

NSW DRUG TRENDS 2001

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

Shane Darke, Sharlene Kaye & Libby Topp

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ABBREVIATIONS

ABCI	Australian Bureau of Criminal Intelligence
ABS	Australian Bureau of Statistics
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AIC	Australian Institute of Criminology
ATSI	Aboriginal and Torres Strait Islander
BOCSAR	NSW Bureau of Crime Statistics and Research
CDHA	Commonwealth Department of Health and Aging
COTSA	Clients of Treatment Service Agencies
DUMA	Drug Use Monitoring in Australia
FDS	Family Drug Support
ICPMR	Institute of Clinical Pathology and Medical Research, NSW Health
IDRS	Illicit Drug Reporting System
IDU	Injecting Drug Users
KIS	Key Informants
NCHECR	National Centre for HIV Epidemiology and Clinical Research
NDARC	National Drug and Alcohol Research Centre
NSP	Needle and Syringe Program
NSW	New South Wales

EXECUTIVE SUMMARY

The 2001 NSW IDRS documented the following trends in illicit drug use.

Demographic characteristics of IDU

The trend towards an earlier initiation into injecting drug use, first noted in the 1999 IDRS, continued. Among the IDU sample, there was a significant correlation between current age and age at initial injection ($r=0.32$, $p<.001$), which indicates that younger IDU, on average, commenced their injecting careers at an earlier age than their older counterparts.

Patterns of drug use among IDU

Compared to 2000, there was a marked increase in the proportion of IDU reporting cocaine as their drug of choice: in 2000, 10% of IDU reported cocaine as their drug of choice, compared to 29% in 2001. There was a corresponding decline in the proportion of subjects nominating heroin as their drug of choice, from 81% in 2000 to 61% in 2001. The increased popularity and use of cocaine is of concern, as cocaine is strongly associated with a higher injection frequency than other injectable drugs: 38% of cocaine users injected more than three times per day in the month preceding the interview, compared to 11% of other IDU.

Heroin

The price of heroin increased in 2001 compared to 2000 (\$320 v \$220 per gram), the first increase in heroin prices recorded since the IDRS commenced in 1996. This increase was detected in the price of caps (\$50 v \$25) and other purchase amounts. The purity of heroin seizures made in NSW by the AFP remained high (65%), whereas the purity of heroin seizures made by the NSW Police Service showed a moderate decline, from 58% in 1999/00 to 47% in 2000/01.

There was a strong perception among IDU and key informants (KIS) that there was a sustained reduction in the availability of heroin in Sydney during the first five months of 2001. The majority of IDU and KIS also reported that the availability of heroin had not returned to pre-Christmas 2000 levels. Although no longer a 'drought', heroin has remained substantially more difficult to obtain than in previous years. Consistent with the decline in the availability of heroin, the median number of days on which heroin had been used in the preceding six months declined from 180 in 2000 to 158 in 2001, as did the proportion of heroin users who had used heroin daily over the preceding six months (53% in 2000 v 42% in 2001). A worrisome effect of the reduced availability

of heroin appears to have been for many heroin users to switch to cocaine injecting.

Methamphetamine

The price of methamphetamine powder and crystalline methamphetamine remained stable; a gram of powder cost \$100 and a 'point' of crystal methamphetamine (0.1gram) cost \$50. The average purity of analysed methamphetamine seizures made by the AFP in NSW decreased from 36% in 2000 to 19% in 2001.

Compared to 2000, there was an increase in the proportion of IDU using methamphetamine. In particular, the trend towards the use of highly potent forms of methamphetamine continued. These powerful forms of the drug included crystalline methamphetamine ('ice', 'shabu') and methamphetamine 'base'. Fifty eight percent of those who had used methamphetamine in the preceding six months reported the use of ice, compared to 35% in 2000 and 7% in 1999. Overall, 29% of the entire IDU sample reported use of ice in the preceding six months, compared to 14% in 2000 and 3% in 1999. KIS noted a concomitant increase in both the incidence and severity of methamphetamine-related psychological problems, particularly symptoms of psychotic, affective and anxiety disorders.

Cocaine

The price of cocaine remained stable between 2000 and 2001 (\$200 per gram, \$50 per cap). The purity of cocaine declined slightly from 51% in 2000 to 45% in 2001. Between 1998 and 2000, there was a stabilisation of high levels of cocaine use among IDU. In 2001, however, IDU, key informant and indicator data all suggested a marked increase in the use of cocaine. The proportion of IDU reporting recent cocaine use increased from 63% in 2000 to 84% in 2001, and the median number of days on which cocaine had been used in the preceding six months increased from 12 days to 90 days. Cocaine powder remained the predominant form of cocaine in NSW, with availability and use of 'crack' cocaine rarely reported.

Cannabis

The median price of the most recent purchase of an ounce of cannabis was \$320, a slight increase from \$300 reported in 2000. This represents the first increase in the ounce price of cannabis since the IDRS was instituted. Prices of half ounces, quarter ounces and grams were identical with those reported in 2000. Cannabis remained easy to obtain in 2001. The perceived potency of cannabis continued to be rated as high, and hydroponically grown cannabis was perceived as continuing to

dominate the market.

Other drugs

After reductions in the prevalence of methadone syrup injection sustained between 1997 and 2000, there was an increase in proportion of IDU who reported recent injection of methadone syrup in 2001 (22% v 13% in 2000). Similarly, the proportion of IDU who had recently injected benzodiazepines increased from 13% in 2000 to 18% in 2001. The increase in the injection of oral pharmaceutical products coincides with the reduced availability of heroin in NSW. Substantial diversion of prescribed pharmaceutical products to illicit drug markets was recorded.

Drug-related issues

The Australian Bureau of Statistics NSW heroin overdose figures for 2000 confirmed a significant decline in the number of heroin overdose fatalities, from 401 in 1999 to 249 in 2000. In addition, there was a marked reduction in the number of suspected heroin overdose deaths referred to the NSW Health Institute of Clinical Pathology and Medical Research between 1999/00 (345) and 2000/01 (265), indicating that heroin overdoses continued to decline throughout 2001.

There was a substantial increase in expenditure on drugs by IDU compared to 2000 (\$150 v \$70). Possible reasons for this include the substantial increase in the price of heroin; and the increased use of cocaine, which is injected more frequently than heroin due to its shorter half-life. Cocaine users reported a significantly higher median expenditure on drugs on the day preceding the interview than other IDU (\$150 v \$50).

IDU whose drug of choice was cocaine were significantly more likely to have recently committed violent crime than IDU nominating heroin as their drug of choice (17% v 6%). This is consistent with the increased levels of violence associated with cocaine use.

The majority of IDU (71%) had perceived an increase in police activity in relation to drugs, and, compared to 2000, there was an increase in the proportion of IDU who reported that police activity had made it more difficult for them to obtain drugs (39% v 28%). The proportion of IDU reporting increased police activity has increased each year since 1998.

1.0 INTRODUCTION

The Illicit Drug Reporting System (IDRS) is Australia's federally-funded national drug monitoring system. The purpose of the IDRS is to provide a standardised, comparable approach to the monitoring of data relating to the use of opiates, cocaine, methamphetamine and cannabis. The IDRS is intended to act as a strategic early warning system, identifying emerging drug problems of national concern. It is not intended to describe phenomenon in detail, but rather, is designed to indicate the need for more detailed data collection by providing sensitive and timely data on emerging trends in illicit drug markets.

The IDRS has operated in NSW since 1996¹. The data described in this report represent a summary of drug trends detected by the NSW IDRS in 2001. Results are summarised by drug type to provide the reader with an abbreviated picture of illicit drug markets and recent trends. NSW drug trends from previous years can be found in the annual *NSW Drug Trends* reports²⁻⁷ and in specialised publications⁸⁻¹¹. Since 2000, trends in the use of ecstasy and other party drugs have formed a separate, specialised component of the IDRS, and are reported elsewhere^{12,13}.

1.1 Study Aims

The specific aims of the 2001 NSW IDRS were:

1. to monitor the price, purity, availability and patterns of use of heroin, methamphetamine, cocaine and cannabis; and
2. to identify emerging trends in NSW illicit drug markets that require further investigation.

2.0 METHOD

The IDRS analyses three main sources of information to document drug trends:

1. a quantitative survey of injecting drug users (IDU);
2. a qualitative survey of key informants, or professionals working in the illicit drug field who have regular contact with and/or specialised knowledge of illicit drug users, dealers or manufacture; and
3. a collation of existing indicator data on drug-related issues.

Previous IDRS research has demonstrated that IDU are an appropriate sentinel group for detecting illicit drug trends, due to their high exposure to many types of illicit drugs. IDU also have first hand knowledge of the price, purity and availability of the main illicit drug classes. Key informant interviews are used to provide contextual information about drug use patterns and health-related issues, such as treatment presentations. The collation of indicator data provides a precise and reliable measure of drug trends detected by the IDU and key informant surveys.

Data from these three sources are triangulated against each other to determine the convergent validity of trends detected. The data sources complement each other in the nature of the information they provide. The data source considered to be the best indicator of a particular drug trend is reported when summarising drug trends. Data from the 2001 IDRS were compared with IDRS findings from previous years to determine changes in drug trends over time.

2.1 Survey of Injecting Drug Users (IDU)

In the 2001 NSW IDRS, the IDU survey consisted of face-to-face interviews with 163 IDU conducted in June 2001. Half of the sample was recruited from the inner city of Sydney (Kings Cross, Redfern) and half from Sydney's south western region (Canterbury, Cabramatta). IDU were recruited from these regions as they capture the two largest open-air illicit drug markets in NSW, namely Kings Cross and Cabramatta. It is in these markets that trends in illicit drug use are likely to first emerge.

IDU were recruited from treatment and support agencies, Needle and Syringe Programs (NSP), and with the assistance of a street-based ethnographer. Potential participants were screened for eligibility; criteria for entry to the study were: (i) at least monthly injection in the six months preceding the interview; and (ii) residence in Sydney for the preceding 12 months, with no significant periods of incarceration during that time.

The structured interview schedule used in previous IDRS research was modified slightly to take into account trends that were documented by the 2000 IDRS. The interview schedule included sections on demographics; drug use history; the price, purity and availability of illicit drugs; criminal activity; injection risk-taking behaviour; health; and general drug trends. Participants were interviewed within the agencies that assisted with recruitment where possible, or at coffee shops, fast-food outlets or on the street. Interviews took about 30 minutes to conduct, and participants were reimbursed \$30 for their time and expenses. Descriptive analyses of the quantitative data derived from the IDU survey were conducted using SPSS for Windows, Release 10.0¹⁴.

2.2 Survey of Key Informants (KIS)

Seventy seven key informants (KIS) who had regular contact with, and/or specialist knowledge of, illicit drug users or dealers or drug manufacture, were interviewed in July and August 2001. To be eligible to act as a key informant, participants must have had at least weekly contact with illicit drug users, and/or contact with a minimum of 10 different illicit drug users, in the six months preceding the interview. Two KIS did not meet these criteria, but possessed specialist knowledge about drug supply or manufacture that would have been otherwise inaccessible. A broad range of KIS were interviewed in 2001 including: drug treatment workers (n=31); needle and syringe program workers (n=19); law enforcement officers (n=4); detoxification workers (n=3); general health workers (n=2); youth workers (n=2); general counsellors (n=2); street outreach workers (n=2); crisis accommodation workers (n=2); health promotion workers (n=2); a researcher; a psychiatrist; a psychologist; a forensic chemist; a school counsellor; a user group representative; a seller of scientific glassware and pH testing equipment; and a representative of the hydroponics industry.

KIS able to comment on methamphetamine users or manufacture were deliberately oversampled in an attempt to obtain a coherent overview of Sydney's dynamic methamphetamine markets. Thus, 30 KIS reported on the use or manufacture of methamphetamine. The remaining KIS reported on the use of heroin (n=20), cannabis (n=16) and cocaine (n=11).

The key informant interview schedule was a semi-structured instrument, based on that used in previous IDRS research, which paralleled the structure of the IDU interview. The interview included sections on drug use patterns; drug price, purity and availability; criminal activity; and health and treatment issues. Interviews took between 30 and 60 minutes to conduct, and most were conducted over the telephone, although several were conducted face-to-face because this was more convenient for the key informant. Notes were taken during the interview, and transcribed in full after completion of the interview. Content analysis was then used to extract recurring themes from these qualitative data.

2.3 Other Indicators

To complement and validate data collected from the IDU and key informant surveys, a range of secondary data sources was examined. These included health, survey, and law enforcement data. The pilot study for the IDRS¹ recommended that such data should be available at least annually; include 50 or more cases; be brief; be collected in the main study site (i.e., Sydney or NSW for the present study); and cover the four main illicit drugs, i.e., heroin, methamphetamine, cocaine and cannabis.

Data sources that have been included in this report include:

- Purity of drug seizures made by the Australian Federal Police (AFP) and the NSW Police Service, collated and provided by the Australian Bureau of Criminal Intelligence (ABCI);
- The number of confirmed opioid-related fatalities in NSW, provided by the Australian Bureau of Statistics (ABS). These data represent the number of drug-related deaths where the cause of death was deemed to be opiate dependence or accidental opiate poisoning, for those aged 15-44 years;
- Toxicology data on suspected drug overdose deaths in that occurred in NSW, provided by the Institute of Clinical Pathology and Medical Research (ICPMR) of NSW Health;
- Toxicology data on intoxicated drivers in NSW, provided by ICPMR. These data represent drugs indicated in the toxicology reports of drivers deemed intoxicated but not testing positive to alcohol;
- Toxicology data from methadone clinics provided by the Pacific Laboratory Medicine Service (PaLMs). These data represent the number of drug positive urine samples received from two government methadone clinics in Sydney, one in the inner-city and the other in the south-west region of Sydney. Urine samples were obtained from patients during the financial years 1998/99, 1999/00, and 2000/01 using a non-random procedure, and data include multiple tests on individual patients;
- NSP client data from two major NSPs located in the inner city of Sydney. These data represent NSP clients' responses when asked to identify the last drug they injected;
- Data on inquiries to the Alcohol and Drug Information Service (ADIS) telephone information service located at St Vincents Hospital;
- Data on calls to Family Drug Support (FDS), a telephone service for the families of drug users coordinated by the Damien Trimingham Foundation;

- Arrest data provided by the NSW Bureau of Crime Statistics and Research (BOCSAR). These data represent the number of arrests for illicit drug use and/or possession (cocaine, narcotics, methamphetamine, cannabis) in NSW; and
- Data from the Drug Use Monitoring in Australia (DUMA) project, collated by BOCSAR. The DUMA program is funded by the Commonwealth Government's Illicit Drug Strategy and is coordinated by the Australian Institute of Criminology (AIC). These data represent the urinalysis results of people detained in police watchhouses in the two NSW sites that participate in the DUMA program, Parramatta and Bankstown.

3.0 RESULTS

3.1 Overview of the IDU Sample

The demographic characteristics of the 163 IDU interviewed in 2001 are presented in Table 1. The mean age of the sample was 32.3 years (SD 7.5, range 17-51), and 72% of subjects were male. The majority of the sample (71%) was not currently in any form of drug treatment, 28% were in methadone maintenance and 1% were maintained on buprenorphine. Two subjects (3%) had used naltrexone in the previous six months, one who had obtained the drug through a doctor and one from illicit sources.

The sample had a mean of 9.5 years (SD 2.0, range 0-12) of school education. The majority (72%) reported no tertiary qualifications; 26% had completed a trade or technical qualification; and 2% had completed university or college qualifications. Most subjects (80%) were currently unemployed, and 61% had a history of imprisonment.

Table 1: Demographic characteristics of IDU sample

Characteristic	N=163
Age (yrs)	32.3
Sex (% male)	72
Employment (%): Not employed Full time Part time/casual Sex worker	80 5 7 7
School education (yrs)	9.5
Tertiary education (%): None Trade/technical University/college	56 39 5
Currently in drug treatment (%)	29
Prison history (%)	55

3.2 Drug Use History and Current Drug Use

The mean age of first injection was 19.9 years (SD 6.4, range 8-48) (Table 2). The two most recent IDRS studies^{6,7} and other recent studies^{15,16} have documented a decrease in the age of initial injection among new recruits to injecting. The current data are consistent with these findings, with a significant correlation between current age and age at initial injection ($r=0.32$, $p<.001$). Heroin was the first drug injected by 64% of subjects; 33% reported that they first injected amphetamines; 2% reported cocaine; and 1% other opiates. One subject had initially injected a combination of methamphetamine and cocaine.

Heroin was the drug of choice for 61% of subjects, and cocaine (29%) was the next most popular drug (Table 2). Small proportions of the sample preferred methamphetamine (5%); cannabis (2%); and methadone, LSD and ecstasy (all 1%). Compared to 2000, there was a marked increase in the proportion of subjects reporting cocaine as their drug of choice: in 2000, 10% of subjects nominated cocaine as their drug of choice, compared to 29% in 2001. There was a corresponding decline in the proportion of subjects nominating heroin as their drug of choice, from 81% in 2000 to 61% in 2001.

Heroin was reported as the drug injected most often in the preceding month by 58% of IDU, a decline from 79% in 2000. Consistent with the increase in the proportion of IDU nominating cocaine as their drug of choice, cocaine was the drug injected most often in the month preceding the interview by 34% of subjects, an increase from 9% in 2000. It is worthy of note that 3% reported heroin/cocaine cocktails ('speedballs', 'CCs') as the drug they injected most often. The pattern of the most recent drug injected reflected the pattern of the drug injected most often.

Seventy one percent of the sample had injected on a daily basis over the preceding month, and one third had injected more than three times a day. Cocaine users were significantly more likely than other IDU to report injecting more than three times per day in the month preceding the interview (38% of cocaine users versus 11% of other IDU; $\chi^2_{df=1}=16.8$, $p<.01$).

The IDU sample engaged in extensive polydrug use. Subjects had used an average of 9.4 (SD 2.4, range 2-13) drug classes in their lives, and 6.5 (SD 2.0, range 2-12) in the six months preceding the interview. An average of 4.3 drug classes (SD 1.8, range 1-9) had been injected at some time, and an average of 2.9 (SD 1.4, range 1-7) drug classes had been injected in the preceding six months.

Table 2: Injection history, drug preferences and polydrug use of IDU

Variable	N=163
Age first injection (years)	19.9
First drug injected (%)	
Heroin	64
Amphetamine	33
Cocaine	2
Other opiates	1
Drug of choice (%)	
Heroin	61
Cocaine	29
Methamphetamine	5
Cocaine+heroin	1
Other	4
Drug injected most often in last month (%)	
Heroin	58
Cocaine	34
Methamphetamine	4
Cocaine+heroin	3
Other	2
Most recent drug injected (%)	
Heroin	57
Cocaine	36
Methamphetamine	3
Cocaine+heroin	1
Other	3
Frequency of injecting in last month (%)	
Less than daily	26
Once a day	12
2-3 times a day	26
>3 times a day	33
Polydrug use	
Number of drug classes ever tried	9.4
Number of drug classes used in last 6 months	6.5
Number of drug classes ever injected	4.3
Number of drug classes injected in last 6 months	2.9

The polydrug use histories of IDU, and routes of administration, are presented in Table 3. As in all previous years, recent use of the four main drugs monitored by the IDRS was common: heroin (96%), cocaine (83%), cannabis (83%) and methamphetamine (51%).

Table 3: Polydrug use history and routes of administration of IDU sample

Drug Class	Ever used	Ever Injected	Injected last 6 months	Ever smoked	Smoked last 6 months	Ever Snorted	Snorted last 6 months	Ever Swallow	Swallow last 6 months	Used last 6 months	Days used last 6 months *
	%	%	%	%	%	%	%	%	%	%	
Heroin	98	98	96	56	10	23	2	15	6	96	158
Methadone	77	47	22					72	46	120	52
Other opiates	37	19	2	10	1	1	1	22	8	13	5
Morphine	38	33	12					13	5	14	4
Amphetamines	85	77	45	10	4	55	15	37	9	51	7
Cocaine	96	94	82	21	7	47	15	12	6	84	90
Hallucinogens	66	15	1	3	0	1	0	63	6	6	2
Ecstasy	50	18	12	1	0	7	3	45	25	30	3
Benzodiazepines	79	38	18	3	2	2	1	78	59	56	20
Alcohol	90	6	0							58	20
Cannabis	97									83	90
Anti-depressants	29									10	90
Inhalants	28									5	2
Tobacco	98									98	180

* Median days use among those who had used in the preceding six months

4.0 HEROIN

The majority (151/163) of IDU and 20 KIS commented on aspects of price, purity, availability and use of heroin.

4.1 Price

Prices paid for heroin by IDU on the last occasion of purchase are presented in Table 4. The median price of IDU purchases of a gram of heroin in Sydney in 2001 was \$320, a significant increase from the average of \$220 paid for a gram in 2000 (Table 4). The increase in the price of heroin between 2000 and 2001 was the first increase recorded since the IDRS commenced in 1996, and was the highest price recorded since 1997 (Figure 1). As in previous years, the median reported price of heroin was cheaper in south western Sydney than in the inner city (\$310 v \$350 per gm).

