C. Rainsford and S. Lenton

WA DRUG TRENDS 2010
Findings from the Illicit Drug Reporting System (IDRS)

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2010

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Abbreviations

ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ACS	Australian Customs Service
ADHD	Attention deficit hyperactivity disorder
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
ATS	Amphetamine-type stimulant
ATSI	Aboriginal or Torres Strait Islander
AUDIT	Alcohol Use Disorders Identification Test
BBVI	Blood-borne viral infections
BMI	Body mass index
CI	Confidence interval
CIDI	Composite International Diagnostic Interview
EDRS	Ecstasy and related Drugs Reporting System
GP	General Practitioner(s)
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HDWA	Health Department of Western Australia
HIV	Human immunodeficiency virus
IDRS	Illicit Drug Reporting System
IDU	Injecting drug user(s)
K10	Kessler Psychological Distress Scale
KE	Key expert(s)
NCHECR	National Centre in HIV Epidemiology and Clinical Research
NCIS	National Coronial Information System
NDARC	National Drug and Alcohol Research Centre
NDSHS	National Drug Strategy Household Survey
NNDSS	National Notifiable Diseases Surveillance System
NSP	Needle and syringe program(s)
NSW	New South Wales
OCD	Obsessive compulsive disorder
OTC	Over the counter
PDI	Party Drugs Initiative
PTSD	Post Traumatic Stress Disorder
PWI	Personal Wellbeing Index
ROA	Route of administration
SD	Standard deviation
SDS	Severity of Dependence Scale
STI	Sexually transmitted infection(s)

WA	Western Australia
WAPS	Western Australian Police Service
WHO	World Health Organization

GLOSSARY OF TERMS

Cap	Small amount, typically enough for one injection
Compared	Not statistically significant (p=>0.05)
Half weight	0.5 gram
Illicit	Illicit 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
Indicator data	Sources of secondary data used in the IDRS (see Method section for further details)
Injecting Drug User(s)	Also referred to as IDU. In the context of the IDRS, refers to persons participating in the IDU Survey component of the IDRS (see Method section for further details)
Key expert(s)	Also referred to as KE; persons participating in the Key Expert Survey component of the IDRS (see Method section for further details)
Licit	Licit 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
Participant	In the context of this report, refers to persons who participated in the IDU survey (does not refer to KE participants unless stated otherwise)
Point	0.1 gram although may also be used as a term referring to an amount for one injection (similar to a 'cap'; see above)
Recent injection	Injection (typically intravenous) in the six months preceding interview
Recent use	Use in the six months preceding interview via one or more of the following routes of administration: injecting, smoking, snorting and/or swallowing
Use	Use via one or more of the following routes of administration: injecting, smoking, snorting and/or swallowing

Guide to days of use/injection

180 days	daily use/injection* over preceding six months
90 days	use/injection* every second day
24 days	weekly use/injection*
12 days	fortnightly use/injection*
6 days	monthly use/injection*

*as appropriate

EXECUTIVE SUMMARY

Common terms used throughout the report

Regular IDU: 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: The number of occurrences within a given time period

Demographic characteristics of injecting drug user participants

Demographic characteristics of injecting drug users (IDU) in 2010 were mostly similar to last year's sample. The mean age was 37 years, which was significantly different to 35 years in 2009. However, the 2010 average age was more comparable to samples prior to 2009. Males again comprised approximately two-thirds of the sample (65%). The entire 2010 sample reported that English was the main language spoken at home and only a small minority identified as Aboriginal or Torres Strait Islander (ATSI). Approximately one-half (47%) reported a prison history, which was a comparable proportion to the 2009 sample. Just under one-half (47%) of the sample reported currently being in drug treatment, which was a significant increase from the 30% reported in 2009. As it was possible that this change in the sample could have affected a number of the results of interest, where there were significant changes in observed drug use patterns and other data from the 2009 to 2010 samples, the data were reanalysed with the sample weighted to control for current treatment ratio changes to check that the observed changes were not due to the larger proportion of participants in current drug treatment in the sample. However, none of the reported significant results were affected by this weighting, suggesting that the observed significant changes were not simply a function of the changes in the proportion of the sample who were in current drug treatment.

There were no significant differences in employment status compared to last year's sample. However, there were some notable differences between samples regarding tertiary education. The average years of education remained comparable to last year at 10 years. In 2010, just over half (53%) of the IDU sample reported no tertiary education, which significantly increased from 37% in 2009. Consequently, there was a significant decrease in the proportion of the 2010 sample reporting trade/technical qualifications, from 54% in 2009 to 34% in 2010. Controlling for the larger proportion of respondents in the 2010 sample in current treatment suggested this finding was not due to sampling differences. The proportions reporting completion of university/college were comparable between sample years. Current unemployment was reported by 77% in 2010 compared to 71% in 2009. Further, 3% in 2010 reported full-time employment compared to 6% in 2009. Overall, the current sample of IDU appear to be less tertiary or trade educated in comparison to the 2009 IDU sample

Patterns of drug use among the IDU sample

Mean age of first injection remained unchanged at 19 years. Frequency of injection proportions were not significantly different to 2009 findings, with the most commonly reported frequency of injection being 'more than weekly, less than daily' by 35% in 2010, which was comparable to 2009 findings.

Heroin and amphetamines remained the most commonly nominated drugs first injected, with 53% nominating amphetamines in 2010 (not significantly different to 56% in 2009). The proportion nominating heroin also remained comparable at 39% in 2010 (34% in 2009). In 2009, for the first time, heroin surpassed methamphetamine as the drug most often injected in the last month; this trend continued in 2010 with 47% reporting heroin vs. 25% reporting methamphetamine as drug most often injected in the last month. A similar trend was observed in most recent drug injected, with the greatest proportion of 38% reporting heroin vs. 25% reporting methamphetamine in 2010 sample. The proportion nominating heroin as the drug of choice was also comparable to 2009, with 60% in 2010 compared to 58% in 2009. In 2010, speed was the most commonly nominated form of methamphetamine in all these contexts; which again was comparable to 2009 findings.

In 2010, over half the sample reported use of tobacco, alcohol, cannabis, benzodiazepines, speed and heroin in the last six months.

Heroin

Lifetime and recent use of heroin were not significantly different across the last two years. In 2010, 89% of IDU reported lifetime use of heroin (94% in 2009) and 69% reported recent use (71% in 2009). However, average days of use in the last six months significantly decreased to 75 days in 2010 from 103 in 2009. The proportion of daily heroin users were comparable between sample years, from 36% in 2009 to 23% in 2010. The proportion of IDU reporting lifetime use of homebake was not significantly different across years (70% in 2009 vs. 74% in 2010), as was recent use (28% in 2009 vs. 31% in 2010) use of homebake. Powder remained the most commonly reported form of heroin used in 2010, with 47% nominating brown and 44% nominating white/off white; these findings were not significantly different to 2009.

The median price of recent purchases of one gram of heroin was $600 (not significantly different to $575 in 2009). The greatest proportion of participants reported on the price of a one-quarter gram, which had a median price of $173; this was comparable to $175 in 2009. The median price for one point of heroin was reported as $50 in 2010, which significantly decreased from $100 in 2009. In 2010, availability of heroin remained comparable to last year. Availability was reported as either 'easy' or 'very easy' by 92% of IDU in 2010, not significantly different to 87% in 2009. Availability over the last six months was reported as 'stable' by the greatest proportion of the sample (67%) which was not significantly different to last year's sample (73%). Similarly, 2010 IDU perception of heroin purity were mostly similar to those found in 2009, with the greatest proportion nominating current purity of heroin as 'medium' (40%), which was comparable to 2009 (38%). The proportion who nominated heroin purity as 'high' or 'low' were also comparable to 2009 findings. In regards to changing heroin purity, the proportion reporting purity as 'increasing' was significantly greater than 2009 findings, from 19% in 2009 to 30% in 2010. The remaining changes to purity proportions were comparable to last year.

Methamphetamine

The IDRS distinguishes between methamphetamine powder ('speed'), methamphetamine base, and crystal methamphetamine ('ice' or 'crystal').

Across the last two years there were no significant differences in lifetime (99% in 2010 vs. 95% in 2009) and recent (64% in 2010 vs. 60% in 2009) use of any form of methamphetamine. Similarly, lifetime and recent use of all forms of methamphetamine remained not significantly different across the two years, with lifetime use of powder (91% in 2010 vs. 93% in 2009), crystal (80% in 2010 vs. 84% in 2009) and base (29% in 2010 vs. 36% in 2009). Recent use of powder (51% in 2010 vs. 56% in 2009), crystal (40% in 2010 vs. 44% in 2009) and base (8% in 2010 vs.

13% in 2009) also remained not significantly different. Average days of any methamphetamine use in the last six months were also comparable, from 33 days in 2009 to 41 days in 2010. However, the average number of days crystal and base methamphetamine were used significantly increased in the 2010 sample, with crystal use increasing from an average of 22 days in 2009 to 36 days in 2010, and base use increasing from an average of three days in 2009 to eight days in 2010. Average number of days speed powder was used did not significantly differ from 2009 (29 days in 2010 vs. 21 days in 2009).

The median prices for one point of speed powder and base remained $50; however, in 2010, the median price for one point of crystal significantly increased from $50 in previous years to $100. Ratings of availability as either 'easy' or 'very easy' were reported by 78% for powder (79% in 2009), 82% for crystal (88% in 2009) and 66% for base (50% in 2009), although reports for base were taken from a very small number of participants and should be treated with caution. The most common source and location for last purchase of all forms of methamphetamine were from friends at a friend's home. Purity of powder was mostly rated as 'medium' (36% in 2010 vs. 21% in 2009); purity of base was rated by two out of three participants as 'high'. Purity of crystal was mostly reported as 'high', which significantly increased from 28% in 2009 to 42% in 2010; conversely, the proportion reporting crystal purity as 'low' significantly decreased from 28% in 2009 to 15% in 2010.

Cocaine

There was no significant difference in the proportion of IDU reporting lifetime use of cocaine (65% in 2010 vs. 60% in 2009). Recent use was also comparable (15% in 2010 vs. 12% in 2009). However, average days of cocaine use significantly decreased from nine days in 2009 to three days in 2010. Only two participants reported on price, purity and availability making it difficult to draw conclusions about the cocaine market in Western Australia (WA).

Cannabis

The vast majority of IDU across all years have reported lifetime use of cannabis and this remained the same in 2010 at 96% (same proportion in 2009). Use of cannabis use in the last six months was reported by 70% of IDU in 2010, which was not significantly different to 72% in 2009. The proportion of daily cannabis users was also comparable: 45% in 2009 and 47% in 2010. The average days of use were 105 days in both 2010 and 2009. Hydroponic cannabis remained the most commonly used form, reported by 91% in 2010 (87% in 2009).

The median price of one ounce of hydroponic cannabis was $350, the same median price was reported in 2009 and the median price of one ounce of bush was $250 which was significantly lower than $290 in 2009. Ratings of availability as either 'easy' or 'very easy' were reported for hydroponic by 88% in 2010 (82% in 2009) and for bush by 87% in 2010 (82% in 2009). Reports of potency were mostly similar to last year, with the majority rating hydroponic cannabis as 'high' (63% in 2010 vs. 69% in 2009) and bush as 'medium' (62% in 2010 vs. 55% in 2009). However, perceptions of changes in bush potency in the last six months did significantly differ between recent sample years, with a significant decrease observed in the proportion reporting potency as 'stable' (57% in 2010 vs. 75% in 2009) and a consequential increase in the proportions reporting bush potency as 'fluctuating' (10% in 2010 vs. 25% in 2009) in the last six months.

Illicit use of pharmaceuticals

IDU who reported illicit use of pharmaceuticals in the last six months were asked the reasons for this use. The most common response for all pharmaceutical types was that it was a substitute for heroin.

Methadone

In 2010, recent illicit use of methadone syrup and physeptone tablets was not significantly different to that 2009. Illicit use in the last six months of methadone was reported by 13% in 2010 compared to 10% in 2009 and physeptone by 4% in 2010 compared to 5% in 2009. Average days of illicit methadone use were six days in 2010, which was comparable to five days in 2009. Mean days of illicit physeptone use was also approximately six, which was comparable to two days in 2009. Only three participants reported on illicit sourcing of methadone. The reported price was one dollar per one millilitre.

Buprenorphine and buprenorphine-naloxone

Recent illicit use of buprenorphine (Subutex) and buprenorphine-naloxone (Suboxone) was not significantly different to last year, with recent illicit use of Subutex reported by 18% of IDRS respondents in 2010 (16% in 2009) and recent use of Suboxone reported by 17% in 2010 (28% in 2009). Mean days of illicit use of Subutex were not significantly different across the last two years (15 days in 2010 compared to 23 days in 2009); mean days of use of illicit Suboxone were also comparable: 81 days in 2010 compared to 50 days in 2009. In 2010, the median reported price of eight milligrams of Subutex was $40 (same in 2009) and eight milligrams of Suboxone was $40 ($50 in 2009); however, this was based on a small number of respondents and therefore may not accurately reflect the current market price. Friends were nominated as the most common source person for obtaining both Subutex and Suboxone.

Morphine

The proportion of respondents reporting recent illicit use of morphine in 2010 was 28%, which was not significantly different to 33% in 2009. Average days of use were also comparable: 36 days in 2010 versus 28 days in 2009. MS Contin remained the most commonly reported type of morphine used. The median price for 100mg of MS Contin was $58 ($50 in 2009) and friends remained the most commonly reported source person, as was friends' homes as the last location for obtaining morphine.

Oxycodone

The proportion of respondents reporting lifetime use of oxycodone significantly decreased from 60% in 2009 to 44% in 2010. Recent illicit use of oxycodone in 2010 (20%) was not significantly different to that in 2009 (29%). Average days of use significantly increased from 23 days in 2009 to 51 days in 2010. The most common type of oxycodone used was Oxycontin. The median price for 40mg of Oxycontin was $22.50 and for 80mg was $50. As with the other illicitly obtained pharmaceuticals, friends and friends' homes were the most commonly reported last source and location.

Over the counter codeine

Since 2009, participants have been asked about the use of over the counter (OTC) codeine separately, whereas in previous years IDRS samples, OTC codeine has been included in 'other opiates'. In 2010, over half (57%) the sample reported using OTC codeine in their lifetime, which was the same proportion reported in 2009. Recent use was reported by 35% in 2010, which was comparable to 43% in 2009. The average number of days OTC codeine was used was 17 days, which was a significant decrease from 44 days in 2009.

Other opioids (not elsewhere specified)

Use of other opioids (not including OTC codeine) has consistently been uncommon among IDU interviewed in the WA IDRS. In 2010, lifetime use of other opioids significantly decreased from 25% in 2009 to 13% of the current sample. Recent use was reported by 7% of the 2010

IDU sample, which was comparable to 15% in 2009. In 2010, the average number of days any other opioids were used was 12, which significantly decreased from 71 days in 2009.

Other drugs

Benzodiazepines

Both lifetime and recent use of any (licit or illicit) benzodiazepine were not significantly different over the last two years. Lifetime use was reported by 81% in 2010 compared to 79% in 2009 and recent use by 61% in 2010 compared to 64% in 2009. The average number of days benzodiazepines were used was 95 in 2010 which was not significantly different to 100 in 2009. Of IDU who recently used benzodiazepines, licit use was more common and the most commonly used benzodiazepine was diazepam (Valium). Of those that reported use in 2010, 97% reported swallowing as the route of administration (ROA).

Pharmaceutical stimulants

Lifetime prevalence of pharmaceutical stimulants (licit or illicit) by the WA IDU sample was 46% in 2010 which was not significantly different to 50% in 2009; recent use was also comparable with 17% in 2010 compared to 18% in 2009. The average number of days of use among recent users was 22 days in 2010 which was comparable to 12 days in 2009. In 2010 among IDU who had recently used pharmaceutical stimulants, the majority reported illicit use and most reported dexamphetamine was the stimulant used. ROA was reported as swallowing (77%) and injecting (53%).

Hallucinogens and ecstasy

Lifetime use of hallucinogens was reported by 70% in 2010, which was comparable to 73% in 2009. Recent use was also not significantly different in 2010 (10%) compared to 2009 (13%). In 2010, the average days of use among recent users was four which was comparable to three in 2009, and all 10 recent users reported LSD was the most commonly used hallucinogen. Lifetime use of ecstasy was also comparable between recent samples, reported by 73% in 2010 and 77% in 2009. Recent use was also not significantly different being 21% in 2010 vs. 29% in 2009 and the mean days of use was five in 2010 not significantly different to nine in 2009.

Inhalants

Lifetime use of inhalants was reported by 22% of the WA IDU sample in 2010, which was comparable to 25% in 2009. Recent use was reported by 6%, which was also not significantly different to the 7% reported in 2009. In 2010, the average days of use were 32 days and one respondent reported using inhalants daily. The most commonly used form of inhalant was nitrous oxide.

Alcohol and tobacco

Lifetime use of alcohol was reported by 97% of the WA IDU sample in 2010, comparable to 98% in 2009. Recent use was reported by 63% in 2010, not significantly different from 71% in 2009. Lifetime use of tobacco was reported by 92% in 2010 (94% in 2009) and recent use remained unchanged, with 85% in both 2010 and 2009. In 2010, the average number of days used in the last six months was 55 days for alcohol (59 days in 2009) and 166 days for tobacco (176 days in 2009).

Health-related harms

A lifetime history of heroin overdose was reported by 47% in 2010, not significantly different to 45% in 2009. Overdose in the last 12 months was reported by 17% in 2010, which was not significantly different to 11% in 2009. A lifetime history of overdose on any other drug was

reported by 15% of IDU in 2010 (22% in 2009), with 4% reporting overdose in the last 12 months.

Indicator data from the Australian Bureau of Statistics reported 467 accidental deaths nationally in 2008. The number of accidental deaths due to opioids among those aged 15 to 54 years in WA was 45 (compared to 22 deaths in 2007), representing 15% of the national total. In WA, these fatalities comprised of 34 males and 11 females.

In 2010, 47% of IDU reported currently being in drug treatment, which was a significant increase from the 30% in 2009; of these participants, 92% were receiving pharmacotherapies for opioid dependence. Methadone (45%) remained the most cited pharmacotherapy, closely followed by Suboxone (40%).

Of closed treatment episodes in WA for 2008/09, amphetamines represented 20%, cannabis represented 16% and heroin represented 9%. Of total calls to the WA Alcohol and Drug Information Service (ADIS) for 2009/10, 15-21% related to amphetamines, 10-14% to cannabis and 2-4% to heroin.

Hospital admissions
At the time of printing, hospital admissions data for 2008 and 2009 was not available.
The number of opioid-related hospital admissions nationally and for WA has remained stable between 2006/07 and 2007/08, the most recent data available at the time of publication. As with most indicator data reflecting harms related to opioids, figures remained substantially lower than those reported prior to the 2001 heroin shortage. The number of amphetamine hospital admissions per million persons has followed a steady, increasing trend over time, with rates in WA consistently being higher than national rates. Cocaine-related hospital admissions remained low relative to those for heroin and methamphetamine. Cannabis-related admissions have steadily increased nationally, but appear to be decreasing in WA.

Injecting risk behaviours
In 2010, 91% of IDU reported obtaining their needles from a needle and syringe program (NSP). The vast majority (92%) reported that they had not used a needle after someone else in the last month. Of the remainder that did report using a needle after someone else (8%), common frequencies were using a needle once (n=2), twice (n=2), three to five times (n=2), six to 10 times (n=1) and more than 10 times (n=1) in the last month. Of these respondents, all reported that only one person had used the needle before them and the most common type of person was a regular sex partner. In 2010, a significant decrease was observed in the number of people reporting that someone had used a needle after them in the last month, from 29% in 2009 to 16% in 2010. Use of injecting equipment after someone else was reported by 36% (32% in 2009), with the most commonly reported equipment being spoons/mixing containers.

In WA, the hepatitis C virus (HCV) continues to be more commonly notified than the hepatitis B virus (HBV). The prevalence of human immunodefiency virus (HIV) among those people who inject drugs in Australia has also remained stable at relatively low rates over the past decade, with HCV more commonly reported.

Among the IDU sample interviewed as part of the IDRS, the most commonly reported injection-related problem remained scarring/bruising reported by 44% in 2010, which was comparable to 49% in 2009. The next most common injection-related problem was difficulties injecting, reported by 38% of IDU in both 2010 and 2009. The proportion reporting a dirty hit did not change significantly, being 18% in 2010 compared to 17% in 2009.

Mental health problems and psychological distress
Mental health problems were reported by 51% of IDU in 2010, which was not significantly different from 37% in 2009. As in previous years, the most commonly reported problems were depression and anxiety. Of those that self-reported a mental health problem, 77% reported attending a professional in relation to the problem.

According to the Kessler Scale of Psychological Distress, 47% of IDU in 2010 were at high or very high risk of psychological distress. This places IDU at much greater risk of psychological distress than the general population, with 10% of the population scoring at these levels according to the 2007 National Drug Strategy Household Survey (NDSHS).

Driving risk behaviours
Of those IDU who had driven a vehicle in the last six months, 19% in 2010 reported driving under the influence of alcohol, which was comparable to 30% in 2009. In contrast, 83% of IDU in 2010 reported driving after consuming illicit drugs (87% in 2009). Of these IDU in 2010, heroin was the most commonly reported drug consumed after which participants drove (51%). The majority (57%) of participants reported that consuming illicit drugs had no impact on their driving ability.

Law enforcement trends
The proportion of IDU reporting arrest in the last 12 months was comparable to recent sample years, being 31% in 2010 compared to 33% in 2009. In 2010, the greatest proportion of those who had been arrested in the last 12 months was for property crime (44%), which was comparable to 2009 findings (47%). In 2010, the proportion reporting criminal activity in the last six months was 51%, which was comparable to 43% in 2009. As in previous years, the most commonly reported criminal activity was drug dealing (37% in 2010 vs. 38% in 2009).

In 2008/09, law enforcement data for WA as a whole indicated that the number of consumer/provider arrests for cannabis (n=6,315) and heroin (n=144) increased, whilst the number of consumer/providers arrests for amphetamine-type stimulants (n=3,243) and cocaine (n=40) all slightly decreased compared to the previous financial year.

Special topics of interest
Personal Wellbeing Index
In 2010, IDU interviewed as part of the IDRS were administered the Personal Wellbeing Index which asks how satisfied respondents were with various aspects of their lives. In the 2010 WA IDRS sample, participants scored lower than the general population on each domain of the wellbeing index.

Social networks

In 2010, the IDRS asked participants questions in relation to social networks. Around one-third (30%) of the WA sample reported contact with a family member nearly every day, while 51% reported contact with a friend(s) nearly every day. The majority reported that they could rely on one or two family members or friends.

General medical practitioners
In 2010, the IDRS sought to investigate access to public health care and services among the IDU population, further identifying the services most utilised by IDU and therefore better informing treatment providers and policy initiatives. Eighty-four percent of the sample reported visiting a GP in the last 12 months for a physical or mental health problem on a median of nine occasions.

More than half (52%) of these visited were for a mental health problem on a median of five occasions.

Alcohol Use Disorders Identification Test

In 2010, participants were asked the Alcohol Use Disorders Identification Test-Consumption (AUDIT-C) as a valid measure of identifying heavy drinking. Among the WA sample, the overall mean score on the AUDIT-C was 3.5. There was no significant difference between the male and female mean AUDIT scores. A cut-off score of 5 or more indicates that further assessment is required. Over one-third (34%) of the WA IDRS sample scored 5 or over on the AUDIT-C, with 39% of males and 26% of females scoring 5 or more, indicating the need for further assessment.

Stimulant and opioid dependence

In 2010, 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. Of those who had recently used a stimulant, the median SDS score was 1.5 (range=0-13), with 35% scoring four or above. Seventy-eight percent reported attributing responses to methamphetamines and 16% to cocaine. Of those who had recently used an opioid, the median SDS score was 8 (range=0-15), with 77% scoring five or above. Over half (59%) reported attributing responses to heroin, while 25% reported morphine and 17% methadone.

Height, weight and body mass index

For the first time in 2010, IDRS participants were asked about their height and weight. The mean height of the national sample was 1.74 metres, weight was 72.5 kilograms and Body Mass Index was 24.1. The IDRS sample reported a higher BMI percentage as 'underweight' compared to the general population aged 18-64 years.

Sexual health

For the first time in 2010, participants were asked to report on the issues surrounding sexual health and testing for a sexually transmitted infection (STI) in the last two years. Over half (55%) of the WA sample reported having been tested in the last two years for a STI. The main reason for the test was as part of a 'routine check up'. Among females in the sample, 53% reported a pap smear test in the last two years. The main reason for 'no' pap smear was 'didn't think of it' and the main reason for a pap smear test was 'health provider suggested it'.

Summary and implications

Findings from the 2010 WA IDRS demonstrate little change from last year's sample in most areas and in others some significant changes in drug use patterns and perceptions among IDU in Perth. The demographic characteristics of the 2010 sample were mostly similar to those of the 2009 sample; however, there were significant differences observed in the average age of the 2010 sample, which increased from 35 years in 2009 to 37 years in 2010. The most noted demographic change in the 2010 IDU sample was a significant increase in the proportion reporting currently engaging in drug treatment. Prior to 2009, a maximum of one-third of the entire IDU sample recruited could be in drug treatment at the time of interview. However, since 2009, this treatment ceiling has been waived in all IDRS jurisdictions, allowing for no upper limit on the proportion of IDU in current drug treatment. To verify that any significant changes in observed drug use patterns and other data from the 2009 to 2010 samples were not due to the larger proportion of the 2010 sample being currently in treatment, the data were reanalysed with the sample weighted to control for current treatment ratio changes. However, none of the reported

significant results were affected by this weighting, suggesting that the observed significant changes were not simply a function of these sampling differences. On the basis of the 2009 and 2010 WA findings, it is suggested that similar strategies are employed to control for other significant changes in sample characteristics should they occur in the future.

There were also some notable changes between samples regarding tertiary education, with a greater proportion of the 2010 IDRS sample reporting no tertiary education than in 2009; consequently, a significant decrease was observed in the proportion of the current sample reporting trade/technical qualifications from the 2009 sample. Overall, the current sample of IDU appears to be less tertiary and trade educated than the 2009 sample. It is unknown why these changes regarding tertiary education occurred in the 2010 sample.

In 2009, heroin surpassed methamphetamine as the drug most often injected in the last month, and this remained the case in 2010. In 2010, a further decline was observed in frequency of methamphetamine injection, with the proportion reporting methamphetamine as the drug most frequently injected representing the lowest recorded since WA IDRS data collection began. These findings suggest that the sample of regular IDU accessed in Perth through the IDRS are more likely to say they are injecting heroin more often than they are injecting methamphetamine. It is unclear to what extent these findings have been affected by the increased proportions of the WA IDRS sample which have been recruited through the onsite NSP at WASUA since 2008.

