

**E. Black, L. Degenhardt and J. Stafford**

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

**NDARC Technical Report No. 248**



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DRUG TRENDS  
2005**



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Illicit Drug Reporting System  
(IDRS)**

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## ABBREVIATIONS

ABCI	Australian Bureau of Criminal Intelligence
ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AGDH&A	Australian Government Department of Health and Ageing
AIHW	Australian Institute of Health and Welfare
A&TSI	Aboriginal and/or Torres Strait Islander
BBVI	Blood-borne viral infections
BOCSAR	NSW Bureau of Crime Statistics and Research
FDS	Family Drug Support
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human Immunodeficiency Virus
ICD	International Classification of Diseases
IDRS	Illicit Drug Reporting System
IDU	Injecting Drug Users
KE	Key Expert
MDMA	3,4-methylenedioxymethamphetamine
MERIT	Magistrates Early Referral Into Treatment
MSIC	Medically Supervised Injecting Centre
NCHECR	National Centre in HIV Epidemiology and Clinical Research
NDARC	National Drug and Alcohol Research Centre
NDLERF	National Drug Law Enforcement Research Fund
NNDSS	National Notifiable Diseases Surveillance System
NSP	Needle and Syringe Program
NSW	New South Wales
NSW MDS DATS	New South Wales Minimum Data Set for Drug and Alcohol Treatment Services
PDI	Party Drugs Initiative
REPIDU	Research and Education Program for Injecting Drug Users
SD	Standard Deviation
SNRI	Serotonin-norepinephrine reuptake inhibitor
SSRI	Selective serotonin reuptake inhibitor
THC	delta-9 tetrahydro-cannabinol

## GLOSSARY OF TERMS

Cap	Small amount, typically enough for one injection
Diverted	see 'Illicit' (below)
Eightball	3.5 grams
Halfweight	0.5 gram
Illicit	Illicit obtainment refers to pharmaceuticals obtained from a prescription in someone else's name, e.g. through buying them from a dealer or obtaining them from a friend or partner. The definition does not distinguish between the inappropriate use of licitly obtained pharmaceuticals, such as the injection of methadone syrup or benzodiazepines, and appropriate use.
Licit	Licit obtainment of pharmaceuticals refers to pharmaceuticals (e.g. methadone, buprenorphine, morphine, oxycodone, benzodiazepines, anti-depressants) obtained by a prescription in the user's name. This definition does not take account of 'doctor shopping' practices; however, it differentiates between prescriptions for self as opposed to pharmaceuticals bought on the street or those prescribed to a friend or partner.
Lifetime injection	Injection (typically intravenous) on at least one occasion in the participant's lifetime
Lifetime use	Use on at least one occasion in the participant's lifetime via one or more of the following routes of administration: inject, smoke, snort and/or swallow.
Point	0.1 gram
Recent injection	Injection (typically intravenous) in the last six months via one or more of the following routes of administration: inject, smoke, snort and/or swallow.
Recent use	Use in the last six months via one or more of the following routes of administration: inject, smoke, snort and/or swallow.
Use	Use via one or more of the following routes of administration: inject, smoke, snort and/or swallow

## **EXECUTIVE SUMMARY**

### **Demographic characteristics of injecting drug user (IDU) participants**

One hundred and fifty-four IDU participated in the 2005 survey. Sixty-two percent were male, 85% were unemployed or on income support (such as disability or sickness benefits or the New Start jobseeker's allowance) at the time of interview. The average age of respondents was 35 years (range 19-55 years). Twenty-three percent of the sample were Aboriginal and/or Torres Strait Islanders. Educational status of the sample varied, with three respondents (2% of the sample) having completed no full years of schooling, 53% percent of the sample having completed year 10 and 16% having completed year 12. Twenty-three percent had obtained a trade or technical qualification and 7% had completed a university or college qualification such as a degree. Seventy percent had not completed any further education after leaving school. Seventy-nine percent had a previous prison history. The average age of first injection was 19 years.

### **Patterns of drug use among the IDU sample**

#### **Heroin**

As in previous years, the majority of the sample continued to nominate heroin as their drug of choice (72%; comparable to 78% in 2004), the drug they had injected most often in the last month (64%), and the drug they had injected most recently (64%). However, whilst heroin remained the most commonly reported drug that participants had injected in the last month, and also the drug that they had injected most recently, these figures decreased from 80% (each) reported in 2004.

The median days on which heroin was used also decreased from 120 (i.e. approximately five days per week) in 2004 to 96 days (i.e. approximately every two days), and 2005 saw the lowest proportion of daily heroin users since 1998. The median number of days heroin was used differed according to geographical area, with a decrease observed in South-West Sydney (from 96 days in 2004 to 67 days in 2005) and an increase in central Sydney (from 160 days to 180 days). Concurrent increases have been observed in the proportion of participants engaged in drug treatment, predominantly methadone, at the time of interview (47% in 2003, 60% in 2004 and 67% in 2005) and this has impacted upon findings.

The median price for a gram of heroin (\$300) and a cap of heroin (\$50) remained stable in 2005 and prices remained higher than those reported prior to the heroin shortage in 2001. Heroin availability remained similar to 2004 levels, with the majority (86%) of participants who commented reporting that it was either 'easy' or 'very easy' to obtain (compared to 93% in 2004). Over half of participants (59%) reported that availability had remained stable (compared with 66% in 2004).

An increased proportion of participants who commented reported heroin purity to be 'low' as compared with 2004 (47% in 2005 as compared with 39% in 2004), making it the most commonly selected response category with which to describe it (other response options being 'high', 'medium', 'fluctuates' and 'don't know'). Very few participants perceived potency to be 'high' (5%). NSW police seizure data indicated that the median purity of low-level heroin seizures remains low (approximately 27%) and has not returned to levels reported prior to 2001. Key expert (KE) comments on the price and availability of heroin were consistent with IDU reports.

Indicator data reflecting harms related to heroin use (overdose numbers, arrests and entry into treatment other than pharmacotherapy) showed relatively stable rates over the past year, and remained substantially lower than figures recorded prior to 2001, suggesting that the NSW heroin market has not returned to pre-shortage levels of use or associated harm.

## **Methamphetamine**

Fifty-eight percent of participants had used some form of methamphetamine (speed powder, base, ice or liquid<sup>1</sup>) in the preceding six months, a proportion comparable to 2003 (56%). Similar proportions reported use of speed (38%; 35% in 2004), while a marginally larger proportion reported having used base compared with 2004 (38%; 31% in 2004), and there was a slight decrease in proportions using ice (38%; this figure was 45% in 2004). Use of the liquid form of methamphetamine remained uncommon at 6% (5% in 2004). Frequency of use of all forms of methamphetamine remained sporadic with the majority of users doing so fortnightly or less often, although a slight increase was observed in the proportion of daily users (from 3% in 2004 to 7% of users in 2005).

A 'point' (0.1 of a gram) was the most popular purchase amount for all three main forms of methamphetamine, and the median price remained stable at \$50 for speed powder, base and ice. Speed powder was cheaper than the more potent forms (base and ice) when bought in larger amounts such as half grams, grams and 'eightballs' (3.5g).

Two-thirds (69%) of participants completing the section on speed powder price, purity and availability reported that it was 'very easy' or 'easy' to obtain and that availability had remained stable (66%). According to participants completing the base price, purity and availability section, base was also 'easy' or 'very easy' to obtain (79%), with availability remaining stable (68%). Ice remained readily available for the majority of those commenting, with 53% stating that it was 'easy' or 'very easy' to obtain, and this represented a decrease from 79% in 2004. An increase was also observed among those who thought it was 'difficult' or 'very difficult' to obtain (from 16% in 2004 to 38% in 2005). However, the majority of participants commenting on ice availability reported that it had remained stable over the six months preceding interview.

Purity of methamphetamine seizures made by NSW Police has increased slightly over the past twelve months, from approximately 10-15% to 24%. Participants who felt able to comment on perceived purity continued to report speed powder as being of 'low' (36%) or 'medium' (34%) purity and that this had remained stable (37%). Reports on base were more mixed, although it was most commonly rated as 'medium' or 'high' (63%), with this having remained stable. Ice was perceived as the strongest form overall, with 66% reporting it as 'medium' or 'high', and with the largest proportion selecting the response option 'high' (46%). Again, purity of ice was most often reported to be stable (42%).

KE reported on a range of methamphetamine forms, with ice, base and speed powder all commonly mentioned, and comments were generally consistent with those of IDU, with the exception of increases in use and related problems in some geographical areas (Western Sydney, the inner city, and among

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<sup>1</sup> Methamphetamine powder (referred to here as 'speed' or 'speed powder') is typically a fine-grained powder, generally white or off-white in colour, but may range from white through to beige or pink due to differences in the chemicals used to produce it. Base (which can also be known as 'pure', 'wax' or 'point') is the paste methamphetamine that is 'moist', 'oily' or 'waxy' and is often brownish in colour. Ice comes in crystalline form, in either translucent or white (sometimes with a pink, green or blue hue) crystals that vary in size. A fourth form, liquid amphetamine or 'oxblood', has also been identified, and is typically red/brown in colour.

client admissions to two rehabilitation units). As in previous years, indicator data reflecting harms related to methamphetamine use presented a mixed picture, with the majority of indicators remaining stable or continuing to fluctuate over the last twelve months, while others increased (e.g. recorded police incidents of possession/use in inner Sydney, calls to Family Drug Support [a telephone helpline] regarding methamphetamine, and inpatient hospital admissions for methamphetamine dependence). These may reflect what are presumably low treatment numbers for methamphetamine, as compared with heroin, several reasons for which have been suggested. These include the possibility that a proportion of methamphetamine users may not wish to obtain treatment, a lack of knowledge regarding treatment options among users, a lack of existing treatment options in their area and/or reticence to attend existing treatment agencies.

## **Cocaine**

A moderate increase in cocaine use was observed in 2005, although this did not approach the high levels reported in 2001 during the peak of the heroin shortage. Sixty percent of participants reported cocaine use in the preceding six months (as compared with 47% in 2004) and although the frequency of use remained sporadic, the median number of days cocaine was used doubled, from approximately once per month to twice per month. Eleven percent of the sample reported daily cocaine use, again representing an increase from 3% in 2004.

Reports of availability remained relatively stable, with 69% of those completing survey items on cocaine price, purity and availability reporting it to be either 'easy' or 'very easy' to obtain as compared with 66% in 2004. However, a notable increase was observed among those reporting cocaine as 'very easy' to obtain, rising to 48% (32% of all respondents) from 32% (15% of all respondents) in 2004. Again, availability was commonly perceived to be stable.

The price per cap of cocaine remained stable at \$50. An increase was observed in the number of participants who reported purchasing cocaine in the six months preceding interview, with 61 reporting buying a cap during this time (this figure was 34 in 2004). Slight fluctuations in price were reported for other common purchase amounts as compared with 2004.

Purity of cocaine seized by NSW Police fluctuated slightly over the past twelve months, but remained higher than previously. Participants most commonly reported that cocaine was of 'medium' (40%; representing 20% of the entire sample) or 'low' purity (28%; or 18% of the entire sample). However, reports were fairly mixed, with one-fifth (20%) reporting it to be of 'high' purity. Purity was also most often rated as having been 'stable' (34%) over the six months preceding interview, although a substantial proportion thought that it was decreasing (32%).

KE comments and indicator data were generally consistent with those of IDU, and suggested that increases in cocaine use had been observed in some areas, particularly the inner city and South-West Sydney.



## **Cannabis**

The cannabis market has remained relatively unchanged since the commencement of the NSW IDRS in 1996, and the majority of participants (80%) reported having used cannabis in the six months preceding interview. Frequency of use among these IDU remained at 180 days (daily use) in 2005.

Large proportions of participants reported use of both the hydroponic ('hydro') and outdoor grown ('bush') forms of marijuana, with hydro appearing to dominate the market. The use of resin (hashish) and oil (hash oil) remained rare. The price of hydroponic cannabis was \$20 per gram (the most popular purchase amount) and the overwhelming majority of those completing the price, purity and availability section of the survey (92%) reported that it was readily available, i.e. 'easy' or 'very easy' to obtain. The price per gram of bush cannabis was the same as for hydro (\$20), but larger amounts were slightly cheaper than for hydro. Bush was less readily available, with 53% reporting it to be readily available (i.e. 'easy' or 'very easy') to obtain. Fewer participants were able to comment on bush potency, which is often in itself an indication of lower levels of use and availability. As in 2004, potency of hydroponic cannabis was reported to be 'high' and bush was reported to be 'medium'.

KE reports on cannabis were generally consistent with those of IDU. KE reports suggested that frequency and use patterns had remained stable, with health services in some areas noting an increase in people seeking treatment. A number of KE also noted an increase in mental health problems among younger cannabis users. Some changes were reported in cannabis cultivation. Indicator data also reflected the stability of the market, with very little change occurring over the past year, although increases in the numbers of treatment episodes for counselling and withdrawal management were observed.

## **Use of illicit pharmaceuticals**

### **Illicit Methadone**

Just under one-fifth (17%) of participants reported use of illicitly obtained methadone syrup in the six months preceding interview, representing a decrease from 29% in 2004, and use was sporadic (less than monthly). Approximately half of those who had used illicit methadone had also been engaged in methadone treatment during this period, indicating that methadone was being diverted by those engaged in treatment, as well as to those who were not. Approximately one-tenth (11%) of participants reported injecting illicit methadone syrup in the preceding six months, again representing a decrease from 2004 (22%). Again, just over half (53%) of this group were engaged in methadone treatment during this period. Illicit methadone was considered to be readily available with 60% of those completing survey items on illicit methadone price and/or availability reporting that it was 'easy' or 'very easy' to obtain; one-fifth reported that it was 'difficult'.

Use and injection of illicitly obtained physeptone tablets remained uncommon, with 3% reporting use and 1% reporting injection in the six months preceding interview.

### **Illicit Buprenorphine**

Small percentages (8%) reported the use of illicit buprenorphine in the preceding six months, with less than half (46%, n=6) of these persons reporting engagement in buprenorphine treatment during this period. Five percent of participants reported injecting illicit buprenorphine in the preceding six months on a median of two days, 38% of whom (n=3) had been in treatment during this time. Eighteen

percent of participants who had used buprenorphine (licit and/or illicit) in the six months preceding interview reported illicit buprenorphine as the form they had used most often. These figures are comparable to 2004 data.

## **Morphine**

One-quarter (27%) of the sample reported use of morphine, predominantly obtained from illicit sources, in the six months preceding interview. Overall, twenty-three percent of the sample reported use of illicit morphine in the six months preceding interview. Almost one-quarter (24%) had injected morphine in the last six months, and among those who had injected it in the month preceding interview, 62% (8% of the entire sample) had experienced at least one associated injection-related problem. Frequency of use was low, with a median of four days (less than monthly use) reported. MS Contin was the most common brand of morphine used, with 100mg tablets costing a reported median price of \$25. Nineteen percent reported buying morphine (compared to 21% in 2004), predominantly from street dealers.

Approximately one-quarter (27%) of the sample felt confident to comment on the price and/or availability of illicit morphine. Among these participants, 50% thought that it was either 'easy' (31%) or 'very easy' to obtain (19%). Availability was generally considered to have remained stable.

## **Oxycodone and other opioids**

In 2005 a distinction was made between licit and illicit oxycodone and other opioids due to concerns that illicit use of, and problems associated with, diversion of oxycodone may be increasing. In previous years, oxycodone was included under 'other opioids'.

Sixteen percent of participants reported use of oxycodone in the six months preceding interview and 11% of the sample reported injecting it in this time. Frequency of use was low, at a median of one day in the preceding six months. Seventy percent of those who had used oxycodone reported that they had usually obtained it through illicit sources.

Use of other opioids not specified elsewhere (e.g. codeine and pethidine; whether licitly or illicitly obtained) was also relatively uncommon, with 14% reporting recent use on a median of eight days (i.e. just over monthly use). Four percent reported injecting other opioids in the six months preceding interview on a median of seven days. Panadeine Forte, a pharmaceutical drug containing 30mg codeine, continued to be the main form used and approximately half (47%) of those reporting other opioid use had obtained them illicitly.

Use of homebake heroin (a form of heroin extracted from pharmaceutical opioids) remained uncommon among the IDU participant sample.

## **Benzodiazepines**

Prevalence of benzodiazepine use remained stable, with almost two-thirds (65%) reporting use in the six months preceding interview, although a substantial decrease was observed in frequency of use. In 2005, participants had used on a median of 29 days (i.e. more than once per week), as compared with 60 days in 2004 (approximately 2-3 days per week). However, the proportion of daily users remained stable at approximately 20%.

Following a restriction in the availability of benzodiazepine gel capsule preparations (Euhypnos, Nocturne, Normison & Temaze) being introduced on 1 May 2002, and the subsequent removal of these drugs from the pharmaceutical market in March 2004, the prevalence of benzodiazepine injection has markedly decreased. Between 2001 and 2003, approximately 20% of participants reported recent injection of benzodiazepines, a proportion which decreased to 13% in 2004 and 2% in 2005. Similarly, the median days on which they were injected has decreased from 20 days in 2003 (i.e. just less than once per week) to two days in 2005. Among those reporting daily use, none reported intravenous use in the preceding six months. Forty percent of the sample reported using illicitly sourced benzodiazepines, and Valium/diazepam and Serepax/oxazepam were the most commonly reported forms used.

### **Other drugs**

Just over one-fifth (23%) reported use of anti-depressants over the six months preceding interview on a median of 179 days (i.e. almost daily use). These were licitly obtained, and taken orally. Little change was observed in recent use of anti-depressants as compared with 2004; however, these figures have steadily increased since 1997 (13%).

Hallucinogen, ecstasy and inhalant use remained relatively infrequent. Hallucinogen (LSD and magic mushroom) use in the six months preceding interview was reported by 5% of the sample on a median of one day, and 2% had injected them on a median of one day. Ecstasy use during this period was reported by 19% on a median of two days, and twelve percent reported injecting it over this period on a median of 1.5 days. Only two percent of participants reported inhalant (amyl nitrate and glue) use on a median of six days.

Just over half of the sample (54%) had consumed alcohol in the preceding six months on a median of 12 days, i.e. approximately twice per month. Five percent of the sample consumed alcohol daily. These figures represent little change from 2004. By contrast, virtually all participants (97%) reporting smoking tobacco in the six months preceding interview on a median of 180 days (i.e. daily); a finding that has remained consistent across all previous years of the IDRS.

### **Associated harms**

The proportion of IDU sharing needles remained stable, with 14% reporting that they had used a needle after someone else in the preceding month (compared with 13% in 2004) and a slight decrease was observed in those reporting that someone else used a needle after them (15%; as compared with 21% in 2004). The proportion reporting shared use of other injecting equipment such as filters and water also decreased slightly (43%; compared to 52% in 2004).

Since 2001, there has been a steady increase in the proportions of IDU reporting a private home as both their usual injection location (from 55% in 2001 to 68% in 2005) and the location of their last injection (from 47% in 2001 to 64% in 2004 and 60% in 2005). Figures were similar in 2005 as compared to 2004. Less than a fifth of IDU reported that their usual location was a public place (17%; consistent with results obtained in 2004 and a sizeable decrease from 42% in 2001) and approximately one-quarter reported it as their most recent location for injection (26% in 2005, as compared to 49% in 2001). Thirteen percent reported that they usually injected at the Sydney Medically Supervised Injecting Centre in Kings Cross, and the same proportion (13%) reported it had been the location in which they had last injected. This represents a relatively slow but consistent increase since 2001, when these figures were 3% and 4%, respectively.

Two-thirds (66%) of participants reported injection related health problems in the past month (compared to 65% in 2004), with 36% reporting multiple problems (comparable to 38% in 2004). Consistent with previous years, prominent scarring/bruising of injection sites (39%) and difficulty injecting (46%) were the most frequent problems reported. Over half of the sample (60%) reported ever having overdosed on heroin, and 11% had done so in the last twelve months. Three percent of participants reported overdosing on any drug in the last month – typically heroin in conjunction with another depressant drug such as methadone or benzodiazepines.

One-fifth of the IDU sample reported driving under the influence of an illicit drug in the six months preceding interview, and this was typically heroin, cannabis and/or cocaine. Even higher rates have been reported by other research conducted on IDU participants in Sydney (Darke et al., 2004). Driving under the influence of illicit drugs remains a topical issue, generating research and the implementation of policies such as road-side drug testing. Dissemination strategies to distribute information about the effects of different drugs upon driving to IDU appears justified.

There was little change in 2005 in the proportion of participants (73%) who reported spending money on drugs on the day prior to interview. The median amount spent was \$90.

Just under half the sample (40%) reported experiencing a mental health problem other than drug use in the preceding six months, and 84% of this group (representing 34% of the entire sample) reported seeking advice from a mental health professional during this time (usually a psychiatrist or GP). Depression continued to be the most commonly reported mental health problem (28% of all participants, compared to 24% in 2004), followed by anxiety (9% of all participants; 10% in 2004).

Twenty-seven percent of participants reported that they had become verbally aggressive when under the influence of a drug in the six months preceding interview, and 15% stated that they had become physically so. Participants more commonly reported becoming verbally aggressive when in withdrawal or ‘coming down’ from a drug (38%), while rates of physical aggression were lower at 15%.

Proportions reporting involvement in criminal activity in the month preceding interview (49%) remained relatively stable, and the most commonly reported offences were property crime and drug dealing (27% each). Forty-four percent of participants stated that they had been arrested in the previous twelve months, representing little change from 43% in 2004. As in previous years, the majority of participants (66%) perceived that police activity had increased in the preceding six months. Just over half the sample (60%) reported that their ability to obtain drugs had been unaffected.

## Implications

The findings of the 2005 NSW IDRS indicate that further attention is required in the following areas:

- Wider implementation of effective interventions for stimulant (cocaine and methamphetamine) users, and development of strategies to engage and retain users in these programs.
- Dissemination of available treatment options for psychostimulant dependence to users.
- Continued provision of services – e.g. counselling and withdrawal management – for those wishing to cease or reduce cannabis use.
- Careful monitoring by medical practitioners of the diversion of methadone and other opioids such as morphine and oxycodone. Increasing trends towards this have been noted in other jurisdictions, and to a lesser extent in Sydney, NSW.
- Continued surveillance of patterns and prevalence of benzodiazepine use and diversion, and careful monitoring by medical practitioners of the clinical need for their prescription.
- Continued focus on education regarding overdose (particularly with regard to use of multiple depressant drugs) and the dangers of sharing injecting equipment other than needles, including safer injecting strategies. In the context of increased stimulant use, continued education regarding the effects of prolonged use (e.g. agitation, aggression, paranoia and psychosis), strategies to reduce risk (e.g. rest periods between binges) and referral into treatment where appropriate seems warranted.
- Increased/continued awareness of the need for treatment of the comorbid mental health problems that many IDU may be experiencing. Despite the fact that many participants were aware that they had recently experienced such problems, one-fifth of those who reported mental health problems were not receiving help for them. Maintaining links between drug services and mental health services remains critical as rates of comorbidity were reportedly high. In particular, the likelihood that comorbid mental health problems may affect treatment outcome needs to be acknowledged and addressed by both mental health and drug treatment services. Future work might usefully investigate participant awareness and understanding of mental health problems, including treatment service availability. In addition, exploration of barriers to mental health services encountered by this group and identification of where improvements may be made (where possible) would be of continuing benefit.
- While a large proportion of participants who used anti-depressant medication had used it daily, anecdotal evidence from KE and IDU suggest that adherence to these drugs is problematic for a notable proportion of IDU. Investigation into use of, and compliance with, anti-depressant medication by this population may enable more successful treatment.
- Further investigation into driving under the influence of drugs, for example the frequency and circumstances under which it occurs, is already an area of considerable research effort. Dissemination of this information to drug users including IDU would also appear justified.
- High rates of tobacco use have consistently been documented in the IDU samples over time, and consideration should be given to providing smoking cessation treatment education/options to IDU considering ceasing or reducing use whilst in treatment for illicit drug use.
- Continued and ongoing communication between law enforcement and health services to ensure the goals of both organisations are, or continue to be, met as successfully as possible.
- It has also been demonstrated that rural and other metropolitan areas may have different patterns of drug use and related harms (e.g. Day et al., 2005). Further research into this issue might usefully enable user groups, health workers and policy makers in areas with different patterns of drug use and related issues to adapt more general health promotion messages, responses and so on to become more relevant to their particular area and/or client group(s).

## 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 phenomena 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.

One component of the IDRS involves interviews with regular IDU to obtain information on use patterns and drug markets. IDU are recruited as a sentinel group of users that are active in illicit drug markets. The information from the IDU survey is therefore not representative of illicit drug use in the general population, nor is it indicative of all illicit or injecting drug users, but identifies emerging trends that require further monitoring.

The IDRS has operated in NSW since 1996. The data described in this report represent a summary of drug trends detected by the NSW IDRS in 2005. 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* reports. All IDRS reports from previous years (in NSW and for all other jurisdictions) may be downloaded in full from the NDARC website, <http://ndarc.med.unsw.edu.au> (under 'Drug Trends'). Quarterly bulletins are also produced on IDRS and related data (also available on the NDARC website), and IDRS results are also disseminated in a range of forums including national and international conferences and at the annual IDRS Drug Trends Conference. Details of all of these may also be found on the NDARC website.

Papers on specific issues using NSW data from the IDRS both in isolation or in conjunction with datasets from other jurisdictions have also been published in the peer reviewed literature, including (Degenhardt et al., in press, Degenhardt et al., 2005b, Degenhardt et al., 2005c, Degenhardt et al., 2003, Mattick et al., 2004, Breen et al., 2002, Darke et al., 2002a, Darke et al., 2002c, Darke et al., 2002d, Day et al., 2003, Fry and Bruno, 2002, Griffiths et al., 2000, Hando et al., 1998b, McKetin, 2000, Shand et al., 2003, Topp et al., 2004, Topp et al., 2003a, Topp et al., 2003b, Topp et al., 2002, Roxburgh et al., 2005). A list of these publications is available on the NDARC website.

A separate study monitoring trends in ecstasy and related drug use (the Party Drugs Initiative, or PDI) commenced in NSW in 2000 and findings are reported elsewhere (Degenhardt et al., 2005a, Dunn et al., 2006). Copies of these reports may also be downloaded from the NDARC website: <http://ndarc.med.unsw.edu.au/> (under 'Drug Trends').

### 1.1 Study Aims

As in previous years, the specific aims of the 2005 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 considers three main sources of information when documenting drug trends:

1. a quantitative survey of injecting drug users (IDU);
2. a semi-structured interview with key experts (KE), who are professionals working in the illicit drug field, and 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 located within main drug market areas 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 illicit drug classes considered. KE 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, often at a community level, which may have been detected by the IDU and KE 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. Data from the 2005 IDRS were also compared with IDRS findings from previous years to determine changes in drug trends and related issues over time.

### 2.1 Survey of injecting drug users (IDU)

In the 2005 NSW IDRS the IDU survey consisted of face-to-face interviews with 154 IDU, conducted in Sydney during June 2005. Half (49%) of the sample was recruited from the inner city (Kings Cross and Redfern), and the remainder from Sydney's South-West (Liverpool, Canterbury). In previous years, interviews were conducted at Cabramatta rather than Liverpool; closure of the service at Cabramatta in mid-2003 resulted in the requirement to find a new interview site from 2004 onwards. As with the other locations where recruitment is conducted, Liverpool was selected as it is a key illicit drug market area and it is in these markets that trends in illicit drug use are likely to first emerge. It should be noted that a shift in the site in South-Western Sydney (close to a pharmacotherapy treatment service) since 2004 has probably contributed to a slight over-representation of methadone and buprenorphine clients within the sample. This should be taken into consideration when interpreting our findings.

IDU were recruited from various sites offering Needle and Syringe Program facilities. Potential participants were screened for eligibility; criteria for entry to the study were: (i) at least monthly injection of any drug in the six months preceding the interview; and (ii) resident in Sydney for the preceding twelve months, with no significant periods of incarceration during that time.

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 (mental and drug-related) and general drug trends. Participants were interviewed within the agencies that assisted with recruitment where possible, or at coffee shops and fast-food outlets close by. Interviews took about 30-40 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 13.0 (2004).

## 2.2 Survey of Key Experts (KE)

Fifty-six KE who had regular contact with, and/or specialist knowledge of, illicit drug users<sup>2</sup>, dealers or drug manufacture, were interviewed in July and August 2005. To be eligible, participants must have had at least weekly contact with illicit drug users or suppliers, and/or contact with a minimum of ten different illicit drug users or suppliers in the six months preceding the interview. As broad a range of KE as possible were interviewed in 2005 including drug treatment workers (including counsellors, psychologists and Magistrates Early Referral Into Treatment [MERIT] program workers), health education officers (including needle and syringe program workers), residential rehab managers, law enforcement officers, nurses, researchers, a rehab intake officer and an accommodation services manager.

KE are recruited from a range of geographical areas across Sydney, including the drug market areas in which IDU are recruited. KE selection is based upon a desire to interview persons who have contact with a broader group of drug users including injecting drug users, and who have knowledge of drug markets that is broader than the information that we obtain from our participants, and can give some indication of trends across Sydney and NSW.

Twenty-eight KE reported on the use and/or supply of heroin, eight on the use, manufacture and/or supply of methamphetamine, 14 on cannabis use and/or supply, and six on the use and supply of cocaine. As has been the case for the past couple of years, cocaine Key Experts were difficult to find, with many professionals reporting that there was very little cocaine available among the users they came into contact with and therefore that use in these groups remained uncommon.

The KE interview schedule was a semi-structured instrument, based on previous years of the IDRS, and which followed a similar structure to 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 approximately 45 to 60 minutes to conduct, and were conducted over the telephone with the exception of one that was conducted face-to-face. Notes were taken during the interview and content analysis conducted to identify recurring themes and patterns in the data.

## 2.3 Other indicators

To complement and validate data collected from the IDU and KE surveys, a range of secondary data sources were examined. These included health, survey and law enforcement data. The pilot study for the IDRS 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, New South Wales 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 are:

- Alcohol and Drug Information Service – calls received regarding problematic drug use;
- Family Drug Support – telephone support service for family members affected by problematic drug use and for users themselves;
- Australian Bureau of Statistics – overdose data;
- Australian Crime Commission – purity data from Police seizures;

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<sup>2</sup> The illicit drug users to whom KE refer are typically, but not exclusively, injecting drug users.



- Australian Government Department of Health and Ageing, National Notifiable Diseases Surveillance System – notifications of Hepatitis C and Hepatitis B;
- Sydney Medically Supervised Injecting Centre – data on drugs injected at the Centre
- Needle and Syringe Programs data on last drug injected;
- National Centre in HIV Epidemiology and Clinical Research (NCHECR) – HIV and HCV seroprevalence data from the annual Needle and Syringe Program (NSP) Survey;
- NSW Bureau of Crime Statistics and Research – incidents recorded for possession/use;
- NSW Department of Health – drug-related visits to emergency departments, NSW ambulance callouts to overdoses, numbers registering for opioid pharmacotherapy treatment, number of treatment episodes by drug type, drug-related inpatient hospital admissions and toxicology data from suspected drug users in which drugs were detected;
- NSW Police – Number of clandestine methamphetamine and MDMA laboratory detections.

## 3.0 RESULTS

### 3.1 Overview of the IDU sample

The demographic characteristics of the 154 IDU participants interviewed in 2005 are presented in Table 1. The mean age of the sample was 35 years (range 19-55), 62% of the respondents were male and almost a quarter (23%) were Aboriginal and/or Torres Strait Islanders. The majority (83%) were heterosexual. Educational status of the sample varied, with three respondents (2% of the sample) reported having completed no full years of schooling, 53% percent of the sample having completed year 10 and 16% having completed year 12. Twenty-three percent had obtained a trade or technical qualification and 7% had completed a university or college qualification such as a degree. Seventy percent had not completed any further education after leaving school. The majority of the sample reported that their main source of income was a pension or government benefit (85%), while 7% reported a wage or salary, 6% nominated criminal activity, 5% reported sex work, and 1% nominated child support.

**Table 1: Demographic characteristics of the IDU sample, 2004-2005**

Characteristic	2004 N=157*	2005 N=154
Age (mean years, range)	34.0 (19-55 years)	34.5 (19-55 years)
Sex (% male)	68	62
Employment (%):		
Not employed / on a pension	83	85
Full time	3	1
Part time/casual	8	5
Home Duties	5	7
Student	1	1
Received income from sex work last month	11	12
Aboriginal and/or Torres Strait Islander (%)	–	23
Heterosexual (%)	–	83
Bisexual (%)	–	12
Gay or lesbian (%)	–	5
Other (%)	–	1
School education (mean no. years, range)	9.4 (2-12 years)	9.2 (0-12 years)
Tertiary education (%):		
None	58	70
Trade/technical	40	23
University/college	3	7
Currently in drug treatment <sup>^</sup> (%)	60	67
Prison history (%)	67	79

**Source:** IDRS IDU Interviews

\* Data from one participant were not reported for the following variables: employment status, tertiary education, current drug treatment and prison history. For these variables, N=156.

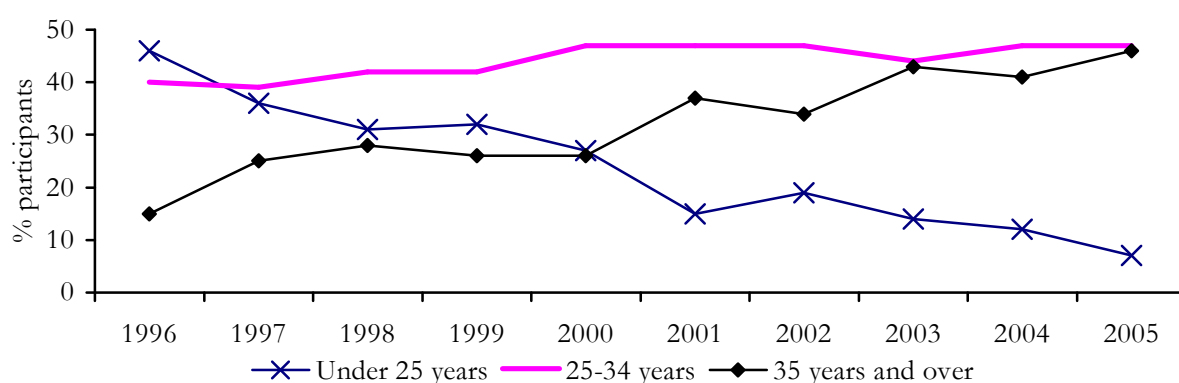
<sup>^</sup> Refers to any form of drug treatment, including pharmacotherapies, counselling, detoxification, etc. Between 2003 and 2004, a substantial increase in participants reporting being in drug treatment was noted (47% in 2003 vs. 60% in 2004). This was suggested to be partly an unfortunate artefact of a change in interview site to an NSP close to a methadone unit, but also a reflection of changes over time whereby IDU are increasingly willing and/or able to engage with treatment services. In 2005, participants at the new site were again more likely to report being engaged in treatment than at the former site, where treatment was comparatively uncommon. Consequently, while there has been an increasing trend among IDU to report current engagement in treatment across all NSW sites, comparisons with previous years should still be interpreted with caution.

The decrease in proportions reporting obtaining trade/technical qualifications may be due to greater stringency in reporting as compared with 2004.

#### *Age of the IDU sample over time*

The proportion of younger users interviewed has gradually decreased over the past nine years of the project (see Figure 1). While there is clearly an ageing cohort effect, there could be a number of additional reasons for this. Firstly, it may be that fewer younger people are injecting or that they are injecting less often. Secondly, it may be that younger users are less likely to access NSPs (where recruitment is conducted) than in previous years, or are unwilling to take part in research conducted at NSPs. Thirdly, in recent years, younger IDU were more likely to be using methamphetamine than their older counterparts (Degenhardt et al., submitted), and methamphetamine users have been identified as less likely to access health services such as NSPs (Kelly et al., 2005).

**Figure 1: Age distribution of IDU in the NSW (Sydney) IDRS samples, 1996-2005**



Source: IDRS IDU interviews

#### *Current and previous drug treatment*

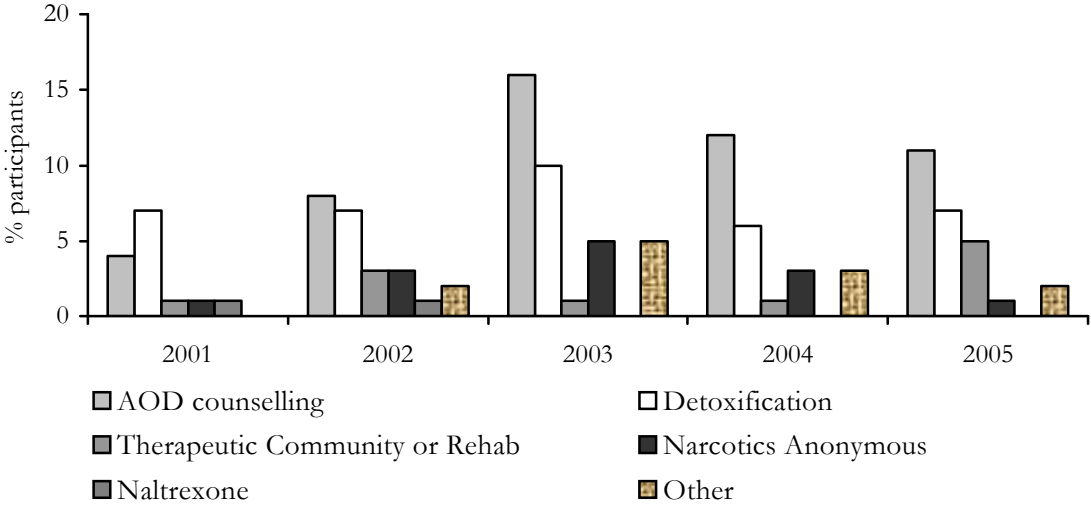
Two-thirds of the sample (67%) reported that they were currently in drug treatment. Participants currently engaged in treatment were asked what their main form of treatment was. Seventy-seven percent (51% of the entire sample) said methadone, 22% reported buprenorphine (15% of the sample) and 1% reported drug counselling (1% of the entire sample). No participants reported current involvement in other types of treatment such as detox, therapeutic community, narcotics anonymous or naltrexone. However, as participants were asked about the 'main' type of treatment they were currently receiving, it is important to note that participants who cited pharmacotherapy as their main form of drug treatment may also have been engaged in a number of treatments (e.g. counselling, case management, etc.).

Participants were also asked if they had been in treatment at any stage over the past six months, with 18% reporting *not* having been in any form of drug treatment over this time. In terms of pharmacological maintenance forms of drug treatment, a large proportion (56%) had been on a methadone program (syrup or physeptone), 25% had received buprenorphine, and no participants reported use of naltrexone in the six months preceding interview.

With regard to other forms of treatment, 7% had been in detox, 1% had attended Narcotics Anonymous, 11% had been in drug counselling, and 7% reported a range of other drug treatments. No participants had attended a therapeutic community, however, it should be noted that one of the study's inclusion criteria was that participants had not had significant periods of time away from the drug market area, and thus some participants may have been excluded from

participating in the study for this reason). Figures for non-pharmacological maintenance forms of treatment have remained fairly consistent at under 20% per treatment type since 2001, when the survey item was first included (Figure 2).

**Figure 2: Proportion of participants reporting treatments other than opioid replacement pharmacotherapy in past six months, 2001-2005**



Source: IDRS IDU interviews  
 NB: Multiple responses could be selected

**3.2 Drug use history and current drug use**

The mean age of first injection was 19.2 years (SD 5.8, range 9-38) (Table 2). Similar to the 2004 sample, heroin was the first drug injected by the majority of participants (66%), followed by amphetamines (28%), cocaine (3%) and morphine (1%).

**Table 2: Injection history, drug preferences and polydrug use of IDU participants, 2004-2005**

Variable	2004 N=157	2005 N=154
Age first injection (years)	20.1	19.2
First drug injected (%)		
Heroin	62	66
Amphetamines	32	28
Cocaine	3	3
Morphine	1	1
Drug of choice (%)		
Heroin	78	72
Cocaine	8	16
Methamphetamine (any form)	10	9
<i>Speed</i>	4	5
<i>Base</i>	2	1
<i>Crystal Methamphetamine (ice)</i>	5	3
Benzodiazepines	1	0
Cannabis	2	2
Drug injected most often in last month (%)		
Heroin	80	64
Cocaine	4	15
Methamphetamine (any form)	11	14
<i>Speed</i>	4	9
<i>Base</i>	1	2
<i>Crystal Methamphetamine (ice)</i>	6	3
Benzodiazepines	0	0
Morphine	1	2
<i>Not injected in last month</i>	1	3
Most recent drug injected (%)		
Heroin	80	64
Cocaine	5	17
Methamphetamine (any form)	13	13
<i>Speed</i>	5	9
<i>Base</i>	2	1
<i>Crystal (ice)</i>	6	3
Benzodiazepines	0	0
Morphine	1	2
Frequency of injecting in last month (%)		
<i>Not injected in last month</i>	1	3
Weekly or less	8	12
More than weekly, but less than daily	34	23
Once per day	10	17
2-3 times a day	33	27
>3 times a day	14	18
Polydrug use		
Mean number of drug classes ever used* (range)	11.0 (3-17)	11.2 (2-17)
Mean number of drug classes used*in last 6 months (range)	7.0 (1-14)	7.1 (2-14)
Mean number of drug classes ever injected^ (range)	4.9 (1-12)	5.3 (1-11)
Mean number of drug classes injected^ in last 6 months (range)	2.8 (1-8)	2.9 (1-11)

**Source:** IDRS IDU interviews

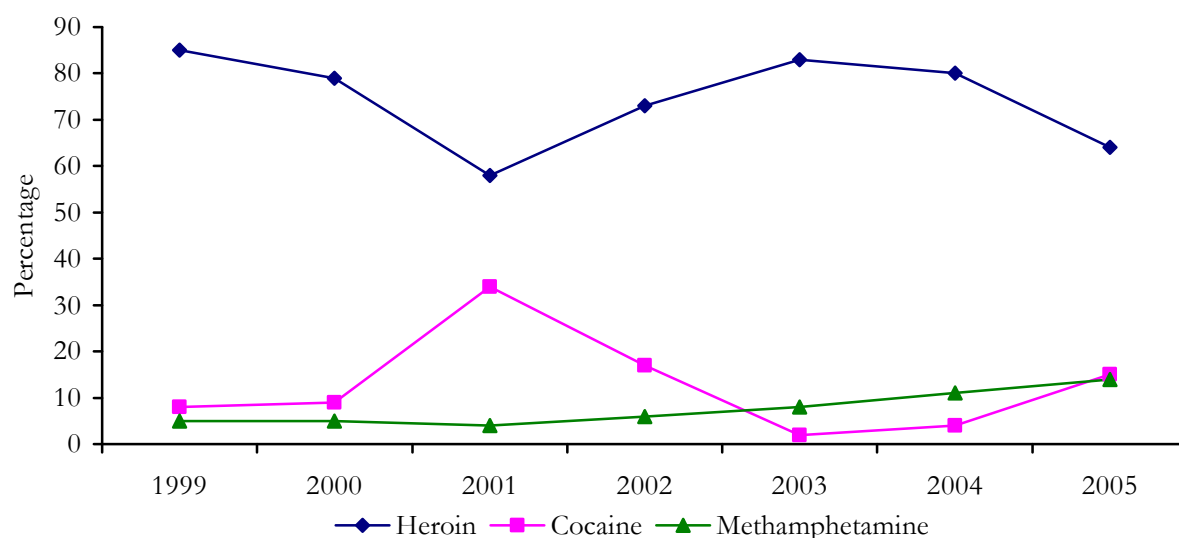
\* 'Used' refers to any of the following routes of administration: smoke/inhale, snort, swallow/ingest and inject. The seventeen categories considered are as follows: heroin, methamphetamine (any form), pharmaceutical stimulants, methadone (inc. physeptone), morphine, homebake, oxycodone, other opioids (not already mentioned), cocaine, hallucinogens, ecstasy, benzodiazepines, alcohol, cannabis, anti-depressants, inhalants, tobacco and buprenorphine.

^ Drugs considered are as for 'use', excluding cannabis, tobacco and inhalants; the maximum number of drug types is 14.

Participants' drug of choice remained similar to previous years, with heroin as the most common drug of choice (72%). However, the proportion of those nominating cocaine doubled, from 8% in 2004 to 16% in 2005.

As in previous years, the most commonly injected drug over the month preceding interview was heroin (64%), although this represented a decrease from 80% in 2004. In contrast, the proportion of respondents reporting cocaine as the most commonly injected drug increased from 4% in 2004 to 15%. However, this increase was less dramatic than that recorded during the heroin shortage in 2001 (Figure 3). Overall, there was no substantial change in proportions reporting methamphetamine as the drug most commonly injected, however, there was a slight increase in those reporting speed powder (from 4% in 2004 to 9% in 2005) and a slight decrease in those reporting the crystal form (from 6% in 2004 to 3% in 2005). Overall, methamphetamine injection has been gradually increasing since 2001. Proportions nominating other drugs as the most commonly injected remained low and stable.

**Figure 3: Drug injected most last month, 1999-2005**



**Source:** IDRS IDU interviews  
 NB: Survey item was first included in 1999.

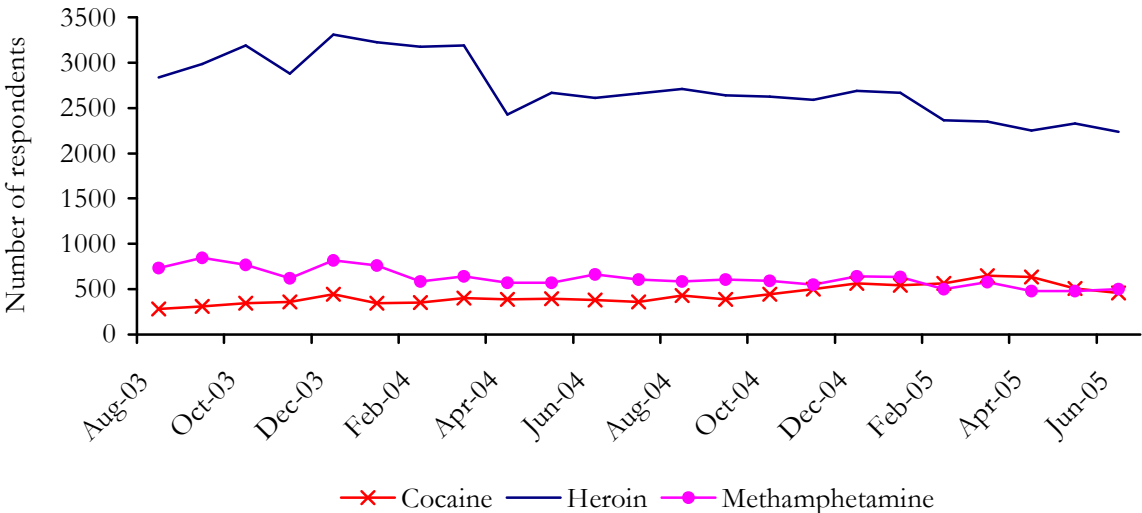
In 2005, questions were included on 18 drugs, including both illicit and commonly used pharmaceuticals such as other forms of opioid, benzodiazepines and anti-depressants<sup>3</sup>. Consistent with previous years the IDU sample engaged in extensive polydrug use, with respondents reporting that they had used an average of 11.4 (SD 3.1, range 2-18) drug classes in their lives and 7.1 (SD 2.3, range 2-15) in the six months preceding interview. Respondents had injected an average of 5.3 drug types (SD 2.3, range 1-12) at some time in their lives, and an average of 2.9 (SD 1.7, range 1-12) drug classes in the preceding six months. These figures appear slightly greater than those reported in 2004, however, this is predominantly due an increase in the number of drug categories from 17 in 2004 to 18 in 2005. In 2005, oxycodone was considered as a separate category from 'other opioids' under which it was previously included. Therefore, to enable comparison with 2004 data in Table 2, oxycodone and other opioids were combined (total drug classes in both years= 17; 14 for injectable substances); these figures show little change from 2004.

<sup>3</sup> Categories are as follows: heroin, methamphetamine (any form), pharmaceutical stimulants, methadone (inc physeptone), morphine, homebake, oxycodone, other opioids (not already mentioned), cocaine, hallucinogens, ecstasy, benzodiazepines, alcohol, cannabis, anti-depressants, inhalants, tobacco and buprenorphine.

Consistent with polydrug use reported by the IDU sample, several KE commented that, among those with whom they had contact, polydrug use was common with users substituting other drugs when they could not obtain their preferred drug.

Figure 4 shows the most recent drug injected as reported by respondents attending three inner city NSPs, and the pattern is consistent with IDRS reports. The majority of attendees reported heroin as the last drug injected, although numbers have decreased since the first quarter of 2004. Numbers reporting methamphetamine have slightly declined since 2003, with cocaine becoming nominated approximately equally as often.

**Figure 4: Number of respondents attending three inner city NSPs reporting heroin, methamphetamine and cocaine as last drug injected, August 2003-June 2005**



Source: Three inner city NSPs

The polydrug use histories of IDU participants, including routes of administration, are presented in Table 3. Recent use of the four main drugs monitored by the IDRS remained common: heroin (88%), cannabis (80%), cocaine (60%) and methamphetamine (any form; 61%).