The price of smaller purchase amounts of heroin also increased in 2001 compared to 2000. The cost of a 'cap' of heroin had doubled from \$25 to \$50; half grams increased from \$100 to \$150; and eighth of grams from \$35 to \$50. Quarter grams increased from \$70 to \$75, but this figure disguised a substantial number of IDU who reported paying \$100 for quarter grams. A 'rock' of heroin, first mentioned by IDU in 2000 as a purchase amount, increase from \$30 to \$50. A 'rock' appears to be a small amount of heroin, approximately equivalent to a cap.

Consistent with the purchase prices, more than half (55%) of IDU reported that the price of heroin had increased in the preceding six months, and only 9% believed it had decreased. The comparable figures for 2000 were 2% and 44%. As has been the case since 1999, quarter grams remained the most commonly purchased amount of heroin, with caps the next most common purchase amount (Table 4).

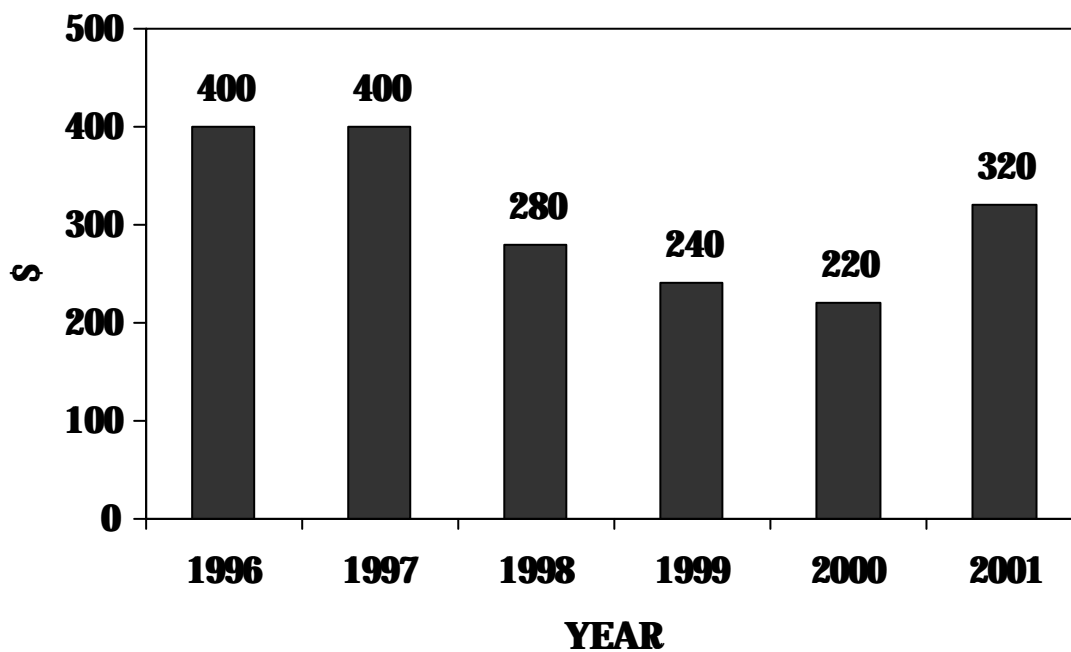
KIS estimates of the price of a heroin gram were consistent with those reported by IDU. The median price per gram nominated by KIS was \$340, and the price of a cap of heroin was reported to be between \$50 and \$80. Consistent with IDU reports, KIS also reported heroin being sold in quarter grams (\$70-\$120) and half grams (\$140-\$160).

Table 4: Price of most recent heroin purchases by IDU, 2000 - 2001

Amount	Median price* \$	Number of purchasers
Gram	320 (220)	23
Cap	50 (25)	79
Half gram	150 (100)	59
Quarter gram	75 (70)	101
Eighth of gram	50 (35)	9
"Rock"	50 (30)	17

** 2000 median prices in brackets*

Figure 1: Median price of a gram of heroin estimated from IDU purchases, 1996 - 2001



4.2 Availability

There was a strong perception among IDU that there had been a heroin 'drought' in Sydney during 2001. Eighty eight percent of IDU believed that heroin had become difficult to obtain during 2001. The reduced availability was most commonly believed by IDU to have commenced in December 2000 (36%) or January 2001 (24%). A majority (57%) of IDU believed that the availability of heroin was yet to return to pre-Christmas 2000 levels; although no longer a 'drought', heroin was considered substantially more difficult to obtain than in previous years. The height of the 'drought' was most commonly believed by IDU to have ended in April/May 2001.

Consistent with IDU reports, more than half (56%) of KIS reported that heroin had become more difficult to obtain in 2001, and the remainder reported that availability fluctuated.

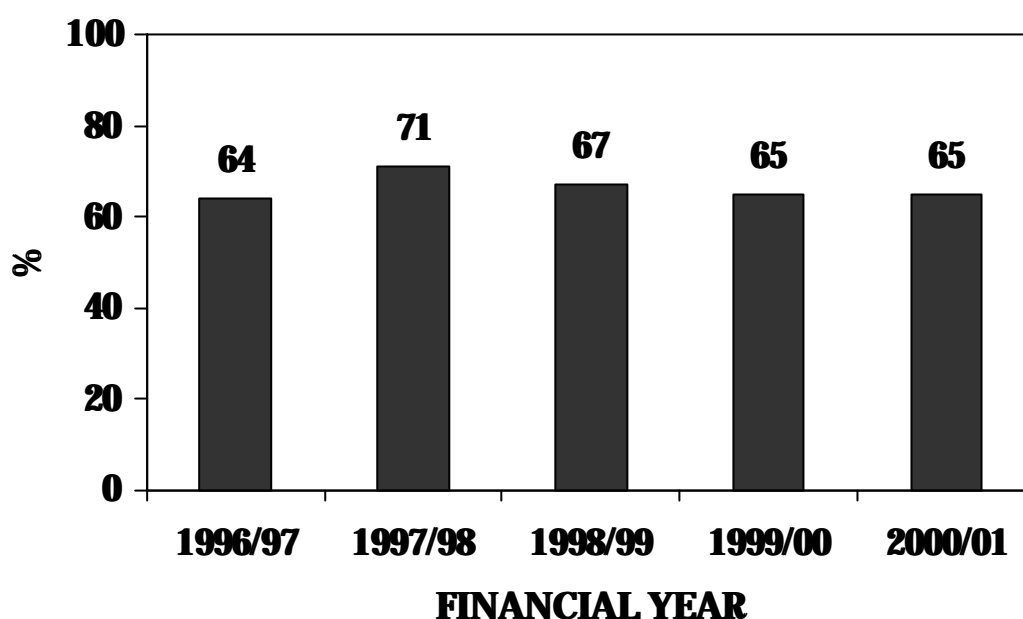
IDU reported purchasing heroin predominantly from street dealers (38%), by contacting dealers on mobile phones (32%), at the dealer's home (22%) and friends (7%).

4.3 Purity

The purity of analysed heroin seizures made by the AFP in NSW remained stable between 2000 and 2001 at 65% (Figure 2). NSW Police Service seizures, however, exhibited a moderate decline from 2000 (58% - 47%). In the past, there has been little difference between the purity of large-scale AFP seizures and smaller local seizures of heroin, suggesting that little cutting was occurring after importation. The shortage of heroin appears to have result in more cutting of the drug after importation.

IDU reported that heroin was of low (44%) to medium (33%) purity, and that the purity of heroin had decreased (46%) or fluctuated (25%) in the preceding six months. Only 9% of IDU who commented on heroin had perceived an increase in purity in the preceding six months.

Figure 2: Mean purity of analysed heroin seizures made by the AFP in NSW, 1996/97 - 2000/01



4.4 Use

4.4.1 Prevalence of Heroin Use

Heroin was the drug of choice of 61% of IDU surveyed in 2001, a marked decrease from 81% in 2000 (Figure 3). As can be seen from Figure 3, the decline in heroin as drug of choice is the first substantial decline recorded since the inception of the IDRS, and coincides with the large increase in cocaine as drug of choice discussed in Section 3.2. Consistent with these data, the majority of KIS believed that the number of heroin users, and the frequency and quantity of heroin use, had declined over the preceding six months.

Consistent with the decline in the proportion of IDU reporting heroin as their drug of choice, there was a decline in the number of IDU reporting heroin as the drug they had injected most recently (Figure 4).

Figure 3: Proportion of NSW IDRS IDU samples reporting heroin as drug of choice, 1996 - 2001

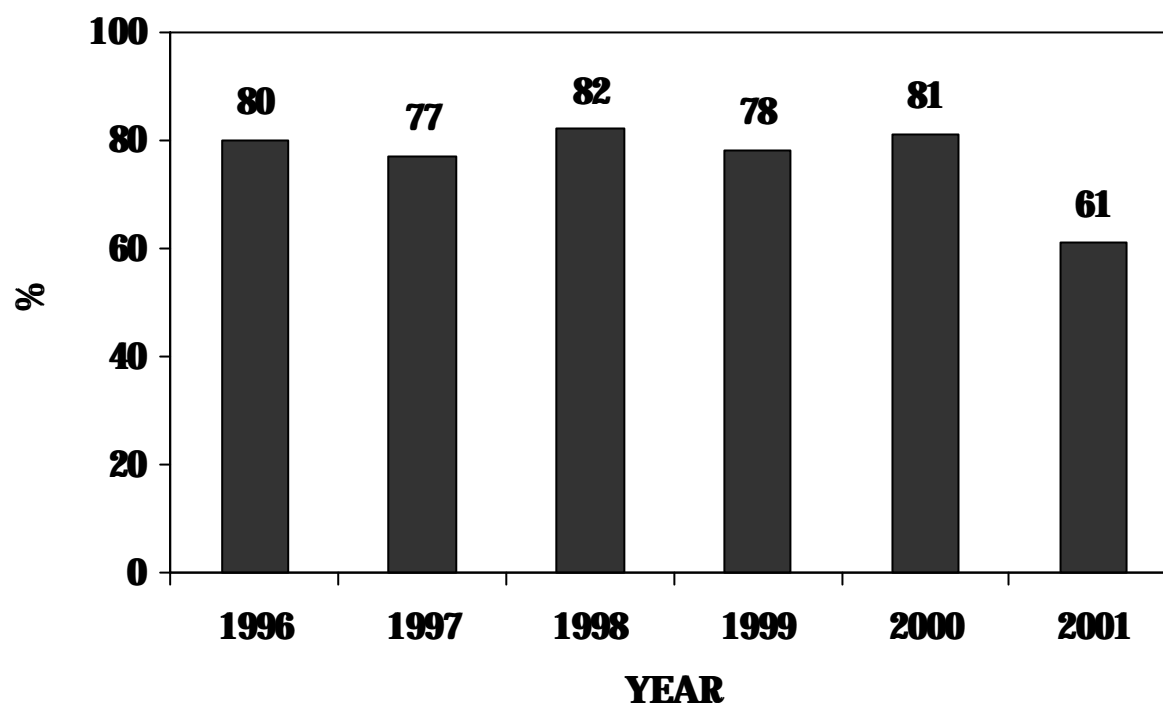
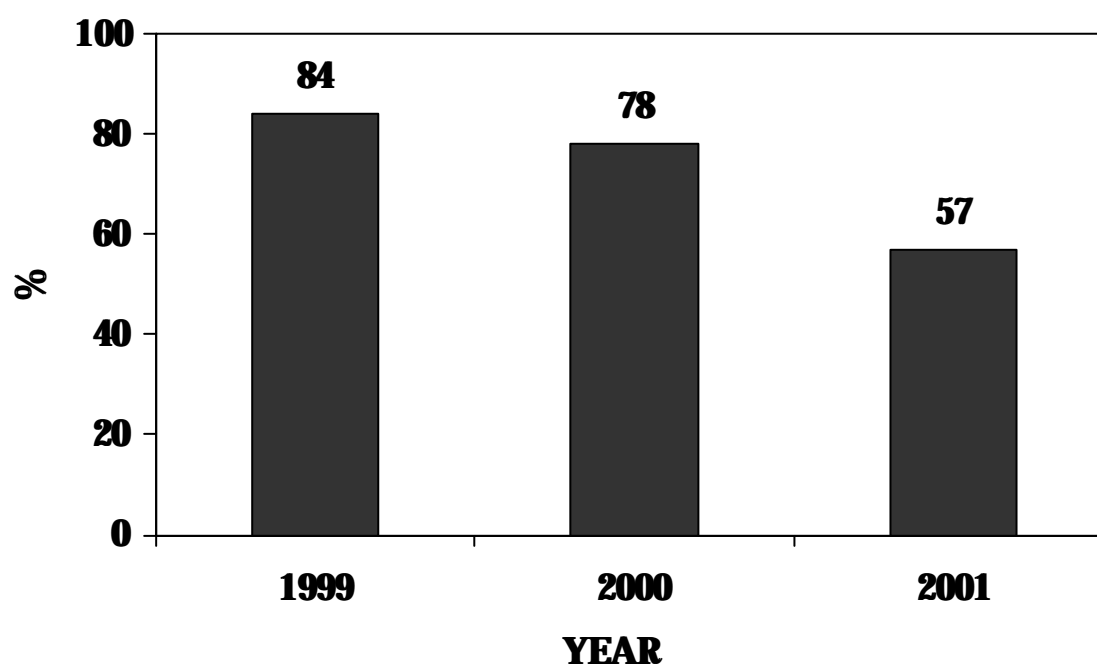


Figure 4: Prevalence of heroin as last drug injected among NSW IDRS IDU samples, 1999 - 2001



Numerous indicators consistently suggested a decrease in the number of heroin users (see following pages). For the second consecutive year, there was a marked decline in the number of suspected heroin overdose fatalities referred to ICPMR (Figure 5). Arrests for narcotic use/possession decreased (Figure 6), as did the proportion of clients from two Sydney NSPs that reported that heroin was the last drug injected (Figure 7). Declines were recorded in the number of calls to both ADIS and FDS that related to heroin (Figures 8 & 9), as well as in the proportion of persons detained at police watchhouses in Parramatta and Bankstown who tested positive for opiates under the DUMA program (Figure 10).

Overall, IDU data, KIS reports and secondary data sources were consistent in demonstrating a marked decline in the prevalence of heroin use in NSW throughout 2001.

Figure 5: Number of morphine positive suspected overdose deaths in NSW, 1995/96 - 2000/01

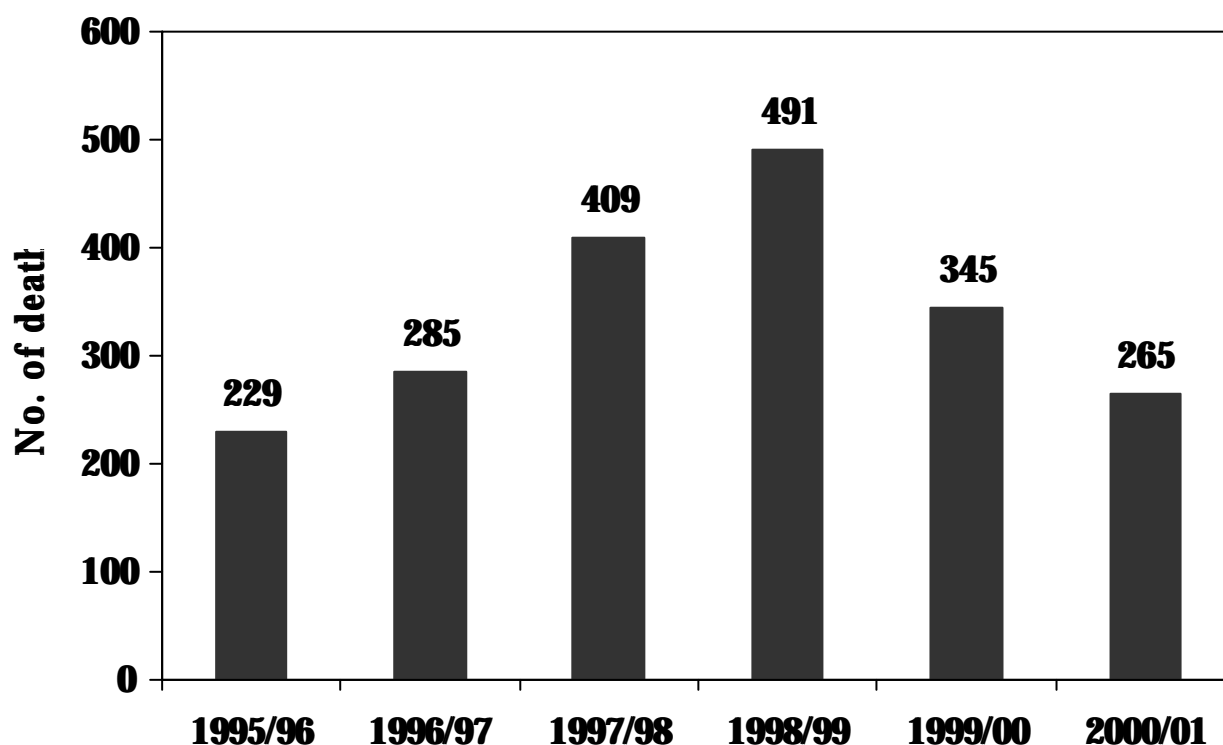


Figure 6: Number of arrests for narcotic use and possession in NSW, 1996/97 - 2000/01

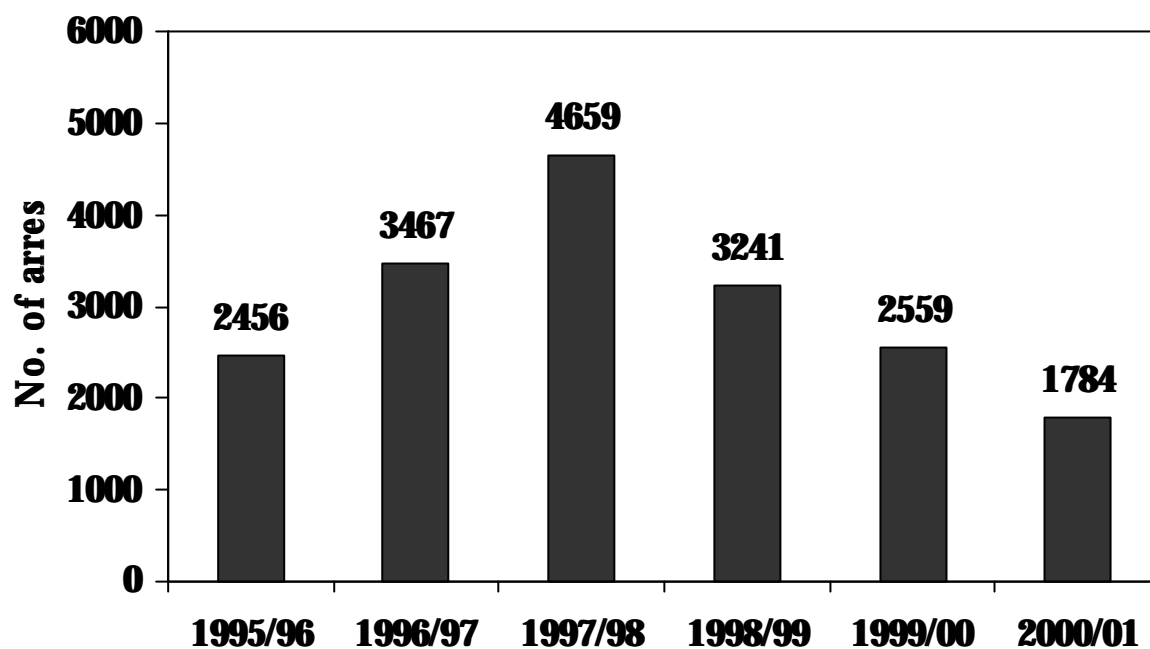
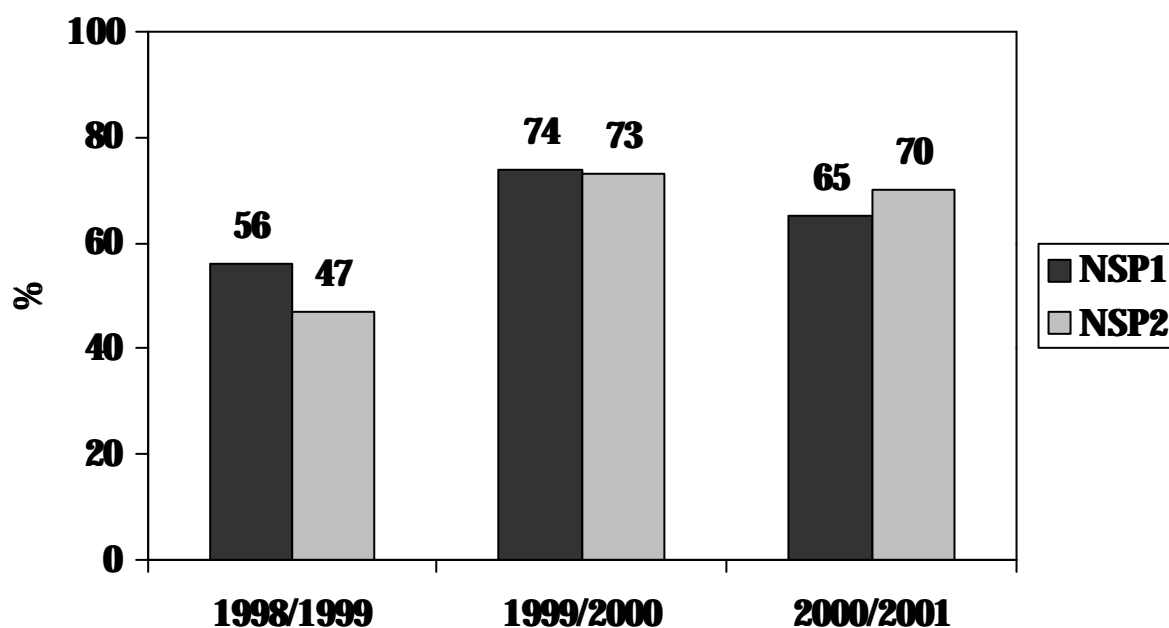
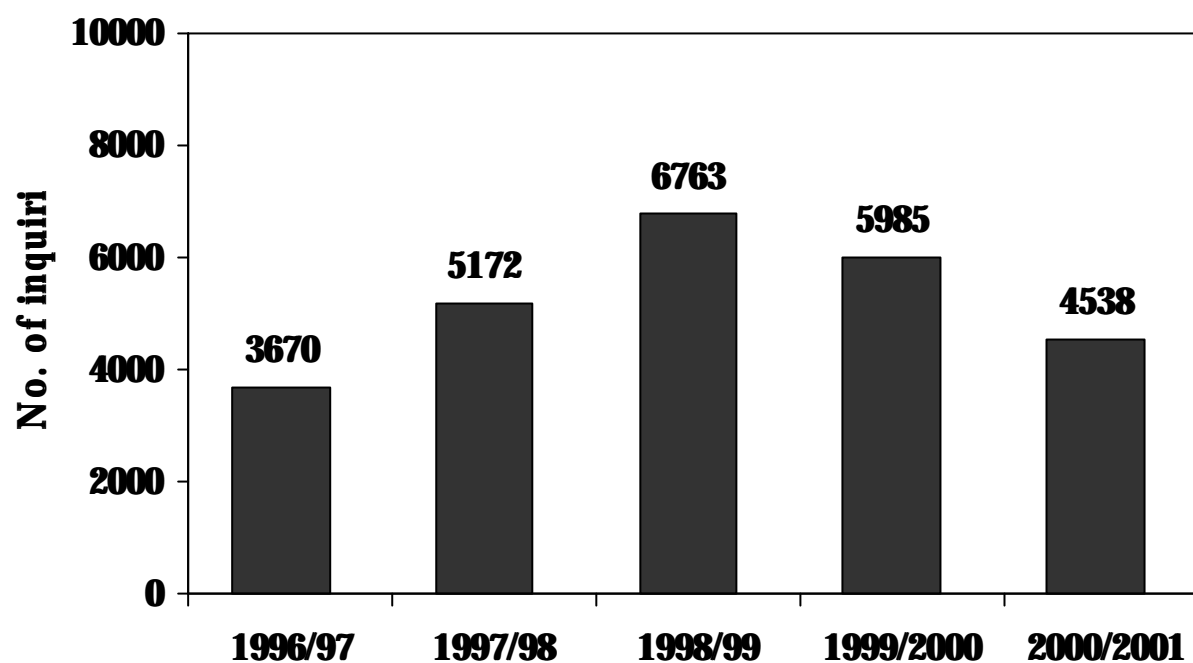