Notwithstanding, the trends regarding heroin use in Perth as indicated by the IDRS are somewhat unclear. Findings from the 2009 WA IDRS sample suggested some significant changes in heroin use patterns may have been occurring among IDU in Perth at the time. These changes included increased frequency of heroin use among recent users as well as increased proportions reporting daily heroin use. Yet, findings from the 2010 WA IDRS sample suggest that even though lifetime and recent use rates have remained largely unchanged from 2009, there has been a significant decrease in the average days of heroin use among recent users. However, observed peaks and falls in average number of days heroin has been used has been consistently occurring since 2005, which is most likely due to continuous shifts in heroin availability. The median price of one point of heroin significant decreased in 2010, although there was no significant difference in the price of a gram of the drug. Overall, the price of heroin still remains more expensive in WA than prior to the heroin shortage in 2001. Heroin availability remained comparable to previous years, reported as either 'easy' or 'very easy' to obtain by the majority of recent heroin users. Heroin purity appears to have remained modest in WA, although there are some indications that heroin purity has been increasing in the last six months. Overall, the 2010 IDRS data is mixed and confusing regarding heroin use trends in WA. It will be of interest to see whether there is evidence of a clear trend in heroin use in the WA IDRS data to be collected in 2011.

In 2010, there were no significant differences in the proportion reporting lifetime and recent use of most methamphetamine forms. However, the average number of days of use for crystal and base methamphetamine significantly decreased from 2009 to 2010. Overall, methamphetamine use appears to be decreasing over time, a trend seen in a number of the indicators since 2007. In 2010, methamphetamine price, purity and availability proportions remained mostly comparable to those observed in 2009; the only exception was a significant increase observed in the median price of a point of crystal and in the reported purity of crystal as 'high' in 2010. This may suggest the presence of a higher purity and possibly more expensive form of crystal methamphetamine available in the Perth drug market at the time of data collection.

Ambulance data indicated that the number of ambulance callouts to narcotic overdoses in WA has increased significantly in the last three years. This may be due to an apparent increase in heroin purity, fluctuations in purity, or a decrease in heroin price. However, the ambulance callout figures remain far lower than those prior to the heroin shortage. Self-reported overdoses were reported by just under half the WA sample in 2010. The reason that overdose fatalities in WA remain low compared to the pre-shortage levels is probably because, overall, heroin purity appears to remain modest in WA, although there are some indications that heroin purity has been fluctuating in recent times. These fluctuations in purity may explain why WA has seen localised and sporadic clusters of overdoses over the last two years. This poses an overdose risk, and reinforces the need to continue to implement the prudent steps already commenced in WA (Rainsford, Lenton & Fetherston, 2010) to prevent heroin overdoses and fatalities. These have included continued monitoring of overdose trend data; reviewing and updating resources and training materials; considering targeting those most at risk of overdose, including people leaving prison and abstinence oriented treatment programs; reviewing protocols regarding police attendance at overdoses; and considering expanding access to naloxone for peer administration (Lenton, Dietze et al. 2009; Lenton, Dietze et al. 2009).

There were no significant differences in both lifetime and recent use of most other opioids, including homebake, illicit use of methadone, physeptone, Subutex, Suboxone, morphine and OTC codeine. However, the average number of days OTC codeine and 'other opiates' (not specified elsewhere) were used in the last six months significantly decreased. Lifetime use of oxycodone significantly decreased in the 2010 sample, and even though recent use was not significantly different from last year's sample, the average number of days illicit oxycodone was used in the last six months more than doubled from 2009 to 2010. Together, these findings suggest that whilst there has not been an increase in the proportion of IDU who are using oxycodone, those that are using the drug seem to be doing so more often, and all of these participants all reported injecting these drugs. Clearly, there are potential risks associated with illicit, intravenous use of prescribed medications intended for oral administration. In particular, problems with oxycodone use have been well documented in North America and elsewhere, and this needs to continue to be closely monitored in Australia (Drugs and Crime Prevention Committee, 2007).

With regards to other harm-reduction issues, although the proportion reporting that someone else had used a needle after them in the last month significantly decreased in 2010, the proportion reporting sharing other injecting equipment after someone else remained high – reported by over one-third of the 2010 IDU sample. This is problematic among IDU because the re-using of injecting equipment can efficiently transmit blood borne viruses, such as HCV. Secondly, the vast majority of IDU reported driving under the influence of illicit drugs and most perceived this to have no impact on their driving ability. Thus, information about drug driving is needed and roadside testing may represent a potential site for intervention. Thirdly, mental health problems were self-reported by 51% of IDU and 47% were at high or very high risk of psychological distress. Finally, participants in the 2010 WA IDRS scored lower than the general population on each domain of the personal wellbeing index, which asked participants how satisfied they were with various aspects of their lives. Therefore, improving the profile of and access to appropriate mental health services should be another key target for harm-reduction initiatives among IDU.

1. INTRODUCTION

The Illicit Drug Reporting System (IDRS) aims to provide a national co-ordinated approach to monitoring data on the use of opioids, cocaine, methamphetamine and cannabis. It is intended to act as a strategic early warning system that identifies emerging drug problems of state and national concern. Rather than describe such phenomena in detail, the IDRS is designed to be timely and sensitive to emerging drug trends, thereby providing direction for more detailed data collection.

The IDRS is funded by the Australian Government Department of Health and Ageing (AGDH&A). The project is co-ordinated at the national level by the National Drug and Alcohol Research Centre (NDARC) at the University of New South Wales, thereby ensuring that comparable data is collected in every jurisdiction in Australia.

The IDRS commenced in New South Wales (NSW) in 1996 and has been conducted in Western Australia (WA) since 1998; thus, this report presents the findings of the 12th year of data collection in WA. Results are summarised according to the four main drug types, with the use of other drugs also reported. Additionally, this report continues the initiative commenced in 2003 when the IDRS attempted to collect more detailed information on the illicit markets for pharmaceutical opioids. A separate study monitoring trends in ecstasy and related drug use (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. Both IDRS and EDRS jurisdictional and national reports can be downloaded from the NDARC website: http://ndarc.med.unsw.edu.au

1.1 Study aims

As in previous years, the specific aims of the WA component of the 2010 IDRS were to examine:

- trends in illicit drug use in Perth;
- trends in illicit drug markets in Perth, such as price, purity and availability;
- health-related harms associated with illicit drug use, particularly intravenous use; and
- emerging illicit drug trends that warrant further investigation.

2. METHOD

Three data collection methods are used in the IDRS:

- a survey of people who regularly inject drugs;
- a key expert (KE) survey of professionals working in the field; and
- an examination of existing indicator data.

These methods provide effective means to determine drug trends and the triangulation of data sources allows for validation of observed trends across the different sources. People who regularly inject drugs (injecting drug users or IDU) are surveyed because they are regarded as a sentinel group for detecting illicit drug trends due to their increased exposure to many types of illicit drugs. Irrespective of their drug of choice, IDU often have firsthand knowledge of the price, purity and availability of the other illicit drugs under study. KE are interviewed because they provide contextual information on drug use patterns and other drug-related issues, including health. Indicator data are collected to provide quantitative support for the trends in drug use detected by the other methods.

2.1 Survey of IDU

The IDU survey consisted of face-to-face interviews with 100 IDU between June and August 2010. Subjects were recruited through flyers distributed at pharmacies throughout the Perth metropolitan region and recruitment at a central needle and syringe programs (NSP). Snowballing techniques were also utilised. Potential participants were screened upon contact with researchers to ensure they fulfilled the participation criteria. Criteria were: having injected at least monthly in the six months prior to interview, having been resident in the Perth metropolitan area for no less than 12 months prior to interview; and being a minimum of 18 years of age. Ethics approval was granted from the Curtin University Human Research Ethics Committee (HR48/2009). This sampling strategy has produced a demographic that is comparable with IDU interviewed in preceding years.

The interview schedule included sections on demographics; drug use history; the price, purity and availability of illicit drugs; criminal activity; injection risk-taking behaviour; health-related issues; driving risk behaviour; and experiences with law enforcement. Interviews took approximately 30 minutes and participants were reimbursed $40 for their time and travel expenses. Descriptive analyses of the quantitative data derived from the IDU survey were conducted using PASW Statistic 18.0 for Windows.

2.2 Survey of KE

In 2010, nine KE interviews were conducted. Eligibility for participation in the study was having at least weekly contact with illicit drug users in the six months prior to interview and/or contact with 10 or more illicit drug users in that time. KE interviews were either conducted in person or over the telephone in accordance with convenience and availability. Interviews took approximately 20-30 minutes, with KE invited to comment on drug use patterns, drug availability, criminal behaviour, health and other issues affecting the illicit drug users with whom they had contact. KE in 2010 consisted of needle exchange workers, drug treatment workers, general health and emergency department workers, and law enforcement workers.

2.3 Other indicators

Secondary data sources were examined to complement and validate the data collected from both the IDU and KE surveys. Data were utilised that provided indicators of illicit drug use and related harms, and included law enforcement data, national survey data and health data.

The selection criteria to determine what sort of indicator data should be included in the IDRS were developed in the pilot study (Hando et al., 1997b). Where possible, information is provided in financial year format to cover the same time period as that covered by the study. A number of sources provided indicator data for the 2010 IDRS:

- Australian Crime Commission (ACC) for information on drug seizures and arrests;
- Australian Institute of Health and Welfare (AIHW) for treatment data obtained from the National Minimum Data Set and National Opioid Pharmacotherapy Statistics;
- telephone advisory service data from the Alcohol and Drug Information Service (ADIS);
- Australian Bureau of Statistics (ABS) for overdose data;
- overdose-related calls attended by the WA St John Ambulance Service provided by St John Ambulance Australia WA Inc;
- Data on needle and syringe distribution, provided by the Sexual Health Branch, Health Department of Western Australia (HDWA);
- Rates of unspecified and incident cases of the hepatitis B virus (HBV) and the hepatitis C virus (HCV) from the Communicable Diseases Network, Australia, National Notifiable Diseases Surveillance System database; and,
- Blood-borne viral infection (BBVI) rates from blood testing carried out as part of the Australian NSP survey, prepared by the National Centre in HIV Epidemiology and Clinical Research (NCHECR).

2.4 Data analysis

The IDU participant survey results are used as the primary basis on which to estimate drug trends. These participants provide the most comparable information on drug price, availability and use patterns in all jurisdictions and over time. However, purity of drug seizures data provided by the ACC is an objective indicator of drug purity, and such data are also presented in this report. Other indicator data are reported to provide a broader overview and a basis against which trends in IDU participant data may be contextualised. KE data are discussed within the individual jurisdictional reports to provide a context around the quantitative data from the IDU surveys.

Categorical variables were analysed using $\chi 2$. All data were analysed using PASW Statistics 18 for Windows. Further analysis was conducted on the main drugs of focus in the IDRS to test for significant differences between 2009 and 2010 for drug of choice, last drug injected, drug injected most often in the last month, recent use, purity and availability. Confidence intervals (CI) were calculated using an Excel spreadsheet available at http://www.cebm.net/index.aspx?o=1023 (Tandberg). Higher and lower CI results which crossed over the value of zero were not significant. Confident intervals were only included in the report if findings were statistically significant ($p=<.05$). This calculation tool was an implementation of the optimal methods identified by Newcombe (Newcombe, 1998). Significance testing using the Mann-Whitney U calculation was used to compare 2009 and 2010 median days of use for the major drug types discussed. There was a significant increase in the proportion of the 2010 sample in current drug treatment compared to 2009. Since it was possible that this change in the sample could have affected a number of the results of interest, where

there were significant changes in observed drug use patterns and other data from the 2009 to 2010 samples, the data were reanalysed with the sample weighted to control for current treatment ratio changes to check that the observed changes were not due to the larger proportion of participants in current drug treatment in the sample. The weighting procedure produced a No:Yes current treatment ratio of 70:30. Note that despite this checking using weights, all the data reported in this report are based on the unweighted sample.

More detailed analyses on specific issues may be found in other literature, including quarterly bulletins and peer-reviewed articles produced by the project, details of which may be found on the NDARC website, www.ndarc.med.unsw.edu.au.

3. DEMOGRAPHICS

3.1 OVERVIEW OF THE IDU PARTICIPANTS

The demographic characteristics of 100 IDU who took part in the 2010 WA IDRS are presented in Table 1. The mean age of the sample was 37 years (range=18-63 years), which was significantly different to 35 years in 2009 (t=2.041, df=99, p=.044); however, the 2010 mean age was comparable to samples prior to 2009. Sixty-five percent were male, which was not significantly different to last year (60%). Nine percent identified as Aboriginal and/or Torres Strait Islander (ATSI) which was comparable to 4% in 2009. The entire 2010 sample reported English as the main language spoken at home. The majority (88%) identified as heterosexual. In 2010, IDU were asked about current relationship status; the greatest proportion of the current sample was single (53%), next most common was partnered (27%), then married/de facto (14%). Just under half (47%) reported a prison history, which was not significantly different to last year (51%).

The mean years of education remained unchanged at 10 years (range 6-12 years). However, there were some notable differences between samples regarding tertiary education. In 2010, more than half (53%) the IDU sample reported having no tertiary education, a significant increase from 37% in 2009 (95%CI -0.28, -0.02). Consequently, there was also a significant decrease in the proportion of the current sample reporting trade/technical qualifications, from 54% in 2009 to 34% in 2010 (95%CI 0.06, 0.33). Some 13% of the 2010 IDU sample reported completion of university/college which was not significantly different to the 9% in 2010. The proportion of the sample reporting current unemployment was 77% in 2010, which was comparable to 71% in 2009. Similarly, the proportion reporting current full-time employment was 3% in 2010, which was not significantly different from 9% in 2009. Only 1% of the 2010 sample reported receiving income from sex work in the last month compared to 3% in 2009. Overall, compared to last year, the current sample of IDU appeared to be less tertiary educated and less trade-based or technically educated. The average weekly income reported by the current sample was $348 which was comparable to $304 in 2009.

KE made several comments regarding the age and gender of IDU. There was agreement among KE that the majority of IDU range from their mid-teens to late 50s. Most KE reported that a greater proportion of IDU were male, whilst a few KE reported an equal ratio of male to female. These statements were largely supported by the demographics found in the current sample of IDU.

With regards to ethnicity, three KE reported that IDU were mostly Caucasian Australian, whereas one KE also reported a small proportion of IDU were from ATSI backgrounds. KE reported that IDU generally had varied levels of education, with the majority educated to Grade 10 or below. However, one KE reported that a small proportion of IDU were tertiary educated, often with a sophisticated knowledge in chemistry or pharmacy, and that these individuals were setting up small clandestine methamphetamine labs and doing the 'cooking' themselves. However, this same KE reported that the majority of 'cooks' were often less knowledgeable and sophisticated in these areas. In regards to employment status, it was reported by most KE that IDU were largely unemployed and often on a disability pension, although one KE also reported a small proportion of IDU currently engaged in study or part-time employment. All KE noted that some IDU had a history of previous imprisonment or a criminal history. One KE commented on an increase in homelessness observed recently.

Table 1: Demographic characteristics of IDU participants, 2007-2010

	2007 N=80	2008 N=100	2009 N=100	**2010 N=100**
Age (mean years, range)	37 (17-59)	37 (19-61)	35 (18-62)	**37 (18-63)***
Sex (% male)	61	62	60	**65**
Employment (%):				
Not employed/on a pension	78	61	71	**77**
Full time	4	13	6	**3**
Part time/casual	15	19	12	**14**
Home duties	0	1	2	**1**
Student	0	2	5	**1**
Other	4	4	4	**4**
Received income from sex work last month	4	0	3	**1**
Aboriginal and/or Torres Strait Islander (%)	7	3	4	**9**
Heterosexual (%)	84	89	81	**88**
Bisexual (%)	9	6	7	**7**
Gay or lesbian (%)	5	4	8	**5**
Other (%)	3	1	4	**0**
School education (mean no. years, range)	10 (6-12)	10 (7-12)	10 (7-12)	**10 (6-12)**
Tertiary education (%):				
None	56	38	37	**53***
Trade/technical	38	42	54	**34***
University/college	6	20	9	**13**
Average weekly income	-	-	$304	**$348**
Currently in drug treatment^ (%)	34	37	30	**47***
Prison history (%)	46	45	49	**47**

Source: IDRS IDU interviews

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

* Significant at alpha level .05

3.1.1 Current and previous treatment

Of IDU in 2010, the proportion reporting they were currently in drug treatment significantly increased from 30% in 2009 to 47% in 2010 (95% CI -0.30, -0.03). Of participants engaged in treatment, 45% were receiving methadone syrup and 40% were on Suboxone. Smaller proportions reported drug counselling (6%), Subutex, and oxycodone (4% each). Methadone syrup was also the most common treatment reported in 2009. Of 2010 IDU in treatment, the mean duration in current treatment was 27 months (range=1-180).

Participants were also asked if they had been engaged in treatment at any time during the previous six months and 43% reported that they had. The greatest proportion of these participants reported previous methadone treatment (25%) followed by previous Suboxone treatment (20%). Smaller proportions reported previous drug counselling (11%), Subutex and oxycodone (2% each).

3.1.2 Recruitment

Participants were asked if they had participated in the IDRS or EDRS in previous years, as shown in Table 2. More than one-third of the current sample (37%) had previously participated in the IDRS and a minority (4%) had participated in the EDRS. Approximately three-quarters (72%) of current IDU were recruited via a NSP and nearly one-quarter (24%) through word of mouth. Current sources of recruitment were comparable to the proportions of those in the 2009 sample. Similar to 2008 and 2009 IDRS recruitment methods, IDRS advertising and interviewing could be conducted at the WA NSP site; this has proved to be a method that is both convenient and comfortable for both participants and interviewers, and therefore successful in attaining the required participant numbers within the desired recruitment time.

Table 2: Source of recruitment and previous participation in IDRS and EDRS, 2010

Characteristic	2010 N=100
Participated in IDRS in previous years (%)	37
Where found out about IDRS survey (%):	
NSP	72
Treatment provider	2
Advert in street press	1
Word of mouth	24
Chemist	0
Participated in EDRS in previous years (%)	4

Source: IDRS IDU interviews

3.2 Drug use history and current drug use

Table 3 presents injection history, drug preferences and polydrug use of IDU in 2010. The mean age of first injection among current IDU was 19 years, which remains unchanged from the last three sample years.

Frequency of injection proportions were not significantly different to 2009 findings, with the most commonly reported frequency of injection being 'more than weekly, but less than daily' (35% in 2010 vs. 33% in 2009). The next greatest frequency of injection proportions were '2-3 times a day' (27% in 2010 vs. 26% in 2009), followed by 'weekly or less' (21% in 2010 vs. 16% in 2009), then 'one per day' (10% in 2010 vs. 19% in 2009) and lastly 'more than three times a day' (7% in 2010 vs. 5% in 2009).

Amphetamines and heroin remained the most common drugs first injected, with 53% nominating methamphetamines in 2010 compared with 56% in 2009, and heroin was nominated by 39% in 2010, which was comparable to 34% in 2009.

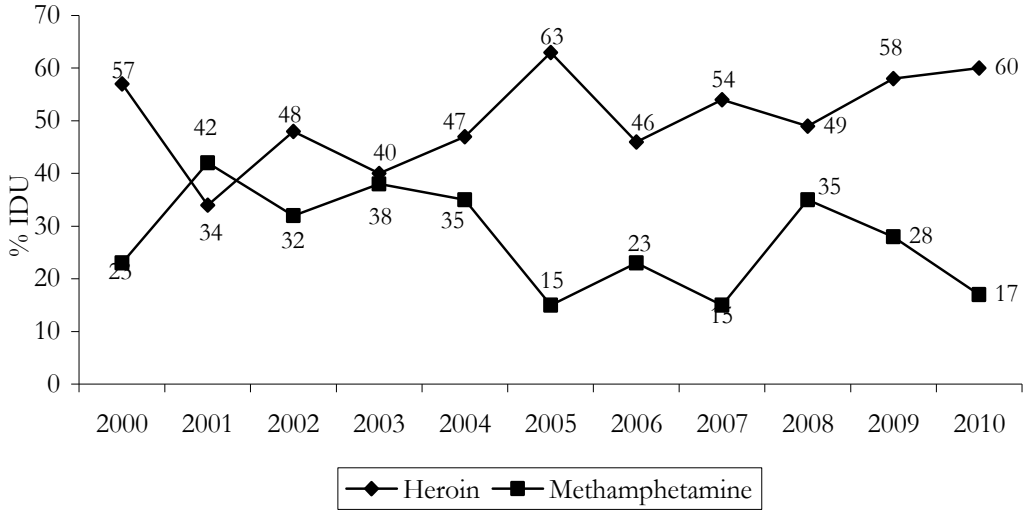
Table 3: Injection history, drug preferences and polydrug use of IDU participants, 2007-2010

	2007 N=80	2008 N=100	2009 N=100	**2010 N=100**
Age first injection (mean years)	19	19	19	**19**
First drug injected (%)				
Heroin	44	38	34	**39**
Amphetamines	43	51	56	**53**
Cocaine	0	1	0	**0**
Morphine	10	5	5	**3**
Drug of choice (%)				
Heroin	54	49	58	**60**
Cocaine	1	1	1	**0**
Methamphetamine (any form)	15	35	28	**17**
Speed	*13*	*11*	*17*	**11**
Base	*3*	*0*	*0*	**0**
Crystal methamphetamine (ice)	*0*	*24*	*11*	**6**
Cannabis	8	7	4	**11**
Drug injected most often in last month (%)				
Heroin	38	32	50	**47**
Cocaine	0	0	1	**0**
Methamphetamine (any form)	33	43	32	**25**
Speed	*24*	*19*	*24*	**17**
Base	*3*	*0*	*0*	**0**
Crystal methamphetamine (ice)	*6*	*24*	*8*	**8**
Most recent drug injected (%)				
Heroin	36	34	46	**38**
Cocaine	0	0	1	**1**
Methamphetamine (any form)	29	42	30	**25**
Speed	*21*	*17*	*22*	**18**
Base	*3*	*0*	*0*	**0**
Crystal methamphetamine (ice)	*5*	*25*	*8*	**7**
Frequency of injecting in last month (%)				
Not injected in last month	*1*	*1*	1	**0**
Weekly or less	11	38	16	**21**
More than weekly, but less than daily	31	31	33	**35**
Once per day	29	17	19	**10**
2-3 times a day	18	8	26	**27**
>3 times a day	10	5	5	**7**

Source: IDRS IDU interviews

Heroin remained the most commonly reported drug of choice as nominated by 60% of IDU in 2010, which was not significantly different from the 58% in 2009 (Figure 1). There was no significant change in the proportion reporting methamphetamine (speed, base and crystal) as the drug of choice which was 17% in 2010 compared to 28% in 2009.

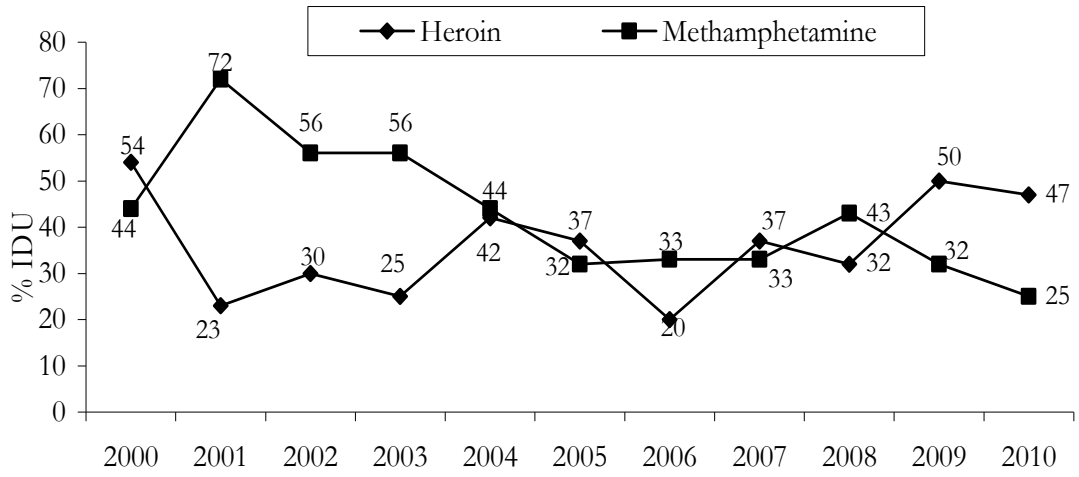
Figure 1: Drug of choice, 2000-2010



Source: IDRS IDU interviews

Findings from the 2010 sample suggested increasing trends in heroin use over the last two sample years. This was also apparent in responses to questions regarding injection, with almost half (47%) the 2010 sample reporting heroin as the drug most commonly injected in the last month, which was comparable to 50% in 2009 (Figure 2 and Table 4). Additionally, the proportions reporting any form of methamphetamine as the drug most often injected in the last month were also comparable to last year, with 25% in 2010 compared to 32% in 2009. In 2010, speed remained the most commonly reported form of methamphetamine most often injected in the last month reported by 17% of the currently sample, which was comparable to 24% in 2009. Small proportions of the sample reported Buprenorphine (12%), crystal methamphetamine (8%), 'other drugs' (6%), morphine (5%), oxycodone and other opiates (1% each) as the drug injected most often in the last month (see Table 4).

Figure 2: Drug injected most last month, 2000-2010



Source: IDRS IDU interviews

Table 4: Drug injected most often in the last month 2009-2010

Drug	2009 N=100	2010 N=100
Heroin	50	47
Methamphetamine		
Speed	24	17
Ice/crystal	8	8
Buprenorphine**	11	12
Morphine	3	5
Oxycodone	1	1
Cocaine	1	0
Other opiates	1	1
Other*	1	6

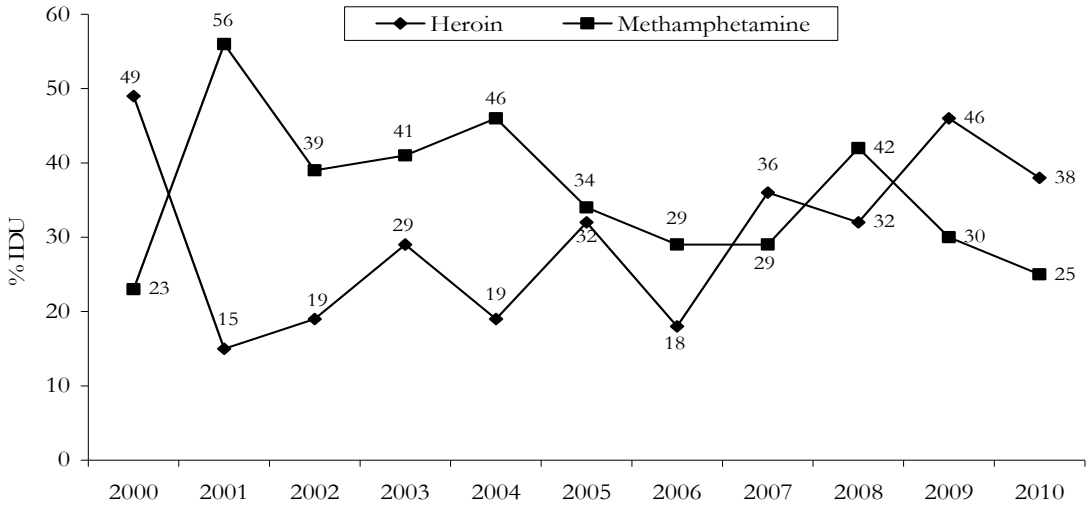
Source: IDRS IDU interviews

** Includes buprenorphine-naloxone (Suboxone)

* Includes homebake (3%) and ecstasy, methadrone and speed with heroin (1% each)

In 2010, the greatest proportion of respondents nominated heroin (38%) as the drug most recently injected. This was followed by one-quarter of the 2010 sample nominating methamphetamine as the drug last injected. These findings were comparable to last year (46% and 30% respectively) (Figure 3).