**Table 3: Polydrug use history of the IDU sample, 2005**

Drug Class	Ever used %	Ever Injected %	Injected last 6 mths %	Days injected in last 6 mths*	Ever Smoked %	Smoked last 6 mths %	Ever snorted %	Snorted last 6 mths %	Ever Swallowed %	Swallowed last 6 mths+ %	Used^ last 6 mths %	Days in treatment* last 6 mths	Days used^ in last 6 mths*
Heroin	100	100	88	96	59	7	25	1	19	4	88		96
Methadone (prescribed)	81	40	7	56					80	55	55	180	180
Methadone (not prescribed)	52	36	11	20					34	10	17		4
Physeptone (prescribed)	11	2	0	0	0	0	0	0	11	3	3	7.5	7.5
Physeptone (not prescribed)	17	10	1	1	0	0	0	0	14	2	3		1
<i>Any methadone (inc Physeptone)</i>	88	55	14	10					86	60	64		180
Buprenorphine (prescribed)	44	16	7	2	0	0	0	0	43	25	25	135	125
Buprenorphine (not prescribed)	17	13	5	2	1	0	0	0	8	5	8		2
<i>Any Buprenorphine</i>	53	26	11	2	1	0	0	0	47	27	29		90
Morphine	62	56	24	4	1	1	1	1	31	10	27		4
Oxycodone (prescribed)	13	6	1	90.5	0	0	0	0	12	3	3		1
Oxycodone (not prescribed)	28	18	10	1	1	1	0	0	14	5	14		1
Homebake	13	12	3	3	1	1	1	0	3	1	4		2
Other opioids	29	9	4	7	4	0	1	0	22	13	14		8
Speed powder	82	80	38	6.5	12	3	44	6	31	5	38		10
Base/point/wax	55	52	36	6	10	5	6	1	14	5	38		6
Ice/shabu/crystal	65	62	35	3.5	23	11	3	1	4	3	38		4
Amphetamine liquid	38	34	6	12					10	0	6		12
Pharmaceutical stimulants	21	6	3	1	1	0	1	0	18	4	6		2
<i>Any form Meth/ Amphetamine#</i>	90	88	57	14	29	15	47	8	45	12	61		16

Source: IDRS IDU interviews

^ Refers to any route of administration, i.e. includes use via injection, smoking, swallowing, and snorting

+ Refers to/includes sublingual administration of buprenorphine

\* Among those who had used/injected. # Category includes speed powder, base, ice, amphetamine liquid (oxblood) and pharmaceutical stimulants



**Table 3: Polydrug use history of the IDU sample, 2005 (continued)**

Drug Class	Ever used %	Ever Injected %	Injected last 6 mths %	Days injected in last 6 mths*	Ever Smoked %	Smoked last 6 mths %	Ever snorted %	Snorted last 6 mths %	Ever Swallowed %	Swallowed last 6 mths+ %	Used^ last 6 mths %	Days in treatment* last 6 mths	Days used^ in last 6 mths*
Cocaine	90	90	60	12	20	6	42	8	10	2	60		12
Hallucinogens	62	12	2	1	4	0	4	0	59	5	5		1
Ecstasy	49	26	12	1.5	2	1	5	3	40	14	19		2
Benzodiazepines	84	26	2	2	1	0	1	1	1	84	65		29
Alcohol	94	7	1	2					94	53	53		12
Cannabis	96										80		180
Anti-Depressants	45	1	0	0					44	23	23		179
Inhalants	28										2		6
Tobacco	99										97		180

**Source:** IDRS IDU interviews

^ Refers to any route of administration, i.e. includes use via injection, smoking, swallowing, and snorting

+ Refers to/includes sublingual administration of buprenorphine

\* Among those who had used/injected.

## 4.0 HEROIN

Participants were asked if they were able to comment on the price, purity and/or availability of heroin, and in 2005 96% of the IDU sample felt confident to answer at least some of these survey items. The remainder did not feel confident to answer any questions on the heroin market, and this is likely to reflect a proportion of users who do not use, or come into contact with users or dealers of, heroin regularly enough to be able to comment. Twenty-eight KE commented on heroin market indicators and/or heroin use patterns.

Use of homebake is discussed under Section 8: Opioids.

### 4.1 Price

Prices paid for heroin by IDU participants on the last occasion of purchase are shown in Table 4 below. The median price reported for a gram of heroin remains unchanged from 2002 at \$300 per gram. This price remains substantially higher than prices reported in 2000 (\$220), prior to the heroin shortage in 2001 (Figure 5). In 2005, prices varied by geographical location; the median price per gram was \$350 in inner Sydney as compared with \$300 in the South-West. Similarly, the median price per quarter gram and half gram was higher in the inner city, with median prices of \$80 per quarter gram and \$170 per half gram in the inner city. Median prices in the South-West for these amounts were \$70 and \$140 respectively. Caps are the smallest, and by far the most common, purchase amount, and generally contain enough heroin for one injection. Eighteen participants in the South-West (representing 38% of those in the South-West who had recently purchased heroin) reported paying \$40 the last time they had bought a cap, while only three participants in the inner Sydney area had paid this amount. However, the median price per cap was \$50 in both areas.

Half weights (half grams) were the second most common purchase amount after caps, followed by quarter grams and grams. A decrease was observed in the number of participants who reported buying amounts other than caps. Thirteen IDU participants reported buying heroin in points, an amount more commonly used in previous years to refer to purchase amounts of methamphetamine and cocaine. A 'point' refers to 0.1g, and it is similar to a cap in that it is typically a quantity used for one injection.

As shown in Table 4, price ranges were extremely wide. In the majority of cases, this is likely to be a reflection of purity/availability within that particular person's network and various other circumstances which may influence the cost of a particular deal.

**Table 4: Price of most recent heroin purchases by IDU participants, 2004-2005**

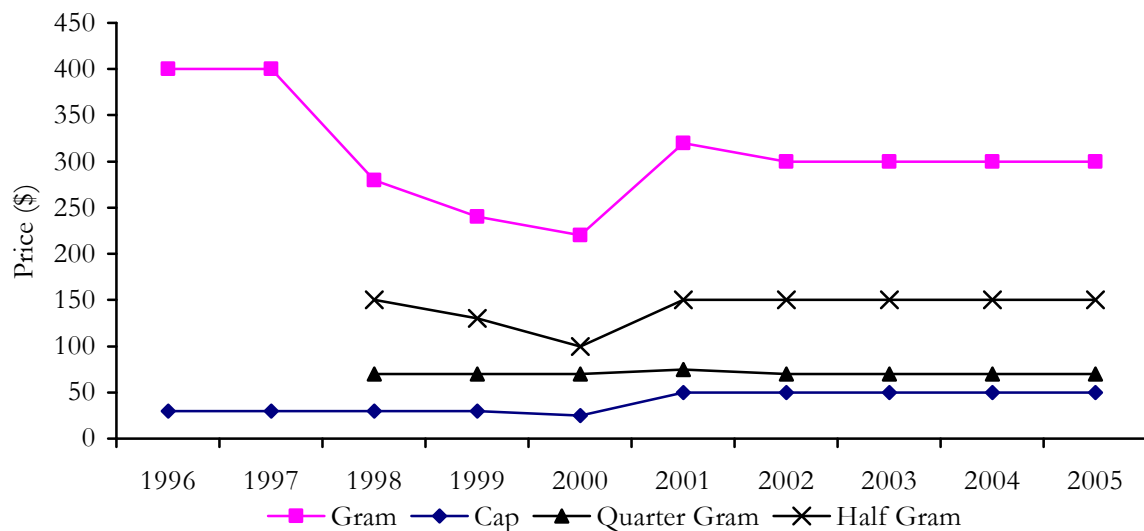
Amount	Median price* \$	Range	Number of purchasers*
Cap	50 (50)	\$30-\$100	93 (98)
Quarter gram	70 (70)	\$50-\$150	38 (51)
Half gram (Half weight)	150 (150)	\$90-\$300	54 (80)
Gram	300 (300)	\$150-\$500	31 (34)

Source: IDRS IDU interviews

\* 2004 data are presented in brackets

Heroin prices have remained stable over the past few years (Figure 5). In addition to survey items on last purchase price, participants were also asked whether they considered the price of heroin to have changed over the last six months (response options were ‘don’t know’, ‘increasing’, ‘stable’, ‘decreasing’ and ‘fluctuating’). Over two-thirds of participants (69% of those who commented; representing 66% of the entire sample) reported price stability over the preceding six months. Eighteen percent thought that it had increased in price over the preceding six months (18% of those who commented or 13% of the entire sample), and this represented little change from 2004 (14% of those who commented or 13% of the entire sample). Small proportions reported that it had decreased (3% of those who commented; 3% of the entire sample) or fluctuated (4% of those who commented; 4% of the entire sample). Overall, this provides further evidence that prices have generally remained stable over this time.

**Figure 5: Median prices of heroin estimated from IDU purchases, 1996-2005**



Source: IDRS IDU interviews

NB: Survey items relating to quarter and half grams were first included in 1998

A number of KE reported that the price of heroin was somewhat cheaper in some areas of South-West Sydney, at between \$25 and \$50 per cap, than in the inner city where it was consistently reported to cost approximately \$50 per cap. Prices per gram fell within the range reported by IDU participants. Consistent with IDU reports, most KEs thought the price had remained stable, although there was some suggestion that the price had decreased in some areas of South-West Sydney, and had increased in the Hunter region (however, a gram was reported by this KE to cost \$300, the same as that reported by the participant sample in Sydney).

## 4.2 Availability

Participants were asked if they knew about current heroin availability (whether it was ‘very easy’, ‘easy’, ‘difficult’ or ‘very difficult’) and whether this has changed in the last six months (response options were ‘easier’, ‘stable’, ‘more difficult’ or ‘fluctuates’). Reports of heroin availability were very similar to those reported in 2004, although there was a slight decrease in those reporting that it was ‘easy’ to obtain and a slight increase among those reporting it to be difficult or who did not know. The majority of IDU participants (59% of those who commented, representing 56% of the entire sample) believed that heroin availability had remained stable, although this represented a slight decrease from 2004 (66% of those who commented; 62% of the entire sample; Table 5).

**Table 5: Participants’ reports of heroin availability in the past six months, 2004-2005**

	2004 (N=157)	2005 (N=154)
<b>Current availability</b>		
Did not respond* (%)	6	5
Did respond (%)	94	95
<i>Of those who responded:</i>		
Very Easy (%)	56 (53% of entire sample)	61 (58% of entire sample)
Easy (%)	37 (35% of entire sample)	25 (23% of entire sample)
Difficult (%)	7 (6% of entire sample)	8 (8% of entire sample)
Very Difficult (%)	None	1 (1% of entire sample)
Don’t know*	None	5 (5% of entire sample)
<b>Availability change over the last six months</b>		
Did not respond* (%)	6	5
Did respond (%)	95	95
<i>Of those who responded:</i>		
More difficult (%)	18 (17% of entire sample)	21 (21% of entire sample)
Stable (%)	66 (62% of entire sample)	59 (56% of entire sample)
Easier (%)	10 (9% of entire sample)	12 (12% of entire sample)
Fluctuates (%)	6 (6% of entire sample)	3 (3% of entire sample)
Don’t know^ (%)	1 (1% of entire sample)	5 (5% of entire sample)

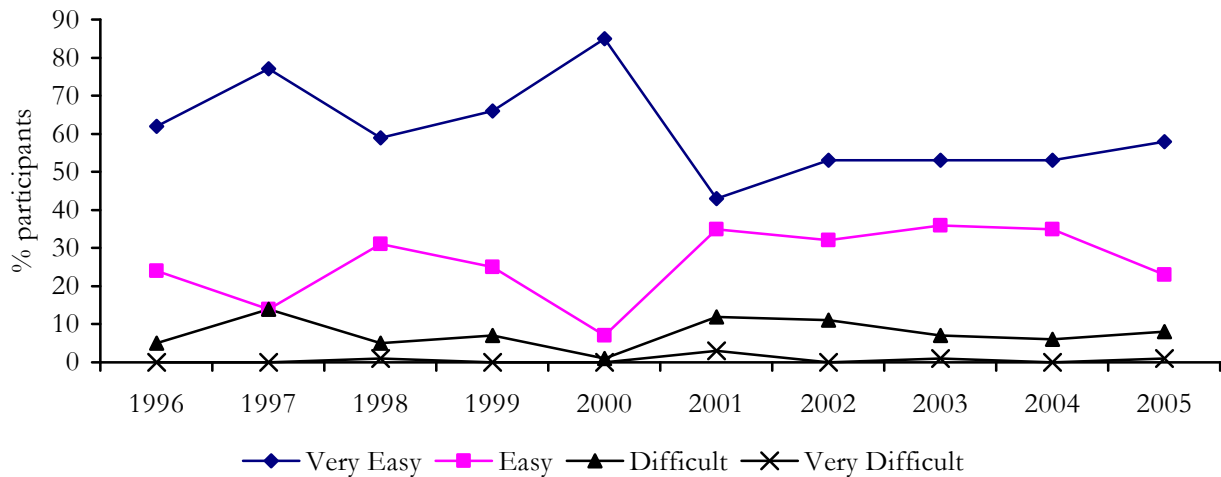
**Source:** IDRS IDU interviews

\* ‘Did not respond’ refers to participants who did not feel confident enough in their knowledge of the heroin market to respond to survey items.

^ ‘Don’t know’ refers to participants who were able to respond to survey items on price and/or purity of heroin but had not had enough contact with users/dealers to respond to items concerning availability.

Figures on current availability have remained relatively stable since 2002 (Figure 6), as have proportions reporting that availability had remained stable over the preceding six months.

**Figure 6: Participant reports of current heroin availability, 1996-2005**

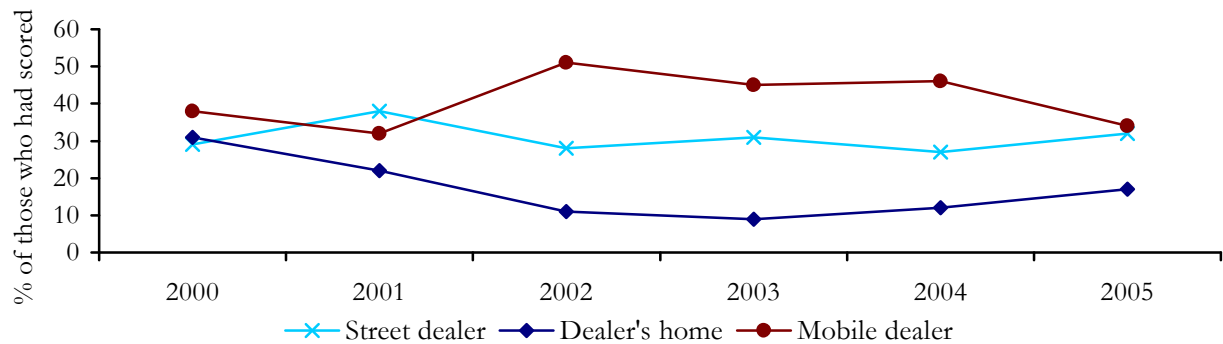


Source: IDRS IDU interviews

Consistent with IDU comments, the vast majority of KE reported that heroin was ‘very easy’ to obtain, with the remainder stating that it was ‘easy’. Availability was reported to have remained stable in most areas, and appeared to have increased in some areas of South-West Sydney.

The majority (88%) of participants had purchased heroin in the last six months, and the following data refer to these participants rather than the entire sample. Methods of purchase were similar to those reported in 2004, with the two main places/methods people used to score being either organised by telephone (mobile dealer; reported by 34% of those who had bought heroin in the last six months), or purchasing on the street (reported by 32% of those who had purchased heroin in the last six months). In 2005 there was a slight decrease in those using a mobile dealer (26% in 2004) and a slight increase in those accessing a street market (27% in 2004). However, these two methods have consistently been reported as the most commonly used sources since 2001 (Figure 7). Other methods reported in 2005 included through a friend (whether purchased or as a gift; 10%; 9% in 2004), home delivery (7%; 5% in 2004) or from a dealer’s home (17%; 12% in 2004). The usual length of time it took participants to score heroin was generally between five and sixty minutes, although estimations ranged from one minute to three hours (median 20 minutes).

**Figure 7: Proportions reporting street dealers, dealer's homes and mobile dealers as main place obtained heroin, among those who had scored, 2000-2005**

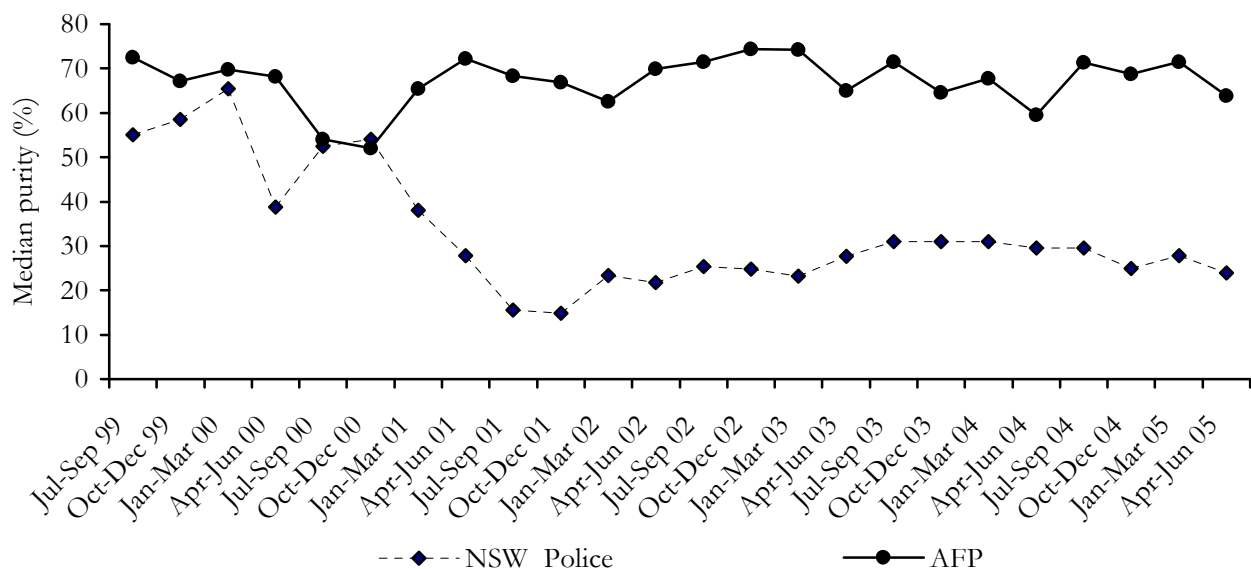


Source: IDRS IDU interviews  
 NB: Data prior to 2000 were not directly comparable

### 4.3 Purity

Figure 8 shows that the analysed median purity of NSW Police heroin seizures remained stable over the past twelve months, and remains substantially lower (at approximately 27%) than levels reported in early 2001. With the exception of the last half of 2000 (when purity dropped to below 60%), the purity of Australian Federal Police (AFP) heroin seizures that were analysed remained relatively stable between 1999 and 2005 at between approximately 60% to 70%. This is consistent with AFP seizures being larger seizures that are detected at the border, at a higher level of distribution than state police seizures, prior to the heroin being 'cut' for lower, street level distribution. Purity of AFP seizures for the past three years however, should be interpreted with caution as it is based on small numbers of seizures (refer Figure 9).

**Figure 8: Purity of heroin seizures analysed in NSW, by quarter, 1999/00-2004/05**

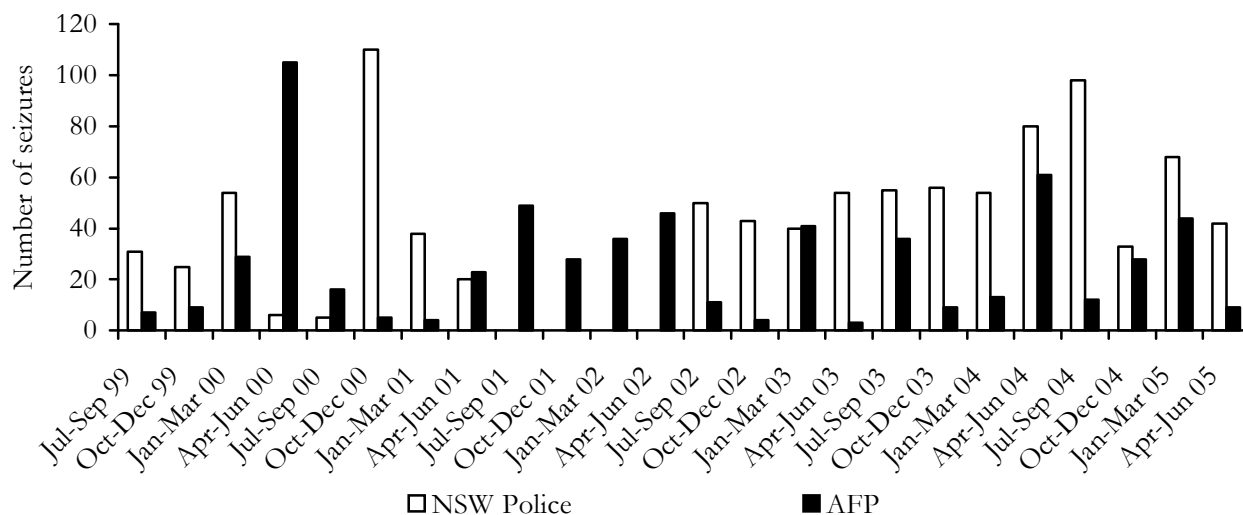


Source: ABCI 2001, 2002; ACC, 2003, 2004, 2005

Figure 9 shows the number of heroin seizures upon which the above purity figures are based. It should be noted that not every seizure is analysed. In addition, the period between the date of seizure by police and the date of receipt at the laboratory can vary greatly, and no adjustment has been made to account for double counting joint operations between the AFP and NSW Police.

In the past three years, the number of seizures analysed by NSW Police varied from 33 to 98 seizures per quarter. The number of seizures analysed by the AFP per quarter have fluctuated over this period, with the lowest number analysed in the second quarter of 2005 (9 seizures) and the highest in the first quarter of 2005 (44 seizures).

**Figure 9: Number of heroin seizures analysed in NSW, by quarter, 1999/00-2004/05**



Source: ABCI 2001, 2002; ACC, 2003, 2004, 2005

NB: NSW Police data for numbers of seizures for 2001/02 were unavailable.

The majority (74%) of IDU participants who commented thought that heroin purity was ‘low’ (47%) or ‘medium’ (33%). Only five percent reported purity was ‘high,’ and 10% thought it fluctuated (Table 6, comparable figures from 2004 also shown). Since commencement of the IDRS in 1996, only small proportions participants have reported purity to be high, instead selecting ‘medium’ or ‘low’ most frequently (Figure 10). Whilst this reflects purity since the heroin shortage in 2001, participants rarely reported purity as high even in the late 1990s. This bias in reporting may be partly related to tolerance.

Participant perceptions of purity change over the last six months were mixed, with the majority reporting that it had either remained stable (31% of those commenting; Table 6) or had decreased (29% of those commenting; Table 6). IDU comments were generally consistent with NSW Police seizure data, and it is likely that these seizures rather than AFP seizures are reaching this group of street level users.

**Table 6: Participants' perceptions of heroin purity in the past six months, 2004-2005**

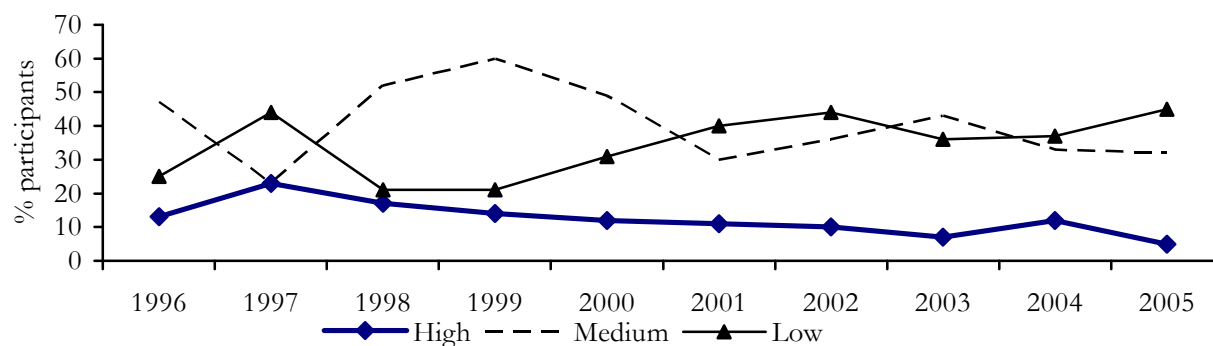
	2004 (N=157)	2005 (N=154)
<b>Current purity</b>		
Did not respond* (%)	6	5
Did respond (%)	94	96
<i>Of those who responded:</i>		
High (%)	12 (12% of entire sample)	5 (5% of entire sample)
Medium (%)	35 (33% of entire sample)	33 (32% of entire sample)
Low (%)	39 (37% of entire sample)	47 (45% of entire sample)
Fluctuates (%)	12 (12% of entire sample)	10 (10% of entire sample)
Don't know^ (%)	2 (2% of entire sample)	5 (5% of entire sample)
<b>Purity change over the last six months</b>		
Did not respond* (%)	6	5
Did respond (%)	94	96
<i>Of those who responded:</i>		
Increasing (%)	10 (10% of entire sample)	15 (14% of entire sample)
Stable (%)	26 (24% of entire sample)	31 (30% of entire sample)
Decreasing (%)	34 (32% of entire sample)	29 (28% of entire sample)
Fluctuating (%)	28 (26% of entire sample)	17 (16% of entire sample)
Don't know^ (%)	3 (3% of entire sample)	8 (8% of entire sample)

Source: IDRS IDU interviews

\* 'Did not respond' refers to participants who did not feel confident enough in their knowledge of the heroin market to respond to survey items

^ 'Don't know' refers to participants who were able to respond to survey items on price and/or availability of cocaine, but had not had enough contact with users/dealers, or had not used a sufficient number of times to feel confident responding to items concerning purity

**Figure 10: Proportion of IDU participants reporting current heroin purity as high, medium or low, 1996-2005**



Source: IDRS IDU interviews



Many KE who commented thought heroin purity fluctuated, while others reported varying perceptions from low to high purity, based on client reports and/or observation. Law enforcement KEs reported that it generally fluctuated between 17-30% purity at street level with a median purity of 23-24%, and that this had been the case since around 2001.

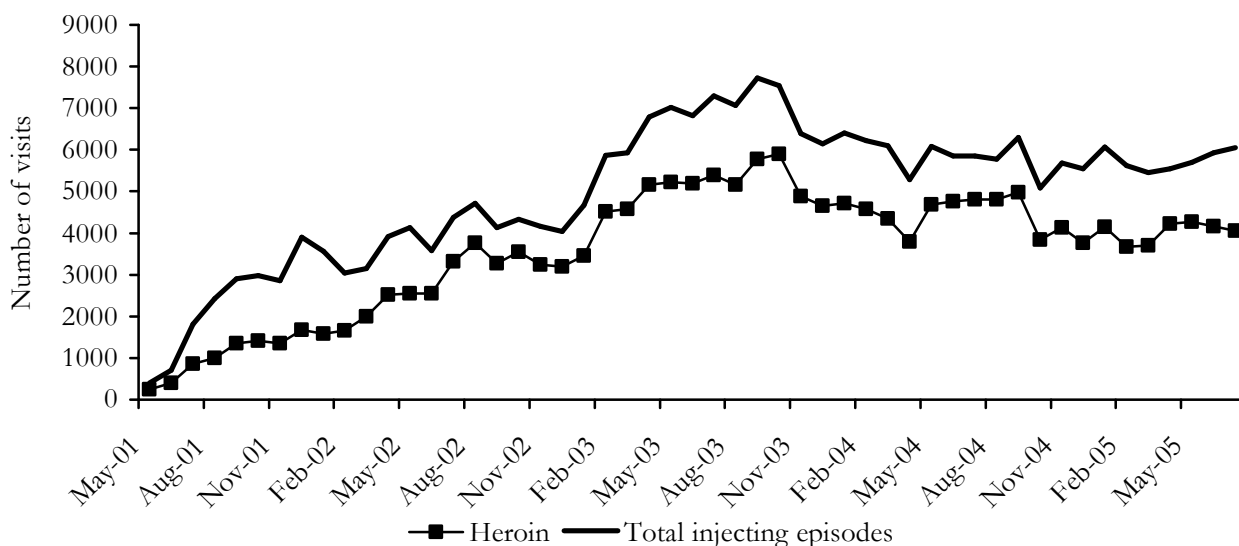
## 4.4 Use

### 4.4.1 Heroin use among IDU participants

Although the majority of participants (88%) had used heroin in the six months preceding interview, this represents a decrease from the 95% who reported use in 2004. Heroin remained the drug of choice for the majority of the sample (Table 2). Although heroin also remained the most commonly nominated drug for 'drug injected last' (64%) and 'drug injected most often' (64%), decreases were observed in 2005 (these figures were both 80% in 2004). There were concomitant increases in these categories for those nominating cocaine (see 'Cocaine' section for further details on cocaine use).

Figure 11 shows the number of attendances to the Sydney MSIC in Kings Cross where heroin was the drug injected (based on client reports). The following caveats need to be considered when interpreting these data. Firstly, the hours of operation changed over the first two years of operation (from four to up to twelve per day) and secondly, the number of individuals attending increased continuously over the first 2 years of operation, as IDU became aware of this new service. However, heroin has remained the drug most commonly injected since the centre opened, with the exception of July 2001-January 2002 where cocaine was equally or more commonly injected. While clients who injected heroin have accounted for the majority of all visits since June 2002, this figure decreased slightly in 2005 to approximately two-thirds of all visits.

**Figure 11: Number of attendances to Sydney MSIC where heroin was injected, and total number of visits, 2001-2005**



Source: Sydney MSIC, Kings Cross

NB: Total visits refers to the total number of valid visits at which a response was given

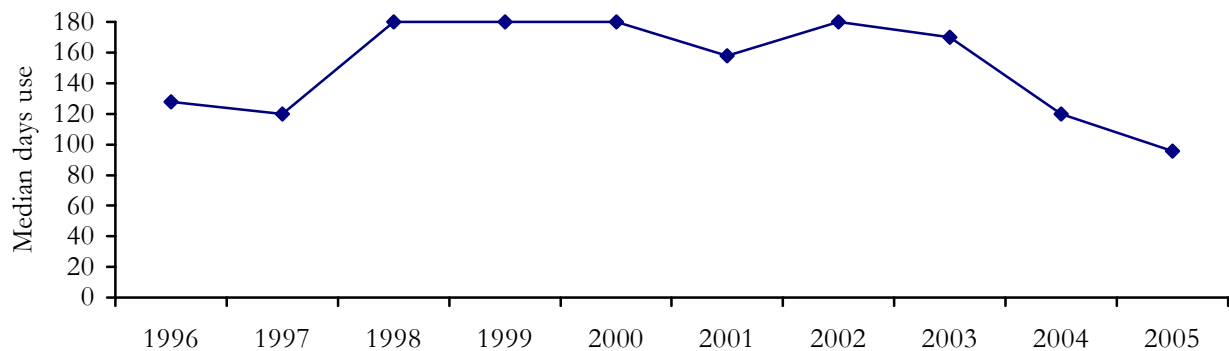
The majority of KE reported that there had been no change in patterns of heroin use, although one KE located south of Sydney had observed increased use due to increased availability in the area, and

another KE had observed a decrease in frequency of use attributed to the service attracting a younger clientele with less established patterns of use. The majority of KE believed that IDU were using heroin between one and four times per day, with those engaged in treatment using less often, e.g. weekly, fortnightly or less. One KE reported that in their area they had observed that a number of IDU decreased their heroin use due to low purity, and had started using cocaine, while others were quitting, and some were going to greater lengths to obtain reasonable quality heroin. Some other KE also noted that people who previously used heroin were currently using cocaine.

#### 4.4.2 Current patterns of heroin use

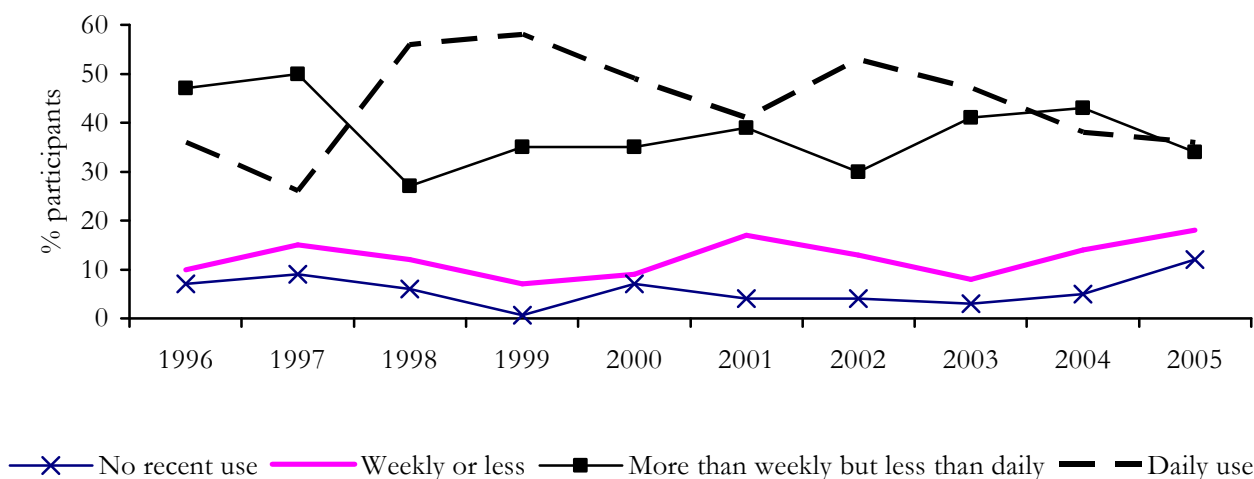
The median number of days of heroin use in the six months preceding interview has decreased dramatically over the past three years from 170 days (i.e. almost daily use) in 2003 to 120 days in 2004 (approximately five days per week), and again in 2005 to 96 days (i.e. use on approximately every second day). However, median days use differed according to geographical area, with a decrease observed in South-West Sydney (from 96 days in 2004 to 67 days in 2005) and an increase in central Sydney (from 160 days to 180 days). Overall, 2005 saw the lowest median days of use since 1996 (Figure 12) and the lowest proportion of daily users since 1998 (Figure 13). Consistent with the decrease in daily users, proportions of participants reporting less frequent use (use averaging weekly or less, or not at all in the past six months) has gradually increased since 2001 and in 2005 was at the highest level since the IDRS commenced in 1996. Similarly, a slightly lower proportion (48%) of IDU reported heroin use on the day prior to interview compared with 2004 (61%). These decreases have been observed alongside an increase in the proportions of participants reporting current methadone treatment (see Section 4.5.2, under ‘Methadone treatment’). A larger proportion of participants in South-West Sydney reported current methadone treatment than in inner Sydney (58% and 44%, respectively).

**Figure 12: Median days heroin use in the past six months, 1996-2005**



Source: IDRS IDU interviews

**Figure 13: Patterns of heroin use, 1996-2005**



Source: IDRS IDU interviews

Use of both ‘rock’ and ‘powder’ forms of heroin were commonly reported, with 87% of users reporting use of powder and 94% reporting use of powder in the six months preceding interview. Over half of the sample (52%) stated that heroin rock was the form they had used most often during this period, with 42% reporting powder, and 7% of participants who were unable to nominate a form that they had used most (usually because they had used rock and powder equally as often). As in previous years, several participants reported anecdotally that rock and powder forms often came together in the same deal.

Of the KE who commented, the majority reported that both rock and powder forms were used, and similar proportions reported mainly powder or mainly rock. Some KE reported that both forms sometimes came within the same deal. There were no reports of homebake use.

KE reports were in agreement with IDU regarding route of administration of heroin. The vast majority reported that the main route of administration for heroin was injection, and that smoking was rarely used as a route of administration by the sample (this is consistent with 7% of IDU reporting that they smoked heroin in the preceding six months, as compared with 88% who had injected it; Table 3). In previous years, KE have noted that the relative proportions of those who inject and those who smoke heroin may differ by cultural group, e.g. in Asian cultures in which ‘chasing the dragon’ (smoking/inhaling) is a more traditional route of administration.

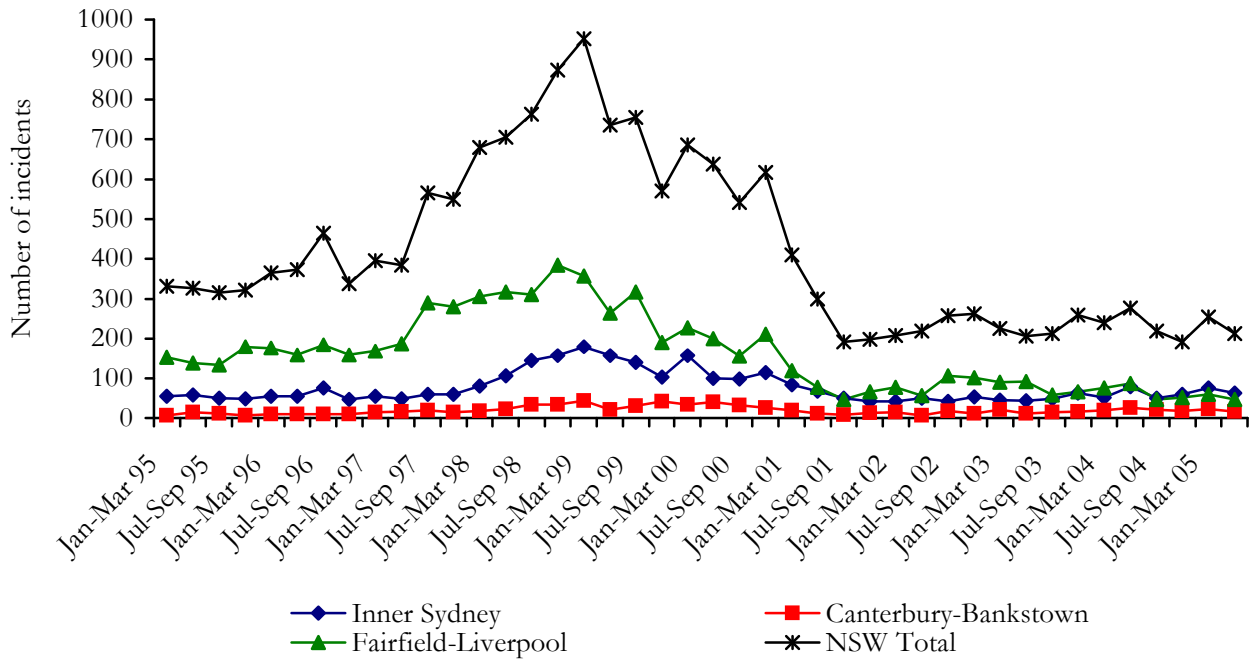
## 4.5 Heroin related harms

### 4.5.1 Law enforcement

Figure 14 shows the number of police recorded criminal incidents for narcotic (heroin, methadone and opium) possession/use by quarter in the Inner Sydney area, the Fairfield-Liverpool area, the Canterbury-Bankstown area and NSW as a whole from January 1995<sup>4</sup>. It is evident that the numbers of incidents detected declined throughout 2001 and have subsequently remained lower than levels prior to the heroin shortage. Since late 2003 to early 2004, similar numbers of incidents have been recorded in the Fairfield-Liverpool and Inner Sydney areas, with fewer incidents in the Canterbury-Bankstown area.

<sup>4</sup> The regions Inner Sydney, Fairfield-Liverpool and Canterbury-Bankstown refer to ABS Statistical Subdivisions.

**Figure 14: Recorded incidents of narcotic possession/use by geographic area per quarter, January 1995-June 2005**



Source: NSW Bureau of Crime Statistics and Research

NB: Changes in the number of recorded incidents may be indicative of changes in police activity, or an increase in possession/use, or a reflection of both.

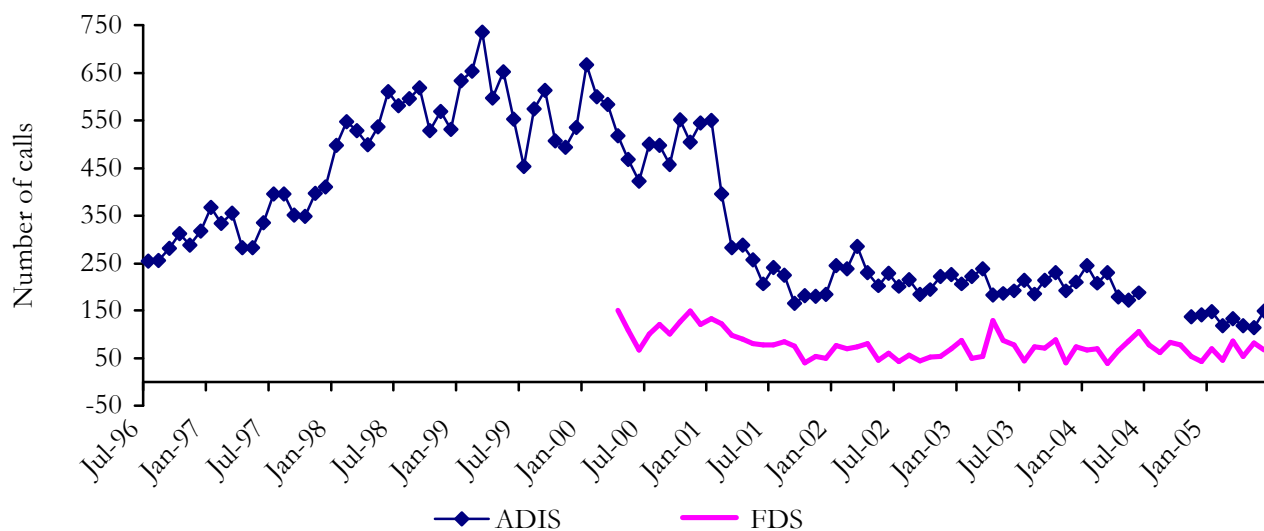
#### 4.5.2 Health

##### *Calls to telephone helplines*

Figure 15 shows the number of calls to the Alcohol and Drug Information Service (ADIS) where heroin was mentioned as any drug of concern, and to the Family Drug Support (FDS) line regarding heroin as the primary drug of concern. The number of enquiries to FDS regarding heroin were much lower than numbers received at ADIS, reflecting the different sizes of these services. FDS is a family support line and callers are often younger than callers utilising the ADIS service.

The number of calls to ADIS regarding heroin appear to have decreased steadily over the last eighteen months and in May 2005 the lowest number of calls where heroin was mentioned as a drug of concern was reported (114 calls). During 2001, calls almost halved from 517 in January 2001 to 255 in March 2001, and a decrease in the number of calls to FDS at this time was also observed. Calls to FDS regarding heroin remained relatively stable in the last four years with the exceptions of a sharp increase in the month of April 2003 (128 calls) and a smaller increase in June 04 (106 calls).

**Figure 15: Number of enquiries to ADIS and FDS regarding heroin, 1996-2005**

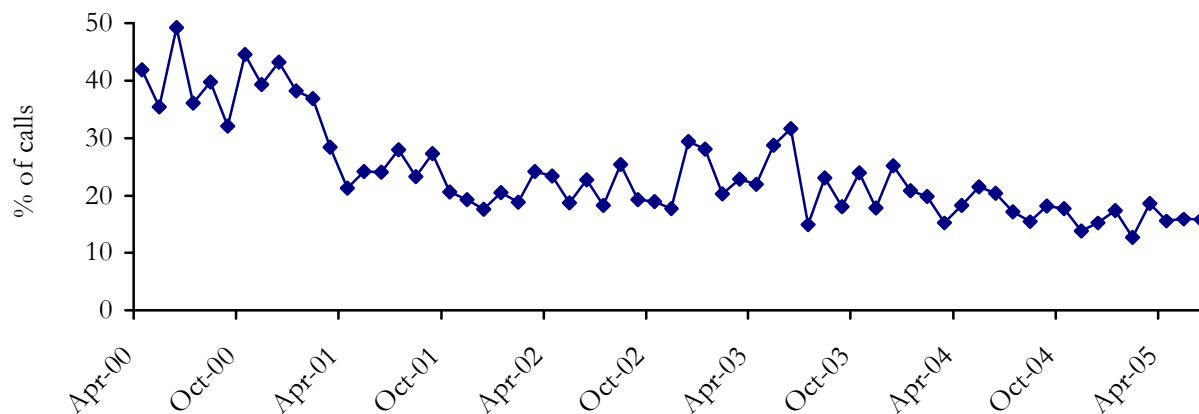


**Source:** ADIS and FDS

NB: FDS data were only available on a monthly basis from April 2000 and refer to calls where any mention of heroin was made. ADIS data refer to the number of calls where heroin was mentioned as any drug of concern. ADIS data were unavailable for the period July to October 2004.

The proportion of calls made to FDS regarding heroin has remained fairly stable over the past two years (Figure 16). This proportion remains substantially lower than those reported in the period 1999-2001.

**Figure 16: Proportion of calls to FDS regarding heroin, 2000-2005**

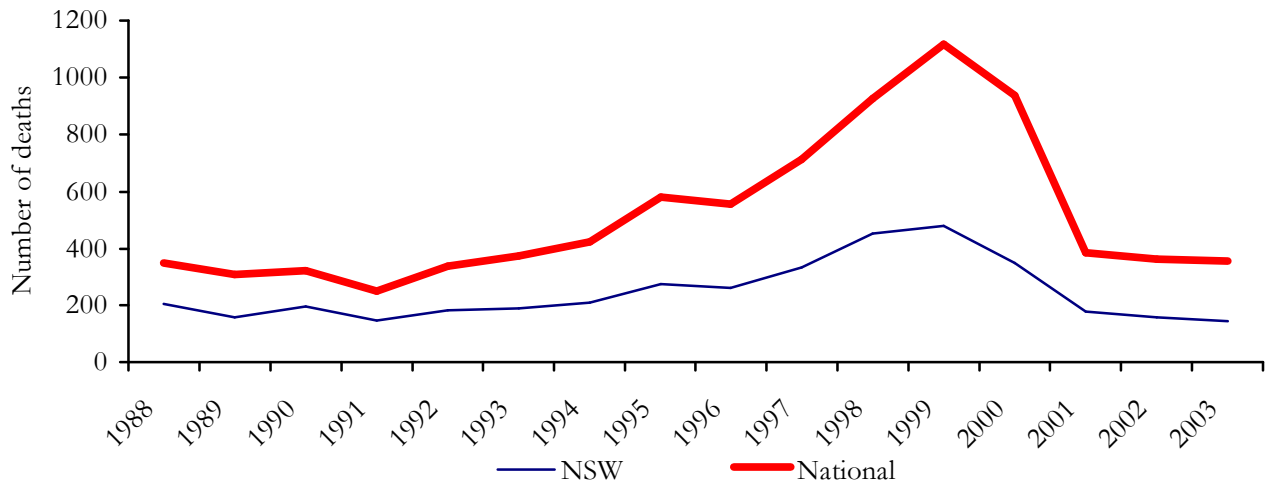


**Source:** FDS

*Overdose*

Figure 17 shows Australian Bureau of Statistics (ABS) data on accidental opioid deaths among those aged 15-54 in Australia and NSW for the period 1988-2003 (Degenhardt et al., 2004a). Data from 2004 onwards were unavailable at the time of publication. Deaths in NSW have remained relatively stable since 2001, and have accounted for just under half (between 40-46%) of the national total since this time. As in previous years, males accounted for the majority (71%) of the 2003 deaths in NSW (this figure was 82% in 2002). The number of deaths remained lower than those recorded in the period 1996-2001, in which they peaked in 1999 at 481.

**Figure 17: Number of accidental deaths due to opioids among those aged 15-54 years in NSW and Australia, 1988-2003**



**Source:** Australian Bureau of Statistics mortality database

NSW ambulance callouts to overdoses have also remained relatively stable at approximately 100 to 200 calls per month since July 2001 (Figure 18). The number of calls decreased dramatically in late 2000, and has not returned to levels recorded during the period 1998 to 2000, during which they peaked at 545 in January 1999.

**Figure 18: Number of ambulance callouts to overdoses 1995-2005**

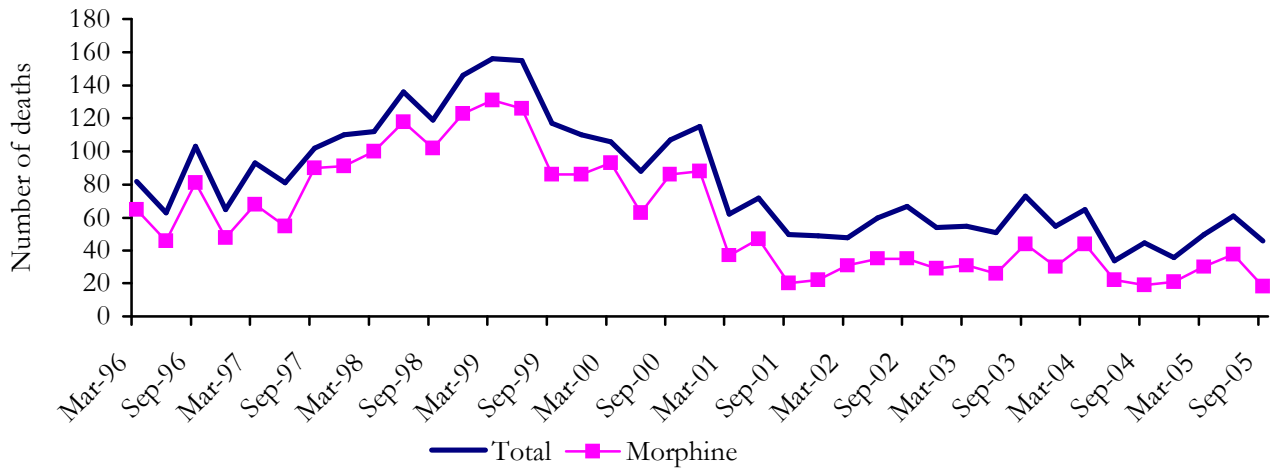


**Source:** Ambulance Service of NSW case sheet database

A similar pattern was observed in the number of deaths of suspected drug users (as determined by police or pathologists) in which morphine was detected, with figures remaining relatively stable in the past four years, following a peak in the late 1990s and a decrease during 2000-2001 (Figure 19). Morphine related deaths made up over two-thirds of deaths in which drugs were detected prior to 2001 and subsequently declined to account for approximately half of all suspected drug-related deaths, with the exceptions of the second quarter (April-June; 22 of all 34 deaths) of 2004 and the third quarter of 2005 (July-September; 18 of all 46 deaths). As noted by other data sources, morphine related deaths

decreased dramatically in early 2001. Figures have remained much lower since 2001 than numbers recorded in earlier years.

