new south wales

J. Van Buskirk and L. Burns

NSW DRUG TRENDS 2012

Findings from the

Illicit Drug Reporting System (IDRS)

Australian Drug Trends Series No. 92

NEW SOUTH WALES DRUG TRENDS 2012

Findings from the Illicit Drug Reporting System (IDRS)

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Disclaimer: as with all statistical reports there is the potential for minor revisions of data in this report over its life. Please refer to the online version at www.ndarc.med.unsw.edu.au under 'drug trends'

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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
ANSPS	Australian Needle and Syringe Program Survey
AODTS	Alcohol & Other Drug Treatment Services
AUDIT-C	Alcohol Use Disorders Identification Test - Consumption
BBVI	Blood-borne viral infections
BNX	Buprenorphine-naloxone (Suboxone)
BOCSAR	NSW Bureau of Crime Statistics and Research
BPI	Brief Pain Inventory
BPN	Buprenorphine (Subutex)
CI	Confidence Interval
CNMP	Chronic non-malignant pain
DATS	Drug and Alcohol Treatment Services
ED	Emergency department
EDRS	Ecstasy and related Drugs Reporting System
FTND	Fagerstrom Test for Nicotine Dependence
FDS	Family Drug Support
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
HSI	Heavy Smoking Index
IDRS	Illicit Drug Reporting System
IDU	Injecting Drug Use
IRID	Injection-Related Injuries or Diseases
LOC	Loss of consciousness
K10	10-item Kessler Psychological Distress Scale
KE	Key expert(s)
MCS	Mental Component Score
MDMA	3,4-methylenedioxymethamphetamine
MH	Mental health
MMT	Methadone maintenance treatment
MSIC	Medically Supervised Injecting Centre
NA	Narcotics Anonymous
NCHECR	National Centre in HIV Epidemiology and Clinical Research
NCIS	National Coronial Information System
NDARC	National Drug and Alcohol Research Centre
NNDSS	National Notifiable Diseases Surveillance System

NSP	Needle and Syringe Program
NSW	New South Wales
NSW MDS	New South Wales Minimum Data Set
NSW MDS DATS	NSW Minimum Data Set for Drug and Alcohol Treatment Services
OP	Outpatient
OST	Opioid substitution treatment
OTC	Over the counter
PBS	Pharmaceutical Benefits Scheme
PCS	Physical Component Score
PDI	Party Drugs Initiative
PGSI	Problem Gambling Severity Index
PMA	Para-methoxyamphetamine
PO	Pharmaceutical opioids
PWI	Personal Wellbeing Index
PWID	People Who Inject Drugs
RDT	Roadside Drug Testing
REPIDU	Research and Education Program for Injecting Drug Users
SD	Standard Deviation
SDS	Severity of Dependence Scale
SF-12	Short Form 12-Item Health Survey
SNRI	Serotonin-norepinephrine reuptake inhibitor
SPSS	Statisitical Package for the Social Sciences
STI	Sexually Transmitted Infection
TBI	Traumatic Brain Injury
THC	delta-9 tetrahydro-cannabinol

GLOSSARY OF TERMS

Cap	A small amount, typically enough for one injection
Cook up	The use of heat to dissolve in the preparation for injection
Central Sydney	In the PWID survey data refers to participants recruited in Kings Cross and Redfern; in the KE survey data refers to participants referring to these and/or surrounding suburbs in the inner city, e.g. Surry Hills, Darlinghurst
Days of use/injection	180 days: daily use/injection over preceding 6 months
	90 days: use/injection every 2nd day over preceding 6 months
	24 days: weekly use/injection over preceding 6 months
	12 days: fortnightly use/injection over preceding 6 months
Diverted/ Diversion	The selling, trading, giving or sharing of one's medication to another person, including through voluntary, involuntary and accidental means.
Eightball	3.5 grams
Extra-medical use	Use of a prescribed medication without prescription, or not 'as directed' by a doctor but not excluding the possibility that use may be driven by medical reasons
Fit	Slang derived from 'outfit' referring to a needle-syringe
Fitpack	A small package of needle syringes and related injecting equipment dispensed by Needle Syringe Programs, vending machines, pharmacy or via Outreach
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 general 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 the PWID survey data refers to participants recruited in Liverpool and Canterbury; in the 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
Score	To purchase or obtain drugs
Sentinel surveillance	In the context of the IDRS, systematic, ongoing collection and analysis of data from sub-populations (PWID) considered to have the potential to provide an early indication of emerging trends in illicit drug use and associated harms

EXECUTIVE SUMMARY

Common terms used throughout the report

People who inject drugs (PWID) regularly	A person or people who have injected a drug on six or more separate occasions in the previous six months
Recent use	Used at least once in the previous six months
Sentinel group	A surveillance group that point towards trends and harms
Median	The middle value of an ordered set of values
Mean	The average
Frequency	Number of occurrences within a given time period

Demographic characteristics of people who inject drugs (PWID)

In 2012, one hundred and fifty-one people participated in the IDRS survey. Sixty percent were male, ninety-three percent reported they were not currently working or were currently receiving 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 39 years (range 19-59 years). Thirty percent of the sample identified as Aboriginal and/or Torres Strait Islanders[1]. Ninety-four percent of the sample identified English as the main language spoken at home. Sixty-nine percent of the sample had completed year 10, and 21% had completed year 12 at high school. Fifty-one percent had obtained a trade or technical qualification, and 5% had completed a university or college qualification such as a degree. Forty-eight percent had not completed any further education after leaving school. The majority (66%) of participants reported previous prison history and the average age of first injection was 19 years (range 10-37).

Patterns of drug use among the PWID sample

Heroin

Following the trends of previous years, heroin was still the preferred drug of choice (69%), in 2012 and this remained stable with reports from last year (70% in 2011). Heroin was the drug most often injected in the month prior to interview (62%; 62% in 2011) and the drug people had injected most recently (59%; 61% in 2011). Eighty-nine percent of participants reported use on one or more occasions in the six months preceding interview (87% in 2011). The median days of recent heroin use also remained stable at 96 days (90 days in 2011). The proportion of participants reporting daily use was 36% (28% in 2011).

[1] Please note that the Aboriginal and/or Torres Strait Islander proportion of the sample is not indicative of numbers of Indigenous persons who regularly inject drugs.

The median price for a gram ($350) increased from the price reported in 2011 ($300) but the price for a cap of heroin ($50) remained stable. Prices continued to remain higher than those reported prior to the heroin shortage in 2001. Heroin remained accessible in 2012, with 84% (82% in 2011) of those who commented reporting that it was either 'easy' or 'very easy' to obtain. The majority of participants that commented (76%; 64% in 2011) on ease of availability reported it had remained stable.

Participant reports (among those who commented) on heroin purity continued to be mixed in 2012. Thirty-eight percent of the participants that commented reported current purity as low, which remained stable, just over one-third (35%; 37% in 2011) reported it as medium. Thirty-three percent (32% in 2011) of those commenting considered purity levels to have remained stable over the preceding six months, while just over one quarter (26%; 37% in 2011) commented that it had decreased.

Methamphetamine

The proportion reporting any recent methamphetamine use (speed powder, base, ice or liquid[2,3]) increased in 2012 (from 60% in 2011 to 72% in 2011), though this change was not statistically significant. Among those reporting any recent use (speed, base, ice, liquid) the median number of days of use was 24 days which remained stable with 2011. The majority of users had used each form weekly or less over the six months preceding interview and the proportion (6% in 2012) of people reporting daily use of any type of methamphetamine over the past four years remained low relative to the proportion of daily heroin users.

A 'point' (0.1 of a gram) remained 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/crystal. Again in 2011, there were insufficient numbers of purchases of any form of methamphetamine to comment on price changes in amounts larger than points.

Speed and ice/crystal forms of methamphetamine were typically reported by the majority of users as 'very easy' or 'easy' to obtain, whereas the availability of base varied. Availability for all forms was typically reported to have remained stable over the six months preceding interview. In 2012 there was a significant ($p < .01$) increase in the number of participants reporting methamphetamine powder as 'high' purity compared with 2011.

Cocaine

Recent cocaine use among PWID remained comparable to 2011 with 44% of the sample reporting recent use in 2011 (47% reporting use in 2012). The median days of use among users, also remained stable in 2012 at a median of 7 days (approximately monthly use). Daily cocaine use remained stable with 5% of users reporting daily use (3% in 2011). Reports of crack

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[2] Methamphetamine powder (referred to 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.

[3] In previous years, 'any form' of methamphetamine included pharmaceutical stimulants. In 2006 and 2007, they were considered separately from methamphetamine. Prevalence and frequency of pharmaceutical stimulant use have remained low and stable in NSW.

cocaine were once again almost non-existent among the PWID sample, a finding reflected in KE reports. The majority (71%; 67% in 2011) reported cocaine availability to be 'easy' or 'very easy'. The median price per 'cap' of cocaine remained stable in 2012 at $50. The median price of a gram increased in 2012 from $300 in 2011 to $375, though low numbers reported purchasing cocaine by the gram and, hence, this result should be interpreted with caution. Very low numbers of participants reported purchases of other amounts.

A significantly higher proportion of PWID reported cocaine purity as 'medium' in 2012 (48% versus 32% in 2011; $p < 0.05$).

Cannabis

The cannabis market continued to remain relatively unchanged since the commencement of the NSW IDRS in 1996. The majority of participants (72%; 81% in 2011) in the 2012 participant sample reported having used cannabis in the six months prior to interview. The median frequency of use among PWID remained at 180 days (daily use), which has been stable for the past 9 years.

In line with previous years, a large proportion of participants reported use of both the hydroponic ('hydro') and outdoor-grown ('bush') forms of cannabis, with hydro appearing to dominate the market. The number of participants reporting purchase of resin (hashish) and oil (hash oil) continued to remain very rare and infrequent. The price of hydroponic cannabis remained stable at $20 per gram (the most popular purchase amount), though significantly fewer PWID reported that it was readily available, i.e. 'easy' or 'very easy' to obtain (87% versus 96% in 2011, $p < 0.05$). 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 continued to be reported as less easily available than hydro, with fewer participants able to complete survey items on bush market characteristics (price, potency and availability). Potency of hydroponic cannabis continued to be reported as 'high', and bush continued to be reported as 'medium'.

Use of pharmaceuticals

The IDRS monitors the extra medical use patterns and market characteristics of opioid pharmaceutical medications including both those prescribed for opioid substitution treatment (OST; i.e. methadone, buprenorphine, buprenorphine-naloxone), and those prescribed for pain relief (i.e. morphine and oxycodone).

Non-prescribed methadone

One-quarter (25%) of participants reported use of illicitly obtained methadone syrup in the six months preceding interview, which is stable compared with 2011 (23%). Use remained stable and relatively infrequent (approximately monthly). Fifteen percent of participants reported injecting illicit methadone syrup in the preceding six months (18% in 2011), the frequency (median days) of injection also remained stable at approximately monthly. However, significantly fewer of those that could comment on the availability of non-prescribed methadone reported that it was 'very easy' or 'easy' to obtain (64% versus 80% in 2011). The median price of 50 cents per millilitre remained stable.

Recent use and injection of Physeptone obtained without prescription continued to remain uncommon.

Non-prescribed buprenorphine and buprenorphine-naloxone

The recent use and injection of non-prescribed buprenorphine in the preceding six months remained stable in 2012. The frequency of injection of non-prescribed buprenorphine over this period continued to remain low and stable.

Buprenorphine-naloxone (Suboxone) tablets have been investigated by the IDRS since it was listed on the Pharmaceutical Benefits Scheme (PBS) in April 2006. In September 2011, Buprenorphine-naloxone film was also added to the PBS, and so was also investigated in the 2012 IDRS. Six percent of the sample reported recent use of illicit buprenorphine-naloxone tablets (7% in 2011), with 5% reporting recent use of buprenorphine-naloxone film. The median number of days of use for illicit buprenorphine-naloxone tablets or film was low, with less than monthly use reported. In addition, very low numbers reported recent injection of either tablets or film (2% and 1%, respectively).

Morphine

An increase in prevalence of any recent morphine use among the NSW IDRS PWID sample had been observed since 2001; however, in 2012 it remained comparable with 2011 (23% versus 28% in 2011). Recent use of non-prescribed morphine also remained stable (21% in both 2011 and 2012), as did recent injection (19% versus 20% in 2011). The median number of days non-prescribed morphine was injected was 10.

MS Contin remained the most common brand of morphine used. The median price for 100mg MS Contin tablets ('grey nurses') was $40 per tablet, consistent with 2011 prices. Participants typically reported that it was 'very easy' or 'easy' to obtain. Availability was generally considered to have remained stable.

Oxycodone

Since 2005, a distinction has been made between prescribed and non-prescribed and other opioids in an effort to monitor the non-prescribed use of, and problems associated with, the diversion of oxycodone. Until 2005, oxycodone was included under 'other opioids'.

Fifty percent of participants reported use of any (prescribed or non-prescribed) oxycodone in the six months preceding interview, a significant increase from 38% in 2011, $p < 0.05$. Participants reported using oxycodone a median of 20 days (i.e. almost weekly), an increase in the frequency of use reported in 2011 (6 days). Although the proportion of PWID reporting recent injection of oxycodone was stable (42% versus 32% in 2011), the median number of days injected significantly increased from 6 in 2011 (i.e. monthly use) to 24 days (i.e. weekly) in 2012.

Forty-two percent of the sample felt confident to comment on the price and/or availability of illicit oxycodone in 2012, a significant increase from 22% in 2011. As per previous years the most common purchase amounts were 80mg OxyContin tablets, bought for a median price of $40 (range: $20-$50) each. The majority (71%; 78% in 2011) of participants commenting reported that availability was considered 'easy' or 'very easy', with availability generally considered to have remained stable.

Over the counter codeine

Since 2009 survey specific questions were asked about over the counter (OTC) codeine use and it was subsequently removed from the 'other opioids' classification. In 2011, thirty-eight percent of the sample reported recent use of OTC codeine, on a median of 5 days and no participants reported recent injection. Recent injection of other opioids also remained low (1%).

Benzodiazepines

Prevalence of benzodiazepine use remained relatively stable with 64% (63% in 2011) reporting use in the six months preceding interview, the frequency of use decreased from a median of 90 days in 2011 to 67.5 days in 2012. The injection of benzodiazepines remained low with 2% (3% in 2011) reporting any injection in the past six months.

Eleven percent had recently used 'licit' alprazolam on a median of 170 days while 40% had recently used 'illicit' alprazolam on a median of 20 days. Twenty-three percent of the NSW sample reported having used 'licitly' obtained other benzodiazepines on a median of 104 days in the last six months. While, thirty-three percent reported using 'illicitly' obtained other benzodiazepines on a median of 12 days in the six months preceding interview.

Excluding Alprazolam, the most commonly used brand of benzodiazepine was diazepam (including generic diazepam, Valium, Antenex) (78%), followed by oxazepam (Serepax) (10%), and temazepam (7%).

Seroquel

Thirty-eight percent of the sample had used Seroquel® in the last six months (21% licit, 19% illicit), a significant increase from 21% in 2011. 'Licit' Seroquel® has been used on a median of 180 days compared to three days for 'illicit' Seroquel®.

Other drugs

Hallucinogens, ecstasy and inhalant use were relatively low within this sample. Only one participant reported recent hallucinogen use in 2012. Although approximately one-half (48%) of the sample had tried ecstasy, recent use was reported by only 7% of the sample on a median of 2 days. Prevalence of recent inhalant use (e.g. nitrous oxide, amyl nitrite) remained low at 3%.

Alcohol and tobacco

Sixty-one percent of participants had consumed alcohol in the preceding six months (60% in 2011) on a median of 12 days, i.e. approximately once per fortnight. This was a decrease from 2011 in which participants who had consumed alcohol in the preceding six months did so on a median of 24 days (i.e. weekly use). Sixteen percent of participants reported daily use of alcohol.

Tobacco remained the most commonly used substance investigated by the IDRS, with virtually all participants (95%) 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. Unlike smoking prevalence in the general population (Australian Institute of Health and Welfare, 2011a) smoking among IDRS participants has not declined over time.

Health-related trends associated with drug use

Thirteen percent of all participants who had ever experienced a non-fatal heroin overdose had done so in the year prior to interview (25% in 2011). There was only one report of overdose in the month preceding the interview (n=4 in 2011).

Participant reports of borrowing and lending of needles and syringes, as well as sharing of other injecting equipment remained stable in 2012.

The most commonly reported location for last injection remained a private home, this remained stable with 2011.

Again in 2011, participants were asked the site on their body for their last injection. The majority (75%) reported their arm and only small proportions reported neck, groin, leg or foot.

Sixty-two percent of PWID participants who had injected in the last month reported at least one injection-related problem during this time (56% in 2011). As per 2011, the most commonly reported problems were prominent scarring/bruising of injection sites (39%; 38% in 2011) and difficulty injecting (34%; 36% in 2011).

Forty-five of the sample reported experiencing a mental health problem, other than drug dependence, in the preceding six months (52% in 2011), with 72% reporting seeking advice from a mental health professional (61% in 2011). Depression continued to be the most commonly reported mental health problem (31%; 31% in 2011).

Again in 2012, the 10-item Kessler Psychological Distress Scale (K10) was administered. The K10 assesses recent levels of psychological distress (anxiety and depressive symptomatology). The majority of participants fell into the 'high' or 'very high distress' level of psychological distress category, at a proportion higher than the Australian normative value.

Three percent of the entire sample had driven under the influence of any alcohol in 2012. Sixteen percent of the entire sample had driven 'soon' after taking (an) illicit drug(s), with heroin being the most common drug last taken before driving.

Law enforcement-related trends associated with drug use

The proportion of PWID participants that reported being arrested in the previous 12 months remained stable at 36% of the entire sample (37% in 2011). Self-reported crime trends continued to follow those reported in previous years with the two most commonly reported crimes in the month prior to interview being drug dealing (21%; 29% in 2011) and property crime (19%; 22% in 2011). The daily expenditure on drugs and alcohol (excluding tobacco and prescribed medication) decreased to a median of $50 per participant from $100 in 2011 (range $10-$3,000).

1 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 people who inject drugs (PWID) to obtain information on use patterns and drug markets. PWID participants are recruited as a sentinel group that are active in illicit drug markets. The information from the IDRS survey is, therefore, not representative of illicit drug use in the general population, nor is it indicative of all illicit drug use or of all people who inject drugs, 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 2012. 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 Drug Trends Conference. Details of all of these may also be found 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, Degenhardt, & Stafford, 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 2012 NSW IDRS were:

Aims of NSW IDRS

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

2 METHOD

The IDRS considers three main sources of information when documenting drug trends:

Main sources informing the NSW IDRS

- a quantitative survey of people who inject drugs (PWID) participants;
- 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, people who inject drugs, dealers or manufacture; and
- a collation of existing indicator data on drug-related issues.

Previous IDRS research has demonstrated that PWID participants 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. PWID participants 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 participant 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 participant 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 2012 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 people who inject drugs (PWID) regularly

In the 2012 NSW IDRS, the PWID survey consisted of face-to-face interviews with 151 PWID, conducted in Sydney during June 2012. Sixty-one percent 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 to 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 and this should be taken into consideration when interpreting our findings.

Participants were recruited from various sites offering Needle and Syringe Program facilities. Potential participants were screened for eligibility i.e. 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 rehabilitation, therapeutic community or other time away during that period. This ensures current knowledge of the drug market.

The interview schedule included sections on demographics, drug use history, the price, purity and availability of illicit drugs, the colour of heroin, criminal activity, injection risk-taking

behaviour, driving risk behaviour, experiences with drug detection dogs, health (mental and drug-related) and general drug trends. Participants were interviewed within the agencies that assisted with recruitment and were interviewed, where possible, at coffee shops and fast-food outlets close by. Interviews took about 60 minutes to conduct, were interviewer-administered and participants were reimbursed $40 for their time and travel expenses. Descriptive analyses of the quantitative data derived from the PWID survey were conducted using SPSS Statistics for Windows, Release 20.0 (IBM, 2010).

2.2 Survey of key experts (KE)

Nineteen KE who had regular contact with, and/or specialist knowledge of, people using illicit drugs[4], drug dealers or drug manufacturers, were interviewed in October 2012. To be eligible, participants must have had at least weekly contact with people using or supplying illicit drugs, and/or contact with a minimum of ten different people using or supplying illicit drugs in the six months preceding the interview. As broad a range of KE as possible were interviewed in 2012 including drug treatment workers, therapeutic community and residential detoxification workers, law enforcement officers, registered nurses, clinical nurse consultants 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 PWID participants are recruited. KE selection is based upon a desire to interview persons who have contact with a broader group of people who use drugs, including people who inject drugs 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.

The KE interview schedule was a semi-structured instrument, based on previous years of the IDRS, and covered similar topic areas to the PWID interview. The interview included sections on drug use patterns, drug price, purity and availability, criminal activity, and health and treatment issues. Interviews took approximately 30 minutes to conduct, and were conducted face-to-face or over the phone. 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 participant user 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.

[4] The people who use illicit drugs to whom KE refer are typically, but not exclusively, injecting drug users.

Data sources that have been included in this report are:

Other indicators informing the NSW IDRS

- 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 people who use drugs 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;
- Kirketon Road Centre; Needle and Syringe Program data on last drug injected;
- National Centre in HIV Epidemiology and Clinical Research (NCHECR) – human immunodeficiency virus (HIV) and hepatitis C virus (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 NSP 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; and
- NSW Police – number of clandestine methamphetamine and 3,4-methylene-dioxymethamphetamine (MDMA) laboratory detections.

3 DEMOGRAPHICS

3.1 Overview of people who inject drugs (PWID) regularly

The demographic characteristics of the 151 PWID participants who took part in the interview in 2012 are presented below (Table 1). The mean age of the sample was 39 years (range 19-59), 60% were male and 29% identified themselves as Aboriginal and/or Torres Strait Islander[5]. The vast majority identified as heterosexual (87%) and reported that English was the main language they spoke at home (94%). The educational status of the sample varied from the completion of no schooling (>1%) through to completion of year 12 (21%). Sixty-one percent had completed year 10 or higher. Forty-six percent had obtained a trade or technical qualification and 5% had completed a university or college qualification such as a degree. Approximately half (48%) had not completed any further education after leaving school. The majority of the sample (95%) reported that they were currently not employed or receiving a government pension. Ninety-two percent of the sample reported that their main source of income over the preceding month had been a pension or government benefit, while 3% reported a wage or salary, 3% nominated criminal activity and 2% reported sex work. Sixty percent of participants reported being single, while just under one-fifth (18%) reported being married or de facto, and the same proportion (18%) had a current partner. Smaller proportions reported being separated/divorced (3%) or widowed/widower (1%).

[5] Please note that Aboriginal and/or Torres Strait Islander proportion of sample is not indicative of numbers of Indigenous persons who regularly inject drugs.

Table 1: Demographic characteristics of PWID participants, 2008-2012

Characteristic	2008 N=151	2009 N=152	2010 N=154	2011 N=150	**2012 N=151**
Age (mean years, range)	37.1 (19-57)	38.2 (19-52)	39.3 (19-58)	40.0 (21-58)	**39.6 (19-59)**
Sex (% male)	63	65	61	65	**60**
Employment (%):					
Not employed/on a pension	79	86	88	84	**93**
Full time	6	2	1	4	**1**
Part-time/casual	7	9	9	6	**3**
Home duties	5	3	1	2	**1**
Student	1	0	1	2	**1**
Aboriginal and/or Torres Strait Islander* (%)	19	20	22	17	**29**
Heterosexual (%)	86	88	84	84	**87**
Bisexual (%)	9	8	7	11	**10**
Gay or lesbian (%)	3	3	6	5	**2**
Other (%)	2	1	3	1	**1**
School education (mean no. years, range)	10 (1-12)	10 (5-12)	9.7 (3-12)	9.8 (4-12)	**9.8 (0-12)**
Tertiary education (%):					
None	48	57	55	52	**49**
Trade/technical	47	36	36	42	**46**
University/college	5	7	9	5	**5**
Currently in drug treatment^ (%)	50	47	67	72	**60**
Prison history (%)	62	65	69	71	**66**
Current relationship status (%):					
Married/de facto	37	21	26	28	**18**
Regular partner	19	16	16	20	**18**
Single	39	52	53	43	**60**
Separated/divorced	4	9	3	5	**3**
Widowed/widower	1	1	2	3	**1**

Source: IDRS PWID interviews

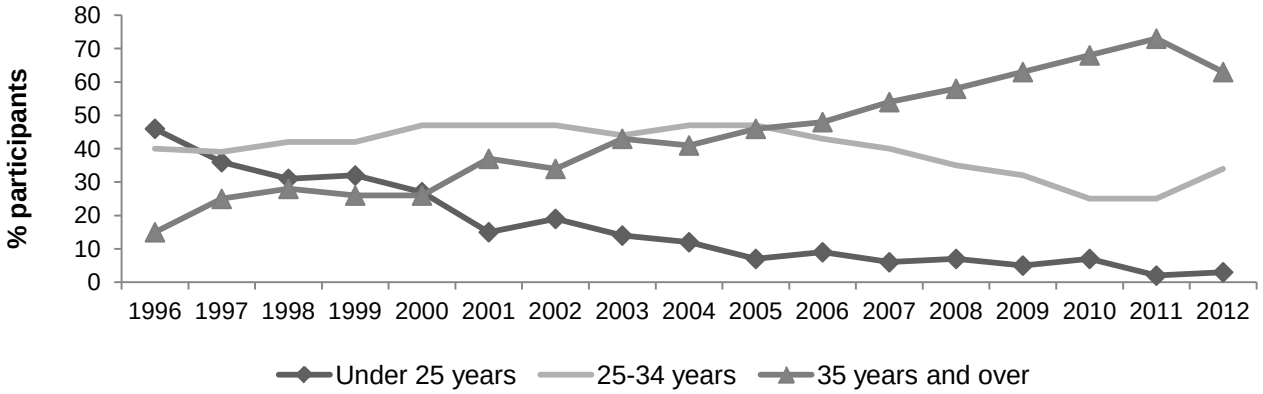
^ Refers to any form of drug treatment, including pharmacotherapies, counselling, detoxification, etc.

* Aboriginal and/or Torres Strait Islander proportion of sample is not indicative of numbers of Indigenous persons who regularly inject drugs

3.1.1 Age of the PWID sample over time

The mean age (39.6 years) of the sample is in keeping with the gradual increase in age over time. The 35 years and over age group, representing the majority (73%) of the sample has continued to increase over time. Correspondingly, since 1996 the proportion of younger users interviewed generally decreased over time (see Figure 1). There are several reasons that could contribute to this. First, it may be that fewer younger users are accessing NSP (where recruitment is conducted) in recent years, or are less willing to take part in research conducted at NSP. Second, in recent years, younger PWID are more likely to be using methamphetamine than their older counterparts (Deganhardt et al., 2008), and some research has shown that methamphetamine users may be less likely to access health services such as NSP (E. Kelly, McKetin, & McLaren, 2005). Finally, there may simply be fewer young people beginning regular drug injection; some evidence has suggested that there have been lower numbers of hepatitis C infections among younger age groups in recent years, which would be consistent with this possibility (Day, Degenhardt, Gilmour, & Hall, 2005). Further research is required to investigate these possibilities in greater detail.

Figure 1: Age distribution of PWID in the NSW (Sydney) IDRS samples, 1996-2012



Source: IDRS PWID interviews

3.1.2 Recruitment

Participants were asked if they had taken part in the IDRS or the EDRS in previous years, as shown in Table 2. Only a small minority (4%) reported having been interviewed for the Ecstasy and related Drugs Reporting System (EDRS) previously. Just over one-third (35%) of participants in 2012 reported having taken part in the IDRS survey previously (between 1996 and 2011). The majority of participants had been recruited by way of advertisements placed in NSP, followed by word of mouth (Table 2).

Table 2: Previous participation in the IDRS and EDRS and source of participant recruitment, 2008-2012

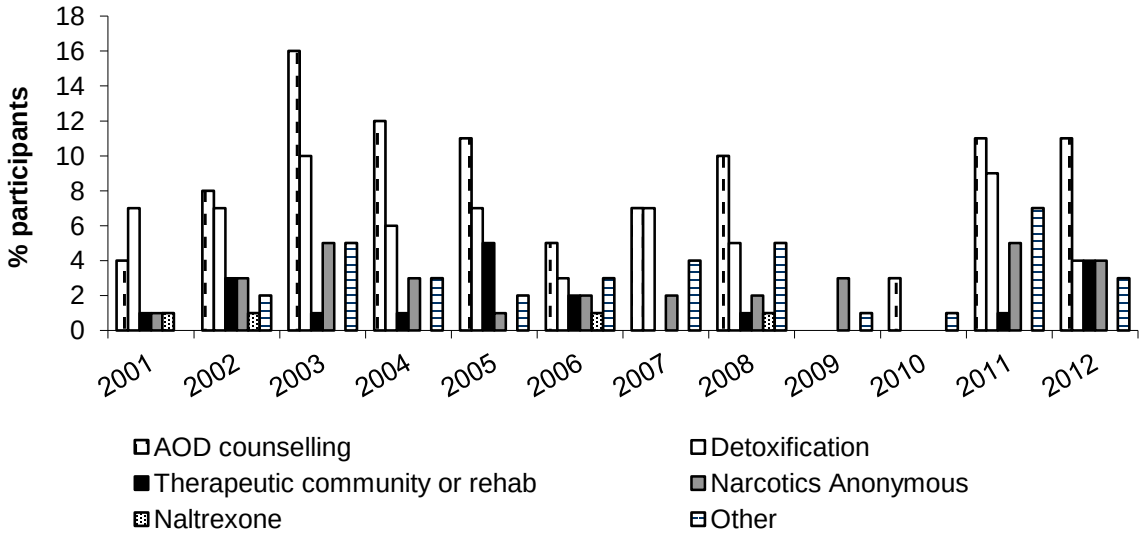
	2008 N=151	2009 N=152	2010 N=154	2011 N=150	2012 N=151
Participated in IDRS in previous years (%)	12	22	30	32	35
Where found out about IDRS survey recruitment (%)					
Needle and Syringe Program (NSP)	62	60	53	57	49
Treatment provider	8	7	4	4	7
Advert in street press	1	1	0	0	1
Word of mouth	29	33	43	36	40
Participated in EDRS in previous years (%)	1	1	3	4	4

Source: IDRS PWID interviews

3.1.3 Current and previous drug treatment

Sixty percent of participants reported that they were currently in drug treatment. Of those participants currently engaged in treatment, 74% (44% of the entire sample) reported methadone/biodone as their main form of treatment, and six participants (4% of the sample) reported buprenorphine and 15 participants (10% of entire sample) reported they were on buprenorphine-naloxone (Suboxone). Only two participants nominated that drug counselling was their main form of treatment (1% of entire sample). There were no current reports of narcotics anonymous, naltrexone treatment, therapeutic community or detoxification. 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, detoxification, case management, etc.). Participants were also asked if they had been in treatment at any stage over the past six months (Figure 2); just over one quarter (28%) reported 'not' having been in any form of drug treatment over this time.

Figure 2: Proportion of participants reporting treatments other than opioid replacement pharmacotherapy in the past six months, 2001-2012



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

4 CONSUMPTION PATTERNS

4.1 Drug use history and current drug use

The mean age of first injection was 19.11 years (SD 4.9, range 10-37) (Table 3). Similar to previous years, heroin was the first drug injected by the majority of participants (58%), followed by methamphetamine (33%) and cocaine (5%). Heroin remained the most commonly reported drug of choice (67%), remaining stable from 2011 and 2010 (70% and 71% respectively).

As in previous years, heroin remained the drug most often injected in the month preceding the interview (62%) and also the most common recently injected drug (59%) (Table 3). A significantly higher proportion reported injection 'more than 3 times a day' in the month preceding the interview compared to 2011 values (15% versus 7%; $p < 0.05$).

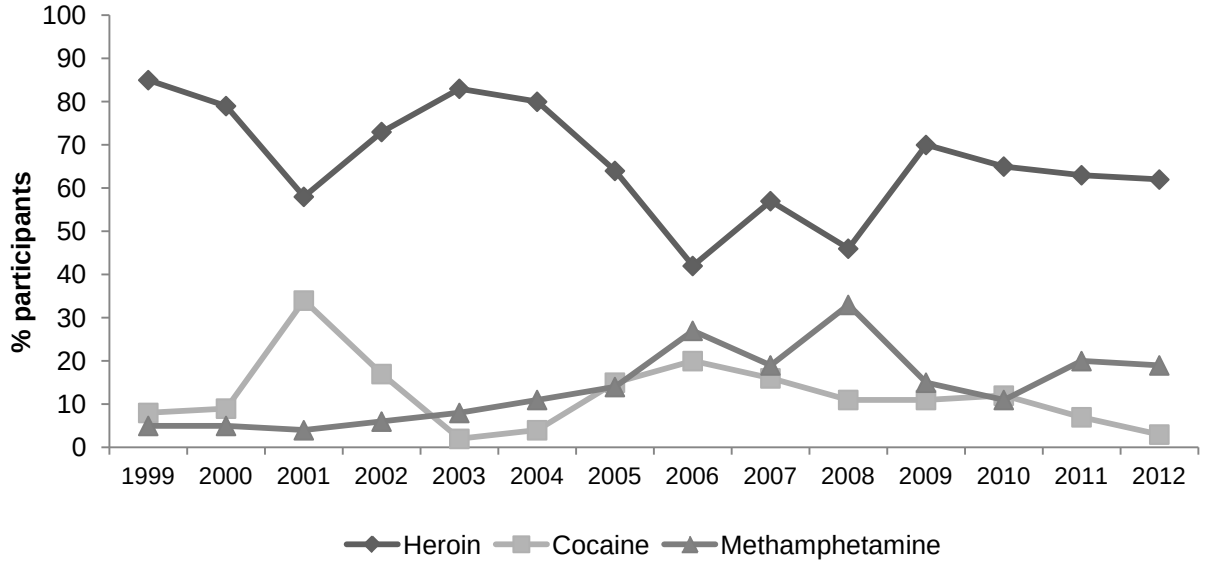
Table 3: Injection history, drug preferences and polydrug use of PWID participants, 2009-2012

Variable	2009 N=152	2010 N=154	2011 N=150	2012 N=151
Age first injection (mean years)	18.8	18.7	19.44	19.11
First drug injected (%)				
Heroin	58	61	63	58
Methamphetamines	34	33	33	33
Cocaine	5	3	3	5
Morphine	0	1	0	1
Drug of choice (%)				
Heroin	72	71	70	67
Cocaine	10	11	7	5
Methamphetamine (any form)	13	10	16	15
Speed	5	3	1	3
Base	1	0	1	0
Crystal methamphetamine (ice)	7	7	14	12
Benzodiazepines	1	0	1	1
Cannabis	3	3	3	2
Drug injected most often in last month (%)				
Heroin	70	65	63	62
Cocaine	11	12	7	3
Methamphetamine (any form)	15	11	20	19
Speed	5	3	1	2
Base	1	1	1	0
Crystal methamphetamine (ice)	9	7	18	17
Benzodiazepines	0	1	0	0
Morphine	3	5	1	4
Oxycodone	N/A	N/A	3	5
Most recent drug injected (%)				
Heroin	64	62	61	59
Cocaine	13	11	5	5
Methamphetamine (any form)	14	11	17	23
Speed	5	3	1	3
Base	3	3	1	1
Crystal (ice)	6	5	15	19
Benzodiazepines	1	2	0	0
Morphine	4	5	4	3
Oxycodone	N/A	N/A	3	8
Frequency of injecting in last month (%)				
Not injected in last month	0	1	1	1
Weekly or less	15	15	13	14
More than weekly, but less than daily	33	30	43	34
Once per day	17	18	14	14
2-3 times a day	24	26	23	23
>3 times a day	11	10	7	15

Source: IDRS PWID interviews

N/A: Not Available; NB: Percentages do not equate to 100 as more than one response may have been selected

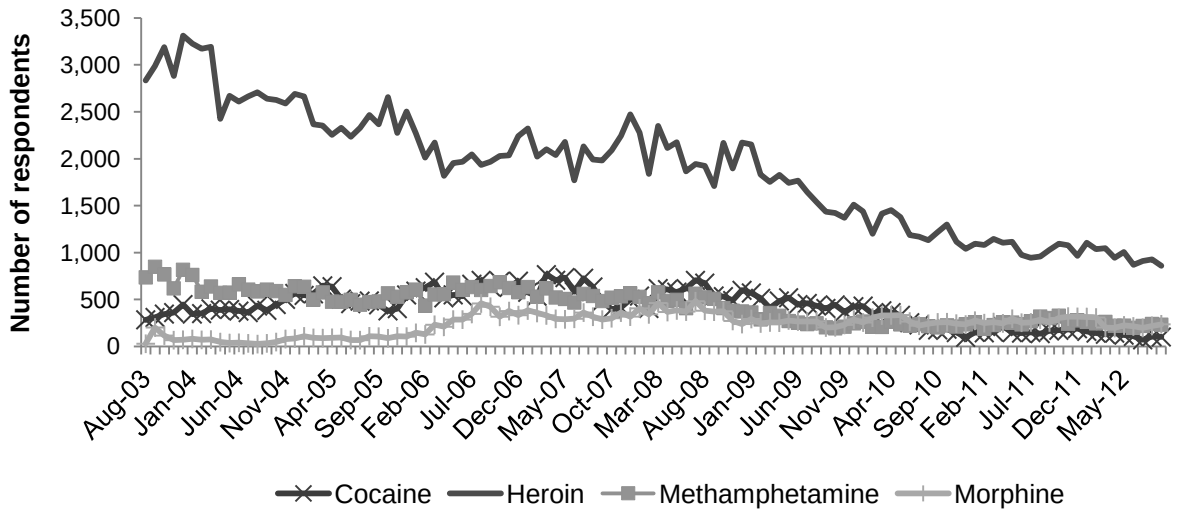
Figure 3: Drug injected most last month, 1999-2012



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

Figure 4 (below) illustrates the most recent drug injected as reported by respondents attending three inner city NSP. Heroin continued to be reported as the last drug injected consistently by the majority of respondents. Despite occasional fluctuations, there has been an overall decline, in the numbers reporting heroin throughout the reporting period. This decline had continued in 2012, with two of lowest levels recorded since 2003 reported in the past 12 months (January 2012: 1,106 and September 2012: 859 respondents nominating heroin as the last drug injected). The numbers reporting methamphetamine (all forms) over the past 12 months is generally stable with the occasional fluctuation. The number of people nominating cocaine in the 12 months to September 2012 also declined to the lowest since 2003 (72 respondents in July 2012). The number of respondents nominating morphine had steadily increased since August 2004 (26 visits) peaking again at an all time high of 483 visits in July 2008 after a period of stabilisation in 2007. The last 12 months saw morphine peak in November 2011 with 319 respondents, then trend downward until September 2012 when 237 respondents reported use.

Figure 4: Number of respondents attending three inner city NSPs reporting heroin, methamphetamine, cocaine and morphine as last drug injected, August 2003-September 2012



Source: Three inner city NSP

The polydrug use histories of PWID participants, including routes of administration, are presented in Table 4. Recent use of the four main drugs monitored by the IDRS remained common: heroin (89%), cannabis (72%), methamphetamine (any form; 72%) and cocaine (44%). Further discussion of the use of these drugs may be found under the relevant section headings elsewhere in the report.

Table 4: Polydrug use history of the PWID sample, 2012

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	99	99	87	96	56	9	23	3	22	6	89		96
Homebake heroin	61	36	7	6	1	0	0	0	4	1	7		6
Any heroin (inc. homebake)	99	99	89	100	56	9	23	3	25	6	89		100
Methadone (prescribed)	76	37	5	42					73	46	48	180	180
Methadone (not prescribed)	62	43	15	4					38	14	25		4
Physeptone (prescribed)	7	1	0	0	0	0	0	0	6	1	1	1	1
Physeptone (not prescribed)	19	10	1	49.5	1	0	1	0	12	1	3		3.5
Any methadone (inc. Physeptone)	88	59	19	7					82	55	62		180
Buprenorphine 'Subutex' (prescribed)	37	15	3	48	4	1	0	0	32	7	8	102	93
Buprenorphine 'Subutex' (not prescribed)	30	26	11	3	8	2	0	0	12	3	13		4
Any buprenorphine (exc. buprenorphine-naloxone)	51	33	13	4	11	2	0	0	35	10	20		9.5
Buprenorphine-naloxone 'Suboxone' Tablets (prescribed)	21	1	0	0	1	0	0	0	20	7	7	60	60
Buprenorphine-naloxone 'Suboxone' Tablets (not prescribed)	13	6	2	1	3	1	0	0	9	4	6		2
Any buprenorphine-naloxone 'Suboxone' Tablets	31	7	2	1	4	1	0	0	31	11	13		10
Buprenorphine-naloxone 'Suboxone' Film (prescribed)	12	1	1	10	0	0	0	0	26	9	9	67.5	67.5
Buprenorphine-naloxone 'Suboxone' Film (not prescribed)	5	1	1	30	1	1	0	0	5	5	5		3.5
Any buprenorphine-naloxone 'Suboxone' Film	16	1	1	40	1	1	0	0	15	13	13		50.5
Any buprenorphine-naloxone (any form)	36	8	3	2	5	1	0	0	26	19	22		
Morphine (prescribed)	22	16	5	4	3	0	0	0	6	2	6	7	6
Morphine (not prescribed)	49	44	19	10	2	0	2	0	19	5	21		10
Any morphine	58	52	21	10	2	0	2	0	23	6	23		10

Source: IDRS PWID interviews

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

* Among those who had used/injected

+ 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

Table 4: Polydrug use history of the PWID sample, 2012 (continued)

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*
Oxycodone (prescribed)	15	11	9	25	0	0	0	0	10	6	11	7	11.5
Oxycodone (not prescribed)	65	55	40	20	3	1	1	0	25	14	46		10
Any oxycodone	69	57	42	24	3	0	1	0	33	19	50		20
Other opioids (not elsewhere classified)	25	3	0	0	1	0	0	0	24	11	11		5
OTC Codeine	21	3	0	0	0	0	0	0	20	11	11		3
Speed powder	71	57	16	6	6	1	28	1	27	1	17		5
Base/point/wax	51	44	14	3	3	0	3	1	11	1	15		24
Ice/shabu/crystal	81	75	63	24	43	27	4	1	14	5	68		3.5
Amphetamine liquid	24	20	3	21					4	0	3		21
Any form methamphetamine#	*91*	*86*	*67*	*24*	*44*	*27*	*32*	*2*	*38*	*7*	*72*		*24*
Pharmaceutical stimulants (prescribed)	5	1	0	0	0	0	0	0	4	1	1		30
Pharmaceutical stimulants (not prescribed)	14	7	2	3	2	0	1	1	9	2	4		3.5
Any form pharmaceutical stimulants	*19*	*7*	*2*	*3*	*2*	*0*	*1*	*1*	*13*	*3*	*5*		*4*
Cocaine	82	73	42	7	15	2	34	4	8	0	44		7
Hallucinogens	50	5	0	0	0	0	0	0	44	1	1		1
Ecstasy	48	12	1	2	1	0	3	1	43	7	7		2
Alprazolam (prescribed)	19	0	0	0	2	0	1	0	17	11	11		170
Alprazolam (not prescribed	44	5	1	36	1	0	1	0	47	38	40		20
Any form Alprazolam	56	5	1	36	1	0	1	0	55	46	48		24
Other benzodiazepines (prescribed)	36	1	0	0	0	0	0	0	36	23	23		104
Other benzodiazepines (not prescribed)	44	3	1	72	1	0	0	0	43	33	33		12
Any benzodiazepine (excl. Alprazolam)	61	3	1	72	1	0	0	0	60	46	47		48
Any form benzodiazepine	74	8	2	48	1	0	1	0	74	64	64		67.5
Steroids	7	3	0	0	1	0	0	0	3	1	1		9
Seroquel (prescribed)	22	1	0	0					21	20	21		180
Seroquel (not prescribed)	33	1	0	0					32	19	20		3
Any form Seroquel	52	1	0	0					50	38	38		14

Source: IDRS PWID interviews

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

* Among those who had used/injected

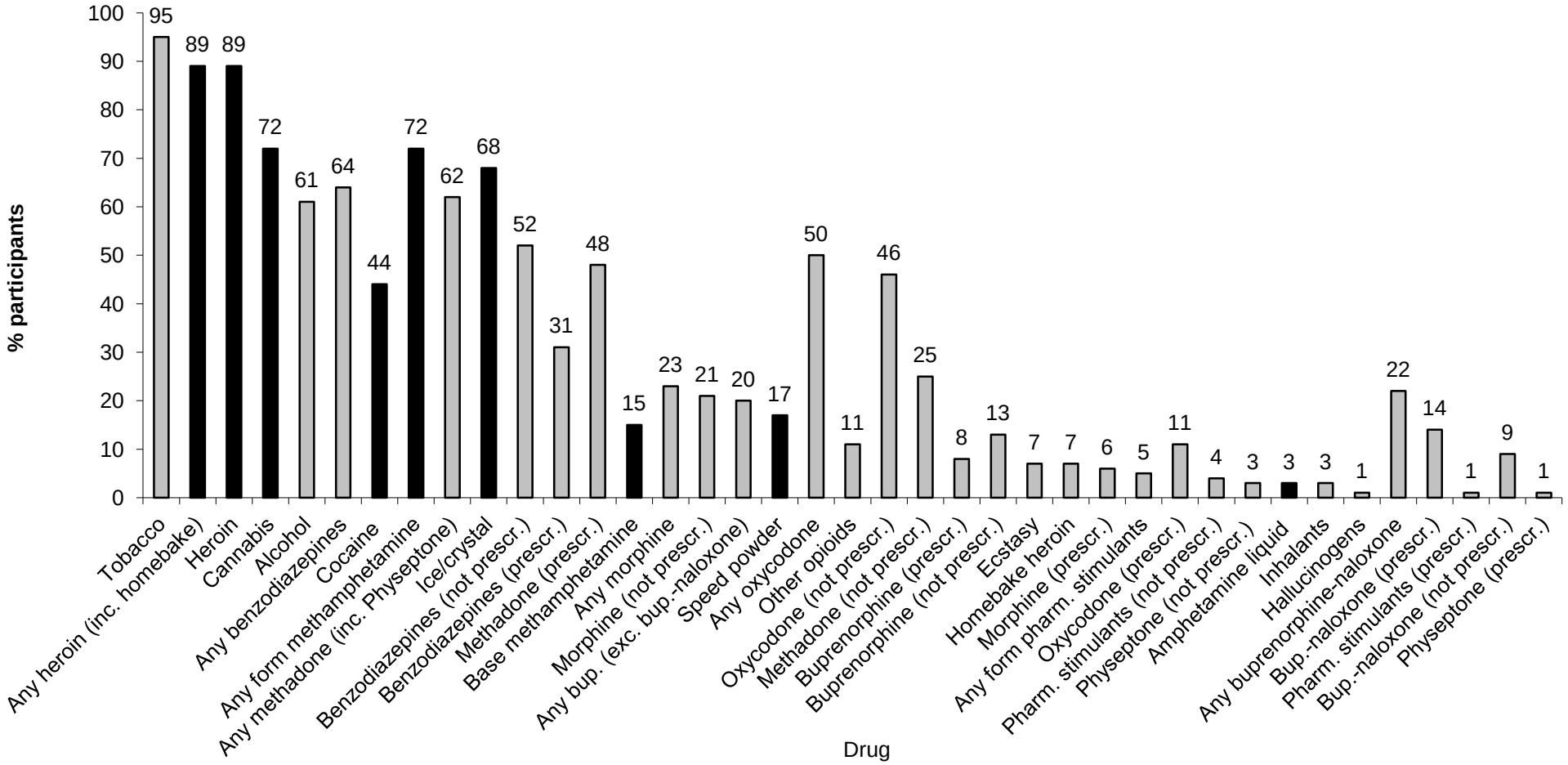
Category includes speed powder, base, ice/crystal and amphetamine liquid (oxblood)

Table 4: Polydrug use history of the PWID sample, 2012 (continued)

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*
Alcohol	88	7	0	0					86	61	61		12
Cannabis	95				89	72			27	4	72		180
Inhalants	21										3		2.5
Tobacco	99										95		180

Source: IDRS PWID interviews
^ Refers to any route of administration, i.e. includes use via injection, smoking, swallowing, and snorting
* Among those who had used/injected

Figure 5: Prevalence of drug use in the six months preceding interview, NSW 2012*



Source: IDRS PWID 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 4

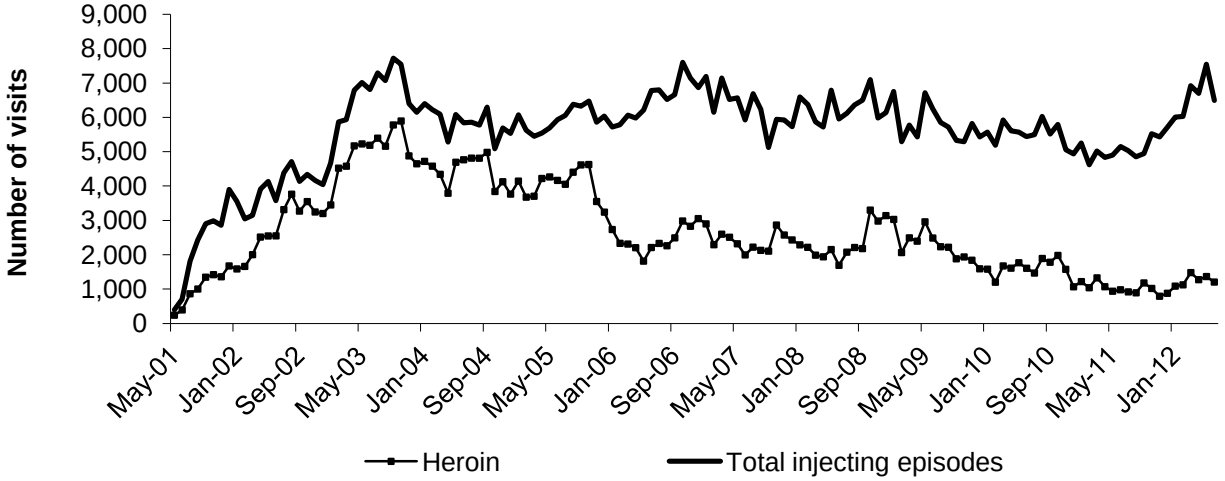
4.2 Heroin

4.2.1 Heroin use among PWID participants

The majority of participants (89%) had used heroin in the six months preceding interview, this remained stable with the 87% reported in 2011. Heroin remained the drug of choice for over two-thirds (67%) of the sample (Table 3) also remaining stable with the 70% reporting it in 2011. Heroin also remained the most commonly nominated for 'drug injected last' (59%), stable with the 61% reporting it in 2011. Similarly, heroin continued to be the 'drug injected most often in the last month' (62%), comparable with the 63% that reported it in 2011.

