E. Black, A. Roxburgh and L. Degenhardt

NSW DRUG TRENDS 2006
Findings from the 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
BBVI	Blood-borne viral infections
BOCSAR	NSW Bureau of Crime Statistics and Research
EDRS	Ecstasy and Related Drugs Reporting System (formerly called the Party Drugs Initiative, or PDI)
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 User(s)
KE	Key Expert(s)
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
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 (now called the Ecstasy and Related Drugs Reporting System, or EDRS)
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.
Central Sydney	In IDU survey data refers to participants recruited in Kings Cross and Redfern; in KE survey data refers to participants referring to these and/or surrounding suburbs in the inner city, e.g. Surry Hills, Darlinghurst.
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, antidepressants) 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: injecting, smoking, snorting and/or swallowing.
Point	0.1 gram, although may also be used as a term referring to an amount for one injection (similar to a 'cap'; see above).
Recent injection	Injection (typically intravenous) on at least one occasion in the last six months.
Recent use	Use in the last six months via one or more of the following routes of administration: injecting, smoking, snorting and/or swallowing.
South-West Sydney	In IDU survey data refers to participants recruited in Liverpool and Canterbury; in KE survey data refers to participants referring to these and/or surrounding suburbs, e.g. Fairfield, Cabramatta.
Use	Use via one or more of the following routes of administration: injecting, smoking, snorting and/or swallowing.

EXECUTIVE SUMMARY

Demographic characteristics of injecting drug user (IDU) participants

One hundred and fifty-two IDU participated in the 2006 survey. Sixty-one percent were male, 82% 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 18-58 years). Twenty-two percent of the sample identified as Aboriginal and/or Torres Strait Islanders (A&TSI). Educational status of the sample varied, ranging from five years completed, 54% percent of the sample having completed year 10 and 13% having completed year 12. Thirty-nine percent had obtained a trade or technical qualification and 3% had completed a university or college qualification such as a degree. Fifty-nine percent had not completed any further education after leaving school. Sixty-three percent had a previous prison history. The average age of first injection was 19 years (range 9-40).

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 (49%), the drug they had injected most often in the last month (42%), and the drug they had injected most recently (42%). These figures were substantially lower than previous years: in 2004, heroin was the last drug injected and most commonly injected drug in the past month for 80% of the sample, and 64% (each) in 2005. Eighty-one percent of participants reported use on one or more occasions in the six months preceding interview.

The median days on which heroin was used also continued to decline from 96 days in 2005 (i.e. approximately every two days) to 72 days (i.e. three times per week) in 2006; 2006 was also the year in which there was the lowest proportion of daily heroin users since the IDRS began (25%). As in 2005, the median number of days on which heroin was used differed by geographical area. However, although in 2005 a decrease in days of use was seen in South West Sydney and use remained stable in central Sydney, 2006 saw a stabilising of days of use in the South West (67 days in 2005; 65 in 2006) and a halving in the days of use in central Sydney (from 180 days, or daily, use in 2005 to 90 days in 2006).

The median price for a gram ($300) and a cap of heroin ($50) remained stable in 2006 and prices remained higher than those reported prior to the heroin shortage in 2001. Heroin remained accessible in 2005, with 69% of those commenting reporting that it was either 'easy' or 'very easy' to obtain. However, there was some suggestion of a decrease in availability, as the proportion reporting that it was 'difficult' or 'very difficult' to obtain increased from 9% in 2005 to 28% in 2006. Participants tended to report availability as having remained stable (47%) or more difficult (35%).

The majority of participants (among those who commented) reported that heroin purity was currently low (64%) and decreasing (48%). Key expert (KE) comments on price, purity and availability were consistent with IDU reports, with some discussion around different pricing methods and indications that heroin quality was generally poor. KE and IDU commenting on heroin use typically characterised users as engaging in polydrug use, using other drugs such as illicit opioids, benzodiazepines and stimulants in response to continued low heroin availability/purity. There was suggestion of a slight increase in homebake use among some

groups of drug users, reflected in a slight increase in IDU reports of use. However, the use of this opioid remained uncommon and infrequent.

Key experts (KE) also noted the appearance of Afghani brown alkaline heroin, predominantly in central Sydney with some indication of its use extending to South-West Sydney for a short period. This had prompted a number of harm reduction efforts by health providers, who noted that this form of heroin requires different injection preparation methods. However, all KE noted that the predominant form remained white (or off-white) powder, believed to be sourced from South East Asia.

Indicator data reflecting harms related to heroin use remained stable or decreased over the past year, and remained substantially lower than figures recorded prior to 2001. The NSW heroin market has not returned to pre-shortage levels of use or associated harm.

Methamphetamine

Seventy-two percent of participants had used some form of methamphetamine (speed powder, base, ice or liquid[1,2]) in the preceding six months, representing an increase from 2005 (58%). The most common form used was ice/crystal (57%; an increase from 38% in 2005), followed by speed powder (49%; an increase from 38% in 2005). Prevalence of base use remained fairly stable at 43% (38% in 2005), and prevalence of liquid methamphetamine remained stable and low (5%; 6% in 2005). Frequency of methamphetamine use (any form) also increased, to a median of 26 days (i.e. approximately weekly use), compared to 2005 (16 days, i.e. just over fortnightly use). The proportion of daily methamphetamine users increased from 5% in 2005 to 10% of the entire sample in 2006. Again these increases were mainly observed in the use of speed powder and ice/crystal, with frequency of base and liquid methamphetamine use remaining stable.

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). Increases were observed in the median prices paid for larger quantities of base, and decreases were observed in the median prices paid for larger quantities of ice/crystal. However, it should be noted that prices quoted for larger quantities were based on small numbers of participants, and should be interpreted with caution.

The three main forms of methamphetamine (speed, base and ice/crystal) were typically reported by users as 'very easy' or 'easy' to obtain. This was particularly the case for ice/crystal, which was reported as 'very easy' to obtain by approximately one-third of the entire sample, as compared with one-tenth of participants in 2005. Availability was typically reported to have remained stable over the six months preceding interview.

[1] 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 crystals (sometimes with a pink, green or blue hue) that vary in size. A fourth form, liquid amphetamine or 'oxblood', has also been identified, and is typically red/brown in colour.

[2] In previous years, 'any form' of methamphetamine included pharmaceutical stimulants. In 2006, they were considered separately from methamphetamine. Prevalence and frequency of pharmaceutical stimulant use have remained low and stable in NSW.

As in previous years, user perceptions indicated that ice/crystal and base were higher in purity than speed powder, with ice/crystal most commonly being reported as 'high', base as 'medium' and speed powder as 'low'. KE reports indicated that speed powder was typically 9-20% pure, while ice/crystal fluctuated and could reach up to 80% purity. Reports by IDU and KE generally suggested that purity had remained stable over the preceding six months.

KE reported on a range of methamphetamine forms, with ice/crystal and speed powder mentioned most often, and few reports of base use. However, a number of KE also noted that while users most often spoke about 'ice', they were often uncertain as to what extent users were also using other forms of methamphetamine. While use of ice/crystal was reported to have increased among clients of some health services over the past few years, opinions about the extent of this use were in some cases critical of media reports of a so-called 'ice epidemic'. Law enforcement KE in some areas reported that they had increased staff skills training in response to an increase in problematic behaviour among methamphetamine users, and a health KE in another area reported that their service had increased anger management training for clients in response to increased numbers of methamphetamine users. One KE had observed a decrease in ice/crystal use among some users due to negative experiences reported by the users they had contact with.

As in previous years, indicator data reflecting harms related to methamphetamine use presented a mixed picture, with increases noted in the number of recorded incidents of possession/use in the inner city, methamphetamine lab detections, and the number of calls regarding ice/crystal to telephone help lines. A number of health indicators showed figures as being stable (e.g. admissions to emergency departments), while decreases were observed in the number and rate of methamphetamine-related hospital admissions.

Cocaine

A moderate increase in cocaine use was observed in 2006, although this did not approach the high levels reported in 2001 during the peak of the heroin shortage. Sixty-seven percent of participants reported cocaine use in the preceding six months (as compared with 60% in 2005), and the median days of use increased from 12 days in 2005 (i.e. approximately fortnightly use) to a median of 20 days in 2006 (i.e. just under weekly use). Ten percent of participants reported daily use over the past six months. Cocaine use was more prevalent among participants recruited in central Sydney than those recruited in the South-West. Reports of crack cocaine were almost non-existent among the IDU sample, a finding reflected in KE reports.

Reports of cocaine availability remained relatively stable, with 71% of those who were able to comment reporting it to be either 'easy' or 'very easy' to obtain as compared with 69% in 2005. However, a decrease was observed among those reporting cocaine as 'very easy' to obtain, from approximately one-third of participants in 2005 to approximately one-fifth in 2006. Overall, while cocaine remained readily available to a large proportion of the sample, this may be indicative of a slight decrease in availability compared with 2005. Availability was commonly perceived to have remained stable over the preceding six months. More broadly; however, law enforcement KE indicated an increase in cocaine availability across the state.

Prices for cocaine remained stable. Caps remained the most common purchase amount ($50; n=47), although there was a decrease in the number of participants reporting purchase (n=61 in 2005).

IDU participant reports on cocaine purity were mixed, with one-quarter of the sample (one-third of those commenting) reporting it as 'medium', and 16% each reporting it as 'high' or 'low'. Purity was most often rated as having been 'stable' (26% of the sample, or 36% of those able to comment on cocaine market characteristics) over the six months preceding interview, although a substantial proportion thought that it was decreasing (18% of the sample, or 25% of those commenting). Overall these reports indicated little change from 2005.

KE comments regarding use patterns were generally consistent with those of IDU, suggesting that cocaine use remained more prevalent in central Sydney, and was used more sporadically in other areas. Also consistent with these geographic differences, indicator data showed that cocaine use had increased in the inner city (number of visits to the Sydney Medically Supervised Injecting Centre [MSIC] where cocaine was injected and number of visits to three inner city Needle and Syringe Programs (NSPs) where cocaine was reported as the last drug injected), and had remained stable and higher than other areas of NSW (recorded incidents of cocaine possession/use). State-wide indicator data suggested that harms related to cocaine use had increased or remained stable.

Cannabis

The cannabis market has remained relatively unchanged since the commencement of the NSW IDRS in 1996. The majority of participants (80%) in the 2006 IDU sample reported having used cannabis in the six months preceding interview. The median frequency of use among IDU remained at 180 days (daily use) in 2006.

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. There was a slight increase in the number of participants reporting purchase of the resin (hashish) and oil (hash oil) forms compared to 2005; however, overall indications suggested that use remained rare. The price of hydroponic cannabis was $20 per gram (the most popular purchase amount) and the majority of participants (72% of the entire sample, or 94% of those completing the section on cannabis market characteristics) reported that it was readily available, i.e. 'easy' or 'very easy' to obtain. The price per gram of bush cannabis was also $20, but, as in previous years, larger purchase quantities of bush were slightly cheaper than for the equivalent quantity of hydro. Bush was more difficult than hydro to obtain, with fewer participants able to complete survey items on bush market characteristics (price, potency and availability), and only 15% of the sample (49% of those able to comment on bush market characteristics) reporting it to be 'easy' or 'very easy' to obtain. As in 2005, 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, and that the number and profile of clients attending treatment services had remained stable in many areas. However, some health KE noted an increase in people seeking treatment for cannabis use, and one KE had received an increased number of queries from people concerned about workplace drug testing and drug driving testing. 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.

Use of illicit pharmaceuticals

Illicit methadone

One-quarter (25%) of participants reported use of illicitly obtained methadone syrup in the six months preceding interview, a similar level compared to 2005 (17%), and use was sporadic (less than monthly). Just under half of those who had used illicit methadone had also been engaged in methadone treatment during this period, suggesting that methadone was being diverted by those engaged in treatment, as well as to those who were not. One-fifth of participants reported injecting illicit methadone syrup in the preceding six months (11% in 2005), indicating that prevalence had increased slightly from 2005 and was similar to 2004 findings. Frequency of injection was also reported as less than monthly. Again, just under half of this group were engaged in methadone treatment during this period. Reports on illicit methadone availability were somewhat mixed, although almost one-third of the sample reported that it was 'easy' or 'very easy' to obtain. There was some indication of a price increase, with the median price per ml increasing from 50c to 75c; however, the modal price remained at 50c per ml. KE reports indicated that reasons for diversion may be many and varied; research into the reasons for diversion is currently being conducted.

Use and injection of illicitly obtained Physeptone tablets remained uncommon, with 2% each reporting use and injection in the six months preceding interview.

Illicit buprenorphine and buprenorphine-naloxone

An increase was observed in the reported use of illicit buprenorphine in the preceding six months, from 8% in 2005 to 19% in 2006. Less than one-third of these participants reported engagement in buprenorphine treatment during this period. The prevalence of illicit buprenorphine injection during the six months prior to interview also increased, from 5% in 2005 to 15% in 2006, although the frequency of injection over this period remained low (less than monthly).

In 2006, items were included on buprenorphine-naloxone (Suboxone), which was listed on the Pharmaceutical Benefits Scheme 1-2 months prior to interview. There were no reports of buprenorphine-naloxone diversion in 2006.

Morphine

Prevalence of morphine use among the NSW IDRS IDU has gradually increased since 2001, with 37% of the 2006 sample reporting use in the preceding six months. However, frequency of use remained low (median of 7 days in 2006). One-third of the sample reported the use of illicitly obtained morphine in the six months preceding interview, on a median of 8 days (i.e. approximately 1-2 times per month). Use of licitly obtained morphine was uncommon, with 7% of the sample having used it on a median of 5 days. The majority of participants who reported morphine use in 2006 were recruited in central Sydney, with much lower rates of use in the South West. This was also reflected in KE reports, and indicator data from the Sydney MSIC (located in Kings Cross, central Sydney) which showed a clear increase in clients injecting morphine.

Nineteen percent of participants reported injecting morphine in the month preceding interview, and, of these, just over half (55%; 11% of the entire sample) reported experiencing problems that they attributed to morphine injection, such as difficulty finding veins and prominent scarring or bruising. MS Contin remained the most common brand of morphine used, with 100mg tablets ('grey nurses') costing a reported median price of $25.

Just over one-third (38%; an increase from 27% in 2005) of the sample felt confident to comment on the price and/or availability of illicit morphine. These participants typically reported that it was 'easy' or 'very easy' to obtain. Availability was generally considered to have remained stable.

Oxycodone

As 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. Until 2005, oxycodone was included under 'other opioids'.

Twenty percent of participants reported use of oxycodone in the six months preceding interview on a median of 13.5 days (i.e. approximately once per fortnight). A fairly small proportion of the sample (14%) reported injecting it in this time on a median of eleven days. General use patterns of licitly and illicitly obtained oxycodone were similar, although injection of oxycodone was more common when it was illicitly obtained.

KE reports indicated that the use of oxycodone remained relatively uncommon among IDU; however, it should be noted that it may in some cases be referred to by users as 'morphine', so it is difficult to know the extent to which changes in 'morphine' also apply to oxycodone.

Twenty-two percent of the sample felt confident to comment on the price and/or availability of illicit oxycodone. The most common purchase amounts were 80mg OxyContin tablets, bought for a median price of $25 each (the same price as for 100mg MS Contin morphine tablets). These participants had mixed views on availability, with similar proportions reporting it as 'easy', 'very easy' and 'difficult' to obtain. Availability was generally considered to have remained stable.

Other opioids

Use of other opioids not specified elsewhere (e.g. codeine and pethidine; whether licitly or illicitly obtained) was uncommon, with 6% reporting recent use on a median of 4.5 days (i.e. less than monthly use). One percent reported injecting other opioids in the six months preceding interview on a median of three days. Panadeine Forte, a pharmaceutical drug containing 30mg codeine, continued to be the main form used; just over one-third of those reporting other opioid use had obtained them illicitly.

Benzodiazepines

Prevalence of benzodiazepine use decreased slightly, with just over half (59%) reporting use in the six months preceding interview on a median of 25 days (i.e. approximately weekly use). By comparison, 65% reported use on a median of 29 days in 2005. The proportion of daily users decreased slightly from 20% in 2005 to 14% in 2006. Injection of benzodiazepines was relatively uncommon, and was substantially lower since the removal of benzodiazepine gel capsules (e.g. Normison, Euhypnos) from the market. Thirty-seven percent of participants (62% of benzodiazepine users) reported use of illicitly obtained benzodiazepines in the last six months, and diazepam and oxazepam remained the most common forms used.

Other drugs

Approximately one-quarter of participants reported antidepressant use in the six months preceding interview, representing little change from 2005. In the vast majority of cases, they were licitly obtained and taken orally.

Hallucinogen, ecstasy and inhalant use remained relatively infrequent. Hallucinogen use in the six months preceding interview was reported by 5% of the sample on a median of two days, and 1% had injected them on a median of 1.5 days. Hallucinogen figures refer to LSD; there were no reports of recent 'magic mushroom' use. While over half of the sample had tried ecstasy, recent use was reported by approximately one-quarter of the sample on a median of two days. Twelve percent reported injecting it in the preceding six months on a median of two days. Prevalence of inhalant use (e.g. nitrous oxide, amyl nitrate and paint) remained low at 2%.

Approximately two-thirds of the sample had consumed alcohol in the preceding six months on a median of 20 days, i.e. approximately once per week. Approximately one-tenth of the sample reported daily alcohol use. Tobacco remained the most commonly used substance investigated by the IDRS, with virtually all participants (96%) reporting smoking tobacco in the six months preceding interview on a median of 180 days (i.e. daily); a finding that has remained consistent since 1996 when the project commenced.

Associated harms

Approximately one-third to two-fifths of IDU recruited in NSW reported recent testing for BBVI (hepatitis B, hepatitis C and/or HIV), with high self-reported rates of hepatitis C infection and low rates of HIV infection. Participants reported some confusion in their understanding of their BBVI status Small proportions reported receiving antiviral treatment for hepatitis C.

Survey data suggest that the proportions of IDU reporting borrowing and/or lending of needles and other injecting equipment have remained stable or decreased slightly compared to 2005.

The most commonly reported location for injection (usual and most recent) was a private home, with less than one-quarter of participants reporting that their usual location was a public place. These figures represent little change from 2005. Just over one-tenth reported that they usually injected at the Sydney MSIC, and 15% reported last injecting at the MSIC. While these figures remained stable compared to 2005, an increase in reports of injecting at the MSIC has occurred since 2001, when these figures were 3% (usually injected) and 4%, (last injected).

Two-thirds of IDU participants who had injected in the last month reported at least one injection-related problem during this time (the same figure as in 2005), and 38% percent reported two or more problems during this time (as in 2005). The most commonly reported problems were prominent scarring/bruising of injection sites (51%) and difficulty injecting (42%). Over half of the sample (56%) 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 (either alone or in combination with another drug/s).

Five percent of the sample reported driving under the influence of alcohol in the six months preceding interview on a median of four occasions. Thirty percent reported driving under the influence of an illicit drug in this time, most commonly heroin, methamphetamine and/or cannabis. These are lower than the rates have reported by other research with IDU in Sydney (e.g. Darke et al., 2004).

Almost one-third of the sample reported experiencing a mental health problem other than drug dependence in the preceding six months, and 80% of this group (representing 23% 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 (20%), followed by anxiety (8%) and schizophrenia (7%).

Thirty-six 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 aggressive. Participants more commonly reported becoming verbally aggressive when in withdrawal or 'coming down' from a drug (47%), while rates of physical aggression were lower at 15%. The most commonly reported drugs attributed to these instances of aggression were heroin (particularly during withdrawal), methamphetamine and alcohol (when under the influence).

The proportion reporting involvement in criminal activity in the month preceding interview (55%, mainly drug dealing and property crime) has remained relatively stable over time. A marginal decrease was observed in reports of arrest over the preceding twelve months, from 44% in 2005 to 39% in 2006. As in previous years, the majority of participants (57%) perceived that police activity had increased in the preceding six months. Just over half the sample (62%) reported that their ability to obtain drugs had been unaffected by police activity.

Implications

The findings of the 2006 NSW IDRS indicate that further attention is required in the following areas:

- Wider implementation of effective interventions for stimulant (cocaine and methamphetamine) users appears necessary and development of strategies to engage and retain users in these programs would be of benefit.
- Dissemination of available treatment options for psychostimulant dependence to users is required.
- Continued skills training for frontline workers dealing with people who use psychostimulants in a problematic manner and/or who present in crisis appears warranted. This includes health service providers and law enforcement personnel. A number of guideline documents have been developed under the National Drug Strategy (e.g. Baker et al., 2004, Jenner et al., 2004a, Jenner et al., 2006, Jenner et al., 2004b).
- There should be continued provision of services – e.g. counselling and withdrawal management – for those wishing to cease or reduce cannabis use.
- Continued careful monitoring is required by medical practitioners of the diversion of pharmaceutical preparations (e.g. benzodiazepines and opioids), whilst also continuing to appropriately provide these medications to those with genuine clinical need. Provision of targeted harm reduction messages and equipment such as pill filters should be considered for those who continue to inject such preparations.
- There may be many interpretations of the term 'diversion' and reasons for doing so. Clear and honest dialogue between case workers/prescribers and clients is crucial in minimising diversion and related harms whilst also achieving the highest rates of treatment adherence. Further research is currently being conducted into this area to increase understanding of this difficult issue.
- Continued monitoring of the currently low prevalence of alkaline heroin and homebake heroin, associated harms and production of the latter within Australia is necessary. Should their use become more widespread, the flexibility in harm reduction efforts (such as information on safer methods of use and provision of the necessary equipment) demonstrated by health services in central Sydney will be required more broadly.
- There should be continued focus on education regarding overdose and safer injecting strategies. In the context of increased stimulant use, a number of actions seem warranted. These include targeted education regarding the effects of prolonged use (e.g. agitation, aggression, paranoia and psychosis), practical strategies to reduce risk (e.g. rest periods between binges), skills training or counselling for users (e.g. on recognising and dealing with anxiety, anger and low mood) and referral into treatment where appropriate. An example of such information may be found in a booklet developed with input from users ('On Thin Ice: A User's Guide' at http://ndarc.med.unsw.edu.au/).
- Continued emphasis on the importance of regular BBVI testing and vaccination to injecting drug users, including efforts to maximise the availability of these services to injecting drug users (e.g. provision of testing at/near NSPs). Continued efforts should also be made to provide clear messages and interpretations of BBVI test results, including access to follow-up information and referral.
- Increased/continued awareness of the need for treatment of the comorbid mental health and polydrug use problems that many IDU may be experiencing and promotion of available services to injecting drug users are warranted. 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, and effects of drug use on

signs and symptoms. 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 antidepressant 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, antidepressant 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.
- Following the introduction of drug driving testing in NSW, dissemination of the legislation and penalties to users appears warranted.
- High rates of tobacco use have consistently been documented in the IDU samples over time, and consideration should be given to providing smoking reduction/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 is recommended 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., 2005a). 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 2006. 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., 2006, p.19, Degenhardt et al., 2005a, Degenhardt et al., 2005b, Degenhardt et al., 2003, Mattick et al., 2004, Breen et al., 2002, Darke et al., 2002c, Darke et al., 2002b, Darke et al., 2002a, Day et al., 2003, Fry and Bruno, 2002, Griffiths et al., 2000, Hando et al., 1998, 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, Black and Degenhardt, 2006). A list of these publications is available on the NDARC website.

A separate study monitoring trends in ecstasy and related drug use (the Ecstasy and Related Drugs Reporting System, or EDRS, formerly known as the Party Drugs Initiative, or PDI) commenced in NSW in 2000 and has been conducted nationally since 2003. Findings are reported elsewhere (Dunn et al., 2006, Stafford 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 2006 NSW IDRS were:

1. to monitor the price, purity, availability and patterns of use of heroin, methamphetamine, cocaine, cannabis and other drugs; 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 and related issues, 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 and can provide a broader context against which the IDU data may be compared. 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 2006 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 2006 NSW IDRS the IDU survey consisted of face-to-face interviews with 152 IDU, conducted in Sydney during June 2006. Half (51%) 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 (in close proximity to a pharmacotherapy treatment service) since 2004 is likely to have contributed to a slight over-representation of methadone and buprenorphine clients within the sample. Efforts were made in 2006 to limit the proportion of participants engaged in pharmacotherapy treatment; nonetheless 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, residential rehab, therapeutic community or other time away during that period.

The interview schedule included sections on demographics, drug use history, the price, purity and availability of illicit drugs, criminal activity, injection risk-taking behaviour, blood-borne viral infection (BBVI) testing, driving risk 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, were interviewer-administered 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 14.0.2 (2006).

2.2 Survey of key experts (KE)

Fifty-seven KE who had regular contact with, and/or specialist knowledge of, illicit drug users[3], dealers or drug manufacture, were interviewed in July and early September 2006. 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 2006 including drug treatment workers (including nurse unit managers, counsellors, psychologists and Magistrates Early Referral Into Treatment [MERIT] program workers), health education officers (including needle and syringe program workers), therapeutic community and residential rehab managers, law enforcement officers, nurses, researchers, a residential rehab intake officer and user group representatives.

KE are recruited from a range of geographical areas across Sydney, both within and outside 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-three KE completed the questionnaire with a focus on the use and/or supply of heroin, 17 on the use, manufacture and/or supply of methamphetamine, 14 on cannabis use and/or supply, and five 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 many groups remained uncommon.

The KE interview schedule was a semi-structured instrument, based on previous years of the IDRS, and which covered similar topic areas 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:

[3] The illicit drug users to whom KE refer are typically, but not exclusively, injecting drug users.

- 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;
- 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 Program 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 units dispensed from public NSPs and pharmacies, 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 152 IDU participants interviewed in 2006 are presented in Table 1. The mean age of the sample was 35 years (range 18-58), 61% of the respondents were male and almost a quarter (22%) were Aboriginal and/or Torres Strait Islanders. Ninety-two percent reported that English was the main language they spoke at home. The majority (84%) identified as heterosexual. Educational status of the sample varied from completion of year five (1%) through to completion of year 12 (13%). Over half (54%) had completed year 10 or higher. Thirty-nine percent had obtained a trade or technical qualification and 3% had completed a university or college qualification such as a degree. The majority of the sample reported that they were currently unemployed or receiving government benefits. Eighty percent of the sample reported that their main source of income over the preceding month had been a pension or government benefit, while 7% reported a wage or salary, 7% nominated criminal activity, and 4% reported sex work.

Table 1: Demographic characteristics of the IDU sample, 2005-2006

Characteristic	2005 N=154	2006 N=152
Age (mean years, range)	34.5 (19-55 years)	34.6 (18-58 years)
Sex (% male)	62	61
Employment (%):		
Not employed/on a pension	85	82
Full time	1	3
Part-time/casual	5	6
Home duties	7	7
Student	1	3
Received income from sex work last month	12	10
Aboriginal and/or Torres Strait Islander (%)	23	22
Heterosexual (%)	83	84
Bisexual (%)	12	13
Gay or lesbian (%)	5	3
Other (%)	1	1
School education (mean no. years, range)	9.2 (0-12 years)	9.5 (5-12 years)
Tertiary education (%):		
None	70	59
Trade/technical	23	39
University/college	7	3
Currently in drug treatment^ (%)	67	56
Prison history (%)	79	63

Source: IDRS IDU interviews

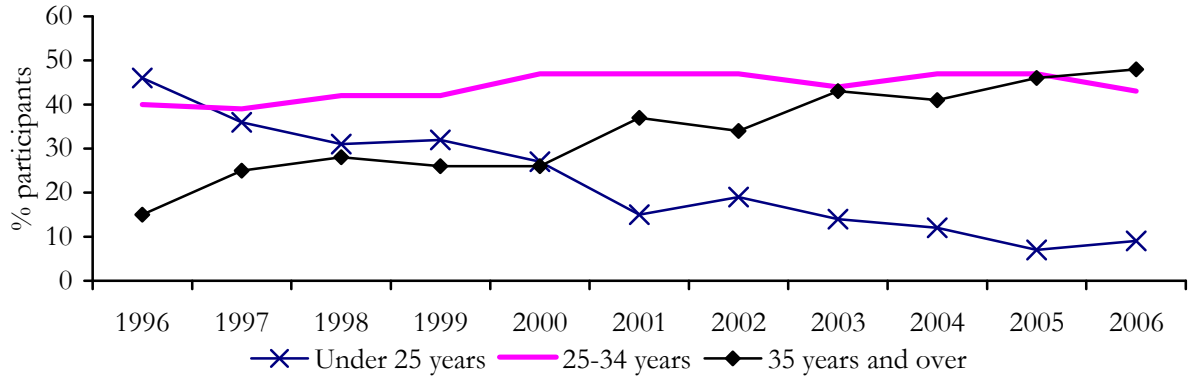
^ Refers to any form of drug treatment, including pharmacotherapies, counselling, detoxification, etc.

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). There could be a number of reasons for this. First, it may be that fewer younger users are accessing NSPs than in previous years (where recruitment is conducted), or are less willing to take part in research conducted at NSPs. Second, in recent years, younger IDU are more likely to be using methamphetamine than their older counterparts (Degenhardt et al., in preparation), and some research has shown that methamphetamine users may be less likely to

access health services such as NSPs (Kelly et al., 2005). Finally, there may simply be fewer young people beginning regular drug injection; some evidence has suggested that there have been lower numbers of incident hepatitis C infections among younger age groups in recent years, which would be consistent with this possibility (Day et al., 2005b). Further research is required to investigate these possibilities in greater detail.

Figure 1: Age distribution of IDU in the NSW (Sydney) IDRS samples, 1996-2006



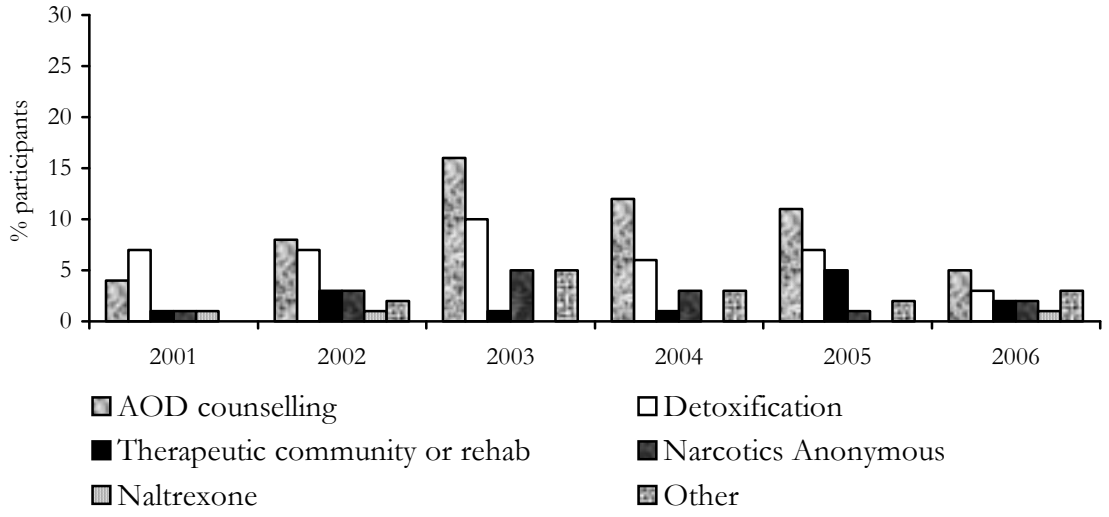
Source: IDRS IDU interviews

Current and previous drug treatment

Just over half of the sample (56%) reported that they were currently in drug treatment. Of those participants engaged in treatment, 73% (41% of the entire sample) reported methadone as their main form of treatment, 24% reported buprenorphine (13% of the sample) and 1% reported buprenorphine-naloxone (Suboxone; 1% of the entire sample) maintenance treatments. As in 2005, no participants reported current involvement in other types of treatment such as detoxification, therapeutic communities, 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; 34% reported *not* having been in any form of drug treatment over this time. In terms of pharmacological maintenance forms of drug treatment, a large proportion of participants (45%) had been on a methadone program (syrup or Physeptone), 19% had received buprenorphine, and 1% had received buprenorphine-naloxone. No participants reported use of naltrexone in the six months preceding interview. Figures for non-pharmacological maintenance forms of treatment have remained relatively consistent at under 20% per treatment type, although there has been a slight decline in the numbers reporting involvement in alcohol and other drug (AOD) counselling (Figure 2).

Figure 2: Proportion of participants reporting treatments other than opioid replacement pharmacotherapy in past six months, 2001-2006



Source: IDRS IDU interviews
NB: Multiple responses could be selected. Survey item first included in 2001.

3.2 Drug use history and current drug use

The mean age of first injection was 18.8 years (SD 5.8, range 9-40) (Table 2). Similar to previous years, heroin was the first drug injected by the majority of participants (62%), followed by amphetamines (33%) and cocaine (3%).

While heroin remained the most commonly reported drug of choice, a notable decrease was observed in the proportion of participants nominating it as compared with 2005 (49% cf. 72%). A concurrent increase was observed in the proportion nominating methamphetamine as their drug of choice (23%) compared to 2005 (9%).

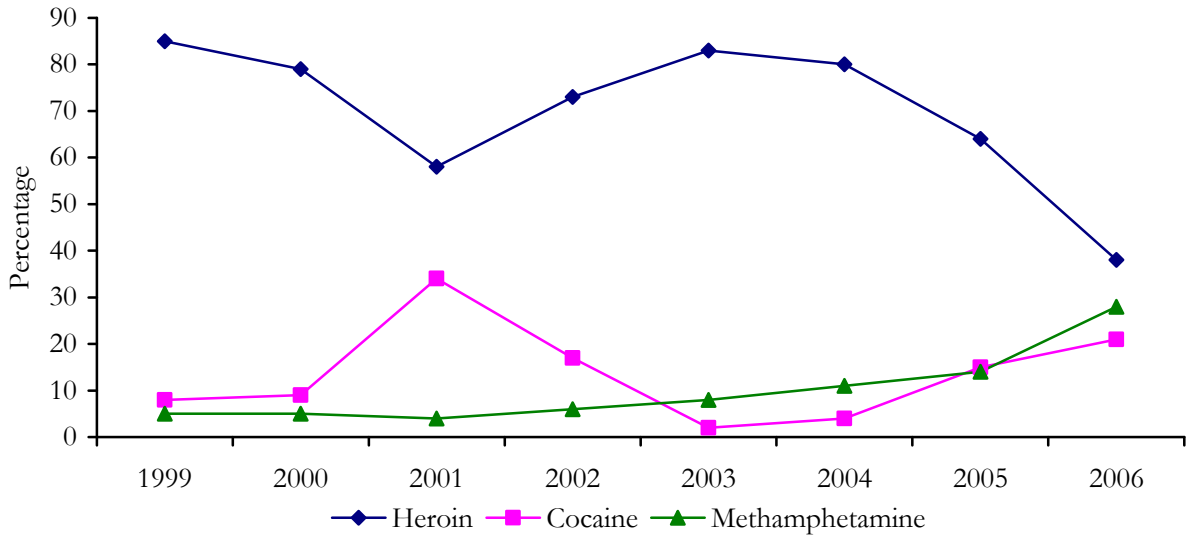
Table 2: Injection history, drug preferences and polydrug use of IDU participants, 2005-2006

Variable	2005 N=154	2006 N=152
Age first injection (mean years)	19.2	18.8
First drug injected (%)		
Heroin	66	62
Amphetamines	28	33
Cocaine	3	3
Morphine	1	0
Drug of choice (%)		
Heroin	72	49
Cocaine	16	18
Methamphetamine (any form)	9	23
Speed	*5*	*7*
Base	*1*	*5*
Crystal methamphetamine (ice)	*3*	*11*
Benzodiazepines	0	1
Cannabis	2	3
Drug injected most often in last month (%)		
Not injected in last month	*3*	*1*
Heroin	64	42
Cocaine	15	20
Methamphetamine (any form)	14	27
Speed	*9*	*9*
Base	*2*	*5*
Crystal methamphetamine (ice)	*3*	*13*
Benzodiazepines	0	0
Morphine	2	6
Most recent drug injected (%)		
Heroin	64	42
Cocaine	17	20
Methamphetamine (any form)	13	27
Speed	*9*	*9*
Base	*1*	*5*
Crystal (ice)	*3*	*13*
Benzodiazepines	0	0
Morphine	2	6
Frequency of injecting in last month (%)		
Not injected in last month	*3*	*1*
Weekly or less	12	21
More than weekly, but less than daily	23	26
Once per day	17	15
2-3 times a day	27	20
>3 times a day	18	17

Source: IDRS IDU interviews

As in previous years, the most commonly injected drug over the month preceding interview was heroin (42%), although this proportion is the lowest reported since 1999 (Figure 3). In contrast, the proportion of respondents reporting cocaine as the most commonly injected drug increased slightly from 15% in 2005 to 20% in 2006, and the proportion nominating methamphetamine increased from 14% to 27%.

Figure 3: Drug injected most last month, 1999-2006



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

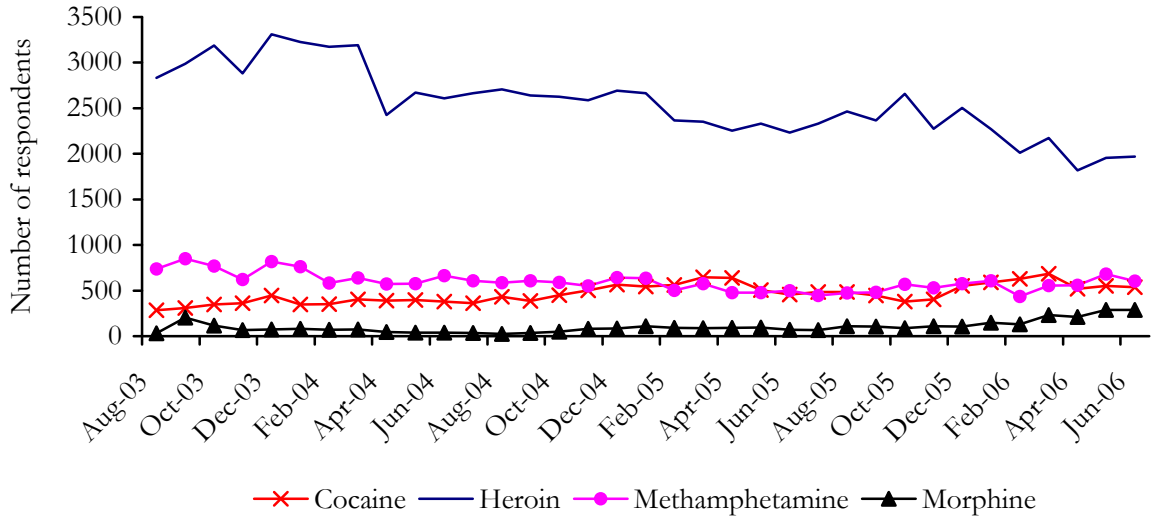
Overall, proportions nominating other drugs as the most commonly injected remained low and fairly stable. However, some differences were observed by geographical area, with greater proportions in 'Inner City' Sydney (i.e. participants recruited in Kings Cross and Redfern) nominating morphine as compared to those in 'South West' Sydney (i.e. Liverpool and Canterbury; 9% vs. 0%, Fisher's Exact Test, p=0.014). In South West Sydney, a larger proportion of participants nominated methamphetamine as the drug most injected (37% vs. 19%, Fisher's Exact Test, p=0.011). There were no significant differences in proportions reporting heroin as the drug most injected (37% in the Inner City vs. 40% in the South West) or cocaine (26% in the Inner City vs. 15% in South West Sydney).

Consistent with previous years, the sample had engaged in polydrug use in the six months preceding interview. Just over one-third of participants (36%) had used all four of the drugs investigated within the IDRS (heroin, methamphetamine, cocaine and cannabis) on at least one occasion over this time. A relatively large proportion of the sample (34%) had used other opioids in addition to these four in the last six months. However, it should be noted that 'opioids' includes both licitly and illicitly obtained opioids (e.g. methadone, buprenorphine, buprenorphine-naloxone, morphine, oxycodone and homebake heroin).

Consistent with participant reports, 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 IDU and KE participant reports. The majority of attendees have consistently reported heroin as the last drug injected, although numbers have decreased since the first quarter of 2004, reaching the lowest level recorded since 2003 (1817 in April 2006). Numbers reporting methamphetamine and cocaine have increased slightly since mid-2005, nominated by approximately 400-700 respondents each per month. The number of respondents nominating morphine has steadily increased since August 2004 (26 visits), reaching a peak of 287 in May and June 2006.

Figure 4: Number of respondents attending three inner city NSPs reporting heroin, methamphetamine, cocaine and morphine as last drug injected, August 2003-June 2006



Source: Three inner city NSPs

The polydrug use histories of IDU participants, including routes of administration, are presented in Table 3. Prevalence of drug use in the six months preceding interview is also shown in Figure 5. Recent use of the four main drugs monitored by the IDRS remained common: heroin (81%), cannabis (80%), cocaine (67%) and methamphetamine (any form; 72%). Further discussion of the use of these drugs may be found under the relevant section headings elsewhere in the report.

Table 3: Polydrug use history of the IDU sample, 2006

Drug Class	Ever used %	Ever injected %	Injected last 6 mths %	Median days injected in last 6 months*	Ever smoked %	Smoked last 6 mths %	Ever snorted %	Snorted last 6 mths %	Ever swallowed %	Swallowed last 6 mths+ %	Used^ last 6 mths %	Median days in treatment* last 6 mths	Median days used^ in last 6 mths*
Heroin	98	98	80	72	63	13	29	5	21	5	81		72
Homebake heroin	32	30	12	5.5	6	1	3	1	1	1	13		6
Any heroin (inc. homebake)	*98*	*98*	*80*		*63*	*14*	*30*	*5*	*21*	*5*	*82*		
Methadone (prescribed)	75	41	10	5					74	46	47	180	180
Methadone (not prescribed)	55	43	20	5.5					36	13	26		4
Physeptone (prescribed)	11	3	1	10	1	1	0	0	11	2	2	40	12
Physeptone (not prescribed)	19	11	2	5	0	0	0	0	13	3	5		2
Any methadone (inc Physeptone)	*88*	*61*	*25*	*8*					*83*	*52*	*61*		*180*
Buprenorphine (prescribed)	46	18	5	3	3	1	0	0	45	20	20	178	90
Buprenorphine (not prescribed)	30	23	15	3	5	1	0	0	11	5	19		3
Any buprenorphine (exc. buprenorphine-naloxone)	*59*	*35*	*16*	*4*	*6*	*1*	*0*	*0*	*47*	*22*	*33*		*29*
Buprenorphine-naloxone (prescribed)	1	0	0	0	0	0			1	1	1	14	14
Buprenorphine-naloxone (not prescribed)	0	0	0	0	0	0			0	0	0		0
Any buprenorphine-naloxone	1	0	0	0	0	0			1	1	1		14
Morphine (prescribed)	24	13	5	4.5	1	1	1	0	11	3	7		5
Morphine (not prescribed)	54	49	29	7	1	0	0	0	22	10	31		8
Any morphine	*70*	*58*	*32*	*7*	*1*	*0*	*1*	*<1*	*32*	*12*	*37*		*7*
Oxycodone (prescribed)	12	5	3	27.5	1	0	0	0	11	4	5		25
Oxycodone (not prescribed)	27	22	14	6	0	0	0	0	11	6	18		7
Any oxycodone	32	24	16	11	1	0	0	0	18	9	20		13.5
Other opioids (not elsewhere classified)	16	3	1	3	2	1	0	0	13	8	6		4.5

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 (trade name Subutex) and buprenorphine-naloxone (trade name Suboxone). NB buprenorphine-naloxone was first listed on the Pharmaceutical Benefits Scheme (PBS) in April 2006, two months prior to participant interviewing.

Table 3: Polydrug use history of the IDU sample, 2006 (continued)

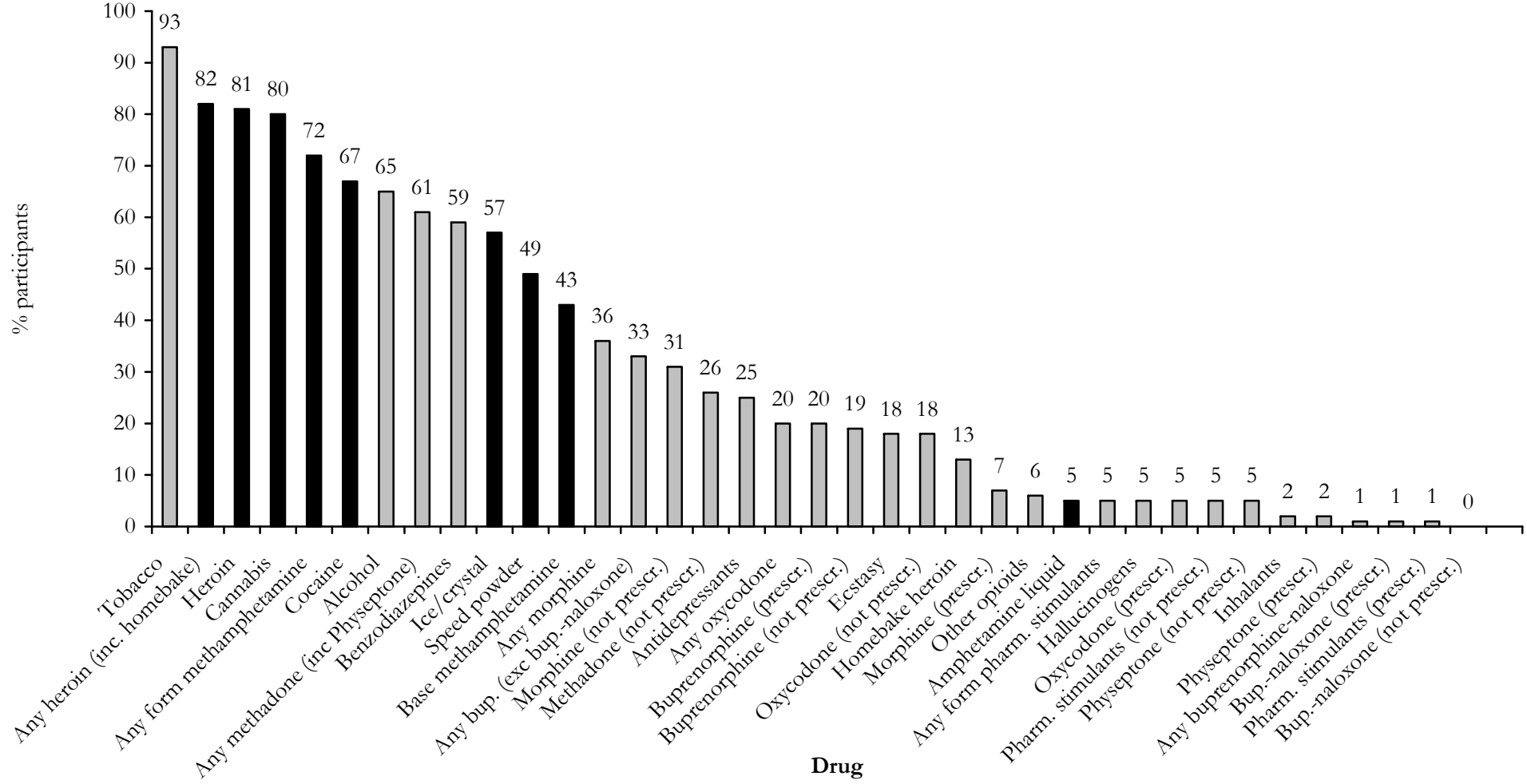
Drug Class	Ever used %	Ever injected %	Injected last 6 mths %	Days injected in last 6 mths*	Ever smoked %	Smoked last 6 mths %	Ever snorted %	Snorted last 6 mths %	Ever swallowed %	Swallowed last 6 mths+ %	Used^ last 6 mths %	Days in treatment* last 6 mths	Days used^ in last 6 mths*
Speed powder	87	78	47	15	14	4	43	5	32	6	49		20
Base/point/wax	68	66	42	5	8	2	5	1	17	3	43		5
Ice/shabu/crystal	72	68	54	12	34	20	1	1	5	3	57		12
Amphetamine liquid	36	30	2	5					10	0	5		2
Any form methamphetamine#	*93*	*89*	*70*	*26*	*42*	*22*	*45*	*5*	*41*	*8*	*72*		*26*
Pharmaceutical stimulants (prescribed)	5	0	0		0	0	0	0	5	1	1		180
Pharmaceutical stimulants (not prescribed)	12	2	0		2	2	0	0	11	4	5		7
Any form pharmaceutical stimulants	*15*	*2*	*0*	*0*	*2*	*2*	*0*	*0*	*15*	*5*	*5*		*13.5*
Cocaine	92	88	66	20	20	3	40	11	11	4	67		20
Hallucinogens	55	13	1	1.5	3	0	1	0	53	4	5		2
Ecstasy	55	24	7	2	1	0	5	1	49	15	18		2
Benzodiazepines	80	13	4	3	1	1	1	1	79	59	59		25
Alcohol	93	3	0	0					92	65	65		20
Cannabis	94										80		180
Antidepressants	44	3	1	12					43	24	25		135
Inhalants	18										2		48
Tobacco	96										93		180

Source: IDRS IDU interviews

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

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

Figure 5: Prevalence of drug use in the six months preceding interview, NSW 2006*



Source: IDRS IDU interviews

* Key drugs investigated in the IDRS (i.e. heroin, methamphetamine, cocaine and cannabis) shown in black.