Figure 3: Drug last injected prior to interview 2000-2010

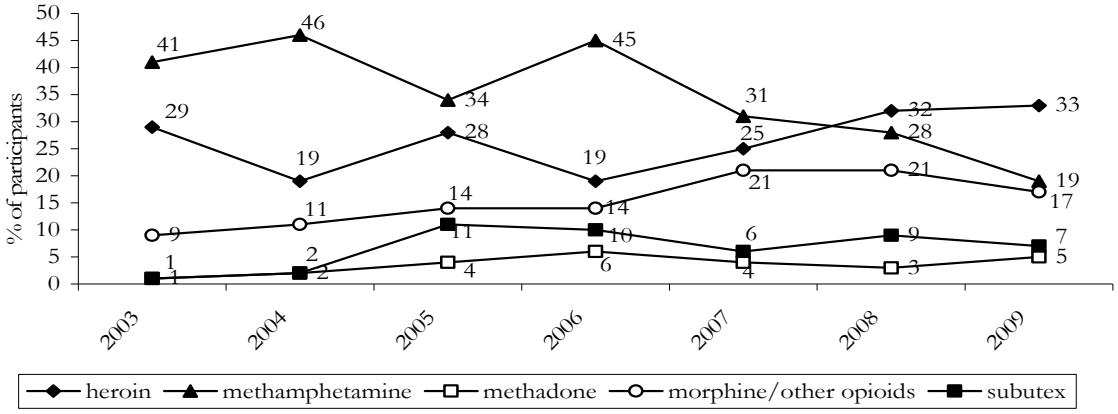


Source: IDRS IDU interviews

IDU also reported on the drugs they had consumed the day before interview and 7% reported they had not consumed any drug. The most common drugs reported in this context were cannabis (38%), tobacco (36%), heroin (27%), alcohol (22%), benzodiazepines (20%) and Suboxone (17%). The median amount of money spent on drugs the day before interview was $30 (range=$0-$600).

Data from the NSP Survey (NCHECR, 2010), presented in Figure 4, shows that methamphetamine has been the most commonly reported last drug injected by participants in this survey from 2003 to 2007. However, in 2008, heroin exceeded methamphetamine as the drug last injected by NSP attendees. This trend continued in 2009, with the greatest proportion of survey respondents (33%) reporting heroin as the last drug injected.

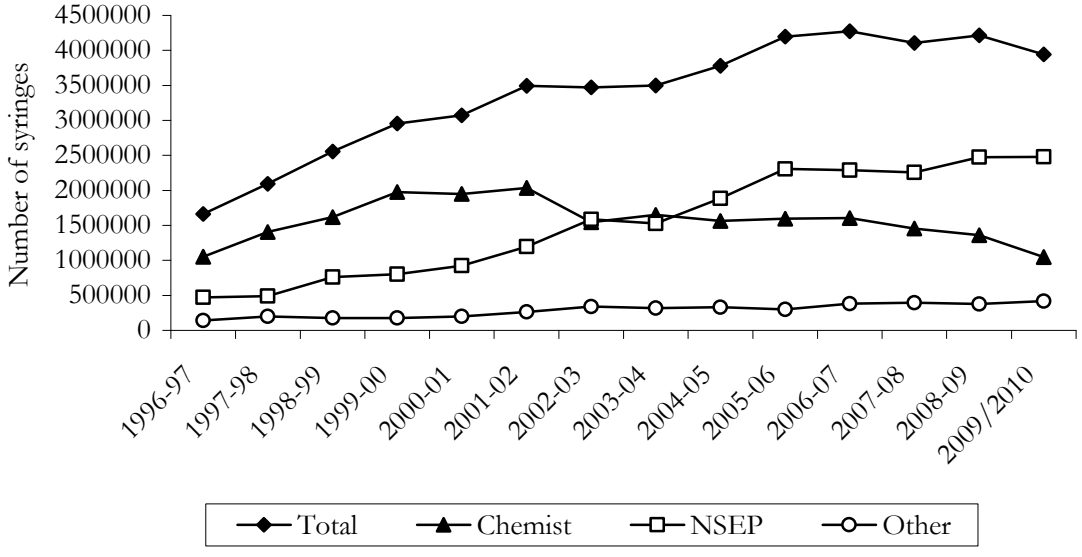
Figure 4: Last drug injected reported by NSP attendees, WA 2003-2009



Source: Australian NSP Survey (NCHECR), 2010

Figures from the Sexual Health Branch of the HDWA show that 3,942,441 syringes were distributed in WA during the 2009/10 financial year. As has been the case since 2003/04, the bulk of these were distributed via NSP, responsible for 2,480,039 in 2009/10. Less common sources of syringes were chemists distributing 1,045,134 and other sources such as hospitals and vending machines accounting for 417,268. Data concerning syringe distribution in WA since 1996/97 is portrayed in Figure 5.

Figure 5: Sources of syringe distribution in WA 1996/1997-2009/10



Source: Sexual Health Branch, HDWA

Drug use history of the IDU sample, 2010

The drug use histories of IDU participants in the WA IDRS in 2010, including route of administration (ROA), are presented in Table 5. Over one-half of the 2010 sample had used the following drugs in the last six months: tobacco (85%), cannabis (70%), heroin (69%), alcohol (63%) and speed (51%). Further discussion of the use and market characteristics of each drug type can be found under the relevant section heading in the report.

Table 5: Drug use history of the IDU sample, 2010

Drug class	Ever used %	Ever injected %	Injected last 6 mths %	Mean (median) days injected in last 6 mths*	Ever smoked %	Smoked last 6 mths %	Ever snorted %	Snorted last 6 mths %	Ever swallowed %	Swallowed last 6 mths+ %	Used^ last 6 mths %	Mean (median) days in treatment* last 6 mths	Mean (median) days used^ in last 6 mths*
Heroin	89	88	69	78 (60)	36	3	12	2	16	3	69		75 (55)
Homebake heroin	74	74	31	37 (12)	1	0	0	0	2	0	31		37 (12)
Any heroin (inc. homebake)	*89*	*89*	*74*	*81 (72)*	*37*	*3*	*12*	*2*	*17*	*3*	*74*		*81 (72)*
Methadone (prescribed)	45	18	6	22 (5)					41	26	26	136 (180)	146 (180)
Methadone (not prescribed)	32	23	8	6 (4)					18	8	13		6 (4)
Physeptone (prescribed)	7	3	1	1 (1)	0	0	0	0	5	1	1	14(14)	14 (14)
Physeptone (not prescribed)	26	18	3	5 (3)	0	0	0	0	9	2	4		6 (6)
Any methadone (inc. physeptone)	*65*	*41*	*14*	*14 (5)*					*54*	*35*	*38*		*102 (129)*
Buprenorphine (prescribed)	28	14	0	-	0	0	0	0	24	5	5	118 (180)	118 (180)
Buprenorphine (not prescribed)	46	37	13	18 (7)	3	2	1	1	17	7	18		15 (6)
Any buprenorphine (exc. buprenorphine-naloxone)	*47*	*40*	*13*	*18 (7)*	*3*	*2*	*1*	*0*	*35*	*12*	*34*		*39 (7)*
Buprenorphine-naloxone (prescribed)	27	17	13	84 (90)	0	1	0	0	26	18	20	120 (130)	121 (130)
Buprenorphine-naloxone (not prescribed)	36	31	15	90 (90)	1	1	0	0	9	3	17		81 (30)
Any buprenorphine-naloxone	*47*	*37*	*25*	*88 (90)*	*1*	*1*	*0*	*0*	*30*	*20*	*37*		*103 (110)*
Morphine (prescribed)	23	18	4	48 (6)	0	0	0	0	11	3	4		51 (12)
Morphine (not prescribed)	60	54	27	36 (10)	4	0	0	0	20	7	28		36 (10)
Any morphine	*68*	*61*	*29*	*37 (10)*	*4*	*0*	*0*	*0*	*23*	*8*	*30*		*38 (9)*
Oxycodone (prescribed)	17	8	6	88 (69)	0	0	0	0	13	6	8		132 (180)
Oxycodone (not prescribed)	44	40	20	51 (35)	0	0	0	0	8	1	20		51 (35)
Any oxycodone	*54*	*43*	*24*	*61 (48)*	*0*	*0*	*0*	*0*	*20*	*6*	*26*		*77 (60)*
Other opioids (not elsewhere classified)	13	6	1	1 (1)	1	0	0	0	8	5	7		12 (4)

Table 5: Polydrug use history of the IDU sample, 2010 (continued)

Drug class	Ever used %	Ever injected %	Injected last 6 mths %	Mean (median) days injected in last 6 mths*	Ever smoked %	Smoked last 6 mths %	Ever snorted %	Snorted last 6 mths %	Ever swallowed %	Swallowed last 6 mths+ %	Used^ last 6 mths %	Mean (median) days in treatment* last 6 mths	Mean (median) days used^ in last 6 mths*
Speed powder	91	86	50	29 (12)	25	8	39	4	26	3	51		29 (14)
Base/point/wax	29	26	7	8 (8)	3	2	2	2	4	2	8		9(7)
Ice/shabu/crystal	80	74	39	36 (24)	37	14	10	2	15	4	40		36(24)
Amphetamine liquid	19	18	11	2 (2)					1	0	1		2(2)
Any form methamphetamine#	*99*	*95*	*63*	*42 (24)*	*49*	*20*	*44*	*6*	*36*	*7*	*64*		*41(24)*
Pharmaceutical stimulants (prescribed)	12	1	1	10 (10)	0	0	1	0	10	11	1		180(180)
Pharmaceutical stimulants (not prescribed)	54	18	9	7 (3)	0	0	5	0	45	13	17		22(4)
Any form pharmaceutical stimulants	*57*	*18*	*9*	*7 (3)*	*0*	*0*	*5*	*0*	*48*	*13*	*17*		*22(4)*
Cocaine	65	32	9	4 (3)	3	1	35	6	8	3	15		3(3)
Hallucinogens	70	2	0	-	0	0	0	0	70	10	10		4 (3)
Ecstasy	73	16	5	2 (1)	0	0	5	2	69	20	21		5 (2)
Benzodiazepines (prescribed)	62	7	3	61 (90)	0	1	1	0	60	42	44		115 (131)
Benzodiazepines (not prescribed)	49	2	0	-	0	0	1	0	49	26	26		30 (14)
Any form benzodiazepines	*81*	*8*	*3*	*60 (90)*	*0*	*1*	*1*	*0*	*79*	*59*	*61*		*95 (90)*
Over the counter codeine	57	4	1	1(1)	0	0	0	0	55	33	35		17(6)
Alcohol	97	2	0	-					97	62	63		55(24)
Cannabis	96										70		105(113)
Inhalants	22										6		32 (2)
Tobacco	92										85		166(180)

Source: IDRS IDU interviews

^ Refers to any ROA, 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; does not include pharmaceutical stimulants

Note: Median days are shown in brackets

4 HEROIN

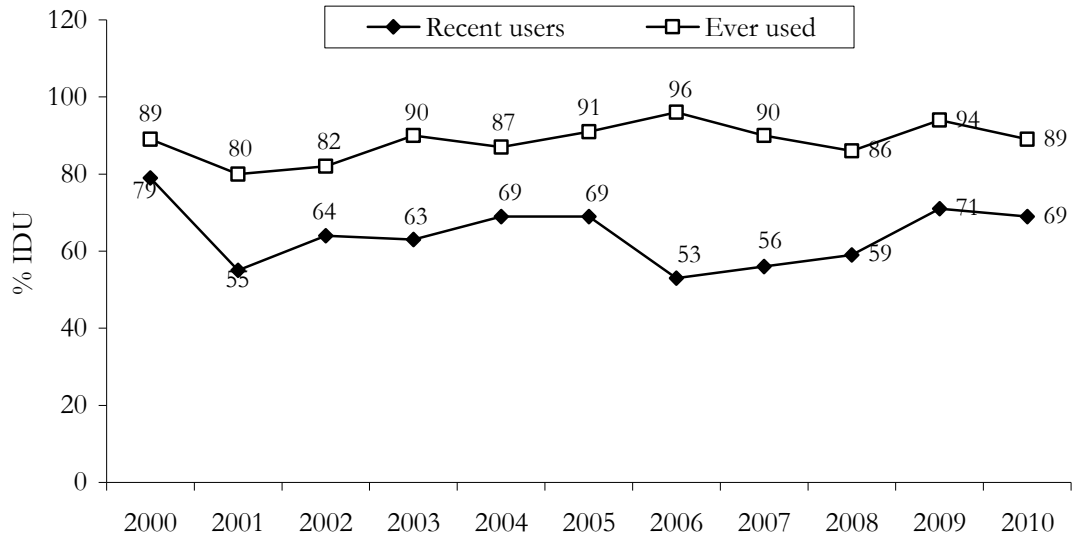
4.1 Use

4.1.1 Heroin use among IDU participants

A lifetime history of heroin use was reported by 89% of the 2010 IDU sample which was not significantly different to 94% in 2009 (Figure 6). Of current IDU that reported lifetime use, 99% had injected, 40% had smoked, 18% had swallowed and 14% had snorted heroin in their lifetime.

The proportion of IDU reporting lifetime use of homebake was comparable to recent sample years, from 74% in 2010 to 70% in 2009. Of current IDU that reported lifetime use, 100% had injected, 3% had swallowed and 1% had smoked homebake in their lifetime.

Figure 6: Patterns of heroin use, 2000-2010

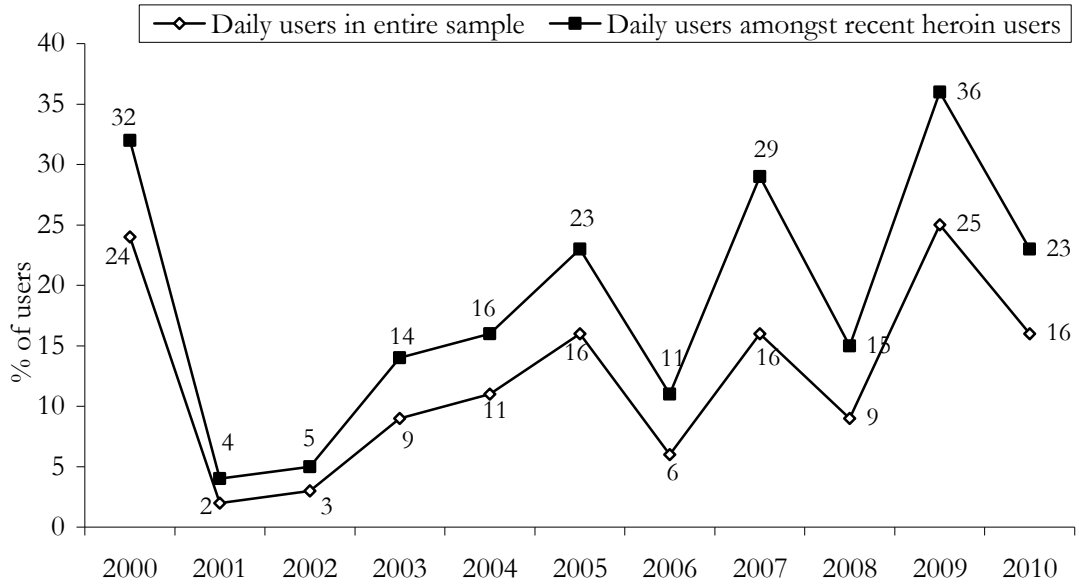


Source: IDRS IDU interviews

4.1.2 Current patterns of heroin use

Use of heroin in the six months prior to interview was also comparable to last year, with 69% of the current IDU sample reporting recent heroin use compared to 71% in 2009 (Figure 7). Of these participants, 100% had injected heroin in the last six months, 4% had smoked it, 4% had swallowed it, and 3% had snorted it. Days of use ranged from one to 180 days, with the number of daily users of heroin among the entire sample remaining comparable, from 25% in 2009 to 16% in 2010. The number of recent heroin users reporting daily use was also comparable from 36% in 2009 to 23% in 2010 (Figure 7).

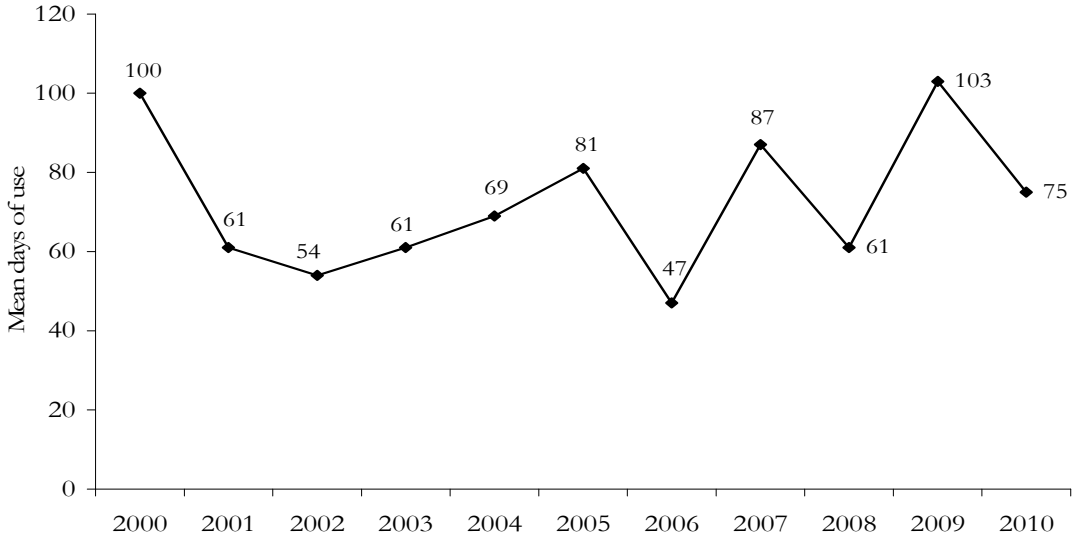
Figure 7: Daily heroin users, 2000-2010



Source: IDRS IDU interviews

The mean days of heroin use among recent users significantly decreased from 103 in 2009 to 75 days in 2010 (t=-3.370, df=68, p=.001) (Figure 8). Evident in Figure 8, peaks and falls in mean days of use have been consistently occurring since 2005. This may indicate ongoing variability in heroin availability.

Figure 8: Mean days of heroin use in past six months, 2000-2010



Source: IDRS IDU interviews

The proportion reporting recent use of homebake was 31% in 2010 which was not significantly different to the 28% in 2009. Of these participants, 100% reported injecting homebake in the last six months and the mean days of use was 37 days in 2010 which was comparable to 22 days in 2009.

Of the total IDU sample, 74% reported use of any form of heroin (including homebake) in the last six months. Of these participants, 100% reported injection as a ROA for any heroin used in the last six months.

In 2010, a flashcard presenting different forms and colours of heroin was provided to IDU participants in order to identify the form of heroin most commonly used in the last six months. In 2010, 69 IDU provided information pertaining to the forms of heroin they had used in the last six months. Powder was the most common form used, with 47% reporting use of brown powder, followed by 44% reporting use of white/off white powder, then 10% reporting use of brown rock and 7% reporting use of white/off white rock.

KE who commented on heroin reported solely on intravenous use. Reports of frequency of heroin use were varied, with one KE reported daily use among IDU and two KE who reporting heroin use occurred from every second to third day or even weekly. Colours of heroin reported by KE included white, beige, brown and pink. One KE reported an increase in the amount of purer heroin from Afghanistan currently available in Perth at the time. Two KE commented that heroin users were also typically polydrug users, using any combination(s) of morphine, oxycodone, methadone, buprenorphine, over the counter (OTC) codeine and benzodiazepines.

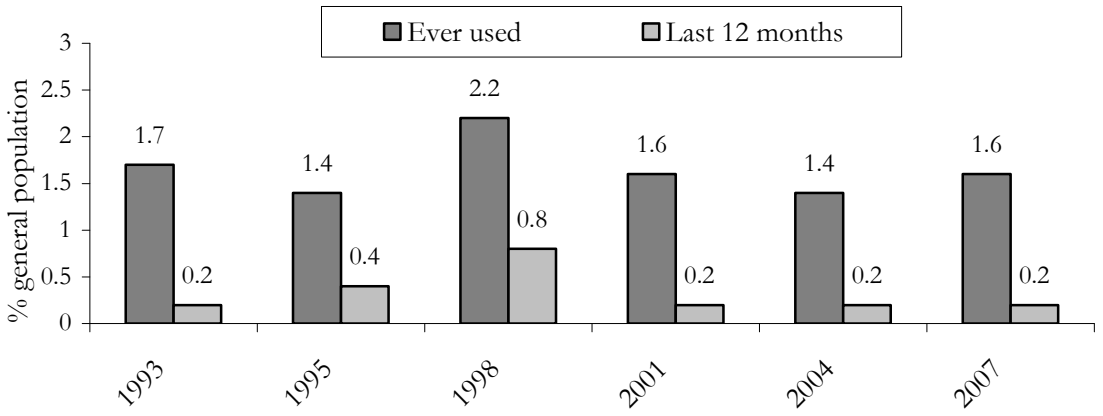
4.1.3 Heroin preparation before last injection

In 2010, IDU participants were asked questions about the preparation of heroin for last use, of which 66 participants responded. Thirty-two of these participants (49%) reported using heat and seven participants (11%) reported using citric acid to 'cook' heroin. The greatest proportion of these respondents reported having to do either preparation methods for white/off white powder or rock heroin by 41%, followed by brown powder or rock by 56%.

4.2 Heroin use in the general population

According to the 2007 National Drug Strategy Household Survey (NDSHS) which is the most recently conducted, 1.6% of the general Australian population aged 14 years and older had ever used heroin (AIHW, 2008). This was similar to 1.4% in 2004 (Figure 9). The proportion reporting use of heroin in the previous 12 months was the same in 2004 and 2007 at 0.2%; this was also the same proportion of the WA population. Males were more likely than females to have ever used heroin (2% vs. 1%) and to have used heroin in the last 12 months (0.3% vs. 0.1%). The 30-39 years age group was the most likely age group to report ever using heroin (3%), while the 20-29 years age group was the most likely to report use of heroin in the previous 12 months (0.5%).

Figure 9: Prevalence of heroin use among the population aged 14 years and over in Australia, 1993-2007



Source: **NDSHS 1988-2007 (AIHW)**

4.3 Price

Table 6 presents the prices that the IDU interviewed in the IDRS reported paying for heroin on the last occasion of purchase. The most common size of purchase reported was one-quarter gram (n=34), which had a median price of $173, which was comparable to $175 in 2009. One-half gram of heroin was reported by 11 participants in 2010 and had a median price of $300, which was the same median price in 2009. Twenty participants reported on one point of heroin with a median price of $50, which was significantly less than the median of $100 reported last year (t=-2.539, df=19, p=.02), although this was based on a small number of respondents reporting in 2009 (n=9). One gram of heroin had a median price of $600 (n=20) in 2010 which was not significantly different to $575 in 2009. The median price of one cap of heroin was $50 in 2010 (n=5) and in 2009 (n=11).

Table 6: Price of most recent heroin purchases by IDU participants, 2009-2010

Amount	Median price* $	Range	Number of purchasers*
Cap	50^ (50)	50-100	5 (11)
Point	50* (100)	18-200	20 (5)
Quarter gram	173 (175)	150-275	34 (43)
Half gram (Half weight)	300 (300)	250-510	11 (29)
Gram	600 (575)	50-800	20 (22)

Source: IDRS IDU interviews

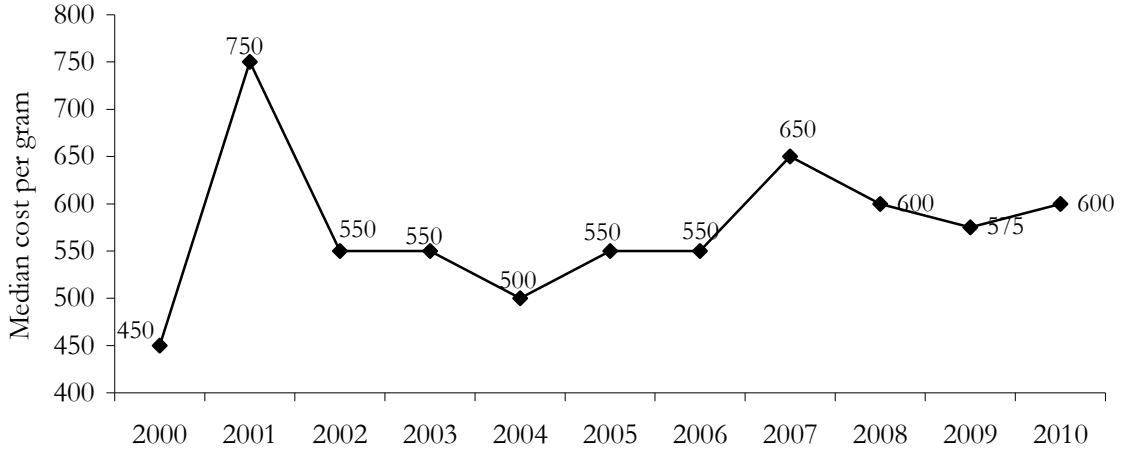
* 2009 data are presented in brackets

^ figures based on less than 10 reports

* Significant at alpha level .05

The median price of one gram of heroin in Perth across IDRS surveys is shown in Figure 10. In 2000, the median price was $450 which drastically increased to $750 the following year, since then it stabilised to around $550 per gram through to 2006. In 2007, the median price was $650 per gram compared to $600 per gram in 2008 followed by a median price of $575 per gram in 2009. In 2010, the median price of one gram of heroin was $600. Differences between the 2009 and current sample were not significant.

Figure 10: Median price of one gram of heroin estimated from IDU purchases, 2000-2010



Source: IDRS IDU interviews

Participants were also asked whether the price of heroin had changed in the last six months. In 2010, 55 IDU responded to this item, with almost two-thirds (66%) reporting the price as 'stable'. This was comparable to the 2009 sample with 58% of those who responded reporting the price of heroin as 'stable' over the previous six months. One-fifth (20%) reported the price had increased, while 9% reported it as 'fluctuating', both were comparable to last year's findings (21% and 7% respectively). A small proportion (n=3) reported the price as 'decreasing' (6%), compared to no respondents in 2009.