Figure 7: Proportion of NSP clients that reported that heroin was the last drug injected, 1998/99 - 2000/01



**Figure 8: Number of inquiries to ADIS regarding heroin,
1996/97 - 2000/01**



**Figure 9: Proportion of inquiries to FDS regarding heroin,
1999/00 - 2000/01**

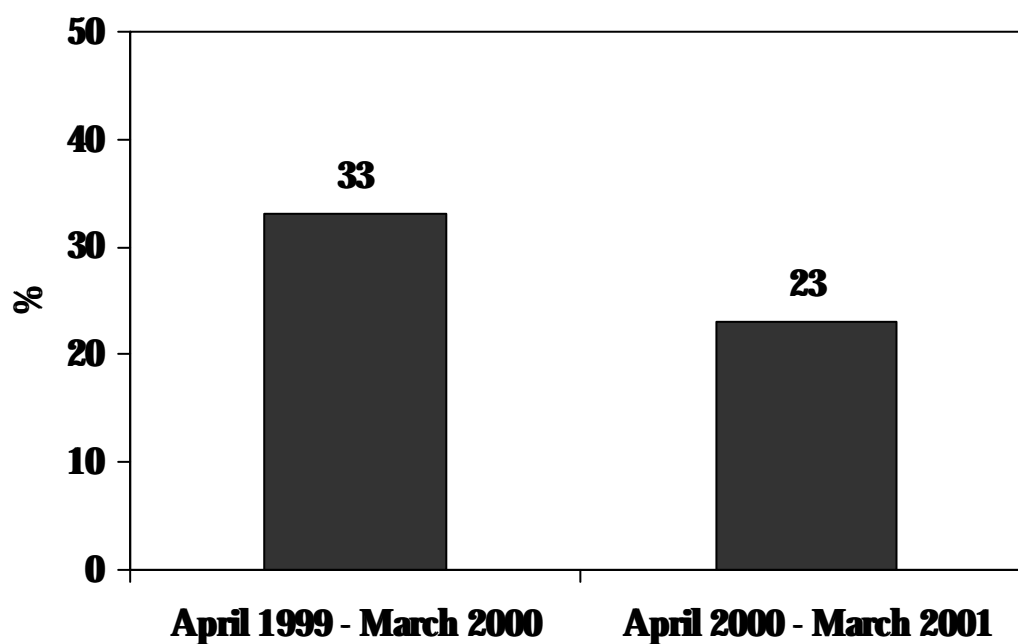
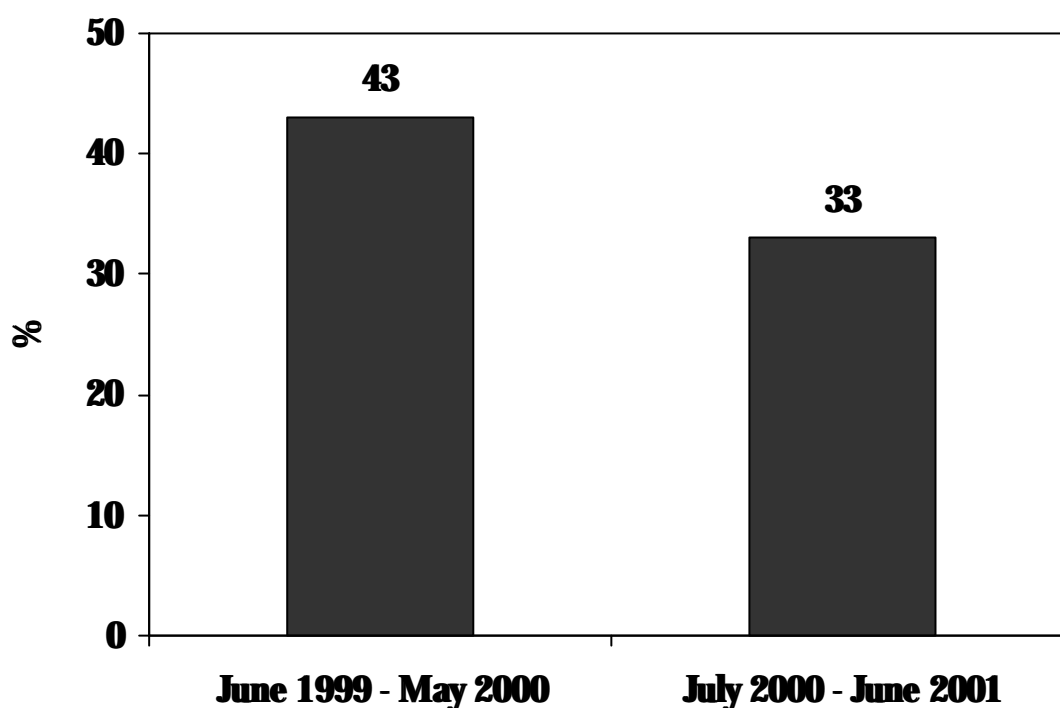


Figure 10: Proportion of detainees at Parramatta and Bankstown police watchhouses testing positive to opiates under the DUMA program, 1999/00 - 2000/01



4.4.2 Current Patterns of Heroin Use Among IDU

Consistent with the decline in the availability of heroin, the median number of days on which heroin had been used by heroin users in the IDU sample in the preceding six months declined from 180 days in 2000 to 153 in 2001. The proportion of IDU who had used heroin daily over the six months preceding the interview declined from 53% in 2000 to 42% in 2001.

The use of cocaine by primary heroin users was common. Three quarters (76%) of IDU who described heroin as their drug of choice had used cocaine in the preceding six months. These primary heroin users had used cocaine on a median of 48 days, and 25% had used cocaine daily in that period.

The most common purchase amount of heroin between 1996 and 1998 was the 'cap' (approximately 0.10-0.15gm). In 1999, quarter grams replaced caps as the most common amount purchased by IDU, and this trend was sustained throughout 2000 and 2001.

4.5 Trends in Heroin Use

IDU were asked whether they had noticed any trends in heroin use. Comments overwhelmingly related to the reduced availability of heroin. It was generally believed that there had been an increase in the injection of cocaine due to the shortage of heroin. Two contrary trends were also reported by IDU: that many heroin users were using more of the drug, due to its reduced purity; and that the shortage was leading to a reduction in the amount of heroin people were using. KIS also reported such contrary trends; three KIS reported the use of increased amounts of heroin due to its poor quality, and three other KIS reported that use had decreased for the same reasons. These conflicting reports are likely to reflect different reactions to the shortage among different heroin users.

As in previous years, many IDU and KIS stated that heroin users were getting younger. The significant association between younger age and earlier initiation of injecting drug use, discussed in Section 3.2, is consistent with these perceptions.

4.6 Summary of Heroin Trends

- The availability of heroin has substantially reduced
- There has been a marked increase in the price of heroin
- The prevalence and frequency of heroin use have declined
- The purity of heroin has remained relatively stable, although more 'cutting' of the drug appears to be taking place prior to its distribution at the street level
- There has been a significant decrease in the number of heroin overdose fatalities recorded in NSW that began in 1999 and appears to have been sustained throughout 2001

5.0 METHAMPHETAMINE

In the past, the IDRS used the overarching term 'amphetamines' to refer to both amphetamine and methamphetamine. Throughout the 1980s, the form of illicit amphetamine most available in Australia was amphetamine sulfate¹⁷. Following the legislative controls introduced in the early 1990s on the distribution of the main precursor chemicals¹⁸, illicit manufacturers were forced to rely on different recipes for 'cooking' amphetamine. Throughout the 1990s, the proportion of amphetamine-type substance seizures that were methamphetamine (rather than amphetamine) steadily increased, until methamphetamine clearly dominated the market¹⁹. In Australia today, the powder traditionally known as 'speed' is almost exclusively methamphetamine rather than amphetamine. The more potent forms of this family of drugs, known by terms such as ice, shabu, base and crystal meth, are also methamphetamine. Therefore, the term methamphetamine will now be used in the IDRS to refer to the drugs available in this class, and the distinction will be drawn between the powder form that has traditionally been available in Australia, and the more potent forms that have in recent years become increasingly available and more widely used.

Comment on aspects of price, purity, availability and use of methamphetamine was made by 50/163 of the IDU sample, and by 30 key informants.

5.1 Price

The median price of the last gram of methamphetamine powder purchased by IDU was \$100 (Table 5), a slight increase on the median price of \$90 reported in 2000. Other amounts of methamphetamine powder purchased by IDU in the six months preceding the interview were half grams (\$50) and 'eightballs' (one eighth of an ounce or 3.5 gms) (\$150), the prices of which were identical with those reported by IDU in 2000. Eightballs were first noted in 2000, and have remained a common purchase quantity. Overall, the price of methamphetamine powder appeared to have remained relatively stable between 2000 and 2001, a view shared by 80% of IDU commenting on methamphetamine.

Table 5: Price of most recent methamphetamine purchases by IDU, 2001

Amount	Median price \$	Number of purchasers
<i>Powder</i>		
Gram	100	18
Half gram	50	31
"Eightballs" (3.5 gms)	150	11
<i>Ice/shabu/base</i>		
Point (0.1 gram)	50	19

The reports of the 19 KIS able to comment on the price of methamphetamine powder were consistent with those of the IDU. Most KIS agreed that a gram of powder costs between \$80 and \$100. Three KIS reported that half-grams of methamphetamine powder are \$40, and three reported that eightballs are approximately \$150 (range \$120-\$220). Of the 23 KIS able to comment on changes in the price of methamphetamine, almost all reported that the price had either remained stable (n=14) or decreased (n=8).

In 2000, anecdotal reports emerged of the availability of the more potent forms of methamphetamine ('ice', 'shabu', 'base') in 'points' (0.1 gram) for \$50. The price of points was directly assessed among IDU in 2001. Consistent with the anecdotal reports of 2000, the median price of a point of potent methamphetamine in 2001 was \$50, and 71% of IDU who commented believed the price had remained stable in the preceding six months. KIS reported the price for a range of quantities of ice/shabu and base, from points for \$40-\$50 (n=4), grams for \$200 (n=1), eightballs for \$500-\$600 (n=1), quarter ounces for \$1200 (n=1) and ounces for between \$3500 and \$5000 (n=1).

5.2 Availability

Of those IDU who commented on the availability of methamphetamine powder, the majority

(78%) described it as 'easy' or 'very easy' to obtain, and 71% considered that availability had remained stable in the preceding six months. The more potent forms of methamphetamine were regarded by 84% of IDU who commented as easy/very easy to obtain. Sixty percent of IDU who commented considered that the availability had remained stable in the preceding six months, and a further 15% reported that availability of potent methamphetamine had increased.

KIS reports on the availability of methamphetamine were consistent with those of IDU. Of the 28 KIS who commented, 25 described methamphetamine as 'very easy' to obtain and the other three described it as 'easy'. This was the case regardless of to which form of methamphetamine KIS referred. Sixteen KIS reported that the availability of methamphetamine had recently increased, and 11 reported that availability had remained stable in the preceding six months.

IDU usually obtained methamphetamine powder from: mobile dealers (25%), dealers' homes (25%), street dealers (22%), or from friends (18%). More potent forms of methamphetamine were usually obtained from mobile dealers (41%), dealers' homes (24%), street dealers (19%), or from friends (8%). Nine KIS had perceived a recent increase in the number of people selling methamphetamine, six of whom considered the increase was specifically among low-level user-dealers, and four of whom perceived the increase in user-dealers to be among young people in particular. All nine of these KIS considered that the range of places from where and people from whom methamphetamine could be obtained had increased in the preceding six months. Ice/shabu distribution points were reported in Cabramatta, Chatswood, Fairfield/Campsie, Kings Cross, Liverpool and Manly.

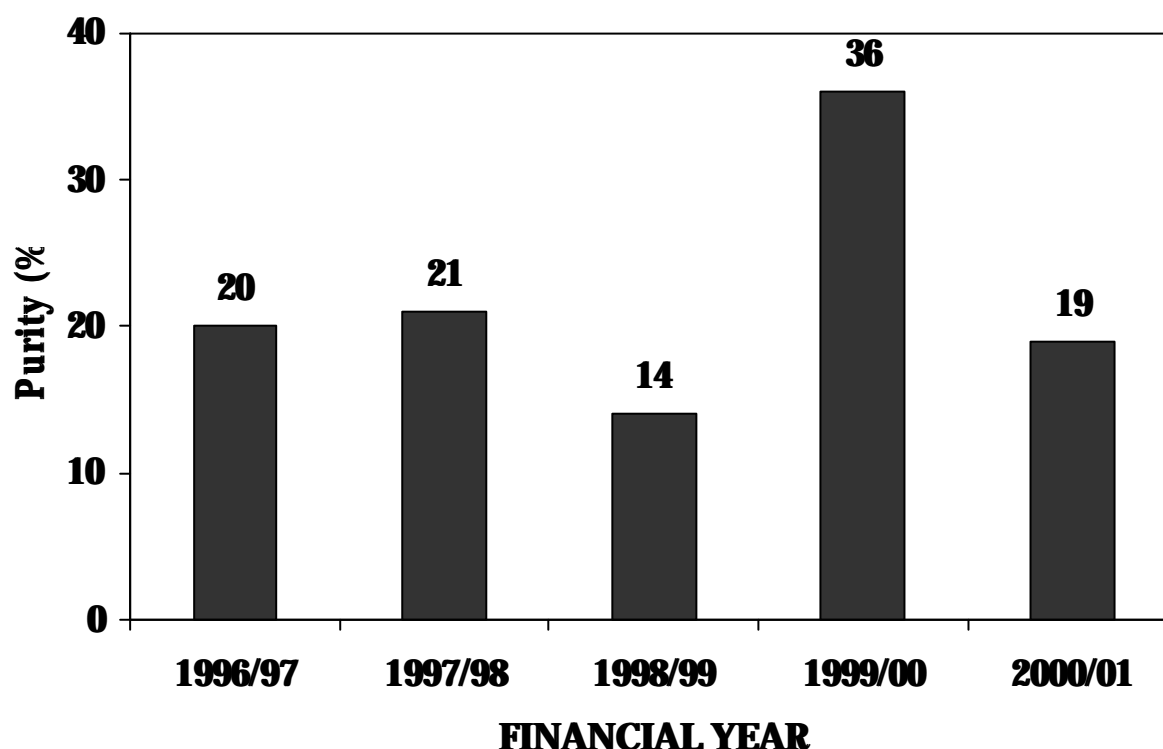
KIS were almost unanimous in agreeing that there is not an open-air market for potent methamphetamine in Sydney as there is in many areas for other drugs such as heroin and cocaine. Two KIS had heard reports of such open-air methamphetamine markets, one in Kings Cross and one in Westmead, but both agreed that it was unlikely that genuine ice/shabu could be accessed in such areas, and that users who scored from unknown street dealers were likely to be swindled. Two KIS reported an increase in the number of dealers willing to make 'home deliveries' of methamphetamine, although this appears to be a trend with all drugs rather than just methamphetamine. This trend has also been noted by the NSW Police Service¹⁹, and appears to have arisen so that dealers can avoid the attraction of attention to their premises caused by a large number of visitors. Two other KIS reported an increased number of dealers, usually located in private houses, who sold a range of drugs, usually cannabis, ecstasy, methamphetamine and

cocaine, rather than specialising in a single drug.

5.3 Purity

The purity of analysed seizures of methamphetamine made by the AFP in NSW continued to fluctuate (Figure 11). After increasing sharply from 14% in 1998/99 to 36% in 1999/00, purity fell to 19% in 2000/01. After including seizures of methamphetamine made by the NSW Police Service, the overall purity of analysed methamphetamine seizures exhibited a small decline, from 15% in 1999/00 to 12% in 2000/01.

Figure 11: Mean purity of analysed methamphetamine seizures made by the AFP in NSW, 1996/97 - 2000/01



IDU and KIS who commented on the purity of methamphetamine made a clear distinction between the perceived purity of methamphetamine powder and the more potent forms. Methamphetamine powder was rated by IDU who commented as being of medium (43%) to low (35%) purity; only 14% of IDU described methamphetamine powder as high purity. In contrast, 81% of IDU who commented on the purity of ice/shabu/base considered their purity high, and only 5% described the purity as low.

Similarly, of the 22 KIS who commented on purity, 17 distinguished between powder and the more potent forms. Eight described the purity of powder as 'medium' and three described it as 'low'. All KIS who commented described the more potent forms as of high purity. Purity was considered by KIS to have either increased (n=17) or remained stable (n=7) in the preceding six months. The perceived difference in the purity of the different forms of the drug is reflected in the prices discussed above. Thus, a gram of methamphetamine powder cost \$100, compared to \$50 for 0.1 gram of ice/shabu/base.