**Figure 19: Number of suspected drug related deaths in which morphine was detected post mortem and total number of drug related deaths, by quarter, 1996-2005**

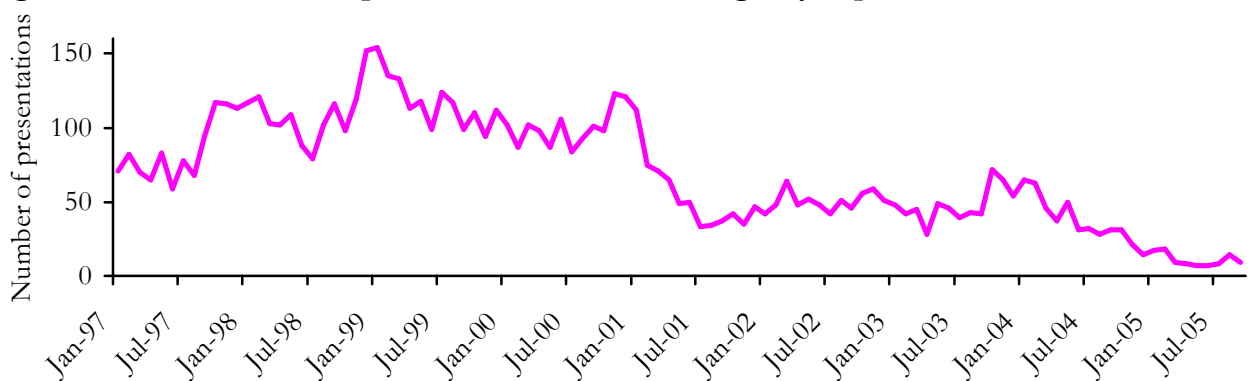


**Source:** Forensic Toxicology Laboratory database, Division of Analytical Laboratories

NB: These numbers relate to deaths in which morphine (a metabolite of heroin) was detected, however, there may have also been other drugs present.

Following a decrease in heroin overdose presentations in 2001, numbers remained lower at approximately 30-70 per month with a slight peak of 72 presentations in October 2003 (Figure 20). This increase represents the highest number of presentations since early 2001, with a subsequent decrease to the lowest level reported since 1997.

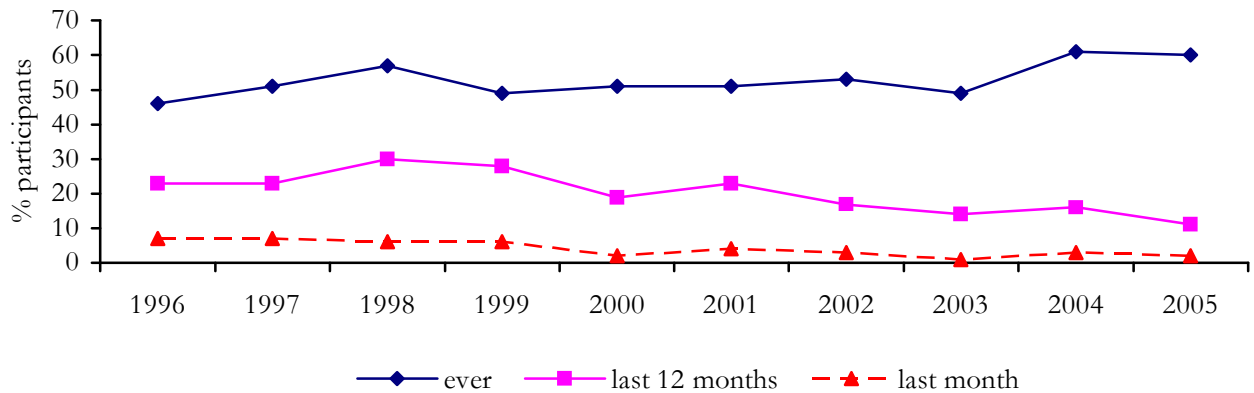
**Figure 20: Heroin overdose presentations to NSW emergency departments, 1997-2005**



**Source:** Emergency Department Information System, NSW Department of Health

The proportion of IDU participants who reported overdosing on heroin in the last month remained low at 2%, and a decrease was seen amongst those reporting overdose in the last twelve months (Figure 21). Other research has also shown that when people overdose on heroin that they are more likely to be attributed to a range of depressant drugs in combination with heroin, for example benzodiazepines, alcohol and other opioids (Darke et al., 2000, Gerostamoulos et al., 2001).

**Figure 21: Proportion of IDU participants who had ever overdosed, overdosed in the past 12 months, and the past month, 1996-2005**



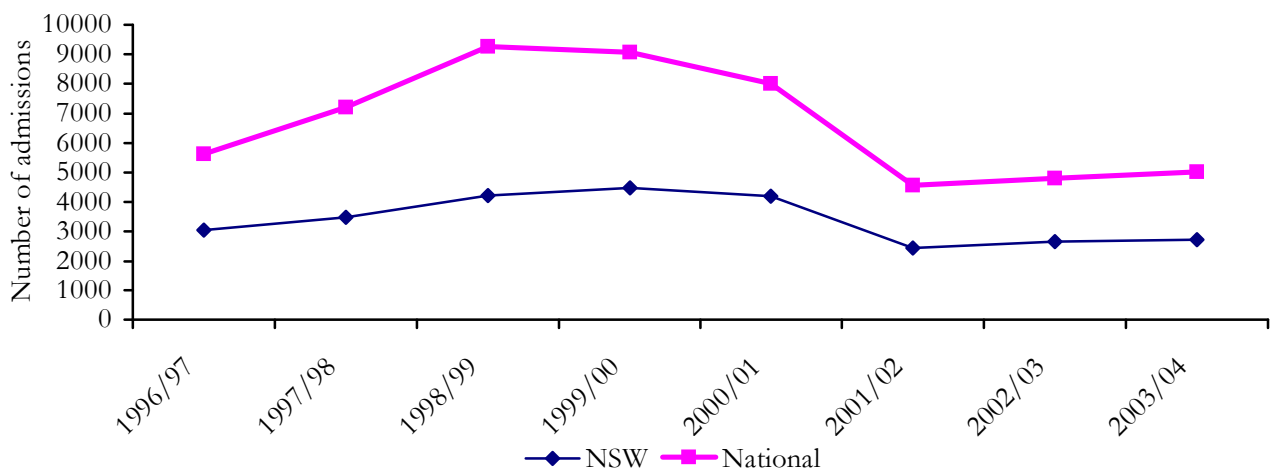
Source: IDRS IDU interviews

NB: Data for overdose in the last month were not collected in 1996

### Hospital Admissions

The number of hospital separations among persons aged 15-54 years in which opioids were coded as the principal diagnosis, are shown in Figure 22 below. Diagnoses for the period 1998 to 2004 were coded using ICD-10-AM codes (First edition for 1998/99 and 1999/00, Second edition for 2000/01 and 2001/02, and Third edition for 2002/03 and 2003/04), and prior to this, ICD-9-CM was used to code hospital separations. A principal diagnosis is accorded where opioids are established (after study) to be chiefly responsible for occasioning the patient's episode of care. Similar to IDU data and other indicators, figures have increased slightly over the past few years but have remained lower than those reported in the late 1990s.

**Figure 22: Number of inpatient hospital admissions for persons aged 15-54 where opioids were the principal diagnosis per million people, NSW and nationally, 1996/97-2003/04**



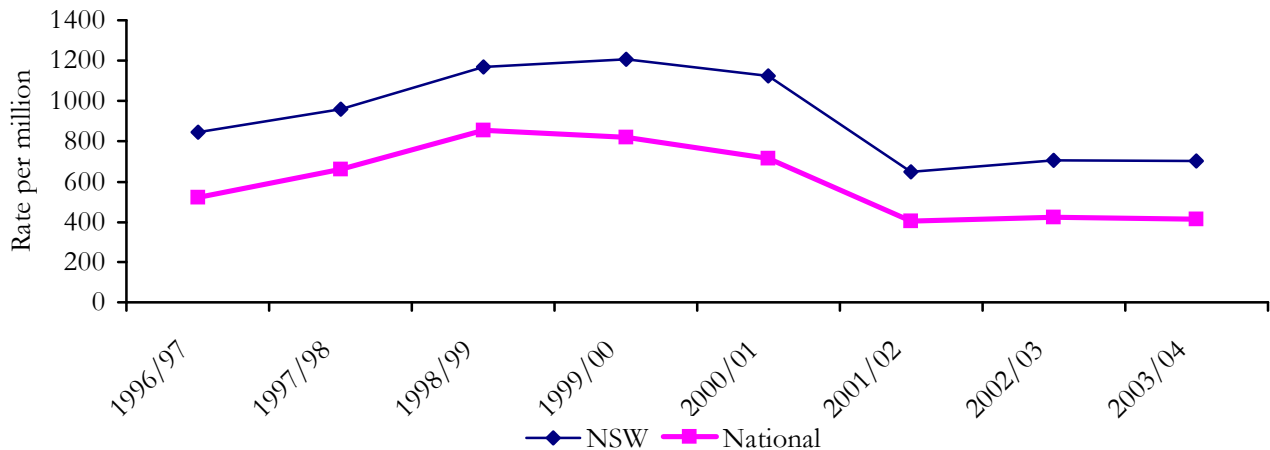
Source: National Hospital Morbidity Database; Roxburgh & Degenhardt (in press)

Figure 23 shows the rates of inpatient hospital admissions where opioids were the principal diagnosis per million people aged 15-54 years. Rates have remained relatively stable over the past twelve months,



following a slight increase between 2001/02 and 2003/04 in NSW, where figures have consistently remained higher than the national figures. The rates of admissions in both NSW and nationally remain substantially lower than in previous years. NSW continued to account for approximately half of all inpatient hospital admissions in Australia where opioids were the principal diagnosis.

**Figure 23: Rate of inpatient hospital admissions where opioids were the principal diagnosis per million people aged 15-54 years, NSW and nationally, 1996/97-2003/04**

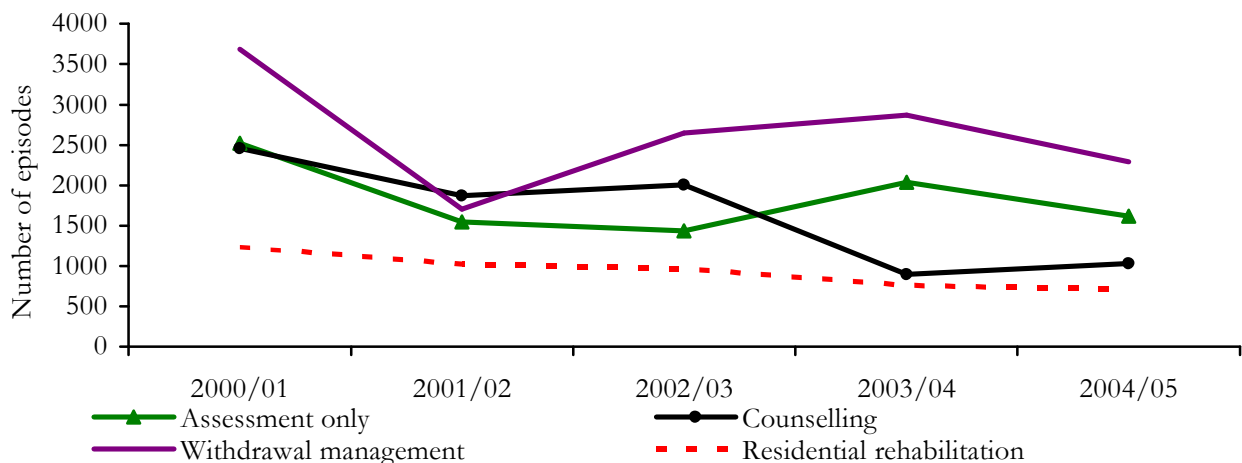


**Source:** National Hospital Morbidity Database; Roxburgh & Degenhardt (in press)

### Treatment

Figure 24 shows the number of closed treatment episodes based on the date of commencement by treatment type where the principal drug of concern was opioids. Numbers entering for assessment only and withdrawal management have fluctuated over the past few years, with a decrease during 2000/01-2001/02, a subsequent increase over the following years and another notable decrease in over the last year. Numbers entering residential rehabilitation have also gradually declined from 1237 in 2000/01 to 700 in 2004/05. Numbers entering counselling continued to fluctuate, and have remained lower over the past two years than previously.

**Figure 24: Number of heroin treatment episodes by treatment type, NSW 2000/01-2004/05**

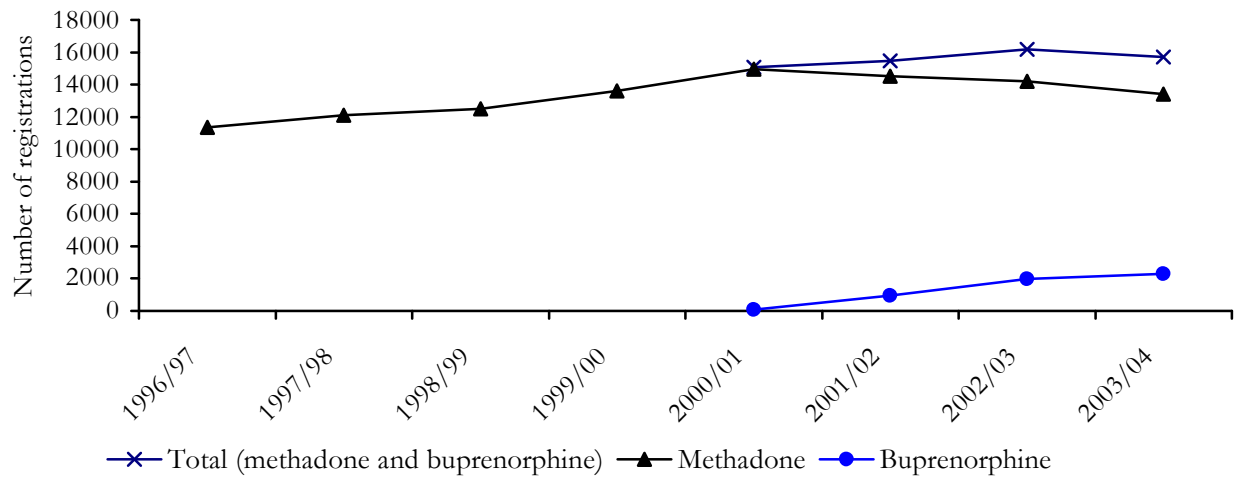


**Source:** NSW Minimum Data Set (NSW MDS) for Drug and Alcohol Treatment Services (DATS), NSW Department of Health.

NB: The NSW MDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period.

Figure 25 shows that the number of people receiving opioid pharmacotherapy increased from 11,365 in 1996/97 to 16,165 in 2002/03 and then decreased slightly to 15,719 in 2003/04. The vast majority of opioid pharmacotherapy clients received methadone, although numbers on buprenorphine have increased steadily since its introduction in 2000. Data for 2004/05 were unavailable at the time of publication.

**Figure 25: Number of registrations for opioid pharmacotherapy, NSW 1996/97-2003/04**



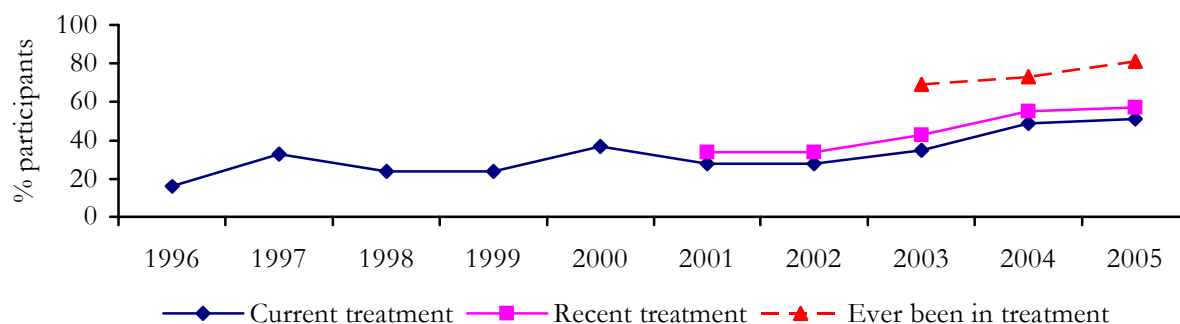
**Source:** Pharmaceutical Services Branch, NSW Department of Health  
 NB: Buprenorphine pharmacotherapy was introduced in NSW in 2000.

#### *Methadone treatment*

A distinction was made between the use of prescribed (licit; where the prescription was in the participant's name) and non-prescribed (illicit; where the prescription was in someone else's name) methadone and physeptone. This section will discuss the use of prescribed methadone and physeptone only. The use of illicit (or non-prescribed) methadone and physeptone will be discussed under Section 8: Opioids.

Fifty-five percent of IDU participants had used methadone that had been prescribed for them in the preceding six months (56% reported any use of licit methadone during this period in 2004), one-fifth of whom (18%) also reported illicit methadone use. Seven percent of respondents reported injecting prescribed methadone in the six months preceding interview. Three percent of IDU participants reported using prescribed physeptone tablets, and no participants reported injecting these in the preceding six months. There has been a steady increase in the proportion of IDU reporting current engagement in a methadone maintenance program, from 16% in 1996 to 51% in 2005 (Figure 26). Over half of IDU (57%) reported receiving methadone treatment in the preceding six months (compared to 34% in 2001). As in previous years, methadone syrup was the predominant form used (as opposed to physeptone). A larger proportion of participants in South-West Sydney reported current methadone treatment than those in inner Sydney (58% and 44%, respectively).

**Figure 26: Proportion of participants reporting methadone treatment, 1996-2005**



Source: IDRS IDU interviews

Amongst those who had been on a methadone program in the six months preceding interview, the median number of days of use in the preceding six months was 180 days (the same as 2004; compared with 162 days in 2003). The median number of days of prescribed physiotherapy use was 7.5 days, representing a slight increase from 4 days in 2004; however, as in previous years, these figures are based on small numbers. Seventy-five percent of methadone users reported daily use, remaining stable compared to 2004 (71%). Similarly, the proportion of IDU reporting methadone use on the day prior to interview remained stable at 41%, as compared with 47% in 2004.

Overall, IDU participants indicated little change from last year in terms of either the prevalence or the frequency of methadone use, consistent with increased numbers reporting engagement in a methadone treatment program first noted in 2004. However, it should be noted that the IDRS deliberately recruits a 'sentinel' population of IDU who are current and active participants in illicit drug markets. As a consequence, those in the IDU samples who report being in treatment may not be representative of treatment populations more generally, particularly those who withdraw from injecting drug use once engaged in treatment. Similarly, as regular injecting drug use is a requirement for participation in the IDU survey, participants who are also engaged in methadone treatment – of whom there is a substantial proportion in the 2005 IDRS – may not be representative of methadone clients generally.

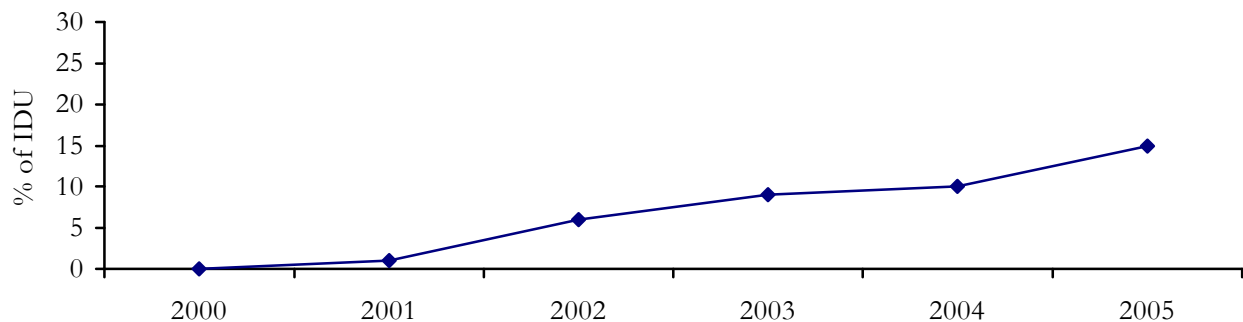
For information on diverted (illicit) methadone, please see Section 8: Opioids.

#### *Buprenorphine treatment*

As with methadone, a distinction was made between the use of prescribed and non-prescribed buprenorphine. Use of illicit (or non-prescribed) buprenorphine is discussed under Section 8: Opioids. Forty-four percent of IDU reported ever having been prescribed buprenorphine (compared with 30% in 2003 and 36% in 2004), and 25% reported using it in the preceding six months (this figure was 17% in 2004). Fifteen percent stated they were currently participating in buprenorphine treatment (this figure was 10% in 2004; Figure 27). Among those who used licit buprenorphine, the median number of days of use in the last six months was 125, representing an increase from 90 days in 2004 and 60 days in 2003. Among those who had used it, 47% reported that they had done so daily (this represents 12% of the entire sample; an increase from 4% in 2004). Buprenorphine can be dosed daily or every two days, however, the majority of participants were dosed daily and so the median days in treatment was also 135 days. Therefore, these data suggest that both the prevalence of participation in buprenorphine

treatment and frequency of buprenorphine use have increased. Prevalence of buprenorphine use has also increased state-wide (Figure 25).

**Figure 27: Proportion of participants reporting current buprenorphine treatment, 2000-2005**



Source: IDRS IDU interviews

For information on diverted buprenorphine please see Section 8: Opioids.

#### **4.6 Trends in heroin use**

In 2005, a minority of participants (n=37; 24% of the entire sample) commented that they had seen changes in the number or 'type' of people (open to their interpretation) using heroin. As in previous years, comments on general trends in heroin use were typically that younger people were using heroin. However, this was not completely consistent, with six participants stating that they thought that there were fewer people using heroin. Consistent with previous years, a number of IDU also commented that there appeared to be a broader range of people (e.g. people from a range of ethnic backgrounds or of different age groups) using heroin.

Again, as in previous years, a minority of IDU participants (16%) noted that there had been a change in the frequency of heroin use among those other than themselves. As in 2004, this was most commonly attributed to low purity. A number of respondents noted that they had seen a decrease in heroin use because cocaine and/or amphetamines were of better quality, or because they perceived that greater numbers of people had commenced methadone treatment. The remainder (84%) of the sample did not comment, indicating that they had not noticed any changes in frequency of use.

## 4.7 Summary of heroin trends

- The price of a cap and of a gram of heroin remained stable in 2005, and remains substantially higher than prices reported prior to the heroin shortage in 2001. There was some indication of a decrease in price in the South-West Sydney area.
- IDU reports of heroin availability suggest that it has remained relatively stable and has not returned to levels recorded prior to 2001.
- The purity of AFP heroin seizures remained relatively stable over the past twelve months at approximately 60% to 70%. The purity of NSW Police seizures also remained stable, although at a lower level (approximately 27%).
- The majority of IDU participants thought heroin was of low or medium purity. Purity was generally thought to be stable or decreasing.
- Frequency of heroin use has continued to decrease overall, although this was predominantly in South-West Sydney, with an increase in the median days used reported in central Sydney.
- Indicator data on heroin use and related harms remained stable for the past twelve months, and remained substantially lower than figures recorded prior to 2001.
- KE reports suggested that there had been some changes in the heroin market, for example a decrease in price, and in some areas a switch to cocaine use had been made by some users. With the exception of these changes, overall, the heroin market appeared to have remained relatively stable since 2004.

## 5.0 METHAMPHETAMINE

In response to the increasing diversification of the methamphetamine markets in Australia identified by the 2001 IDRS (Topp et al., 2002), data are collected for three different forms of methamphetamine: methamphetamine powder (referred to here as ‘speed’ or ‘speed powder’); methamphetamine base (‘base’), and crystal methamphetamine (‘ice’). Speed is also a generic term for methamphetamine; however, here it refers only to the powder form. It is typically a fine-grained powder, generally white or off-white in colour, but may range from white through to beige or pink due to differences in the chemicals used to produce it. Base (which can also be known as ‘pure’, ‘wax’ or ‘point’) is the paste methamphetamine that is ‘moist’, ‘oily’ or ‘waxy’ and is often brownish in colour. It can be difficult to dissolve for injection due to its oily consistency. Ice comes in crystalline form, in either translucent or white (sometimes with a pink, green or blue hue) crystals that vary in size. A fourth form, liquid amphetamine or ‘oxblood’, has also been identified, and is typically red/brown in colour. However, as it is used infrequently, IDU are not surveyed regarding its price, purity or availability. Previous research indicated that participants are able to differentiate between these forms when surveyed, and clarification is made with participants that they and the interviewer are referring to the same forms of methamphetamine.

*Photographs most commonly identified by IDU participants as being of speed powder, base and ice, NSW*

*Speed powder*



*Base*



*Ice*



NB: For further information specific to the Sydney methamphetamine market, including supply, use patterns and harms, see also McKetin et al., (2005a)

Participants were asked if they were able to comment on the price, purity and/or availability of speed powder, base and/or ice. In 2005 46% of the IDU sample felt confident to answer at least some of the survey items regarding speed powder. Just over half of the sample (56%) commented on base price, purity and/or availability, and 55% commented on ice. The remainder did not feel confident to answer any questions on one or more of these drug forms, and this is likely to reflect a proportion of users who do not use or come into contact with users or dealers regularly enough to be able to comment. The proportions of participants who have been able to comment on price, purity and/or availability of both base and ice have increased since 2002 (when 16% and 17% responded, respectively) to 44% (base) and 45% (ice) in 2005, reflecting a greater exposure to the drug market among the sample.

Eight KE commented on methamphetamine market indicators (price, purity and/or availability) and/or patterns of use among users. As terms used by users such as ‘speed’ and ‘goey’ may often be used as a generic term for methamphetamine, some KE provided information about methamphetamine in general, without making a distinction between different forms. Liquid amphetamine use was reported to be rare or unheard of in the six months preceding interview.

## 5.1 Price

### *Speed powder*

As with previous years, and other drug types, smaller amounts of speed (in this case, points and halfweights) were the most popular. There was an increase in the proportions reporting purchase of points, halfweights, grams and eightballs (despite little change in use patterns) compared to 2004. As shown in Table 7, price ranges were extremely wide. In most cases, this is likely to be a reflection of purity/availability within that particular person's network and various other circumstances which may influence the cost of a particular deal.

**Table 7: Price of most recent methamphetamine purchases by IDU participants, 2005**

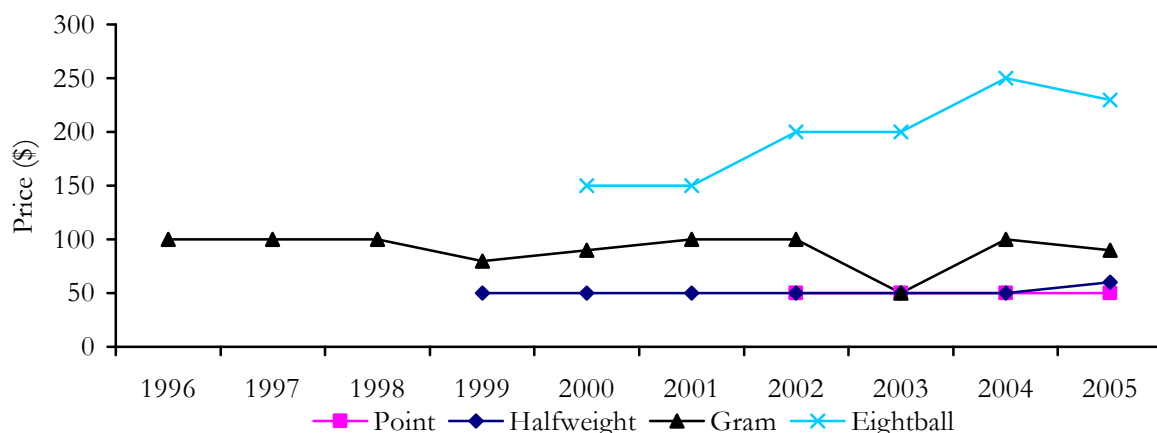
Amount	Median price* \$	Range	Number of purchasers*
<i>Speed powder</i>			
Point (0.1 gram)	50 (50)	\$10-\$50	29 (13)
'Halfweight' (0.5 grams)	60 (50)	\$20-\$250	20 (10)
Gram	90 (100)	\$50-\$400	10 (3)
'Eightball' (3.5 grams)	250 (230)	\$70-\$770	9 (6)
<i>Base</i>			
Point	50 (50)	\$25-\$70	36 (22)
'Halfweight' (0.5 grams)	150 (150)	\$70-\$190	5 (11)
Gram	160 (200)	\$50-\$300	8 (5)
'Eightball' (3.5 grams)	350 (425)	\$180-\$650	5 (4)
<i>Ice</i>			
Point (0.1 gram)	50 (50)	\$30-\$70	37 (28)
'Halfweight' (0.5 grams)	250 (150)	\$120-\$250	7 (13)
Gram	350 (280)	\$150-\$550	10 (9)

Source: IDRS IDU interviews

\* 2004 data are presented in brackets

The median price per gram of speed powder has remained relatively stable since 1996 at approximately \$90-\$100, with small fluctuations in 1999 and 2003. The median price per point has remained the same since data were first collected on this purchase amount in 2002 (\$50). Interestingly, in previous years the price per halfweight was also \$50, the same price as a point, and remained stable from 1999 (when this amount was first recorded) until 2005, when it increased slightly to a median of \$60 (Figure 28).

**Figure 28: Median prices of speed powder estimated from IDU purchases, 1996-2005**



Source: IDRS IDU interviews

As shown in Table 7 and Figure 28 above, prices have generally remained fairly stable in 2005. Participants were also asked if the price of speed powder had changed in the last six months, and consistent with this, 77% of those who commented (42% of all participants) reported price stability over the last six months. Ten percent of those who commented (5% of the entire sample) thought that the price had increased, 7% didn't know, 5% thought that prices had decreased, and 1% thought it had fluctuated. A further point of note is that just under half of all participants (46%) did not feel confident to answer any questions on speed powder, reflecting a somewhat smaller drug market for this drug among participants of the NSW IDRS as compared with heroin.

Consistent with IDU participant reports, KE reports suggested that the price for a gram of speed powder could range from between \$50-\$200, and that this had remained stable over the preceding six months.

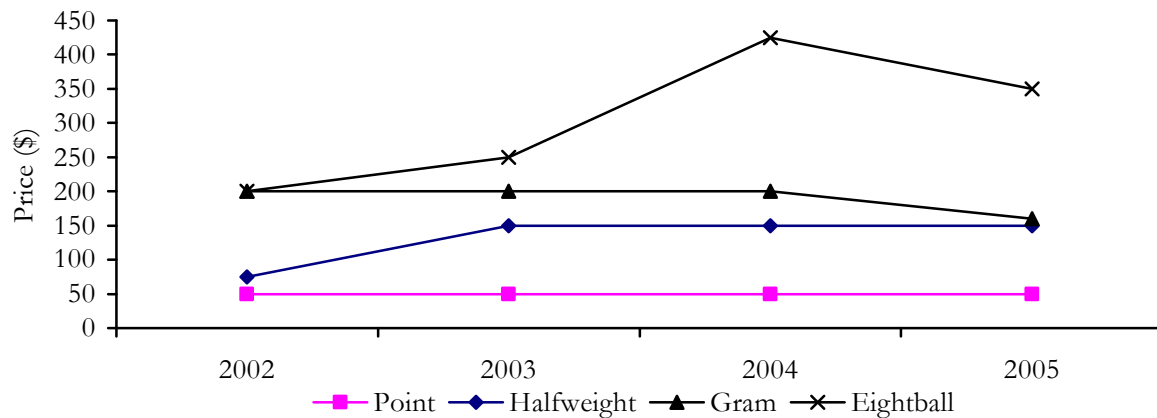
#### Base

The most popular purchase amount for base, as with all other forms of methamphetamine, was a point, the smallest reported purchase amount (Table 7). This has been a consistent finding over the preceding years of the IDRS in NSW. Thirty-six participants reported buying base in points in the preceding six months, making it the most popular purchase amount. Fewer participants reported buying larger, more expensive amounts such as grams, eightballs and halfweights.

The median price for points and halfweights of base remained the same as prices reported in 2003 and 2004 (\$50 and \$150, respectively). Decreases in price were observed for grams and eightballs, although it should be noted that prices were based on small numbers (less than ten responses), and so should be interpreted with caution, particularly as the price ranges were fairly wide. Overall, prices have remained fairly stable since 2002, when items regarding base methamphetamine were first included in the survey (Figure 29).



**Figure 29: Median prices of base estimated from IDU purchases, 2002-2005**



Source: IDRS IDU interviews

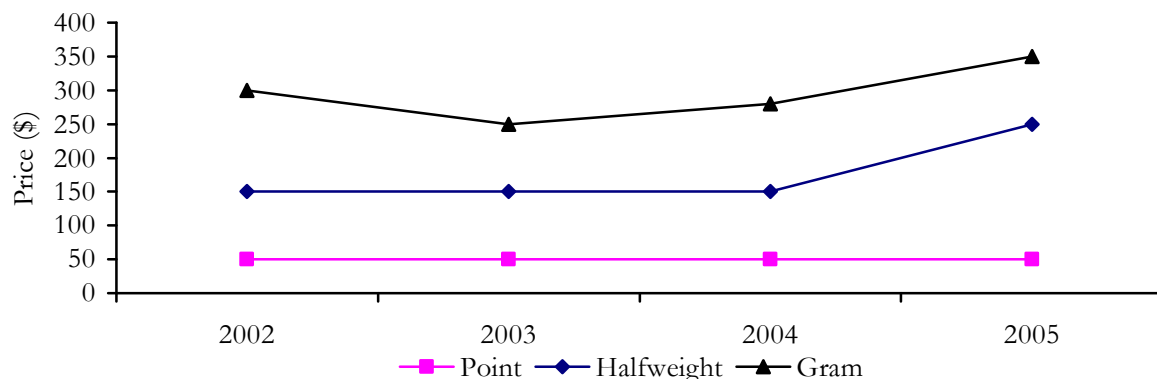
Participants who commented on base generally thought that the price of base had remained stable over the preceding six months (72%; representing 33% of the entire sample). Thirteen percent stated that it had increased (representing 6% of the entire sample) and 2% (less than 1% of the entire sample) thought that it had fluctuated. Compared to 2004, fewer participants reported a decrease in price (from 5% in 2004 to none in 2005) and a larger proportion of participants stated that they did not know (from 5% in 2004 to 11% in 2005). Overall, this suggests little change from 2004.

KE reports suggested that the price for a point of base was between \$20 and \$50, a gram cost approximately \$100-\$150 and an eightball cost approximately \$450-\$600. Prices were reported to have remained stable over the preceding six months.

*Ice*

Again, as with speed and base, the most commonly purchased amounts of ice were points (37 purchases) and halfweights (7 purchases, representing a slight decrease from 2004). While the price for a point remained stable from previous years, increases were reported in the price per halfweight and per gram (Table 7; Figure 30). Only one person reported purchasing an eightball in 2005.

**Figure 30: Median prices of ice estimated from IDU purchases, 2002-2005**



Source: IDRS IDU interviews

NB: Eightballs were not included as the number of participants reporting purchasing this amount was insufficient (n<3 each year)

Participants who commented on ice generally thought that the price had remained stable over the preceding six months (61%; representing 27% of the entire sample). Seventeen percent stated that it had increased (representing 8% of the entire sample), 1% that it had decreased (1% of the entire sample) and 20% (9% of the entire sample) stated that while they were able to comment on other aspects of price, purity and/or availability, they didn't know whether prices had changed. No participants reported that prices had fluctuated. This represents little change from 2004, with the exception of a smaller proportion reporting the price to have decreased (12% of those commenting in 2004).

A point of ice was reported by KE to cost between \$50-\$100, and this was reported to have remained stable over the preceding six months. Grams were reported to cost approximately \$400.

## **5.2 Availability**

### *Speed powder*

Participants completing the speed powder section of the survey (containing questions on price, purity and availability) were asked 'how easy is it to get speed [powder] at the moment?'. The response options available were 'very easy', 'easy', 'difficult', 'very difficult' and 'don't know'. Among the IDU who reported on the availability of speed, over two-thirds (69%; 38% of the entire sample) thought it 'very easy' (36%; 20% of the entire sample) or 'easy' (33%; 18% of the entire sample) to obtain, representing little change from 2004 (Table 8). There was a slight increase in those reporting it to be 'very difficult' to obtain, although this remained a minority of the sample. Since 1996, speed powder has generally and consistently been reported as 'easy' or 'very easy' to obtain.

Sixty-six percent of the IDU commenting on speed (35% of the entire sample) thought that availability had remained stable in the preceding six months, representing little change from 2004 (Table 8). An increase was observed in the proportion of participants who believed it had become more difficult to obtain (from 7% of those commenting in 2004 to 17% in 2005). Small proportions continued to report that it had become easier to obtain (9% of those commenting), that availability had fluctuated (1% of those commenting), or that while they were able to comment on other aspects of price, purity or availability, they did not know whether the price of speed powder had changed over the last six months.

Each year since 1996, the majority of participants commenting have consistently and generally reported that the availability of speed powder had been stable over the six months prior to interview, with little change in proportions selecting other response options.

**Table 8: Participants' reports of methamphetamine availability in the past six months, 2004-2005**

	Powder		Base		Ice	
	2004 (N=157)	2005 (N=154)	2004 (N=157)	2005 (N=154)	2004 (N=157)	2005 (N=154)
<b>Current availability</b>						
Did not respond* (%)	64	46	75	56	63	55
Did respond (%)	36	54	26	44	37	45
<i>Of those who responded:</i>						
Very Easy (%)	40 (15% of entire sample)	36 (20% of entire sample)	35 (9% of entire sample)	47 (21% of entire sample)	36 (13% of entire sample)	28 (12% of entire sample)
Easy (%)	39 (14% of entire sample)	33 (18% of entire sample)	43 (11% of entire sample)	32 (14% of entire sample)	43 (16% of entire sample)	25 (11% of entire sample)
Difficult (%)	18 (6% of entire sample)	18 (10% of entire sample)	23 (6% of entire sample)	19 (8% of entire sample)	16 (6% of entire sample)	29 (13% of entire sample)
Very Difficult (%)	2 (0.6% of entire sample)	7 (4% of entire sample)	None	None	None	9 (4% of entire sample)
Don't know^ (%)	2 (0.6% of entire sample)	6 (3% of entire sample)	None	2 (0.6% of entire sample)	None	10 (5% of entire sample)
<b>Availability change over the last six months</b>						
Did not respond* (%)	64	47	74	56	62	55
Did respond (%)	36	53	26	44	38	45
<i>Of those who responded:</i>						
More difficult (%)	7 (3% of entire sample)	17 (9% of entire sample)	7 (2% of entire sample)	18 (8% of entire sample)	15 (6% of entire sample)	22 (10% of entire sample)
Stable (%)	68 (25% of entire sample)	66 (35% of entire sample)	63 (17% of entire sample)	68 (30% of entire sample)	58 (22% of entire sample)	55 (25% of entire sample)
Easier (%)	14 (5% of entire sample)	9 (5% of entire sample)	15 (4% of entire sample)	10 (5% of entire sample)	10 (4% of entire sample)	10 (5% of entire sample)
Fluctuates (%)	2 (0.6% of entire sample)	1 (0.6% of entire sample)	12 (3% of entire sample)	None	10 (4% of entire sample)	1 (0.6% of entire sample)
Don't know^ (%)	9 (3% of entire sample)	7 (4% of entire sample)	2 (2% of entire sample)	4 (2% of entire sample)	9 (3% of entire sample)	12 (5% of entire sample)

**Source:** IDRS IDU interviews

\* 'Did not respond' refers to participants who did not feel confident enough in their knowledge of the market to respond to survey items

^ 'Don't know' refers to participants who were able to respond to survey items on price and/or purity, but had not had enough contact with users/dealers to respond to items concerning availability

Very few KE were able to report on speed availability, although among those who did comment the majority reported it to be the easiest form of methamphetamine to obtain, and that availability had fluctuated or remained stable over the preceding six months (no clear, consistent increases or decreases were observed).

Forty percent of participants reported purchasing speed powder in the six months preceding interview. Approximately one-third of these participants reported that their usual source was a street dealer (29%; 30% in 2004), and a similar proportion reported that their usual source was a dealer's home (27%; an increase from 18% in 2004). Almost a quarter (24%) reported that they most often obtained speed powder through friends (whether it was purchased or given; a decrease from 35% in 2004), and just under one-fifth (18%) usually organised purchase via calling the dealer on their mobile (mobile dealer; a similar proportion to the 13% who reported this in 2004). The median time that participants reported it usually took them to score speed was half an hour (NB: range 1 minute to three hours); an increase from 20 minutes reported in 2003 and 2004.

### *Base*

Base was also generally reported to be 'very easy' (47%) or 'easy' (32%) to obtain, with an increase among those reporting it as 'very easy' to obtain and a decrease in those reporting it as 'easy' to obtain, as compared with 2004 (Table 8). There was little change in proportions reporting it as 'difficult' or 'very difficult' to obtain as compared with 2004, suggesting that while there may have been some increase in base availability, approximately one-fifth (18%) of the sample who commented on the base market still had trouble obtaining it.

With the exception of a gradual increase in the proportion of participants reporting current availability as 'very easy' since 2002, and a decrease in those reporting availability as 'easy' between 2004 and 2005, there has been little overall, change in reports of current base availability since 2002, when survey items were first included.

Consistent with the above finding, the majority of participants (68% of those commenting; representing 30% of all participants) reported that availability over the past six months was 'stable' (Table 8). This has been a consistent finding since 2002, with 'stable' as the most commonly selected response option (excluding 'don't know' responses).

The majority of KE were unable to comment on base availability, however, of the two who did, both believed that it was currently difficult to obtain in their geographic area, having become harder to obtain in the last six months. However, KE commenting on methamphetamine use presented a slightly different picture for their area/client group (see below).

Less than half (40%) of the entire sample had purchased base in the six months preceding interview, and these participants were asked to nominate their usual source of base. Responses were extremely varied, with approximately one-quarter of each reporting obtaining it from each of the following sources: a dealer's home (28%; an increase from 15% in 2004); a street dealer (25%; a decrease from 33% in 2004); through a friend (23%; an increase from 12% in 2004); or by arranging it through a mobile phone (mobile dealer; 21%; a decrease from 36% in 2004). The median time to score was twenty minutes (range one minute to three hours); a decrease from 2003 and 2004, when the median time to score was half an hour.

### *Ice*

Just over half (53%) of participants commenting on ice stated that it was either 'very easy' (28%; representing 12% of all participants) or 'easy' (25%; representing 11% of the entire sample) to obtain. Almost one-third thought it was 'difficult' or 'very difficult' (38%) to obtain. This suggests an overall, decrease in reported availability since 2004, when over three-quarters (79%) of those commenting believed that it was easy or very easy to obtain, and less than one-fifth (16%) reported that it was difficult or very difficult to score (Table 8).

Some consistency with these reports may be seen in the slight increase in participants reporting that ice had become 'more difficult' to obtain (from 15% in 2004 to 22% in 2005), a continuing trend since 2003 when 7% selected this response option. However, the majority (55%) reported that over the last six months, availability had remained stable (Table 8). Small proportions reported that ice had become easier to score (10% of those who commented) or had fluctuated (1%). Twelve percent of those who provided information about market indicators for ice (i.e. price, purity and/or availability) reported that they did not know, a reflection that they had not had enough contact with ice users or dealers or had not used it frequently enough themselves to be able to comment. Overall, the majority of participants each year have reported ice availability as stable, with the exception of 2003 where it was most commonly reported as easier to obtain.

Again, few KE were able to report on current availability of ice, however, of those who did (n=4) some reported that it was relatively easy to obtain, while others thought it was difficult. The majority of KE reported that availability had remained stable over the preceding six months, with the exception of one KE in Western Sydney who noted that methamphetamine generally appeared to be easy to obtain, with it having become easier to obtain in the last six months.

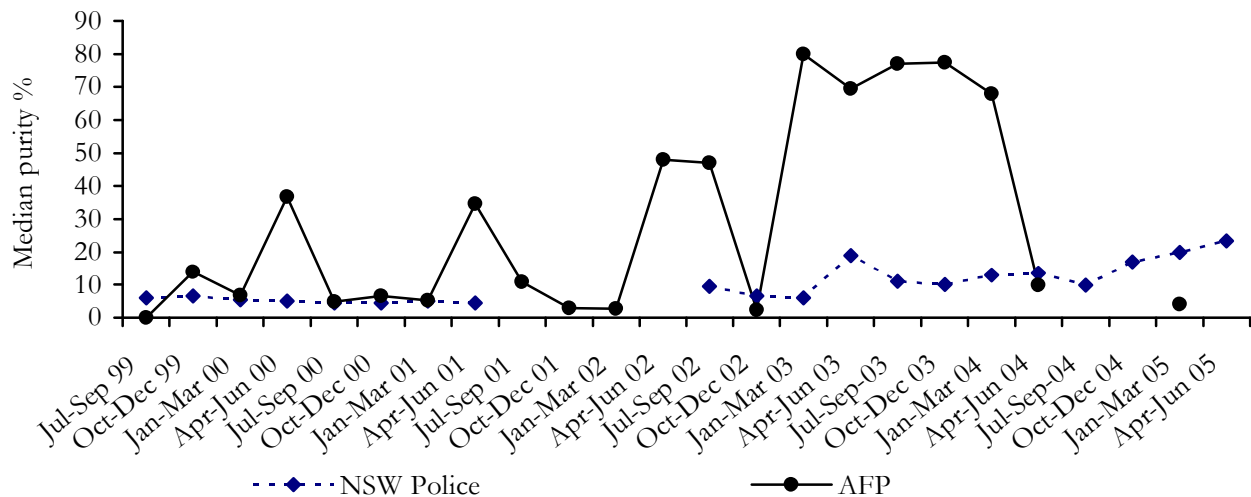
Thirty-nine percent of all participants had purchased ice in the six months preceding interview. Among these, similar proportions reported that their usual source was a mobile dealer (27%; 28% in 2004), a street dealer (25%; a slight decrease from 31% in 2004), or a friend (whether bought or given; 27%; 24% in 2004). Just under one-fifth had scored at a dealer's home (17%; a slight increase from 12% in 2004), and 5% reported that they usually obtained it via home delivery (this figure was 4% in 2004). The median time that IDU reported it usually took them to score was half an hour (range 1 minute to three hours), the same as in 2004 and twice that reported in 2003 (15 minutes).

### **5.3 Purity**

Figure 31 shows the median purity of methylamphetamine seizures analysed in NSW for the period 1999/00 to 2004/05. There were only two AFP seizures (median purity 4%) for the period 2004/05, both of which were made in the first quarter of 2005. These data contrast with the previous year when purity was relatively high ranging between 50-80% (based on a larger number of seizures analysed). AFP figures should be interpreted with caution as they are based on small numbers of seizures analysed (Figure 32). In contrast, NSW Police seizures that were analysed have generally been lower in purity (at approximately 10% to 25%) than AFP purity, and have gradually increased over the past twelve months.

It should be noted that figures do not represent the purity levels of all methylamphetamine seizures – only those that have been analysed at a forensic laboratory. In addition, the period between the date of seizure by police and the date of receipt at the laboratory can vary greatly, and no adjustment has been made to account for double counting joint operations between the AFP and NSW Police.

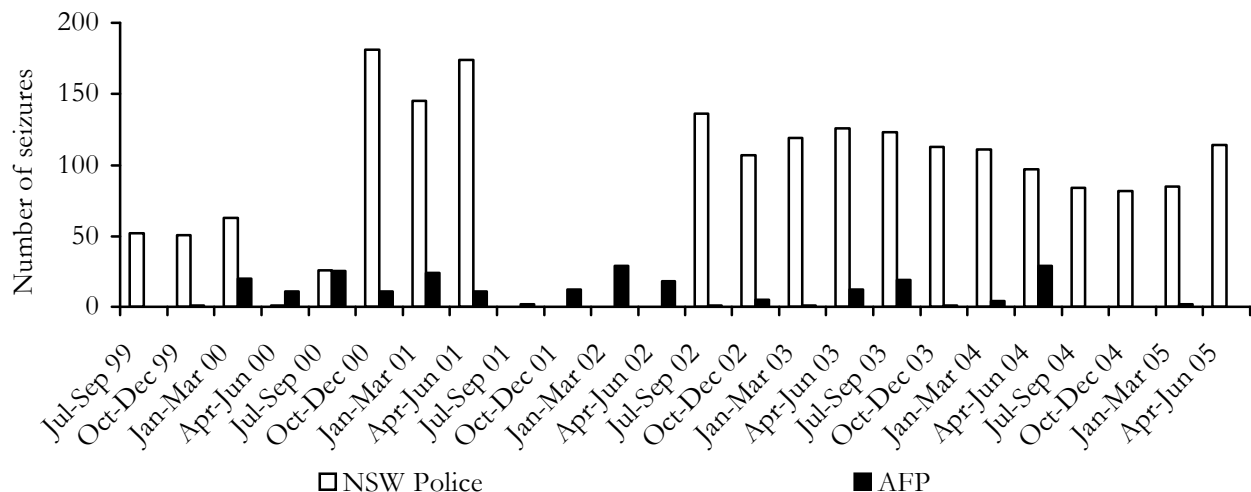
**Figure 31: Purity of methylamphetamine seizures analysed in NSW, by quarter, 1999/00-2004/05**



**Source:** ABCI 2001, 2002; ACC, 2003, 2004, 2005  
 NB: NSW Police data for the financial year 2001/02 were unavailable.

Figure 32 shows the number of methylamphetamine seizures upon which the above purity figures are based. Numbers of AFP seizures analysed have remained below 30 per quarter since 1999. The number of NSW Police seizures analysed has remained higher, at approximately 80 seizures per quarter, for the past twelve months.

**Figure 32: Number of methamphetamine seizures analysed in NSW, by quarter, 1999/00-2004/05**



**Source:** ABCI 2001, 2002; ACC, 2003, 2004, 2005  
 NB: NSW Police data for the financial year 2001/02 were unavailable.