Only one KE reported on the price of heroin and stated that it was approximately $100 for a point.

4.4 Availability

Participants were asked about the current availability of heroin and any change in availability over the last six months (Table 7). In 2010, 59 IDU commented on these items compared to 60 IDU in 2009. In 2010, responses were mostly similar to 2009 findings with the greatest proportion (53%) of those who commented reporting the current availability of heroin as 'very easy' which was comparable to 45% in 2009. The next greatest proportion of the 2010 sample reported current heroin availability as 'easy' (39%) which was also comparable to 42% in 2009. The proportion reporting current availability as 'difficult' was reported by 7% in 2010 which was comparable to 13% in 2009. Only 2% of the current sample rated current availability as 'very difficult', compared to no respondents in 2009. With regard to changes in availability over the last six months, again, responses were largely similar across previous years with the greatest proportion reporting 'stable' by 67% in 2010, which was comparable to 73% in 2009. Together,

these results suggest that IDU perceived heroin availability as easy and that this availability has been relatively stable from 2009 to 2010. .

Table 7: Participants' reports of heroin availability in the past six months, 2009-2010

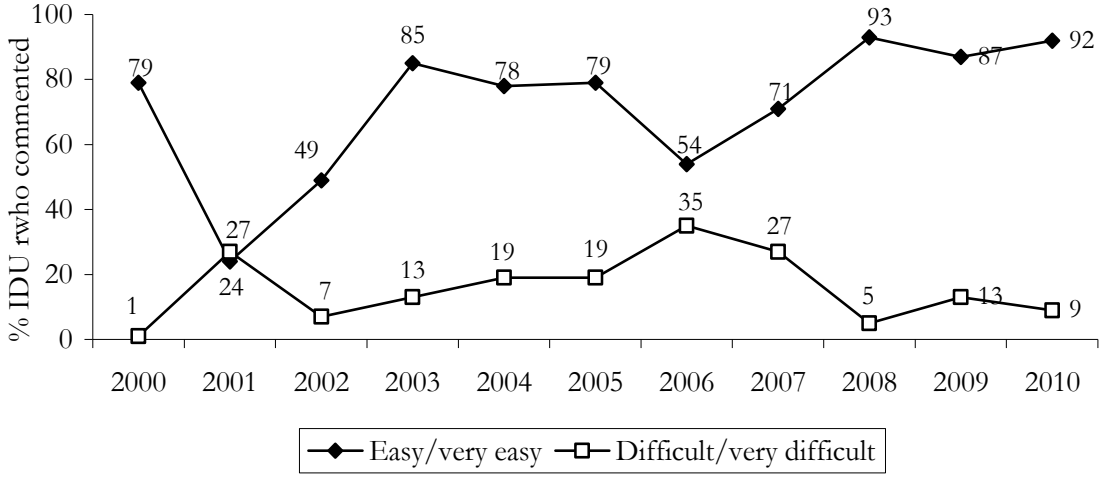
	2009 (N=100)	2010 (N=100)
Current availability		
Did not respond* (%)	40	41
Did respond (%)	60	59
Of those who responded:		
Very easy (%)	45%	53%
Easy (%)	42%	39%
Difficult (%)	13%	7%
Very difficult (%)	0%	2%
Availability change over the last six months		
Did not respond* (%)	40	43
Did respond (%)	60	57
Of those who responded:		
More difficult (%)	8%	12%
Stable (%)	73%	67%
Easier (%)	13%	16%
Fluctuates (%)	5%	5%

Source: IDRS IDU interviews

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

Reports of current availability of heroin across surveys are shown in Figure 11 and illustrate a trend towards increasing availability since 2006.

Figure 11: IDU reports of current heroin availability, 2000-2010



Source: IDRS IDU interviews

Three KE reported an overall increase in the perceived availability of heroin in Perth during this time. In addition, a few health KE reported this increase in availability could only be assumed by an observed increase in the number of heroin-related presentations to emergency departments over the past two years. Another outreach worker KE believed that homebake was increasingly more prevalent due an assumed increase in the amount of homebake available due to an increase in the number of wheel filters being requested at the NSP.

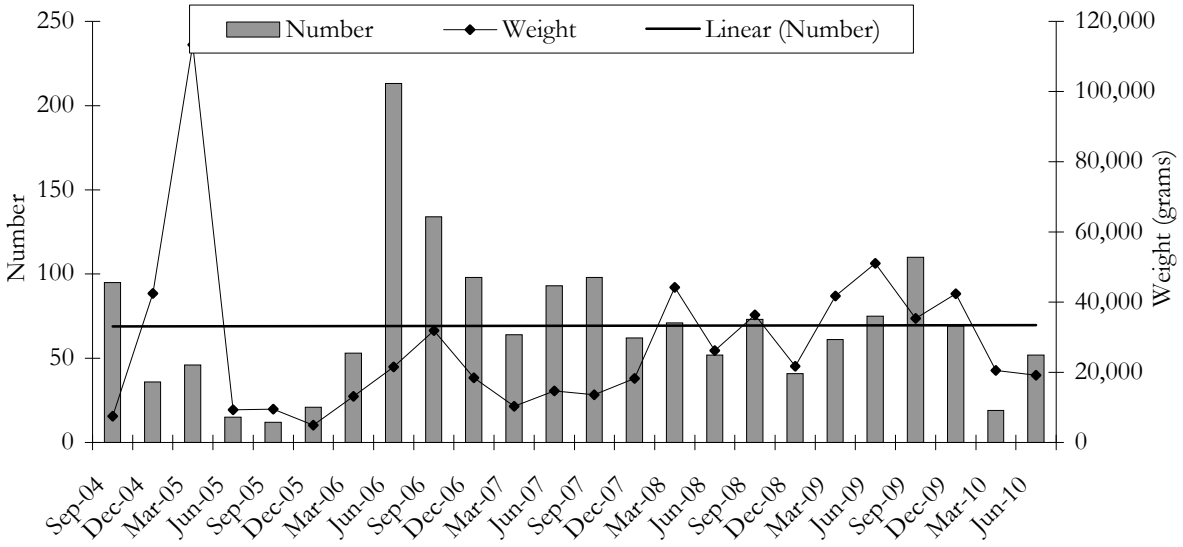
In 2010, 60 IDU responded to questions about persons and locations for last sourcing heroin. The most commonly nominated source of heroin of last purchase was friends (42%), followed by known dealers (35%). These proportions were comparable to 2009; however, the greatest proportion of the sample nominated known dealers (37%), closely followed by friends (35%). Smaller proportions of the current sample nominated acquaintances (18%), street dealers and unknown dealers (2% each).

In recent sample years, the most commonly nominated last location for obtaining heroin has been at an agreed public location. Of those who commented in 2010, 35% nominated last sourcing heroin from an agreed public location, followed by 26% nominating friends' homes. Smaller proportions also nominated dealers' homes (18%) and acquaintances' home (7%).

Figure 12 shows the number and weight of heroin seizures by Australian Custom Services (ACS) at the Australian border from 2004/05 to 2009/10, by quarter. The number of seizures was less than 100 per quarter until a sharp increase in June 2006 to 213 seizures. The number of seizures has since stabilised. Conversely, the greatest weight of a seizure was in March 2005 of 113,296.42 grams. Weights have since stabilised, with the exception of a peak in March 2008 to 44,214.10 grams and in March 2009 to 41,768.54 grams and June 2009 to 51,074.98 grams. In the most recent quarters, the number of heroin seizures reported increased in September 2009 to 110 seizures, representing the highest number of seizures since September 2006. Conversely, March

2010 decreased to 19 seizures, which was the lowest number of heroin seizures reported since September 2005. The total number of ACS heroin seizures in 2009/10 was 250, which was the same number reported in 2008/09, and the total weight of seizures for this period was 117522.01 grams compared to 150,893.26 grams in 2008/09.

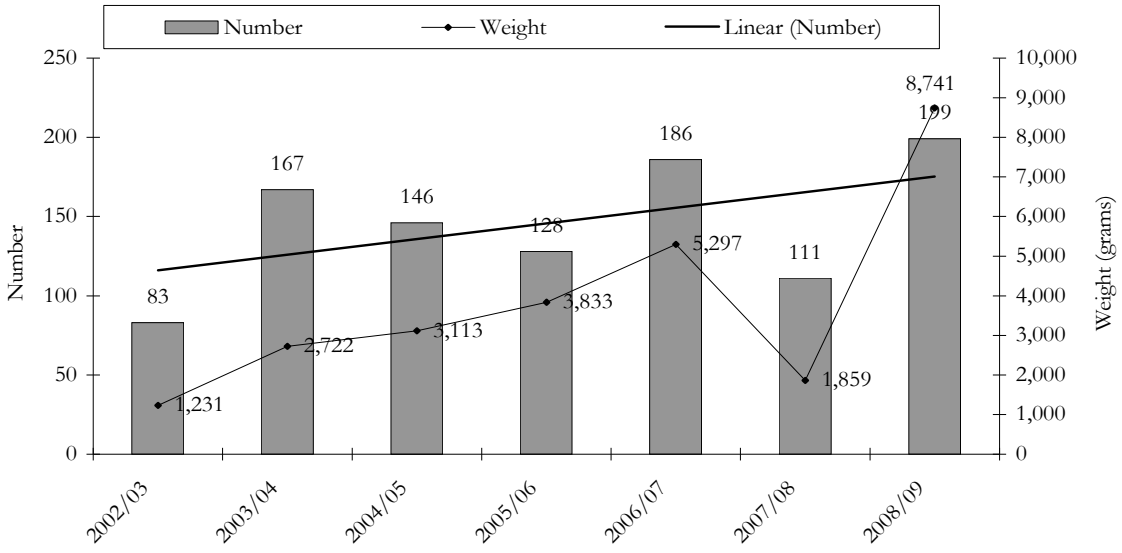
Figure 12: Number and weight of heroin seizures by ACS, 2004/05-2009/10



Source: **ACS**

Figure 13 presents the total number and combined weight of heroin seizures made by the West Australian Police Service (WAPS) and the Australian Federal Police (AFP) in WA from 2002/03 to 2008/09. It is evident that while the number of seizures has fluctuated across time, the weight of seizures had been steadily increasing until a dramatic decline in 2007/08 to 1,859 grams, following this, a drastic increase occurred in 2008/09 to 8,741 grams, representing the greatest weight recorded since 2002/03. In 2008/09, WAPS made 182 heroin seizures in WA with a weight of 1,098 grams, while AFP made 17 heroin seizures in WA with a weight of 7,643 grams. Thus, while WAPS made more seizures, those made by the AFP were of greater total weight.

Figure 13: Number and weight of heroin seizures by WAPS and AFP, WA 2002/03-2008/09



Source: **ACC**

4.5 Purity

Participants were asked to comment on their perception of the purity of heroin and any change in purity over the last six months (Table 8). In both 2009 and 2010, 60 participants commented on purity. Again, proportions reported were mostly similar to those found last year. In 2010, the greatest proportion reported current purity of heroin as 'medium' (40%), which was comparable to 2009 (38%). Additionally, the 2010 proportions reporting current purity as 'high' and 'low' were not significantly different to 2009.

With regard to changes in purity over the last six months (Table 8), a significant increase was observed in the proportion of the current sample reporting purity as 'increasing' over the last six months, from 17% in 2009 to 30% in 2010 (95%CI -0.03, 0.22). The remaining purity proportions were comparable to last year, with 18% reporting purity as 'decreasing' in the last six months compared to 15% in 2009, 27% reported purity as 'stable' compared to 37% in 2009 and 25% reported purity as 'fluctuating' in 2010 compared to 23% in 2009.

Table 8: Participants' perceptions of heroin purity in the past six months, 2009-2010

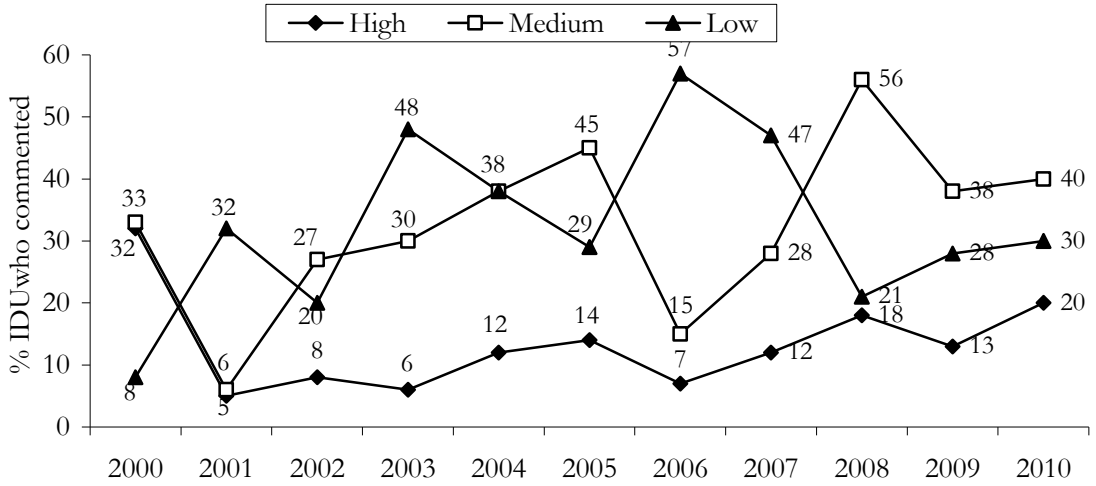
	2009 (N=100)	2010 (N=100)
Current purity		
Did not respond* (%)	40	**40**
Did respond (%)	60	**60**
Of those who responded:		
High (%)	13	**20**
Medium (%)	38	**40**
Low (%)	28	**30**
Fluctuates (%)	18	**10**
Purity change over the last six months		
Did not respond* (%)	40	**44**
Did respond (%)	60	**56**
Of those who responded:		
Increasing (%)	17	**30**
Stable (%)	37	**27**
Decreasing (%)	15	**18**
Fluctuating (%)	23	**25**

Source: IDRS IDU interviews

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

Figure 14 presents reports of current purity across IDRS surveys from 2000 to 2010. It was evident in 2008, there was an increasing trend in reports of purity as 'medium' and a decreasing trend in reports of purity as 'low' since 2006; since then, however, reports of purity as 'medium' decreased from 56% in 2008 to 38% in 2009, and have since stabilised in 2010 (40%). The proportions reporting purity as either 'high' or 'low' also remained comparable to 2009, suggesting that heroin purity appears to remain modest in WA.

Figure 14: Proportion of IDU reporting current heroin purity as 'high', 'medium' or 'low', 2000-2010

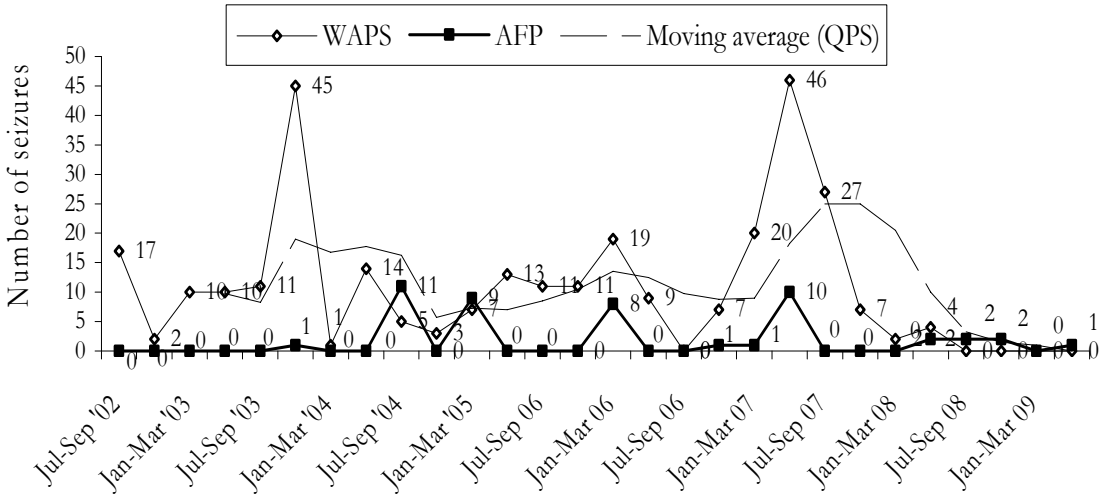


Source: IDRS IDU interviews

Three KE reported on the increasing purity of heroin, which anecdotally contributed to an increase in the number of overdoses and presentations in emergency departments across Perth (refer to Figure 46). One KE reported a period when heroin purity was thought to be extremely high and resulted in an increased number of IDU 'dropping'.

Figure 13 above presented the total number of heroin seizures in WA for which a weight was recorded. Figure 15 presents the number of heroin seizures made in WA by WAPS and AFP for which purity was analysed at a forensic laboratory from 2002/03 to 2008/09. It is apparent that, prior to October-December 2007, WAPS has been responsible for the majority of heroin seizures analysed in WA, with the AFP often recording no seizures in a quarter. However, as evident in Figure 15, WAPS seizures have fluctuated over time, declining in recent quarters. In 2008/09, WAPS reported no heroin seizures analysed and the AFP reported five heroin seizures analysed in WA.

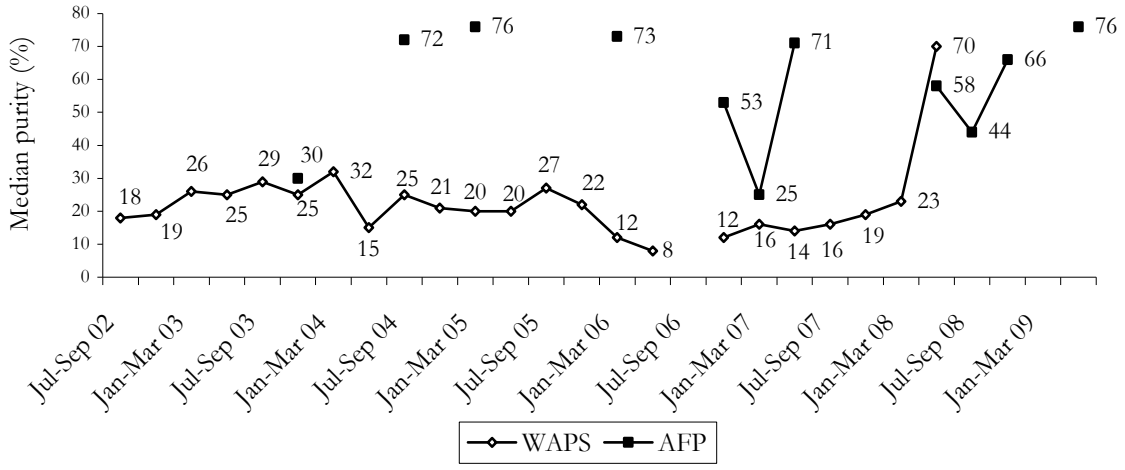
Figure 15: Number of heroin seizures analysed in WA, by quarter, 2002/03-2008/09



Source: ACC

Figure 16 shows the median purity of heroin seizures presented above in Figure 15. It is evident that the median purity of seizures made by WAPS has remained relatively consistent over time, although there was a sharp increase in April-June 2008 to a median purity of 70%; however, in the most recent quarter, no heroin seizures were analysed for purity by the WAPS. The median purity of seizures made by the AFP has previously been higher than those of WAPS, with the exception of April-June 2008 when WAPS seizures purity superseded this trend. Since then, purity of seizures made by AFP has remained comparable to previous purity levels. From July 2008 to June 2009, the median purity across all AFP seizures analysed was 62%.

Figure 16: Purity of heroin seizures analysed in WA, by quarter, 2002/03-2008/09



Source: ACC
Note: Where there are no data points, no seizures were analysed

4.6 Summary of heroin trends

- Prevalence of lifetime and recent use of heroin were comparable to last year. In 2010, lifetime use was reported by 89% of IDU (94% in 2009) and recent use by 69% (71% in 2009).
- Frequency of recent use significantly decreased from an average of 103 days in 2009 to an average of 75 days in the 2010 sample.
- Furthermore, the proportion of daily heroin users was comparable to recent sample years from 36% in 2009 to 23% in 2010.
- The median reported price for one gram of heroin was $600 in 2010 compared to $575 in 2009. The majority of those who responded reported the price of heroin as 'stable' over the last six months.
- Current availability of heroin was rated as 'very easy' or 'easy' by 92% in 2010, which was comparable to 87% of participants in 2009.
- Current purity was rated as 'high' by 20% in 2010 which was comparable to 13% in 2009, and as 'medium' by 40% in 2010, comparable to 38% in 2009. In regards to changes in purity over the last six months, a significant increase was observed in the proportion of the current sample reporting purity as 'increasing' over the last six months, from 19% in 2009 to 30% in 2010.
- In sum, IDU reports in 2010 suggest that frequency of heroin use has decreased. However, reporting of current price, purity and availability have mostly remained stable since 2009.

5. METHAMPHETAMINE

For the purposes of the IDRS and in response to emerging methamphetamine markets, data are collected for three different forms of methamphetamine: methamphetamine powder (referred to as speed); methamphetamine base (referred to as base or paste); and crystal methamphetamine (referred to as ice or crystal). Speed is typically a white or off white fine-grained powder; base is typically of a brown, waxy form; and crystal may be translucent or white crystals of varying size. Another less common form of methamphetamine is liquid amphetamine (referred to as 'ox blood'), which is typically red/brown in colour. IDU were asked about their use of this form, but due to its rarity, were not questioned about its market. For the other forms, IDU were asked if they were able to comment on market aspects such as price, purity and availability.

5.1 Use

5.1.1 Methamphetamine use among IDU participants

In 2010, lifetime use of any form of methamphetamine was reported by 99%, which was not significantly different to last year (95%). Of these participants, 96% had ever injected, 50% had ever smoked, 44% had ever snorted and 36% had ever swallowed a form of methamphetamine.

Specific to form, 91% reported lifetime use of speed (93% in 2009), 29% reported lifetime use of base (36% in 2009), 80% reported lifetime use of crystal (84% in 2009), and 19% reported lifetime use of liquid amphetamine (17% in 2009). There were no significant differences between lifetime use of speed, base, crystal and liquid methamphetamine forms. Patterns of lifetime and recent use of methamphetamine across years are shown in Table 9.

Table 9: Patterns of methamphetamine use in the last six months by form, 2009-2010

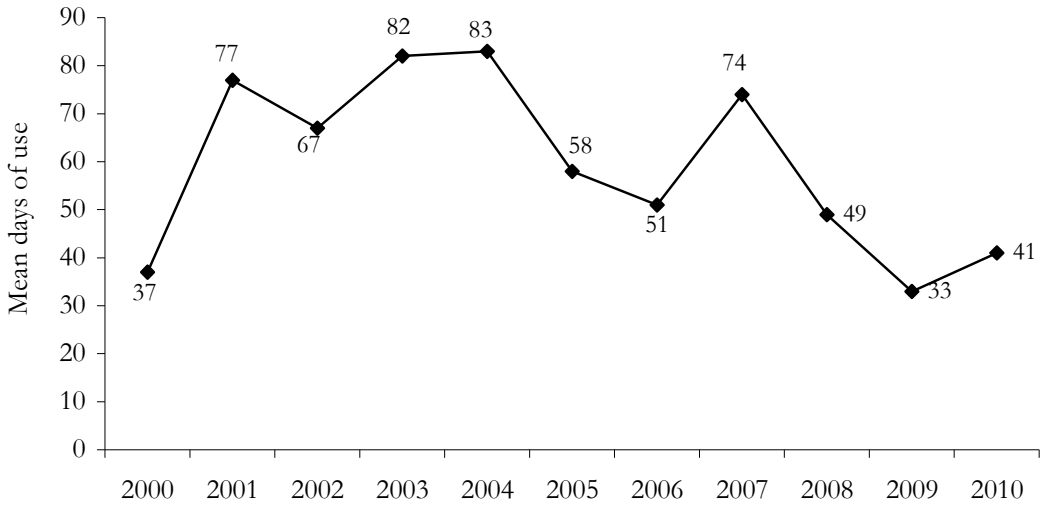
Form used (%)	2009 (N=100)	2010 (N=100)
Speed		
Ever used	93	**91**
Used last six months	56	**51**
Base		
Ever used	36	**29**
Used last six months	13	**8**
Crystal		
Ever used	84	**80**
Used last six months	44	**40**
Liquid		
Ever used	17	**19**
Used last six months	1	**1**
Any methamphetamine		
Ever used	95	**99**
Used last six months	60	**64**

Source: IDRS IDU interviews

5.1.2 Current patterns of methamphetamine use

In 2010, 64% of IDU reported use of any form of methamphetamine in the last six months, which was not significantly different to last year (60%). Of these participants, 95% injected a form of methamphetamine during this period. As shown in Figure 17, the average number of days any form of methamphetamine was used during the last six months by these participants was 41 days (median of 24 days). This was comparable to 2009 findings, with an average of 33 days reported.

Figure 17: Mean days of use for any methamphetamine by WA IDU 2000-2010



Source: IDRS IDU interviews

In 2010, recent use of speed (powder) was reported by 51% of the sample, which was not significantly different to the 56% who did so in the 2009 sample. In 2010, 98% of these participants reported injecting speed in the last six months. Days of use ranged from one to 180 days, with only one respondent reporting using speed on a daily basis (compared to no respondents in 2009). Mean days of use was 29, which was comparable to 21 days reported in 2009.

Recent use of base was reported by 8% of IDU in 2010, which was comparable to 13% in 2009. The majority of recent base users (88%) reported injecting in the last six months. Days of use ranged from two to 10; no respondents reported using base on a daily basis, which was comparable to 2009 findings. Mean days of use was eight, which was significantly greater than an average of three days reported in 2009 ($t=2.245$, $df=7$, $p=.060$) and controlling for the current treatment changes in the sample suggested this was not due to these sampling differences.