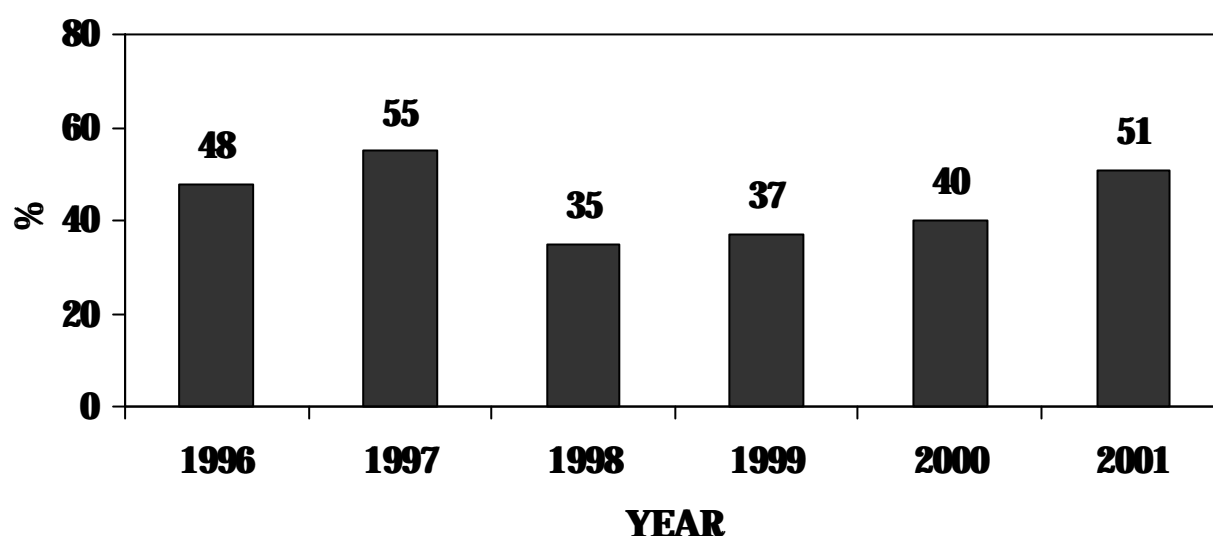
5.4 Use

5.4.1 Prevalence of Methamphetamine Use

The proportion of IDU who had used methamphetamine in the six months preceding the interview increased from 40% in 2000 to 51% in 2001. The proportion of IDU reporting recent methamphetamine use declined between 1997 and 1998, coincident with the emergence of cocaine injection among Sydney IDU. Every year since 1998, the IDRS has recorded an increase in the use of methamphetamine among IDU, with the increase between 2000 and 2001 being the largest recorded to date (Figure 12).

Twelve KIS had perceived a recent increase in the overall numbers of people using methamphetamine, three of whom attributed this change to increased availability and purity. Five specifically noted that the increased numbers related to a broader range of people initiating methamphetamine use, with a wider range of ages, social backgrounds, cultural backgrounds and so on. Seven KIS considered that the more potent forms of methamphetamine would continue to lead to an expansion of the market for methamphetamine, although there was disagreement as to whether the more potent forms would appeal to people who had never used methamphetamine powder (n=3), or only to those with an extensive methamphetamine use history (n=4).

Figure 12: Proportion of NSW IDRS IDU samples that reported recent use of methamphetamine, 1996 - 2001



Indicator data were consistent with IDU and KIS data in suggesting an increase in the number of methamphetamine users. Data from two Sydney NSPs showed small increases in the proportion of clients who nominated methamphetamine as their last drug injected (Figure 13). Arrests for methamphetamine use/possession increased for the second consecutive year (Figure 14). There was also a marked increase in the number of NSW drug-related deaths in which methamphetamine was detected (Figure 15). Although not necessarily the cause of death, increases in the prevalence of a drug in overdose deaths is an indicator of increased use of that drug among the general population of drug users. The number of inquiries made to ADIS regarding methamphetamine declined slightly, but remained at levels in excess of that seen prior to the resurgence of methamphetamine documented in 2000 (Figure 16).

Data from the 2001 Clients of Treatment service Agencies (COTSA) census²⁰ are also consistent with an increase in recent years in the use of methamphetamine. COTSA is a point prevalence census of Australian drug treatment agencies. COTSA recorded a moderate increase from 4.9% in 1995 to 6.6% in 2001 in the proportion of clients being treated for methamphetamine as the primary drug issue at NSW treatment agencies. This increase in treatment presentations was reflected in the reports of three KIS employed in different treatment agencies, and a fourth who worked in a specialist detoxification facility, all of whom had perceived a recent increase in the proportion of methamphetamine users presenting for treatment.

Overall, IDU data, KIS reports and indicator data were consistent in suggesting an increase in the use of methamphetamine in NSW throughout 2001.

Figure 13: Proportion of Sydney NSP clients that reported that methamphetamine was the last drug injected, 1998/99 - 2000/01

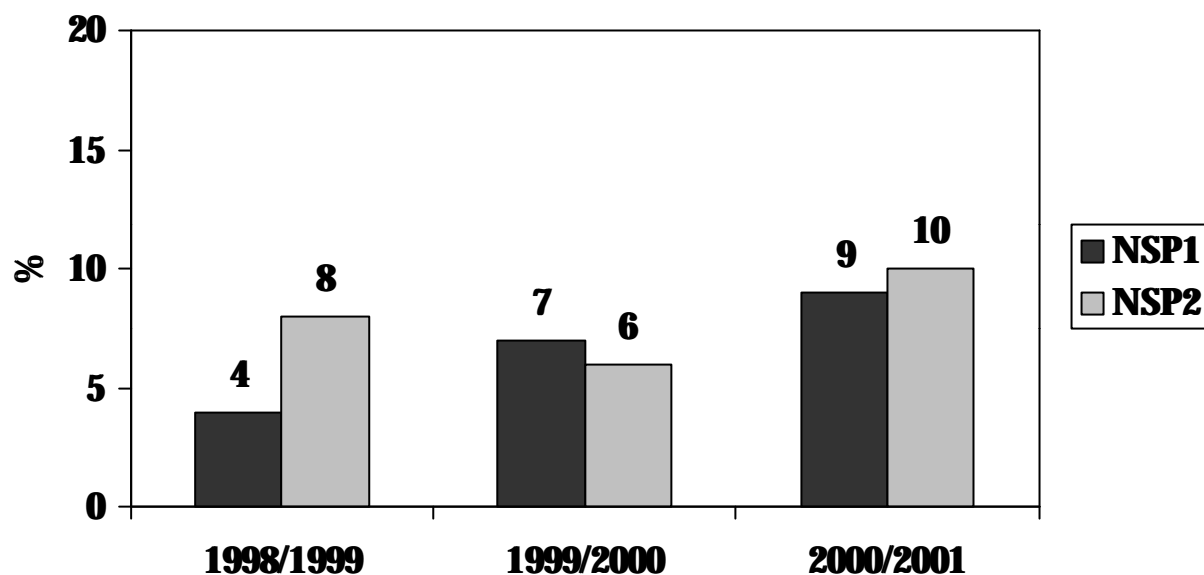


Figure 14: Number of arrests for methamphetamine use/possession in NSW, 1998/99 - 2000/01

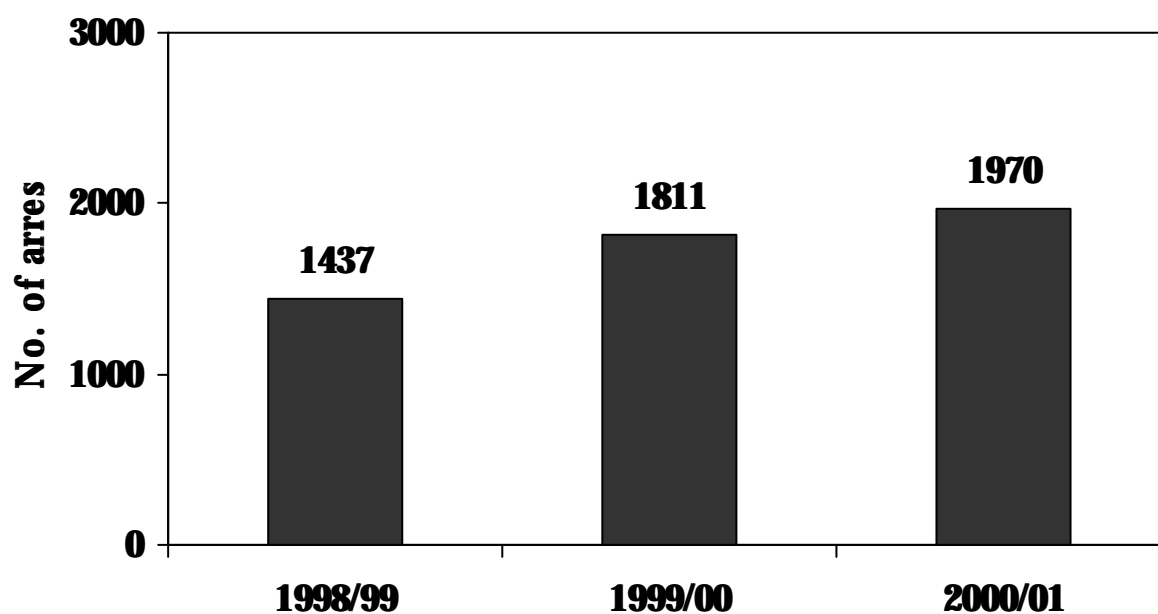


Figure 15: Proportion of NSW drug-related deaths that tested positive for methamphetamine, January 1997 - July 2001

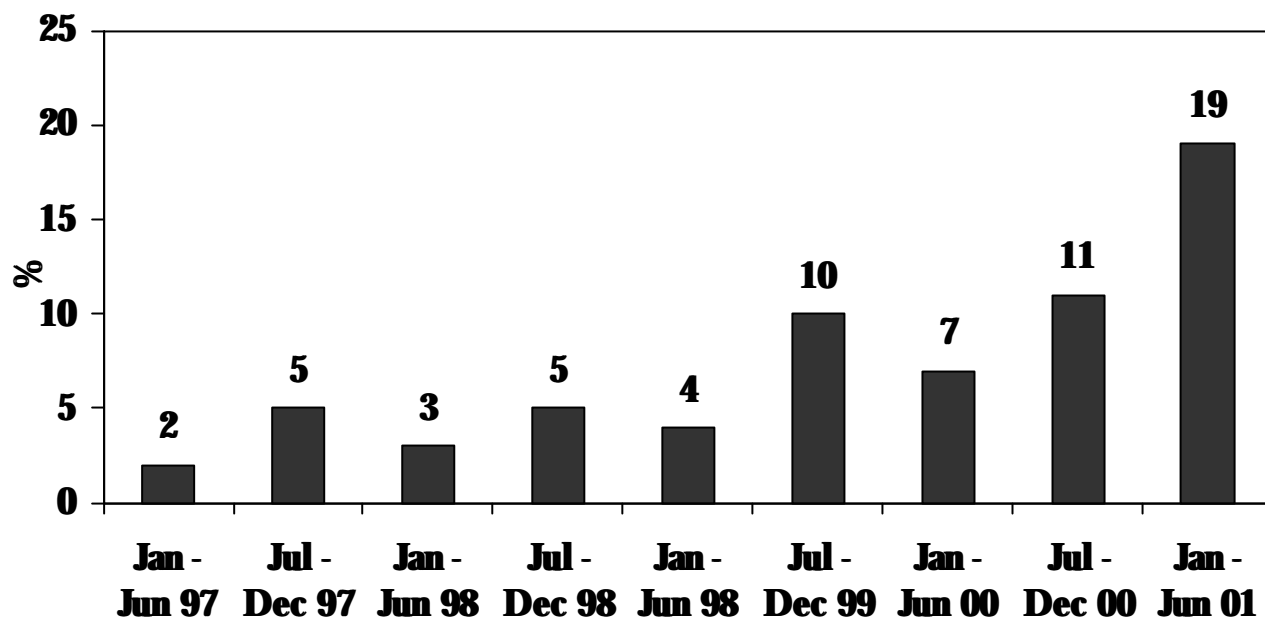
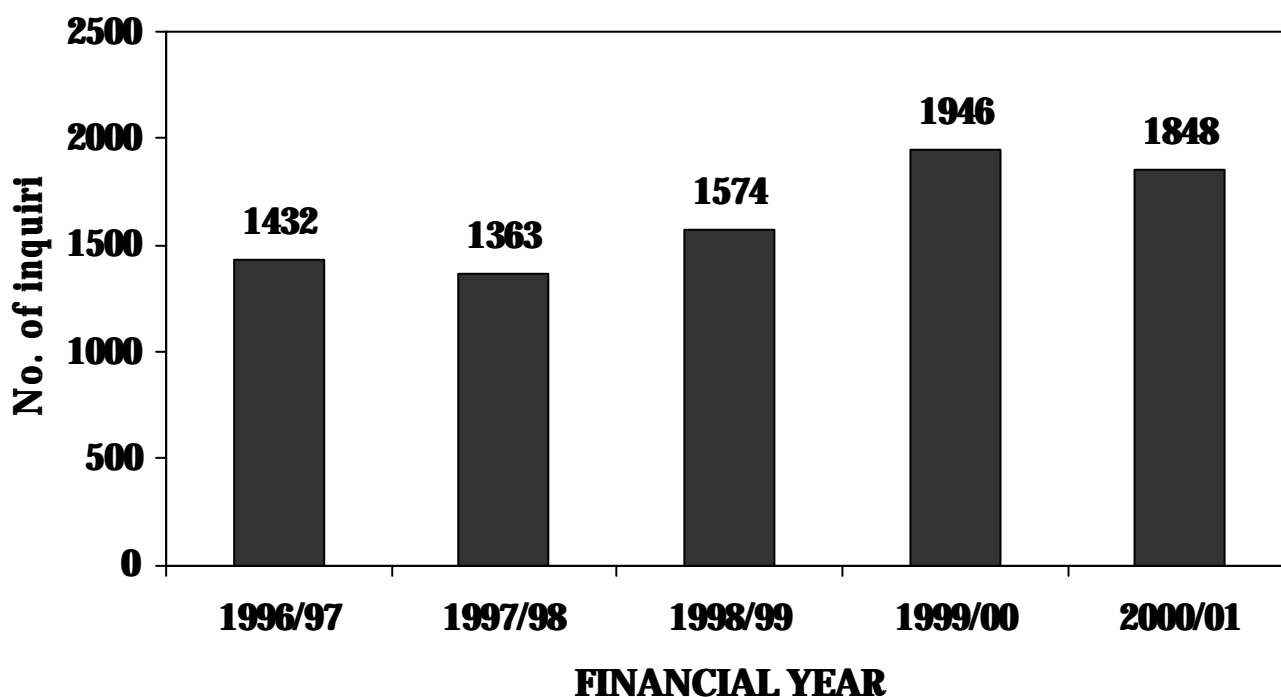


Figure 16: Number of inquiries to ADIS regarding methamphetamine, 1996/97-2000/01



5.4.2 *Current Patterns of Methamphetamine Use*

It appears that there are presently available at least three forms of methamphetamine that are considered by Sydney's illicit drug markets to be distinct commodities:

- (1) **speed** - methamphetamine powder that has been the dominant form of illicit methamphetamine available in Australia since the mid-1990s. This is known in the market as speed, whiz, goey and a variety of other names, and is typically a powder ranging in colour from white through to yellow, orange, pink or brown. The differences in appearance of speed are due to differences in the reagents used in the manufacturing process and the expertise of the 'chemist' who 'cooks' it.
- (2) **base** - also sometimes known as meth, this is a sticky, gluggy, waxy or oily form of damp powder, paste or crystal that is manufactured locally and often has a yellow or brownish hue due to the presence of iodine and other impurities. These impurities prevent the substance from forming into the large translucent crystals typical of ice/shabu (see below). Base is oily because most methamphetamine currently available in Australia is manufactured from the precursor pseudoephedrine¹⁹. The pseudoephedrine to methamphetamine conversion produces the base form of methamphetamine, which is an oil. An oil is not a highly marketable commodity in Australian illicit drug markets, because it cannot be easily injected or snorted. Therefore, the manufacturers attempt, with varying degrees of precision, to purify methamphetamine base (an oil) into methamphetamine hydrochloride (a salt or crystal).
- (3) **ice** - also known as shabu and crystal or crystal meth, this is a crystalline form of high purity methamphetamine which is imported into Australia. One key informant with extensive contact with both methamphetamine importers and domestic manufacturers suggested that all methamphetamine imported into Australia is manufactured to patent in China and is then transited to other Asian countries such as the Phillipines and Indonesia before arriving in Australia. This report is consistent with intelligence collected from supply-side law enforcement agencies¹⁹.

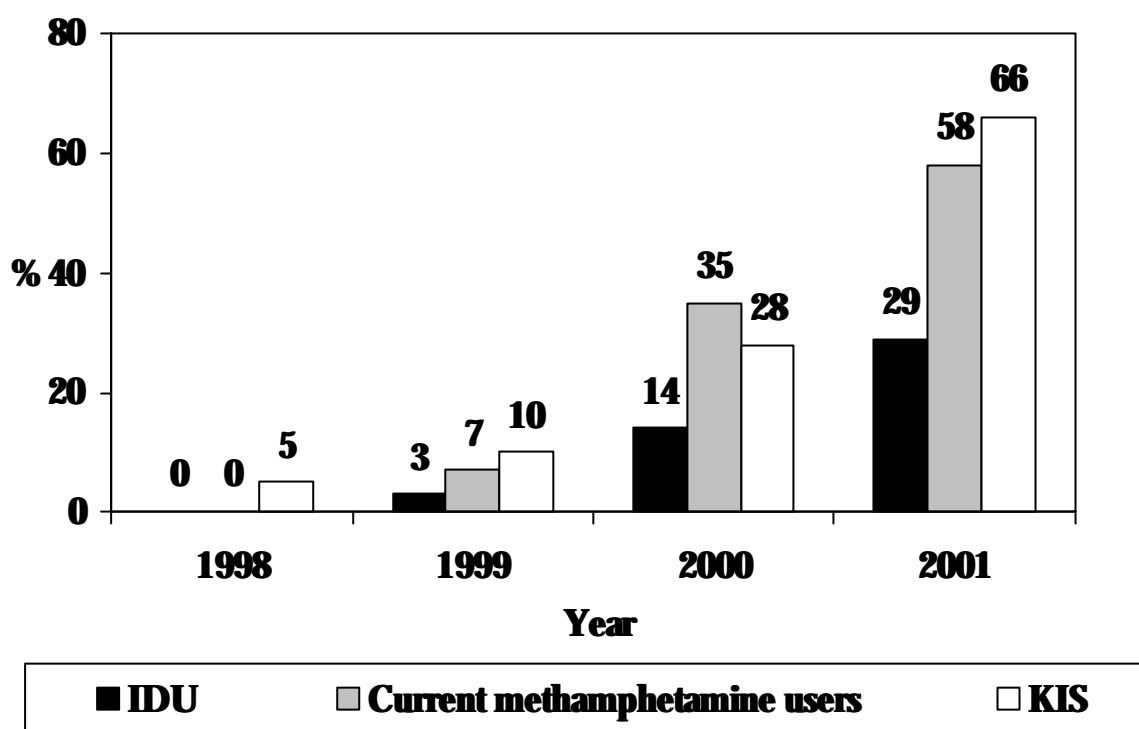
The terms used to refer to the various forms of methamphetamine appear to be used somewhat interchangeably, and often incorrectly, by users and dealers alike. KIS who had contact with domestic manufacturers and distributors suggested that this lack of clarity was not accidental, and that domestic manufacturers/distributors will sometimes refer to their product as 'ice' or 'shabu' in order to increase its appeal and monetary value. There is nothing precluding the domestic manufacture of pure, crystalline methamphetamine, and it is presently impossible to rule out the possibility that some high quality methamphetamine is in fact made locally. However, it was generally agreed that Australian illicit methamphetamine manufacturers simply do not have the expertise or the time to purify their product to the extent undergone by the imported product.

The use of ice/shabu was first noted in the 1998 NSW IDRS, when 2/42 (5%) KIS reported that a small proportion of their clients had discussed the use of this drug. These KIS knew little about the drug at that time, and no IDU interviewed for the 1998 NSW IDRS reported its use. Between 1999 and 2000, increasing proportions of KIS had contact with clients who had used ice/shabu in the six months preceding the interviews, and small but increasing proportions of IDU reported recent use of these forms of methamphetamine (Figure 17).

The trend towards wider use of the more potent forms of methamphetamine continued in 2001. Sixty six percent of all KIS noted the recent use of these forms among their clients. Fifty eight percent of IDU who had used methamphetamine in the preceding six months (29% of the entire IDU sample) reported recent use of ice/shabu, an increase from 35% in 2000. Forty five percent of methamphetamine users had used base in the preceding six months (23% of the IDU sample). Ice/shabu was the form of methamphetamine used most often in the preceding six months by 28% of methamphetamine users, and base by 16% of methamphetamine users. Overall, 33% of the entire IDU sample had used either ice/shabu or base in the preceding six months.

Powder was the most common form of methamphetamine used in the six months preceding the interview by IDU who had used methamphetamine (83%), and was the form used most often by 54% of methamphetamine users. As in previous years, the use of liquid (5%) and prescription (11%) amphetamine was unusual among methamphetamine users.

Figure 17: Proportion of IDU, current methamphetamine users and KIS reporting recent use of ice/shabu, 1998 - 2001



The reports of KIS were consistent with the IDU data in suggesting that an increasing proportion of Sydney's methamphetamine market is sourced by the more potent forms of methamphetamine rather than methamphetamine powder. Twenty five of the 30 (83%) KIS who reported on methamphetamine had contact in the preceding six months with users, manufacturers or importers of the more potent forms of methamphetamine. Moreover, nine of those 25 reported that the more potent forms sourced the majority of the methamphetamine market, and another two KIS estimated that there was a fairly even split in the market between those users who accessed and used methamphetamine powder and those who accessed and used the more potent forms. Taking into account the reports of all KIS who were able to comment on the form of methamphetamine used by those with whom they had recent contact (n=29), an average of 40% (range 0-100%) of the methamphetamine market was estimated to be sourced by the more potent forms.

Six KIS commented that they had noticed a recent increase in the number of primary opiate (heroin or methadone) users that had reinitiated methamphetamine use, or increased their quantity/frequency of methamphetamine use, and all related this increase directly to the reduced availability of heroin in 2001.