*Speed powder*

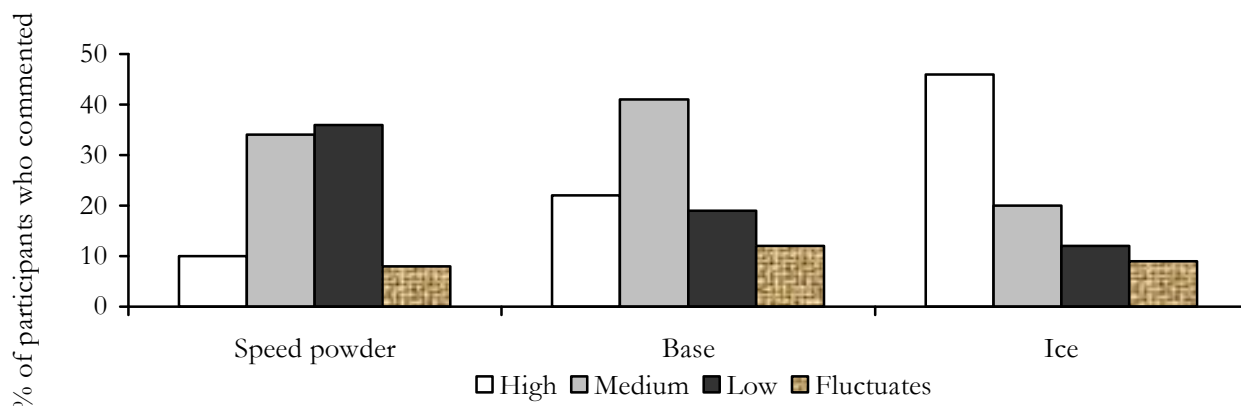
Just over half (54%) of the sample commented on the perceived current purity of speed powder. Of these participants, the majority (70%; representing 38% of all participants) thought that it was either of

'low' (36%; 20% of the entire sample) or 'medium' (34%; 18% of all participants) purity. In comparison, only ten percent (5% of the entire sample) rated it as of 'high' purity, and 8% (5% of the entire sample) reported that it fluctuated (Figure 33). Twelve percent (7% of all participants), while able to comment on other aspects of speed powder (price or availability), were unsure as to the current strength of speed powder. Overall, this suggests a decrease in perceived purity as compared with 2004, where 26% of those commenting reported it as of 'low' purity, 32% rated it as 'medium', 19% thought it was 'high', 7% thought it 'fluctuated' and 16% said they didn't know.

Just over half of the sample (54%) commented on purity over the six months preceding interview. The majority of these participants thought that it had either been stable (37%; representing 20% of all participants) or had decreased over this time (33%; representing 18% of all participants). Only 5% (3% of all participants) thought that it had increased, and 12% (7% of the entire sample) thought it had fluctuated.

One law enforcement KE in the inner Sydney area reported that speed powder was typically 10-20% pure.

**Figure 33: Participant perceptions of methamphetamine purity (speed powder, base and ice), among those who commented, 2005**



Source: IDRS IDU interviews

#### Base

Just under half (44%) of all participants commented on current base purity. The majority (63%) of IDU commenting on base thought that it was of 'medium' (41%; representing 18% of all participants) to 'high' purity (22%; a decrease from 2004; representing 10% of all participants), while 19% (8% of the entire sample) thought it was 'low' and 12% (representing 5% of all participants) thought that it 'fluctuated' (Figure 33). Six percent (3% of the entire sample) said that they didn't know. Comparable figures in 2004 were: 39% thought it was of 'medium' purity, 32% thought it was 'high', 17% reported that it was 'low' and 10% said it had fluctuated. Two percent did not feel confident to answer the question. Overall, this suggests little change from 2004, with the exception of a decrease in the proportion reporting base being of 'high' purity.

With regards to whether the purity had changed over the last six months, again, reports were mixed. One-third of participants who commented (33%; or 15% of the entire sample) thought that it had remained stable. Almost a quarter (24%; 10% of the entire sample) thought that it had fluctuated, 22%

(10% of all participants) thought it had decreased, 12% (5% of the entire sample) thought it had increased and 9% said that they didn't know.

One law enforcement KE in the inner Sydney area reported that base was typically 30-40% pure.

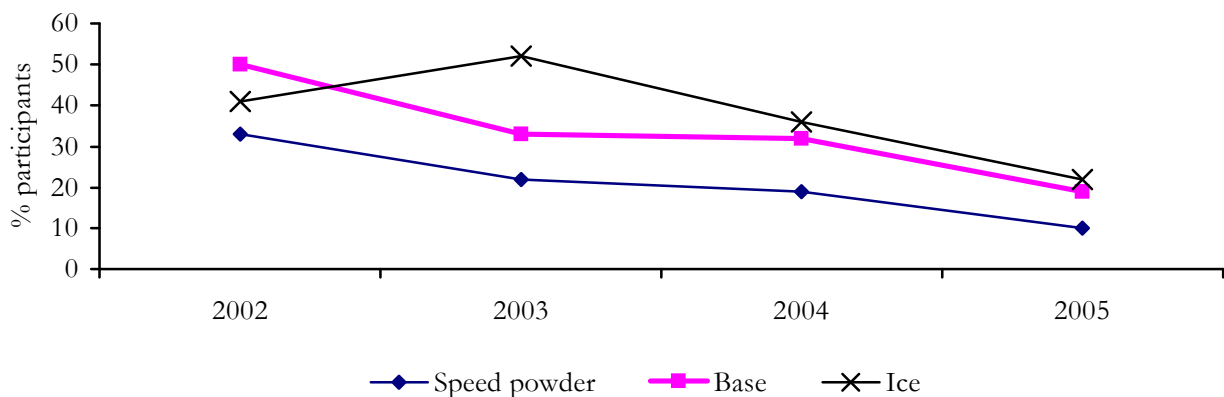
*Ice*

Just under half (45%) of all participants were able to comment on the purity of ice. As in previous years, it was more commonly reported to be of high strength than other forms of methamphetamine (Figure 33). Almost half (46% of those commenting, representing 21% of all participants) stated that it was 'high', and 20% (9% of all participants) thought it was 'medium' (Figure 33). Small proportions thought it was 'low' (12%; 5% of all participants) or 'fluctuates' (9% of those commenting; 4% of the entire sample). Thirteen percent of those who commented on ice market characteristics (price and/or availability) said that did not know about the current purity of ice, typically because they had not used it enough, or at all, to be able to comment and had not had enough contact with users or dealers. Responses were more varied than in 2004, when 36% rated it as 'high', 41% reported it to be 'medium', and 3% thought it was 'low'.

When asked about whether purity had changed over the last six months, 42% of those responding (19% of all participants) believed that it had remained stable. Sixteen percent thought it had fluctuated, and similar proportions thought that it had either increased (12%; representing 5% of all participants) or decreased (10% of those commenting, or 5% of all participants). One-fifth (20%; 9% of all participants) did not know whether purity had changed over this time or not.

Figure 34 shows the proportion of IDU reporting the purity of each form of methamphetamine as 'high'. Greater proportions of IDU reported ice and base as being 'high' in purity compared with speed, and ratings of perceived purity of all three forms as 'high' have decreased over the last two years.

**Figure 34: Proportion of participants reporting speed powder, base and ice purity as 'high', 2002-2005**



Source: IDRS IDU interviews

NB: Data on all three forms commenced in 2002.



One law enforcement KE in the inner Sydney area reported that ice could be up to 70% pure, and was less variable in purity than the powder and base forms. Other KEs commented that users had reported it to be currently of low purity. Other research has indicated that, based on seizures, high purity crystal methamphetamine has an average purity of 80%; low purity crystal an average purity of 19%; whereas base averaged 21% and powder 10% (McKetin et al., 2005a).

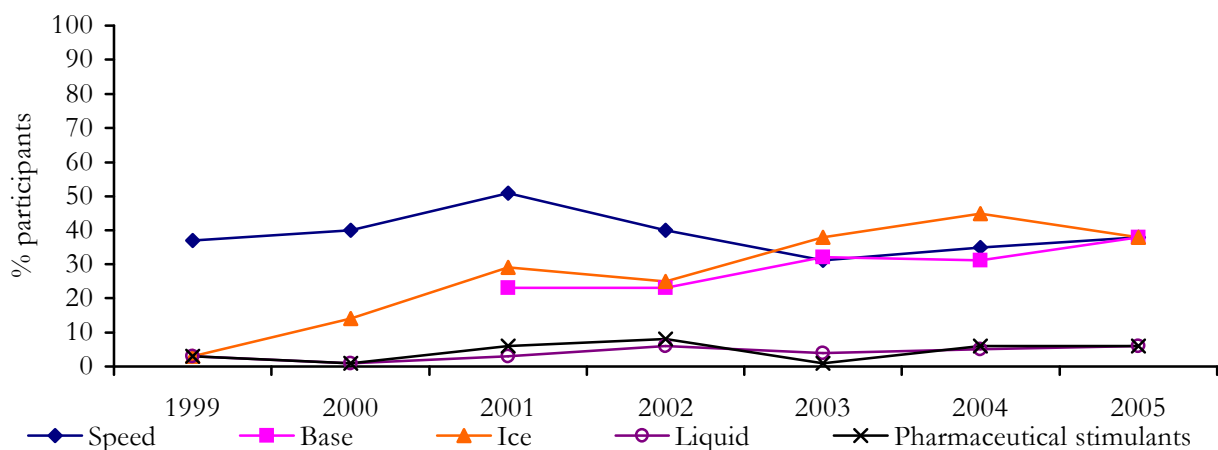
## 5.4 Use

### 5.4.1 Methamphetamine use among IDU participants

Just over half of participants (58%) reported use of some form of methamphetamine (speed, base, ice or liquid) in the six months preceding interview, representing little change from 56% in 2004. Considered separately, the same proportion (38%) reported use of each of the following forms in the last six months: speed powder; base; ice. Liquid amphetamine (also known as ‘oxblood’) was considerably less common, with only 6% of participants reporting use in the last six months. These figures indicate marginal changes in the prevalence of ice and base use since 2004, with a decrease in ice use and an increase in base use (Figure 35).

A small proportion of participants (6%) reported using prescription amphetamines or other pharmaceutical stimulants in the preceding six months (Figure 35).

**Figure 35: Proportion of IDU reporting methamphetamine and pharmaceutical stimulant use in the past six months, 1999-2005**



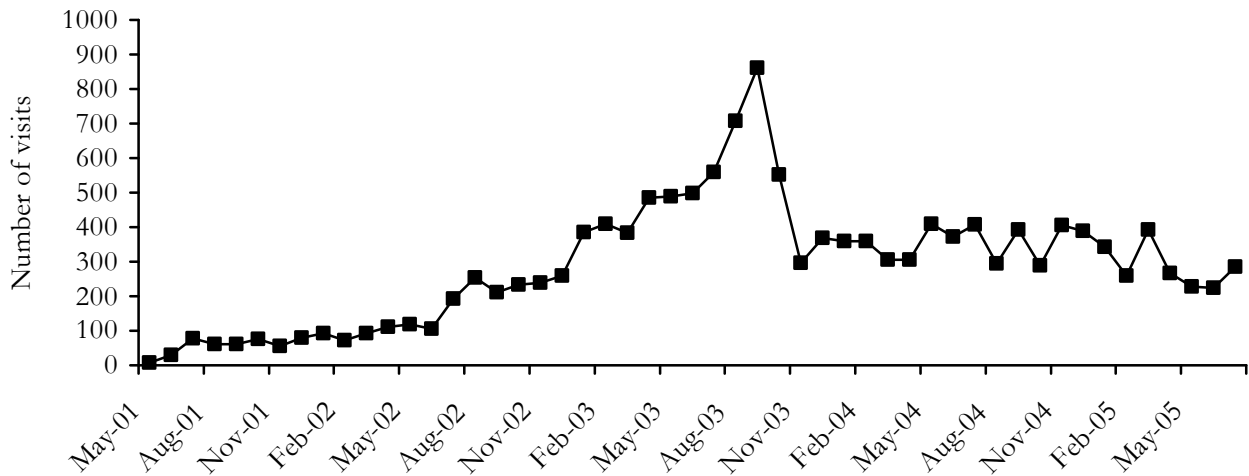
**Source:** IDRS IDU interviews

NB: Pharmaceutical stimulants includes licit use of prescription amphetamines.

Figure 36 shows the number of attendances to the Sydney MSIC where methamphetamine was the drug injected<sup>5</sup>. Numbers reporting methamphetamine have increased gradually since 2001, reaching a peak in September 2003 (861 visits, accounting for 11% of all visits), followed by a steep decline. Figures have remained relatively stable since December 2003, accounting for between 5-7% of visits.

<sup>5</sup> The following caveats need to be considered when interpreting these data: 1) Hours of operation changed over the first 2 years of operation (from four to up to twelve per day) and 2) The numbers of individuals attending increased continuously over the first 2 years of operation as IDU became aware of this new service.

**Figure 36: Number of attendances to Sydney MSIC where methamphetamine was injected, 2001-2005**



Source: Sydney MSIC, Kings Cross

#### 5.4.2 Current patterns of methamphetamine use

Among users, the median number of days of speed use (i.e. via any route of administration) in the preceding six months was ten (i.e. almost once per fortnight), similar to seven days reported in 2004. For base this figure was six days (i.e. an average of once per month), representing no change from 2004. Similarly, there was little change in the median number of days used for ice, from five days in 2004 to four days in 2005.

In terms of each form of methamphetamine, the majority of users had used weekly or less over the six months preceding interview (Table 9). This represents little change from 2004, although there was a slight increase in the number of daily users, with three daily speed powder users (one participant reported daily use in 2004), four daily base users (none in 2004) and three daily ice users (none in 2004). The proportion of methamphetamine users reporting daily use of any form of methamphetamine (also including pharmaceutical stimulants) increased slightly from 3% in 2004 to 7% in 2005 (representing 2% and 5% of the entire sample each year, respectively; Table 9 and Figure 37). Slight decreases were reported in those using base more than weekly but less than daily, with 15% of base users reporting this pattern of use compared to 27% in 2004. A similar pattern was observed in ice use, with 17% reporting using more than weekly but less than daily as compared with 24% in 2004.

**Table 9: Patterns of methamphetamine use in the last six months, by type, 2005**

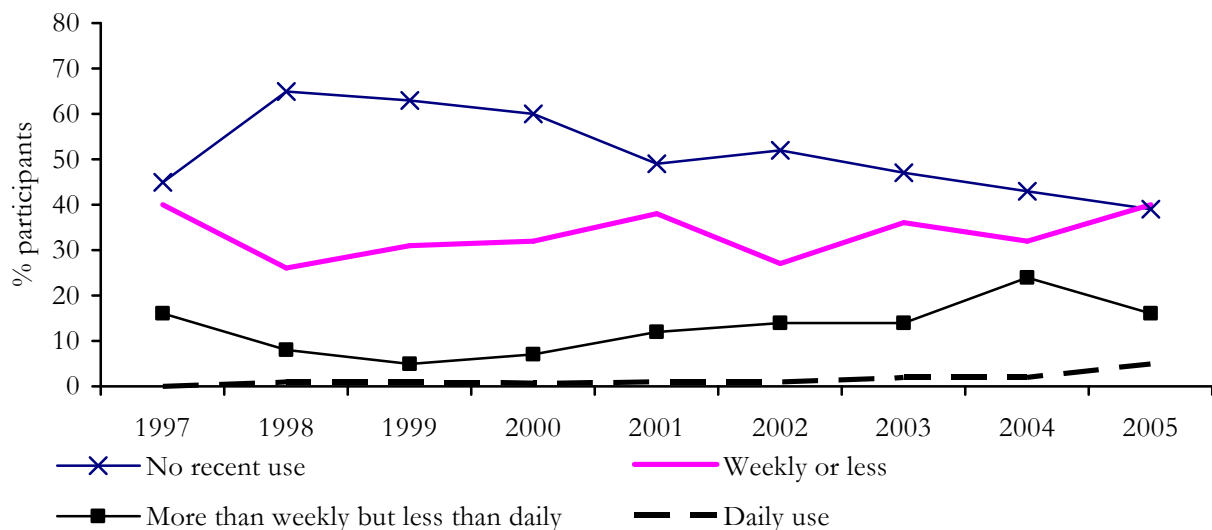
Form used	Among the entire sample		Among those who had used		
	% who had not used	% who had used	% used weekly or less <sup>^</sup>	% used more than weekly, but less than daily	% used daily
Speed powder	62	38	76 (29% of entire sample)	19 (7% of entire sample)	5 (2% of entire sample)
Base	62	38	78 (30% of entire sample)	15 (6% of entire sample)	7 (3% of entire sample)
Ice	62	38	78 (29% of entire sample)	17 (6% of entire sample)	5 (2% of entire sample)
Any form meth/amphetamine*	39	61	66 (40% of entire sample)	27 (16% of entire sample)	7 (5% of entire sample)

Source: IDRS IDU interviews

\* Also includes pharmaceutical stimulants and liquid methamphetamine

<sup>^</sup> Excludes those who had not used

**Figure 37: Patterns of methamphetamine use (any form) by IDU participants, 1997-2005**



Source: IDRS IDU interviews

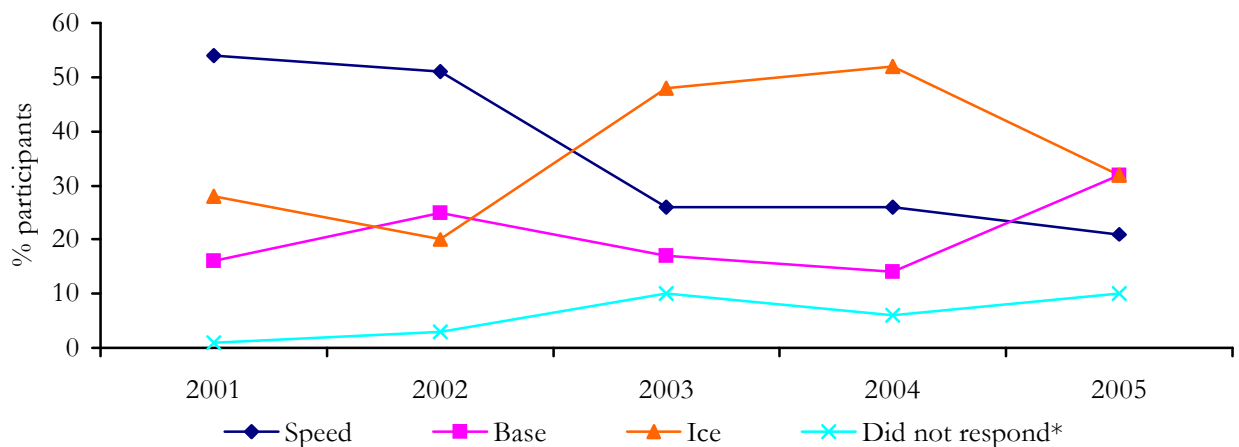
NB: 1996 data were unavailable

KE reports on methamphetamine use were relatively mixed, reflecting a range of geographical areas and clientele. Concern was raised by a KE in the Western Sydney area who had noted an increase in methamphetamine use, and also problems experienced by a number of users in the area. These issues included general ill health, agitation, paranoia, tics, aggressive behaviour, delusional thoughts and injection-related problems such as abscesses and vein damage. These clients did not appear to want or be seeking health service provision. A KE in the inner Sydney area also commented that they had observed an increase in methamphetamine users (despite a decrease in availability), sores, mental health

problems and treatment seeking behaviour among clients they had come into contact with. Similarly, an increase in admissions to two rehabs suggested an increase in methamphetamine as a drug of concern (even if not the primary drug for which treatment was sought), and associated problems such as agitation, anxiety and psychotic symptoms such as paranoia. Three KE across a number of other geographic areas had noted no change in methamphetamine use, associated problems or treatment seeking behaviour.

As in previous years, participants who had used methamphetamine (including pharmaceutical stimulants) were also asked which form they had used most often in the six months preceding interview. Approximately one-third of users (32%) nominated ice, and the same proportion (32%) nominated base as the form they had most used. One-fifth (21%) stated that they had used speed powder most frequently, 4% percent nominated prescription amphetamines (whether illicitly or licitly obtained), and 10% were unable to nominate a form most used, typically because they had used more than one form equally as often. This represents some change from 2004, with an increase in those using base and a decrease in those using ice most frequently (Figure 38).

**Figure 38: Methamphetamine form most used in the preceding six months, among recent methamphetamine users, 2001-2005**



**Source:** IDRS IDU interviews

NB: Data collection on the form most used commenced in 2001.

\* 'Did not respond' typically indicates respondents who were unable to nominate one form as the one most used, i.e. they used two or more forms equally as often

KE comments also reflected those of IDU with ice and base most commonly reported as the forms most used. Speed powder was also commonly reported as a form used, although one KE commented that it was less desirable due to lower purity. As in previous years, a number of KE were unable to differentiate between forms used as users often referred to 'speed' as a generic term for methamphetamine. The use of liquid amphetamine ('oxblood') was not reported.

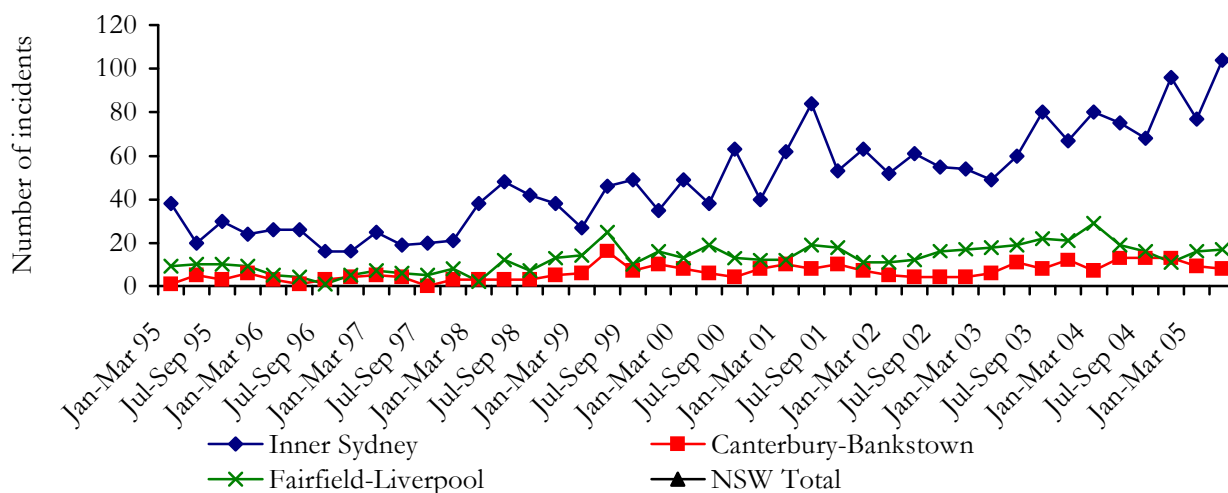
## 5.5 Methamphetamine related harms

### 5.5.1 Law enforcement

Figure 39 shows that the number of police recorded criminal incidents per quarter for amphetamine possession/use is higher in the Inner Sydney area than it is in Fairfield-Liverpool and Canterbury-

Bankstown<sup>6</sup>. Recorded incidents in the inner Sydney area have increased over the last two years, while they have remained fairly stable in Canterbury-Bankstown and Fairfield-Liverpool.

**Figure 39: Recorded incidents of amphetamine possession/use by geographic area per quarter, January 1995-June 2005**

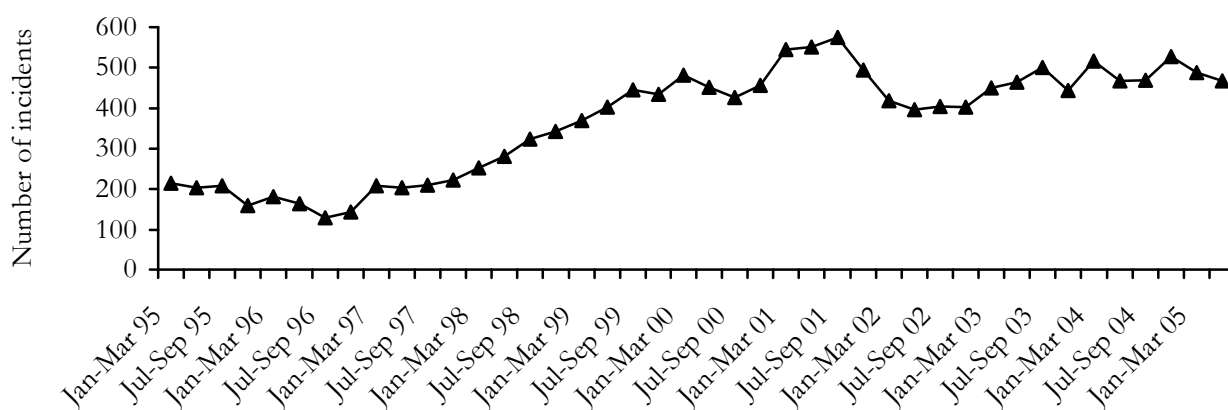


**Source:** NSW Bureau of Crime Statistics and Research

NB: Changes in the number of recorded incidents may be indicative of changes in police activity, or an increase in possession/use, or a reflection of both

The number of recorded incidents across NSW as a whole has increased slightly over the past two years following a peak around the time of the heroin shortage (2001) and subsequent decline in 2002 (Figure 40). The number of incidents per month is now around 400, compared to 200 per month in 1995.

**Figure 40: Recorded incidents of amphetamine possession/use (whole of NSW) per quarter, January 1995 – June 2005**



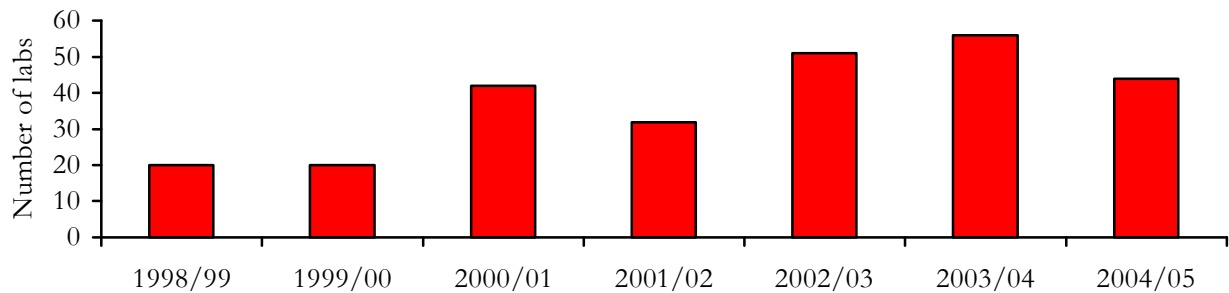
**Source:** NSW Bureau of Crime Statistics and Research

NB: Changes in the number of recorded incidents may be indicative of changes in police activity, or an increase in possession/use, or a reflection of both.

<sup>6</sup> The regions Inner Sydney, Fairfield-Liverpool and Canterbury-Bankstown refer to ABS Statistical Subdivisions.

The number of clandestine laboratories detected in NSW has steadily increased over time from 20 in the 1998/99 financial year to 56 in 2003/04, and declined slightly in 2004/05 (44 detections) (Figure 41).

**Figure 41: Number of clandestine methamphetamine and MDMA laboratories detected by NSW Police 1998-2005**



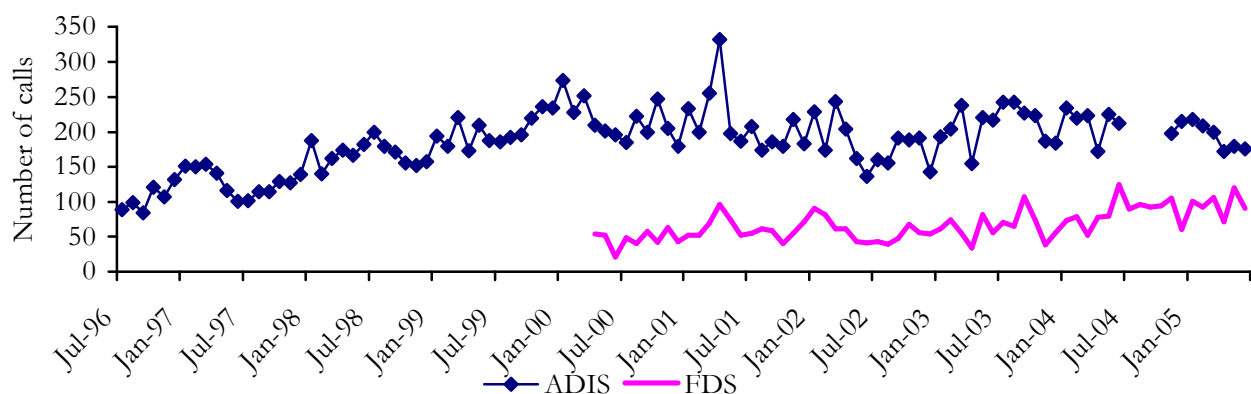
Source: NSW Police Service

Law enforcement KE reported an increase in clandestine laboratory detections in the inner city area over the preceding six to twelve months.

### 5.5.2 Health

Figure 42 shows the number of calls to the ADIS and FDS lines regarding amphetamines. Similar to heroin, the number of enquiries to FDS regarding amphetamines was much lower than numbers received at ADIS during the period 2000 to 2003. Figures for ADIS remained relatively stable over the past three years, and were consistently higher than figures reported in the late 1990s. Calls to FDS have increased slightly over this period. Calls to both services regarding amphetamines increased in early 2001, simultaneous to the decrease in number of calls received regarding heroin. The proportion of calls to FDS relating to amphetamines has increased from approximately 15-20% in 1999 to 20-25% in 2005.

**Figure 42: Number of enquiries to ADIS and FDS regarding amphetamines, including 'ice', 1996-2005**

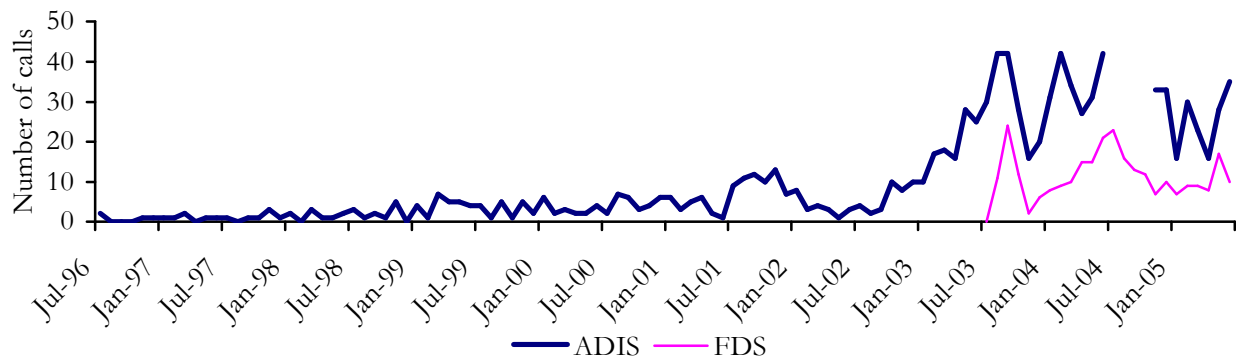


Source: ADIS and FDS

NB: Family Drug Support data were only available from April 2000 and refer to calls where any mention of amphetamines was made. ADIS data refer to the number of calls where amphetamines were mentioned as any drug of concern. ADIS data were unavailable for the period July-October 2004.

Figure 43 shows the number of calls for ice, one of the more potent forms of methamphetamine. An increase in calls during 2001 is consistent with Figure 42 above and a clear increase can be observed in 2003, with the number of calls fluctuating but remaining higher over the past three years than previously.

**Figure 43: Number of enquiries to ADIS and FDS regarding ‘ice’, 1996-2005**



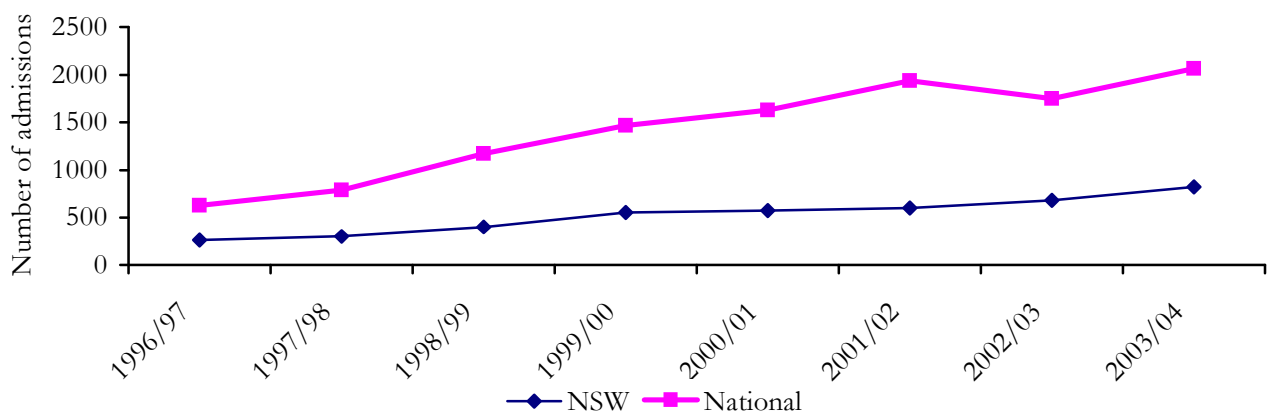
**Source:** ADIS and FDS

NB: FDS commenced distinguishing between forms of amphetamine/methamphetamine in July 2003. FDS data refer to calls where any mention of ice was made. ADIS data refer to the number of calls where ice was mentioned as any drug of concern. ADIS data were unavailable for the period July to October 2004.

As described previously, a number of KE reported increases in physical and mental health problems associated with methamphetamine use and injection, while KE in other geographical areas suggested that there had been no change.

The number of inpatient hospital admissions among persons aged 15-54 years in which amphetamines were the principal diagnosis is shown in Figure 44 below. As outlined previously, diagnoses for the period 1998 to 2004 were recorded using ICD-10-AM codes, and prior to this, ICD-9-CM was used to code hospital separations. A principal diagnosis is defined as having been chiefly responsible for occasioning the patient’s episode of care in hospital. Figures have steadily increased over the study period in both NSW (from 260 in 1996/97 to 824 in 2003/04) and nationally (from 633 in 1996/97 to 2066 in 2003/04).

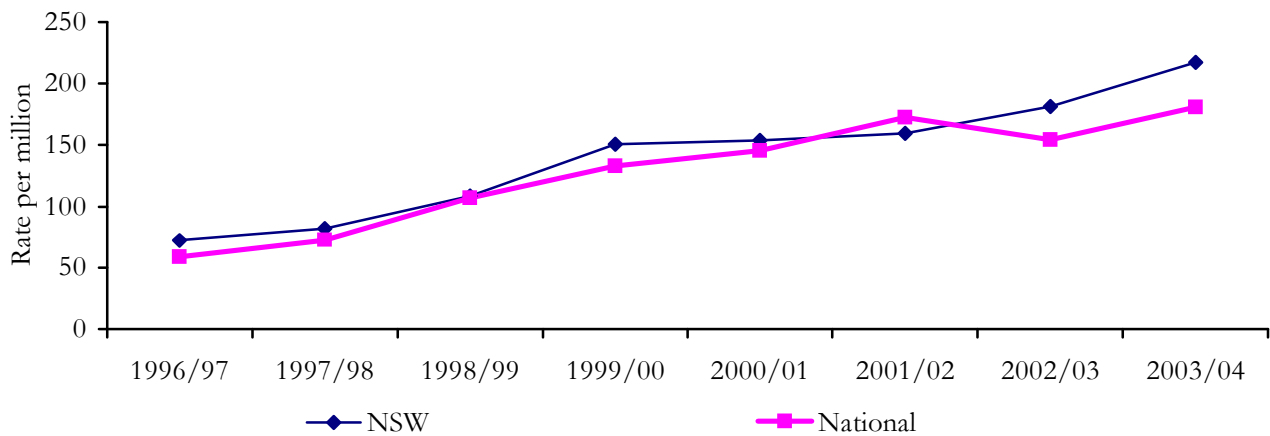
**Figure 44: Total number of inpatient hospital admissions for persons aged 15-54 where amphetamines were the principal diagnosis, NSW and nationally, 1996/97-2003/04**



**Source:** National Hospital Morbidity Database; Roxburgh & Degenhardt (in press)

Figure 45 shows the rates of hospital admissions where amphetamines were the principal diagnosis per million people aged 15-54 years. Rates in both NSW and nationally have increased over the study period, particularly in NSW where it was 72 per million persons in 1996/97 and increased to 217 in 2003/04. Between 1999/00 and 2002/03, NSW has accounted for between one-third and two-fifths of all inpatient hospital admissions where amphetamines were the principal diagnosis.

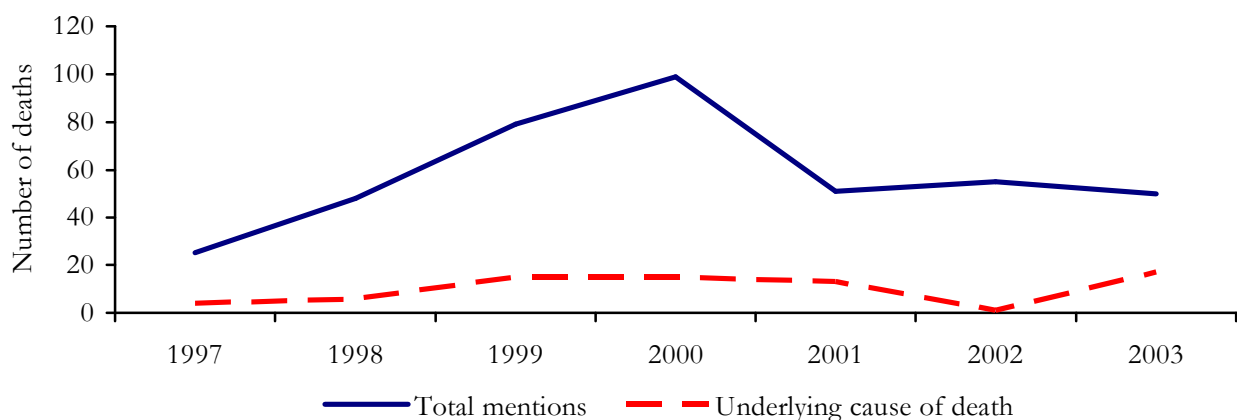
**Figure 45: Rate of inpatient hospital admissions where amphetamines were the principal diagnosis per million people aged 15-54 years, NSW and nationally, 1996/97 to 2003/04**



Source: National Hospital Morbidity Database; Roxburgh & Degenhardt (in press)

Figure 46 shows Australian Bureau of Statistics (ABS) data on accidental drug-induced deaths in which methamphetamine was mentioned among those aged 15-54 in Australia for the period 1997-2003 (Degenhardt et al., 2004b). This includes deaths where it was determined to be the underlying cause of death, as well as those where methamphetamine was detected but where another drug was believed to be primarily responsible. Deaths have remained relatively stable since 2001, following a sharp increase in total mentions in 2001. The number of deaths in which methamphetamine was determined to be the underlying cause has remained relatively stable over time at less than 20 per year, with 17 recorded in 2003. Data from 2004 onwards were unavailable at time of printing.

**Figure 46: Number of accidental drug-induced deaths mentioning methamphetamine (total and underlying) among those aged 15-54 years in Australia, 1997-2003**

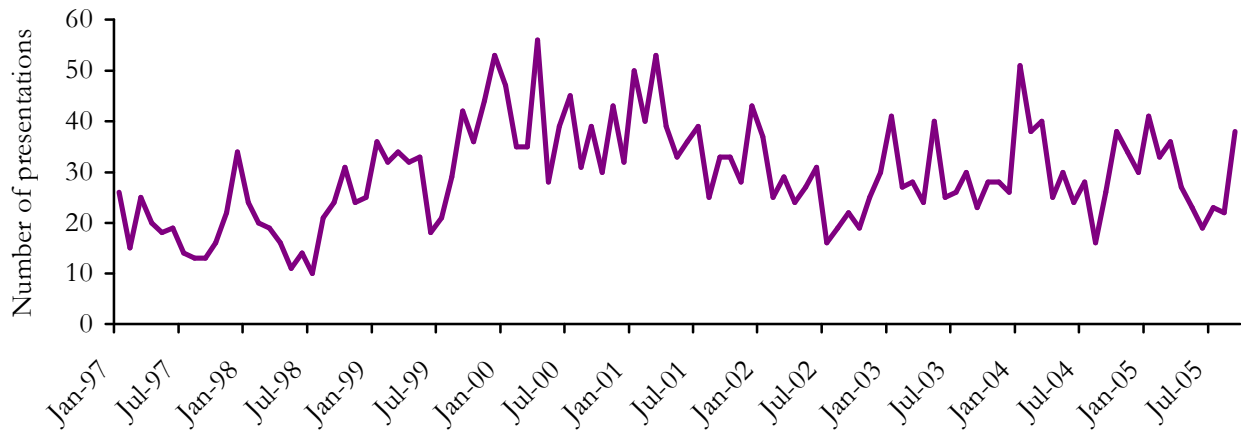


Source: Australian Bureau of Statistics Causes of Death database



The total number of amphetamine overdose presentations to NSW emergency departments has fluctuated in the past two years, peaking at 51 in January 2004 and decreasing to 16 in August 2004 and reducing again to 19 in June 2005 (Figure 47).

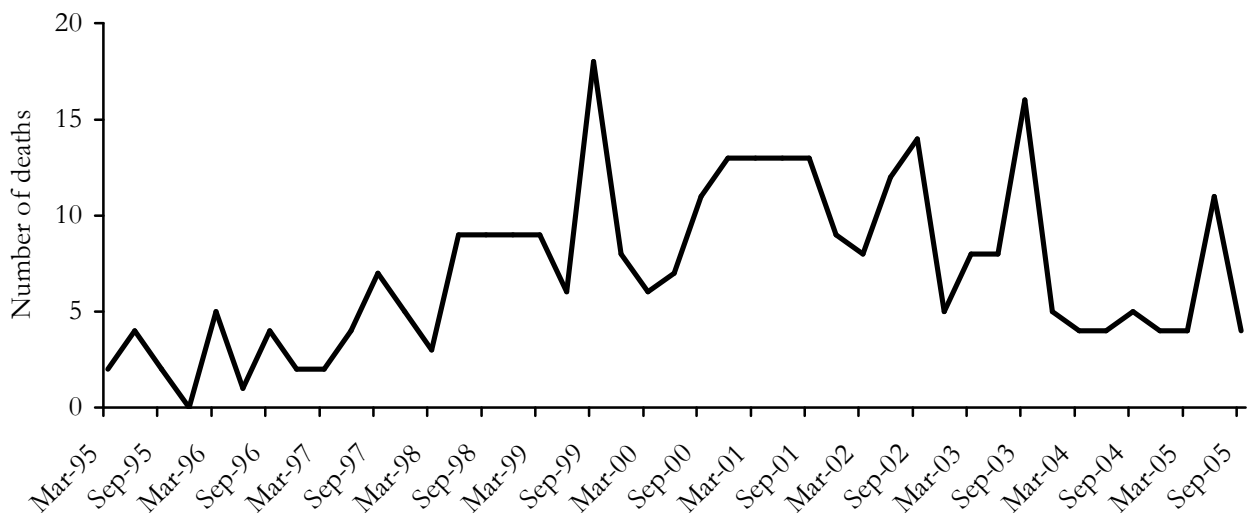
**Figure 47: Amphetamine overdose presentations to NSW emergency departments, 1997-2005**



**Source:** Emergency Department Information System, NSW Department of Health

The number of suspected drug related deaths in which amphetamines were detected (Figure 48) has fluctuated over the past few years and since 2004 have remained at the lowest levels reported since 1998.

**Figure 48: Number of suspected drug related deaths in which amphetamines were detected post mortem, by quarter, 1995-2005**



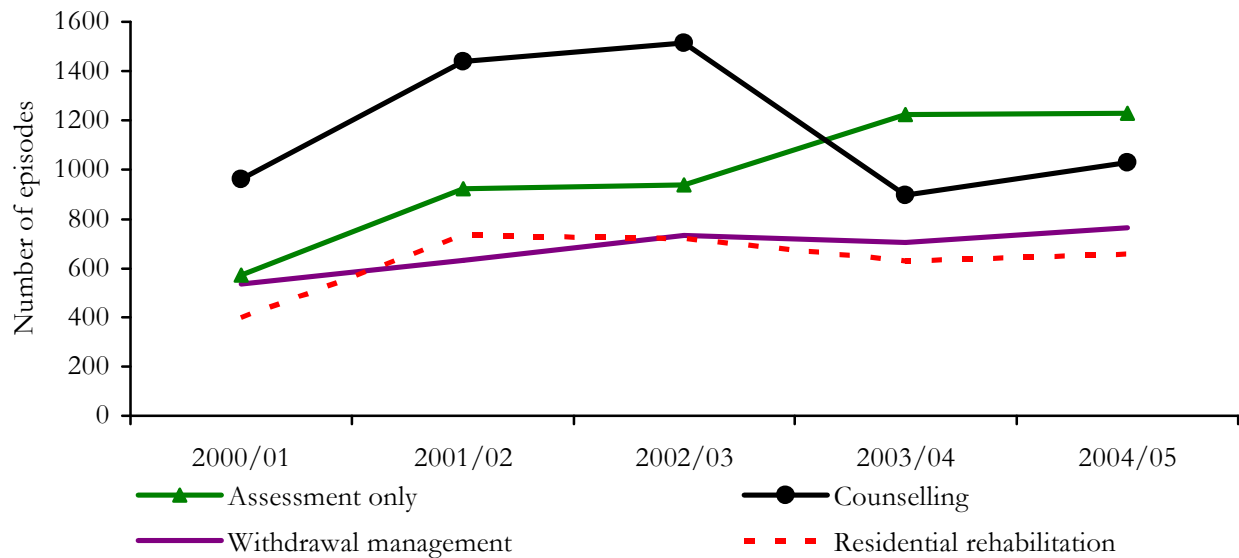
**Source:** Forensic Toxicology Laboratory database, Division of Analytical Laboratories

NB: These numbers relate to deaths in which amphetamines, including methamphetamine, were detected, however, there may have also been other drugs present.

The numbers of closed treatment episodes based on the date of commencement where the principal drug of concern was amphetamines have increased slightly or remained stable over the past twelve months for all four of the main forms of treatment (Figure 49). Prior to this, there was a steady increase in numbers receiving assessment only (from 574 in 2000/01 to 1029 in 2004/05) and withdrawal management (from 538 in 2000/01 to 764 in 2004/05). Numbers entering counselling have fluctuated

over the past few years, reaching a peak of 1515 in 2002/03. An overall, increase may be seen in the numbers engaged in residential rehabilitation between 2000/01 (397 episodes) and 2004/05 (658 episodes).

**Figure 49: Number of amphetamine treatment episodes by treatment type, NSW 2000/01-2004/05**



**Source:** NSW MDS DATS, NSW Department of Health

NB: The NSW MDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period

## 5.6 Trends in methamphetamine use

All participants were asked at the end of the survey if there were any recent changes in the types of drugs their friends had been using. Nine participants reported increased use of one or more forms of methamphetamine, mainly referring to ice or amphetamines generally.

## 5.7 Summary of methamphetamine trends

- Prices for a ‘point’ of all three forms of methamphetamine have remained relatively stable, while prices fluctuated for larger amounts of speed powder. Larger amounts of ice increased in price compared to 2004, while larger amounts of base decreased in price; however, in many cases only small numbers of participants had made such purchases so results should be interpreted with a degree of caution.
- All three forms of methamphetamine remained readily available compared to 2004, particularly base and speed. While ice also remained easy or very easy to obtain according to the majority of participants commenting, an increase was observed among those reporting that it was difficult or very difficult to obtain as compared with 2004. Availability of all three forms had generally remained stable over the preceding six months.
- Just over one-third of participants reported use of speed powder, base and/or ice over the preceding six months. This represents a slight decrease in prevalence of ice use and a minor increase in the prevalence of base use since 2004. This represents the continued dynamic nature of methamphetamine use since 2001.

- Patterns of methamphetamine use continued to be sporadic across all three forms, with the majority of users having used weekly or less. A marginal increase was observed in the number of daily methamphetamine users (be it speed, base, ice or liquid methamphetamine, and also including pharmaceutical stimulants), from 3% of the participant sample in 2004 to 7% in 2005.
- Ice and base were the most commonly used forms of methamphetamine in the preceding six months.
- Overall, key expert comments suggested that price, purity and use of ice, base and speed powder remained relatively stable or continued to fluctuate while use of liquid methamphetamine remained rare. However, increases in methamphetamine use and associated problems were reported in some geographical areas.
- Indicator data showed a somewhat mixed picture with regard to amphetamine use although all data showed increases during 2001. The majority of indicators have remained stable/continued to fluctuate, e.g. recorded incidents of possession/use in NSW as a whole, calls to ADIS, a telephone helpline, overdose presentations) or increased slightly (e.g. recorded incidents of possession/use in inner Sydney, calls to FDS [a telephone helpline] regarding methamphetamine, inpatient hospital admissions) over the past year. Seizure data from NSW Police suggest a slight increase in purity over the preceding twelve months.

## 6.0 COCAINE

Participants were asked if they were able to comment on the price, purity and/or availability of cocaine, and in 2005 66% of the IDU sample felt confident to answer one or more of these survey items, representing an increase from 48% in 2004. The remainder did not feel confident to answer any questions on the cocaine market, and this is likely to reflect a proportion of users who do not use or come into contact with users or dealers of cocaine regularly enough to be able to comment.

As stated previously, cocaine KE remained relatively difficult to find this year, as many had not had contact with cocaine users, suggesting that increases in cocaine use that were observed in the drug market areas in which the IDU survey is conducted were not widespread across the remainder of Sydney. However, the number of KE (six) who were able to talk about cocaine was larger than in 2004. For further exploration and discussion of the Sydney cocaine market, see also Shearer et al. (2005).

### 6.1 Price

Prices paid for cocaine by IDU participants on the last occasion of purchase are presented in Table 10. The median price for a gram of cocaine was \$280, a slight decrease from \$290 reported in 2004, but a sustained increase from all previous years (Figure 50).

As in 2004, the median prices for halfweights and quarter grams also increased from the previous year, although due to small numbers commenting on the latter, results should be interpreted with caution. Caps remained the most commonly purchased amounts, and the median price remained unchanged at \$50 (Figure 50).

An increase was also observed in the numbers of participants who had recently purchased cocaine as compared with 2004, an indication of an increase in use since this time. This is particularly evident in purchase patterns of caps, which almost doubled to 61 participants, representing 40% of the entire sample. This increase approached the levels reported in 2002, when 84 respondents reported purchase of a cap in the six months prior to interview. Quarter gram and halfweight purchases remained comparatively uncommon, and the number of purchasers remained similar to 2004.

