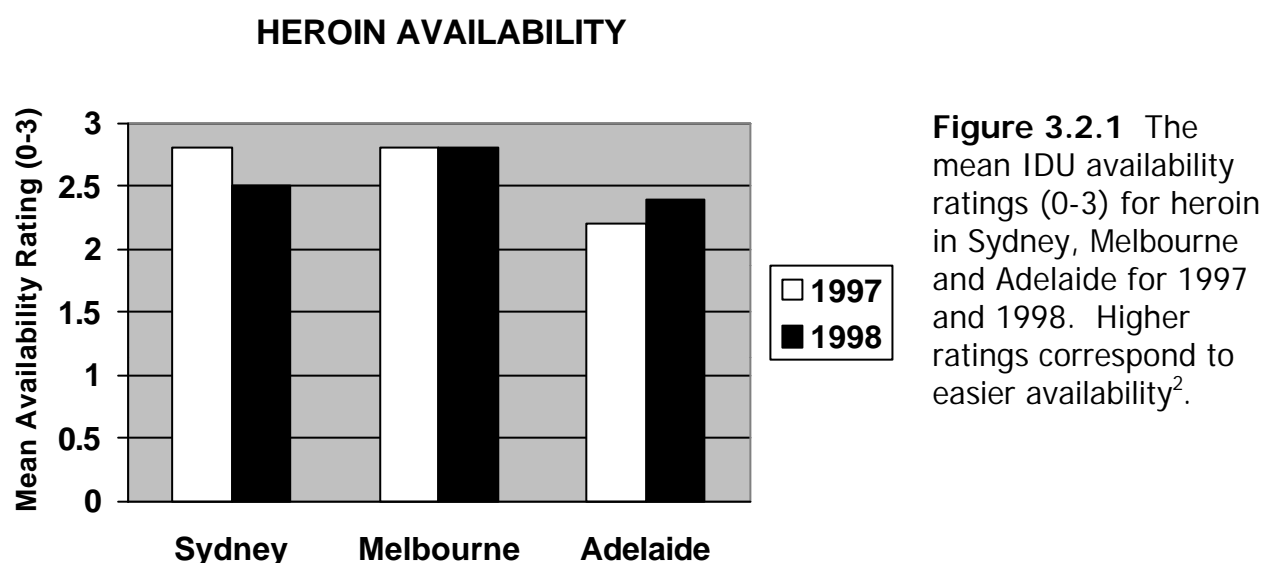
Unit	City	Year	
		1997	1998
Gram	Sydney	400	280
	Melbourne	450	400
	Adelaide	400	400
Cap	Sydney	30(30-50)	30(25-50)
	Melbourne	40(30-50)	25(20-50)
	Adelaide	50	50

¹ A cap is a small quantity of heroin weighing between 0.1 and 0.3 grams (ABCI, 1997).

3.2.2 Availability

Heroin was rated as easy or very easy to obtain by IDU in all three states (see Figure 3.2.1), but was rated to be easier to obtain in Melbourne and Sydney than in Adelaide. Heroin was rated as “very easy” to obtain by 62% of IDU in Sydney, and 82% of IDU in Melbourne, compared with 43% in Adelaide.

The high availability of heroin in 1998 is consistent with high availability also found in 1997, particularly in both Sydney and Melbourne (Figure 3.2.1²). Most IDU also rated the availability of heroin as stable (Sydney 71%, Melbourne 48%, Adelaide 73%) with a substantial proportion from Melbourne (35%) reporting that heroin had become easier to obtain.



3.2.3 Purity

The purity of heroin increased in all three states, with the purity levels of SA and VIC converging with the high purity levels found in NSW (see Figure 3.2.2). The increase in purity from 1997 to 1998 was greatest in VIC and SA (NSW AFP seizures 64% vs. 71%; VIC, 35% vs. 62%; SA, 37% vs. 59%).

It should be noted that purity of heroin in NSW is based on AFP heroin seizures, which may be more pure than street level heroin. Comparison of the purity of AFP seizures from 1997 with the purity of seizures made by all police in NSW (see Figure 3.2.2) shows that AFP seizures were on average 9% more pure (1997: all police seizures 55%, AFP seizures 64%).

² Refer to Appendix 1, Table 9, for mean availability ratings.

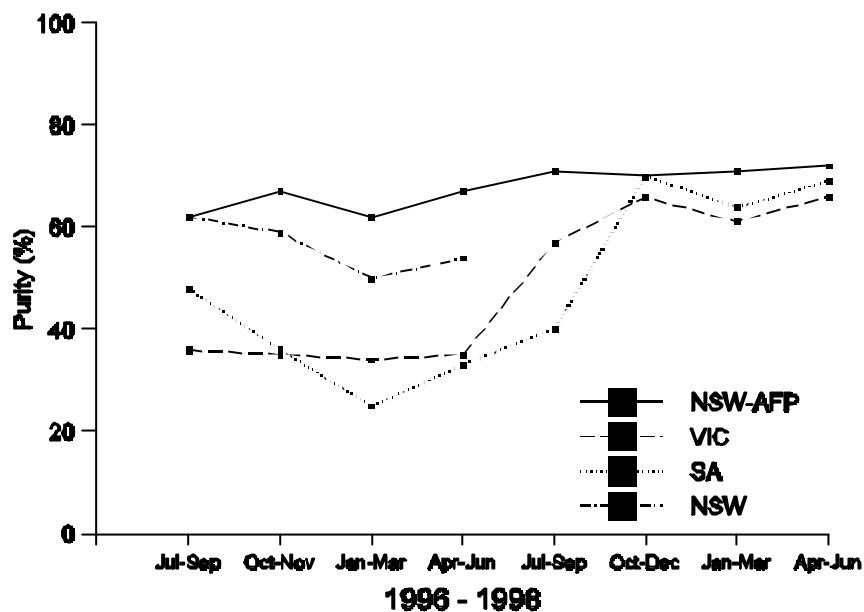


Figure 3.2.2
Mean purity of heroin seizures in NSW, SA, and VIC for each quarter in the 1996/97 and 1997/98 financial years. NSW-AFP figures represent the purity of AFP seizures only.

3.2.4 Use

Following is a summary of the major trends found in heroin use (see Table 3.2.2). More detail on heroin use trends can be found in Appendix 1.

The use of heroin powder and heroin rock was widespread in all three cities, although less IDU in Adelaide reported using heroin rock (80%) than in Melbourne (97%) and Sydney (95%).

Use of heroin among injecting drug users (IDU) was high in all cities, particularly Melbourne and Sydney where nine in ten IDU had used heroin in the last six months. The frequency of heroin use among IDU was higher in Sydney and Melbourne (approximately 6-7 days/week) than Adelaide (approximately 3 days/week). Frequency of use also increased in Melbourne and Sydney since 1997, but remained the same in Adelaide (see Table 3.3.2).

It is noteworthy that approximately one in five injecting drug users in Sydney and Melbourne had smoked heroin in the preceding six months, a finding consistent with other research suggesting smoking has become a relatively common route of heroin administration.

There was also a trend in Sydney for heroin to be the first drug injected by more IDU in 1998 (67% cf. 44% in 1997). A similar trend was found in Melbourne among IDU who had begun injecting within the last five years. These newer initiates to injecting were nearly twice as likely to use heroin the first time they injected compared with other IDU (62% vs. 32%).

Table 3.2.2 Heroin use patterns in the last six months among IDU in 1997 and 1998 by city.

	City	Year	
		1997	1998
% who used heroin	Sydney	91	93
	Melbourne	95	91
	Adelaide	90	75
% smoked heroin	Sydney	19	22
	Melbourne	19	26
	Adelaide	12	4
Days of use ^a	Sydney	120	180
	Melbourne	105	140
	Adelaide	68	72

^a Median days of use in the last six months among IDU who had used heroin during this period.

Prevalence of heroin use among IDU can be estimated from the annual National Needle and Syringe Exchange Survey. According to this survey heroin was the last drug injected by the majority of IDU in NSW (48%), VIC (79%) and SA (43%). There was a notable discrepancy between prevalence in heroin use in VIC relative to NSW and SA, which was associated with more methadone injection in NSW (20%) and more amphetamine injection in SA (40%).

An estimate of the proportion of the general population who use opiates can be provided by the 1997 National Survey of Mental Health and Well-Being (Commonwealth Department of Health and Family Services). This survey found that 1.2% of their sample had used opiates (including heroin, methadone and other opiates available on prescription) at least five times in the preceding year, while 0.2% of the sample met criteria for an opiate use disorder in the past year.

According to the 1998 National Household Survey the percentage of people who had ever used heroin had increased since 1995 (2.2% vs. 1.4%), as had the percentage who had used heroin in the last year (0.4% vs. 0.7%).

3.2.5 Other trends

Key informants reported an increase in the number and types of heroin users in all states, particularly an increase in the number of young users, and an increase in the number of female users in Melbourne. In Adelaide there was particular concern expressed about the impact of increasing heroin use among indigenous and Vietnamese communities.

There was an increase in heroin-related inquiries to ADIS in NSW and SA, and an increase in

DIRECT-Line calls regarding heroin in VIC. Fatal opioid overdoses continued to increase in VIC and NSW. These trends are covered in detail in section 3.7 (DRUG-RELATED ISSUES).

3.3 AMPHETAMINE

This section contains a summary of trends in the price, purity, availability and use of amphetamine in the three states for 1997 and 1998. Information provided is based on IDU reports unless otherwise specified. More comprehensive information on amphetamine trends can be found in Appendix 1.

3.3.1 Price

According to IDU reports, the price of amphetamine was stable in all cities, and twice the price in Sydney (\$100 per gram) than in Melbourne or Adelaide (\$50 per gram).

The Australian Bureau of Criminal Intelligence provides quarterly figures on the price of covert drug purchases in each Australian jurisdiction. According to covert purchases of amphetamine made in the 1997/98 financial year, one gram (or street weight) of amphetamine costs \$80-100 in NSW, \$50 in VIC, and \$50-60 in SA. These prices are nearly identical to those reported by IDU in all three states.

3.3.2 Availability

The mean availability ratings for amphetamine in each of the three cities in 1997 and 1998 can be seen in Figure 3.3.1³. Amphetamine was most difficult to obtain in Melbourne with 40% of IDU rating it as either difficult or very difficult to obtain, compared with 9% in of IDU in Sydney and 2% in Adelaide.