A majority of KIS described recent changes in patterns of methamphetamine use that related to the increased availability and use of the more potent forms of methamphetamine. Although the emergence of smoking as a route of administration was not reflected in IDU data, 15 KIS suggested that the most common route of administration of ice/shabu is by smoking. This was most frequently in a special glass pipe similar to a crack pipe, but there were also reports of ice/shabu being 'chased' on foil, or mixed with cannabis and smoked through a bong.

Eight KIS reported decreased quantities of methamphetamine use due to the strength of the subjective effects of the more potent forms, and because they are sold in 'points', rather than the grams which methamphetamine powder has traditionally been sold in Australia. Some KIS who reported decreased quantities of use noted that this is something of a false economy; because the subjective effects of the potent forms were stronger and more reinforcing than the effects of powder, users would start using more often, manifest increased tolerance and eventually come to require greater quantities in order to achieve the desired effects.

The issue of dramatic methamphetamine-related side-effects was of concern to the majority of KIS. Twenty-three of the thirty methamphetamine KIS reported an increase in the incidence, severity, or both, of psychological disorders related to methamphetamine use. The most common reports were of early stage psychotic symptoms (n=15), such as severe paranoia, hallucinations, and delusions of persecution.

Nine KIS reported a recent increase in both severity and incidence of symptoms of anxiety among methamphetamine users, manifest as paranoia, anxiety, agitation, edginess and aggression. Eight KIS noted an increase in the incidence or severity, or both, of affective disorders among methamphetamine users, notably depression and significant mood swings. Eight KIS commented on increased hostility and violence among methamphetamine users as a consequence of heightened paranoia and aggression.

Physical health declines among methamphetamine users were less frequently discussed by KIS than were psychological issues; however, there was consistency in these reports also. Six KIS commented that the general physical health of their methamphetamine using clients had declined recently, manifest by disturbed appetite and sleep patterns, severe weight loss, skin problems and decreased resistance to infection. The increase in such problems was considered to be more severely manifest among users of the more potent forms of methamphetamine. Five KIS, all of whom were either NSP workers or treatment workers, had recently noticed increased vascular damage among injecting methamphetamine users, due to their use of oily base that is difficult to prepare and dissolve for injection. Three KIS reported an increase in the number of methamphetamine users who presented with severe lesions of the face and other skin areas, due to the stereotyped 'picking' or 'grooming' behaviour that chronic stimulant use can induce.

Among all KIS who commented on the psychological and physical health of their clients who used methamphetamine, some general principles were consistently endorsed. In particular, it was agreed that those methamphetamine users accessing the more potent forms tended to experience greater psychological and physical damage related to their use. They were consistently described as 'messier', more chaotic, more 'hardcore', harder to engage, more unkempt, more paranoid, more aggressive, more agitated, more damaged and generally much harder work than users of methamphetamine powder.

It was also unanimously agreed that the users of the more potent forms of methamphetamine reached these states of chaos far more quickly into their use careers than do users of methamphetamine powder. It was perceived by KIS that users of the more potent forms start to experience serious physical and psychological side-effects after only a few months of heavy use, and therefore tend to present requesting help after a relatively short period of time. Users of methamphetamine powder may take some years of heavy chronic use before they reach such states of disorder.

5.5 Trends in Methamphetamine Use

When asked to comment on noticeable changes in the drugs their peers were using, the most common response given by IDU concerned the use of ice/shabu/base. The perceptions of IDU were thus consistent with both quantitative IDU data and the qualitative reports of KIS on the forms of methamphetamine reported above. The emergence of potent forms of methamphetamine was first mentioned in the 1998 IDRS as a potential trend in the drug market⁵. The data from the 2000 and 2001 IDRS indicate that the availability and use of these forms of methamphetamine have continued to increase throughout Sydney's illicit drug markets. They appear to be associated with a greater incidence and severity of side-effects, particularly psychological problems, but also physical health problems and increased tendencies towards violence. Given the lack of information relating to these forms of methamphetamine, and the absence of interventions proven to attract and retain this population, this trend has grave implications for both public health and public order.

5.6 Summary of Methamphetamine Trends

- The use of methamphetamine appears to be increasing
- The price of methamphetamine has remained relatively stable
- The availability and use of potent forms of methamphetamine, such as ice/shabu and base, have increased substantially
- Smoking has emerged as a route of administration for the more potent forms of methamphetamine, particularly among non-injectors
- The more potent forms of methamphetamine appear to be associated with a greater incidence and severity of side-effects, particularly psychological problems

6.0 COCAINE

Comment on aspects of price, purity, availability and use of cocaine was made by 128/ 163 (79%) of the IDU sample. This represents an increase on the 56% of IDU who were able to comment in 2000, and is consistent with wider availability of, and exposure to, the drug. Ten KIS commented on the use of cocaine.

6.1 Price

The median price of the most recent purchase by IDU of a gram of cocaine was \$200, and half-grams and quarter-grams were proportional in cost (Table 6). The median price of the most recently purchased cap of cocaine was \$50. The price of cocaine has been stable in NSW since 1998, and consistent with this, 77% of IDU believed the price of cocaine had not changed in the six months preceding the interview. As in all years since cocaine emerged as a major problem in Sydney in 1998, caps continued to be the most commonly reported purchase quantity (Table 6). KIS reports of the price of cocaine were consistent with those of IDU, with most reporting that a gram of cocaine cost \$200, and caps cost between \$20 and \$80.

Table 6: Price of most recent cocaine purchases by IDU, 2001

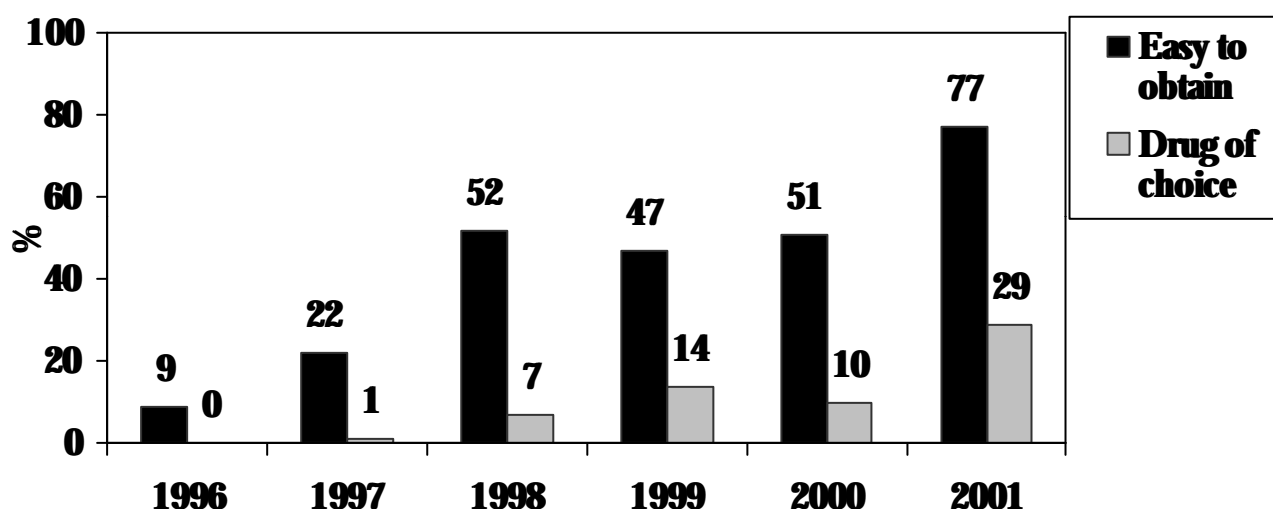
Amount	Median price \$	Number of purchasers
Gram	200	22
Cap	50	80
Half gram	100	46
Quarter gram	50	28

6.2 Availability

Cocaine was estimated to be easy or very easy to obtain by 96% of the 128 IDU who could comment. Perceived availability of cocaine among the NSW IDRS IDU samples over the period 1996-2001 is presented in Figure 18. This figure presents the proportion of the entire IDU sample in each year that regarded cocaine as easy/very easy to obtain. The remaining IDU either regarded cocaine as difficult to obtain, or were unable to comment. As can be seen, the proportion of the entire 2001 IDU sample that regarded cocaine as easy to obtain was 77%, an increase from 51% in 2000. The last increase in perceived availability of this magnitude occurred in 1998, when cocaine first emerged as a significant problem among Sydney IDU. The extent of the change in the cocaine market over the period of the IDRS is illustrated by reference to 1996, when only 9% of the IDU sample described cocaine as easy to obtain. Consistent with the IDU data, in 2001, all cocaine KIS reported that cocaine was easy to obtain, and the majority believed that availability had remained stable.

IDU reports of their drug of choice in 2001 were consistent with the increase in perceived availability of cocaine (Figure 18). In 2001, 29% of the IDU sample nominated cocaine as their drug of choice, the highest proportion ever recorded by the IDRS, and an increase from 10% in 2000. When the IDRS commenced in 1996, no IDU nominated cocaine as their drug of choice.

Figure 18: Availability of cocaine among NSW IDRS IDU samples, 1996-2001

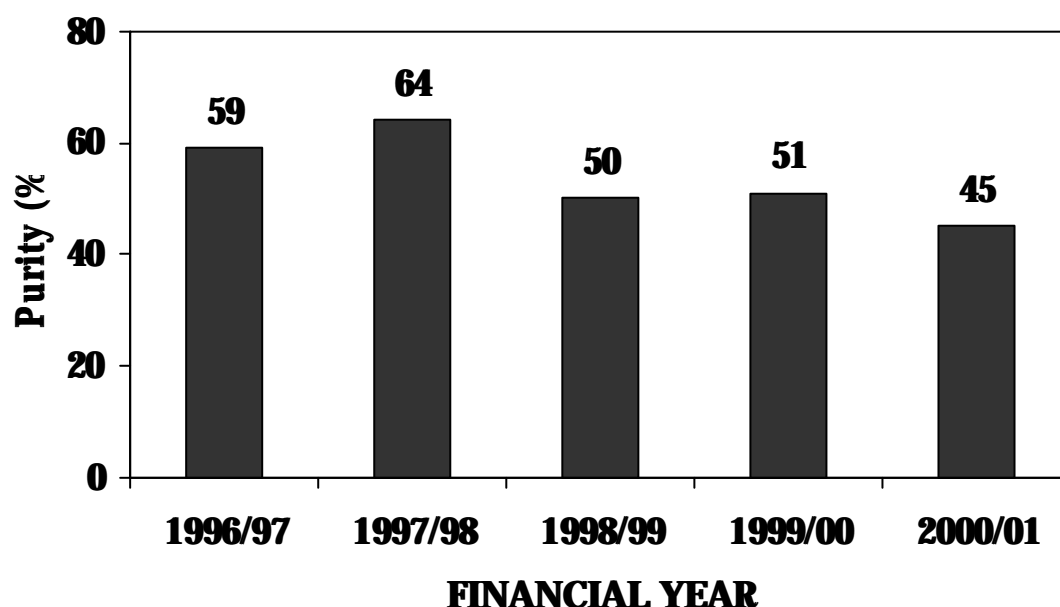


The pattern of purchasing of cocaine was similar to that of heroin, with 37% of cocaine users purchasing cocaine predominantly from street dealers, 28% from mobile dealers, 27% from dealers' homes, and 7% from friends.

6.3 Purity

The purity of analysed cocaine seizures made by the AFP in NSW declined slightly, from 51% in 1999/00 to 45% in 2000/01 (Figure 19). When analysed seizures made by the NSW Police Service were included for consideration, the overall purity of cocaine in NSW remained stable, increasing from 47% in 2000 to 49% in 2001. In contrast to the previous two years, the purity of cocaine was estimated by IDU to be medium (43%) to high (30%). In 2000, only 17% of IDU described the purity of cocaine as high.

Figure 19: Mean purity of cocaine seizures made by the AFP in NSW, 1996/97 - 2000/01



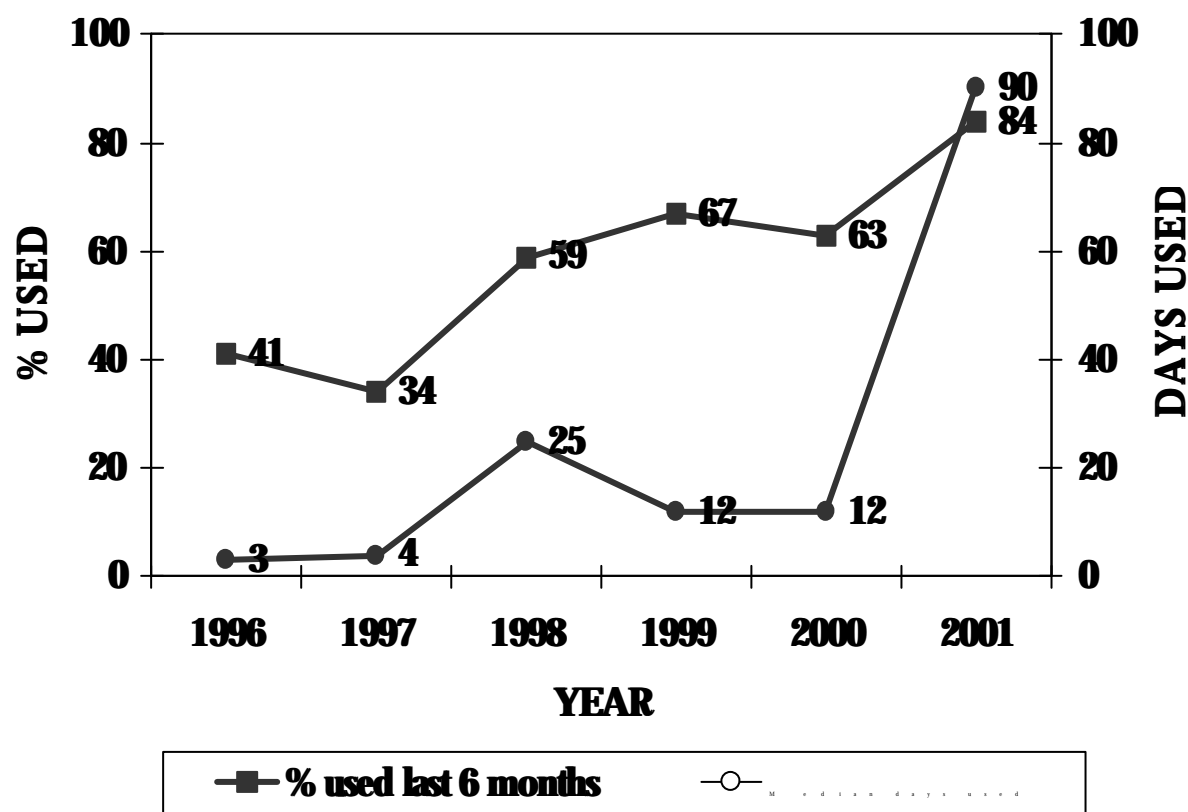
6.4 Use

6.4.1 Prevalence of Cocaine Use

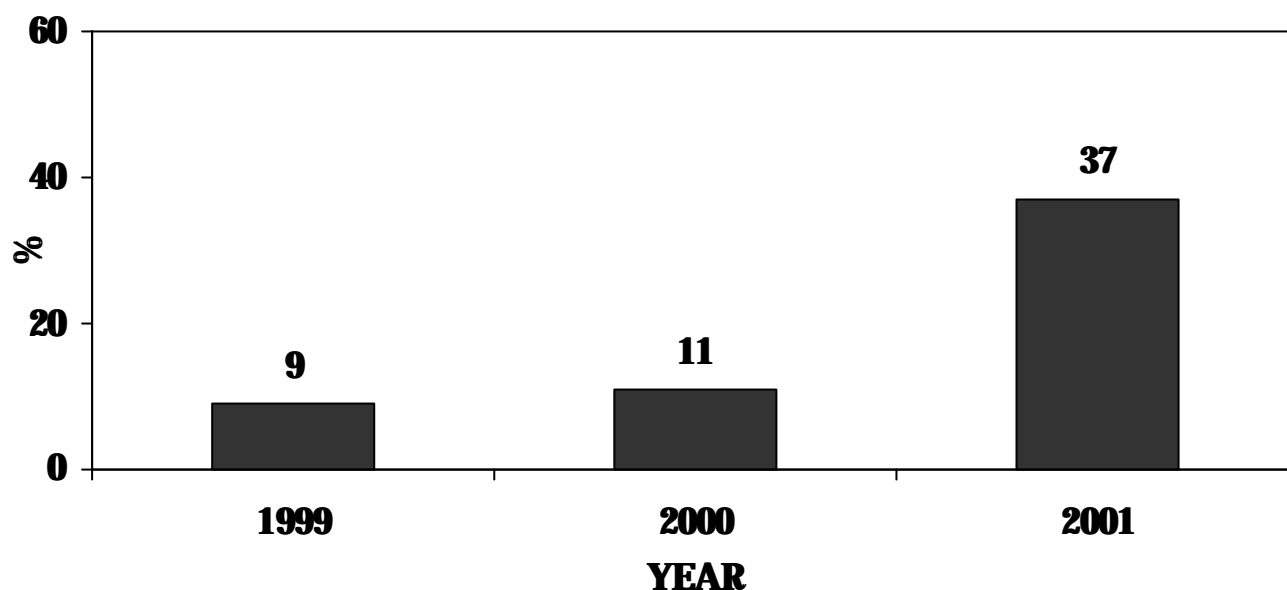
There was a substantial increase in the prevalence of recent cocaine use among the IDU sample in 2001 (84%) compared to 2000 (63%) (Figure 20). This increase is the largest recorded since 1998, when cocaine first emerged as a major drug in the Sydney IDU market. After the sharp increase in cocaine use in 1998, cocaine use plateaued among IDU until 2001. Overall, the proportion of IDU reporting recent cocaine use has more than doubled since the inception of the IDRS in 1996 (Figure 20).

Similarly, there was a marked increase from in the proportion of IDU who reported that cocaine was the drug they had most recently injected, from 11% in 2000 to 37% in 2001 (Figure 21).

Figure 20: Proportion of IDU that reported recent use of cocaine, and median days cocaine use, 1996 - 2001



**Figure 21: Prevalence of cocaine as last drug injected among
NSW IDRS IDU samples, 1999 – 2001**



Other indicators consistently pointed to an increase in 2001 in the prevalence of cocaine use in NSW. There was an increase in the proportion of suspected drug-related deaths in NSW that tested positive for cocaine (Figure 22). Although not necessarily the cause of death, increases in the prevalence of a drug in overdose deaths is a marker for increased use of that drug among the general population of drug users. Compared to 2000, in 2001 there were also increases in the number of arrests for cocaine use/possession in NSW (Figure 23); the proportion of methadone patient urinalyses that tested positive for cocaine (Figure 24); the proportion of persons detained at police watchhouses in Bankstown and Parramatta testing positive for cocaine (Figure 25); and the number of inquiries to ADIS regarding cocaine (Figure 26). Thus, a range of secondary indicator data sources were consistent with IDU data in suggesting an increase in the prevalence of cocaine use in NSW in 2001.