Figure 6 shows the number of attendances to the Sydney MSIC in Kings Cross where heroin was the drug injected (based on client reports) between 2001 and 2012. 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 people who inject drugs (PWID) became aware of this new service. Heroin had been 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 until more recently when 'other opioids' (predominantly oxycodone and morphine) were equally or more commonly injected (see Section 8). There has been a steady downward trend in attendances for heroin injection since 2009, and in the 12 months to June 2012 heroin has accounted for approximately 15-24% of all attendances to Sydney MSIC.

Figure 6: Number of attendances to Sydney MSIC where heroin was injected and total number of visits, May 2001-June 2012



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

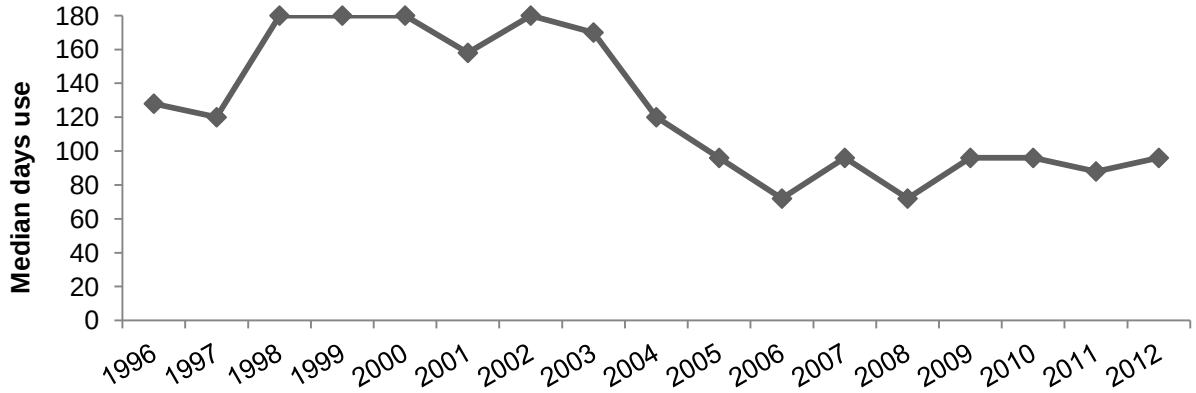
4.2.1.1 Homebake

Homebake use remained uncommon among the PWID sample of the NSW IDRS. Seven percent of the sample reported use in the last six months (Table 4), which is a non-statistically significant increase from the 13% reported in 2011 and is comparable with the 5% reported two years prior in 2010. Seven percent reported injection in the last 6 months, a non-statistically significant decrease from the 10% reported in 2011.

4.2.2 Current patterns of heroin use

The median number of days of heroin use in the six months preceding interview remained stable in 2012 at 96, approximately every 2nd day. In comparison, ten years earlier (2002) the median days use was daily (180 days; Figure 7). Similarly the prevalence of recent heroin use reported in 2012 has also remained stable (89% versus 87% in 2010).

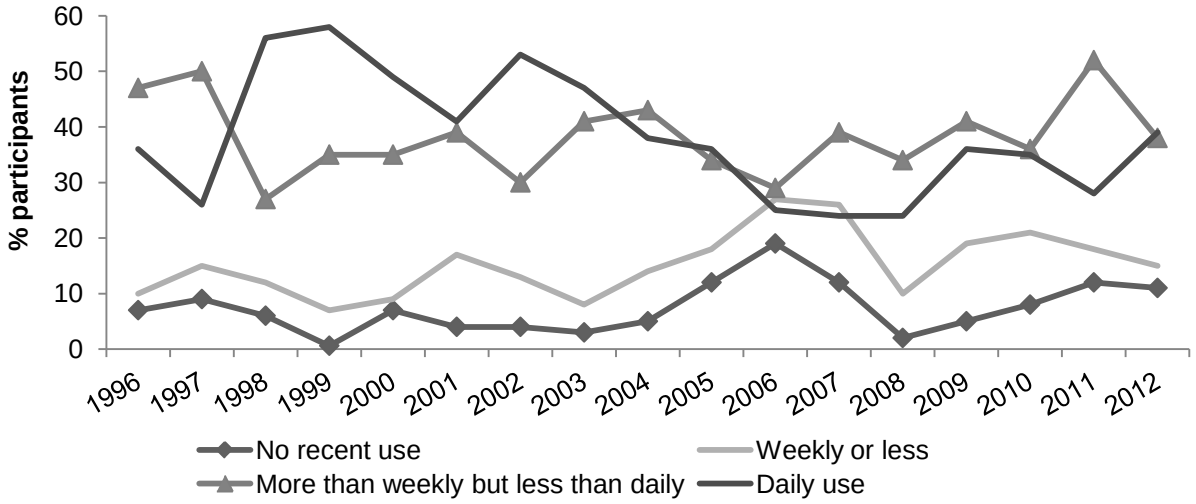
Figure 7: Median days of heroin use in the past six months, 1996-2012



Source: IDRS PWID interviews

Just under two-fifths of all participants (39%) reported daily use of heroin in 2012. A comparable proportion (28%) of all participants reported daily heroin use in 2011 (Figure 8). There was a significant decrease ($p < 0.05$) reporting more than weekly, but less than daily use, down from 52% in 2011 to 38% of all participants in 2012 (Figure 8). This figure is comparable to levels reported in 2009 and 2010 (41% and 36%, respectively) and thus represents a return to levels seen previously. Approximately half (48%) of all participants reported use on the day prior (49% in 2011). Proportions that have used heroin weekly or less also remained stable in 2012.

Figure 8: Patterns of heroin use, 1996-2012



Source: IDRS PWID interviews

4.2.3 Forms of heroin used

As in previous years, participants were asked about the forms of heroin they had used over the preceding six months. Ninety-six percent of participants who had reported recent use of heroin they described as white/off-white 'powder' or 'rock' (89% in 2011) and 50% reported recent use of heroin described as brown/beige 'powder' or 'rock', which is a significant decrease from the proportion reported in 2011 (67%). The form most used (over the preceding six months) among those who could comment was white/off-white 'powder' (48%; 38% in 2011), followed by white/off-white 'rock' (36%; 32% in 2011). Eleven percent of those who could comment nominated beige/brown 'powder' (15% in 2011) and only 5% had used beige/brown 'rock' (11% in 2011) most often.

4.2.4 Heroin forms and preparation

Traditionally, Australia's heroin has originated from the Golden Triangle (Myanmar, Laos PDR and Thailand) (Ciccarone, 2009; UNODC, 2009) and has been white or off-white in colour. This form of heroin had an acidic (acetone/hydrochloride) base and was relatively easy to prepare for injection as it was quite refined and water soluble. In contrast, heroin produced in the Golden Crescent region (Afghanistan and Pakistan) is rarely seen in Australia (Ciccarone, 2009), and is usually brown in colour and less refined. Typically brown heroin is alkaline and, therefore, requires heating and often citric or ascorbic acid to make it water soluble for injection. It is also considered more amenable to smoking as a route of administration.

More recently it has been demonstrated that heroin colour is not a reliable determinant of geographic origin (Zerell, Ahrens, & Gerz, 2005). Therefore, while the following information provides an indication of the appearance of heroin used by participants of the IDRS, it is not possible to draw conclusions about its geographic origin, purity or the preparation method required for its injection based on these data alone. Further research into this area is required before firmer conclusions can be drawn.

Brown heroin was first identified in NSW in 2006. Participants in the IDRS first commented on the presence of brown heroin in the same year. In 2007, the issue was investigated by asking participants to describe the colour forms of heroin they had used over the last six months, in addition to the 'form most used'.

Again in 2012, participants were asked if they had used heat and/or citric/ascorbic/acetic acid to prepare heroin for injection on the last occasion of injection. Thirty-five percent reported using heat on the last occasion, a significant decrease from 51% in 2011, while only 4% reported using any form of citric/ascorbic/acetic acid, stable with 2011 values (9%).

Participants were also asked to identify the colour of the heroin on the last occasion of injection where heat and/or citric/ascorbic/acetic acid had been used in preparation. Of those who reported using heat or acid on the last occasion the majority (56%) of respondents described the colour of heroin as brown/beige and approximately two fifths (39%) described it as white/off-white in colour.

4.2.4.1 Homebake

The median number of days of homebake use in the preceding six months was 6 (i.e. monthly use, range 1-96 days) a decrease from the 9 days reported in 2011. The median number of days on which it had been injected by users in this time also decreased from 10 days in 2011 to 6 days (range 1-96 days) in 2012.

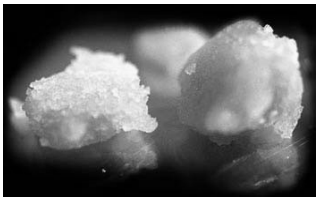
4.3 Methamphetamine

In response to the increasing diversification of the methamphetamine markets in Australia identified by the 2001 IDRS (Topp, Degenhardt, Kaye, & Darke, 2002), data were 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, PWID are not surveyed regarding its price, purity or availability. Previous research indicated that participants were able to differentiate between these forms when surveyed (C. Breen et al., 2004; A Roxburgh, Breen, & Degenhardt, 2004), and clarification was made with participants that they and the interviewer were referring to the same forms of methamphetamine.

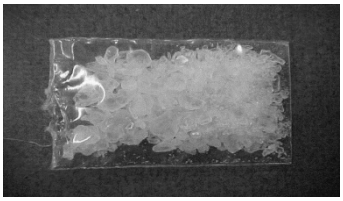
Photographs most commonly identified by PWID participants as being of speed powder, base and ice, NSW

Speed powder

Base



Ice



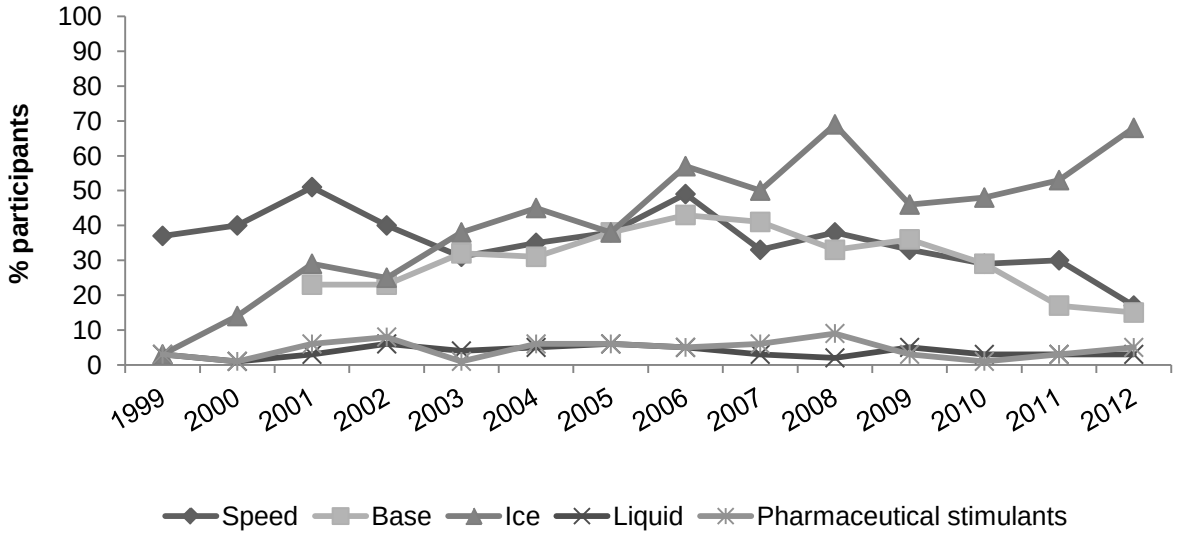
NB: For further information specific to the Sydney methamphetamine market, including supply, use patterns and harms, see McKetin, McLaren et al. (2005)

4.3.1 Methamphetamine use among PWID participants

The proportion (72%) reporting the use of any form of methamphetamine (speed, base, ice/crystal or liquid) in the six months preceding interview significantly increased in 2012 from 60% in 2011. Considered separately, the most commonly used form was ice/crystal (71%, 53% in 2011), followed by speed (17%; 30% in 2011) and then base (15%; 17% in 2010). Liquid amphetamine (also known as 'oxblood') remained considerably less common, with only 3% (also 3% in 2011) of participants reporting use in the last six months (Figure 9). These figures represent a significant increase in the proportion indicating recent crystal methamphetamine use in 2012, with a significant decrease in the proportion reporting recent speed use.

Again in 2012, a distinction was made between the licit versus illicit use of pharmaceutical stimulants (including prescription amphetamines). Only one participant reported use of prescribed pharmaceutical stimulants in the six months preceding interview; while the use of non-prescribed pharmaceutical stimulants continued to remain low in 2012, with only 4% (2% in 2011) of participants reporting recent use. The recent use of any pharmaceutical stimulants by this group has remained at less than 10% since 1999 (Figure 9).

Figure 9: Proportion of PWID reporting methamphetamine and pharmaceutical stimulant use in the past six months, 1999-2012

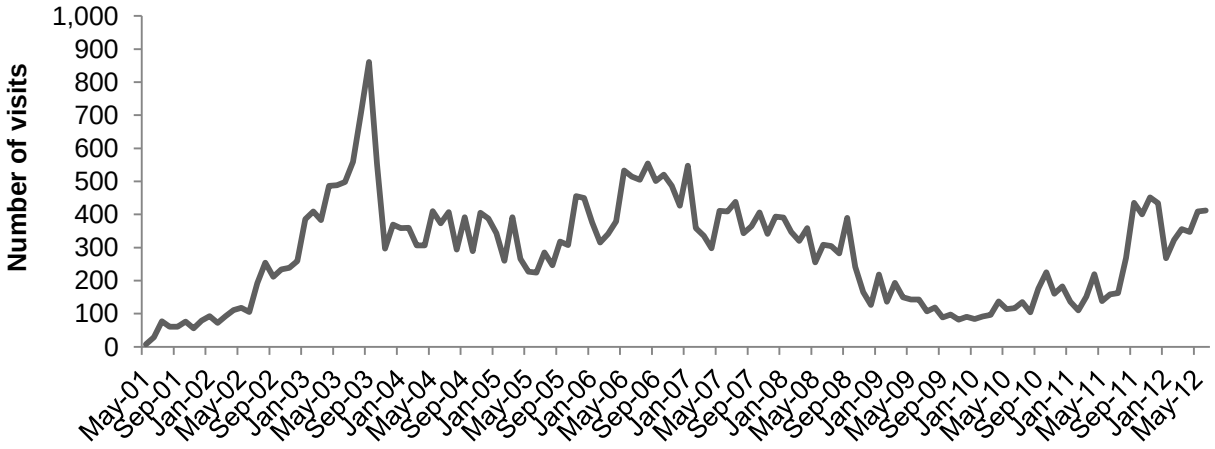


Source: IDRS PWID interviews
NB: Pharmaceutical stimulants also include prescribed use

Figure 10 shows the number of attendances to the Sydney Medically Supervised Injecting Centre (MSIC) where methamphetamine was the drug injected[6]. Numbers reporting methamphetamine increased gradually since 2001, reaching a peak in September 2003 (861 visits that month and accounting for 11% of all visits), followed by a steep decline in subsequent months (Figure 10). Figures remained relatively stable between December 2003 and June 2007, accounting for between 5-7% of visits, increasing slightly in April 2006 to January 2007. In the 12 months to June 2012 there has been a steady increase in the number of methamphetamine injections at MSIC, reaching a peak in November 2011 with 452 attendances, the highest figure since July 2007, and finishing on 412 in June 2012. Since October 2008, attendances at MSIC for methamphetamine injection have remained under 5% of all attendances. However, in the 12 months leading up to June 2012 the average proportion of all injections for which methamphetamine accounted was 6%, peaking in November 2011 at almost 9%.

[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 PWID became aware of this new service.

Figure 10: Number of attendances to Sydney MSIC where methamphetamine was injected, May 2001-June 2012



Source: Sydney MSIC, Kings Cross

4.3.2 Current patterns of methamphetamine use

The proportion (72%; 60% in 2011) of participants reporting any recent methamphetamine use (speed, base, ice/crystal, base) increased significantly in 2012. Among those reporting any recent use (speed, base, ice, liquid) the median number of days of use was 24 days (approximately weekly use), an increase from 19 days (approximately fortnightly use) in 2011. The majority of users had used each form weekly or less over the six months preceding interview, followed by more than weekly, but less than daily (Table 5 and Figure 11). Overall, this represents little change from 2011, however, closer examination of various types of methamphetamine showed that there was a significant increase (68% versus 53% in 2011; Table 5) in the recent use of ice, as well as a significant decrease in the recent use of speed (17% versus 30% in 2011; Table 5). It should be noted that the proportion (3% in 2012) of people reporting daily use of any type of methamphetamine over the past four years remained low relative to the proportion of daily heroin users (see Section 4.2.2 Current patterns of heroin use).

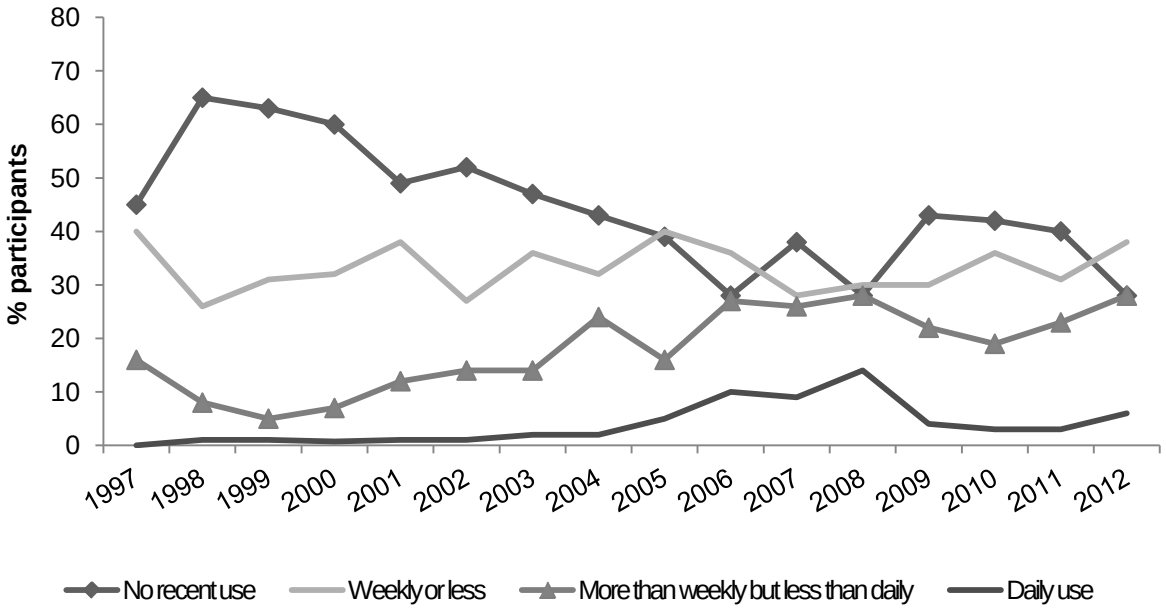
The use of any pharmaceutical stimulants (prescribed and non-prescribed) continues to remain very low (3% in 2011) among this sample of PWID and changes in patterns of use should be interpreted with caution. The median number of days of any recent pharmaceutical stimulant use was 12 days (fortnightly use; 4 days in 2011). Illicitly obtained pharmaceutical stimulants were used on a median of 18 days in the past 6 months (4 days in 2011). Only 1% of participants (0% in 2011) had recently used pharmaceutical stimulants that were prescribed to them on a median of 6 days (monthly use).

Table 5: Patterns of methamphetamine use in the last six months, by type, 2012

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	83 [70]	17 [30]	81 [72]	19 [23]	0 [5]
Base	85 [83]	15 [17]	86 [80]	14 [16]	0 [4]
Ice/crystal	32 [47]	68 [53]	57 [60]	38 [35]	9 [5]
Any form of methamphetamine*	28 [43]	72 [60]	53 [54]	39 [41]	8 [5]

Source: IDRS PWID interviews
* Also includes liquid methamphetamine
^ Excludes those who had not used
[ ] Indicates % used in previous year

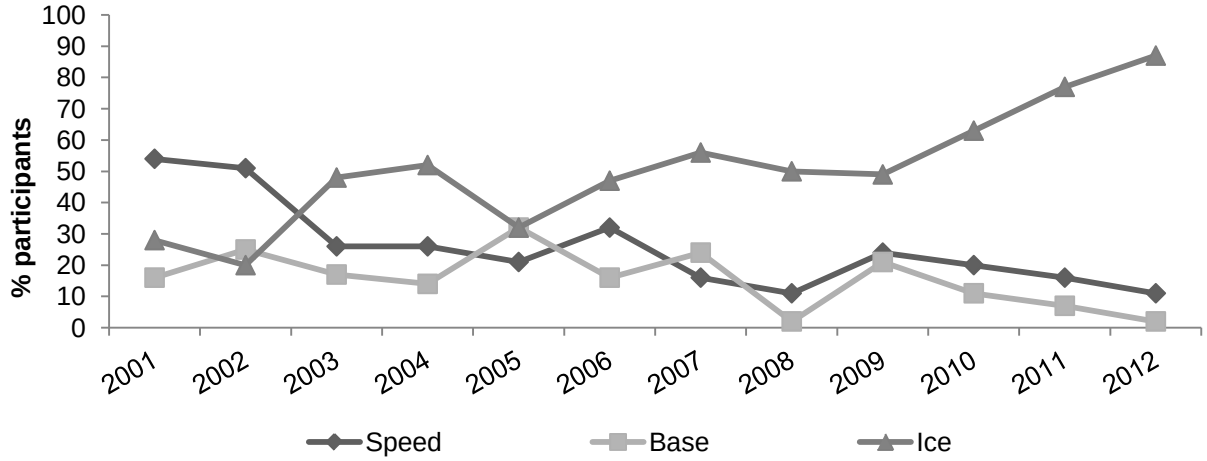
Figure 11: Patterns of methamphetamine use (any form) by PWID participants, 1997-2012



Source: IDRS PWID interviews

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. Eighty-seven percent of recent users (62% of entire sample) nominated ice/crystal (77% in 2011; 39% of entire sample), eleven percent nominated speed powder (16% in 2011) and 2% nominated base (7% in 2011). Among those who had recently used methamphetamines there were no significant differences in 2012 in the proportion reporting recent use of ice, although among the entire sample the recent use of ice significantly increased from 2011 (Figure 12; Table 5).

Figure 12: Methamphetamine form most used in the preceding six months, among recent methamphetamine users, 2001-2012



Source: IDRS PWID interviews
NB: Data collection on the form most used commenced in 2001. Pharmaceutical stimulants included in figures between 2001 and 2005; excluded in data from 2006-2012

4.4 Cocaine

As stated previously, and comparable to previous years, it was difficult to find cocaine KE this year. This suggested that cocaine use was not typically widespread among PWID outside the main drug market areas in which the IDRS survey was conducted. It also suggested there may be hidden groups of users who are not coming to the attention of health services and/or law enforcement agencies in relation to their cocaine use. For more information on cocaine markets in Sydney see Shearer and Johnson et al. (2005, 2007).

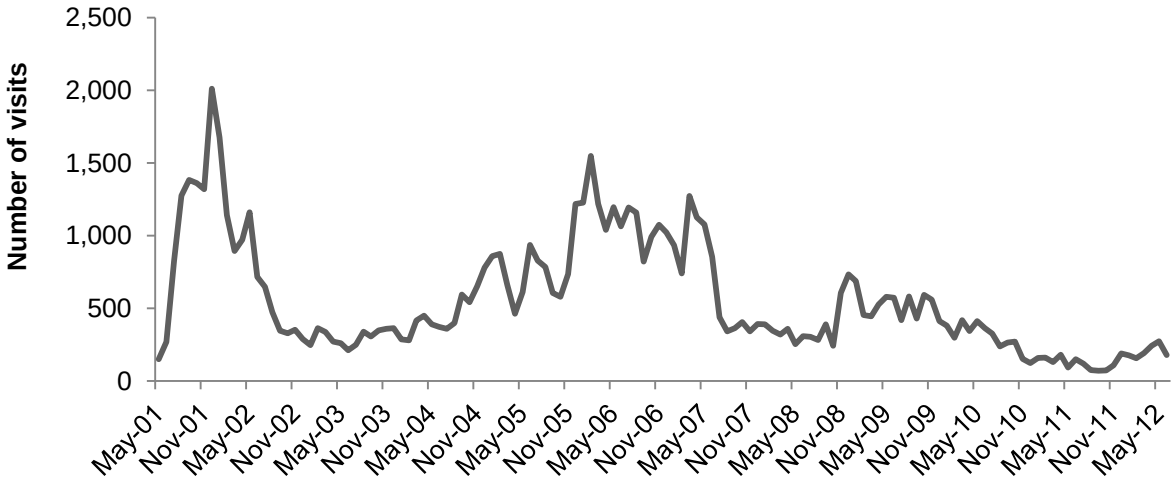
4.4.1 Cocaine use among PWID participants

Forty-four percent of PWID participants in 2012 reported cocaine use in the preceding six months, consistent with 2011 numbers (47%). Only 10 percent (5% in 2011) of the sample reported use of cocaine on the day prior to interview. Five percent reported cocaine as the drug last injected (5% in 2011).

Figure 13 shows the number of attendances to the Sydney MSIC where cocaine was the drug injected[7]. Following a peak in use in December 2001 (2,010 visits), and a subsequent decline to less than 450 visits per month to inject cocaine, numbers reporting cocaine use 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 to inject cocaine, reaching a peak of 1,549 in February 2006. The 12 months to June 2012 saw a slight increase in attendances from the previous year, peaking at 273 attendances in May 2012.

[7] 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 PWID became aware of this new service.

Figure 13: Number of attendances to Sydney MSIC where cocaine was injected, May 2001-June 2012

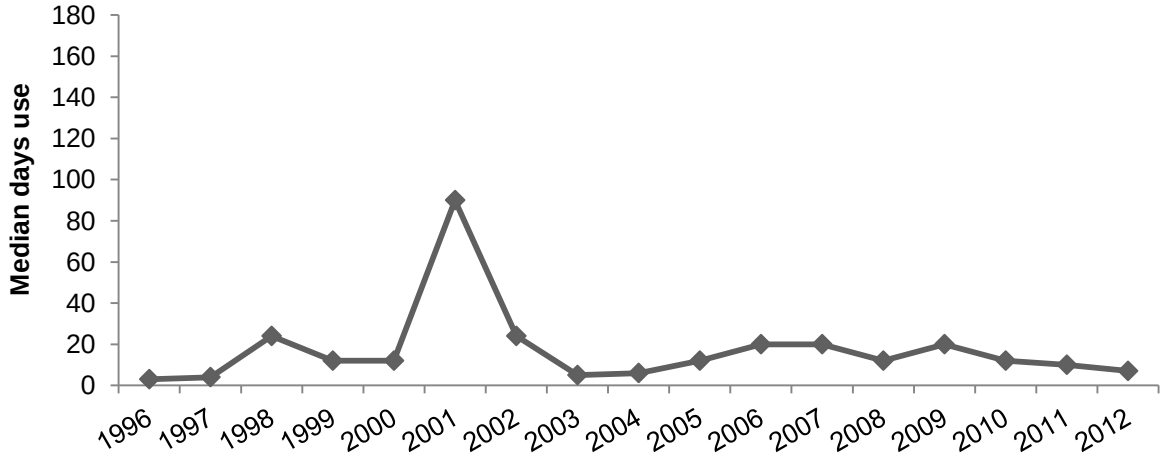


Source: Sydney MSIC, Kings Cross

4.4.2 Current patterns of cocaine use

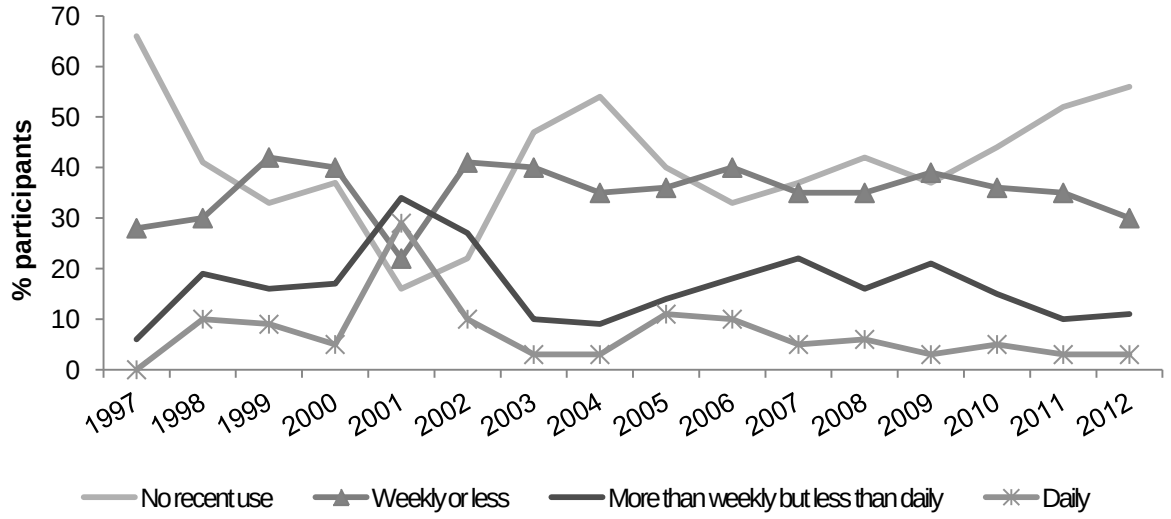
Frequency of cocaine use among PWID participants in the last six months remained stable in 2012. Cocaine was used on a median of 7 days (approximately monthly) in 2012 (10 days in 2011) (Figure 14). Daily cocaine use remained stable with 5% (3% in 2011) of recent users (2% of all participants) reporting daily use (Figure 15).

Figure 14: Median days of cocaine use in the past six months, 1996-2012



Source: IDRS PWID interviews

Figure 15: Patterns of cocaine use, 1997-2012



Source: IDRS PWID interviews

Participants were also asked which form of cocaine they had used most often over the last six months. Seventy-nine percent of participants who had recently used cocaine reported that powder was the form they had used most often in the last 6 months, which is stable from 2011 (83%). Twenty-one percent of recent users reported rock cocaine as the form most used (16% in 2011), and there was only one participant reporting using crack cocaine as the form most used. Eight percent of recent users (4% in 2011) reported having used any crack cocaine in the six months preceding interview. No KE reported hearing about the use of crack cocaine, indicating that, similar to previous years, its use remained rare.

4.5 Cannabis

The IDRS has differentiated between hydro and bush prices since 2003, and since 2004 it has also differentiated between 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 remained sporadic, information about potency and availability are not sought from PWID participants. Since 2007, participants have been asked whether they were able to distinguish between hydro and bush cannabis forms.

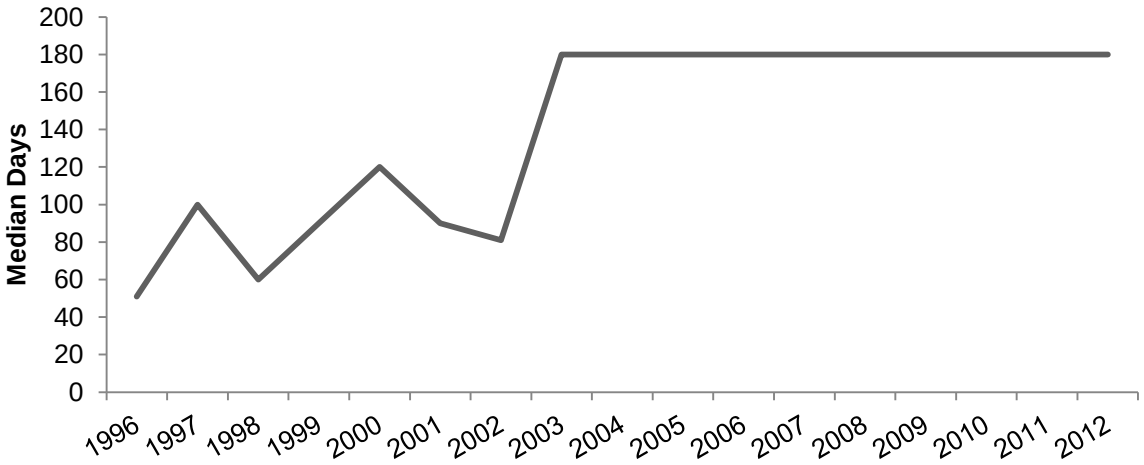
4.5.1 Cannabis use among PWID participants

Recent use of cannabis continued to remain high among participants in 2012. Seventy-two percent of participants reported the recent use of cannabis (81% in 2011 and 72% in 2010). While the proportion reporting cannabis use on the day prior to interview remained stable in 2012 with 42% having used cannabis the day prior (48% in 2011).

4.5.2 Current patterns of cannabis use

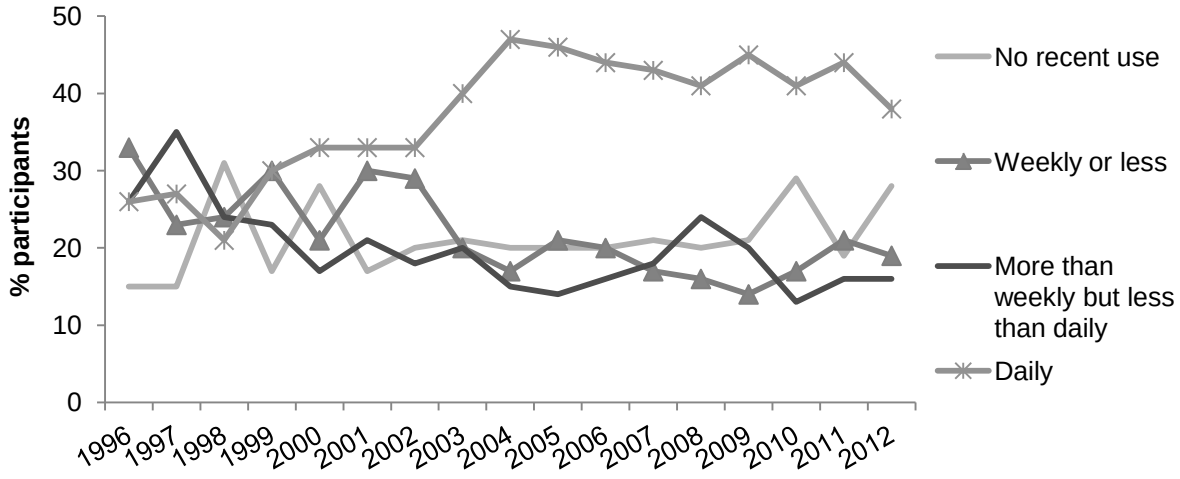
The median number of days of cannabis use, among those who used, was 180 in the preceding six months (i.e. daily). This had remained stable for the past ten years, with levels remaining substantially higher than pre-2002 inclusive (Figure 16). The proportion of recent consumers of cannabis reporting daily use of cannabis remained stable in 2012 (52%; 38% of entire sample). Participants who had smoked cannabis in the last six months were asked about the quantity used and methods of cannabis use on the last occasion.

Figure 16: Median number of days of cannabis use among those who had used cannabis in the past six months, 1996-2012



Source: IDRS PWID interviews

Figure 17: Patterns of cannabis use, 1996-2012



Source: IDRS PWID interviews

Ninety-five percent of respondents who had used cannabis, reported using hydro in the preceding six months (also 95% in 2011), and 42% of cannabis users reported using bush during this time (48% in 2011). Five percent of recent cannabis users reported use of hashish (8% in 2011) and only 3% of participants (4% in 2011) had used hash oil. When asked which form of cannabis they had 'used most often' in the last six months, the vast majority (91%) of recent users reported hydro, 9% reported bush and no participants reported hash oil. These rates remain stable with 2011.

4.6 Pharmaceutical opioids

The IDRS monitors the extra-medical use (non-prescribed and/or not 'as directed' by a doctor) patterns and market characteristics of opioid pharmaceutical medications including both those prescribed for opioid substitution treatment (OST; i.e. methadone, buprenorphine, buprenorphine-naloxone), and those prescribed for pain relief (i.e. morphine and oxycodone) as these have been associated with a range of public health concerns, including toxicity, mortality, and where injected, injection-related problems such as vein damage and infections (O'Brien, Day, Black, Thetford, & Dolan, 2006). With regard to OST, it is imperative to consider that screening of participants ensured that those sampled had all been active in the illicit drug markets of the area, and thus they were able to provide meaningful data on market indicators.

While the majority (58%) of those sampled in 2012 were engaged in OST at the time of interview, responses presented are not representative of all clients engaged in drug treatment services.

Below in Table 6 are the definitions used when discussing opioids use.

Table 6: Definitions used when discussing opioid use

Pharmaceutical Opioids (including OST)
Use of these substances is broadly split into the following categories (Black et al., 2008).
1. Use of licitly obtained opioids, i.e. use of opioids obtained by a prescription in the user's name, through any route of administration.
2. Use of illicitly obtained opioids, i.e. those obtained from a prescription in someone else's name, through any route of administration ('illicit use').
3. Use of any opioids, i.e. does not distinguish between licit and illicit methods of obtainment.
Injection
1. Injection of licitly obtained opioids.
2. Injection of illicitly obtained opioids.
3. Injection of any opioids.

NB: See Glossary for further details of terms. For information on data covering the use of licitly obtained methadone, buprenorphine and buprenorphine-naloxone, data on OST, please see also Section 6.3 Drug treatment

4.6.1 Methadone

Methadone is prescribed for the treatment of opioid dependence. It is usually prescribed as a syrup preparation, and is often dosed under supervised conditions. Take-away doses are available for some patients depending on various state/territory regulations. Physeptone tablets are less common in Australia and are usually prescribed for people in methadone treatment who are travelling, or in a minority of cases, where the methadone syrup is not tolerated. As mentioned previously, illicit use of methadone and Physeptone was defined as the use of medication not obtained with a prescription in the participant's name. The participant may have bought the medication on the street or obtained it from a friend or acquaintance. See also Section 6.3: Drug treatment for information on the use of prescribed methadone.

As in previous years, detailed data were collected in 2012 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 6.3 Drug treatment.

One-quarter (25%) of all participants reported using non-prescribed methadone in the six months preceding interview (23% in 2011). The frequency of use among recent users was a median of four days (6 days in 2011). In response to the question 'what were the main reasons you used illicit methadone in the last 6 months' 30% of participants reported that it was used to alleviate withdrawal symptoms, 21% reported that it was due to their prescribed dose being insufficient, 15% reported that it was due to an inability to 'score' other substances, 6% reported that it was to treat self-dependence, as well as 6% reporting that the reason was due to methadone being cheaper than other opioids. Reasons for using illicit methadone such as 'long waiting list for treatment', 'on holidays away from home' and 'seeking an opiate effect' were endorsed by only one participant each.

Fifteen percent of participants reported injecting illicitly obtained methadone in the preceding six months on a median of 4 days (i.e. approximately once a month), which was comparable to 2011 (18% of participants on a median of 6 days). Nineteen percent of all participants reported injection of any form of methadone (i.e. syrup or Physeptone tablets; regardless of whether it was prescribed or non-prescribed) on a median of 7 days (approximately monthly use). The proportion of participants reported injection of any form of methadone significantly decreased from 2011 (in which 31% recently injected methadone) though the frequency of use remained stable (6 days in 2011).

Nineteen percent of participants (12% in 2011) reporting recent methadone or Physeptone use reported non-prescribed methadone syrup as the form most often used in the preceding six months. This remains stable with 2011. Use of non-prescribed Physeptone use remained uncommon, with only 3% of participants reporting use in the preceding six months (4 % in 2011) and only 1% reported injecting Physeptone in the 6 months prior to interview.

4.6.2 Buprenorphine

Thirteen percent of all participants (12% in 2011) reported the use of non-prescribed buprenorphine in the preceding six months. The frequency of use in 2012 remained stable with use occurring on a median of four days (four in 2011). Eleven percent of participants reported injecting non-prescribed buprenorphine on a median of three days, which remained consistent compared to 2011 (12%, on a median of six days).

Thirteen percent of participants reported injecting any form of buprenorphine (excluding buprenorphine-naloxone) in the preceding six months (16% in 2010) on a median of 4 days (less than monthly use; also 4 days in 2011). No participants reported any injection-related problem ('dirty hit') or overdose associated with buprenorphine. The prevalence and frequency of buprenorphine injection remained comparable with 2011.

4.6.3 Buprenorphine-naloxone (Suboxone)

Questions on buprenorphine-naloxone (Suboxone) have also been included in the PWID survey since 2006 when it was first listed on the Pharmaceutical Benefits Scheme. In 2012, eleven percent (7% in 2011) of people interviewed reported being on Suboxone treatment at some stage in the last 6 months. Continuing trends from previous years, the injection of Suboxone (either in tablet or film form) in 2012 was extremely low. Only three percent (5% in 2011) reported injecting Suboxone that wasn't prescribed to them in the last 6 months on a median of 1.5 days.

4.6.4 Morphine

It should be noted that, in some cases, 'morphine' appears to be a generic term used by people who use or inject drugs to refer to opioid pills, a finding reported by KE and also reflected in PWID participant 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[8] where the requirement still remained.

4.6.5 Use patterns

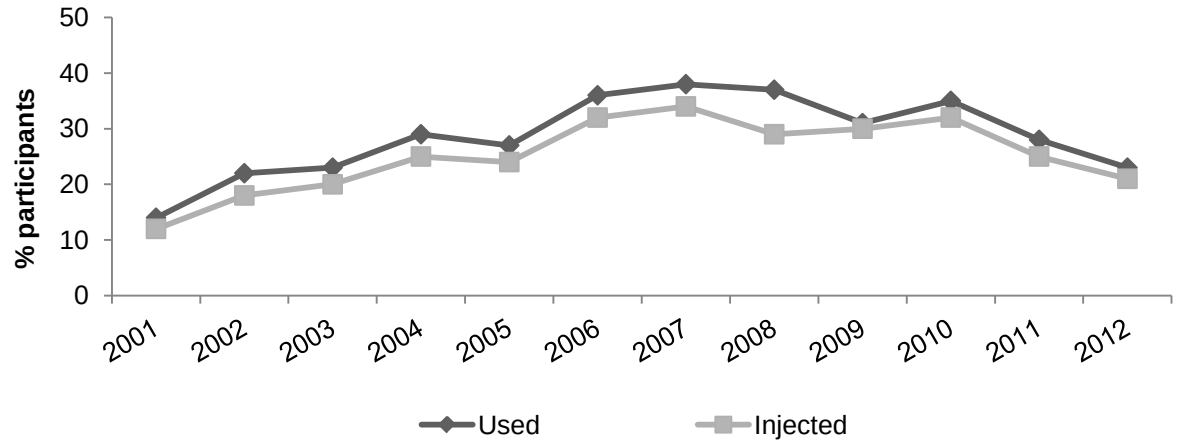
Since 2006, a distinction has been drawn between the use of morphine obtained via prescription and the use of non-prescribed morphine (Table 4). Twenty-one percent (also 21% in 2011) reported use of non-prescribed morphine on a median of 10 days (also 10 days in 2011). Almost one-fifth (19%) of participants reported the recent injection of non-prescribed morphine on a median of 10 days (20% on a median of 10 days in 2011). In response to the question 'what were your main motivations for non-prescribed morphine use' 39% percent of recent users reported self treatment, 39% reported substitution for heroin and/or other opioids, 13% reported intoxication and 3% reported being away from home.

The use of prescribed morphine was noticeably less prevalent (6% had recently used it; 5% had injected it in the same period) which remained comparable with 2011 (7% recently used; 4% recently injected). Frequency of use decreased to a median of 6 days (from 14 days in 2011), though there was also a decrease in the frequency of injection which occurred on a median of 4 days (10 days in 2011) in the six months proceeding interview.

To enable comparison with previous years, the following information refers to 'any' form of morphine, i.e. no distinction has been made between prescribed and non-prescribed morphine. In 2012, approximately one-quarter (23%; 28% in 2011) of participants reported using any morphine in the preceding six months on a median of 10 days (12 days in 2011). In terms of injection 21% (23% in 2011) reported injection of any morphine on a median of ten days (11 days in 2011) in this time (Figure 18). The frequency of any morphine injection thus appears to have remained stable with 2011 figures at roughly fortnightly use.

[8] 'Drug dependent' is defined as 'a person who has acquired, as a result of repeated administration: (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.

Figure 18: Proportion of PWID reporting morphine use and injection in the past six months 2001-2012

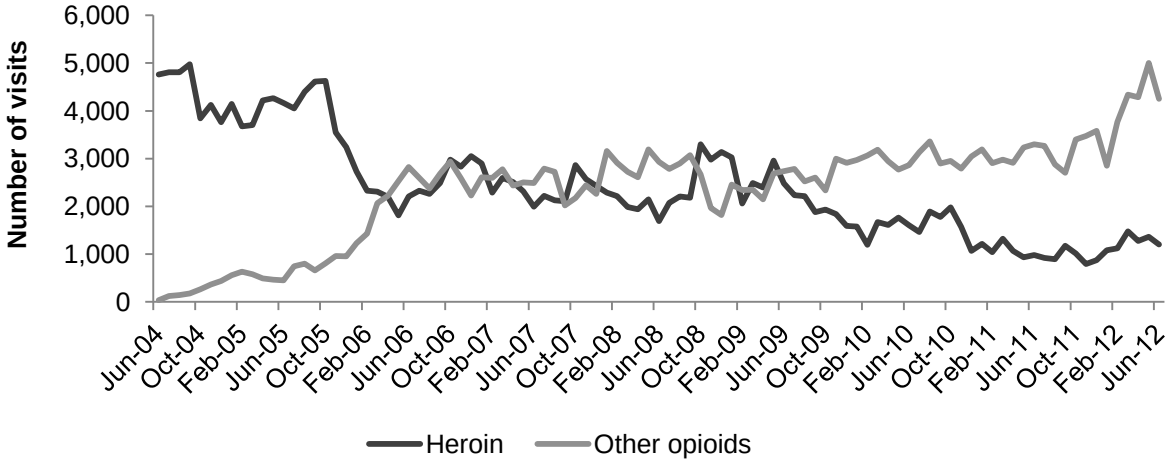


Source: IDRS PWID interviews
NB: Prior to 2001, morphine was included under 'other opioids'

Nine percent of recent users (2% of entire sample) reported daily morphine use, although the majority (54%; 13% of entire sample) reported using weekly or less often. No participants reported experiencing problems that they attributed to morphine injection in the past month, either in the form of a 'dirty hit' or an overdose.