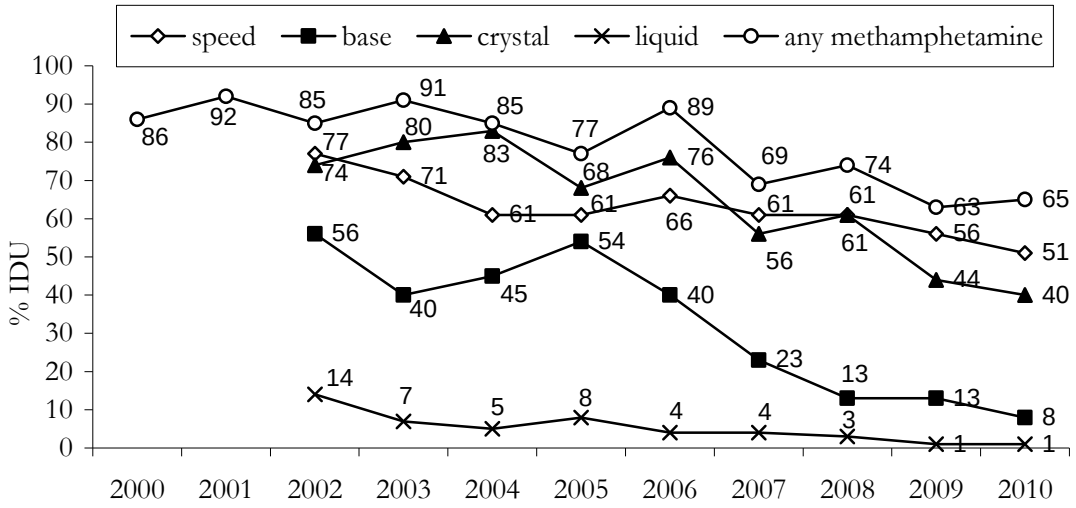
Recent use of crystal was reported by 40% of IDU, which was comparable to 44% in 2009. All but one of the recent users reported injecting crystal in the last six months. Thirty-five percent of recent users of crystal reported smoking crystal in the last six months; this was followed by 10% also reporting swallowing crystal, and 5% reporting snorting crystal in the last six months. Days of use ranged from one to 180, with only one participant reporting use of crystal on a daily basis (compared to no respondents in 2009). Mean days of use was 36, which significantly increased from an average of 22 days in 2009 ($t=2.049$, $df=39$, $p=.047$). Controlling for the current treatment changes in the sample suggested this was not due to these sampling differences.

Recent use of liquid methamphetamine remained uncommon; only 1% of IDU reported use in 2010 (equal proportion in 2009). The one respondent who reported using liquid amphetamine had only injected it in the last six months on a total of two days.

With regards to the form of methamphetamine most commonly used in the 2010 sample, 56% nominated speed, 42% nominated crystal and 2% nominated base. Similar findings were reported in 2009 with 60% nominating speed as the form most commonly used, followed by 40% nominating crystal. No participant nominated base in 2009.

Figure 18 shows the proportion of IDU in Perth reporting use of methamphetamine in the last six months across IDRS surveys. Use of all forms has been relatively stable in the last six months, with no significant changes in recent use proportions occurring since 2009.

Figure 18: Proportion of IDU reporting methamphetamine use in the last six months, 2000-2010



Source: IDRS IDU interviews
Note: Prior to 2006, 'any methamphetamine' included pharmaceutical stimulants

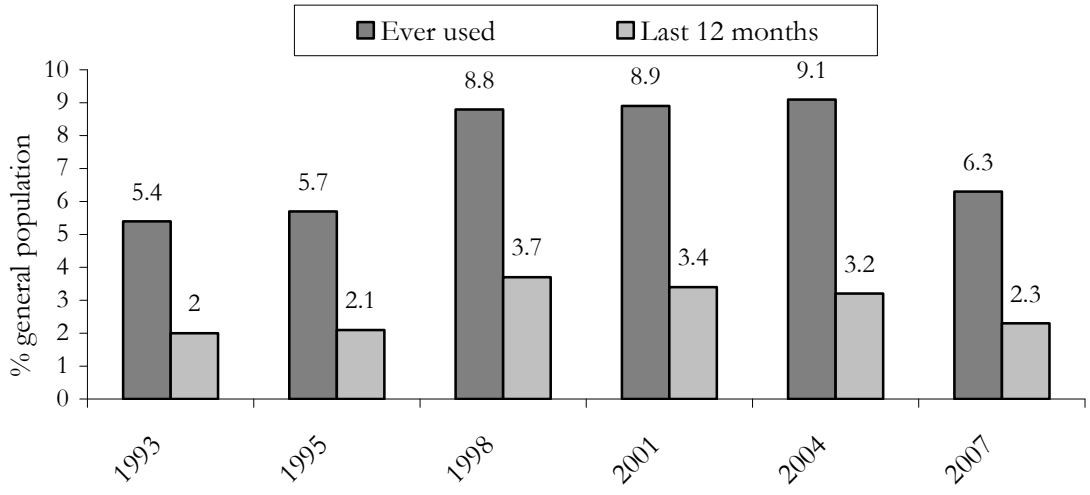
In regards to methamphetamine forms and colours, four KE reported on the preference for crystal (rock) methamphetamine among regular IDU, with one KE reporting the majority of crystal as being either completely clear or slightly yellow, and (more rarely) blue tones. Two KE also mentioned that powder (speed) methamphetamine is rarely seen. In regards to ROA, two KE each reported on injection and smoking as ROA for methamphetamine, and one KE commented that in the past younger users tended to smoke crystal; however, recently there appears to be an increased trend in young methamphetamine users going straight to injecting and that these individuals are not usually educated on safer injecting practices. One KE also reported that methamphetamine is currently being used to cut ecstasy pills. Reports on frequency of methamphetamine use varied from daily to weekly and two KE reported binging was typical among methamphetamine users. Most KE reported that methamphetamine was the one of the most problematic drugs in Perth at the time. Main reasons given for this were: increased prevalence in the drug market recently, increases in young people using it, increasing numbers of clandestine laboratories being uncovered, the violent nature of the users and the 'big time' dealers, and behavioural and psychological harms methamphetamine causes to its users. These

factors are making methamphetamine a problematic and often dangerous drug to deal with within the community. In addition, a number of KE from health backgrounds emphasised how difficult methamphetamine users are to deal with in a hospital setting. Two KE reported an observed increase in the amount of methamphetamine-induced psychosis presentations to emergency departments, with one KE stating that it feels like a 'whole new level of psychosis' that is 'more intense' with 'more arousal' and often involving a longer recovery. Two KE also expressed the difficulty in treating methamphetamine users, largely because there is currently no clear treatment or agonist drug available.

5.2 Methamphetamine use in the general population

According to the 2007 NDSHS, 6.3% of the Australian general population aged 14 years and older had ever used methamphetamine (AIHW, 2008c). This represents a significant decrease from 9.1% in 2004 (Figure 19). There was also a significant decrease in the proportion reporting use of methamphetamine in the previous 12 months from 3.2% in 2004 to 2.3% in 2007. Males are more likely than females to have ever used methamphetamine (7.7% vs. 4.9%) and to have used methamphetamine in the last 12 months (3.0% vs. 1.6%). The 20-29 years age group was the most likely age group to report lifetime methamphetamine use (16%) and use in the previous 12 months (7.3%).

Figure 19: Prevalence of methamphetamine use among the population aged 14 years and over in Australia, 1993-2007



Source: **NDSHS 1988-2007 (AIHW)**

5.3 Price

Participants in the WA IDRS were asked what different amounts of the various forms of methamphetamine cost and how much they paid for their most recent purchase. The latter is presented in Table 10 and median prices for one gram of each form of methamphetamine are presented in Figure 20.

In 2010, 23 participants reported on the price of one point of speed with a median of $50 (same in 2009) and seven participants reported on the price of one gram of speed with a median of $400 (same in 2009). There were 11 participants who reported on the price of a half weight of speed, with a median of $200 (same in 2009) and four participants reported on the price of an eight ball of speed with a median price of $1,150, which slightly increased from $1,100 in 2009,

although this was not significant. Prices were mostly comparable to those reported last year; however, current findings are based on the reports of a smaller number of participants than in 2009.

In 2010, only three participants reported on the price of any quantity of base. Two participants reported one point of base cost a median price of $50 and one participant reported on the price of one gram of base with a median of $400. In 2009, no participants reported on the price of base.

In 2010, 21 participants reported on the price of one point of crystal with a median of $100, which significantly increased from $50 in 2009 (t=5.642, df=20, p=.000). Six participants reported on the price of one gram of crystal with a median of $500, which was comparable to $400 in 2009. There were five participants who reported on the price of a half weight of crystal, with a median of $200 (same in 2009) and four participants reported on the price of an eight ball of crystal with a median of $1,350, which was comparable to $1,200 in 2009. However, reports on the price of a half weight, gram and eight ball were based on a smaller number of respondents and therefore should be interpreted with caution.

Table 10: Price of most recent methamphetamine purchases by IDU participants, 2010

Amount	Median price* $	Range	Number of purchasers*
Speed			
Point (0.1 gram)	50 (50)	50-100	23 (26)
Half weight (0.5 grams)	200 (200)	50-300	11 (25)
Gram	400^ (400)	80-400	7 (16)
Eight ball (3.5 grams)	1150^ (1100)	1000-1500	4 (13)
Base			
Point	50^ (-)	50-50	2 (0)
Half weight (0.5 grams)	- (-)	-	0 (0)
Gram	400^ (-)	400	1 (1)
Eight ball (3.5 grams)	- (-)	-	0(0)
Crystal			
Point (0.1 gram)	100 (50)	50-100	21 (18)
Half weight (0.5 grams)	200^ (200)	200-250	5 (15)
Gram	500^ (400)	400-600	6 (11)
Eight ball (3.5 grams)	1350^ (1200)	1100-2150	4 (7)

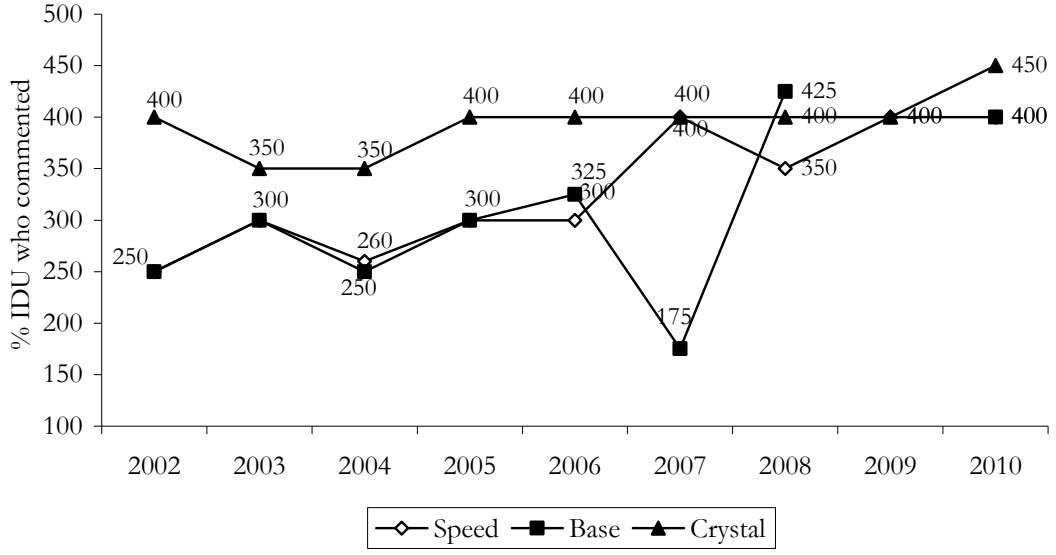
Source: IDRS IDU interviews

* 2009 data are presented in brackets

^ Based on small (<10) purchases

Figure 20 presents the median prices per gram of most recent purchase for each methamphetamine form across years. The median price for one gram of crystal increased for the first time since 2005, from $400 to $450 in 2010; however, this was not a significant increase. The median price of one gram of speed has remained stable at $400 since 2009. Only one participant reported the median price of one gram of base to be $400; however, due to only one participant reporting, these findings should be interpreted with caution. No participant commented on price for any quantity of base in 2009.

Figure 20: Median prices of methamphetamine per gram estimated from IDU purchases, 2002-2010



Source: IDRS IDU interviews
Note: Price data for base methamphetamine in 2007 and 2008 is based on only two purchases. Purchases of other quantities of base do not support evidence that a real fall in price occurred in 2007

Participants were asked if they perceived any changes in the price of methamphetamine over the last six months. There were 34 IDU who responded about speed with the greatest proportion of 50% reporting price as 'increasing', followed by 41% reporting price as 'stable' in the last six months. Only three IDU responded regarding base, with two participants reporting the price as 'stable' (67%) and one respondent as 'increasing' (33%). Of the 33 IDU responding about crystal, 49% reported the price as 'stable', 39% as 'increasing', and 12% as 'fluctuating'. No respondents for each methamphetamine form reporting price change as 'decreasing' in the last six months. Overall, findings from 2010 suggest that the price of speed methamphetamine is perceived by the majority to be 'increasing'.

A few KE reported that methamphetamine prices had increased in the last six months; one of these KE reported a recent increase in the price of one point of methamphetamine, from $50 to $100 in 2010.

5.4 Availability

IDU were asked about the current availability of each form of methamphetamine and any changes in availability over the last six months (Table 11). Of the 36 participants who commented on speed, the majority (47%) rated current availability as 'very easy', followed by 31% rating it as 'easy'. More than two-thirds (78%) rated the availability of speed over the last six months as 'stable'. Only three participants commented on base, with one respondent each rating current availability as 'very easy', 'easy' and 'difficult'. There were also three respondents who reported on base availability over the last six months, with two reporting it as 'stable' and one as 'more difficult' to obtain. Of the 33 participants who commented on crystal, just under half (49%) rated current availability as 'easy', followed by 33% rating it as 'very easy'. Crystal availability over the last six months was rated by over two-thirds (71%) as 'stable'.

Table 11: Participants' reports of methamphetamine availability in the past six months, 2009-2010

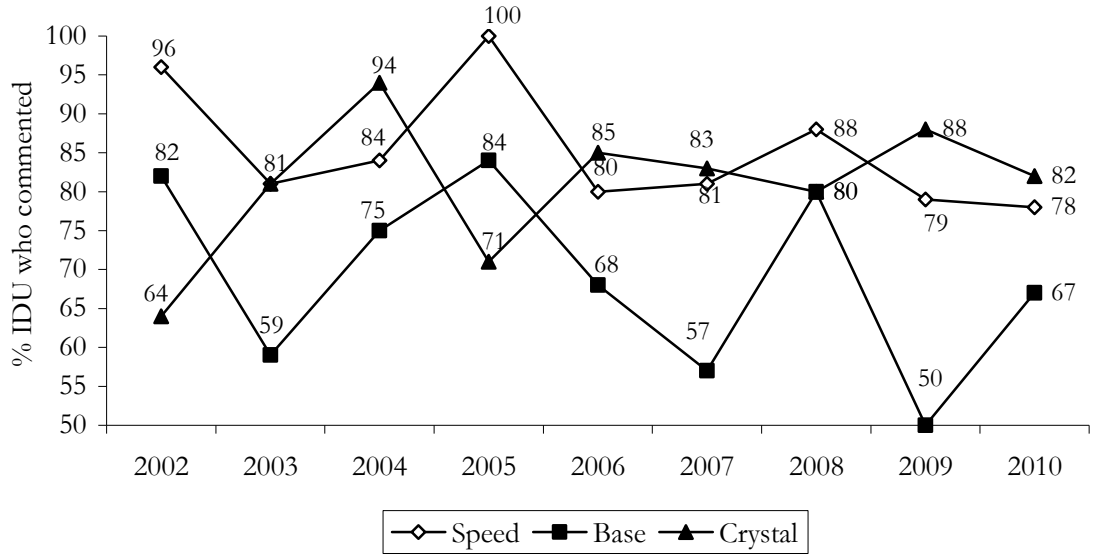
	Speed		Base		Crystal	
	2009 (N=100)	2010 (N=100)	2009 (N=100)	2010 (N=100)	2009 (N=100)	2010 (N=100)
Current availability						
Did not respond* (%)	58	**64**	98	**97**	75	**67**
Did respond (%)	42	**36**	2	**3**	25	**33**
Of those who responded:						
Very easy (%)	24	**47**	50	**33**	28	**33**
Easy (%)	55	**31**	0	**33**	60	**49**
Difficult (%)	21	**17**	0	**33**	4	**12**
Very difficult (%)	0	**6**	0	**0**	0	**6**
Availability change over the last six months						
Did not respond* (%)	58	**64**	98	**97**	75	**69**
Did respond (%)	42	**36**	2	**3**	25	**31**
Of those who responded:						
More difficult (%)	17	**11**	0	**33**	4	**13**
Stable (%)	67	**78**	50	**67**	72	**71**
Easier (%)	5	**3**	0	**0**	12	**10**
Fluctuates (%)	10	**8**	0	0	4	**7**

Source: IDRS IDU interviews

* 'Did not respond' refers to participants who were not confident in their knowledge of the market

The proportion of IDU who rated current availability as 'easy' or 'very easy' for each form of methamphetamine across IDRS surveys is presented in Figure 21. It is evident that there has been fluctuation over the years; however, since 2006, ratings for speed and crystal have been relatively stable. Reports for base show considerable variation, which is most likely due to the small number of participants who comment on base each year. There were only three respondents reporting on availability for base in 2010.

Figure 21: IDU reporting 'easy' or 'very easy' availability of methamphetamine by form in WA 2002-2010



Source: **IDRS IDU interviews**
Note: 'Don't know' responses excluded

KE reported current availability of methamphetamine to be easy and that this availability is currently increasing in Perth, with one KE even predicting that methamphetamine availability was going to continue increasing over the next year.

IDU were asked about sources of each form of methamphetamine. Of the 33 participants who reported on speed, just over half (52%) nominated friends as the person from whom speed was last obtained. Just under one-quarter (24%) nominated known dealers, less than a quarter nominated acquaintances (15%), and smaller proportions nominated street dealers and unknown dealers (3% each). With regards to locations of purchase, 30% reported friends' home, 21% reported an agreed public location, 15% reported dealers' homes, 12% each reported home delivery and acquaintances' houses, 6% reported street market, and 3% reported 'other'.

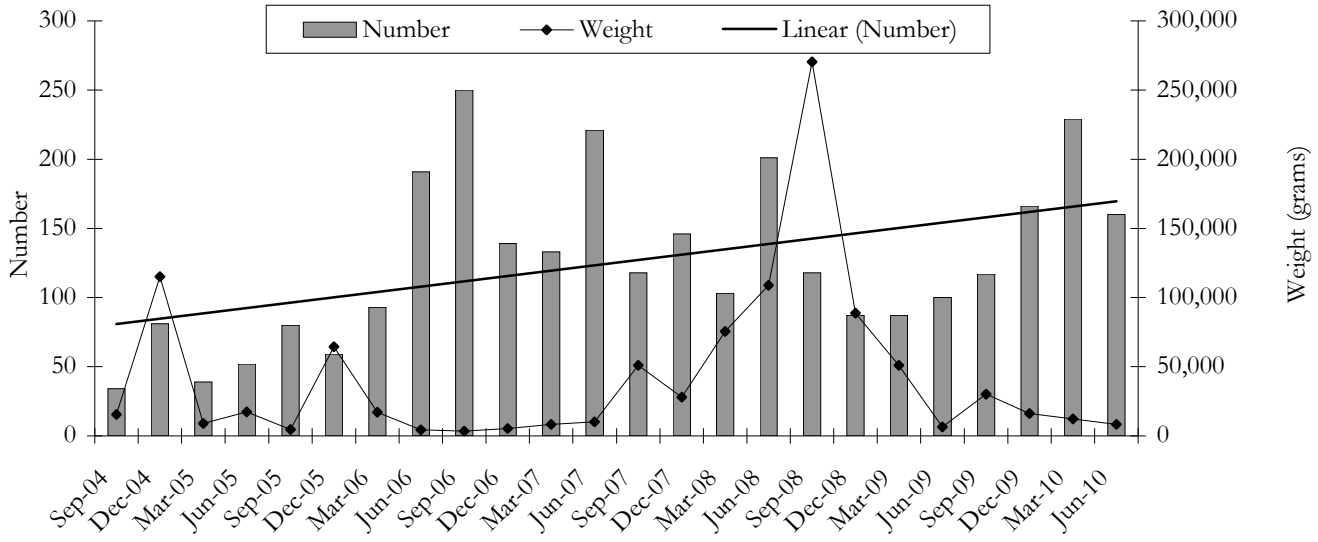
Only three participants responded for base: one nominated friends, one nominated known dealers and one nominated acquaintances as sources of base. With regards to locations, two participants nominated dealers' homes and one nominated friends' homes.

There were 33 participants who reported on the source person and location for when they last obtained crystal. Of these more than half (55%) nominated friends, followed by 27% nominating known dealers. Another 12% reported acquaintances as a common last source person and 3% each nominated street dealers and unknown dealers. Friends' homes was reported by 25% as the most common last location of purchase, followed by 21% each reporting an agreed public location and dealers' homes; 18% reported home delivery. Smaller proportions of 6% nominated street market and 3% for acquaintances' homes.

Overall, friends and friends' homes were the most common last person and last location from which they sourced methamphetamine.

Figure 22 shows the number and weight of ATS seizures by ACS at the Australian border from 2004/05 to 2009/10, by quarter. ACS classifies amphetamine, methamphetamine and crystal methamphetamine as ATS. Across time, the number of seizures in each quarter has fluctuated, but the overall trend shows a slight increase (see linear trend line). The total number of ACS ATS seizures in 2009/10 was 672 which increased from 392 in 2008/09; the total weight of seizures for this period was 66,693.63 grams compared to 115,345.06 grams in 2008/09.

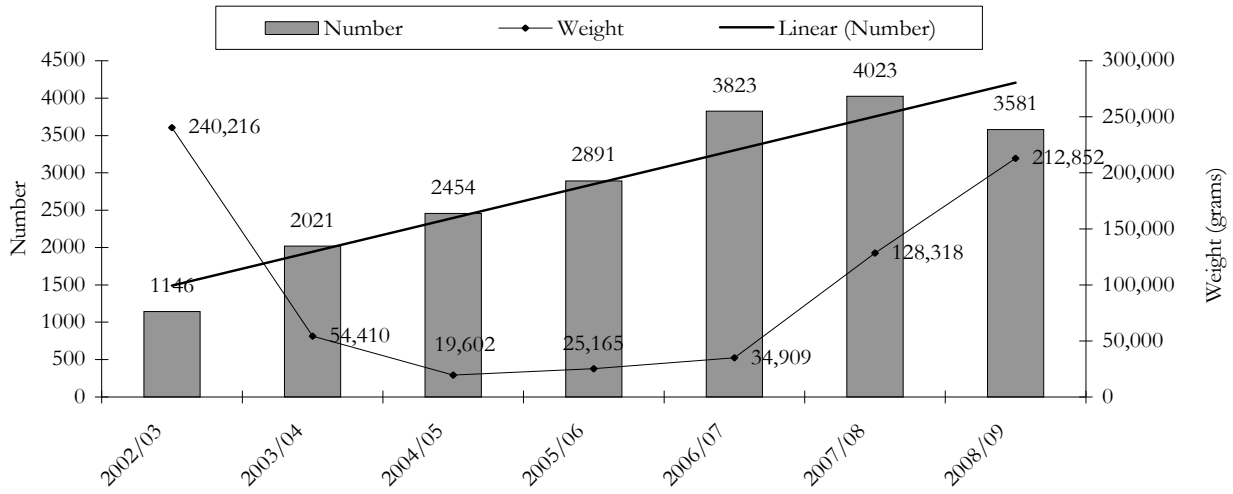
Figure 22: Number and weight of methamphetamine seizures by ACS, 2004/05-2009/10



Source: **ACS**

Figure 23 presents the total number and combined weight of ATS seizures made by WAPS and AFP in WA from 2002/03 to 2008/09. It is evident that while the number of seizures increased across time, the weight of seizures sharply decreased from 2002/03 to 2006/07, and more recently has been increasing. The number of ATS seizures by WAPS and AFP also appears to be increasing over time (see linear trend line). This suggests that police are making a greater number of seizures of larger weights in recent years. In 2008/09, WAPS and the AFP made 3,581 ATS seizures in WA with a total weight of 212,852 grams.

Figure 23: Number and weight of amphetamine-type stimulant seizures by WAPS and AFP, WA 2002/03-2008/09



Source: **ACC**

One KE from a law enforcement background reported that during the last 12 months, crime squads have shifted their focus 'higher', from ounce methamphetamine dealers to pound dealer. Additionally, the number of clandestine labs being uncovered in WA has increased in the last two years. With one KE reporting that, at time of interview, 113 labs had been uncovered in WA. This KE predicted another 40 would be found by the end of 2010. However, it was reported that most of these labs are only 'small cooks' for personal use, with methamphetamine manufacture in WA no longer just involving sophisticated, high-level syndicates, as most of the instructions, equipment and ingredients can be sourced from the internet, from other cooks, the local hardware and from pharmacies where cold and flu medications can be purchased. The individuals currently engaging in these 'small cooks' were reported to be of varying economic and educational backgrounds.

5.5 Purity

IDU were asked about the current purity of each form of methamphetamine (Table 12) and perceived changes in purity over the last six months. Of the 36 participants who responded regarding speed, the greatest proportion (36%) rated current purity as 'medium', followed by one-quarter (25%) rating it as 'high'. This represents an increase in the proportion rating purity as 'medium' compared to last year (21%), with corresponding decreases in proportions rating it as 'low' (33% in 2009). Only three participants responded for base, with two participants reporting purity as 'high' and the other as 'medium'. Of the 33 participants who responded for crystal, the greatest proportion (than a third) rated purity as 'high' (42%), followed by reporting purity as 'medium' (24%), then 'fluctuates' (18%) and 'low' (15%). These ratings for crystal represent an increase in the proportion reporting purity as 'high'; from 28% in 2009 to 42% in 2010 (95%CI -0.26, -0.00) and a corresponding decrease in the proportion reporting purity as 'low' from 28% in 2009 to 15% in 2010 (95%CI 0.01, 0.24) (see Table 10). Controlling for the current treatment changes in the sample suggested this was not due to these sampling differences.

Table 12: Methamphetamine purity by user report 2009-2010

	Speed		Base		Crystal	
	2009 (N=100)	2010 (N=100)	2009 (N=100)	2010 (N=100)	2009 (N=100)	2010 (N=100)
Current purity						
Did not respond* (%)	58	**64**	98	**97**	75	**67**
Did respond (%)	42	**36**	2^	**3**	25	**33**
Of those who responded:						
High (%)	26	**25**	50^	**67**	28	**42**
Medium (%)	21	**36**	0	**33**	28	**24**
Low (%)	33	**17**	0	**0**	28	**15**
Fluctuates (%)	19	**22**	0	**0**	4	**18**

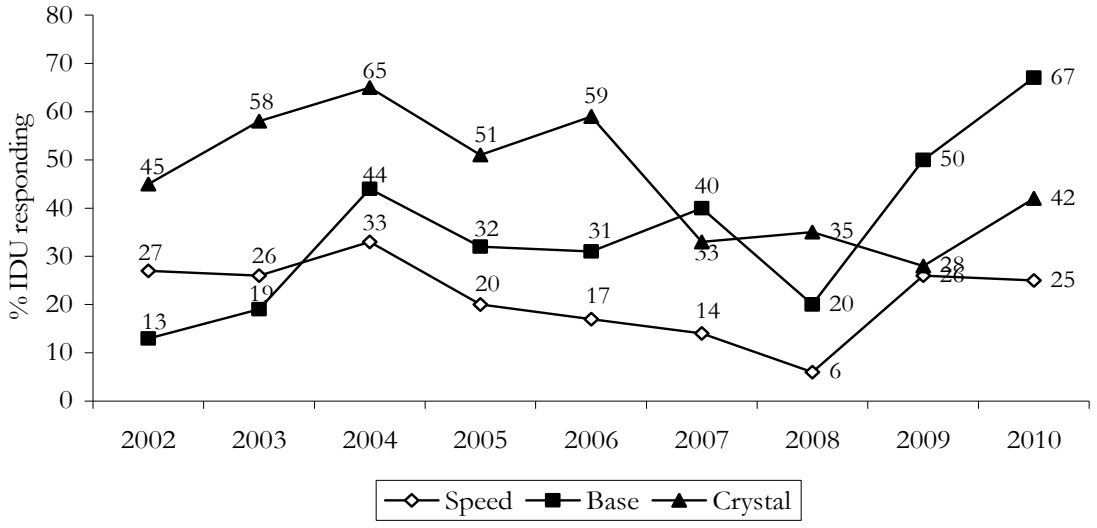
Source: IDRS IDU interviews

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

^ Based on less than 10 participants

Figure 24 presents the proportion of IDU commenting on methamphetamine who rated each form as 'high' purity across IDRS surveys. In comparison to 2009 findings, ratings of crystal and base purity as 'high' have increased overall; however, extreme caution is warranted in interpreting ratings for base, given that only three participants commented. Ratings of speed as 'high' were comparable to 2009 findings.