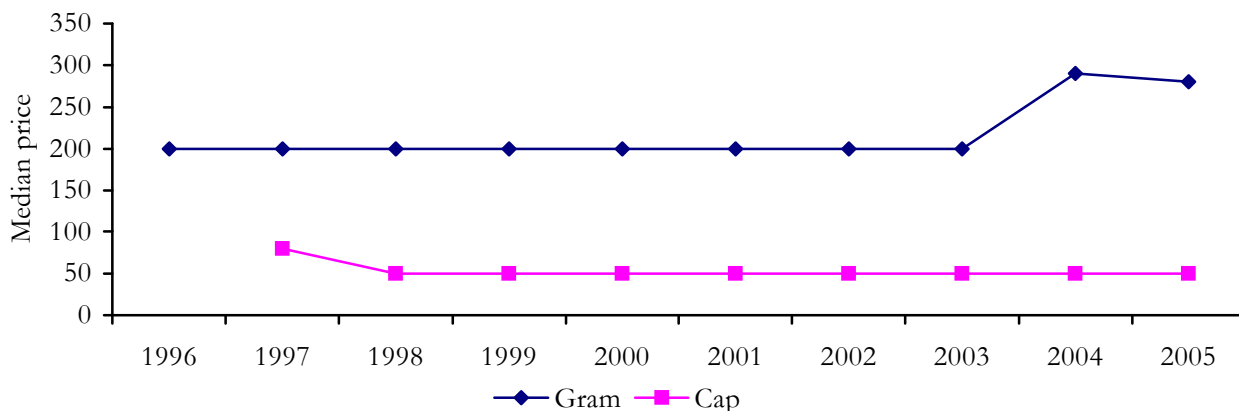
**Table 10: Price of most recent cocaine purchases by IDU participants, 2005**

Amount	Median price* \$	Range	Number of purchasers*
Cap	50 (50)	\$50-\$100	61 (34)
Quarter gram	100 (72.50)	\$50-\$100	4 (4)
'Halfweight' (0.5 grams)	150 (140)	\$100-\$220	16 (12)
Gram	280 (290)	\$100-\$400	14 (6)

Source: IDRS IDU interviews

\*2004 data are presented in brackets

**Figure 50: Median price of a gram and cap of cocaine estimated from IDU participant purchases, 1996-2005**



Source: IDRS IDU interviews

Price ranges were wide (Table 10), and this is likely in most cases to be a reflection of purity/availability within that particular person’s network and various other circumstances which may influence the cost of a particular deal.

Reflecting the consistent price reported per cap (the most commonly purchased amount) since 2004, the majority of participants commenting on cocaine (67%; representing 44% of all participants) reported that the price had remained stable in the preceding six months. Small proportions of those commenting reported it as increasing (11%; or 7% of all participants), decreasing (6%; or 4% of all participants), fluctuating (1%; or 1% of all participants), or said that they did not know (16%; or 10% of all participants). Reports of price change represent little change from 2004.

KEs reported that price was often determined by purity, ranging from \$200-\$250 per gram for low/street grade up to \$400-\$450 per gram for higher grade cocaine. Caps were reported to cost \$50 or between \$50 and \$70. Prices were commonly reported to have remained stable.

## 6.2 Availability

Forty-eight percent of participants commenting on cocaine market characteristics (price, purity and/or availability) thought that it was ‘very easy’ to obtain cocaine, representing an increase from 32% who said so in 2004 (Table 11). Twenty-one percent of participants rated it as ‘easy’ (34% thought so in 2004), 21% thought it was ‘difficult’ (as compared with 28% in 2004), and 7% reported that cocaine was ‘very difficult’ (an increase from 1% in 2004) to obtain. Similar proportions in both years said that they didn’t know enough to be able to comment on current cocaine availability (4% in 2005, and 5% in 2004).

Two-thirds (62%) of participants commenting on cocaine (representing 41% of all participants) believed that availability had remained stable, as compared with 55% (27% of the entire sample) in 2004 (Table 11). Eighteen percent (12% of the entire sample) reported that it had become more difficult to obtain over the last six months, and 13% (8% of the entire sample) thought it had become easier. One percent (1% of the entire sample) thought that availability had fluctuated over this time period, representing little change from 2004 when 20% thought it had become more difficult, and 11% thought it had become easier, to obtain.

**Table 11: Participants' reports of cocaine availability in the past six months, 2004-2005**

	2004 (N=157)	2005 (N=154)
<b>Current availability</b>		
Did not respond* (%)	52	34
Did respond (%)	48	66
<i>Of those who responded:</i>		
Very Easy (%)	32 (15% of entire sample)	48 (32% of entire sample)
Easy (%)	34 (17% of entire sample)	21 (14% of entire sample)
Difficult (%)	28 (13% of entire sample)	21 (14% of entire sample)
Very Difficult (%)	1 (0.6% of entire sample)	7 (5% of entire sample)
Don't know^ (%)	5 (3% of entire sample)	4 (3% of entire sample)
<b>Availability change over the last six months</b>		
Did not respond* (%)	52	34
Did respond (%)	48	66
<i>Of those who responded:</i>		
More difficult (%)	20 (10% of entire sample)	18 (12% of entire sample)
Stable (%)	55 (27% of entire sample)	62 (41% of entire sample)
Easier (%)	11 (5% of entire sample)	13 (8% of entire sample)
Fluctuates (%)	1 (0.6% of entire sample)	1 (0.6% of entire sample)
Don't know^ (%)	13 (6% of entire sample)	7 (5% of entire sample)

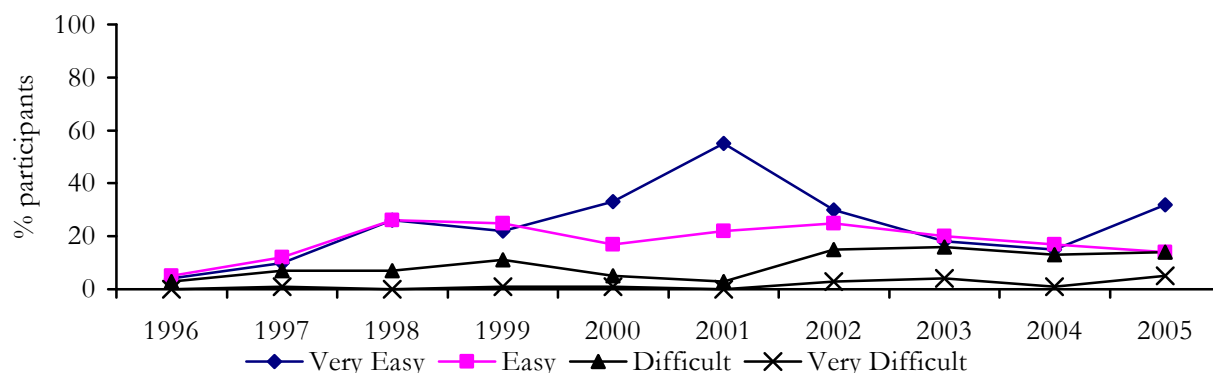
**Source:** IDRS IDU interviews

\* 'Did not respond' refers to participants who did not feel confident enough in their knowledge of the cocaine market to respond to survey items

^ 'Don't know' refers to participants who were able to respond to survey items on price and/or purity of cocaine, but had not had enough contact with users/dealers to respond to items concerning availability

With the exception of the aforementioned increase amongst those rating it as 'very easy' to obtain, figures on current availability have remained relatively stable over the last three years, following a peak and subsequent decline in use in 2001 and 2002 (Figure 51). The increase in cocaine availability and use occurred around the same time as a documented shortage in the availability and use of heroin.

**Figure 51: Participant reports of current cocaine availability, 1996-2005**



Source: IDRS IDU interviews

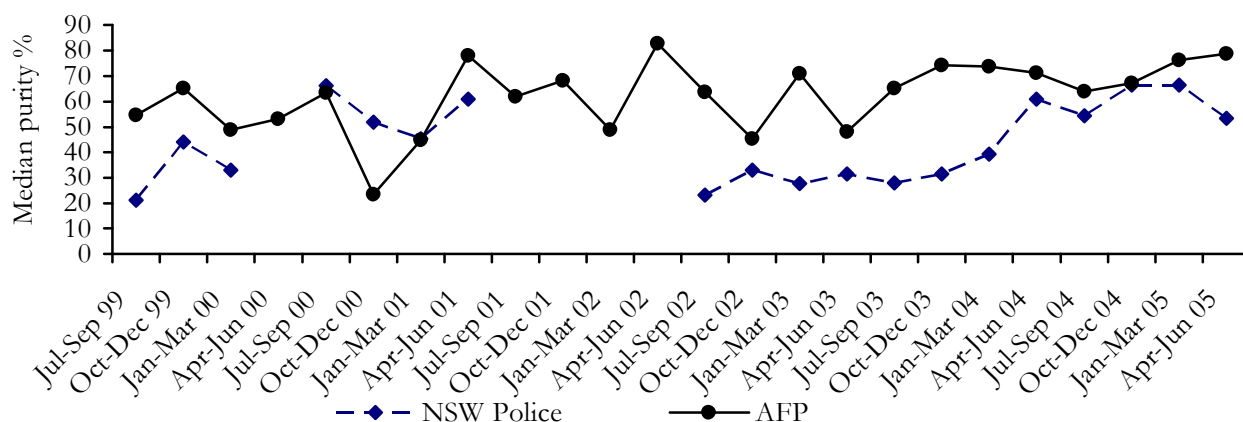
Participants were also asked about their usual source or method of obtaining cocaine. Among those who had bought cocaine in the last six months, the majority reported buying it from street dealers (37%; representing little change from 40% in 2004) or through contacting dealers on a mobile phone (31%; similar to 32% who said so in 2004). Smaller proportions reported obtaining cocaine through friends, either buying it or receiving it as a gift (13%; as compared with 18% in 2004), by going to a dealer’s home (14%; an increase from 7% in 2004), or by organising for the dealer to bring it to their home (6%; as compared with 4% in 2004). With the exception of a slight increase in the proportion reporting ‘home delivery’ as their main method of purchase, this represents little change from purchasing patterns reported in 2004. The median time IDU participants reported it usually took them to score cocaine was 15 minutes (the same as in 2004), with reports ranging from one minute to two hours.

KE reports suggested that in the inner Sydney and South-West Sydney areas cocaine was easy for cocaine using IDU to obtain, and that this had either remained stable or had recently become easier. One KE reported that it was difficult to obtain cocaine and that this had remained stable; however, this KE referred to a group of non-IDU users who typically used at weekends. One KE commenting on the Hunter area reported that cocaine had recently become more difficult for users to obtain.

### 6.3 Purity

The purity of cocaine seizures analysed by NSW Police has fluctuated over the past twelve months and has remained higher than previous years (Figure 52). The purity of cocaine seizures analysed by the AFP remained relatively stable over the past year, and purity has remained higher than that of seizures by NSW Police. AFP seizures are typically larger seizures that are detected at a higher level of distribution than state police seizures, prior to the heroin being ‘cut’ for lower, street level distribution. Some of the purity figures should be interpreted with caution as they are based on small numbers of seizures (refer Figure 53). It should also be noted that figures do not represent the purity levels of all cocaine seizures – only those that have been analysed at a forensic laboratory. The period between the date of seizure by police and the date of receipt at the laboratory can vary greatly. No adjustment has been made to account for double counting joint operations between the AFP and State/Territory Police.

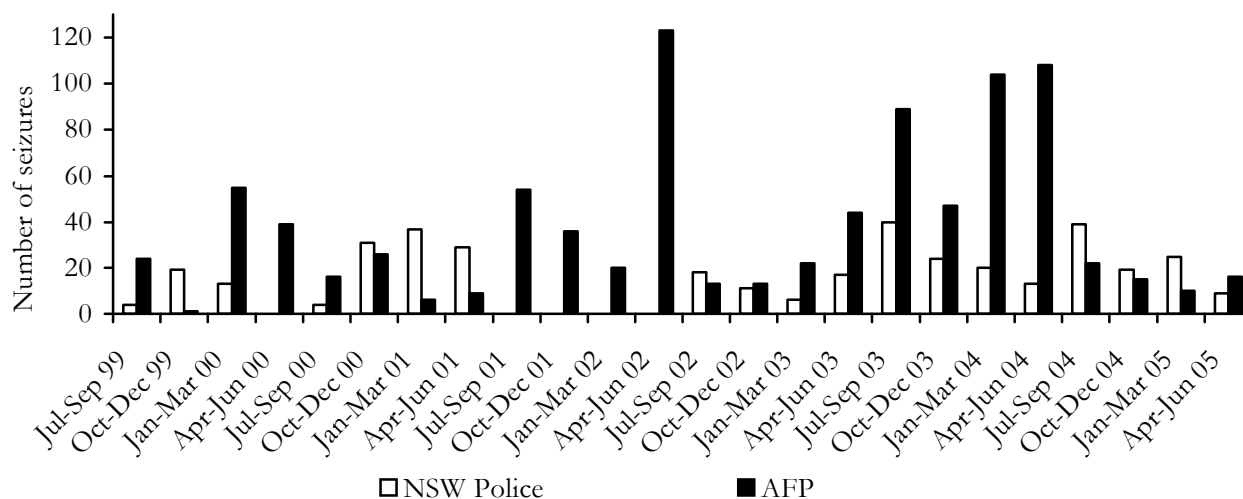
**Figure 52: Purity of cocaine seizures analysed in NSW, by quarter, 1999/00-2004/05**



**Source:** ABCI 2001, 2002; ACC, 2003, 2004, 2005  
 NB: NSW Police data for the financial year 2001/02 were unavailable

Figure 53 shows the number of seizures analysed in NSW between 1999/00 and 2004/05. The number of seizures analysed by the NSW Police has remained relatively stable over the past eighteen months at approximately 20 per quarter, with the exception of the third quarter of 2004 when 39 seizures were analysed. The number of seizures analysed by the AFP decreased from 108 in the April 2004 quarter to a low of 10 in the January 2005 quarter.

**Figure 53: Number of cocaine seizures analysed in NSW, by quarter, 1999/00-2004/05**



**Source:** ABCI 2001, 2002; ACC, 2003, 2004, 2005  
 NB: NSW Police data for the financial year 2001/02 were unavailable

The majority (68%) of participants commenting on cocaine reported purity as being ‘medium’ (40%; representing 20% of the entire sample) or ‘low’ (28%; representing 18% of the entire sample; Table 12). One-fifth (20%) reported that cocaine was of ‘high’ purity. These figures are comparable to 2004 figures. Participants were also surveyed concerning whether purity had changed over the last six months. Approximately one-third (34%; 23% of the entire sample) thought it had remained stable, and another third (32%) thought that it was decreasing.



**Table 12: Participants' perceptions of cocaine purity in the past six months, 2004-2005**

<b>Current purity</b>	<b>2004 (N=157)</b>	<b>2005 (N=154)</b>
Did not respond* (%)	52	34
Did respond (%)	48	66
<i>Of those who responded:</i>		
High (%)	21 (10% of entire sample)	20 (13% of entire sample)
Medium (%)	34 (17% of entire sample)	40 (20% of entire sample)
Low (%)	26 (13% of entire sample)	28 (18% of entire sample)
Fluctuates (%)	7 (3% of entire sample)	6 (4% of entire sample)
Don't know^ (%)	12 (6% of entire sample)	7 (5% of entire sample)
<b>Purity change over the last six months</b>		
Did not respond* (%)	52	34
Did respond (%)	48	66
<i>Of those who responded:</i>		
Increasing (%)	15 (7% of entire sample)	10 (7% of entire sample)
Stable (%)	22 (11% of entire sample)	34 (23% of entire sample)
Decreasing (%)	26 (13% of entire sample)	32 (21% of entire sample)
Fluctuating (%)	16 (8% of entire sample)	11 (7% of entire sample)
Don't know^ (%)	21 (10% of entire sample)	13 (8% of entire sample)

**Source:** IDRS IDU interviews

\* 'Did not respond' refers to participants who did not feel confident enough in their knowledge of the cocaine market to respond to survey items

^ 'Don't know' refers to participants who responded to survey items on price and/or availability of cocaine, but had not had enough contact with users and/or dealers, or had not used often enough to feel able to respond to items concerning purity

KE reports of cocaine purity varied and this is a reflection of information obtained from seizures from higher levels of supply in addition to information obtained from the street and other levels. Cocaine at the street level was reported to be of the lowest purity, particularly for smaller amounts such as caps (e.g. 5-20% purity). KEs commenting on purity change tended to be of the belief that it had either increased slightly or remained stable.

## 6.4 Use

### 6.4.1 Cocaine use among IDU participants

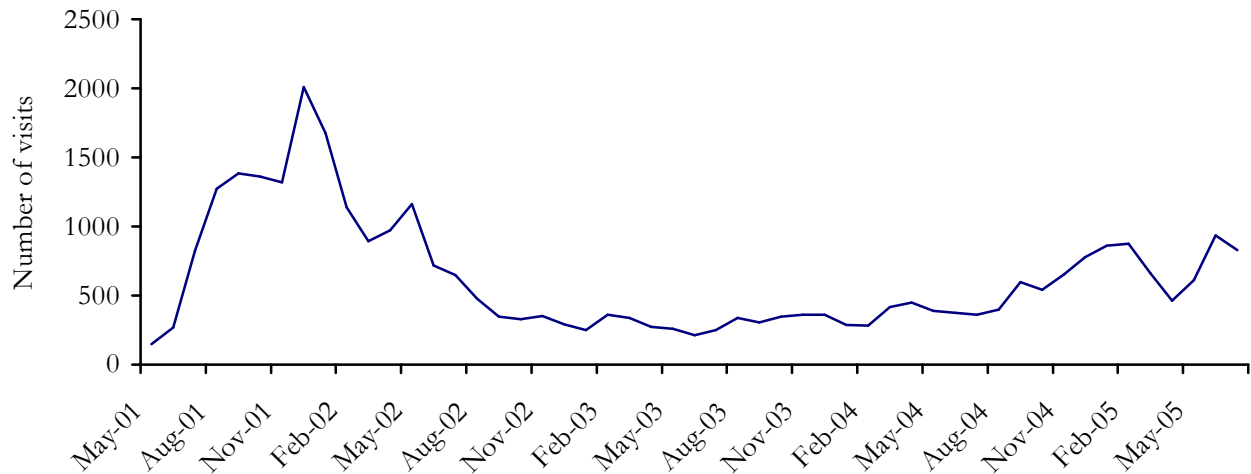
Sixty percent of IDU participants reported cocaine use in the preceding six months, representing an increase from 47% in 2004 (Figure 56).

Figure 54 shows the number of attendances to the Sydney MSIC where cocaine was the drug injected<sup>7</sup>. Following a peak in use in December 2001 (2010 visits), and a subsequent decline to less than 400 visits per month (June 2002), numbers reporting cocaine remained relatively stable until the third quarter of

<sup>7</sup> The following caveats need to be considered when interpreting these data: 1) hours of operation changed over the first 2 years of operation (from four to up to twelve per day); and 2) the numbers of individuals attending increased continuously over the first 2 years of operation as IDU became aware of this new service

2004. From this time, numbers have fluctuated from month to month, varying between 464 visits in April 2005 and 937 visits in June 2005. Proportionately, cocaine has accounted for between 8-16% of all visits per month to the centre since September 2004. Whilst figures suggest an overall, increase in use in 2004 and 2005, levels have remained substantially lower than those reported during late 2001-early 2002, when indicators of cocaine use (according to self-reports by IDU and according to a range of other data from routine surveillance systems) suggested that cocaine availability and use was at its peak among this group.

**Figure 54: Number of attendances to Sydney MSIC where cocaine was injected, 2001-2005**

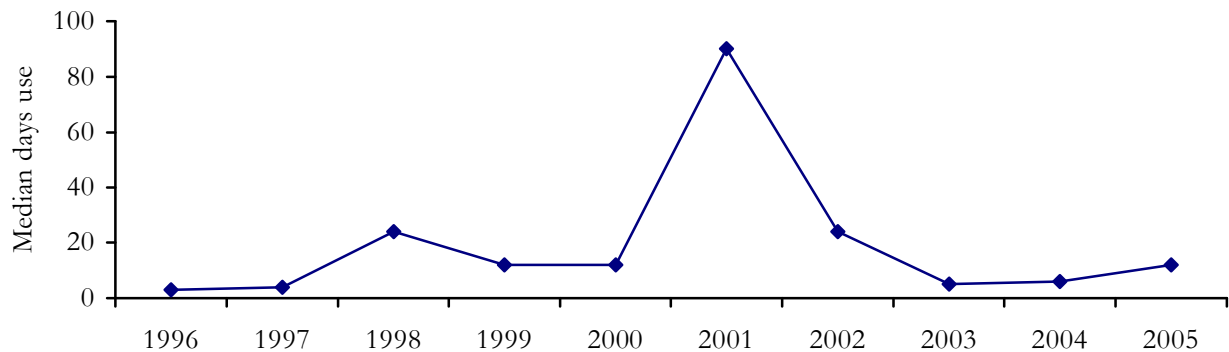


Source: Sydney MSIC, Kings Cross

#### 6.4.2 Current patterns of cocaine use

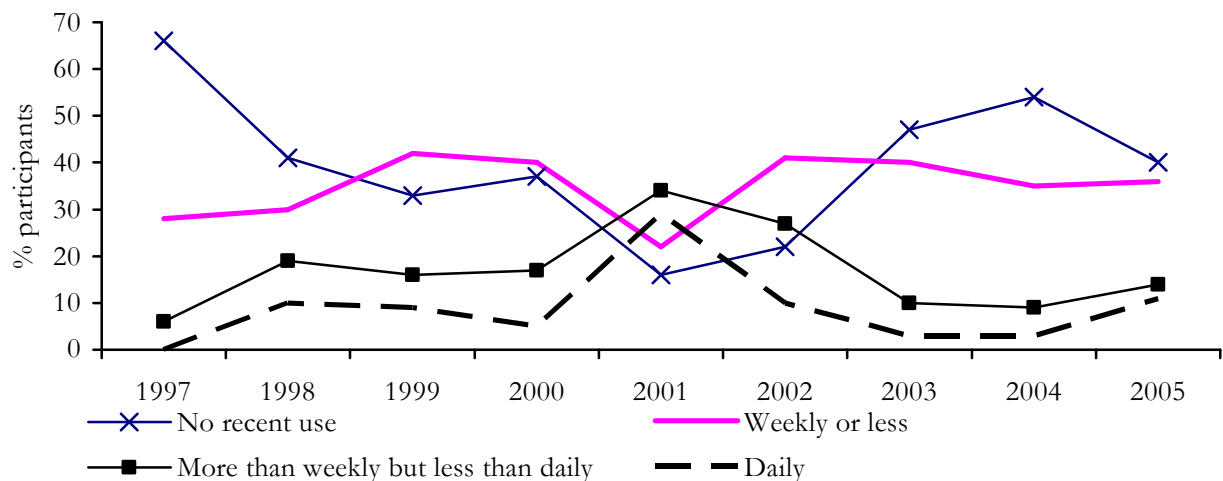
Frequency of cocaine use among IDU participants in the last six months increased from a median of six days (i.e. monthly use) in 2004 to twelve days in 2005, although levels did not reach those reported in 2001 at the height of the heroin shortage (Figure 55). Approximately one-fifth of cocaine users (18%; or 11% of all participants) reported daily cocaine use, a sizeable increase from 3% of users (also representing 3% of the entire sample) reporting such use in 2004. Use patterns over the past ten years of the NSW IDRS are shown in greater detail in Figure 56 below.

**Figure 55: Median days cocaine use in the past six months, 1996-2005**



Source: IDRS IDU interviews

**Figure 56: Patterns of cocaine use, 1997-2005**



Source: IDRS IDU interviews

Law enforcement key expert reports suggested that there had been an increase in the number of cocaine detections by police in New South Wales over the last six to eighteen months, and that these were almost exclusively in the inner Sydney and South-West Sydney areas, although a slight increase was also observed in cocaine use by a health KE in the Western Sydney area. The number of cocaine users – often injecting drug users – in the inner Sydney and South-West Sydney areas was reported to have increased recently by several KE from both law enforcement and health backgrounds, although one KE interviewed in the inner Sydney area had not observed an increase. This may possibly have been because cocaine was already relatively commonly used among the people with whom the KE had had contact; however, this KE also noted that there had been an increased number of requests for treatment services among this group (something that had not been observed among KE in other geographic areas). Some concerns were raised by health KE relating to cocaine users they had seen appearing to be more physically unwell (e.g. sores, general appearance), and some users were reported to be engaging in risky injecting practices such as the re-use of equipment in order to obtain any residual cocaine (‘washouts’). Concern was also raised relating to a greater number of users who were in a hurry to inject and consequently taking less care over safer injecting practices. No changes in mental health problems related to cocaine use, such as agitation or paranoia, were reported.

KEs commenting on other groups of cocaine users, such as those who did not inject and would typically use ecstasy and cannabis in addition to cocaine, and professionals with higher socioeconomic status, reported that patterns of use had remained stable, e.g. use on weekends.

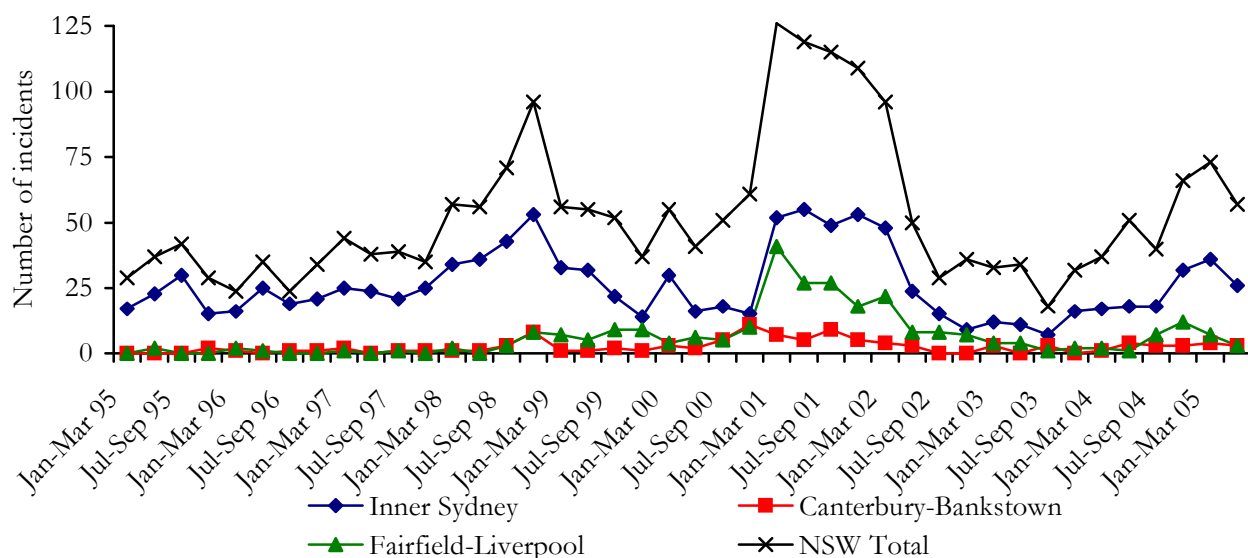
Participants were also asked which form of cocaine they had used most often over the last six months. Ninety-eight percent of participants who had used cocaine reported that cocaine (powder and/or rock) was the form they had used most often, with the remaining two percent (n=2) reporting that they had used crack cocaine most often. All KE commenting on cocaine reported that crack cocaine use had remained either rare or unheard of, with one KE reporting that cocaine powder is generally of low quality and so conversion to crack cocaine was uneconomical.

## 6.5 Cocaine related harms

### 6.5.1 Law enforcement

Figure 57 shows that the number of police recorded criminal incidents for cocaine possession/use have increased in the inner Sydney area over the past year, and have consistently remained higher than in Fairfield-Liverpool and Canterbury-Bankstown<sup>8</sup>. Incidents of cocaine possession/use recorded in the inner Sydney area reflect IDU reports of cocaine use, with peaks occurring in 1998, 2001 and 2005. Smaller increases were also recorded in Canterbury-Bankstown and Fairfield-Liverpool during the former of these periods, with a slight increase also observed in the Fairfield-Bankstown area in late 2004. A law enforcement KE commenting on cocaine across NSW reported that there had been a gradual increase in detections of smaller amounts of greater purity over the past 18 months.

**Figure 57: Recorded incidents of cocaine possession/use by geographic area per quarter, January 1995-June 2005**



**Source:** NSW Bureau of Crime Statistics and Research

NB: Changes in the number of recorded incidents may be indicative of changes in police activity, or an increase in possession/use, or a reflection of both

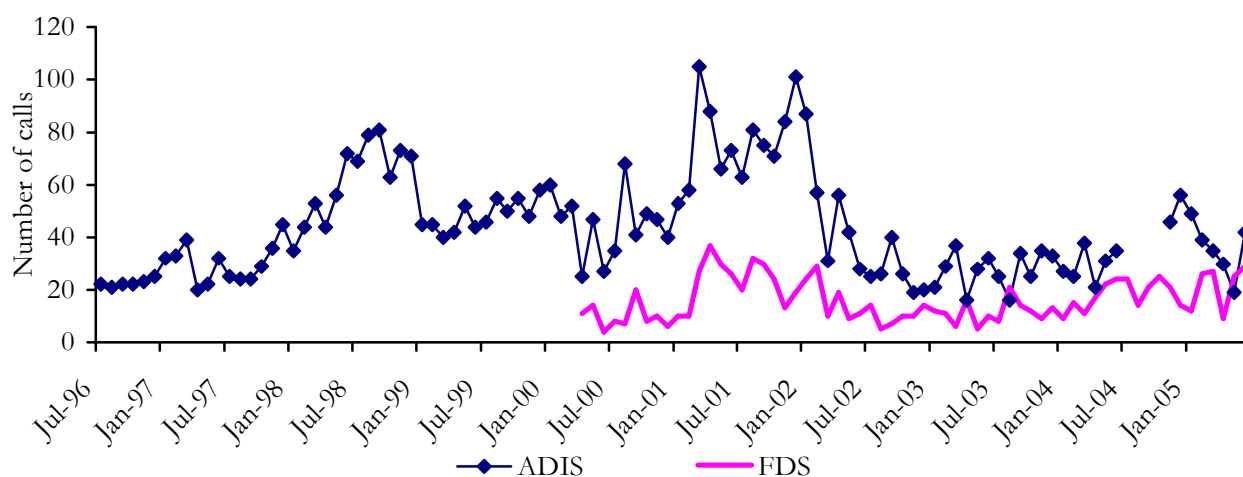
<sup>8</sup> The regions Inner Sydney, Fairfield – Liverpool and Canterbury – Bankstown refer to ABS Statistical Subdivisions.

## 6.5.2 Health

### *Calls to telephone helplines*

Figure 58 shows the number of calls to the ADIS and FDS lines regarding cocaine. Figures for both ADIS and FDS appear to have remained relatively stable over the past three years, although a slight peak in calls to ADIS can be seen during early 2005, consistent with IDU and other indicator data, with another increase mid-year. Figures have not returned to levels reported during 2001. Calls to FDS regarding cocaine also increased throughout 2001, accounting for a peak of 12% of all calls in October, and have subsequently decreased. Since this time cocaine has accounted for between 3-7% of calls.

**Figure 58: Number of enquiries to ADIS and FDS regarding cocaine, 1996-2005**

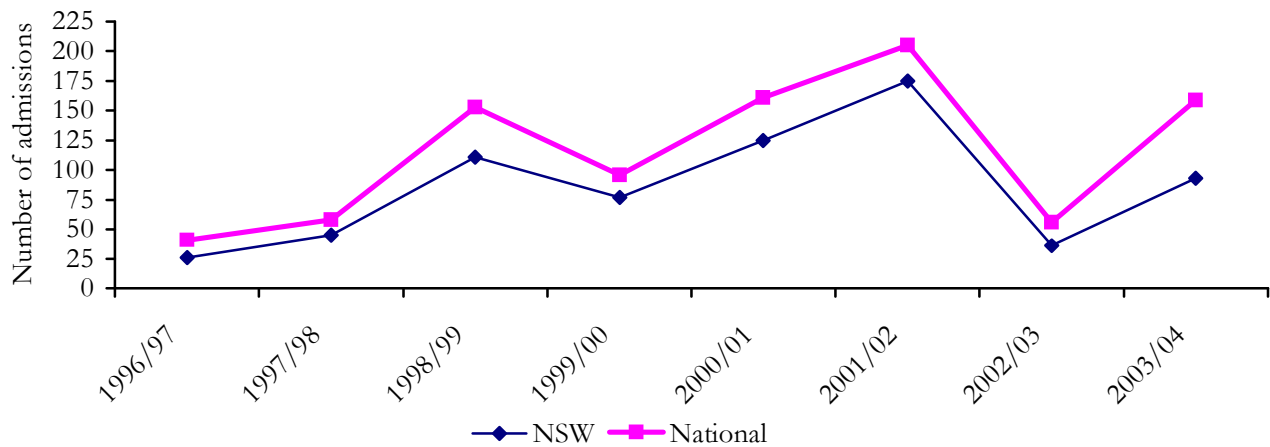


**Source:** ADIS and FDS

NB: Family Drug Support data were only available from April 2000 and refer to calls where any mention of cocaine was made. ADIS data refer to the number of calls where cocaine was mentioned as any drug of concern. ADIS data were unavailable for the period July-October 2004

The number of inpatient hospital separations in which cocaine was implicated as a principal diagnosis is shown in Figure 59. As outlined previously, diagnoses for the period 1998 to 2004 were recorded using ICD-10-AM codes, and prior to this, ICD-9-CM was used to code hospital separations. A principal diagnosis is defined as having been chiefly responsible for occasioning the patient's episode of care in hospital. Similar to IDU data and a number of other indicators, figures have increased, following a peak and subsequent decline in admissions during 2001/02 and 2002/03.

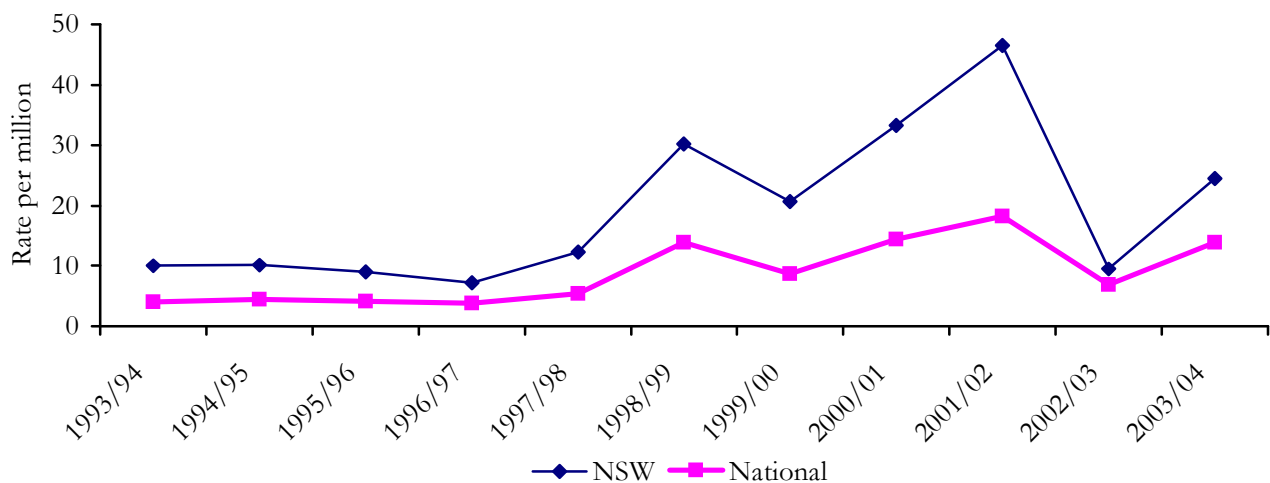
**Figure 59: Total number of inpatient hospital admissions for persons aged 15-54 where cocaine was the principal diagnosis, NSW and nationally, 1996/97-2003/04**



Source: National Hospital Morbidity Database; Roxburgh & Degenhardt (in press)

The rates of inpatient hospital admissions where cocaine was the principal diagnosis per million people aged 15-54 years are shown in Figure 60 below. In accordance with IDU and other indicators, rates in NSW peaked in 2001/02, decreased quite markedly between 2001/02 and 2002/03, and have increased once again albeit to a lesser extent. While NSW has consistently accounted for over half of inpatient hospital admissions in Australia where cocaine was the principal diagnosis, this proportion has decreased from a peak of 85% in 2001/02 to 58% in 2003/04.

**Figure 60: Rate of inpatient hospital admissions where cocaine was the principal diagnosis per million people aged 15-54 years, NSW and nationally, 1993/94-2003/04**

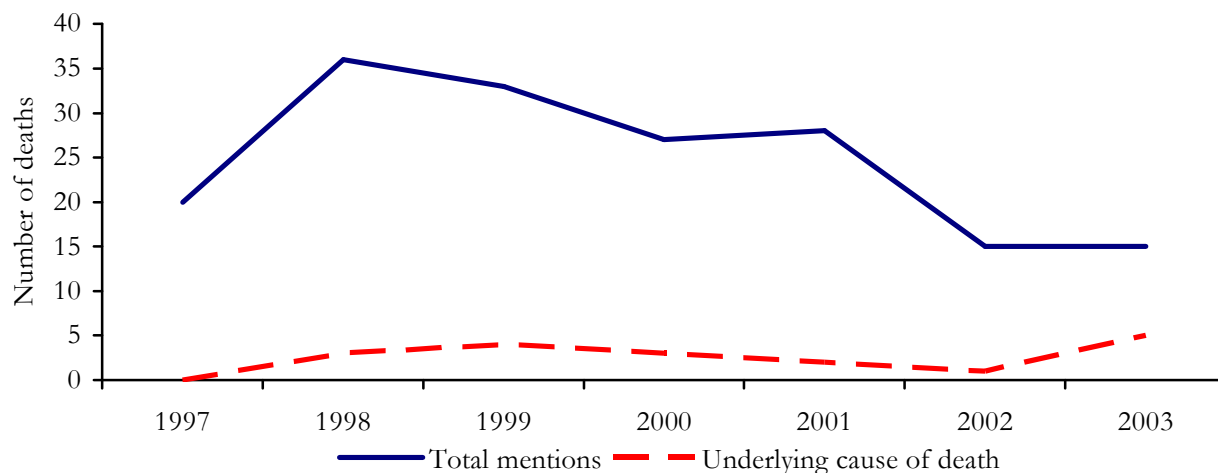


Source: National Hospital Morbidity Database; Roxburgh & Degenhardt (in press)

Figure 61 shows ABS data on accidental drug-induced deaths in which cocaine was mentioned among those aged 15-54 in Australia for the period 1997-2003 (Degenhardt et al., 2004b). This includes deaths where cocaine was determined to be the underlying cause of death, as well as those where it was mentioned but where another drug was believed to be primarily responsible (usually opioids). Deaths have remained relatively stable since 2002, following a decline in total mentions between 2001-2002. The number of deaths in which cocaine was determined to be the underlying cause has remained in

single figures since 1997, with the greatest number (5) recorded in 2003. Data from 2004 onwards were unavailable at time of printing.

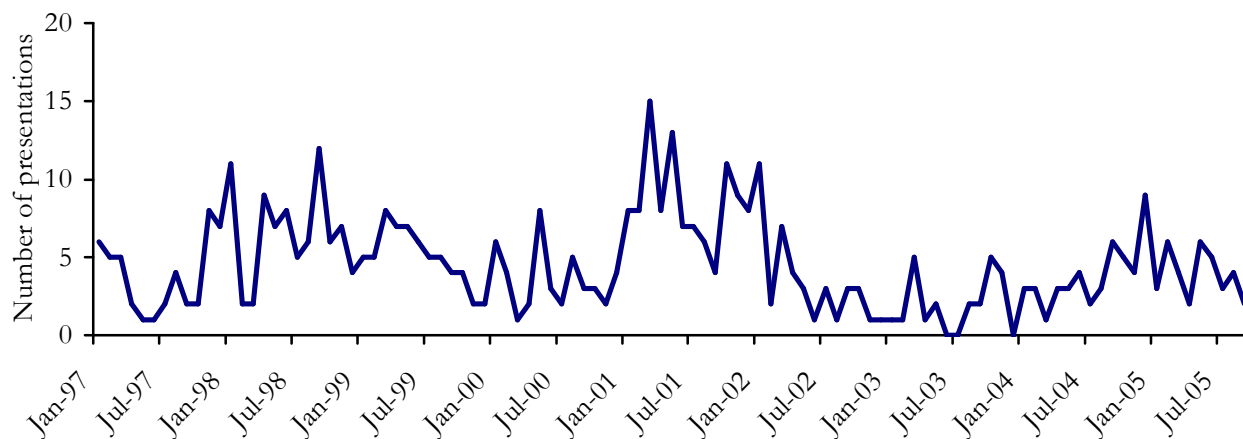
**Figure 61: Number of accidental drug-induced deaths mentioning cocaine (total and underlying) among those aged 15-54 years in Australia, 1997-2003**



Source: ABS mortality database

The number of cocaine overdose presentations to NSW emergency departments has remained extremely low in the past two years (Figure 62). This is consistent with cocaine use patterns and IDU reports of cocaine availability, with a substantial peak in numbers during 2001 and a decline in early 2002. Consistent with IDU reports, a less substantial increase was recorded in early 2005 (the six month period about which the IDU sample are surveyed), and presentations remained marginally higher in late 2004-2005 than in the preceding two years.

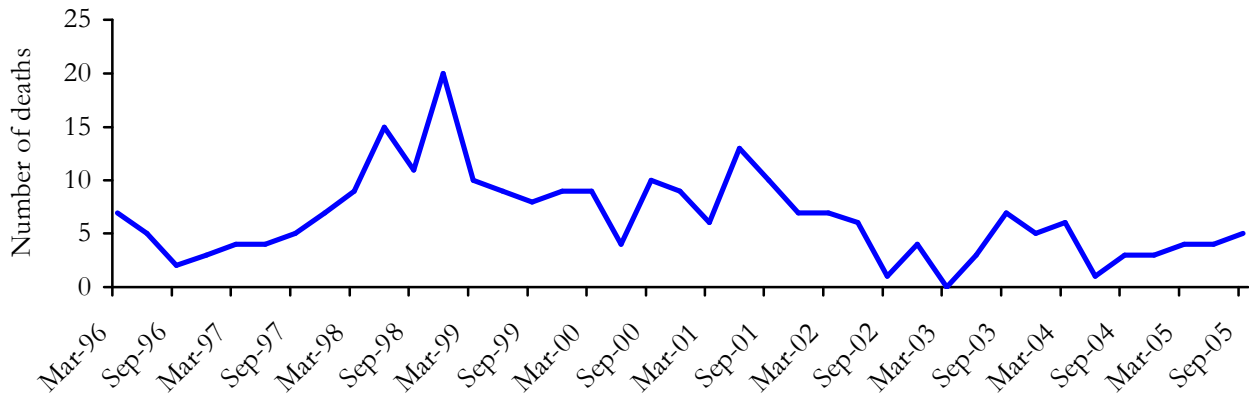
**Figure 62: Cocaine overdose presentations to NSW emergency departments, 1997-2005**



Source: Emergency Department Information System, NSW Department of Health

The number of drug related deaths in which cocaine was detected post mortem have increased slightly over the last twelve months (Figure 63), although they remain lower than the substantial increases following in the third quarter of 1998 (October-December) and the second quarter of 2001 (April-June).

**Figure 63: Number of suspected drug related deaths where cocaine was detected post mortem, by quarter, 1996-2005**

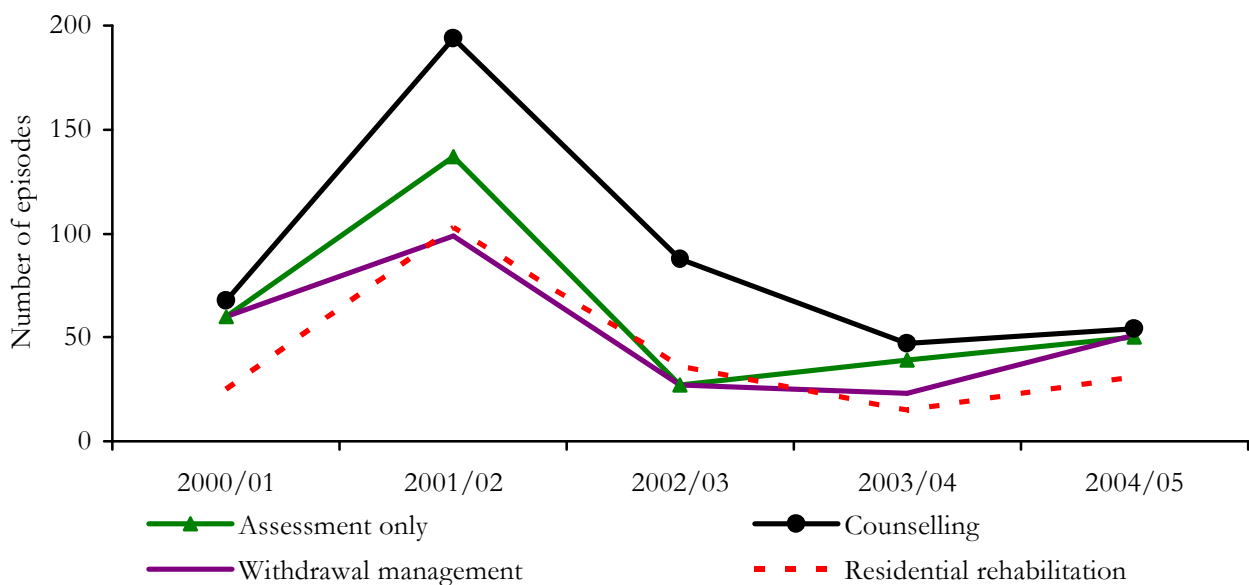


**Source:** Forensic Toxicology Laboratory database, Division of Analytical Laboratories

**NB:** These numbers relate to deaths in which cocaine was detected, however, there may have also been other drugs present

The number of closed treatment episodes based on the date of commencement where the principal drug of concern was cocaine has remained at less than 100 per treatment type since 2002/03. A peak in treatment episodes occurred across all four main treatment types: assessment only; counselling; withdrawal management; and residential rehabilitation – in 2000/01 (Figure 64).

**Figure 64: Number of cocaine treatment episodes by treatment type, NSW 2000/01-2004/05**



**Source:** NSW MDS DATS, NSW Department of Health

**NB:** The NSW MDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period



## 6.6 Trends in cocaine use

When asked about whether there had been any change in the types of drugs participants' friends or acquaintances were using recently, only eight participants made reference to cocaine, commenting that more people seemed to be using it than in the past.

## 6.7 Summary of cocaine trends

- The price for a cap has remained stable since 1998 at \$50. Slight fluctuations in price were reported for other common purchase amounts as compared with 2004.
- Cocaine availability remained similar to 2004, with over two-thirds of those commenting reported that it was 'easy' or 'very easy' to obtain. However, an increase was observed among those reporting it to be 'very easy', indicative of slightly greater ease of access.
- Purity of cocaine seized by NSW Police fluctuated slightly over the past twelve months, but remained higher than previously. Participant reports of purity were mixed, although it was most commonly reported as being of 'medium' purity.
- An increase in prevalence of cocaine use was observed in 2005, although this did not approach the high levels reported in 2001 during the peak of the heroin shortage. While frequency of cocaine use also increased, it remained sporadic among the majority of participants. Eleven percent of participants reported daily cocaine use as compared with three percent in 2004.
- Indicator data suggest that there has been an increase in cocaine use in some areas, particularly inner Sydney and South-West Sydney, with increases also seen in presentations to primary healthcare settings (as indicated by inpatient hospital admissions and overdose presentations to emergency departments).
- KE reports suggested that there had been increases in cocaine use in some geographical areas and that these were not presently widespread across the whole of Sydney or New South Wales.

## 7.0 CANNABIS

Participants were asked if they were able to comment on the price, potency and/or availability of hydroponic and/or outdoor-grown ('bush') cannabis, and in 2005 83% of the IDU sample felt confident to answer at least some of the survey items on hydroponic and/or bush cannabis. Unless specified otherwise, proportions refer to the comments of this subgroup. The remainder did not feel confident to answer any questions on one or both of these forms of cannabis, and this is likely to reflect a proportion of users who do not use or come into contact with users or dealers of cannabis regularly enough to be able to comment.

Fourteen key experts commented on the cannabis market (price, purity and/or availability) and/or cannabis use over the preceding six to twelve months.

This year represents the second in which potency and availability information was separated for hydroponically grown ('hydro') and outdoor grown cannabis ('bush').

### 7.1 Price

Prices paid for hydro and bush by IDU participants on the last occasion of purchase are presented in Table 13. Hydro appeared to be the more popular form of cannabis with fewer participants reporting the purchase of bush. Use of the resin (hashish) and oil (hash oil) forms remains uncommon.

#### *Hydro*

Participants were surveyed concerning the price paid the last time they had bought hydroponic cannabis. The median price paid for a gram of hydro was \$20, the same as in previous years (Table 13; Figure 65). Similarly, there were no changes in prices paid for quarter ounces and ounces, and a slight decrease was observed in the median price last paid for a half ounce (from \$160 to \$150).

As in previous years, and with other drugs surveyed (e.g. heroin, cocaine, methamphetamine), the most popular purchase amount of hydro was the smallest generally available, i.e. grams (n=55), followed by quarter ounces (n=35). Thirteen participants reported buying three grams of hydro on one occasion of purchase at a median price of \$50, and 13 participants reported buying a 'stick' (usually anecdotally reported to be equivalent to a gram of cannabis) at a median price of \$20 (smaller 'sticks' were occasionally available for \$10).

Participants were also asked whether they thought that prices had changed over the six months preceding interview. Consistent with reported prices for hydro, which remained stable, the majority of IDU participants who commented (73%; representing 61% of the entire sample) also reported that the price was stable, with small proportions stating that it had increased (8%; 7% of the entire sample), decreased (6%; 5% of the entire sample) or fluctuated (4%; 3% of the entire sample). Nine percent (8% of the entire sample) reported that they did not know. These figures represent little change from 2004.