NB: 'Any heroin' includes heroin and homebake heroin. 'Any form methamphetamine' includes speed powder, base, ice/crystal and liquid amphetamine. 'Any methadone' includes licit (prescr.) and illicit (not prescr.) methadone syrup and Physeptone. 'Any morphine', 'any buprenorphine', 'any oxycodone', 'any form pharmaceutical stimulants' and 'any form bup.-naloxone' include licit and illicit forms of the drug in any formulation unless otherwise specified. 'Other opioids' refers to opioids not elsewhere classified. 'Use refers to any form of administration and does not necessarily imply injection- for further information on routes of administration, please refer to Table 3. Buprenorphine-naloxone was first listed on the Pharmaceutical Benefits Scheme (PBS) in April 2006, two months prior to participant interviewing.

4.0 HEROIN

Participants were asked if they were able to comment on the price, purity and/or availability of heroin, and in 2006, 90% 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 injecting drug users who do not use, or come into contact with users or dealers of, heroin regularly enough to be able to comment. Twenty-three KE commented on heroin market indicators and/or heroin use patterns. Use of homebake heroin (a form of heroin made from pharmaceutical products, involving the extraction of diamorphine from pharmaceutical opioids such as codeine or morphine) is also discussed within this section; however, as its use remains uncommon, detailed market characteristics are not obtained.

4.1 Price

Prices paid for heroin by IDU participants on the last occasion of purchase are shown in Table 4. The median prices reported for a gram and a cap of heroin remain unchanged from 2002 at $300 per gram and $50 per cap, respectively. These remain substantially higher than prices reported in 2000 ($220 per gram; $25 per cap), prior to the heroin shortage in 2001 (Figure 6).

A slight decline was observed in the number of participants reporting heroin purchase over the six months prior to interview as compared with 2005 (Table 4). Eleven 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' traditionally referred to 0.1g, although anecdotal evidence suggests that, similar to 'cap', the term may be used to refer to a quantity used for one injection rather than as a description of the weight.

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 purchase.

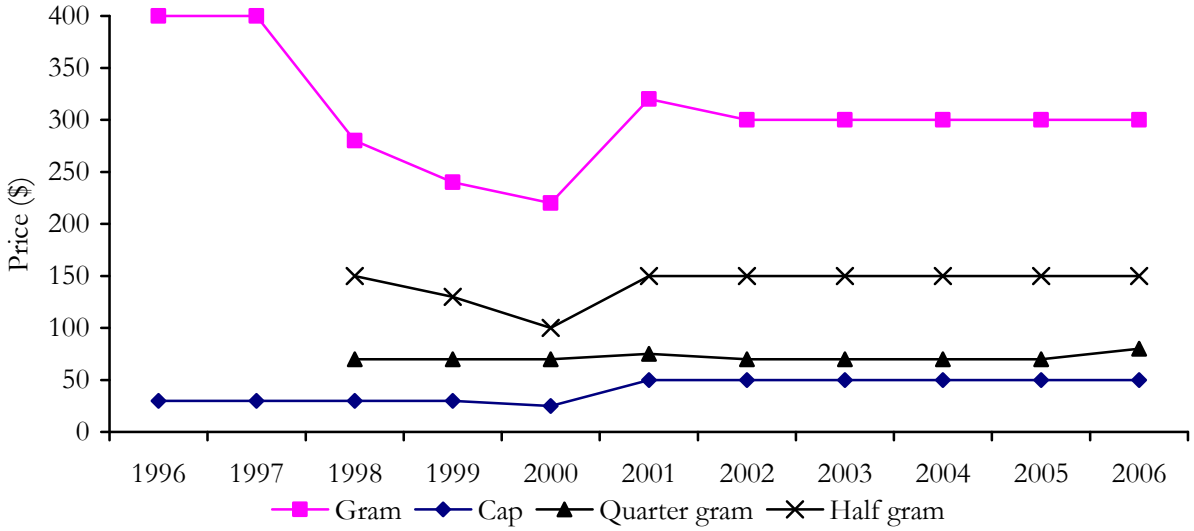
Table 4: Price of most recent heroin purchases by IDU participants, 2005-2006

Amount	Median price* $	Range	Number of purchasers*
Cap	50 (50)	$40-$100	61 (93)
Quarter gram	80 (70)	$50-$150	25 (38)
Half gram ('halfweight')	150 (150)	$50-$490	47 (54)
Gram	300 (300)	$50-$400	22 (31)

Source: IDRS IDU interviews
* 2005 data are presented in brackets

Heroin prices have remained stable over the past few years (Figure 6). It should be noted that IDU and KE participants sometimes report that the amount of a drug bought within a purchase amount (e.g. as a 'cap' or a 'fifty-dollar deal') has decreased over the past few years.

Figure 6: Median prices of heroin estimated from IDU purchases, 1996-2006



Source: IDRS IDU interviews
NB: Survey items relating to quarter and half grams were first included in 1998

In addition to survey items on last purchase price, participants were also asked whether they thought the price of heroin had changed over the last six months (response options were 'don't know', 'increasing', 'stable', 'decreasing' and 'fluctuating'). The majority of participants who commented (57%; compared to 69% in 2005) reported price stability over the preceding six months. Over one-quarter (26%) of those who commented thought that price had increased over the preceding six months (as compared with 18% in 2005), with smaller proportions nominating 'decreasing' (4%) or 'fluctuating' (5%).

Following KE reports in 2005 of cheaper prices for heroin in some areas of South West Sydney, the price of heroin in 2006 was reported to be the same across Sydney at $50 per cap, consistent with IDU participant reports. KE reported that the amount contained within a cap varied from between 0.1g (a 'point') and 0.3g. Also of note was that in some areas of central Sydney, 0.2g was reported to cost $100 (a 'hundred dollar deal') and that this purchase amount was becoming increasingly more common as compared with the more traditional 'fifty dollar deal' containing approximately 0.1g. This pattern was also reported to have occurred in sales of cocaine and crystal methamphetamine. A two-tier pricing system was also noted in South West Sydney, with lower quality deals costing $50 and purer heroin costing approximately $100-$150. Few KE were able to comment on the price for larger amounts such as grams, consistent with lower purchase prevalence among IDU participants, although comments made reflected the IDU data presented above. Overall these figures complement IDU reports, and provide additional detail on a range of factors influencing/related to price.

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'). As in 2005, most participants reported that heroin was 'easy' (38%, or 34% of the entire sample) or 'very easy' (31%, representing 28% of the entire sample) to obtain (Table 5, Figure 7). However, one-quarter (24%) of participants who commented believed it to be 'difficult' to obtain heroin, the highest proportion since the NSW IDRS commenced in 1996. Views on whether availability had changed were fairly mixed, with just under half (47%) believing it to have remained stable and over one-third (35%) reporting that it had become more difficult.

Table 5: Participants' reports of heroin availability in the past six months, 2005-2006

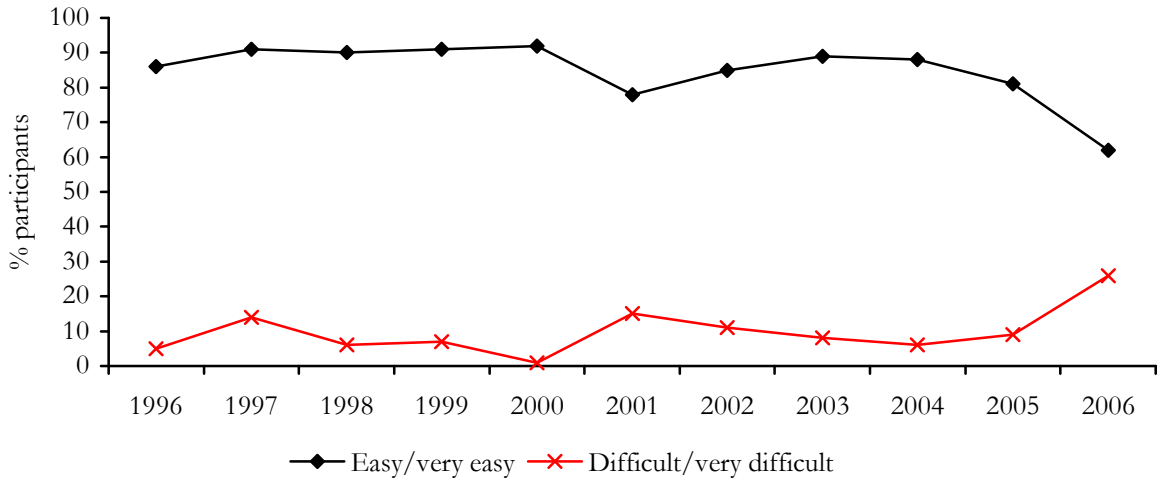
	2005 (N=154)	2006 (N=152)
Current availability		
Did not respond* (%)	5	11
Did respond (%)	95	90
Of those who responded:		
Very easy (%)	61 *(58% of entire sample)*	31 *(28% of entire sample)*
Easy (%)	25 *(23% of entire sample)*	38 *(34% of entire sample)*
Difficult (%)	8 *(8% of entire sample)*	24 *(22% of entire sample)*
Very difficult (%)	1 *(1% of entire sample)*	4 *(4% of entire sample)*
Don't know*	5 *(5% of entire sample)*	3 *(3% of entire sample)*
Availability change over the last six months		
Did not respond* (%)	5	11
Did respond (%)	95	90
Of those who responded:		
More difficult (%)	21 *(21% of entire sample)*	35 *(31% of entire sample)*
Stable (%)	59 *(56% of entire sample)*	47 *(42% of entire sample)*
Easier (%)	12 *(12% of entire sample)*	7 *(7% of entire sample)*
Fluctuates (%)	3 *(3% of entire sample)*	7 *(6% of entire sample)*
Don't know^ (%)	5 *(5% of entire sample)*	4 *(4% 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.

Figure 7: Participant reports of current heroin availability, 1996-2006

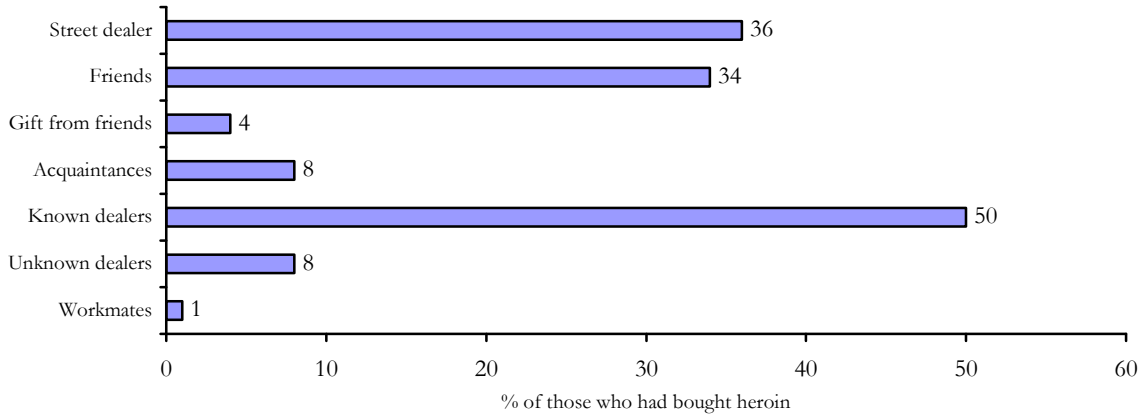


Source: IDRS IDU interviews

Consistent with IDU comments, KE reports on availability were more mixed than in 2005, with responses ranging from 'very easy' to 'difficult'. Comments around this issue included that heroin was still available to those who wanted to obtain it, that availability was in some areas highly dependent on contacts, and that some IDU were weighing up the pros and cons of obtaining heroin vs. alternatives with a more reliable dosage/purity such as morphine tablets. Among KE, availability was reported to have remained stable or to have decreased.

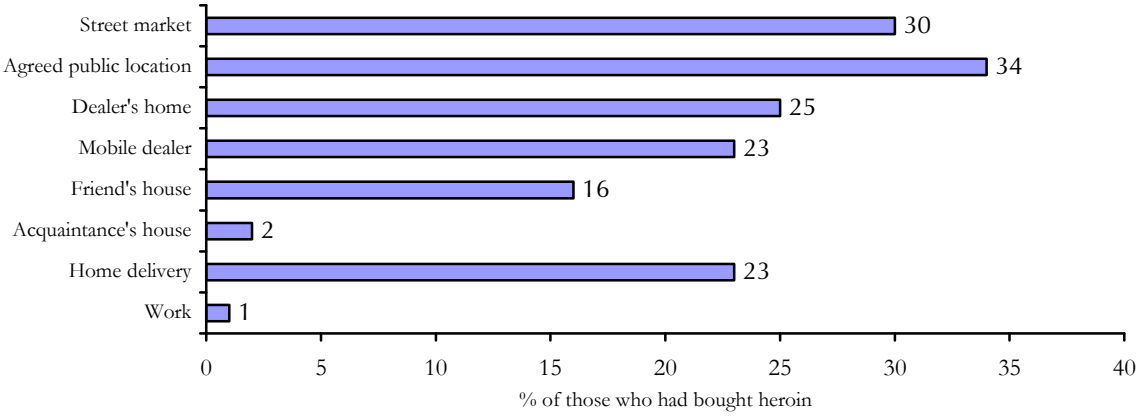
The majority (89%) of participants had purchased heroin in the last six months, and the following data refer to these participants rather than the entire sample. The most common sources of heroin in the preceding six months were known dealers (50%), street dealers (36%) and friends (34%; Figure 8). Participants reported scoring from a range of locations, both public (e.g. street market, agreed public location) and private (e.g. dealer's home, home delivery; Figure 9).

Figure 8: People from whom heroin was purchased in the preceding six months, 2006



Source: IDRS IDU interviews
NB: More than one response could be selected

Figure 9: Locations where heroin was scored in the preceding six months, 2006

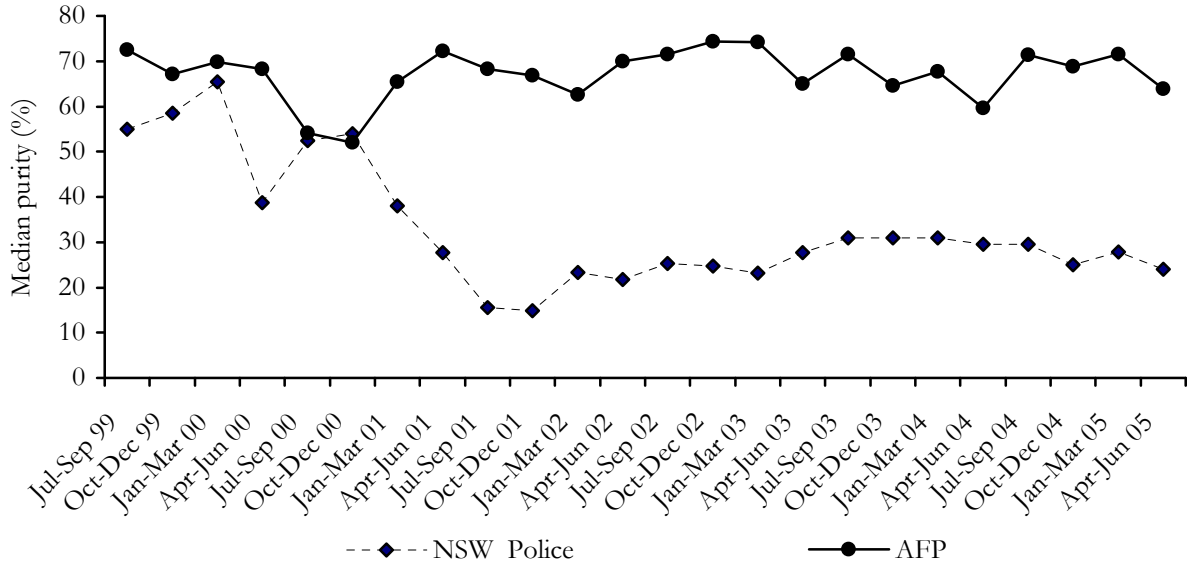


Source: IDRS IDU interviews
NB: More than one response could be selected

4.3 Purity

Figure 10 shows that the analysed median purity of NSW Police heroin seizures remained stable over the period 2004/05, remaining 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% and 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 most recent years shown should be interpreted with caution as it is based on small numbers of seizures (refer Figure 11). Data for 2005/06 were unavailable at the time of publication.

Figure 10: Purity of heroin seizures analysed in NSW, by quarter, 1999/00-2004/05

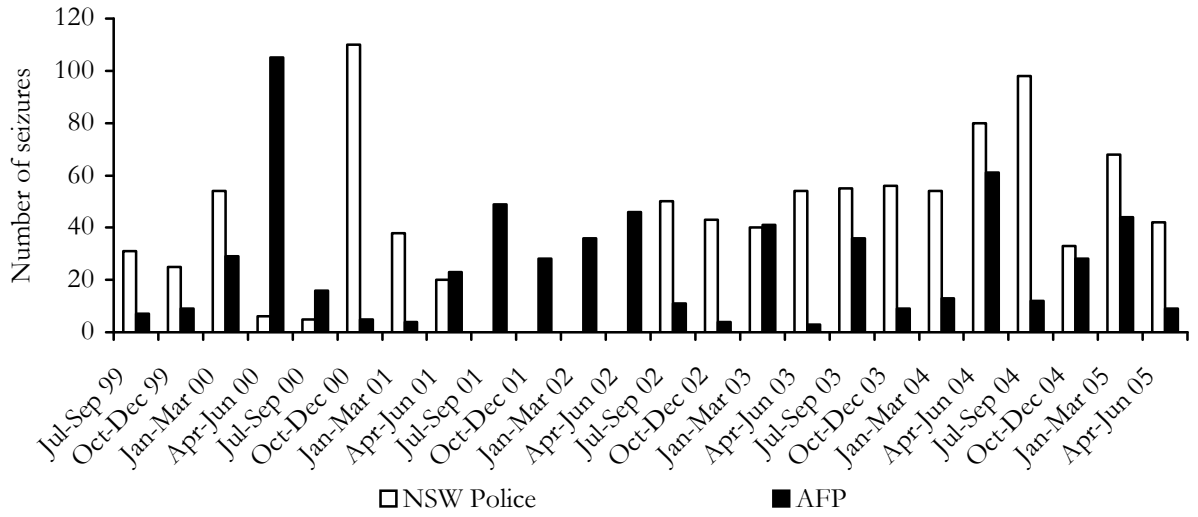


Source: ABCI 2001, 2002; ACC, 2003, 2004, 2005
NB: Data were unavailable for 2005/06 at time of publication

Figure 11 shows the number of heroin seizures upon which the above purity figures were 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 three most recent years shown, 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 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 11: 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. Data were unavailable for 2005/06 at time of publication.

Participants were also asked to comment on their perception of the purity of heroin, and the majority (64%) who commented thought that heroin purity was 'low', representing an increase from 47% in 2005, and the highest proportion reporting 'low' purity since 1996. Only 9% reported that purity was 'high,' and 4% thought it fluctuated (Table 6). Since commencement of the IDRS in 1996, only small proportions of participants have reported purity to be high, instead selecting 'medium' or 'low' most frequently (Figure 12). Whilst this may reflect a decline in purity within the context of reduced availability of heroin, it may also reflect individual levels of tolerance to heroin.

Participant perceptions of purity change over the last six months were mixed, with the majority reporting that it was either decreasing (48% of those commenting) or had remained stable (32% of those commenting; Table 6).

Table 6: Participants' perceptions of heroin purity in the past six months, 2005-2006

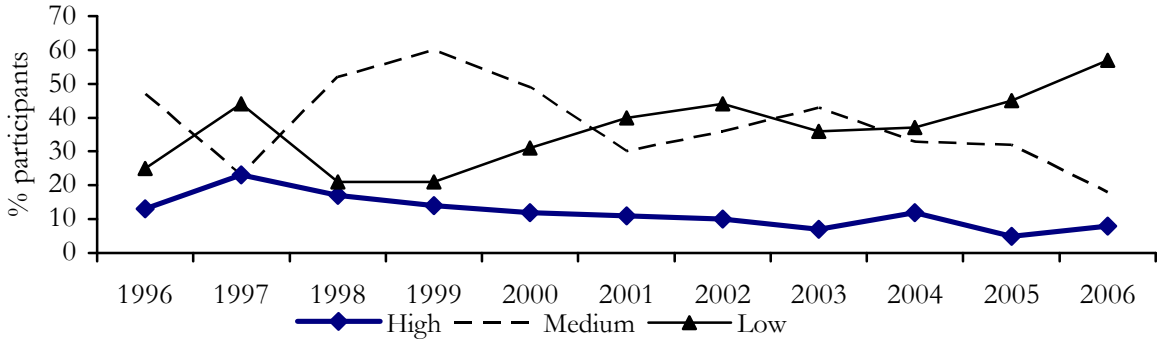
	2005 (N=154)	2006 (N=152)
Current purity		
Did not respond* (%)	5	90
Did respond (%)	96	11
Of those who responded:		
High (%)	5 *(5% of entire sample)*	9 *(8% of entire sample)*
Medium (%)	33 *(32% of entire sample)*	21 *(18% of entire sample)*
Low (%)	47 *(45% of entire sample)*	64 *(57% of entire sample)*
Fluctuates (%)	10 *(10% of entire sample)*	4 *(4% of entire sample)*
Don't know^ (%)	5 *(5% of entire sample)*	2 *(2% of entire sample)*
Purity change over the last six months		
Did not respond* (%)	5	90
Did respond (%)	96	11
Of those who responded:		
Increasing (%)	15 *(14% of entire sample)*	9 *(8% of entire sample)*
Stable (%)	31 *(30% of entire sample)*	32 *(28% of entire sample)*
Decreasing (%)	29 *(28% of entire sample)*	48 *(43% of entire sample)*
Fluctuating (%)	17 *(16% of entire sample)*	7 *(7% of entire sample)*
Don't know^ (%)	8 *(8% of entire sample)*	4 *(4% 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 heroin, 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 12: Proportion of IDU participants reporting current heroin purity as high, medium or low, 1996-2006



Source: IDRS IDU interviews

Among KE from the health sector who commented, many thought heroin purity was generally low to medium, based on client reports and/or observation of behaviour, overdoses etc., and

that it had fluctuated or decreased over the preceding six months with the exception of occasional reports of a short-lived higher quality batch in circulation. Two KE in different geographic areas reported that there appeared to have been a very recent purity increase in the weeks preceding interview (July/August 2006). Law enforcement KE reports suggested that it generally fluctuated between approximately 14%-22% in analysed seizures, having decreased from higher levels reported in mid-2005 (27-30%).

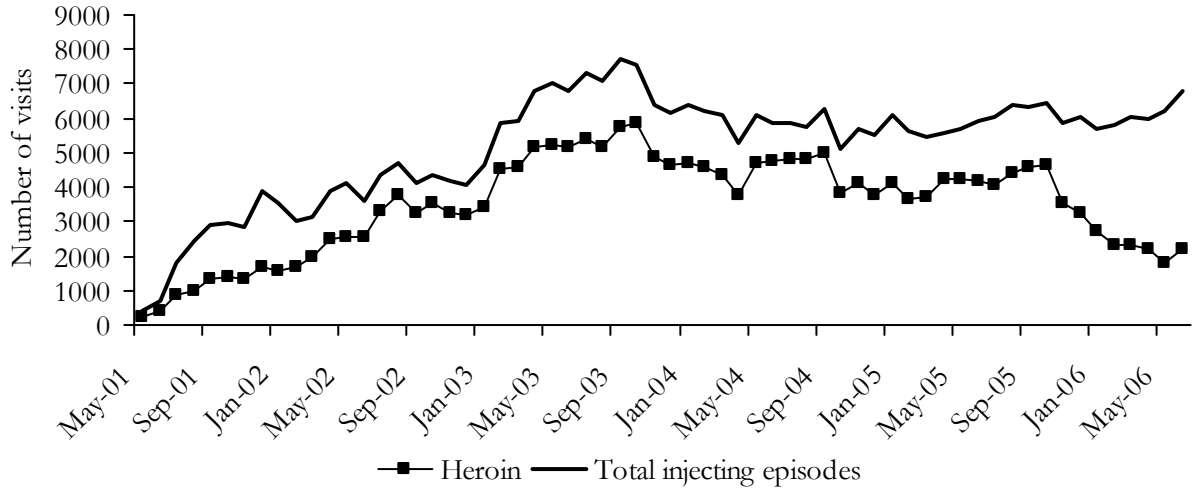
4.4 Use

4.4.1 Heroin use among IDU participants

Although the majority of participants (81%) had used heroin in the six months preceding interview, this represents a consistent decrease from the 97% who reported use in 2003 (figures for intervening years were: 2004- 95% and 2005- 88%). Heroin remained the drug of choice for the majority of the sample (Table 2). Although heroin also remained the most commonly nominated for 'drug injected last' (42%) and 'drug injected most often in the last month' (42%), decreases were observed in 2006 (these figures were 64% in 2005 and 80% in 2004 for both last drug injected and drug most frequently injected in the last month). Concomitant increases in proportions nominating cocaine as 'drug injected last' and 'most often injected' were noted in both 2005 and 2006, while an increase in proportions nominating methamphetamine for these categories was evident in 2006 (see 'Cocaine' and 'Methamphetamine' sections for further details on the use of these drugs).

Figure 13 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. First, the hours of operation changed over the first two years of operation (increasing from four hours to twelve hours per day) and second, the number of individuals attending increased continuously over this period, as IDU became aware of this new service. 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, and more recently in April-June 2006 when opioids (predominantly morphine) were equally or more commonly injected. Heroin has accounted for approximately 30-40% of all visits to Sydney MSIC since February 2006. This decline was also reflected in the IDRS IDU survey data and KE reports of decreased heroin use.

Figure 13: Number of attendances to Sydney MSIC where heroin was injected, and total number of visits, 2001-2006



Source: Sydney MSIC, Kings Cross
NB: Total visits refers to the total number of valid visits at which a response was given

When asked about patterns of heroin use among IDU, virtually all KE referred to increases in the use of other drugs among this group. This was partially attributed to the low and unreliable purity of heroin, and other drugs being of a more 'reasonable' or reliable quality, e.g. cocaine, crystal methamphetamine, benzodiazepines, morphine and other pharmaceutical opioids.

Homebake

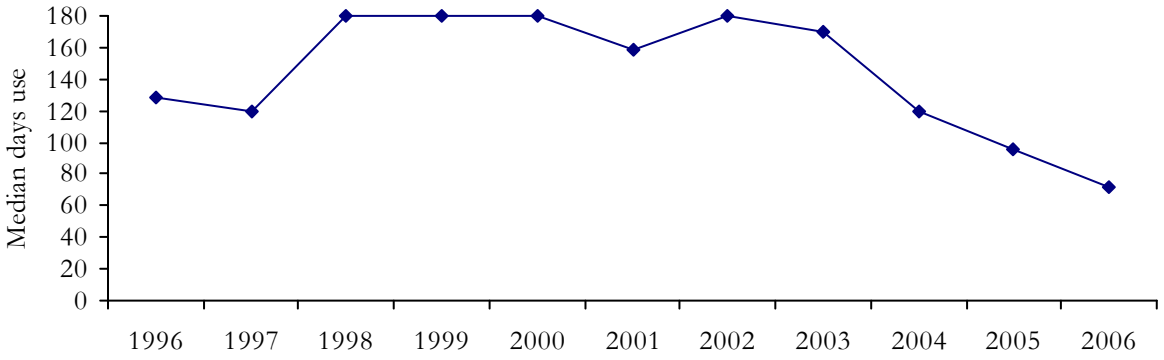
Homebake use remains uncommon among the injecting drug user sample of the NSW IDRS, although slight increases were observed compared to 2005. Thirteen percent of the sample reported use in the last six months (Table 3), as compared with 4% in 2005. Twelve percent reported injection in the preceding six months, again a slight increase from 2005 (3%). Use of homebake in the preceding six months occurred predominantly among participants recruited in the inner city as compared with the South West (23% vs. 1%, respectively). KE across Sydney typically reported that homebake use remained relatively rare among the users with whom they had had recent contact. However, one KE stated that a small number of their clients had reported an increase in homebake use over the preceding six to twelve months.

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 72 days in 2006 (i.e. approximately 3-4 times per week). However, median days use differed according to geographical area, with a substantial decrease observed in central Sydney (from 180 days to 90 days). By contrast, the median number of days of use in South West Sydney remained stable at 65 days (this figure was 67 days in 2005). Overall, 2006 saw the lowest median days of use (Figure 14) and the lowest proportion of daily users since 1996 (Figure 15). Consistent with the decline in median days of use, 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 2006 proportions recorded were the highest since the IDRS commenced in 1996. The proportion of daily heroin users among the sample has decreased from 58% of all participants in 1998 to the

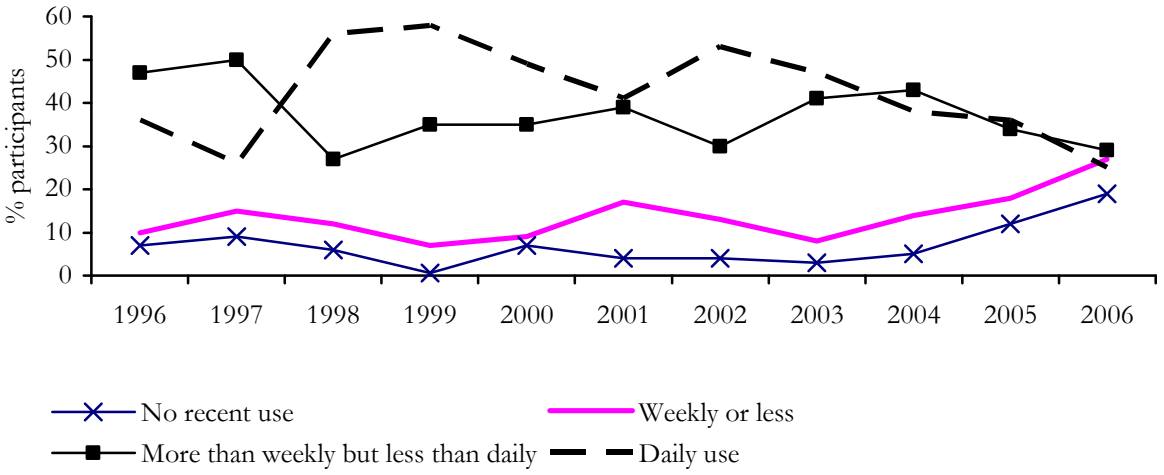
lowest level recorded (25% of all participants, or 31% of recent heroin users) in 2006, and the proportion of participants who reported heroin use on the day prior to interview was the lowest since 2000 (38%; the first year for which data were available).

Figure 14: Median days of heroin use in the past six months, 1996-2006



Source: IDRS IDU interviews

Figure 15: Patterns of heroin use, 1996-2006



Source: IDRS IDU interviews

Use of both 'rock' (78% of those who commented) and 'powder' (72% of those who commented) forms of heroin were commonly reported, while 15% of those commenting reported use of homebake in the six months preceding interview. Half of those commenting (49%) stated that heroin rock was the form they had used most often during this period, with the same proportion reporting powder. One participant reported homebake heroin as the form they had most used in the preceding six months.

A number of KE reported on the use of brown heroin, believed to be from Afghanistan or the Golden Crescent, in the Kings Cross area, and to a much lesser (and short-lived) extent in South West Sydney. Brown heroin is alkaline, and needs to be mixed with acid and heated in order to make it more soluble for injection. It is also more amenable to smoking as a route of administration. A number of health KE working with injecting drug users spoke of health

promotion activities that they had developed in response to this change, including communication with users and user groups, and provision of metal spoons and citric acid to avoid harms such as infections from the use of lemon juice and vinegar. However, KE in all areas, including Kings Cross and South West Sydney, continued to report that white (or beige) heroin (typically of South East Asian origin) was the main form used.

Homebake

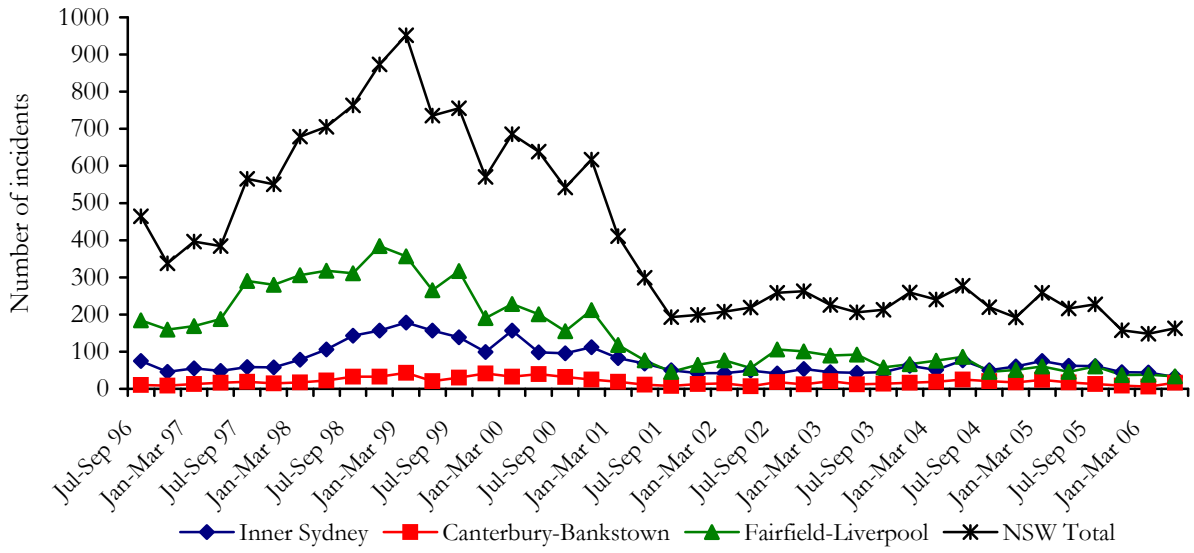
The median number of days of homebake use in the preceding six months was six (i.e. use approximately once per month, range 1-150 days), as compared with a median of 3 days (range 1-6 days) in 2005. The median number of days on which it had been injected by users in this time was similar at 5.5 days (range 1-150 days), and remained low compared to previous years (this figure was 3 days, range 1-5 days).

4.5 Heroin-related harms

4.5.1 Law enforcement

Figure 16 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 July-September 1996[4]. It is evident that the numbers of incidents declined throughout 2001 and have subsequently remained lower than levels recorded prior to the heroin shortage. Since late 2003 to April-June 2006, similar numbers of incidents have been recorded in the Fairfield-Liverpool and Inner Sydney areas, with fewer incidents in the Canterbury-Bankstown area.

Figure 16: Recorded incidents of narcotic possession/use by geographic area per quarter, July-September 1996 to April-June 2006



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] The regions Inner Sydney, Fairfield-Liverpool and Canterbury-Bankstown refer to ABS Statistical Subdivisions.

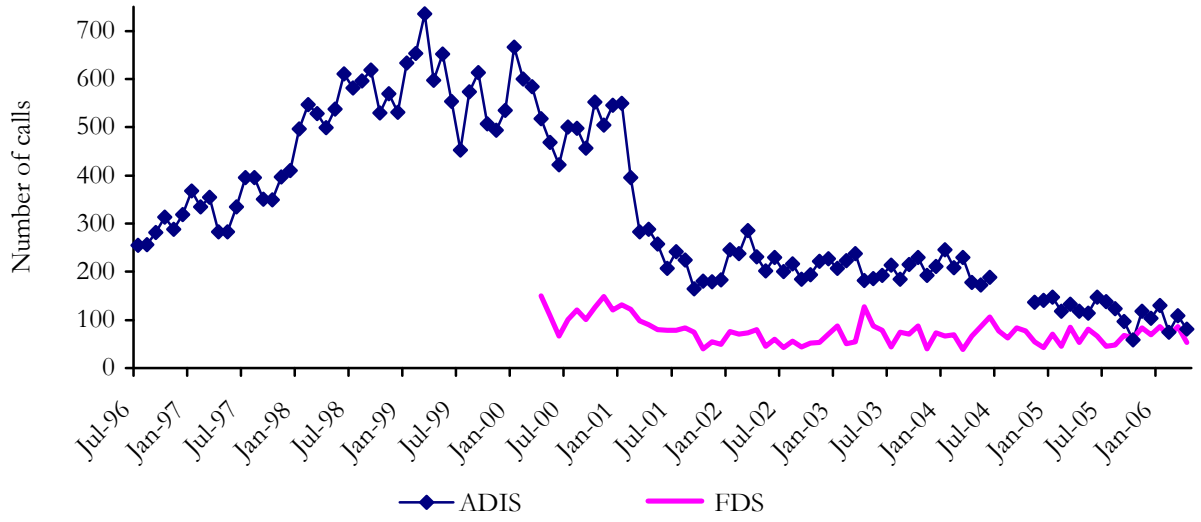
4.5.2 Health

Calls to telephone helplines

Figure 17 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 until recently, reflecting the different sizes and target groups of these services.

The number of calls to ADIS regarding heroin appear to have decreased steadily over the last two years and in October 2005 the lowest number of calls where heroin was mentioned as a drug of concern was reported (58 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 five 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 17: Number of enquiries to ADIS and FDS regarding heroin, 1996-2006



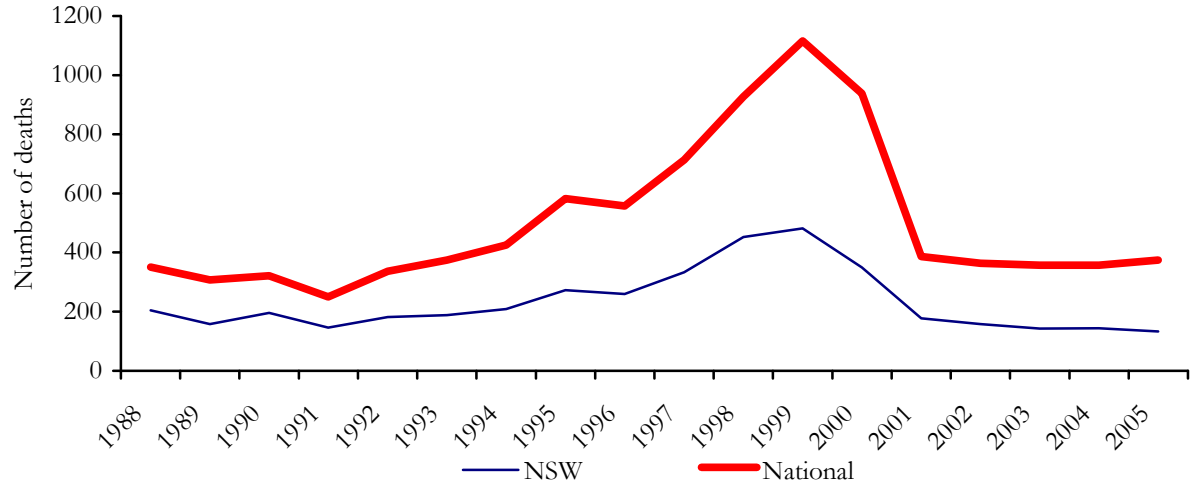
Source: ADIS and FDS

NB: FDS data were only available on a monthly basis from April 2000 and refer to calls where any mention of heroin was made. FDS is based in NSW but data may include some calls from interstate. ADIS data include calls made in NSW and the Australian Capital Territory (ACT) and 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 and FDS data were unavailable for the period May-June 2006.

Overdose

Figure 18 shows Australian Bureau of Statistics (ABS) data on accidental opioid deaths among those aged 15-54 in Australia and NSW for the period 1988-2005 (Degenhardt and Roxburgh, 2007a). Deaths in NSW have remained relatively stable since 2001, and in 2005 accounted for just over one-third (36%) of the national total. As in previous years, males accounted for the majority (75%) of the deaths in NSW during 2005 (this figure was 80% in 2004). The number of deaths remained lower than those recorded in the period 1996-2001, in which they peaked in 1999 at 481.

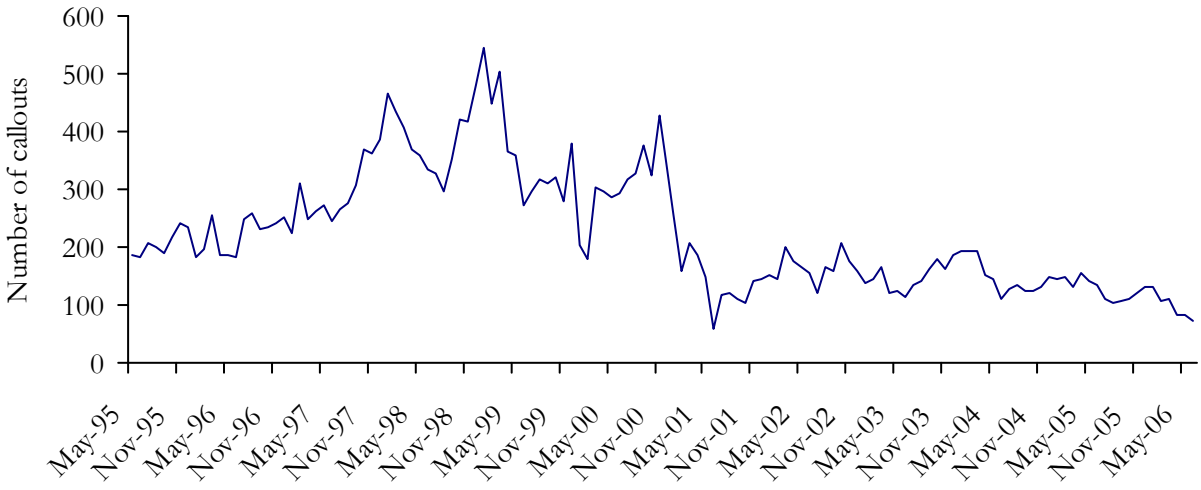
Figure 18: Number of accidental deaths due to opioids among those aged 15-54 years in NSW and Australia, 1988-2005



Source: Australian Bureau of Statistics mortality database; Degenhardt and Roxburgh (2007a)

NSW ambulance callouts to overdoses have decreased to under 100 per month since April 2006, approaching the lowest level recorded (60 in June 2001; 73 in June 2006; Figure 19). The number of calls decreased dramatically in late 2000, and has not returned to levels recorded prior to 2000, during which they peaked at 545 in January 1999.

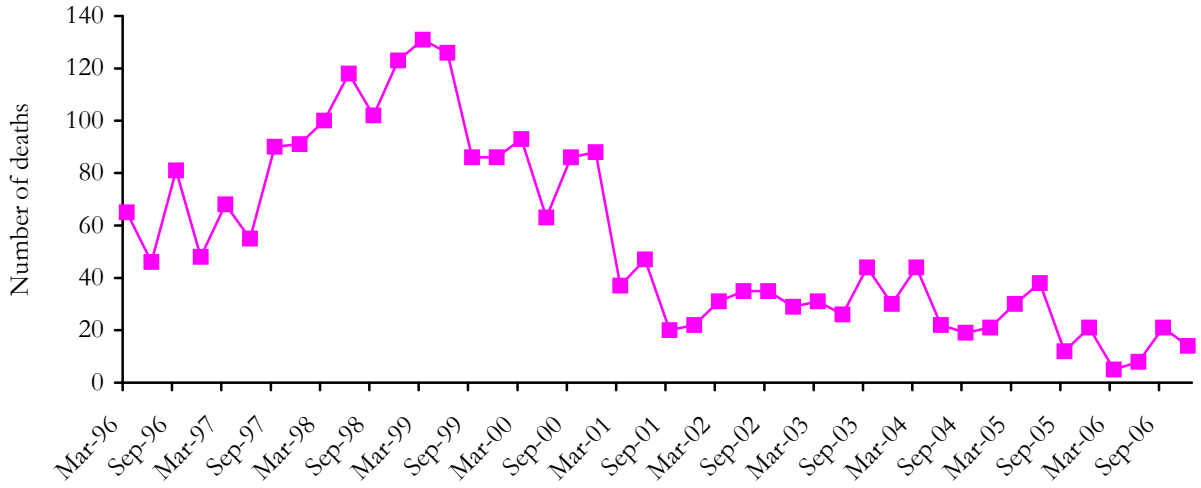
Figure 19: Number of ambulance callouts to overdoses 1995-2006



Source: Ambulance Service of NSW case sheet database

The period 2005-2006 has seen the lowest number of deaths of suspected drug users (as determined by police or pathologists) in which morphine was detected since 1996 (Figure 20). Figures reached a peak in the late 1990s and have gradually decreased since 2000-2001. As noted by other data sources, morphine-related deaths decreased dramatically in early 2001.

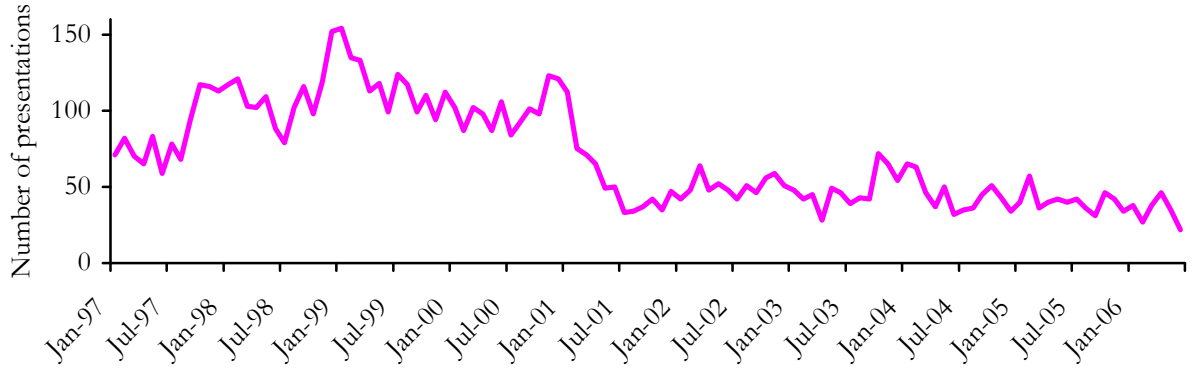
Figure 20: Number of suspected drug-related deaths in which morphine was detected post-mortem, by quarter, 1996-2006



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.

Heroin overdose presentations to NSW emergency departments have remained at less than 50 per month since March 2005. Figures have remained low following a decrease in heroin overdose presentations in 2001 (Figure 21). These represent the lowest levels reported since 1997.