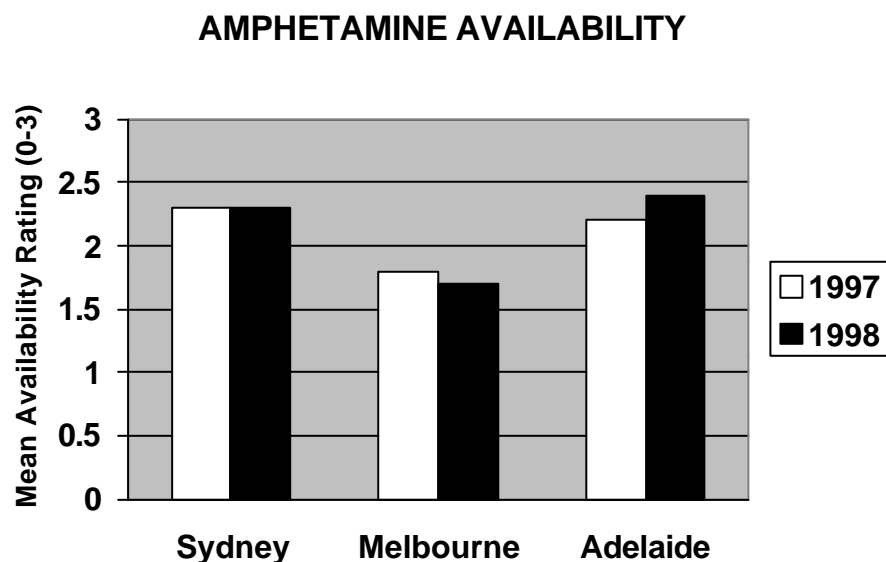


Figure 3.3.1
Mean IDU availability ratings (0-3) for amphetamine in Sydney, Melbourne and Adelaide for 1997 and 1998. Higher ratings correspond to easier availability³.

3.3.3 Purity

³ Refer to Appendix 1, Table 9, for mean availability ratings.

The purity of amphetamine was stable and low in all states (see Figure 3.3.2). Note that purity levels for NSW represent the purity of AFP seizures, which are typically higher than that of all police seizures (cf. 20% vs. 7% for 1996/97). Small seizures (presumably street level seizures) made by the AFP in 1997/98 had an average purity of 5% – comparable with the purity level of all NSW police seizures analysed in 1996/97. Details of purity levels by quarter in each state are contained in Appendix 1 (Table 12).

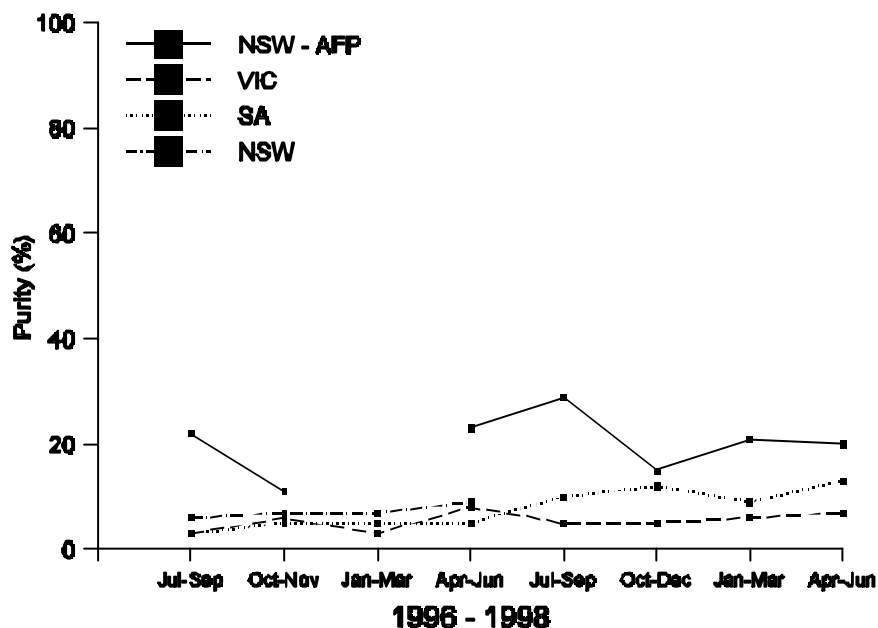


Figure 3.3.2 Mean purity of amphetamine (amphetamine and methamphetamine) seizures by state for each quarter in the 1996/97 and 1997/98 financial years. NSW-AFP figures represent the purity of AFP seizures only.

3.3.4 Use

Amphetamine use was stable and low in both Sydney and Melbourne, but appeared to have increased in Adelaide. The increase in amphetamine use in Adelaide was apparent with regard to both the frequency of use among amphetamine users (25 vs. 17 days in the last six months, see Figure 3.3.3), and the proportion of IDU who had injected amphetamine in 1998 compared with 1997 (70% vs. 45%, see Figure 3.3.4). The increase in amphetamine use in Adelaide may have been partly due to an over-representation of amphetamine users in the Adelaide IDU sample in 1998, but could not be explained entirely by sampling differences between the two years (Hayes et al., 1999).

As can be seen in Table 3.3.1 most IDU who used amphetamine in the last six months injected the drug (87-97%), although a significant proportion also snorted amphetamine (29-41%). Important was the finding that few smoked amphetamine (5-8%), suggesting low use of smokable freebase methamphetamine (also called “ice” or “shabu”). There was little change in routes of administration among amphetamine users from 1997 to 1998 (see Table 3.3.1).

Figure 3.3.3 Median days of amphetamine use during the previous six months among IDU

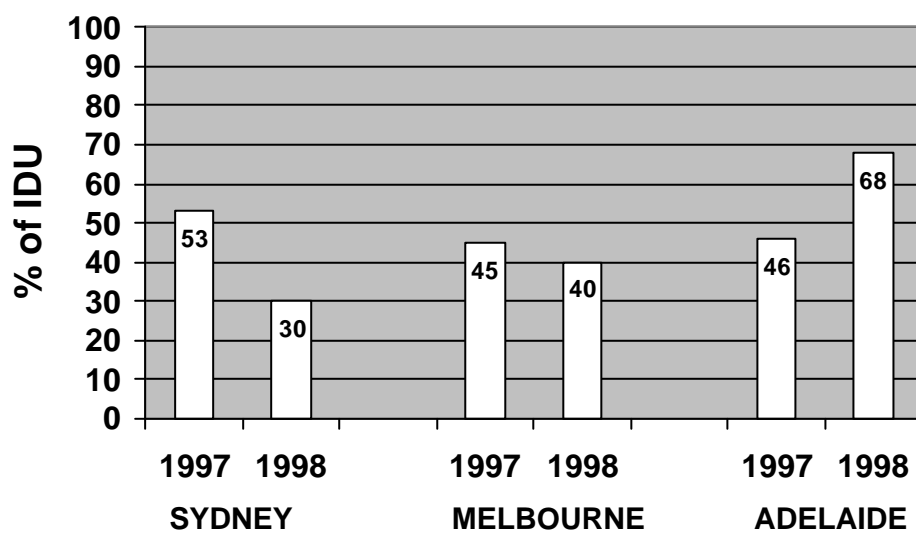
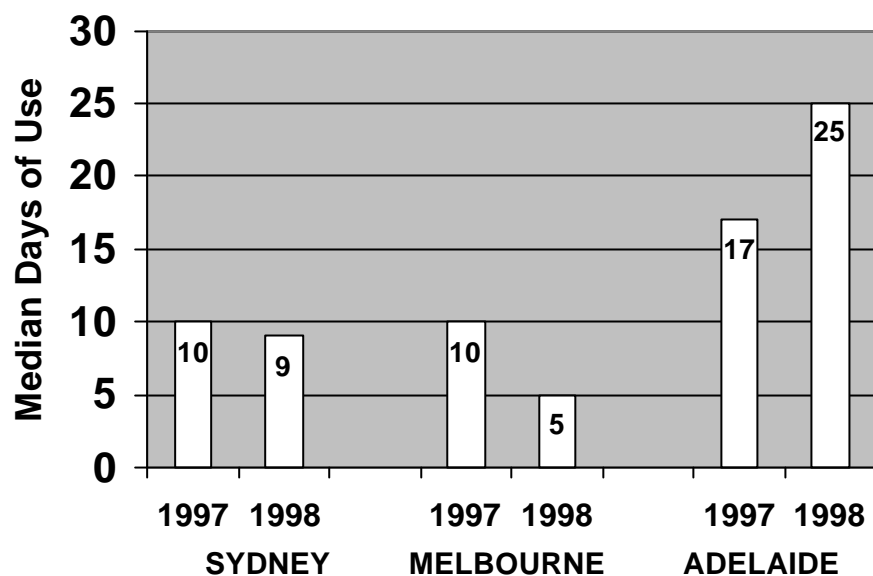


Figure 3.3.4
Percent of IDU who injected amphetamine in the previous six months in Sydney, Melbourne and Adelaide in 1997 and 1998.

Table 3.3.1 Route of amphetamine administration among those IDU who had used amphetamine in the past six months in 1997 and 1998 by city.

	City	Year	
		1997	1998
% injected	Sydney	94	87
	Melbourne	93	91
	Adelaide	87	97
% snorted	Sydney	26	41
	Melbourne	28	34
	Adelaide	22	29
% smoked	Sydney	9	5
	Melbourne	8	7
	Adelaide	11	8

Among those IDU who had used amphetamine in the last six months, the type of amphetamine used in each state was overwhelming “powder” amphetamine, a finding consistent with the 1997 IDRS (see Figure 3.3.5). Few IDU reported use of prescription amphetamine or liquid amphetamine (“oxblood”).

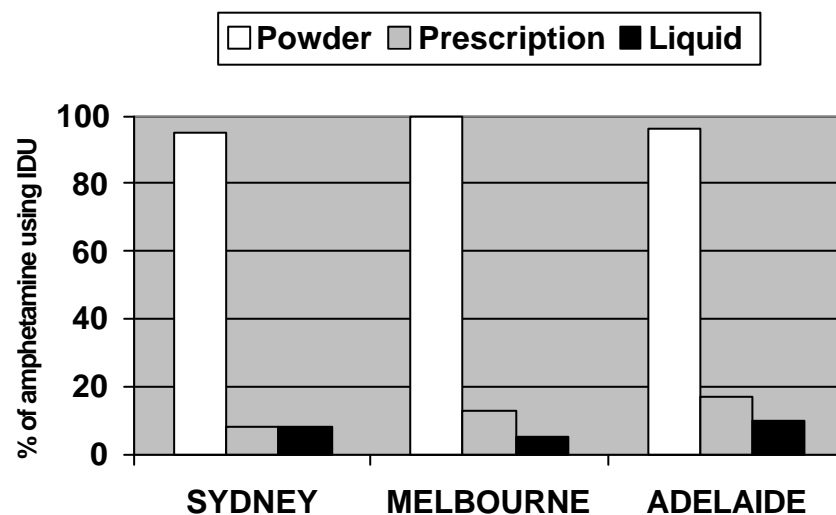


Figure 3.3.5 Form of amphetamine used among those IDU who had used amphetamine in the past six months by city.

Prevalence of amphetamine use among IDU can be estimated from the annual National Needle and Syringe Exchange Survey. According to this survey, amphetamine was the last drug injected by a large proportion of IDU in SA (40%), but few IDU in NSW (8%), VIC (3%).

According to the 1997 National Survey of Mental Health and Well-Being, 1% of adults (males 1.4%, females 0.6%) had used stimulants (amphetamine, ecstasy, and other stimulants available on prescription) at least five times in the preceding year, while 0.3% qualified for a substance use disorder in the past 12 months (Hall et al., 1998).

The 1998 National Household Survey found that amphetamine was still the second most commonly used illicit drug used after cannabis, with 8.7% of their sample having ever used amphetamine, and 3.6% having used in the last year. These figures suggested an increase in amphetamine use among the general population since 1995, when 5.7% of people surveyed had ever tried amphetamine and 2.1% had used in the last year.