### *Bush*

Median prices for bush (quarter ounces, half ounces and ounces) decreased slightly in 2005 as compared with 2004, with the exception of grams which remained at \$20 (Table 13). Similar to hydro, the most popular purchase amount for bush was a gram (n=31), and the median reported price (\$20) was the same as a gram of hydro. Prices paid for bush tended to range more widely than those paid for hydro, with fewer purchasers and there was a tendency for it to be slightly cheaper overall. This has remained a consistent pattern since 2003 (Figure 65).

Again, consistent with reported prices for bush, the majority of participants who commented (52%; representing 43% of the entire sample) thought prices had remained stable (a decrease from 67% of those commenting; 38% of the entire sample in 2004). Two percent (2% of the entire sample) thought it had increased, 4% (3% of the entire sample) thought it had decreased and 1% (1% of the entire sample) thought it had fluctuated. Almost half of participants commenting (41%; 34% of the entire sample) stated that they didn't know whether prices had changed recently as compared with 2004 when these figures were 25% of those commenting and 14% of the entire sample, respectively. This suggests that fewer participants believed they had used bush enough times or had enough contact with dealers and/or users to be able to comment.

Price ranges for both forms of marijuana were wide (Table 13). This is likely to be a reflection of purity/availability within that particular person's network and various other circumstances which may influence the cost of a particular deal.

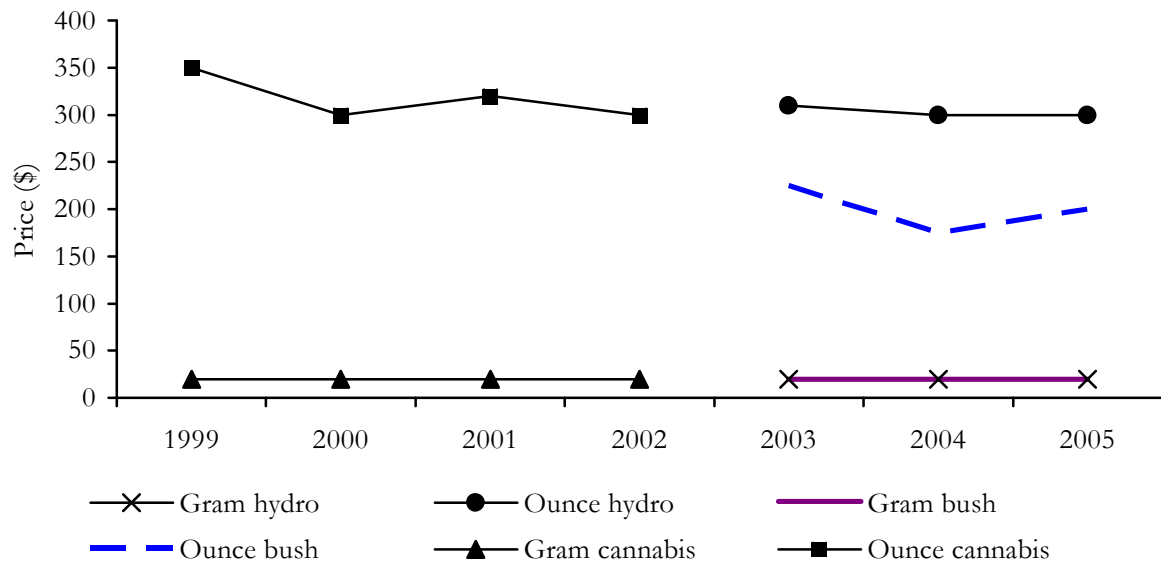
**Table 13: Price of most recent cannabis purchases by IDU participants, 2005**

<b>Amount</b>	<b>Median price* \$</b>	<b>Range</b>	<b>Number of purchasers*</b>
<i>Hydro</i>			
Gram	20 (20)	\$10-\$80	55
Quarter Ounce	90 (90)	\$70-\$170	35
Half Ounce	150 (160)	\$150-\$350	14
Ounce	300 (300)	\$200-\$400	9
<i>Bush</i>			
Gram	20 (20)	\$10-\$50	31
Quarter Ounce	80 (90)	\$60-\$100	11
Half Ounce	145 (150)	\$80-\$200	6
Ounce	200 (175)	\$150-\$400	10

**Source:** IDRS IDU interviews

\*2004 median prices are in brackets

**Figure 65: Median prices of cannabis estimated from IDU participant purchases, 1999-2005**



Source: IDRS IDU interviews

NB: Survey items on the last price paid were first included in 1999. A distinction between hydroponic and bush cannabis was introduced in 2003; prior to this date prices for the last purchase of cannabis (any form) were collected. The median prices per gram of hydroponic and bush cannabis were identical in 2003, 2004 and 2005

KE reports most commonly suggested that a gram or a ‘stick’ of cannabis cost \$20 but could range from \$10-\$35 across NSW. An ounce was reported to be approximately \$150-\$350 (type of cannabis not reported) and for larger amounts hydro was more expensive. Locally grown bush was reported by another KE to cost \$20-\$35 per gram, \$100 per quarter ounce, \$400-\$700 per ounce and \$3,500-\$4,500 per pound. Hydroponic cannabis was reported to cost \$3,600-\$5,000 per pound. Hashish was reported to cost \$50 per gram, \$450-\$800 per ounce and one kilogram was believed to cost \$8,000-\$12,500. Prices were reported to have remained stable over the preceding six months.

### Hash and Hash Oil

Only two participants reported buying hash in the preceding six months, and there were no reports of hash oil purchase.

## 7.2 Availability

A distinction between hydroponic and outdoor (bush) cannabis was again made in 2005.

### Hydro

The vast majority of participants commenting on hydro thought it was ‘very easy’ (70%; representing 58% of all participants) or ‘easy’ (22%; representing 18% of all participants) to obtain (Table 14). The vast majority (82%; representing 68% of all participants) reported availability as ‘stable’ over the preceding six months. This represents little change from 2004. Prior to 2004, no distinction was drawn between hydro and bush availability, with participants instead being surveyed about cannabis availability generally. From 2000 until 2004, approximately half of all respondents reported that cannabis was ‘very easy’ to obtain (Figure 66).

*Bush*

In contrast to hydro, a smaller proportion of those commenting (26%; representing 21% of the entire sample) reported that bush was ‘very easy’ to obtain, and a larger proportion (38%; representing 31% of the entire sample) reported that they didn’t know, typically because they had not had sufficient exposure to the market or users and/or dealers of this form of cannabis. This represents little change from 2004 (Table 14). Almost half of participants commenting on bush (47%; or 39% of the entire sample) reported that availability had remained stable in the six months preceding interview.

**Table 14: Participants’ reports of cannabis availability in the past six months, 2004-2005**

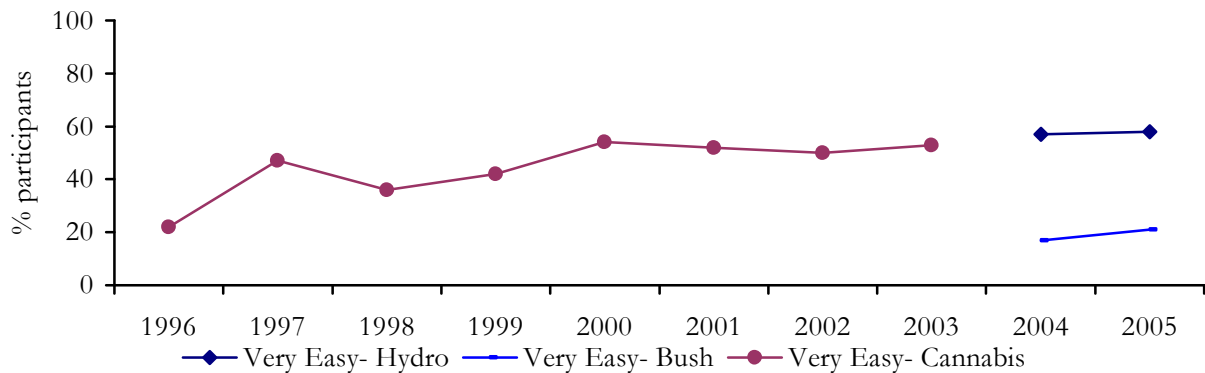
Current availability	Hydro		Bush	
	2004 (N=157)	2005 (N=154)	2004 (N=157)	2005 (N=154)
Did not respond* (%)	16	17	16	17
Did respond (%)	84	83	84	83
<i>Of those who responded:</i>				
Very Easy (%)	67 <i>(57% of entire sample)</i>	70 <i>(58% of entire sample)</i>	30 <i>(17% of entire sample)</i>	26 <i>(21% of entire sample)</i>
Easy (%)	28 <i>(24% of entire sample)</i>	22 <i>(18% of entire sample)</i>	24 <i>(13% of entire sample)</i>	17 <i>(14% of entire sample)</i>
Difficult (%)	3 <i>(3% of entire sample)</i>	2 <i>(2% of entire sample)</i>	25 <i>(14% of entire sample)</i>	16 <i>(13% of entire sample)</i>
Very Difficult (%)	None	None	1 <i>(1% of entire sample)</i>	4 <i>(3% of entire sample)</i>
Don’t know <sup>^</sup>	2 <i>(1% of entire sample)</i>	6 <i>(5% of entire sample)</i>	20 <i>(12% of entire sample)</i>	38 <i>(31% of entire sample)</i>
<b>Availability change over the last six months</b>				
Did not respond* (%)	16	17	16	17
Did respond (%)	84	83	84	83
<i>Of those who responded:</i>				
More difficult (%)	2 <i>(2% of entire sample)</i>	7 <i>(6% of entire sample)</i>	14 <i>(8% of entire sample)</i>	15 <i>(12% of entire sample)</i>
Stable (%)	91 <i>(76% of entire sample)</i>	82 <i>(68% of entire sample)</i>	63 <i>(35% of entire sample)</i>	47 <i>(39% of entire sample)</i>
Easier (%)	2 <i>(2% of entire sample)</i>	4 <i>(3% of entire sample)</i>	None	None
Fluctuates (%)	1 <i>(1% of entire sample)</i>	1 <i>(1% of entire sample)</i>	1 <i>(1% of entire sample)</i>	1 <i>(1% of entire sample)</i>
Don’t know <sup>^</sup> (%)	4 <i>(3% of entire sample)</i>	6 <i>(5% of entire sample)</i>	23 <i>(13% of entire sample)</i>	38 <i>(31% of entire sample)</i>

**Source:** IDRS IDU interviews

\* ‘Did not respond’ refers to participants who did not feel confident enough in their knowledge of the market to respond to survey items

<sup>^</sup> ‘Don’t know’ refers to participants who were able to respond to survey items on price and/or purity, but had not had enough contact with users/dealers to respond to items concerning availability

**Figure 66: Participant reports of current cannabis availability, 1996-2005**



**Source:** IDRS IDU interviews

NB: A distinction between hydroponic and bush cannabis was introduced in 2004. Prior to this time survey items referred to any form of cannabis.

Patterns of purchase of hydro and bush forms of cannabis were similar, with those who had purchased in the last six months predominantly obtaining it through friends either as a gift or by buying it from them (35% hydro, 39% bush) or by buying it from a street dealer (27% hydro, 33% bush). Just under a fifth bought from a dealer's home (20% hydro, 12% bush), with smaller proportions reporting that they usually organised purchase through contacting a dealer on a mobile phone (mobile dealer; 10% hydro, 4% bush) or by the dealer delivering it to their home (7% hydro, 4% bush). Other methods through which IDU participants had predominantly scored were reported by 4% (hydro) and 9% (bush).

Some small changes in scoring methods were observed as compared with 2004, with scoring through friends becoming more common (from 23% of those who had bought it in 2004 to 35% in 2005) and a decrease in the proportion who reported usually buying from a street dealer (from 19% in 2004 to 10% in 2005). Similar to hydro, an increase was also observed in the proportion of participants who reported predominantly obtaining bush through friends (from 29% in 2004 to 39% in 2005). A decrease in the use of mobile dealers for bush was also seen (from 18% in 2004 to 4% in 2005). With the exception of these changes, usual scoring methods remained similar in both years.

The median time in which IDU reported that it usually took them to score hydro was ten minutes; the same as for bush. These patterns indicate that there has been no change since 2004.

Both law enforcement and health KE reported that cannabis was easy to obtain for regular users from a range of demographic groups and in a variety of geographic locations and that this had remained stable over the preceding six months.

### 7.3 Potency

Participants were questioned about their perceptions of current potency (whether it was 'low', 'medium', 'high', 'fluctuates' or that they did not know), and whether they thought that the potency of hydro and bush had changed over the last six months (response options were: 'stable'; 'increasing'; 'decreasing'; 'fluctuating'; and 'don't know').

## *Hydro*

Similar to participant reports in 2004, the majority of participants commenting on hydro reported it as currently being of 'high' (57%; 47% of the entire sample) potency, followed by 29% (representing 24% of the entire sample) who rated it as being of 'medium' potency. Only 2% (1% of the entire sample) thought that it was of 'low' potency, and 6% believed that it fluctuated. The majority (58% of those commenting; 48% of the entire sample) believed that potency had remained stable in the preceding six months, with smaller proportions reporting that it had increased (15%; representing 12% of the entire sample), decreased (9%; representing 7% of the entire sample) or fluctuated (10%; 8% of the entire sample). Nine percent (7% of all participants) stated that they did not know.

## *Bush*

In contrast to hydro, where a large proportion of participants felt able to comment, a smaller proportion felt confident to comment on bush potency, with 40% of those commenting on price and/or availability of bush (representing 33% of all participants surveyed) saying that they did *not* know about current potency. Among those who commented, almost one-third (29%; 24% of all participants) thought it was of medium potency, 14% (12% of all participants) thought it was of high potency, and 12% (10% of all participants) thought it was of low potency. A further 6% (5% of all participants) thought it fluctuated. When asked about whether potency had changed over the last six months, most respondents (42% of those commenting; 35% of the entire sample) stated that it had remained stable over the last six months. Only small proportions thought that it had increased (4%; 3% of the entire sample), decreased (6%; 5% of the entire sample) or fluctuated (7%; 6% of the entire sample). Again, a large proportion (41%; 34% of the entire sample) said that they didn't know about potency change, again suggestive of lower use levels.

Overall, these findings indicate that according to IDU perceptions, hydroponic cannabis appears to dominate the market, and is generally seen as of higher potency than outdoor grown 'bush' cannabis. Potency of both forms was generally perceived to have remained stable. This represents little change from 2004.

Law KE commented that no data were currently available on cannabis potency in Australia, and therefore that while there was a perception that hydroponic cannabis contained greater quantities of THC (delta-9 tetrahydro-cannabinol) than outdoor grown cannabis this had not been proven. Another law enforcement KE commented that in some cases healthy outdoor grown cannabis may be mistaken by users as hydro. However, in general 'hydro' was reported to be very strong, and bush was rated as being of medium potency. Potency was reported to have remained stable or have increased over the last six months.

## **7.4 Use**

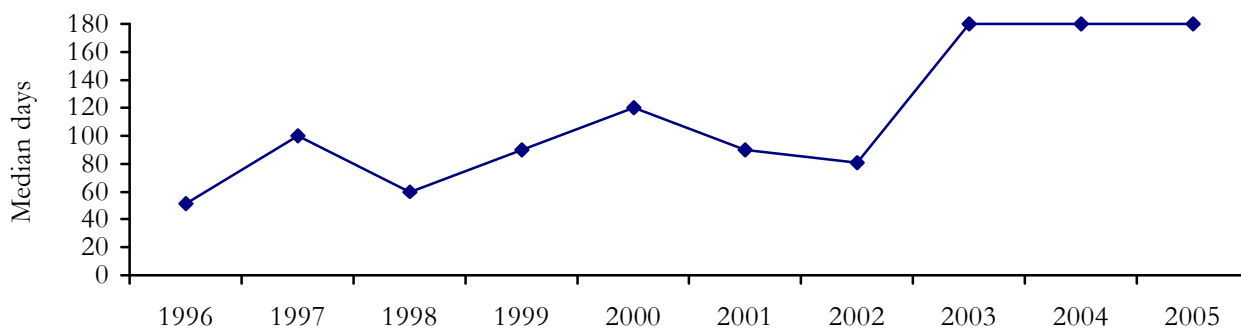
### **7.4.1 Cannabis use among IDU participants**

As in previous years, there was little change in the prevalence of cannabis use among participants. Eighty percent had used cannabis in the preceding six months (79% said so in 2004). Prevalence of cannabis use among sentinel groups of IDU in Sydney, NSW has remained relatively stable since the commencement of the IDRS in 1996. KE reports on prevalence of use were mixed, with some reporting an increase in users (particularly presenting to services), and others reporting no change.

### 7.4.2 Current patterns of cannabis use

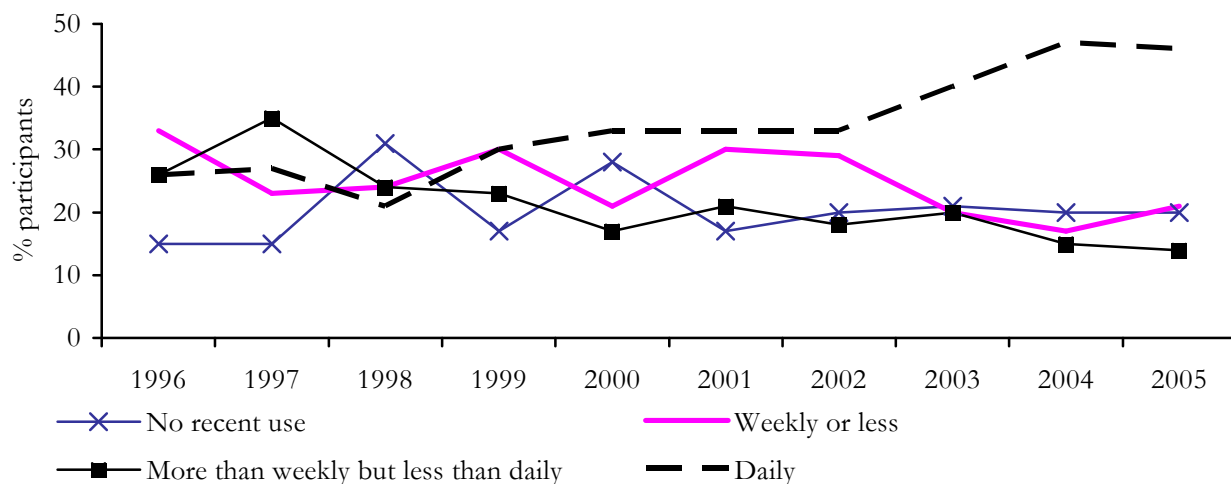
The median number of days of cannabis use by those who used was 180 in the preceding six months (i.e. daily). This represents no change from 2003 or 2004, with levels remaining substantially higher than in previous years (Figure 67). Forty-seven percent of IDU participants (59% of the cannabis users) reported daily use in the preceding six months, representing no change from 2004 (Figure 68).

**Figure 67: Median number of days of cannabis use in the past six months, 1996-2005**



Source: IDRS IDU interviews

**Figure 68: Patterns of cannabis use, 1996-2005**



Source: IDRS IDU interviews

In agreement with IDU data, the majority of the cannabis KE reported that there had been no change in the frequency or quantity of use among the cannabis users with whom they had had contact. The majority (typically those working in treatment services) reported that daily use was the usual pattern, with some using a couple of times per week. The quantity used on an occasion of use ranged from two cones up to 60 cones per day.

Consistent with larger proportions of IDU reporting that they had bought hydro, 96% of respondents who had used cannabis reported using hydro in the preceding six months, and 69% of cannabis users reported using bush during this time. These figures were 98% and 74% in 2004, respectively. By



contrast, only 7% of users reported use of hashish (8% in 2004) and 2% had used hash oil (6% in 2004). When asked which form of cannabis they had used most often in the last six months, the vast majority (87% of users) reported hydro and 11% of cannabis users reported bush. No participants reported that hashish or hash oil as the form most frequently used, and 2% were unable to pick a single form most used, most likely because they had used more than one form equally as often. This represents little change from 2004, when 88% of users reported using hydro most often, 8% used bush, 4% had used two or more forms equally as often, and no participants reported using hashish or hash oil most often.

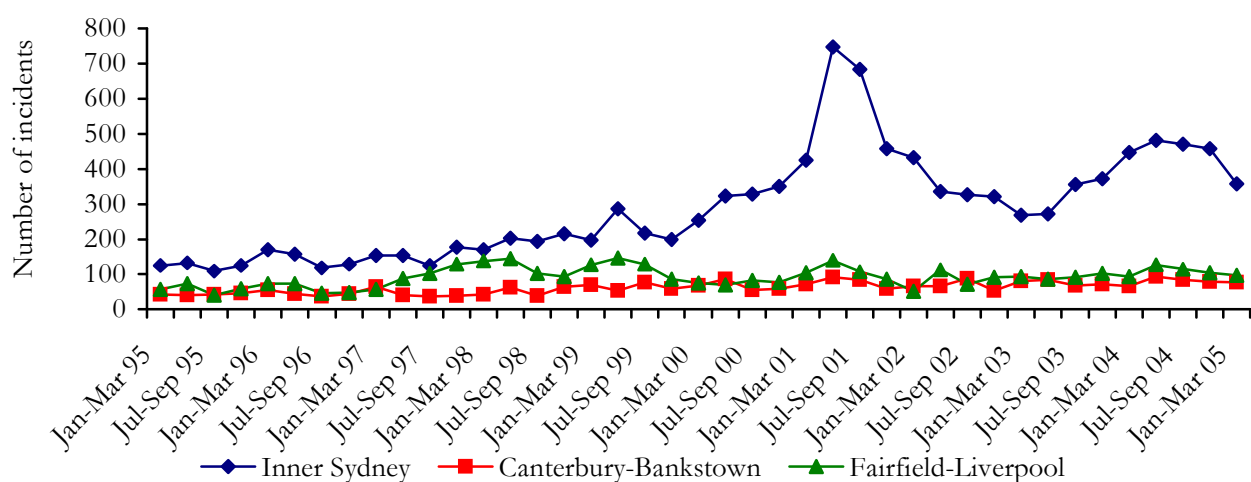
Consistent with IDU reports, hydroponic cannabis was reported by KE as the most commonly used form of cannabis, with some use of bush and very little or no use of hashish or hash oil. However, some debate over the accuracy of bush and hydro identification was highlighted by one KE who suggested that in some cases healthy bush may be mistaken for hydroponic. It should be noted that the majority of KE were commenting on cannabis use within the greater Sydney metropolitan area, the area in which a number of law KE reported hydroponic cannabis was typically cultivated. By contrast, large scale bush cannabis cultivation occurred outside Sydney and was consequently more accessible to users located in these areas.

## 7.5 Cannabis related harms

### 7.5.1 Law enforcement

Figure 69 shows the number of police recorded criminal incidents of cannabis possession/use per quarter in the Inner Sydney area, Fairfield-Liverpool and Canterbury-Bankstown<sup>9</sup>. The number of recorded incidents in the Inner Sydney area has decreased in early 2005 following a gradual increase from the second quarter of 2003. The numbers of incidents recorded in the Fairfield-Liverpool and Canterbury-Bankstown areas are much lower than inner city figures, and have remained stable over time.

**Figure 69: Recorded incidents of cannabis possession/use by geographic area per quarter, January 1995-June 2005**



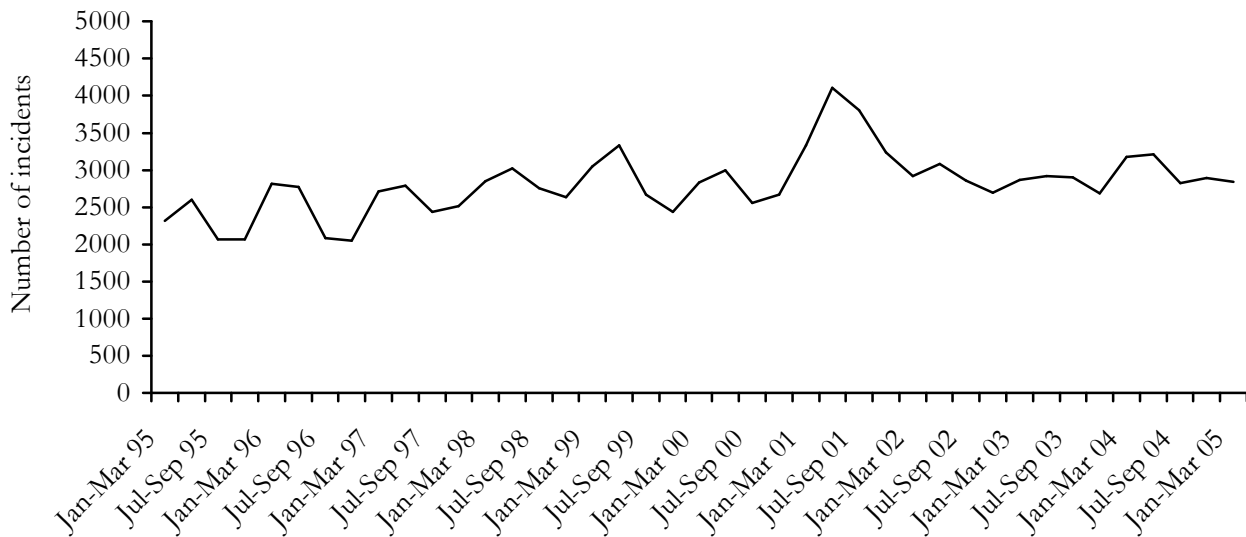
**Source:** NSW Bureau of Crime Statistics and Research

NB: Changes in the number of recorded incidents may be indicative of changes in police activity, or an increase in possession/use, or a reflection of both

<sup>9</sup> The regions Inner Sydney, Fairfield-Liverpool and Canterbury-Bankstown refer to ABS Statistical Subdivisions.

Across NSW as a whole, recorded incidents of cannabis possession/use per quarter have remained relatively stable over time (Figure 70). Similar to increases noted in Inner Sydney, a substantial peak occurred in the second quarter of 2001 (April-June; 4110 incidents).

**Figure 70: Recorded incidents of cannabis possession/use (whole of NSW) per quarter, January 1995-June 2005**



**Source:** NSW Bureau of Crime Statistics and Research

NB: Changes in the number of recorded incidents may be indicative of changes in police activity, or an increase in possession/use, or a reflection of both

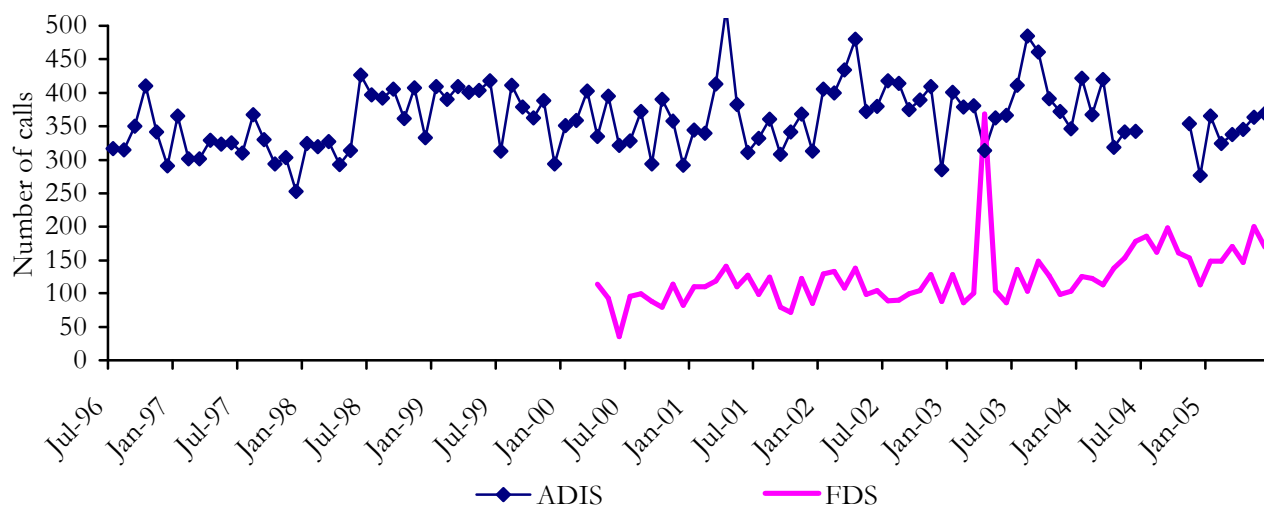
One law enforcement KE commented that it may be becoming more difficult to grow cannabis outdoors, and that cultivators were turning to hydroponically grown cannabis. This KE also highlighted a number of issues associated with this. Firstly, that the potency may have increased highlights implications for dependency and associated mental health issues such as paranoia. A second area of concern raised by this KE related to safety issues associated with the diversion of electricity by some organised groups involved in larger scale production, particularly where water and electricity were in close proximity. Law enforcement KE commenting on cannabis cultivation reported that there had been an increase in large-scale hydroponic cannabis cultivation in Sydney by a group of people predominantly of South-East Asian background over the past few years, although the vast majority of people involved in large-scale cultivation remained of white/European descent.

## 7.5.2 Health

### *Calls to telephone helplines*

The number of calls to ADIS regarding cannabis has remained relatively stable since 2001 (Figure 71). The peak in calls to FDS where cannabis was mentioned during 2003 may be due to an irregularity in the data recorded rather than reflecting a real increase. There has been a gradual increase in proportion of calls relating to cannabis received by FDS, from 32% in April 2000 to 40% in June 2005.

**Figure 71: Number of enquiries to ADIS and FDS regarding cannabis, 1996-2005**

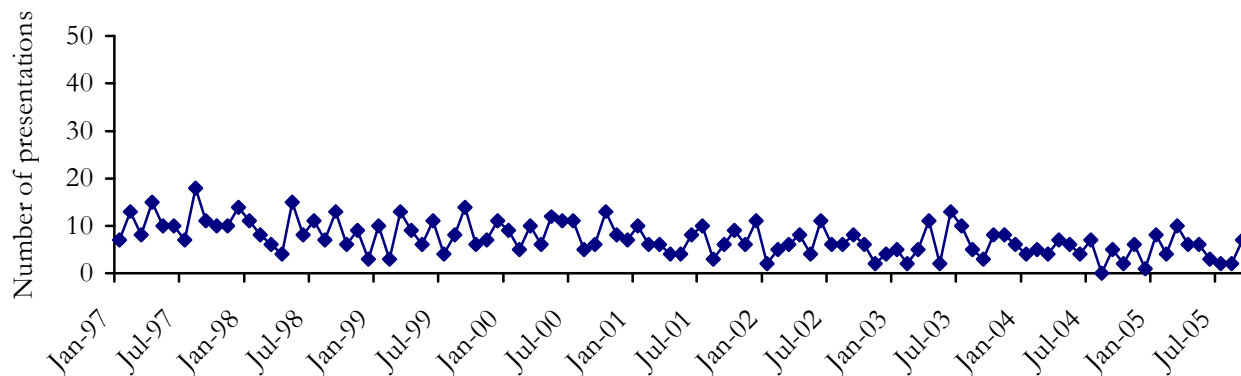


**Source:** ADIS and FDS

NB: Family Drug Support data were only available from April 2000 and refer to calls where any mention of cannabis was made. ADIS data refer to the number of calls where cannabis was mentioned as any drug of concern. ADIS data were unavailable for the period July – October 2004

The number of cannabis toxicity presentations to emergency departments has remained extremely low at less than twenty per month since 1997 (Figure 72).

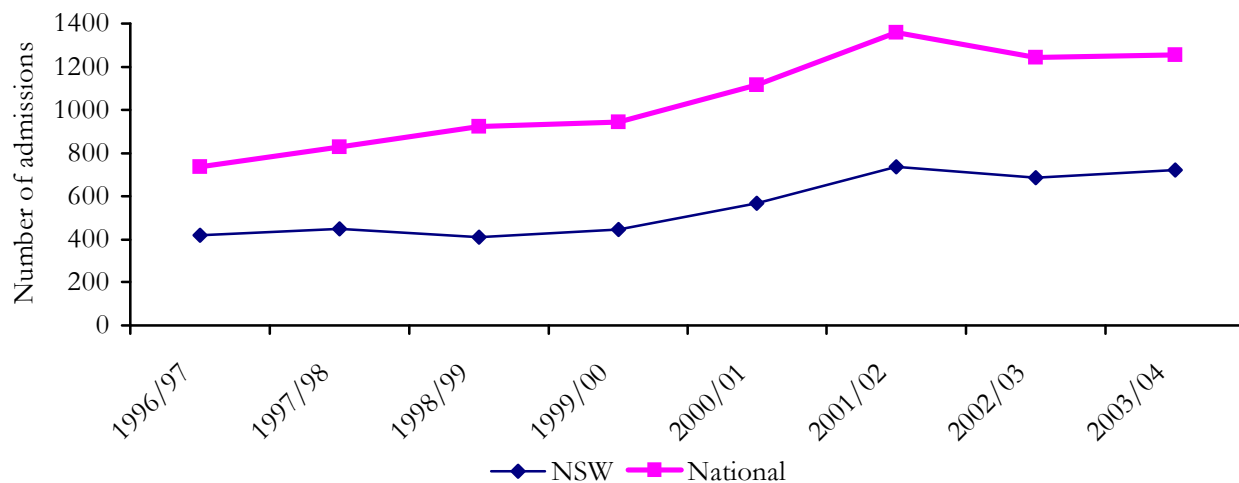
**Figure 72: Cannabis toxicity presentations to NSW emergency departments, 1997-2005**



**Source:** Emergency Department Information System, NSW Department of Health

The number of hospital admissions in which cannabis was implicated as a principal diagnosis is shown in Figure 73 below. As specified in previous chapters, diagnoses for the period 1998 to 2004 were recorded using ICD-10-AM codes, and prior to this, ICD-9-CM was used to code hospital separations. A principal diagnosis is defined as having been chiefly responsible for occasioning the patient’s episode of care in hospital. These figures refer to persons aged between 15-54 years of age. Figures have remained relatively stable over the past two years, following an increase from 1996/97.

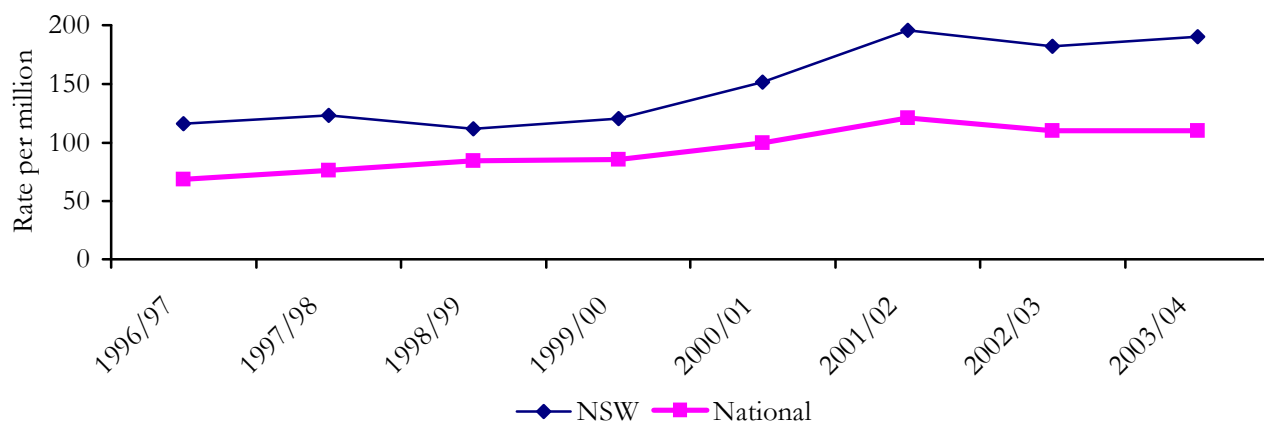
**Figure 73: Number of inpatient hospital admissions for persons aged 15-54 where cannabis was the principal diagnosis, NSW and nationally, 1996/97-2003/04**



**Source:** National Hospital Morbidity Database; Roxburgh & Degenhardt (in press)

Figure 74 shows the rates of hospital admissions where cannabis was the principal diagnosis per million people aged 15-54 years. Rates in NSW remain higher than nationally, and have remained higher over the past two years than previously. Since 2000/01, NSW has accounted for between 50-60% of Australian inpatient hospital admissions where cannabis was the principal diagnosis.

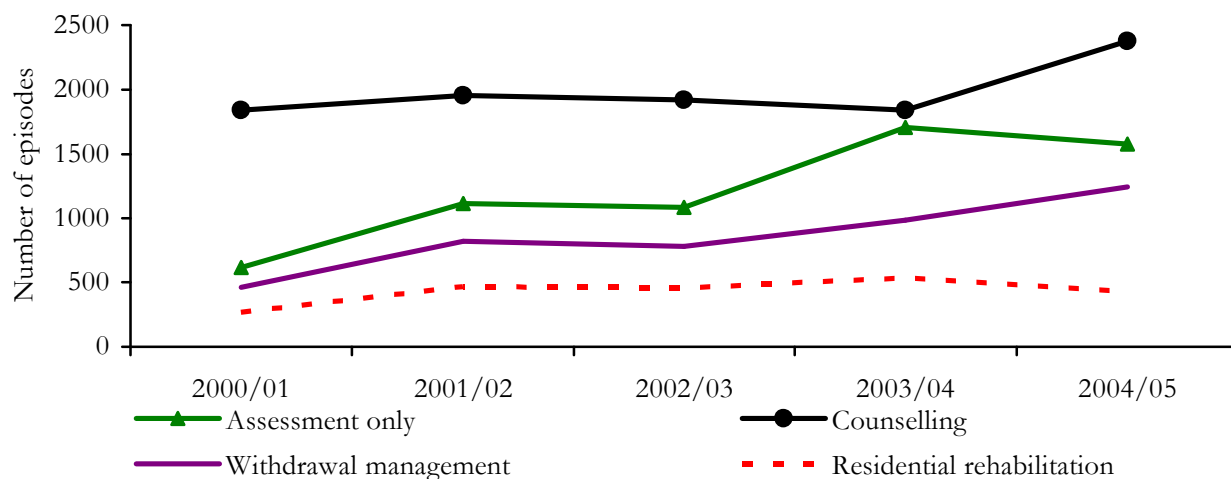
**Figure 74: Rate of inpatient hospital admissions where cannabis was the principal diagnosis per million people aged 15-54 years, 1996/97 to 2003/04**



**Source:** National Hospital Morbidity Database; Roxburgh & Degenhardt (in press)

Figure 75 shows the number of closed treatment episodes based on the date of commencement where the principal drug of concern was cannabis, by treatment type. Numbers entering for assessment only have declined over the past year, following a gradual increase from 613 in 2000/01 to 1707 in 2003/04 (this figure was 1575 in 2004/05). Overall, numbers entering withdrawal management have increased since 2000/01 while numbers entering counselling remained relatively stable until 2004/05 when a sharp increase was observed. Numbers commencing residential rehabilitation have remained relatively stable since 2001/02 at 400 or more per year (this figure was 270 in 2000/01).

**Figure 75: Number of cannabis treatment episodes by treatment type, NSW 2000/01-2004/05**



**Source:** NSW MDS DATS, NSW Department of Health

NB: The NSW MDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period

KE comments on health problems associated with cannabis use were mixed, with some reporting a concerning increase in clients presenting to services with symptoms of anxiety, depression and/or psychosis, and this was particularly noticeable among younger users. Other KE reported that there had been no change.

## 7.6 Trends in cannabis use

Prevalence of cannabis use remained unchanged among IDU, with patterns of price, purity, availability and use similar to those noted in 2004. KE reports suggested that in some areas there had been an increase in cannabis-using clients presenting to services, and an increase among those experiencing mental health problems. The extent to which this may have been influenced by factors such as the media and government attention was not possible to determine.

## 7.7 Summary of cannabis trends

- The cannabis market remained stable. Prices for grams of cannabis have remained stable at \$20, and lower than prices reported between 1996 and 1999. Bush cannabis remained slightly cheaper than hydroponic cannabis for larger amounts, and the same price for smaller amounts.
- Hydroponic and outdoor grown cannabis remained readily available, particularly the hydroponic form.
- The potency of hydroponic cannabis was perceived to be 'high' and to have remained stable over the preceding six months. Bush cannabis was perceived to be of medium potency and this was reported to have remained stable.
- Hydroponic cannabis remained the most commonly used form of cannabis, although a substantial proportion of IDU had also recently used bush cannabis. Use of hash and hash oil remained uncommon.
- Prevalence of cannabis use remained stable, and just under half of the IDU participant sample reported daily use.

- KE reports suggested that frequency and use patterns had remained stable, with health services in some areas noting an increase in people seeking treatment. A number of KE also noted an increase in mental health problems among younger cannabis users.
- Indicator data suggested that the prevalence of cannabis use within the broader community, and harms related to such use, has remained relatively stable. An increase in the number of police detections occurred in inner Sydney in 2003 and 2004 and has declined more recently. There has been a slight increase in the number of calls to Family Drug Support over the past 18 months. Consistent with some KE reports of an increase in treatment seeking, an increase was noted in the number of treatment episodes for counselling and withdrawal management.

## 8.0 OPIOIDS

### 8.1 Use of illicit methadone

As in previous years, detailed data were collected in 2005 regarding the purchase, frequency of use and injection of illicit methadone syrup and physseptone tablets. This was to provide further clarification regarding the use of methadone prescribed for treatment and the diversion of prescribed methadone. Information on prescribed (licit) methadone may be found in Section 4.5.2: Methadone treatment.

#### *Price, availability and market characteristics*

Among IDU who had used any form of methadone in the preceding six months, the median price for methadone liquid was reported to be 50 cents per ml, representing no change from 2004.

As with other drug types, all participants were asked about the illicit methadone market, as they may have had sufficient exposure to the market to be able to comment, regardless of whether they had used it themselves. Almost half of the participants (46%) commented on the price and/or availability of illicit (street) methadone. Of these, the majority (60%; 27% of the entire sample) reported that the price had remained stable over the six months preceding interview. Just over one-quarter (27%; 12% of the entire sample) reported that they did not know, and small proportions stated that the price had increased (7%; representing 3% of the entire sample), decreased (4%; 2% of the entire sample) or fluctuated (1%; representing 1% of the entire sample).

With regard to current availability of street methadone, among those who commented, 30% (representing 14% of the entire sample) thought it was 'very easy' to obtain, 30% (14% of the entire sample) thought it was 'easy' to obtain, while 20% (9% of the entire sample) thought it was 'difficult'. No participants rated it as 'very difficult' to score. When asked whether availability had changed over the preceding six months, the majority of those commenting (60%; 27% of the entire sample) reported that it had remained stable. Overall, findings suggest that the illicit methadone market has remained relatively stable in terms of price and availability since 2004.

Just under one-fifth (19%) of participants reported buying illicit methadone in the past six months (25% in 2004). As in 2004, it was primarily obtained from street dealers and through friends. Of those who purchased illicit methadone, 90% reported that the source was a take-away dose, while the remainder did not know. The median length of time it took to score illicit methadone was ten minutes (range one minute to 24 hours).

#### *Use patterns*

Just under one-fifth (17%) of all participants reported using illicit methadone syrup in the six months preceding interview (29% in 2004), and had done so on a median of four days (five days in 2004). Just over half of this group (58%; the same as in 2004) had also been engaged in methadone treatment during this period.

Eleven percent of IDU participants (a decrease from 22% in 2004) reported injecting illicitly obtained methadone syrup in the preceding six months on a median of twenty days (five in 2004), i.e. just under

once per week, although the modal response was one day during the entire period. Just over half (53%) of those injecting illicit methadone syrup were engaged in methadone treatment during this period.

Seven percent of participants (15% in 2004) reported illicit methadone syrup as the form most often used in the preceding six months, none of whom were in methadone treatment during this time.

Illicit physeptone use remained uncommon, with three percent of participants (n=4) reporting use in the preceding six months (1% in 2004) on a median of one day (compared with two days in 2004). Three of these respondents were engaged in methadone treatment during this period.

A decrease was observed in the proportion of participants who reported injecting methadone or physeptone (whether licitly or illicitly obtained) in the month preceding interview, from 15% of all participants in 2004 to 8% of all participants in 2005. Just over half of these participants (58%; n=7) reported injection-related problems due to methadone (as compared to 67% in 2004), the most common being methadone dependence (33%), followed by experiencing a dirty hit (25%), prominent scarring or bruising (17%), difficulty in finding veins (17%) and swelling of the arm (8%). No other injection-related problems, such as abscesses/infections, thrombosis or gangrene, were reported to have been experienced due to methadone injection.

KE reports were mixed, with some reporting that methadone diversion was an issue in their area, and others reporting that it was not. This may be a reflection of a number of factors such as the nature of the client group and relative price, purity and availability of other drugs such as heroin.

## **8.2 Use of illicit buprenorphine**

Eight percent of IDU (the same as in 2004) reported the use of illicit buprenorphine in the preceding six months on a median of two days (two in 2004). Of this group, just under half (46%) had been engaged in buprenorphine treatment during this period. This represents a substantial increase from 8% in 2004 and a return to levels reported in 2003 (43%); however, caution should be exercised when interpreting these data as only small numbers reported use.

Five percent of IDU reported injecting illicit buprenorphine on a median of two days, the same as 2004. Of these, just over one-third (38%) were engaged in buprenorphine treatment during this period.

Five percent of participants (18% of those who had used licit and/or illicit buprenorphine) reported illicit buprenorphine as the form most often used in the past six months, one of whom was in buprenorphine treatment during this period. Five percent of all participants reported they had injected buprenorphine in the past month, 43% of whom (n=4) reported resulting injection related problems. The most commonly reported problems associated with injection over the last month were prominent scarring or bruising (14%), swelling of the arm (14%) and difficulty finding veins for injection (14%). Overall, illicit buprenorphine use has remained low and relatively stable among IDU participants since 2004.

KE commenting on buprenorphine suggested a slight increase in illicit use/availability in some areas of Sydney and the Hunter, although prevalence of use remained relatively low. Problems associated with injection of buprenorphine use did not appear to be particularly prevalent, although there had been



some reports of candida/eye infections occurring due to this practice in South-West Sydney. Following the introduction of a health campaign at a local harm reduction program, prevalence of buprenorphine injection was believed to have decreased. By contrast, a KE in the inner Sydney area commented that illicit buprenorphine use appeared to have decreased over the preceding twelve months.

### 8.3 Morphine

Morphine was predominantly obtained from illicit sources with 81% of morphine users reporting illicit morphine as the form most used (this figure was 78% in 2004), with 12% reporting licit morphine and 7% who did not select either as a form most used (typically because they had used both forms equally as often). As in previous years, MS Contin was the most common brand of morphine used, and 14% of all participants reported having bought 100mg MS Contin tablets at a median price of \$25 (range \$10-\$40), representing an increase from \$20 reported in 2003 and 2004. This price increase was also reported by a KE commenting on morphine price.

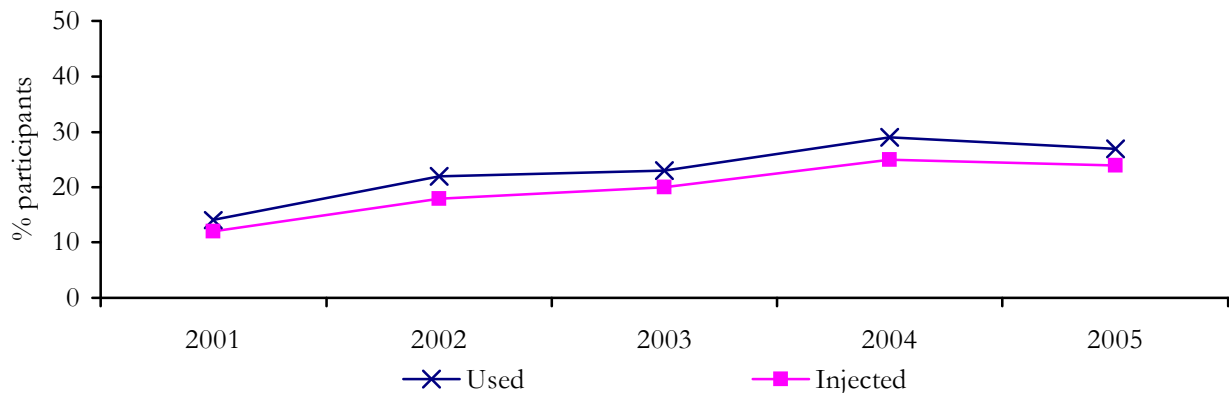
Just under one-third of the sample (27%) commented on illicit morphine price and availability. Of these, 52% (representing 14% of the entire sample) thought that the price had remained stable over the last six months. Approximately one-quarter (24%; 7% of the entire sample) thought that the price had increased, 2% (1% of the entire sample) thought it had increased, and 19% (5% of the entire sample) said that they didn't know enough to comment on whether the price had changed. In terms of availability, almost one-third (31%; representing 8% of the entire sample) thought it was 'easy' to obtain, 19% (5% of the entire sample) thought it was 'very easy' to obtain, 24% (7% of the entire sample) thought it was 'difficult' to obtain, 7% (2% of the entire sample) thought it was 'very difficult' to obtain and 19% (5% of the entire sample) did not know. Most participants who commented (55%; 15% of the entire sample) thought that availability had remained stable over the preceding six months. Twelve percent (3% of the entire sample) thought it had become more difficult, 7% (2% of the entire sample) believed that it was easier, and 2% (1% of the entire sample) thought it had fluctuated. Almost one-quarter (24%; 7% of all respondents) did not know, typically because they had not had enough exposure to the morphine market to be able to comment on availability over the last six months.

Nineteen percent of participants reported buying illicit morphine in the six months preceding interview, typically from street dealers (59%) or through friends (31%; either as a gift or as a purchase).

#### *Use patterns*

Almost one-third (27%) of IDU reported using morphine in the preceding six months on a median of four days, i.e. less than monthly use (Figure 76; Table 3). This compares with 28% of participants who used on a median of five days in 2004. Ninety percent of the morphine users (23% of the entire sample) reported illicit morphine use during this period. In terms of injection, approximately one-quarter (24%) of IDU participants reported injecting morphine (25% reported doing so in 2004) on a median of four days (the same as in 2004). The prevalence of morphine use and injection has remained stable since 2004 following a gradual increase from 2001. Frequency of morphine use has remained stable with participants reporting less than monthly use since 2001. Ninety-four percent of those who reported recent morphine injection had used illicit morphine in the preceding six months. This represents little change from 87% recorded in 2004.