Figure 24: Proportion of IDU reporting each methamphetamine by form as 'high' purity, 2002-2010



Source: IDRS IDU interviews

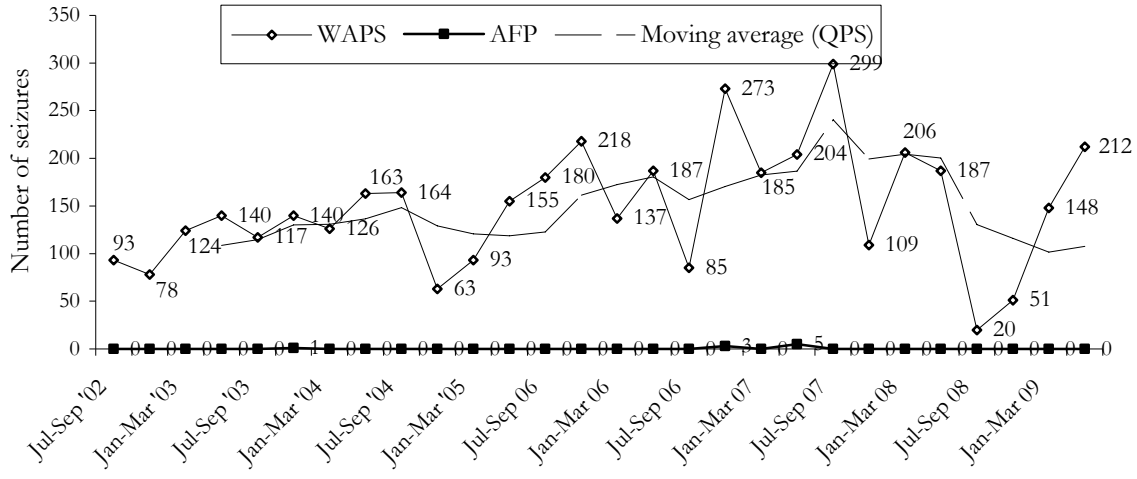
NB: In 2010 only three participants responded for base, suggesting extreme caution in interpretation

Asked whether the purity of speed had changed in the six months prior to interview, the greatest proportion reported it was 'stable' (35%). This was followed by 29% who rated it as 'decreasing' , 20% as 'fluctuating' and 15% as 'increasing'. With regards to base, only three participants responded, two rated it as 'stable' and one as 'increasing'. The greatest proportion (31%) of those who commented on crystal rated it as 'fluctuating', closely followed by 28% rating it as 'stable', 25% as 'increasing', and 16% as 'decreasing'.

As with availability, most KE perceived current methamphetamine purity to be increasing, although two KE also mentioned that it may not necessarily be the methamphetamine that is increasing in purity, but the drug currently being used to cut it. Therefore this may offer some plausible explanation to why more KE are reporting a 'whole new', 'more intense' level of methamphetamine-induced psychosis presentations in hospital emergency departments.

Figure 25 presents the number of methamphetamine seizures made in WA by WAPS and AFP for which purity was analysed at a forensic laboratory from 2002/03 to 2008/09. It is apparent that WAPS are responsible for almost all methamphetamine seizures analysed in WA, with AFP only recording seizures in three-quarters (October-December 2003, October-December 2006, and April-June 2007). WAPS seizures were stable from July-September 2002 to July-September 2004, but then decreased sharply. A steady increase followed until October-December 2006; since then, the number of seizures has fluctuated. In July-September 2008, this number decreased to the lowest number of seizures analysed since July-September 2002; since then, they have been steadily increasing per quarter. In 2008/09, WAPS and AFP made a total of 431 methamphetamine seizures analysed in WA.

Figure 25: Number of methamphetamine seizures analysed in WA, by quarter, 2002/03-2008/09

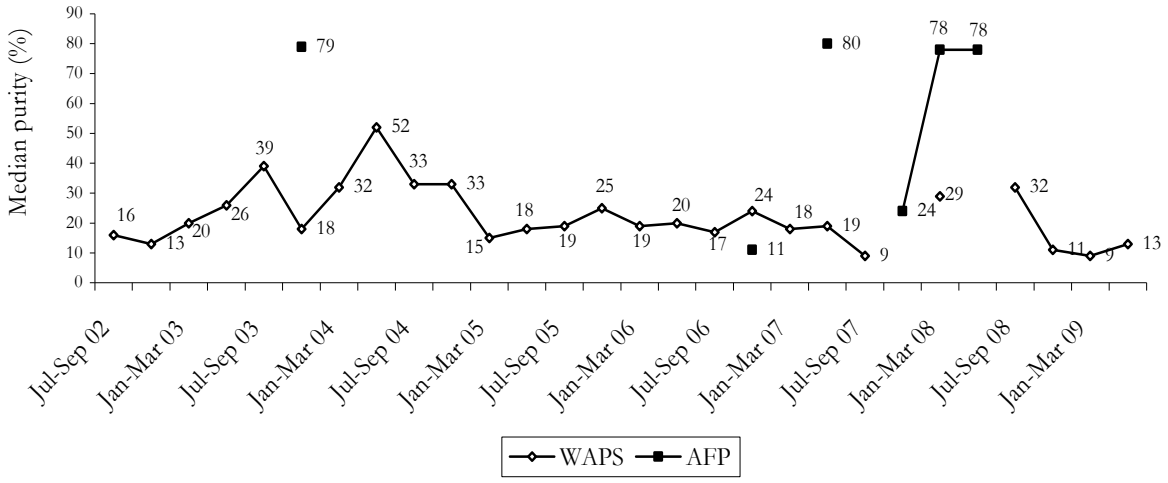


Source: ACC

Figure 26 shows the median purity of methamphetamine seizures presented above in Figure 25. It is evident that the median purity of seizures made by WAPS fluctuated between July-September 2002 and January-March 2005, but has since stabilised. All AFP seizures from 2007/08 were of much greater purity than the WAPS seizures. From July 2008 to June 2009, the

median purity across all WAPS seizures analysed was 12%, while no methamphetamine seizures were analysed by AFP in WA during this period.

Figure 26: Purity of methamphetamine seizures analysed in WA, by quarter, 2002/03-2008/09



Source: ACC

5.6 Summary of methamphetamine trends

- There was no significant change in lifetime or recent use of all forms of methamphetamine from 2009 to 2010.
- Lifetime use of speed was reported by 91% in 2010 compared to 93% in 2009. Recent use was also comparable, from 56% in 2009 to 51% in 2010.
- Lifetime use of crystal was reported by 80% of IDU which was comparable to 84% in 2009; recent use was also comparable from 44% in 2009 to 40% in 2010.
- Lifetime use of base was reported by 29% in 2010, which was comparable to 36% in 2009. Recent use was also comparable, from 13% in 2009 to 8% in 2010.
- Among those who had used methamphetamine in the last six months, the average days used for all forms of methamphetamine were comparable to 2009. Speed was used an average of 29 days which was comparable to 21 days in 2009; base was used an average of seven days, again, comparable to three days in 2009 (although based on a small sample size in both years); and crystal was used an average of 36 days, which significantly increased from 22 days in 2009.
- The median price for one point of all forms of methamphetamine remained $50. The median price for one gram of speed was $400. The median price for a gram of crystal was $500 in 2010. Only one participant reported on price for base, which was $400 for a gram. There was a significant increase in the proportion of the 2010 sample reporting changes in price for crystal and speed as 'increasing' in the last six month.
- Current availability was rated as 'very easy' or 'easy' by 78% of those who commented on speed, 66% for base (n=3), and 82% for crystal. The greatest proportion of IDU reported availability for all forms was stable in the last six months.
- Current purity was rated as 'medium' by the greatest proportion of those who responded for speed (36%) and current purity of crystal was rated as 'high' by 42%. Three participants commented on the purity of base; two reported purity as 'high' and one reported it to be 'medium'.

6. COCAINE

6.1 Use

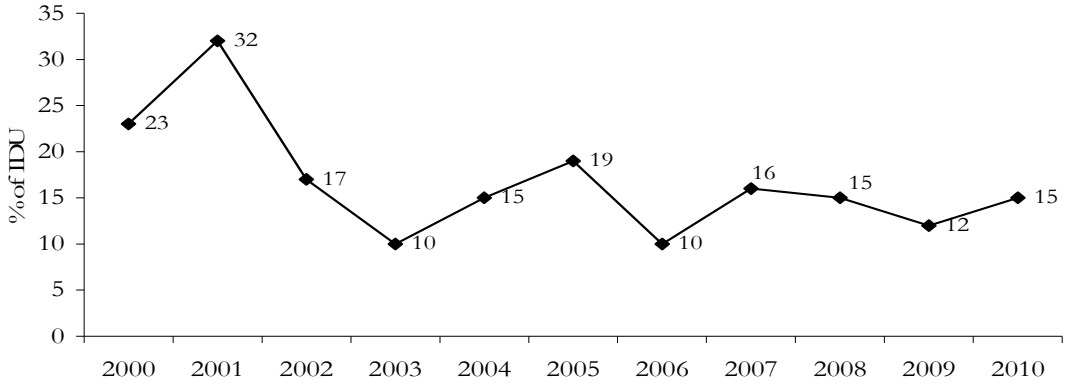
6.1.1 Cocaine use among IDU participants

In 2010, lifetime use of cocaine was reported by 65% of IDU, which was comparable to 60% reported in 2009. Of these participants in 2010, 49% reported lifetime injection of cocaine and 55% reported lifetime snorting of cocaine.

6.1.2 Current patterns of cocaine use

Use of cocaine in the six months preceding interview was reported by 15% of IDU, which was not significantly different to the 12% who reported recent use in 2009. Of these participants, 60% reported injecting cocaine in the last six months and 40% reported snorting. Days of use ranged from one to 12, with an average of three days of use in the last six months, which significantly decreased from nine days in 2009 (t=-7.040, df=14, p=.000). Recent cocaine use by IDU across IDRS surveys is presented in Figure 27 and shows that it has remained at low prevalence since 2002.

Figure 27: Cocaine use in the past six months, 2000-2010



Source: IDRS IDU interviews

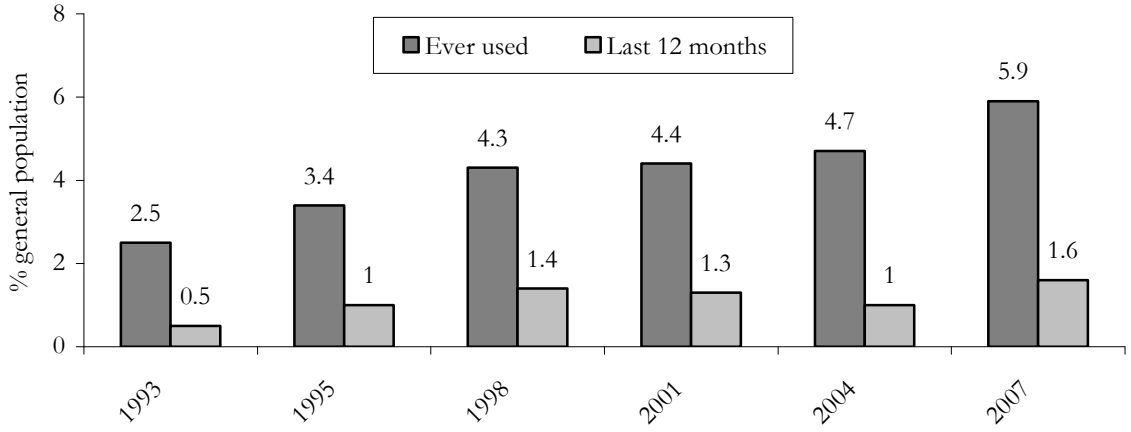
Of the 14 IDU who provided information on the forms of cocaine used, 100% reported that the form most used was powder cocaine.

Most KE commented that cocaine use appears to have increased in the last year, with one KE reporting that the 4.5 tonnes of ecstasy seized by Australian customs in 2008 has caused an overall decrease in ecstasy purity in Australia, and therefore other drugs such as cocaine and 'research chemicals' have compensated for this gap in the drug market. Two KE from a health care setting also reported an increase in the number of cocaine-related presentations coming into emergency departments. Interestingly, one KE even reported having witnessed individuals cooking 'crack cocaine' in the last 12 months. Crack cocaine is a freebase form of cocaine that is most commonly smoked (The Australian Drug Guide, 2006). This form is more common in the United States and is considered rare in Australia (World Drug Report, 2010). This sighting was reported to be very small scale and for personal use only.

6.2 Cocaine use in the general population

According to the 2007 NDSHS, 6% of the general population aged 14 years and older had ever used cocaine (AIHW, 2008). This represented a significant increase from 5% in 2004 (Figure 28). There was also a significant increase in the proportion reporting use of cocaine in the previous 12 months from 1% in 2004 to 1.6% in 2007. Males were more likely than females to have ever used cocaine (7% vs. 5%) and to have used cocaine in the last 12 months (2% vs. 1%) The 20-29 years age group was slightly more likely than the 30-39 years age group to have ever used cocaine (12% vs. 11%). However, the 20-29 years age group was most likely to have used cocaine use in the previous 12 months (5%).

Figure 28: Prevalence of cocaine use among the population aged 14 years and over in Australia, 1988-2007



Source: **NDSHS 1988-2007 (AIHW)**

6.3 Price

In 2010, only two participants reported on the price of cocaine. The one respondent that commented on the price of one point of cocaine reported it cost $40. Of the two who commented on the price of one gram, it was reported to cost an average of $325 a gram (Table 13).

Table 13: Price of most recent cocaine purchases by IDU participants, 2010

Amount	Median price* $	Number of purchasers*
Point	40^(-)	1 (0)^
Quarter gram	- (180^)	0 (1)^
Half gram (half weight)	- (360)	- (0)^
Gram	325^ (450)	2 (1)^

Source: IDRS IDU interviews

* 2009 data are presented in brackets

^ Based on a small number of purchases

In regards to price change for cocaine in the last six months, one participant reported that price was 'decreasing' and one participant reported it to be 'stable'.

Five KE reported that the price of cocaine had decreased during the 12 months preceding interview. With one KE stating that cocaine was no longer considered just for the wealthy, but was now far more affordable, particularly to young people.

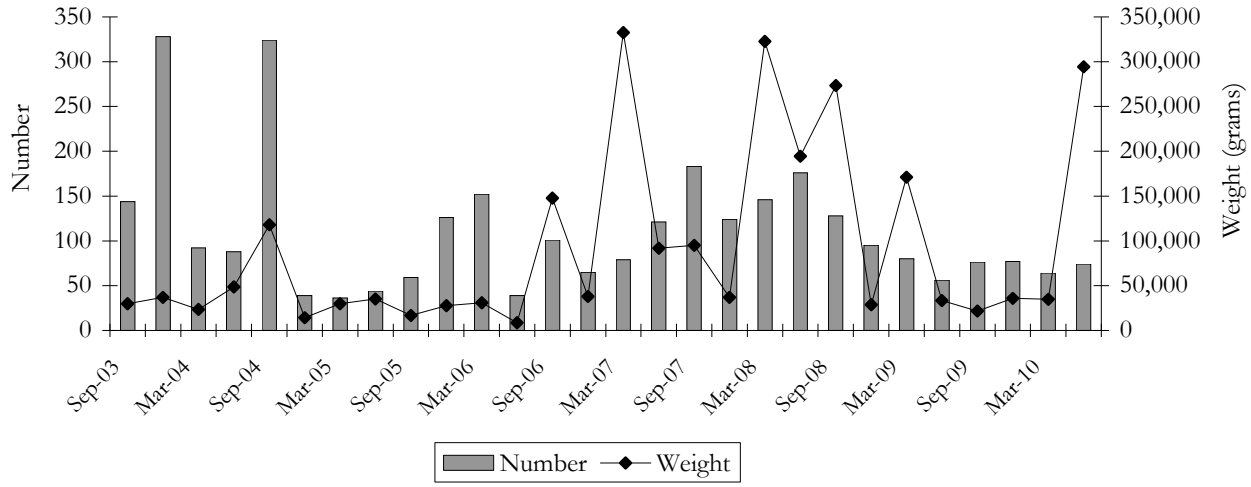
6.4 Availability

Only five participants commented on availability of cocaine, with three participants reporting the current availability of cocaine as 'easy' (60%), and the remaining two participants reported availability as 'very easy' (40%). Again, five respondents reported on changes to cocaine availability in the last six months, with three reporting it was easier (60%) and two reported availability was 'stable' (40%). However, due to the small sample that reported, these findings should be interpreted with caution.

Four respondents commented on source of cocaine, with two participants reported last purchasing cocaine from friends (50%) and one each reported known dealers and acquaintances (25% each). This was purchased at an agreed public location (n=3) and at a friends home (n=1).

The number and weight of cocaine seizures by the ACS from 2003/04 to 2009/10 is shown in Figure 29. There has been considerable fluctuation in the number and weight of cocaine seizures across time. There have been four significant peaks in weight in March 2007 (332,599.06 grams), March 2008 (322,761.87 grams), September 2008 (273,412.38 grams) and more recently in June 2010 (294,555.10 grams). The total number of cocaine seizures for 2009/10 was 291 and the total weight of seizures for this period was 386,778.75 grams.

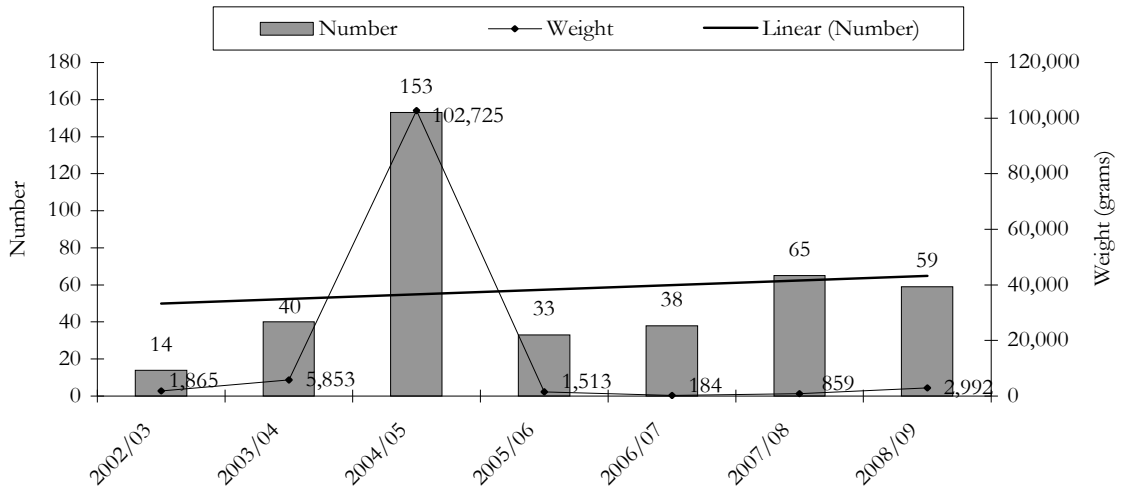
Figure 29: Number and weight of cocaine seizures by ACS, 2003/04-2009/10



Source: ACS

Figure 30 presents the total number and combined weight of cocaine seizures made by WAPS and AFP in WA from 2002/03 to 2008/09. The number and weight of seizures have been relatively low, with the exception of 2004/05. This was due to a marked increase in AFP seizures to 109 seizures with a weight of 101,691 grams. In 2008/09, WAPS and AFP made 59 cocaine seizures in WA with a total weight of 2,992 grams.

Figure 30: Number and weight of cocaine seizures by WAPS and AFP, WA 2002/03-2008/09



Source: **ACC**

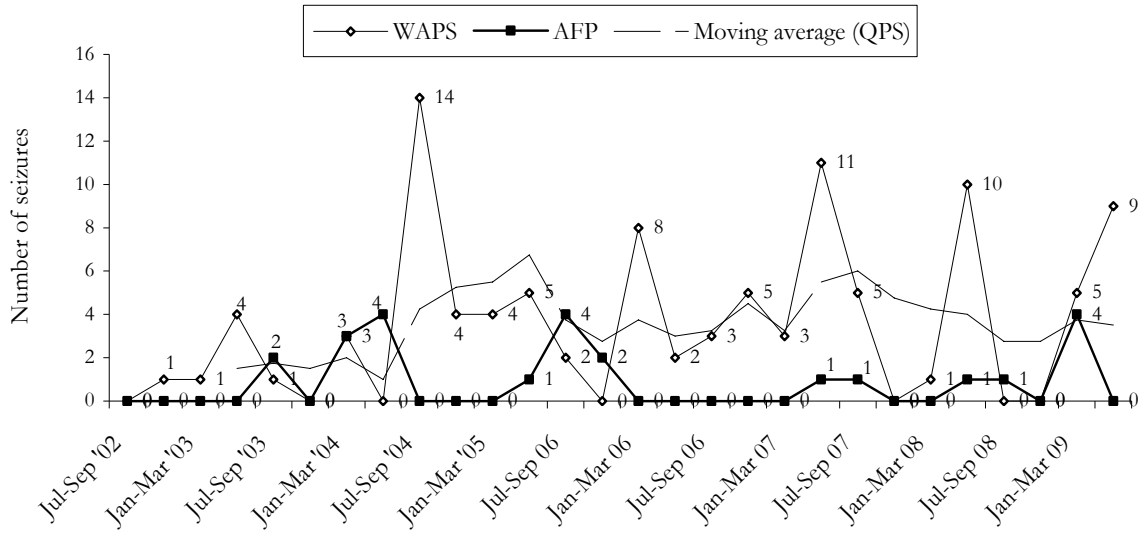
Three KE reported that cocaine was more readily available in Perth during 2010. One KE also stated that cocaine was currently more readily available than cannabis.

6.5 Purity

As with price and availability, only a small number of IDU (n=5) commented on purity of cocaine. Two participants reported current purity as 'high' (40%), and one participant each reported 'medium', 'low' and 'fluctuates' (20%). Changes in purity of cocaine over the last six months were reported by two participants, with one reporting 'increasing' and one reporting 'stable'. Due to the small sample reporting on purity, these findings should be interpreted with caution.

Figure 31 presents the number of cocaine seizures made in WA by WAPS and AFP for which purity was analysed at a forensic laboratory from 2002/03 to 2008/09. It is apparent that WAPS was responsible for the majority of cocaine seizures analysed in WA, with AFP recording no seizures in the majority of quarters. The number of both WAPS and AFP seizures has fluctuated over time; however, they are low in comparison to the number of seizures of other drugs such as amphetamines and cannabis in WA. In 2008/09, WAPS made a total of 14 cocaine seizures and AFP made a total of five seizures analysed in WA.

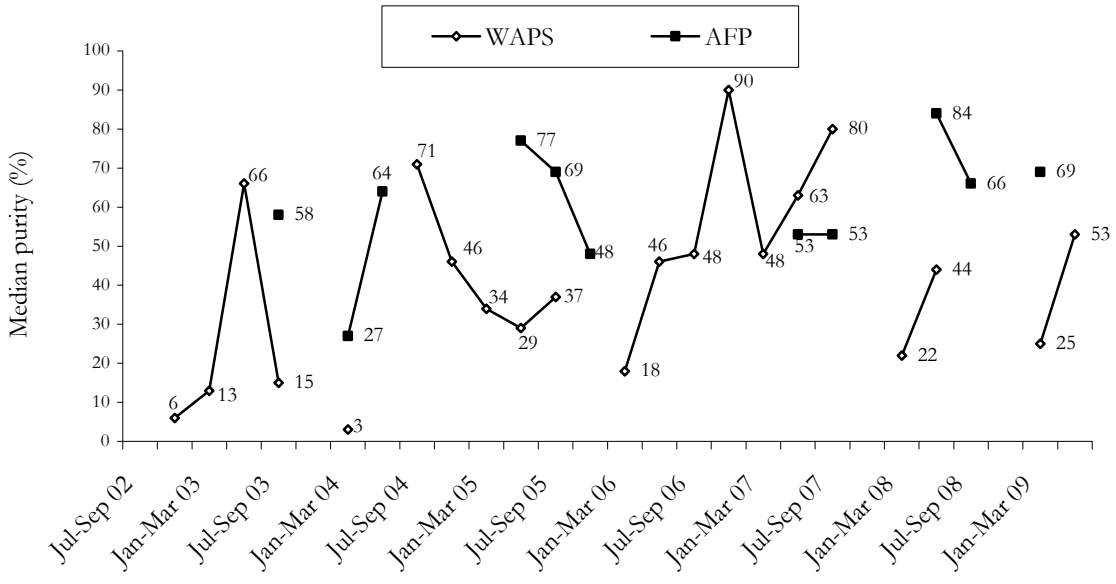
Figure 31: Number of cocaine seizures analysed in WA, by quarter, 2002/03-2008/09



Source: ACC

Figure 32 shows the median purity of cocaine seizures presented above in Figure 31. It is evident that the median purity of seizures made by both WAPS and AFP has fluctuated over time. In the most recent quarter, AFP seizures were of greater purity than the WAPS seizures. From July 2008 to June 2009, the median purity across all WAPS seizures analysed was 52%, while the median purity across all AFP seizures analysed was 67%.

Figure 32: Purity of cocaine seizures analysed in WA, by quarter, 2002/03-2008/09



Source: ACC

6.6 Summary of cocaine trends

- Lifetime use of cocaine by IDU was reported by 65% of the 2010 sample which was not significantly different from the 60% who reported lifetime use in 2009.
- Recent use was reported by 15% of the 2010 sample which was not significantly different from the 12% in 2009.
- Frequency of cocaine use significantly decreased among recent users in 2010, from an average of nine days in 2009 to an average of three days in 2010.
- Only two participants commented on the price of cocaine, with one point reported to cost $40 and one gram reported to cost an average of $325.
- Only five participants reported on availability and purity of cocaine with varying responses, therefore making it difficult to draw conclusions about the cocaine market in WA.