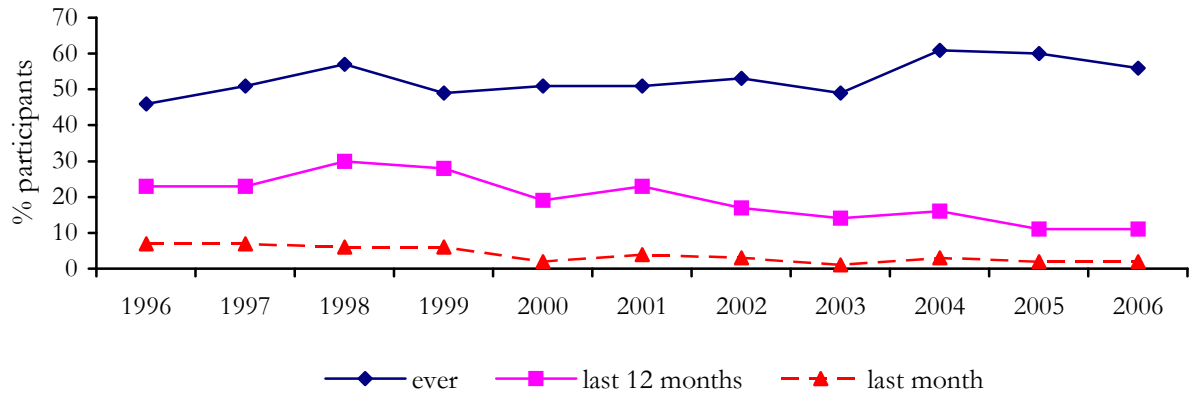
Figure 21: Heroin overdose presentations to NSW emergency departments, 1997-2006



Source: Emergency Department Information System, NSW Department of Health
NB: Figures refer to overdose only and do not include presentations for use disorders.

The proportion of IDU participants who reported overdosing on heroin in the last twelve months and in the last month remained low at 11% and 2%, respectively, while those reporting having ever overdosed on heroin remained relatively stable (Figure 22).

Figure 22: Proportion of IDU participants who had ever overdosed, overdosed in the past 12 months, and the past month, 1996-2006

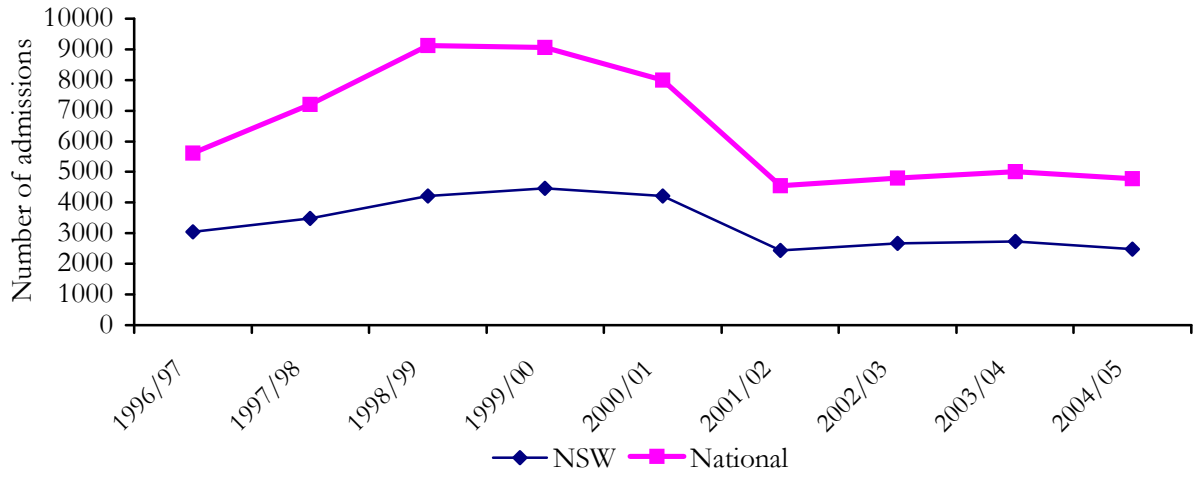


Source: IDRS IDU interviews

Hospital admissions

The number of hospital separations among persons aged 15-54 years in which the principal diagnosis was opioid-related is shown in Figure 23. A principal diagnosis that is opioid-related is recorded where opioids are established (after discharge) to be chiefly responsible for occasioning the patient's episode of care. Similar to IDU data and other indicators, figures have decreased slightly over the past year and have remained lower than those reported in the late 1990s.

Figure 23: Number of principal opioid-related hospital admissions among people aged 15-54, NSW and Australia, 1996/97-2004/05

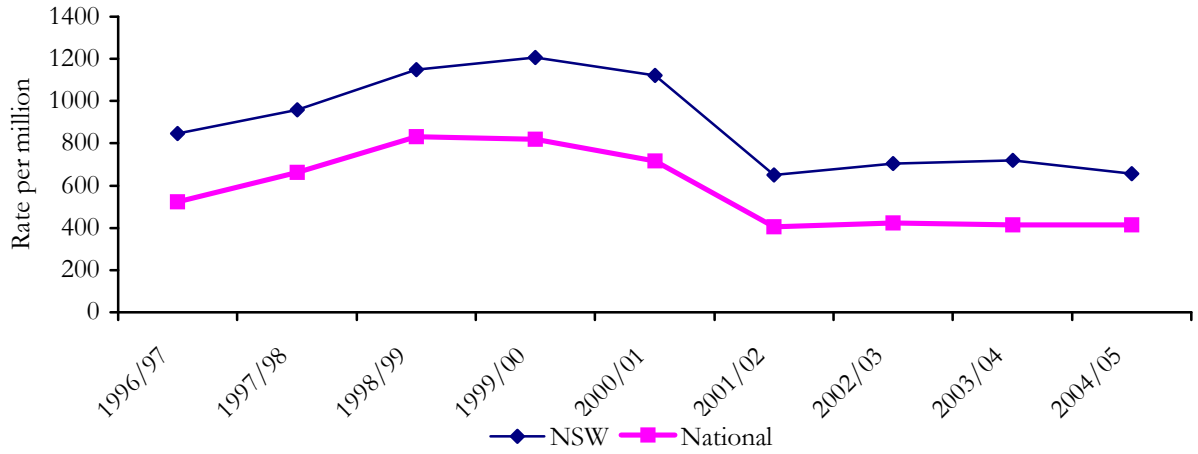


Source: Australian Institute of Health and Welfare (AIHW), ACT, TAS, NT, QLD, SA, NSW, VIC and WA Health Departments

Figure 24 shows the number per million persons aged 15-54 years of opioid related hospital admissions. Numbers have decreased slightly over the past twelve months, following a slight increase between 2001/02 and 2003/04 in NSW, and have remained stable nationally over this time. New South Wales figures have consistently remained higher than the national figures. The number of admissions per million persons in both NSW and nationally remain substantially lower

than in previous years and NSW continued to account for approximately half of all opioid-related hospital admissions in Australia.

Figure 24: Number per million persons of principal opioid-related hospital admissions among people aged 15-54 years, NSW and nationally, 1996/97-2004/05



Source: National Hospital Morbidity Database, AIHW; Roxburgh & Degenhardt (2006)

Treatment

Figure 25 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 over the last two years. Numbers entering residential rehabilitation have also gradually declined from 1237 in 2000/01 to 580 in 2005/06. Numbers entering counselling continued to fluctuate, and have remained lower over the past three years than previously.

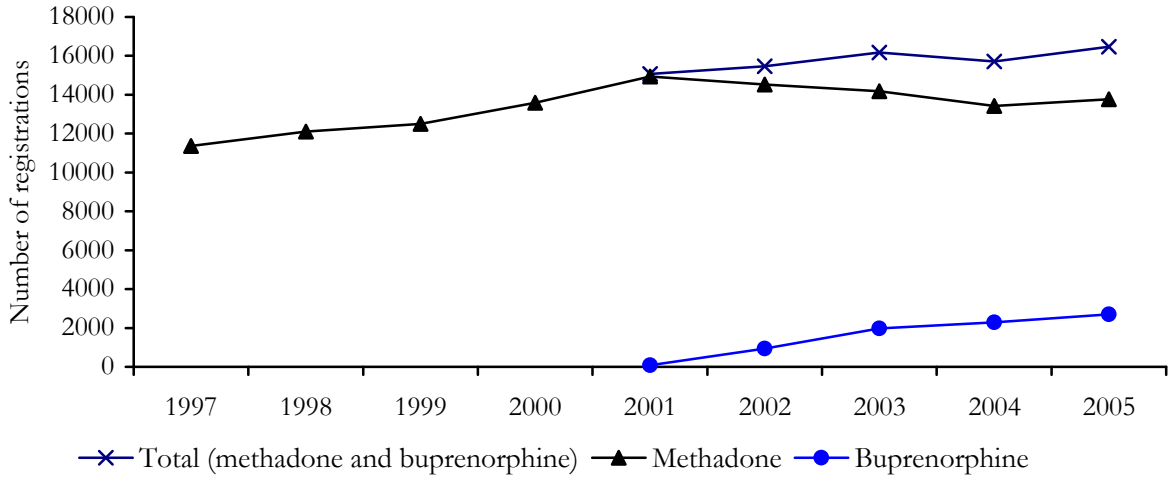
Figure 25: Number of heroin treatment episodes by treatment type, NSW 2000/01-2005/06

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. Numbers are based on the date of commencement.

Figure 26 shows that the number of people receiving opioid pharmacotherapy increased from 11,365 on the 30th June 1997 to 16,469 on the 30th June 2005. The vast majority of opioid pharmacotherapy clients received methadone, although numbers on buprenorphine have increased steadily since its introduction in 2000. On 30th June 2005, 71% of opioid pharmacotherapy clients obtained their treatment through a private provider, 18% received it through a public prescriber, 10% were in correctional facilities and less than 1% obtained their treatment through a public/private prescriber (i.e. a prescriber in a private clinic which receives some public funding). Data for 2006 were unavailable at the time of publication.

Figure 26: Number of registrations for opioid pharmacotherapy on the 30th June each year, NSW 1997-2005



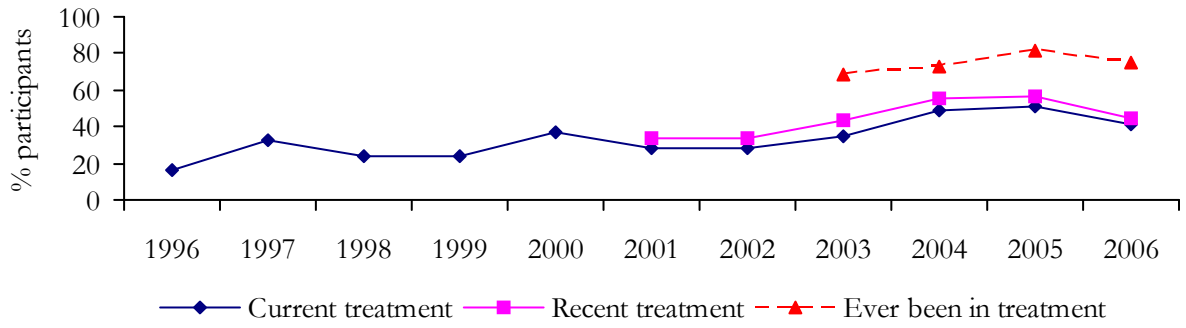
Source: Pharmaceutical Services Branch, NSW Department of Health
NB: Buprenorphine pharmacotherapy was introduced in NSW in 2000.

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 (a tablet form of methadone). This section discusses 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.

Forty-seven percent of participants had used methadone that had been prescribed for them in the preceding six months (55% reported any use of licit methadone during this period in 2005), and 10% reported injecting prescribed methadone during this time. Two percent of IDU participants reported using prescribed Physeptone tablets, and one percent reported injecting these in the preceding six months. Overall, 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, although the figure decreased to 41% in 2006. This may be partially attributable to efforts made to recruit fewer treatment clients in the 2006 IDRS (Figure 27). Just under half of IDU (45%) reported receiving methadone treatment at some point 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 central Sydney (48% and 34%, respectively).

Figure 27: Proportion of participants reporting methadone treatment, 1996-2006



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, i.e. daily use (the same as 2005). The median number of days of prescribed Physeptone use was 40 days, representing an increase from 7.5 days in 2005; 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 2005 (75%).

Overall, IDU participants indicated little change from last year in terms of either the prevalence or the frequency of methadone use. 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 and/or illicit drug market activity 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 2006 IDRS – may not be representative of methadone clients generally.

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

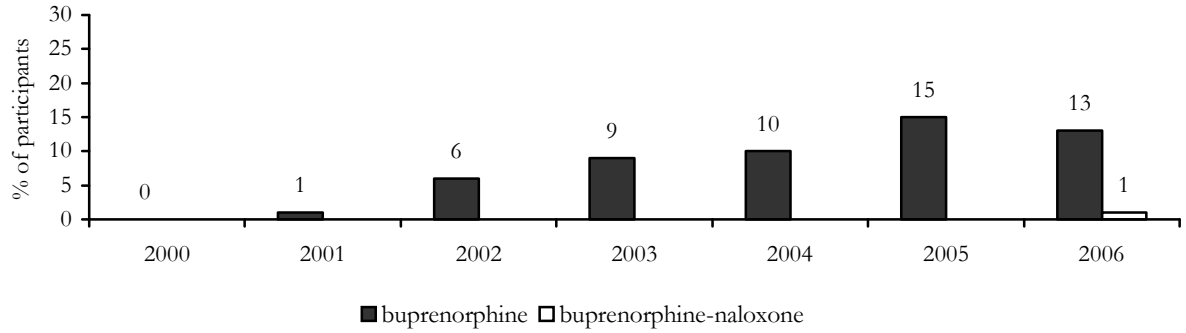
Buprenorphine treatment (including buprenorphine-naloxone)

As with methadone, a distinction was made between the use of prescribed and non-prescribed buprenorphine. Following the listing of buprenorphine-naloxone (Suboxone) on the Pharmaceutical Benefits Scheme in April 2006 (i.e. two months prior to participant interviews), questions were also included on this drug. Use of illicit (or non-prescribed) buprenorphine (including buprenorphine-naloxone) is discussed under Section 8: Opioids.

Forty-six percent of IDU reported ever having been prescribed buprenorphine (compared with 44% in 2005), and 20% reported using it in the preceding six months (this figure was 25% in 2005). Thirteen percent stated they were currently participating in buprenorphine treatment (this figure was 15% in 2005; Figure 28). As described previously, the slight decreases in recent use and current treatment may be partially attributed to efforts made to reduce the number of opioid pharmacotherapy clients recruited in the study. Among those who used licit buprenorphine, the median number of days of use in the last six months was 178 (i.e. almost daily use), representing

an increase from 125 in 2005, 90 days in 2004 and 60 days in 2003. Among those who had used it, 23% reported that they had done so daily (this represents 5% of the entire sample; an increase from 12% in 2005). When used as a maintenance treatment, 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 180 days. Please note that buprenorphine may also be prescribed during opioid detoxification.

Figure 28: Proportion of participants reporting current buprenorphine treatment, 2000-2006



Source: IDRS IDU interviews
NB: Buprenorphine-naloxone (brand name Suboxone) item first included in 2006

One percent of participants reported having been prescribed buprenorphine-naloxone, with one percent having used it in the preceding six months. The median number of days use was 14. There were no reports of injecting prescribed buprenorhpine in the past six months.. None of the participants who had been prescribed buprenorphine-naloxone reported using any illicit opioid pharmacotherapies in the preceding six months.

For information on diverted buprenorphine (including buprenorphine-naloxone) please see Section 8: Opioids.

4.6 Trends in heroin use

As in previous years, the IDU survey contained a number of open-ended questions which ask participants about any general trends in drug use that they have noticed, for example in the number of users, the types of drugs being used, and so on. As in previous years, comments on general trends in heroin use included several comments that younger people were using heroin (Note: this may be influenced, at least in part, to the participants themselves growing older).

A common theme arising in participants' comments related to a decrease in heroin use. Some attributed this to low purity, low availability and/or high cost of the drug, and a few participants believed that it was related to a greater police presence. With regard to frequency of heroin use, a range of responses were given, with suggestions of some people ceasing or, alternatively, increasing their heroin use due to low purity, low availability and high price. Other participant reports indicated that some people had increased other drug use (including methamphetamine, morphine, cocaine, oxycodone and alcohol – not necessarily by the same people), and some had

sought drug treatment. While a number of other participants reported the contradictory belief that there were more, rather than fewer, people using heroin, the majority of comments suggested an overall decline in frequency of use.

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.

4.7 Summary of heroin trends

- The price of a cap and of a gram of heroin remained stable in 2006, and remains substantially higher than prices reported prior to the heroin shortage in 2001. Prices were reported to be similar across different regions of the city, following suggestions of a price decrease in 2005 in the South West and a return to prices reported in 2004.
- IDU reports of heroin availability were mixed, suggesting that for some participants it had become more difficult to obtain since 2005. KE reports reflected this finding, suggesting that changes occurring in the key drug market areas (where IDU were surveyed) had also occurred more broadly across a number of other metropolitan areas.
- The majority of IDU participants thought heroin was of low purity. Purity was generally thought to have decreased or to have remained stable over the preceding six months.
- Frequency of heroin use has continued to decrease overall, although this was predominantly among IDU interviewed in central Sydney, where the median days of use declined dramatically, approaching figures reported in the South West. The median days used reported in the South West remained stable. Declining frequency of use was reflected in KE reports and indicator data sources from central Sydney areas, such as the Sydney MSIC.
- The use of brown alkaline heroin was noted in central Sydney, notably Kings Cross, with suggestion of a supply in the South West for a short period. Key experts in other geographical areas had not observed these changes, suggesting that at the time of interview the change remained relatively localised.
- The use of homebake was noted by a small number of KE, with a marginal increase in use among the IDU sample.
- KE reports suggested that heroin users were increasingly using other drugs, often due to poor or unreliable quality heroin. These included stimulants (cocaine, methamphetamine), opioids (e.g. morphine) and benzodiazepines.
- Indicator data on heroin use and related harms remained stable or decreased over the past twelve months, and remained substantially lower than figures recorded prior to 2001.

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' or 'crystal'). '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/crystal comes in crystalline form, in either translucent or white crystals (sometimes with a pink, green or blue hue) 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 (Breen et al., 2004b, Roxburgh et al., 2004), 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. (2005)

Participants were asked if they were able to comment on the price, purity and/or availability of speed powder, base and/or ice. In 2006, 62% of the IDU sample felt confident to answer at least some of the survey items regarding speed powder. Just over half of the sample (53%) commented on base price, purity and/or availability, and 67% 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 methamphetamine users or dealers regularly enough to be able to comment.

Seventeen 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. As in previous years, 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 number of participants reporting purchase of points, halfweights, grams and eightballs compared to 2005. 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 purchase.

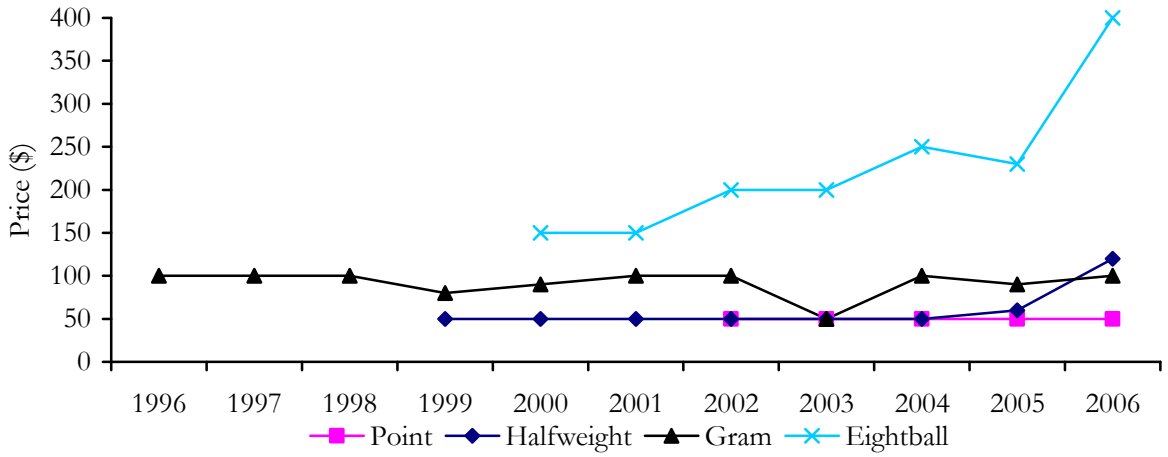
Table 7: Price of most recent methamphetamine purchases by IDU participants, 2006

Amount	Median price* $	Range	Number of purchasers*
Speed powder			
Point (0.1 gram)	50 (50)	$20-$50	34 (29)
'Halfweight' (0.5 grams)	120 (60)	$50-$200	15 (20)
Gram	100 (90)	$30-$400	17 (10)
'Eightball' (3.5 grams)	400 (250)	$140-$1200	13 (9)
Base			
Point	50 (50)	$20-$50	43 (36)
'Halfweight' (0.5 grams)	180 (150)	$50-$200	9 (5)
Gram	200 (160)	$50-$400	10 (8)
'Eightball' (3.5 grams)	500 (350)	$450-$1200	7 (5)
Ice			
Point (0.1 gram)	50 (50)	$35-$75	56 (37)
'Halfweight' (0.5 grams)	200 (250)	$150-$300	14 (7)
Gram	325 (350)	$50-$600	10 (10)
'Eightball' (3.5 grams)	900 (1500)	$700-$1100	5 (1)

Source: IDRS IDU interviews
* 2005 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), while median prices for halfweights and eightballs have increased since 2005 (Figure 29). However, it should be noted that the range of reported prices was fairly wide (Table 7).

Figure 29: Median prices of speed powder estimated from IDU purchases, 1996-2006



Source: IDRS IDU interviews

Participants were also asked if the price of speed powder had changed in the last six months, and 59% of those who commented (36% of all participants) reported price stability over the last six months. This compares with 77% of those who commented (42% of the sample) in 2005. Ten percent of those who commented (6% of the entire sample; similar to 2005 figures) thought that the price had increased, 25% didn't know (an increase from 7% in 2005), 2% thought that the price had decreased (comparable with 5% who reported a decrease in 2005, and 5% thought it had fluctuated (as compared with 1% in 2005). Overall this suggests little change in price from 2005.

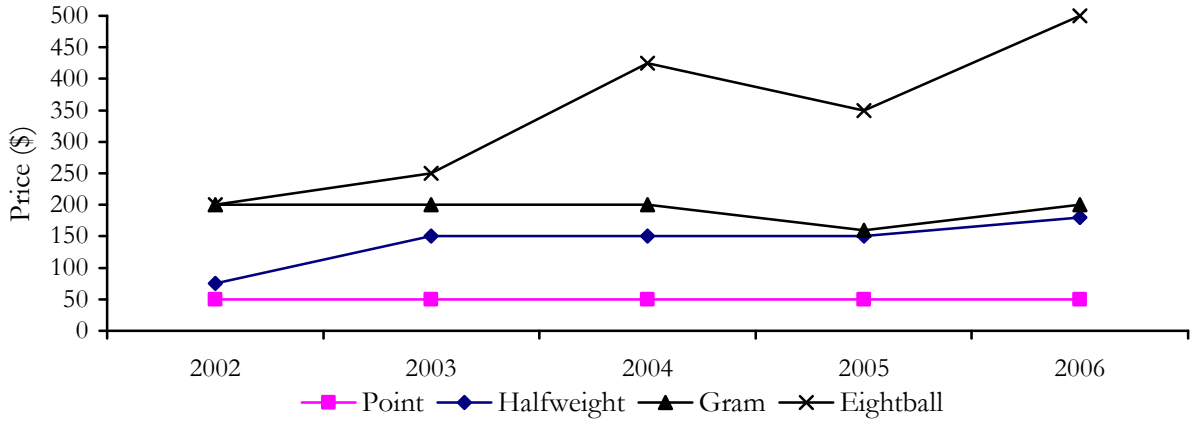
KE reports suggested that the price per gram of speed powder could range from between $40-$90 at the street level, depending on purity, and prices were typically reported to have remained stable over the preceding six months.

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. Forty-three 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 per point of base remained stable at $50, while the median prices for other amounts increased. However, it should be noted that prices for larger amounts were based on small numbers (ten responses or less), and should be interpreted with caution, particularly as the price ranges were fairly wide. Overall, with the exception of prices for eightballs (a relatively uncommon purchase amount), prices have remained fairly stable since 2002, when items regarding base methamphetamine were first included in the survey (Figure 30).

Figure 30: Median prices of base estimated from IDU purchases, 2002-2006



Source: IDRS IDU interviews

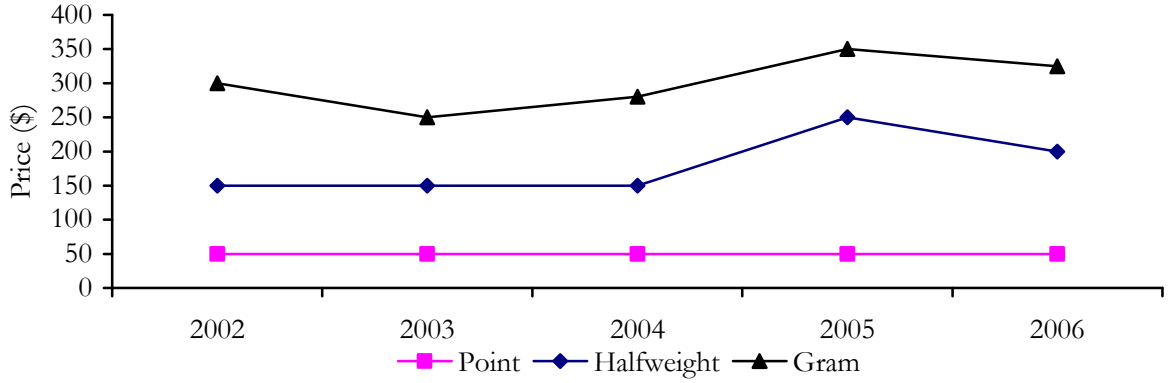
Participants who commented on base generally thought that the price had remained stable over the preceding six months (63%; representing 34% of the entire sample). Eleven percent stated that it had increased (representing 6% of the entire sample), 5% (3% of the entire sample) thought that it had fluctuated and 21% (11% of the entire sample) stated that they did not know. This represents little change from 2005, with the exception of a larger proportion reporting that they did not know whether the price had changed recently (11% of those commenting in 2005) and a decrease in the proportion reporting it to be stable (72% in 2005).

Only one KE was able to comment on the price of base methamphetamine, indicating that it cost $40 per point and $250-$400 per gram. Prices were reported to have remained stable over the preceding six months.

Ice/crystal

Larger numbers of participants reported recent purchase of ice/crystal compared to 2005. Again, as with speed and base, the most commonly purchased amounts of ice were points (56 purchases) and halfweights (14 purchases, both representing an increase in purchases from 2005). While the price for a point remained stable from previous years, decreases were reported in the price per halfweight, gram and eightball (Table 7; Figure 31), although only small numbers reported buying larger amounts so results should be interpreted with caution.

Figure 31: Median prices of ice/crystal estimated from IDU purchases, 2002-2006



Source: IDRS IDU interviews
NB: Median price per eightball not shown due to small numbers reporting purchase.

Participants who commented on ice/crystal generally thought that the price had remained stable over the preceding six months (61%; representing 41% of the entire sample). Fourteen percent stated that it had increased (representing 9% of the entire sample), 6% (4% of the entire sample) reported that it had fluctuated and 20% (13% 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 decreased. This represents little change from 2005.

A point of ice was reported by KE to cost between $35-100, and this was reported to have remained stable over the preceding six months. Grams were reported to cost approximately $400, half grams $250, and ounces approximately $7,000.

5.2 Availability

Speed powder

Participants 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 (68%; 42% of the entire sample) thought it was 'very easy' (37%; 23% of the entire sample) or 'easy' (31%; 19% of the entire sample) to obtain, representing virtually no change from 2005 (Table 8). Since 1996, speed powder has consistently been reported as 'easy' or 'very easy' to obtain.

Just under half (47%) of the IDU commenting on speed (35% of the entire sample) thought that availability had remained stable in the preceding six months, representing a decrease from 2005 (66%; Table 8). A slight increase was observed in the proportion of participants who believed it had become easier to obtain (from 9% in 2005 to 15% in 2006). A similarly small proportion continued to report that it had become more difficult to obtain (14% of those commenting) or that availability had fluctuated (1% of those commenting). Approximately one-quarter (23%, representing an increase from 7% in 2005) stated 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.

Very few KE were able to report on speed availability; however, those that could reported that it was easy to obtain, while others reported it was very difficult. One law enforcement KE reported that speed powder was the most common form state-wide, while a small number of health KE referring to specific Sydney metropolitan areas (e.g. the Eastern suburbs, Western Sydney) reported that it was not readily available to users with whom they were in contact. This was particularly the case among health KE who were speaking about groups of injecting drug users.

Forty-four percent of participants reported purchasing speed powder in the six months preceding interview, most commonly from friends (42%), known dealers (39%) and street dealers (31%), with only small proportions reporting obtaining it from other sources (Figure 32). The locations at which participants had usually scored were varied, with the most common being a street market (39%), followed by a friend's house (30%), a dealer's home (25%) and/or an agreed public location (19%; Figure 33).

Base

Base was also generally reported to be 'easy' (42%) or 'very easy' (36%) to obtain, with an increase among those reporting it as 'easy' to obtain and a decrease in those reporting it as 'very easy' to obtain, as compared with 2005 (Table 8). As in previous years, only small proportions reported it as 'difficult' or 'very difficult' to obtain, suggesting that it remained easily accessible. Consistent with this, the majority of participants (64% of those commenting; representing 34% 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' being the most commonly selected response option (excluding 'don't know' responses).

KE reports suggested that base methamphetamine was available, but not a predominant form that was detected by law enforcement, or used by users with whom health KE had had contact.

Just under half (41%) of the entire sample reported purchasing base in the six months preceding interview, most commonly from known dealers (45%), friends (39%) and street dealers (23%; Figure 32). Locations that base had most commonly been purchased from included a street market (32%), dealer's home (29%) and/or from an agreed public location (23%; Figure 33).

Table 8: Participants' reports of methamphetamine availability in the past six months, 2005-2006

	Powder		Base		Ice	
	2005 (N=154)	2006 (N=152)	2005 (N=154)	2006 (N=152)	2005 (N=154)	2006 (N=152)
Current availability						
Did not respond* (%)	46	38	56	47	55	35
Did respond (%)	54	62	44	53	45	65
Of those who responded:						
Very easy (%)	36 *(20% of entire sample)*	37 *(23% of entire sample)*	47 *(21% of entire sample)*	36 *(19% of entire sample)*	28 *(12% of entire sample)*	50 *(32% of entire sample)*
Easy (%)	33 *(18% of entire sample)*	31 *(19% of entire sample)*	32 *(14% of entire sample)*	42 *(22% of entire sample)*	25 *(11% of entire sample)*	27 *(18% of entire sample)*
Difficult (%)	18 *(10% of entire sample)*	11 *(7% of entire sample)*	19 *(8% of entire sample)*	7 *(4% of entire sample)*	29 *(13% of entire sample)*	7 *(5% of entire sample)*
Very difficult (%)	7 *(4% of entire sample)*	4 *(3% of entire sample)*	None	3 *(1% of entire sample)*	9 *(4% of entire sample)*	3 *(2% of entire sample)*
Don't know^ (%)	6 *(3% of entire sample)*	17 *(11% of entire sample)*	2 *(0.6% of entire sample)*	12 *(7% of entire sample)*	10 *(5% of entire sample)*	13 *(9% of entire sample)*
Availability change over the last six months						
Did not respond* (%)	47	38	56	47	55	33
Did respond (%)	53	62	44	53	45	67
Of those who responded:						
More difficult (%)	17 *(9% of entire sample)*	14 *(9% of entire sample)*	18 *(8% of entire sample)*	11 *(6% of entire sample)*	22 *(10% of entire sample)*	10 *(7% of entire sample)*
Stable (%)	66 *(35% of entire sample)*	47 *(29% of entire sample)*	68 *(30% of entire sample)*	64 *(34% of entire sample)*	55 *(25% of entire sample)*	57 *(38% of entire sample)*
Easier (%)	9 *(5% of entire sample)*	15 *(9% of entire sample)*	10 *(5% of entire sample)*	6 *(3% of entire sample)*	10 *(5% of entire sample)*	17 *(11% of entire sample)*
Fluctuates (%)	1 *(0.6% of entire sample)*	1 *(1% of entire sample)*	None	0 *(0% of entire sample)*	1 *(0.6% of entire sample)*	2 *(1% of entire sample)*
Don't know^ (%)	7 *(4% of entire sample)*	23 *(15% of entire sample)*	4 *(2% of entire sample)*	19 *(10% of entire sample)*	12 *(5% of entire sample)*	15 *(10% 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

Ice/crystal

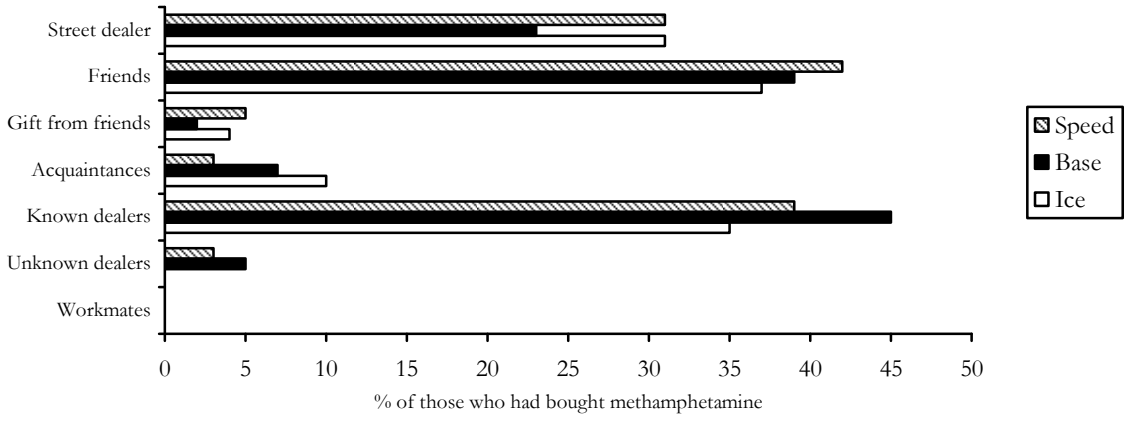
Over three-quarters (77%) of participants commenting on ice/crystal stated that it was 'very easy' (50%; representing 32% of all participants) or 'easy' (27%, or 18% of all participants) to obtain. This represents an increase from 2005 (53%) and a concomitant decrease in the proportion reporting it as 'difficult' to obtain (7% in 2006; 29% in 2005). The proportion reporting it as 'very difficult' to obtain remained at less than 10% of those commenting, and 13% stated that they didn't know (Table 8). This suggests a return to (and perhaps an increase beyond) availability levels reported in 2004, when over three-quarters (79%) of those commenting believed that it was easy (43%) or very easy (36%) to obtain, and when 16% reported that it was difficult or very difficult to obtain.

The majority of participants (57%) reported that availability over the last six months had remained stable (Table 8). Smaller proportions reported that ice/crystal had become easier to obtain (17%; an increase from 10% in 2005), more difficult to obtain (10%; a decrease from 22% in 2005) or had fluctuated (2%; comparable to 2% in 2005). Fifteen percent of those who provided information about market indicators for ice/crystal (i.e. price, purity and/or availability) reported that they did not know whether availability had changed, a reflection that they had not had enough contact with ice/crystal 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 availability as stable, with the exception of 2003 where it was most commonly reported as easier to obtain.

KE impressions indicated that ice/crystal was readily available to those wishing to use it and that availability had remained stable or increased over the preceding six months.

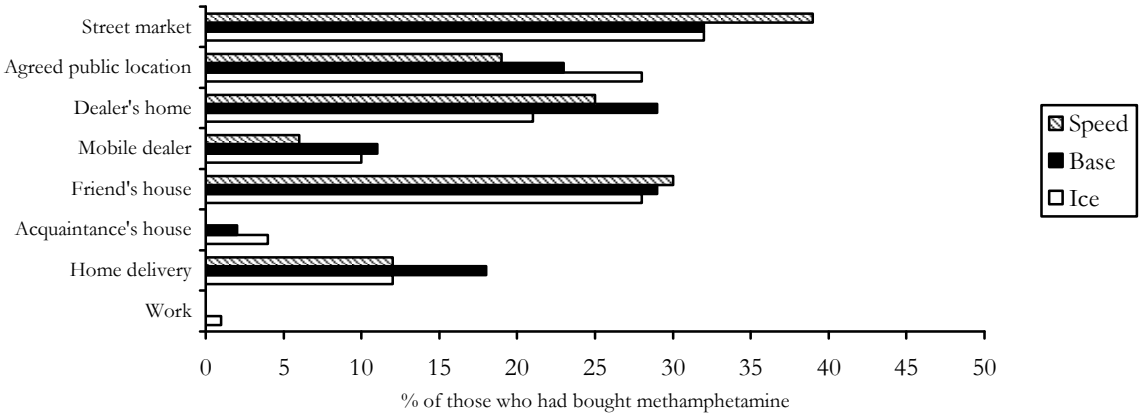
Forty-seven percent of all participants had purchased ice in the six months preceding interview. Among these, the most commonly reported sources (as with other forms of methamphetamine) were friends (37%), known dealers (35%) and street dealers (31%; Figure 32). The most commonly reported locations of purchase were street market (32%), an agreed public location (28%) and/or a friend's house (28%; Figure 33).

Figure 32: People from whom methamphetamine was purchased in the preceding six months, 2006



Source: IDRS IDU interviews
NB: More than one response could be selected

Figure 33: Locations where methamphetamine was scored in the preceding six months, 2006



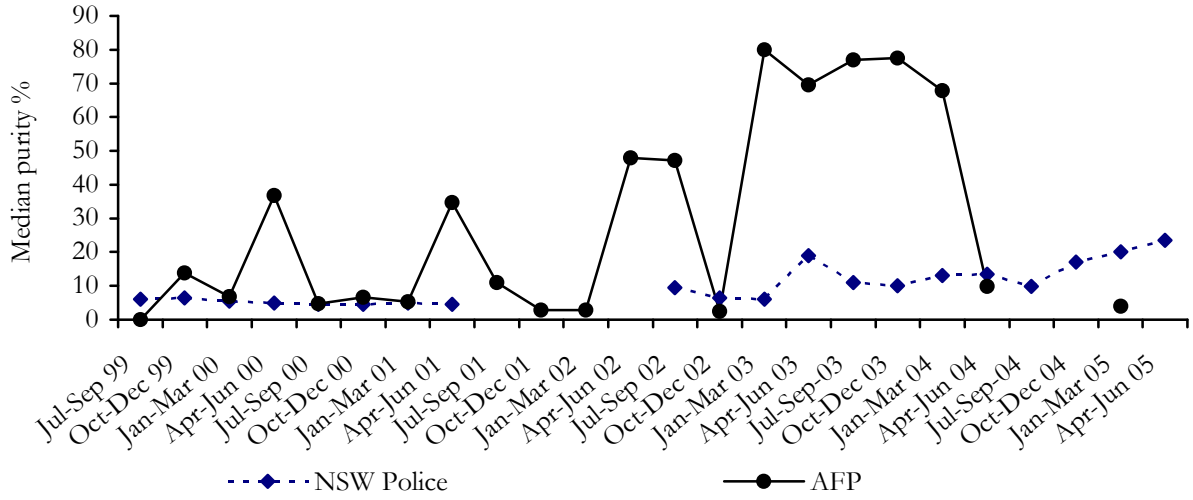
Source: IDRS IDU interviews
NB: More than one response could be selected

5.3 Purity

Figure 34 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 35). 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. Data for 2005/06 were unavailable at the time of publication.

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.

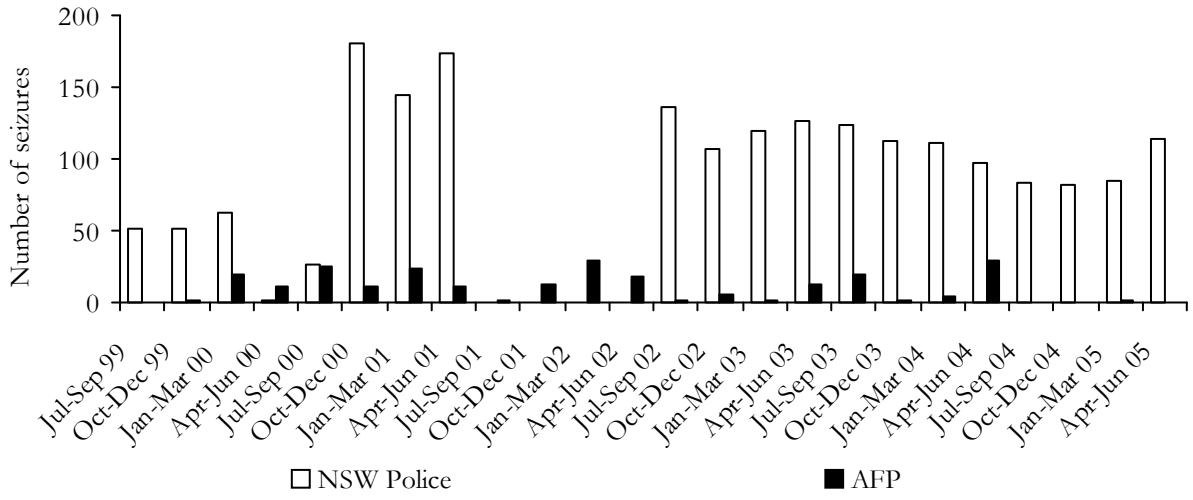
Figure 34: Purity of methylamphetamine seizures analysed in NSW, by quarter, 1999/00-2004/05



Source: ABCI 2001, 2002; ACC, 2003, 2004, 2005
NB: NSW Police data for the financial year 2001/02 were unavailable. Data for 2005/06 were unavailable at time of publication

Figure 35 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 35: Number 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. Data for 2005/06 were unavailable at time of publication

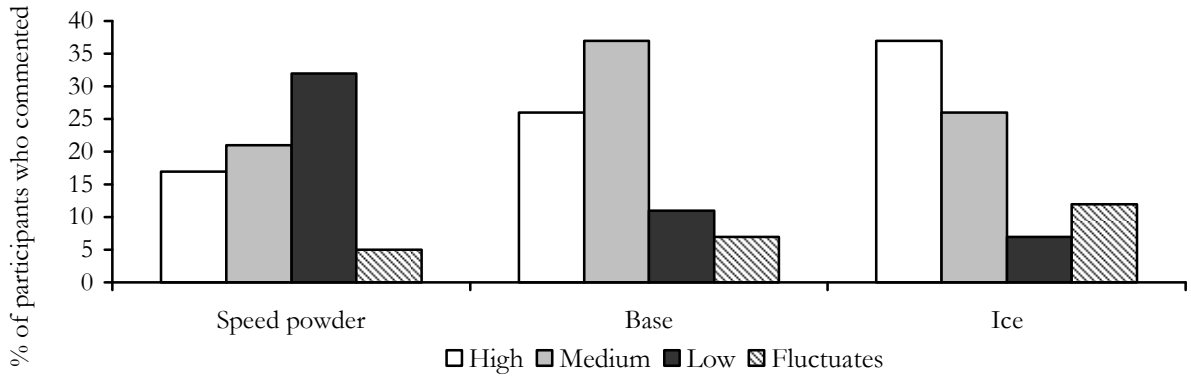
Speed powder

Nearly two-thirds (62%) of the sample commented on the perceived current purity of speed powder. Of these participants, approximately one-third (32%; 20% of the entire sample) thought that it was of 'low' purity (this figure is comparable with 36% of responding participants in 2005). Approximately one-fifth (21%; 13% of all participants) thought it was 'medium' (a decrease from 34% in 2005), almost one-fifth (17%; 11% of the entire sample) reported that it was of 'high' purity (10% in 2005) and 5% (3% of the entire sample) thought that it had fluctuated (Figure 36). While able to respond to items concerning other aspects of speed powder (price or availability), 25% of those commenting (15% of all participants) , were unsure as to the current purity of speed powder. Overall, this suggests that purity has remained fairly stable over the past few years, with 'low' being the most commonly selected response option, followed by 'medium'.

As in previous years, the majority of participants commenting thought that speed purity had either been stable over the preceding six months (30%; 18% of the entire sample) or had decreased over this time (25%; representing 15% of all participants). Only 6% (4% of all participants) thought that it had increased, and 11% (7% of the entire sample) thought it had fluctuated. Overall this represents little change from 2005.

Law enforcement KE reported that speed powder was typically between 9%-20% pure.

Figure 36: Participant perceptions of methamphetamine purity (speed powder, base and ice), among those who commented, 2006



Source: IDRS IDU interviews

Base

The majority (63%) of IDU commenting on base thought that it was of 'medium' (37%; 20% of all participants) to 'high' purity (26%; 14% of all participants), while 11% (6% of all participants) thought it was 'low' and 7% (representing 4% of all participants) thought that it 'fluctuated' (Figure 36). Nineteen percent (10% of all participants) reported that they didn't know. Comparable figures in 2005 were: 41% thought it was of 'medium' purity, 22% thought it was 'high', 19% reported that it was 'low' and 12% said it had fluctuated. Six percent did not feel confident to answer the question and selected the 'don't know' response. Overall, this suggests little change from 2005, with the exception of an increase in the proportion reporting that while they could answer some items on price and availability (typically the current price), they could not comment on purity.

Purity was generally reported to have remained stable over the six months preceding interview (43%; 23% of the entire sample), with smaller proportions reporting that it had decreased (20%; 11% of the entire sample), fluctuated (10%; 5% of the entire sample) or increased (5%; 3% of the entire sample). Twenty-two percent reported that they didn't know. These findings were more consistent than those reported in 2005[5].

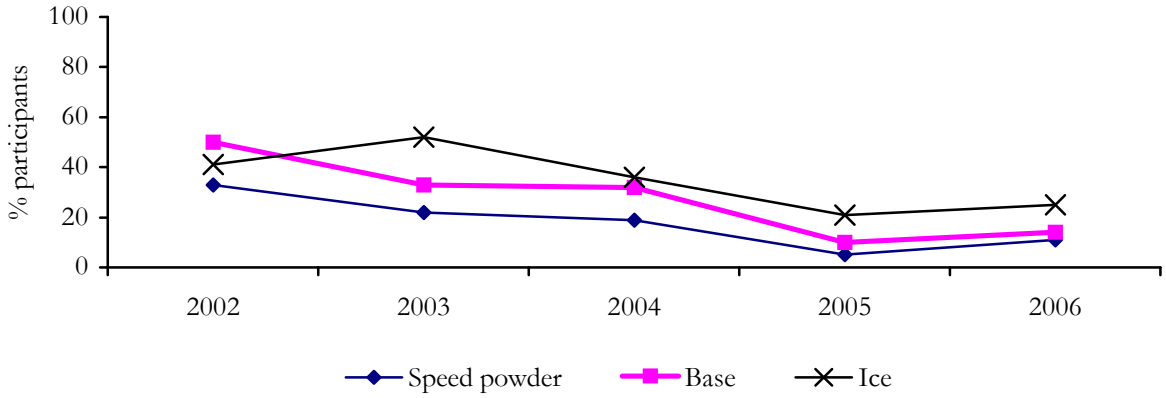
Ice/crystal

As in previous years, ice/crystal was more commonly reported to be of high purity than other forms of methamphetamine (Figure 36). Just over one-third (37% of those commenting, representing 25% of all participants) stated that ice/crystal purity was 'high', and 26% (17% of all participants) thought it was 'medium'. Small proportions thought it was 'low' (7%; 5% of all participants) or that it 'fluctuates' (12% of those commenting; 8% of the entire sample). Nineteen percent of those who commented on ice/crystal market characteristics (price and/or availability) said they did not know about the current purity of ice/crystal, either because they had not used it enough or had not had enough contact with ice/crystal users or dealers to be able to comment. Overall, reports were more varied and suggestive of a decrease in perceived purity than in 2005 when 46% rated it as 'high', 20% reported it to be 'medium' and 12% thought it was 'low'.

When asked about whether purity had changed over the last six months, 41% of those responding (28% of all participants) believed that it had remained stable. Sixteen percent thought it had decreased, 12% reported that it had fluctuated and 7% thought it had increased. One-quarter (25%; 16% of all participants) did not know whether purity had changed over this time.