**Figure 76: Proportion of IDU reporting morphine use and injection in the past six months 2001-2005**



Source: IDRS IDU interviews

Five percent of users (representing 1% of the sample) reported daily morphine injection, although the majority (62%; 17% of the sample) reported using monthly or less.

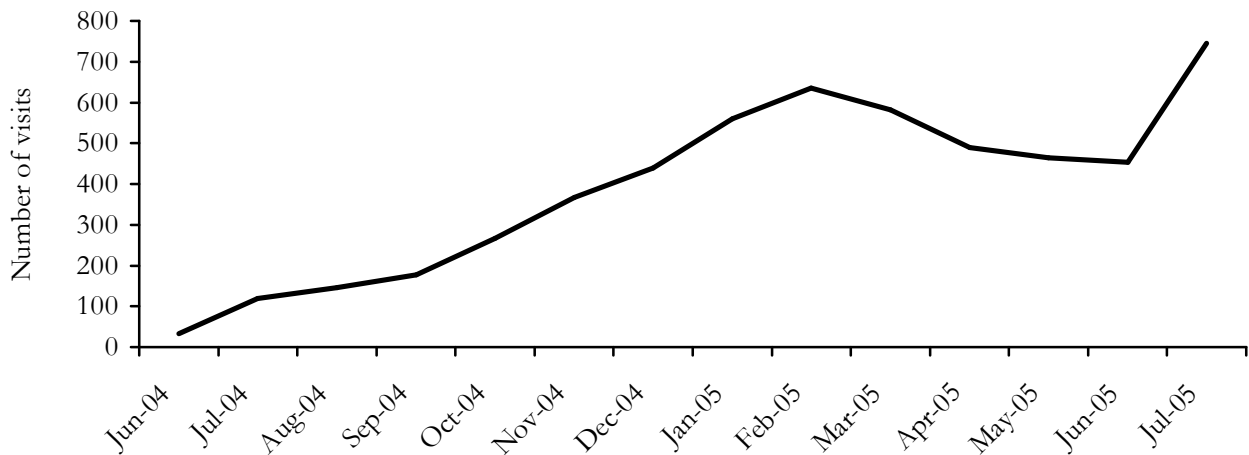
Fourteen percent of participants reported injecting morphine in the month preceding interview, and of these, almost two-thirds (62%; 8% of the entire sample) reported experiencing problems that they attributed to morphine injection. The most commonly reported problems were difficulty finding veins (43%), and swelling of the hand (29%). A variety of other problems were also reported, included swelling of the arm (24%), morphine dependence (24%), prominent scarring or bruising (14%), dirty hits (10%), skin ulcers (5%), swelling of the feet (5%), swelling of the leg (5%), thrombosis/blood clots (5%) and headaches (5%).

Whilst there was a low prevalence of morphine injection in the preceding month, experience of problems among those who inject them was high. Eighty-five percent (n=11) of this group reported two or more problems due to recent morphine injection (range one to five problems).

KE reports were mixed, with the majority reporting that use in their area was rare, although there was some suggestion of an increase in use in some parts of the inner Sydney area.

The number of visits to Sydney MSIC where opioids were injected is presented in Figure 77. These figures include morphine, oxycodone and other pharmaceutical opioids (primarily morphine). The number of attendances where other opioids were injected has increased substantially since 2004, and accounted for 12% of all visits in July 2005.

**Figure 77: Number of attendances to Sydney MSIC where other opioids (including morphine)\* were injected, 2004-2005**



**Source:** Sydney MSIC, Kings Cross

\* Excludes heroin and methadone, and includes morphine, oxycodone, palfium and pethidine

## 8.4 Oxycodone and other opioids

### *Oxycodone*

In 2005 a distinction was made between licit and illicit oxycodone (e.g. OxyContin, Endone) and other opioids due to concerns that illicit use of, and problems associated with, diversion of oxycodone may be increasing. In previous years, oxycodone was included under ‘other opioids’.

Approximately one-third of participants (34%) reported having used oxycodone (whether licitly or illicitly obtained) at some stage in their lifetime, and 21% reported having ever injected it (Table 3). Sixteen percent of participants reported using either licit or illicit oxycodone in the six months preceding interview on a median of one day. Eleven percent stated that they had injected it during this time, again on a median of one day.

With regard to illicit oxycodone use only, fourteen percent of participants reported use in the preceding six months, on a median of one day (range 1-12 days). Injection in the last six months was reported by 10% of the sample, again on a median of one day (range 1-12 days, i.e. from one occasion to approximately fortnightly use).

Seventy-two percent of oxycodone users (12% of the entire sample) reported that they had used illicit oxycodone most often, as compared with 16% who nominated licit oxycodone, and 12% who did not respond (typically an indication of having used both forms equally as often). The most commonly used brand was OxyContin, followed by Endone, although some users were uncertain as to which brand they had used.

### *Other opioids*

Fourteen percent of IDU participants reported using other opioids such as codeine and pethidine in the preceding six months (Table 3). The median number of days on which other opioids had been used in the preceding six months was eight, i.e. just over monthly use. Among this group, almost half (47%; representing 5% of the entire sample) reported using illicit opioids during this period. Injection of other opioids was relatively infrequent, with 4% of participants reporting injection on a median of 7 days in the preceding six months (i.e. approximately monthly use). Panadeine Forte (which contains 30mg codeine) continued to be the predominant type of other opioid used. It should be noted that 'Other opioids' does not include homebake.

### *Homebake*

Homebake is a form of heroin made from pharmaceutical products. It involves the extraction of diamorphine from pharmaceutical opioids such as codeine or morphine. Homebake use remains uncommon among the injecting drug user sample of the NSW IDRS. In 2005, just over one-tenth (13%) of the sample reported use of homebake on one or more occasions in their lifetime, and 12% reported having ever injected it (Table 3). Four percent of the sample reported use in the last six months on a median of three days (range 1-6) and 3% reported injecting it during this time on a median of three days (range 1-5).

## 9.0 OTHER DRUGS

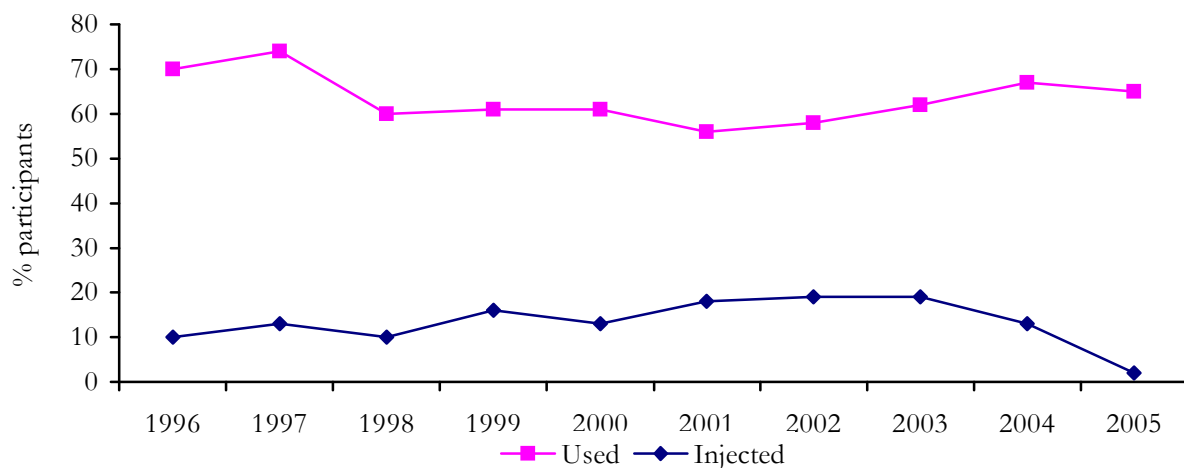
### 9.1 Benzodiazepines

In 2005, almost two-thirds of participants (65%) reported use of benzodiazepines in the six months preceding interview on a median of 29 days, i.e. on just over one day per week (Table 3; Figures 78 and 79). While prevalence remained stable from 2004 (when 67% of participants reported use) the number of days on which they used decreased substantially from 60 days in 2004 (i.e. between 2-3 days per week). However, the proportion of participants reporting daily use has remained relatively stable at 20% in 2005, with the decrease predominantly observed among those who used more than weekly, but less than daily (Figure 80).

In previous years there has been concern relating to the injection of, and injection related problems associated with, benzodiazepines, particularly temazepam gel caps (Euhypnos, Nocturne, Normison & Temaze). These gel cap formulations were restricted on 1 May 2002, and subsequently removed completely from the pharmaceutical market at the end of March 2004. In 2005 the lowest prevalence of benzodiazepine injection (2%) was reported since 1996, when the IDRS commenced in NSW. The median number of days benzodiazepines were injected was 2, a decrease from 9 days in 2004 and 20 days in 2003 (Figure 79). No respondents reported daily injection of benzodiazepines.

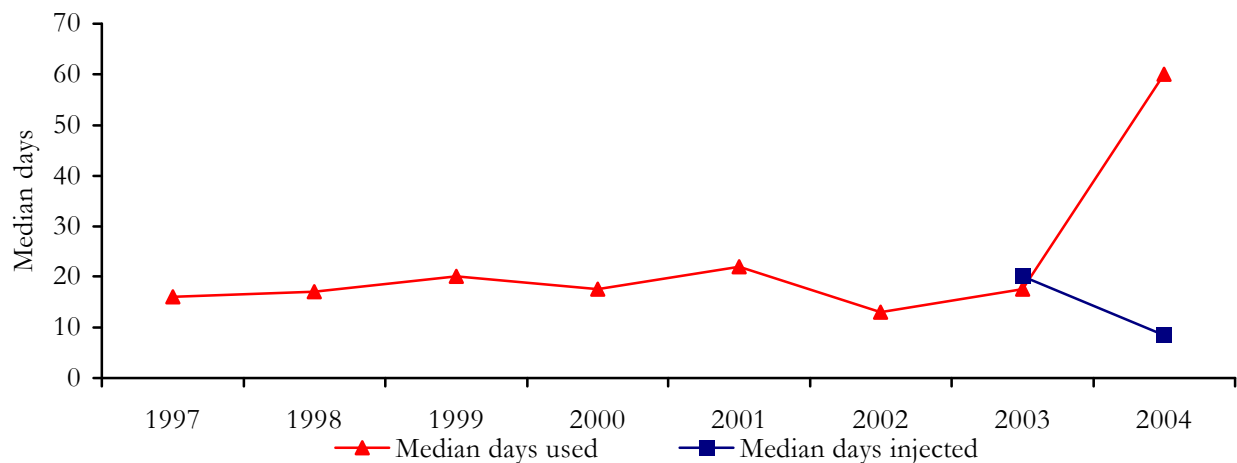
For further discussion of benzodiazepine injection and related problems in Australia, including those associated with temazepam gel cap use, see Breen et al. (2003).

**Figure 78: Proportion of IDU reporting benzodiazepine use and injection in the preceding six months, 1996-2005**



Source: IDRS IDU interviews

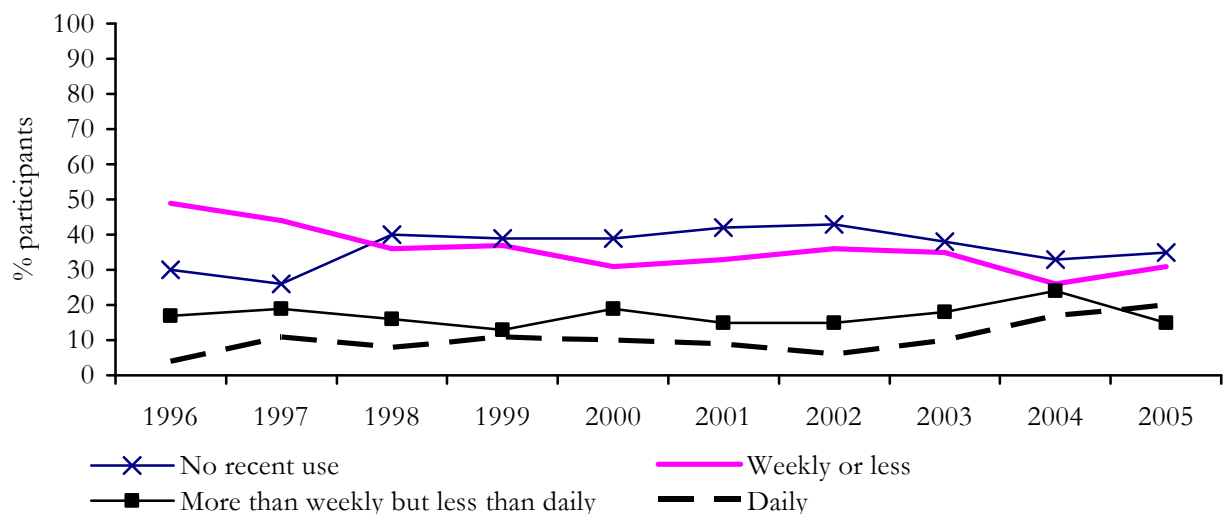
**Figure 79: Median days use and injection of benzodiazepines in the past six months, 1997-2005**



Source: IDRS IDU interviews

NB: Collection of data on the number of days injected commenced in 2003

**Figure 80: Patterns of benzodiazepine use, 1996-2005**



Source: IDRS IDU interviews

None of the participants who reported daily use had injected benzodiazepines in the last six months, representing a decrease from 30% (6% of the entire sample) in 2004.

Forty percent of participants (63% of benzodiazepine users) reported use of illicitly obtained benzodiazepines in the last six months. Fifty-one percent of users reported that they had mainly used licit benzodiazepines in the last six months, as compared with 44% who had usually sourced them illicitly, and 8% who did not respond (typically because they had used licit and illicit benzodiazepines equally as often).

The most commonly used brand of benzodiazepine remained diazepam (including generic diazepam, Valium and Valpam), which was specified by 59% of users, followed by 18% specifying oxazepam (Serepax). Only one participant reported temazepam (specifically Normison) as the main brand used,

consistent with the restriction and withdrawal of this medication over the past three years. The proportion of participants reporting benzodiazepine use on the day prior to interview remained stable at 25% (27% in 2004).

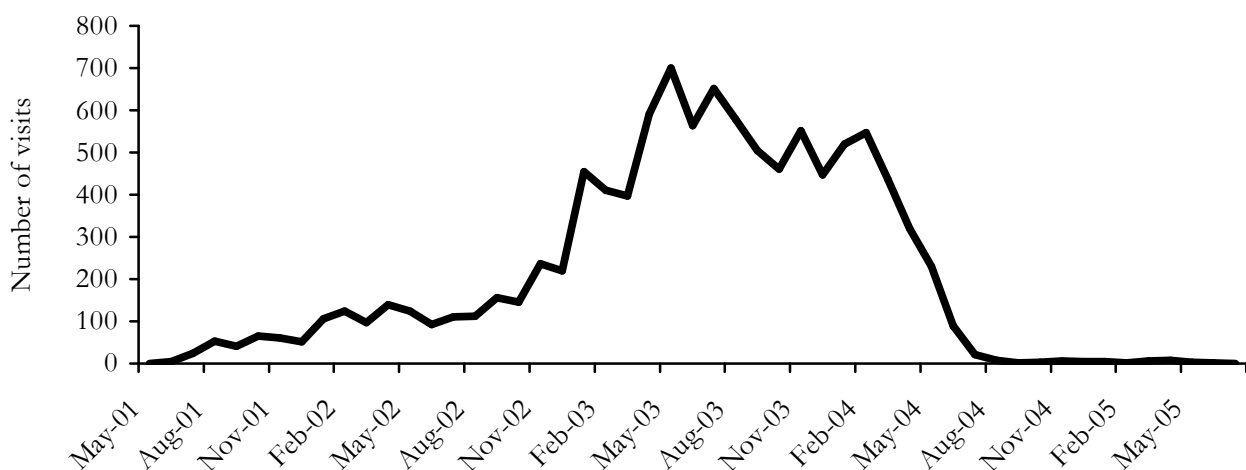
Overall, the prevalence of benzodiazepine use among participants has remained relatively stable and injection of benzodiazepines has decreased to the lowest level reported since the IDRS commenced in 1996 (Figure 79). Overall, the frequency of use has reduced dramatically, although the proportion of daily users has remained stable.

As with methadone, morphine and buprenorphine, participants were also asked if they had injected benzodiazepines in the month preceding interview and if so, whether they had experienced any associated problems. In 2005, only one participant reported injecting benzodiazepines in the month prior to completing the survey, representing a decrease from ten participants who said so in 2004. This participant stated that he/she had experienced abscesses/infections, swelling of the arm and swelling of the hand consequent to this behaviour.

Consistent with IDU participant reports, KE commenting on benzodiazepine use had noted a decrease in benzodiazepine injection over the preceding six to twelve months.

Data from the Sydney MSIC in Kings Cross show that the number of clients who injected benzodiazepines has decreased dramatically during 2004, from 520 in January to five in December (Figure 81) and has remained low at less than ten per month. The most commonly injected benzodiazepines at MSIC were temazepam gel caps, and the withdrawal of these from the Australian pharmaceutical market at the end of March 2004 resulted in the dramatic decline observed. These data remain consistent with IDRS IDU reports<sup>10</sup>.

**Figure 81: Number of attendances to Sydney MSIC where benzodiazepines were injected, 2001-2005**

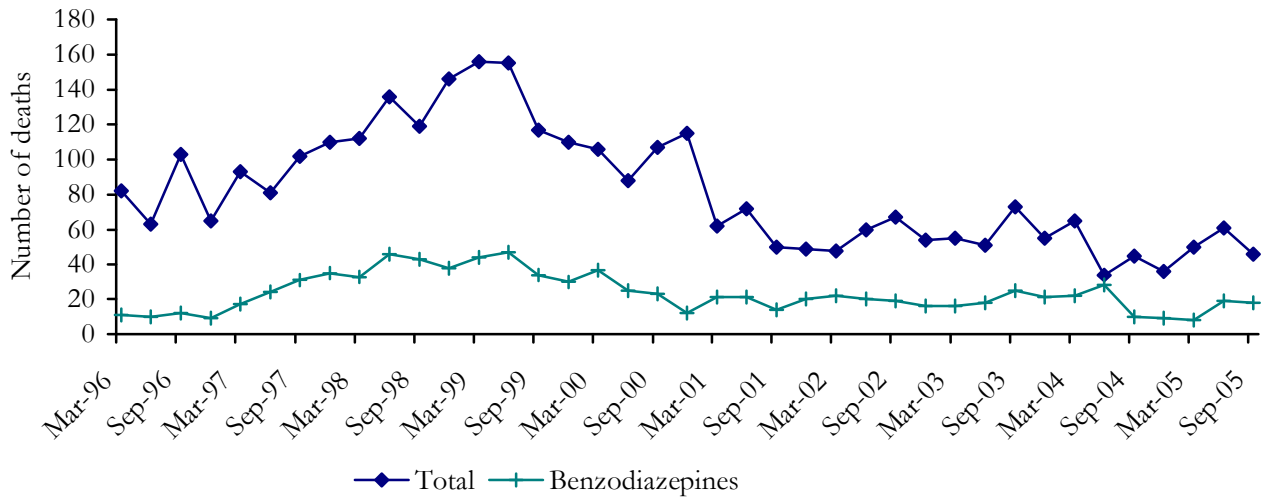


Source: Sydney MSIC, Kings Cross

<sup>10</sup> The following caveats need to be considered when interpreting these data: 1) hours of operation changed over the first 2 years of operation (from four to up to twelve per day); and 2) the numbers of individuals attending increased continuously over the first 2 years of operation as IDU became aware of this new service

The number of deaths of suspected drug users in which benzodiazepines were detected has remained lower over the past twelve months than previously, and in June 2004 they were detected in almost all (28 of 34) drug-related deaths (Figure 82).

**Figure 82: Number of suspected drug related deaths in which benzodiazepines were detected post mortem and total number of drug-related deaths, by quarter, 1996-2005**

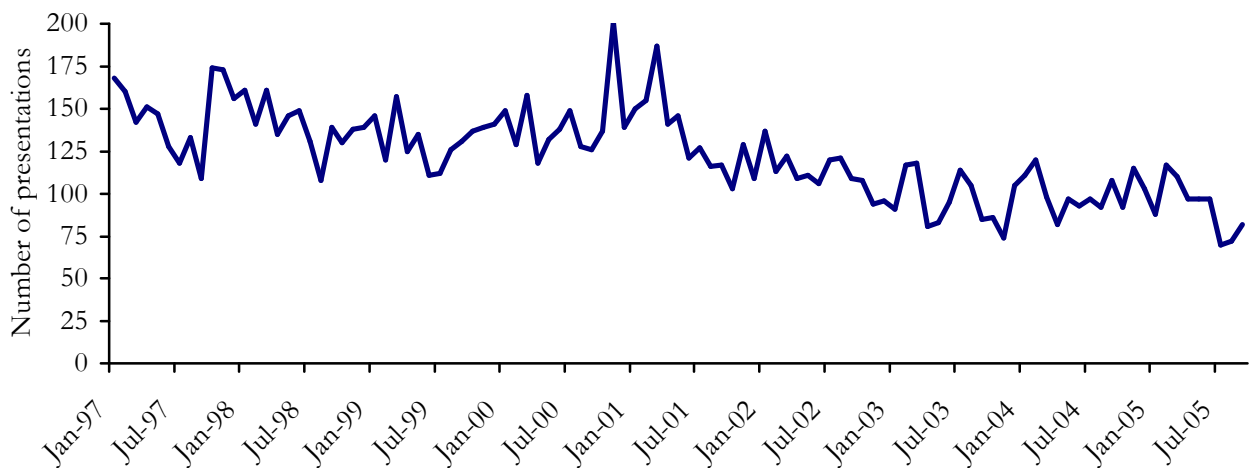


**Source:** Forensic Toxicology Laboratory database, Division of Analytical Laboratories

**NB:** These numbers relate to deaths in which benzodiazepines were detected, however, there may have also been other drugs present.

The number of benzodiazepine overdose presentations to NSW emergency departments has decreased gradually since 2001 (Figure 83). It is important to note, however, that the majority of overdose presentations occur among older women and people who may have intentionally overdosed; it is likely that IDU form only a minority of suspected overdoses at emergency departments.

**Figure 83: Benzodiazepine overdose presentations to NSW emergency departments, 1997-2005**



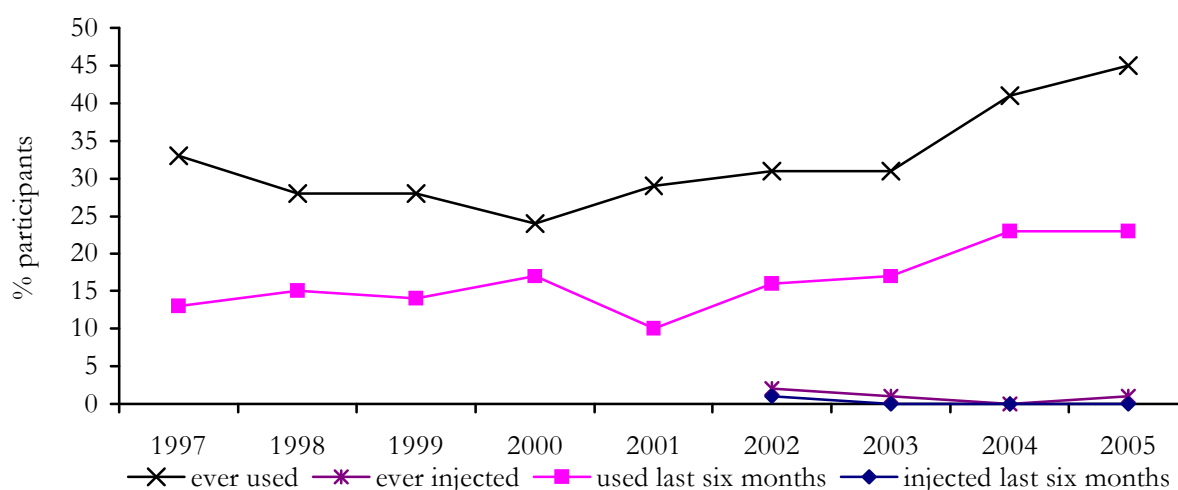
**Source:** Emergency Department Information System, NSW Department of Health



## 9.2 Anti-depressants

Survey items concerning anti-depressant use have been included since 1997, and items on injection since 2002. In 2005, 45% of the sample reported ever having used anti-depressants, and less than 1% reported having ever injected them (Table 3; Figure 84). Twenty-three percent had used them in the last six months on a median of 179 days (range 2 to 180 days). No participants had injected anti-depressants in the last six months. A gradual increase has been observed in both the proportions reporting lifetime and recent (i.e. in the last six months) use of anti-depressants since 1997. In contrast, reports of lifetime injection have remained low at 2% or less and recent injection at less than 1% since 2002.

**Figure 84: Proportion of IDU reporting anti-depressant use and injection in the preceding six months, 1997-2005**



**Source:** IDRS IDU interviews

NB: Survey items on anti-depressant injection were first included in 2002

There were no significant gender differences in rates of reporting ever having used anti-depressants (46% of females and 45% of males reported use), or in reporting using them in the last six months (21% of females and 25% of males). This contrasts with 2004, when female participants were significantly more likely to report having ever used anti-depressants than their male counterparts (54% females vs. 36% males, 95% CI: 0.24-0.97), although there were no significant differences in prevalence of recent use (i.e. use in the six months preceding interview).

There were no reports of recent illicit anti-depressant use, with all participants reporting using their own prescriptions, and having taken them orally. KE reported that anti-depressant diversion was virtually unheard of or non-existent among their clients. Diversion of anti-depressants has remained virtually non-existent since 1997 when survey items on their use were first included. This is perhaps unsurprising as anti-depressants generally require use for several days or weeks before they become effective. They also lack an acute onset (e.g. an immediate high/rush or relief from discomfort/pain) and are often associated with unpleasant initial side effects which may also act as a deterrent to licit use. In addition to this, KE reported that continued use of prescribed anti-depressants was difficult for a number of injecting drug users due to being unable to pay for scripts.

The most common anti-depressant used was mirtazapine (Avanza, a tetracyclic anti-depressant), followed by venlafaxine (Efexor, an SNRI), sertraline (Zoloft, an SSRI) and citalopram (Cipramil, an

SSRI). Overall, SSRIs were the most common type of anti-depressant prescribed. However, it should also be noted that 39% of participants who reported anti-depressant use did not report which brand they used, typically saying that they couldn't remember its name, and occasionally demonstrating confusion by naming an anti-psychotic or other form of medication.

Participants were also questioned about recent mental health issues such as depression. By far the most commonly reported mental health problem was depression (28% of all participants, or 69% of those reporting suffering from some form of mental health problem). This represents a decrease from 2004 when 38% of respondents (78% of those who reported having a mental health problem) reported experiencing depression in the six months preceding interview. Of those who reported experiencing depression in the preceding six months, three-quarters (76%) reported consulting a health professional about depression and 51% had used anti-depressants in this time. For further details please refer to Section 10.7: Associated Harms – Mental health problems.

### **9.3 Hallucinogens**

While fairly large proportions of IDU participants reported having used hallucinogens at some stage in their lifetimes (e.g. 62% of participants in 2005), recent use remained fairly low, with only 5% of participants reporting use in the six months preceding interview (Table 3). Frequency of use was also low, with those who had used reporting doing so on a median frequency of one day in this time (range 1-4). The main type of hallucinogen used in the last six months was LSD (88% of hallucinogen users; 5% of the entire sample), followed by magic mushrooms (25% of users; representing one percent of the entire sample). Twelve percent of the sample had injected hallucinogens at some stage in the past, and 2% had injected them in the last six months (median days injected=1, range 1-2).

### **9.4 Ecstasy**

Ecstasy use remains relatively rare among the injecting drug user sample of the NSW IDRS. Just under half (49%) of the sample reported use of ecstasy on one or more occasions in their lifetime, and 26% reported having ever injected it (Table 3). Approximately one-fifth (19%) reported use in the last six months on a median of two days (range 1-96), and 12% reported injecting it during this time on a median of 1.5 days (range 1-96).

A separate monitoring system investigating trends in ecstasy and related drug use and related issues has been conducted in New South Wales since 2000 and across all Australian jurisdictions since 2003. This is called the Party Drugs Initiative, or PDI. Information, reports and bulletins from this initiative are available from the NDARC website <http://ndarc.med.unsw.edu.au/> (under 'Drug Trends').

### **9.5 Inhalants**

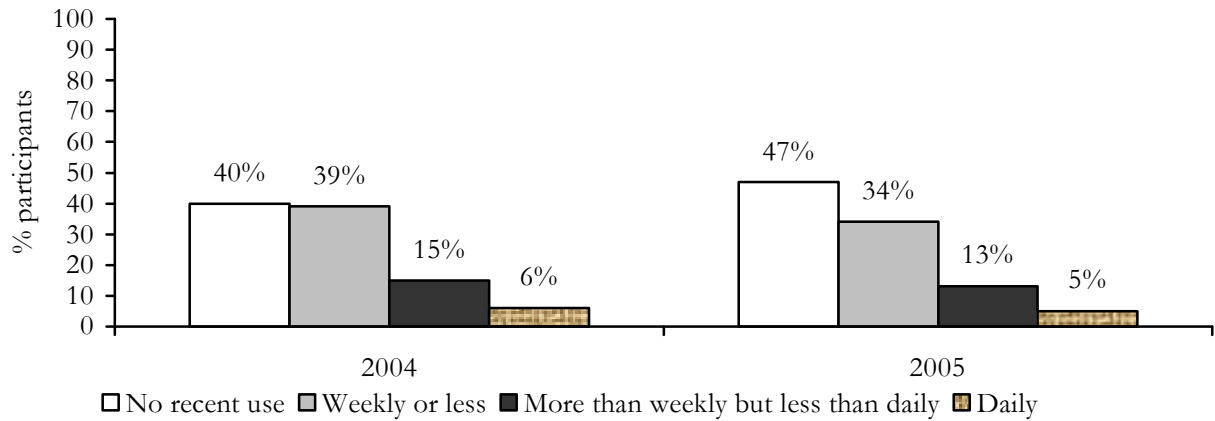
Just over one-quarter of participants (28%) reported ever having inhaled volatile substances such as amyl nitrate, petrol, glue and/or lighter fluid (Table 3). Two percent of participants (n=3) reported use in the six months preceding interview on a median of six days (i.e. monthly use; range 5-10). Of these three participants, one reported mainly using glue and the other two reported mainly using amyl nitrate. One KE reported that an increase in clients reporting amyl nitrate use had been reported recently.

### **9.6 Alcohol and Tobacco**

Just over half (53%) of the sample had consumed alcohol in the six months prior to interview on a median of 12 days (i.e. twice per month; range 1-180). Among those who had consumed alcohol in this time, 10% (representing 5% of the entire sample) reported daily use; the majority (65%; or 34% of all participants) drank weekly or less often (Figure 85). Rates of daily use were lower than among the

general population aged 14 and over (9%), while rates of drinking weekly were more comparable to the general population (41%; AIHW, 2005, p25).

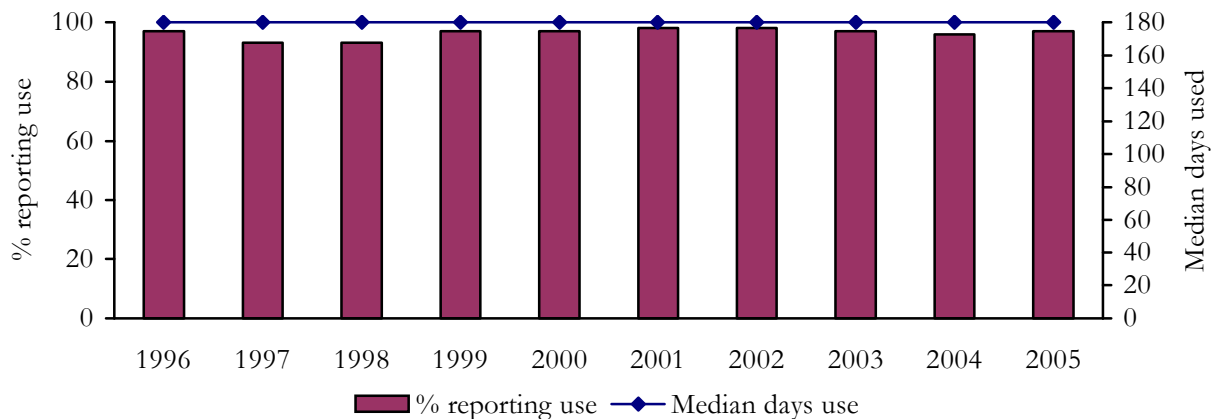
**Figure 85: Patterns of alcohol use, 2004-2005**



Source: IDRS IDU interviews

The vast majority of participants (97%) reported smoking tobacco in the last six months on a median of 180 days, i.e. daily use (range 90-180; Table 3). Ninety-six percent of the sample were daily smokers. High prevalence and frequency of tobacco use has been reported since 1996 (Figure 86). This is substantially higher than among the general population, 17% of whom are daily smokers (AIHW, 2005, p19).

**Figure 86: Participant reports of tobacco use in the last six months, 1996-2005**



Source: IDRS IDU interviews

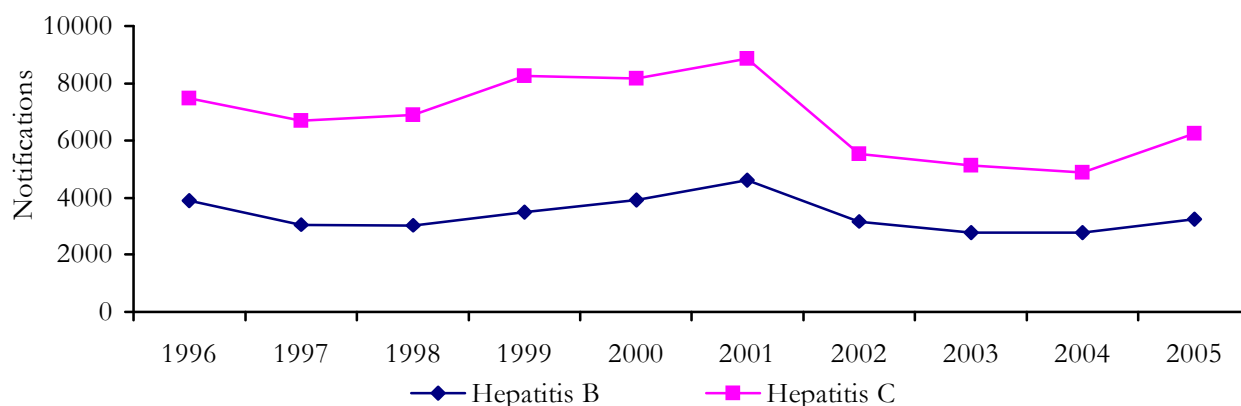
## 10.0 ASSOCIATED HARMS

### 10.1 Blood-borne viral infections

People with a history of injecting drug use are at significantly greater risk of acquiring hepatitis B (HBV), hepatitis C (HCV) and Human Immunodeficiency Virus (HIV) than the general population (NCHECR, 2002). This is because blood-borne viral infections (BBVI) can be transmitted through the sharing of needles, syringes and other equipment.

Figure 87 shows the total number of notifications for HBV and HCV in NSW. Incident (newly acquired) infections and unspecified infections (i.e. notifications where the timing of the disease acquisition is unknown) are presented. HCV continued to be more commonly notified than HBV, and for the first time since 2000 there has been an increase in notifications, from 4897 in 2004 to 6254 in 2005. HBV notifications have also increased, from 2775 in 2004 to 3264 in 2005. Notifications remain lower than levels reported in 2001.

**Figure 87: Total notifications for (unspecified and incident) HBV and HCV infections, NSW 1996-2005**



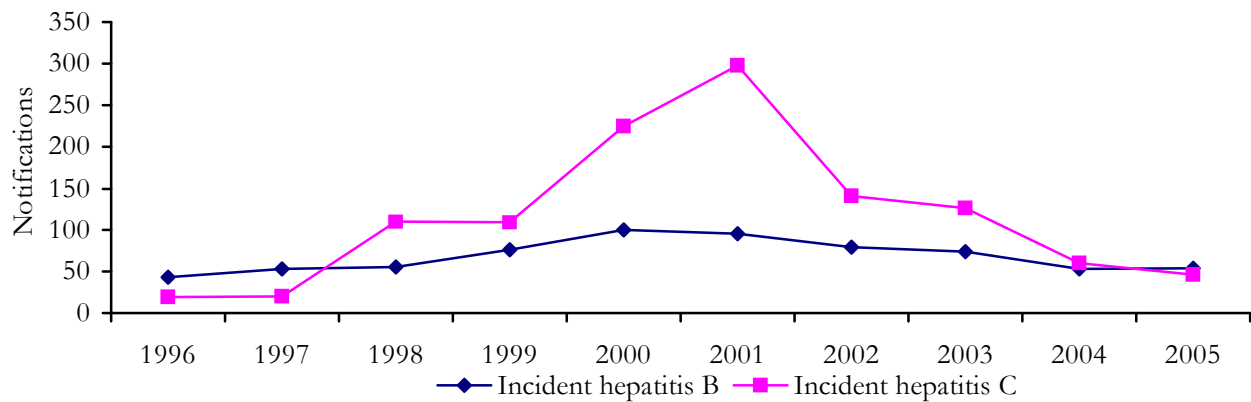
**Source:** Communicable Diseases Network – Australia – NNDSS<sup>11</sup>

NB: The 2005 data are provisional

Trends in the number of incident notifications for HBV and HCV in NSW are shown in Figure 88. HBV incident reporting has remained stable and low, recorded as 53 in 2004 and 54 in 2005. A marginal decline occurred in the number of HCV incident notifications, from 60 in 2004 to 46 in 2005, following a dramatic decrease from 127 in 2003.

<sup>11</sup> There are several caveats to the NNDSS data that need to be considered. As no personal identifiers are collected, duplication in reporting may occur if patients move from one jurisdiction to another and are notified in both. In addition, notified cases are likely to represent only a proportion of the total number of cases that occur, and this proportion may vary between diseases, between jurisdictions, and over time.

**Figure 88: Total notifications for incident HBV and HCV infection, 1996-2005**

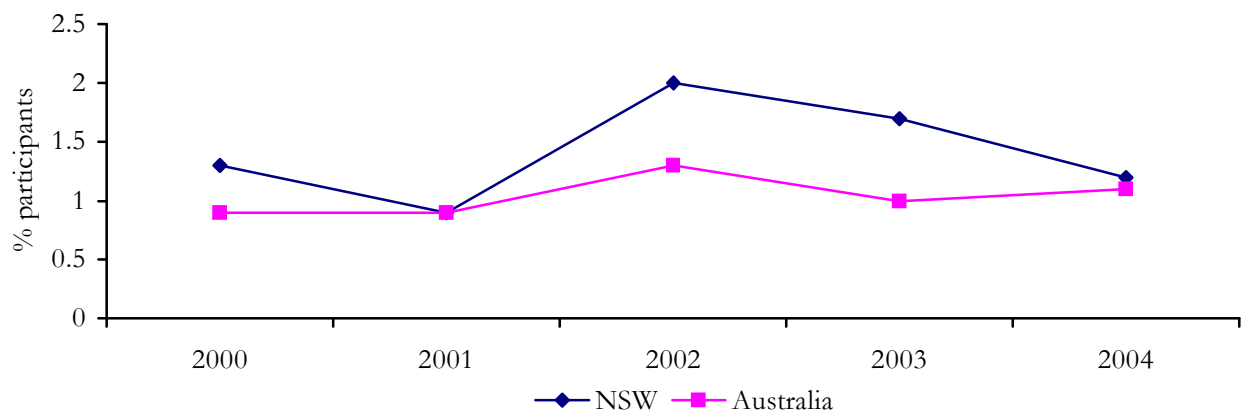


**Source:** Communicable Diseases Network – Australia – NNDSS<sup>12</sup>

NB: The 2005 data are provisional

The Annual NSP Survey has continued to find relatively low rates of HIV antibody amongst IDU participants in NSW, ranging from 0.9% in 2001 to 2% in 2002, and are slightly higher than those reported nationally (Figure 89). Detection of hepatitis C antibody in capillary blood tests (finger-prick samples) conducted on participants remained high at 71% in 2004, higher than the national figure (60%; Figure 90).

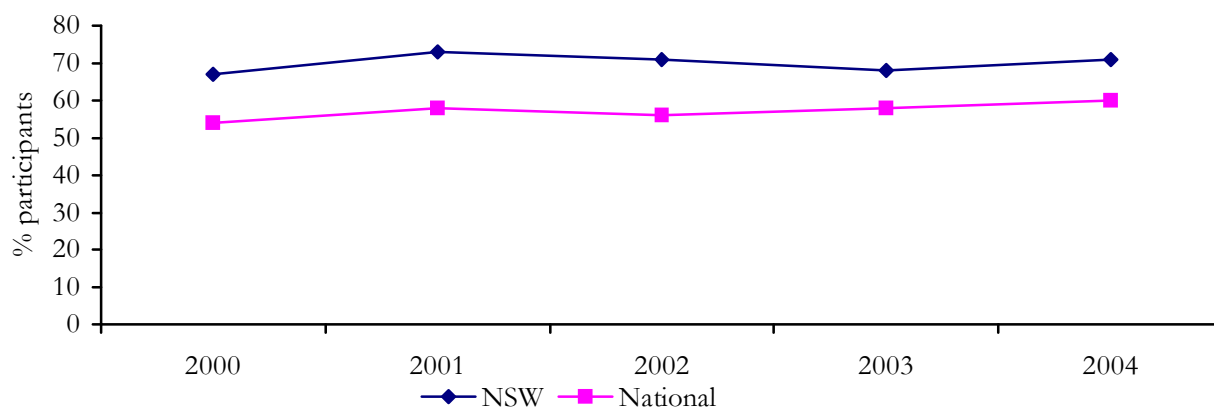
**Figure 89: Prevalence of HIV antibody among NSP Survey participants, 2000-2004**



**Source:** NCHECR, 2005

<sup>12</sup> There are several caveats to the NNDSS data that need to be considered. As no personal identifiers are collected, duplication in reporting may occur if patients move from one jurisdiction to another and are notified in both. In addition, notified cases are likely to only represent a proportion of the total number of cases that occur, and this proportion may vary between diseases, between jurisdictions, and over time.

**Figure 90: Prevalence of HCV antibody among NSP Survey participants, 2000-2004**



**Source:** NCHECR, 2005

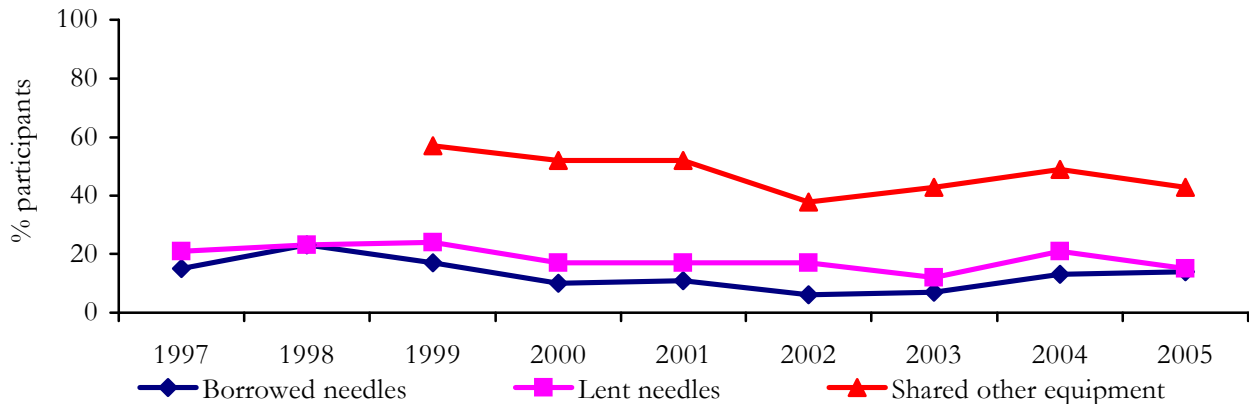
One finding of note highlighted by KE concerns the practice of withdrawing blood after overdose, a cultural practice sometimes engaged in by members of the Vietnamese-Australian community. This practice, which has worrying implications for increased risk of serious injury or death, and the spread of BBVI, has been investigated in detail by Ho and Maher (2004). One KE in South-West Sydney had learned of this practice and questioned clients to assess the extent to which this occurred; the KE had three reports of this occurring in the six months preceding interview. The KE reported that it tended to be an older Vietnamese person who commenced the blood-letting, while younger IDU reported that they were often unsure about the reasoning behind the practice. These younger clients tended to be satisfied with health education the KE provided on this practice.

## **10.2 Sharing of injecting equipment among IDU participants**

Ninety-seven percent of participants reported that they had injected on at least one occasion in the month preceding interview. Among these participants, 14% of participants reported using a needle that had already been used by someone else ('borrowed needle'), comparable to 13% in 2004 (Figure 91). Seven percent (6% of the entire sample) had borrowed a needle on one occasion, and 7% (7% of the entire sample) reported borrowing a needle on between two and five occasions. All participants who responded to the question reported that only one other person had used the needle before them. The person who had used the syringe first was usually a regular sex partner (on 43% of occasions), although responses also included a close friend (14%), an acquaintance (14%), a relative (10%), a casual sex partner (10%) or a stranger (5%).

Fifteen percent of those who had injected in the last month (representing 15% of the entire sample) reported passing needles on to other users ('lent needle') in 2005, a slight decrease from 21% in 2004. Eight percent (8% of the entire sample) reported that this had happened on one occasion, with 7% (7% of all participants) lending on between two and five occasions.

**Figure 91: Proportion of IDU reporting sharing injecting equipment in the month preceding interview, 1997-2005**



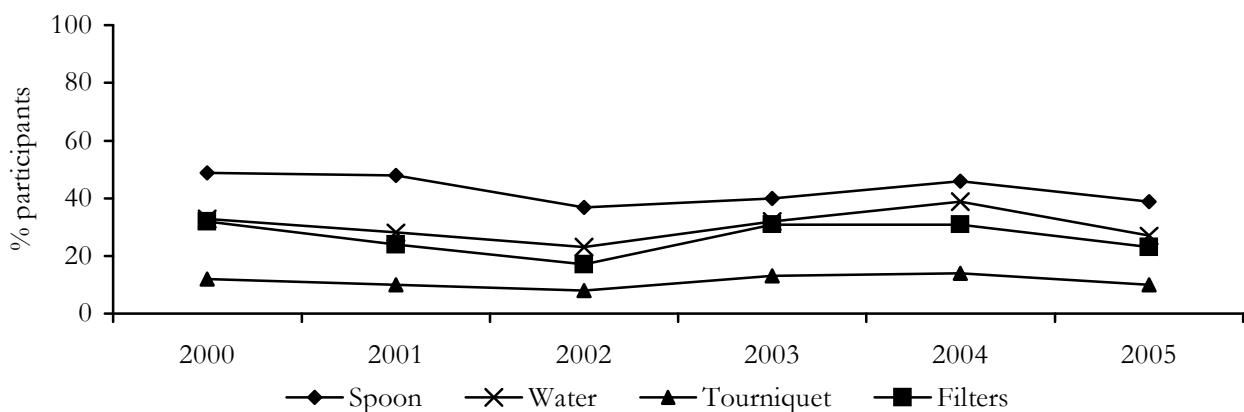
**Source:** IDRS IDU interviews

NB: Survey items on other injecting equipment (including spoons, water, filters and tourniquets) were first included in 1999. Figure excludes participants who had not injected in the last month (in 2003 n=1, 2004 n=1 and 2005 n=4 were excluded)

As in previous years, sharing of injecting equipment was more common than sharing of needles and syringes, with 43% reporting sharing a filter, spoon, water, tourniquet and/or other item of injecting paraphernalia in the month preceding interview. Overall, Figure 92 shows that participant reports of borrowing needles and syringes have remained relatively stable (from 15% in 1997 to 14% in 2005). Reports of lending needles have decreased marginally, from 21% in 1997 to 15% in 2005, and reports of sharing other injecting equipment have also declined from 57% in 1999 to 43% in 2005.

Figure 92 shows a breakdown of the types of injecting equipment IDU participants reported sharing. Spoons/mixing containers remained the most commonly shared item (39%), followed by water (27%), filters (23%) and tourniquets (10%). Overall, these data indicate that the rates of sharing equipment have decreased slightly since 2000, with the exception of tourniquet sharing, which has remained stable.

**Figure 92: Proportion of IDU participants reporting sharing other injecting equipment by type, 2000-2005**



**Source:** IDRS IDU interviews

NB: Excludes participants who had not injected in the last month (in 2003 n=1, 2004 n=1 and 2005 n=4 were excluded)

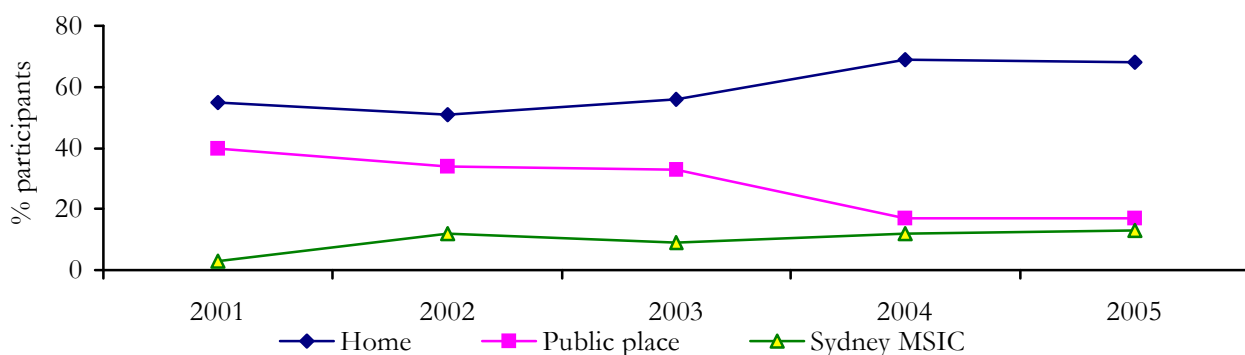
### 10.2.1 Summary

Rates of reporting of newly acquired (incident) HBV and HCV to health authorities have remained relatively stable since 2004, although the total number of HCV notifications (i.e. including those where the timing of the disease acquisition is unknown) have increased. IDRS survey data suggest that the proportions of IDU participants reporting borrowing and/or lending of needles and other injecting equipment has remained stable or decreased slightly compared to 2004. This continues to be of concern with regard to the transmission of blood-borne viral infections such as HBV and HCV, in addition to an increased likelihood of vein damage and injection problems through re-use of blunt needles.