3.3.5 Other trends

Key informants from Adelaide reported increasing use of amphetamine and an increase in the number of youth using amphetamine. There was also an increase in the number of inquiries made to ADIS in South Australia regarding amphetamine. These trends are covered in detail in the section 3.7, DRUG-RELATED ISSUES).

3.4 COCAINE

This section contains a summary of trends in the price, purity, availability and use of cocaine in the three states for 1997 and 1998. Information provided is based on IDU reports unless otherwise specified. More comprehensive information on cocaine trends can be found in Appendix 1.

3.4.1 Price

Based on IDU reports, the price of cocaine per gram was cheapest in Sydney (\$200 per gram), had decreased in Melbourne from \$300 to \$200 per gram, and remained stable in Adelaide at \$250 per gram.

In Sydney, caps of cocaine appeared to have become the most common unit of purchase, with more IDU reporting on price of cocaine caps than in previous years, or than in the other cities (see Figure 3.4.1, and Table 5 in Appendix 1). Cocaine caps in Sydney were also cheaper than in 1997 (\$50 vs. \$80). The price of cocaine caps in Adelaide remained stable at \$50, while very few IDU from Melbourne reported on the price of cocaine caps.

The Australian Bureau of Criminal Intelligence provides quarterly figures on the price of covert drug purchases in each Australian jurisdiction. According to covert purchases of cocaine made in the 1997/98 financial year, one gram of cocaine costs \$200 in NSW, \$200-250 in VIC, and \$250 in SA. The price of a cocaine cap was only reported for NSW, and was \$20-80. These prices are consistent with prices reported by IDU, and also with the availability of cocaine caps in NSW.

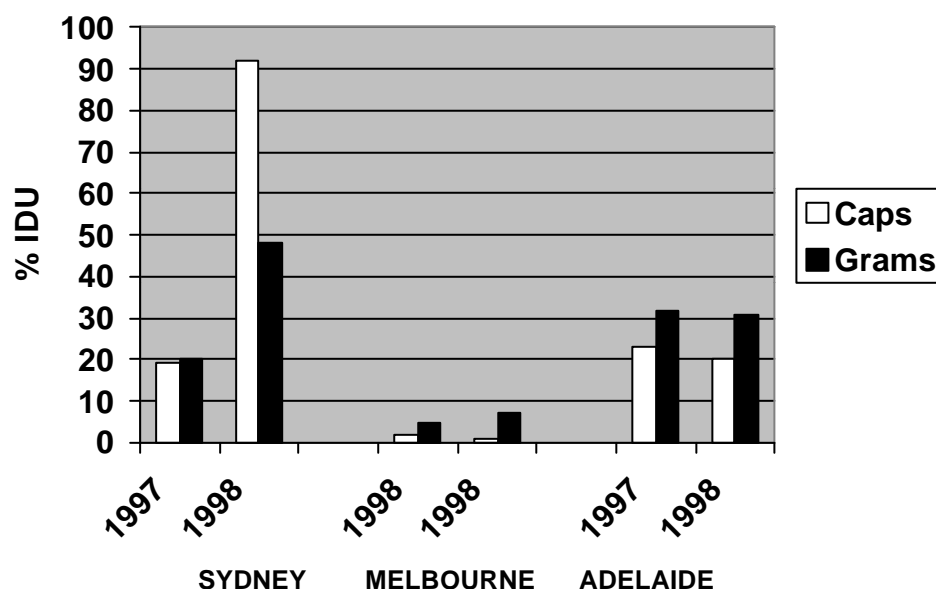


Figure 3.4.1
Percent of IDU who could comment on the price of cocaine caps and grams in Sydney, Melbourne and Adelaide in 1997 and 1998.

3.4.3 Availability

Cocaine was easy to obtain in Sydney, and difficult to obtain in both Melbourne or Adelaide (see Figure 3.4.2⁴). Availability had also increased in Sydney in 1998 with more IDU rating cocaine as “very easy” to obtain (43% vs. 33%) and half as many IDU claiming that cocaine was difficult to obtain (13% vs. 24%).

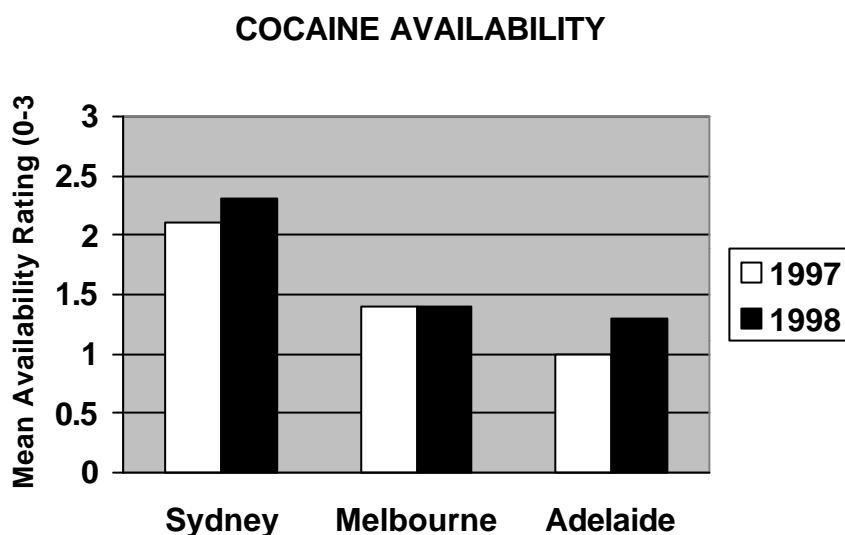


Figure 3.4.2 Mean IDU availability ratings (0-3) for cocaine in Sydney, Melbourne and Adelaide for 1997 and 1998. Higher ratings correspond to easier availability⁴.

3.4.2 Purity

The purity of cocaine (Figure 3.4.3) had increased in all three states since 1997 and was higher in NSW and VIC than in SA (NSW AFP seizures 64% vs. 59%; VIC, 54% vs. 37%; SA, 44% vs. 35%).

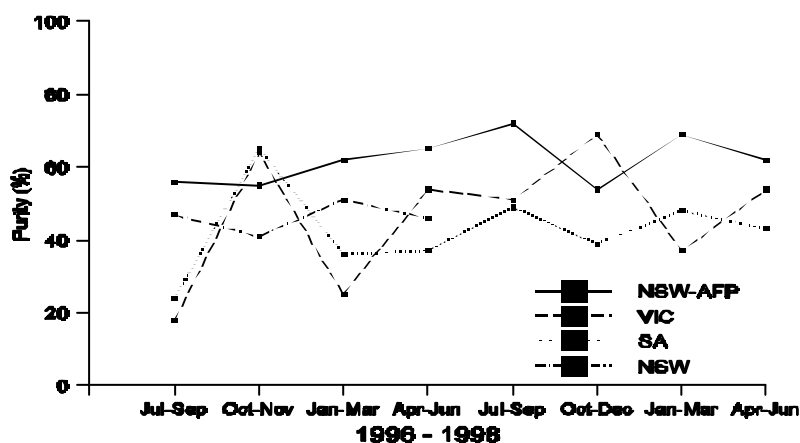


Figure 3.4.3 Mean purity of cocaine seizures in NSW, SA and VIC for each quarter in the 1996-97 and 1997-98 financial years. NSW-AFP figures represent the purity of AFP seizures only.

⁴ Refer to Appendix 1, Table 9, for mean availability ratings.

3.4.4 Use

Use of cocaine had increased dramatically among IDU in Sydney, and was higher than in both Melbourne and Adelaide. In Sydney, the proportion of IDU who had used cocaine in the last six months had increased since 1997 (59% vs. 34%). The median frequency of cocaine use had also increased (25 days vs. 4 days, in the last six months) with 17% of IDU using cocaine daily compared with 2% in 1997. The increase in cocaine use in 1998 was particularly apparent in the Western region of Sydney where the frequency of cocaine use among IDU rose dramatically in 1998 (see Figure 3.4.4).

The increase in cocaine use in Sydney was due mostly to an increase in the injection of powder cocaine. There was no evidence of an increase in smoking cocaine or the use of crack (freebase) cocaine (see Tables 17 and 20 in Appendix 1). Cocaine use remained very low in Melbourne, while levels of use in Adelaide appeared comparable with those seen in Sydney in 1996-97 (see Tables 17 and 18, Appendix 1).

Prevalence of cocaine use among IDU can be estimated from the annual National Needle and Syringe Exchange Survey. According to this survey, cocaine was the last drug injected by more IDU in NSW (6%), than in SA (3%) or VIC (1%). The prevalence of cocaine injection in NSW had increased from 5% in 1997, an increase that was most apparent in the inner city (Kings Cross, Redfern) and south-west Sydney (Cabramatta).

Findings from the 1998 National Household Survey suggest a slight increase in cocaine use among the general population since 1995. There was an increase in both the percentage of survey participants that had ever tried cocaine (4.3% vs. 3.4%) and the percentage that had used cocaine in the last year (1.4% vs. 1.0%).

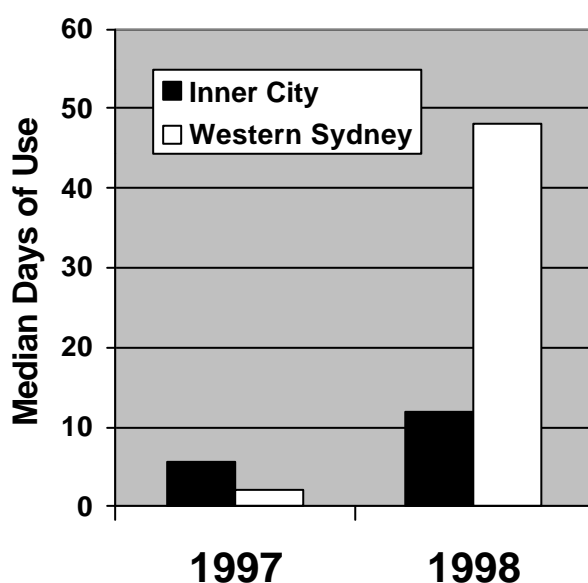


Figure 3.4.4
Median days of cocaine use in the last six months among IDU in the inner city and western region of Sydney in 1997 and 1998.

3.4.5 Other trends

Consistent with the IDU survey, key informants in Sydney reported more injecting of cocaine among heroin users. Key informant reports suggested that users injected cocaine up to 15 to 30 times per day, and often used cocaine in conjunction with heroin, either sequentially or as a cocktail (“speedballs” or “CCs”). The particularly poor health and psychosocial functioning of injecting cocaine users was also noted.

Other indicator data (NSEP client data, toxicology of suspected overdose fatalities, and toxicology of urine from methadone patients) also supported an increase in cocaine use in Sydney. Data on the number of criminal incidents relating to possession/use or dealing/trafficking in cocaine in NSW in 1996-98 are shown in Figure 3.4.5 (Chilvers, 1999), and also suggest an increase in cocaine use in NSW. Further information on cocaine use in Sydney can be found in NSW Drug Trends 1998 (McKetin et al. 1999).

Key informant reports from Adelaide suggested that availability and use of cocaine might be increasing. Key informants in Melbourne indicated that cocaine was presently too expensive to be a viable drug choice by primary heroin users.