Figure 22: Proportion of suspected drug-related deaths in NSW that tested positive for cocaine, January 1997 - June 2001

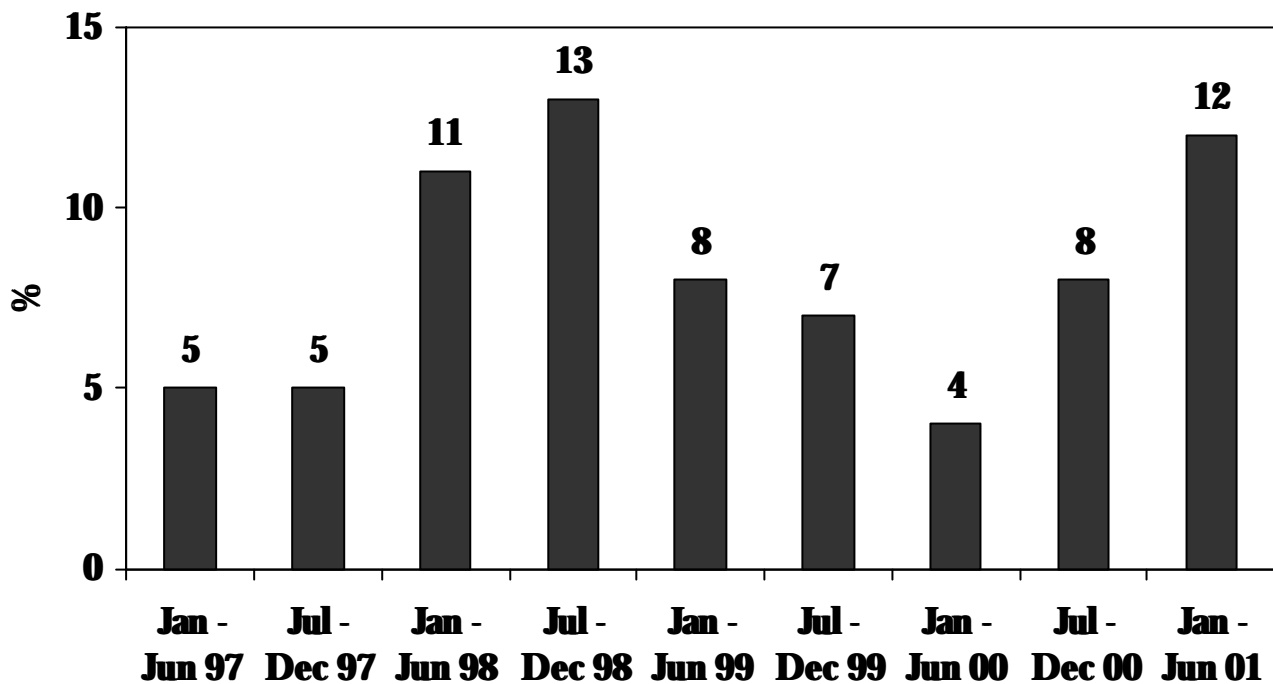


Figure 23: Number of arrests for cocaine use/possession in NSW, 1996/97 - 2000/01

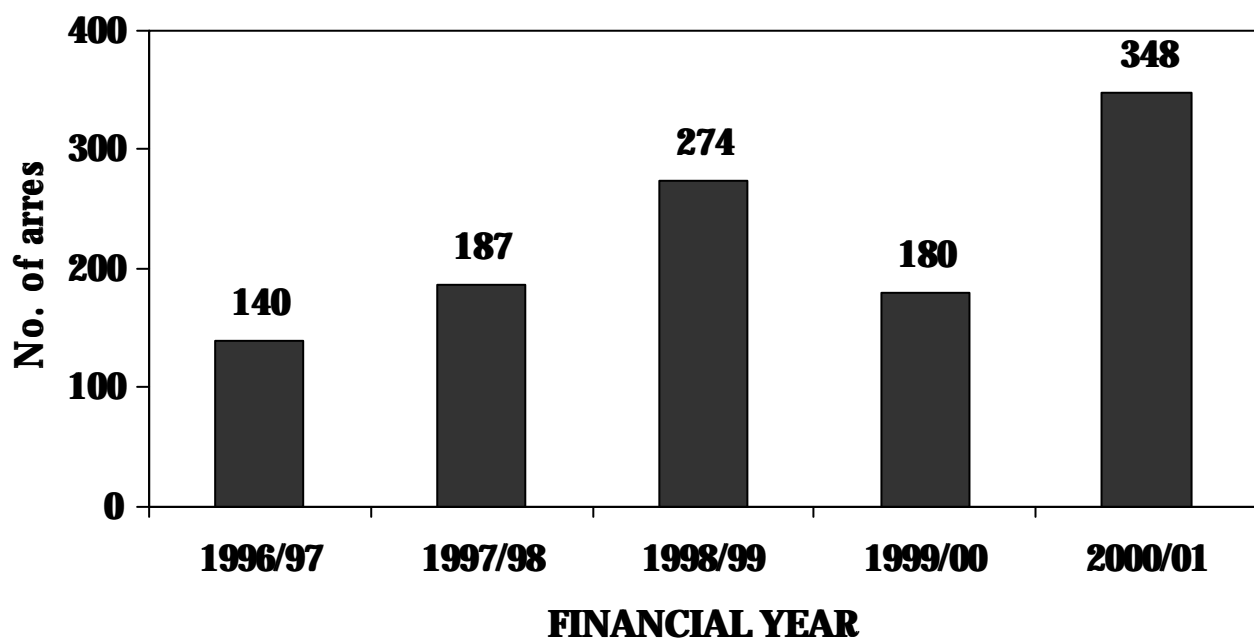


Figure 24: Proportion of methadone patient urinalyses that tested positive for cocaine, 1998/99 - 2000/01

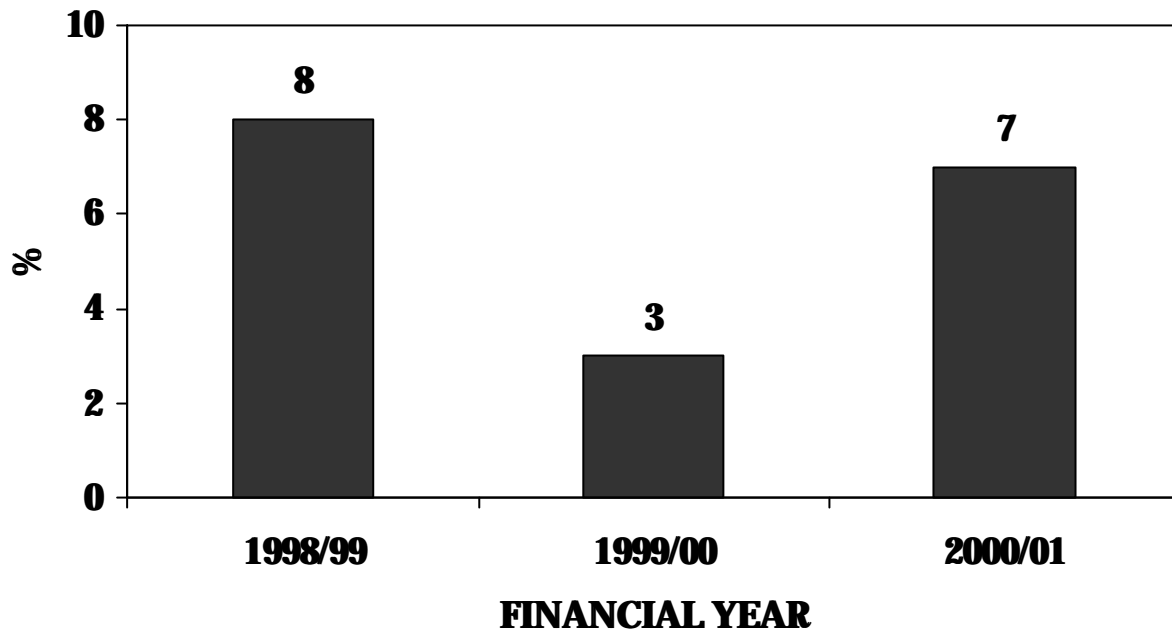


Figure 25: Proportion of police detainees at Parramatta and Bankstown watchhouses testing positive to cocaine under the DUMA program, 1999/00 – 2000/01

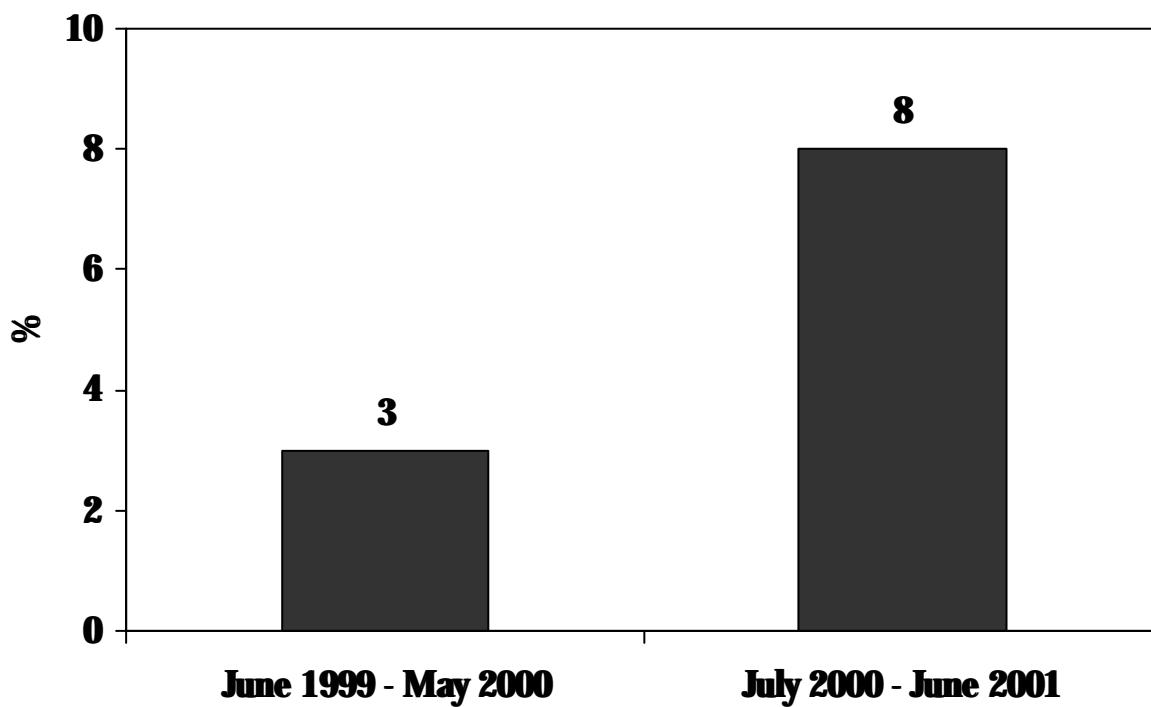
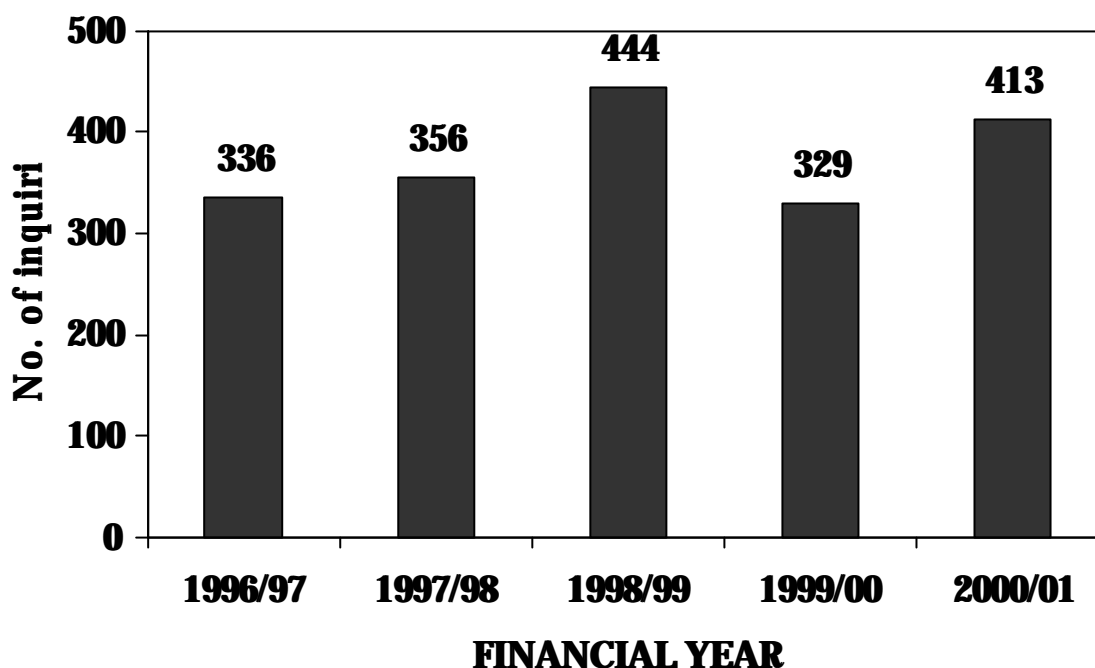


Figure 26: Number of inquiries to ADIS regarding cocaine, 1996/97 - 2000/01



6.4.2 Current Patterns of Cocaine Use

There was a dramatic increase in the frequency of cocaine use among IDU between 2000 and 2001 (Figure 20). The median number of days on which cocaine had been used in the six months preceding the interview increased from 12 days in 2000 to 90 days in 2001. Twenty nine percent of the IDU sample (34% of cocaine users) had used the drug daily in the six months preceding the interview. In 2000, only 5% of IDU were daily cocaine users. Overall, the 2001 IDRS indicates that there are substantially more people using cocaine, and that the drug is being used at a greatly increased frequency.

Current cocaine users were asked whether the reduced availability of heroin had affected their cocaine use. More than a third (37%) of current cocaine users stated that their cocaine use had increased as a result of the shortage in heroin. Eleven percent reported that they had started using cocaine, and 50% stated that the availability of heroin had no effect on their cocaine use. No cocaine user reported using less cocaine as a result of changes in the availability of heroin. Overall, then, almost half (48%) of current cocaine users had either started using cocaine, or increased their cocaine use, in response to the reduced availability of heroin.

As in all years since the emergence of cocaine in Sydney in 1998, the use of cocaine by IDU was almost exclusively of the powder form of the drug (cocaine hydrochloride). Ninety nine percent of IDU who had used cocaine in the preceding six months had used cocaine powder, and only 2% reported the recent use of crack. Two KIS reported that a minority of their clients had been baking cocaine powder into 'freebase' (crack) cocaine and smoking it through a crack pipe. It appears, however, that crack cocaine is yet to be either imported into Australia, or distributed for financial profit.

KIS reported that, as in 1998, the major increase in cocaine use that occurred in Sydney in 2001 was primarily among existing heroin users. KIS attributed the increase in the use of cocaine by this group to the sustained shortage of heroin, and noted an increase in cocaine-related problems.

6.5 Trends in Cocaine Use

Increased prevalence and frequency of cocaine use was a change in the drug market commonly reported by IDU when asked to comment whether there were any noticeable changes in the drugs their peers were using. IDU reported that there had been a marked increase in the prevalence and frequency of cocaine use as a result of the reduced availability of heroin, with existing heroin users transferring to primarily injecting cocaine. The data presented above on drug of choice indicate that many IDU now prefer cocaine, so that higher levels of cocaine use may continue even in the face of increasing heroin availability.

6.6 Summary of Cocaine Trends

- There has been a substantial increase in cocaine use among IDU since 2000, that appears to be due, at least in part, to the reduced availability of heroin
- The price of cocaine has remained stable
- The purity of cocaine has remained relatively stable
- The frequency of cocaine use among IDU has increased dramatically since 2000
- The use of crack cocaine remains rare

7.0 CANNABIS

Comment on the price, purity, availability and use of cannabis was made by 116/163 IDU, and by 16 KIS.

7.1 Price

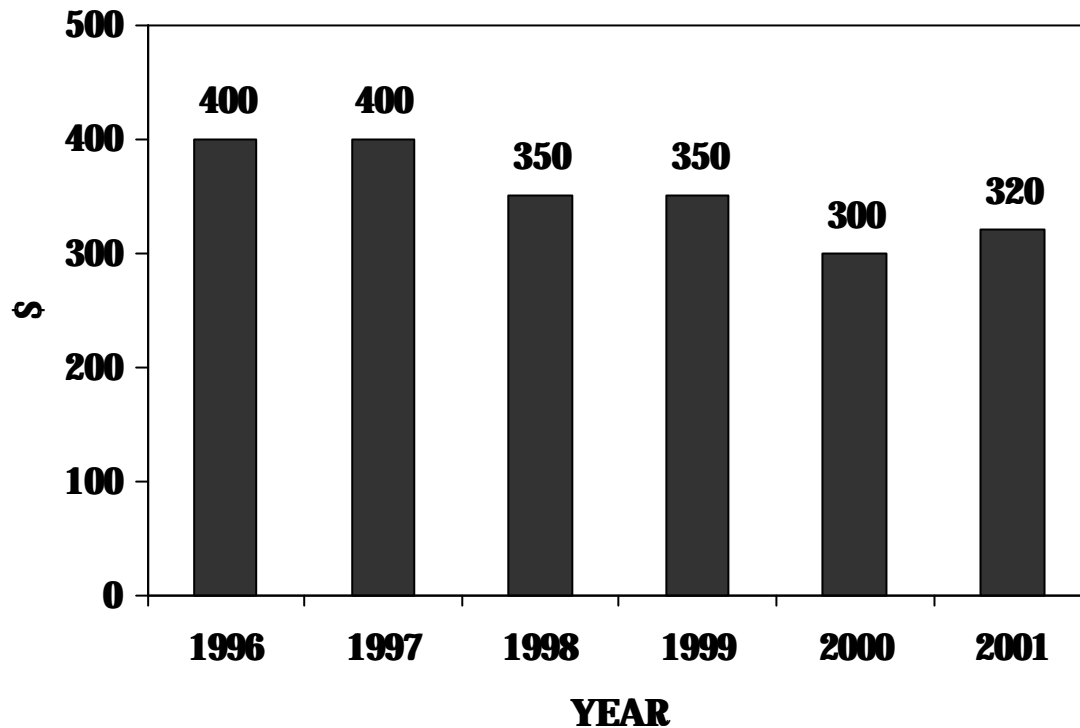
The median price paid for the most recent purchase of an ounce of cannabis was \$320 (Table 7), a slight increase from the price reported in 2000 (\$300). This represents the first increase in the ounce price of cannabis since the IDRS was instituted (Figure 27). Prices of half ounces, quarter ounces and grams were identical with those reported in 2000. As in 2000, grams and quarter ounces were the most common purchase quantities among IDU.

KIS estimates were consistent with IDU purchase prices, with a gram consistently quoted as costing \$20 or \$25, an ounce ranging from \$300-\$350, and a quarter of an ounce quoted as costing between \$100 and \$130.

Table 7: Price of most recent cannabis purchases by IDU, 2001

Amount	Median price (\$)	Number of purchasers
Ounce	320	18
Half ounce	180	13
Quarter ounce	100	40
Gram	20	79

Figure 27: Median price of an ounce of cannabis estimated from IDU purchases, 1996 – 2001



7.2 Availability

As in all years of the IDRS, virtually all (98%) of IDU described cannabis as easy to obtain, and 90% reported that availability had remained stable. There was a high level of consistency between IDU and KIS reports, with all KIS describing cannabis as very easy to obtain and availability as stable. IDU purchased cannabis predominantly from street dealers (35%), at dealers' homes (23%), from friends (23%), or from mobile dealers (10%).

7.3 Potency

The THC content of cannabis seizures is not routinely tested in NSW. IDU commenting on cannabis regarded it as being of high potency (78%), and only 2% described cannabis as of low potency. The majority (81%) of IDU considered that potency had remained stable in the six months preceding the interview. Again, there was a high level of consistency between the reports of IDU and those of KIS, with most (n=13) KIS describing the potency or strength of cannabis as high, and two describing it as medium. Thirteen KIS considered that the potency had remained stable in the preceding six months, and two considered that it had increased.

7.4 Use

7.4.1 Prevalence of Cannabis Use

Cannabis is by far the most common illicit drug used in NSW and, as such, is less likely to show the fluctuations seen in smaller drug markets such as heroin, methamphetamine or cocaine. There were no obvious trends in cannabis use in 2001. The use of cannabis among IDU over the period 1996-2001 shows no obvious trends, being highly prevalent in all years (Figure 28). The number of criminal incidents relating to cannabis use and/or possession in NSW in 2001 remained high relative to other illicit drugs, and showed an increase on the figures for 1999/2000 (Figure 29). However, this is equally likely to reflect greater street level policing as an increase in the prevalence of use of the drug. The number of intoxicated drivers who tested positive for cannabis remained steady between 2000 and 2001 (Figure 30), as did the number of inquiries to ADIS regarding cannabis (Figure 31).

The COTSA survey found that the proportion of clients of treatment agencies being treated for cannabis as the primary drug problem increased from 6.4% in 1995 to 9.3% in 2001²⁰. Although relatively modest, this increase reflects an increased recognition of cannabis-related harm and the need for treatment among chronic cannabis smokers.