Figure 37 shows the proportion of IDU reporting the purity of each form of methamphetamine as 'high'. Greater proportions of IDU reported ice/crystal and base as being 'high' in purity compared with speed, and ratings of perceived purity of all three forms as 'high' have remained relatively stable since 2005.

Figure 37: Proportion of participants reporting speed powder, base and ice/crystal purity as 'high', 2002-2006



Source: IDRS IDU interviews
NB: Data on all three forms commenced in 2002.

[5] Figures for 2005 were: 33% thought it had remained stable, 24% thought that it had fluctuated, 22% thought it had decreased, 12% thought it had increased and 9% said that they didn't know.

Law enforcement KE reported that ice/crystal could be up to 80% pure, but could fluctuate quite widely. This reflects research in previous years indicating 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., 2005).

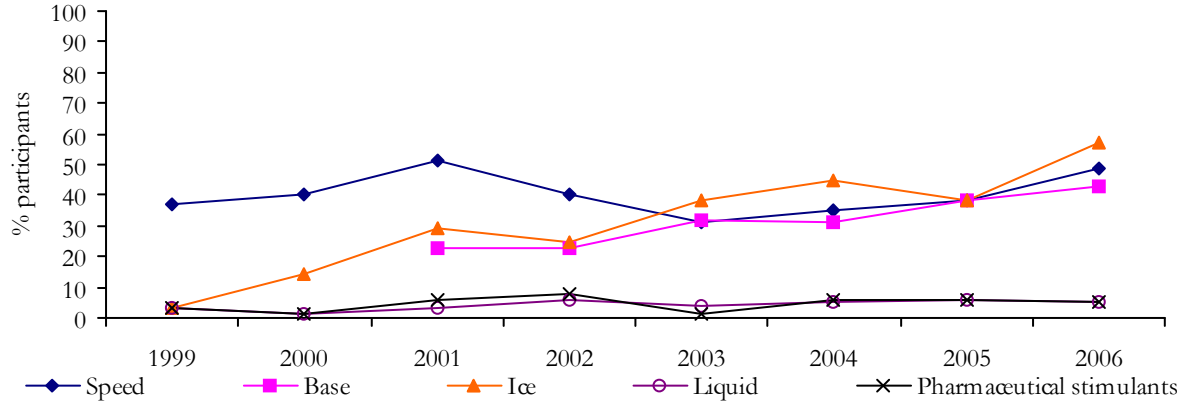
5.4 Use

5.4.1 Methamphetamine use among IDU participants

Almost three-quarters of participants (72%) reported use of some form of methamphetamine (speed, base, ice/crystal or liquid) in the six months preceding interview, representing an increase from 58% in 2005. Considered separately, the most commonly used form was ice/crystal (57%), followed by speed powder (49%) then base (43%). Liquid amphetamine (also known as 'oxblood') remained considerably less common, with only 5% of participants reporting use in the last six months. These figures indicate little change in the prevalence of base use, and increases in prevalence of ice/crystal and speed powder use since 2005, when these figures were 38% for each of these three forms (Figure 38).

In 2006, a distinction was made between the licit vs. illicit use of pharmaceutical stimulants (including prescription amphetamines). One percent of participants reported use of licitly obtained pharmaceutical stimulants in the six months preceding interview, and five percent of participants reported use of illicitly obtained pharmaceutical stimulants in this time. The recent use of pharmaceutical stimulants by this group has remained at less then 10% since 1999 (Figure 38).

Figure 38: Proportion of IDU reporting methamphetamine and pharmaceutical stimulant use in the past six months, 1999-2006



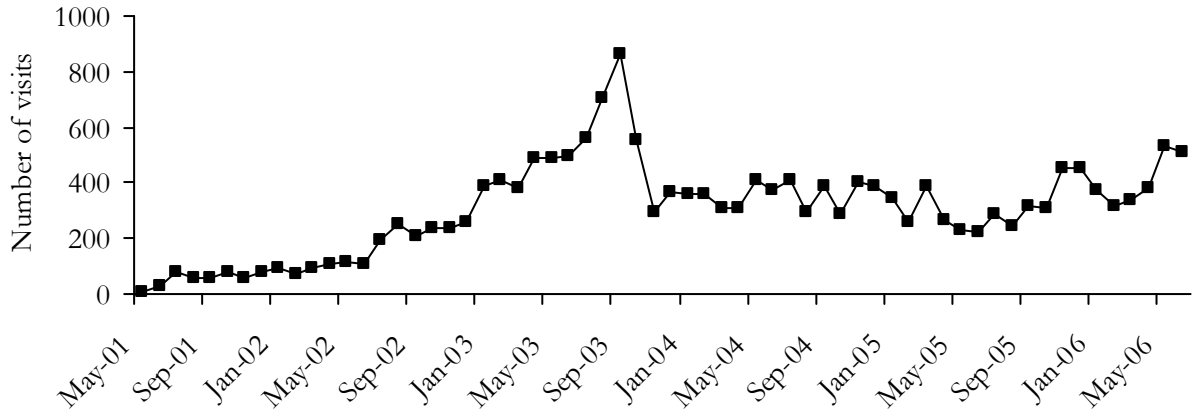
Source: IDRS IDU interviews
NB: Pharmaceutical stimulants includes licit use of prescription amphetamines.

Figure 39 shows the number of attendances to the Sydney MSIC where methamphetamine was the drug injected[6]. 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 in subsequent months. Figures remained relatively stable between December 2003

[6] 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.

and April 2006, accounting for between 5-7% of visits, increasing slightly in April 2006. Methamphetamine has accounted for less than 10% of all injecting episodes since September 2003.

Figure 39: Number of attendances to Sydney MSIC where methamphetamine was injected, 2001-2006



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 twenty (i.e. almost once per week), representing an increase from ten days reported in 2005. For base this figure was five days (i.e. an average of once per month), representing little or no change from 2005 (6 days). The median number of days of ice/crystal use increased from four days in 2005 to 12 days (i.e. approximately once per fortnight) in 2006.

The majority of users had used each form weekly or less over the six months preceding interview (Table 9). This represents little change from 2005. The proportion of methamphetamine users reporting daily use of any form of methamphetamine increased slightly from 7% in 2005 to 14% in 2006 (representing 5% and 10% of the entire sample each year, respectively; Table 9 and Figure 40). Overall this shows an increase in methamphetamine use generally since 2005; however, it should be noted that the proportion of daily users remains low relative to the proportion of daily heroin users and equivalent to the proportion of daily cocaine users (see Sections 4.4.2 – Current patterns of heroin use, and Section 6.4.2 – Current patterns of cocaine use).

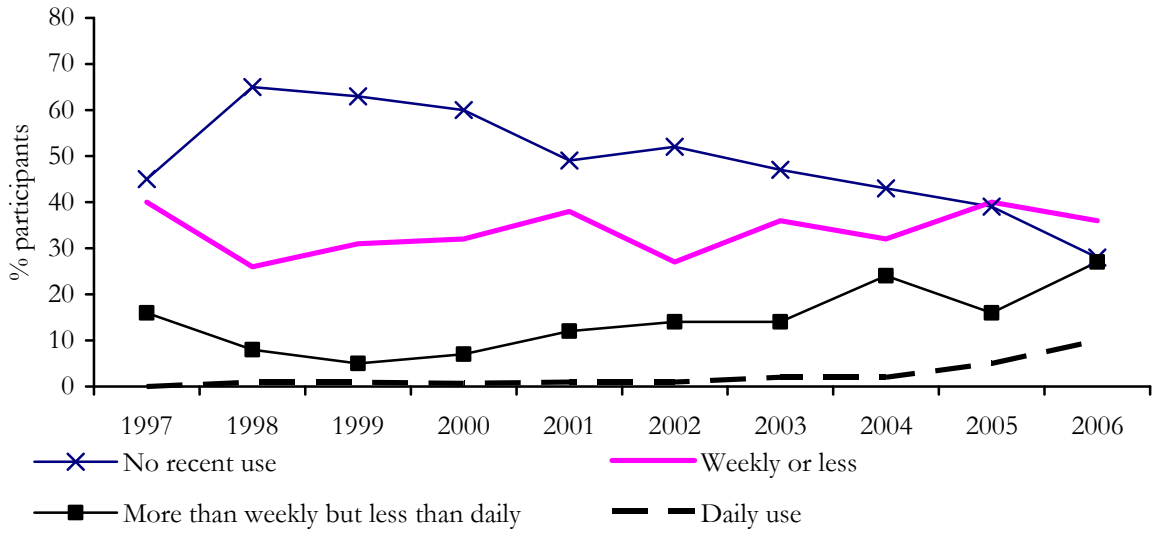
The median days of pharmaceutical stimulant use (whether licitly or illicitly obtained) increased from 2 days in 2005 to 13.5 in 2006. Illicitly obtained pharmaceutical stimulants were used on a median of 7 days (i.e. approximately monthly use), whilst licitly obtained pharmaceutical stimulants were used daily by users (median 180 days).

Table 9: Patterns of methamphetamine use in the last six months, by type, 2006

Form used	Among the entire sample		Among those who had used		
	% who had not used in the last 6 months	% who had used	% used weekly or less^	% used more than weekly, but less than daily	% used daily
Speed powder	51	49	60 *(30% of entire sample)*	31 *(15% of entire sample)*	9 *(5% of entire sample)*
Base	57	43	72 *(31% of entire sample)*	27 *(11% of entire sample)*	2 *(0.7% of entire sample)*
Ice/crystal	43	57	67 *(38% of entire sample)*	26 *(15% of entire sample)*	7 *(4% of entire sample)*
Any form methamphetamine*	28	72	49 *(36% of entire sample)*	37 *(27% of entire sample)*	14 *(10% of entire sample)*

Source: IDRS IDU interviews
* Also includes liquid methamphetamine
^ Excludes those who had not used (percentage of entire sample shown in parentheses)
NB: Prior to 2006, 'any form methamphetamine' also included pharmaceutical stimulants (excluded from 2006).

Figure 40: Patterns of methamphetamine use (any form) by IDU participants, 1997-2006



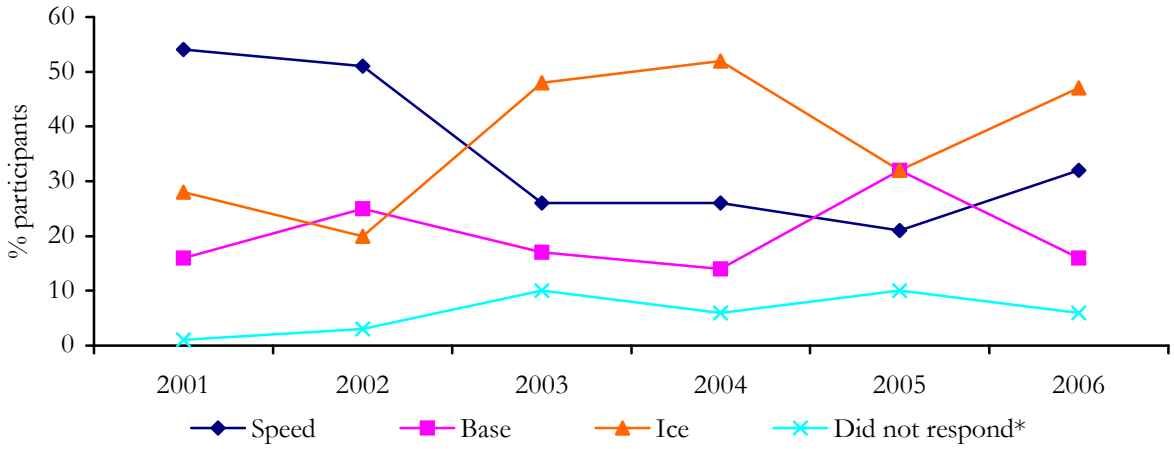
Source: IDRS IDU interviews
NB: 1996 data were unavailable

KE reports reflected a range of geographical areas and clientele. Use patterns varied widely, including fortnightly use by some injecting drug users, weekend use (e.g. over 2-3 days) by people who also used ecstasy, and daily use (some smoking, others injecting) among dependent users. Methamphetamine use was reported to have increased among clients of some health services (e.g. NSPs, detoxification services, residential rehabs) over the past few years, although opinions on its impact were, in some cases, critical of media reports of an 'ice epidemic'.

In areas where an increase in methamphetamine use had been noted, for example in central Sydney, some law enforcement KE stated that the behavioural effects of methamphetamine use (such as aggression) can lead to more problematic interactions with users. An increase in skills training was being implemented in response. However, one KE noted that crime levels (including violent crime) in their local area did not appear to have changed. Health KE often reported observing instances of agitation, 'scattered' thinking and poor mental and physical health among users that they attributed to methamphetamine use. While they were aware of instances of aggression, drug-induced psychosis and chaotic behaviour, they reported these instances tended to be the exception rather than the rule. Overall, health KE had not observed an increase in problems (e.g. aggression); however, in response to an increase in ice users presenting for treatment, one service had increased their delivery of anger management training for clients. Indeed, one KE actually reported a decrease in ice/crystal use among the client group they had contact with, due to serious problems some of these users had experienced (such as being scheduled to a psychiatric ward).

As in previous years, participants who had used methamphetamine were also asked which form they had used most often in the six months preceding interview. Almost half of users nominated ice/crystal (47%; this figure was 32% in 2005), approximately one-third nominated speed powder (32%; this figure was 21% in 2005), and 16% nominated base (this figure was 32% in 2005). Six percent of methamphetamine users 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 2005 and a return to figures reported in 2004 (Figure 41).

Figure 41: Methamphetamine form most used in the preceding six months, among recent methamphetamine users, 2001-2006



Source: IDRS IDU interviews
NB: Data collection on the form most used commenced in 2001. Pharmaceutical stimulants included in figures between 2001 and 2005; excluded in 2006 data.

* '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

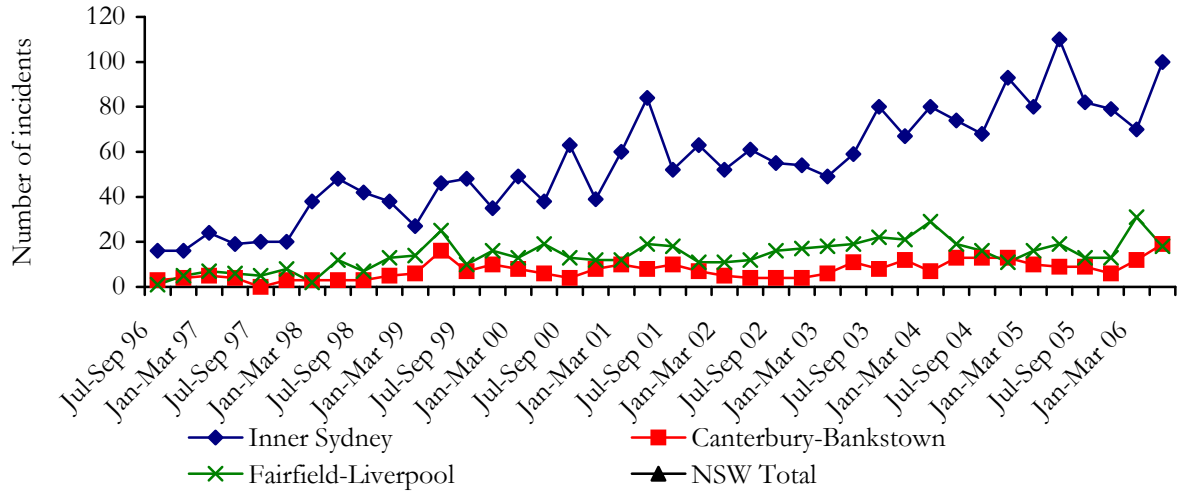
Reports from KE recruited across metropolitan Sydney reflected IDU reports, with ice/crystal most commonly reported as the form most used, and fewer commenting on base and speed powder than in 2005. The use of liquid amphetamine ('oxblood') was not reported.

5.5 Methamphetamine-related harms

5.5.1 Law enforcement

Figure 42 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[7]. Recorded incidents in the Inner Sydney area have increased over the last three years, while they have remained fairly stable in Canterbury-Bankstown and Fairfield-Liverpool.

Figure 42: Recorded incidents of amphetamine possession/use by geographic area per quarter, July-September 1996 to April-June 2006

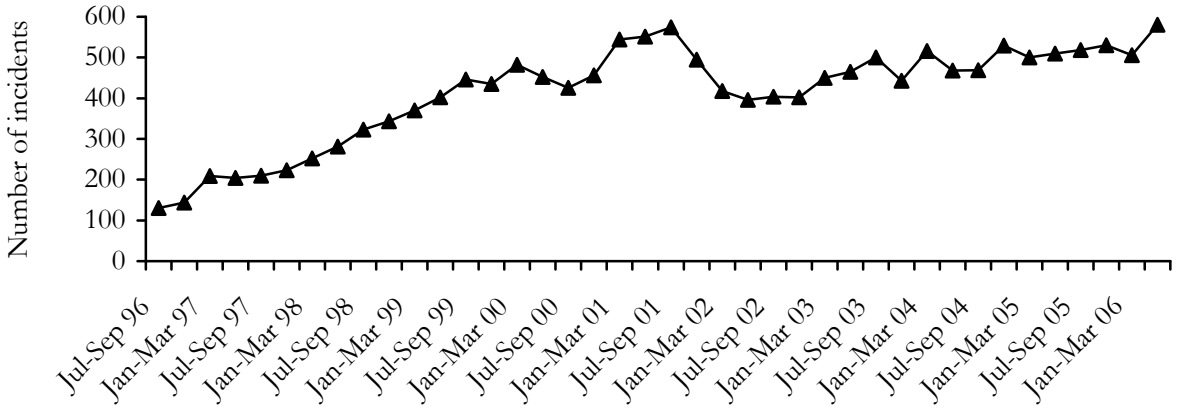


Source: NSW Bureau of Crime Statistics and Research
NB: Changes in the number of recorded incidents may be indicative of changes in police activity, or an increase in possession/use, or a reflection of both

The number of recorded incidents across NSW as a whole has increased slightly over the past three years following a peak around the time of the heroin shortage (2001) and subsequent decline in 2002 (Figure 43). The number of incidents per quarter is now around 500, compared to 200 per quarter in 1997.

[7] The regions Inner Sydney, Fairfield-Liverpool and Canterbury-Bankstown refer to ABS Statistical Subdivisions.

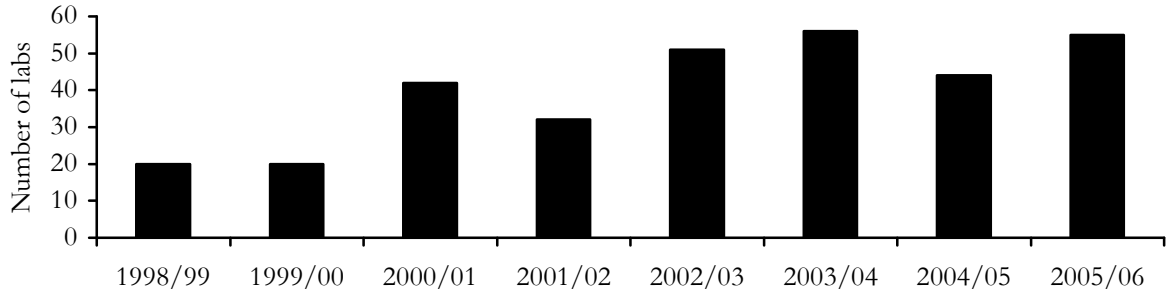
Figure 43: Recorded incidents of amphetamine possession/use (whole of NSW) per quarter, July-September 1996 to April-June 2006



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 clandestine laboratories detected in NSW has steadily increased over time from 20 in the 1998/99 financial year to 55 in 2005/06 (Figure 44). In 2005/06, these laboratories were typically producing methamphetamine using the hyperphosphorus method (rather than the Nazi, red phosphorous or Phenyl-2-Propanone [P2P] methods), and/or were generally using illicitly obtained pseudoephedrine. Nine laboratories were producing MDMA (ecstasy) and none were producing homebake heroin. Pseudoephedrine compound preparations were rescheduled on the 1st January 2006 from S2 (pharmacy medicines) to S3 (pharmacist only medicines) and from 1st April 2006 liquid pseudoephedrine preparations containing more than 800mg per pack and other preparations with 720mg or more being rescheduled to S4 (prescription-only medicines; Pharmaceutical Services Branch, NSW Health, personal communication, January 2007). The data provider reported that in response to these changes, *"reports of 'pseudo running' have decreased in recent months which in turn has caused a reduction in the historically common smaller home premises meth labs"* (data provider, NSW Police, personal communication, 18 December 2006).

Figure 44: Number of clandestine methamphetamine and MDMA laboratories detected by NSW Police 1998/99-2005/06



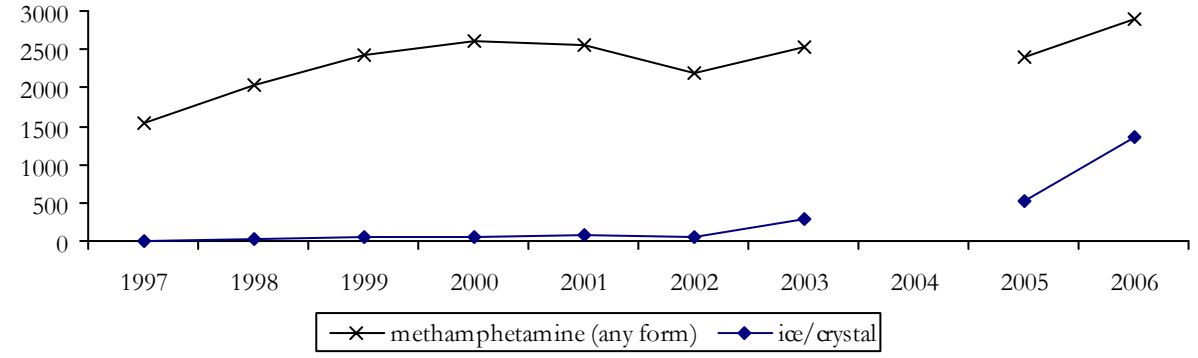
Source: NSW Police Service

5.5.2 Health

Calls to telephone helplines

Figure 45 shows the number of calls to the ADIS regarding amphetamines (any form), and ice/crystal alone, for the years 1997-2006. The total number of calls where amphetamines (including ice/crystal) were mentioned has increased over time, reaching 2887 in 2006. The number of calls where the ice/crystal form was specifically mentioned has also increased, from 521 in 2005 to 1369 in 2006. It is also worth noting that this may also reflect an increase in public awareness and concern following a large number of recent controversial media reports on the subject.

Figure 45: Number of enquiries to ADIS regarding amphetamines, including ice/crystal, 1997-2006

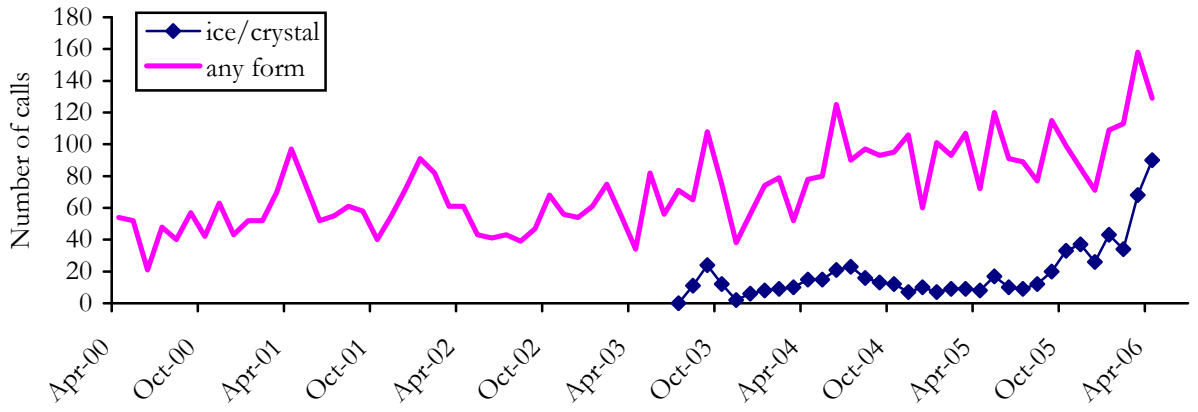


Source: ADIS

NB: ADIS data include calls made in NSW and the Australian Capital Territory (ACT) and refer to the number of calls where amphetamines (including ice/crystal) were mentioned as any drug of concern. Data are not shown for 2004 as data were unavailable for the full calendar year.

Figure 46 shows the number of calls to the FDS lines regarding amphetamines for the period 2000. Similar to ADIS, the number of enquiries to FDS regarding amphetamines has increased over the past few years. The number of calls specifically regarding ice/crystal has also increased over the past year, from 8 in April 2005 to 90 in April 2006. It is again worth noting that this may also reflect an increase in public awareness and concern following a large number of recent controversial media reports on the subject.

Figure 46: Number of enquiries to FDS regarding amphetamines, including ice/crystal, 2000-2006



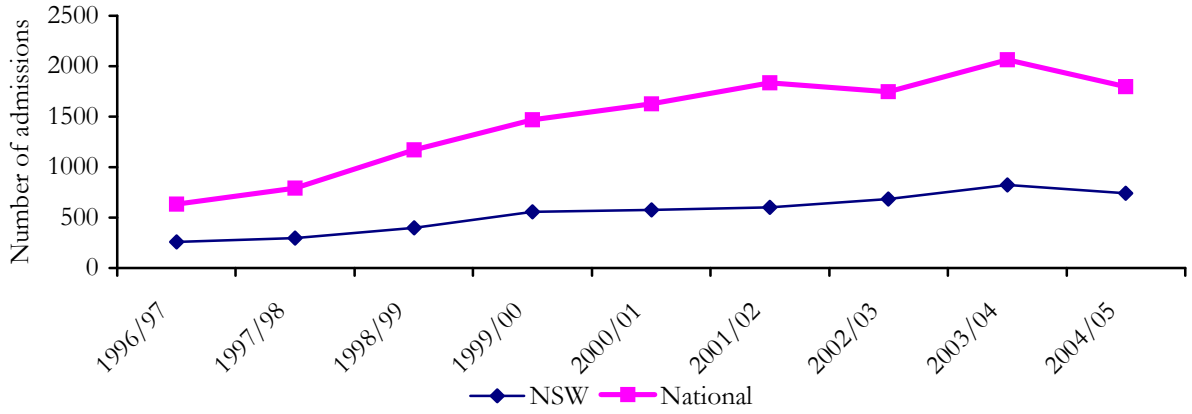
Source: FDS

A number of KE noted increased physical and mental health problems associated with methamphetamine use and injection, while KE in other geographical areas suggested that there had been no change.

Hospital admissions

The number of inpatient hospital admissions among persons aged 15-54 years in which the principal diagnosis was amphetamine related is shown in Figure 47. Figures steadily increased in NSW over the period to a peak of 824 in 2003/04 and decreased slightly to 743 in 2004/05. National figures followed a similar pattern, peaking at 2066 in 2003/04 and subsequently declining to 1797 in 2004/05.

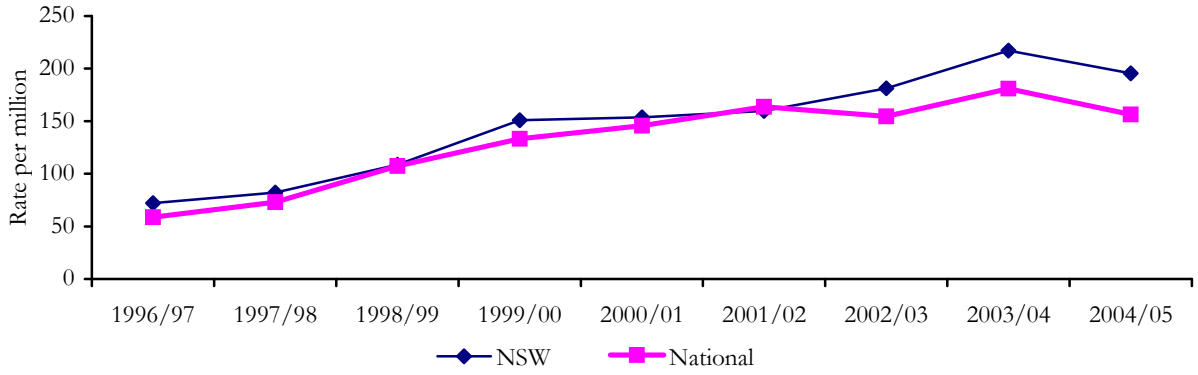
Figure 47: Number of principal amphetamine-related hospital admissions among persons aged 15-54, NSW and nationally, 1996/97-2004/05



Source: National Hospital Morbidity Database, AIHW; Roxburgh & Degenhardt (2006)

Figure 48 shows the number per million persons of hospital admissions in which the principal diagnosis was amphetamine-related. Numbers in both NSW and nationally increased over the study period to a peak in 2003/04, decreasing in 2004/05. Between 1999/00 and 2003/04, NSW has accounted for between approximately one-third and two-fifths of all principal amphetamine-related hospital admissions.

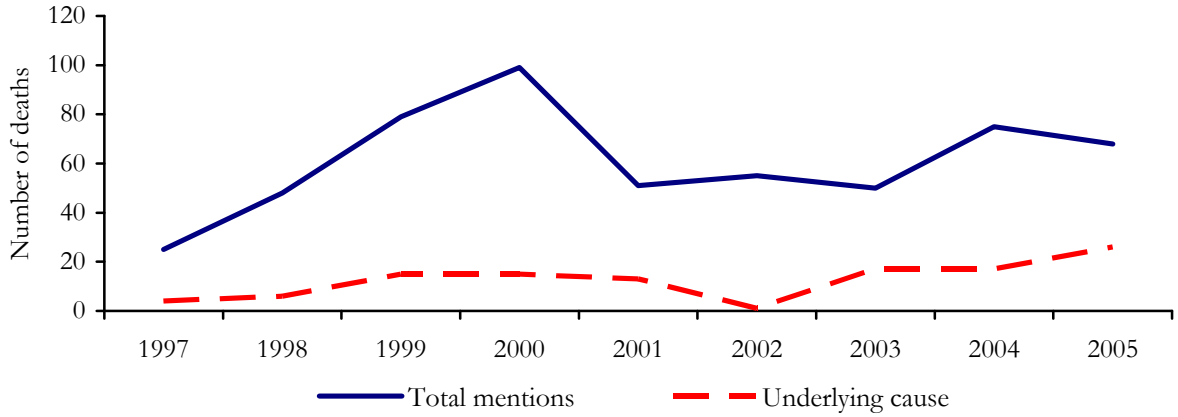
Figure 48: Number per million persons of principal amphetamine-related hospital admissions among people aged 15-54 years, NSW and nationally, 1996/97 to 2004/05



Source: National Hospital Morbidity Database, AIHW; Roxburgh & Degenhardt (2006)

Figure 49 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 1997-2005 (Degenhardt and Roxburgh, 2007b). 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 in which methamphetamine was mentioned have decreased slightly since 2004 (68 in 2005 vs. 75 in 2004) and remain lower than in 2000 (99 deaths). However, the number of deaths in which methamphetamine was determined to be the underlying cause remained have increased slightly, with 26 recorded in 2005 (this figure was 17 in 2004).

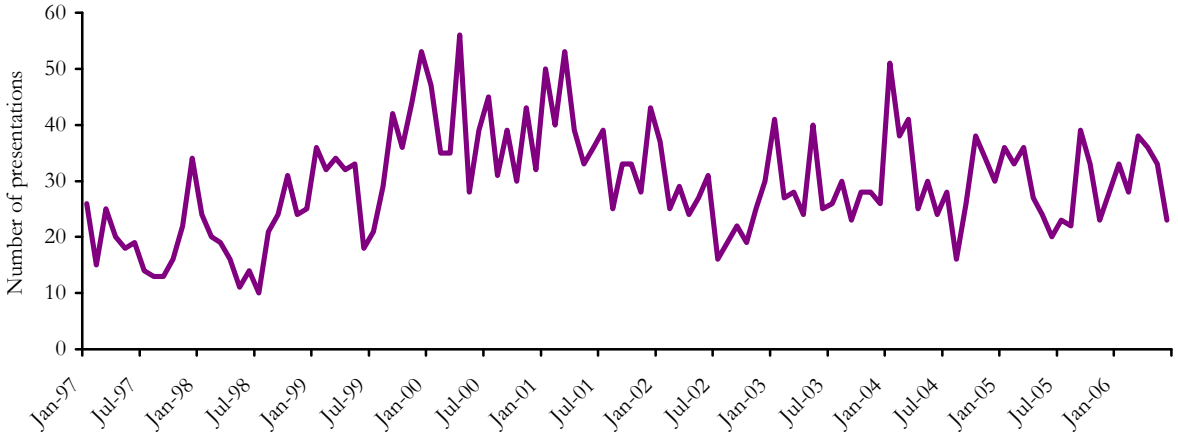
Figure 49: Number of accidental drug-induced deaths mentioning methamphetamine (total and underlying) among those aged 15-54 years in Australia, 1997-2005



Source: Australian Bureau of Statistics Causes of Death database; Degenhardt and Roxburgh (2007b)

The total number of amphetamine overdose presentations to NSW emergency departments has fluctuated in the past two years, accounting for between 20 and 40 visits per month state-wide since September 2004 (Figure 50).

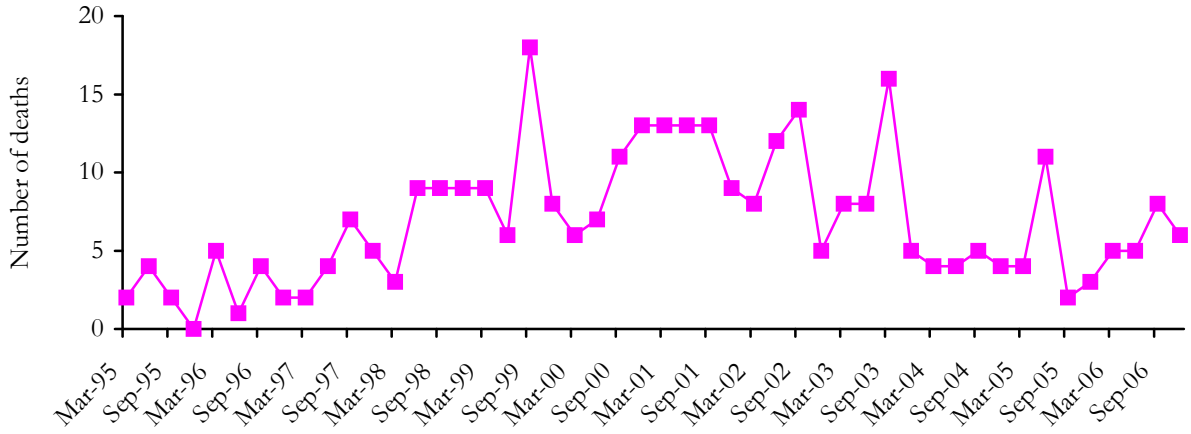
Figure 50: Amphetamine overdose presentations to NSW emergency departments, 1997-2006



Source: Emergency Department Information System, NSW Department of Health.
NB: Figures refer to overdose only and do not include presentations for use disorders.

The number of suspected drug-related deaths in which amphetamines were detected has fluctuated over the past few years (Figure 51). Figures have remained at less than ten per quarter for the last three years, with the exception of April-June 2005 (11 deaths). These figures do not include methylenedioxymethamphetamine, methylenedioxyamphetamine, or p-methoxyamphetamine. Also excluded are pseudoephedrine and ephedrine as only deaths related to illicit amphetamines are presented.

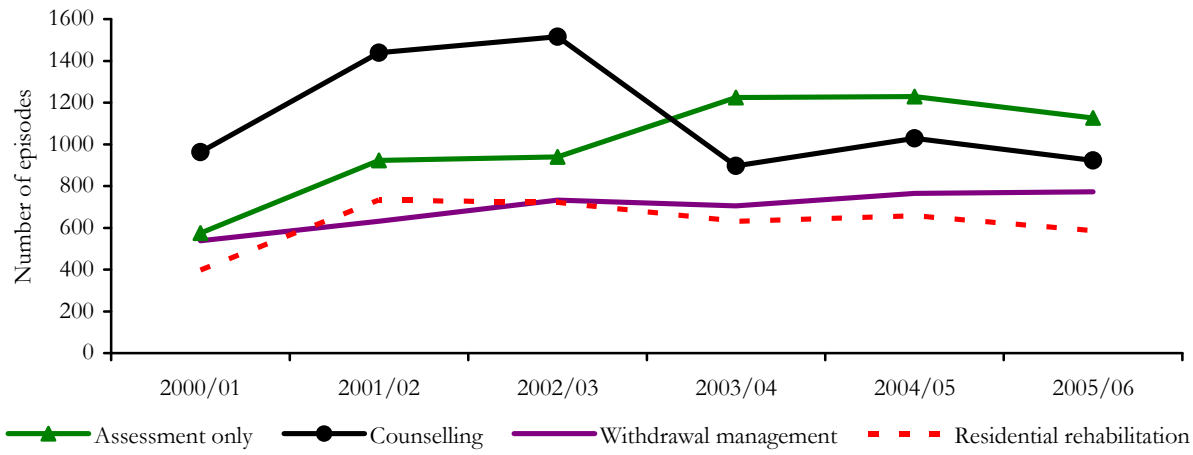
Figure 51: Number of suspected drug-related deaths in which illicit amphetamines were detected post-mortem, by quarter, 1995-2006



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 decreased slightly or remained stable over the past twelve months for all four of the main forms of treatment (Figure 52). 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. The numbers engaged in residential rehabilitation have remained relatively stable over the past three years (from 631 episodes in 2003/04 and 587 in 2005/06).

Figure 52: Number of amphetamine treatment episodes by treatment type, NSW 2000/01-2005/06



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. Numbers are based on the date of commencement.

5.6 Trends in methamphetamine use

All participants were asked at the end of the survey if they had observed any recent changes in drug use. A common theme was the discussion of an increase in speed and ice/crystal use. In some instances this was attributed to low availability and purity of heroin, which was still seen as the preferred drug for many IDU. Several users also thought that there had been an increase in mental health problems and, reflecting law KE reports, aggression. They attributed these changes to in increase in ice use among the people with whom they had had contact recently.

5.7 Summary of methamphetamine trends

- Prices for a 'point' of all three forms of methamphetamine remained stable, and this remained the most common purchase amount. Prices for larger amounts of speed powder and base increased slightly, while larger amounts of ice decreased in price compared to 2005. However, in many cases only small numbers of participants had made such purchases so results should be interpreted with caution.
- All three forms of methamphetamine remained readily available and this was generally reported to have remained stable over the preceding six months.
- IDU and law enforcement KE data suggested that there had been little to no change in the purity of methamphetamine, with speed powder remaining relatively low, and ice/crystal higher and variable. Base was considered to be of 'medium' purity.
- Almost three-quarters of participants reported use of methamphetamine over the preceding six months, with increases noted in the prevalence of speed and ice/crystal use, and a slight increase in base use. Use of liquid methamphetamine and of pharmaceutical stimulants remained low.

- Frequency of methamphetamine use increased from 2005, but continued to be relatively sporadic across all three forms, with the majority of users having used weekly or less. However, 10% of the entire IDU sample reported daily methamphetamine use in 2006, an increase from 5% in 2005.
- Ice was the most commonly used form of methamphetamine in the preceding six months, followed by speed powder. The proportion reporting having predominantly used base in this time decreased markedly compared to 2005. These figures are similar to those reported in 2004.
- 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 among clients were reported by some health services, and had become increasingly problematic for some law enforcement personnel.
- As in previous years, indicator data showed a somewhat mixed picture with regard to amphetamine use. Reflecting law enforcement KE reports, an increase in recorded incidents of possession/use occurred in the inner city, whilst figures remained stable in Canterbury-Bankstown, Fairfield-Liverpool and state-wide. Increases were also reported in the number of methamphetamine labs detected and the number of calls to telephone helplines related to ice/crystal use. Other health indicators remained stable (e.g. emergency department admissions and numbers of hospital admissions).

6.0 COCAINE

Participants were asked if they were able to comment on the price, purity and/or availability of cocaine, and in 2006 73% of the IDU sample felt confident to answer one or more of these survey items, representing an increase from 66% in 2005. 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, it was difficult to find cocaine KE this year, as many had not had contact with cocaine users. This suggests that cocaine use is not typically widespread among injecting drug users outside the main drug market areas in which the IDU survey is conducted. It also suggests there may be groups of cocaine users who do not typically come to the attention of health or police services in relation to their cocaine use. In 2006, three health and two law enforcement KE completed the interview with a focus on cocaine users and/or suppliers, while a further fourteen KE completing surveys focused on other drugs made some comment about cocaine use in their area (typically that its use was uncommon among users they saw). 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 $300, a slight increase from $280 reported in 2005, and a sustained increase since 2003 (Figure 53). The median prices for halfweights and quarter grams remained stable. Caps remained the most commonly purchased amounts, and the median price remained unchanged at $50.

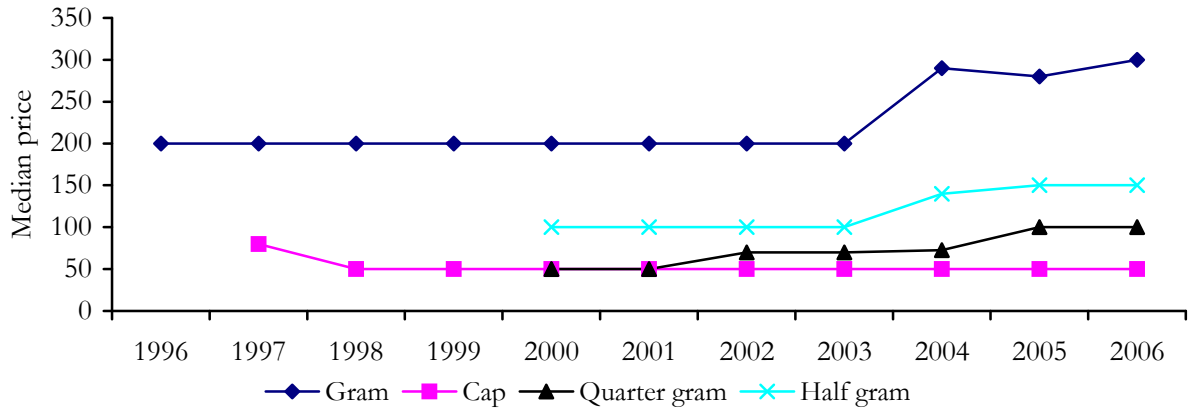
A decrease was observed in the numbers of participants who had recently purchased a cap of cocaine as compared with 2005, while the number reporting purchase of a gram almost doubled from 14 people in 2005 to 22 people in 2006. Quarter gram and halfweight purchases remained comparatively uncommon, and the number of purchasers remained similar to 2005.

Table 10: Price of most recent cocaine purchases by IDU participants, 2006

Amount	Median price* $	Range	Number of purchasers*
Cap	50 (50)	$50-$100	47 (61)
Quarter gram	100 (100)	$100-$100	5 (4)
'Halfweight' (0.5 grams)	150 (150)	$100-$270	16 (16)
Gram	300 (280)	$35-$400	22 (14)

Source: IDRS IDU interviews
*2005 data are presented in brackets

Figure 53: Median price of a gram and cap of cocaine estimated from IDU participant purchases, 1996-2006



Source: IDRS IDU interviews

Price ranges for halfweights and grams 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 purchase. It has been noted anecdotally that, with drugs such as cocaine and heroin, it is sometimes possible to buy a $50 cap or a $100 cap, with the price determined by the amount (i.e. a $100 cap contains more of the drug) and/or purity.

The majority of participants commenting on cocaine (64%; representing 47% of all participants) reported that the price had remained stable in the preceding six months. Small proportions of those commenting reported it as increasing (14%; or 11% of all participants), decreasing (3%; or 2% of all participants), fluctuating (2%; or 1% of all participants), or that they did not know (17%; or 13% of all participants). These findings represent little change from 2005.

Only one key expert commented on the price of cocaine, reporting that it cost $50 for 0.1g, and that this appeared to have decreased from between $80-$100.

6.2 Availability

Thirty percent of participants commenting on cocaine market characteristics (price, purity and/or availability) thought that it was 'very easy' to obtain cocaine, representing a decrease from 48% in 2005 (Table 11) and a return to levels reported in 2004 (32%). Forty percent of participants commenting rated it as 'easy' (an increase from 21% in 2005), 19% thought it was 'difficult' (comparable to 21% in 2005), and 10% reported it was 'very difficult' (comparable to 7% in 2005) to obtain (Figure 54). Ten percent said that they didn't know enough to be able to comment on current cocaine availability (4% in 2005).

Almost two-thirds (61%) of participants commenting on cocaine (representing 45% of all participants) believed that availability had remained stable, comparable to 62% (41% of the entire sample) in 2005 (Table 11). Fifteen percent (11% of the entire sample) reported that it had become more difficult to obtain over the last six months, and 11% (8% of the entire sample)

thought it had become easier. Two percent (1% of the entire sample) thought that availability had fluctuated over this time period, representing little change from 2005.

Table 11: Participants' reports of cocaine availability in the past six months, 2005-2006

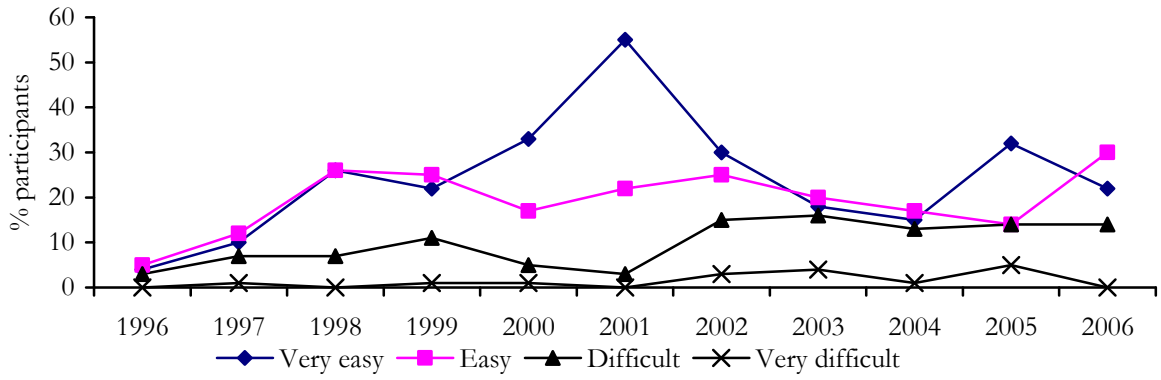
	2005 (N=154)	2006 (N=152)
Current availability		
Did not respond* (%)	34	28
Did respond (%)	66	72
Of those who responded:		
Very easy (%)	48 *(32% of entire sample)*	30 *(22% of entire sample)*
Easy (%)	21 *(14% of entire sample)*	41 *(30% of entire sample)*
Difficult (%)	21 *(14% of entire sample)*	19 *(14% of entire sample)*
Very difficult (%)	7 *(5% of entire sample)*	0 *(0% of entire sample)*
Don't know^ (%)	4 *(3% of entire sample)*	10 *(7% of entire sample)*
Availability change over the last six months		
Did not respond* (%)	34	27
Did respond (%)	66	73
Of those who responded:		
More difficult (%)	18 *(12% of entire sample)*	15 *(11% of entire sample)*
Stable (%)	62 *(41% of entire sample)*	61 *(45% of entire sample)*
Easier (%)	13 *(8% of entire sample)*	11 *(8% of entire sample)*
Fluctuates (%)	1 *(0.6% of entire sample)*	2 *(1% of entire sample)*
Don't know^ (%)	7 *(5% of entire sample)*	11 *(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 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

Figure 54: Participant reports of current cocaine availability, 1996-2006

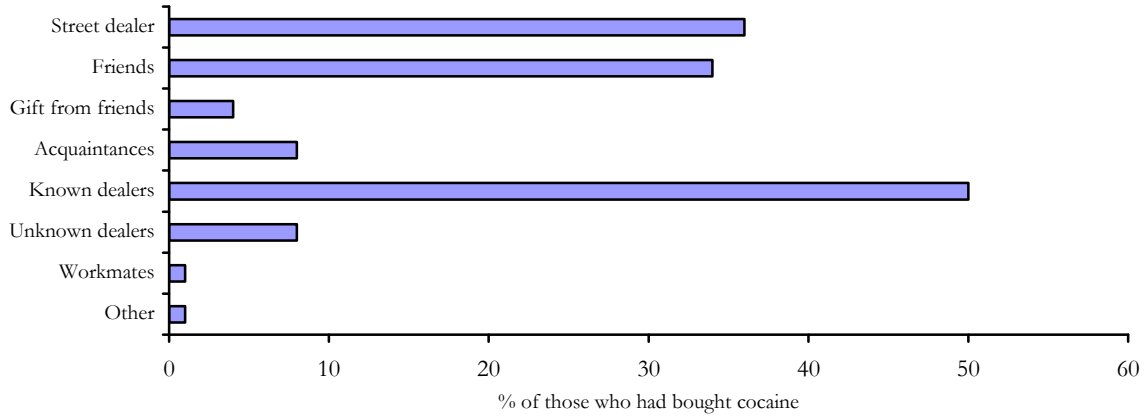


Source: IDRS IDU interviews

KE reports suggested an increase in cocaine availability in New South Wales over the preceding twelve months. This was a general increase, and not restricted to injecting drug users.