The number of visits to Sydney MSIC where other opioids, including morphine and oxycodone were injected is presented in Figure 19. The number of attendances where other opioids were injected has increased since 2004, and, for the first time in May and June of 2006, other opioids accounted for a greater proportion of injections than heroin. From October 2006 to January 2007, heroin returned to accounting for the greater proportions of injections over other opioids. Figures then became relatively equal before other opioids again, accounted for the greater proportion of injections from May 2007 to September 2008. Since May 2009 other opioids have accounted for the greatest proportion of injections.

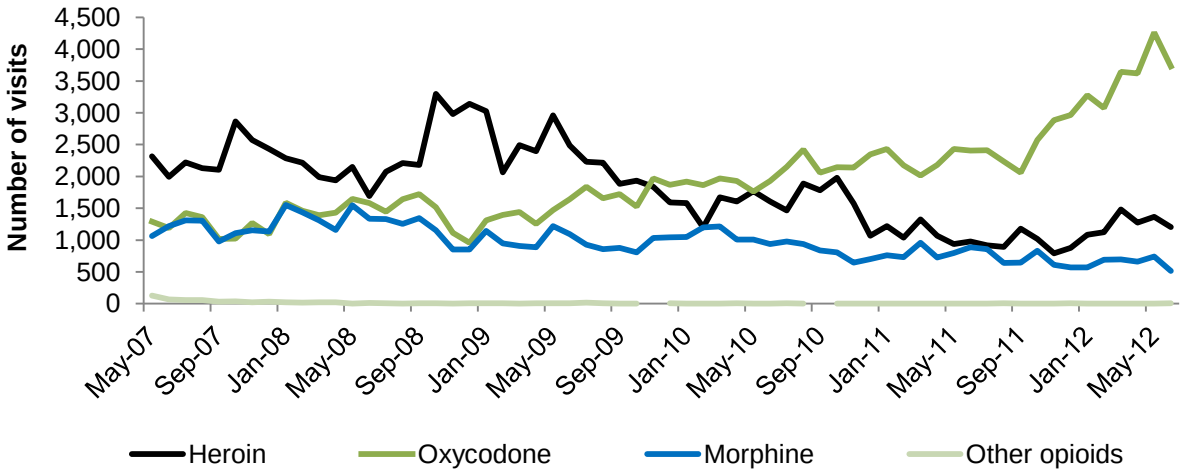
Figure 19: Number of attendances to Sydney MSIC where other opioids (including morphine)* and heroin were injected, June 2004-June 2012



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

Since January 2008 oxycodone has been the most prevalent pharmaceutical opioid injected in attendances to the Sydney MSIC. In the 12 months to June 2012 attendances for oxycodone injection at the Sydney MSIC continued to increase and oxycodone continued to be the most common opioid injected. Attendances for heroin injection at MSIC were characterised by a downward trend over the same period (Figure 20).

Figure 20: Number of attendances to Sydney MSIC where morphine, oxycodone and other opioids were injected, May 2007-June 2012



Source: Sydney MSIC, Kings Cross

4.6.6 Oxycodone

For information on changes to oxycodone prescribing legislation that became effective from January 2006, please see Section 5.7 Morphine.

4.6.7 Use patterns

This was the fifth year, in which a distinction was made between prescribed and non-prescribed oxycodone (e.g. OxyContin, Endone) and other opioids due to concerns that the use of non-prescribed, and problems associated with, diversion of oxycodone may be increasing. In previous years, oxycodone was included under 'other opioids'.

Sixty-nine percent of all participants reported having used oxycodone (whether obtained via prescription or other methods) at some stage in their lifetime, and 57% reported having ever injected it (Table 4). Half of all participants reported using any (prescribed or non-prescribed) oxycodone in the six months preceding interview on a median of twenty days (almost weekly use) which represented a significant increase in both prevalence and frequency of use from values seen in 2011 (38% and also a median of 6 days). The recent injection of any oxycodone also rose in 2012 (42% versus 32% in 2011), though this increase was not statistically significant.

With regard to non-prescribed oxycodone use, almost one half (46%; 34% in 2011) of participants reported use in the preceding six months, on a median of ten days (4 days in 2011). This increase, however, did not reach statistical significance. Fourteen percent (5% of entire sample) of participants reporting recent illicit use were daily users (180 days). The majority (58%; 23% of entire sample) of people reporting use in the last 6 months were using weekly or less often. Injection in the last six months was reported by 40% of the sample on a median of 20 days (30% on a median of 5 days in 2011). Overall, these figures suggest that prevalence of

recent illicit oxycodone use has increased in 2012. This finding is consistent with many key expert testimonials who explain that oxycodone use, and especially injection, is on the rise in Sydney.

In response to the question 'what were your main motivations for non-precribed oxycodone use?' 67% of recent users reported self treatment, 56% reported substitution for heroin and/or other opioids and 13% reported intoxication as the main motivation. Other reasons for using illicit oxycodone included 'availability', 'missing methadone dose' and 'pain management', though each of these were endorsed by only one participant.

With regard to prescribed oxycodone, 11% of participants reported use in the preceding six months, on a median of 7 days (5%; 19 days in 2011). Injection of prescribed oxycodone in the last six months was reported by 9% of the sample on a median of 25 days (3%; 120 days in 2010). These reports suggested that use of prescribed oxycodone had remained stable, while the frequency of injection had decreased

Of those reporting any recent oxycodone use, the vast majority (81%; 40% of entire sample) used non-prescribed oxycodone rather than prescribed oxycodone, (see Section 8.4: Pharmaceutical opioids). The most common brand used was OxyContin (83%; 41% of entire sample). There were only small numbers reporting generic oxycodone (7%; 3% of entire sample) as the brand most commonly used, and only one participant reporting Endone as the brand most commonly used.

4.7 Over the counter codeine

Again in 2011, the IDRS survey included questions on the use of over the counter (OTC) codeine. Just over a fifth (21%) of participants reported that they had ever used OTC codeine. Eleven percent of all participants reported that they had used OTC codeine in the six months prior to interview on a median of 3 days. This represents a significant decrease from 2011 values, in which 50% had ever used OTC codeine and 38% had used OTC codeine in the preceding six months on a median of 5 days. All recent OTC codeine users had swallowed it and no participants reported that they had recently injected it. The brands most commonly reported as being used were Nurofen Plus (42%), Panadeine (17%) and 'Chemist's own pain tablets/capsules' (17%).

4.8 Other opioids

One half (50%) of participants reported that they had ever used opioids other than those listed above at least once in their lifetime, and 4% had ever injected them. In the six months prior to interview, 38% of participants reported the use of other opioids on a median of 5 days. Comparisons with data prior to 2009 should be interpreted with caution as OTC codeine was not included in its own section (See Section 8.4) until 2009 rather it was under the category of other opioids. It should be also noted that 'other opioids' does not include homebake.

4.9 Other drugs

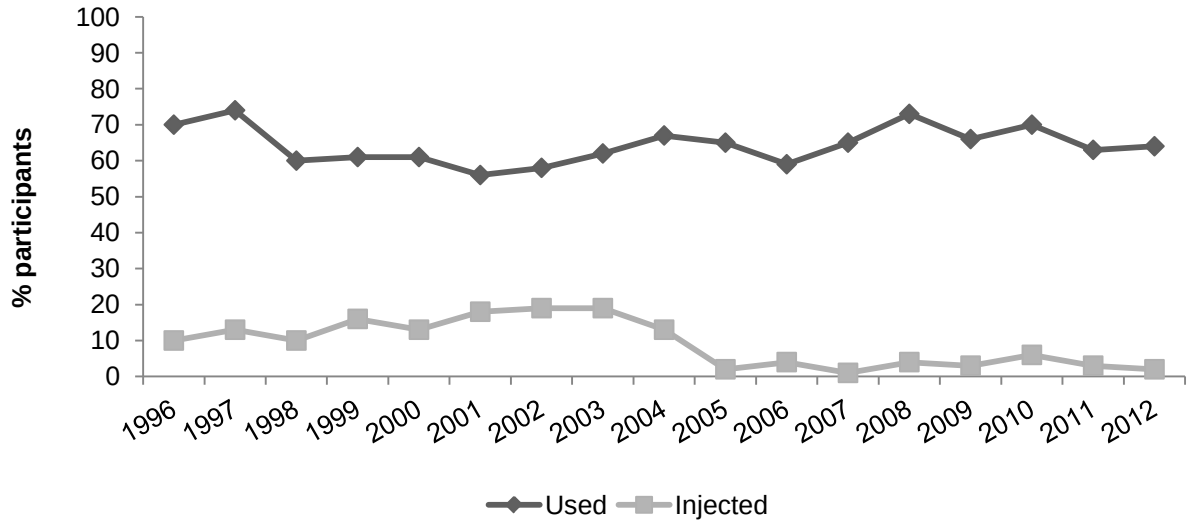
4.9.1 Benzodiazepines

Seventy-four percent of the NSW sample had reported the use of any benzodiazepines at some stage in their lifetime. Sixty-four percent (63% in 2011) reported the recent use of any benzodiazepines on a median of 67.5 days in the last six months (90 days in 2011) (Figure 21 and Figure 22). Among those who recently used any benzodiazepines, 36% reported using them daily in the last six months (Figure 23).

Only small numbers reported recently injecting any benzodiazepines (2%) on a median of 48 days in the last six months (Figure 21 and Figure 22). Almost three quarters (71%) of those who reported recent any benzodiazepine use stated that 'illicit' benzodiazepines were the form they had most used in the preceding six months, which is a significant increase from 2011 values (49%).

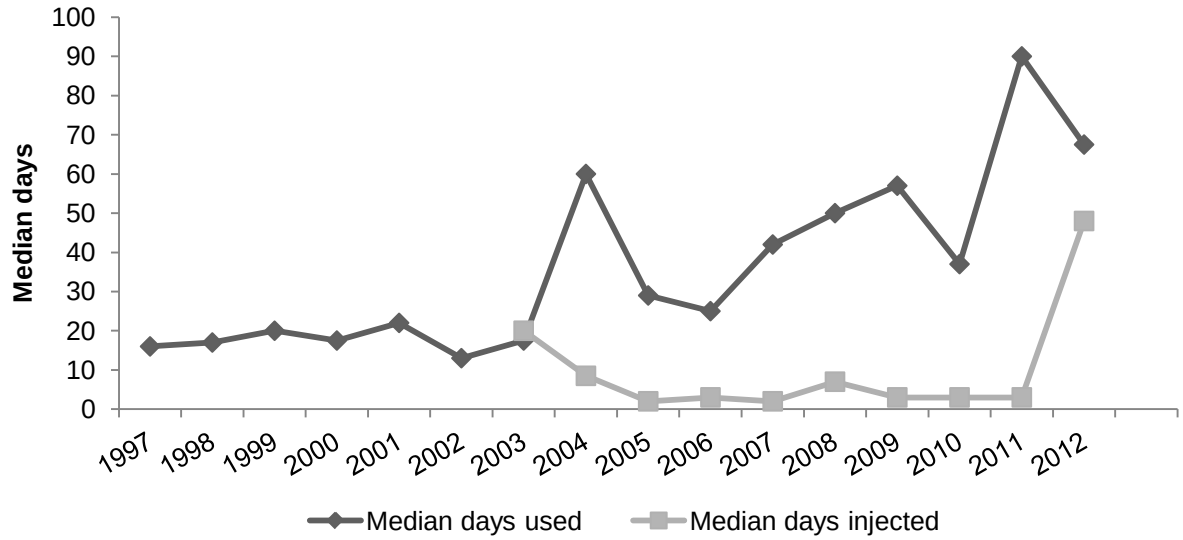
Since 2011 participants have been asked separately about the use of alprazolam and other benzodiazepines use (please see below).

Figure 21: Proportion of PWID participants reporting (prescribed and non-prescribed) benzodiazepine use and injection in the preceding six months, 1996-2012



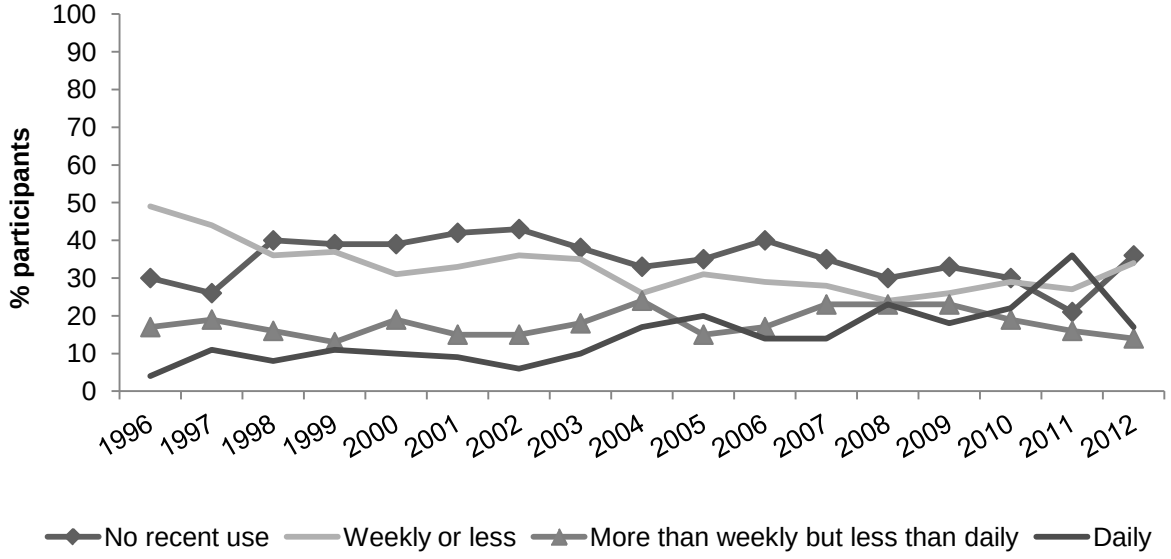
Source: IDRS PWID interviews

Figure 22: Median days use and injection of (prescribed and non-prescribed) benzodiazepines in the past six months, 1997-2012



Source: IDRS PWID interviews
NB: Collection of data on the number of days injected commenced in 2003. The median days used in 2011 should be interpreted with caution as a number of changes were made to the questionnaire which might explain the increase

Figure 23: Patterns of (prescribed and non-prescribed) benzodiazepine use, 1996-2012



Source: IDRS PWID interviews

4.9.1.1 Alprazolam

Fifty-six percent of the NSW sample reported using some form of alprazolam in their lifetime (16% licit and 41% illicit). Nearly half (48%) reported recently using any form of alprazolam on a median of 48 days in the last six months. Eleven percent had recently used 'licit' alprazolam on a median of 170 days while 40% had recently used 'illicit' alprazolam on a median of twenty days (Table 7).

A smaller proportion (5%) had injected alprazolam at some stage in their life (all of which was illicit), with 1% injecting any form of alprazolam (also all illicit) in the last six months.

Table 7: Alprazolam use patterns, 2012

	NSW (n=151)
Recent use (%)	
Licit	11
Illicit	40
Any form (licit and/or illicit)	48
Median days used *	
Licit	170
Illicit	20
Any form (licit and/or illicit)	24

Source: IDRS PWID interviews
* Among those who reported recent use or injection. Maximum number of days, i.e. daily use = 180.

4.9.1.2 Other benzodiazepines

Seventy-four percent of the NSW sample had used any form of other benzodiazepines not including alprazolam in their lifetime (36% licit and 44% illicit). Just under half (47%) recently used any form of other benzodiazepines on a median of 48 days (approximately twice per week; Table 8).

Twenty-three percent of the NSW sample reported having used 'licitly' obtained other benzodiazepines on a median of 104 days in the last six months. On the other hand, 33% percent reported using 'illicitly' obtained other benzodiazepines on a median of 12 days in the six months preceding interview (Table 8).

Proportions of respondents reporting the recent injection of other benzodiazepines (any form – excludes alprazolam) in the last six months was low at 1%.

Table 8: Other benzodiazepine (excludes alprazolam) use patterns, 2012

	NSW (n=151)
Recent use (%)	
Licit	23
Illicit	33
Any form (licit and/or illicit)	47
Median days used *	
Licit	104
Illicit	12
Any form (licit and/or illicit)	48

Source: IDRS participant interviews
* Among those who reported recent use or injection. Maximum number of days, i.e. daily use = 180.

Excluding Alprazolam, the most commonly used brand of benzodiazepine was diazepam (including generic diazepam, Valium, Valpam and Antenex) (81%), followed by oxazepam (Serepax) (10%), and temazepam (9%). Thirty percent of participants reported benzodiazepine use on the day prior to interview (21% in 2010).

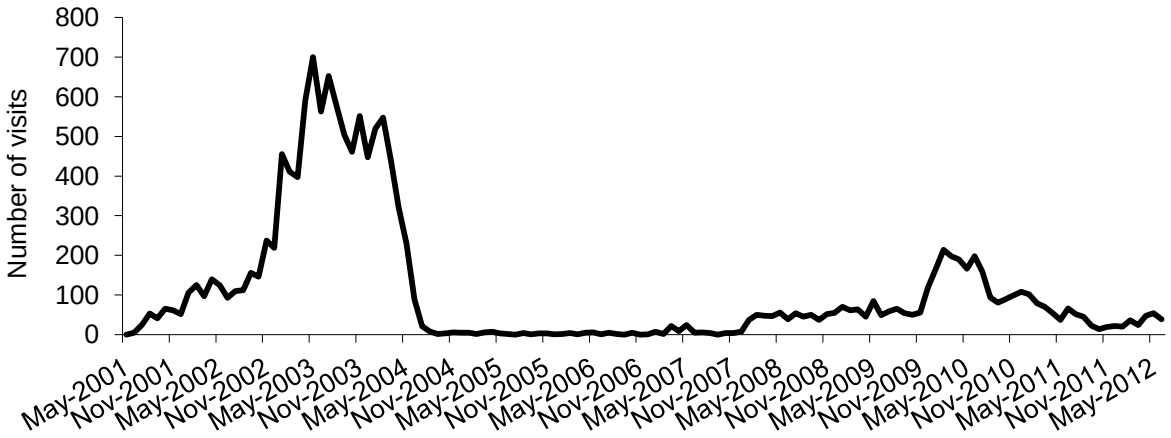
In previous years, there had been concern relating to the injection of, and injection-related problems associated with, benzodiazepines, particularly temazepam gelatine capsules

(Euhypnos, Nocturne, Normison and Temaze). These gel cap formulations were restricted on 1 May 2002, and subsequently removed completely from the pharmaceutical market at the end of March 2004. In 2012, the prevalence of benzodiazepine injection was comparable with recent years (1% in 2012; 3% in 2011; 6% in 2010; 3% in 2009). Overall, the prevalence of benzodiazepine injection and the frequency of injection has remained stable over the past few years.

4.9.1.3 MSIC data

Data from the Sydney MSIC show that the number of clients who injected benzodiazepines fell dramatically with the withdrawal of temazepam gelatine capsules from the Australian pharmaceutical market at the end of March 2004. Since the withdrawal of temazepam gelatine capsules from the market until early 2010 benzodiazepine injection at MSIC has remained low and stable. In early to mid 2010, there was an increase in the number of attendances for benzodiazepine injections and the 12 months to June 2012 has a fluctuation in attendances[9], though numbers remained lower than the peaks seen in 2010. The number of attendances to Sydney MSIC where benzodiazepines were injected was still less than that reported prior to the withdrawal of temazepam gelatine caps from the market at the end of March 2004.

Figure 24: Number of attendances to Sydney MSIC where benzodiazepines were injected, May 2001-June 2012



Source: Sydney MSIC, Kings Cross

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

4.9.2 Seroquel® (Quetiapine)

Since 2011, participants have been asked about the use of Seroquel® (quetiapine). Of the NSW sample 52% reported a lifetime use of Seroquel® (22% licit, 33% illicit). Thirty-eight percent of the sample had used Seroquel® in the last six months (21% licit, 20% illicit), which represented

[9] 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 PWID became aware of this new service

a significant increase from 2011 rates (21%; 9% licit, 13% illicit). 'Licit' Seroquel® had been used on a median of 180 days compared to three days for 'illicit' Seroquel®. No participants reported injecting Seroquel® in the last six months.

4.9.3 Hallucinogens

Half (50%, 47% in 2011) of PWID participants reported having used hallucinogens at some stage in their lifetime and only one instance of recent use (Table 4). Five percent of the sample had injected hallucinogens at some stage in the past (7% in 2011) and no participants reported having injected them in the last six months. These figures, overall, represented stability in the use of hallucinogens when compared with 2011.

4.9.4 Ecstasy

Ecstasy use within this sample of participants in NSW continued to remain at relatively low levels. Forty-eight percent of participants reported use of ecstasy in their lifetime, and 7% reported having used it within the six months prior to interview (10% in 2011). Twelve percent of participants had reported ever injecting ecstasy, though only one participant (6 in 2011; 4% of the entire sample) reported having injected ecstasy in the six months preceding interview on a median of 2 days (see Table 4).

A separate monitoring system investigating trends in ecstasy and related drug use and related issues had 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').

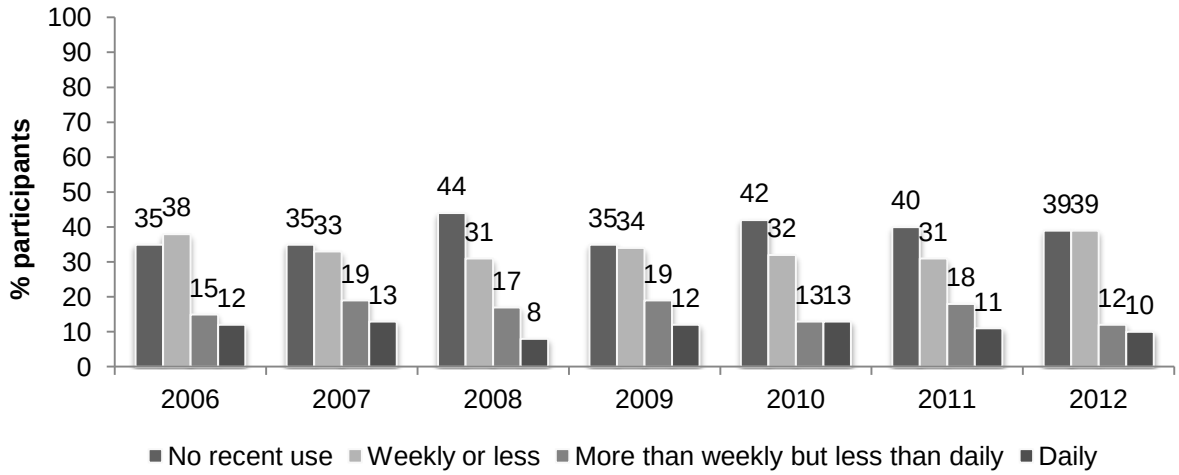
4.9.5 Inhalants

Twenty-one percent of participants (18% in 2011) reported ever having inhaled volatile substances such amyl nitrite, petrol, glue and/or lighter fluid (butane) (Table 4). Recent use (3%) remained low and stable as did the frequency of use (2.5 days). The only form of inhalant reported being recently used by participants was amyl nitrite. There were no KE reports regarding use of inhalants.

4.9.6 Alcohol

More than one-half (61%) of the participants in the sample had consumed alcohol in the six months prior to interview on a median of 12 days (i.e. once per fortnight; range 1-180). Both the recent use and the frequency of use remained stable (60% and 12 days in 2011). Sixteen percent (10% of the entire sample) reported daily use of alcohol. These figures were generally consistent with levels reported over the last 3 years. Sixty-four percent (39% of all participants) drank weekly or less often (Figure 25). Rates of daily use in the entire sample (10%) were comparable with the general population aged 14 and over (7%), while rates of drinking weekly were lower than the general population (39% of the entire sample) (Australian Institute of Health and Welfare, 2011a).

Figure 25: Patterns of alcohol use, 2006-2012

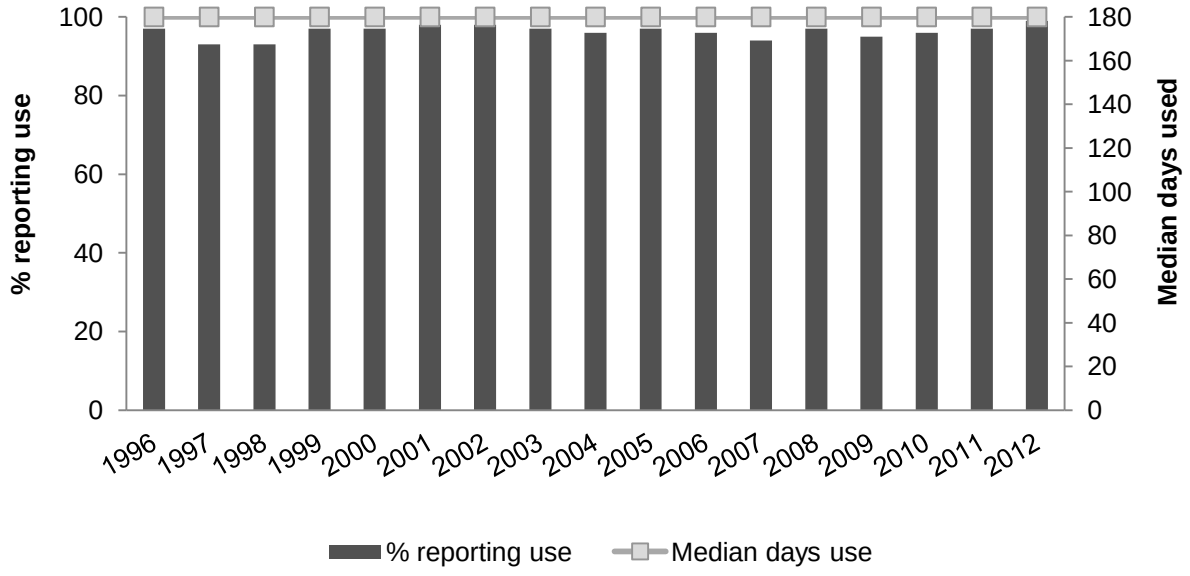


Source: IDRS PWID interviews

4.9.7 Tobacco

Tobacco continued to remain the most commonly used substance investigated by the IDRS. The vast majority of participants (99%) reported smoking tobacco in the last six months on a median of 180 days (Table 4), i.e. daily use (range 10-180). Ninety-six percent of the sample who had smoked tobacco in the preceding six months were daily smokers. High prevalence and frequency of tobacco use has been reported since 1996 (Figure 26). This figure continues to be substantially higher than among the general Australian population (15% of whom are daily smokers), and contrary to trends noted in the general population the prevalence of smoking among IDRS is not declining over time (Australian Institute of Health and Welfare, 2011a). The use of tobacco is the single most preventable cause of morbidity and mortality in Australia (Begg et al., 2007). Given the prevalence of smoking among the IDRS sample and that they are continuing to age over time (Figure 1) is of particular concern.

Figure 26: Participant reports of tobacco use in the last six months, 1996-2012



Source: IDRS PWID interviews

5 DRUG MARKET: PRICE, PURITY, AVAILABILITY AND PURCHASING PATTERNS

5.1 Heroin

When asked to comment on the price, purity and/or availability of heroin, 89% of the PWID sample felt confident to answer at least some of these survey items. The remaining 11% did not feel confident to answer any questions on the heroin market, and this is likely to reflect a proportion of people who inject drugs but do not use heroin, or come into contact with users, or dealers of, heroin regularly enough to be able to comment. 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 remained uncommon, detailed market characteristics have not been obtained.

5.1.1 Heroin Price

The prices participants paid for heroin on the last occasion of purchase are shown in Table 9. Again in 2012, the median price reported for a cap of heroin remained unchanged at $50 and has remained unchanged since 2002. A gram of heroin, however, increased from $300 in 2011 to $350 (Table 9). These prices continue to remain substantially higher than prices reported in 2000 ($220 per gram; $25 per cap), prior to the reported heroin shortage in 2001 (Figure 27).

Nineteen participants (13% of entire sample) 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 0.1 gram, although anecdotal evidence suggests that, similar to a 'cap' or a 'deal', 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 9, price ranges were extremely wide. This may reflect purity/availability within that particular person's network and the numbers reporting.

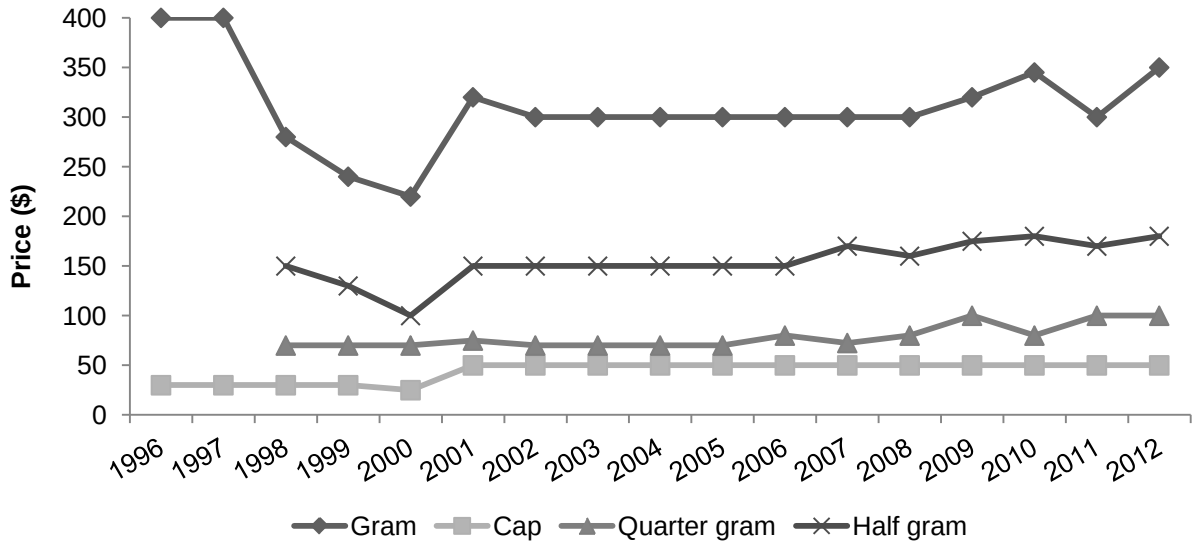
Table 9: Price of most recent heroin purchases by PWID participants, 2011-2012

Amount	Median price* $	Range $	Number of purchasers*
Cap	50 (50)	30-100	77 (81)
Quarter gram	100 (100)	70-250	21 (27)
Half gram ('halfweight')	180 (170)	70-450	37 (35)
Gram	350 (300)	50-1,500	21 (29)

Source: IDRS PWID interviews
* 2011 data are presented in brackets

Heroin prices have remained relatively stable since 2002, with the exception of single gram amounts which have fluctuated in the last three years (Figure 27). It should be noted that participants and KE sometimes reported that the amount of a drug bought within a purchase amount (e.g. as a 'cap' or a 'fifty-dollar deal') had fluctuated or decreased over the past few years.

Figure 27: Median prices of heroin estimated from PWID purchases, 1996-2012



Source: IDRS PWID 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 ('don't know', 'increasing', 'stable', 'decreasing' and 'fluctuating'). Almost three-quarters of participants that commented (71%) reported price stability over the preceding six months. Twenty-two percent of those who commented thought that price had increased over the preceding six months (comparable with 22% in 2011), with a smaller proportion nominating 'fluctuating' (6%, 3% in 2011) and one participant (1%) reported 'decreasing' heroin prices.

5.1.2 Availability

Participants were asked about current heroin availability (whether it was 'very easy', 'easy', 'difficult' or 'very difficult') and whether this had changed in the last six months ('easier', 'stable', 'more difficult' or 'fluctuates'). Again in 2012, the majority of participants reported that heroin was 'easy' (46%) or 'very easy' (38%) to obtain (Table 10; Figure 28). Fourteen percent (reported that heroin was difficult to obtain (16% in 2011) and only 2% of participants claimed that heroin was 'very difficult' to obtain.

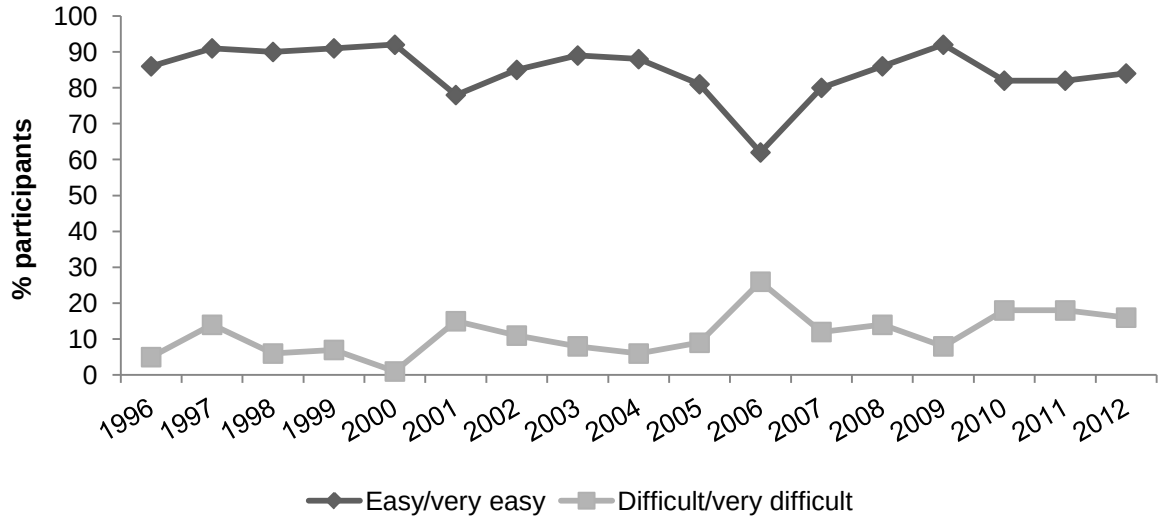
The vast majority (87%) of the sample were able to comment on heroin availability in the last 6 months, 77% reported that heroin availability over this time had remained stable. Smaller proportions of participants claimed that ease of access to heroin had become 'more difficult' (14%) or 'easier' (5%) to obtain (Table 10).

Table 10: Participants' reports of heroin availability in the past six months, 2008-2012

	2008 N=151	2009 N=152	2010 N=154	2011 N=150	2012 N=151
Current availability					
Did not respond* (%)	17	6	8	13	13
Did respond (%)	83	94	92	87	87
Of those who responded: Very easy (%)	39	59	57	50	38
Easy (%)	46	33	26	32	46
Difficult (%)	13	8	14	16	14
Very difficult (%)	1	0	4	2	2
Availability change over the last six months					
Did not respond* (%)	17	6	8	14	13
Did respond (%)	83	94	92	86	87
Of those who responded:					
More difficult (%)	17	14	20	19	14
Stable (%)	67	72	70	64	77
Easier (%)	10	11	9	11	5
Fluctuates (%)	2	3	1	6	4

Source: IDRS PWID 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

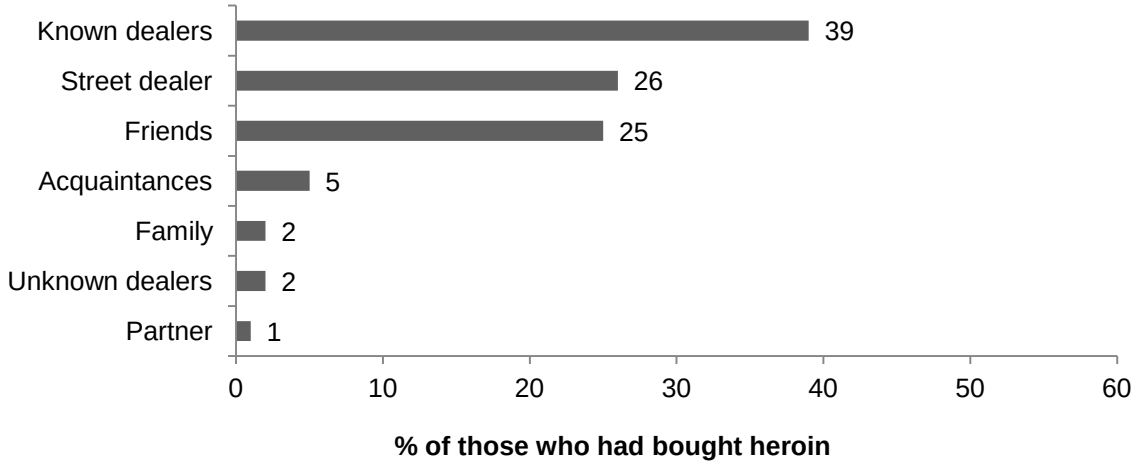
Figure 28: Participant reports of current heroin availability, 1996-2012



Source: IDRS PWID interviews

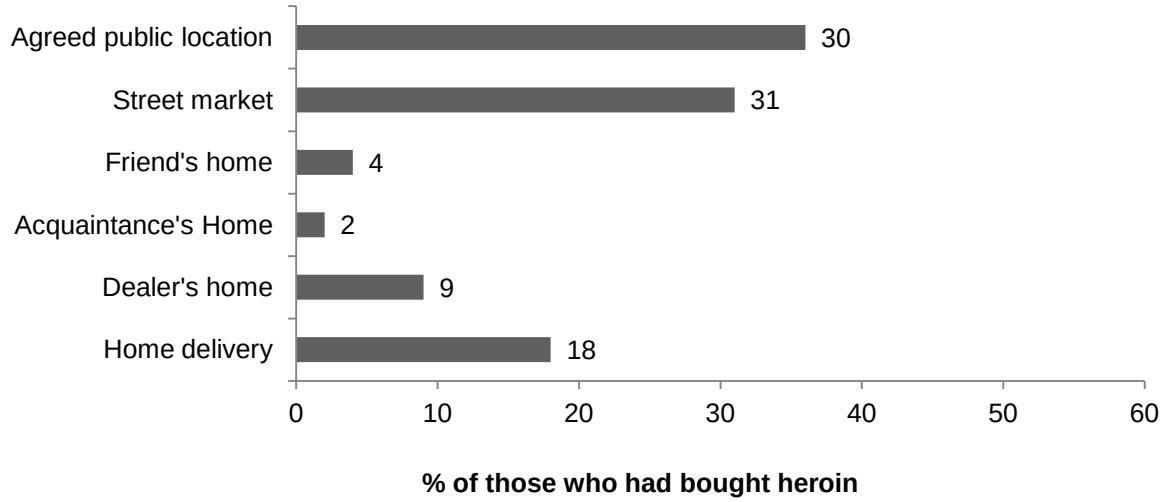
Of those participants that had purchased heroin in the last six months (86%), the most common sources of heroin on the last occasion of purchase were known dealers (39%), street dealers (26%) and friends (25%) (Figure 29). Participants reported scoring from a range of locations, both public (e.g. street market, agreed public location) and private (e.g. dealer's home, home delivery) with the most common remaining an 'agreed public location' (30%) (Figure 30).

Figure 29: People from whom heroin was purchased on the last occasion, 2012



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

Figure 30: Locations where heroin was purchased on the last occasion, 2012

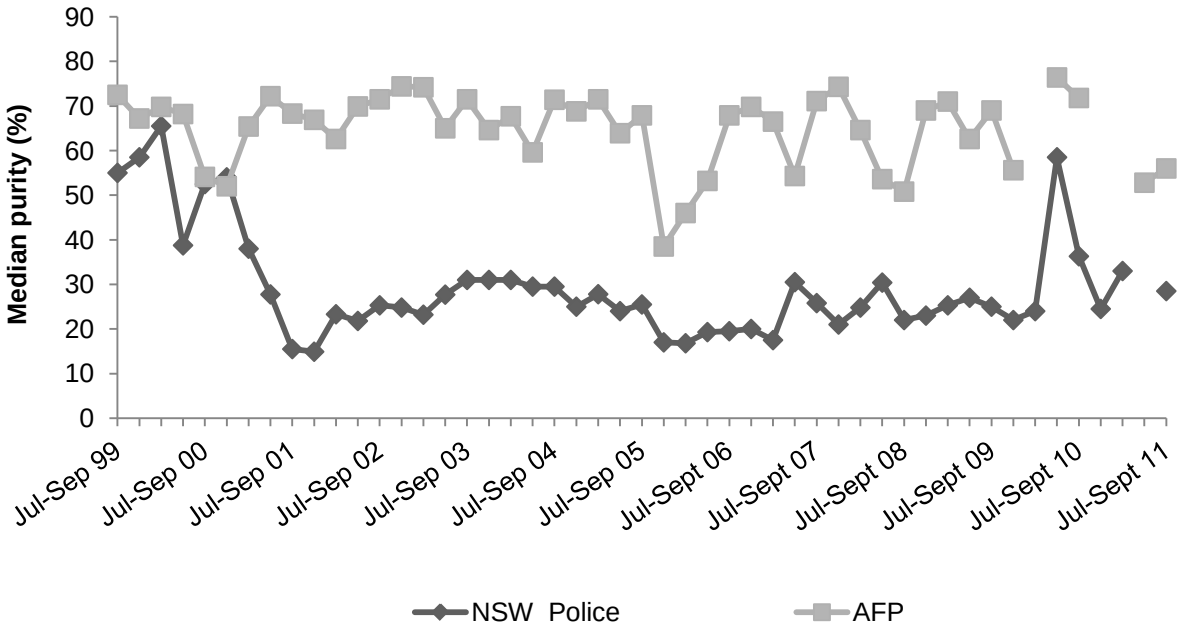


Source: IDRS PWID interviews
NB: More than one response could be selected

5.1.3 Purity

Figure 31 shows the analysed median purity of NSW Police heroin seizures during the 1999/00 to 2010/11 period. The overall median purity in 2010/11 (24.5%; range: 1-80%) reported by NSW Police remained comparable with the 2009/10 reporting period (24.5% in 2009/10). Overall, the purity of Australian Federal Police (AFP) heroin seizures that were analysed during 2010/11 remained stable with a median of 56% in the 12 months to June 2011 (67.8% in 2009/10).

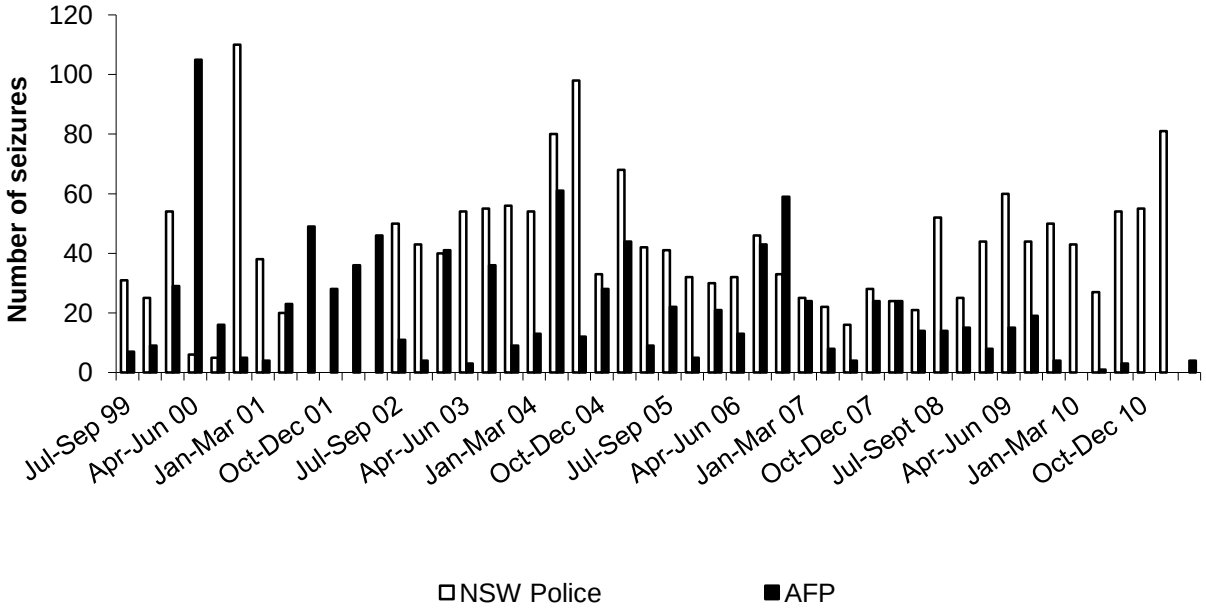
Figure 31: Purity of heroin seizures analysed in NSW, by quarter, 1999/00-2010/11



Source: Australian Bureau of Criminal Intelligence (2001, 2002); Australian Crime Commission (2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012)
NB: Data were unavailable for 2011/12 at time of publication; no AFP seizure data for NSW January-March 2010, October-December 2010 and January-March 2011; no NSW Police data for April-June 2011.

Figure 32 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 that may occur in joint operations between the AFP and NSW Police. The total number of heroin seizures analysed by NSW Police in 2010/11 was 190 (161 cases in 2009/10). There was a decline in the total number of heroin seizures analysed by the AFP from 52 to 24 cases in the same period (Figure 32).

Figure 32: Number of heroin seizures analysed in NSW, by quarter, 1999/00-2010/11



Source: Australian Bureau of Criminal Intelligence (2001, 2002); Australian Crime Commission (2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012)
NB: NSW Police data for numbers of seizures for 2001/02 were unavailable. Data were unavailable for 2011/12 at time of publication

Participants were also asked to comment on their perception of the current purity of heroin. Thirty-eight percent of those who commented reported it to be low purity, 33% reported it be 'medium', 17% reported it 'fluctuates' and 13% believed it to be 'high' (Table 11). Since the 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 33). This was also the case in 2012, with only 13% of participants rating current heroin purity as 'high'. While this may reflect a change in purity, it may also reflect individual levels of tolerance to heroin.

Participant perceptions of purity change over the last six months varied, approximately one third (35%) reported that it has remained stable (32% in 2011), 31% reported that it had decreased (37% in 2011). These results are comparable with 2011 (Table 11).

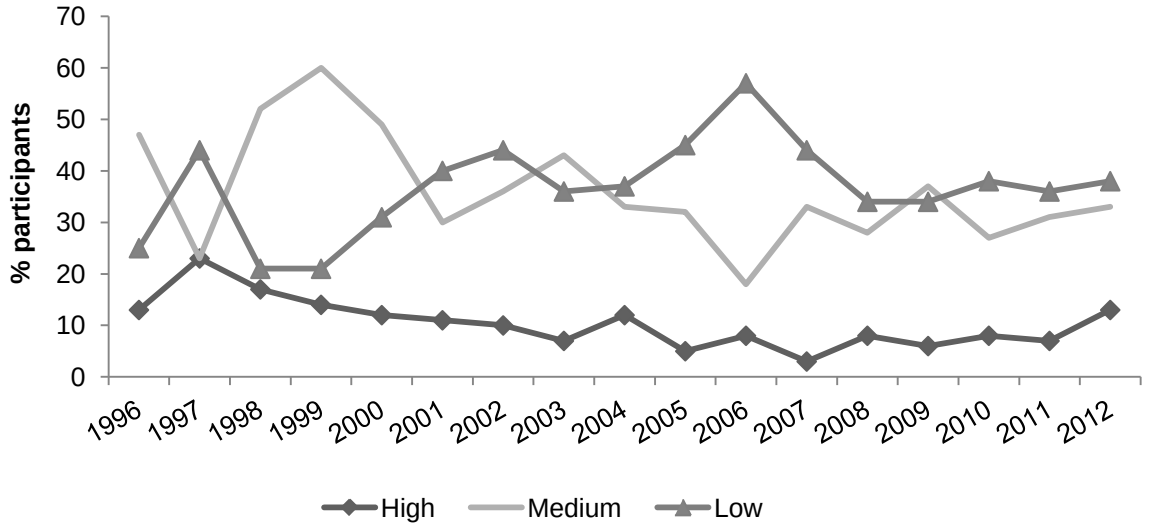
Table 11: Participants' perceptions of heroin purity in the past six months, 2008-2012

	2007 N=153	2008 N=151	2009 N=152	2010 N=154	2011 N=150	2012 N=151
Current purity						
Did not respond* (%)	6	17	6	11	15	16
Did respond (%)	94	83	94	89	85	84
Of those who responded:						
High (%)	4	10	6	9	8	13
Medium (%)	35	34	39	31	37	33
Low (%)	47	42	40	43	42	38
Fluctuates (%)	11	8	13	18	13	17
Purity change over the last six months						
Did not respond* (%)	5	17	6	13	17	16
Did respond (%)	96	83	94	87	83	84
Of those who responded:						
Increasing (%)	13	18	16	7	11	13
Stable (%)	38	27	33	41	32	35
Decreasing (%)	22	37	30	36	37	31
Fluctuating (%)	19	10	18	17	20	21

Source: IDRS PWID 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

Figure 33: Proportion of PWID participants reporting current heroin purity as high, medium or low, 1996-2012



Source: IDRS PWID interviews

5.1.4 Trends in heroin use

As in previous years, the PWID survey contained a number of open-ended questions which asked participants about any general trends in drug use that they had noticed, for example in the number of users and the types of drugs used. As in previous years, comments on general trends in heroin use included several comments that the quality of heroin had decreased (this may be influenced, at least in part, by tolerance) and similar to comments from 2010 that there was an increasing number of younger people using heroin (this may be influenced, at least in part, by the participants themselves growing older). There were many comments, however, stating that ice usage was on the increase, and this was found to be significantly higher in the IDRS data in 2012.