Figure 28: Proportion of NSW IDRS IDU samples reporting recent use of cannabis, 1996 - 2001

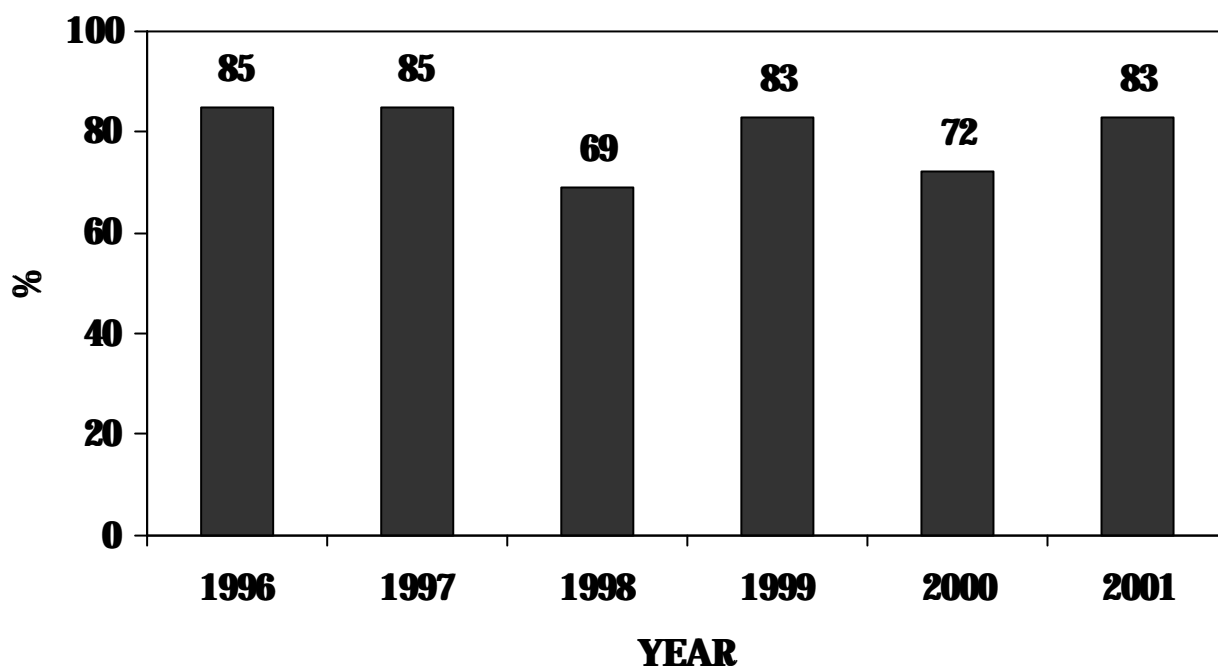


Figure 29: Number of arrests for cannabis use/possession in NSW, 1996/97 - 2000/01

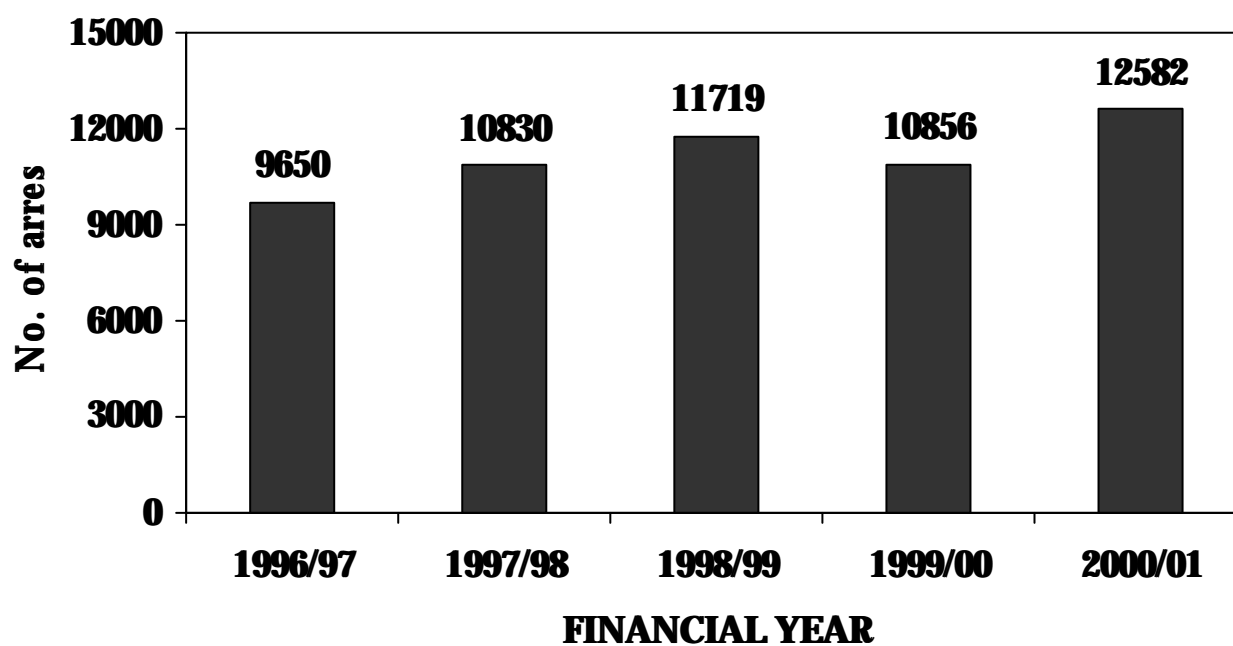


Figure 30: Proportion of intoxicated drivers who tested positive for cannabis, 1995/96 - 2000/01

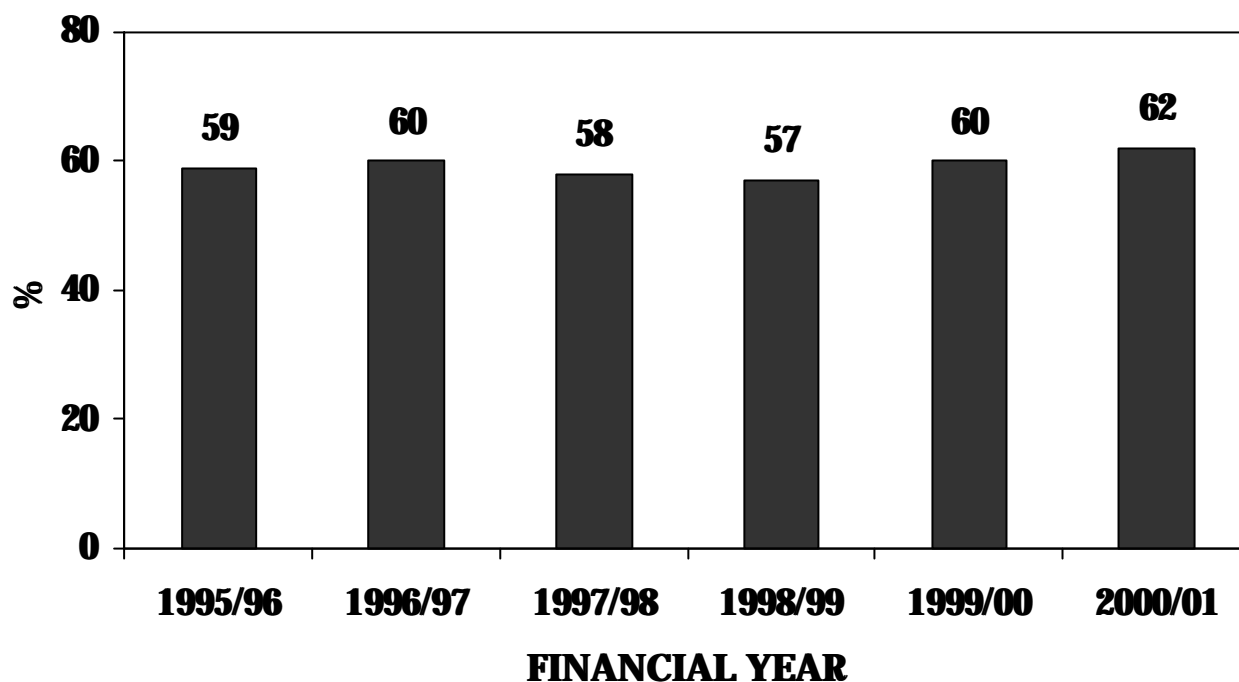
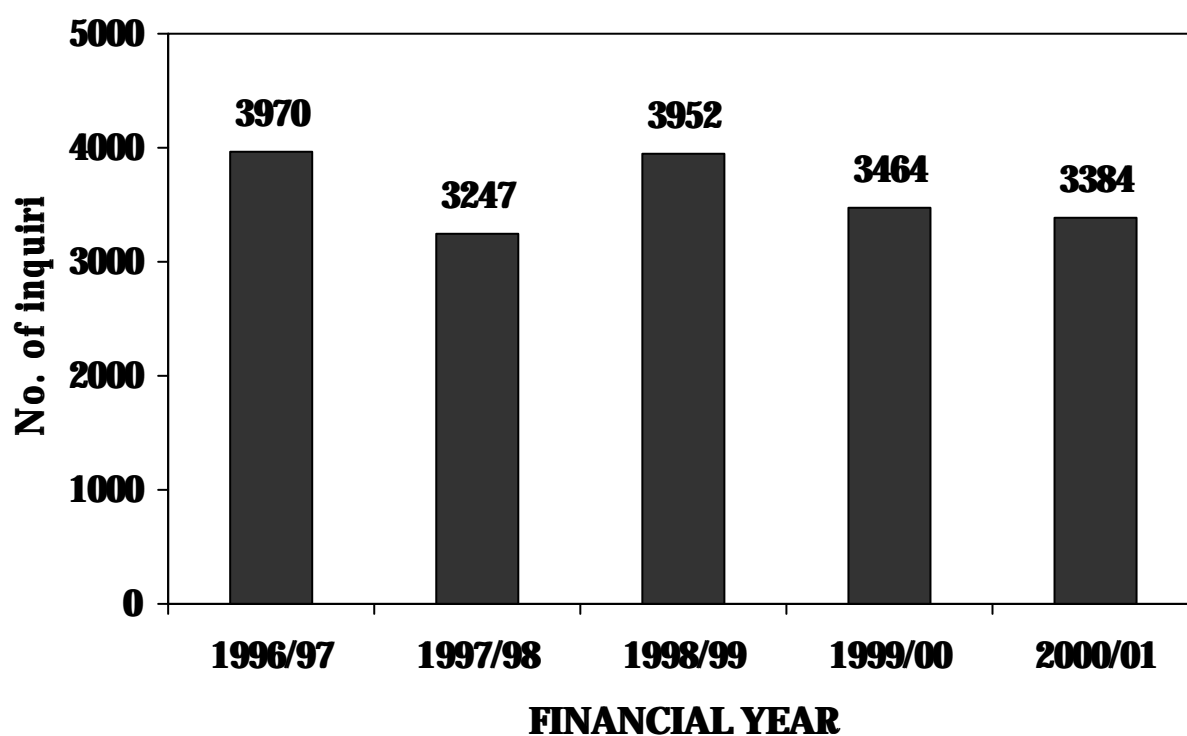


Figure 31: Number of inquiries to ADIS regarding cannabis, 1996/97 - 2000/01



7.4.2 Current Patterns of Cannabis Use

Ninety six percent of IDU who had used cannabis in the preceding six months stated that they had used hydroponically grown cannabis ‘heads’, and 87% had used predominantly this form in that time frame. The use of naturally grown cannabis (‘bush buds’) was reported by 57% of cannabis users, and 13% reported that this was the main form of cannabis they had used in the preceding six months. One third (34%) of cannabis users reported the use of hash in the preceding six months, but only 1% had used predominantly this form. The recent use of hash oil remained relatively uncommon among cannabis users (8%). The median number of days on which cannabis had been used in the six months preceding the interview was 90, representing use, on average, every second day. Thirty nine percent of cannabis users had used the drug daily in the preceding six months.

Consistent with the patterns of cannabis use documented among IDU, virtually all KIS agreed that the cannabis market continues to be dominated by hydroponically grown ‘heads’ of cannabis plants. KIS almost uniformly reported that there was little naturally grown cannabis or hashish available in Sydney, nor were such forms of cannabis perceived as highly sought after. A key informant employed in the hydroponics industry considered that from approximately March to August, a higher proportion of the cannabis market is sourced by naturally grown cannabis, as this is the time when most outdoor growers harvest their crops. KIS reports were also consistent with those of IDU in suggesting that the great majority of cannabis users smoke the drug using a ‘bong’ or water pipe. A bong serves to cool the smoke so that it can be held in the lungs for longer, thereby maximising absorption. Most KIS reported that a substantial proportion of cannabis smokers mixed their cannabis with tobacco prior to smoking (a 50-50 mix was most commonly cited), to make the drug last longer and/or to assist burning during administration.

All KIS reported that the majority of cannabis users with whom they had recent contact smoked weekly or more often. Indeed, the majority of KIS reported that most of the cannabis users with whom they had recent contact were daily smokers, but given that a large number of treatment workers were interviewed, this pattern of use should not be considered typical of all cannabis smokers. Reported quantities of use were widely varied, although many KIS agreed that approximately one gram or 10-12 ‘cones’ of cannabis was a reasonable average quantity consumed in a day (range 3-70 cones per day). Frequency and quantity of use were related to financial situation, especially among the younger users.

7.5 Trends in Cannabis Use

Of the eleven treatment worker KIS interviewed, six had perceived an increase in the proportion of presentations to their treatment agency in which cannabis was the primary drug issue. In one agency, cannabis had, for the first time, become the most common primary presenting drug problem, taking over from alcohol. The perceptions of these KIS are supported by the COTSA²⁰ data discussed above, which showed an increase in the proportion of clients presenting to NSW treatment agencies with cannabis as their primary drug problem.

7.6 Summary of Cannabis Trends

- The price of cannabis has increased slightly, from \$300 per ounce in 2000 to \$320 in 2001
- The potency of cannabis has remained high
- Hydroponically grown cannabis continued to dominate the market
- Most cannabis users continue to smoke the drug mixed with tobacco and through a bong
- Between 1995 and 2001, there was an increase in cannabis users seeking treatment for cannabis dependence, from 6.4% of NSW treatment presentations to 9.4%

8.0 OTHER DRUGS

8.1 Ecstasy and Other Party Drugs

As in 2000¹², trends in the use of ecstasy and other party drugs formed a separate, specialised component of the IDRS in 2001, and are reported elsewhere¹³.

8.2 Methadone

Methadone had been used by 52% of IDU in the six months preceding the interview, including 23% of subjects who had not been enrolled in methadone maintenance over that period. Overall, 25% of IDU reported the use of illicit methadone in the preceding six months, indicating that substantial diversion of prescribed methadone to untreated heroin users continued to occur. The use of methadone was almost all of methadone syrup, with only 1% of IDU reporting the use of physeptone tablets in the preceding six months.

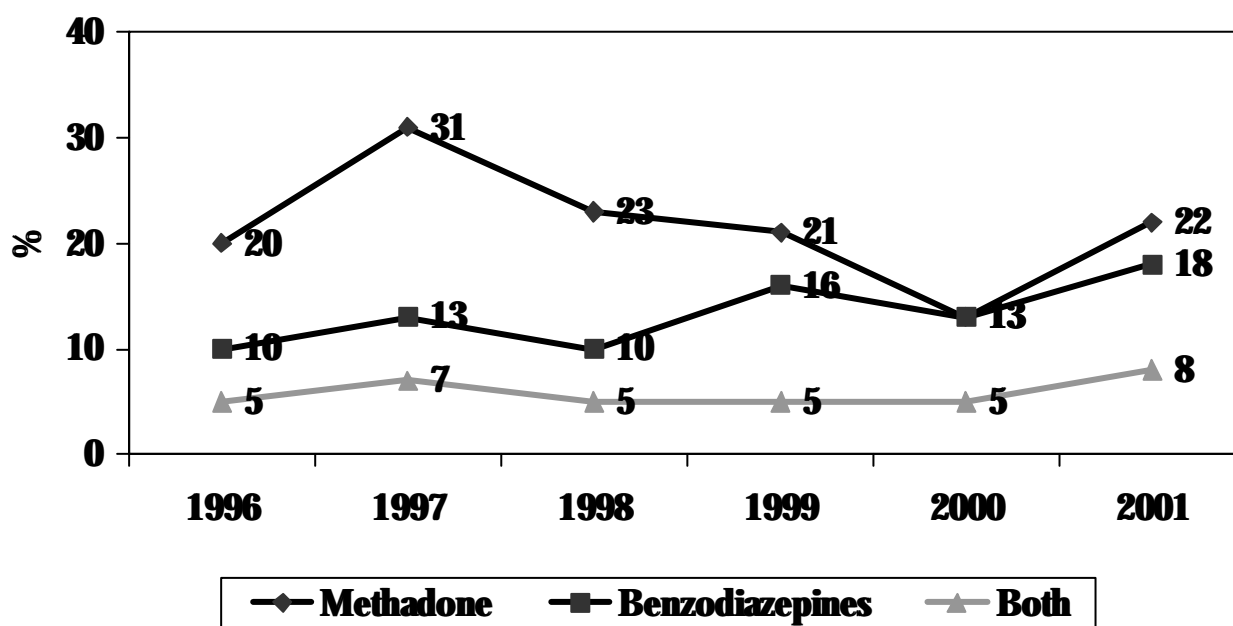
The injection of methadone syrup is associated with considerable harm^{10,21}. After declining each year since 1997, there was an increase in the prevalence of recent methadone injecting among IDU in 2001 (Figure 32). Twenty two percent of IDU had injected methadone in the preceding six months, an increase from 13% in 1999. The decline in the prevalence of methadone injecting in NSW in 1998 coincided with the withdrawal from distribution through NSW NSPs of 10ml and 20ml syringes, and vein infusion sets, as well as tightened restrictions on the number of take-away methadone doses¹⁰. The increase in the prevalence of methadone injection in 2001 coincides with the reduced availability of heroin. The apparent increase in methadone injection may have resulted from heroin users injecting methadone in lieu of heroin, due to decreased heroin availability.

8.3 Benzodiazepines

The use of benzodiazepines remained a prominent feature of the polydrug use patterns of IDU, with 56% having used them in the preceding six months. The most commonly used benzodiazepine was diazepam (e.g., Valium™) which had been used in the preceding six months by 26% of IDU. Flunitrazepam use (Hypnoval™, Rohypnol™) remained low (9%). Equal proportions of IDU had obtained benzodiazepines from licit (39%) and illicit (39%) sources in the preceding six months. The diversion of benzodiazepines to others than to whom they were prescribed appeared to be substantial. KIS reported that diazepam and temazepam (Normison™, Temaze™, Euhypnos™) were the most commonly used benzodiazepines.

Benzodiazepine injection is, like the injection of methadone syrup, associated with elevated risk of harm^{22,23}. As was the case with methadone, there was an increase in the proportion of IDU who had injected benzodiazepine tablets in the preceding six months (Figure 32). In 2001, 18% of IDU had injected benzodiazepines in the preceding six months, compared to 13% in 2000. The proportion of IDU who had injected both benzodiazepines and methadone also increased. The increase in reported benzodiazepine injection may be related to the reduced availability of heroin.

Figure 32: Proportion of NSW IDRS IDU samples that reported recent methadone and/or benzodiazepine injecting 1996 – 2001



8.4 Anti-depressants

Ten percent of IDU had used antidepressants in the preceding six months, a decline from the 17% reported in 2000. In contrast to benzodiazepines, the illicit use of antidepressants was rare, with only one IDU reporting having used illicit antidepressants in the preceding six months. As in 2000, the antidepressants most commonly used by IDU in 2001 were serotonin specific reuptake inhibitors (SSRIs) such as Prozac™ (11/16). This is in contrast to 1999, when tricyclic antidepressants were most commonly used. This shift is significant, as tricyclics are substantially more toxic than SSRIs, and are associated with an increased risk of heroin overdose²⁴.

8.5 Other Opioids

The use of opioid preparations other than heroin and methadone remained common, with 21% of IDU reporting the use of such preparations on the preceding six months, and 12% having injected them in this period. These figures are almost identical to those reported in 2000. The lower prevalence in the proportion having recently used other opioid preparations noted between 2000 (23%) and 1999 (34%) was thus maintained. Morphine (13%) was the opioid most commonly used by IDU in the preceding six months, with Panadeine Forte™ (7%) the next most common opioid. This is in contrast to all previous years of the IDRS, in which Panadeine Forte™ was consistently reported to be the most commonly used other opioid.

8.6 Summary of Other Drugs

- The injection of methadone syrup increased in 2001 compared to 2000
- The injection of benzodiazepine tablets increased in 2001 compared to 2000
- Substantial diversion of methadone syrup and benzodiazepine tablets to illicit markets appears to occur
- SSRIs were the most commonly used antidepressants in 2001
- Very little diversion of antidepressants to illicit markets appears to occur
- Morphine was the most commonly used other opioid in 2001

9.0 DRUG-RELATED ISSUES

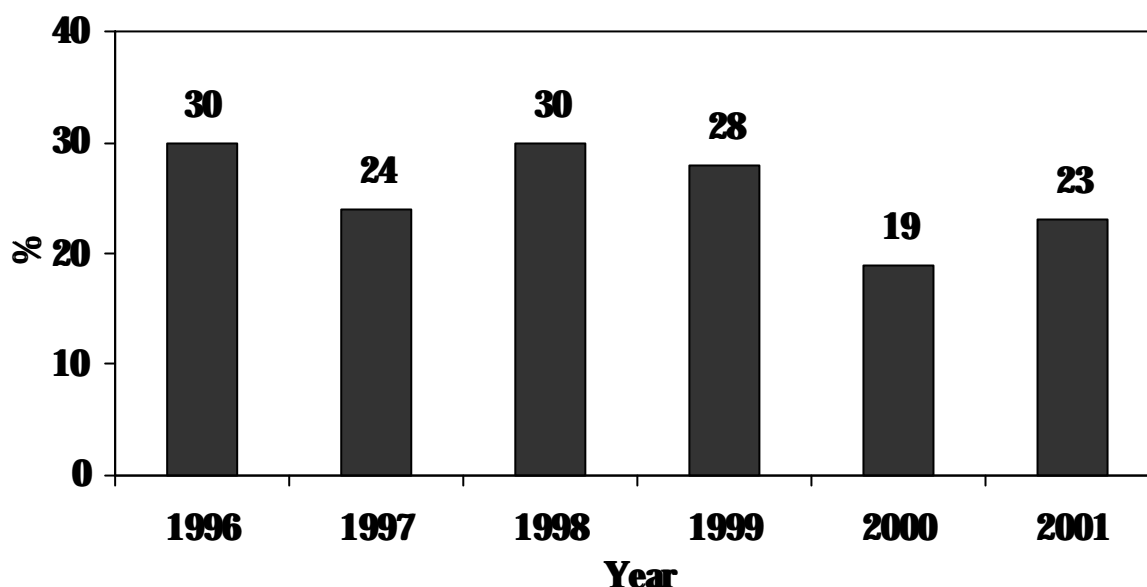
9.1 Heroin Overdose

ABS figures showed a sharp decline in opioid overdose deaths in NSW, from 401 deaths in 1999, to 249 deaths in 2000. This decline cannot be related to the reduced availability of heroin, which was widely considered to have taken hold in December 2000/January 2001.