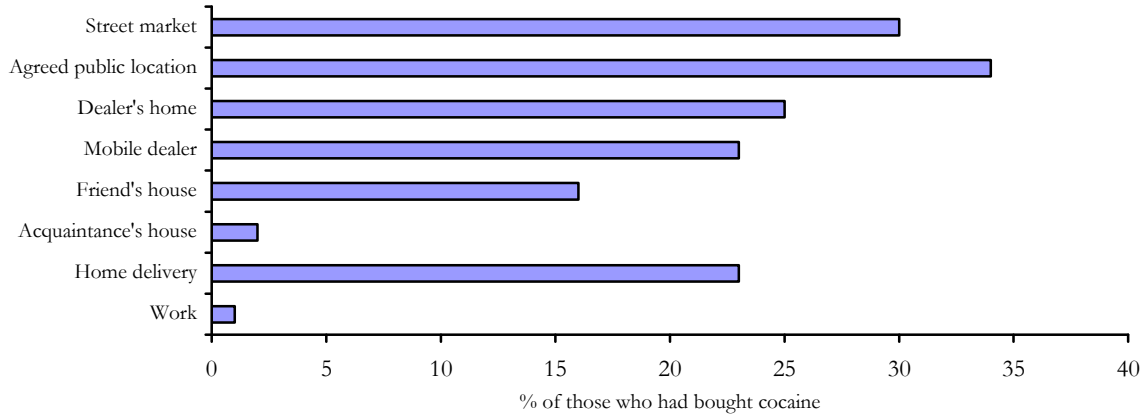
The most common sources of purchasing cocaine over the preceding six months were known dealers (50%), followed by street dealers (36%) and friends (34%; Figure 55). Locations where these purchases were most commonly made were varied (Figure 56).

Figure 55: People from whom cocaine was purchased in the preceding six months, 2006



Source: IDRS IDU interviews
NB: More than one response could be selected

Figure 56: Locations where cocaine was scored in the preceding six months, 2006



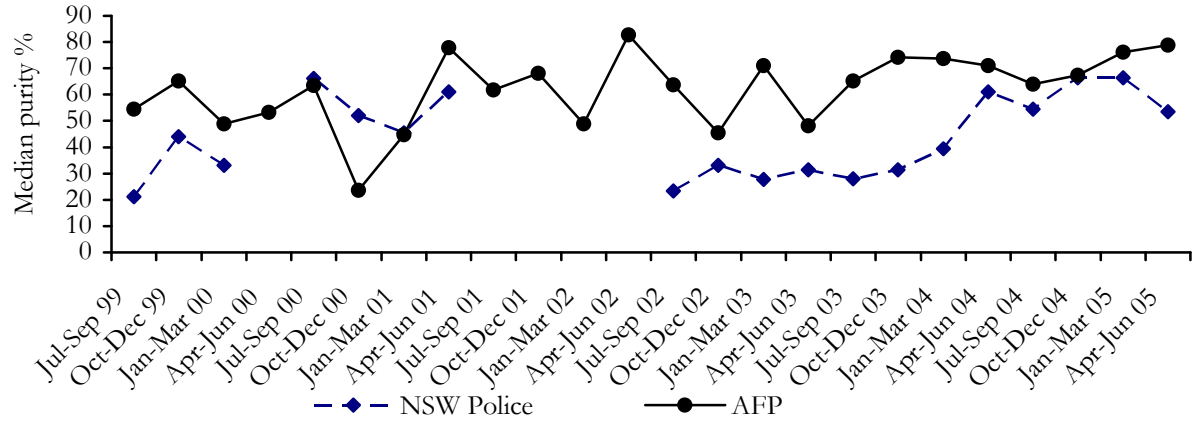
Source: IDRS IDU interviews
NB: More than one response could be selected

6.3 Purity

The purity of cocaine seizures analysed by NSW Police has fluctuated between 2003/04 and 2004/05 and remained higher than previous years (Figure 57). The purity of cocaine seizures analysed by the AFP remained relatively stable over this time, and purity 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 58). 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. Data for 2005/06 were unavailable at the time of publication.

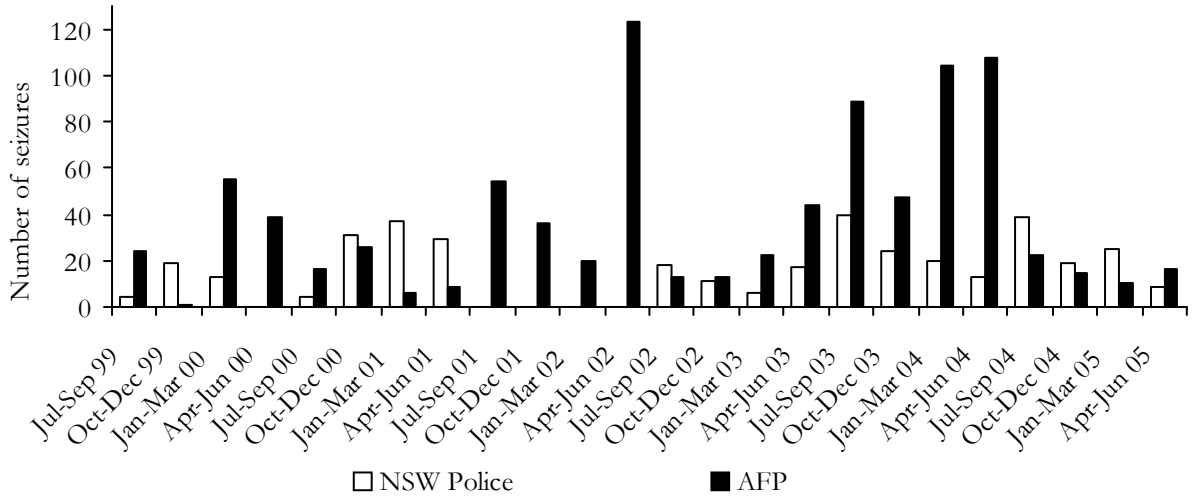
Figure 57: Purity of cocaine seizures analysed in NSW, by quarter, 1999/00-2004/05



Source: ABCI 2001, 2002; ACC, 2003, 2004, 2005
NB: NSW Police data for the financial year 2001/02 were unavailable. Data for 2005/06 were unavailable at time of publication

Figure 58 shows the number of seizures analysed in NSW between 1999/00 and 2004/05. The number of seizures analysed by the NSW Police remained relatively stable between the third quarter of 2003 and the second quarter of 2005 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. Data for 2005/06 were unavailable at the time of publication.

Figure 58: 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. Data for 2005/06 were unavailable at time of publication

Reports of perceived cocaine purity among IDU were mixed, with one-third of those commenting reporting it as 'medium' and slightly lower proportions reporting it as 'high' (22%) or 'low' (23%; Table 12). Ten percent thought it fluctuated, and 13% commented on other aspects of the cocaine market but stated that they were unable to comment on purity. Approximately one-third (36%; 26% of the entire sample) thought that cocaine purity had remained stable in the preceding six months, and one-quarter (25%; 18% of the entire sample) thought that it was decreasing. These are comparable to 2005 figures.

Table 12: Participants' perceptions of cocaine purity in the past six months, 2005-2006

Current purity	2005 (N=154)	2006 (N=152)
Did not respond* (%)	34	27
Did respond (%)	66	73
Of those who responded:		
High (%)	20 *(13% of entire sample)*	22 *(16% of entire sample)*
Medium (%)	40 *(20% of entire sample)*	33 *(24% of entire sample)*
Low (%)	28 *(18% of entire sample)*	23 *(16% of entire sample)*
Fluctuates (%)	6 *(4% of entire sample)*	10 *(7% of entire sample)*
Don't know^ (%)	7 *(5% of entire sample)*	13 *(9% of entire sample)*
Purity change over the last six months		
Did not respond* (%)	34	27
Did respond (%)	66	73
Of those who responded:		
Increasing (%)	10 *(7% of entire sample)*	9 *(7% of entire sample)*
Stable (%)	34 *(23% of entire sample)*	36 *(26% of entire sample)*
Decreasing (%)	32 *(21% of entire sample)*	25 *(18% of entire sample)*
Fluctuating (%)	11 *(7% of entire sample)*	14 *(10% of entire sample)*
Don't know^ (%)	13 *(8% of entire sample)*	16 *(12% 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 (e.g. among white collar workers). High level cocaine seizures (i.e. at importation) were reported to be of approximately 80% purity, decreasing to approximately 40% once it reached the street level. Law enforcement KE indicated that a greater proportion of seizures were at either end of the purity range reported, with a decrease in mid-range purity seizures.

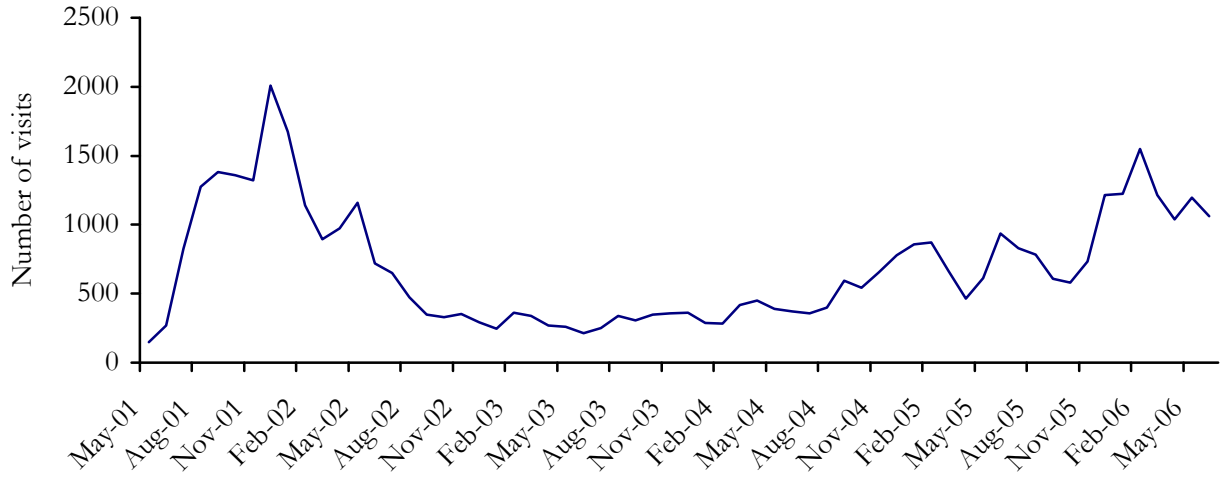
6.4 Use

6.4.1 Cocaine use among IDU participants

Sixty-seven percent of IDU participants in 2006 reported cocaine use in the preceding six months, representing a slight increase from 60% in 2005. One-fifth of the sample (20%) reported use of cocaine on the day prior to interview. Figures differed by geographic area, with significantly more participants in the inner city area reporting use of cocaine in the last six months (79% vs. 59%, Fisher's Exact Test=0.024), and almost one-third of participants in the inner city reporting use on the day prior to interview (28% vs. 12%) compared to those in the South West (Fisher's Exact Test, p=0.002).

Figure 59 shows the number of attendances to the Sydney MSIC where cocaine was the drug injected[8]. Following a peak in use in December 2001 (2010 visits), and a subsequent decline to less than 450 visits per month, numbers reporting cocaine remained relatively stable until the third quarter of 2004. From this time, numbers fluctuated, varying between 464 visits in April 2005 and 937 visits in June 2005, reaching a peak of 1549 in February 2006. Proportionately, cocaine has accounted for between 8-21% of all visits per month to the centre since September 2004 with the exception of February 2006 (27%). Overall, figures have increased over the past three years, consistent with reports from IDU and other data sources. However, levels have remained lower than those reported during late 2001-early 2002.

Figure 59: Number of attendances to Sydney MSIC where cocaine was injected, 2001-2006



Source: Sydney MSIC, Kings Cross

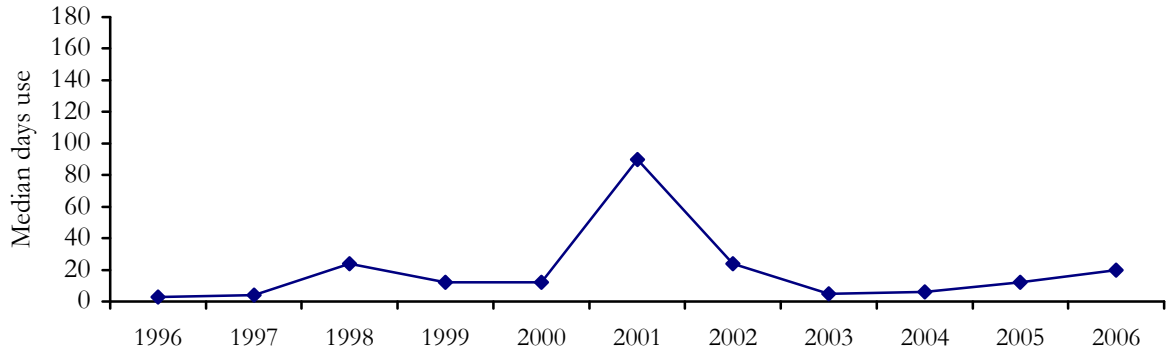
6.4.2 Current patterns of cocaine use

Frequency of cocaine use among IDU participants in the last six months increased from a median of twelve days in 2005 (i.e. approximately fortnightly use) to a median of 20 days in 2006

[8] 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

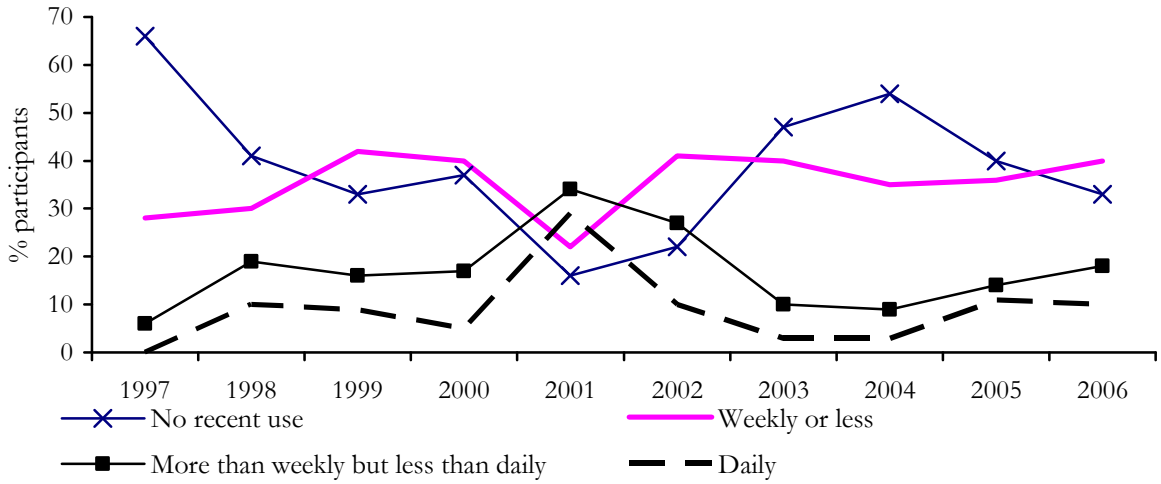
(i.e. just under weekly use). However, levels of cocaine use did not reach those reported in 2001, and the majority of participants reported using weekly or less often (Figures 60 and 61). Fifteen percent of cocaine users (10% of all participants) reported daily cocaine use, comparable with 18% of users in 2005. The majority of daily users were recruited in the inner city.

Figure 60: Median days of cocaine use in the past six months, 1996-2006



Source: IDRS IDU interviews

Figure 61: Patterns of cocaine use, 1997-2006



Source: IDRS IDU interviews

Health KE typically reported that they saw very little cocaine use among the people with whom they had had contact, although there was some suggestion of a slight increase in use, either as a primary drug, or more commonly as one of many drugs used opportunistically. Reflecting IDU reports, KE who reported cocaine use among their clients were more commonly located in central Sydney, although there were some exceptions. There was some indication of an increase in availability in South West Sydney and in an area of Western Sydney.

One health KE reported that their service had seen an increase in the number of cocaine users attending. This group of users was described as typically employed or students who regularly injected cocaine, and who were not typically in other drug treatment or contact with law

enforcement. Their physical health was described as good, but mental health issues were of concern to the KE and the users themselves, with psychotic symptoms, particularly paranoia, being apparent. Law enforcement KE reported that cocaine was more commonly being seized by police than previously, and was attributed to an increase in availability. Sydney was reported to remain one of the larger markets for cocaine in Australia.

Participants were also asked which form of cocaine they had used most often over the last six months. Eighty-seven percent of participants who had used cocaine reported that cocaine (powder and/or rock) was the form they had used most often, with no participants reporting having used crack cocaine more often. Four participants reported having used crack cocaine in the six months preceding interview. None of the KE reported hearing about the use of crack cocaine, surmising that its use remained rare to non-existent.

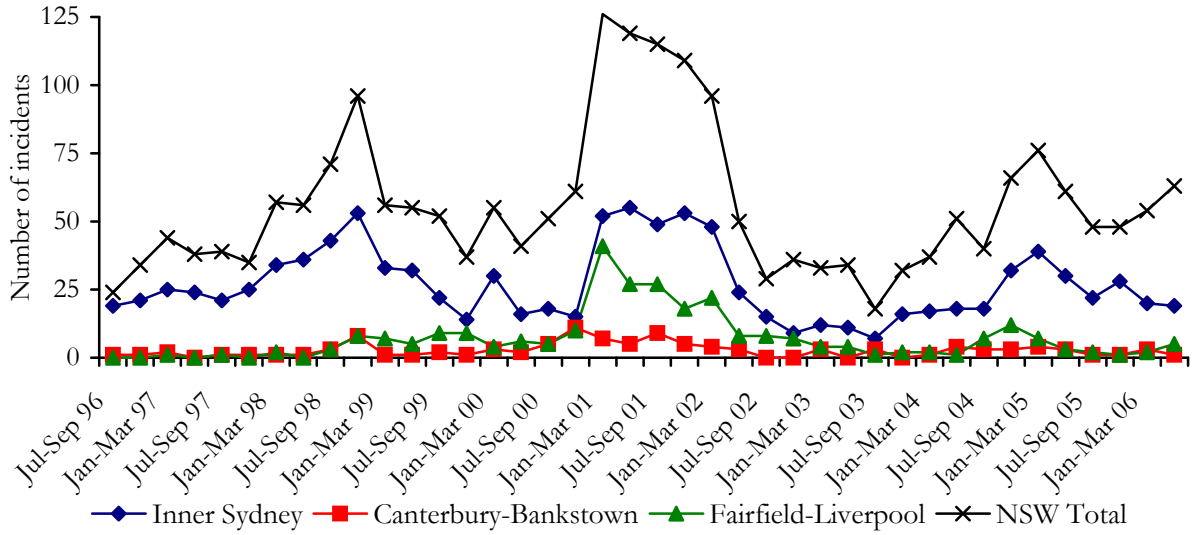
6.5 Cocaine-related harms

6.5.1 Law enforcement

Figure 62 shows the number of police recorded criminal incidents for cocaine possession/use in Inner Sydney, Fairfield-Liverpool and Canterbury-Bankstown[9]. Incidents of cocaine possession/use recorded in the Inner Sydney area reflect IDU reports of cocaine use, with peaks occurring in 1998 and 2001, and while figures have fluctuated, a significant increase of 23.9% per year occurred between July 2003 and June 2006 (NSW Bureau of Crime Statistics and Research, unpublished data accessed through the Crime Trends Tool at http://bocd.lawlink.nsw.gov.au/bocd/cmd/crimetrends/Init, February 2007) Rates have remained higher in Inner Sydney than in the South-West areas of Fairfield-Liverpool and Canterbury-Bankstown. Smaller increases were also recorded in Canterbury-Bankstown and Fairfield-Liverpool in 1998 and 2001, with a slight increase also observed in the Fairfield-Liverpool area in late 2004. The state-wide increase in recorded incidents over the most recent year available (2005/06; 213 incidents) reflect law enforcement KE reports suggesting an increase in availability generally across NSW; however, the total figure remains lower than 2004/05 (243 incidents).

[9] The regions Inner Sydney, Fairfield-Liverpool and Canterbury-Bankstown refer to ABS Statistical Subdivisions.

Figure 62: Recorded incidents of cocaine possession/use by geographic area per quarter, July-September 1996 to April-June 2006

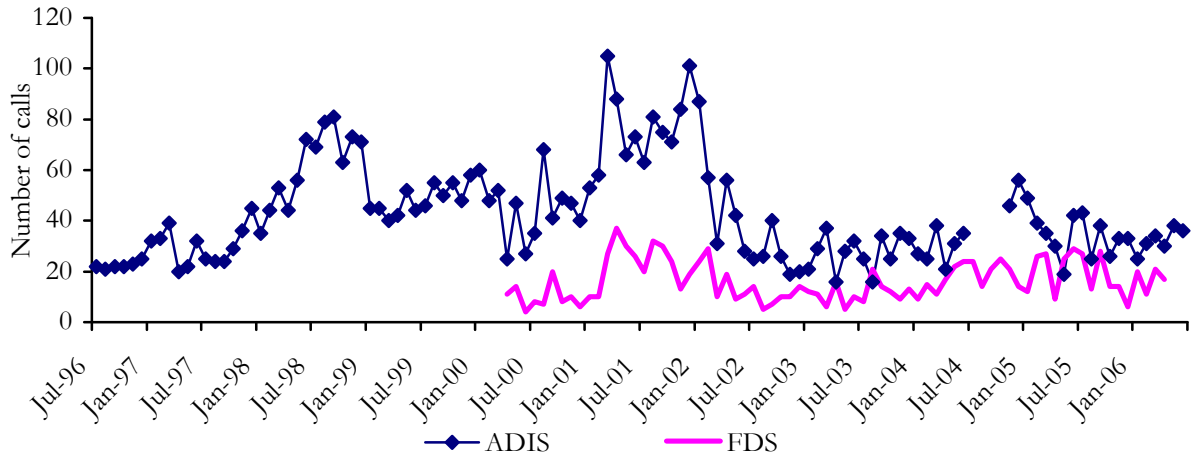


Source: NSW Bureau of Crime Statistics and Research
NB: Changes in the number of recorded incidents may be indicative of changes in police activity, or an increase in possession/use, or a reflection of both

6.5.2 Health

Calls to telephone helplines
Figure 63 shows the number of calls to the ADIS and FDS lines regarding cocaine. Figures for both services appear to have remained relatively stable over the past four 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.

Figure 63: Number of enquiries to ADIS and FDS regarding cocaine, 1996-2006



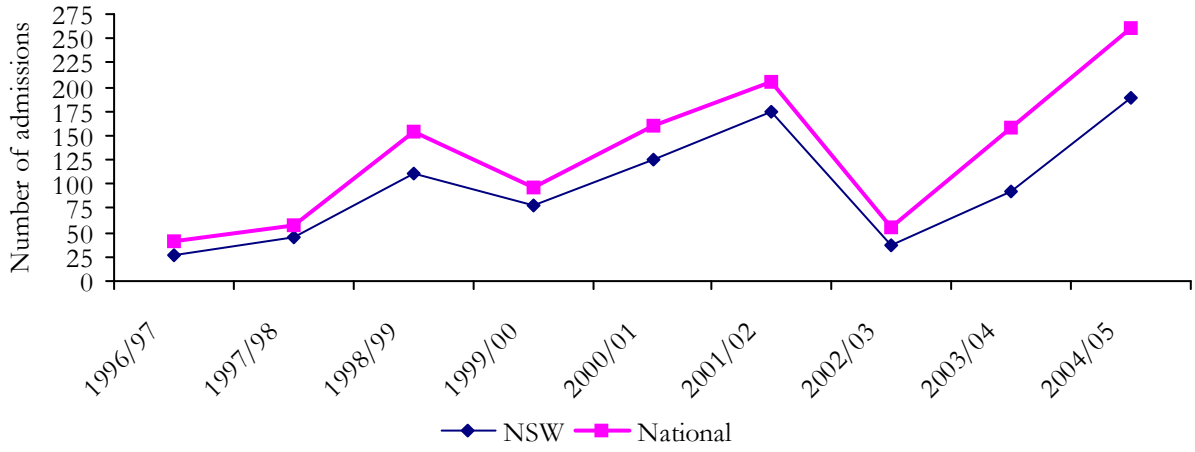
Source: ADIS and FDS

NB: FDS data were only available on a monthly basis from April 2000 and refer to calls where any mention of cocaine was made. FDS is based in NSW but data may include some calls from interstate. ADIS data include calls made in NSW and the Australian Capital Territory (ACT) and refer to the number of calls where cocaine was mentioned as any drug of concern. ADIS data were unavailable for the period July to October 2004 and FDS data were unavailable for the period May-June 2006.

Hospital Admissions

The numbers of inpatient hospital separations in which the principal diagnosis was cocaine-related are shown in Figure 64. Figures have increased over the last two years shown, following a peak and subsequent decline in admissions during 2001/02 and 2002/03.

Figure 64: Number of principal cocaine-related hospital admissions among persons aged 15-54, NSW and nationally, 1996/97-2004/05

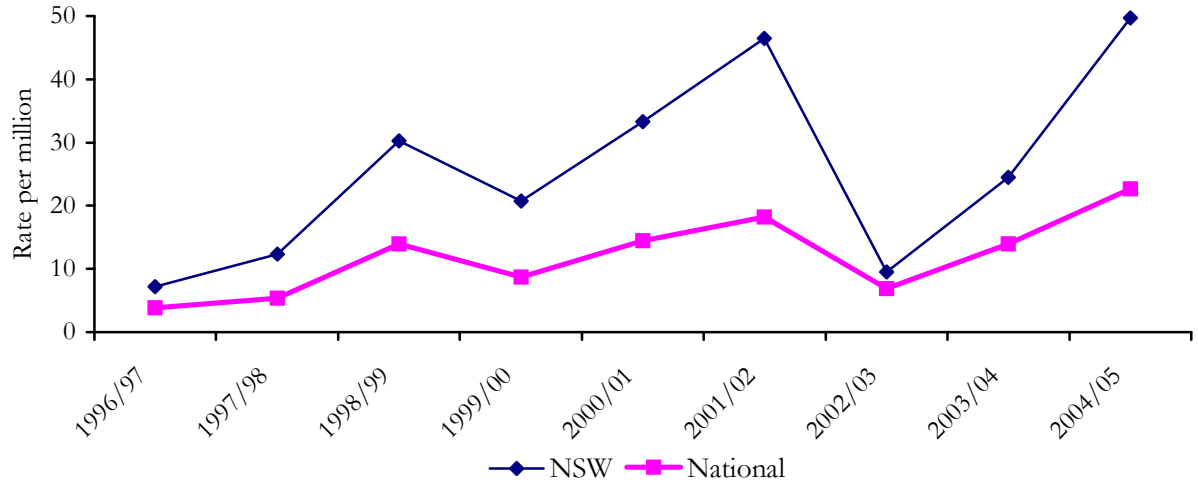


Source: National Hospital Morbidity Database, AIHW; Roxburgh & Degenhardt (2006)

The number per million persons of cocaine-related hospital admissions are shown in Figure 65. In accordance with IDU and other indicators, numbers in NSW peaked in 2001/02, decreased quite markedly between 2001/02 and 2002/03, and have increased once again to the highest recorded within the study period (49.73 in NSW and 22.71 nationally). NSW has consistently

accounted for over half of the total cocaine-related hospital admissions in Australia, and accounting for 72% in 2004/05.

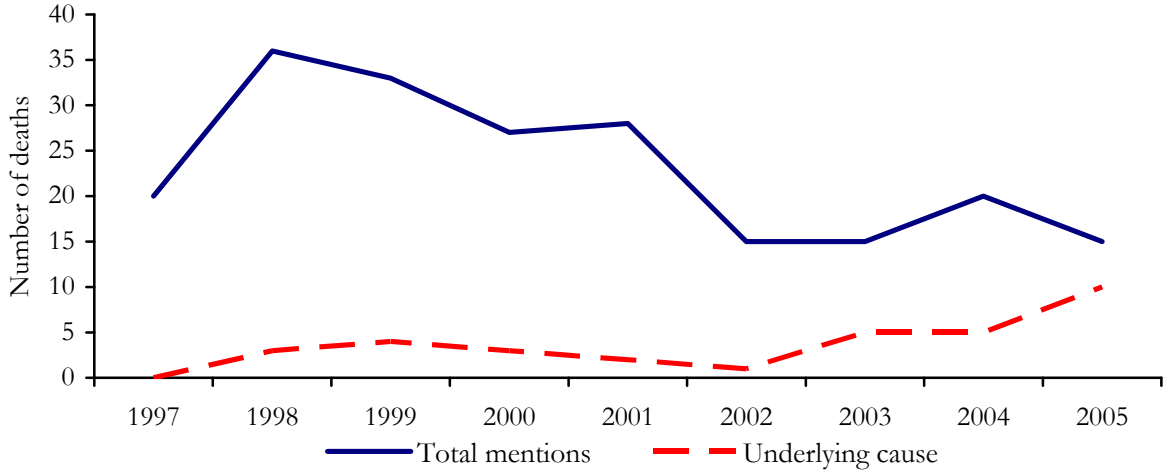
Figure 65: Number per million persons of principal cocaine-related hospital admissions among people aged 15-54 years, NSW and nationally, 1996/97-2004/05



Source: National Hospital Morbidity Database, AIHW; Roxburgh & Degenhardt (2006)

Figure 66 shows ABS data on accidental drug-induced deaths in which cocaine was mentioned among those aged 15-54 in Australia for the period 1997-2005 (Degenhardt and Roxburgh, 2007b). 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 2003, decreasing from 20 to 15 deaths (total mentions). The number of deaths in which cocaine was determined to be the underlying cause has remained at ten or less since 1997, with the greatest number (10) recorded in 2005.

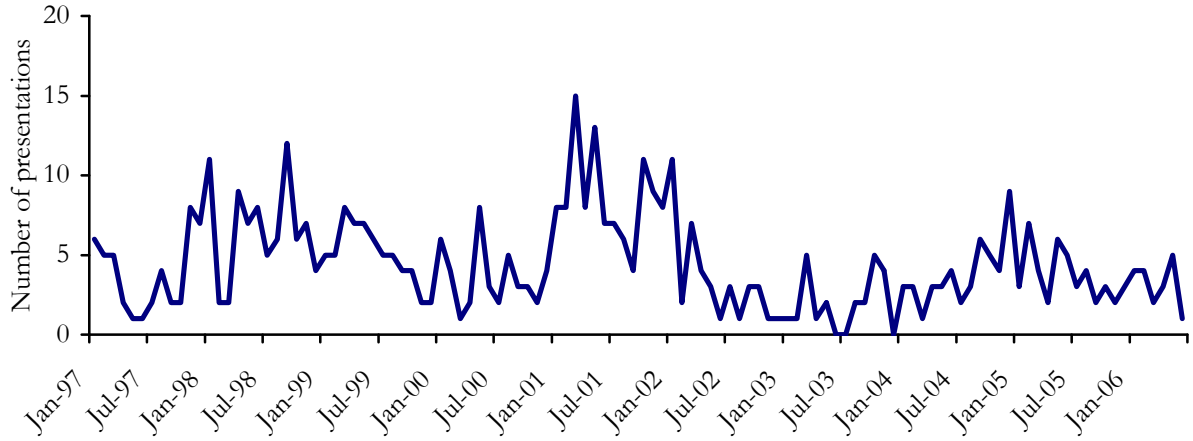
Figure 66: Number of accidental drug-induced deaths mentioning cocaine (total and underlying) among those aged 15-54 years in Australia, 1997-2005



Source: ABS mortality database; Degenhardt and Roxburgh (2007b)

The number of cocaine overdose presentations to NSW emergency departments has remained extremely low at less than ten per month since February 2002 (Figure 67). 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.

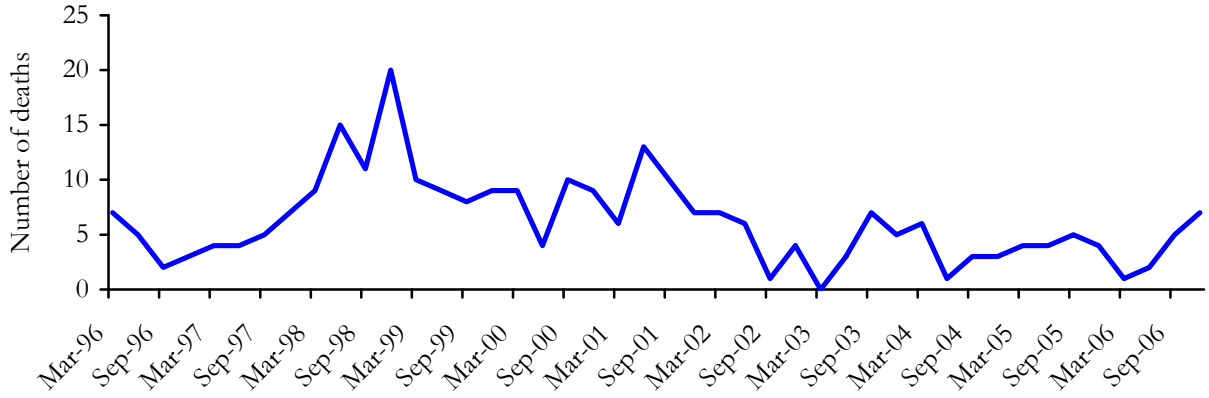
Figure 67: Cocaine overdose presentations to NSW emergency departments, 1997-2006



Source: Emergency Department Information System, NSW Department of Health
NB: Figures refer to overdose only and do not include presentations for use disorders.

The number of drug-related deaths in which cocaine was detected post-mortem has remained low over the last twelve months. Over the past five years, figures have remained at less than ten per quarter (Figure 68).

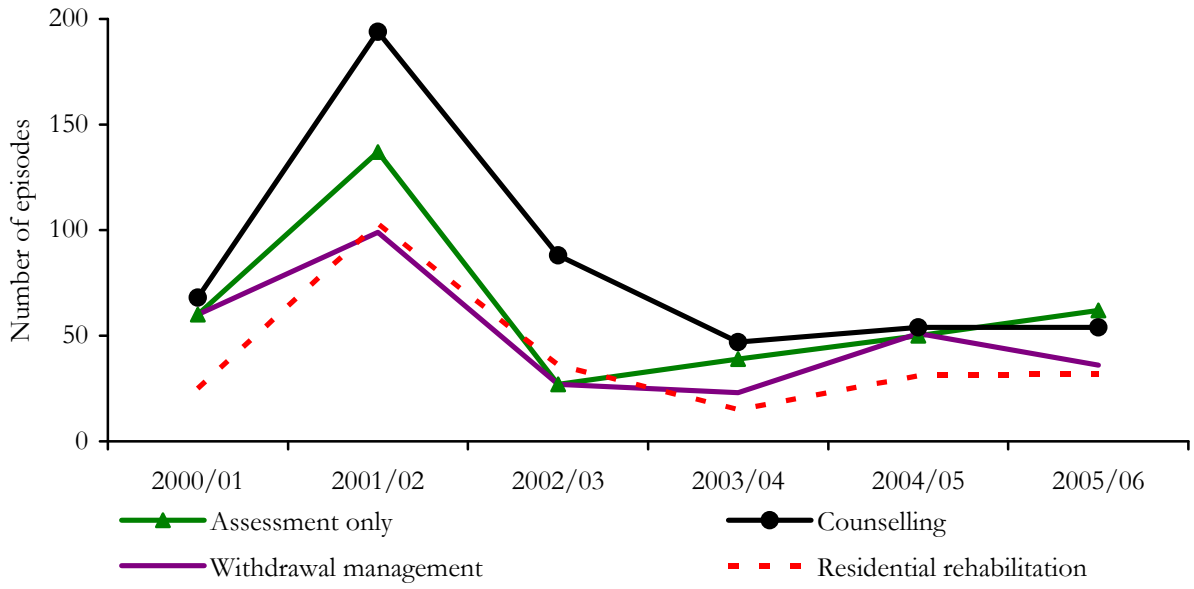
Figure 68: Number of suspected drug-related deaths where cocaine was detected post-mortem, by quarter, 1996-2006



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 69).

Figure 69: Number of cocaine treatment episodes by treatment type, NSW 2000/01-2005/06



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. Numbers are based on the date of commencement.

6.6 Trends in cocaine use

In response to general open ended questions on changes in drug use, a number of participants made reference to cocaine, commenting that more people seemed to be using it than in the past. As with methamphetamine, in some instances this was attributed to low availability and low purity of heroin.

6.7 Summary of cocaine trends

- The price for a cap has remained stable since 1998 at $50. Prices for other amounts have remained stable since 2005.
- Just over half of the entire sample reported that cocaine was readily available (i.e. 'easy' or 'very easy' to obtain), and this was reported to have remained stable over the preceding six months.
- As in 2005, participant reports of purity were mixed, although as in previous years it was most commonly reported as being of 'medium' purity.
- Increases in prevalence and frequency of cocaine use were observed in 2006, although this did not approach the high levels reported in 2001 during the peak of the heroin shortage. Fifteen percent of participants reported daily cocaine use as compared with 11% in 2005.
- Indicator data on cocaine supported IDU and KE reports of greater cocaine use in central Sydney than other areas. Health and law enforcement indicators of harms related to cocaine use were mixed. Some had increased (e.g. recorded incidents of possession/use in the inner city and over NSW generally and total mentions of cocaine in accidental drug-induced deaths), while some had remained stable (e.g. recorded incidents of possession/use in Fairfield-Liverpool and Canterbury-Bankstown, calls to telephone helplines, inpatient hospital admissions and overdose presentations).
- KE reports suggested that cocaine use had either remained stable or increased slightly, depending on the geographic area and group of people to whom the KE was referring. There was a strong indication from some law enforcement KE that there had been an increase in cocaine availability across NSW, although this had not been observed across all local area commands.

7.0 CANNABIS

Participants were asked if they were able to comment on the price, potency and/or availability of hydroponic ('hydro') and/or outdoor-grown ('bush') cannabis, and in 2006 78% of the IDU sample felt confident to answer at least some of the survey items on hydro. By contrast, only about one-third (31%) of participants were able to report on bush price, purity and/or availability, supporting previous years' findings that indicated hydro tends to dominate the Sydney market. 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 cannabis users or dealers regularly enough to be able to comment.

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

The IDRS IDU survey has differentiated between hydro and bush prices since 2003, and since 2004 it has also differentiated between been potency and availability of the two main forms used in Australia. Information on hashish (hash) and hash oil prices are collected but, as its use remains sporadic, information about potency and availability are not sought from IDU participants.

7.1 Price

Prices paid for hydro and bush by IDU participants on the last occasion of purchase are presented in Table 13. As in previous years, hydro appeared to be the more popular form of cannabis with fewer participants reporting the purchase of bush. Purchase 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 hydro. The median price paid for a gram of hydro was $20, the same as in previous years (Table 13; Figure 70). Similarly, there were no changes in prices paid for quarter ounces of half ounces, and a slight increase was observed in the median price last paid for an ounce (from $285 to $300).

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=47), followed by quarter ounces (n=40). Fifteen participants reported buying three grams for $50 and seven participants reported buying a 'stick' (usually anecdotally reported to be equivalent to a gram of cannabis) at a median price of $20.

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 (80%; representing 62% of the entire sample) also reported that the price was stable, with small proportions stating that it had increased (6%; 5% of the entire sample), decreased (5%; 4% of the entire sample) or fluctuated (2%; 1% of the entire

sample). Eight percent (6% of the entire sample) reported that they did not know. These figures represent little change from 2005.

Bush

Median prices for bush (grams, quarter ounces and ounces) remained the same as those reported in 2005 (Table 13). While the price per half ounce appears to have decreased, it should be noted that the 2006 figure is based on only one participant purchase, with the 2005 figure also based on small numbers. The number of participants who had bought bush was lower in 2006 than in 2005. For the first time since 2003 (when this distinction between forms was first made in the IDRS), the most popular purchase amount for bush was an ounce (n=9) rather than a gram (n=4). There was a tendency for larger quantities of bush to be slightly cheaper than for hydro, continuing a consistent pattern since 2003 (Figure 70).

Again, consistent with reported prices for bush, the majority of participants who commented (55%; representing 17% of the entire sample) thought prices had remained stable, representing little change from 2005 (52% of those commenting). Eleven percent (3% of all participants) thought that it had fluctuated, 2% thought it had increased, 4% thought it had decreased and 1% thought it had increased. Almost a third of participants commenting (28%; 9% of the entire sample) stated that they didn't know whether prices had changed recently (this compares with 41% of those commenting in 2005). Together, these findings again suggest that cannabis which is reputed to have been grown outdoors (bush) is less commonly used by this group than hydro.

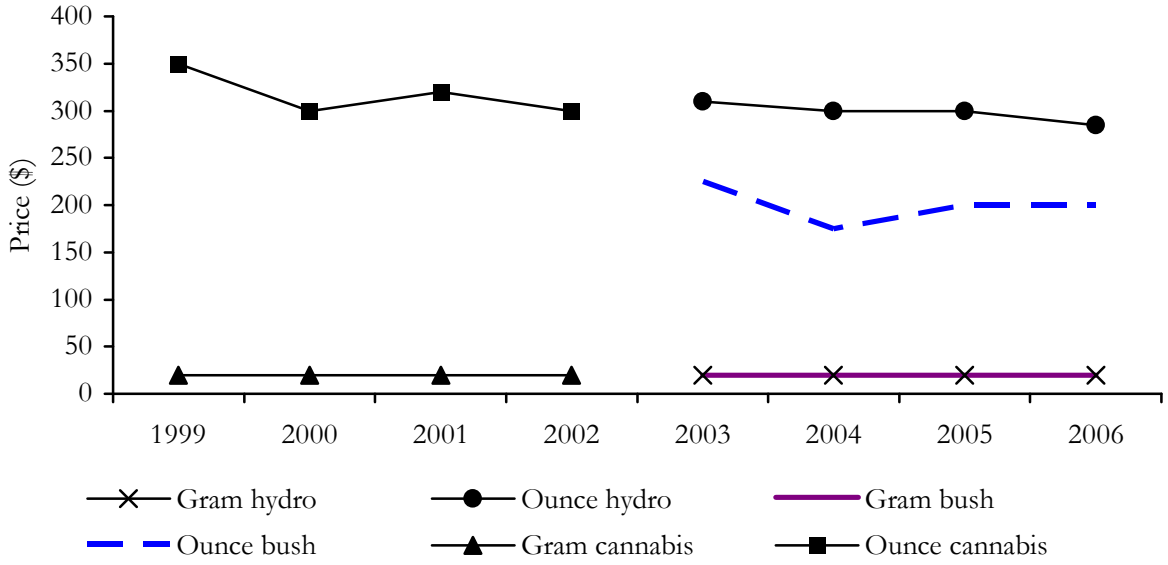
Price ranges for larger quantities of cannabis were wide (Table 13). This is likely to be a reflection of potency/availability within that particular person's network and various other circumstances which may influence the cost of a particular purchase.

Table 13: Price of most recent cannabis purchases by IDU participants, 2006

Amount	Median price* $	Range	Number of purchasers*
Hydro			
Gram	20 (20)	$20-$90	47 (55)
Quarter ounce	90 (90)	$50-$110	40 (35)
Half ounce	150 (150)	$100-$250	11 (14)
Ounce	285 (300)	$190-$400	22 (9)
Bush			
Gram	20 (20)	$20-$25	4 (31)
Quarter ounce	80 (80)	$70-$80	4 (11)
Half ounce	75 (145)	$75-$75	1 (6)
Ounce	200 (200)	$5-$320	9 (10)

Source: IDRS IDU interviews
*2005 median prices are in brackets

Figure 70: Median prices of cannabis estimated from IDU participant purchases, 1999-2006



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, 2005 and 2006.

KE reports most commonly suggested that a gram of cannabis usually cost $20 although could range up to $25, and three grams was reported to cost $50. The price for an ounce at the street level was reported to vary, with hydro costing approximately $250 and bush approximately $200, although prices could be as low as $100 depending on the quality. Prices were reported to have remained stable over the preceding six months.

Hash and Hash Oil

Five participants reported buying a gram of hash in the six months preceding interview for a median price of $80 (range $20-$200), and three participants reported buying a cap of hash oil for a median price of $50 (range $50-$100). While this indicates that the use of these forms of cannabis remains sporadic, it is a slight increase from 2005 when two participants reported buying hash and there were no reports of hash oil purchase.

7.2 Availability

Hydro

The vast majority of participants commenting on hydro thought it was 'very easy' (64%; representing 49% of all participants) or 'easy' (30%; representing 23% of all participants) to obtain (Table 14). The vast majority (83%; representing 65% of all participants) reported availability as 'stable' over the preceding six months. This represents little change from 2005. Note: 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 71).