There was no change in the number of cocaine inquiries made to ADIS in any of the three states. ADIS data can be found under DRUG-RELATED ISSUES (section 3.7).

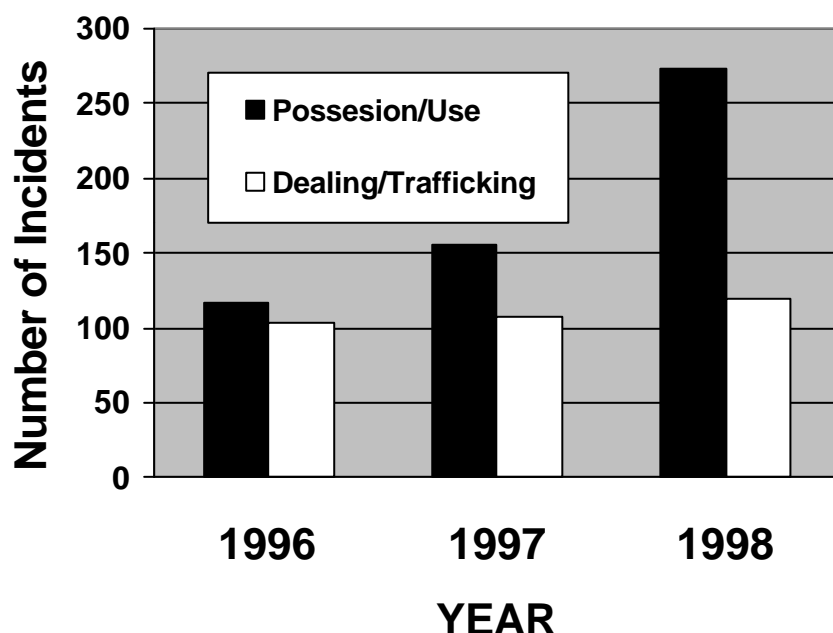


Figure 3.4.5 Number of criminal incidents in NSW relating to cocaine “possession and/or use” and “dealing and/or trafficking” of cocaine, 1996-98 (Chilvers, 1999).

3.5 CANNABIS

This section contains a summary of trends in the price, purity, availability and use of cannabis in the three states for 1997 and 1998. More comprehensive information on cannabis trends can be found in Appendix 1.

3.5.1 Price

IDU reports suggested that the price of cannabis per ounce and per gram had decreased slightly in all states since 1997, and was cheapest in Adelaide (\$200-250 ounce) (see Table 3.5.1). No distinction was made between the type of cannabis purchased. Median prices for cannabis grams and ounces can be found in Appendix 1, Table 4.

The Australian Bureau of Criminal Intelligence provides quarterly figures on the price of covert drug purchases in each Australian jurisdiction. According to covert purchases of cannabis made in the 1997/98 financial year, one ounce of cannabis costs \$200-550 in NSW, \$350-400 in VIC, and \$300-550 in SA. The price of a gram of cannabis was \$20-50 for NSW, \$25-35 for VIC, and \$20-35 for SA. These prices are slightly higher than those reported by users of the drug, particularly for ounce purchases in SA.

Table 3.5.1. IDU estimates of cannabis price in 1997 and 1998 by city.

Unit	City	Year	
		1997	1998
Gram	Sydney	25	20-25
	Melbourne	20-25	20
	Adelaide	25	20-25
Ounce	Sydney	400	350
	Melbourne	350	320
	Adelaide	250	200-250

3.5.2 Availability

As in 1997, cannabis was rated easy to very easy to obtain in all three states (see Figure 3.5.1⁵). More IDU in Adelaide rated cannabis as very easy to obtain (67%) than in Sydney (49%) or Melbourne (46%).

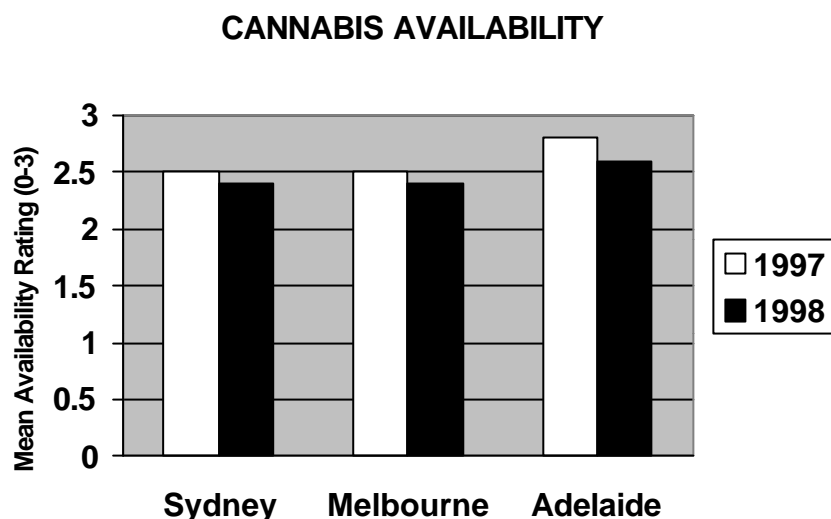


Figure 3.5.1 Mean IDU availability ratings (0-3) for cannabis in Sydney, Melbourne and Adelaide for 1997 and 1998. Higher ratings correspond to easier availability⁵.

3.5.3 Potency

The potency of cannabis was rated as high by the majority of IDU in all three states (see Figure 3.5.2 and Table 15 in Appendix 1), with more IDU in Adelaide rating it as high (85%) than IDU in Sydney (72%) or Melbourne (71%). There was no significant change in the rated potency of cannabis since 1997.

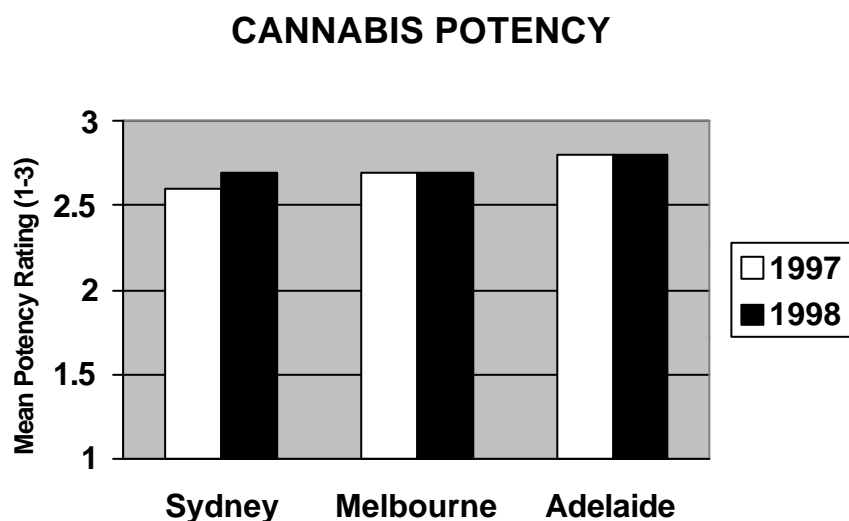


Figure 3.5.2 Mean potency ratings (1-3) for cannabis by IDU in Sydney, Melbourne and Adelaide for 1997 and 1998. Higher ratings correspond to higher potency.

⁵ Refer to Appendix 1, Table 9, for mean availability ratings.

3.5.4 Use

The frequency of cannabis among IDU decreased in Sydney and Melbourne in 1998 compared with 1997, but remained stable in Adelaide (see Figure 3.5.3, and Tables 17 and 18 in Appendix 1). There was also a decrease in the proportion of IDU in Sydney reporting cannabis use in the last six months (69% vs. 85%).

There had been no change in the form of cannabis being used by IDU in Sydney and Melbourne since 1997, where a minority of cannabis using IDU had used hash or hash oil in the last six months (see Table 22 in Appendix 1). In Adelaide, there was a substantial increase in the use of hash and hash-oil compared with 1997 among those IDU who had used cannabis in the last six months (hash 41% vs. 25%, hash oil 20% vs. 9%) (see Table 22 in Appendix 1).

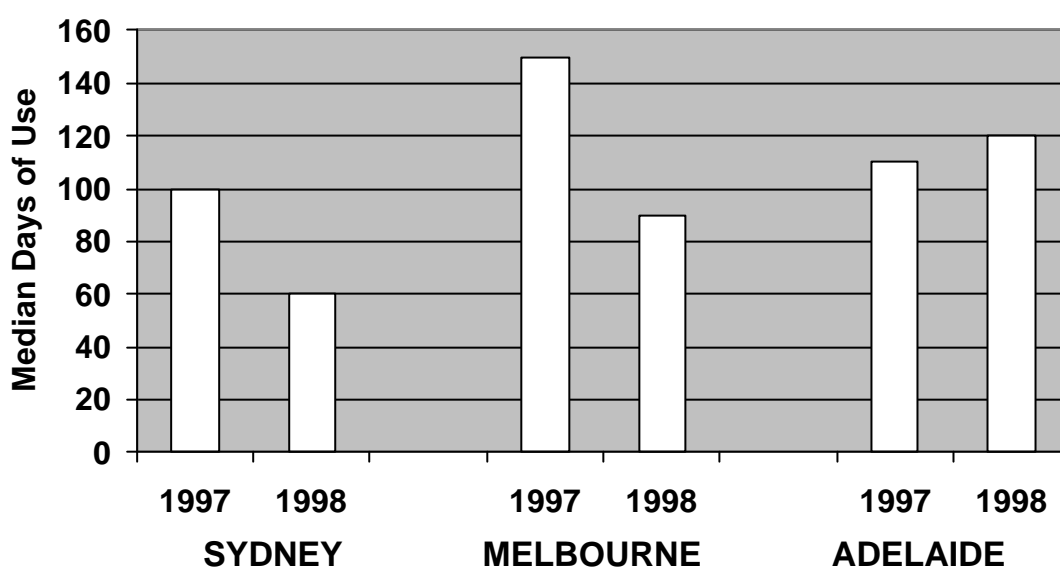


Figure 3.5.3 Median days of cannabis use in the last six months by IDU in Sydney, Melbourne and Adelaide in 1997 and 1998.

The 1997 National Survey of Mental Health and Well-Being (Commonwealth Department of Health and Family Services) found that cannabis was the most commonly used illicit drug, with 10.3% of males and 4.3% of females reporting that they had used it at least 5 times in the last year. An estimated 1.7% of the sample met criteria for a cannabis use disorder, males being three times more likely than females to qualify for a cannabis use disorder (2.7% vs. 0.8%, Hall et al., 1998)

Findings from the 1998 National Household Survey suggest a large proportion of the population use cannabis, and that the number of cannabis users has increased since 1995. Nearly one in five survey participants (17.9%) had used cannabis in the last year, and 39.3% had tried cannabis in their lifetime. These figures suggest an increase in cannabis use relative to 1995 when 31.1% of survey participants

had ever used cannabis, and 13.1% had used in the last year.

3.5.5 Other trends

Although there was a decrease in the use of cannabis among IDU in Sydney, population surveys and key informant reports suggested that cannabis use had increased among youth. Key informants in Adelaide also reported more cannabis users, particularly more young users.