The number of suspected heroin overdose deaths referred to ICPMR, the Institute which conducts toxicological analyses on all suspected drug overdose deaths in NSW, declined for the second consecutive year. The ICPMR reported that the number of suspected drug overdose deaths in NSW in which morphine (the metabolite of heroin) was detected decreased from 491 in 1998/99, to 345 in 1999/00, to 265 in 2000/01.

The proportion of IDU who had experienced a non-fatal heroin overdose in the 12 months preceding the interview increased from 2000 to 200, from 19% to 23%, the first increase in recent overdose since 1998 (Figure 33). Naloxone had been administered to 18% of IDU in the preceding 12 months (Table 8), a slight rise from 15% in 2000. One possible reason for the apparent increase in non-fatal overdoses may be the reduced availability of heroin since December 2000. Less frequent heroin use would result in lowered tolerance to the drug, and may result in overdose when heroin is consumed after a period of abstinence or substantially reduced use. Nearly two thirds (61%) of IDU reported that they had been present at an overdose in the preceding 12 months (Table 8).

Figure 33: Proportion of NSW IDRS IDU samples reporting recent non-fatal heroin overdose, 1996 - 2001



9.2 Injection-Related Problems

Substantial rates of injection-related problems were reported by IDU, with 76% reporting at least one such problem in the preceding month (Table 8), data consistent with recent specialised studies of injection-related problems²⁵. As in previous years, the most commonly reported problems were scarring/bruising of injection sites (55%) and difficulty injecting (indicating vascular damage) (46%). Consistent with the higher frequency of injection among cocaine injectors, a significantly higher proportion of cocaine users than other IDU reported at least one injection-related problem (79% v 59%, $\chi^2_{1df}=5.03$, $p<.01$). Cocaine users also reported a significantly higher number of injection-related health problems than other IDU (1.6 v 1.2; $t_{161}=1.74$; $p<.05$).

Table 8: Drug-related problems of IDU

Drug-related problem	N=163 (%)
<i>Overdose</i>	
Ever overdosed	51
Overdosed in past 12 months	23
Ever been administered naloxone	42
Been administered naloxone in last 12 months	18
Ever present at someone else's overdose	77
Present at someone else's overdose in last 12 months	61
<i>Needle sharing in past month</i>	
Borrowed used needles	11
Lent used needles	17
<i>Injection-related health problems in past month</i>	
Scarring/bruising	55
Difficulty injecting	46
'Dirty hit'	18
Infections/abscesses	12
Overdose	3
<i>Location of last injection</i>	
Home	55
Street/park	36
Public toilet	4
Car	2
Supervised injecting facility	3
Shooting room	2

9.3 Sharing of Injection Equipment

As in previous years, the sharing of needles and syringes remained relatively infrequent among IDU (Table 8). In the month preceding the interview, 11% of IDU had injected with syringes that had already been used previously by another, and 17% had passed on a used syringe. These figures are almost identical to those reported in 2000 (10% and 17% respectively). Almost all (15/18) of those who had injected with a used syringe reported that only one other person had used the syringe prior to themselves, the remainder reporting that two people had used the syringe first. People who had used the syringe previously were reported to be regular sexual partners (n=8), close friends (n=6), or acquaintances (n=2).

Sharing of other equipment used for injection in the month preceding the interview was more common (52%). Spoons that had already been used for mixing up drugs had been used by 48% of IDU in the preceding month, water by 28%, filters by 25% and tourniquets by 10%. These figures are similar to those reported in 2000.

9.4 Location of Injections

As found in the 2000 IDRS and a recent study on injecting locations²⁶, the injection of drugs in public places was common among IDU (Table 8). Approximately half (47%) of IDU reported that their most recent injection was in a home environment, and 55% reported that they had usually injected in a private home in the preceding month. However, 49% of subjects reported that their most recent injection occurred in a public place (e.g. street, toilet, car), and 42% had mostly injected in public places over the preceding month. Approximately equal proportions of subjects from inner city and south western Sydney reported that their most recent injection occurred in a public place (49% v 47%). Four percent of subjects reported that their most recent injection occurred in the Kings Cross supervised injecting room, and 3% usually injected at that site.

9.5 Expenditure on Illicit Drugs

There was substantial expenditure on illicit drugs among IDU. Eighty four percent of IDU had spent money on drugs the day prior to interview. These IDU had spent a median of \$150 (range \$10-\$4,500). More than half (58%) of the sample spent more than \$100 or more on that day, and 34% had spent \$200 or more. Compared to 2000, there was a marked increase in expenditure by IDU (\$150 v \$70). Possible reasons for this include the substantial increase in the price of heroin, and the increased use of cocaine. As noted above, cocaine injectors inject significantly more frequently than other IDU. Cocaine users had a significantly higher median expenditure on drugs on the preceding day compared to other IDU (\$150 v \$50, Mann-Whitney U=1239.5, $p<.01$). There were significant correlations between the amount spent on drugs and frequency of recent injecting (Spearman's $r=0.66$, $p<.001$), and the frequency of reported crime (Spearman's $r=0.25$, $p<.001$).

9.6 Criminal and Police Activity

More than half (58%) of IDU reported having committed a crime in the preceding month, a figure identical to that reported in 2000 (Table 9). There was no difference between the proportions of males and females who reported having committed crime in the preceding month (59% v 53%). As in all previous years, the most commonly reported crimes were drug dealing (39%) and property crime (27%). Forty five percent of IDU had been arrested in the previous twelve months, with males and females equally likely to have been arrested (47% v 42%). The most common grounds for arrest were property crime (18%), possession of a prohibited drug (10%) and drug dealing (6%).

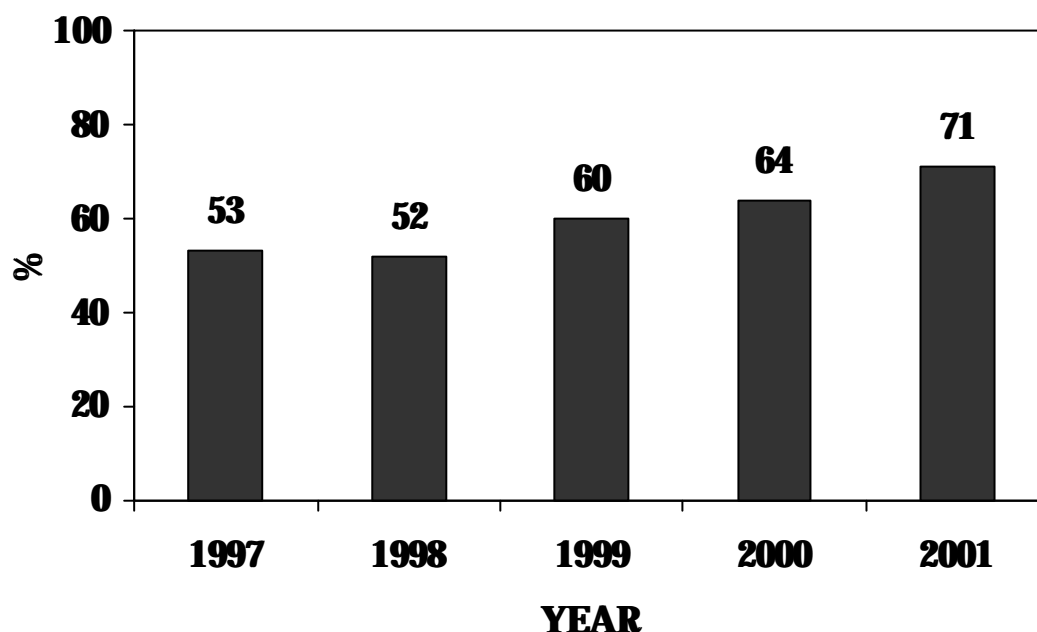
Nine percent of IDU reported having committed violent crime in the preceding month. IDU whose drug of choice was cocaine were significantly more likely to have committed violent crime than IDU who nominated heroin as their drug of choice (17% v 6%, $\chi^2_1=4.51$, $p<.05$). This is consistent with the increased levels of violence associated with cocaine use²⁷.

Table 9: Criminal and police activity as reported by IDU

	N=163 %
<i>Criminal activity in last month:</i>	
Dealing	39
Property crime	27
Fraud	9
Violent crime	9
Any crime	58
Arrested in last 12 months	45
<i>Police activity in last 6 months</i>	
More activity	71
Stable	25
Less activity	1
Don't know	4
<i>More difficult to obtain drugs recently</i>	
Yes	39
No	61
<i>Arrests in last 6 months</i>	
More arrests	58
Stable	41
Less arrests	0
Don't know	1

There was a strong perception among IDU that there had been an increase in police activity in the preceding six months, with 71% reporting a perceived increase in such activity, and only 1% reporting less activity. There was no difference between the proportions of IDU from the inner city and the south west of Sydney reporting an increase in police activity (70% v 71%). Specifically, IDU reported increased use of sniffer dogs, more street patrols and more undercover police activity, such as 'buy busts'. %). The proportion of IDU reporting increased police activity has increased each year since 1998 (Figure 34).

Figure 34: Proportion of NSW IDRS IDU samples reporting increased police activity, 1997 - 2001



Consistent with the increase in the proportions of IDU reporting increased police activity, the proportion reporting that police activity had made it more difficult for them to obtain drugs also increased compared to 2000 (39% v 28%). There was no difference in the proportions of IDU recruited from the inner city and south west of Sydney who believed police activity had made drugs more difficult to obtain (37% v 42%).

Compared to 2000, there was also a substantial increase in the proportion of IDU that reported an increase in the number of friends that had recently been arrested (58% in 2001 v 40% in 2000). There was no difference in the proportion of IDU from the inner city and south west of Sydney that had perceived such an increase (58% v 58%).

Taken together, the foregoing figures indicate that, compared to 2000, IDU perceived a noticeable increase in 2001 in the level of visible police activity relating to illicit drugs, and were more likely to consider that this increase had affected the drug market.

9.7 Summary of Drug-Related Issues

- Heroin overdose deaths continued to decline
- Cocaine use was associated higher levels of injection-related problems
- Expenditure on drugs by IDU increased sharply from that reported in 2000
- Cocaine use was associated with significantly greater expenditure on illicit drugs
- There was a strong perception among IDU of increased street-level policing of illicit drug markets, a trend that has been noted every year since 1998

10.0 SUMMARY

10.1 Drug Use Patterns

The 2001 NSW IDRS confirmed several important changes in the onset and use of illicit drugs. First, the trend towards an earlier initiation into injecting drug use, first mentioned in the 1999 IDRS, continued. Second, since 2000, there has been a dramatic increase in the proportion of subjects reporting cocaine as their drug of choice, and a corresponding decline in the proportion of subjects nominating heroin as their drug of choice. The increased popularity and use of cocaine is of concern, as cocaine is strongly associated with a higher injection frequency than among other IDU.

10.2 Heroin

Major trends emerged in relation to heroin. For the first time since the inception of the IDRS in 1996, there was a marked decrease in the availability of the drug, and a corresponding increase in price. From approximately December 2000 until April/May 2001, heroin was difficult to obtain in Sydney. The heroin market appears to have stabilised, but at reduced availability and markedly higher prices than prior to 2001. One of the major results of the reduced availability of heroin has been a transition by primary heroin users to frequent injection of cocaine. The data on drug of choice suggest that this may be a permanent change among some IDU.

10.3 Methamphetamine

The major trends documented in Sydney's methamphetamine market were increased use of methamphetamine, and, in particular, of potent crystalline and base forms of the drug. The possibility of a trend towards increased use of crystalline methamphetamine was first mooted in the 1999 IDRS⁶, and increases in use were noted and discussed in the 2000 IDRS report⁷. The 2001 IDRS confirms that the use of potent forms of methamphetamine has increased substantially over the past two years. This trend has significant implications for public health and public order, as frequent use of methamphetamine is related to severe psychopathology, including, in extreme

cases, psychosis²⁸.

10.4 Cocaine

An upsurge in the injection of cocaine in Sydney was first documented by the IDRS in 1998⁵. Between 1998 and 2000, cocaine use remained at high, but stable, levels among IDU. The 2001 IDRS revealed a major increase in preference for cocaine, in the number of IDU using cocaine, and in the frequency of cocaine use. As noted above, one of the consequences of the reduced availability of heroin has been a shift towards the frequent injection of cocaine. While the price of heroin increased in 2001, that of cocaine remained stable. All indications are that cocaine has become even more entrenched in the Sydney IDU market, and that many IDU have shifted from primary heroin use to primary cocaine use, a situation that has not been seen prior to this year. Cocaine powder has remained the predominant form of cocaine in NSW, and the availability or use of crack cocaine remains rare.

10.5 Cannabis

There was a slight increase in the price of cannabis, from \$300 per ounce in 2000 to \$320 in 2001. Cannabis remained easy to obtain, and perceived potency remained high. Hydroponically grown cannabis continued to dominate the NSW market, although an increase in the use of hash was noted. As in previous years, bongs were the predominant route of administration.

10.6 Other Drug Use

For the first time since 1997, the IDRS detected an increase in the injection of methadone syrup. Between 1997 and 2000 there was a continuous decrease in the proportion of IDU that reported recently engaging in this practice. Similarly, the injection of benzodiazepines also increased, to the highest level yet recorded by the IDRS. It is likely that these increases are related to the reduced availability of heroin, with many IDU substituting methadone and/or benzodiazepines when heroin was too difficult to obtain.

In 2001, for the first time, the IDRS distinguished between pharmaceutical products such as methadone and benzodiazepines obtained licitly (i.e., prescribed by a practitioner for the person who used them) and those obtained illicitly (i.e., from all other sources). These data clearly indicated that substantial diversion of pharmaceutical products to illicit markets occurs in Sydney.

10.7 Drug-Related Issues

The major trend detected in drug-related issues was the reduction on the number of fatal heroin overdoses in NSW. In 2000, a large reduction in the number of suspected heroin overdose deaths referred to ICPMR was noted, and the prediction that this would be reflected in a decline in the ABS figures for 2000 was confirmed. The current ICPMR data on suspected heroin overdose deaths indicate that the decline in heroin overdose deaths will continue in 2001.

The second major finding on drug-related issues was the strong perception among drug users of increased street-level police activity. IDU reported increased use of sniffer dogs, more street patrols and more undercover police activity, such as 'buy busts' in the six months preceding the interview. Many also believed that these changes had affected the drug market and made obtaining drugs more difficult. The proportion of IDU reporting increased police activity has increased each year since 1998.

10.8 Overview

Overall, the regular monitoring of illicit drug trends by the IDRS has revealed major changes in NSW illicit drug markets over a six year period, that would not have been readily quantifiable without the existence of such a system. The reduction in the availability of heroin in 2001, and the increases in the use of cocaine and methamphetamine, are trends of major significance to the health and law enforcement sectors. Continued monitoring of these trends is an essential prerequisite for the planning and implementation of appropriate policy responses to illicit drug use and drug-related problems.

11.0 REFERENCES

1. Hando, J., Darke, S., O'Brien, S., Maher, L. & Hall, W. (1998) The development of an early warning system to detect trends in illicit drug use in Australia: the Illicit Drug Reporting System. *Addiction Research*, 6, 97-113.
2. O'Brien, S., Darke, S. & Hando, J. (1996) *Drug Trends. Findings from the Illicit Drug Reporting System (IDRS)*. National Drug and Alcohol Research Centre Technical Report No. 38. Sydney, University of New South Wales.
3. Hando, J., O'Brien, S., Darke, S., Maher, L. and Hall, W. (1997) *The Illicit Drug Reporting System Trial: Final Report*. National Drug and Alcohol Research Centre Monograph No. 31. Sydney, National Drug and Alcohol Research Centre.
4. Hando, J. & Darke, S. (1998) *NSW Drug Trends. Findings from the Illicit Drug Reporting System (IDRS)*. National Drug and Alcohol Research Centre Monograph 56. Sydney, National Drug and Alcohol Research Centre.
5. McKetin, R., Darke, S. & Godycka-Cwirko, C. (1999) *New South Wales Drug Trends 1998. Findings of the Illicit Drug Reporting System (IDRS)*. National Drug and Alcohol Research Centre Technical Report No. 72. Sydney, National Drug and Alcohol Research Centre.
6. McKetin, R., Darke, S. and Kaye, S. (2000) *NSW Drug Trends 1999. Findings of the Illicit Drug Reporting System (IDRS)*. National Drug and Alcohol Research Centre Technical Report No. 86. Sydney, National Drug and Alcohol Research Centre.
7. Darke, S., Topp, L. & Kaye, S. (2001) *New South Wales Drug Trends 2000. Findings of the Illicit Drug Reporting System (IDRS)*. National Drug and Alcohol Research Centre Technical Report No. 117. Sydney, National Drug and Alcohol Research Centre.

8. Darke, S., Hall, W. & Topp, L. (2000) *The Illicit Drug Reporting System (IDRS) 1996-2000*. National Drug and Alcohol Research Centre Technical Report No. 101. Sydney, National Drug and Alcohol Research Centre.
9. Darke, S., Topp, L., Kaye, S. & Hall, W. (in press) Heroin use in New South Wales, Australia, 1996-2000: 5 year monitoring of trends in price, purity, availability and use from the Illicit Drug Reporting System (IDRS). *Addiction*.
10. Darke, S., Topp, L. & Ross, J. (in press) The injection of methadone and benzodiazepines among Sydney IDU 1996-2000: 5 year monitoring of trends from the Illicit Drug Reporting System (IDRS). *Drug and Alcohol Review*.
11. Darke, S., Kaye, S. & Topp, L. (in press) Cocaine use in New South Wales, Australia, 1996-2000: 5 year monitoring of trends in price, purity, availability and use from the Illicit Drug Reporting System (IDRS). *Drug and Alcohol Dependence*.
12. Topp, L. & Darke, S. (2001) *NSW Party Drug Trends 2000: Findings of the Illicit Drug Reporting System (IDRS) Party Drugs Module*. National Drug and Alcohol Research Centre Technical report No. 113. Sydney: National Drug and Alcohol Research Centre.
13. Topp, L., Kaye, S. & Darke, S. (in press) *NSW Party Drug Trends 2001: Findings of the Illicit Drug Reporting System (IDRS) Party Drugs Module*. National Drug and Alcohol Research Centre Technical Report. Sydney: National Drug and Alcohol Research Centre.
14. SPSS inc. (1999) *SPSS for Windows, 10.0* (Chicago, SPSS inc).
15. Degenhardt, L., Lynskey, M. & Hall, W. (2000) Cohort trends in the age of initiation of drug use in Australia. *Australian and New Zealand Journal of Public Health*, 24, 421-426.
16. Lynskey, M.T. & Hall, W. (1998) Cohort trends in age of initiation to heroin use. *Drug and Alcohol Review*, 17, 289-297.

17. Chesher, G.B. (1993) Pharmacology of the sympathomimetic psychostimulants. In D. Burrows, B. Flaherty & M. MacAvoy (Eds.), *Illicit Psychostimulant Use in Australia* (pp. 9-30). Canberra: Australian Government Publishing Service.
18. Wardlaw, G. (1993) Supply reduction (law enforcement) strategies pertaining to illicit use of psychostimulants. In D. Burrows, B. Flaherty & M. MacAvoy (Eds.), *Illicit Psychostimulant Use in Australia* (pp. 91-104). Canberra: Australian Government Publishing Service.
19. Australian Bureau of Criminal Intelligence (2001) *Australian Illicit Drug Report, 1999-2000*. Canberra: Commonwealth of Australia.
20. Shand, F.L. & Mattick, R.P. (2001) Clients of treatment service agencies: May 2001 Census findings. Canberra: Australian Government Publishing Service.
21. Darke, S., Ross, J. & Hall, W. (1996) Prevalence and correlates of the injection of methadone syrup in Sydney, Australia. *Drug and Alcohol Dependence*, 43, 191-198.
22. Darke, S., Ross, J., & Hall, W. (1995) Benzodiazepine use among injecting heroin users. *Medical Journal of Australia*, 162, 645-647.
23. Ross, J., Darke, S. & Hall, W. (1997) Transitions between routes of benzodiazepine administration among heroin users in Sydney. *Addiction*, 92, 697-705.
24. Darke, S. & Ross, J. (2000) The use of antidepressants among injecting drug users in Sydney, Australia. *Addiction*, 95, 407-417.
25. Darke, S., Ross, J. & Kaye, S. (2001) Physical injecting sites among injecting drug users in Sydney, Australia. *Drug and Alcohol Dependence*, 62, 77-82.

26. Darke, S., Kaye, S. & Ross, J. (2001) Geographical injecting locations among injecting drug users in Sydney, Australia. *Addiction*, 96, 241-246.
27. Platt, J.J. (1997) *Cocaine Addiction: Theory, Research and Treatment*. Cambridge, Massachusetts: Harvard University Press.
28. Hall, W., Hando, J., Darke, S. & Ross, J. (1996) Psychological morbidity and route of administration among amphetamine users in Sydney, Australia. *Addiction*, 91, 81-87.