Bush

In contrast to hydro, views on bush availability were more mixed, with approximately one-quarter (23%) reporting it to be 'very easy' to obtain, 26% perceiving it to be 'easy' to obtain and approximately one-third (30%) reporting it to be 'difficult' to obtain (Table 14). The proportion of participants reporting that they did not know decreased from 38% in 2005 to 15% in 2006, and the proportion who did not respond to the bush section of the interview increased from 17% in 2005 to 69% in 2006, which may, in part, be due to a change in interview administration. Participants who report that they do not know typically do so because they have not had sufficient exposure to the market or users and/or dealers of this form of cannabis. Approximately two-thirds of participants commenting on bush (64%; or 20% 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, 2005-2006

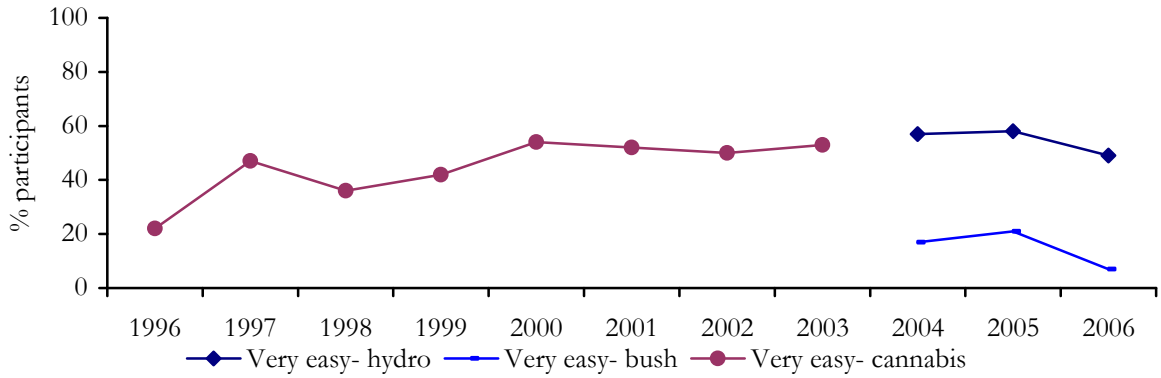
Current availability	Hydro		Bush	
	2005 (N=154)	2006 (N=152)	2005 (N=154)	2006 (N=152)
Did not respond* (%)	17	22	17	69
Did respond (%)	83	78	83	31
Of those who responded:				
Very easy (%)	70 *(58% of entire sample)*	64 *(49% of entire sample)*	26 *(21% of entire sample)*	23 *(7% of entire sample)*
Easy (%)	22 *(18% of entire sample)*	30 *(23% of entire sample)*	17 *(14% of entire sample)*	26 *(8% of entire sample)*
Difficult (%)	2 *(2% of entire sample)*	1 *(1% of entire sample)*	16 *(13% of entire sample)*	30 *(9% of entire sample)*
Very difficult (%)	None	None	4 *(3% of entire sample)*	6 *(2% of entire sample)*
Don't know^	6 *(5% of entire sample)*	6 *(5% of entire sample)*	38 *(31% of entire sample)*	15 *(5% of entire sample)*
Availability change over the last six months				
Did not respond* (%)	17	22	17	
Did respond (%)	83	78	83	
Of those who responded:				
More difficult (%)	7 *(6% of entire sample)*	1 *(1% of entire sample)*	15 *(12% of entire sample)*	13 *(4% entire sample)*
Stable (%)	82 *(68% of entire sample)*	83 *(65% of entire sample)*	47 *(39% of entire sample)*	64 *(20% of entire sample)*
Easier (%)	4 *(3% of entire sample)*	7 *(5% of entire sample)*	None	4 *(1% of entire sample)*
Fluctuates (%)	1 *(1% of entire sample)*	3 *(2% of entire sample)*	1 *(1% of entire sample)*	2 *(1% of entire sample)*
Don't know^ (%)	6 *(5% of entire sample)*	7 *(5% of entire sample)*	38 *(31% of entire sample)*	17 *(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. Changes were made to the administration of the cannabis section of the survey in 2006, resulting in differences between response rates.

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

Figure 71: Participant reports of current cannabis availability, 1996-2006

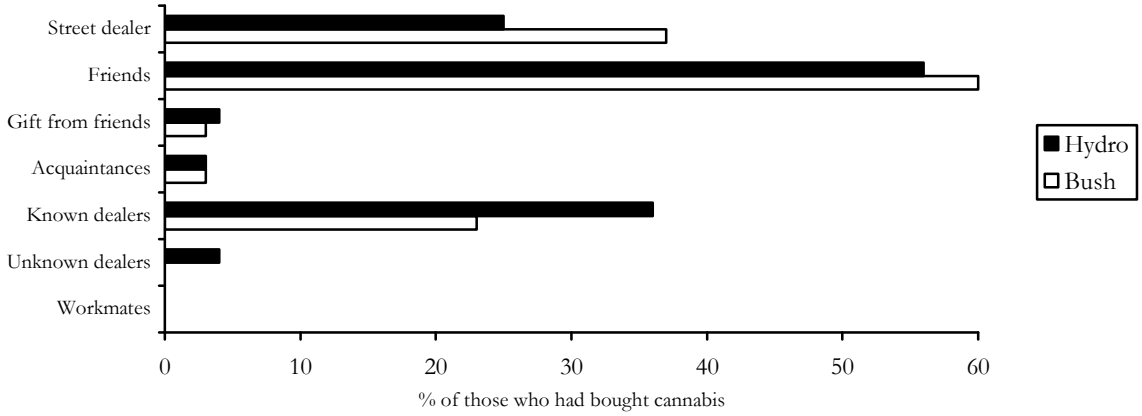


Source: IDRS IDU interviews
NB: A distinction between hydroponic and bush cannabis was introduced in 2004. Prior to this time survey items referred to any form of cannabis.

Seventy percent of participants had purchased hydro in the preceding six months and twenty percent of participants had purchased bush. Just over one quarter (27%) had bought neither hydro or bush. Patterns of purchase of hydro and bush were similar, with those who had purchased in the last six months predominantly obtaining it through friends, from a street dealer (particularly the case for bush) and/or from a known dealer (particularly the case for hydro; Figure 72). Locations where cannabis was scored were varied, including public and private locations (Figure 73).

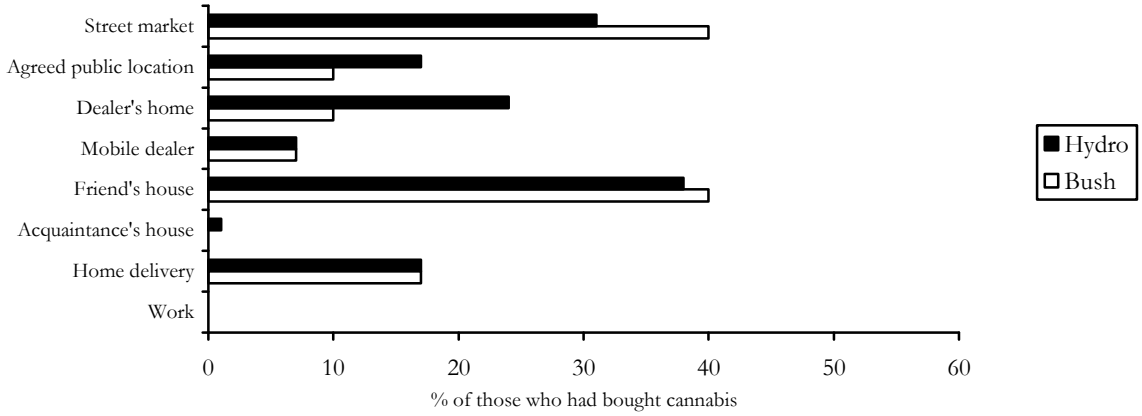
Both law enforcement and health KE focusing on specific geographic areas reported that cannabis was easy to obtain for regular users from a range of demographic groups and that this had remained stable over the preceding six months. Hydroponic cannabis was reported as the more prevalent form in metropolitan areas (e.g. Sydney, Newcastle), although one law enforcement KE reported a decrease in availability of cannabis produced by groups they targeted due to a large number of detections. Large-scale production of bush cannabis was reported to occur in rural NSW, for example in the North-East, and one law enforcement KE noted that since the 1980s there had been a move away from outdoor crops towards indoor (hydro) cultivation scattered across a number of locations, reflected in an increasing number of hydroponic set-up detections over the preceding five years. However, outdoor crop sizes detected by police had remained fairly stable over the year preceding interview. A law enforcement KE noted that a Canadian strain believed to be of particularly high potency was being grown hydroponically.

Figure 72: People from whom cannabis was purchased in the preceding six months, 2006



Source: IDRS IDU interviews
NB: More than one response could be selected

Figure 73: Locations where cannabis was scored in the preceding six months, 2006



Source: IDRS IDU interviews
NB: More than one response could be selected

7.3 Potency

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

Hydro

The majority of participants commenting on hydro reported it as currently being of 'high' potency (73%; 57% of the entire sample), followed by 20% (representing 15% 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 2% (1% of the entire sample) believed that it had fluctuated. Four percent (3% of the entire sample) stated that they did not know. The majority (69% of

those commenting; 53% of the entire sample) believed that potency had remained stable in the preceding six months, with smaller proportions reporting that it had increased or decreased (9% each, representing 7% of the entire sample each) or fluctuated (7%; 5% of the entire sample). Eight percent (6% of all participants) stated that they did not know. Overall these figures follow the same pattern as 2005 reports.

Bush

Among those who commented, almost half (49%; 15% of all participants) thought it was of medium potency, 17% (5% of all participants) thought it was of high potency, and 13% (4% of all participants) thought it was of low potency. A further 4% (1% of all participants) thought it fluctuated and 17% (5% of all participants) said that they didn't know. When asked about whether potency had changed over the last six months, most respondents (60% of those commenting; 18% of the entire sample) stated that it had remained stable over the last six months. Only small proportions thought that it had increased, decreased or fluctuated (each 6%; 2% each of the entire sample). Seventeen percent of those commenting (5% of the entire sample) stated that they didn't know whether potency had changed recently or not.

Overall, these findings indicate that, according to IDU perceptions, hydroponic cannabis appears to dominate the market, and is generally seen as being higher in potency than outdoor-grown 'bush' cannabis. Potency of both forms was generally perceived to have remained stable. This represents little change from 2005.

No routine data are currently collected on cannabis potency in Australia. Therefore, KE were only able to comment based on perceptions and anecdotal reports. A number of KE concurred with the previously documented perception among users that hydroponic cannabis contained greater quantities of THC (delta-9 tetrahydrocannabinol) than outdoor-grown cannabis; however, they highlighted the anecdotal nature of these reports. Potency of cannabis generally was reported to have remained stable or to have increased over the last six months. One law enforcement KE reported that cannabis potency had not changed for a decade or more.

7.4 Use

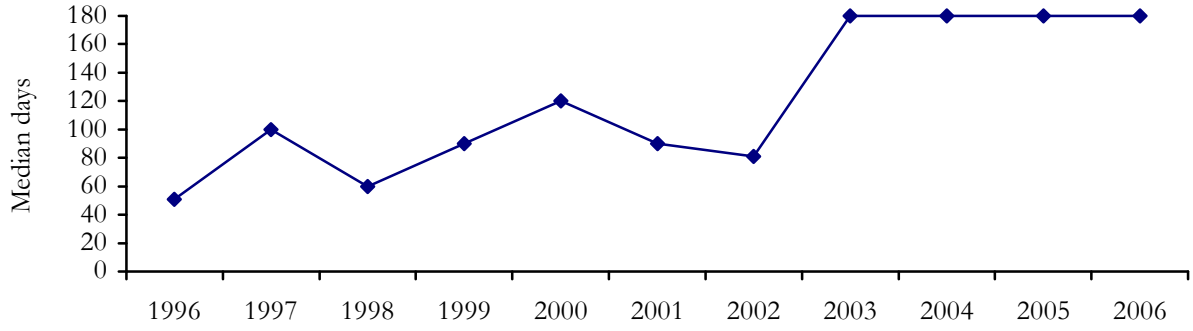
7.4.1 Cannabis use among IDU participants

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 (80% also said so in 2005).

7.4.2 Current patterns of cannabis use

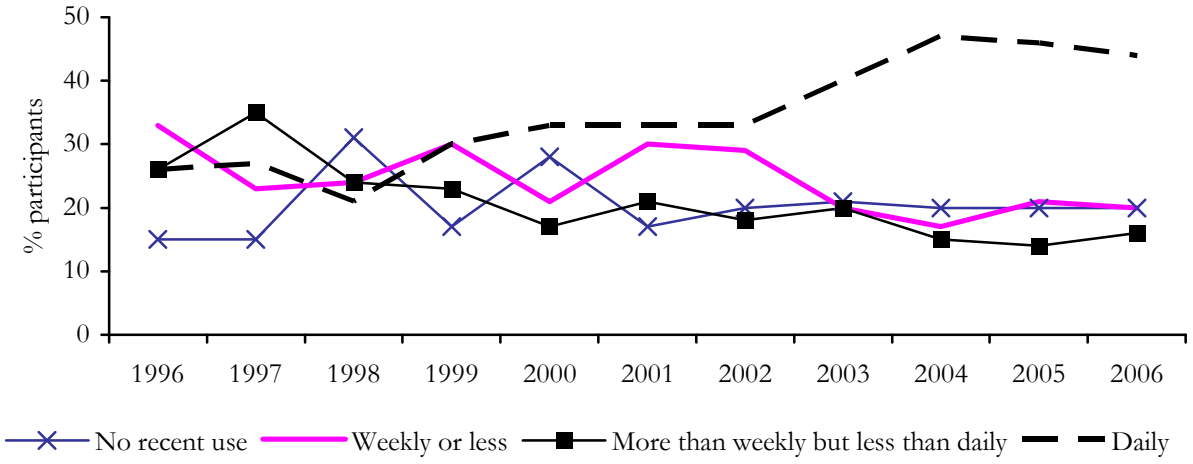
The median number of days of cannabis use among those who used was 180 in the preceding six months (i.e. daily). This has remained stable for the past four years, with levels remaining substantially higher than previously (Figure 74). Forty-four percent of IDU participants (55% of the cannabis users) reported daily use in the preceding six months, representing little change from 2005 (Figure 75).

Figure 74: Median number of days of cannabis use in the past six months, 1996-2006



Source: IDRS IDU interviews

Figure 75: Patterns of cannabis use, 1996-2006



Source: IDRS IDU interviews

In agreement with IDU data, but commenting on a broader range of users, 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. It was often smoked with tobacco and typically smoked in a cone/bong. The majority (typically those working in treatment services) reported that daily use was the usual pattern, either in the evenings and at weekends (typically among the full-time employed) or across the day (more common among those without a full-time occupation). The quantity used on an occasion of use ranged up to 20 or 30 cones per day.

Consistent with larger proportions of IDU reporting that they had bought hydro, 93% of respondents who had used cannabis reported using hydro in the preceding six months, and 44% of cannabis users reported using bush during this time. These figures were 96% and 69% in 2005, respectively. By contrast, only 8% of users reported use of hashish (7% in 2005) and 5% had used hash oil (2% in 2005). When asked which form of cannabis they had used most often in the last six months, the vast majority (76% of users) reported hydro and 11% of cannabis users reported bush. No participants reported hashish or hash oil as the form most frequently used,

and 13% were unable to pick a single form most used, possibly because they had used more than one form equally as often. This represents little change from 2005, when 87% of users reported using hydro most often, 11% used bush, 2% had used two or more forms equally as often, and no participants reported using hashish or hash oil most often.

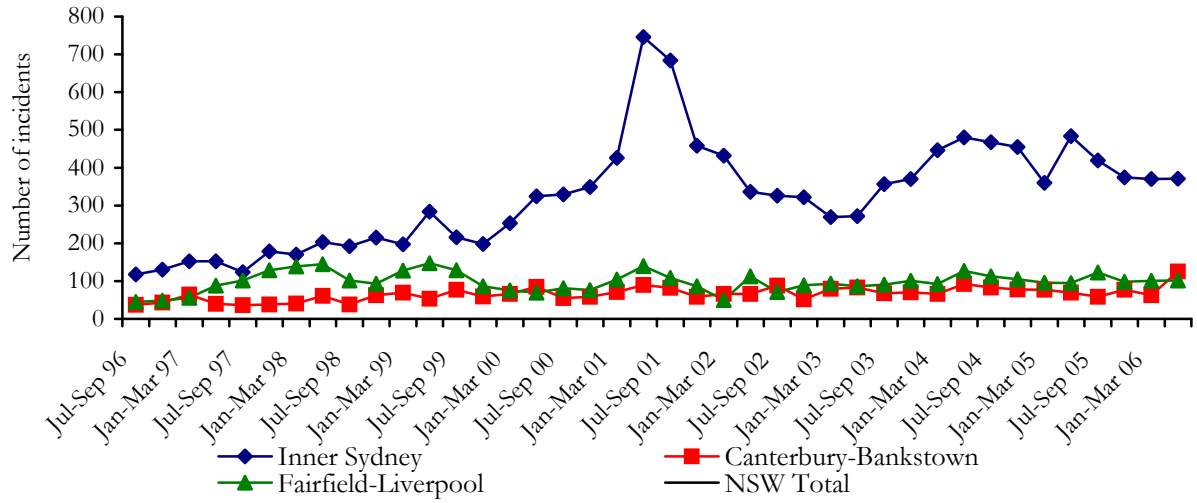
Consistent with IDU reports, hydroponic cannabis was reported by KE as the most commonly used form of cannabis, with some use of bush and very little or no use of hashish or hash oil. It is worth noting a point that was made by KE in 2005 regarding the accuracy of bush and hydro identification. For example, one KE commented that in some cases healthy bush cannabis may be mistaken for hydroponic cannabis. It should also be noted that the majority of KE were commenting on cannabis use within the greater Sydney metropolitan area, whereas large-scale bush cannabis cultivation appears to occur predominantly outside Sydney, and is consequently more accessible to users located in these areas.

7.5 Cannabis-related harms

7.5.1 Law enforcement

Figure 76 shows the number of police recorded criminal incidents of cannabis possession/use per quarter in the Inner Sydney area, Fairfield-Liverpool and Canterbury-Bankstown[10]. The number of recorded incidents in the Inner Sydney area has remained fairly stable over the past 12 months following a gradual increase from the second quarter of 2003 and fluctuations in early-mid 2005. 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 76: Recorded incidents of cannabis possession/use by geographic area per quarter, July-September 1996 to April-June 2006

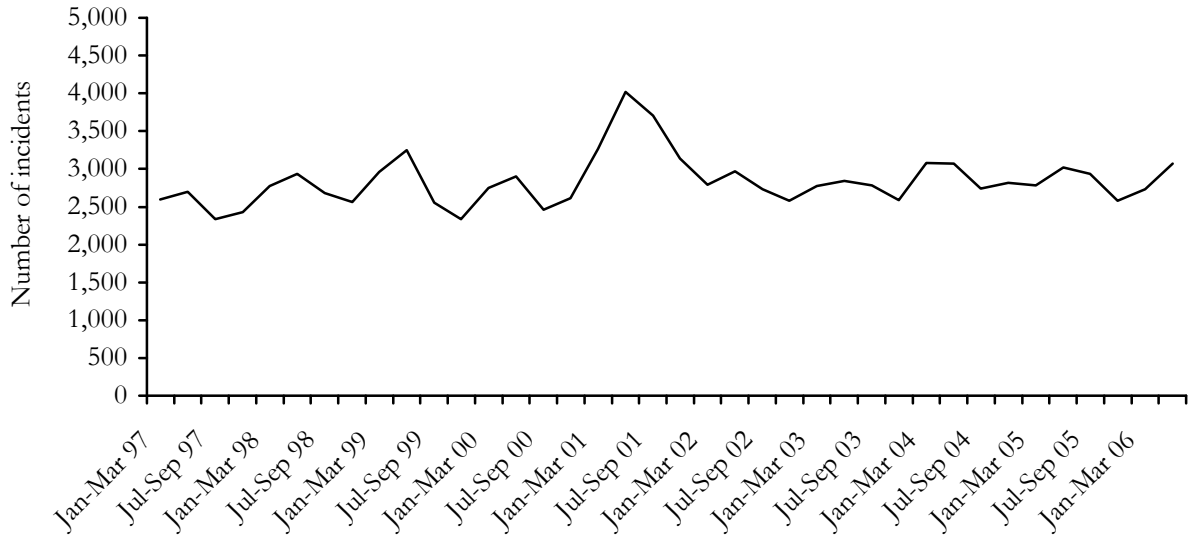


Source: NSW Bureau of Crime Statistics and Research
NB: Changes in the number of recorded incidents may be indicative of changes in police activity, or an increase in possession/use, or a reflection of both

[10] 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 with a slight increasing trend over time (Figure 77). Similar to increases noted in Inner Sydney, a substantial peak occurred in the second quarter of 2001 (April-June; 4110 incidents).

Figure 77: Recorded incidents of cannabis possession/use (whole of NSW) per quarter, July-September 1996 to April-June 2006



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

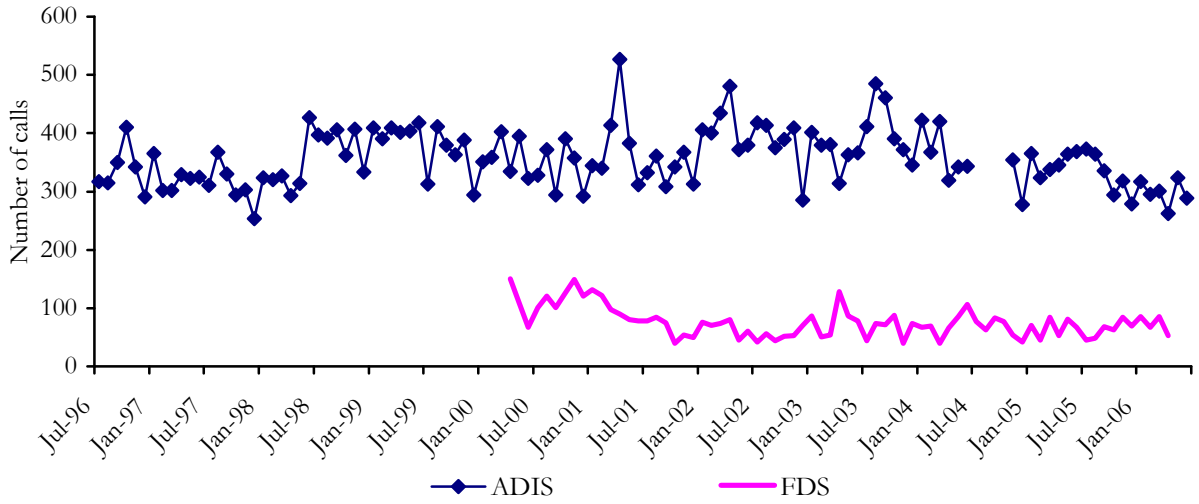
Law enforcement KE referred to changes in legislation that have occurred in order to reflect the different cultivation methods and their respective yields (see the *Drug Misuse and Trafficking Amendment [Hydroponic Cultivation] Act 2006* for details of this and other changes). This amendment means that 50 or more hydroponically grown plants are now considered as a commercial quantity, whereas previously the minimum number of cannabis plants grown by any means that could be considered a commercial quantity was 250.

7.5.2 Health

Calls to telephone helplines

The number of calls to ADIS regarding cannabis has decreased slightly over the last year, from 373 calls in July 2005 to 288 in June 2006 (Figure 78). 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. The number of calls to FDS relating to cannabis has remained fairly stable over the past few years.

Figure 78: Number of enquiries to ADIS and FDS regarding cannabis, 1996-2006

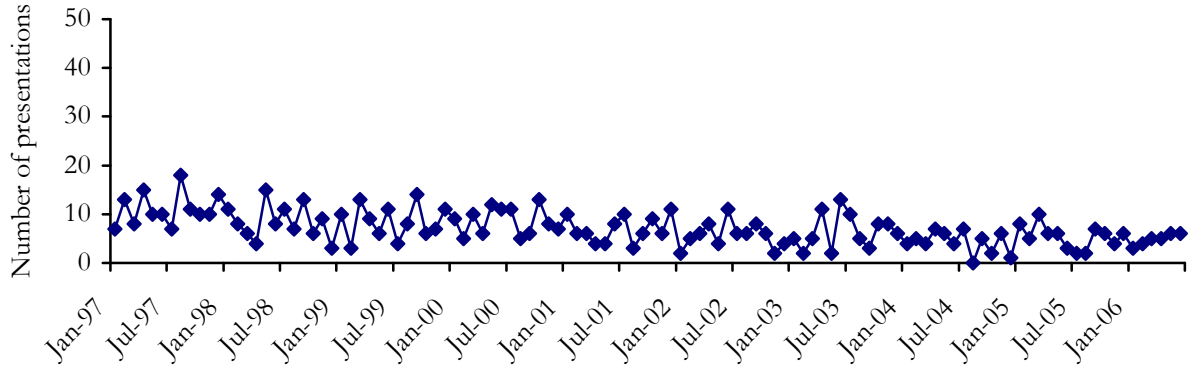


Source: ADIS and FDS
NB: FDS data were only available on a monthly basis from April 2000 and refer to calls where any mention of cannabis was made. FDS is based in NSW but data may include some calls from interstate. ADIS data include calls made in NSW and the Australian Capital Territory (ACT) and refer to the number of calls where cannabis was mentioned as any drug of concern. ADIS data were unavailable for the period July to October 2004 and FDS data were unavailable for the period May-June 2006.

Hospital admissions

The number of cannabis toxicity presentations to emergency departments has remained extremely low at less than twenty per month since 1997 (Figure 79).

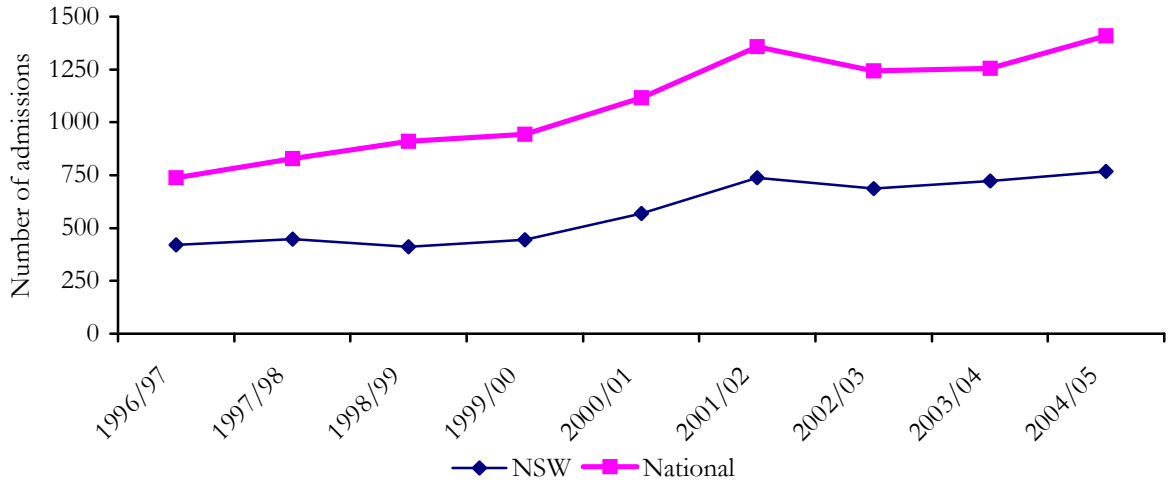
Figure 79: Cannabis toxicity presentations to NSW emergency departments, 1997-2006



Source: Emergency Department Information System, NSW Department of Health
NB: Figures refer to overdose only and do not include presentations for use disorders.

The number of hospital admissions in which the principal diagnosis was cannabis-related is shown in Figure 80, and figures have increased gradually from 1996/97.

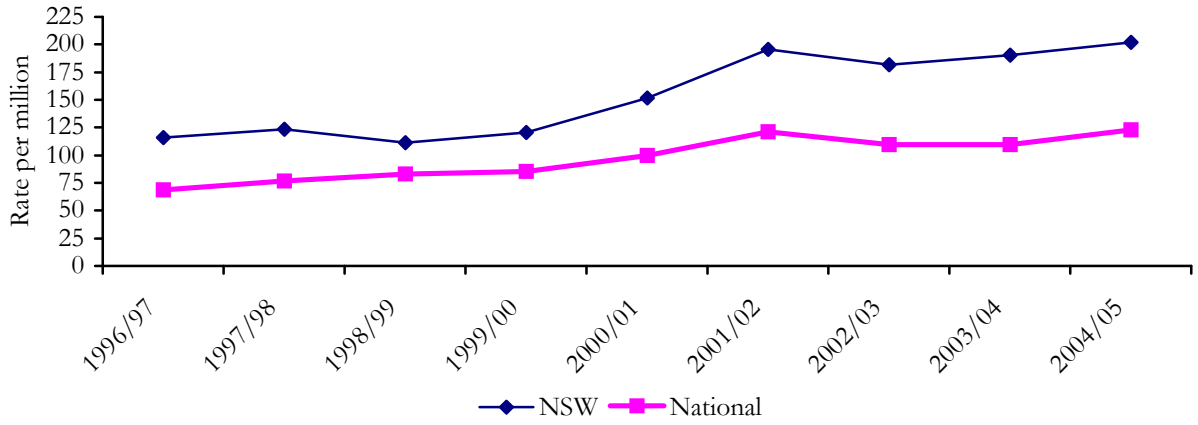
Figure 80: Number of principal cannabis-related hospital admissions among persons aged 15-54, NSW and nationally, 1996/97-2004/05



Source: National Hospital Morbidity Database, AIHW; Roxburgh & Degenhardt (2006)

Figure 81 shows the number per million persons of cannabis-related hospital admissions among people aged 15-54 years. Numbers in NSW remain higher than nationally, and have remained higher over the past three years than previously. Since 2000/01, NSW has accounted for between 50-60% of cannabis-related hospital admissions in Australia.

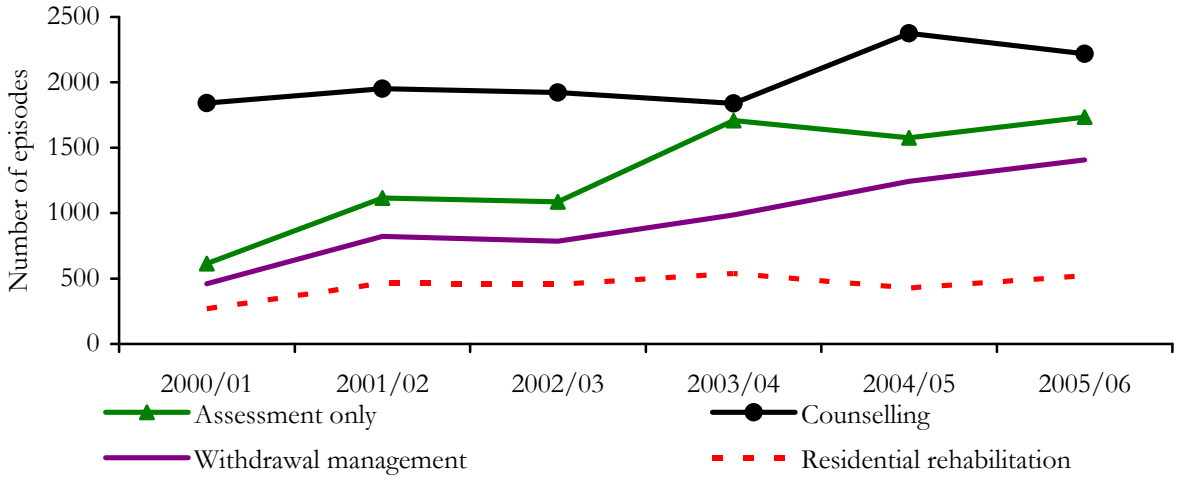
Figure 81: Number per million persons of principal cannabis-related hospital admissions among people aged 15-54 years, 1996/97 to 2004/05



Source: National Hospital Morbidity Database, AIHW; Roxburgh & Degenhardt (2006)

Figure 82 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 increased over the past year, from 1575 in 2004/05 to 1735 in 2005/06 and have overall shown an increasing trend since 2000/01 (613 episodes). Similarly, numbers entering withdrawal management have increased since 2000/01 while numbers entering counselling have declined since 2004/05, although they remain higher than previous years. 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 82: Number of cannabis treatment episodes by treatment type, NSW 2000/01-2005/06



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. Numbers are based on the date of commencement.

The majority of health KE reported that there had been no change in the number of clients seeking treatment for problems associated with their cannabis use, while some services had observed an increase. A number of KE noted an increase in people specifically seeking medication for symptomatic treatment of cannabis withdrawal, e.g. for insomnia. There was also a report of increased enquiries from cannabis users about drug driving testing and workplace drug testing issues, e.g. rules and penalties.

7.6 Trends in cannabis use

As in previous years, few IDU participants commented on open ended survey items on general drug trends with reference to cannabis. This may in part be due to a lack of noticeable changes occurring among this group.

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 a greater number of participants reported recent purchase of hydro compared to bush.
- Hydroponic and bush cannabis remained readily available, particularly hydro, with the majority of participants reporting both forms as 'easy' or 'very easy' to obtain. That a smaller proportion of participants were able to complete the bush section of the questionnaire also suggests less use and perhaps availability among this group (as compared to hydro).
- 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. Slightly more participants reported recent purchase of hash and hash oil than in 2005; however, use of these forms 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 of cannabis had generally remained stable, with either no change or an increase in people seeking treatment, including medication for withdrawal. In agreement with IDU survey data, the predominance of the hydroponic form appeared to extend among other groups of users. There was some indication of a decrease in the availability of hydro produced by some organised groups.
- The majority of indicator data suggested that the prevalence of cannabis use within the broader community, and harms related to such use, has remained relatively stable; however, numbers of hospital admissions where the principal diagnosis was related to cannabis have gradually increased over time.

8.0 OPIOIDS

8.1 Use of illicit methadone

As in previous years, detailed data were collected in 2006 regarding the purchase, frequency of use and injection of illicit methadone syrup and Physeptone 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

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 illicit methadone themselves. Fifty-nine percent of the sample was able to comment on the price, purity and/or availability of illicit, or street, methadone. Among IDU who had used any form of methadone in the preceding six months, the median price for methadone liquid was reported to be 75 cents per ml, representing an increase from 50 cents per ml in 2005. However, the modal price remained at 50c, indicating that this remained the price most commonly paid. No participants were able to comment on the price of Physeptone tablets, possibly reflecting that current use and diversion of illicit Physeptone among this group remains rare.

In response to the survey item 'has the price of illicit methadone changed in the past six months?' approximately half of those commenting (49%; 29% of the entire sample) reported that the price had remained stable during this time. Just over one-third (36%; 21% of the entire sample) reported that they did not know, and small proportions stated that the price had increased (8%; representing 5% of the entire sample) or fluctuated (7%; representing 4% of the entire sample). No participants reported that the price had decreased. Overall, this pattern of responses represents little change from 2005.

With regard to current availability of street methadone, among those who commented, responses were fairly mixed. One-quarter (25%; 15% of the entire sample) reported that it was 'very easy' to obtain, 23% (13% of the entire sample) thought it was 'easy' to obtain, while 20% (11% of the entire sample) thought it was 'difficult'. Five percent rated it as 'very difficult' to obtain. When asked whether availability had changed over the preceding six months, the majority of those commenting (56%; 33% of the entire sample) reported that it had remained stable, with 10% (6% of all participants) reporting that it had become more difficult. Minimal proportions reported that it had become easier or fluctuated (2% each, or 1% each of the entire sample), and one-third (29%; 17% of the entire sample) reported that they didn't know, suggesting low levels of exposure to methadone being sold or otherwise diverted. Overall, findings suggest that the illicit methadone market has remained relatively stable in terms of price and availability over the past few years.

One-quarter (25%) of participants reported buying illicit methadone in the past six months (this figure was 19% in 2005 and 25% in 2004). It was most commonly purchased from friends (45% of those who had bought methadone), street dealers (26% of those who had purchased) and/or acquaintances (18% of those who had bought methadone). The most commonly reported

locations of purchase were from a street market (37%), at a friend's home (32%) or at an agreed public location (18%). Of those who purchased illicit methadone, 84% reported that the source was a take-away dose.

Use patterns

One-quarter (25%) of all participants reported using illicit methadone syrup in the six months preceding interview (17% in 2005), and had done so on a median of four days (the same as in 2005). Just under half of this group (44%; 58% in 2005) had also been engaged in methadone treatment during this period.

One-fifth of IDU participants (20%) reported injecting illicitly obtained methadone syrup in the preceding six months on a median of 5.5 days, i.e. approximately once per month. This represents an increase from 11% of participants injecting illicitly obtained methadone in 2005, and a decrease in the number of days' injection (20 days in 2005). Just under half (45%; 53% in 2005) of those injecting illicit methadone syrup were engaged in methadone treatment during this period. One-quarter of all participants reported injection of any form of methadone (i.e. syrup or Physeptone tablets; regardless of whether it was licitly or illicitly obtained), on a median of 8 days (approximately monthly use).

Twenty-two percent of participants (7% in 2005) reported illicit methadone syrup as the form most often used in the preceding six months, one of whom was in methadone treatment during this time. This increase is not surprising, as the 2006 IDRS sought to recruit larger proportions of IDU not currently engaged in pharmacotherapy, which may well result in larger proportions reporting use of diverted methadone.

Illicit Physeptone use remained uncommon, with 5% of participants reporting use in the preceding six months (3% in 2005) on a median of two days (compared with one day in 2005). Four of these seven respondents were engaged in methadone treatment during this period, either at some stage or for the entire period.

One-quarter of participants reported injecting methadone or Physeptone (whether licitly or illicitly obtained) in the six months preceding interview. Twenty percent of participants reported injecting it in the preceding month, representing an increase from 8% of all participants in 2005 (again this may be partially due to recruitment changes). Just under half of these participants (45%; n=17) reported injection-related problems due to methadone (as compared to 58% in 2005), the most common of which were difficulty finding veins (reported by 36% of those who had injected methadone in the preceding month), prominent scarring or bruising (23%), swelling of the arm (16%), swelling of the hand (10%), methadone dependence (10%), experiencing a dirty hit (3%; n=1), skin ulcers (3%; n=1), overdose (3%; n=1), abscesses or infections (3%; n=1) and thrombosis or blood clots (3%; n=1). The majority (64%) of participants reporting injection-related problems attributed to their methadone injection reported experiencing more than one problem in the preceding month (range: 1-6 problems).

KE reports suggested that patterns of illicit methadone use had remained fairly stable, and use patterns were in some cases described as part of a pattern of polydrug use related to poor availability/purity of heroin and relative availability, purity, price and preference for other drugs.

KE and anecdotal IDU reports indicate that motivations behind the diversion of opioid pharmacotherapies are numerous and varied, including being 'stood over' or threatened, the desire to self-detox or self-medicate when treatment is undesirable or unavailable, for monetary gain or bartering, or for stockpiling for unexpected circumstances such as being unable to attend a clinic.. For a discussion of the issues surrounding take-away policies and methadone diversion, see Ritter and Di Natale (2006).

8.2 Use of illicit buprenorphine

Price, availability and market characteristics

Twenty-eight percent of participants commented on the price and/or availability of illicit (or 'street') buprenorphine, suggesting that while they may not themselves have used it during this time, they were aware of some market characteristics. Buprenorphine (Subutex) is available in 0.4mg, 2mg and 8mg tablets (MIMS, 2007). Illicit buprenorphine was reportedly sold for a median price of $20 per 8mg tablet (range $10-$50) and availability was most commonly reported to be 'difficult' (37%). Almost one-quarter (24% of those commenting) reported it to be 'easy', one-fifth (20%) reported it to be 'very easy' and one-tenth (12%) thought that it was 'very difficult' to obtain. Seven percent of those commenting reported that although they knew how much it generally cost, they were unaware of its availability. Overall these findings suggest that while there is a market for illicit buprenorphine, it is less available than illicit methadone in NSW.

Questions were also included in the IDU survey following the listing of buprenorphine-naloxone (Suboxone) on the Pharmaceutical Benefits Scheme in April 2006 (i.e. 1-2 months before interviewing commenced). It is an alternative pharmacotherapy for opioid dependence which has been developed to have lower abuse (i.e. injection) potential due to the inclusion of naloxone, which may cause withdrawal if injected by a dependent heroin user. There were no reports of diversion in 2006.

Use patterns

Nineteen percent of IDU (8% in 2005) reported the use of illicit buprenorphine in the preceding six months on a median of three days (two in 2005). Of this group, just under one-third (28%) had been engaged in buprenorphine treatment during this period; however, data were not available to ascertain whether illicit use and treatment occurred concurrently. Fifteen percent of IDU reported injecting illicit buprenorphine on a median of three days, an increase in prevalence (but not frequency) as compared to 2005 (5%). Of these, just under one-third (27%; n=6) were engaged in buprenorphine treatment during the past six months.

None of the participants who had been engaged in buprenorphine treatment in the preceding six months reported illicit buprenorphine as the form most often used during this time. Sixteen percent of participants reported injecting any form of buprenorphine in the preceding six months on a median of four days.

Thirteen percent of participants reported they had injected buprenorphine in the past month, 55% of whom (n=11) reported resulting injection-related problems. The most commonly reported problems associated with injection of buprenorphine were prominent scarring or

bruising (reported by 5% of those who had injected it in the last month), buprenorphine dependence and difficulty finding veins for injection (15% for each), and a dirty hit (10%). One-third of participants who reported problems associated with buprenorphine injection had experienced two or more of these problems in the past month (range 1-3).

While the prevalence of buprenorphine use and injection have increased slightly from 2005, the frequency of use has remained sporadic. There were no reports of illicit buprenorphine-naloxone use or injection.

There were mixed reports on the diversion and injection of buprenorphine, with some health KE reporting an increase, and others stating that in their area/client group it had remained low and stable. Still others said that they had heard fewer reports of buprenorphine injection recently, with one KE attributing this to experimentation and the passing of novelty value of the relatively new drug.

8.3 Morphine

It should be noted that, in some cases, 'morphine' appears to be a generic term used by IDU to refer to opioid pills, a finding reported by KE and also reflected in IDU interviews, with some interviewers reporting initial participant confusion between drugs such as MS Contin (morphine) and OxyContin (oxycodone). However, in the majority of cases it was confirmed that participants were correctly referring to morphine rather than oxycodone.

In January 2006, changes were made to the legislation governing the prescription of morphine and a number of other opioids such as oxycodone (Pharmaceutical Services Branch, NSW Health, personal communication, January 2007). Previously, doctors could prescribe such drugs for up to two months, after which time they were required to obtain an authority to continue. Following the amendment, the two month requirement was removed with the exception of people determined to be drug dependent[11], where the requirement still remains.

Price, availability and market characteristics

Thirty-eight percent of participants felt confident enough to respond to survey items concerning price and/or availability of illicit morphine, representing an increase from 27% in 2005. MS Contin remained the most common brand of morphine used, particularly in 100mg tablets ('grey nurses'). Approximately one-quarter (24%) of participants (representing an increase from 14% in 2005) reported having bought 100mg MS Contin tablets at a median price of $25 (range $5-$100) in the six months preceding interview. This figure hasn't changed since 2005. The majority of people who had purchased illicit morphine had been recruited in central Sydney (83%), where several data sources (IDU participants, KE and some indicator data sources) reported morphine use was occurring.

[11] 'Drug dependent' is defined as 'a person who has acquired, as a result of repeated administration of: (a) a drug of addiction, or (b) a prohibited drug within the meaning of the *Drug Misuse and Trafficking Act 1985,* an overpowering desire for the continued administration of such a drug.' See the *Poisons and Therapeutic Goods Act 1966 No 31* for details.

Half of those commenting on the illicit morphine market reported that the price had remained stable over the preceding six months (comparable to 52% who reported stability in 2005). Twenty-one percent believed that it had increased (similar to 24% who reported an increase in 2005) and 26% reported that they didn't know enough to comment, which is often an indication of lower illicit use levels and/or engagement with the market (this figure was 19% in 2005). Small proportions reported that it had either decreased or fluctuated (2% each; these figures were 2% and 0% in 2005, respectively). Overall these figures represent little change from 2005.

Illicit morphine was generally considered to be 'easy' (34% of those commenting; similar to 2005 reports) or 'very easy' to obtain (28%; an increase from 19% in 2005). However, 17% stated that it was 'difficult' (a decrease from 24% in 20005), 9% believing it to be 'very difficult' (comparable to 7% reported in 2005) and 12% reported that they didn't know (19% said so in 2005). Over half (57%) of those commenting stated that availability had remained stable over the preceding six months.

Illicit morphine was most commonly purchased from friends (48% of those commenting), street dealers (38%) and known dealers (12%). The most commonly reported locations of purchase were from a street market (55%), an agreed public location (24%) and/or a friend's house (19%).

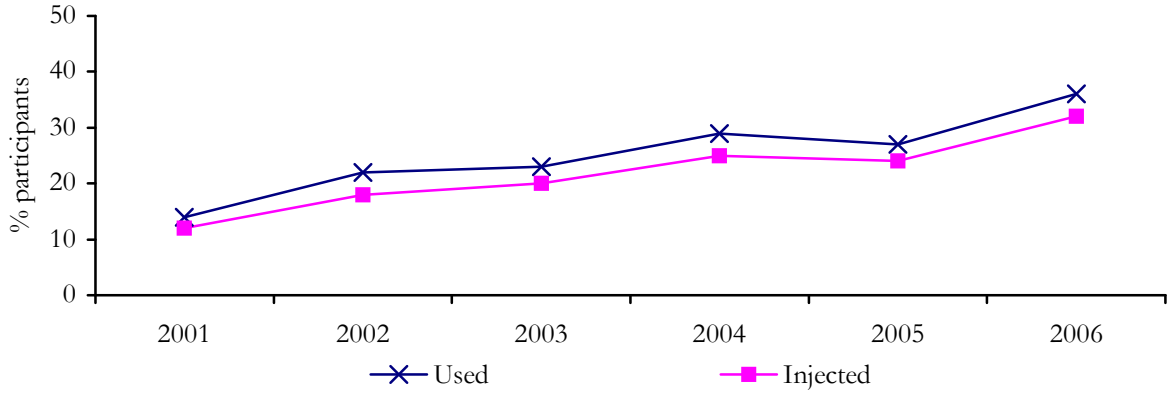
Use patterns

For the first time in 2006, a distinction was drawn between use of licitly obtained (prescribed) and illicitly obtained morphine (Table 3). Approximately one-third (31%) reported use of illicit morphine on a median of 8 days, i.e. just over once per month, in the past six months, with 29% having injected morphine on a median of seven days in this time.

Use of licitly obtained morphine was noticeably less prevalent (7% had used in the last 6 months; 5% had injected it in this time). Frequency of use was also low, on a median of 5 days, and injection on a median of 4.5 days in the preceding six months.

To enable comparison with previous years, the following information refers to *any* form of morphine, i.e. no distinction has been made between licitly and illicitly sourced morphine. Just over one-third (37%) of participants reported using morphine in the preceding six months on a median of seven days, i.e. just over once per month (compared with 27% of participants who used on a median of four days in 2005). In terms of injection, approximately one-third (32%) of IDU participants reported injecting morphine (a slight increase from 24% in 2005) on a median of seven days (4 days in 2005). The prevalence of morphine use and injection has gradually increased from 2001. Frequency of morphine use has remained stable with participants reporting use approximately once per month or less since 2001.

Figure 83: Proportion of IDU reporting morphine use and injection in the past six months 2001-2006



Source: IDRS IDU interviews
NB: Prior to 2001, morphine was included under 'other opioids'

Seven percent of users (n=4; 3% of the sample) reported daily morphine use, although the majority (71%; 26% of the sample) reported using weekly or less often.

KE reports suggested that there had been an increase in morphine use in the central areas of Sydney. This was also noted in 2005; however, there appears to have been a further increase in 2006. This change appeared to be fairly localised, with KE in other areas of Sydney reporting that use of morphine remained uncommon among IDU in their geographic location. Following these reports, anecdotal reports from IDU participant interviewers and indicator data sources suggesting an increase in morphine use in the inner city, further analysis was conducted on patterns of morphine use by geographic area.

In 2006, the majority of recent morphine users (63%) were recruited in central Sydney, similar to 2005 (60%). In 2005, the median days of use by geographic area were comparable (4 days in central Sydney and 3 days in the South West), with a slight increase in days of use only occurring in central Sydney (10 days in 2006). Three of the four daily morphine users were recruited in the central Sydney area. Frequency of morphine use in South West Sydney remained fairly stable at a median of 4.5 days in 2006. Overall this suggests that morphine is more commonly used by participants recruited in the central areas of Sydney.

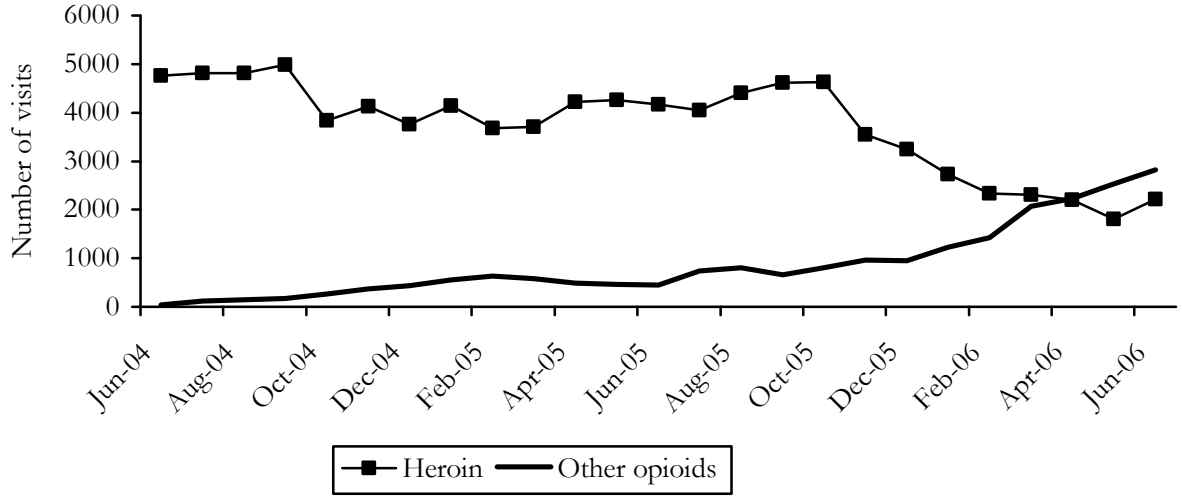
Nineteen percent of participants reported injecting morphine in the month preceding interview, and, of these, just over half (55%; 11% of the entire sample) reported experiencing problems that they attributed to morphine injection. The most commonly reported problems were difficulty finding veins (28% of participants who had injected morphine in the preceding month), scarring and/or bruising (24%) and swelling of the arm (24%). A variety of other problems were also reported, including morphine dependence (17%), thrombosis or blood clots (10%), swelling of the leg (7%), swelling of the hand (7%), skin ulcers (7%), and contact with police (7%).