5.1.5 Key expert comments

- Comments on heroin purity from KE were mixed; several commented that the current purity of heroin had fluctuated so much that it was hard to know what someone would get, while others commented that the quality had become more reliable but expectations of purity were generally lower than in the past. Several KE emphasized that quality was often dependent on PWID social networks.
- KE comments on patterns reflected findings in the PWID survey that heroin remained the drug of choice amongst this group, despite the continuing use of non-prescribed pharmaceutical opioids.
- The price of a cap of heroin was reported to be stable at $50.
- Continuing trends from previous years KE commented again in 2012 that alkaline 'brown' heroin remained uncommon in Sydney.

5.2 Methamphetamine

Participants were asked if they were able to comment on the price, purity and/or availability of speed powder, base and/or ice. In 2012, 17% of the PWID sample felt confident to answer at least some of the survey items regarding speed powder; Eleven percent commented on base price, purity and/or availability; and 64% commented on ice/crystal. These proportions are consistent with 2011 values, with the exception of ice/crystal, where there was a significant increase in those feeling confident enough to answer (51% versus 64%, $p < 0.05$) The remainder did not feel confident to answer any questions on one or more of these drug forms, and this was likely to reflect a proportion of users who did not use, or come into contact with, methamphetamine users or dealers regularly enough to be able to comment.

5.2.1 Price

5.2.1.1 Speed powder

As per previous years, and other drug types, the smaller amounts of speed were the most popular (in this case, points) and prices have continued to remain stable. In 2012, the number of people reporting amounts other than points remained low. Due to this, comparisons with 2011 for halfweights, grams and eightballs should be interpreted with caution due to the low number (n=<10) reporting. As shown in Table 12, 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 12: Price of most recent methamphetamine purchases by PWID participants, 2011-2012

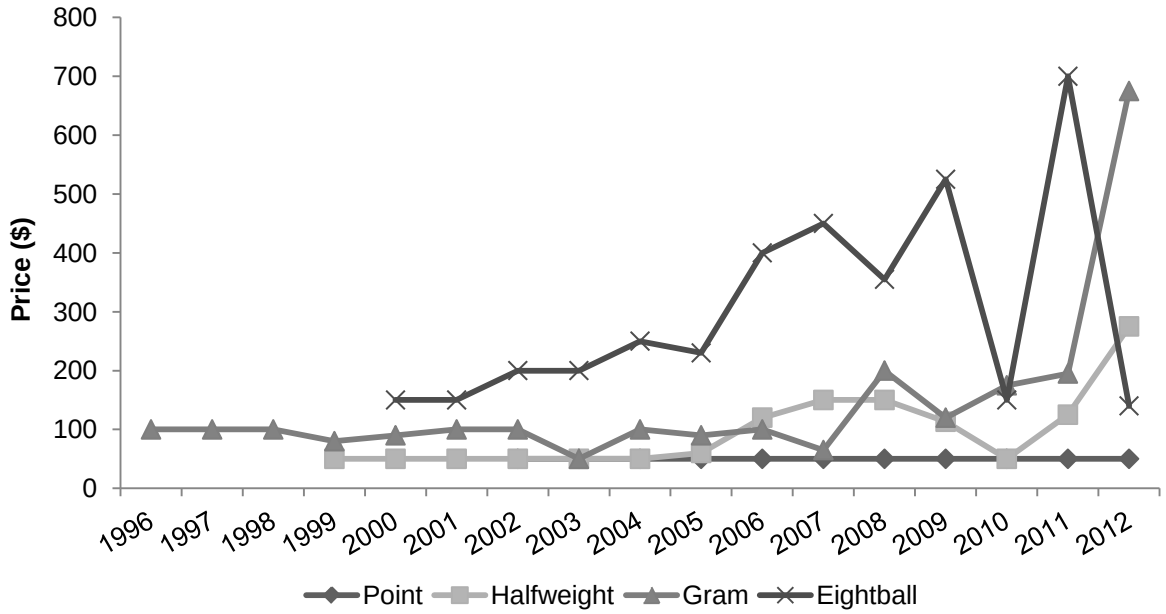
Amount	Median price* $	Range $	Number of purchasers*
Speed powder			
Point (0.1 gram)	50 (50)	40-50	13 (25)
'Halfweight' (0.5 grams)	275 (125)	200-350	2^ (2^)
Gram	675 (195)	150-1,200	2^ (8^)
'Eightball' (3.5 grams)	140 (700)	140-140	1^ (2^)
Base			
Point (0.1 gram)	50 (50)	25-50	15 (15)
'Halfweight' (0.5 grams)	- (180)	-	0^ (1^)
Gram	250 (350)	250-250	1^ (1^)
'Eightball' (3.5 grams)	140 (220)	140-140	1^ (1^)
Ice/crystal meth			
Point (0.1 gram)	50 (50)	50-100	75 (46)
'Halfweight' (0.5 grams)	250 (250)	50-400	11^ (9^)
Gram	400 (400)	50-600	10^ (14^)
'Eightball' (3.5 grams)	1,200-1,200 (900)	1,200-1,200	2^ (5^)

Source: IDRS PWID interviews
* 2011 data are presented in brackets
^ n=<10 results should be interpreted with caution

The median price per point of speed has remained the same since data were first collected on this purchase amount in 2002 ($50). It is important to note, however, that comparisons with the 2011 data should be interpreted with caution due to the low number of reported purchasers for weights other than points this year.

Participants were also asked if the price of speed powder had changed in the last six months, and 80% of those who commented (17% of all participants) reported price stability over the last six months. This remained consistent with comments from 2011. Similarly the proportion of participants reporting an increase (15%; 3% of all participants) remained stable from 2011 (19%; 5% of all participants). Although no participants reported a decrease in prices in 2012 this remained comparable with previous years (also no participants in 2012 and 1% of all participants in 2011). Overall, this suggested prices had remained relatively stable over the period, however, for amounts larger than a point (Figure 34) trends in prices should be interpreted with caution due to small number of people reporting.

Figure 34: Median prices of speed powder estimated from PWID purchases, 1996-2012



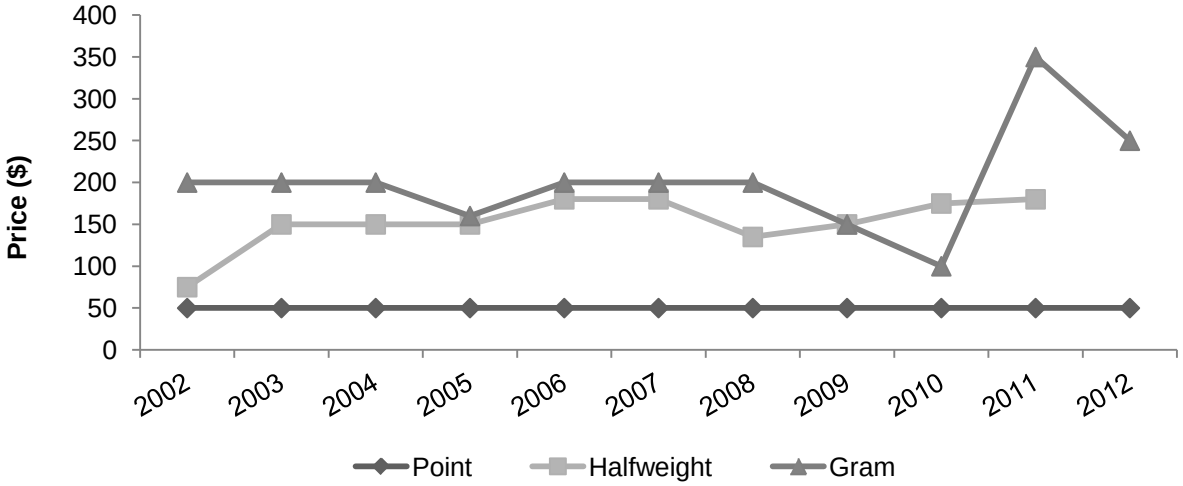
Source: IDRS PWID interviews

5.2.1.2 Base

The most popular purchase amount for base, as with all other forms of methamphetamine, continued to be a point, the smallest reported amount (Table 12). This has been a consistent finding over the preceding years of the IDRS in NSW. Eleven percent of all participants reported buying base in points in the preceding six months, making it the most popular purchase amount. Fewer participants (n=<10 for each amount) reported buying larger, more expensive amounts such as grams and eightballs.

The median price per point of base remained stable, while the median prices for other amounts were based on small numbers (ten responses or less) of participant responses, and should be interpreted with caution, particularly as the price ranges were fairly wide. Prices have remained fairly stable since 2002, with the exception of a gram of base (Figure 35).

Figure 35: Median prices of base estimated from PWID purchases, 2002-2012



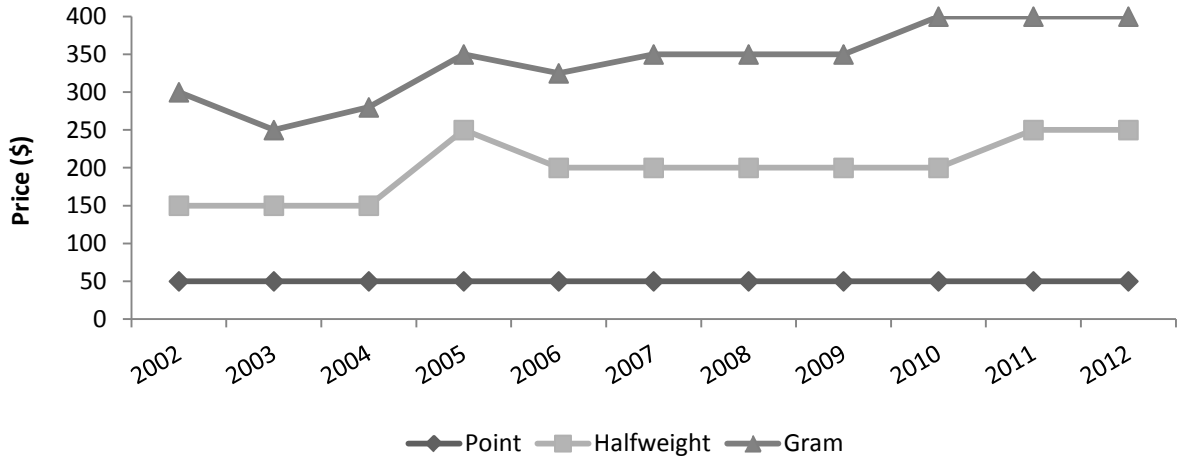
Source: IDRS PWID interviews
NB: Median price per eightball not shown due to small numbers reporting purchase

The majority of participants that commented on base generally thought that the price had remained stable over the preceding six months (93%; 9% of all participants). Seven percent reported that it had increased (1% of entire sample) and no participants reported it had fluctuated or decreased. Base prices, overall, appeared to remain comparable to 2011, though with few participants reporting recently purchasing amounts larger than a point, and no participants reporting recent purchase of a halfweight, these results should be treated with caution.

5.2.1.3 Ice/crystal

Again, as with speed and base, the most commonly purchased amounts of ice/crystal were points (78% of participants reporting at least one purchase in the last 6 months). Fifty-four percent of all participants reported at least one purchase of ice/crystal in the last 6 months, with smaller numbers reporting purchases of grams and halfweights (10 and 11 participants each, respectively) and only two participants reporting recently purchasing an eightball of ice/crystal (Table 12). In 2012, prices for points ice/crystal have remained stable. Price comparisons between 2011 and 2012 for amounts other than points should be interpreted with caution due to the low numbers reporting (Table 12).

Figure 36: Median prices of ice/crystal estimated from PWID purchases, 2002-2012



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

The majority of participants who commented on ice/crystal generally thought that the price had remained stable over the preceding six months (76%; representing 47% of the entire sample). Seventeen percent stated that it had increased (representing 11% of the entire sample), 4% (3% of the entire sample) reported it had fluctuated in price and 3% reported a decrease in price. Overall, comments on price changes in 2012 are comparable with 2011.

5.2.2 Availability

5.2.2.1 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', and 'very difficult'. Among those who could comment, availability was reported as 'very easy' (32%), 'easy' (48%), 'difficult' (20%) to obtain, with no participants reporting that it was 'very difficult' to obtain (Table 13). The majority of the sample that commented reported availability in the preceding six months was stable (63%) comparable with the reported value of 63% in 2011.

Thirteen percent of participants reported purchasing speed powder in the six months preceding interview, a significant decrease from 2011 (29%). Of those purchasing it was most commonly from friends (35%), known dealers (15%) and street dealers (35%), with only a small proportion report obtaining it from other sources. The locations at which participants had usually scored were street market (50%), agreed public location (30%), friend's home (10%), dealer's home (5%), and at home (i.e. delivered; 5%) (Figure 38).

5.2.2.2 Base

Base was reported to be 'very easy' (38%), 'difficult' (38%) and 'easy' 25% to obtain among those that could comment. Seventy-five percent (8% of all participants) reported that availability over the past six months was 'stable' (Table 13).

Ten percent of the entire sample (13% in 2011) reported purchasing base in the six months preceding interview, of those that reported a purchase, it was most commonly from friends (46%), street dealers (23%), and known dealers (15%) (Figure 37). Locations at which base had most commonly been purchased included street market (38%), agreed public location (15%),

friend's home (15%), dealer's home (15%), home delivery (8%), and acquaintance's home (8%) (Figure 38).

5.2.2.3 Ice/crystal

Forty-five percent of participants (representing 28% of all participants) commenting on ice/crystal stated that it was 'easy' and 42% (26% of all participants) said it was 'very easy' to obtain. This is comparable with 2011 (Table 13). The majority of participants (73%, or 46% of entire sample) reported that availability over the last six months had remained stable, with 15% reporting that it had become 'easier', ten percent reporting that it had become 'more difficult', and only two percent reported that availability had fluctuated over the last six months (Table 13).

Fifty-four percent of all participants had purchased ice in the six months preceding interview (46% in 2011). Among these, the most commonly reported sources were friends (36%), street dealers (26%), and known dealers (26%) (Figure 37). The most commonly reported locations of purchase were a street market (38%), agreed public location (16%), dealer's home (16%), friend's home (11%), and home (delivered; 8%) (Figure 38).

Table 13: Participants' reports of methamphetamine availability in the past six months, 2011-2012

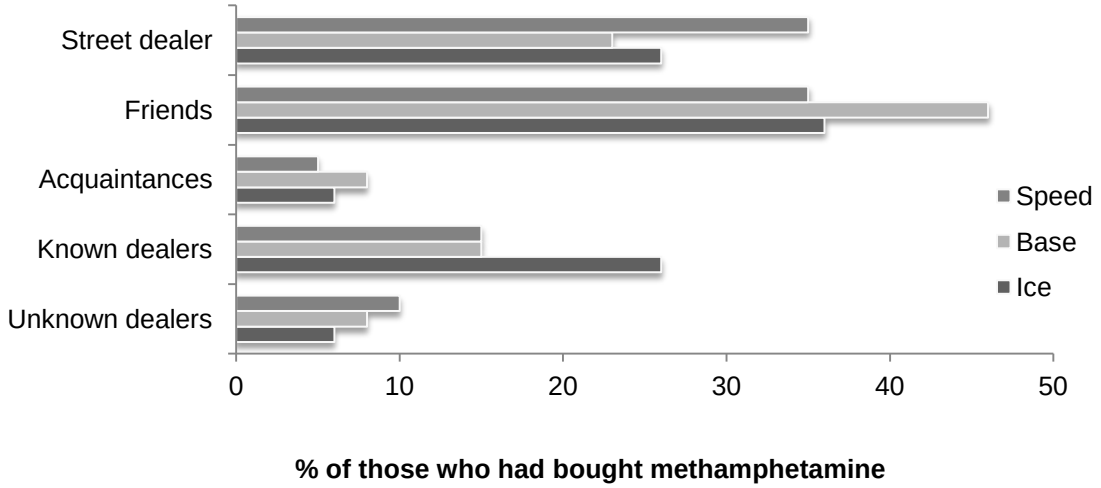
	Powder		Base		Ice/Crystal	
	2011 (N=150)	**2012 (N=151)**	2011 (N=150)	**2012 (N=151)**	2011 (N=150)	**2012 (N=151)**
Current availability						
Did not respond* (%)	71	**83**	77	**89**	49	**38**
Did respond (%)	29	**17**	23	**11**	51	**62**
Of those who responded:						
Very easy (%)	44	**32**	26	**38**	47	**42**
Easy (%)	28	**48**	35	**25**	36	**45**
Difficult (%)	19	**20**	30	**38**	12	**13**
Very difficult (%)	7	**0**	0	**0**	1	**1**
Don't know^ (%)	2	**0**	9	**0**	4	**0**
Availability change over the last six months						
Did not respond* (%)	71	**84**	77	**89**	49	**38**
Did respond (%)	29	**16**	23	**11**	51	**62**
Of those who responded:						
More difficult (%)	23	**21**	17	**25**	17	**10**
Stable (%)	63	**63**	57	**75**	61	**73**
Easier (%)	5	**13**	4	**0**	17	**15**
Fluctuates (%)	7	**4**	13	**0**	1	**2**
Don't know^ (%)	2	**0**	9	**0**	4	**0**

Source: IDRS PWID interviews

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

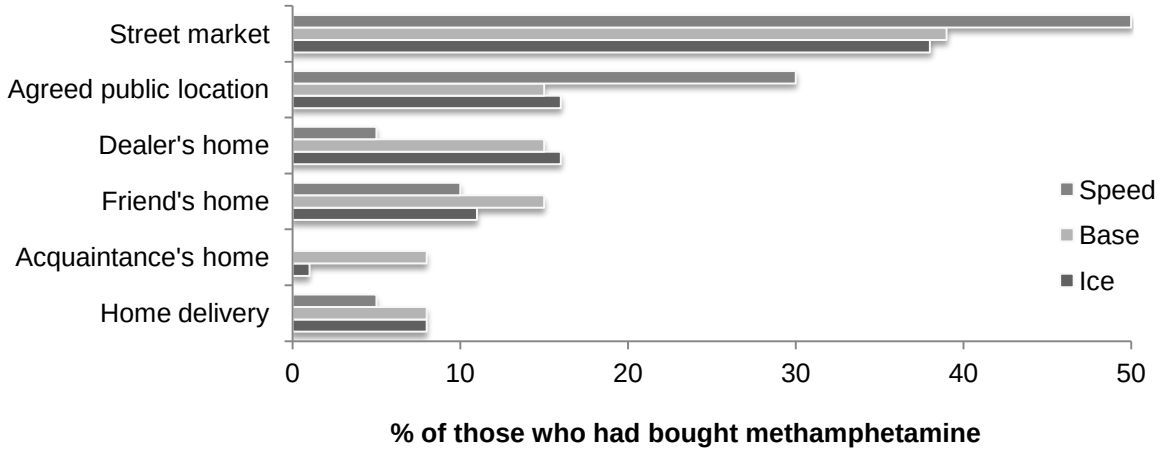
^ 'Don't know' refers to participants who were able to respond to survey items on price and/or purity, but had not had enough contact with users/dealers to respond to items concerning availability

Figure 37: People from whom methamphetamine was purchased in the preceding six months, 2012



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

Figure 38: Locations where methamphetamine was scored in the preceding six months, 2012

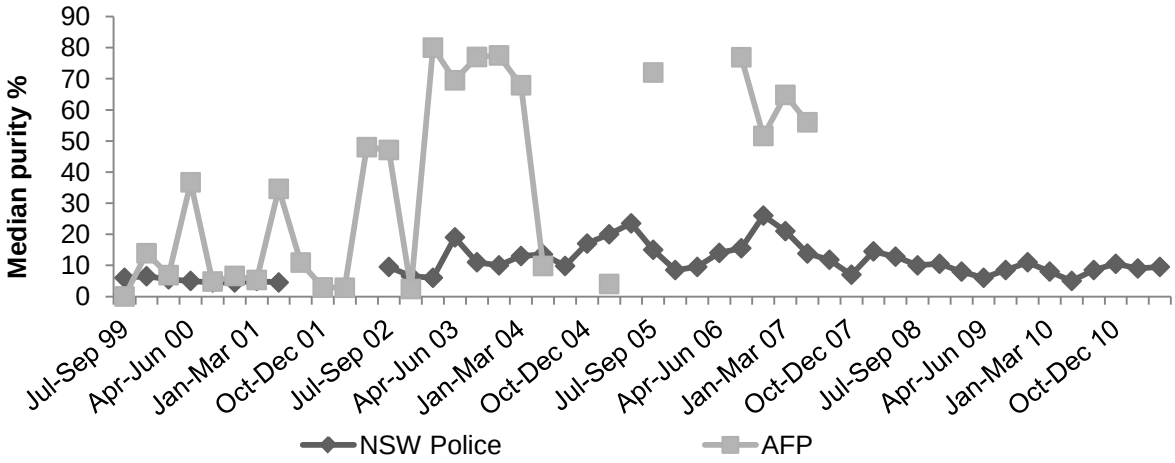


Source: IDRS PWID interviews
NB: More than one response could be selected

5.2.3 Purity

Figure 39 shows the median purity of methylamphetamine seizures analysed in NSW for the period 1999/00 to 2010/11. Again in 2010/11 there were no seizures analysed by AFP in the 12 month period. As analysis by both NSW Police and the AFP has been sporadic since 2004 meaningful interpretation of methylamphetamine purity levels is difficult. The median purity of all seizures analysed by NSW Police remained stable in 2010/11 at 9% (range 0.5-84.5%) with the 8% that was reported in the 2009/10. 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 from joint operations between the AFP and NSW Police.

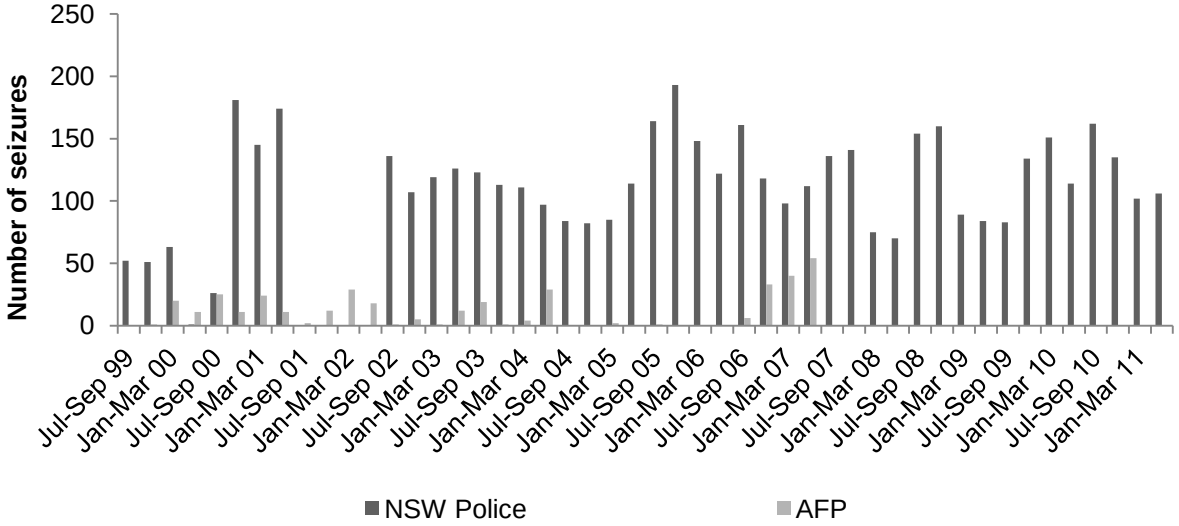
Figure 39: Purity of methylamphetamine seizures analysed in NSW, by quarter, 1999/00-2010/11



Source: Australian Bureau of Criminal Intelligence (2001, 2002); Australian Crime Commission (2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012)
NB: NSW Police data for the financial year 2001/02 were unavailable. Data for 2011/12 were unavailable at time of publication

Figure 40 shows the number of methylamphetamine seizures upon which the above purity figures are based. As analysis of AFP seizures has been sporadic since 2004 and non-existent in the 3 years to June 2011, meaningful interpretation is difficult. The number of seizures analysed by NSW Police has remained stable in the 12 months to June 2011 (505 in 2010/2011 versus 482 in 2009/10).

Figure 40: Number of methylamphetamine seizures analysed in NSW, by quarter, 1999/00-2010/11



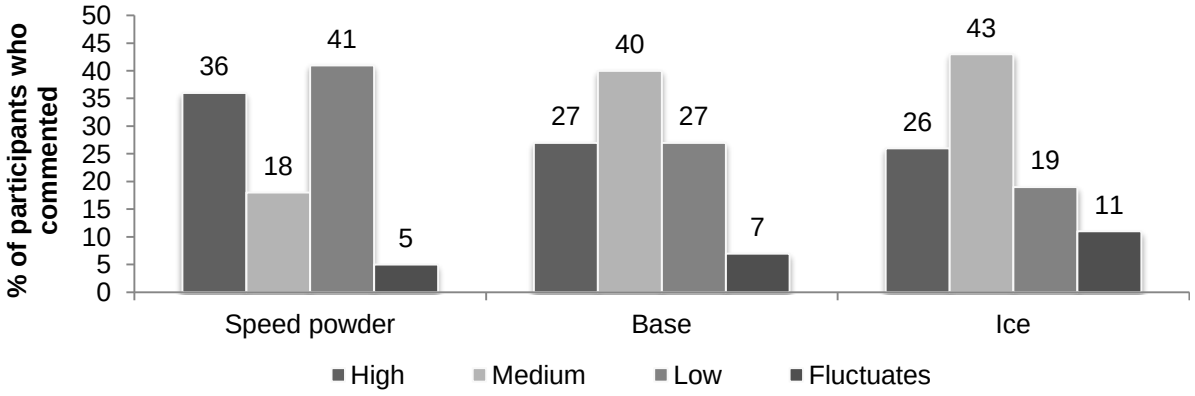
Source: Australian Bureau of Criminal Intelligence (2001, 2002); Australian Crime Commission (2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012)
NB: NSW Police data for the financial year 2001/02 were unavailable. Data for 2011/12 were unavailable at time of publication

5.2.3.1 Speed powder

Fifteen percent of the sample commented on the perceived current purity of speed powder (27% in 2011). In 2012, comments on perceived purity were mixed. Approximately equal amounts of participants described speed powder as 'high' and 'low' (36% and 41%, respectively, or 6% and 5% of all participants, respectively). Eighteen percent (3% of all participants) thought it was 'medium' and 5% (1% of all participants) thought that it 'fluctuates' (Figure 41). This is comparable with 2011. Though the proportion rating speed powder as 'high' increased in 2012 from 2011 values (14% versus 36%), the total number of participants responding to this almost halved (41 versus 22), and, therefore, the increase did not reach statistical significance.

Reports on changes in speed purity were more consistent. Fifty-nine percent of participants who commented reported that purity was 'stable', while 18% of participants thought that speed purity had decreased over the preceding six months. Fourteen percent commented it had 'fluctuated' and 9% reported that it had remained 'stable' (2% and 1% of the entire sample, respectively). Overall, this remains comparable with 2011.

Figure 41: Participant perceptions of methamphetamine purity (speed powder, base and ice), among those who commented, 2012



Source: IDRS PWID interviews

5.2.3.2 Base

Forty percent of recent users (4% of entire sample) commented that base was currently 'medium' purity. An equal proportion of participants that commented on base thought that it was currently either 'high', or 'low', (both 27%, 3% of all participants). Only one participant reported it as 'fluctuating' (Figure 41).

In reporting on changes in purity it was generally reported to have remained stable (67%; 9% of entire sample), with lesser amounts reporting it had 'fluctuated' (22%; 7% of entire sample) or had 'fluctuated' (38%; 3% of the entire sample) over the six months preceding interview. Only one participant believed purity had 'increased'.

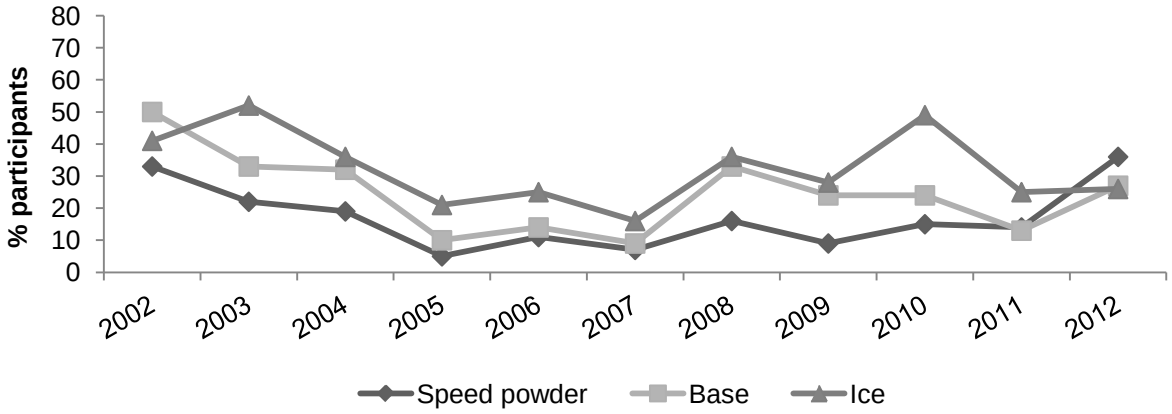
5.2.3.3 Ice/crystal

Forty-three percent (25% of entire sample) of recent users reported the purity of ice/crystal as 'medium'. Twenty-six percent reported it as 'high', while 19% reported 'low' purity (15% and 11% of entire sample, respectively). Only 11% percent (7% of entire sample) of people reporting recent ice/crystal use commented it had fluctuated (Figure 41). These figures are comparable with values reported in 2011.

When asked about whether purity had changed over the last six months, more than half of those responding (53%, 30% of all participants) believed that it remained 'stable' and 21% (12% of the entire sample) thought it had 'decreased'. Almost one-fifth (17%; 10% of the entire sample) of recent ice/crystal users believed it had fluctuated, and 9% reported that it had increased (5% of the entire sample). Although the proportion of participants reporting that ice/crystal purity was 'stable' increased in 2012 from 2011 values (40% versus 53%), this increase failed to reach statistical significance.

Figure 42 shows the proportion of PWID participants reporting the purity of each form of methamphetamine as 'high'. The perceived purity of speed powder and ice/crystal remained comparable with 2011, and differences in perceived base purity between 2011 should be interpreted with caution due to the low numbers commenting on 'high' purity (Figure 42).

Figure 42: Proportion of participants reporting speed powder, base and ice/crystal purity as 'high', 2002-2012



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

5.2.4 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 reoccurring theme was that use of ice/crystal had increased in the 6 months prior to interview.

5.2.5 Key Expert comments

- KE generally believed that the use of ice/crystal had increased among PWID in 2012.
- There were mixed reports on current ice/crystal purity, with some KE reporting recent periods of high purity, with others reporting that purity had decreased overall.
- The prices across all amounts for both crystal/ice and speed remained stable according to KE.
- After a decrease in detections in 2010, law enforcement KE noted an increase in detections in 2011 and 2012 across all types of methamphetamine, with ice/crystal being the most commonly detected methamphetamine

5.3 Cocaine

Twenty-nine percent of participants reported that they were able to comment on the price, purity and/or availability of cocaine in 2012, which is consistent with the 38% that could comment in 2011. 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.

5.3.1 Price

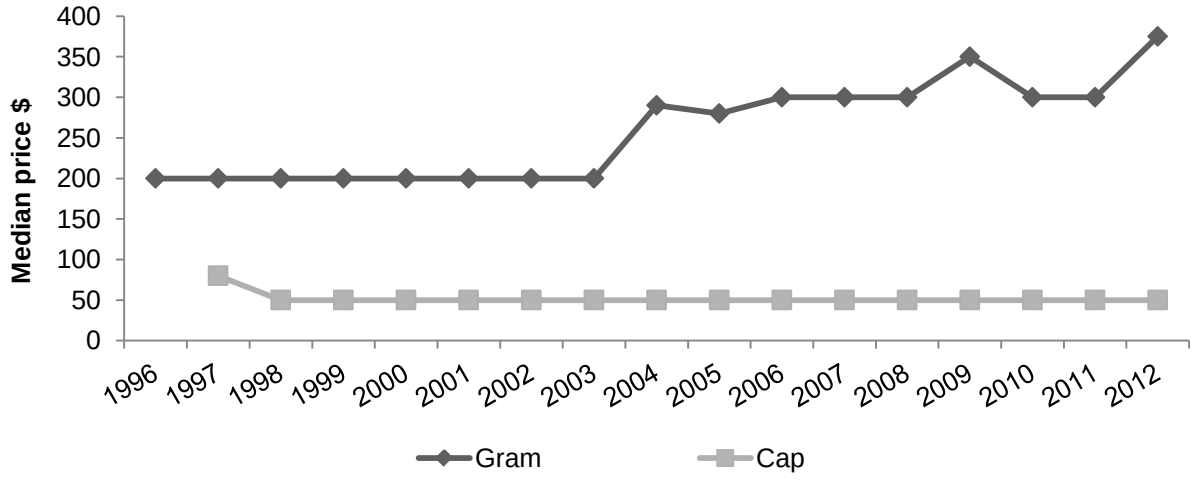
Prices paid for cocaine by PWID participants on the last occasion of purchase are presented in Table 14. The median price for caps, the most popular purchase amount, remained stable. Other amounts such as grams, quarter grams and half weights remained uncommon with an insufficient number of participants (n=<10) able to comment on price (Table 14).

Table 14: Price of most recent cocaine purchases by PWID participants, 2011-2012

Amount	Median price*$	Range ($)	Number of purchasers*
Cap	50 (50)	50-100	23 (30)
Quarter gram	100 (100)	100-130	3^ (3^)
'Half weight'(0.5 grams)	150 (150)	150-450	5^ (5^)
Gram	375 (300)	220-500	6 (15)

Source: IDRS PWID interviews
*2011 data are presented in brackets
^n=<10 results should be interpreted with caution

Figure 43: Median price of a gram and cap of cocaine estimated from PWID participant purchases, 1996-2012



Source: IDRS PWID interviews

The majority of participants (83%; 25% of entire sample) that could comment on cocaine reported that the price had remained 'stable' in the preceding six months. Twelve percent (3% of entire sample) of those commenting reported that cocaine prices had 'increased', 5% (1% of entire sample) reported it had 'fluctuated' in price and no participants reported it had 'decreased' over the past 6 months.

5.3.2 Availability

Forty-one percent (12% of entire sample) of participants commenting on cocaine market characteristics (price, purity and/or availability) thought that it was 'easy' and approximately one-third (30%; 9% of entire sample) thought it was 'very easy' to obtain cocaine (Table 15). One quarter (25%; 7% of entire sample) thought it was 'difficult' and only two participants reported that it was 'very difficult' to obtain (Table 15).

Sixty-five percent of participants (19% of entire sample) commenting on cocaine reported that availability had remained 'stable' (Table 15). Nineteen percent (5% of the entire sample) reported that it had become 'more difficult' to obtain over the last six months, and 12% (3% of the entire sample) thought it had become 'easier' (Table 15). Only two participants (5%) commented that availability has fluctuated in the six months preceding the interview.

Table 15: Participants' reports of cocaine availability in the past six months, 2009-2012

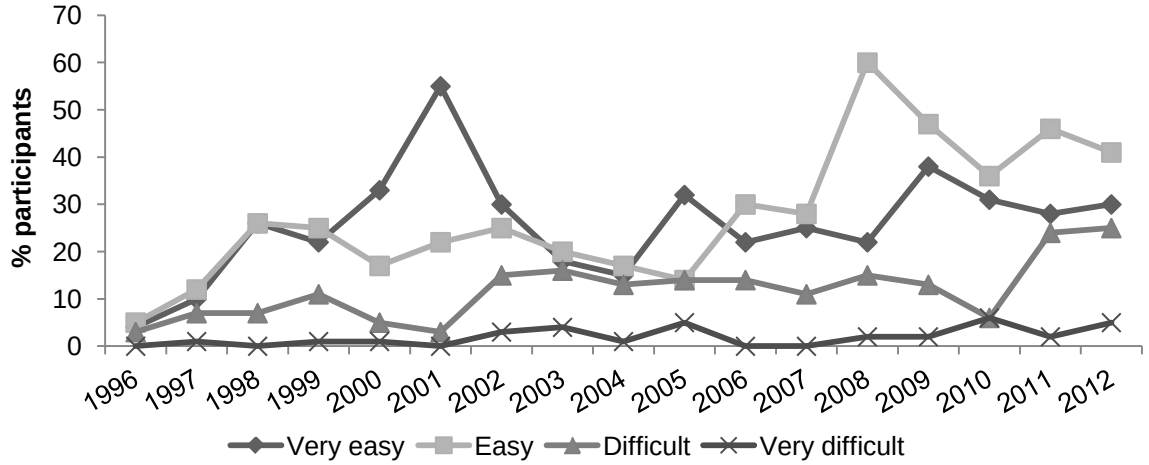
	2009 (N=152)	2010 (N=154)	2011 (N=150)	**2012 (N=151)**
Current availability				
Did not respond* (%)	44	47	63	**71**
Did respond (%)	56	53	37	**29**
Of those who responded:				
Very easy (%)	38	31	27	**30**
Easy (%)	47	36	45	**41**
Difficult (%)	13	27	23	**25**
Very difficult (%)	2	6	2	**5**
Don't know^ (%)	0	0	4	**0**
Availability change over the last six months				
Did not respond* (%)	44	49	63	**72**
Did respond (%)	56	51	37	**28**
Of those who responded:				
More difficult (%)	16	23	27	**19**
Stable (%)	62	67	55	**65**
Easier (%)	17	6	11	**12**
Fluctuates (%)	2	4	2	**5**
Don't know^ (%)	4	0	5	**0**

Source: IDRS PWID 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

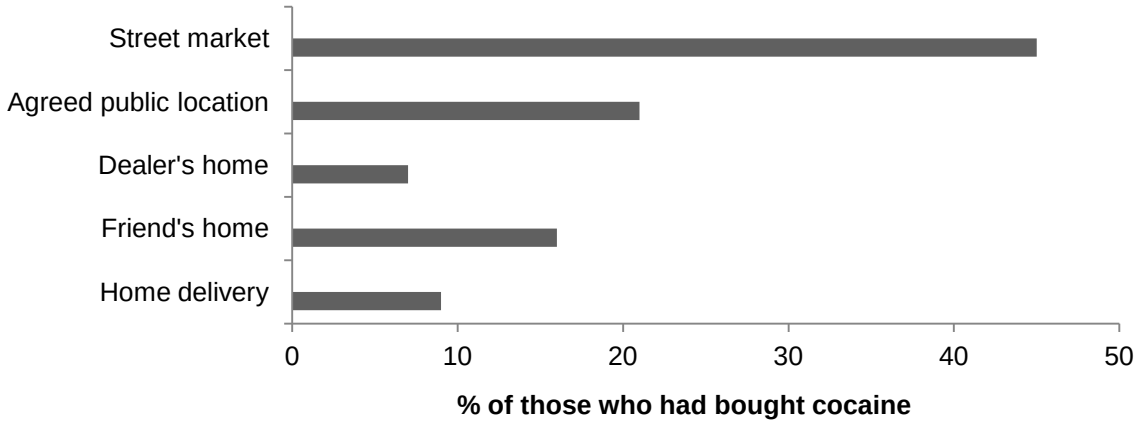
Figure 44: Participant reports of current cocaine availability, 1996-2012



Source: IDRS PWID interviews

The most common sources of purchasing cocaine over the preceding six months were street dealers (40%) followed closely by friends (37%) and street dealers (12%). Locations where these purchases were most commonly made were varied, with the most common venues being a street market (47%), an agreed public location (21%), and friend's home (16%) (Figure 45).

Figure 45: Locations where cocaine was scored in the preceding six months, 2012

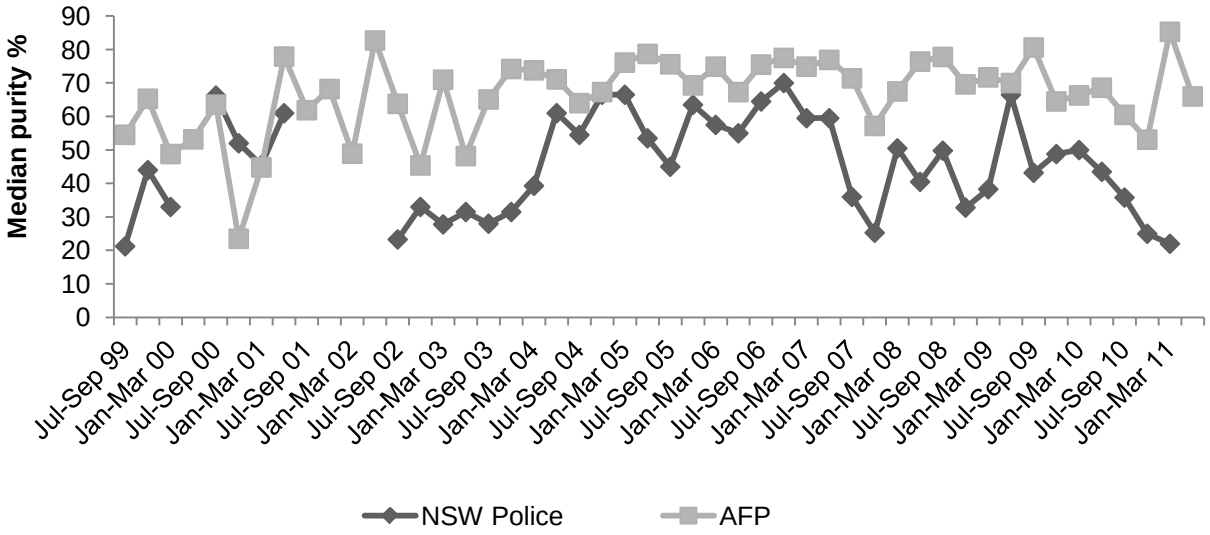


Source: IDRS PWID interviews
NB: More than one response could be selected

5.3.3 Purity

Overall, the median total purity of cocaine seizures analysed by the NSW Police appears to have decreased in the 12 months to June 2011 from the 48% reported in 2009/10 to a median of 29.3%. Similarly, the overall total seizures analysed by the AFP remained relatively stable over the same period (Figure 46). The total median purity of cocaine analysed by the AFP, however, was comparable with 2009/10 values (67.3%) at 66.0% (Figure 46). Purity figures, however, should be interpreted with caution, particularly where they are based on small numbers of seizures (refer to Figure 47). 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 from joint operations between the AFP and State/Territory Police.

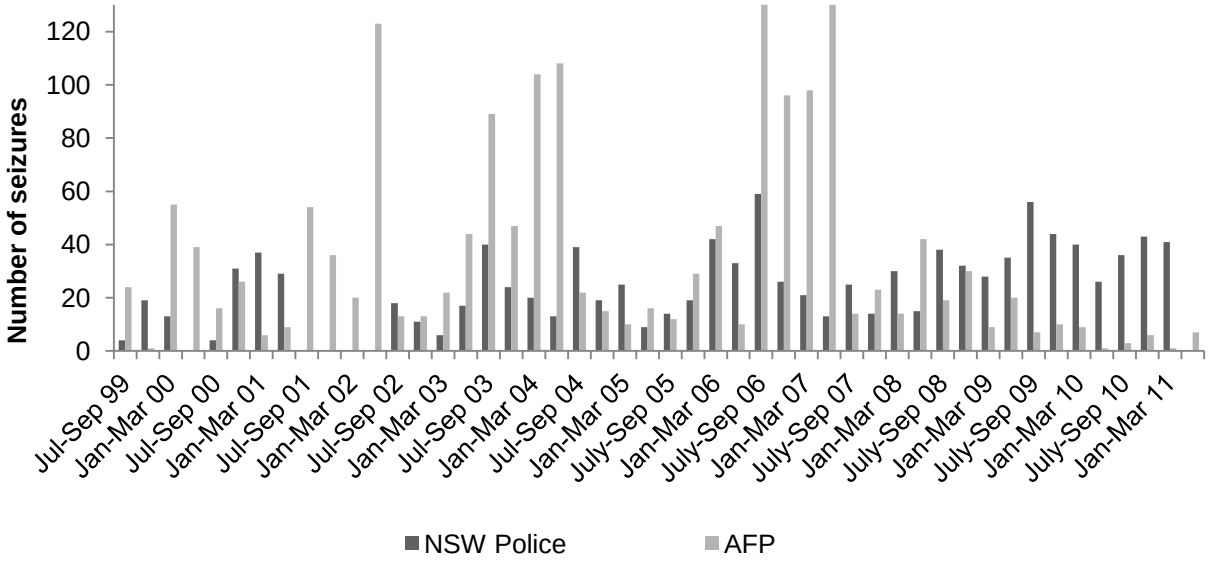
Figure 46: Purity of cocaine seizures analysed in NSW, by quarter, 1999/00-2010/11



Source: Australian Bureau of Criminal Intelligence (2001, 2002); Australian Crime Commission (2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012)
NB: NSW Police data for the financial year 2001/02 were unavailable. Data for 2011/12 were unavailable at time of publication

Figure 47 shows the number of seizures analysed in NSW between 1999/00 and 2010/11. The number of seizures analysed by NSW Police decreased in the 12 month period until June 2011 (120 cases in 2010/2011 versus 166 cases in 2009/10). The number of cases analysed by the AFP declined again in same period from 27 cases in 2009/10 to 17 cases in 2010/11 (Figure 47). Data for 2011/12 were unavailable at the time of publication.

Figure 47: Number of cocaine seizures analysed in NSW, by quarter, 1999/00-2010/11



Source: Australian Bureau of Criminal Intelligence (2001, 2002); Australian Crime Commission (2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012)
NB: NSW Police data for the financial year 2001/02 were unavailable. Data for 2011/12 were unavailable at time of publication

Twenty-eight percent of all participants could comment on current purity of cocaine. Of these, 48% (13% of the entire sample) reported cocaine to be 'medium' purity. Twenty-six percent (7% of entire sample) reported cocaine to be currently be 'low' purity. Fourteen percent of those who could comment (4% of entire sample) reported purity to be currently 'high' and 12% (3% of entire sample) reported that the purity of cocaine 'fluctuates' (Table 16). Comments on purity changes in the 6 months prior to interview were mixed. One-third (30% or 8% of entire sample) believed it had 'decreased' while 40% (11% of entire sample) commented it had remained 'stable'.

Table 16: Participants' perceptions of cocaine purity in the past six months, 2009-2012

	2009 (N=152)	2010 (N=154)	2011 (N=150)	**2012 (N=151)**
Current purity				
Did not respond* (%)	44	50	64	**72**
Did respond (%)	56	50	36	**28**
Of those who responded				
High (%)	28	25	11	**14**
Medium (%)	39	36	30	**48**
Low (%)	18	26	38	**26**
Fluctuates (%)	12	13	18	**12**
Don't know^ (%)	4	0	4	**0**
Purity change over the last six months				
Did not respond* (%)	44	47	64	**74**
Did respond (%)	56	53	36	**26**
Of those who responded				
Increasing (%)	19	12	13	**8**
Stable (%)	28	44	29	**40**
Decreasing (%)	18	23	32	**30**
Fluctuating (%)	24	21	20	**23**
Don't know^ (%)	12	0	7	**0**

Source: IDRS PWID 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

5.3.4 Trends in cocaine use

In response to general, open-ended questions on changes in drug use, there were very few participants able to comment on cocaine.

5.3.5 Key expert comments

- The common theme among KE was that cocaine was viewed as expensive by PWID and use generally remained sporadic.
- Of the few KE who could comment on cocaine in detail it was generally believed that cocaine use among PWID was quite low in 2012 and that purity appeared to be low.
- The KE that could comment reported that cocaine injection was common amongst the sex-working population, though it was rare amongst PWID in general.