### 10.3 Location of injections

As reported previously, four participants reported that they had not injected in the month preceding interview, and so they have been excluded from the following analysis (i.e. the total n=150). The most commonly reported usual location for injection in the month preceding interview was at a private home (68%), with 60% reporting a private home as the location for their most recent injection. Seventeen percent of participants reported that their usual location for injection was a public place (e.g. street, car or public toilet), and 26% reported that a public place was the location of their most recent injection. A gradual increase has been observed in the proportion of participants reporting the Sydney MSIC as their usual and last location for injection (from 3% in 2001 to 13% in 2005, and 4% in 2001 to 13% in 2005, respectively; Figures 93 & 94).

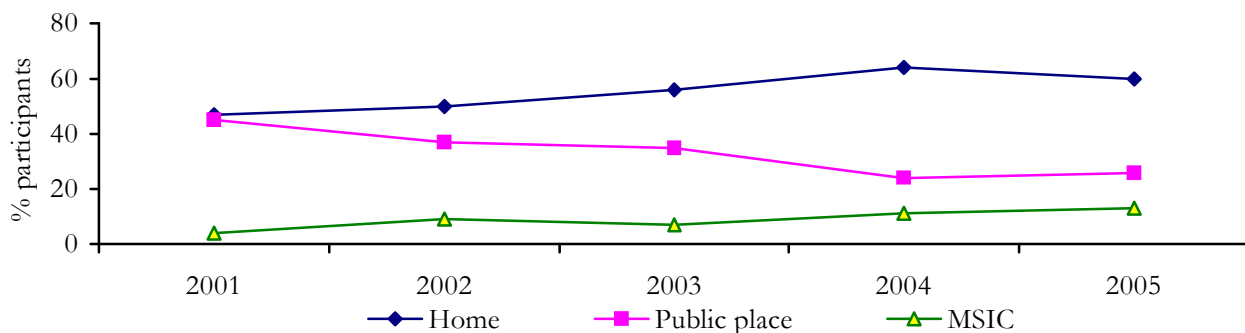
**Figure 93: Proportion of IDU participants reporting usual location for injection in the month preceding interview, 2001-2005**



Source: IDRS IDU interviews

NB: Excludes those who had not injected in the last month (in 2003 n=1, 2004 n=1 and 2005 n=4 were excluded)

**Figure 94: Proportion of IDU participants reporting the last location for injection, 2001-2005**



Source: IDRS IDU interviews

NB: Excludes those who had not injected in the last month (in 2003 n=1, 2004 n=1 and 2005 n=4 were excluded)



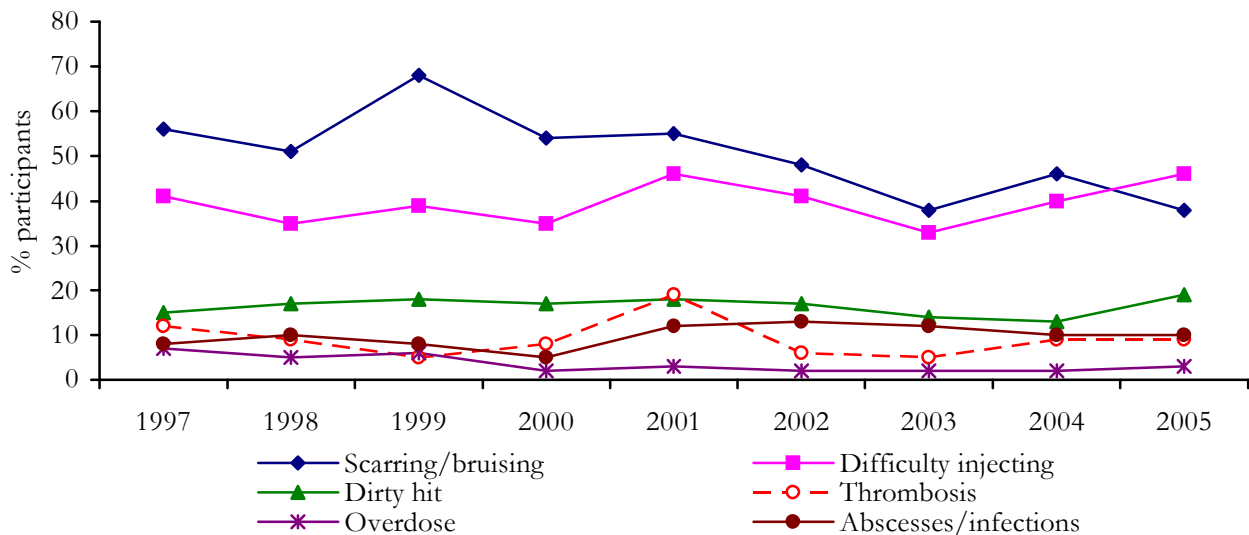
These figures suggest that the proportion of IDU reporting public places as the usual and most recent locations for injecting may have stabilised following a consistent downward trend between 2001 and 2004. This is a positive trend, since public injecting has previously been associated with significant risk behaviours among IDU, such as rushing injection for fear of apprehension, injecting the total 'deal', and sharing of injecting equipment among those injecting together (Maher et al., 1998).

#### 10.4 Injection-related health problems

Two-thirds (66%) of IDU participants who had injected in the last month reported at least one injection-related problem during this time (this figure was 65% in 2004), and 36% percent reported two or more problems during this time (this figure was 38% in 2004). As in previous years, the most commonly reported problems were difficulty injecting (46%) and prominent scarring/bruising of injection sites (39%). Smaller proportions reported experiencing a 'dirty hit' (19%), abscesses or infections from injecting (9%), thrombosis (9%) and overdose (3%).

Figure 95 shows that the proportions reporting dirty hits and difficulty injecting in the past month have increased slightly in the past year. Reports of prominent scarring or bruising have decreased to the lowest level reported, and proportions reporting other problems (thrombosis, abscesses/infections and overdose) have remained fairly stable.

**Figure 95: Proportion of IDU reporting injection-related problems in past month, by problem type, 1997-2005**

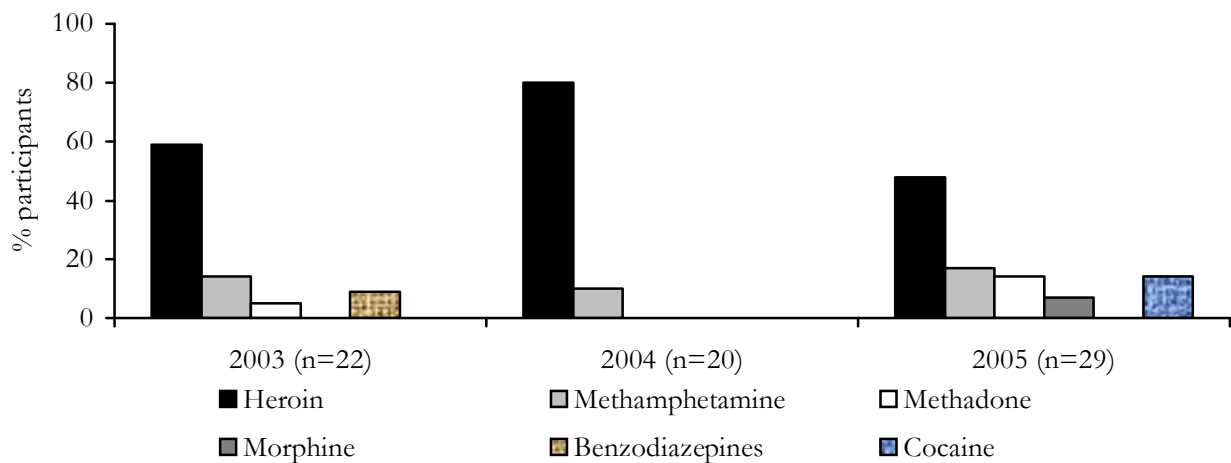


**Source:** IDRS IDU interviews  
**NB:** Includes all participants

Participants who had experienced an overdose in the last month (n=4) were asked what they considered to have been the main drug causing it, and whether they had been using any other drugs at the time (polydrug use). The majority (75%; n=3) had overdosed on heroin, one in conjunction with methadone and two in conjunction with benzodiazepines. The remaining participant reported overdosing on methamphetamine and stated that they had also had methadone 'on board' at the time. All four participants who had overdosed reported receiving subsequent health care, most commonly an ambulance attendance (75%), a drug-specific health service (50%) and/or had visited a hospital emergency department (25%).

As with overdose, participants who had experienced a dirty hit in the last month were asked what they considered to have been the main drug causing it, and whether they had been using any other drugs at the time (polydrug use). The majority of participants who had experienced a dirty hit (n=29) continued to attribute it to heroin (48%; representing 9% of the entire sample). However, greater diversity was observed in the range of other drugs nominated as the primary cause (Figure 96). Just over half of participants who had experienced a dirty hit (52%; representing 10% of the entire sample) reported that other drugs had also contributed, predominantly methadone (n=5) and/or benzodiazepines (n=5). For further information on heroin overdose, see also Section 4.5.2 (under ‘Overdose’). Further detail on overdose may be found in Sections 5.5.2 (for amphetamine), 6.5.2 (for cocaine), 7.5.2 (for cannabis toxicity) and 9.1 (for benzodiazepines).

**Figure 96: Main drug causing dirty hit in last month, 2003-2005**

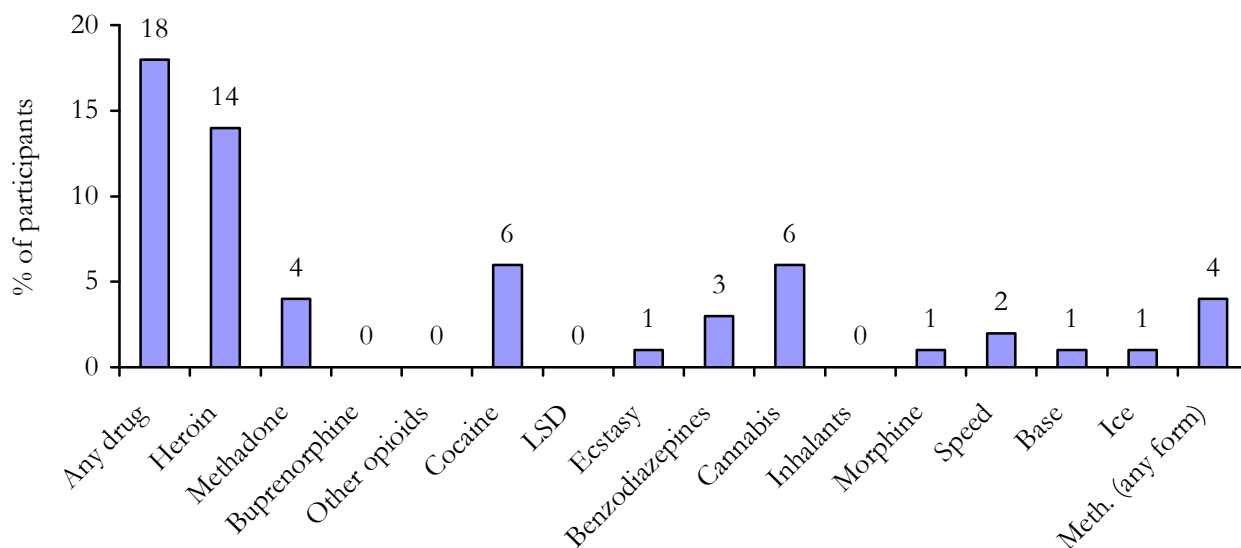


Source: IDRS IDU interviews

## 10.5 Driving risk behaviours

In 2005, participants were surveyed on driving risk behaviours. Two-fifths (41%) of the sample had driven a car in the six months preceding interview, and of these, 43% (representing 18% of the entire sample) had driven within an hour of taking a drug (excluding alcohol). As shown in Figure 97, the most commonly reported drugs used prior to driving were heroin (nominated by 82% of those who had driven under the influence, or 14% of the entire sample), cannabis (33% of those who had driven under the influence, or 6% of the entire sample) and cocaine (nominated by 33% of those who had driven under the influence, or 6% of the entire sample).

**Figure 97: Driving under the influence by IDU participants, by drug type, 2005**



Source: IDRS IDU interviews

### 10.6 Expenditure on illicit drugs

Approximately three-quarters of participants (73%) reported purchasing drugs on the day prior to interview, spending a median of \$90 (range \$5-\$1000). This suggests little change from 2004, when 77% of participants spent a median of \$80 (range \$5-\$400). Among participants who had bought drugs on the day before interview, the majority (59%) had spent \$100 or less.

As in previous years there was a significant correlation between the amount spent on drugs on the day prior to interview and frequency of injecting, with those injecting more frequently reporting having spent larger amounts on the day prior to interview (Spearman’s  $r=.57$ ,  $p < .01$ ).

### 10.7 Mental health problems

Forty percent of participants reported experiencing a mental health problem other than drug use in the preceding six months (this figure was 50% in 2004). The most commonly reported problem was depression (28% of all participants), followed by anxiety (9%), paranoia (7%), schizophrenia (5%) and panic (2%). Other problems included bipolar disorder (1%), drug induced psychosis (1%), a personality disorder (1%) and other psychosis (not drug-induced; 1%).

Thirty-four percent of the sample had attended a health professional for a mental health problem during this time, representing a slight upward trend since 2003 (26% said so in 2003 and 30% said so in 2004). This represents 84% of those reporting experience of a mental health problem other than drug use in the preceding six months, and was an increase from 60% in 2004. The most commonly reported health professionals consulted by IDU participants were psychiatrists (17% of the entire sample), GPs (14%), mental health nurses (8%), counsellors (7%), psychologists (7%), social workers (2%) and hospital emergency departments (1%). Four percent had attended a psychiatric ward in the last six months, and other places where help was sought included a community health service provider (1%), an outreach team (1%), a mental health crisis team (1%), a nutritionist (1%) and a carer (1%).

The most commonly reported problems that participants sought help for were depression (21% of all participants), anxiety (7%), schizophrenia (5%), panic (2%), paranoia (2%), bipolar disorder (1%), a personality disorder (1%), drug-induced psychosis (2%), and other psychosis (not drug-induced; 1%).

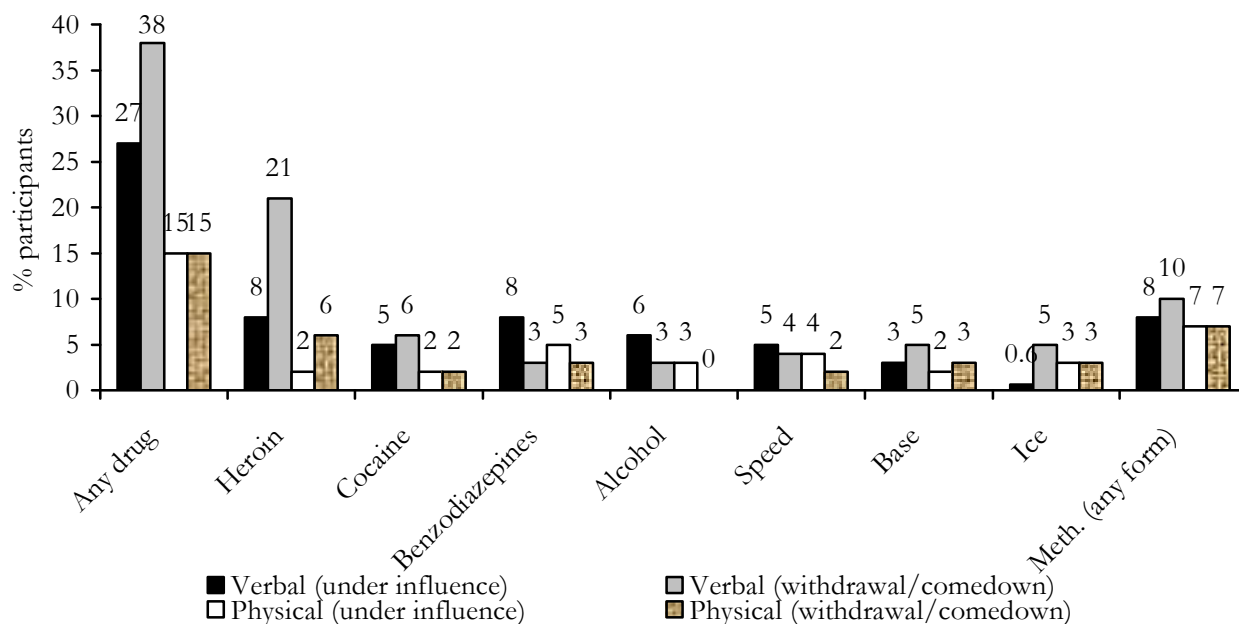
Key expert reports were consistent with IDU participant reports, with symptoms of depression and anxiety occurring most commonly, and a range of other issues such as schizophrenia, other psychotic illness and personality disorders also reported. KE commenting on cannabis and methamphetamine were particularly likely to note the occurrence of psychotic symptoms and anxiety/agitation among users of these drugs, and that the prevalence and/or severity of these symptoms were either stable or increasing. Some KE attributed this perception to increased awareness and training in addition to a genuine perceived increase in issues experienced among or reported by drug users. Another KE noted an increase in drug-induced psychosis among clients attending the service, and an increase of anti-psychotic medication prescribed to manage the residual effects of this. A number of drug services reported that they had been making increased referrals to mental health services, and one KE reported that there appeared to be an increased awareness of mental health issues among clients of the service.

## **10.8 Substance-related aggression**

The 2005 IDU survey included questions regarding substance-related aggression (including alcohol). Twenty-seven percent of participants reported that they had become verbally aggressive (e.g. threatening, shouting, abusive) and 15% stated that they had become physically aggressive (e.g. shoving, hitting, fighting) on one occasion or more when under the influence of a drug in the last six months. In comparison, just over two-thirds (38%) reported that they had become verbally aggressive during withdrawal or a comedown from a drug and 15% said that they had become physically aggressive in this time.

Participants were asked which drugs had caused or contributed to their aggression in the last six months. As shown in Figure 98, similar proportions reported that they had become verbally aggressive under the influence of heroin (8%), benzodiazepines (8%), methamphetamine (8%), alcohol (6%) and cocaine (5%). The most commonly reported drug after which participants reported becoming physically aggressive was methamphetamine (7%), followed by benzodiazepines (5%). A larger proportion (21%) of participants stated that they had become verbally aggressive during heroin withdrawal, followed by methamphetamine (10%) and cocaine (6%). The most commonly reported drugs participants attributed their physical aggression to during withdrawal or a comedown were methamphetamine (7%) and heroin (6%).

**Figure 98: Proportions of substance-related self-reported aggression by IDU participants, 2005**



Source: IDRS IDU interviews

A number of KE reported an increase in aggressive behaviour which was in some cases attributed to use of methamphetamine.

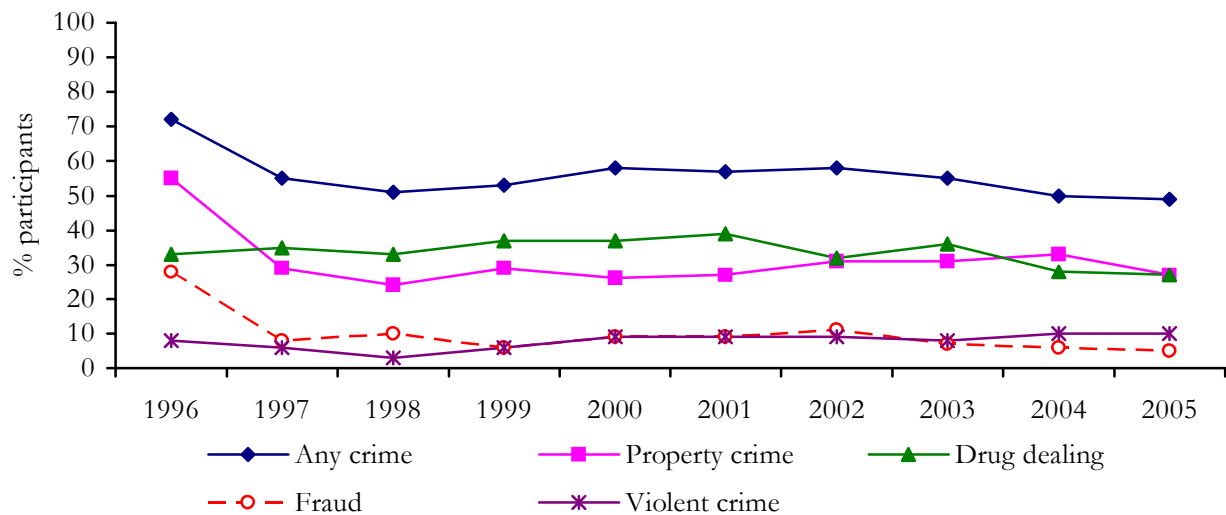
### 10.9 Criminal and police activity

Forty-nine percent of participants reported engaging in any form of crime in the month preceding interview, virtually identical to the 2003 proportion (50%). The most commonly reported crimes were property crime (27%; 33% in 2004) and drug dealing (27%; 28% in 2004). Ten percent of IDU reported engaging in violent crime (the same as in 2004) and 5% reported fraud (6% in 2004).

Forty-four percent of IDU had been arrested in the previous twelve months, representing little change from 43% in 2004. As in the 2003 IDRS, the most commonly cited reasons for arrest were property crime (21%; 19% in 2004), possession/use of a prohibited drug (12%; a slight increase from 7% in 2004 and 8% in 2003), violent crime (10%; 7% in 2004) and drug dealing/trafficking (5%; similar to 4% in 2003). There were no gender differences in those reporting engagement in crime in the last month as compared to those who had not. This represents a slight change from 2004, when males were slightly more likely to report engaging in crime in the month preceding interview, with 56% of males reporting such activity as compared with 38% of females (OR 2.059, 95% CI: 1.03-4.1). As in 2004, there was no significant difference between the proportions of males and females reporting arrest in the previous twelve months (45% versus 43%).

Figure 99 shows that over time there has been a relatively stable proportion of IDU engaging in these four types of offences although overall, there has been a slight decline in reports of involvement in any crime in the month preceding interview.

**Figure 99: Proportion of participants reporting engagement in criminal activity in the last month by offence type, 1996-2005**



Source: IDRS IDU interviews

Overall, while there were some mixed reports, the majority of KE reported that the numbers of drug users involved in these types of crime had remained stable, and highlighted that arrests and seizures made were highly dependent on operations. There was some suggestion that there had been an increase in ‘middle men’ or ‘brokers’ involved in drug dealing in some areas, acting as a go-between between user and supplier.

Two-thirds (66%) of IDU participants perceived that there had been an increase in police activity in the preceding six months, comparable to 70% in 2004 (Table 15). Almost one-third (30%) thought that it had remained stable, while only 2% thought that there had been less police activity. Overall, these figures are comparable to those reported in 2004.

Participants who perceived that there had been a change in police activity were asked to briefly describe the types of changes that had occurred. The overwhelming majority of comments made by participants in South-West Sydney described an increased police presence (particularly uniformed police) on the street, sometimes with drug detection dogs. Some participants reported that they had observed a greater police presence at train stations in the area, often with drug detection dogs. Others commented that there had been an increase in contact between police and themselves and/or others, for example warrant checking, moving on procedures and searches. In central Sydney, participants made reference to an increased police presence generally, including foot patrols, undercover operations and the use of drug detection dogs.

Many KE reported that police activity towards illicit drug users in their area had remained stable in the preceding six months, and a smaller number reported that it had increased. Reports relating to police activity around drug user agencies were mixed, with some reporting an increase, others a decrease, with the majority stating that it had remained stable. One health KE in one area of South-West Sydney raised concerns that clients felt that they could not access the NSP service as they would be targeted by police, and so preferred to obtain injecting equipment from pharmacies. This has important implications for healthcare advice, engagement into services and referral. A health KE in Western

Sydney reported that while police activity had increased recently, there had not been an increase in activity around the NSP, possibly due to improved communication between the health service and the police service. A number of KE commented that they had observed an increase in awareness of issues and in referrals from law enforcement agencies such as probation and parole and juvenile justice.

Three-fifths of the sample (60%) reported that police activity had not made it more difficult for them to score drugs. This represents an increase from 2004, when 53% of the sample reported that their ability to score had been unaffected (Table 15).

**Table 15: Criminal and police activity as reported by IDU participants, 2004-2005**

<b>Criminal and police activity</b>	<b>2004 N=157 %</b>	<b>2005 N=154 %</b>
<i>Criminal activity in last month:</i>		
Dealing	28	27
Property crime	33	27
Fraud	6	5
Violent crime	10	10
Any crime	51	49
Arrested in last 12 months	43	44
<i>Police activity in last 6 months</i>		
More activity	70	66
Stable	26	30
Less activity	1	2
Don't know	3	2
<i>More difficult to obtain drugs recently</i>		
Yes	46	39
No	53	60

Source: IDRS IDU interviews

### 10.9.1 Summary

Participant reports of recent involvement in criminal activity remained stable compared to 2004, as did reports of arrest over the past year. Types of crime engaged in and patterns of arrest also remained relatively stable, with property crime and drug-related crimes reported most frequently. Overall, reports of involvement in any crime in the month preceding interview have declined since 1996.

Perceived levels of police activity remained similar to previous years, with two-thirds believing it to have increased recently. In particular, a greater uniformed police presence was noted in or close to South-West Sydney interview locations, while participants located in more central areas of Sydney reported increased activity among a range of areas including uniformed and undercover police. Two-fifths of the sample (39%) reported that police activity had made it more difficult for them to obtain drugs recently.

## **11.0 DISCUSSION**

This year's IDU sample was comparable to the 2004 sample in terms of demographic characteristics such as age, gender and employment status. Similar proportions also reported being in drug treatment, particularly maintenance pharmacotherapy, at the time of interview, and this remained higher than in previous years. While this proportion of respondents had been steadily increasing prior to 2004, results also suggest an over-representation of pharmacotherapy clients since this time due to a change to one of the interview sites to one in close proximity to a treatment service. Therefore, comparisons with previous years relating to drug use patterns (heroin in particular) should be made with a degree of caution.

It is also imperative to note that while a proportion of the IDU samples in 2004 and 2005 were engaged in pharmacotherapy treatment at the time of interview, responses presented here are not representative of all clients engaged in treatment services, as those treatment clients who had not been active in the illicit drug market were unable to participate. Screening of participants continued to ensure that those sampled had all been active in the illicit drug markets of the area and thus that they were able to provide meaningful data on market indicators.

### **11.1 Heroin**

Market indicators suggested that the heroin market had remained relatively stable, with some indication of a price decrease in South-West Sydney, although prices remained higher than those reported in the late 1990s. Heroin was reported to be readily available, and this had also remained stable, although reports of purity continued to indicate that it remained of fairly low or medium quality. This suggests that the heroin market has remained relatively stable since 2004, and while some recovery has been made, it has yet to return to levels recorded prior to the shortage reported in 2001.

While the majority of IDU participants continued to nominate heroin as their drug of choice, and prevalence and frequency of use remained high as compared with other drug types, patterns of polydrug use and substitution of other drugs by the sample appear to be well established. This may be in part a reflection of adaptability among IDU in response to changes in the illicit drug market and is particularly notable when considering a recent increase in cocaine use and continued high rates of other drugs, particularly methadone and benzodiazepines, among those actively engaged in the illicit drug market.

The frequency of heroin use (as measured by the median number of days use and the proportion of daily users) in the preceding six months has steadily decreased since 2002. However, further analysis revealed that this decrease occurred only among IDU participants sampled in the South-West area of Sydney, with an increase observed in days use among those sampled in the inner city. Possible explanations for this include a steady increase in the number of respondents involved in pharmacotherapy treatment over the last few years, and also the change of site in South-West Sydney to one in close proximity to a treatment unit, as highlighted above.

Both law enforcement and health indicator data indicated little change from 2004 and consistently showed sustained, lower, levels of heroin related harm following the decrease in heroin availability noted during 2001. Incidents recorded for possession and use of heroin, calls to FDS (a telephone helpline) regarding problematic use, inpatient hospital admissions relating to opioids, ambulance callouts to overdoses, attendances to the Sydney Medically Supervised Injecting Centre (MSIC) in Kings Cross, heroin overdose presentations to emergency departments, and registrations for opioid



pharmacotherapy all remained relatively stable, while the number of calls to ADIS, a telephone helpline, and the number of overdose presentations to emergency departments decreased and remained at lower levels than those reported prior to 2001. All of these findings continue to suggest that heroin use has remained lower and stable across New South Wales over the past few years. Nonetheless, IDU who have remained active in Sydney's illicit drug markets have maintained regular access to, and continue to use heroin, albeit less frequently. This remains of concern particularly amongst those who regularly use other depressant drugs such as benzodiazepines, alcohol and other opioids and who may be unaware of the risk of overdose through polydrug use.

## 11.2 Methamphetamine

A larger proportion of the IDU sample completed price, purity and/or availability survey items on base and ice in 2005 as compared to 2004, indicative of greater exposure to the market for these forms of methamphetamine. Median prices for small amounts (points) of all three forms (speed powder, base and ice) remained stable, while increases were observed for large quantities of ice, and decreases for larger quantities of base. Speed powder was generally perceived to be of lower purity than base and ice by both IDU participants and KE, with ice most consistently reported as of high purity. Purity for all three forms was generally reported to have remained stable over the preceding six months. All three forms were reported to be readily available, although an increase was observed in the proportion of IDU participants reporting ice to be difficult to obtain.

Just under two-thirds of the sample had used some form of methamphetamine (or pharmaceutical stimulant) in the six months preceding interview, with identical proportions reporting recent use of speed powder, ice or base. Frequency of use remained sporadic, with the majority of users doing so fortnightly or less often. The proportion of participants reporting daily methamphetamine use increased slightly from three percent in 2004 to seven percent in 2005. It should be noted that the majority of participants are predominantly heroin users and so use patterns and related harms may be somewhat different to dependent methamphetamine users who are not current opioid users. Polydrug users who use both methamphetamine and heroin have been shown to have a greater impact on health services with regards to general health care, e.g. visits to emergency departments, and also to drug treatment services as compared with methamphetamine users who do not use heroin (Kelly et al., 2005). These authors suggest that this is likely to reflect a greater need for health care by this group, such as heroin overdose, and also the relative availability of treatment services for opioid use, e.g. methadone, compared to a comparative lack of methamphetamine-specific treatment services.

KE and indicator data suggest a degree of expansion of harms related to the methamphetamine market. A number of health KE reported an increase in users and/or problems associated with methamphetamine use, such as general ill health, injection related problems, agitation and psychotic symptoms. Concerns related to aggression associated with methamphetamine use were to some extent reflected in IDU participant data, with one in ten participants reporting that they had become verbally aggressive during a comedown or withdrawal from methamphetamine in the last six months, and similar proportions also reported becoming physically and/or verbally aggressive while under the influence of, or during a comedown/withdrawal from methamphetamine. This continues to have important implications for both law enforcement personnel – with whom methamphetamine users have been reported to have a high level of contact (McKetin et al., 2005a) – and healthcare providers in addressing issues associated with use of such stimulants, such as aggression, anxiety, agitation and symptoms of psychosis.

Law enforcement and health indicator data showed a mixed pattern, with the majority remaining stable or continuing to fluctuate over the past twelve months. This suggests that while use has increased slightly among IDU, fortunately the more worrying health-related harms experienced among the wider community have not followed suit as yet. However, while only observed among a few indicator data sources (calls to a telephone helpline, inpatient hospital admissions), and by some KE, there was some suggestion of an increase in methamphetamine-related general health harms among some users.

Methamphetamine is the second most commonly used illicit drug after cannabis among the broader community in Australia, with 9% of the Australian population aged 14 years or more estimated to have ever used it. It had been used on a regular basis (from weekly to daily) by 11% of those reporting methamphetamine use in the past twelve months (AIHW, 2005, p59-60). Considering this, the number of closed treatment episodes remained relatively low, and similar to those reported for heroin, use of which is far less prevalent among the Australian population (2%; AIHW, 2005, p56). While a proportion of regular methamphetamine users may not be experiencing the high levels of harm associated with heroin use, figures for treatment attendance still remain relatively low<sup>13</sup>. Other research has estimated that only one-tenth of regular methamphetamine users attend treatment services each year, compared to over 50% of regular opiate users (Kelly et al., 2005). While it is possible that many of these users are experiencing fewer harms associated with use, a lack of treatment options/availability, and problems attracting users to services have also been identified as additional or alternative explanations (Kelly et al., 2005).

These data suggest the continued need for the further development and expansion of effective treatment program availability for methamphetamine users (including those who are concurrent opioid users) as well as the implementation of strategies to engage and retain these users in treatment. For a recent review of psychostimulant treatment services in Australia see Baker et al. (2004). A number of research trials involving pharmacotherapy and psychosocial interventions for methamphetamine/psychostimulant use are currently planned or underway.

### **11.3 Cocaine**

An increase in cocaine use was observed in the IDU sample in 2005, with three-fifths of the sample reporting use in the last six months on a median of 12 days (i.e. bi-monthly use). Just over one in ten participants reported daily cocaine use over the first six months of 2005, and a larger proportion of participants also reported purchasing cocaine during this time. This compares with just under half of the sample (47%) reporting use on a median of six days, and 3% of the sample reporting daily use, in the 2004 sample. However, levels did not reach those reported in 2001, when a marked increase in cocaine use was observed following a substantial reduction in heroin supply.

In accordance with increased use of cocaine, a larger proportion of participants rated cocaine as 'very easy' to obtain as compared to 2004, and availability was reported to have remained stable over the six months preceding interview. However, the price remained relatively high and stable at \$50 per cap, and reports of purity were comparable to 2004 (mixed reports, but most commonly perceived as being of 'medium' purity). As in previous years, there were only minimal reports of crack cocaine use, and these are likely to remain low for as long as it remains uneconomical to convert (generally relatively low grade at the street level) cocaine into crack cocaine.

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<sup>13</sup> Median estimates have suggested that there are currently approximately 28,000 dependent and 36,900 regular methamphetamine users in NSW, as compared with approximately 22,000 dependent heroin users in 2001 Degenhardt and Day (Eds.) (2004); McKetin et al. (2005b)

In accordance with IDU data, KE and indicator data suggested that there has been an increase in cocaine use and associated problems in some areas, particularly inner Sydney and South-West Sydney, with increases also seen in presentations to primary healthcare settings (as indicated by inpatient hospital admissions and overdose presentations to emergency departments).

Interestingly, numbers of closed treatment episodes for cocaine use (e.g. assessment, withdrawal management, counselling and residential rehabilitation) have remained relatively stable since 2003/04. This again suggests that increases in cocaine use may be relatively localised to the main drug market areas, but may also be indicative – as with methamphetamine, albeit to a lesser extent – of a lack of engagement with respect to users presenting to or engaging with treatment services. This may be for several reasons: first of all, given that many IDU are predominantly opioid users, a large proportion of cocaine users may present for treatment who nominate opioids as their primary/only drug of concern. Further explanations identified by Kelly et al (2005) in relation to methamphetamine users may also apply to cocaine: regular users may be experiencing fewer harms associated with use; they may be unable to access treatment due to a lack of options or availability; and/or they may not perceive treatment services, which have traditionally been – and remain to a large extent – opioid-based, to be able to meet their needs. However, treatment options are available (see Baker et al. 2004, for a review) and as mentioned previously, a number of research trials involving pharmacotherapy and psychosocial interventions for psychostimulant use are currently planned or underway. Data suggest the continued need for the further development and expansion of effective treatment program availability for cocaine users (including those who are concurrent opioid users) as well as the implementation of strategies to engage and retain these users in treatment.

Particularly concerning were reports from a number of KE relating to risky injecting practices engaged in by regular cocaine users. Whilst these changes were not presently widespread across the whole of Sydney or New South Wales, findings highlight the dynamic nature of the illicit drug market and flexibility among many regular IDU in terms of drug use, and differential impacts of these drugs on related harms such as injection-related problems, mental health problems and overdose.

Overall, these data suggest the continued need for flexibility in law enforcement and healthcare services (both frontline and specialised drug treatment services) in recognising and responding to changes within the drug market, patterns of drug use and their effects upon users.

## **11.4 Cannabis**

Consistent with previous years of the IDRS, there was very little change documented in cannabis trends among IDU with the majority of the sample reporting recent use, and 47% reporting daily use in the preceding six months. Given that this increase has been sustained in the context of consistently high prices for heroin, lower heroin purity, and reduced frequency of heroin use as compared with the late 1990s, it may be that IDU are continuing to substitute or supplement their heroin use with cannabis, particularly as hydroponic cannabis is consistently rated as being of ‘high’ potency.

As in previous years, hydroponic cannabis continued to be the predominant form of cannabis used, although just over two-thirds (69%) of those using cannabis also reported using bush in the six months preceding interview. Smaller proportions reported using hash (7%) and hash oil (2%) during this time. A number of law enforcement KE noted that there had been some changes to the large scale cultivation/supply of cannabis over the past few years, and it was noted that outdoor-grown cannabis use may be more prevalent in country areas than in the greater Sydney metropolitan area where hydroponic appears to dominate.

Generally, indicator data suggested that cannabis use in the broader community has not changed recently, with the number of cannabis toxicity presentations to emergency departments, and the number of calls to ADIS (a telephone helpline), the number and rate of inpatient hospital admissions where cannabis was the primary diagnosis remained relatively stable. The number of incidents recorded for cannabis possession and use have remained stable across NSW, with the exception of inner Sydney where the number has fluctuated – possibly due to an increased use of drug detection dogs and/or changes in police operations in the area over this period. Slight increases were observed in the number of calls to Family Drug Support – a telephone helpline – related to cannabis and in the number of closed treatment episodes for withdrawal management and counselling – a finding that was also independently noted by a number of KE. The latter may be due to a genuine increase in cannabis dependence problems, and/or related to an increased awareness in the community of problems associated with cannabis use resulting in an increased demand for specific treatment.

KE reports were generally consistent with IDU and indicator data reports, with a number of KE also noting an increase in mental health problems among younger cannabis users. Overall, with the exception of an increased number of detections in the inner Sydney area, and some suggestion of increased demand for treatment, the cannabis market remained relatively unchanged.

### **11.5 Other opioids**

While illicit methadone remained relatively easy to obtain, a decrease was observed in the proportions of IDU reporting use of illicit methadone in the last six months, from approximately one-third of respondents in 2004 to 17% in 2005, and the median number of days remained sporadic (i.e. less than monthly use). Approximately half of this group reported being engaged in methadone maintenance treatment during this period. Given the very occasional nature of this illicit methadone use, and the high rate of methadone treatment among this sample, it may be that some IDU obtain methadone to substitute for missed doses and maintain them until their next clinic visit.

A decrease was also observed in the proportion reported injecting methadone from illicit sources (11% in 2005 as compared with 22% in 2004) and, of these, just over half had been engaged in methadone treatment. While the median number of days was somewhat higher (just under once per week), the modal number of days was one during the preceding six months. Just over half of respondents who had injected methadone syrup on one occasion or more in the preceding six months had been engaged in methadone treatment during this period. Illicit phsyseptone tablets use remained uncommon, with only 3% of the sample reporting use in the last six months.

Similar to previous years, small proportions (8%) reported use of illicit buprenorphine in the preceding six months, just under half of whom were in buprenorphine treatment during this period. Five percent of the IDU sample reported injection of illicit buprenorphine in the six months preceding interview, while eleven percent reported injection of any buprenorphine – i.e. whether licitly or illicitly obtained – during this time.

These data indicated that some diversion of methadone (and to a lesser extent buprenorphine) to IDU, both in and out of treatment, continues to occur. As would be expected, the vast majority of those who reported primarily using methadone or buprenorphine from illicit sources were not engaged in treatment. Injection of methadone and buprenorphine did not appear to be a significant issue among IDU in Sydney. However, this practice remains an issue of some concern, particularly in relation to buprenorphine and methadone that was received as a pharmacy (rather than take-away) dose as there

are increased harms arising from the dose having been in someone's mouth, including the introduction of bacteria and the increased potential for infection.

In contrast to relatively low levels of illicit buprenorphine use, use of illicit morphine was higher, reported by 24% of participants, and the same proportion had injected some form of morphine (whether licit or illicit) in the six months preceding interview. However, despite a comparatively high prevalence of use, and reports suggesting that it was 'easy' or 'very easy' to obtain, frequency of use remained sporadic at less than monthly use, suggesting that morphine may be used as a substitute for other drugs when the drug of choice (e.g. heroin) is problematic to obtain or of low purity, or when a methadone dose is missed. KE reports indicated that morphine use remained uncommon, although there was some suggestion of an increase in some parts of inner Sydney. Whilst there was a low prevalence of morphine injection in the month preceding interview, it is worth noting that experience of problems among those who inject them was high, and higher than those reported for buprenorphine, methadone and benzodiazepines.

Oxycodone use did not appear to be widespread in New South Wales at this time. However, reports suggest that use may be an emerging issue in other Australian jurisdictions such as Western Australia (Fetherston, 2005), and in the continued context of reduced heroin purity and greater polydrug use by opioid injectors in NSW, remains an issue to monitor. The injection of tablets designed for oral administration, including MS Contin and Oxycontin, is associated with problems such as the increased potential for infection and vein damage.

## **11.6 Benzodiazepines**

While the prevalence of benzodiazepine use has remained relatively stable, a substantial decrease was observed in the frequency of use among the IDU sample as compared with 2004. However, prevalence of use remained relatively high at 29 days (i.e. more than once per week, as compared with 60 days or 2-3 times per week in 2004). The proportion of daily benzodiazepine users remained stable at approximately one-fifth of the sample. Illicit benzodiazepine use was reported by two-fifths of the sample, with Valium/diazepam and Serepax/oxazepam the most commonly used forms.

The proportion of participants reporting benzodiazepine injection in the six months preceding interview decreased from approximately 20% between 2001 and 2003 to only 2% in 2005, a decrease which correlates with the withdrawal of temazepam gel caps from the pharmaceutical market in March 2004. Frequency of injection has also decreased over this period, from 20 days (i.e. approximately once per week) to only 2 days. This has implications for the reduction of associated harms, such as benzodiazepine dependence and injection-related health problems such as vein damage, gangrene and abscesses (Breen et al., 2004a).

Indicator data were consistent with IDU data, with a decrease in injection following withdrawal of temazepam gel capsules as evidenced in the number of MSIC clients reporting injection. Similarly, a decrease in the number of deaths of suspected drug users in which benzodiazepines were detected was observed in late 2004 and despite a slight increase in mid-2005, has remained slightly lower than in previous years. Given that the overall, number of drug-related deaths appears to have decreased, and that they were implicated in a large proportion of deaths that did occur (consistent with an increase in polydrug use among IDU), it remains imperative to continue to educate regular drug users on the risks associated with polydrug use, specifically overdose in combination with other depressant drugs such as opioids and alcohol.

Overall, the data indicated that the restrictions introduced in May 2002 and March 2004 to limit and then withdraw the supply of benzodiazepine gel capsules have impacted on injecting behaviours. However, IDU in Sydney continued to access (both licitly and illicitly) benzodiazepines, and continue to use them frequently. Continued vigilance to minimise the diversion of benzodiazepines, whilst balancing this with the clinical need for their prescription, seems warranted.

### **11.7 Other drugs**

Anti-depressant use remained stable, with just under a quarter reporting use in the last six months, and typically using daily. Misuse of anti-depressants was not reported. Almost half of the participants sampled in 2005 reported that they had been prescribed anti-depressants at some stage in their life, while almost twice the proportion of those reporting use at the time of interview. While these participants may have ceased use as they no longer needed them, anecdotal and KE reports suggested that some individuals choose not to continue taking them for a number of other reasons, such as unwanted side-effects. Prevalence and frequency of use of ecstasy, hallucinogens and inhalants remained low, suggesting that these are not major drugs of concern among the IDU sample. Use of alcohol also remained relatively low, while the vast majority of participants were daily tobacco smokers. Whilst tobacco use is unlikely to be the most pressing concern when considered alongside the acute risks associated with injecting drug use such as overdose, BBVI transmission etc, this remains a substantial health concern.

### **11.8 Associated harms**

The total number of newly acquired HCV notifications in NSW has remained stable compared to 2004. Rates of HCV antibody among IDU in the NSP survey have remained high and stable, whereas rates of HIV antibody in this population have remained low and stable. The proportion of IDU reporting borrowing used needles remained stable while those lending used needles decreased slightly. A slight decrease was observed in the proportions reporting sharing other injecting equipment including spoons, water and filters, from 52% in 2004 to 43% in 2005. Despite these reported increases in safer injecting practices and some apparent stability in prevalence rates of BBVI, continued and increased efforts must be made to provide sterile injecting equipment and information on safer injecting techniques to those who choose to inject drugs, in addition to advice on (and referral into) services where appropriate and available.

Locations for injection have remained relatively stable, with the vast majority reporting injection at home. This has a number of positive implications, including an increase in the likelihood that IDU will inject in a safer manner since fear of apprehension may be less of an issue in the home. However, if IDU are injecting alone, they may be at increased risk of overdosing and failing to receive medical attention if they require it. Proportions reporting injection-related problems have remained relatively stable, while proportions reporting specific problems have either increased (difficulty injecting, dirty hit) or remained stable. While numbers remained small, a greater range of drugs was reported by those who had experienced an overdose or dirty hit in the preceding month, as compared with previous years. Overall, efforts to increase IDU awareness regarding overdose prevention and safety – including the risk of overdose due to polydrug use – should be considered.

Almost one-fifth of the sample reported driving within one hour of using a drug on one occasion, or more, during the six months preceding interview. This is an issue of concern, and further investigation, for example, the frequency and circumstances under which it occurs is already an area of considerable research effort. Dissemination of this information, including the risks involved, to drug users including IDU would also appear justified.

Two-fifths of the sample reported experiencing a mental health problem other than drug dependence in the preceding six months, and as in 2004, depression and anxiety were the most commonly reported problems. However, only 84% of those reporting such a problem had attended a health professional (usually a psychiatrist or GP) regarding such issues during this time. This raises some concern regarding accessibility and availability of services to this group.

Substance-related aggression was experienced by a significant minority of IDU within the preceding six months, particularly verbal aggression during withdrawal (38% of participants), although almost one-third reported becoming verbally aggressive whilst under the influence of a drug. Physical aggression (due to intoxication and/or during withdrawal/a comedown) from a drug was reported by 15% of the sample. The most commonly reported drugs after which this occurred were methamphetamine, heroin (particularly during withdrawal), benzodiazepines and alcohol. Clearly, the IDU interviewed for the IDRS experience and are witness to significant levels of aggression, which might reasonably be considered in future work. This is also a worthwhile issue to consider during drug treatment (e.g. assertiveness training, anger management, personal safety issues, self defence), and as a safety issue for frontline health workers and law enforcement personnel.

There was little change in proportions reporting engagement in criminal activity or offence types, although there was a slight decrease observed in numbers reporting property crime. This group appeared relatively engaged in criminal activity with just under half of the sample being arrested in the previous twelve months. IDU participant perceptions of police activity differed by area, with an increased police presence reported in public areas such as train stations in South-West Sydney, whereas a more general increased police presence (e.g. uniformed, undercover) was noted in inner Sydney. KE perceptions of police activity were dependent on the area and police operations. Also highlighted was the clear need for continued, ongoing communication between law enforcement and health services.

## 12.0 IMPLICATIONS

The findings of the 2005 NSW IDRS indicated several areas of illicit drug use that require further attention including:

- Wider implementation of effective interventions for stimulant (cocaine and methamphetamine) users, and development of strategies to engage and retain users in these programs.
- Continued provision of services – e.g. counselling and withdrawal management – for those wishing to cease or reduce cannabis use.
- Careful monitoring by medical practitioners relating to the diversion of methadone and other opioids such as morphine and oxycodone. Increasing trends towards this have been noted in other jurisdictions, and to a lesser extent in Sydney, NSW.
- Continued surveillance of patterns and prevalence of benzodiazepine use and diversion, and careful monitoring by medical practitioners of the clinical need for their prescription.
- Continued focus on education regarding overdose (particularly with regard to use of multiple depressant drugs) and the dangers of sharing injecting equipment other than needles, including safer injecting strategies. In the context of increased stimulant use, continued education regarding the effects of prolonged use (e.g. agitation, aggression, paranoia and psychosis), strategies to reduce risk (e.g. rest periods between binges) and referral into treatment where appropriate seems warranted.
- Increased/continued awareness of the need for treatment of the comorbid mental health problems that many IDU may be experiencing. Despite the fact that many participants were aware that they had recently experienced such problems, one-fifth of those who reported mental health problems were not receiving help for them. Maintaining links between drug services and mental health services remains critical as rates of comorbidity were relatively high. In particular, the likelihood that comorbid mental health problems may affect treatment outcome needs to be acknowledged and addressed by both mental health and drug treatment services. Future work might usefully investigate participant awareness and understanding of mental health problems, including treatment service availability. In addition, exploration of barriers to mental health services encountered by this group and identification of where improvements may be made (where possible) would be of continuing benefit.
- While a large proportion of participants who used anti-depressant medication had used it daily, anecdotal evidence from KE and IDU suggest that adherence to these drugs is problematic for a notable proportion of IDU. Investigation into use of, and compliance with, anti-depressant medication by this population may enable more successful treatment.
- Further investigation into driving under the influence of drugs, for example the frequency and circumstances under which it occurs, is already an area of considerable research effort. Dissemination of this information to drug users including IDU would also appear justified.
- High rates of tobacco use have consistently been documented in the IDU samples over time, and consideration should be given to providing smoking cessation treatment education/options to IDU considering ceasing or reducing use whilst in treatment for illicit drug use.
- Continued and ongoing communication between law enforcement and health services to ensure the goals of both organisations are, or continue to be, met as successfully as possible.
- It has also been demonstrated that rural and other metropolitan areas may have different patterns of drug use and related harms (e.g. Day et al., 2005). Further research into this area might usefully enable user groups, health workers and policy makers in areas with different patterns of drug use and related issues to adapt more general health promotion messages, responses and so on to become more relevant to their particular area and/or client group(s).



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