Whilst there was a low prevalence of morphine injection in the preceding month, experience of problems among those who inject it remained high. Fifty-six percent (n=9) of this group

reported two or more problems due to recent morphine injection (ranging from one to six problems).

The number of visits to Sydney MSIC where other opioids were injected is presented in Figure 84. These figures include morphine, oxycodone and other pharmaceutical opioids; however, it was primarily morphine and oxycodone being injected (Sydney MSIC, personal communication, January 2007). The number of attendances where other opioids were injected has increased substantially since 2004, and for the first time, in May and June of 2006 other opioids accounted for a greater proportion of injections than heroin.

Figure 84: Number of attendances to Sydney MSIC where other opioids (including morphine)* and heroin were injected, 2004-2006



Source: Sydney MSIC, Kings Cross
* Excludes heroin and methadone, and includes morphine, oxycodone, Palfium and pethidine

8.4 Oxycodone

For information on changes to oxycodone prescribing legislation, please see Section 8.3: Morphine.

Price, availability and market characteristics

Twenty-two percent of participants completed survey items concerning the market for illicit oxycodone. The most common purchase amounts were 80mg tablets (OxyContin), bought for a median of $25 each (range $15-$50). Price was generally reported to have remained stable over the past six months (64% of those commenting), with 15% stating that it had increased, 3% reporting that it had decreased and 18% reporting that they didn't know, typically because they had not had sufficient contact with users and/or suppliers to be able to comment.

Approximately one-third each of participants who commented on oxycodone thought that availability was currently 'easy' (30%), 'very easy' (27%) or 'difficult' (30%), while 6% thought it was 'very difficult' and 3% stated that they didn't know. Availability was reported to have

remained stable by over half of those who commented (58%), while 15% thought it had become more difficult. Smaller proportions thought it had become easier (9%) or fluctuated (3%) while 15% reported that they didn't know.

Oxycodone was most commonly purchased from street dealers (46%) and/or friends (46%). The most commonly cited locations for purchase were from a street market (37%), an agreed public location (33%) or a friend's house (30%).

Use patterns

This was the second year in which 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 (32%) reported having used oxycodone (whether licitly or illicitly obtained) at some stage in their lifetime, and 24% reported having ever injected it (Table 3). Twenty percent of participants reported using either licit or illicit oxycodone in the six months preceding interview on a median of 13.5 days (i.e. approximately once per fortnight), representing an increase from 16% who had used on a median of one day in 2005. The prevalence of oxycodone injection remained fairly stable (11% in 2005; 14% in 2006); however, the median days of injection increased from one day in 2005 to eleven days in 2006.

With regard to illicit oxycodone use only, eighteen percent of participants reported use in the preceding six months, on a median of seven days. One participant reported daily illicit oxycodone use, while the majority of users (81%) reported using weekly or less often. Injection in the last six months was reported by 16% of the sample on a median of 7 days (approximately once per month). Overall these figures suggest that illicit oxycodone use has increased slightly, although patterns of use were typically sporadic.

With regard to licit oxycodone, only fourteen percent of participants reported use in the preceding six months, on a median of seven days (i.e. approximately once per month). Injection in the last six months was reported by 3% of the sample on a median of 27.5 days.

KE reports indicated that use of oxycodone remained relatively uncommon, although it should also be noted that oxycodone may in some cases be referred to by users as 'morphine', and so it is difficult to know the extent to which changes seen in the use of illicit 'morphine' may actually apply to oxycodone (see Section 8: Morphine). However, in the IDU survey every attempt was made to clarify this issue with participants.

As would be expected, given that it was the brand most commonly purchased, the most commonly used brand was OxyContin, followed by Endone and Proladone, although, as in previous years, some users were uncertain as to which brand they had used.

8.5 Other opioids

Six 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 was 4.5, i.e. less than monthly use. Among participants who had used other opioids, just over one-third (36%) reported using illicit opioids during this period, and 43% had not used illicitly obtained other opioids. Injection of other opioids also remained relatively infrequent, with 1% of participants reporting injection on a median of 3 days in the preceding six months (i.e. approximately bi-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.

9.0 OTHER DRUGS

9.1 Benzodiazepines

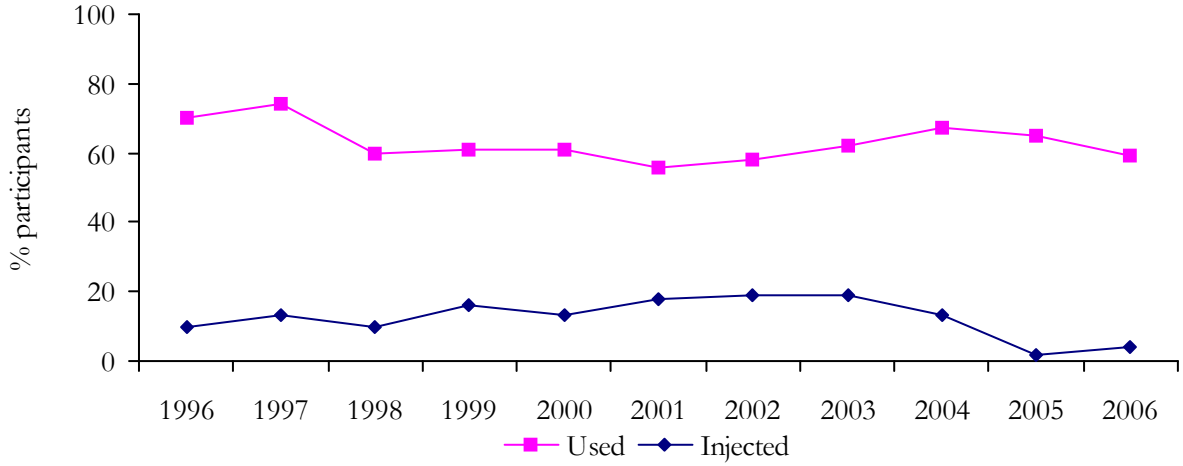
In 2006, over half of the participant sample (59%) reported use of benzodiazepines in the six months preceding interview on a median of 25 days, i.e. approximately weekly use (Table 3; Figures 85 and 86). This represents a slight decrease in prevalence of use compared to 2005 when 65% of participants reported use on a median of 29 days.

The proportion reporting daily use has decreased slightly from 2005, from 20% of the sample (30% of recent benzodiazepine users) to 14% (23% of recent benzodiazepine users) in 2006 (Figure 87); however, this figure has gradually increased over the past 4 years.

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. The lowest prevalence of benzodiazepine injection since 1996 was reported in 2005 (2%), with little change in 2006 (3%). The median number of days on which benzodiazepines were injected was 3, comparable to 2005 (2 days) and a decrease from earlier years (Figure 86). No respondents reported daily injection of benzodiazepines.

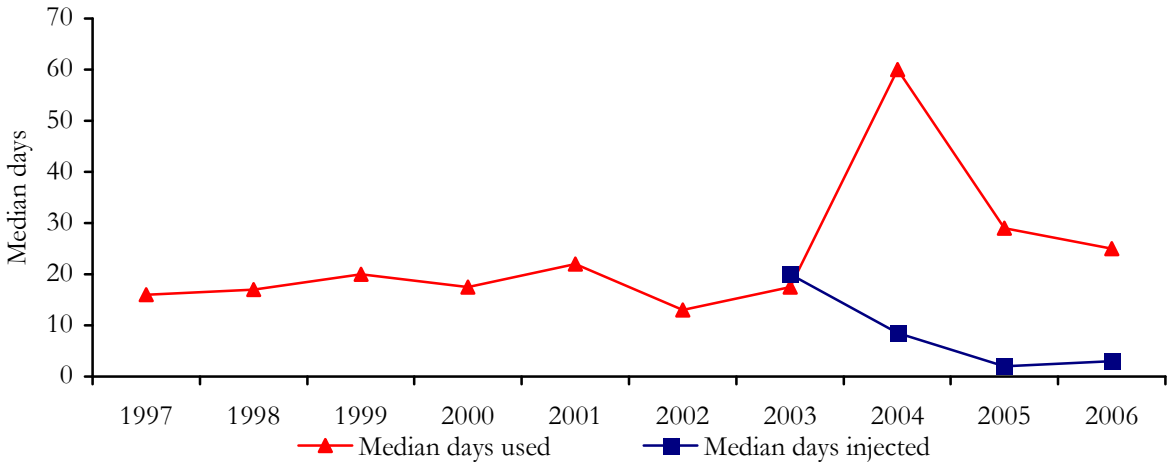
For further discussion of benzodiazepine injection and related problems in Australia, including those associated with temazepam gel cap use, see Breen et al. (2003) and Wilce (2004).

Figure 85: Proportion of IDU reporting benzodiazepine use and injection in the preceding six months, 1996-2006



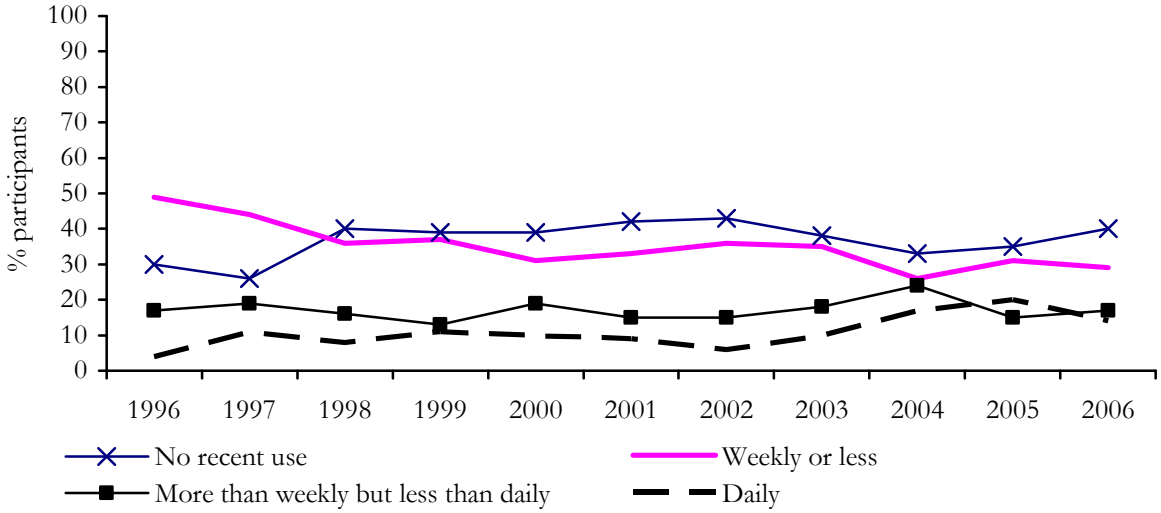
Source: IDRS IDU interviews

Figure 86: Median days use and injection of benzodiazepines in the past six months, 1997-2006



Source: IDRS IDU interviews
NB: Collection of data on the number of days injected commenced in 2003

Figure 87: Patterns of benzodiazepine use, 1996-2006



Source: IDRS IDU interviews

Only one of the 21 participants who reported daily use had injected benzodiazepines in the last six months. This represents a sustained decrease from 30% (6% of the entire sample) in 2004 to none in 2005.

Thirty-seven percent of participants (62% of benzodiazepine users) reported use of illicitly obtained benzodiazepines in the last six months (30% had not; 8% or n=7 were missing data). Fifty-three percent of users reported that they had mainly used licit benzodiazepines in the last six months, as compared with 39% 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 60% of users, followed by 27% specifying oxazepam (Serepax). Two participants 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 decreased to 15% from 25% in 2005.

Overall, the prevalence of benzodiazepine use among participants has decreased slightly and rates of injection have remained low. Frequency of use decreased markedly since 2004; however, the proportion of daily benzodiazepine users has gradually increased over the past 4 years.

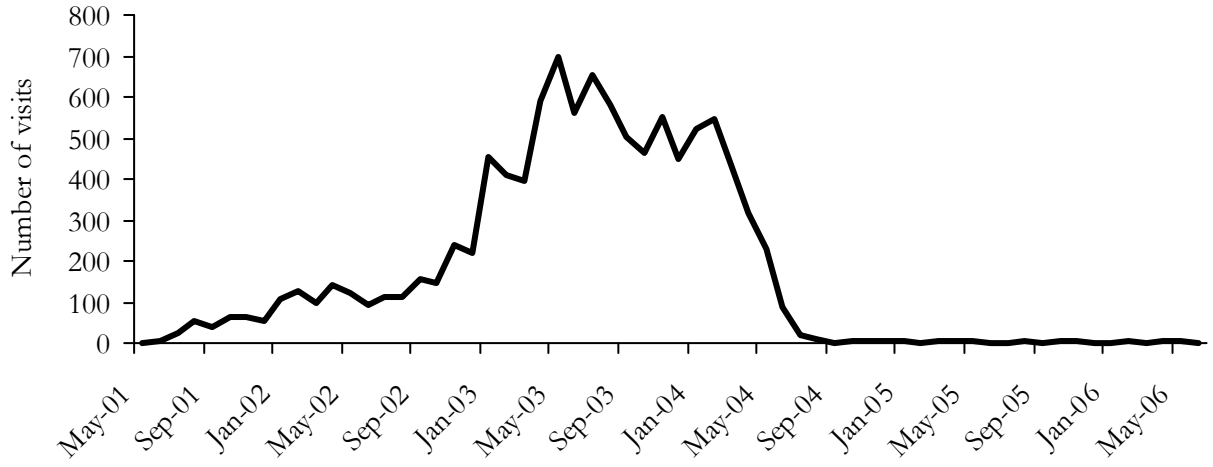
As with methadone, morphine and buprenorphine, participants were asked if they had injected benzodiazepines in the month preceding interview and, if so, whether they had experienced any associated problems. In 2006, only two participants reported injecting benzodiazepines in the month preceding interview, sustaining the low levels reported in 2005 (one participant) and representing a decrease from ten participants who reported doing so in 2004. Only one of these participants reported injection-related problems including scarring/bruising and swelling of the arm due to benzodiazepine injection.

Consistent with IDU participant reports, KE commenting on benzodiazepine use noted that injection of these medications appeared to be uncommon among the drug users with whom they had had recent contact. Reports of oral use were mixed, with some KE reporting a decrease, and several others reporting that it remained common, particularly as part of a pattern of polydrug use among some users. It should also be noted that high rates of mental health problems were also reported among polydrug users, including anxiety.

Data from the Sydney MSIC in Kings Cross show that the number of clients who injected benzodiazepines has remained low following a dramatic decrease during 2004, from 520 in January to five in December of that year (Figure 88) Benzodiazepine injections have accounted for less than ten per month since this time. 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[12].

[12] 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

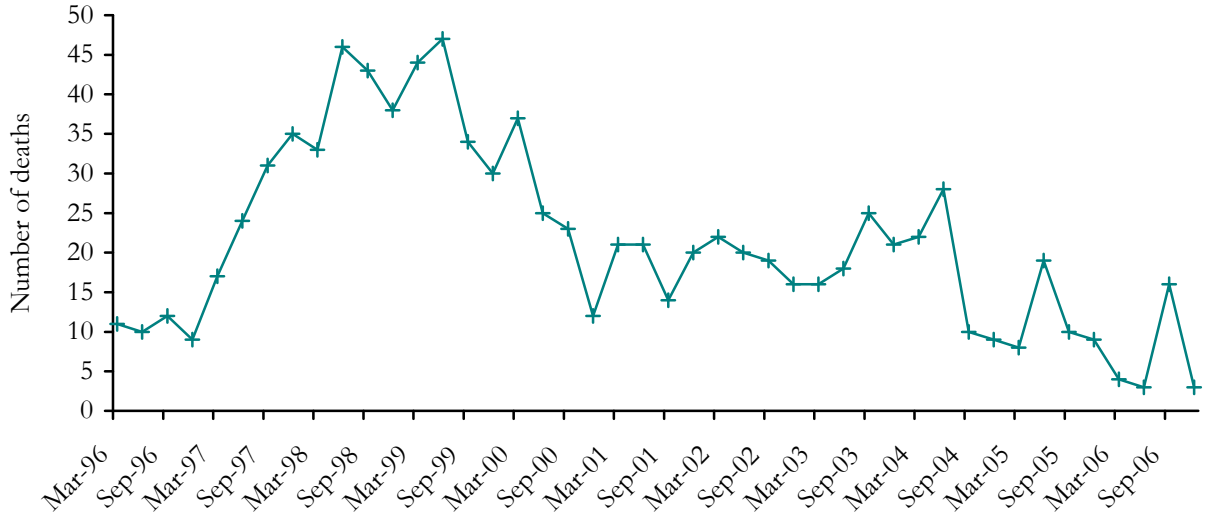
Figure 88: Number of attendances to Sydney MSIC where benzodiazepines were injected, 2001-2006



Source: Sydney MSIC, Kings Cross

The number of deaths of suspected drug users in which benzodiazepines were detected has gradually decreased to less than twenty detections per quarter over the past twelve months (Figure 89).

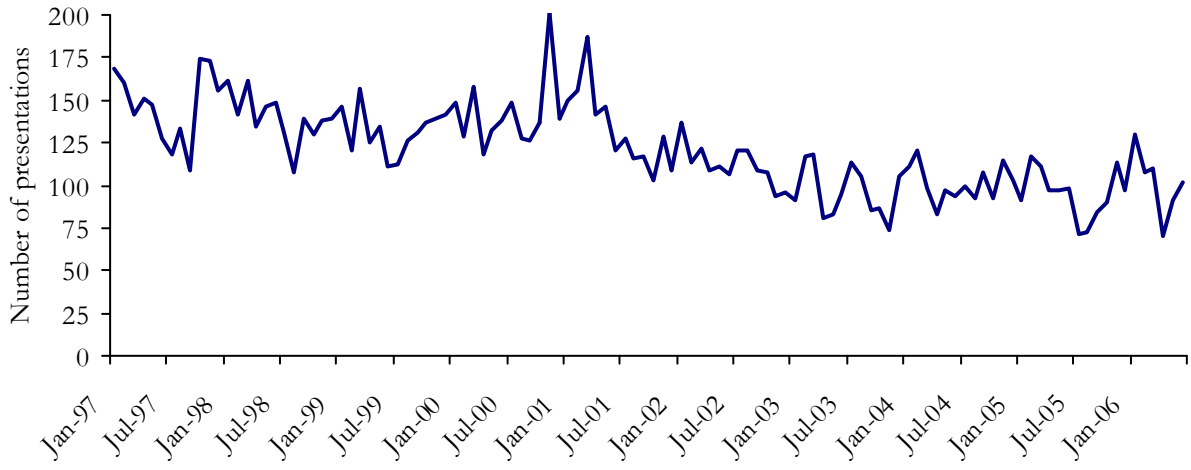
Figure 89: Number of suspected drug-related deaths in which benzodiazepines were detected post-mortem, by quarter, 1996-2006



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 fluctuated over the past twelve months, accounting for between 70 (August 2006) and 130 (January 2006; Figure 90). 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 90: Benzodiazepine overdose presentations to NSW emergency departments, 1997-2006

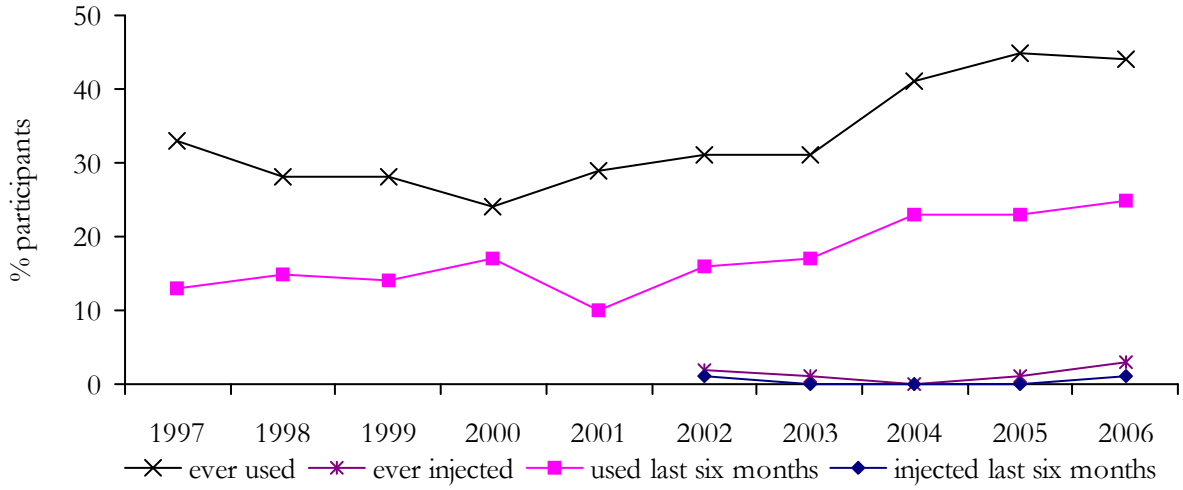


Source: Emergency Department Information System, NSW Department of Health
NB: Figures refer to overdose only and do not include presentations for use disorders.

9.2 Antidepressants

Survey items concerning antidepressant use have been included since 1997, and items on injection since 2002. In 2006, 44% of the sample reported ever having used antidepressants, and 3% reported having ever injected them (Table 3; Figure 91). Twenty-five percent had used them in the last six months on a median of 135 days (range 2 to 180 days). Only one participant had injected antidepressants on twelve days in the last six months. Overall, a gradual increase has been observed in both the proportions reporting lifetime and recent (i.e. in the last six months) use of antidepressants since 1997. In contrast, reports of lifetime injection have remained low at 3% or less and recent injection at less than 1% since 2002.

Figure 91: Proportion of IDU reporting antidepressant use and injection in the preceding six months, 1997-2006



Source: IDRS IDU interviews
NB: Survey items on antidepressant injection were first included in 2002

Women were significantly more likely to report ever having used antidepressants (59% of females and 36% of males, Fisher's Exact Test, p=0.007), and to report use in the six months preceding interview (36% vs. 19%, Fisher's Exact Test, p=0.034). This contrasts with 2005, when there were no significant sex differences.

An increase was observed in the proportion of participants reporting recent illicit antidepressant use, from none in 2005 to 13% of recent antidepressant users (3% of the entire sample) in 2006. KE reports also suggested that antidepressant diversion remained virtually unheard of. Diversion of antidepressants has remained low since 1997 when survey items on their use were first included. This is perhaps unsurprising as antidepressants 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 use.

As in 2005, the most common antidepressant used was mirtazapine (Avanza, a tetracyclic antidepressant). Other more commonly used brands included citalopram (Cipramil, an SSRI), venlafaxine (Efexor, an SNRI) and sertraline (Zoloft, an SSRI). However, it should also be noted that almost half (47%) of participants who reported antidepressant use did not report which brand they used, typically saying that they couldn't remember its name, and occasionally naming an antipsychotic, mood stabiliser or other form of medication, rather than an antidepressant.

Participants were also questioned about recent mental health issues other than their drug use. As in previous years, the most commonly reported mental health problem was depression (20% of all participants, or 68% of those reporting a mental health problem). This represents a slight decrease from 2005 when 28% of respondents reported experiencing depression in the six months preceding interview. However, among those who experienced one or more mental health problems, depression was cited as an issue by almost 70% (68% in 2006; 69% in 2005).

Of those who reported experiencing depression in the preceding six months, 73% reported consulting a health professional about depression and 67% had used antidepressants in this time. For further details please refer to Section 10.7: Associated harms – Mental health problems.

9.3 Hallucinogens

While just over half (55%) of IDU participants reported having used hallucinogens at some stage in their lifetime, recent use remained fairly low, with only 5% 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 of two days in this time (range 1-10). The main type of hallucinogen used in the last six months was LSD (100% of hallucinogen users; 4% of the entire sample), with no reports of magic mushroom use (a decrease from 25% of users in 2005; representing one percent of the entire sample in 2005). Thirteen percent of the sample had injected hallucinogens at some stage in the past, and 1% had injected them in the last six months (median days injected=1.5, range 1-2). With the exception of a possible decline in magic mushroom use, this represents little change in the use of hallucinogens as compared with 2005.

9.4 Ecstasy

Ecstasy use remains relatively uncommon among the IDU sample of the NSW IDRS. Just over half (55%) of the sample reported use of ecstasy in their lifetime, and 24% reported having ever injected it (Table 3).

Approximately one-fifth (18%) reported use in the last six months on a median of two days (range 1-144), and 12% reported injecting it during this time on a median of 2 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 Ecstasy and Related Drugs Reporting System (EDRS; formerly known as the Party Drugs Initiative, or PDI). Information, reports and bulletins from this study are available from the NDARC website http://ndarc.med.unsw.edu.au/ (under 'Drug Trends').

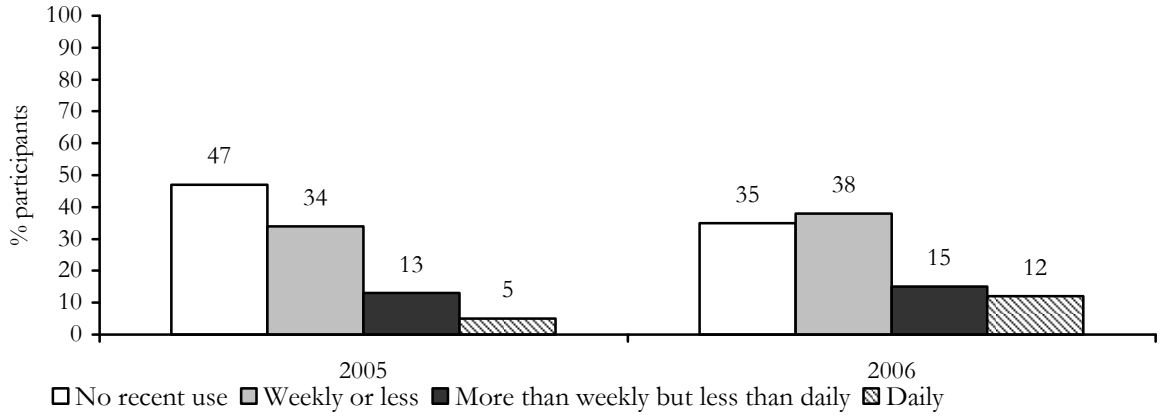
9.5 Inhalants

A decrease was observed in the proportion of participants who reported ever having inhaled volatile substances such amyl nitrate, petrol, glue and/or lighter fluid, from 28% in 2005 to 18% in 2006 (Table 3). An increase was observed in the frequency of recent use, with the median number of days reported as 48 (range 14-96 days) in 2006, as compared with 6 days (range 5-10 days in 2005); however, the prevalence of recent use remained low, with 2% of the entire sample (n=3) reporting use in the preceding six months. Inhalants used included nitrous oxide, amyl nitrate and paint. One KE reported an increase in one particular marginalised group engaging in paint sniffing; otherwise inhalant use was reported as rare among clients of health workers.

9.6 Alcohol and tobacco

Almost two-thirds (65%) of the sample had consumed alcohol in the six months prior to interview on a median of 20 days (i.e. almost once per week; range 1-180). Among those who had consumed alcohol in this time, 18% (representing 12% of the entire sample; approximately double the proportion reported in 2005) reported daily use; the majority (59%; or 34% of all participants) drank weekly or less often (Figure 92). Rates of daily use were slightly higher than among the general population aged 14 and over (9%), while rates of drinking weekly were comparable to the general population (41%; Australian Institute of Health and Welfare, 2005, p. 25). With the exception of the noted increase in daily alcohol consumption in 2006, figures remained similar to those reported in 2005.

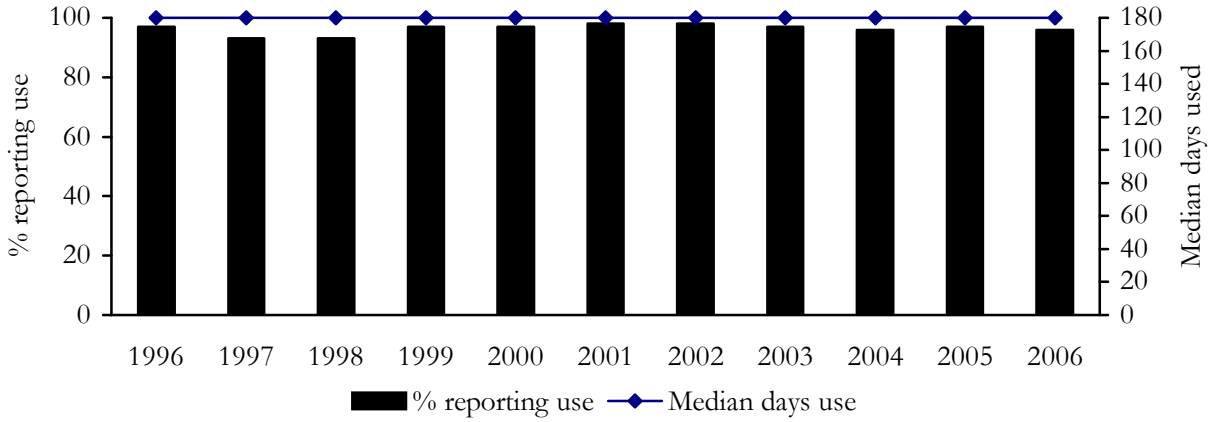
Figure 92: Patterns of alcohol use, 2005-2006



Source: IDRS IDU interviews

Tobacco remained the most commonly used substance investigated by the IDRS. The vast majority of participants (96%) reported smoking tobacco in the last six months on a median of 180 days, i.e. daily use (range 7-180; Table 3). Eight-nine percent of the sample were daily smokers. High prevalence and frequency of tobacco use has been reported since 1996 (Figure 93). This is substantially higher than among the general population, 17% of whom are daily smokers (Australian Institute of Health and Welfare, 2005, p.19).

Figure 93: Participant reports of tobacco use in the last six months, 1996-2006



Source: IDRS IDU interviews

KE reports also indicate that many cannabis smokers in NSW mix tobacco with their cannabis prior to smoking in a cone/bong.

10.0 ASSOCIATED HARMS

10.1 Blood-borne viral infections

People who inject drugs are at greater risk of acquiring blood-borne viral infections (BBVI) such as hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV) than the general population through the sharing of needles, syringes and other equipment. In 2006, items on blood-borne viral infections, including perceived status and vaccination and test histories were added to the IDU survey. For more detailed information on BBVI, please see the Australian NSP Survey (e.g. National Centre in HIV Epidemiology and Clinical Research, 2006, Pointer and Harrison, 2005, Iverson et al., 2006).

BBVI test history

The majority of participants reported having been tested for HBV, HCV and HIV/AIDS at some stage in their lives, with one-third or more reporting undergoing testing within the three months preceding interview (Table 15).

Table 15: BBVI test history of IDU participant sample, NSW, 2006

	Never tested	Tested over 12 months ago	Tested within last 12 months, but not last 3 months	Tested within last 3 months	Don't know/can't remember
Hepatitis B (%)	9	23	33	32	3
Hepatitis C (%)	3	21	34	42	0
HIV/AIDS (%)	6	18	37	39	1

Source: IDRS IDU interviews

NB: No distinction was made between the types of testing (e.g. initial antibody testing or ongoing monitoring of existing infection such as PCR testing in HCV). However, in the vast majority of cases, participants referred only to testing for the purposes of diagnosis and did not mention any testing following a positive diagnosis.

Among participants who had ever been tested for HBV (91% of the sample), the majority (73%) reported that they had received a negative result, 11% believed they received a positive result (detail on whether they were referring to surface antigen, core antibody and/or or surface antibody unavailable[13]), and 7% reported that they didn't know or couldn't remember. A further 8% selected the 'other' response category. The majority of 'other' responses indicated perceived immunity (i.e. that they had tested positive for the core antibody) due to past vaccination or other exposure to the virus. Two participants were still awaiting their test results.

Of the 97% of participants who reported ever having been tested for HCV, 62% reported that their last test result indicated that they were hepatitis C positive, 31% believed themselves to be negative and 3% reported that they didn't know or couldn't recall. The remaining 5% indicated a range of understanding about their status, some of which were confused, e.g. one participant considered him/herself to '*have had [hepatitis C], but not [be] a carrier. [I am] immune forever.*' Other

[13] Hepatitis B surface antigen indicates current infection; Hepatitis B core antibody indicates prior exposure to the virus and is present in anyone who has been exposed to the virus in the past (whether the person is immune or a carrier); hepatitis B surface antibody is present in those who have cleared the virus and are not carriers.

comments included that the test '*came back positive but [there were] antibodies there*', '*[HCV] positive but not contagious*', and '*[I've] cleared the virus- [HCV] negative but a carrier*'. Three further participants believed that they had cleared the virus and two participants were still waiting for their results. For a more in-depth explanation of hepatitis C clinical markers, please refer to the Hepatitis C Council of New South Wales website, http://www.hepatitisc.org.au. Further investigation of injecting drug users' understanding of their test results and status was beyond the scope of the present study and have been investigated elsewhere (O'Brien et al., 2006).

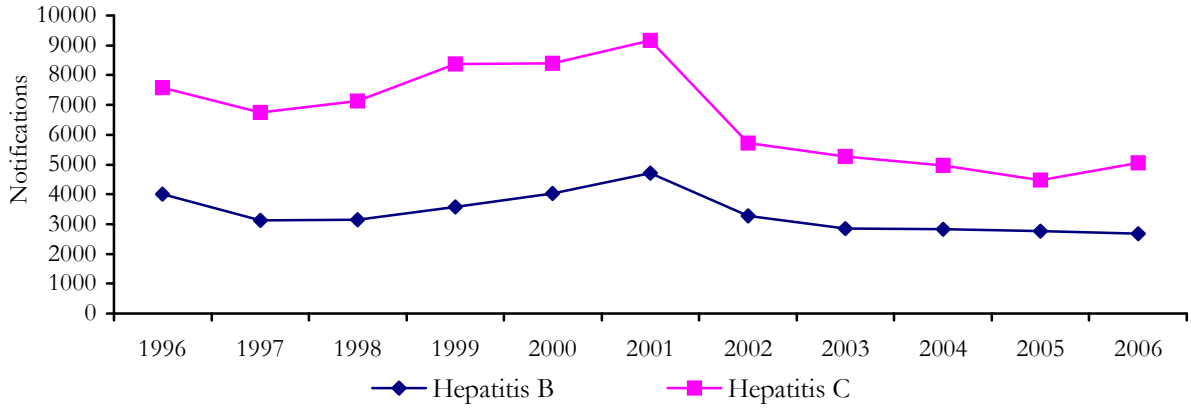
Among those who had ever been tested for HIV, 94% reported that their last test result had been returned negative, 3% were HIV positive, 1% stated that they didn't know or couldn't remember and 1% had not yet received their results.

BBVI vaccination and treatment history
Sixty percent of participants reported past vaccination for hepatitis B, with 77% of those (i.e. 46% of all participants) reporting having completed the course. Thirty-four percent had never been vaccinated, and 5% didn't know. Data were unavailable for two participants.

Participants were also asked if they had ever been treated for HBV or HCV. Five percent of all participants reported having ever received treatment for HBV and 9% reported ever having received antiviral treatment for HCV.

Figure 94 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 4465 in 2005 to 5051 in 2006. HBV notifications have remained relatively stable since 2003 (2844 in 2003; 2675 in 2006). Notifications remain lower than levels reported in 2001.

Figure 94: Total notifications for (unspecified and incident) HBV and HCV infections, NSW 1996-2006

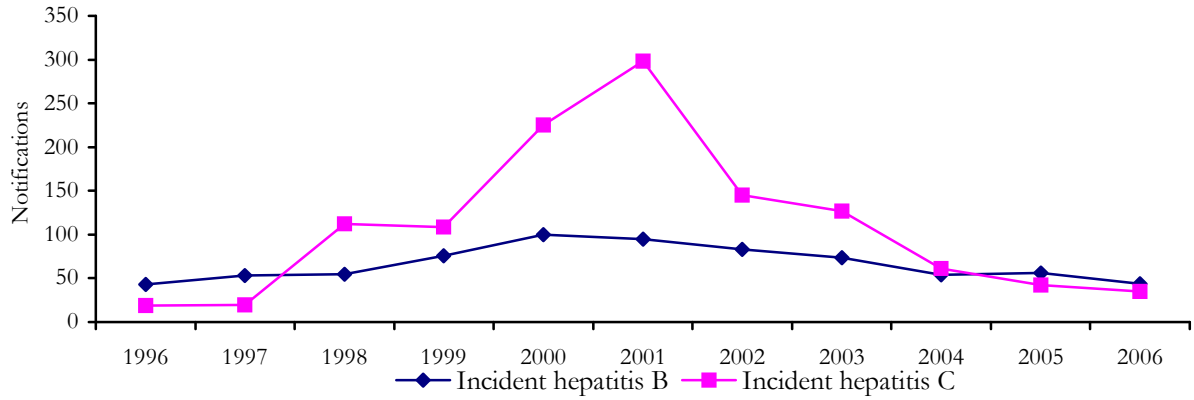


Source: Communicable Diseases Network – Australia – NNDSS[14]
NB: The 2006 data are provisional

[14] 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.

Trends in the number of incident notifications for HBV and HCV in NSW are shown in Figure 95. HBV incident reporting has remained stable and low, recorded as 56 in 2005 and 44 in 2006. A steady decline has been observed in the number of HCV incident notifications, from 298 in 2001 to 35 in 2006.

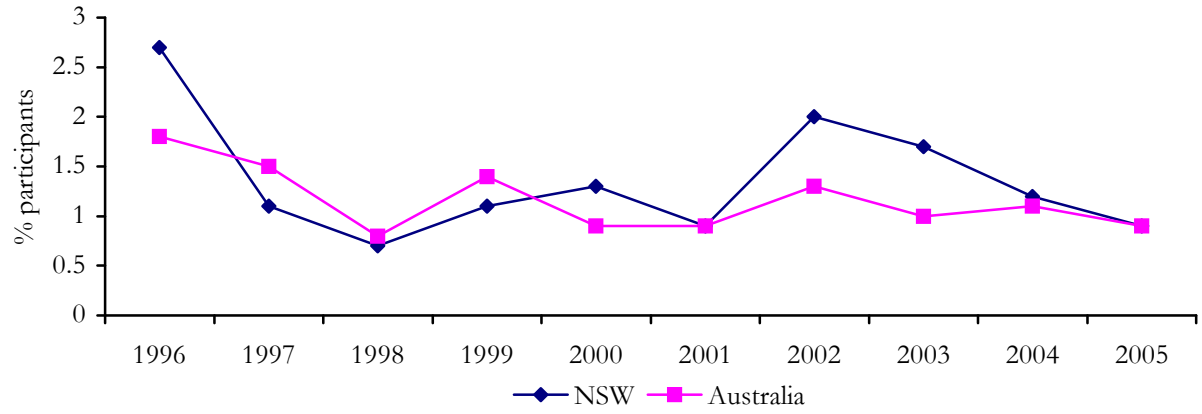
Figure 95: Total notifications for incident HBV and HCV infection, 1996-2006



Source: Communicable Diseases Network – Australia – NNDSS[15]
NB: The 2006 data are provisional

The Annual NSP Survey has continued to find relatively low rates of HIV antibody amongst IDU participants in NSW, ranging from 1.8% in 1996 to 2% in 2002, and, between 2002-2004, were slightly higher than those reported nationally (Figure 96). Detection of hepatitis C antibody in capillary blood tests (finger-prick samples) conducted on NSW participants remained high at 69% in 2005, and higher than the national figure (61%; Figure 97).

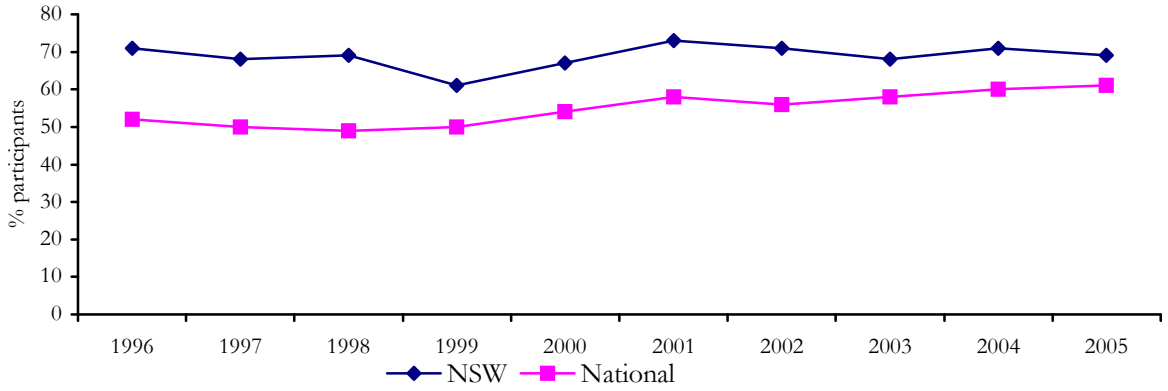
Figure 96: Prevalence of HIV antibody among NSP Survey participants, 1996-2005



Source: NCHECR (2006; personal communication, January 2007)

[15] 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 97: Prevalence of HCV antibody among NSP Survey participants, 1996-2005

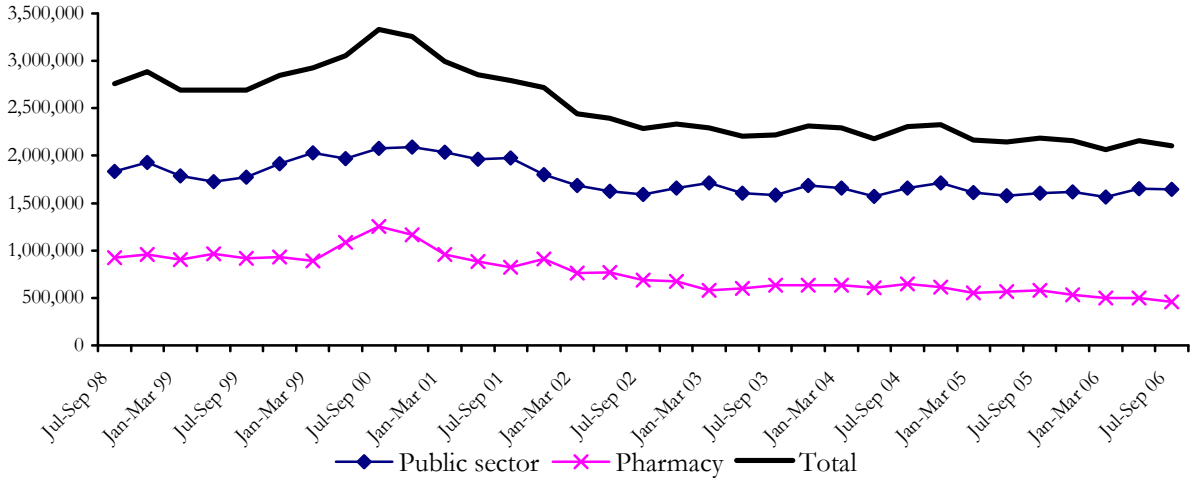


Source: NCHECR (2006; personal communication, January 2007)

10.2 Sharing of injecting equipment by IDU participants

The number of needles and syringes dispensed in New South Wales has remained relatively stable over the past four years, following a peak in distribution in 2000 (Figure 98). The majority of equipment provided through the NSW needle and syringe program is dispensed from public NSPs. There are approximately 30 primary NSP outlets across the state, which typically provide IDU with a range of injecting equipment including needles and syringes, and advice on safer injecting and referral to other services such as drug treatment programs. Primary outlets also undertake a range of other activities such as community liaison and education. There are also over 300 secondary outlets, for example in hospital emergency departments and community health centres, which also provide injecting equipment and educational material. Primary and secondary outlets also provide condoms on request. Equipment obtained through secondary outlets is typically in the form of a 'fitpack' containing needles/syringes, swabs, sterile water, spoon, information on safer injecting and referral. The fitpack also functions as a safe disposal container. There are over 100 NSP-maintained fitpack vending machines across NSW which provide greater availability (typically 24-hour access) to a broad range of people across a range of locations. A large number of pharmacies (around 375) are also involved in providing NSP services, further expanding availability across a broader range of people and locations, and distributing approximately one-quarter to one-third of equipment across the state (NSW Health, personal communication, January 2007).

Figure 98: Number of units dispensed from public NSPs and pharmacies, NSW 1998-2006

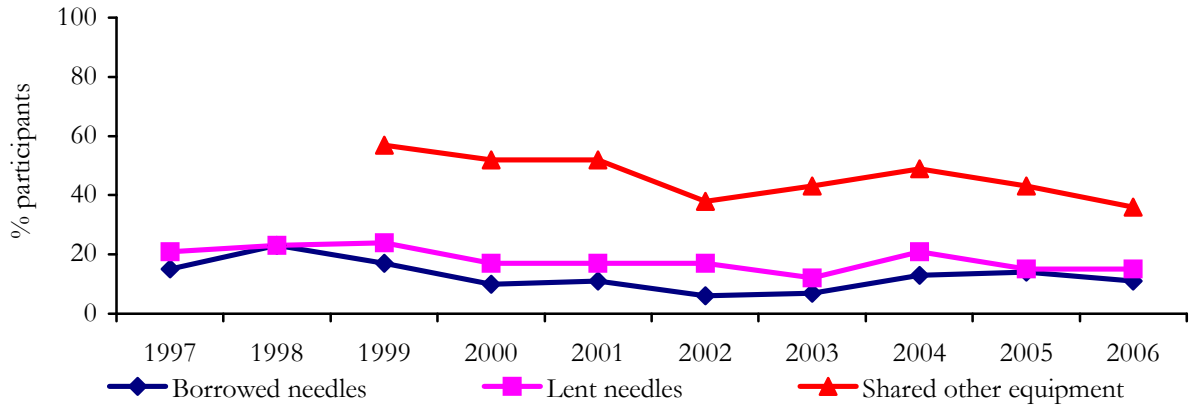


Source: NSW Health NSP data

Ninety-nine percent of participants reported that they had injected on at least one occasion in the month preceding interview. Among these participants, 11% of participants reported using a needle that had already been used by someone else ('borrowed needle'), comparable to 14% in 2005 (Figure 99). Five percent had borrowed a needle on one occasion, 4% reported borrowing a needle on between two and five occasions, one percent reported borrowing on between 6-10 occasions and one participant (1%) had shared on more than ten occasions in the past month. All but two participants who responded to the question reported that only one other person had used the needle before them; the other two participants reported that two people had used it before them. Among participants who reported borrowing a needle, sharing had taken place with a regular sex partner (75%; 8% of the entire sample) and/or a close friend (25%; 3% of the entire sample).

Fifteen percent of those who had injected in the last month reported passing needles on to other users ('lent needle') in 2006, representing no change from 2005. Of those who had lent a needle, 41% (6% of the entire sample) reported that this had happened on one occasion, a further 41% (6% of all participants) lending on between two and five occasions and 18% (3% of the entire sample) reporting lending on ten or more occasions in the preceding month.