5.4 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 2012, Sixty-two percent of the sample felt confident to answer at least some of the survey items on hydro. By contrast, only 21% 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.

5.4.1 Price

Prices paid for hydro and bush by PWID participants on the last occasion of purchase are presented in Table 17. 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 remained uncommon.

5.4.1.1 Hydroponic Cannabis

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 17). In 2012, the median price of a quarter ounce of hydroponic cannabis decreased by $5 to $95, while the price of an ounce increased by $20 to $320. Insufficient numbers of people reported on half ounces to comment on price (Table 17).

As in previous years, and comparable 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=51), followed by quarter ounces (n=24).

Participants were also asked whether they thought that prices had changed over the six months preceding interview. Though there was an increase in the median price of an ounce of hydro, the majority of PWID participants who commented (84%; 50% of entire sample) reported that the price was 'stable', with smaller proportions stating that it had 'increased' (10%; 6% of entire sample), or 'fluctuated' (6%; 3% of the entire sample). No participants reported a decrease in prices. These figures were stable compared to those presented in 2011.

5.4.1.2 Bush Cannabis

In 2011, the median prices for a gram of bush cannabis remained stable (Table 17). The number of reported purchases for all other amounts was low (<10) so results should be interpreted with caution (Table 17).

The most popular purchase amount for bush remained at a gram (n=14), consistent with previous years, excluding 2006 when an ounce was reported as the most purchased amount. There was a tendency for larger quantities of bush to be slightly cheaper than for hydro, continuing a consistent pattern since 2003.

The majority of participants who commented (80%; 16% of the entire sample) thought prices of bush cannabis had remained 'stable', 13% believed it had 'decreased', 7% believed it had 'decreased' and no participants reported that it had 'fluctuated'.

Again in 2012, price ranges for larger quantities of hydroponic and bush cannabis were wide (Table 17). 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 17: Price of most recent cannabis purchases by PWID participants, 2011-2012

Amount	Median price* $	Range	Number of purchasers*
Hydro			
Gram	20 (20)	10-30	51 (55)
Quarter ounce	95 (100)	70-000	24 (46)
Half ounce	120 (160)	120-300	11 (19)
Ounce	320 (300)	240-400	20 (26)
Bush			
Gram	20 (20)	10-20	14 (20)
Quarter ounce	80 (80)	55-100	6^ (12)
Half ounce	120 (150)	100-140	2^ (9^)
Ounce	280 (260)	250-320	5^ (9^)

Source: IDRS PWID interviews
*2011 median prices are in brackets
^n=<10 results should be interpreted with caution

5.4.1.3 Hash and Hash Oil

Only one participant reported buying hash in the six months preceding interview. No one reported purchasing hash oil in last 6 months. This indicated that the use of these forms of cannabis remained sporadic.

5.4.2 Availability

5.4.2.1 Hydroponic Cannabis

The majority of participants commenting on hydro availability thought it was 'very easy' (44%; 27% of all participants) or 'easy' (43%; 26% of all participants) to obtain (Table 18). The majority (86%; 53% of all participants) reported availability as 'stable' over the preceding six months. Note that 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.

5.4.2.2 Bush Cannabis

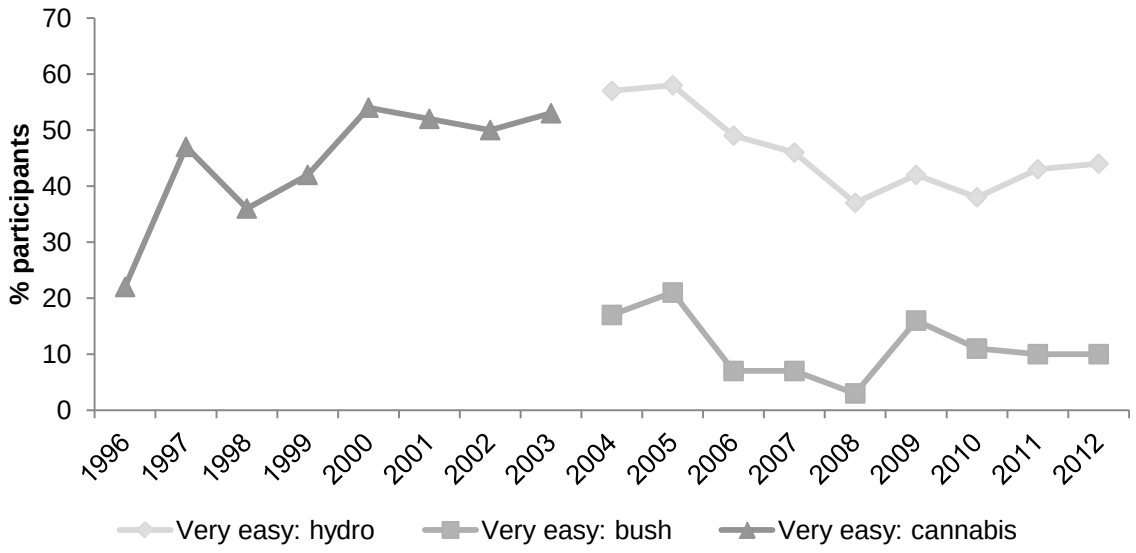
The majority of participants reported bush cannabis to be 'easy' (55%; 11% of entire sample). However, a considerable proportion of the sample who responded reported that bush cannabis was 'difficult' (19%; 4% of the sample) or 'very difficult' (16%, 3% of the sample) to obtain. Only three participants (10% of those who responded; 2% of the entire sample) reported that bush cannabis was 'very easy' to obtain (Table 18). Four-fifths (80%; 16% of entire sample) reported that availability had remained 'stable' in the six months preceding interview. Overall, it appears that the availability of bush cannabis has remained stable compared with 2011 (Table 18; Figure 48).

Table 18: Participants' reports of cannabis availability in the past six months, 2011-2012

	Hydro		Bush	
	2011 (N=150)	**2012 (N=151)**	2011 (N=150)	**2012 (N=151)**
Current availability				
Did not respond* (%)	32	**38**	71	**79**
Did respond (%)	68	**62**	29	**21**
Of those who responded:				
Very easy (%)	63	**44**	35	**10**
Easy (%)	32	**43**	37	**55**
Difficult (%)	3	**13**	26	**19**
Very difficult (%)	1	**0**	2	**16**
Availability change over the last six months				
Did not respond* (%)	33	**38**	71	**80**
Did respond (%)	67	**62**	29	**20**
Of those who responded:				
More difficult (%)	8	**9**	16	**7**
Stable (%)	83	**86**	68	**80**
Easier (%)	5	**4**	11	**10**
Fluctuates (%)	4	**1**	5	**3**

Source: IDRS PWID 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

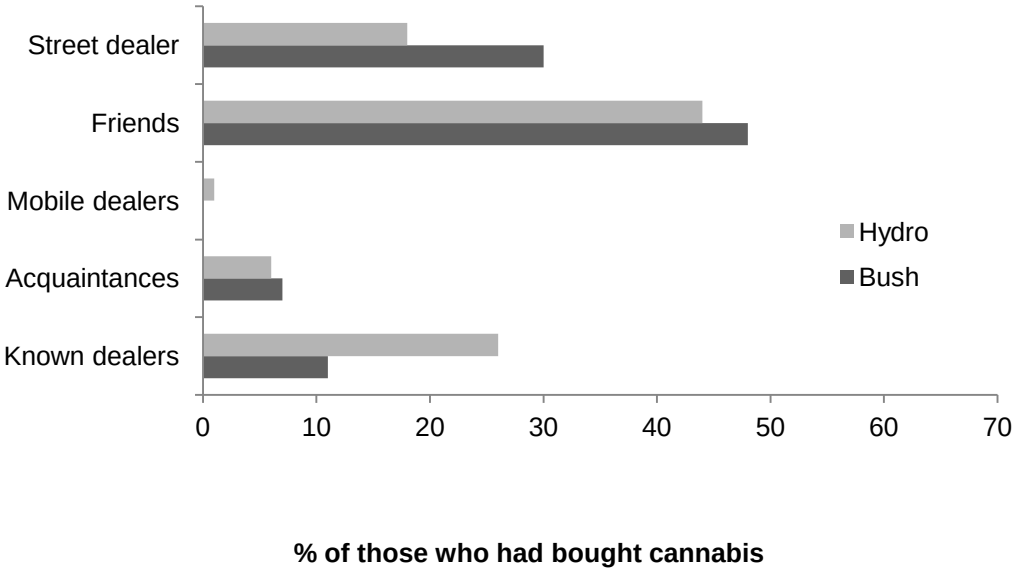
Figure 48: Participant reports of current cannabis availability, 1996-2012



Source: IDRS PWID 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

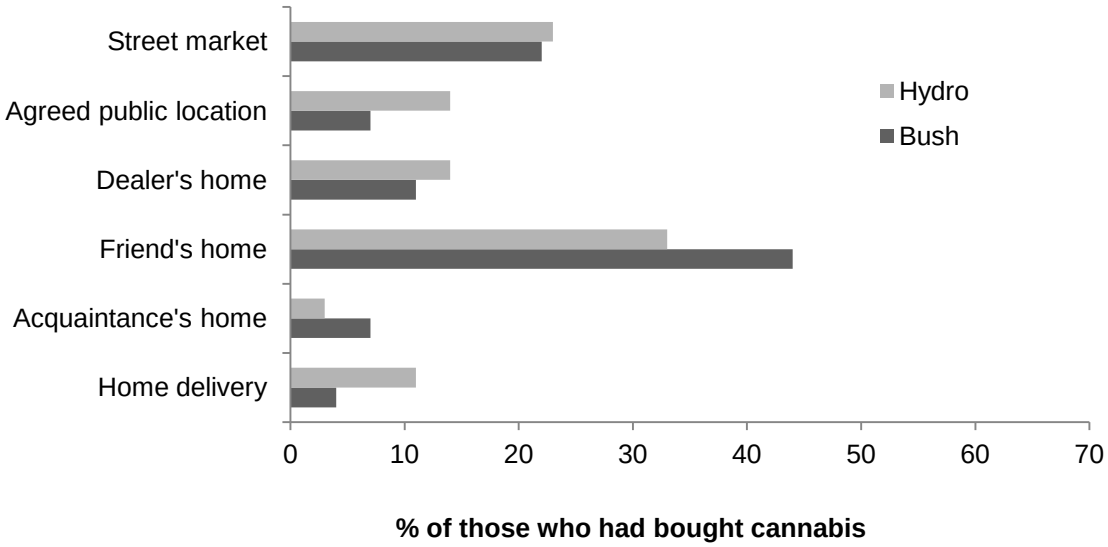
Half of all participants had purchased hydro in the preceding six months and 15% of participants had purchased bush. Patterns of purchase of hydro and bush were fairly similar, with those who had purchased in the last six months predominantly obtaining it through friends, from street dealers and/or from known dealers (Figure 49). Locations where cannabis was scored were varied, including public and private locations (Figure 50).

Figure 49: People from whom cannabis was purchased in the preceding six months, 2012



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

Figure 50: Locations where cannabis was purchased in the preceding six months, 2012



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

5.4.3 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' and 'fluctuating').

5.4.3.1 Hydroponic Cannabis

The majority of participants commenting on hydro reported it as currently being of 'high' potency (70%; 41% of the entire sample), followed by 18% (11% of the entire sample) who rated it as being of 'medium' potency. Only 7% (4% of the entire sample) thought that it was of 'low' potency, and 6% (3% of the entire sample) believed that it had 'fluctuated'. The majority (59% of those commenting; 34% of the entire sample) believed that potency had remained 'stable' in the preceding six months, with smaller proportions reporting that it had 'fluctuated' (23%; 13% of the entire sample), 'increased' or 'decreased' (both 9%; 5% of the sample). Overall, these figures followed a similar pattern to 2011.

5.4.3.2 Bush Cannabis

Among those who commented, 62% (12% of entire sample) thought bush was of 'medium' potency, 17% (3% of entire sample) thought it was of 'low' potency, and equal proportions thought that it was either of 'high' potency, or that it 'fluctuates' (10%; 2% of the sample). When asked about whether potency had changed over the last six months, sixty-nine percent of the respondents that commented (13% of all participants) reported that potency had remained 'stable'. Smaller proportions commented that it had 'decreased' (24%; 5% of all participants), and one participant each reported that it has either 'increased' or 'fluctuated'.

Overall, these findings indicated that, according to PWID perceptions, hydroponic cannabis appeared to dominate the market, and was generally seen as being higher in potency than outdoor-grown 'bush' cannabis. Potency of both forms was generally perceived to have remained stable in 2012.

No routine data is currently collected on cannabis potency in Australia. Therefore, KE were only able to comment based on perceptions and anecdotal reports.

5.4.4 Cannabis trends

As in previous years, there were minimal participant comments on open-ended survey items on general drug trends with reference to cannabis. This may in part be due to lack of noticeable changes occurring among this group.

5.4.5 Key expert comments

- Again in 2012, very few KE were able to comment on cannabis.
- There was consensus among health KE that the prevalence of use remained high for this group, although it was not primarily the drug of concern.
- Cannabis remained the most detected drug (use/possession and trafficking) in NSW according to law enforcement KE.

5.5 Methadone

As with other drug types, all participants were asked about the price, purity and availability of non-prescribed methadone. Thirty-one percent of the sample (32% in 2011), were able to comment on the price, purity and/or availability of illicit methadone. Among participants who had used any form of methadone in the preceding six months, the median price for methadone liquid was reported to be 50 cents per ml, which is stable with the data from previous years.

Only one participant was able to comment on the price of Physeptone tablets with a report price of $5 for 5 mg tablet.

In response to the question 'has the price of illicit methadone changed in the past six months?' the majority of those commenting (70%; 20% of the entire sample) reported that the price had remained 'stable' during this time. Twenty-one percent (6% of the entire sample) reported prices had 'increased'. Smaller proportions of people stated that the price had 'fluctuated' (7%; representing 2% of the entire sample) and only one participant reported it had 'decreased'. Overall, this remained consistent with 2011.

With regard to the current availability of non-prescribed methadone, among those who commented 69% thought it was 'very easy' (19%) to 'easy' (50%) to obtain. Twenty-nine percent (8% of the entire sample) thought it was 'difficult' to obtain with only one participant reporting that it was 'very difficult' to obtain. Overall, this remained stable with 2011.

When asked whether availability had changed over the preceding six months, the majority of those commenting (88%; 25% of the entire sample) reported that it had remained *'*stable*'.* Five percent (1% of all participants) reported that it had become 'more difficult' to obtain in the preceding six months. The same proportion reported that it had become easier to obtain illicit methadone, and only one participant reported its availability had 'fluctuated'.

Overall, the findings suggest that the illicit methadone market has remained relatively stable in terms of price and availability over the past few years. Approximately one-fifth (17%; 23% in 2011; 27% in 2010; 36% in 2009; and 24% in 2008) of participants reported buying illicit methadone in the past six months. Of those that had bought methadone it was most commonly purchased from friends (61%), street dealers (19%), acquaintances (13%), with smaller amounts purchased from known dealers (7%). The most commonly reported locations of purchase were agreed public location (38%), street market (23%), friend's home (23%), home delivery (10%) or at an acquaintance's home (3%).

5.6 Buprenorphine

Eleven percent of participants (16% in 2011) commented on the price and/or availability of non-prescribed buprenorphine, suggesting that while they may not have personally 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).

There were insufficient numbers (n=<10) of people commenting on all forms of Subutex tablets. The majority (60%; 6% of entire sample) of those who commented reported current availability was 'difficult', while only 40% claimed it was 'easy' or 'very easy' (13% and 27%, respectively).

Just over half of the participants who commented (53%; 5% of entire sample) reported that availability of buprenorphine had remained 'stable' over the preceding 6 months, while the remaining 47% believed it had remained 'stable'. Overall, these findings suggested that while there was a market for non-prescribed buprenorphine, it was less available than non-prescribed methadone in NSW.

A question was added in 2007 that asked participants about the last occasion on which they used buprenorphine that wasn't prescribed to them, and what their main reasons for doing so were. In 2012, the main responses were for alleviating withdrawal symptoms (31%) and to treat self-dependence (15%).

5.7 Morphine

Twenty-one percent of participants felt confident enough to respond to survey items concerning price and/or availability of illicit morphine, (26% in 2011). MS Contin continued to remain the most common brand of morphine used.

The median price for 100mg MS Contin tablets ('grey nurses') increased in 2011 to a median of $40 per tablet (range $30-$60; also $40 in 2011). Only six participants commented on 60mg MS Contin (median price $20) and only two participants were able to comment on 100mg prices of Kapanol (median price $50), therefore, results should be interpreted with caution. No participants commented on the price of 50mg Kapanol.

Almost half (48%; 9% of entire sample) of those commenting on the market for non-prescribed morphine reported that the price had remained 'stable' over the preceding six months (60% in 2011). The same amount (46%; 9% of entire sample) of these participants believed that it had 'increased' (36% in 2011) and one participant each believed it had 'fluctuated' or 'decreased'. Overall, these figures are comparable to 2011.

The majority (74% or 15% of entire sample; 68% in 2011) commented that non-prescribed morphine was 'very easy' or 'easy' (29% and 45% respectively) to obtain. One-fifth (19%; 4% of the entire sample) believed it to be 'difficult' (24% in 2011) and 7% that reported it as 'very difficult'. This remained stable with 2011. Sixty percent (57% in 2011) of those commenting stated that availability had remained 'stable' over the preceding six months.

In 2012, morphine was most commonly purchased from street dealers (53% of those commenting), friends (31%), and acquaintances (9%). These figures remained comparable with reports from 2011. The most commonly reported locations of purchase were from a street market (53%), an agreed public location (19%) or a friend's home (13%).

5.8 Oxycodone

In 2012, forty-one percent of all participants were confident enough to complete survey items concerning the market for non-prescribed oxycodone, which represents a statistically significant increase from the 22% who were confident enough to respond in 2011. As per previous years, the most commonly purchased amounts were 80mg tablets (OxyContin), bought for a median of $40 each (range $20-$50). The second most commonly purchased amount, 40mg Oxycontin, had a median price of $20 (range $10-$40). Fewer than ten participants were able to comment on either 10mg or 20mg Oxycontin and there were no participants who commented on prices of Endone. The overall price for oxycodone was reported as having been 'stable' over the past six months (59% of those commenting), with 30% stating that it had 'increased', and a further 7% reporting that it had 'fluctuated'. This remains comparable with 2011.

Just under one-half (49% of those who could comment) thought that current availability of Oxycodone was 'easy' and 22% thought it 'very easy', while one-quarter (25%) thought it 'difficult' and only two participants commented that it currently was 'very difficult'. Availability was reported by the majority of those commenting (62%) to have remained 'stable' over the preceding six months, while 29% reported it had become 'more difficult'. Five percent reported it had fluctuated and 3% participant believed it had become 'easier'.

Oxycodone remained most commonly purchased from street dealers (44%), friends (37%), known dealers (11%) with small proportions reporting acquaintances (6%). The most commonly cited locations for purchase were the street market (52%) an agreed public location (25%) or a friend's home (11%).

5.8.1 Key expert comments

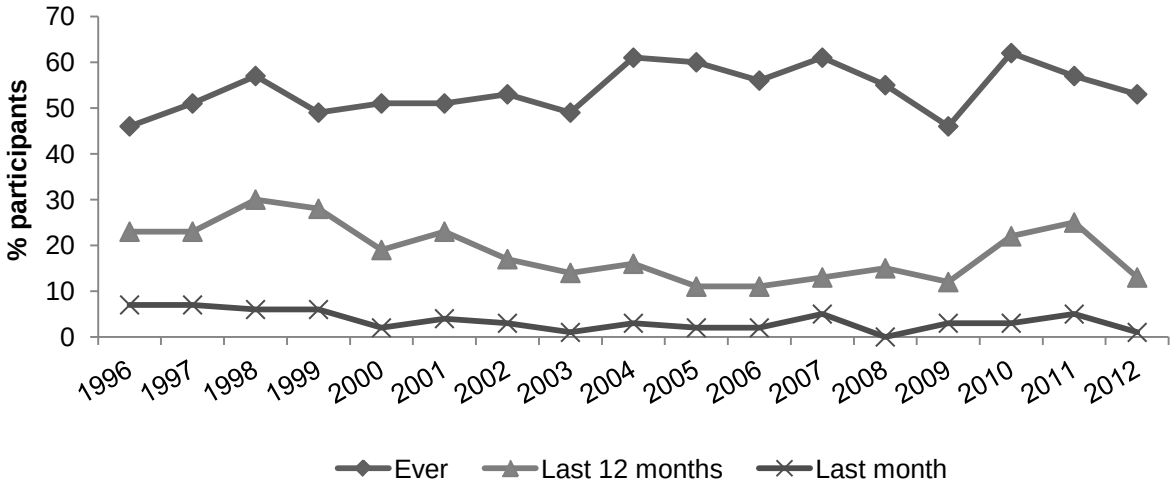
- The majority of health KE were able to comment on pharmaceutical opioids.
- Oxycodone remained the most frequently used pharmaceutical, followed by morphine according to health KE. However, it was repeatedly noted that heroin remained the first drug of choice for these users.
- Following comments from the previous year's poor quality heroin, known dosage and price (cheaper than a cap of heroin) were all identified as reasons for the popularity of pharmaceutical opioids (PO) among PWID.
- Health KE noted a high level of misinformation among clients about the safest way to prepare pharmaceutical opioid tablets for injection.
- A recurring theme among health KE was the prohibitive costs to their service of purchasing pill filters.
- Use of oxycodone as was noted by health KE was disproportionally concentrated among older people with a more established history of injecting drug use, than younger users.

6 HEALTH-RELATED TRENDS ASSOCIATED WITH DRUG USE

6.1 Overdose and drug-related fatalities

Thirteen percent of participants who had ever over overdosed on heroin had done so the twelve months preceding the interview (25% in 2011), and there was only one report of overdose in the last month (4 in 2011) (Figure 51).

Figure 51: Proportion of PWID participants who had ever overdosed, overdosed in the past 12 months, and the past month, on heroin 1996-2012

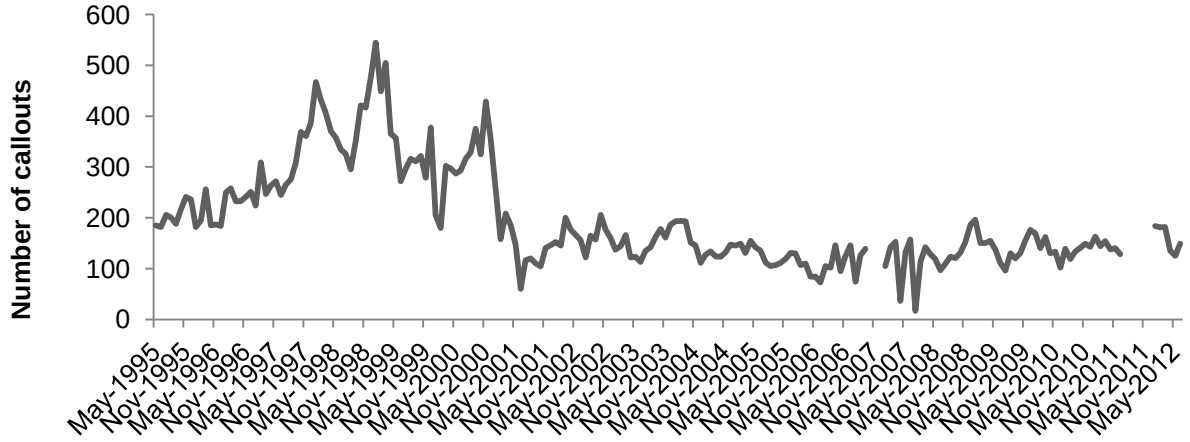


Source: IDRS PWID interviews

Twenty percent of participants (23% in 2011) reported that they had accidentally overdosed on other drugs excluding heroin and morphine an average of three times in their lifetime. Only 6% reported they had accidentally overdosed on other drugs excluding heroin and morphine in the 12 months prior to interview (7% in 2011) and two participants reported accidental overdose on other drugs in the past month.

NSW ambulance callouts to overdoses had remained stable in the 12 months to June 2012. The number of calls decreased dramatically in late 2000, and had not returned to levels recorded prior to 2000 (Figure 52). For further information on ambulance callouts to overdoses in Inner Sydney see (National Centre in HIV Epidemiology and Clinical Research, 2007).

Figure 52: Number of ambulance callouts to overdoses May 1995-June 2012

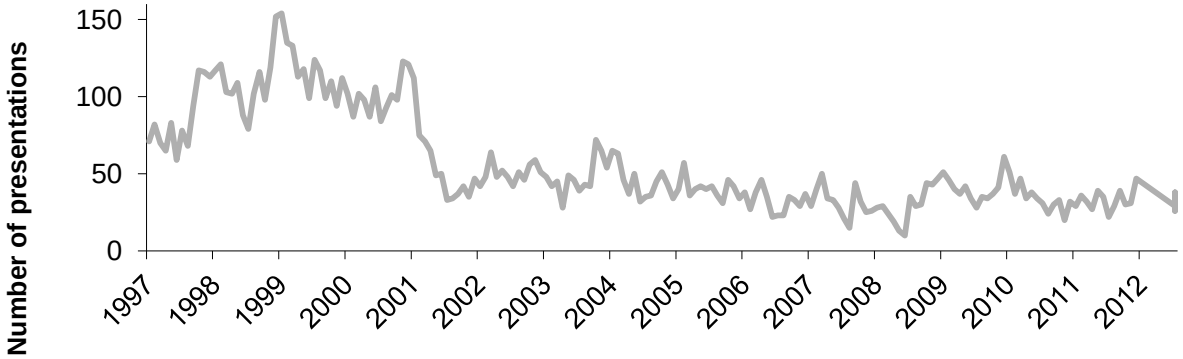


Source: Ambulance Service of NSW case sheet database

6.1.1 Heroin

Apart from a spike in December 2009 (61 presentations) heroin overdose presentations to NSW emergency departments were recorded at 50 per month or under since March 2005. Figures have remained low following a decrease in heroin overdose presentations in 2001 (Figure 53).

Figure 53: Heroin overdose presentations to NSW emergency departments, January 1997-June 2012



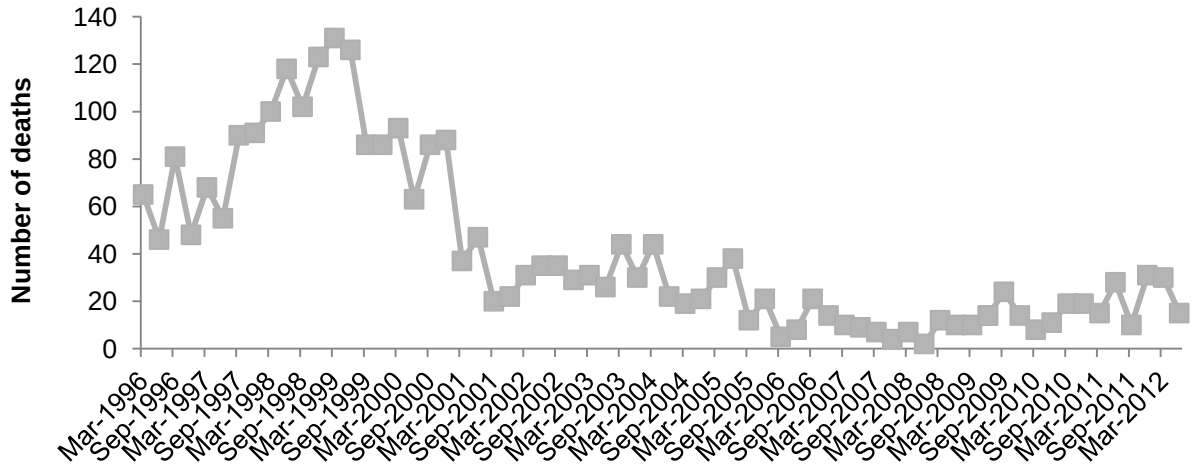
Source: Emergency Department Information System, NSW Department of Health
NB: Figures refer to overdose only and do not include presentations for use disorders

6.1.1.1 Fatal Overdose

The Australian Bureau of Statistics (ABS) has changed the way it collates deaths data, making comparisons to earlier overdose bulletins published by the National Drug and Alcohol Research Centre (L. Degenhardt & Roxburgh, 2007a; L.. Degenhardt & Roxburgh, 2007b) difficult. Since 2003, the ABS has progressively ceased visiting jurisdictional coronial offices to manually update causes of death that had not been loaded onto the computerised National Coronial Information System (NCIS). It was in 2006, that the ABS began to rely solely on data contained on NCIS at the time of closing the deaths data file. In addition, a number of jurisdictions, notably NSW and QLD, reported backlogs in cases that had been finalised by the coroner (i.e. cases where the coroner had determined the cause of death), but not yet loaded onto NCIS. This is likely to have an impact on the number of opioid-related deaths recorded at a national level in 2006, given that NSW and QLD recorded the highest number of opioid-related deaths in Australia during the period 2000 to 2005[10]. Accordingly, drug-related deaths have not been reported here. The following findings relate to numbers of drug-related deaths recorded *at the time of closure* of the 2007 ABS deaths data file. These figures *may not be complete* due to changes in methodology**.**

During the period 2011/12, there were relatively few deaths of people suspected of drug use (as determined by police or pathologists) in which morphine was detected (Figure 54). There was, however, a spike in fatalities in the three month periods leading up to December 2011 and March 2012 with 31 and 30 deaths reported, respectively, the highest numbers since mid-2005, in which 38 deaths were reported. Figures reached a peak in the late 1990s and have gradually decreased since 2000/01. As noted by other data sources, morphine-related deaths decreased dramatically in early 2001.

Figure 54: Number of suspected drug-related deaths in which morphine was detected post-mortem, by quarter, 1996-2012



Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories, NSW Department of Health
NB: These numbers relate to deaths in which morphine (a metabolite of heroin) was detected; however, there may have also been other drugs present

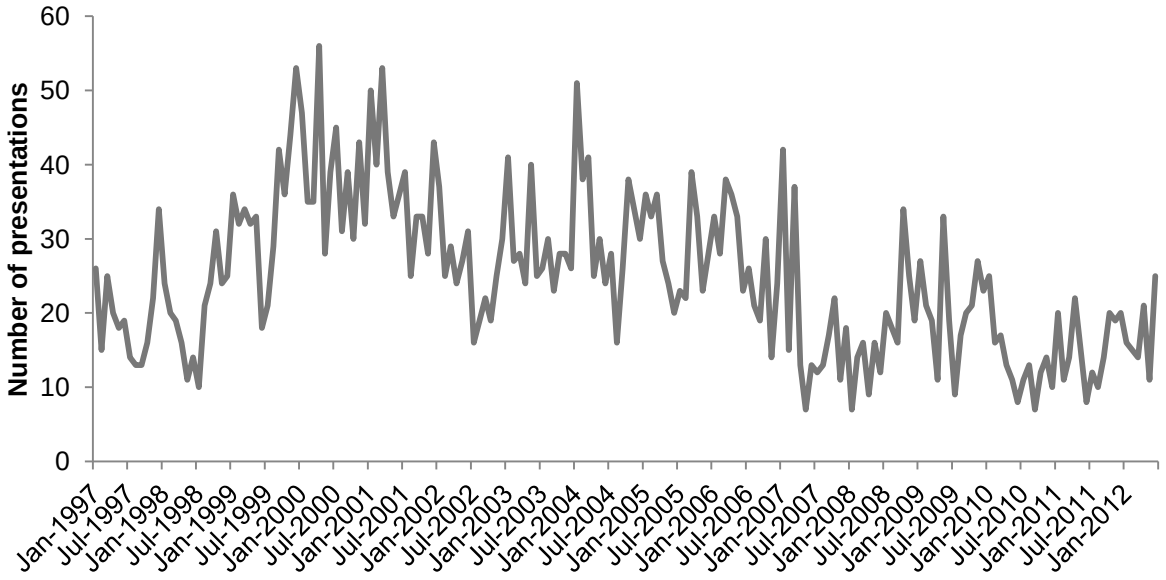
[10] Excerpt taken from**:** (A. Roxburgh & Burns, 2012)

6.1.2 Methamphetamine

6.1.2.1 Non-fatal Overdose

The total number of amphetamine overdose presentations to NSW emergency departments fluctuated again in 2011/12, accounting for between 10 (August 2011) and 25 (June 2012; the final data point) presentations in each month (Figure 55).

Figure 55: Amphetamine overdose presentations to NSW emergency departments, January 1997-June 2012

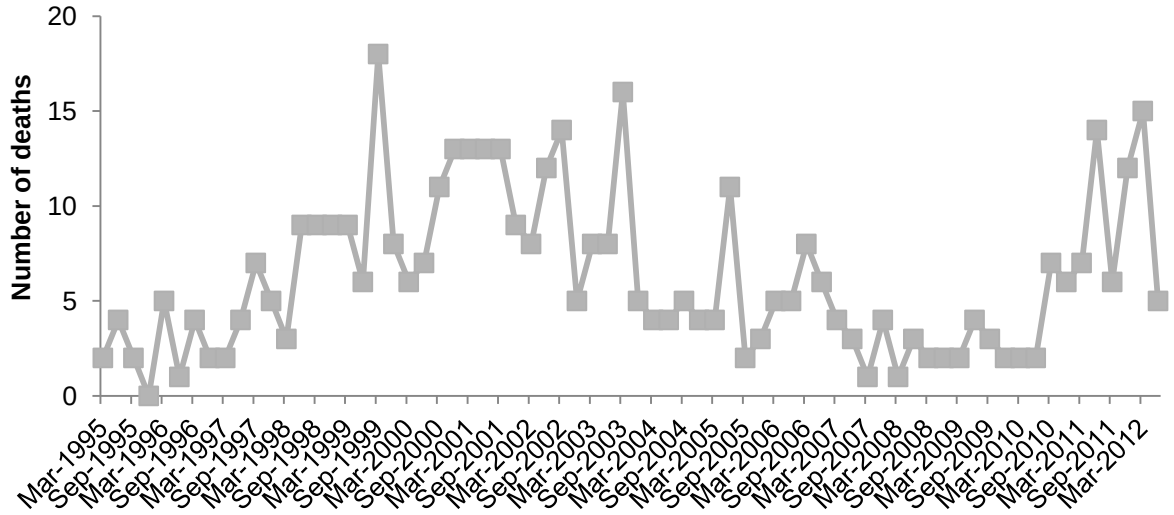


Source: Emergency Department Information System, NSW Department of Health
NB: Figures refer to overdose only and do not include presentations for use disorders

6.1.2.2 Fatal Overdose

The number of deaths of individuals suspected of drug use where amphetamines were detected post mortem in NSW increased in 2011/12, peaking March 2012 with 15 deaths, the highest number recorded since September 2003, in which 16 were recorded. 2011/2012 rates of fatal overdose appear to be returning to the peaks seen between 1999 and 2003 (Figure 56), though future monitoring will reveal if this trend will continue. It is important to note that these figures do not include methylenedioxymethamphetamine, methylenedioxyamphetamine, or p-methoxy-amphetamine. Pseudoephedrine and ephedrine are also excluded as only deaths related to illicit amphetamines are presented.

Figure 56: Number of deaths of individuals suspected of drug use, in which illicit amphetamines were detected post-mortem, NSW, by quarter, 1995-2012



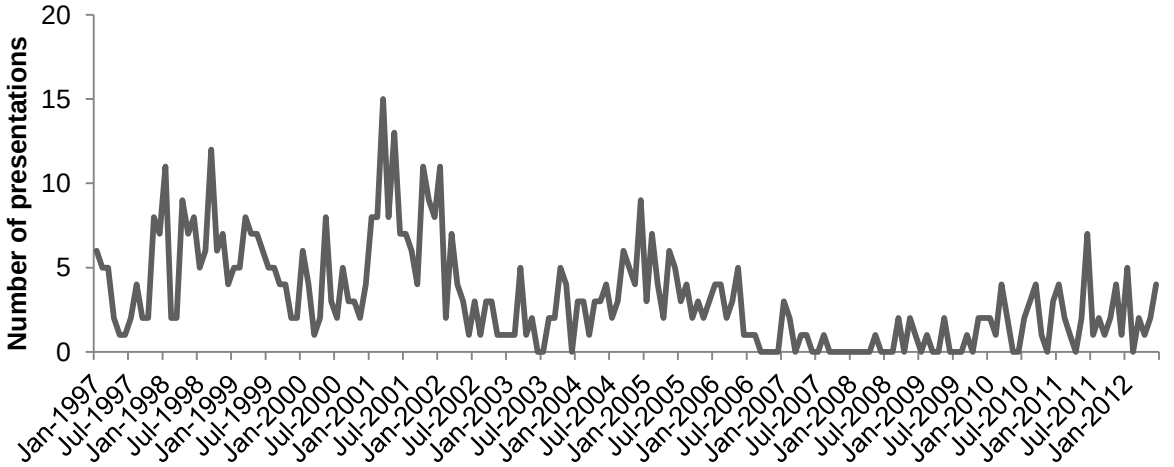
Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories
NB: These numbers relate to deaths in which amphetamines, including methamphetamine, were detected; however, there may have also been other drugs present

6.1.3 Cocaine

6.1.3.1 Non-fatal Overdose

The number of cocaine overdose presentations to NSW emergency departments has remained at less than ten per month since February 2002 (Figure 57). In the 12 months to June 2012, there were a total of 25 recorded presentations (range: 0-5 in 2011/12; 29 in 2010/11).

Figure 57: Cocaine overdose presentations to NSW emergency departments, January 1997-June 2012

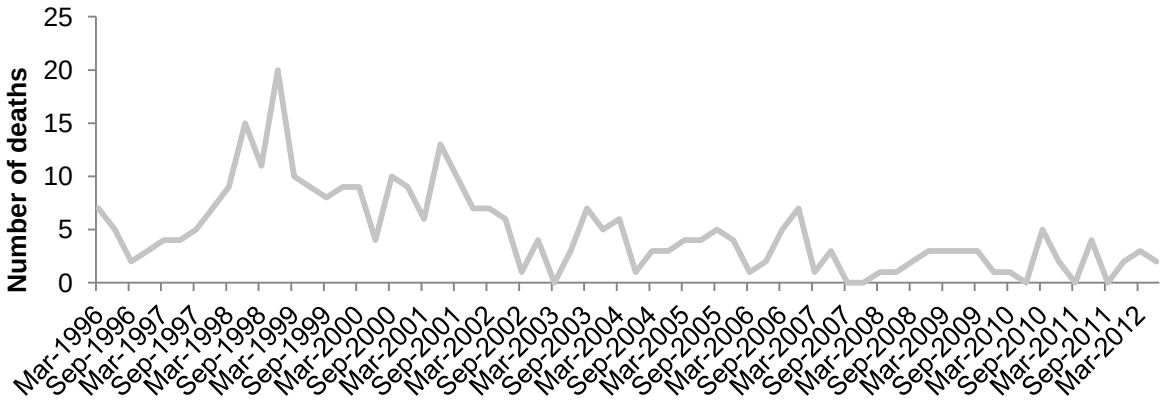


Source: Emergency Department Information System, NSW Department of Health
NB: Figures refer to overdose only and do not include presentations for use disorders

6.1.3.2 Fatal Overdose

The number of drug-related deaths in which cocaine was detected post-mortem has remained low over the last twelve months (range: 0-4; Figure 58), following a peak in the late 1990s. These deaths have not exceeded 20 in any given quarter over the past 12 years and have remained at five or less per quarter since 2007.

Figure 58: Number of deaths of individuals suspected of drug use, in which cocaine was detected post-mortem, NSW, by quarter, 1996-2012

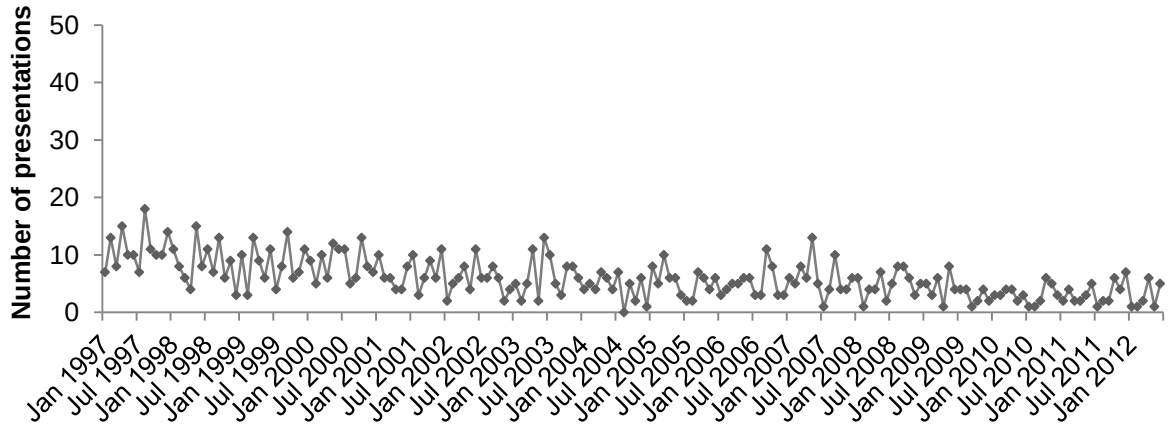


Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories
NB: These numbers relate to deaths in which cocaine was detected; however, there may have also been other drugs present

6.1.4 Cannabis

The number of cannabis toxicity presentations to emergency departments has remained at less than twenty per month since 1997. This remained stable in 2012 (Figure 59).

Figure 59: Cannabis toxicity presentations to NSW emergency departments, January 1997-June 2012



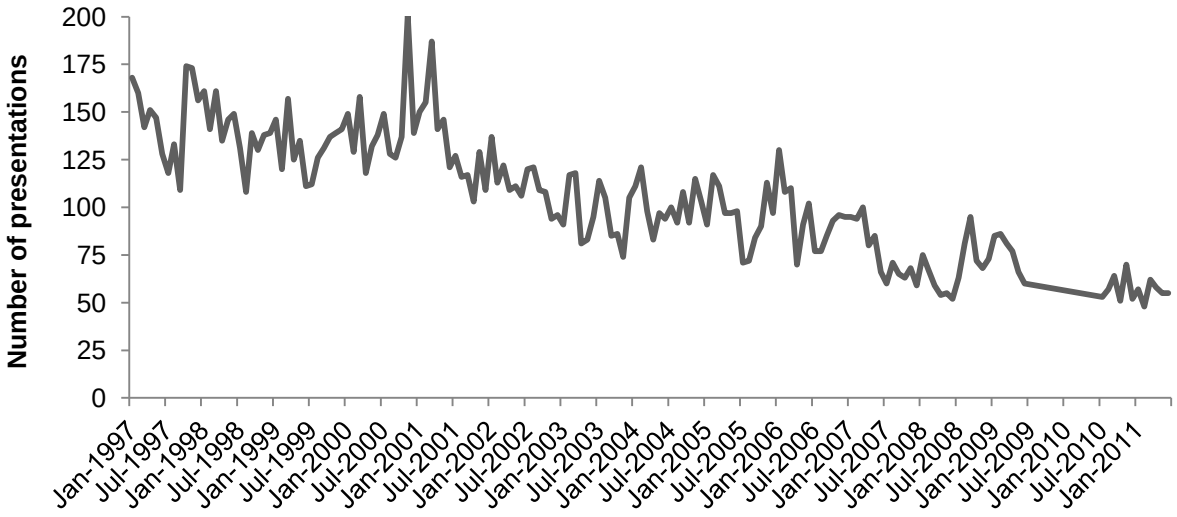
Source: Emergency Department Information System, NSW Department of Health
NB: Figures refer to overdose only and do not include presentations for use disorders

6.1.5 Benzodiazepines

6.1.5.1 Non-fatal Overdose

The number of benzodiazepine overdose presentations to NSW emergency departments has fluctuated over the past twelve months (range 48-70; Figure 60) and continues to decline over time. It is important to note, however, that the majority of overdose presentations occurred among older women and people who may have intentionally overdosed; it is likely that people who use/inject drugs form only a minority of suspected overdoses at emergency departments.

Figure 60: Benzodiazepine overdose presentations to NSW emergency departments, January 1997-June 2011

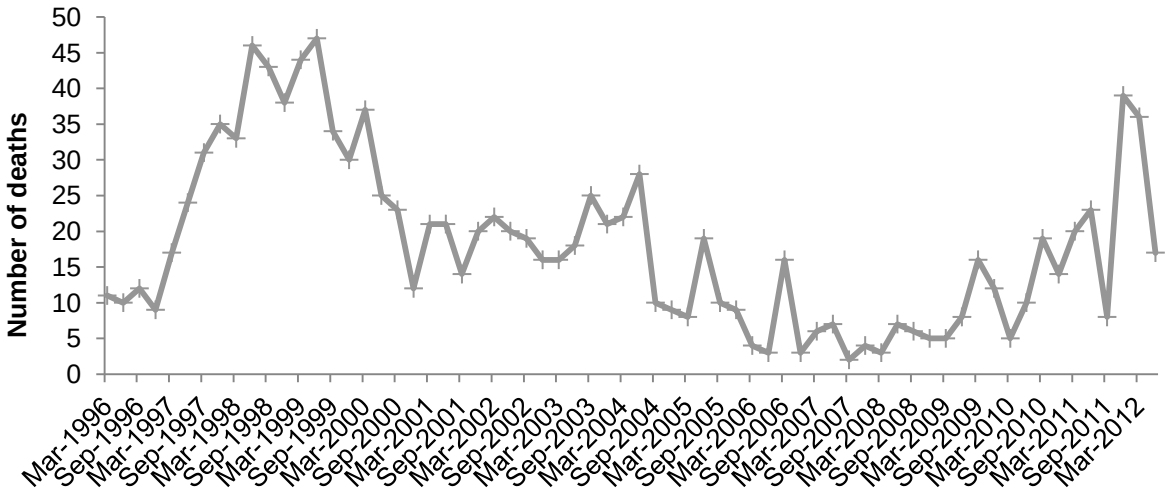


Source: Emergency Department Information System, NSW Department of Health
NB: Figures refer to overdose only and do not include presentations for use disorders. Data for 2012/2013 were unavailable at time of printing.

6.1.5.2 Fatal Overdose

The suspected number of deaths of people who use drugs in which benzodiazepines were detected post-mortem had fluctuated over the last 12 years (Figure 61) although there had been a decline in numbers since early 2000. During 2011/12, however, figures increased to levels not seen since early 2000 (39 in December 2011 versus 37 in March 2000.

Figure 61: Number of deaths of individuals suspected of drug use, in which benzodiazepines were detected post-mortem, NSW, by quarter, 1996-2012



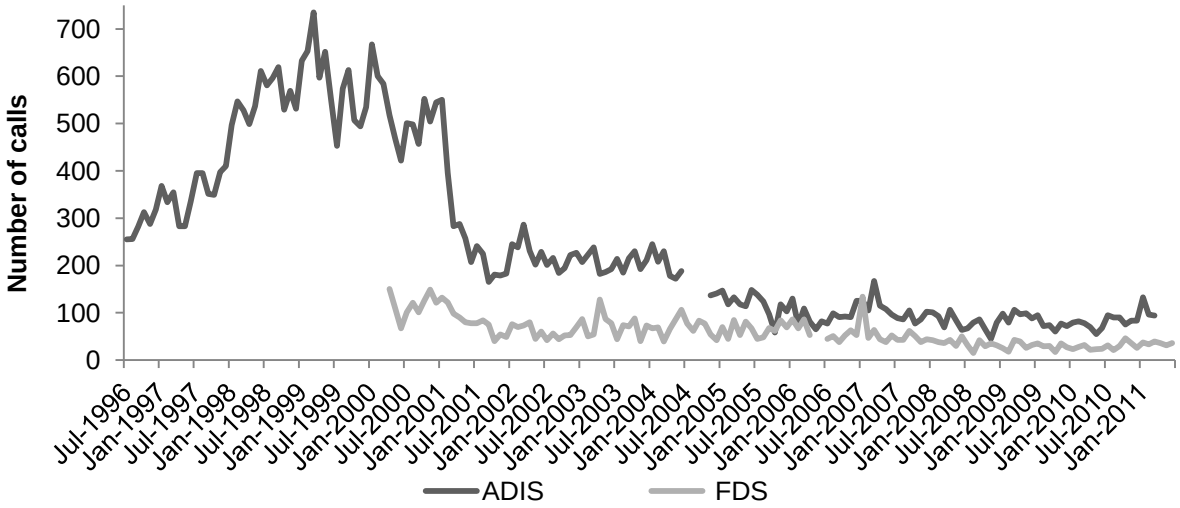
Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories
NB: These numbers relate to deaths in which benzodiazepines were detected; however, there may have also been other drugs present. Data for 2012/2013 were not available at time of printing.