Key informant reports suggested that there was a continuing trend for psychological problems among cannabis users in all three states. In Sydney, key informants reported a continuing trend for heroin use (particularly smoking heroin) among cannabis users. The number of ADIS or Direct-Line inquiries relating to cannabis was similar to 1997 in all three states. Cannabis-related inquiries are covered in detail in the section on DRUG-RELATED ISSUES (section 3.7).

3.6 OTHER DRUGS

3.6.1 Ecstasy

In 1998 ecstasy use was still associated with social events, particularly dance parties and raves, in all three states. The findings of the 1998 National Household Survey suggest that ecstasy use has increased substantially since 1995, with more people reporting lifetime ecstasy use (4.7% vs. 2.4%) and use within the last year (2.4% vs. 0.9%).

Ecstasy cost around \$60 a tablet (Sydney \$50, Adelaide \$60). These price estimates were consistent with Australian Bureau of Criminal Intelligence estimates which are based on covert police purchases of ecstasy (NSW \$20-70, VIC \$80, SA \$40-60).

The purity of police seizures of ecstasy and related derivatives (MDEA, MDA, MBDB, BDMPEA, MDE, PMA) for each quarter in the 1996/97 and 1997/98 financial years is shown in Figure 3.6.1. The purity averaged about 30% in all three states, and had not changed substantially over the two-year period.

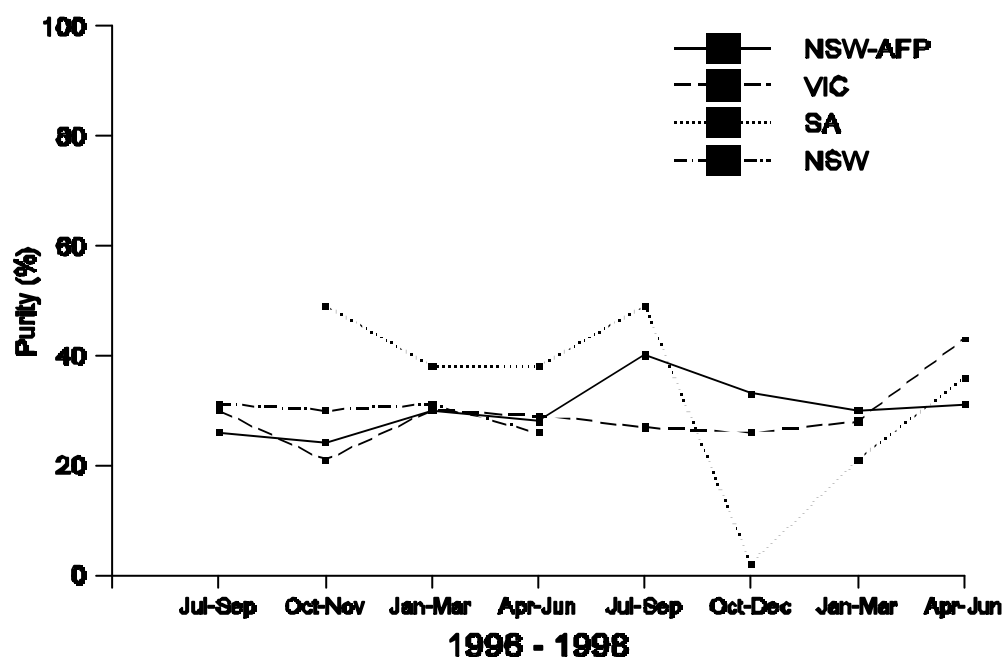


Figure 3.6.1
Mean purity of ecstasy and related derivatives for each quarter in the 1996/1997 and 1997/1998 financial years by state. NSW-AFP figures represent the purity of AFP seizures only.

3.6.2 Methadone

As in 1997, injection of methadone was most prevalent in Sydney, where about half of the IDU who had used methadone in the last six months had injected it (see Table 3.6.1). Methadone syrup was still the most common form of methadone used in all three cities. Use of physeptone tablets was more prevalent among IDU in Adelaide (20%) than either Sydney (6%) or Melbourne (2%).

Table 3.6.1 Percent of methadone using IDU^a who had injected methadone in the last six months in 1997 and 1998 by city.

Year	Sydney	Melbourne	Adelaide
1997	49	6	25
1998	54	6	34

^a IDU who had used methadone in the last six months

3.6.3 Other opiates

At least one-third of IDU in each state had used other opiates in the last six months: 32% in Sydney, 36% in Melbourne and 41% in Adelaide. About half of the IDU who had used other opiates in Melbourne (41%) and Adelaide (55%) had injected them. Only 16% of IDU in Sydney who had used other opiates had injected them, a decrease since 1997 (37%). Panadeine Forte® was the most common other opiate used in Sydney, whereas Panadeine Forte® and morphine were equally common in Adelaide.

3.6.4 Benzodiazepines

As in 1997, a large proportion of IDU from each city had used benzodiazepines in the last six months: 60% in Sydney, 72% Melbourne, 65% in Adelaide. Minorities injected benzodiazepines (Sydney 10%; Melbourne 5%; Adelaide 11%), a decrease relative to 1997 for Sydney and Melbourne (Sydney 18%; Melbourne 27%; Adelaide 8%). The most popular benzodiazepines were diazepam (e.g., Valium®) and flunitrazepam (Rohypnol®).

3.6.5 Anti-depressants

A substantial minority of IDU reported use of antidepressants in the past six months (Sydney 15%; Adelaide 26%; Melbourne 27%), a finding consistent with the 1997 IDRS. Selective serotonin re-uptake inhibitors (SSRIs) were the most common types of antidepressant used.

3.6.6 Inhalants

Recent use of inhalants was not common among IDU (Sydney 7%, Melbourne 5%, Adelaide 6%), and had decreased slightly since 1997 (Sydney 15%, Melbourne 8%, Adelaide 11%). Nitrous oxide was the most commonly used inhalant in Adelaide, whereas amyl nitrate was the most common in Sydney.

3.7 DRUG-RELATED ISSUES

3.7.1 Drug treatment data

Drug-related inquiries

There was an increase in heroin-related inquiries to the Alcohol and Drug Information Service (ADIS) in NSW and SA (see Figures 3.7.1 and 3.7.2), and an increase in DIRECT-Line calls regarding heroin in VIC. In Sydney, there were more inquiries regarding heroin than regarding any other drug type (see Figure 3.7.2). In South Australia there were also more inquiries regarding amphetamine (306 vs. 443) and cocaine (8 vs. 40) compared with 1997.

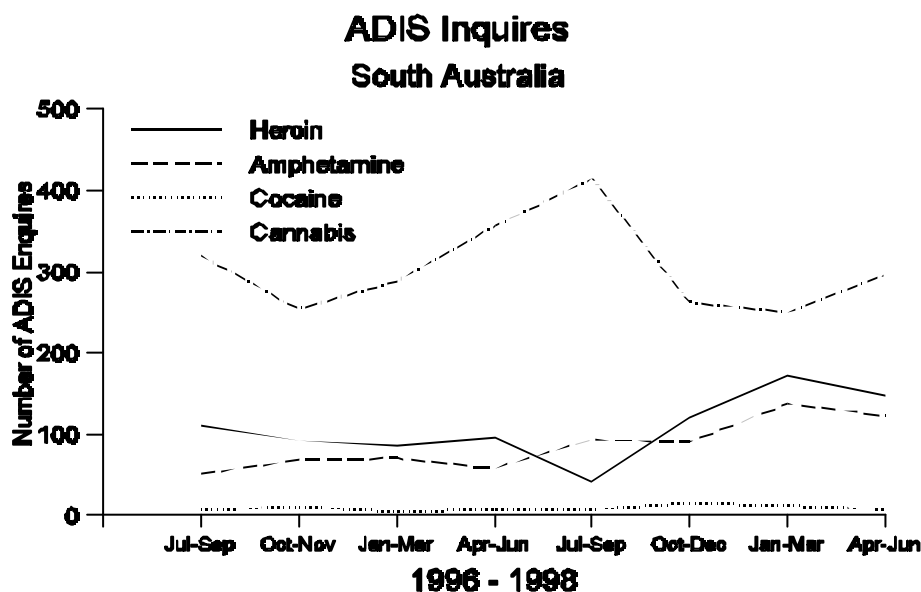


Figure 3.7.1

The number of ADIS drug mentions in SA for each quarter in the 1996/97 and 1997/98 financial years by drug type.

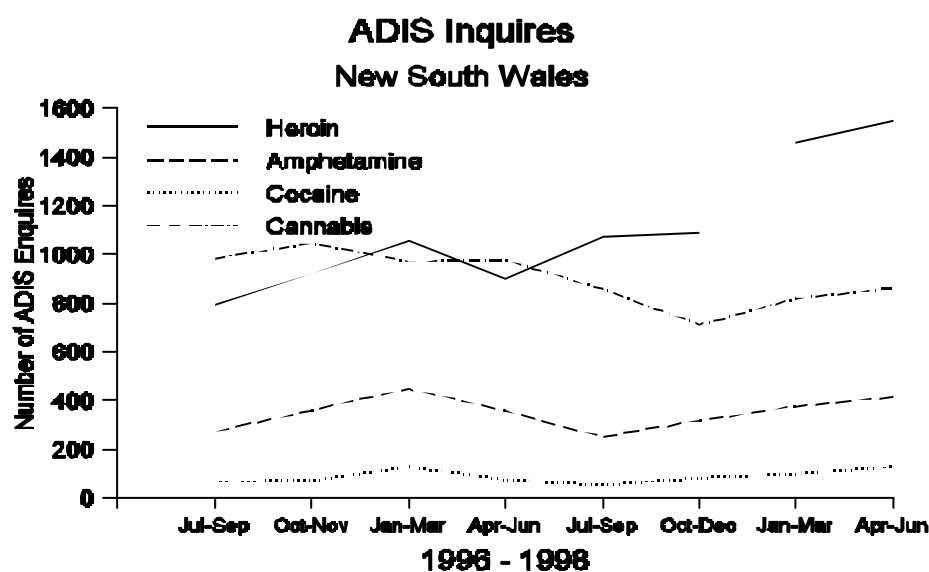


Figure 3.7.2

The number of ADIS drug mentions in NSW for each quarter in the 1996/97 and 1997/98 financial years by drug type.

Prevalence of drug-related disorders

The 1997 National Survey of Mental Health and Well-being (NSMHWB), conducted by the Australian Bureau of Statistics, examined the prevalence of substance use disorders among the general population. Hall et al. (1998) undertook additional analyses on the data obtained from the NSMHWB to determine the prevalence of dependence on particular drug classes using ICD-10 diagnoses among a sample of 10 681 adults aged 18 to 80 years. Use of a drug was defined as having used the drug at least five times in the preceding year.

The prevalence of drug use and drug dependence within the last year can be seen in Figure 3.7.3. Cannabis was the most commonly used illicit drug in the last year (7.3%), followed by sedatives (2.1%), opioids (1.2%) and then stimulants (1.0%). Approximately one in five of those who had used drugs were dependent on them. More of the sample were dependent on cannabis (1.6%) than were dependent on sedatives (0.4%), opioids (0.2%) or stimulants (0.2%). In comparison, 73% of the sample had used alcohol in the last year, and 3.5% of the sample were dependent on alcohol. Drug use disorders (harmful use and dependence) were more common among males (3.1% vs. 1.3%) and younger adults aged 18 to 34 years (4.9% vs. 1.2% for 35-54 year olds).