Figure 99: Proportion of IDU reporting sharing injecting equipment in the month preceding interview, 1997-2006

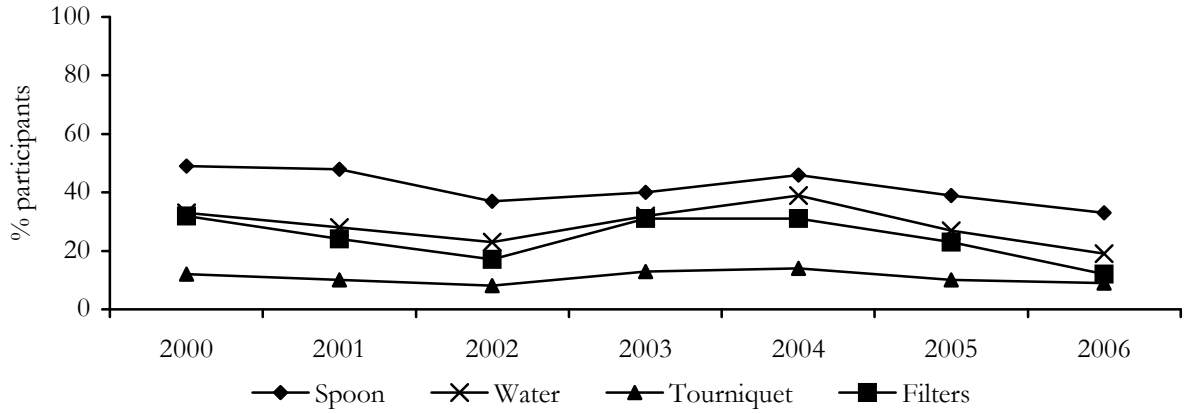


Source: IDRS IDU interviews
NB: Survey items on other injecting equipment (including spoons, water, filters and tourniquets) were first included in 1999. Figure excludes participants who had not injected in the last month (in 2003 n=1, 2004 n=1, 2005 n=4 and 2006 n=1 were excluded)

As in previous years, sharing of injecting equipment was more common than sharing of needles and syringes, with 36% reporting sharing a filter, spoon, water, tourniquet and/or other item of injecting paraphernalia in the month preceding interview. Figure 99 shows that participant reports of borrowing and lending of needles and syringes have remained relatively stable over time, with a slight decline in lending of needles since 2004. The proportion of participants reporting having shared other injecting equipment has also declined, and remains lower than the 57% who reported doing so in 1999.

Figure 100 shows a breakdown of the types of injecting equipment IDU participants reported sharing. Spoons/mixing containers remained the most commonly shared item (33%), followed by water (19%), filters (12%) and tourniquets (9%). Overall, these data indicate that the rates of sharing equipment have decreased slightly over the past two years.

Figure 100: Proportion of IDU participants reporting sharing other injecting equipment by type, 2000-2006



Source: IDRS IDU interviews
NB: Excludes participants who had not injected in the last month (in 2003 n=1, 2004 n=1, 2005 n=4 and 2006 n=1 were excluded)

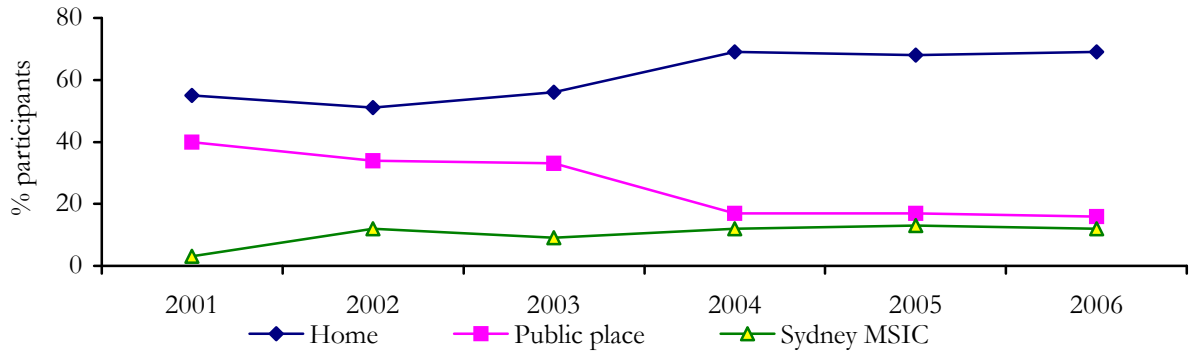
10.2.1 Summary

- Approximately one-third to two-fifths of IDU recruited in NSW reported recent testing for BBVI, with high self-reported rates of HCV. Some confusion was apparent regarding BBVI status, and small proportions reported receiving antiviral treatment.
- The number of newly acquired (incident) HBV and HCV to health authorities have remained relatively stable over the past two years, although the total number of HCV notifications (i.e. including those where the timing of the disease acquisition is unknown) have increased.
- The number of needles and syringes dispensed by pharmacies and NSPs has remained relatively stable over the past few years, although relatively lower than numbers recorded in 2000 and early 2001.
- IDRS survey data suggest that the proportions of IDU participants reporting borrowing and/or lending of needles and other injecting equipment have remained stable or decreased slightly compared to 2005. This continues to be of concern with regard to the transmission of BBVI 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

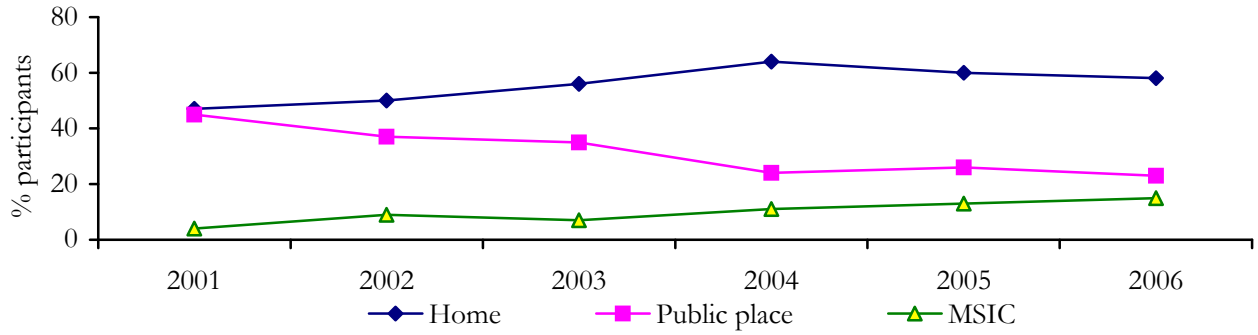
There was little change in participant reports of locations of usual and last injection as compared with 2005. The most commonly reported usual location for injection in the month preceding interview remained at a private home (69%; 68% in 2005), with 58% (60% in 2005) reporting a private home as the location for their most recent injection. Sixteen percent of participants reported that their usual location for injection was a public place (e.g. street, car or public toilet; 17% in 2005), and 23% reported that a public place was the location of their most recent injection. The proportions of participants reporting the Sydney MSIC as their usual and last location for injection have remained stable and higher than in 2001 (from 3% in 2001 to 13% in 2005 and 12% in 2006, and 4% in 2001 to 13% in 2005 and 15% in 2006, respectively; Figures 101 & 102).

Figure 101: Usual location for injection in the month preceding interview, 2001-2006



Source: IDRS IDU interviews
NB: Excludes those who had not injected in the last month (in 2003 n=1, 2004 n=1, 2005 n=4 and 2006 n=1 were excluded)

Figure 102: Last location for injection, 2001-2006



Source: IDRS IDU interviews
NB: Excludes those who had not injected in the last month (in 2003 n=1, 2004 n=1, 2005 n=4 and 20006 n=1 were excluded)

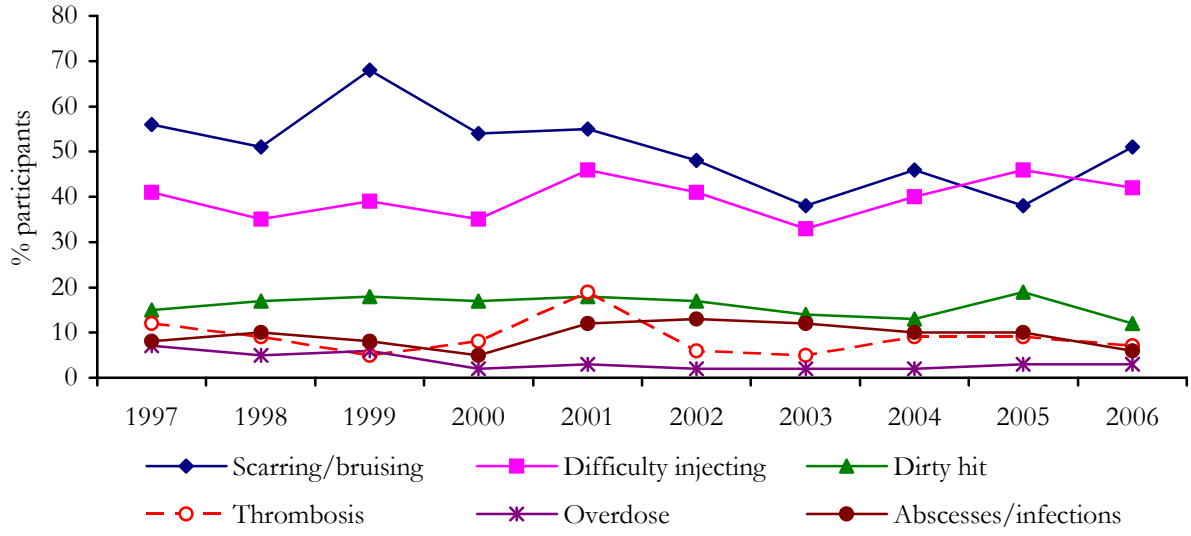
These figures suggest that the proportion of IDU reporting public places as the usual and most recent locations for injecting may have stabilised following a consistent downward trend between 2001 and 2004. This is a positive trend, since public injecting has previously been associated with significant 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 (e.g. Maher et al., 1998).

10.4 Injection-related health problems

Participants were asked whether they had experienced any of the following injection-related problems in the month before interview: overdose, a dirty hit, prominent scarring and/or bruising, thrombosis/blood clots, difficulty injecting and/or abscesses or infections. Two-thirds (66%) of IDU participants who had injected in the last month reported at least one injection-related problem during this time (the same figure as in 2005), and 38% reported two or more problems during this time (again, the same figure as in 2005). As in previous years, the most commonly reported problems were prominent scarring/bruising of injection sites (51%) and difficulty injecting (42%). Smaller proportions reported experiencing a 'dirty hit' (12%), abscesses or infections from injecting (6%), thrombosis (7%) and overdose (3%).

Figure 103 shows that the proportion reporting prominent scarring or bruising has increased since 2005, and has remained the most commonly reported injection-related problem since 1997 with the exception of 2005 when 'difficulty injecting' was more frequently reported. Other problems have remained stable (thrombosis, overdose and abscesses/infections) or decreased (difficulty injecting, dirty hit) since this time.

Figure 103: Proportion of IDU reporting injection-related problems in past month, by problem type, 1997-2006

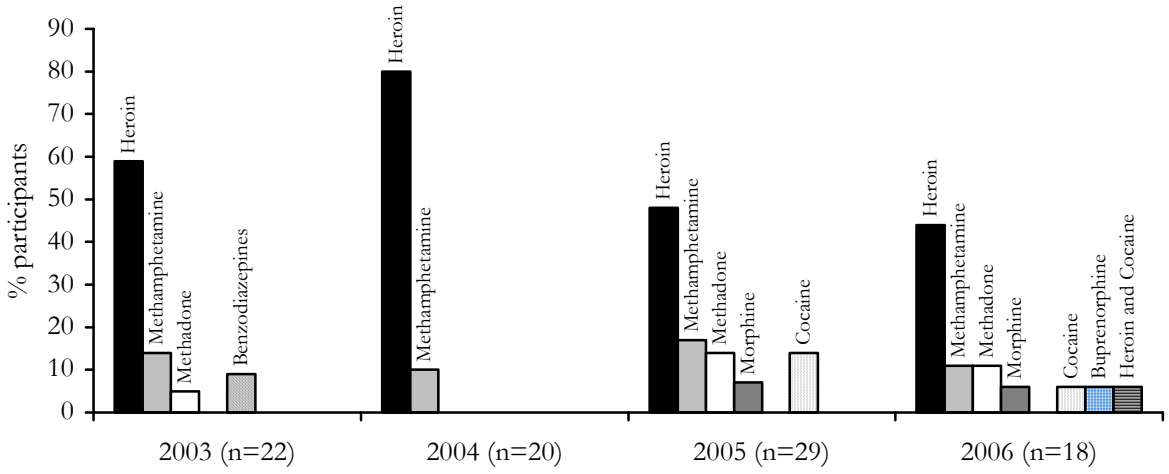


Source: IDRS IDU interviews
NB: Includes all participants

Participants who had experienced an overdose in the last month (n=5) 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 (60%; n=3) had overdosed on heroin, one of whom had also taken cocaine and another of whom had also taken cocaine and benzodiazepines. One participant had overdosed on methadone and benzodiazepines, and one participant reported having overdosed on cocaine alone. Of these five participants, two reported having receiving subsequent healthcare at a generalist healthcare centre or an NSP. One participant reported that they had not received any treatment following their overdose, and two participants did not respond.

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=18) continued to attribute it to heroin (44%; representing 5% of the entire sample). However, greater diversity was observed in the range of other drugs nominated as the primary cause (Figure 104). Just over one-fifth of participants who had experienced a dirty hit (22%) reported that other drugs had also contributed, predominantly cocaine (n=3), followed by methamphetamine (n=1). 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 104: Main drug causing dirty hit in last month, 2003-2006



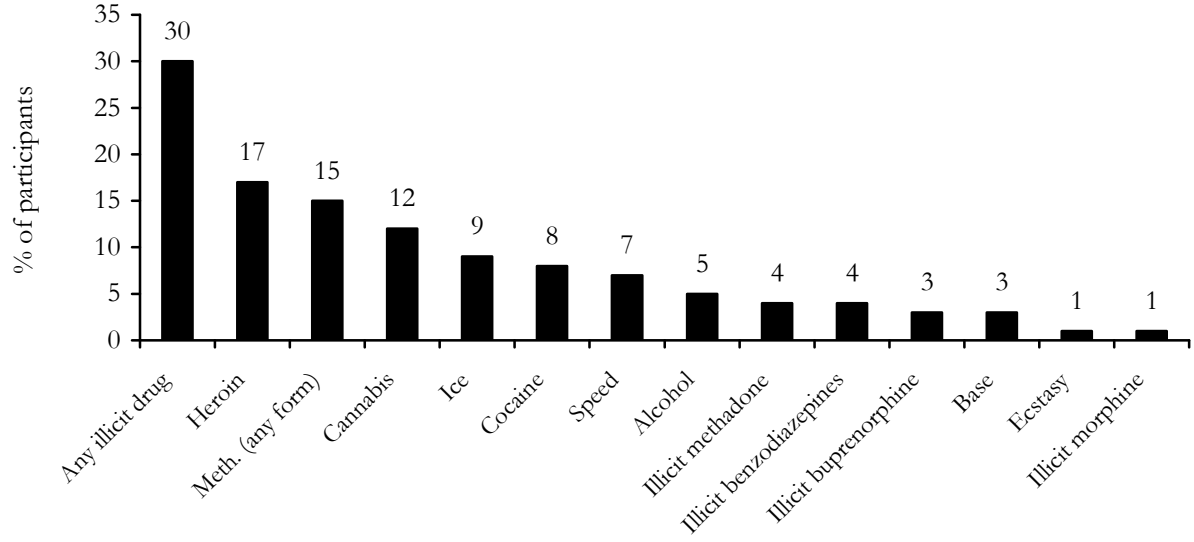
Source: IDRS IDU interviews

10.5 Driving risk behaviours

As in 2005, participants were surveyed on drug driving risk, with additional questions added on driving under the influence (i.e. over the limit) of alcohol in 2006.

Thirty-nine percent of the sample had driven a car in the six months preceding interview, and, of these, 12% (5% of the entire sample) had driven under the influence of alcohol on a median of four occasions during this time (range 1-60 times). Thirty-four percent of those who had driven under the influence of alcohol had also received random breath testing in the preceding six months (58% had not, and data were unavailable for the remaining 9%). None were over the legal blood alcohol limit when tested. By contrast, of those who had driven a car in the past six months, 76% (30% of the entire sample) had driven 'soon' after taking (an) illicit drug(s) during this time. As shown in Figure 105, the most commonly reported drugs used prior to driving were heroin (nominated by 58% of those who had driven under the influence, or 17% of the entire sample), methamphetamine (any form; 51%, or 15% of the entire sample) and cannabis (40% of those who had driven under the influence, or 12% of the entire sample).

Figure 105: Driving under the influence by IDU participants, by drug type, 2006



Source: IDRS IDU interviews

10.6 Expenditure on illicit drugs

Just over two-thirds of participants (69%) reported purchasing drugs on the day prior to interview, spending a median of $100 (range $10-$1500). This suggests little change from 2005, when $90 was reported (range $5-$1000). Among participants who had bought drugs on the day before interview, the majority (54%) had spent $100 or less, with a further 21% having spent between $100-$200.

10.7 Mental health problems

Twenty-nine percent of participants reported experiencing a mental health problem other than drug use in the preceding six months. As in previous years, the most commonly reported problem was depression (20% of all participants), followed by anxiety (8%), schizophrenia (7%) and panic (5%).

Twenty-three percent of the sample had attended a health professional for a mental health problem during this time, representing a decrease from 34% who had done so in 2005, and the lowest proportion since the survey item was introduced in 2003. This represents 80% of those reporting experience of a mental health problem other than drug use in the preceding six months, and remained stable compared to 2005 (84%). The most commonly reported health professionals consulted by IDU participants were psychiatrists (11% of the entire sample), GPs (8%), counsellors (5%), psychologists (3%), community health nurses (2%), mental health nurses (1%), social workers (1%) and psychiatric wards (1%). The most commonly reported problems that participants sought help for were depression (15% of all participants), schizophrenia (6%), and anxiety (4%).

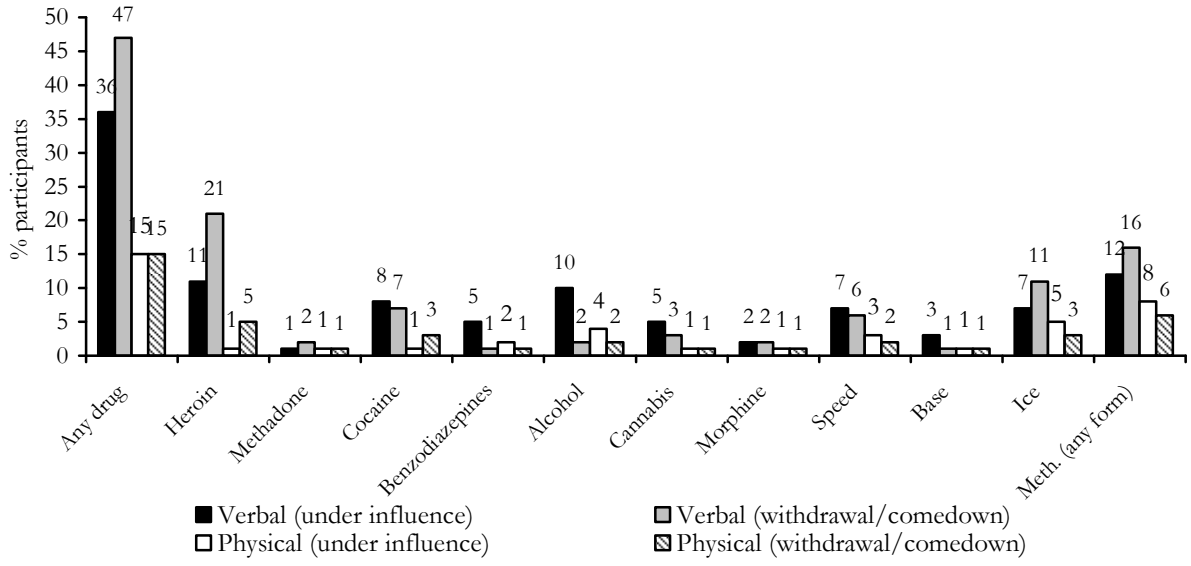
KE reports were consistent with those of IDU, with symptoms of depression and anxiety occurring most commonly, and a range of other issues such as schizophrenia, other psychotic illness and personality disorders also reported.

10.8 Substance-related aggression

Unsurprisingly, reports of verbal aggression were more common than reports of physical aggression. Thirty-six percent of participants reported that they had become verbally aggressive (e.g. threatening, shouting, abusive) and a smaller proportion (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. A greater proportion (47%) reported that they had become verbally aggressive during withdrawal or a comedown from a drug and 15% said that they had become physically aggressive at this time.

Participants were asked which drugs had caused or contributed to their aggression in the last six months. As shown in Figure 106, the substances most commonly identified as related to verbal aggression when under the influence were methamphetamine (any form) (12%), heroin (11%), and alcohol (10%). Physical aggression was most commonly reported to have followed the use of methamphetamine (any form) (8%), followed by alcohol (4%). Verbal aggression during withdrawal and/or comedown was most commonly reported in relation to heroin (21%) and methamphetamine (any form) (16%), while physical aggression during withdrawal or a comedown was most commonly attributed to the use of methamphetamine (any form) (6%) and heroin (5%). Overall these figures show a similar pattern to those reported in 2005.

Figure 106: Proportions of substance-related self-reported aggression by IDU participants, 2006



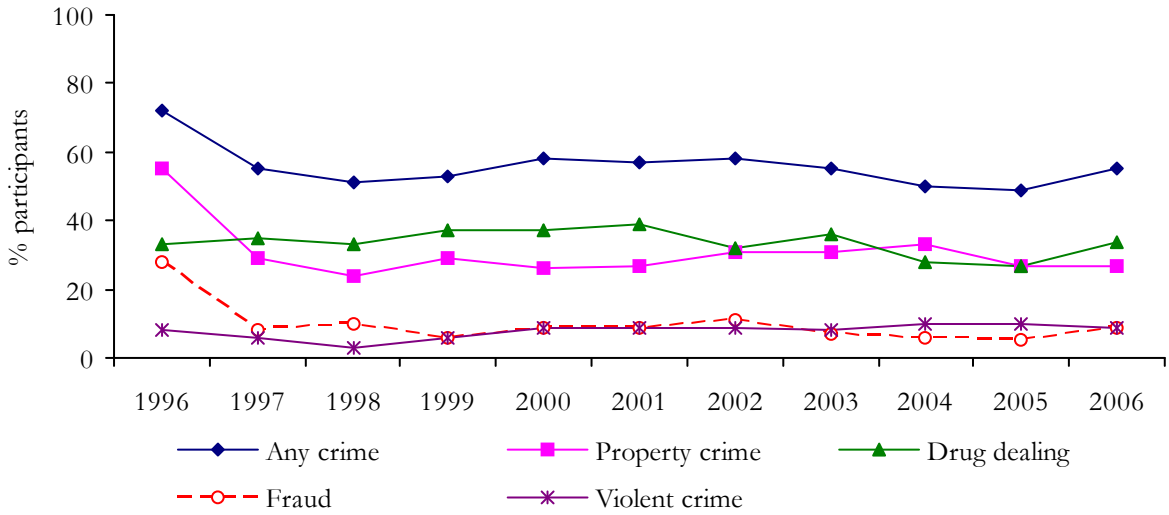
Source: IDRS IDU interviews

A number of law enforcement KE reported an increase in aggressive behaviour which was attributed to use of methamphetamine. Health KE reports were mixed (see Section 5.4.2: Current patterns of methamphetamine use).

10.9 Criminal and police activity

Fifty-five percent of participants reported engaging in any form of crime in the month preceding interview. While this represents a slight increase from 49% in 2005, figures have remained relatively stable between approximately 50%-60% since 1997 (Figure 107). As in previous years, the two most commonly reported crimes were drug dealing (34%) and property crime (27%). Nine percent of IDU reported engaging in violent crime (10% in 2005) and 9% reported fraud (5% in 2005).

Figure 107: Proportion of participants reporting engagement in criminal activity in the last month by offence type, 1996-2006



Source: IDRS IDU interviews

Thirty-nine percent of IDU participants had been arrested in the previous twelve months, representing a marginal decrease from 44% in 2005. The most commonly cited reasons for arrest were property crime (17%; 21% in 2005), possession/use of a prohibited drug (9%; a slight decrease from 12% in 2005 and a return to figures reported in 2004 [7%] and 2003 [8%]) and violent crime (7%; 10% in 2005). Small proportions reported having been arrested for fraud (2%), drug dealing/trafficking (2%), a driving offence (2%), a breach of parole (2%) or breaking an apprehended violence order (2%). There were no gender differences in reports of engagement in crime in the last month; however, males were more likely to report having been arrested in the preceding twelve months (46% vs. 27%; Fisher's Exact Test p=0.03).

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 police operations. As in 2005, there was again some suggestion of an increase in people acting as go-betweens between street-level users and dealers.

As in previous years, the majority (57%) of IDU participants perceived that there had been an increase in police activity in the preceding six months (Table 16). Approximately one-third (32%) 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 2005.

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, particularly around public areas of Liverpool. In central Sydney, participants made reference to an increased police presence generally, including foot patrols and undercover operations, and many referred to the use of drug detection dogs.

In agreement with IDU reports, many health KE commenting on the Liverpool area had noted an increased police presence, and in some cases expressed a degree of concern that clients did not attend services when there were police in the vicinity. This has important implications for healthcare advice, safer injecting practices, engagement into services and referral. KE in other areas provided mixed reports, with some noting an increase in police activity, and others indicating it had remained stable.

As in 2005, three-fifths of the sample (62%) reported that police activity had not made it more difficult for them to score drugs (Table 16). This represents little change from 2005.

Table 16: Criminal and police activity as reported by IDU participants, 2005-2006

Criminal and police activity	2005 N=154 %	2006 N=152 %
Criminal activity in last month:		
Dealing	27	34
Property crime	27	27
Fraud	5	9
Violent crime	10	9
Any crime	49	55
Arrested in last 12 months	44	39
Police activity in last 6 months		
More activity	66	57
Stable	30	32
Less activity	2	2
Don't know	2	9
More difficult to obtain drugs recently		
Yes	39	37
No	60	62

Source: IDRS IDU interviews

10.9.1 Summary

- Participant reports of recent involvement in criminal activity had increased slightly compared to 2005, although figures have remained between approximately 50%-60% for the past decade. Property crime and drug dealing remained the most commonly reported types of crime on the self-report measure.
- A marginal decrease was observed in reports of arrest over the past year.
- The majority of participants perceived that there had been an increase in police activity recently. In particular, a greater police presence in the Liverpool area was noted, while participants located in more central areas of Sydney reported increased activity among a range of areas including drug detection dogs, uniformed and undercover police. Two-fifths of the sample 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 2005 sample in terms of many demographic characteristics such as age, gender and employment status. An effort was made to recruit fewer participants who were engaged in pharmacotherapy, on the premise that these participants would be more actively engaged in injecting drug use. This needs to be kept in mind.

It is also imperative to note that while a proportion of the IDU sampled in 2006 *were* engaged in pharmacotherapy treatment at the time of interview, responses presented are not representative of all clients engaged in drug treatment services. 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

Based on this year's findings, it appears that while heroin was still available to, and used by, IDU in Sydney, it was of relatively low purity, and many IDU and KE reported that people who continued to regularly inject were increasingly using other drugs in addition to, or in place of, heroin because of its low quality. Compared to 2005, heroin prices remained stable, and it was typically reported to be of low rather than medium purity. While the majority of participants reported that heroin remained readily available, a greater proportion reported it to be difficult to obtain compared to 2005. The market has clearly not returned to levels of price (comparatively low), purity (high) and availability (high) reported during the late 1990s.

Although the majority of IDU participants continued to nominate heroin as their drug of choice and the drug injected most frequently in the month preceding interview, sizeable decreases in these figures occurred in 2006 relative to 2005. Similarly, while patterns of heroin use remained high relative to other drugs, decreases in prevalence and frequency of use were reported, including the lowest proportion of daily heroin users reported since the project commenced in 1996.

Further analysis on patterns of heroin use revealed that this decrease occurred primarily among IDU participants sampled in central Sydney, while patterns of use reported in the South West remained stable (with a decrease having already occurred in this area in 2005). The decrease in heroin use in the central Sydney area is most likely due to continued poor quality and availability of heroin in the context of other drugs (licit and illicit), which are either easier to obtain, lower in price and/or perceived to be of higher or more predictable purity.

Two further interesting, but localised, changes occurred in the Sydney heroin market in 2006. Firstly, there were reports of brown heroin (believed to be from either Afghanistan or the Golden Crescent) being used in Kings Cross and South Western Sydney. Heroin in Australia has traditionally originated in South East Asia, and is typically white/beige in appearance. This has important implications not only for supply reduction efforts, but also harm reduction, as brown heroin is alkaline and requires the use of an acid during preparation for injecting. It is also more amenable to smoking as a route of administration. Secondly, a marginal increase was observed in IDU and KE reports of homebake use, a form of heroin derived from pharmaceutical opioids. Should this become an emerging issue, this may also have important implications for both supply and harm reduction efforts.

Both law enforcement and health indicator data showed stable or a relatively lower prevalence of heroin-related harms, suggesting that heroin use has remained lower in Sydney 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 in the context of well established patterns of polydrug use (including other depressant drugs such as benzodiazepines, alcohol and other opioids) among this group, who may be unaware of the risk of overdose through concurrent use of multiple depressant drugs.

11.2 Methamphetamine

Methamphetamine use, particularly speed powder and ice/crystal, was reported by three-quarters of the sample in 2006. Use patterns across the sample had increased since 2005, but remained fairly sporadic, with the majority of methamphetamine users having used it weekly or less often in the preceding six months.

There was a concurrent increase noted in the number of daily methamphetamine users, although this figure (10%) remained substantially lower than the proportion of daily heroin users (25%), and equivalent to the proportion of daily cocaine users.

Market characteristics for methamphetamine (price, purity and availability) remained relatively stable, although there was an increase in the number of participants who had recently purchased ice/crystal. Median prices for small amounts (points) of all three forms (speed powder, base and ice) remained at $50, while fluctuations were observed in the prices for larger quantities. Speed powder was generally perceived to be of lower purity than base and ice/crystal by both IDU and KE, with ice most consistently being reported as high in 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 and this was also reported to have remained stable, although an increase was observed in the proportion of IDU participants reporting ice to be 'very easy' to obtain.

It should be noted that the majority of IDRS 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 drug treatment services) as compared with methamphetamine users who do not use heroin (Kelly et al., 2005); see also Dunn & Degenhardt (forthcoming).

As in previous years, concerns about aggression related to methamphetamine use were reflected among a small group of IDU. Sixteen percent of participants reported becoming verbally aggressive during a comedown or withdrawal from methamphetamine in the last six months Heroin; however, was a more commonly cited drug-related to verbal aggression. Methamphetamine was the most commonly cited drug-related to physical aggression; however, only 6% reported this occurring.

KE and indicator data suggest a slight increase in harms related to methamphetamine use, although reports are not broadly indicative of an 'ice epidemic', as reported by certain media sources. A number of KE reported an increase in users and/or problems associated with methamphetamine use, such as agitation, poor mental and physical health, and in some cases aggression, chaotic behaviour and drug-induced psychosis. Law enforcement KE reported that there had been an increase in problematic interactions with users, while health KE had not experienced these problems. This most likely reflects a difference in the nature of interactions

health services have with methamphetamine users, and may also reflect different groups of methamphetamine users coming into contact with these KE.

Indicator data on methamphetamine-related harms showed a somewhat mixed picture, with some increasing (e.g. the number of clandestine laboratories being detected and the number of recorded police incidents for possession and/or use) and some having stabilised over the past few years (e.g. number of principal amphetamine-related hospital admissions and the number of IDU in the Annual NSP Survey reporting amphetamines as the last drug injected). Some of these indicators still remain relatively lower than those for heroin, particularly hospital admissions.

KE comments, IDU reports, and indicator data, together with other research findings (e.g. McKetin et al., 2005, Roxburgh and Degenhardt, 2006) suggest that a minority of- typically dependent- methamphetamine users may be experiencing problems associated with their methamphetamine use, rather than these problems occurring among a broader group of methamphetamine users. Nonetheless, these users do present unique challenges to frontline law enforcement and health workers, as they are often in crisis at this time, and this would account for the problematic interactions described by law enforcement KE. Specific training for frontline workers continues to be a priority, and a number of guideline documents have been developed under the National Drug Strategy to address some of these issues (e.g. Baker et al., 2004, Jenner et al., 2006, Jenner et al., 2004a, Jenner et al., 2004b).

These data also suggest the continued need for further development and expansion of effective treatment programs for methamphetamine users who are experiencing problems relating to their use (including programs for 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

A slight increase in cocaine use was observed in the IDU sample in 2006, with two-thirds of the sample reporting use in the last six months on a median of 20 days (i.e. almost once per week). One-tenth reported daily cocaine use over the first six months of 2006, representing little change from 2005. However, levels of use have not returned to those reported in 2001. Cocaine was more commonly used in central Sydney than in the South West, a finding reflected in KE reports over the past three years.

In accordance with increased use of cocaine, a larger proportion of participants rated cocaine as 'very easy' to obtain as compared to 2005, and availability was reported as 'easy' or very easy' to obtain by over half of participants. Prices remained fairly stable, although the median price per gram increased slightly. Reports of purity were comparable to 2005 (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.

In accordance with IDU data, KE suggested that there had been an increase in cocaine use in some areas, particularly as part of a pattern of polydrug use, and availability was generally reported to have increased across NSW. Based on KE reports, use among IDU and other users accessing health services in relation to their use was more common in central Sydney and perhaps South West Sydney than elsewhere. However, concern was raised about the mental health of a

group of primary cocaine users in Western Sydney, suggesting that there may be small groups of users in areas outside those containing the main drug markets.

Some of the cocaine-related indicator data also show some increases occurring over the past few years, in particular cocaine-related hospital admissions. Nevertheless, these figures remain relatively smaller than heroin-related hospital admissions, indicating that only small proportions of users may be experiencing problems associated with their cocaine use. In addition, cocaine use most often occurs within the context of polydrug use, and problems may not be exclusive to an individual's cocaine use.

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 44% reporting daily use in the preceding six months. Given the context of consistently high prices for heroin, methamphetamine and cocaine, 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.

As in previous years, hydroponic cannabis continued to be the predominant form of cannabis used, and a large proportion also reported using bush cannabis in the six months preceding interview. Smaller proportions reported using hash (8%) and hash oil (2%) during this time. Price remained relatively low at $20 per gram, and both hydroponic and bush cannabis, particularly the former, were reported to be readily available. Perceived potency of hydro was reported to be 'high' and bush was reported to be 'medium', again indicating little to no change from previous years.

Generally, KE reports and indicator data suggested that cannabis use in the broader community has not changed recently, with a number of health and law enforcement indicators remaining relatively stable. A number of health KE noted an increased number of cannabis users requesting medication for withdrawal, and an increased number of requests for information about drug testing on the roads and in the workplace. Overall, with the exception of some changes in large-scale cannabis production, the cannabis market remained relatively unchanged.

11.5 Other opioids

A slight decrease was observed in the proportions of IDU reporting use of illicit methadone syrup in the last six months, from approximately 17% in 2005 to 25% in 2006, although this figure remained lower than that reported in 2004 (29%). 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 slight increase was also observed in the proportion reported injecting methadone from illicit sources (20% in 2006 as compared with 11% in 2005), with figures similar to those reported in 2004 (22%). Of these, approximately half had been engaged in methadone treatment during the same period. Frequency of illicit methadone injection was sporadic (less than monthly injection, representing a decrease from 20 days in 2005). Just under half of respondents who had injected illicit methadone syrup on one occasion or more in the preceding six months had been engaged in methadone treatment during this period. One-quarter of all participants reported injection of

any form of methadone (i.e. syrup or Physeptone tablets; regardless of whether it was licitly or illicitly obtained), on a median of 8 days (approximately monthly use).

Reports on illicit methadone availability were somewhat mixed, although almost one-third of the sample reported that it was 'easy' or 'very easy' to obtain. There was some indication of a price increase, with the median price per ml increasing from 50c to 75c; however, the modal price remained at 50c per ml. Illicit Physeptone tablets use remained uncommon, with only 2% of the sample reporting use in the last six months and no participants reporting recent purchase of this form of methadone.

An increase was observed in the reported use of buprenorphine (e.g. Subutex), from less than one-tenth of the sample in 2005 to approximately one-fifth in 2006. However, the frequency of use remained sporadic. A similar increase was observed in the prevalence of illicit buprenorphine injection, again with frequency of injection remaining low (less than monthly). Low frequency of use and injection of illicit buprenorphine may suggest low availability and/or low levels of participants' desire to use this drug illicitly. As one KE suggested, it may also reflect experimentation rather than more regular use among some users. Sixteen percent reported injection of any buprenorphine – i.e. whether licitly or illicitly obtained – during this time.

In 2006, survey items were included on buprenorphine-naloxone (trade name Suboxone) use and diversion. This form of opioid maintenance pharmacotherapy was listed on the Pharmaceutical Benefits Scheme in the 1-2 months prior to interview. There were no reports of buprenorphine-naloxone diversion in 2006. This is somewhat unsurprising given both its recent introduction and the inclusion of naloxone in this preparation, which causes withdrawal if injected by a heroin dependent user.

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. The low prevalence of methadone and buprenorphine injection suggests that it does not appear to be a significant issue among IDU in Sydney. However, this practice remains an issue of concern, particularly in relation to diversion of pharmacy (rather than take-away) doses, 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. These harms were reflected to some extent in IDU data, with 55% of those who reported injecting it in the preceding month also experiencing harm that they attributed to this behaviour.

In contrast, use of illicit morphine was higher, with almost one-third of participants reporting use, and a similar proportion reporting injection of any form of morphine (whether licitly or illicitly obtained) in the six months preceding interview. Prevalence of morphine use has increased gradually since 2001; however, frequency of use remains sporadic, at less than monthly use. This suggests that morphine (and indeed other illicitly obtained opioids such as methadone, buprenorphine and oxycodone) may be used as a substitute when the drug of choice (e.g. heroin) is difficult to obtain, of low purity, or when a methadone dose is missed. KE reports indicated that morphine use remained uncommon, with the exception of an increase in some parts of central Sydney. These were reflected in IDU and indicator data. 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 injected morphine was high at 55%.

Oxycodone use did not appear to be widespread in Sydney, with low rates of use and few participants completing the section on oxycodone price and availability. However, a slight increase in use was noted relative to 2005. In addition, KE and indicator data reports suggest that, along with morphine, use of oxycodone is emerging as an issue in the Kings Cross/central

Sydney area. This remains an issue to monitor, particularly given the continued context of reduced heroin purity and greater polydrug use by opioid injectors in NSW, and recent changes in legislation regarding the prescription of these drugs. The injection of tablets designed for oral administration, including MS Contin (morphine) and Oxycontin (oxycodone), is associated with problems such as the increased potential for infection and vein damage.

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.

11.6 Benzodiazepines

A slight decrease in prevalence of benzodiazepine use was reported in 2006, with just over half reporting use in the preceding six months. Median days of use remained stable at approximately weekly use, although a slight decrease was observed in the proportion of daily users (14% in 2006; 20% in 2005). Nevertheless, the proportion of daily users among IDRS IDU has gradually increased over time. Illicit benzodiazepine use was reported by just over one-third of the sample, with Valium/diazepam and Serepax/oxazepam remaining the most commonly used forms.

The proportion of participants reporting benzodiazepine injection in the six months preceding interview remained low at 3%, and frequency of use was also low at a median of 3 days. This represents a sustained decrease since the withdrawal of temazepam gel caps from the pharmaceutical market in March 2004. 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 low and sustained levels of benzodiazepine injection following withdrawal of temazepam gel capsules, as seen in the number of Sydney MSIC clients reporting injection. Nevertheless, within the context of extensive polydrug use, overdose remains a legitimate risk among this group, and it remains imperative to continue to educate regular drug users on these risks associated with combining depressant drugs such as opioids, alcohol and benzodiazepines.

Overall, the data indicated that the removal of benzodiazepine gel capsules in March 2004 has had a sustained impact on injecting behaviours. However, IDU in Sydney continue to access (both licitly and illicitly) benzodiazepines, and to use them frequently. Continued vigilance to minimise the diversion of benzodiazepines, whilst balancing this with the legitimate clinical need for their prescription, is warranted.

11.7 Other drugs

Antidepressant use remained stable among IDU, with one-quarter reporting use in the last six months, and a decrease in the median days of use (135 days, compared to 180 days or daily use in 2005). Only 1% reported injection of antidepressants on a median of 12 days, while 3% reported use of illicitly obtained antidepressants in the past six months. This is perhaps unsurprising given that antidepressants generally require several days or weeks of use before they become effective. They also lack an acute onset and are often associated with unpleasant initial side effects, which may act as a deterrent to licit use. 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, although one-tenth reported daily alcohol use, representing an increase from 2005. Given the prevalence of HCV among IDU in Australia, continued education about the harms associated with heavy drinking patterns (including treatment/referral where appropriate) and HCV status should remain a priority. Alcohol may be

increasingly included in a pattern of polydrug use in the context of low heroin purity as it is inexpensive and likely to augment the effects of opioids and benzodiazepines. As in previous years, 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. Indeed, recent research conducted in Australia on opioid-related deaths found that severe coronary pathology (including bronchopneumonia and particularly hepatic pathology) was more pronounced among older cases, suggesting that the general poor health, and associated lifestyle factors, among opioid users may contribute to the increased risk of opioid overdose (Darke et al., 2006).

11.8 Associated harms

Reasonably high levels of recent BBVI testing and HBV vaccination were reported in the NSW sample with over one-third of participants reporting having been tested in the three months preceding interview and almost half reporting HBV vaccination. Rates of reported HCV prevalence reported by the IDU sample and NSP survey data were high, whilst the prevalence of HBV and HIV were low. The total number of newly acquired HCV notifications in NSW has remained stable over the past two years, as have the number of needles and syringes dispensed across the state. The proportions of IDU reporting borrowing and lending used needles remained relatively stable, and a slight decrease was observed in the proportions reporting sharing other injecting equipment including spoons, water and filters.

Despite some suggestion of a reported increase in safer injecting practices, and 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. This should include efforts to provide testing and vaccination to IDU. This is particularly important, given that IDRS participants in NSW are recruited in key drug market areas where it is often relatively easy to access health services compared to other areas in the state. Also, as some participants were confused about their BBVI status, post-test counselling and ongoing support where appropriate should contain messages that are clearly understood by clients (for further discussion of such issues, see O'Brien et al., 2006).

Locations for injection have remained relatively unchanged, 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 required. Proportions reporting injection-related problems have remained relatively stable, and the most commonly reported problems were difficulty injecting and experience of a dirty hit, problems which in many cases may be improved through better vein care and good injecting practice (e.g. rotation of injection sites, use of clean equipment, etc.). While numbers remained small, experience of overdose and dirty hits were attributed to a range of drugs, 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.

Driving risk behaviour among the sample remained an issue of concern, with one-third of the sample reporting having driven under the influence of drugs in the preceding six months. Driving under the influence of illicit drugs remains a topical issue, generating research and the implementation of policies such as roadside drug testing. Roadside drug driving testing has recently been introduced in NSW, and its impact on users is yet to be determined. Dissemination

strategies to distribute information about the effects of different drugs upon driving, in addition to information on drug driving testing legislation and penalties, to IDU appears warranted. IDU participant interviews were carried out prior to the introduction of drug driving testing legislation in NSW (see http://www.rta.nsw.gov.au/roadsafety/drinkdriving/drugs/ for further information).

One-third of the sample reported experiencing a mental health problem other than drug dependence in the preceding six months, and, as in previous years, depression and anxiety were the most commonly reported problems. However, 20% of those reporting these problems in the past six months had not attended a health professional in regards to these during this time. This raises some concern about the accessibility, availability, and awareness of these services among this group.

Substance-related aggression was experienced by a significant minority of IDU within the preceding six months, particularly verbal aggression during withdrawal (47% of participants), and just over 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) and alcohol (when under the influence). However, proportions reporting these drugs were relatively small. Nevertheless, the IDU interviewed for the IDRS experience and are witness to significant levels of aggression, with the very nature of illicit drug markets often involving violence, and this might be an area that requires future research. This aggression may also be an issue for consideration within drug treatment services (e.g. assertiveness training, anger management, personal safety issues, self defence), including occupational health and safety issues and training for frontline health workers and law enforcement personnel.

Proportions reporting engagement in criminal activity in the month preceding interview have ranged between 50%-60% for a number of years. This group appeared relatively engaged in criminal activity with over one-third of the sample being arrested in the previous twelve months. IDU participant perceptions of police activity differed slightly by area, with an increased police presence reported in public areas of South-West Sydney, particularly Liverpool, whereas a more general increased police presence (e.g. uniformed, undercover) was noted in central Sydney. A number of participants in central Sydney also perceived an increased use of drug detection dogs by police in the area. KE perceptions of police activity were dependent on the area and police operations, with many also noting an increased police presence in the Liverpool area. Also highlighted was the clear need for continued, ongoing communication between law enforcement and health services.

12.0 IMPLICATIONS

The findings of the 2006 NSW IDRS indicate that further attention is required in the following areas:

- Wider implementation of effective interventions for stimulant (cocaine and methamphetamine) users appears necessary and development of strategies to engage and retain users in these programs would be of benefit.
- Dissemination of available treatment options for psychostimulant dependence to users is required.
- Continued skills training for frontline workers dealing with people who use psychostimulants in a problematic manner and/or who present in crisis appears warranted. This includes health service providers and law enforcement personnel. A number of guideline documents have been developed under the National Drug Strategy (e.g. Baker et al., 2004, Jenner et al., 2004a, Jenner et al., 2006, Jenner et al., 2004b).
- There should be continued provision of services – e.g. counselling and withdrawal management – for those wishing to cease or reduce cannabis use.
- Continued careful monitoring is required by medical practitioners of the diversion of pharmaceutical preparations (e.g. benzodiazepines and opioids), whilst also continuing to appropriately provide these medications to those with genuine clinical need. Provision of targeted harm reduction messages and equipment such as pill filters should be considered for those who continue to inject such preparations.
- There may be many interpretations of the term 'diversion' and reasons for doing so. Clear and honest dialogue between case workers/prescribers and clients is crucial in minimising diversion and related harms whilst also achieving the highest rates of treatment adherence. Further research is currently being conducted into this area to increase understanding of this difficult issue.
- Continued monitoring of the currently low prevalence of alkaline heroin and homebake heroin, associated harms and production of the latter within Australia is necessary. Should their use become more widespread, the flexibility in harm reduction efforts (such as information on safer methods of use and provision of the necessary equipment) demonstrated by health services in central Sydney will be required more broadly.
- There should be continued focus on education regarding overdose and safer injecting strategies. In the context of increased stimulant use, a number of actions seem warranted. These include targeted education regarding the effects of prolonged use (e.g. agitation, aggression, paranoia and psychosis), practical strategies to reduce risk (e.g. rest periods between binges), skills training or counselling for users (e.g. on recognising and dealing with anxiety, anger and low mood) and referral into treatment where appropriate. An example of such information may be found in a booklet developed with input from users ('On Thin Ice: A User's Guide' at http://ndarc.med.unsw.edu.au/).
- Continued emphasis on the importance of regular BBVI testing and vaccination to injecting drug users, including efforts to maximise the availability of these services to injecting drug users (e.g. provision of testing at/near NSPs). Continued efforts should also be made to provide clear messages and interpretations of BBVI test results, including access to follow-up information and referral.
- Increased/continued awareness of the need for treatment of the comorbid mental health and polydrug use problems that many IDU may be experiencing and promotion of available services to injecting drug users are warranted. 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, and effects of drug use on signs and symptoms. 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 antidepressant 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, antidepressant 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.
- Following the introduction of drug driving testing in NSW, dissemination of the legislation and penalties to users appears warranted.
- High rates of tobacco use have consistently been documented in the IDU samples over time, and consideration should be given to providing smoking reduction/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 is recommended 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., 2005a). 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).

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