6.2 Calls to telephone helplines

6.2.1 Heroin

Figure 62 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 lower than numbers received at ADIS until recently, reflecting the different sizes and target groups of these services. The number of calls to both services regarding heroin in 12 months to June 2011 remained comparable with 2010, ranging between 75-106 calls a month for ADIS and 21-46 calls a month to FDS.

Figure 62: Number of enquiries to ADIS and FDS regarding heroin, July 1996-June 2011



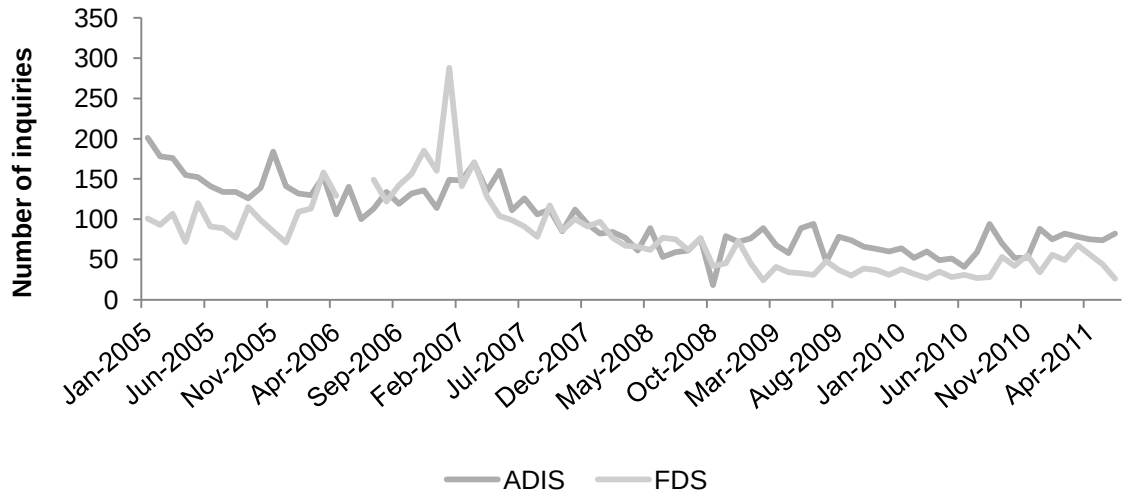
Source: ADIS and FDS

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 refer to the number of calls where heroin was mentioned as any drug of concern. ADIS data were unavailable for the period July-October 2004 and FDS data were unavailable for the period May-June 2006. 2012/2013 data were not available at time of printing.

6.2.2 Methamphetamine

Figure 63 shows the number of calls to the ADIS and FDS lines regarding methamphetamines. The numbers of enquiries to both ADIS and FDS has remained low over the past few years and have fluctuated in the last 12 months (ADIS range: 52-88; FDS range: 26-68).

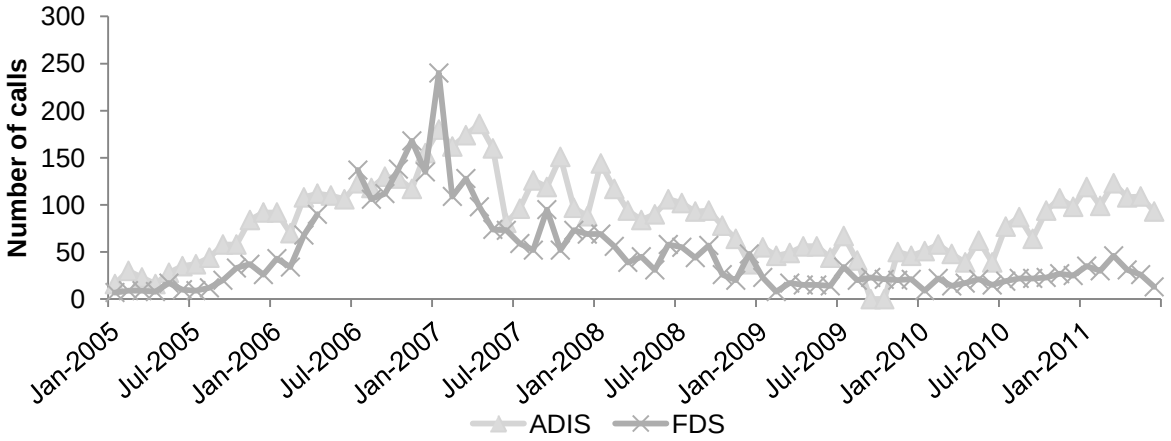
Figure 63: Number of inquiries to ADIS and FDS regarding methamphetamines including 'crystal/ice', January 2005-June 2011



Source: NSW Alcohol and Drug Information Service and Family Drug Support
NB: Family Drug Support data refer to calls where any mention of amphetamines was made. ADIS data refer to the number of calls where amphetamines were mentioned as any drug of concern. FDS data were unavailable for the period May-June 2006. 2012/2013 data were not available at time of printing.

Figure 64 shows the number of calls to the ADIS and FDS lines regarding ice/crystal methamphetamine. Calls to ADIS have been increasing from mid-2009 onward while those to FDS have remained relatively stable over the same period.

Figure 64: Number of enquiries to ADIS and FDS regarding ice/crystal methamphetamine, January 2005-June 2011

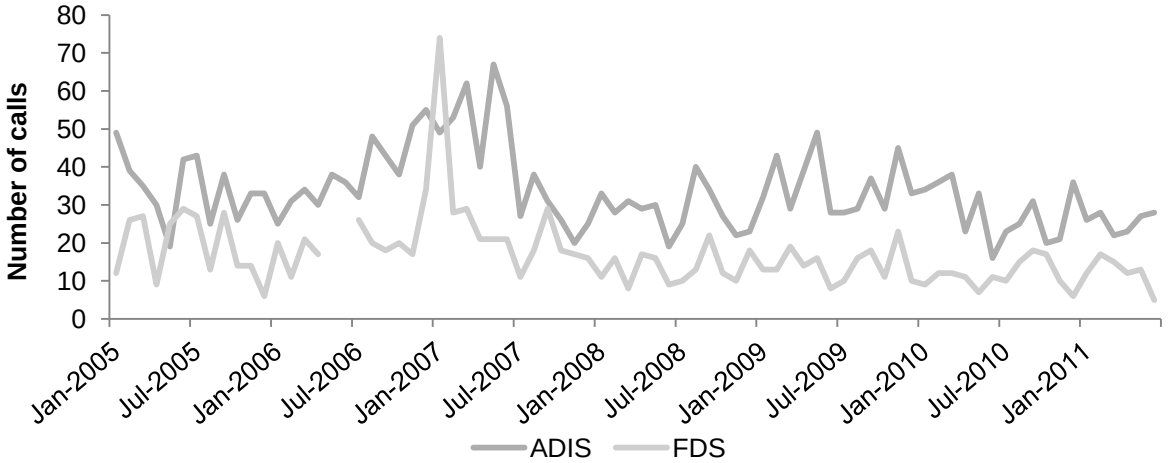


Source: NSW ADIS and FDS
NB: FDS data were only available on a monthly basis and refer to calls where any mention of ice/crystal methamphetamine was made. FDS is based in NSW but data may include some calls from interstate. ADIS data refer to the number of calls where cannabis was mentioned as any drug of concern. ADIS data were unavailable for the period July 2009-June 2010 and FDS data were unavailable for the period May-June 2006. 2012/2013 data were not available at time of printing.

6.2.3 Cocaine

Figure 65 shows the number of calls to the ADIS and FDS lines regarding cocaine. The number of calls per month to both ADIS and FDS have remained relatively stable (ADIS range: 20-31; FDS range: 5-17) over the 12 months to June 2011.

Figure 65: Number of enquiries to ADIS and FDS regarding cocaine, January 2005-June 2011



Source: NSW ADIS and FDS
NB: FDS data were only available on a monthly basis 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 refer to the number of calls where cannabis was mentioned as any drug of concern. ADIS data were unavailable for the period July 2009-June 2010 and FDS data were unavailable for the period May-June 2006. 2012/2013 data were not available at time of printing.

6.2.4 Cannabis

The number of calls to ADIS and FDS regarding cannabis has remained relatively stable in the 12 months to June 2012 (Figure 66).

Figure 66: Number of enquiries to ADIS and FDS regarding cannabis, January 2005-June 2011

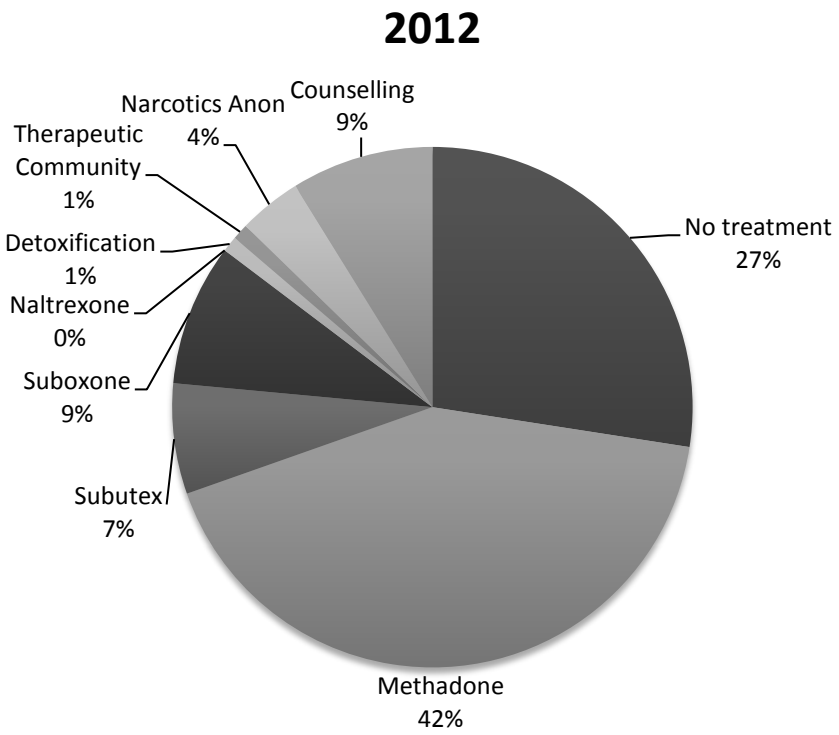
Source: ADIS and FDS
NB: FDS data were only available on a monthly basis and refer to calls where any mention of cannabis was made. FDS is based in NSW but data may include some calls from interstate. ADIS data refer to the number of calls where cannabis was mentioned as any drug of concern. ADIS data were unavailable for the period July 2009-June 2010 and FDS data were unavailable for the period May-June 2006. 2012/2013 data were not available at time of printing.

6.3 Drug treatment

6.3.1 Forms of treatment

The majority (60%) of all PWID participants were in some form of treatment at the time of interview, which is significantly fewer than the 72% who were in some form of treatment in 2011. Of those currently in drug treatment 70% reported being currently in a form of OST, with the majority (75%, 44% of all participants) of those currently on OST receiving methadone and smaller amounts receiving buprenorphine-naloxone (Suboxone) (16%; 10% of entire sample) or buprenorphine (7%; 4% of entire sample). Those currently in treatment had been in that treatment for a median of 48 months (i.e. four years). Seventy-two percent of all participants had been in some form of treatment in the past six months. Of these, 73% (43% on entire sample) had been on methadone maintenance treatment (MMT), 16% (9% of the entire sample) had been on buprenorphine-naloxone (Suboxone) treatment, 15% (9% of the sample) reported drug counselling, and 11% (7% of the entire sample) reported buprenorphine. Other treatments accessed over the past 6 months by participants were Narcotics Anonymous (7%; 4% of the sample) and detoxification treatment (2%; 1% of entire sample). Only one participant reported treatment at therapeutic communities in the six months prior to interview (Figure 67).

Figure 67: Proportion of participants reporting any form of drug treatment in last 6 months, 2012

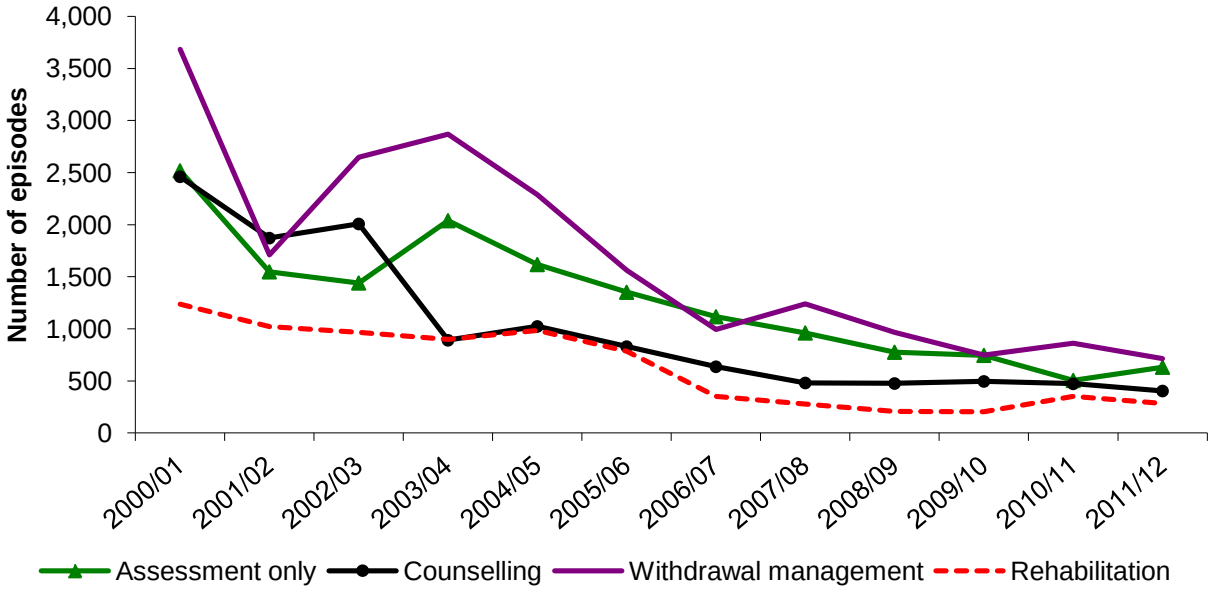


Source: IDRS PWID interviews
NB: More than one form of treatment could be nominated

6.3.2 Heroin treatment

Figure 68 shows the number of closed treatment episodes based on the date of commencement by treatment type where the principal drug of concern was heroin. Numbers entering for 'assessment only' have fluctuated over the past few years, with a decrease during 2000/2001-2001/2002, a subsequent increase in 2003/04 and a low, but steady decrease over the last eight years. Numbers entering residential rehabilitation have also gradually declined from 1,237 in 2000/2001 to 284 in 2011/2012. Numbers entering counselling continued to decline, and have remained lower over the past six years than previously. It is important to interpret these data with caution as they are based on closed episodes and episodes may be excluded if not completed in the period.

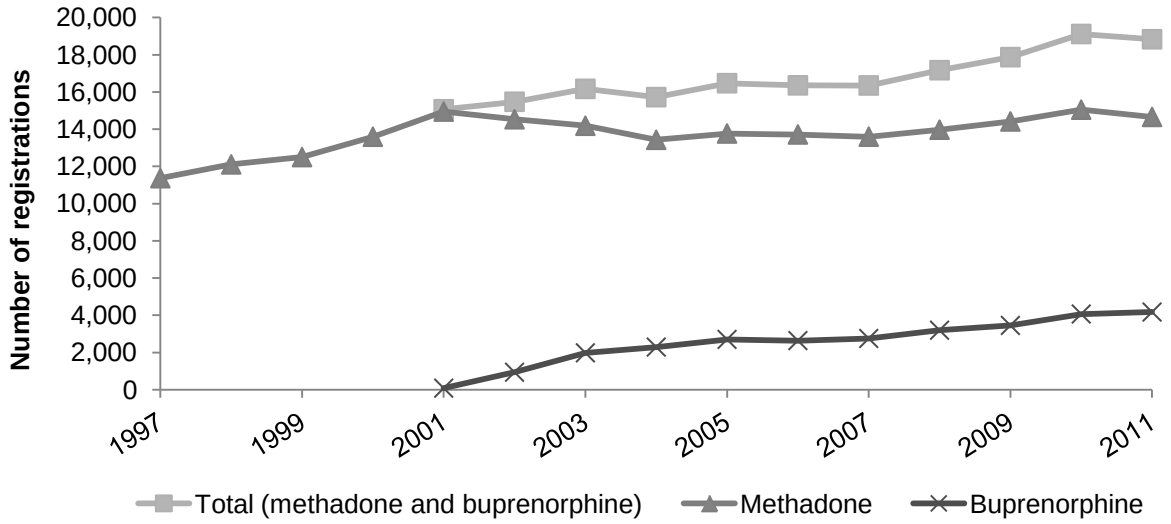
Figure 68: Number of heroin treatment episodes by treatment type, NSW 2000/01-2011/12



Source: NSW Minimum Data Set (NSW MDS) for Alcohol and other Drug Treatment Services (AODTS), 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 69 shows that the number of people receiving all forms opioid substitution treatment in NSW increased from 11,365 on the 30th June 1997 to 18,831 on the 30th June 2011. Overall, in 12 months to the end of June 2011 there was a slight decrease in the numbers seen in 2010 (19,114). The vast majority of opioid pharmacotherapy clients received methadone. The number of people receiving buprenorphine has generally increased since its introduction in 2000. As of June 2011 thirty-three percent of Australia's 2,264 pharmacotherapy sites were located in NSW and were dosing 18,831 clients. The vast majority of sites (601) were pharmacies, with smaller amounts of public clinics (37), private clinics (12) or correctional settings (1). The same data for 2011 was not available at the time of publication. Fifty-seven percent of opioid pharmacotherapy clients obtained their treatment through a private provider, 32% received it through a public prescriber, 10% were in correctional facilities and 2% obtained their treatment through a public/private prescriber (i.e. a prescriber in a private clinic which receives some public funding (Australian Institute of Health and Welfare, 2011b, 2012)

Figure 69: Number of registrations for opioid substitution treatment on the 30th June each year, NSW, 1997-2011



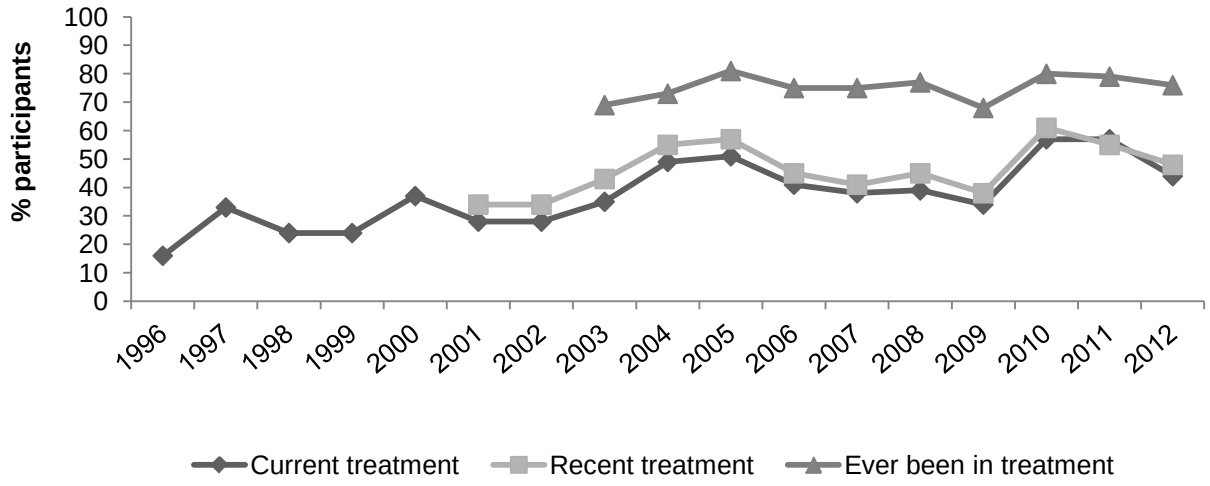
Source: Australian Institute of Health and Welfare (2011b)
NB: Buprenorphine pharmacotherapy was introduced in NSW in 2000. Data for 2011 were unavailable at the time of publication. In NSW, unlike all other jurisdictions, clients prescribed buprenorphine/naloxone (Suboxone) are counted under buprenorphine

6.3.3 Methadone treatment

A distinction was made between the use of prescribed (where the prescription was in the participant's name) and non-prescribed (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.

Forty-eight percent of participants had used methadone that had been prescribed for them in the preceding six months (63% in 2011) and 5% reported injecting prescribed methadone during this time. Only 1% of participants reported recent use of prescribed Physeptone tablets. Overall, there has been a steady increase in the proportion of PWID participants reporting current engagement in a methadone maintenance treatment (MMT) (Figure 70). Forty-four percent of PWID reported receiving methadone treatment at some point in the preceding six months (55% in 2011). As in previous years, methadone syrup was the predominant form of OST used.

Figure 70: Proportion of participants reporting methadone treatment, 1996-2012



Source: IDRS PWID interviews

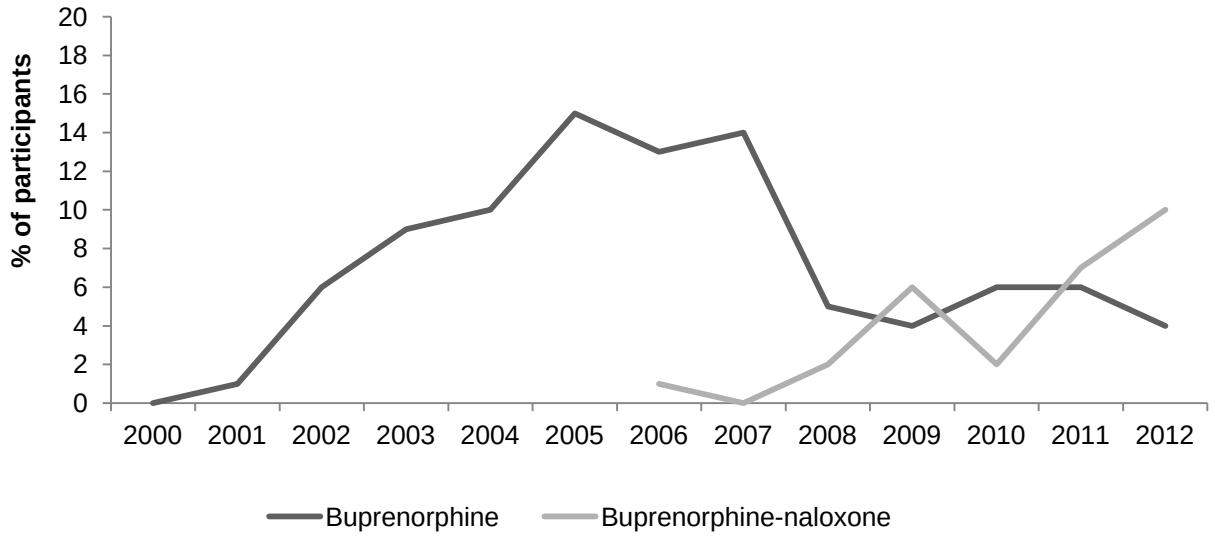
Amongst those who had been on a methadone program in the six months preceding interview, the median number of days of use in the preceding six months was 180 days, i.e. daily use (the same as 2011). Sixty-five percent of methadone users (31% of entire sample) reported daily use, which remains comparable to 2011 (69%). It should be noted that the IDRS deliberately recruits a 'sentinel' population of people who inject drugs and are current and active participants in illicit drug markets. As a consequence, those in the PWID 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 IDRS survey, participants who are also engaged in methadone treatment – of whom there is a substantial proportion in the 2012 IDRS – may not be representative of methadone clients generally.

6.3.4 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, questions were also included on this drug. In addition, a distinction was made between buprenorphine-naloxone (Suboxone) in both its tablet and sublingual film form.

Approximately one-third (37%) of the sample reported ever having been prescribed buprenorphine (Subutex). Eight percent of participants reported using it in the preceding six months which is stable with the 15% reported in 2011. Four percent stated they were currently participating in buprenorphine treatment (6% in 2011) (Figure 71). Among those who used prescribed buprenorphine, the median number of days of use in the last six months was 93 days, (median 66 days in 2011). When used as a maintenance treatment, buprenorphine can be dosed daily or every two days. The median days in treatment increased to 102 days (i.e. around every second day; range 14-180 days; 180 in 2010). Please note that buprenorphine may also be prescribed during opioid detoxification.

Figure 71: Proportion of participants reporting current buprenorphine treatment, 2000-2012



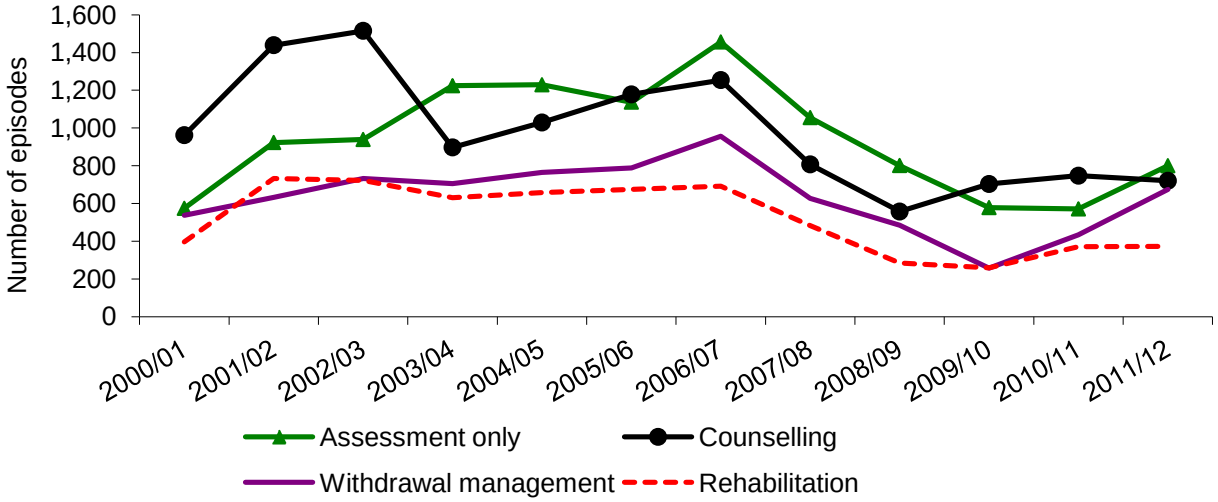
Source: IDRS PWID interviews
NB: Buprenorphine-naloxone (Suboxone) item first included in 2006

Approximately one-quarter (26%) of participants reported ever being prescribed buprenorphine-naloxone (Suboxone) in either form, with 21% reporting a prescription of buprenorphine-naloxone tablets and 12% reporting a prescription of sublingual film. Fourteen percent reported a prescription in the last 6 months, with 7% reporting recent prescription in its tablet form and 9% reporting a recent prescription in sublingual film form. Seven percent of participants had a prescription at the time of interview. The median number of days of use in the last six months for buprenorphine-naloxone tablets was 60 days (i.e. just over twice a week; 179 days in 2011) and the median days for buprenorphine-naloxone film was 67.5. The median number of days enrolled in treatment for buprenorphine-naloxone tablets and film was 60 and 67.5 days, respectively. No participants reported recent injection of prescribed buprenorphine-naloxone in its tablet form and only one participant reported recent injection of buprenorphine-naloxone in its film form.

6.3.5 Methamphetamine treatment

There were mixed results in the number of closed treatment episodes, based on the date of commencement where the principal drug of concern was amphetamines, over the past twelve months for all four of the main forms of treatment (Figure 72). It does appear, however, that instances of withdrawal management and assessment treatment episodes are on the rise, though they are still lower than the highs seen in 2006/07. It is important to interpret these data with caution as they are based on closed episodes and episodes maybe excluded if not completed in the period. Prior to 2006/07, there was a steady increase in numbers receiving 'assessment only' and 'withdrawal management', while both 'assessment only' and 'rehabilitation' remained relatively stable. As noted above these changes should be interpreted with caution.

Figure 72: Number of amphetamine treatment episodes by treatment type, NSW, 2000/01-2011/12

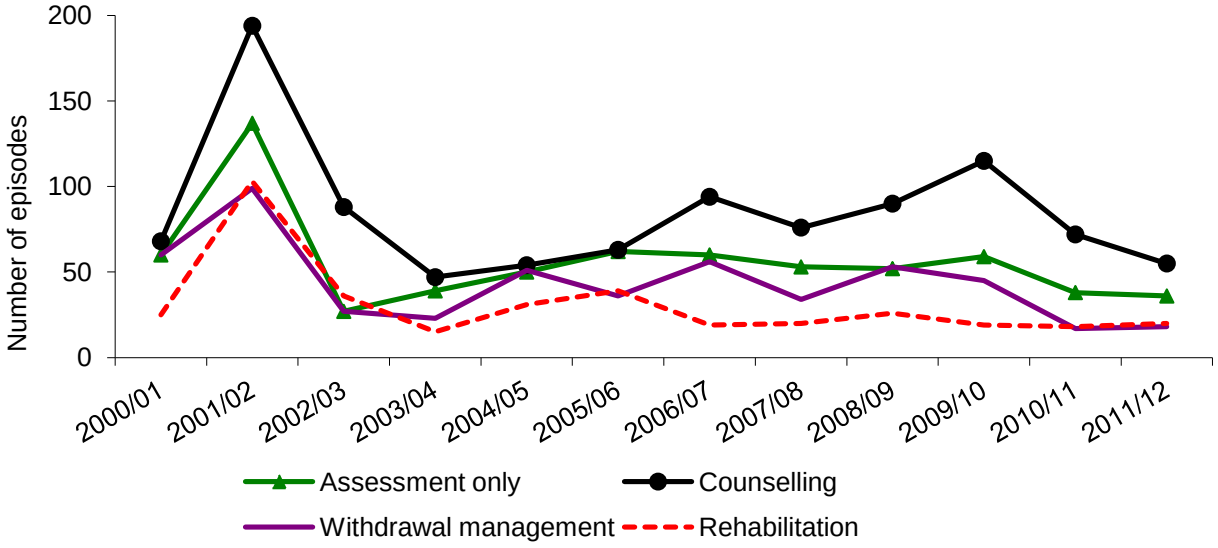


Source: NSW Minimum Data Set for Drug and Alcohol Treatment Services (MDS AODTS), NSW Department of Health.
NB: The NSW MDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period. Numbers are based on the date of commencement.

6.3.6 Cocaine treatment

Apart from a spike in 2009/10 in 'counselling' 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. In 2011/12, there was a decrease in all main forms of treatment types, except 'withdrawal' and 'residential rehabilitation' which remained stable (Figure 73). It is important to interpret these data with caution as they are based on closed episodes, and episodes maybe excluded if not completed in the period.

Figure 73: Number of cocaine treatment episodes by treatment type, NSW, 2000/01-2011/12

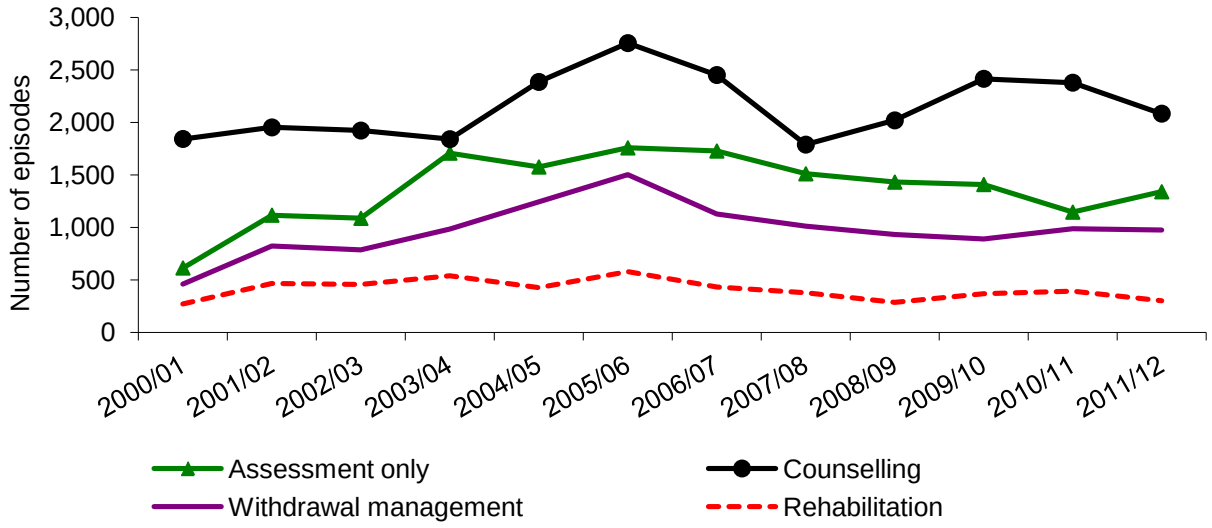


Source: NSW MDS AODTS, NSW Department of Health.
NB: The NSW MDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period. Numbers are based on the date of commencement

6.3.7 Cannabis treatment

Figure 74 shows the number of closed treatment episodes based on the date of commencement where the principal drug of concern was cannabis, by treatment type. Numbers entering for 'assessment only' have declined gradually over the past few years. Similarly, numbers entering 'withdrawal management' have increased since 2000/2001, peaking in 2005/2006 (1,502 episodes) and subsequently have decreased slightly in the past 5 years. As noted above it is important to interpret these data with caution as they are based on closed episodes and episodes may be excluded if not completed in the period. Numbers commencing 'residential rehabilitation' have remained relatively stable since 2001/2002 at 400 or more per year (this figure was 270 in 2000/2001), peaking in 2005/06, gradually declining since to stabilise over the last two years (Figure 74).

Figure 74: Number of cannabis treatment episodes by treatment type, NSW, 2000/01-2011/12



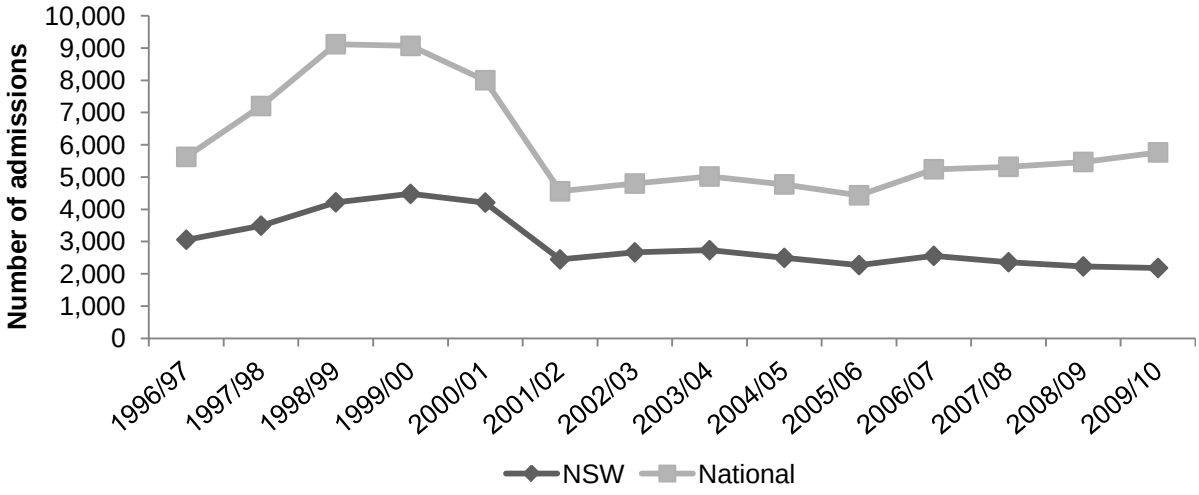
Source: NSW MDS AODTS, NSW Department of Health
NB: The NSW MDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period. Numbers are based on the date of commencement

6.4 Hospital admissions

6.4.1 Heroin

The number of hospital separations among persons aged 15-54 years in which the principal diagnosis was opioid-related is shown in Figure 75. 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. Figures decreased around 2001/02, coinciding with a reduction in the availability of heroin, and since this time have remained low and relatively stable.

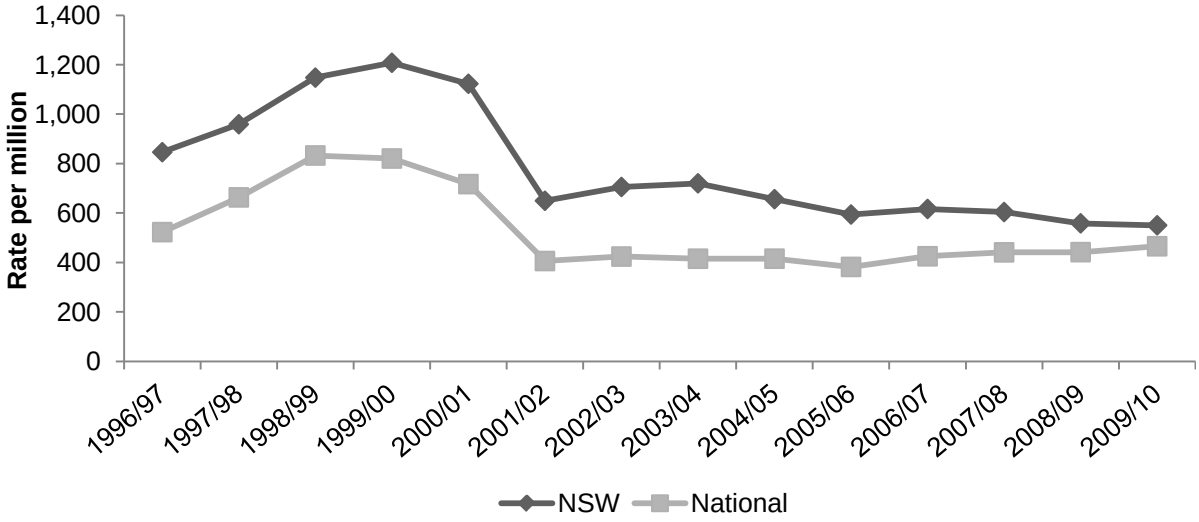
Figure 75: Number of principal opioid-related hospital admissions among people aged 15-54, NSW and Australia, 1996/97-2009/10



Source: A. Roxburgh and Burns (in press)

Figure 76 shows the number per million persons aged 15-54 years of opioid-related hospital admissions**.** Numbers have remained relatively stable over the past twelve months, following a slight increase between 2001/02 and 2003/04 in NSW. 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 76: Number per million persons of principal opioid-related hospital admissions among people aged 15-54 years, NSW and nationally, 1996/97-2009/10

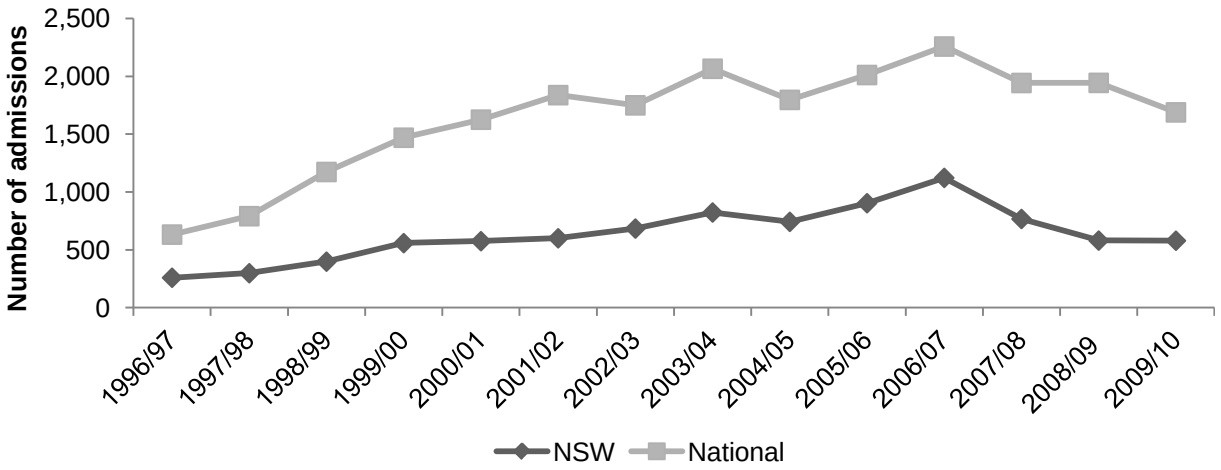


Source: A. Roxburgh and Burns (in press)

6.4.2 Methamphetamine

The number of inpatient hospital admissions among persons aged 15-54 years in which the principal diagnosis was amphetamine-related is shown in Figure 77. Despite minor fluctuations, figures appear to have steadily increased from 1996/1997 until 2007/2008. In the past few years, however, a steady decline has been observed from the high point seen in 2006/2007 of 1123 admissions in NSW and 2258 nationally, to 580 admissions in NSW and 1689 nationally in the 2009/2010 period.

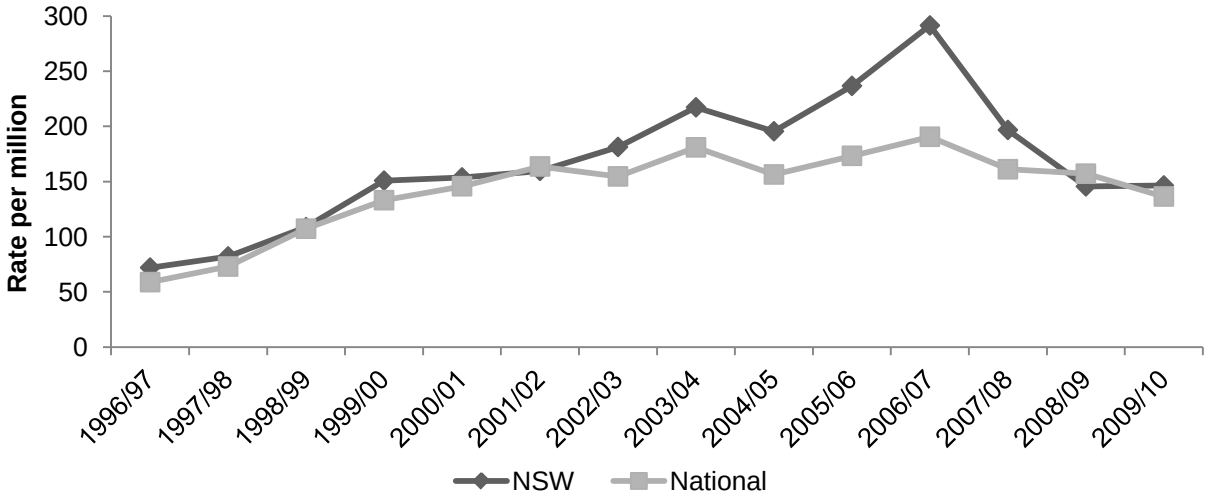
Figure 77: Number of principal amphetamine-related hospital admissions among persons aged 15-54, NSW and nationally, 1996/97-2009/10



Source: A. Roxburgh and Burns (in press)

Figure 78 shows the number per million persons of hospital admissions in which the principal diagnosis was amphetamine-related. Numbers in both NSW and nationally have increased over time; however, since 2007/08 there has been a decrease in both NSW and national admissions.

Figure 78: Number per million persons of principal amphetamine-related hospital admissions among people aged 15-54 years, NSW and nationally, 1996/97-2009/10

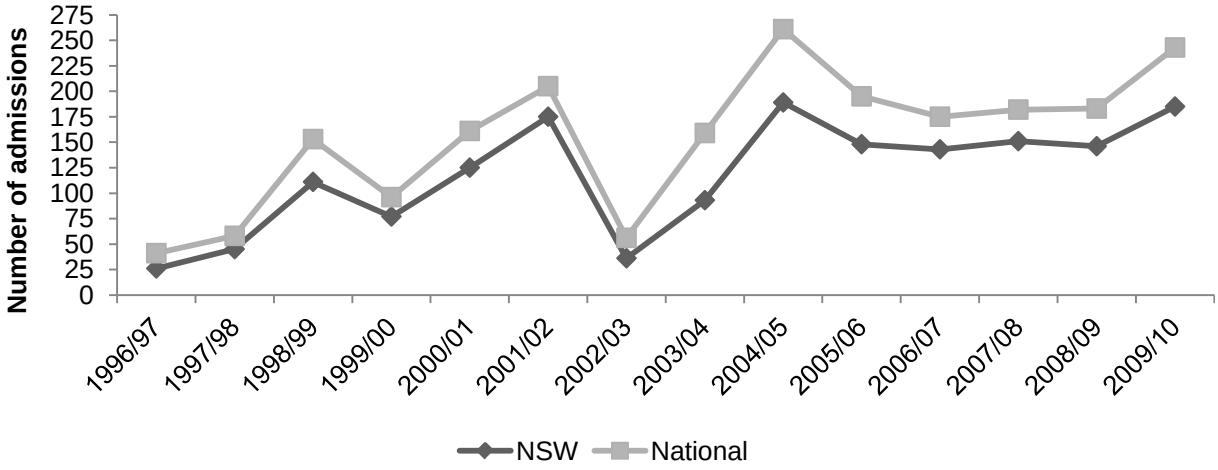


Source: A. Roxburgh and Burns (in press)

6.4.3 Cocaine

The numbers of inpatient hospital separations in which the principal diagnosis was cocaine-related are shown in Figure 79. Figures increased both in NSW and nationally from 2002/03 to 2004/05. Although these figures appear to have plateaued in recent years, 2009/10 saw an increase comparable with 2004/05 values (185 versus 189 for NSW; 243 versus 261 nationally).

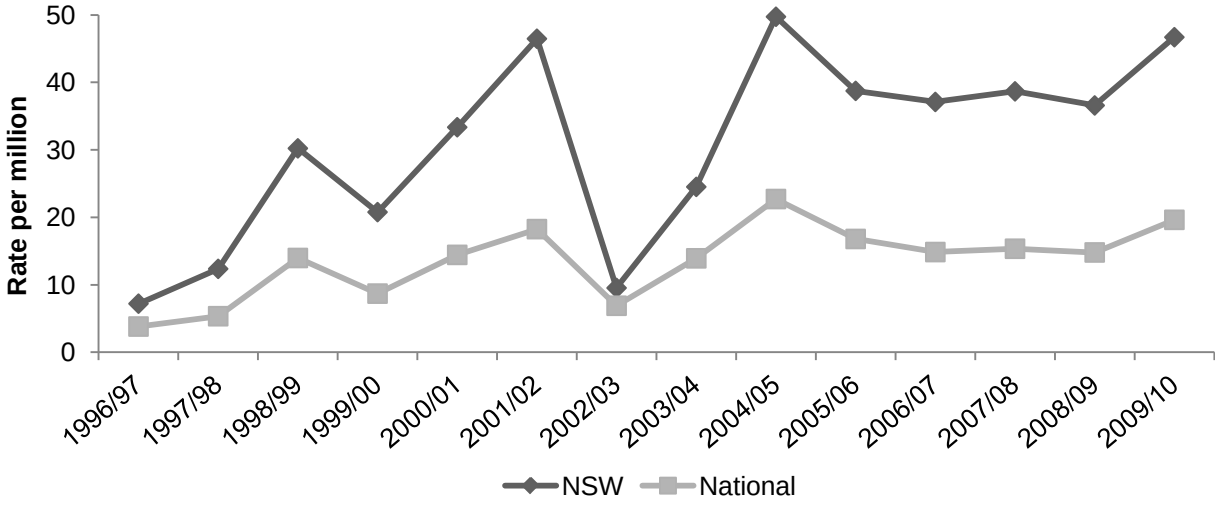
Figure 79: Number of principal cocaine-related hospital admissions among persons aged 15-54, NSW and nationally, 1996/97-2009/10



Source: A. Roxburgh and Burns (in press)

The number per million persons of cocaine-related hospital admissions are shown in Figure 80. Numbers in NSW have fluctuated across time; numbers peaked in 2001/02, decreased quite markedly between 2001/02 and 2002/03, and increased again to the highest recorded within the study period in 2004/05 (49.73 in NSW and 22.71 nationally). A decrease was observed in 2005/06 and although figures have remained relatively stable in the 3 years to 2008/09, 2009/10 saw an increase when compared to 2008/09 values (46.70 versus 36.58 in NSW; 19.63 versus 14.79 nationally).