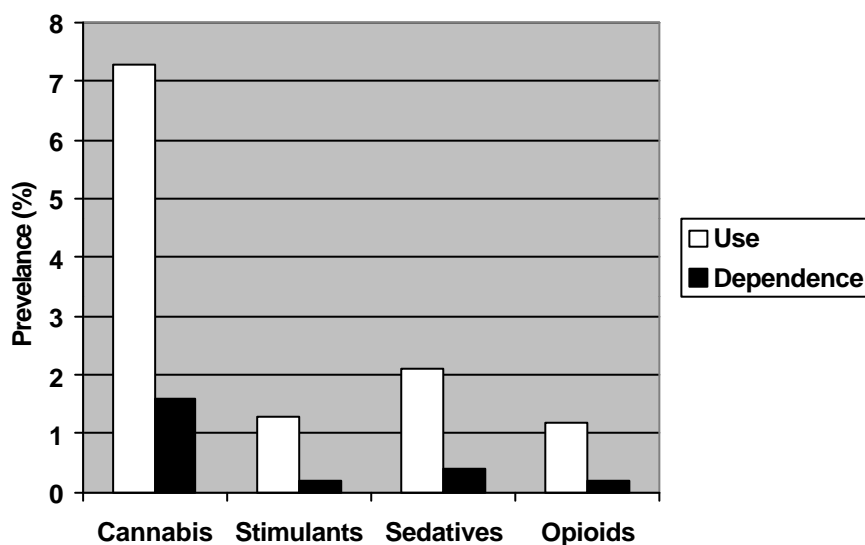


Figure 3.7.3
Prevalence of drug use and drug dependence in Australia based on the National Survey of Mental Health and Well-Being, 1997 (Hall et al., 1998).

Treatment data

The 1998 pilot study for the National Minimum Data Set Project for Alcohol and Other Drug Treatment Services (Conroy & Copeland, 1998) sampled 1318 primary clients of treatment service agencies in Australia. Preliminary findings from this project showed that the majority of clients presented with a primary opioid problem (see Figure 3.7.4). Specifically, 28.9% of clients presented to treatment services with a primary heroin problem, and a further 13.6% presented with a drug problem that involved other opiates, including methadone. The number of clients presenting with any opioid-related problem ($n = 543$, 42.5%) exceeded the number of clients presenting with an alcohol problem ($n =$

464, 36.4%). Cannabis was the next most prevalent presenting drug problem (n = 138, 10.8%), followed by amphetamine (n = 49, 3.8%). Only two clients (0.2%) presented with cocaine as their primary drug problem. No clients presented with ecstasy as their main drug problem.

In terms of routes of administration, most heroin users presenting for treatment injected the drug (86%), and a small proportion smoked heroin (8%). Similarly, 86% of clients presenting with an amphetamine problem injected amphetamine.

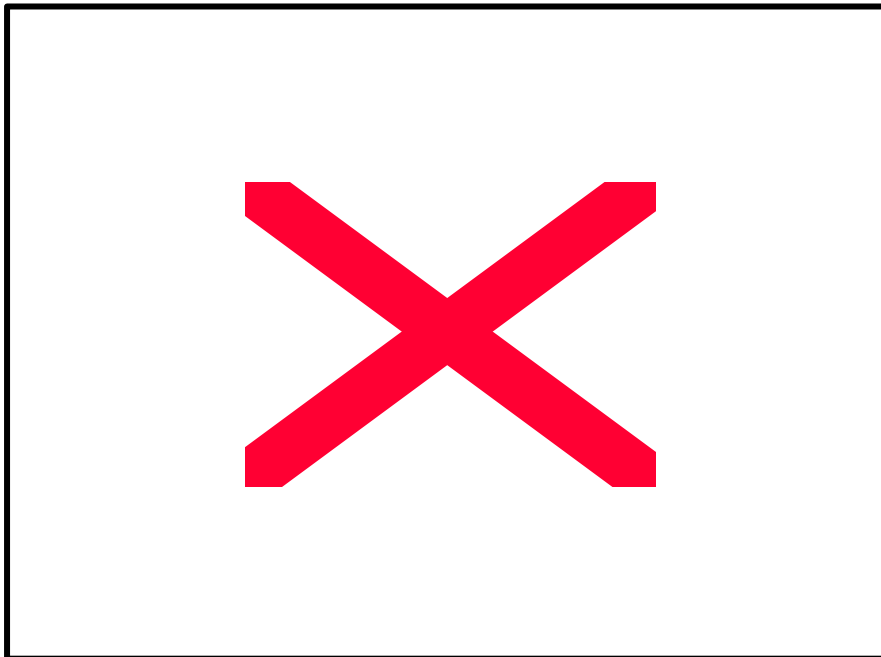


Figure 3.7.4 The number of clients presenting to treatment services in Australia with a primary drug problem involving opioids (heroin, methadone, and other opiates), amphetamine, cocaine, cannabis or alcohol (Conroy & Copeland, 1998).

3.7.2 Heroin overdose

In 1998 self-report of non-fatal heroin overdoses among IDU increased in Sydney and Melbourne but not in Adelaide (see Table 3.7.1). Self-reported non-fatal overdose trends were consistent with indicator data on fatal overdoses, which also showed an increase in overdose fatalities in NSW and VIC but not SA.

Table 3.7.1 Percent of IDU reporting heroin overdoses in 1997 and 1998 by city.

Year	Sydney	Melbourne	Adelaide
1997			
Ever OD	51	56	62
OD past 12 months	24	22	29
1998			
Ever OD	57	60	50
OD past 12 months	30	27	23

The increase in opioid overdoses found in Sydney and Melbourne is part of a continuing trend since 1991. Data on opioid-related fatalities provided by the Australian Bureau of Statistics (Hall et al., 1999) are shown in Figure 3.7.5. It can be seen from Figure 3.7.5 that the number of opioid-related overdoses in VIC and NSW continued to increase in 1997 relative to earlier years, and was highest in NSW. The higher prevalence of opioid overdoses in NSW and VIC was still apparent after adjusting for population size (see Figure 3.7.6).

Overdose figures from 1998 in NSW suggest that the number of overdoses has continued to increase. In Sydney, the number of suspected opioid overdose fatalities that occurred during the 1998 January-August period was 40% higher than for the corresponding period in 1997. These figures were provided by the Division of Analytical Laboratories, NSW Health, and are explained further in the NSW Drug Trends report (McKetin et al., 1999).

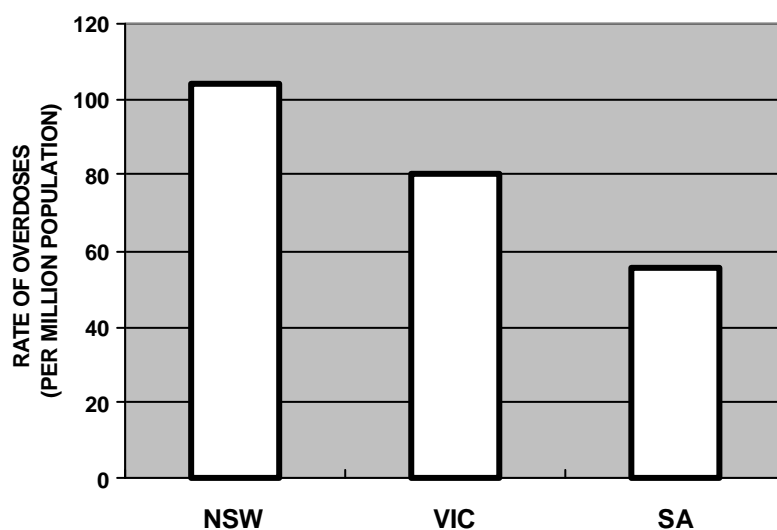
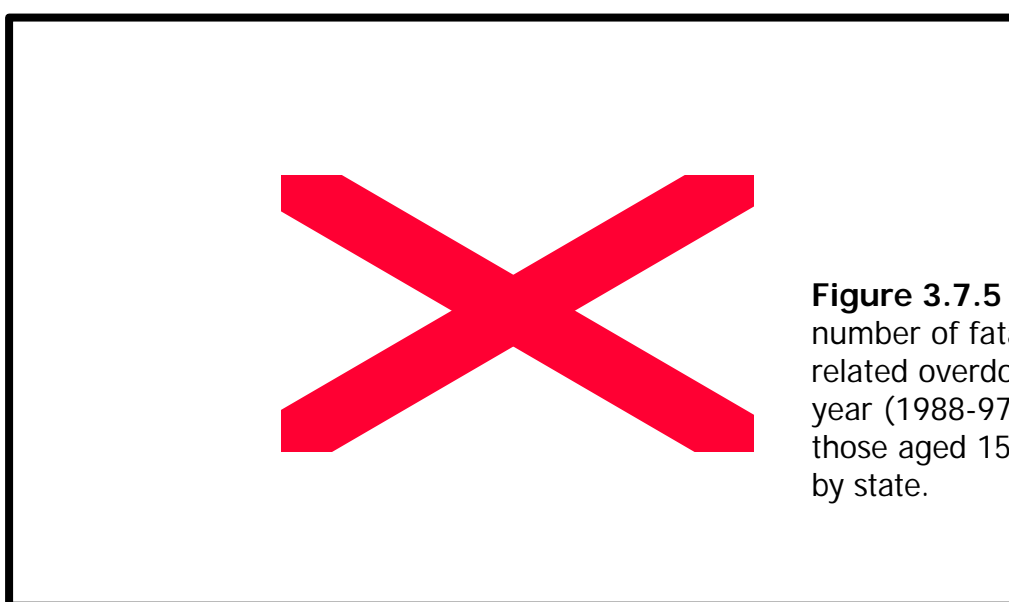


Figure 3.7.6 Rate per million of opioid overdose fatalities among those aged 15-44 years in 1997 by state.

3.7.3 Needle sharing behaviour

Needle sharing behaviour remained relatively low and stable in all three states (see Table 3.7.2).

Table 3.7.2 Percent of IDU reporting needle sharing in the last month in 1997 and 1998 by city.

	Sydney	Melbourne	Adelaide
1997			
Lent	21	26	18
Borrowed	15	22	19
1998			
Lent	23	34	24
Borrowed	23	23	21

3.7.4 Crime

Reported criminal involvement among IDU was high in all three states (Table 3.7.3). The proportion of IDU reporting crime in the last month was stable in Sydney and Melbourne, but had increased in Adelaide since 1997 ($P^2_{df\ 1} = 26.3, p < .00001$), as had the total number of crimes committed by IDU since 1997 (Mean crime score 2.2 vs. 1.4, $t = -3.2, p < .01$). The higher proportion of IDU committing crime ($P^2_{df\ 1} = 8.9, p < .01$), and the higher total crime score ($F = 9.2, p < .01$) in 1998 compared with 1997, were still apparent after adjusting for age differences between the two years; younger age being significantly associated with higher levels of crime ($r_s = -0.13, p < .05$).

Table 3.7.3 Percent of IDU reporting criminal activity in the last month in 1997 and 1998 by city.