7. CANNABIS

7.1 Use

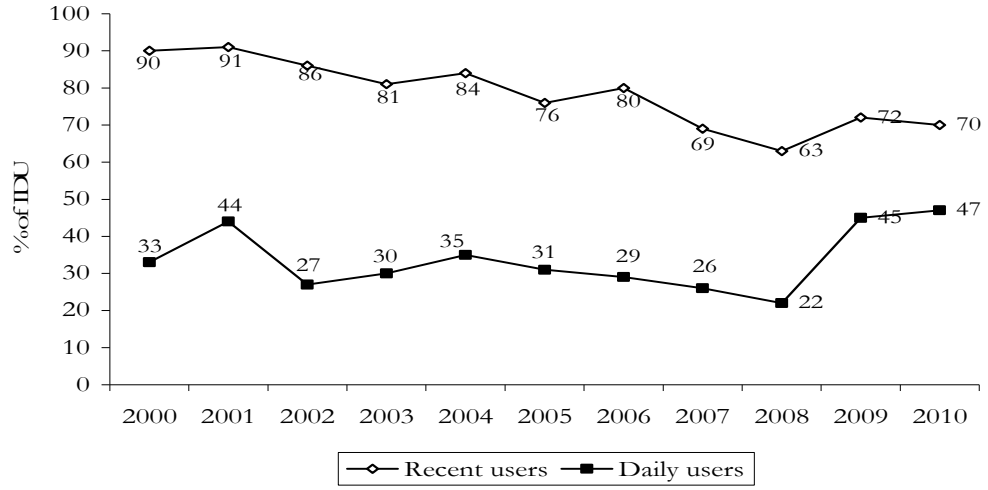
7.1.1 Cannabis use among IDU participants

In 2010, lifetime use of cannabis was reported by 96% of IDU, which was the same proportion who reported lifetime use in 2009.

7.1.2 Current patterns of cannabis use

Use of cannabis in the last six months was reported by 70% of IDU in 2010, which was not significantly different from the 72% who reported recent use in 2009. In 2010, days of use ranged from one to 180, with 47% of the total IDU sample reporting use of cannabis on a daily basis (45% in 2009); this proportion represents the highest number of daily cannabis users since IDRS data collection began. Mean days of use was 105, which was the same number of average days reported in 2009. The proportion of IDU reporting any use and daily use of cannabis in the last six months is presented in Figure 33.

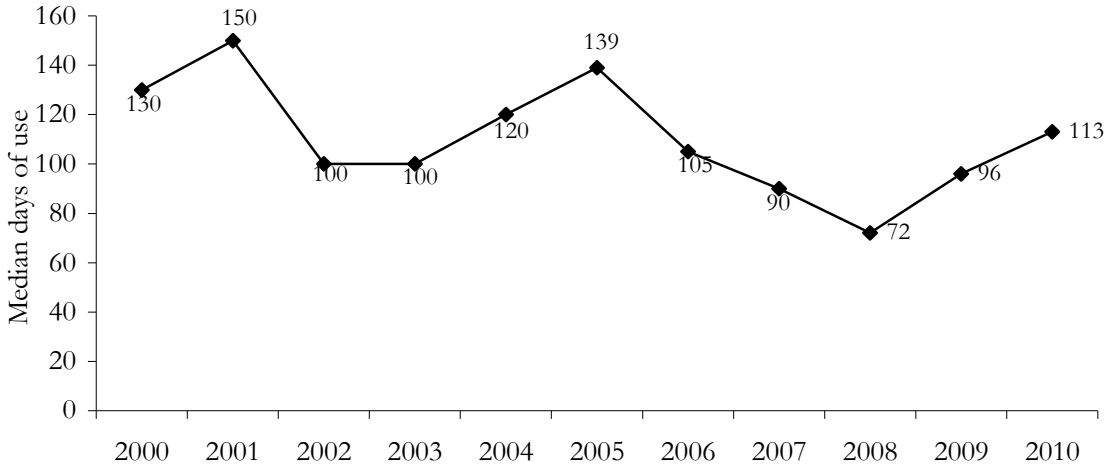
Figure 33: Recent use and daily users of cannabis in the past six months, 2000-2010



Source: IDRS IDU interviews

Figure 34 shows the median number of days cannabis was used among IDU across IDRS surveys. As evident in Figure 34, there has been some variation since 2000; however, from 2005 to 2008, the use of cannabis by IDU was steadily decreasing. Since then, recent IDU samples suggest that frequency of cannabis use by IDU has been increasing, from a median of 72 days in 2008, to 96 days in 2009 and then 113 days in 2010, representing the greatest median days used since 2005.

Figure 34: Median days of cannabis use in the past six months, 2000-2010



Source: IDRS IDU interviews

IDU who reported use of cannabis were asked about forms of cannabis used in the last six months. In the past, use of hydroponic cannabis (hydro) has consistently been more commonly reported than bush cannabis among WA IDU. This trend remained in 2010: 68 participants responded, with 91% reporting that hydro was the form they mostly used, while 9% reported bush.

Participants who had smoked cannabis in the last six months were asked how much cannabis they smoked on the occasion of last use. Fifty-nine participants said they used cones, with a median of three cones smoked (range=0.5-20 cones). Three participants smoked joints, with a median of one joint smoked (range=1-3 joints).

KE made only a few comments regarding cannabis use among IDU. KE reported that generally most IDU use cannabis and no notable changes have been observed in use patterns in the last 12 months. One KE commented that cannabis use can often be problematic for individuals more predisposed to mental health problems such as schizophrenia and psychosis, and that often when dependent cannabis users stop using, their mental health deteriorates very rapidly which often results in contact with the health system to try to manage this. One KE from a health care setting reported observing an increase in regular cannabis users presenting for cannabinoid hyperemesis syndrome, a disorder associated with long -term cannabis use (Sontineni et al., 2009). Symptoms include cyclical vomiting and a bizarre hot showering behaviour, where the heat is reported to minimise the symptoms. This KE reported this behaviour can be harmful, as often individuals are coming into hospital emergency departments with hot water burns. This KE suspected this phenomenon was caused by harmful chemicals used to encourage growth in hydroponic cannabis plants.

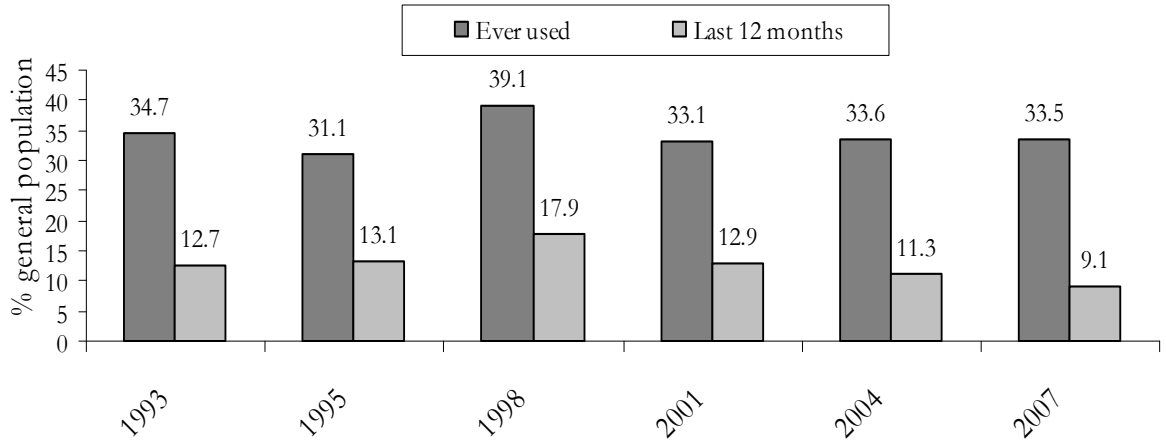
7.2 Cannabis use in the general population

According to the 2007 NDSHS, 34% of the Australian general population aged 14 years and older had ever used cannabis (AIHW, 2008). There was a significant decrease in the proportion reporting use of cannabis in the previous 12 months from 11% in 2004 to 9% in 2007 (Figure

35). The proportion reporting use in the previous 12 months peaked in 1998 and has steadily declined across subsequent surveys.

As with other drugs presented in the NDSHS, males are more likely than females to have ever used cannabis (37% vs. 30%) and to have used cannabis in the last 12 months (12% vs. 7%). The 30-39 years age group was the most likely group to report lifetime cannabis use (55%), while the 20-29 years age group was the most likely to report use in the previous 12 months (21%).

Figure 35: Prevalence of cannabis use among the population aged 14 years and over in Australia, 1993-2007



Source: **NDSHS 1993-2007**

7.3 Price

IDU were asked to report on the current price of cannabis and how much they paid at their most recent purchase.

Hydro

Prices paid at last purchase are shown in Table 14. The greatest number of participants (n=27) reported on the last price paid for one ounce of hydro, which had a median price of $350 (range=$250-$400). Fifteen participants reported on the price of one gram of hydro, with a median of $25 (range=$20-$35) and 11 participants reported on the price of one half ounce of hydro, with a median of $175 (range=$120-$200). These prices were mostly comparable to those reported last year, with the exception of the price of one half ounce of hydro which increased from a median price of $150 in 2009 to $175 in 2010; however, this was not statistically significant.

Bush

Only a few participants reported on price at last purchase of bush (Table 14). Ten participants reported on the current price of one ounce of bush, with a median of $250 (range=$180-$300), significantly decreasing from a median of $290 in 2009 (t=-2.884, df=9, p=.018). Nine participants reported on the price of one 'bag' of bush, with a median of $25 (range=$10-$50), which was the same price in 2009. Four participants reported on the price of one-half of an ounce of bush, with a median of $160 (range=$100-$175), which was not a significant increase from $125 in 2009. However, caution must be exercised in interpreting this difference given the small number of participants who responded.

Two participants reported on the price of hash or hash oil in 2010, the median price for a gram was $70 (range=$40-$100).

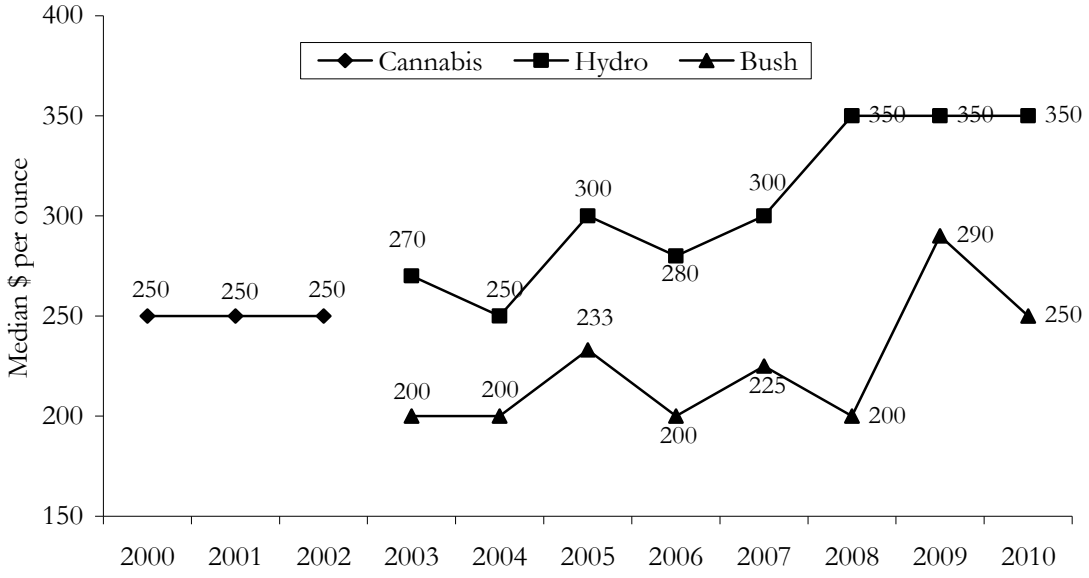
Table 14: Price of most recent cannabis purchases by IDU participants, 2010

Amount	Median price* $	Range	Number of purchasers*
Hydro			
Gram	25 (25)	20-35	15 (18)
Half Ounce	175 (150)	120-200	11 (17)
Ounce	350 (350)	250-400	27 (30)
Bush			
Gram	25^ (25)	10-25	8 (4)^
Half Ounce	160^ (125)	100-175	4 (5)^
Ounce	250 (290)	180-300	10 (12)

Source: IDRS IDU interviews
* 2009 median prices are in brackets
^ Based on small (<10) purchases

The median price of one ounce of cannabis as reported by IDU across IDRS surveys is presented in Figure 36. Hydro has consistently been more expensive than bush across time. In previous sample years, the price of bush has remained relatively stable; however, the median price for an ounce of bush cannabis increased in 2009, and has since significantly declined in 2010 (t=-2.884, df=9, p=.018). However, these findings are based on a small number of respondents reporting and therefore findings should be interpreted with caution. Conversely, the price of hydro has been stable since the 2008 IDU sample.

Figure 36: Median prices of an ounce of cannabis estimated from IDU participant purchases, 2000-2010



Source: IDRS IDU interviews
Note: No distinction was made between cannabis forms prior to 2003

With regard to any change in the price of cannabis over the last six months, 55 participants reported on hydro and 29 reported on bush. Regarding the price of hydro, 56% reported it as 'stable' and 35% reported it as 'increasing'. For bush, 83% reported the price as 'stable', 10% reported it as 'fluctuating', and 7% as 'increasing'.

7.4 Availability

IDU were asked about the current availability of cannabis and any perceived changes in availability over the last six months (Table 15).

Hydro

In 2010, just over half (51%) of participants who commented reported current availability of hydro as 'very easy', which was significantly greater than 27% in 2009 (95%CI -0.36, -0.10). Controlling for the current treatment changes in the sample suggested this was not due to these sample differences. Consequently, there was a significant decrease in the proportion reporting current availability as 'easy', from 61% in 2009 to 37% in 2010 (95%CI 0.10, 0.36) and controlling for the current treatment changes in the sample suggested this was not due to these sample differences. Eleven percent rated current availability as 'difficult' and 2% as 'very difficult'. With regard to availability over the last six months, 82% rated it as 'stable' which was comparable to last year. There was a decrease in the proportion rating it as 'fluctuating' from 18% in 2009 to 4% in 2010 (95%CI -0.23, -0.05). Controlling for the current treatment changes in the sample suggested this was not due to these sample differences. These 2010 findings suggest an overall increase in 'very easy' current availability of hydroponic cannabis in comparison to the 2009 sample. This increase appears to have been stable over the last six months.

Bush

In 2010, more than half (60%) of those who commented reported current availability of bush as 'easy'. This was followed by 27% rating currently availability as 'very easy', 10% as 'difficult' and only 3% rating it as 'very difficult'. These findings were comparable to last year. With regard to availability over the last six months, 76% rated it as 'stable', while almost one-fifth (17%) rated it as 'more difficult'. Both findings were comparable to last year (62% and 19% respectively). Seven percent reported that availability had become easier which was comparable to 5% in 2009 and no respondents rated it as 'fluctuating', which was significantly less that the 14% reported in 2009 (95%CI 0.07, 0.22). Similar to 2009, the current availability of bush cannabis has been perceived as mostly 'easy' or 'very easy' to obtain by the largest proportion of those reporting, and that changes to this availability over the last six months have been stable.

Table 15: Participants' reports of cannabis availability in the past six months, 2009-2010

Current availability	Hydro		Bush	
	2009 (N=100)	2010 (N=100)	2009 (N=100)	2010 (N=100)
Did not respond* (%)	66	**43**	78	**70**
Did respond (%)	44	**57**	22	**30**
Of those who responded:				
Very easy (%)	27	**51**	18	**27**
Easy (%)	61	**37**	64	**60**
Difficult (%)	9	**11**	18	**10**
Very difficult (%)	2	**2**	0	**3**

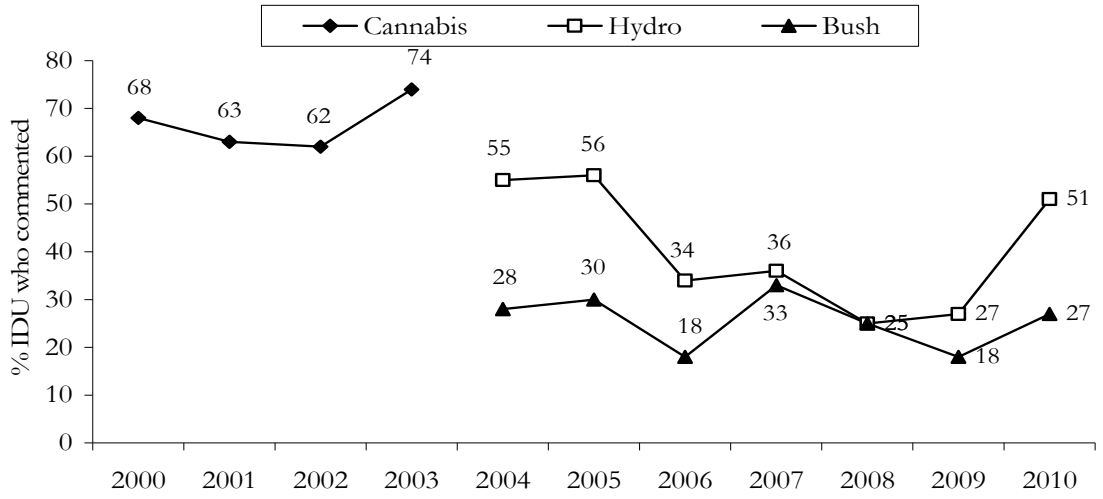
Availability change over the last six months				
Did not respond* (%)	66	**44**	79	**71**
Did respond (%)	44	**56**	21	**29**
Of those who responded:				
More difficult (%)	5	**5**	19	**17**
Stable (%)	73	**82**	62	**76**
Easier (%)	5	**9**	5	**7**
Fluctuates (%)	18	**4**	14	**0**

Source: IDRS IDU interviews

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

Figure 37 presents the proportion of IDU who commented that rated current availability of cannabis as 'very easy'. It is evident that ratings of bush as 'very easy' have been fluctuating over time but more recently increasing in availability. In previous years, ratings of hydroponic cannabis as 'very easy' have been steadily decreasing over time; however, in 2010 this significantly increased, suggesting that hydroponic cannabis has become more available in 2010.

Figure 37: Participant reports of current cannabis availability as 'very easy', 2000-2010



Source: IDRS IDU interviews

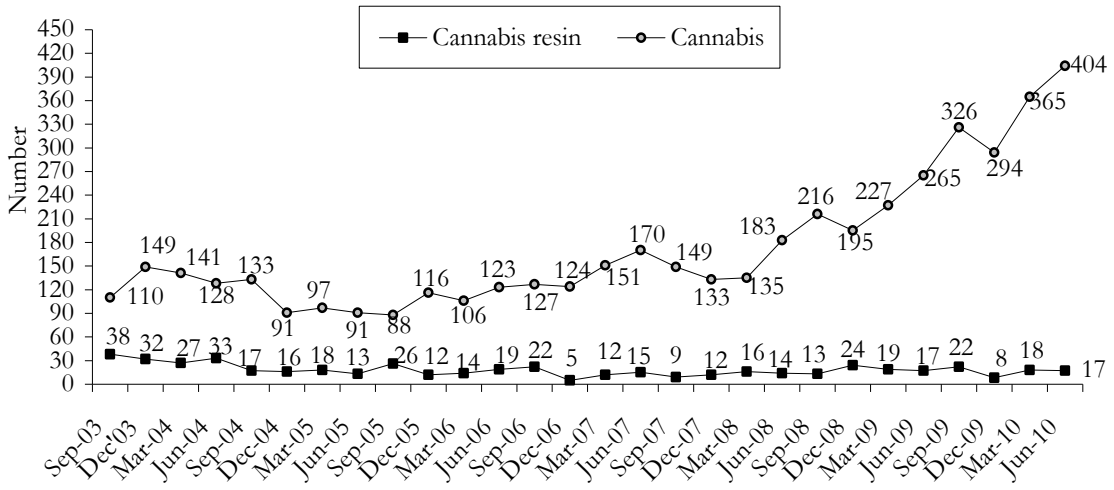
Note: A distinction between hydro and bush cannabis was introduced in 2004; prior to this time, survey items referred to any form of cannabis

Of the 56 IDU responding to questions about who was the last person they obtained hydro from, 73% indicated that it came from a friend which was also the most common response in previous years. Other common responses were known dealers (16%) and acquaintances (7%). The most common location for last obtaining cannabis was at a friend's home, nominated by 54%. Also common were an agreed public location (21%), dealer's home (14%) and acquaintance's house (4%).

There were 29 IDU who provided information concerning where they last obtained bush cannabis from. As with hydro, the most common last source was friends nominated by 66%, followed by known dealers (24%), acquaintances' (7%) and a small proportion nominated unknown dealers (3%). The most common last location for obtaining bush cannabis was at a friend's home, nominated by 54%. This was followed by agreed public location (18%), dealers' homes (14%) and home delivery (11%). A smaller proportion nominated acquaintances' houses (4%).

Figure 38 shows the number of cannabis and cannabis resin seizures by ACS from July 2003 to June 2010. The total number of cannabis importations intercepted at the Australian border has fluctuated during this period, but there is evidence of an overall increase in seizures, particularly in the most recent two quarters, often doubling the number of seizures found prior to 2008. Seizures of cannabis resin have remained consistently low over time. The most common form of cannabis seized by ACS is cannabis seed. The total number of cannabis seizures for 2009/10 was 1,389 and the total number of cannabis resin seizures was 65.

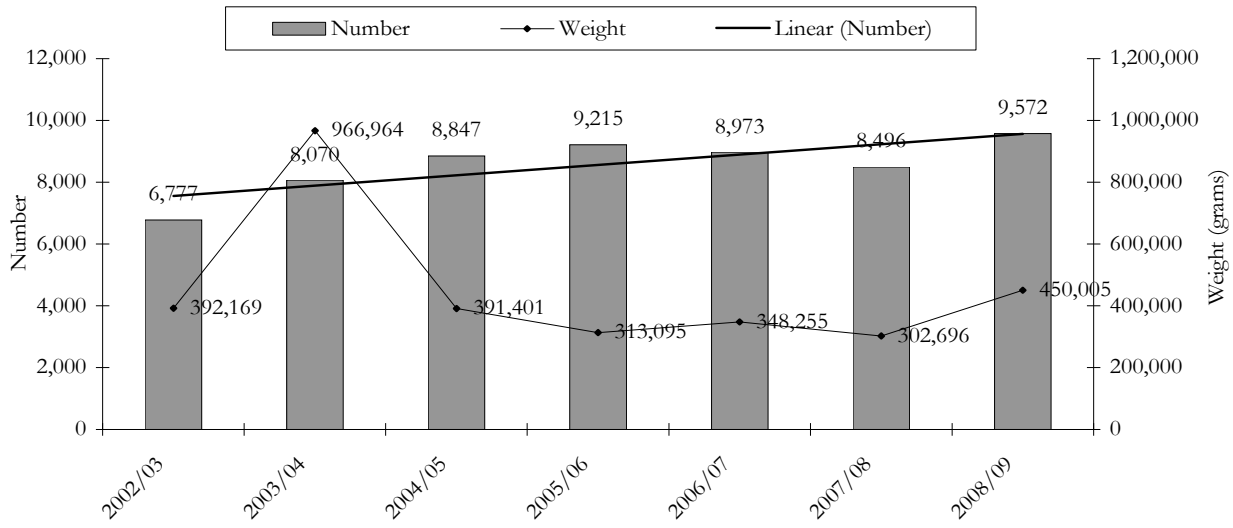
Figure 38: Number of cannabis seizures by ACS, 2003/04-2009/10



Source: **ACS**

Figure 39 presents the total number and combined weight of cannabis seizures made by WAPS and AFP in WA from 2002/03 to 2008/09. The number of seizures increased from 2002/03 to 2004/05 and has since stabilised. The weight of seizures increased sharply from 2002/03 to 2003/04, but has since decreased and stabilised. In 2008/09, WAPS and AFP made 9,572 cannabis seizures in WA with a weight of 450,005 grams.

Figure 39: Number and weight of cannabis seizures by WAPS and AFP, WA 2002/03-2008/09



Source: **ACC**

One KE reported a perceived decrease in cannabis availability, while another KE reported a lull in cannabis availability in the beginning of 2010; this was reported to have since recovered, making cannabis easier to access.

7.5 Potency

IDU were asked about the current potency of cannabis and any change in potency over the last six months (Table 16). Fifty-six IDU commented on hydro, with the majority (63%) nominating current potency as 'high', followed by 30% nominating it as 'medium'. With regard to changes in potency over the last six months, almost three-quarters (69%) reported potency as 'stable'. Smaller proportions reported it as 'fluctuating' (15%), 'increasing' (13%) and 'decreasing' (4%), which were all comparable to last year.

Twenty-nine IDU responded for bush cannabis; the majority (62%) nominated its current potency as 'medium', followed by 21% nominating current potency of bush as 'high'. Both these findings were comparable to last year. Smaller proportions nominated bush purity as 'fluctuates' (10%) and only 7% said that bush purity was 'low'; these findings were also comparable to 2009. With regard to changes in potency of bush over the last six months, the greatest proportion (57%) rated it as 'stable', which was significantly less than the 75% reporting 'stable' in 2009 (95%CI 0.05, 0.30). Conversely, a significant increase was observed in the proportion reporting it as 'fluctuating', from 10% in 2009 to 25% in 2010 (95%CI 0.05, 0.30). Smaller proportions rated it as increasing (11%), which was reported by no participants in 2009 (95%CU -0.19, -0.05). Controlling for the current treatment changes in the sample suggested these significant changes were not due to these sample differences. Only 7% rated changes in purity over the last six months as 'decreasing', which was comparable to 15% in 2009.