Figure 80: Number per million persons of principal cocaine-related hospital admissions among people aged 15-54 years, NSW and nationally, 1996/97-2009/10

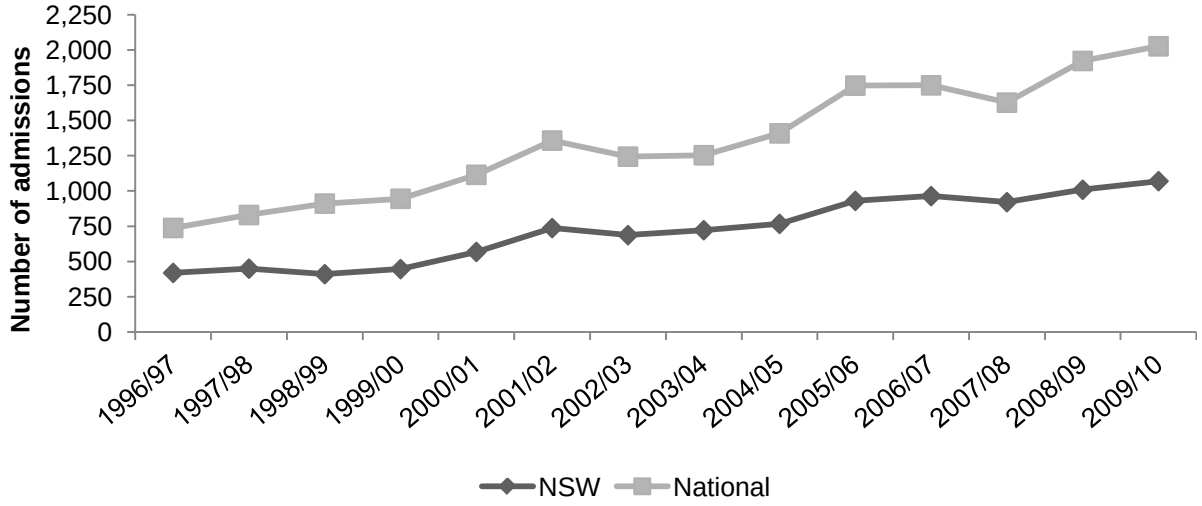


Source: A. Roxburgh and Burns (in press)

6.4.4 Cannabis

The number of hospital admissions in which the principal diagnosis was cannabis-related is shown in Figure 81. Across time, figures have gradually increased both in NSW and nationally. Figures observed in NSW in 2009/10 remained relatively stable with this trend.

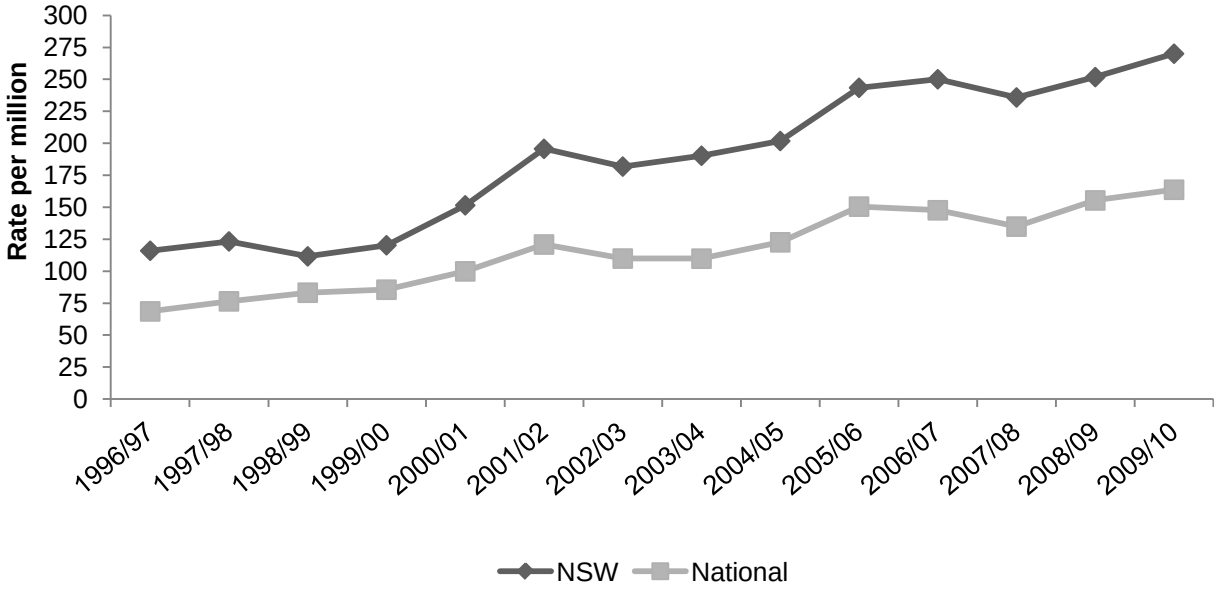
Figure 81: Number of principal cannabis-related hospital admissions among persons aged 15-54, NSW and nationally, 1996/97-2009/10



Source: A. Roxburgh and Burns (in press)

Figure 82 shows the number per million persons of cannabis-related hospital admissions among people aged 15-54 years. Both nationally and in NSW, numbers increased during 1996/97 and 2001/02, and remained relatively stable during 2001/02 and 2002/03. Since 2005/06, numbers have shown a gradual increase in both NSW and nationally.

Figure 82: Number per million persons of principal cannabis-related hospital admissions among people aged 15-54 years, 1996/97-2009/10



Source: A. Roxburgh and Burns (in press)

6.5 Injecting risk behaviours

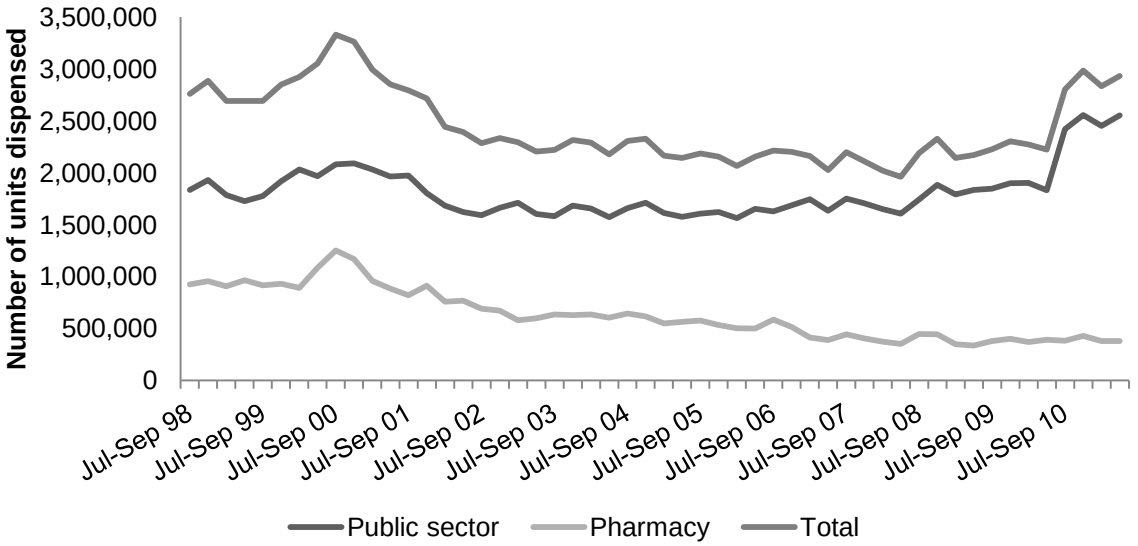
6.5.1 Sharing of injecting equipment by PWID participants

6.5.1.1 Needle syringe programs

There are 33 primary NSP outlets across the state, which typically provide PWID with a range of injecting equipment including needles and syringes, 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, e.g. 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 approximately 160 NSP-maintained Fitpack® automatic dispensing machines across New South Wales which provide greater availability (typically 24-hour access) to a broad range of people across a range of locations. A large number of pharmacies (approximately 375) are also involved in providing NSP services, further expanding availability across a broader range of people and locations. Pharmacies currently distribute less than 15% of equipment across the state, down from a peak of 35% in 2000/01. The number of needles and syringes dispensed in New South Wales by NSP has increased over the last year after remaining relatively stable over the seven years prior (Figure 83). The number of needles and syringes dispensed by pharmacies over the same period has decreased and most of the equipment provided through the NSW NSP is dispensed from public NSP (HIV/AIDS and Infectious Diseases Branch; NSW Department of Health, 2012).

In 2012, participants in the IDRS were asked from what sources they obtained their needle and syringes over the last 6 months. Results showed the vast majority of participants (96%) obtained needles and/or syringes from the NSP (public sector). It is important to note that this number may also be high due to the method of IDRS recruitment via advertisements at NSP sites. Just over one quarter of all participants reported they obtained needles and/or syringes from an NSP vending machine (28%). The third most popular source was chemist/pharmacy (23%), followed by friends (13%). Other sources reported included MSIC (9%), hospital (6%), partner (4%), dealer (also 4%), or outreach/peer worker (3%).

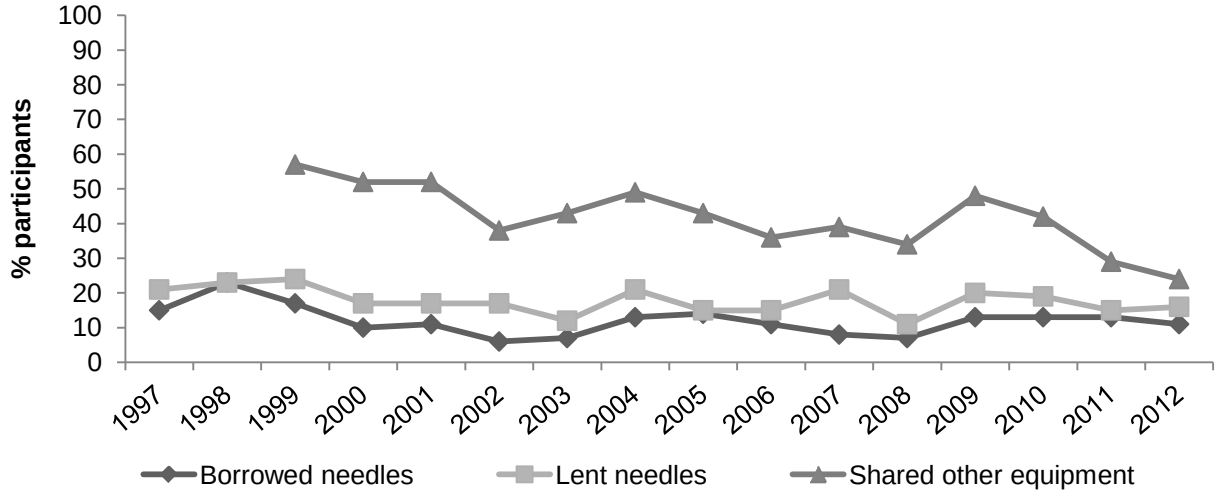
Figure 83: Number of units dispensed from public NSP and pharmacies, NSW, July 1998-June 2011



Source: NSW Department of Health; HIV/AIDS and Infectious Diseases Branch

In line with previous data, 99% of participants reported that they had injected on at least one occasion in the month preceding interview. Eleven percent of these participants reported using a needle that had already been used by someone else ('borrowed needle'). This remained stable with the 13% also reported in 2011 and 2010 (Figure 84). Sixteen percent of those who had injected in the last month reported passing needles on to other PWID ('lent needle') in 2011, which remained stable with the 15% reported in 2011.

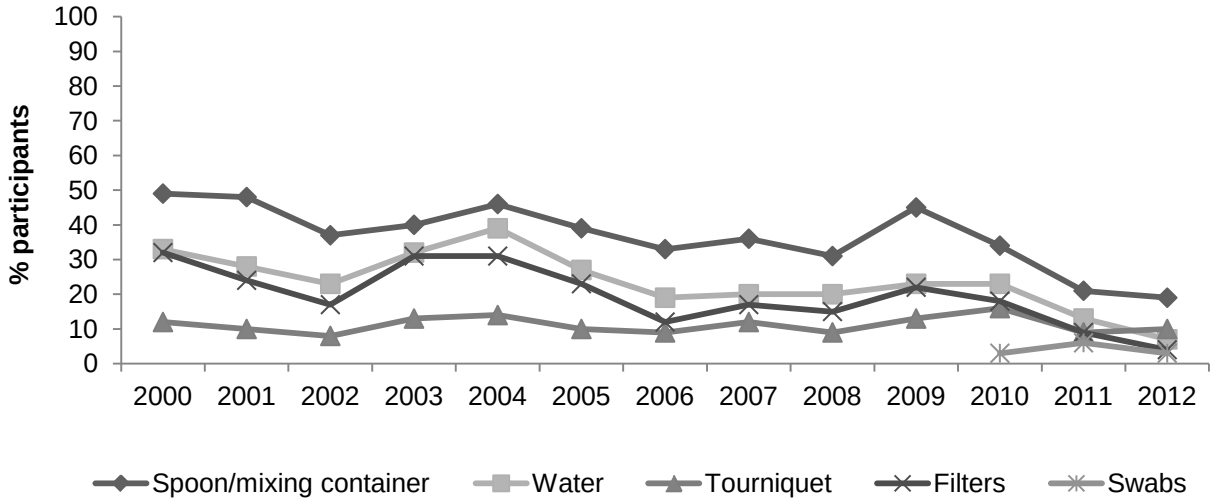
Figure 84: Proportion of PWID reporting sharing injecting equipment in the month preceding interview, 1997-2012



Source: IDRS PWID 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; 2006 n=1; 2007 n=2; 2008 n=2; 2012 n=1) were excluded. In 2009 (n=152), 2010 (n=154) and 2011 (n=150) all participates reported injection in month prior to interview

As in previous years, sharing of injecting equipment was more common than sharing of needles and syringes. Twenty-four percent reported sharing a filter, spoon, water, tourniquet and/or other item of injecting paraphernalia in the month preceding interview which is stable with the 26% reporting sharing equipment in 2011. Figure 85 shows a breakdown of the types of injecting equipment PWID participants reported sharing. Among those reporting any sharing in the past month, spoons/mixing containers remained the most commonly shared item (81%; 19% of entire sample), followed by tourniquets (42%; 10% of entire sample), water (28%; 7% of entire sample) filters (17%; 4% of entire sample), and swabs (3%; 1% of entire sample). Overall these figures are consistent with 2011.

Figure 85: Proportion of PWID participants reporting sharing other injecting equipment by type, 2000-2012



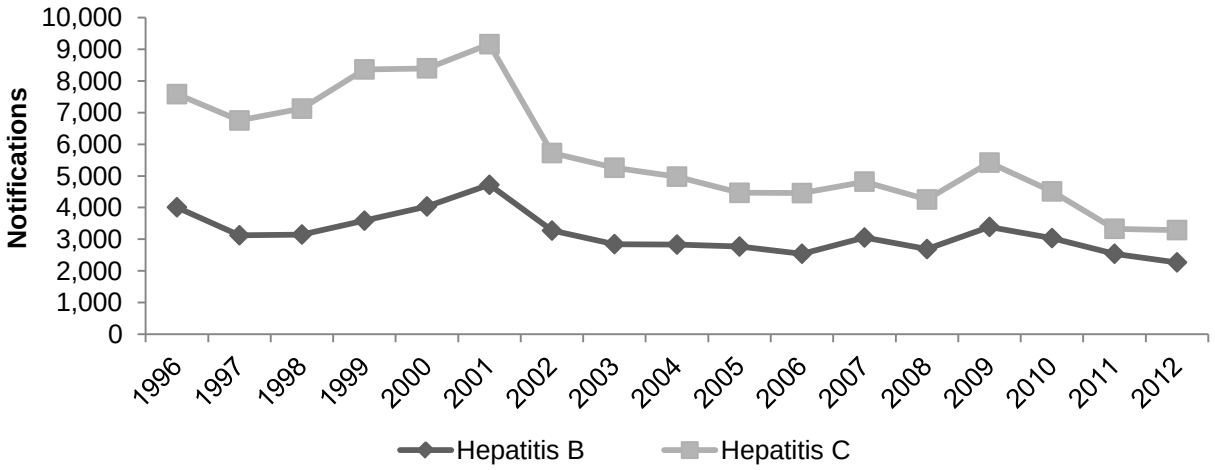
Source: IDRS PWID interviews
NB: Survey items on other injecting equipment (including spoons, water, filters and tourniquets) were first included in 1999 and swabs in 2010. Figure excludes participants who had not injected in the last month (in 2003 n=1; 2004 n=1; 2005 n=4; 2006 n=1; 2007 n=2; 2008 n=2; 2012 n=1) were excluded. In 2009 (n=152), 2010 (n=154) and 2011 (n=150) all participants reported injection in month prior to interview

6.5.2 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. For more detailed information on BBVI, please see the Australian NSP Survey (Kirby Institute, May 2011).

Figure 86 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, with the number of notifications decreasing in the 12 months to 2012 (3,287 notifications). HBV notifications have remained relatively stable since 2003 (2,844 notifications versus 2,267 in 2012). Notifications for both HCV and HBV still remained lower than levels reported in 2001.

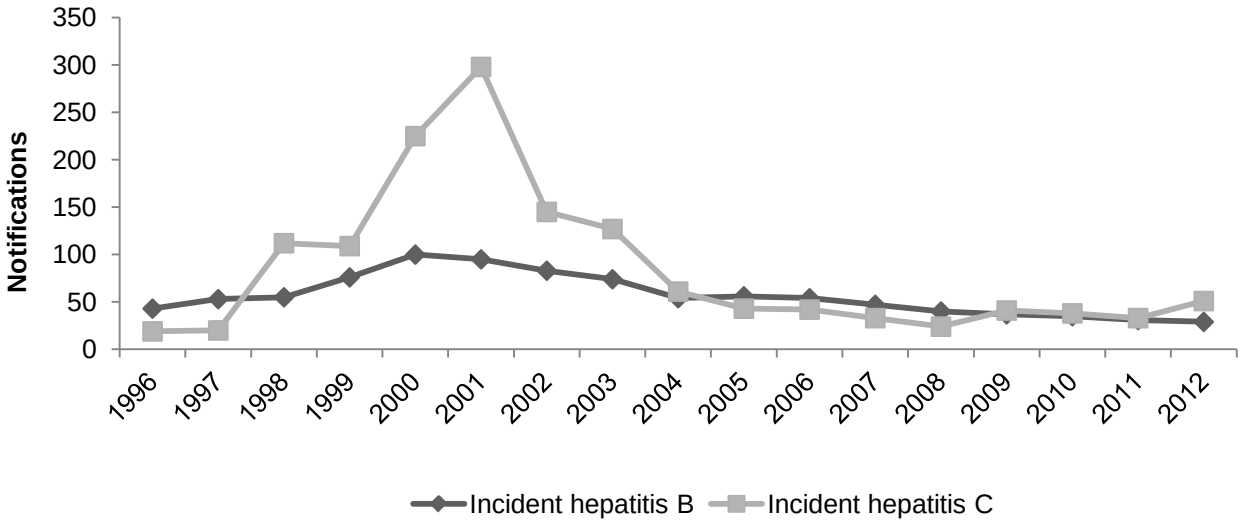
Figure 86: Total notifications for (unspecified and incident) HBV and HCV infections, NSW, 1996-2012



Source: Communicable Diseases Network – Australia – National Notifiable Diseases Surveillance System (NNDSS)[11]

Trends in the number of incident notifications for HBV and HCV in NSW are shown in Figure 87. HBV incident reporting had remained stable and low; recorded as 31 in 2011 and 29 in 2012. A steady decline had been observed in the number of HCV incident notifications, from 298 in 2001 to 24 in 2008, however, in the 12 months to 2012 it increased from 33 in 2011 to 51 incident notifications.

Figure 87: Total notifications for incident HBV and HCV infection, 1996-2012

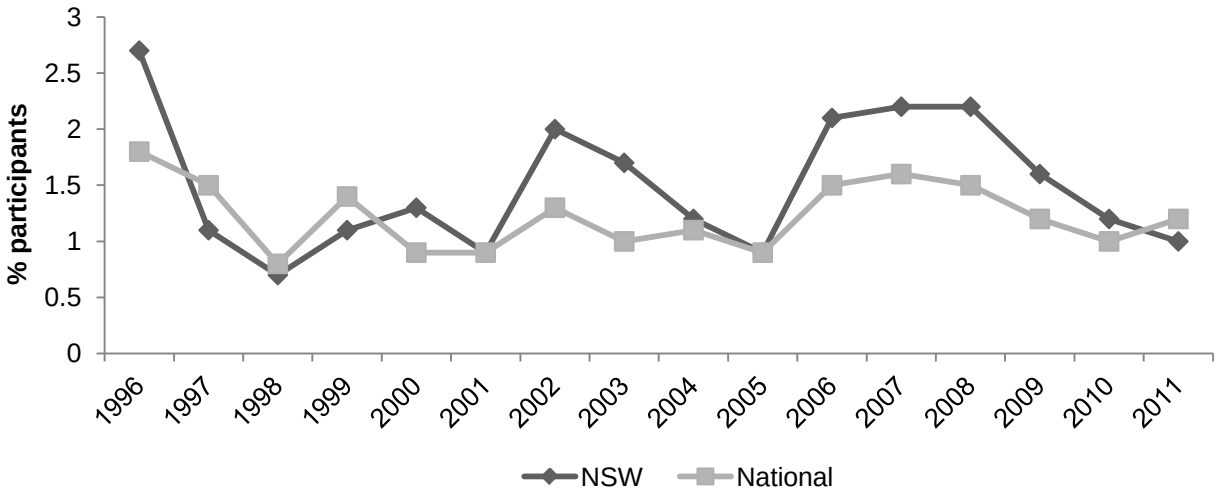


Source: Communicable Diseases Network – Australia – NNDSS[11]

[ll] 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.

HIV antibody prevalence among NSP participants continued a downward trend in 2010, both in NSW (1.0%) and at a national level (1.2%). The NSW figure is the lowest recorded since 2005 (0.9%), and the national figure represents a small increase from the 2010 prevalence (1%) and is equal to the prevalence seen in 2009 (Figure 88).

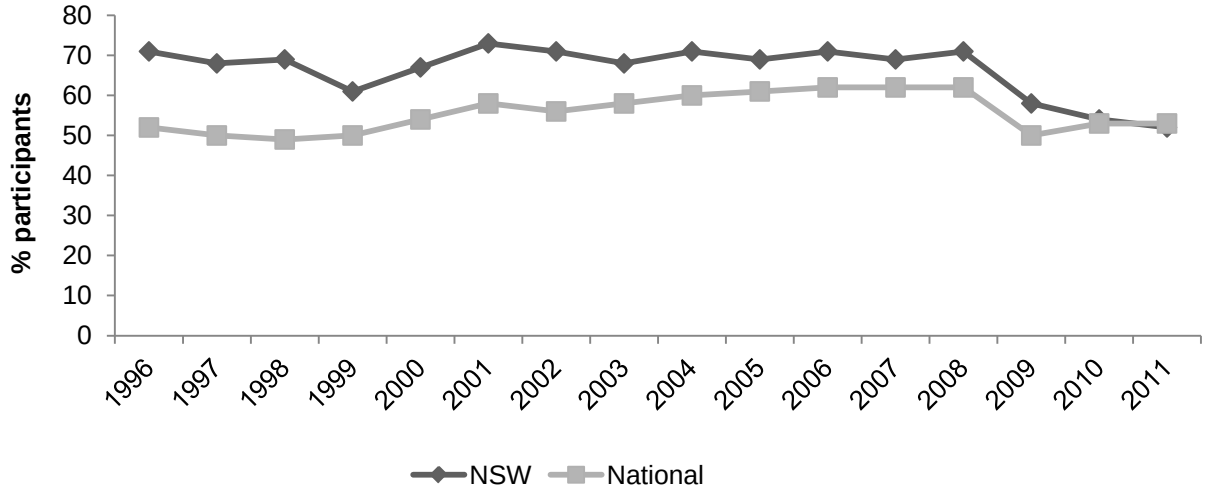
Figure 88: Prevalence of HIV antibody among NSP survey participants, 1996-2011



Source: NCHECR
NB: Data for 2012 were unavailable at the time of publication

Detection of Hepatitis C (HCV) antibody in capillary blood tests (finger-prick samples) conducted on NSW participants continued to remain high in 2011. In 2011, the NSW prevalence (52%) is comparable with the national figure (53%), and both of these figures are consistent with 2010 values (54% and 53%, respectively; Figure 89).

Figure 89: Prevalence of HCV antibody among NSP survey participants, 1996-2011

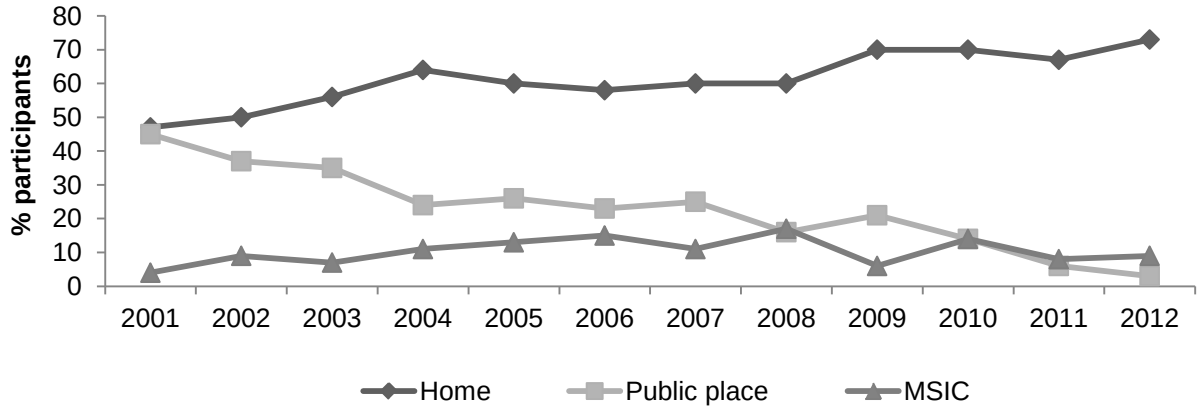


Source: NCHECR
NB: Data for 2012 were unavailable at the time of publication

6.5.3 Location of injections

The most commonly reported location for last injection remained at a private home (73%; 67% in 2011). Nine percent reported Sydney MSIC (8% in 2011) and only 3% reported public place (6% in 2011) as the locations of their most recent injection (Figure 90).

Figure 90: Last location for injection, 2001-2012



Source: IDRS PWID interviews
NB: Excludes those who had not injected in the last month (in 2003 n=1; 2004 n=1; 2005 n=4; 2006 n=1; 2007 n=2; 2008 n=2; 2012 n=1) were excluded. In 2009 (n=152), 2010 (n=154) and 2011 (n=150) all participants reported injection in month prior to interview

6.5.4 Injection sites

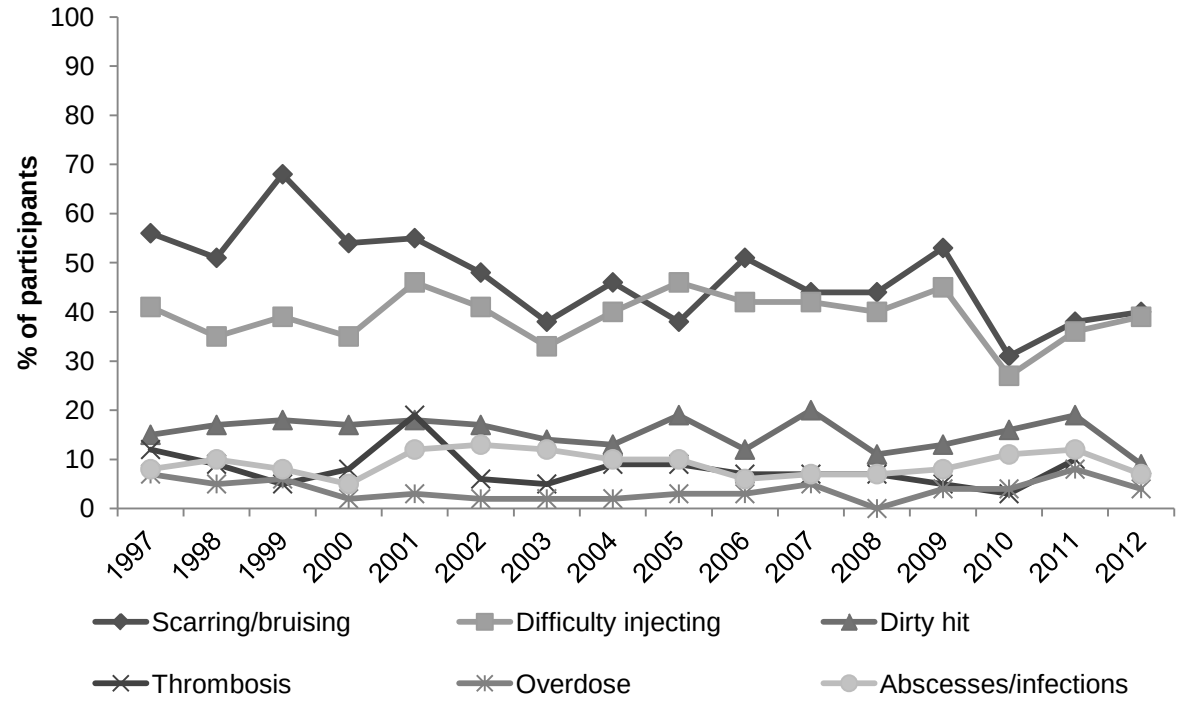
Again in 2012 participants were also asked questions about the site on their body where they had last injected. Seventy-five percent of participants reported that they last injected in their arm. Twelve percent of participants reported last injecting in their hand or wrist, 5% reported last injecting in their leg, 3% each reported their neck or foot and 2% reported their groin. This remained stable with 2011.

6.5.5 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. Just over half (59%) of PWID participants who had injected in the last month reported at least one injection-related problem during this time (56% in 2011). As in previous years, the most commonly reported problems were prominent scarring/bruising of injection sites (40%) and difficulty injecting (39%). Nine percent reported experiencing a 'dirty hit' that made them feel sick, smaller proportions, in line with previous years, reported problems of abscesses or infections associated with injecting (7%), thrombosis (5%) and overdose (4%).

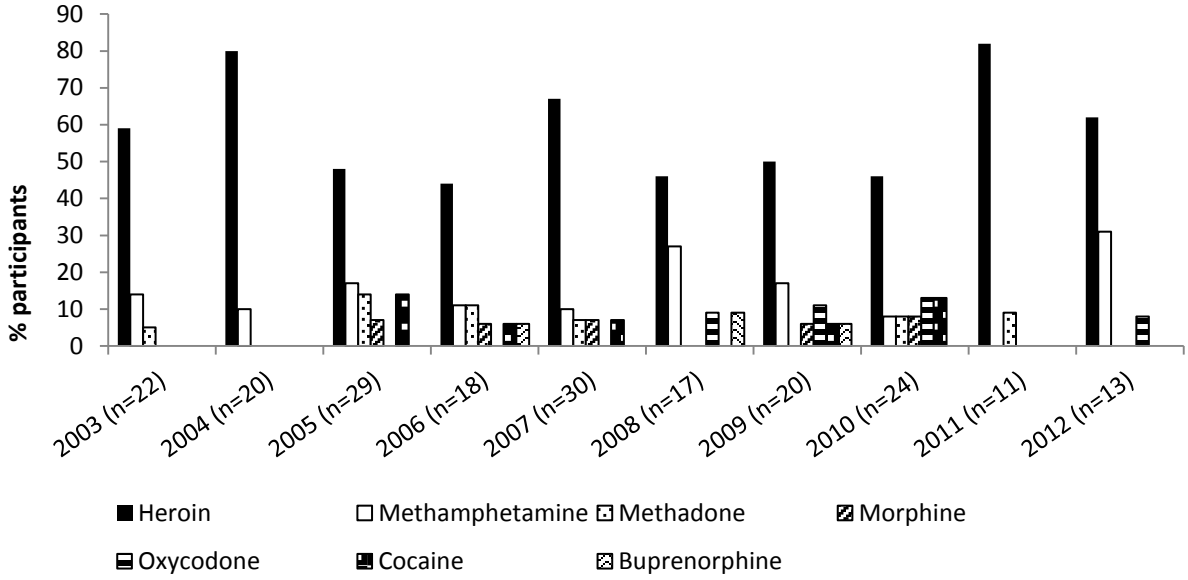
Figure 91 shows that while the proportion reporting prominent 'scarring or bruising' has remained the most commonly reported injection-related problem since 1997 (with the exception of 2005), since 2007 the issue of having 'difficulty injecting' has risen to almost equal levels in proportion of prevalence reported. Reports of thrombosis and abscesses/infections have continued to remain low and relatively stable. For the past 10 years overdose has remained the least commonly reported injection-related problem and this continued in 2012. For further information on overdose, see also Section 6.1 Overdose and drug-related fatalities.

Figure 91: Proportion of PWID reporting injection-related problems in past month, by problem type, 1997-2012



Source: IDRS PWID interviews
NB: Includes all participants

Figure 92: Main drug causing dirty hit in last month, 2003-2012



Source: IDRS PWID interviews

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 they would attribute it to, 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=13) continued to attribute it to heroin (62%; representing 5% of the entire sample; Figure 92).

6.6 Blood-borne viral infections

People who inject drugs are at significantly greater risk of acquiring hepatitis B virus (HBV), hepatitis C virus (HCV)[12] and human immunodeficiency virus (HIV), as BBVI can be transmitted via the sharing of needles, syringes and equipment.

In 2012, IDRS participants were asked questions about BBVI testing and vaccinations. Of those who commented, 97% reported testing for HBV in their lifetime compared to 99% for HCV and 97% for HIV.

Of those who were tested for HBV, two-thirds (67%) had a test within the past year and one-third (38%) within the last three months. Six percent reported a positive result and 4% had been treated for HBV (anti-viral therapy only). Two-thirds (63%) had been vaccinated again HBV, with 88% having completed the course. The main reason for HBV vaccination was due to a history of injecting drug use (37%, Table 19).

Table 19: HBV testing and vaccination among PWID, 2012

	N=146
Ever tested for HBV (%)	97
Recent testing for BBVI	N=92
Tested within the last 12 months (%)	67
Tested within the last 3 months (%)	38
Positive result for most recent test (%)	6
Has been vaccinated again HBV (%)	63
Completed HBV vaccination course* (%)	88
Main reason for HBV vaccination	N=92
At risk (injecting drug use) (%)	37
At risk (sexual) (%)	1
Going overseas (%)	6
Vaccinated as a child (%)	7
Work (%)	1
Don't know (%)	4
Other (%)	44

Source: IDRS participant interviews
* among those who had been vaccinated

Among those tested for HCV, two-thirds (69%) had a test within the past year and just over one-third (39%) within the last three months. Just over half (54%) reported a positive result. Thirteen percent of those who commented had been treated for HCV (anti-viral therapy only), with 10% receiving HCV treatment (currently or in the last 12 months). The main reason for HCV testing

[12] HCV antibody testing has only been available since 1990.

on the last occasion was a 'matter of routine' (42%) and 'it was a responsible thing to do' (17%; Table 20).

Table 20: HCV testing among PWID, 2012

	N=145
Ever tested for HCV	99
	N=143
Tested within the last 12 months (%)	69
Tested within the last 3 months (%)	39
Positive result for most recent test (%)	54
Treated for HCV (anti-viral therapy) (%)	13
Currently receiving HCV treatment* (%)	10
Last time tested for HCV reason	N=92
Matter of routine (%)	42
Responsible thing to do (%)	17
Free testing (%)	1
Insistence of health professional (%)	3
Shared needles (%)	2
Shared other injecting equipment (%)	1
Concern about exposure through injecting (%)	4
Exposure by other needs (blood spills, needle stick injury etc) (%)	0
Educational poster/brochure (%)	0
Tested on induction to prison (%)	1
Monitoring existing infection (%)	12
Other (%)	21

Source: IDRS participant interviews
* Among those who had received treatment for HCV

Almost three quarters (73%) of those who were tested for HIV were tested in the past year and over one third (38%) were tested in the past three months. Two percent reported a positive result.

The main reasons for not being tested for either HBV, HCV or HIV recently or ever (n=34) were; meant to but didn't get around to testing (18%), already known to be positive (18%), never share needles (15%), no desire/interest in being tested (12%), inconvenience of being tested (9%), never shared injecting equipment (6%), vaccinated for HBV (6%) and other (27%).

6.7 Mental and physical health problems and psychological distress

One-half (46%) of all participants reported experiencing a mental health problem other than drug dependence in the preceding six months (52% in 2011). As in previous years, the most commonly reported problem was depression (68%; 30% of all participants). Of those reporting a mental health problem 57% (26% of all participants) reported anxiety, 27% (12% of all participants) reported panic, 19% (9% of all participants) reported paranoia, another 19% reported schizophrenia, 13% (6% of entire sample) reported manic-depression/bipolar disorder, 10% (5% of entire sample) reported drug induced psychosis, and 4% reported any personality disorders (2% of entire sample). Reported instances of panic and paranoia are both statistically significantly ($p < 0.05$) higher than 2011 values, in which instances were 9% and 6%, respectively.

Seventy-two percent of the sample had attended a health professional for a mental health problem during this time. Of those that reported a mental health problem in the six months prior to interview, 53% (13% of all participants) reported receiving prescribed antidepressant medication for treatment of that condition. Among the most commonly prescribed antidepressant medication for treatment were Avanza (mirtazapine), followed by Efexor (venlafaxine), Prozac (fluoxetine) and Zoloft (sertraline) and then smaller amounts reporting Lexapro (escitalopram), Endep (amitriptyline) and Lovan (fluoetine). Forty-seven percent (12% of all participants)

reported receiving prescribed antipsychotic medications for treatment of their mental health issue (65% or 16% of all participants in 2011). The most commonly reported antipsychotic medications for treatment were Seroquel (quetiapine), Zyprexa (olanzapine) and Clopixol (zuclopenthixol). Thirty-two percent (8% of entire sample) reported being prescribed benzodiazepines for mental health issues in the six months prior to interview. For more information on use of benzodiazepines see Section 4.9.1.

6.7.1 Psychological Distress measure

The 10-item Kessler Psychological Distress Scale (K10) (Kessler et al., 2002) was first included in the IDRS in 2007. The K10 is a questionnaire designed to yield a global measure of 'psychological distress' based on questions about the level of anxiety and depressive symptoms experienced in the most recent 4-week period. The normative values for the Australian population, in conjunction with the scoring categories for distress, were available from the 2010 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 2011a). K10 scores were classified in accordance with the following 10 to 15 'low' levels of psychological distress, 16 to 21 as 'moderate' levels of psychological distress, 22 to 29 as 'high' levels of psychological distress, and 30 to 50 as 'very high' levels of psychological distress.

Of those that answered this section (n=148), the mean score was 25.5 (median 25; SD 9.99; range 8-50). As is evident below, IDRS participant scores vastly differed from those reported among the Australian general population, with a larger proportion reporting 'high' and 'very high' distress (Table 21). However, it should be noted that these categories were developed from studies of the general population and the extent to which they would apply to the IDRS sample has not been established.

Table 21: Kessler 10 scores in the 2010 National Drug Strategy Household Survey and NSW PWID participant sample 2009-2012

K10 category	National Drug Strategy Household Survey 2010	IDRS 2009 N=149	IDRS 2010 N=154	IDRS 2011 N=148	**IDRS 2012 N=149**
% reporting no or low distress	70	13	15	16	**13**
% reporting moderate distress	21	22	24	19	**21**
% reporting high distress	7	32	29	28	**28**
% reporting very high distress	2	34	32	37	**38**

Source: PWID participant interviews; (Australian Institute of Health and Welfare, 2008, 2011a)

6.8 Driving risk behaviour

Since 2005, participants have been surveyed on drug driving risk and additional questions were added on driving under the influence (i.e. over the limit) of alcohol in 2006. In 2007, further questions were added relating to the last occasion in which drug driving occurred, specifically, the drug that was taken, along with the waiting time before driving, as well as perceived driving ability while under the influence of illicit drugs. A question was also added in 2007, in light of legislation in NSW that allows NSW Police to conduct random roadside tests for driving under the influence of illicit drugs.

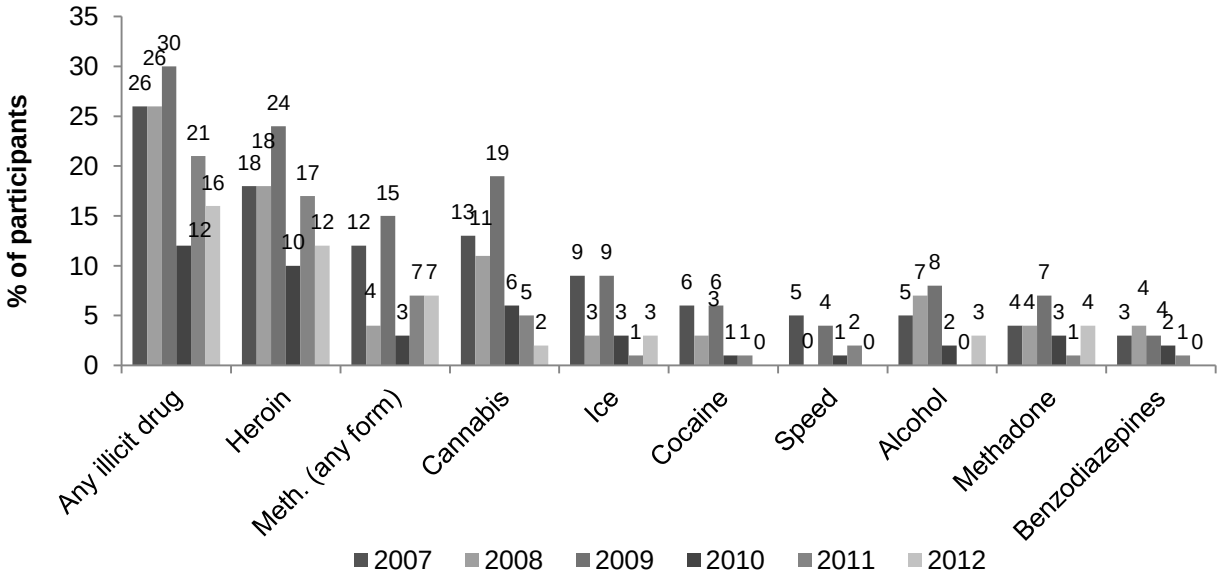
6.8.1 Driving and Alcohol

Twenty-three percent of the sample (n=35) had driven a motor vehicle in the six months preceding interview and, of these, 14% (3% of the entire sample) had driven under the influence of *any* alcohol. Of those reporting driving under the influence no participants reported that they believed they had driven while they were over the legal limit[13] of alcohol on a median of three occasions.

6.8.2 Driving and illicit drugs

Of those who had driven a car in the past six months, 69% (16% of the entire sample) had driven 'soon' after taking (an) illicit drug(s). As shown in Figure 93, heroin remained the drug nominated most by participants (75% of those who had driven under the influence of drugs, 12% of the entire sample); followed by ice/crystal (17%; 3% of the entire sample), and cannabis (13%, 2% of entire sample).

Figure 93: Driving under the influence among the entire PWID sample, by drug type, 2007-2012



Source: IDRS PWID interviews

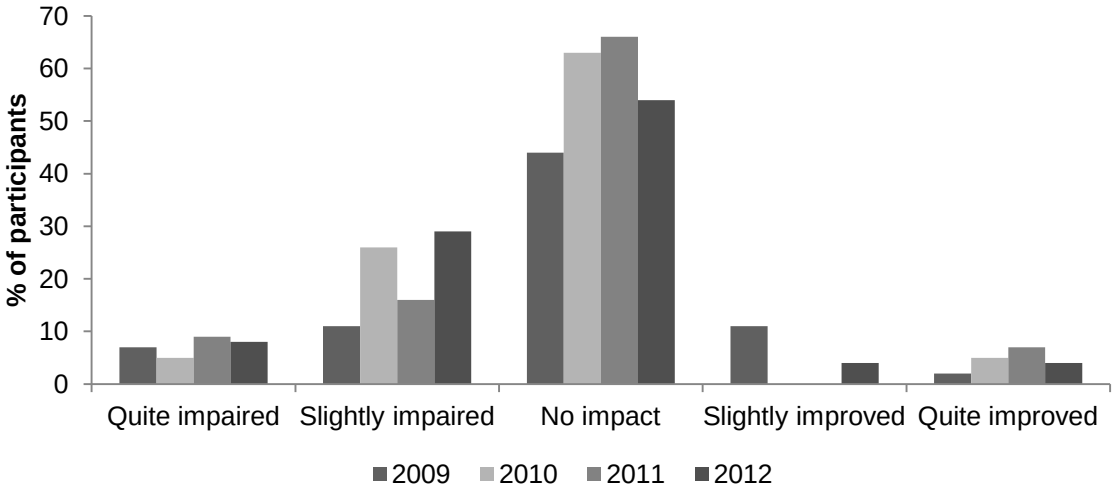
Again in 2012, participants that reported driving while under the influence of drugs other than alcohol, were also asked about the last occasion on which that occurred, what specific drug had they taken, and on average how much time they left between taking the drug(s) and driving. Results of the 'last drug taken' closely resembled trends observed in Figure 93, heroin was the drug reported by the majority of participants (75%; 12% of all participants) who had driven under the influence of illicit drug(s) in the six months prior to interview. Heroin was followed by methadone (25%, 4% of all participants), ice/crystal (17%, 3% of all participants), then cannabis, oxycodone and morphine (13% each; 2% of all participants). Participants waited an average of 66 minutes after taking drug(s) and then driving (30 minutes in 2011). Seventeen percent (4%

[13] Note that these figures are based on self-report, and should be interpreted with caution.

of the entire sample) of participants responded that they usually waited 5 minutes or less after taking illicit drug(s) and driving a motor vehicle.

Perceived driving ability (i.e. level of impairment) was asked about on the last occasion in which driving under the influence of illicit drug(s) had occurred. The majority of participants reported that they perceived there was no impact from the drug(s) on their driving (54% of those who drove under the influence of illicit drugs, 9% of all participants); 29% percent (5% of all participants) reported that they believed their driving was 'slightly impaired', 8% (1% of entire sample) commented that their driving was 'quite impaired' and one participant each commented that driving ability was 'slightly improved' or 'quite improved' (Figure 94).

Figure 94: Perceived driving ability (i.e. level of impairment) of PWID participants under the influence, 2009-2012



Source: IDRS PWID interviews

December 2006, saw the introduction of legislation that allowed NSW Police the power to conduct roadside drug (driving) testing (RDT). The drugs that can be detected by the saliva sample include delta-9-tetrahydro-cannabinol (THC), the active component of cannabis, methamphetamine ('ice', 'speed', 'base' etc.) and methylene-dioxymethylamphetamine (MDMA or 'ecstasy'). It is also considered an offence to drive with the presence of cocaine or morphine (heroin) in blood or urine (unless prescribed). Penalties for positive results of driving under the influence of these illicit drugs include gaol sentences of up to nine months, unlimited licence suspensions and fines of $2,200.

Participants were asked if they had been roadside drug tested and of the result. Three percent of the sample reported ever being subject to a roadside drug test and only 2% of the entire sample reported being subject to test in the 6 months prior to interview. Of those ever subject to a test less than one-half (50%; 1% of the entire sample) ever reported a positive result. No participants reported being arrested for driving under the influence of drugs other than alcohol in the past 12 months.