	Sydney	Melbourne	Adelaide
1997			
Any Crime	55	62	50
Property	29	36	14
Dealing	35	40	41
Fraud	8	17	11
Violence	6	10	0
1998			
Any Crime	51	54	69
Property	24	33	31
Dealing	23	33	57
Fraud	10	12	15
Violence	3	8	4

IDU perceptions of police activity are shown in Table 3.7.4. As in 1997, the majority of IDU in Sydney and Melbourne perceived an increase in police activity and just under half reported that more of their friends had been arrested recently. A substantial proportion of IDU in Sydney and Melbourne also reported that police activity had made it harder to obtain drugs recently. The increase in police activity and consequent difficulty obtaining drugs appeared to be greater in Melbourne than Sydney. Police activity in Adelaide had remained stable, and slightly fewer IDU reported that police activity had made it difficult to obtain drugs than in 1997.

Table 3.7.4 Percent of IDU reporting recent changes in police activity and associated difficulty obtaining drugs in 1997 and 1998 by city.

	Sydney	Melbourne	Adelaide
1997			
Increased police activity	60	64	51
More arrests	42	40	27
Harder to get drugs	36	34	28
1998			
Increased police activity	55	78	36
More arrests	47	49	21
Harder to get drugs	35	48	19

Data on crime relating to illicit drugs

Data was obtained on the number of police offences relating to each drug type in SA, and the number and rate of criminal incidents relating to each drug type in NSW.

The number and rate of criminal incidents relating to drug “use and/or possession” and “trafficking and/or dealing” for NSW per calendar year 1996-98 are shown in Table 3.7.5. In NSW there were far more criminal incidents relating to cannabis than to narcotics or cocaine, and the rate criminal incidents relating to cannabis had increased over the 1996-1998 period. There had also been an increase in the rate of criminal incidents relating to both narcotics and cocaine.

Similar to NSW, there were far more police offences relating to cannabis in SA than to any other drug (see Figure 3.7.7). The number of cannabis offences remained stable across the 1996/97 and 1997/98 financial years. Offences relating to amphetamine were second most common, and rose from 1996/97 to 1997/98. The number of offences relating to heroin in the 1997/98 financial year was less than that for amphetamine, and had remained stable across the two-year period. Very few offences involved cocaine. Data on police offences was provided by the South Australian Police.

Table 3.7.5 The number and rate per 100 000 population of criminal incidents in NSW relating to each drug class, 1996-98: Number (rate).

	1996		1997		1998	
Use/Possession						
Cocaine	117	(1.9)	156	(2.5)	273	(4.3)
Narcotics	1541	(24.8)	1895	(30.2)	2977	(46.9)
Cannabis	9,742	(157.0)	10,459	(166.7)	11,159	(176.0)
Dealing/Trafficking						
Cocaine	103	(1.7)	108	(1.7)	120	(1.9)
Narcotics	637	(10.3)	706	(11.3)	747	(11.8)
Cannabis	1,223	(19.7)	1,029	(16.4)	1,068	(16.8)

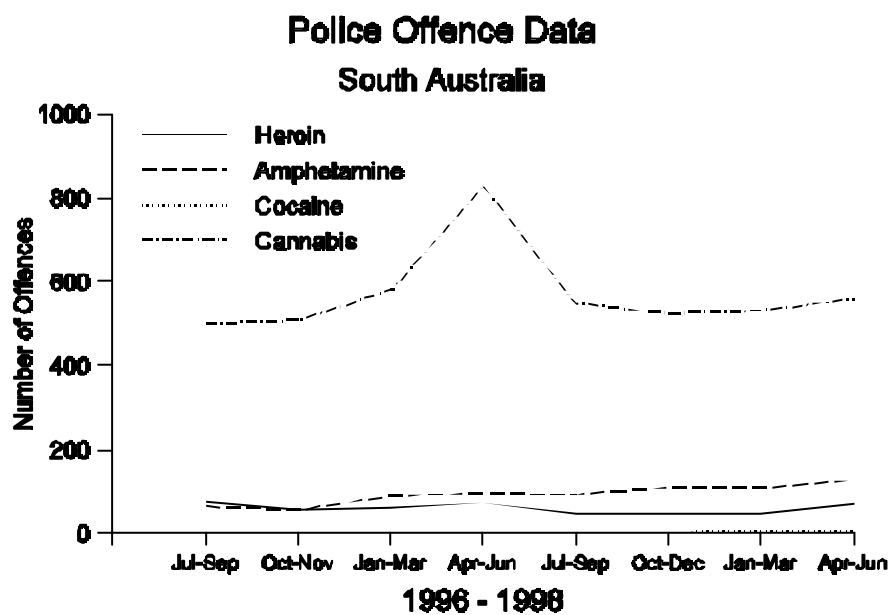


Figure 3.7.7
The number of police offences in SA by drug class for each quarter in the 1996/97 and 1997/98 financial years.

Customs drug seizures⁶

The weight of drugs seized by the Australian Customs Service indicates increased detection of illicit drugs at the Australian border over the last five years. Weight of drug seizures from 1995/96 to 1998/99 YTD⁷ are shown by drug class in Figure 3.7.8. As can be seen from Figure 3.7.8, there has been an increase in the weight of heroin and cocaine seized since 1995/96. It is worth noting that the weight of ecstasy seizures from 1995/96 to 1998 was much higher than for the 1990-1995 period (range 0 to 22.2 kg).

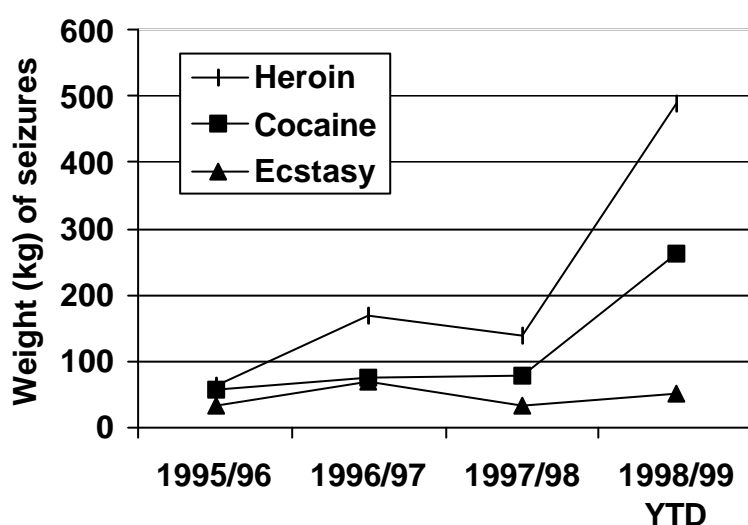


Figure 3.7.8
Weight of drug seizures made by the Australian Customs Service, 1995/96 to 1998/99 (YTD⁶), by drug class.

6 Data accurate as of 30 June 1997. Figures may vary from those previously published due to adjustments arising from subsequent chemical analysis and information received from the AFP. Also, seizures subject to ongoing investigation (including controlled deliveries) may not appear. Weight shown may be net, gross or estimated. Where a weight or number of tablets for ecstasy was not available, an estimate of 0.29 gm per tablet has been used.

7 YTD = Year to date data as of 31 December 1998.

4.0 SUMMARY AND CONCLUSION

Summary

The drug trends reported herein constitute the findings from the second year of a multi-state data collection for the IDRS, which was conducted in 1998. The IDRS has proved it could track drug trends over time, and has continued to discriminate between different drug trends in each state. The most salient drug trend was a continuing increase in heroin use, accompanied by cheaper, readily available high purity heroin. This trend was much more apparent in Melbourne and Sydney than in Adelaide, with the former cities also experiencing an increase in harms associated with heroin use, particularly overdose. The second major trend detected by the IDRS was an increase in cocaine use in Sydney. This trend was characterised by more IDU injecting cocaine frequently, and was apparent in both the inner city and western regions of Sydney. Cocaine using IDU had lower levels of psychosocial functioning relative to other IDU, and suffered more injection-related problems. The increase in cocaine use among IDU was restricted to Sydney, with no substantial evidence of more cocaine use in Melbourne or Adelaide. The third major trend noted was an increase in amphetamine use, particularly injection of amphetamine, in Adelaide.

There were several less salient trends detected by the IDRS. These included a continuing trend for smoking of heroin in Sydney and Melbourne, and for heroin use among cannabis users in Sydney. In Adelaide, there was an increase in self-reported crime among IDU, and an increase in the use of hash and hash-oil by cannabis using IDU. All three states noted psychological problems among cannabis users. The use of pharmaceuticals among IDU remained high. Despite this, injection of benzodiazepines had decreased in Sydney and Melbourne since 1997, as had injection of other opioids (excluding methadone) in Sydney. Methadone injection was still a common practice among Sydney IDU. A substantial proportion of IDU in Sydney and Melbourne reported that there had been an increase in police activity and that police activity had made it harder to obtain drugs.

Methodological considerations

One issue that arose during the 1998 IDRS was that of sampling consistency between 1997 and 1998. Differences in sampling procedures may bias drug trends, or produce specious drug trends. The IDRS sampling procedure did not vary greatly between 1997 and 1998, or to an extent that could plausibly explain emergent drug trends. Despite this, it needs to be acknowledged that the IDRS aims to be a “sensitive” indicator of drug trends. To be sensitive to emergent drug trends, the IDRS must maintain sufficient flexibility to respond to new patterns of drug use. Although such flexibility in sampling necessarily entails a risk of sampling bias, the validity of such trends is enhanced by examining convergence of drug trends between different sources (i.e., other indicators, key informant reports). Drug trends may also be confirmed by data from population surveys, which alone are not sufficiently timely to act as an early warning indicator of emerging drug issues.

Implications

The main aim of the IDRS is to identify emerging drug problems and suggest areas for more detailed investigation. The findings from the 1998 IDRS suggest the following areas require attention from the view of public health, law enforcement and further research:

1. continuing investigation into factors that may limit the current heroin market and reduce initiation to heroin injecting;
2. continuing research into factors that may reduce harms associated with heroin use, particularly overdose;
3. research on the prevention of harms associated with cocaine use in Sydney, particularly the potential spread of blood-borne viruses;
4. documentation of factors associated with the rapid expansion of the cocaine market in Sydney, and an investigation of factors affecting this market;
5. continued close monitoring of cocaine use in Sydney and other jurisdictions;
6. investigation of factors responsible for increasing crime among IDU in Adelaide;
7. continued close monitoring of the use of more potent forms of cannabis (i.e., hash and hash-oil) in Adelaide and any associated harms; and
8. further research into factors affecting initiation into amphetamine injecting in Adelaide.

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Table 1. Median price of heroin reported by IDU for NSW in 1996-98, VIC and SA in 1997-98.

Unit	State	Year		
		1996	1997	1998
Gram	NSW	400	400	280
	VIC		450	400
	SA		400	400
Cap	NSW	30	30	30
	VIC		40	25
	SA		50	50

Table 2. Median price of amphetamine reported by IDU for NSW in 1996-98, VIC and SA in 1997-98.

Unit	State	Year		
		1996	1997	1998
Gram	NSW	100	100	100
	VIC		50	50
	SA		50	50
Ounce	NSW	-	1000	1000
	VIC		600	750
	SA		900	875

Table 3. Median price of cocaine reported by IDU for NSW in 1996-98, VIC and SA in 1997-98.

Unit	State	Year		
		1996	1997	1998
Gram	NSW	200	200	200
	VIC		300	200
	SA		250	250
Cap	NSW	80	80	50
	VIC		-	-
	SA		50	50

Table 4. Median price of cannabis reported by IDU for NSW in 1996-98, VIC and SA in 1997-98.

Unit	State	Year		
		1996	1997	1998
Gram	NSW	25	25	20
	VIC		25	20
	SA		25	20
Ounce	NSW	400	400	350
	VIC		350	320
	SA		250	235

Table 5. Percent of IDU who could comment on the price of different heroin purchase units for NSW in 1996-98, VIC and SA in 1997-98.

Unit	State	Year		
		1996	1997	1998
Gram	NSW	59	50	60
	VIC		44	51
	SA		54	62
Cap	NSW	40	83	93
	VIC		53	75
	SA		79	86

Table 6. Percent of IDU who could comment on the price of different amphetamine purchase units for NSW in 1996-98, VIC and SA in 1997-98.

Unit	State	Year		
		1996	1997	1998
Gram	NSW	22	45	23
	VIC		50	-
	SA		63	85
Ounce	NSW	-	15	3
	VIC		7	11
	SA		27	36

Table 7. Percent of IDU who could comment on the price of different cocaine purchase units for NSW in 1996-98, VIC and SA in 1997-98.

Unit	State	Year		
		1996	1997	1998
Gram	NSW	13	20	48
	VIC		5	7
	SA		32	31
Cap	NSW	5	19	92
	VIC		2	1
	SA		23	20

Table 8. Percent of IDU who could comment on the price of different cannabis purchase units for NSW in 1996-98, VIC and SA in 1997-98.

Unit	State	Year		
		1996	1997	1998
Gram	NSW	25	61	63
	VIC		69	72
	SA		31	42
Ounce	NSW	38	61	44
	VIC		27	54
	SA		77	89

Table 9. Mean availability ratings (0-3) for heroin, cocaine, amphetamine and cannabis in NSW in 1996-98, VIC and SA in 1997-98. Higher scores reflect easier availability.

Drug	State	Year		
		1996	1997	1998
Heroin	NSW	2.6	2.8	2.5
	VIC		2.8	2.8
	SA		2.2	2.4
Amphetamine	NSW	2.0	2.3	2.3
	VIC		1.8	1.7
	SA		2.2	2.4
Cocaine	NSW	1.9	2.1	2.3
	VIC		1.4	1.4
	SA		1.0	1.3
Cannabis	NSW	1.8	2.5	2.4
	VIC		2.5	2.4
	SA		2.8	2.6

Note. 0 = very difficult to obtain; 1 = difficult to obtain; 2 = easy to obtain; 3 = very easy to obtain.

Table 10. Annual mean purity (%) of heroin, amphetamine, cocaine, and ecstasy (MDMA and related derivatives) seizures made in NSW, VIC and SA in the 1996/97 and 1997/98 financial years.

Drug	State	Year	
		1996/97	1997/98
Heroin	NSW-AFP	64	71
	NSW	55	
	VIC	35	62
	SA	37	59
Amphetamine	NSW-AFP	20	21
	NSW	7	
	VIC	5	12
	SA	4	6
Cocaine	NSW-AFP	59	64
	NSW	46	
	VIC	37	54
	SA	35	44
MDMA and derivatives	NSW-AFP	26	32
	NSW	29	
	VIC	28	30
	SA	40	30

Note. NSW-AFP figures are based on AFP seizures only, which may be higher than the purity of street level drugs.

Table 11. Purity (%) of heroin seizures made in NSW, VIC and SA in the 1996/97 and 1997/98 financial years by quarter.

YEAR	QTR	STATE			
		NSW	NSW-AFP	VIC	SA
96/97	1 st	62	62	36	48
	2 nd	59	67	35	36
	3 rd	50	62	34	25
	4 th	54	67	35	33
97/98	1 st		71	57	40
	2 nd		70	66	70
	3 rd		71	61	64
	4 th		72	66	69

Note. QTR = quarter. NSW-AFP figures are based on AFP seizures only, which may be higher than the purity of street level drugs.

Table 12. Purity (%) of amphetamine seizures made in NSW, VIC and SA in the 1996/97 and 1997/98 financial years by quarter.

YEAR	QTR	STATE			
		NSW	NSW-AFP	VIC	SA
96/97	1 st	6	22	3	3
	2 nd	7	11	6	5
	3 rd	7	-	3	5
	4 th	9	23	8	5
97/98	1 st		29	10	5
	2 nd		15	12	5
	3 rd		21	9	6
	4 th		20	13	7

Note. QTR = quarter. NSW-AFP figures are based on AFP seizures only, which may be higher than the purity of street level drugs.

Table 13. Purity (%) of cocaine seizures made in NSW, VIC and SA in the 1996/97 and 1997/98 financial years by quarter.

YEAR	QTR	STATE			
		NSW	NSW-AFP	VIC	SA
96/97	1 st	47	56	18	24
	2 nd	41	55	64	65
	3 rd	51	62	25	36
	4 th	46	65	54	37
97/98	1 st		72	51	49
	2 nd		54	69	39
	3 rd		69	37	48
	4 th		62	54	43

Note. QTR = quarter. NSW-AFP figures are based on AFP seizures only, which may be higher than the purity of street level drugs.

Table 14. Purity (%) of MDMA^a seizures made in NSW, VIC and SA in the 1996/97 and 1997/98 financial years by quarter.

YEAR	QTR	STATE			
		NSW	NSW-AFP	VIC	SA
96/97	1 st	31	26	30	-
	2 nd	30	24	21	49
	3 rd	31	30	30	38
	4 th	26	28	29	38
97/98	1 st		40	27	49
	2 nd		33	26	2
	3 rd		30	28	21
	4 th		31	43	36

Note. QTR = quarter. NSW-AFP figures are based on AFP seizures only, which may be higher than the purity of street level drugs.

^a MDMA, MDEA, MBDB, BDMPEA, MDA, MDE, PMA

Table 15. Mean IDU ratings of cannabis potency (1-3) for NSW in 1996-98, VIC and SA in 1997-98.

		Year		
		1996	1997	1998
Cannabis	NSW	2.6	2.6	2.7
	VIC		2.7	2.7
	SA		2.8	2.8

Note. Higher ratings correspond to higher potency: 1 = low, 2 = medium, 3 = high.

Table 17. Drug use history of the IDU samples in 1998

Drug Class	Ever used %	Ever injected %	Injected last 6 months %	Ever smoked %	Smoked Last 6 months %	Ever snorted %	Snorted last 6 months %	Ever swallowed %	Swallowed last 6 months %	Used last 6 months %	Days used last 6 months ^a
SYDNEY (N = 176)											
Heroin	100	99	93	55	22	27	5	17	7	93	180
Amphetamine	71	64	30	11	2	44	14	38	9	35	9
Cocaine	81	69	55	9	3	38	17	5	4	59	25
Cannabis	92									69	60
MELBOURNE (N = 293)											
Heroin	98	97	93	52	21	22	3	26	10	93	150
Amphetamine	92	85	40	13	4	69	16	52	10	40	5
Cocaine	50	36	15	5	1	32	8	9	4	12	3
Cannabis	97									88	90
ADELAIDE (N = 140)											
Heroin	84	84	71	35	4	26	1	14	4	71	72
Amphetamine	98	98	68	24	6	76	20	67	14	70	25
Cocaine	81	68	32	16	4	48	12	11	1	34	5
Cannabis	99									84	120

^a Among IDU who had used the drug in the last six months

Table 18. Drug use history of the IDU samples in 1997

Drug Class	Ever used %	Ever injected %	Injected last 6 months %	Ever smoked %	Smoked last 6 months %	Ever snorted %	Snorted last 6 months %	Ever swallowed %	Swallowed last 6 months %	Used last 6 months %	Days used last 6 months ^a
SYDNEY (N = 154)											
Heroin	98	97	90	61	19	29	5	23	10	91	120
Amphetamine	87	83	53	24	5	65	14	54	10	57	10
Cocaine	69	57	28	18	4	43	9	12	1	34	4
Cannabis	97									85	100
MELBOURNE (N = 254)											
Heroin	97	97	95	48	19	29	4	31	15	95	105
Amphetamine	95	88	45	12	4	71	13	54	26	47	10
Cocaine	58	42	5	13	2	39	5	8	2	10	2
Cannabis	99									82	150
ADELAIDE (N = 119)											
Heroin	90	90	86	40	12	23	3	10	1	88	68
Amphetamine	95	89	40	19	5	66	10	56	9	45	17
Cocaine	79	67	29	12	3	57	10	7	1	33	6
Cannabis	97									83	110

^a Among IDU who had used the drug in the last six months

Table 19. Heroin form and route of administration for IDU who had used heroin in the last six months in 1997-98 by state.

	State	Year	
		1997	1998
ROUTE (% IDU)			
injected	NSW	99	99
	VIC	99	99
	SA	97	100
snorted	NSW	5	5
	VIC	5	3
	SA	3	2
smoked	NSW	21	24
	VIC	19	21
	SA	13	6
swallowed	NSW	11	8
	VIC	15	11
	SA	1	5
FORM (% IDU)			
powder	NSW	89	87
	VIC	95	76
	SA	96	80
rock	NSW	94	95
	VIC	91	97
	SA	85	80

Table 20. Amphetamine form and route of administration for IDU who had used amphetamine in the last six months in 1997-98 by state.

		Year	
		1997	1998
ROUTE (% IDU)			
injected	NSW	94	87
	VIC	93	91
	SA	87	97
snorted	NSW	26	41
	VIC	28	34
	SA	22	29
smoked	NSW	9	5
	VIC	8	7
	SA	11	8
swallowed	NSW	19	26
	VIC	16	24
	SA	20	20
FORM (% IDU)			
powder	NSW	100	95
	VIC	100	100
	SA	100	96
liquid	NSW	3	8
	VIC	7	5
	SA	11	10
prescription	NSW	10	8
	VIC	16	13
	SA	11	17

Table 21. Cocaine form and route of administration for IDU who had used cocaine in the last six months in 1997-98 by state.

		Year	
		1997	1998
ROUTE (% IDU)			
injected	NSW	83	91
	VIC	48	66
	SA	85	92
snorted	NSW	27	27
	VIC	48	43
	SA	31	36
smoked	NSW	12	5
	VIC	16	6
	SA	8	11
swallowed	NSW	4	7
	VIC	16	17
	SA	3	4
FORM (% IDU)			
powder	NSW	90	99
	VIC	88	87
	SA	95	96
freebase	NSW	12	8
	VIC	4	6
	SA	8	4

Table 22. Cannabis form used by IDU who had used cannabis in the last six months in 1997-98 by state.

		Year	
		1997	1998
FORM (% IDU)			
marijuana	NSW	99	99
	VIC	98	99
	SA	100	100
hash	NSW	24	20
	VIC	26	23
	SA	25	41
hash oil	NSW	8	10
	VIC	18	20
	SA	9	20