6.15.1 Key expert comments

The most reoccurring themes in relation to health-related trends among KE were:

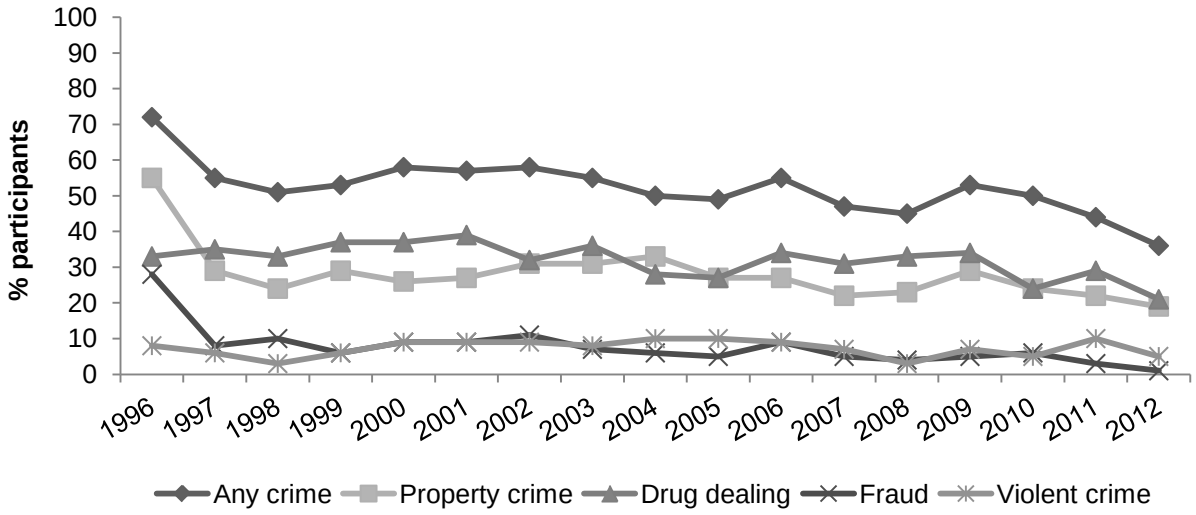
- mental health issues continue to be a major problem for PWID and there was ongoing issues engaging and referring clients into mental health (MH) services;
- dental health and stable housing remained ongoing areas of health concern for this population;
- ongoing issues with long waiting lists and bureaucratic hurdles for accessing OST, particularly MMT;
- access to HCV treatment has become more available, as well as health promotion within services appearing more effective;
- increased levels of chronic pain maybe be associated in part to ageing population of PWID;
- poor vein care, in part due to increased injection of pharmaceutical opioids designed for oral consumption, is leading to increased difficulty in finding veins, as well as increased rates of infection;
- although the use of pill filters is increasing, it is still quite low, and this leads to many associated problems such as emphysema and abscesses;
- polydrug use, particularly the use of benzodiazepines with opioids and/or alcohol was a recurring issue in the management of overdoses; and
- non-fatal overdoses remained low and stable

7 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH DRUG USE

7.1 Reports of criminal activity among PWID

Thirty-six percent of participants reported engaging in any form of crime in the month prior to interview (50% in 2011). Though this decrease did not reach statistical significance, the proportion of the sample reporting any crime in the month prior to interview appears to be trending downwards from the 45-50% reported each year for the past decade (Figure 95). The two most commonly reported crimes were, as in previous years, drug dealing and property crime (21% and 19% of the entire sample respectively). Five percent of PWID participants reported engaging in violent crime (10% in 2011) and 1% reported fraud (3% in 2011).

Figure 95: Proportion of participants reporting engagement in criminal activity in the last month by offence type, 1996-2012



Source: IDRS PWID interviews

The percentage of PWID participants that reported being arrested in the previous twelve months remained relatively stable at 36% of the entire sample (37% in 2011) (Table 22). The most commonly cited reasons for arrest in the last 12 months were property crime (13%; 14% in 2011) and possession/use of a prohibited drug (11%; 15% in 2011). Reported arrests for reasons pertaining to violent crime (includes assault, violence in a robbery, armed robbery, sexual assault) remain stable (5%; 4% in 2011). Small proportions reported having been arrested for drug dealing/trafficking (2%), or use/possession of weapons (1%).

Table 22: Criminal activity as reported by PWID participants, 2006-2012

Criminal and police activity	2006 N=152	2007 N=153	2008 N=151	2009 N=152	2010 N=154	2011 N=150	**2012 N=151**
Criminal activity in last month (%)							
Dealing	34	31	33	34	24	29	**21**
Property crime	27	22	23	29	24	22	**19**
Fraud	9	5	4	5	6	3	**1**
Violent crime	9	7	3	7	5	10	**5**
Any crime (%)	55	46	45	53	50	50	**36**
Arrested in last 12 months (%)	39	41	36	42	44	37	**36**

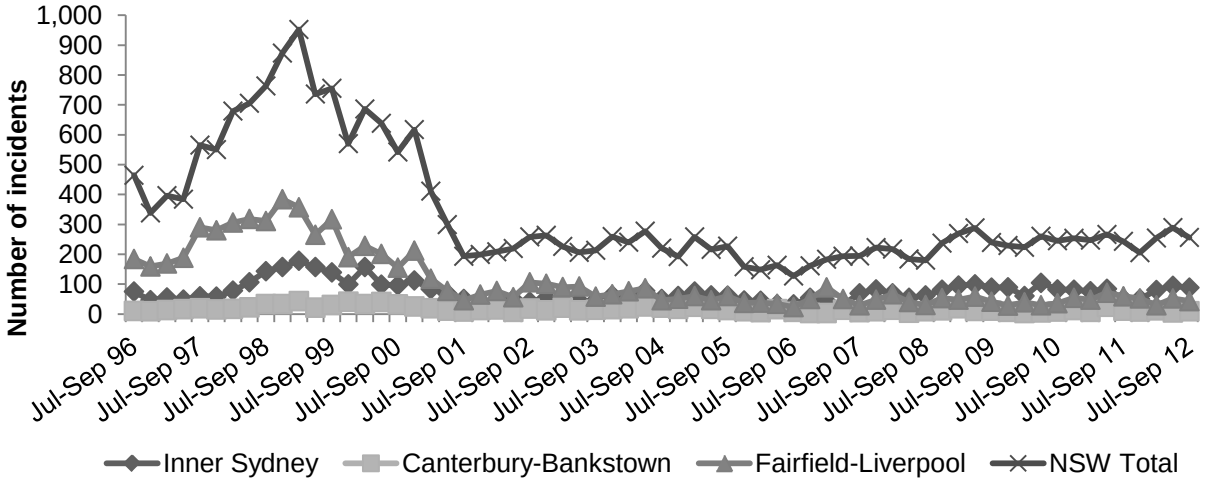
Source: IDRS PWID interviews

7.2 Arrests

7.2.1 Heroin

Figure 96 illustrates the number of police recorded criminal incidents for narcotics (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 1996-September 2012[14]. As can be seen below, the numbers of incidents declined throughout 2001 and have remained relatively stable at lower levels since that time. Since the April-June quarter 2010, the number of incidents across all areas has remained relatively stable (Figure 96).

Figure 96: Recorded incidents of narcotic possession/use by geographic area per quarter, July 1996-September 2012



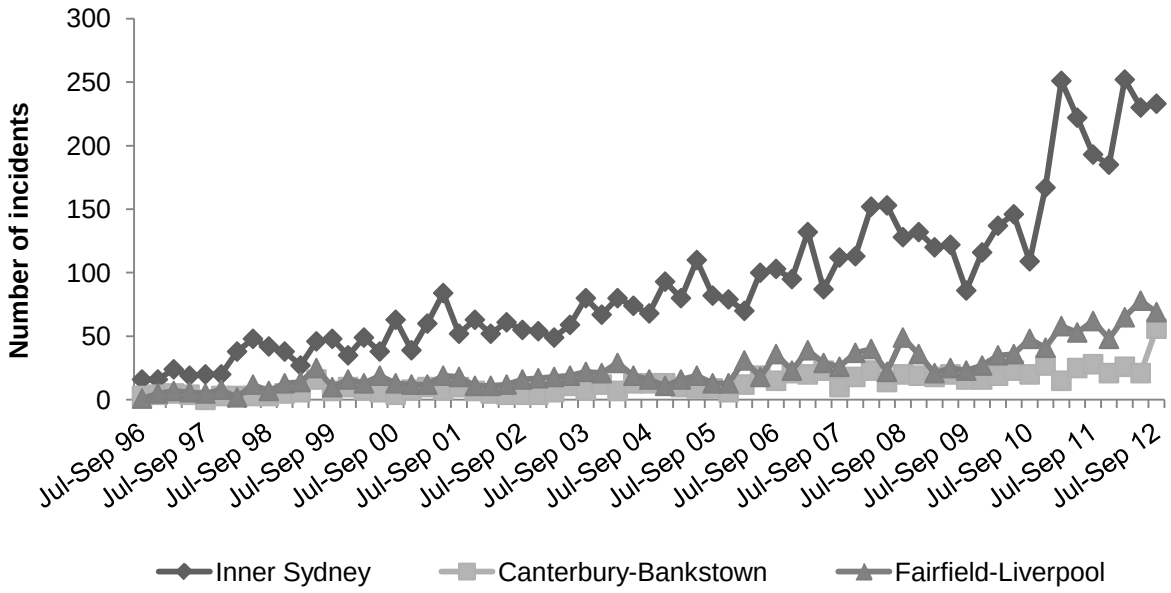
Source: NSW Bureau of Crime Statistics and Research (unpublished data accessed through the Crime Trends Tool at http://bocd.lawlink.nsw.gov.au/bocd/cmd/crimetrends/Init accessed 12th February 2013)
NB: Changes in the number of recorded incidents may be indicative of changes in police activity, or an increase in possession/use, or a reflection of both

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

7.2.2 Methamphetamine

Figure 97 shows the number of criminal incidents per quarter for amphetamine possession/use across Sydney. Recorded incidents in the Canterbury-Bankstown area continued to remain relatively stable overall before seeing a twofold increase in the final recorded quarter (56 in July-September 2012 versus 21 in April-June 2012). Across NSW and the areas of Inner Sydney and Fairfield-Liverpool there was a notable increase in police incidents.

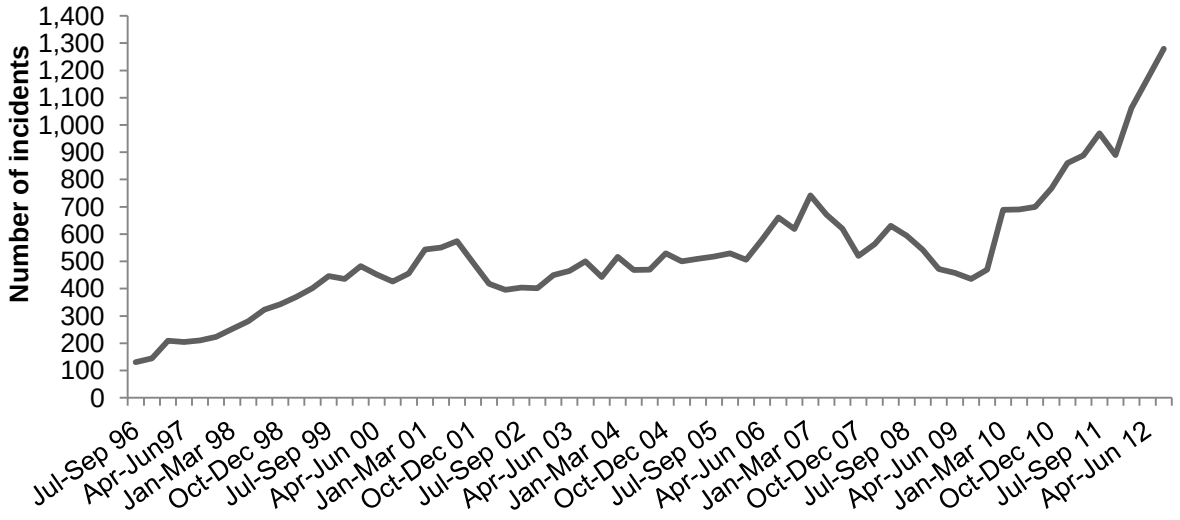
Figure 97: Recorded incidents of amphetamine possession/use by geographic area per quarter, July 1996-September 2012



Source: 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 accessed 12th February 2013
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

State-wide there has been an overall upward trend in police record incidents of amphetamine possession/use since 1996. This trend has continued with the 12 months to September 2012 recording the highest number of incidents since recording began in 1996 (Figure 98).

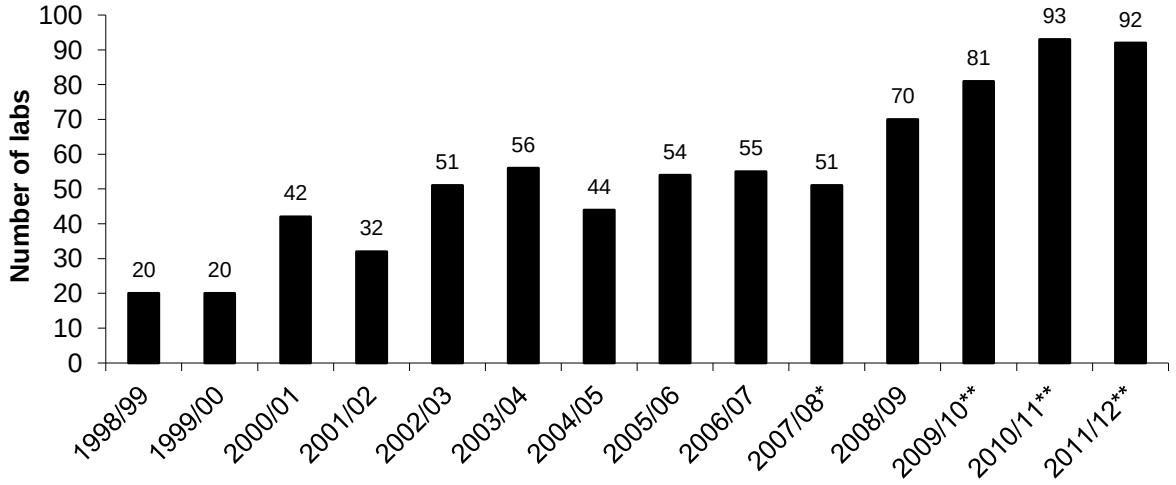
Figure 98: Recorded incidents of amphetamine possession/use (whole of NSW) per quarter, July 1996-September 2012



Source: 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 accessed 12th February 2013
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

In 2011/12, there were 92 detections of clandestine laboratories detected in NSW, of which approximately half were storage sites, one-quarter where inactive and the remainder were a combination of active or historical storage sites (Figure 99).

Figure 99: Number of clandestine methamphetamine and MDMA laboratories detected by NSW Police, 1998/99-2011/12

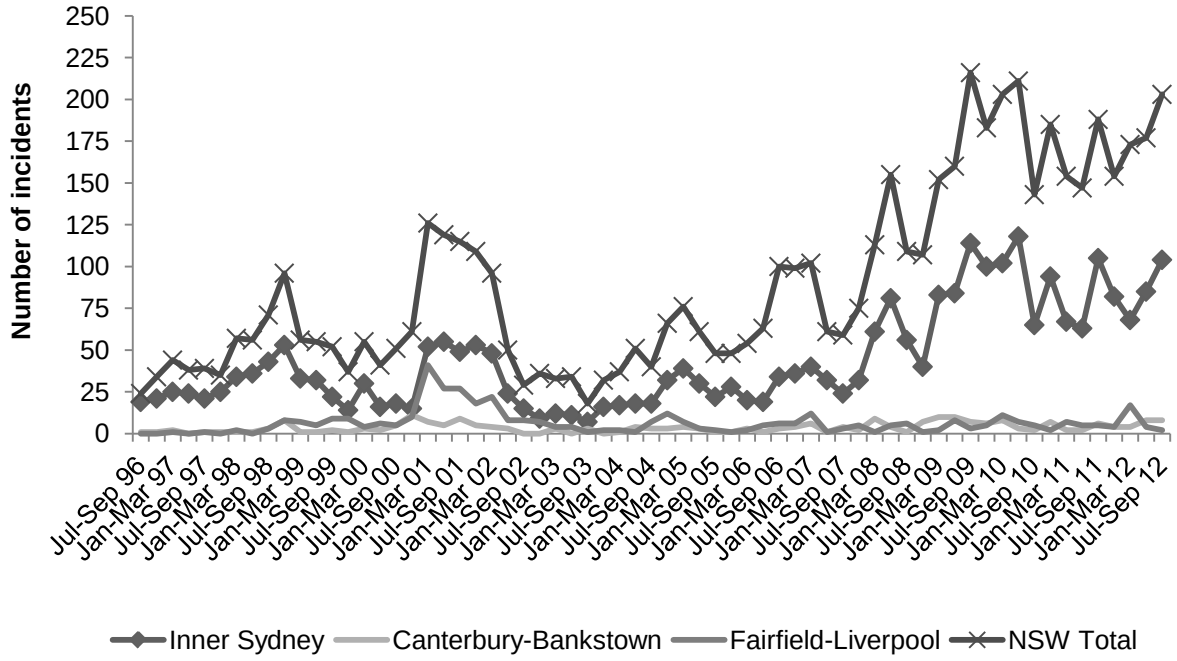


Source: NSW Police
* Includes 2 para-methoxyamphetamine (PMA) laboratories
**Includes 1 PMA laboratories
NB: data may include active, non-active and historical laboratories as well as storage sites

7.2.3 Cocaine

Figure 100 shows the number of police recorded criminal incidents for cocaine possession/use in Inner Sydney, Fairfield-Liverpool, Canterbury-Bankstown and NSW as a whole. Incidents of cocaine possession/use recorded in the Inner Sydney area peaked in 1998, 2001 and 2010. Levels have remained higher in Inner Sydney than in the South-West areas of Fairfield-Liverpool and Canterbury-Bankstown. The April-June quarter of 2010 had the highest number of incidents recorded in Inner Sydney since data started being collected in 1996/97 and trends have remained relatively stable over the 12 months to September 2012.

Figure 100: Recorded incidents of cocaine possession/use by geographic area per quarter, July 1996-September 2012

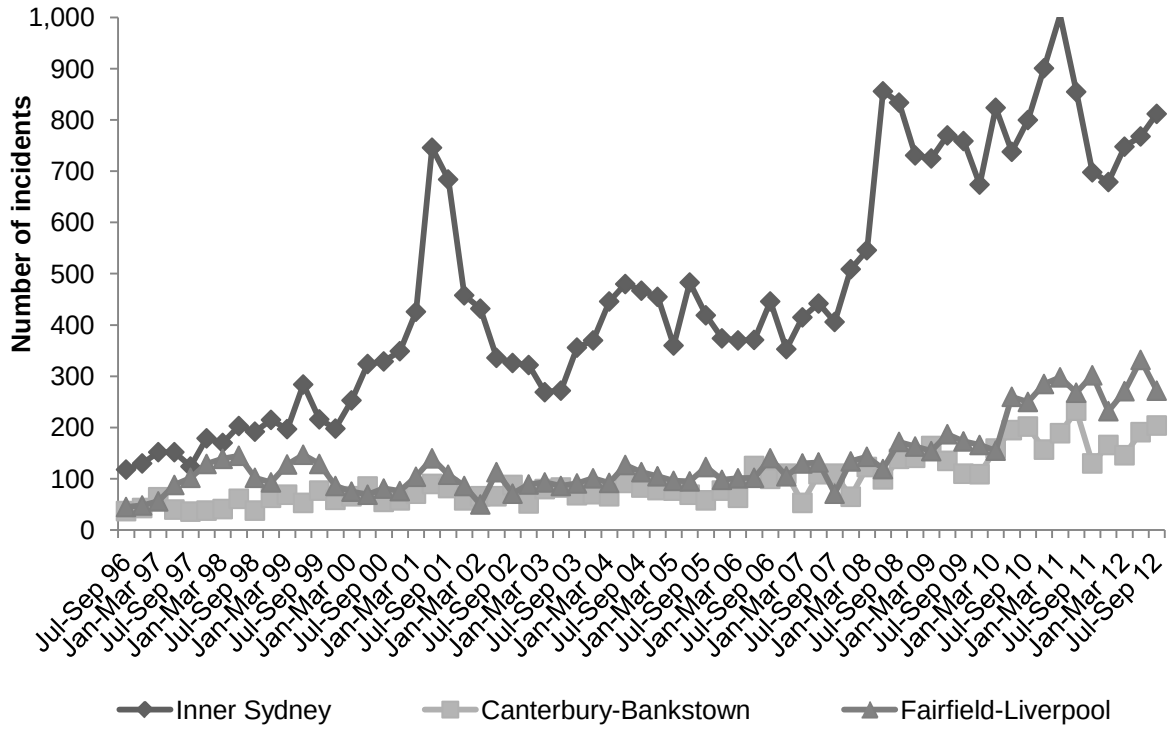


Source: NSW Bureau of Crime Statistics and Research (unpublished data accessed through the Crime Trends Tool at http://bocd.lawlink.nsw.gov.au/bocd/cmd/crimetrends/Init accessed 12th February 2013)
NB: Changes in the number of recorded incidents may be indicative of changes in police activity, or an increase in possession/use, or a reflection of both

7.2.4 Cannabis

Figure 101 shows the number of police recorded criminal incidents of cannabis possession/use per quarter in the Inner Sydney, Fairfield-Liverpool and Canterbury-Bankstown areas. Upward trends continued across Inner Sydney, Fairfield-Liverpool Canterbury-Bankstown areas and NSW overall over the 12 months to September 2012. The numbers of incidents recorded in the Fairfield-Liverpool and Canterbury-Bankstown areas were lower than inner city figures, yet similar to Inner Sydney, there had been an upward trend in the number of incidents. The number of incidents recorded in Fairfield-Liverpool in April-June 2012 (332) was the highest seen for this area since data were first collected in July-September 1996.

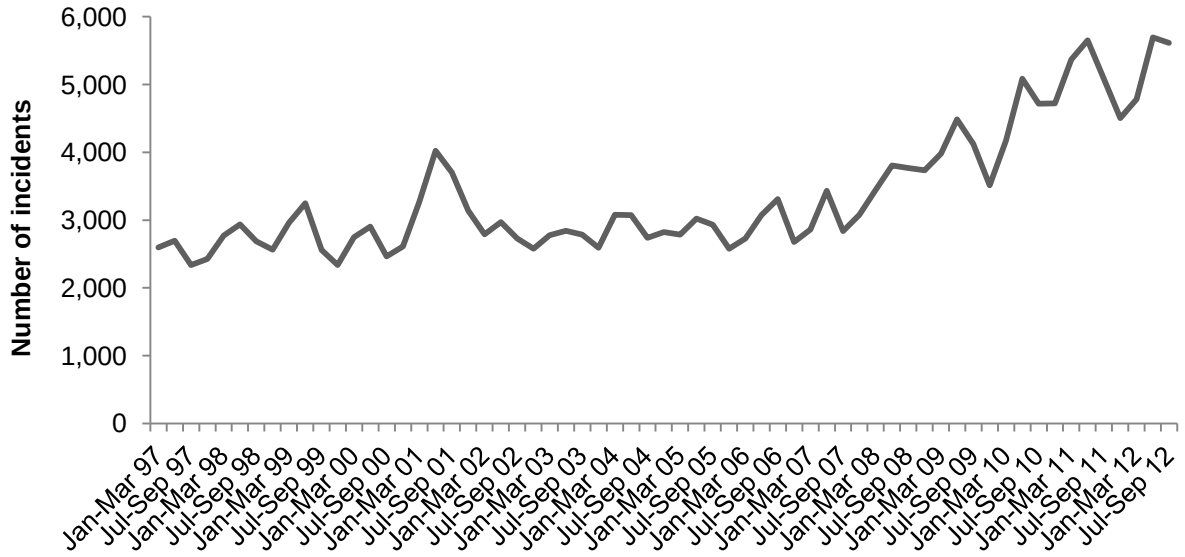
Figure 101: Recorded incidents of cannabis possession/use by geographic area per quarter, July 1996-September 2012



Source: 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 accessed 12th February 2013)
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

In the 12 months to September 2012 there had been an increase in the number of recorded incidents of cannabis possession/use per quarter across NSW (Figure 102). A peak occurred in the second quarter of 2001 (April-June; 4,110 incidents) and for the 12 months to September 2012 incidents had increased to a record number (5,693 April-June 2012).

Figure 102: Recorded incidents of cannabis possession/use (whole of NSW) per quarter, January 1997-September 2012



Source: 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 accessed 12th February 2013)
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

7.3 Expenditure on illicit drugs

Ninety-five percent of participants reported purchasing drugs on the day prior to interview, spending a median of $100 (range $10-$3,000). This remained stable with 2011 (also median of $100; by 95% of participants). Among participants who had bought drugs on the day before interview, 21% had spent between $100-$199, 13% had spent between $200 and $399, 10% between $50-$99, 12% between $20-$49 and only 8% spent less than $20. Only small numbers of participants (6%) reported spending $400 or more on drug purchases on the day prior to interview. One-quarter (28%; 27% of entire sample) of those that reported purchasing drugs on the day prior to interview reported spending nothing ($0) in the transaction.

7.3.1 Key expert comments

The most reoccurring themes in relation to law enforcement-related trends among KE were:

- the increase in clandestine laboratory detections was reflects a coordinated response in detection intelligence from law enforcement rather than reflecting an actual increase in laboratories;
- a decline in the purity of heroin was noted over the 6 months prior to interview, with average purity dropping from 32.59% to 27%;
- purity of detected methamphetamines appeared to be increasing;
- the number of police detainees using ice had increased in the year preceding the interview; and
- after a reduction in detections in 2009, 2011/12 saw a 33% increase in the number of detections for heroin, as well as a slight increase in detections of all types of methamphetamines.

8 SPECIAL TOPICS OF INTEREST

8.1 Fagerstrom test for nicotine dependence

In 2012, participants who smoked daily were asked the Fagerstrom Test for Nicotine Ddependence (FTND). These questions included 'How soon after waking do you smoke your first cigarette?', do you find it difficult to refrain from smoking in places where it is forbidden?, 'Which cigarette would you hate to give up?', 'How many cigarettes a day do you smoke?', Do you smoking more frequently in the morning?' and 'Do you smoke even when you are sick in bed?'.

The FTND gives a score between zero and 10. The responses were then scored on a four category scheme (0,1,2,3) for both time to the first cigarette of the day (≤5, 6-50, 31-60 and 61+ minutes) and average daily consumption of cigarettes (1-10, 11-20, 21-30, 31+ cigarettes). The remaining questions were scored either 0 or 1. The sum of these scores was computed and a cut-off score between 6 and 8 was used to indicate 'high' nicotine dependence. A score of 8 or more was used to indicate 'very high' nicotine dependency (Heatherton, Kozlowski, Frecker, & Fagerstrom, 1991).

As seen in Table 23, nearly half (44%) of the sample who commented reported smoking their first cigarette within five mins of waking and one-third between five to 30 mins of waking. Forty-six percent of daily smokers reported smoking between 11-20 cigarettes a day and 31% smoked 10 or less cigarettes a day.

Thirty-two percent of daily smokers reported that they find it difficult to retrain from smoking in forbidden places such as a library, 68% reported that they would hate to give up the first cigarette in the morning compared to other times of the day. Around half reported smoking more often in the morning and when in bed when sick. The mean FTND score was 5.1 (SD=2.4). Thirty-one percent of the daily smokers scored above 4, 6 and 8 on the FTND indicating 'high' nicotine dependence.

Table 23: Heavy Smoking Index for nicotine dependence, 2011-2012

	2011	2012
Time till first cigarette	n=136	n=134
Within 5 minutes (%)	50	44
5-30 mins (%)	32	34
31-60 mins (%)	11	11
60+ mins (%)	7	10
Number of cigarettes smoked a day	n=136	n=133
10 or less cigarettes (%)	33	31
11-20 cigarettes (%)	38	46
21-30 cigarettes (%)	19	18
31 or more cigarettes (%)	10	5
High Dependence* (%)	49	68
Mean score	3.3	5.1

Source: IDRS participant interviews
* Scored 4 or above

8.2 Alcohol Use Disorders Identification Test-Consumption

Recently a lot of media attention has focused on young people and alcohol. However, there has been less focus on alcohol use amongst people who regularly inject drugs. People who regularly inject drugs are particularly at risk for alcohol related harms due to a high prevalence of the hepatitis C virus (HCV). Half of the participants interviewed in the Australian NSP Survey 2011 (n=2,395) were found to have HCV antibodies (Kirby Institute, May 2011). Given that the consumption of alcohol has been found to exacerbate HCV infection and to increase the risk of both non-fatal and fatal opioid overdose and depressant overdose (Coffin et al., 2007; Darke,

Duflou, & Kaye, 2007; Darke, Ross, & Hall, 1996; Schiff & Ozden, 2004) it is important to monitor risky drinking among PWID.

The information on alcohol consumption currently available in the IDRS includes the prevalence of lifetime and recent use, number of days of use over the preceding six months. Participants in the IDRS were asked the Alcohol Use Disorders Identification Test-Consumption (AUDIT-C) as a valid measure of identifying heavy drinking (Bush, Kivlahan, McDonell, Fihn, & Bradley, 1998). The AUDIT-C is a three item measure, derived from the first three consumption questions in the AUDIT. Dawson et al (Dawson, Grant, Stinson, & Zhou, 2005) reported on the validity of the AUDIT-C finding that it was a good indicator of alcohol dependence, alcohol use disorder and risk drinking.

Among IDRS participants who drank alcohol in the past year, the overall mean score on the AUDIT-C was 5.6 (median=5, range 1-12). No significant differences were found for gender. Males and females scoring similar on the AUDIT-C (5.9 versus 5.1; $p > 0.05$) According to Dawson et al (Dawson et al., 2005) and Haber et al (Haber, Lintzeris, Proude, & Lopatko, 2009) *Guidelines for the Treatment of Alcohol Problems* a cut-off score of five or more indicated that further assessment was required.

Just under half (49%) of the participants who drank in the past year scored 5 or over on the AUDIT-C. Fifty-seven percent of males and 43% females scored 5 or more indicating the need for further assessment (Table 24).

Table 24: AUDIT-C among people who injected drugs and drank alcohol in the past six months, 2012

	2012
Mean AUDIT-C score SD (range)	5.18 3.2 (0-12)
Score of 5 or more* (%)	49
All participants (%)	29
Males (%, n=51)	57
Females (%, n=39)	43

Source: IDRS participant interviews
*Among those who drank alcohol in the past year

8.3 Brief pain inventory

In 2012, the Brief Pain Inventory (BPI) was applied to examine the association between injecting drug use and the legitimate therapeutic goals of pharmaceutical opioids (e.g. pain management). Comparisons been PWID and the general population, both in Australia and internationally have consistently shown excess mortality and morbidity (English et al., 1995; Hulse, English, Milne, & Holman, 1999; Vlahov et al., 2004)yet there is no current evidence in Australia on the characteristics or the extent to which PWID obtain pharmaceutical opioids (licitly or illicitly) for the management of chronic non-malignant pain. Furthermore, there is growing evidence that prescribers are often reluctant to prescribe pharmaceutical opioids to people with a history of injecting drug use (Baldacchino, Gilchrist, Fleming, & Bannister, 2010). This module seeks to examine the complex interplay among PWID, pain management and the extra-medical use of pharmaceutical opioids (PO) among a sample of PWID and specifically address the issue of access to, and distribution of, PO by PWID.

The BPI is a tool used for the assessment of pain in both clinical and research settings. The BPI uses rating scales from 0 to10. For questions 3 to 6, 0 is ‘no pain’ and 10 is ‘pain as bad as you can imagine’. The mean of questions 3 to 6 is then calculated to make the ‘pain severity score’. For questions 9A to 9G, 0 is ‘Does not Interfere’ and 10 is ‘Completely Interferes’. The mean of

questions 9A to 9G is then calculated to make the 'pain interference score'. The 'pain interference score' looks at how much pain interferes with daily activities: general activity, mood, walking, normal work, relations, sleep and enjoyment of life.

In Table 25, forty-one percent (N=62) of the sample experienced pain (other than everybody pain) on the day of interview. Of those who experienced pain, the majority (67%) reported the pain as chronic non-cancer pain (continuous pain which lasts for more than three months), while 15% reported acute pain and 13% chronic cancer/malignant pain. The mean 'pain severity score' was 4.7 (SD 2.1; range 0-10). The mean 'pain interference score' was 5.1 (SD 2.9; range 0-10) (Table 25).

Participants were also asked on a scale of 0 to 10 (0=no relief, 10=complete relief) how much relief they experienced from any treatments/medications they received. Of those who received treatment/medication for pain (n=48), a mean score of 4.3 (SD 3.4; range 0-10) was reported.

Participants were then asked if they had any trouble obtaining sufficient pain relief from a doctor or specialist. Of those who experienced pain, around half (52%) reported trouble obtaining pain relief from a doctor or specialist in the last six months. Participants were also asked if they informed the doctor or specialist about their drug use when requesting pain relief in the last six months. Of those who commented (n=55), 29% report 'no', 40% report 'yes', 18% reported 'yes, but not all use' and 13% reported that the 'doctor already knew' (Table 25).

Table 25: Brief Pain Inventory (BPI) among PWID who commented, 2012

	2012
Experience pain today (other than everyday pain; %)	41
Nature of pain	N=62
Acute/short term pain (%)	15
Chronic non-cancer pain (%)	67
Chronic cancer/malignant pain (%)	13
Other (%)	5
Mean 'Pain Severity' score	4.7
Mean relief experience from treatment/medications*	4.3
Mean 'Pain Interference' score	5.1
Told doctor about drug use when requested pain relief	N=55
No (%)	29
Yes (%)	40
Yes, but not all use (%)	18
Doctor already knew (%)	13

Source: IDRS Injecting drug user interviews
* Among those who received treatment/medication for pain and commented

8.4 Pharmaceutical opioids

Since the heroin shortage (2001) the Illicit Drugs Reporting System (IDRS) has noted an increase in the use and injection of morphine and oxycodone. Over the same period the age of people who inject drugs (PWID) has also increased. The Australian Needle Syringe Program (NSP) survey (Kirby Institute, May 2011) noted similar findings over the same period. We know from a number of Australian and international studies that PWID experience excess morbidity and mortality when compared to those in the general population (English et al., 1995; Hulse et al., 1999; Randall et al., 2011; Vlahov et al., 2004) and that prescribers are often reluctant to prescribe opioid analgesics to people with a history of injecting drug use(Baldacchino et al., 2010; Merrill & Rhodes, 2002). This section aims to examine the complex interplay among PWID, pain management and the extra-medical use of pharmaceutical opioids (PO).

In 2012, participants in the IDRS were asking questions about the use of PO and pain. Pharmaceutical opioids included methadone, buprenorphine, buprenorphine-naloxone, morphine, oxycodone, and other PO such as fentanyl, pethidine and tramadol. Seventy-eight percent reported the use of PO in the last six months (Table 26), a statistically significant increase from the 46% reporting previous use in 2011. Among those who recently used PO (n=118), 41% reported using them to treat self-dependence for pain relief, 32% for pain relief, 16% because they were cheaper than heroin, 14% because they were seeking an opioid effect and 12% because they couldn't score heroin. Oxycontin (oxycontin) was listed as the PO of choice by 40% of those that commented, followed by Methadone/Biodone (30%), MS Contin (morphine; 13%), with fewer participants listing Suboxone (buprenorphine/naloxone; 7%), Subutex (buprenorphine; 5%) and Fentanyl (2%). Only one participant nominated Dilaudid as his or her PO of choice. Participants were asked if they were refused PO medications for pain due to injecting history. Of those who commented 24% reported 'yes' and 32% 'hadn't sought pain relief' (Table 26).

Table 26: Pharmaceutical opioid use among people who inject drugs, 2012

	NSW 2012
Used pharmaceutical opioids in the last 6 months (%)	78
Reason for using pharmaceutical opioids*	N=118
Treat self-dependence (%)	41
Seek an opioid effect (%)	14
Pain relief (%)	32
Know what dose to expect (%)	7
Cheaper than heroin (%)	16
Current heroin purity (%)	9
Couldn't score heroin (%)	12
Safer than heroin (%)	11
Pharmaceutical opioid of choice*	N=116
Oxycontin (oxycodone) (%)	40
Methadone/Biodone (%)	30
MS Contin (morphine) (%)	13
Suboxone (buprenorphine/naloxone) (%)	7
Subutex (buprenorphine) (%)	5
Fentanyl (%)	2
Dilaudid (%)	1
Refused pharmaceutical opioids medications for pain due to injecting history	N=115
Yes (%)	24
Haven't sought pain relief (%)	32
No, concealed injecting history (%)	8
Prescribed pharmaceutical opioids[#]	N=79
For pain last six months (%)	43
Sourced information about filtering[##]	N=76
Haven't obtained any information (%)	39
NSP (%)	20
MSIC (%)	28
Friends (%)	7
Other (%)	6

Source: IDRS participant interviews
* Among those who recently used. Multiple responses were allowed
[#] Among those who sought pain relief
[##] Among those who recently injected a pharmaceutical opioids

8.5 Opioid and stimulant dependence

Understanding whether participants are dependent is an important predictor of harm, and typically demonstrates stronger relationships than simple frequency of use measures.

In 2012, the participants in the IDRS were asked questions from the Severity of Dependence Scale (SDS) for the use of stimulants and opioids.

The SDS is a five-item questionnaire designed to measure the degree of dependence on a variety of drugs. The SDS focuses on the psychological aspects of dependence, including impaired control of drug use, and preoccupation with and anxiety about use. The SDS appears to be a reliable measure of the dependence construct. It has demonstrated good psychometric properties with heroin, cocaine, amphetamine, and methadone maintenance patients across five samples in Sydney and London (Dawe, Loxton, Hides, Kavanagh, & Mattick, 2002).

Previous research has suggested that a cut-off of four is indicative of dependence for methamphetamine users (Topp & Mattick, 1997) and a cut-off value of three for cocaine (Kaye & Darke, 2002). No validated cut-off for opioid dependence exists; however, researchers typically use a cut-off value of 5 for the presence of dependence.

Of those who had recently used an opioid and commented (n=147), the median SDS score was 8 (mean 8.3, range 0-15), with 76% scoring five or above. There were no significant differences regarding gender and mean opioid SDS score, nor regarding gender and those who scored five or above. Of those who scored five or above (n=114), 79% reported specifically attributing responses to heroin, 6% morphine, 24% methadone, 8% buprenorphine and 6% oxycodone.

Of those who had recently used a stimulant and commented (n=104), the median SDS score was 3 (mean 4.2; range 0-15), with 48% scoring four or above. There were no significant differences regarding gender and mean stimulant SDS score, nor regarding gender and those who scored four or above. Of those who scored four or above (n=50), 65% reported specifically attributing responses to methamphetamines, 40% cocaine and 4% pharmaceutical stimulants.

8.6 Opioid substitution therapy (OST) medication injection

Due to the introduction of buprenorphine-naloxone film in 2011, questions were included in the 2012 IDRS survey asking about the recent injection of opioid substitution treatment (OST) medications (methadone, buprenorphine and buprenorphine-naloxone). Table 27 presents data from these findings.

Of the entire sample, 19% of participants reported recently injecting methadone, 8% reported recently injecting buprenorphine, 2% buprenorphine-naloxone 'tablet' and 1% buprenorphine-naloxone 'film'.

Please refer to Larance and colleagues for further information on OST medication injection (Larance et al., in preparation).

8.7 Injection-related injuries and diseases

People who inject drugs (PWID) are exposed to a broad range of potential harms including (but not limited to) bacterial infections, soft tissue damage and vascular injury. Research conducted with PWID has identified high levels of experience of such injuries (Dwyer et al., 2007).

Previous IDRS surveys have asked a limited set of questions regarding harms experienced from injecting. The aim of these questions is to gather greater detail of experience of these harms and identify individual risk factors significant for injection related injuries and diseases. Results can be compared with findings from the Injection-Related Injuries and Diseases (IRID) project (Dwyer et al., 2007).

In 2012, IDRS participants were asked if they had ever and recently (in the last six months) experienced any injection-related injuries or diseases (IRID) from the list used in the IRID project (Dwyer et al., 2007). Table 28 below lists the IRIDs ever and recently experienced in the last six months by participants in the IDRS survey and also those from the IRDI project. It should be noted that recent use in the IRDI project is in the last 12 months. For example, of those who commented in the IDRSD project (N=145), nearly half (44%) reported in their lifetime and 35% reported recently experiencing redness near the injection site. This compared to 42.2% (ever) and 28.3% (recently) in the IRID project. While most of the results were similar some differences were noted (Table 28).

Table 27: Self-reported injection-related injuries and diseases ever experienced and recently* from injection, 2012

Problems experienced from injecting (%)	The IRID Project (N=393)		NSW IDRS Participants (N=145)	
	Ever	Last 12 months*	Ever	Last 6 months*
Non-serious IRIDs				
Redness near injecting site (%)	42.2	28.3	44.1	34.8
Swelling near injecting site (%)	45.0	30.9	50.0	35.9
Raised red area (%)	56.0	41.3	47.2	37.2
Dirty hit (%)	67.9	35.4	48.3	9.0
Hit an artery when injecting (%)	21.9	9.4	27.8	15.2
Numbness/Pins and Needles (%)	19.3	12.4	33.8	28.3
Collapsed/blocked veins (%)	47.8	27.0	32.4	22.1
Potentially Serious IRIDS				
Pus-filled lump (%)	16.5	7.0	19.3	9.0
Internal/inside body abscesses (%)	3.0	1.0	9.0	3.4
Red, hot, swollen, tender skin (cellulitis) (%)	14.2	7.0	24.8	13.1
Inflamed veins (thrombophlebitis) (%)	14.2	6.6	33.8	24.1
Swelling leaves a dent (Pitting oedema) (%)	7.4	4.4	29.0	19.3
Puffy Hands Syndrome (lymph oedema) (%)	7.1	3.9	19.3	13.1
Fistula (permanent hole) (%)	n.a.	n.a	11.0	8.3
Injecting sinus (%)	4.8	2.8	n.a	n.a.
Serious IRIDS				
Heart infection (Endocarditis) (%)	3.0	1.0	2.8	2.0
Septicaemia (%)	4.3	1.3	n.a.	n.a.
Septic arthritis (%)	1.0	0.2	n.a.	n.a.
Osteomyelitis (%)	0.5	0.2	n.a.	n.a.
Serious infection (unspecified) (%)	2.3	0.5	n.a.	n.a.
Other serious infection needing stay in hospital and intravenous antibiotics (septic arthritis, osteomyelitis, septicaemia) (%)	n.a	n.a.	16.6	4.8
Deep vein thrombosis (blood clot) (%)	3.3	1.3	4.8	2.1
Gangrene (%)	0.8	0.3	4.8	2.1

Source: IDRS participant interviews, (Dwyer et al., 2007)
*Recently = last six months for the IDRS and the last 12mths for the IRID project (Dwyer et al., 2007);
n.a. = Not applicable

8.8 Neurological history

People with a neurological illness or injury may be at greater risk of experiencing adverse effects associated with drug use. Existing research indicates that there is an association between traumatic brain injury (TBI) and drug use (Corrigan, Bogner, & Holloman, 2012). This may be due to greater exposure to violence, mental illness, poor nutrition and poor sleep among other factors. TBI is a major cause of morbidity and mortality in developed countries (Bruns & Hauser, 2003) and can result in long term physical and cognitive impairments, as well as negatively impact upon psychological wellbeing, social and occupational outcomes (Tait, Anstey, & Butterworth, 2010). The cognitive, emotional and functional impairments associated with drug use could potentially compound those associated with TBI (M. P. Kelly, Johnson, Knoller, Drubach, & Winslow, 1997). In 2012, the IDRS examined the prevalence of selected neurological illnesses and also of TBI among PWID. Table 29 and Table 31 outline the results of this investigation.

Table 28: Incidence of selected neurological conditions among PWID who commented, 2012

	NSW **n=147**
Epilepsy[15] (%)	4
Stroke (%)	3
Hypoxia (%)	1
Traumatic Brain Injury[16] (%)	52

Source: IDRS Injecting drug user interviews

The lifetime prevalence of epilepsy was higher in this group (4%) than the Australian population estimate (0.7%) obtained in the 2007-2008 National Health Survey (Australian Bureau of Statistics, 2009). Data from the same survey estimates the Australian prevalence of cerebrovascular disease (including stroke) as approximately 1.2%, lower than the proportion reported in the current sample (3%). It is difficult to estimate the prevalence of hypoxic brain injury because it can result from a range of different situations (including drowning, carbon monoxide poisoning, heart attack etc.). Nonetheless, the prevalence in this group is reasonably low.

In contrast, a substantial proportion of the group (52%) reported a lifetime history of TBI[17]. In a recent study, Perkes et al. (2011) estimated the lifetime prevalence of TBI with loss of consciousness (LOC) as 35% among a community sample of males in Australia. Similarly, a cohort study conducted in Christchurch, New Zealand demonstrated that approximately 32% of the community sample had experienced at least a mild-traumatic brain injury by 25 years of age. Both of these prevalence estimates are lower than that recorded in our sample. However, caution should be used when directly comparing these figures due to differences in sampling techniques and data collection.

[15] National prevalence approximately 6.4 per 1,000 people (i.e. 0.6%) in 2001 (Australian Bureau of Statistics, 2001)

[16] Population prevalence rates usually between approximately 01. and 0.4% (Bruns & Hauser, 2003)

[17] TBI was measured as a knock on the head resulting in loss of consciousness.

Table 29: Traumatic Brain Injury (TBI) among PWID, 2012

	N=77
Median No. of TBIs (range)	2 (1-50)
Median LOC* (mins)	3
Most severe LOC – median age Years,range)	24 (3-54)
For most severe TBI: Under influence of alcohol (%) Under influence of drugs (%)	 19 26
Main drug: Heroin (%) Methadone (%) Benzodiazepines (%) Morphine (%) Speed (%) Ice/crystal (%) Other (%)	N=19 53 5 11 5 0 11 15

Source: IDRS Injecting drug user interviews
* LOC = Loss of consciousness.

Multiple TBIs were the norm with the median number of TBI experienced over the lifetime equalling 2 (range 1-50). Participants were asked further details about the most severe occasion. The vast majority of participants who had experienced a TBI reported that the LOC on the most severe occasion lasted only a few minutes (consistent with a mild injury). However, a reasonable proportion (27%) of this group reported a LOC of greater than half an hour. The most severe TBI had usually occurred during the mid-twenties at a median of 24 years of age (range: 3-54). Approximately one-fifth of the group were under the influence of alcohol (19%) at the time of the injury and around a quarter (26%) were under the influence of at least one drug (mainly heroin) (Table 30).

Some people experience neuropsychological sequelae (symptoms such as cognitive, motor and behavioural changes) following a TBI which can complicate recovery. A large proportion of the group (68%) reported having experienced neurological sequelae immediately following the injury. The most common complaints were poor concentration (62%), memory loss (56%) and poor coordination/balance (54%). Ongoing complaints were less common (43% of those that had a TBI, N=33). Participants who had experienced ongoing issues complained mostly of ongoing memory loss (73% of those reporting ongoing issues), ongoing mood changes (70%), ongoing word finding problems while speaking (58%), ongoing poor concentration (55%), ongoing problems with coordination and balance (48%) and ongoing personality change (39%).

Table 30: Effects of Traumatic Brain Injury (TBI) among PWID, 2012

	N=75
Experienced any effects* following the injury (%)	72
Experienced at the time (%):	N=54
Functional weakness	37
Poor concentration	62
Memory loss	56
Word finding problems	54
Poor coordination/balance	50
Personality change	33
Mood changes/Anxiety issues	52

Source: IDRS participant interviews
* Neurological, cognitive, behavioural or psychiatric effects.

8.9 Possession laws

Drug trafficking thresholds are used throughout every state and territory in Australia and often reverse the onus of proof onto users who exceed the nominated threshold quantity to prove they do not possess drugs for the purpose of trafficking. For the first time in 2012, participants in the IDRS were asked a number of questions relating to drug trafficking thresholds/possession laws. The aim of these questions was to find out whether regular users were aware of the existence of drug trafficking thresholds.

Participants were firstly asking a hypothetical scenario, 'Imagine you are caught by police and have drugs on you, do you think the *quantity* of drugs will affect the type of charge you will get?'. Those participants who responded 'yes' were then asked 'what *quantity* would you need to possess to be charged with *sell or supply* (as opposed to possession for personal use), for heroin, methamphetamine, MDMA, cocaine and cannabis?'.

Eighty-three (83%) of the sample believed the quantity of drugs caught with would affect the type of charge received. Of those who believed the quantity would affect the type of charge received and commented, the median number of points required for heroin and methamphetamine was two and three, respectively (Table 32). The median number of grams for heroin and methamphetamine was one, while the median for cocaine and cannabis was 1.6 and 3, respectively. The median number of grams for MDMA was 1.6, though this was reported by fewer than ten participants and thus this result should be interpreted with caution. The median number of MDMA pills was five and the median number of cannabis ounces was one.

Table 31: Drug trafficking thresholds among PWID, 2012

	Points	Grams	Pills	Ounces
Heroin	2	1	n.a.	n.a.
Methamphetamine	3	1	n.a.	n.a.
MDMA	n.a.	1.6^	5	n.a.
Cocaine	n.a.	1.1	n.a.	n.a.
Cannabis	n.a.	3	n.a.	1

Source: IDRS participant interviews
NB: Heroin point n=27, grams n=61; methamphetamine points n=20, grams n=33; MDMA pills n=21, grams n=4; cocaine grams n=48; cannabis grams n=39, ounces n=35
n.a. = Not applicable
^ small numbers reporting (n<10), results should be interpreted with caution

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