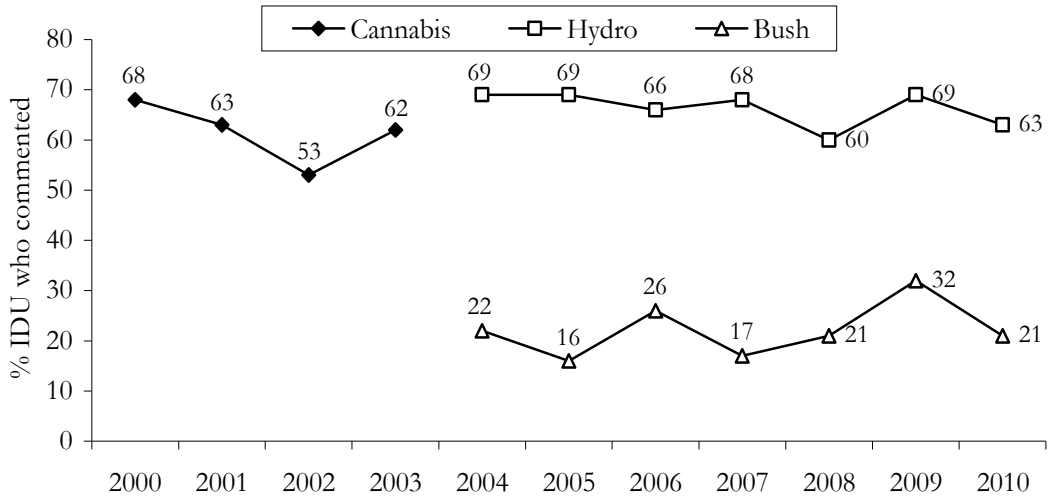
Table 16: IDU estimates of cannabis potency 2009-2010

Current potency	Hydro		Bush	
	2009 (N=100)	2010 (N=100)	2009 (N=100)	2010 (N=100)
Did not respond* (%)	58	**44**	78	**71**
Did respond (%)	42	**56**	22	**29**
Of those who responded:				
High (%)	69	**63**	32	**21**
Medium (%)	21	**30**	55	**62**
Low (%)	0	**0**	9	**7**
Fluctuates (%)	10	**7**	5	**10**
Potency change over the last six months				
Did not respond* (%)	60	**45**	80	**72**
Did respond (%)	40	**55**	20	**28**
Of those who responded:				
Increasing (%)	10	**13**	0	**11**
Stable (%)	75	**69**	75	**57**
Decreasing (%)	3	**4**	15	**7**
Fluctuating (%)	13	**15**	10	**25**

Source: IDRS IDU interviews

Figure 40 presents the proportion of IDU who commented that rated current cannabis potency as 'high' across IDRS surveys. It is evident that more recent ratings of hydro potency as 'high' have been stable. Ratings for bush show greater variation with a range of 16%-32% of participants rating its current potency as 'high' across years. The proportion of the sample reporting current bush purity as 'high' (21%) was not significantly different to 2009 findings.

Figure 40: Participant reports of current cannabis potency as 'high', 2000-2010



Source: IDRS IDU interviews

Note: A distinction between hydro and bush cannabis was introduced in 2004; prior to this time, survey items referred to any form of cannabis

7.6 Summary of cannabis trends

- Similar to previous years, the vast majority of IDU (96%) reported lifetime use of cannabis.
- Recent use of cannabis was not significantly different to last year: 70% in 2010 and 72% in 2009. Frequency of use among recent cannabis users was 105 days in 2010, which was the same in 2009. The number of participants reporting daily use of cannabis was also comparable, with 47% in 2010 and 45% in 2009.
- The reported price of hydro was comparable to last year, with the median price for an ounce being $350 since 2008. The median price of one ounce of bush decreased from last year, with a median price of $290 in 2009 to $250 in 2010. However, only a small number of respondents commented.
- Current availability of hydro was rated as 'very easy' or 'easy' by 88% in 2010 (same in 2009); however, a greater proportion of the 2010 sample reported current availability as 'very easy' compared to 2009 findings. Current availability of bush cannabis was reported as 'easy' or 'very easy' by 87% in 2010, which was comparable to 2009 (82%).
- Current potency of hydro was rated as 'high' by 63% of those who responded in 2010 (69% in 2009). Current potency of bush was rated as 'medium' by 62% of those who responded in 2010 (55% in 2009).

8. OPIOIDS

The IDRS monitors illicit (non-prescribed) use patterns and market characteristics of opioid pharmaceutical medications. This includes those typically prescribed for opioid substitution treatment (i.e. methadone, buprehorphine, buprenorphine-naloxone) and for pain relief (i.e. morphine, oxycodone, OTC codeine). For information on data relating to licit use of methadone, buprenorphine and buprenorphine-naloxone, please see section 10.3, Drug Treatment.

8.1 Illicit use of methadone

Methadone is prescribed for the treatment of opioid dependence and is usually administered in syrup form or, less commonly, as tablets called Physeptone.

8.1.1 Use patterns

Lifetime illicit use of methadone was reported by 32% of IDU; of these, 72% reported ever injecting and 56% reported ever swallowing illicit methadone. The proportion reporting illicit use of methadone in the last six months was 13% in 2010, not significantly different to the 10% in 2009. Of these participants, 62% reported injecting and 62% reported swallowing in the last six months. Days of use ranged from one to 24, with four median days use. Mean days of use was six in 2010, which was comparable to the five days reported in 2009. Mean days of injection in the last six months was also comparable, with an average of six days reported for both 2010 and 2009.

Lifetime illicit use of physeptone was reported by 26% of IDU; of these, 69% reported ever injecting and 35% reported ever swallowing. The proportion reporting illicit use of physeptone in the last six months was 4% which was not significantly different to the 5% in 2009. Of these participants, 75% (n=3) reported injecting and 50% (n=2) reported swallowing in the last six months. Days of use ranged from one to 10 days, with a median of approximately six days used. Mean days of use was also approximately six, which was comparable to the two days reported in 2009. Mean days of injection in the last six months was comparable to last year, with an average of approximately five days in 2010 compared to two in 2009.

In 2010, IDU were asked about the reasons for illicitly using methadone and three IDU responded. The most commonly reported reason was as a substitute for heroin/opiates (n=3). Two participants also nominated intoxication as a reason for illicitly using methadone.

8.1.2 Market characteristics

Price data per millilitre of methadone syrup were not commonly provided by IDU in 2010, as in previous years. Three of the 13 participants who had used illicit methadone in the last six months provided information; the median price of illicit methadone was reported to be approximately $1.00 per millilitre, which reflects the findings of previous years. Two participants reported changes in methadone price, with both reporting it to be stable over the six months preceding interview. No participants reported on the illicit price of 5mg of Physeptone; however, one participant reported 10mg of Physeptone cost $10.

There were three participants also reported on the availability of illicitly obtained methadone. Current availability was rated by two participants as 'easy' and by one participant as 'very difficult'. Availability over the last six months was rated by two participants as 'stable'.

Of the three participants who reported that they illicitly bought methadone in the last six months, one each nominated friends, acquaintances and unknown dealers as the source person last time illicit methadone was purchased. There were also three participants who reported on last location for illicitly sourcing methadone, two nominated an agreed public location and one nominated a park.

8.2 Use of illicit buprenorphine

Buprenorphine is sold under the brand name of Subutex and buprenorphine-naloxone as Suboxone.

8.2.1 Use patterns

Lifetime illicit use of Subutex was reported by 46% of IDU; of these participants, 80% reported ever injecting and 37% reported ever swallowing. Illicit use in the last six months was reported by 18%, which was not significantly different to 16% reported in 2009. Of these participants, 72% reported injecting and 39% reported swallowing in the last six months. In 2009, all recent users reported injecting illicit Subutex in the last six months. Days of use ranged from one to 180, with a median of seven days, compared to 11 days in 2009. The mean number of days of use was approximately 15 days which was not significantly different to the 23 in 2009. Mean days of injection was 13 days in 2010 which not significantly different to the 23 days reported in 2009.

Lifetime illicit use of Suboxone was reported by 36% of IDU; of these participants, 86% reported ever injecting and 25% percent reported ever swallowing. Illicit use in the last six months was reported by 17%, which was comparable to 28% in 2009. Of these participants, 88% reported injecting and 18% reported swallowing in the last six months. Days of use ranged from one to 180, with a median of 30 days use. Mean days of use was 81, which was not significantly different from 50 days in 2009. Mean days of injection was approximately 80 days in 2010 which was not significantly different to the 40 days in 2009.

In 2010, IDU were asked about the reasons for illicitly using Subutex and five participants responded. The most commonly reported reasons were self treatment (n=5), intoxication (n=1), and as a substitute for heroin/opiates (n=1). Reasons for illicit use of Suboxone were provided by 12 IDU and the most common reason was self treatment and intoxication (n=6 each). One respondent also reported that the main reason for using illicit Suboxone was to keep away from heroin. More than one response could be chosen for this question.

8.2.2 Market characteristics

There were three participants who reported on the illicit price of 8mg of Subutex, with a median of $40 (range=$30-$50). No participants reported the price paid for 0.4mg or 2mg of illicitly obtained Subutex in 2010. Two participants reported on the illicit price of 8mg of Suboxone, with a median of $40 (range $30-$50). No other participants reported on price paid for any other quantity of illicit Suboxone.

In 2010, five participants reported on the availability of illicitly obtained Subutex. Current availability was reported by three participants as 'easy', and by one participant each as 'very easy' and 'very difficult'. Availability over the last six months was rated by four participants as 'stable' and by one participant as 'more difficult'. Fourteen participants reported on availability of illicitly obtained Suboxone. Current availability was rated by eight participants as 'easy', by four as 'very easy' and by two as 'difficult'. Availability over the last six months was rated by nine participants as 'stable', by three participants as easier and by one participant each as 'more difficult' and 'fluctuates'.

Two KE reported that the selling of pharmaceuticals, even diverted, was very common practice, often occurring inside health and treatment services.

Of those participants that reported on the source of their illicitly obtained Subutex (n=4), two nominated friends as their last source person, followed by one each nominating an acquaintance and a known dealer. There were four participants who also commented on the last location they purchased Subutex, with one each nominating dealer's home, friend's home, an agreed public location, and a park. Fourteen participants reported on the last source person and location from which they had illicitly obtained Subuxone. Of these participants, eleven nominated friends as the last source person, followed by known dealers (n=2) and acquaintances (n=1). Fourteen participants also reported on last location of purchase, with five nominating friends' homes, three nominating an agreed public location, two nominating home delivery and one each reporting dealers' homes, acquaintances' houses, work, and a park.

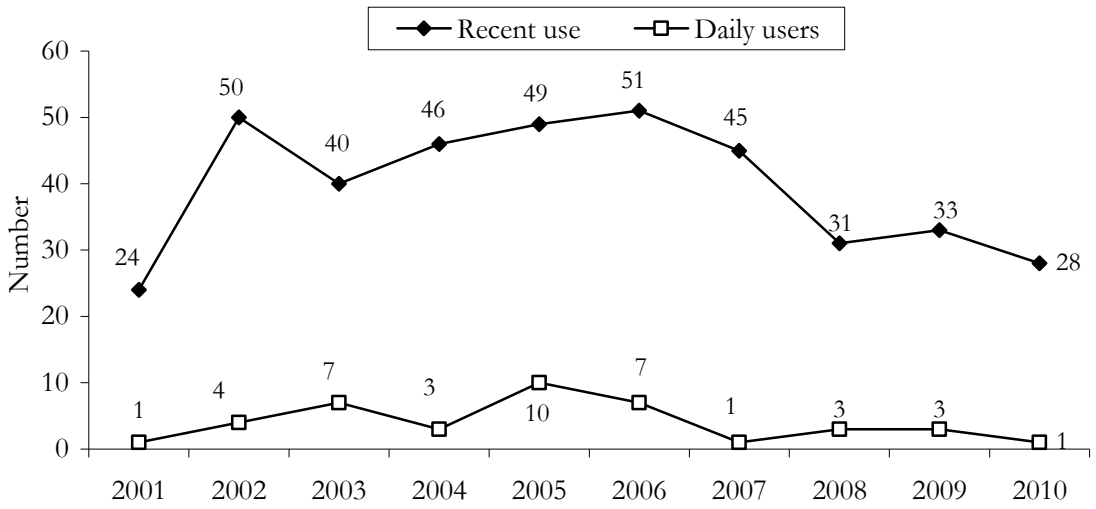
8.3 Morphine

8.3.1 Use patterns

Lifetime illicit use of morphine was reported by 60% of the 2010 IDRS sample which was not significantly different to the 71% in 2009. Of the current sample, 90% reported ever injecting which was significantly greater than 68% in 2009 (95%CI -0.32, -0.10). One-third (33%) of those who had ever used morphine reported swallowing, which was significantly greater than 9% in 2009 (95%CI -0.55, -0.09). The proportion reporting illicit use of morphine in the last six months was 28%, which was not significantly different to the 33% reported in 2009. Of these participants, 96% reported injecting (97% in 2009) and 25% reported swallowing in the last six months which was significantly greater than 6% in 2009 (95%CI -0.28, -0.09). Days of use ranged from one to 180, with a median of 10 days. Mean days of use was 36, which was comparable to 28 days reported in 2009. Mean days of injection was 36 days, which was again comparable to last year's average of 29 days.

Figure 41 presents the proportion of IDU who reported illicit use of morphine in the last six months and daily illicit use across IDRS surveys. It is evident that the proportion of IDU reporting illicit use of morphine has steadily decreased since 2006 but has since stabilised from 2008. The proportion reporting daily use has remained low since data collection began in 2001.

Figure 41: Proportion of IDU reporting recent and daily illicit morphine use in the past six months 2001-2010



Source: IDRS IDU interviews

Fifteen participants reported on the reasons for illicitly using morphine. The most common reasons were given for using illicit morphine were as a substitute for heroin/opiates (n=12), intoxication (n=7), and self treatment (n=6).

Thirty IDU reported any use of morphine in the last six months and, of these, 87% reported illicit use was the more common type of use, which was comparable to 89% in 2009. These participants reported MS Contin as the most common brand used, reported by 80% (n=24). This was also the most common brand reported in previous years.

8.3.2 Market characteristics

As in previous years, the most commonly reported form of illicitly purchased morphine was MS Contin. Twelve participants reported on the price of a 100mg tablet, with a median price of $58 (range=$17.50-$100). Five participants reported on the price of 60mg, with a median of $35 (range=$15-$50). Sixteen participants reported on any perceived change in the illicit price of morphine in the last six months. Of these participants, 56% rated it as 'stable' (n=9), 38% as 'increasing' (n=6), and 6% as 'decreasing' (n=1).

Eighteen participants also reported on the availability of illicitly obtained morphine in the last six months. Current availability was rated by 39% as 'very easy' and 'easy' (n=7 each), followed by 22% as 'difficult' (n=4). Availability over the last six months was rated by 61% as 'stable' (n=11), followed by 22% as 'easy' (n=4) and 17% as 'more difficult' (n=3).

Eighteen participants also reported on the last source person and last location of illicitly obtained morphine. Friends were the most commonly reported last source person (44%, n=8) and friends' homes (28%, n=5) was the most commonly reported last source location.

8.4 Oxycodone

8.4.1 Use patterns

Lifetime illicit use of oxycodone was reported by 44% of the 2010 IDRS sample which was a significant decrease from 60% in 2009 (95%CI 0.02, 0.29). The vast majority of 91% (n=40) reported ever injecting and 18% reported ever swallowing. The proportion reporting use in the last six months was 20% in 2010 which was not significantly different to the 29% in 2009. Of these participants, all reported injecting which was comparable to 97% in 2009 and 5% reported swallowing in the last six months compared to 10% in 2009. Days of use ranged from two to 180, with a median of 35 days. The mean days of use were 51, which was a significant increase from a mean of 23 days in 2009 (t=2.448, df=19, p=0.02). Mean days of injection was also 51, which was also a significant increase from a mean of 24 days in 2009 (t=2.361, df=19, p=.029).

Thirteen participants reported on the reasons for illicitly using oxycodone. The most common reasons given were as a substitute for heroin/opiates (n=9), intoxication (n=7) and self treatment (n=6). More than one response could be chosen for this question.

Twenty-six participants reported any use of oxycodone in the last six months and of these, 72% reported illicit use was the most common type of use. Of those that had mostly used oxycodone illicitly, Oxycontin was the most common brand, reported by 92% of recent users. The remainder reported using generic oxycodone and Oxynorm.

One KE reported that opiate use is rife among IDU, with most users sourcing it both licitly and illicity.

8.4.2 Market characteristics

In 2010, six participants reported on the price of 40mg of oxycodone, with a median price of $22.50 (range=$20-$35). Eleven participants reported on the price of an 80mg tablet, with a median of $50 (range=$20-$70). Of the 14 participants who were able to comment on any perceived change in price over the last six months, eight participants rated it as 'stable' (57%) and six as 'increasing' (43%).

Fifteen participants were able to report on the current availability of illicitly obtained oxycodone. Eight participants reported it as 'easy' (53%), while five reported it as 'very easy' (33%) and two as difficult (13%). Fifteen participants were also able to report on availability over the last six months, with 10 rating it as 'stable' (67%), three as 'more difficult' (20%) and two as easier (13%).

Fifteen participants reported on the last source person and last location for illicitly obtained oxycodone. The most common last source person was friends with 53% (n=9) and the most common last location of purchase was friends' homes with 47% (n=7).

8.5 Use of OTC codeine

In 2010, participants were asked about the use of OTC codeine separately. In previous years, OTC codeine has been included under 'other opioids'. Over half (57%) of the WA sample reported using OTC codeine in their lifetime, which was the same proportion in 2009. Thirty-five percent reported using OTC codeine on a median of six days (or around once a month) in the last six months. The mean days of use was 17, which significantly decreased from 44 days in 2009 (t=-4.916, df=33, p=.000). No significant difference was found between 2009 and 2010 for recent OTC codeine use. Only one participant reported injecting OTC codeine recently. The main brands used were Panadeine® and Nurofen Plus® (both 36%).

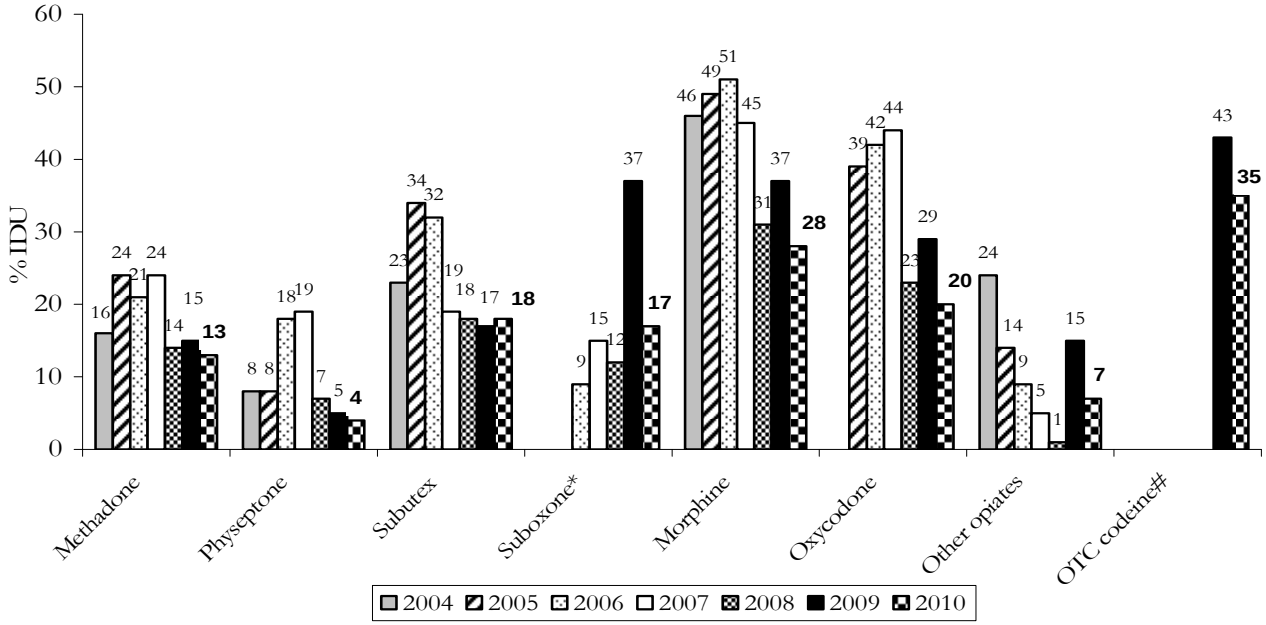
One KE reported that use of OTC codeine in products such as ibuprofen tablets are an emerging problem. Users make no effort to split the codeine from the ibuprofen and are often uneducated on the harms it can cause. When taken in high doses, ibuprofen can lead to renal failure and gastrointestinal bleeding. This emerging trend has implications for harm reduction strategies.

8.6 Other opioids (not elsewhere specified)

Other opioids include (but are not limited to) opium and pethidine (not including OTC codeine). Lifetime use of other opioids was reported by 13% of the 2010 IDRS sample which decreased significantly from 25% in 2009 (95%CI 0.01, 0.23). Of these respondents, 6% reported ever injecting and 8% percent reported ever swallowing. Recent use was reported by 7% on a median of four days in the last six months, which was comparable to the 15% on a median of nine days in 2009. The mean days of use were 12 in 2010, which significantly decreased from 71 days in 2009 (t=-7.315, df=6, p=.00). Of those participants who had used in the last six months (n=7), five participants reported swallowing and two reported injecting other opioids in the last six months. Frequency of injection was reported on a median of four days during this time.

Figure 42 presents the proportion of IDRS samples across survey years that reported illicit use of the various opioid drugs other than heroin in the six months preceding interview. It is evident that the 2010 proportions reporting recent use of methadone, physeptone, morphine and oxycodone are the lowest observed since 2004.

Figure 42: Recent use of opioids other than heroin by IDU survey respondents 2004-2010



Source: IDRS IDU interviews

* Data only collected since 2006

Data only collected since 2009, previously included in 'other opiates' category

8.7 Summary of opioid trends

- Recent illicit use of methadone was reported by 13% of the sample in 2010, not significantly different to the 10% in 2009. The average days of use was six in 2010, which was comparable to five days in 2009.
- Recent illicit use of physeptone was reported by 4% of the sample in 2010, not significantly different to the 5% in 2009. The average days of use was six days, which was comparable to two in 2009.
- Recent illicit use of Subutex was not significantly different across the last two years: 18% in 2010 compared to 16% in 2009. In 2010, the average days of use was 15 days, not significantly different from 23 days in 2009.
- Recent illicit use of Suboxone was reported by 17% in 2010, which was comparable to 28% in 2009; the average days of use were not significantly different across the years: 81 in 2010 and 50 in 2009.
- Recent illicit use of morphine was reported by 28% of the sample in 2010, which was not significantly different to the 33% in 2009. In 2010, the average days of use was 36, not significantly different to the 28 days in 2009.
- Recent illicit use of oxycodone was not significantly different across recent years: 20% in 2010 and 29% in 2009. In 2010, the average days of use was 51, which was significantly greater than 23 days in 2009.
- Recent use of OTC codeine was reported by 35% in 2010, which was not significantly different to the 43% in 2009. In 2010, the average number of days used was 17 days, which was significantly less than 44 days in 2009.
- Recent use of other opiates was reported by 7% in 2010, which was comparable to 15% in 2009. The average number of days of use significantly decreased from 71 days in 2009 to 12 days in 2010.
- In sum, recent illicit use of other opioids has remained relatively stable, with the exception of a significant decrease in the frequency of illicit oxycodone use in the past six months preceding interview.

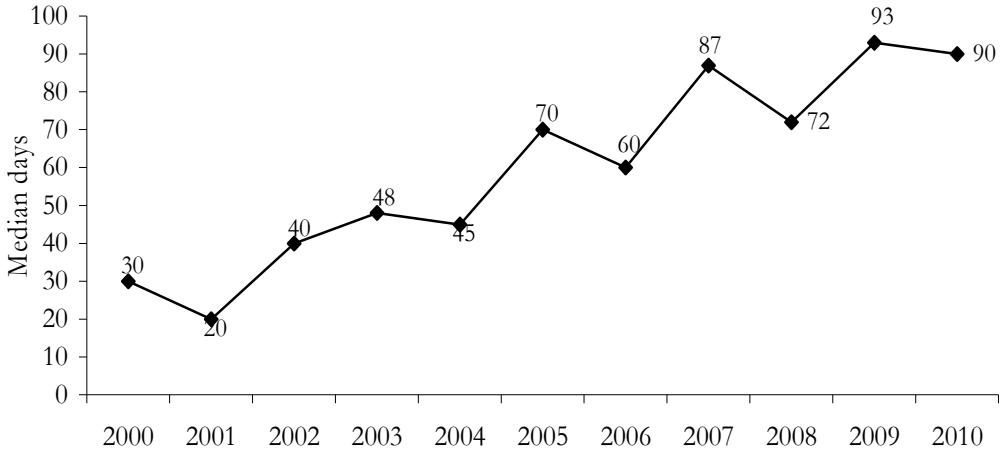
9. OTHER DRUGS

9.1 Benzodiazepines

Lifetime use of either prescribed or illicitly obtained benzodiazepines was reported by 81% of the 2010 sample, which was not significantly different to the 79% in 2009. Of these participants, 98% reporting ever swallowing, while injection was rare (10%). Use of any benzodiazepine in the last six months was reported by 61% of the 2010 sample, which was not significantly different to 64% in 2009. Of those that reported recent use in 2010, 97% reported swallowing.

Figure 43 shows the median days of use across IDRS surveys. Days of use among recent users in 2010 ranged from one to 180 days, with a median of 90 days compared to 93 days in 2009. Mean number of days was 95, which was also comparable to 100 days in 2009. In 2010, 24 participants (40%) reported daily benzodiazepine use which was comparable to the 29 participants in 2009 (47%).

Figure 43: Median days use of any benzodiazepines in the past six months, 2000-2010



Source: IDRS IDU interviews

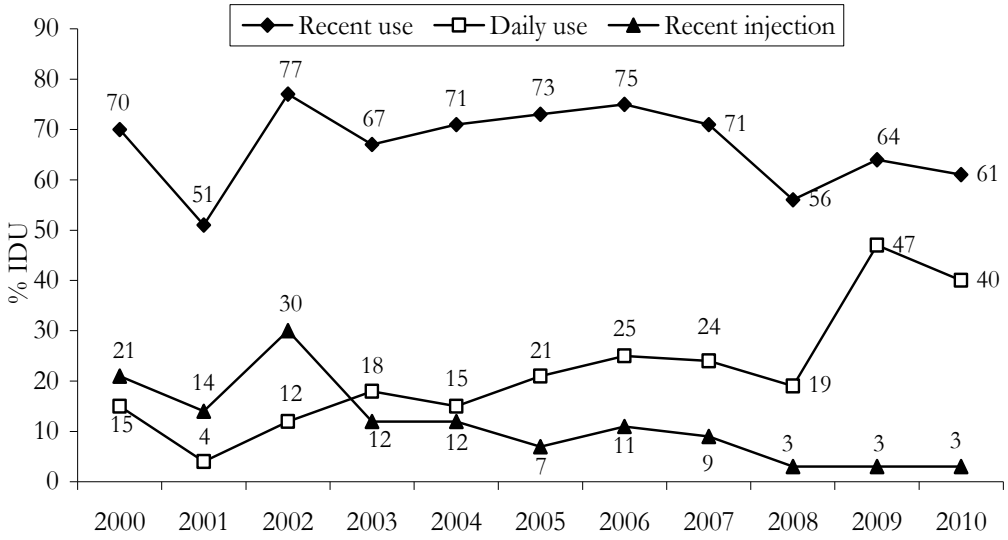
Participants who had used benzodiazepines in the last six months were asked about the main brand used. As in previous years, the most commonly used benzodiazepine was diazepam (Valium), reported by 73%. Following this was alprazolam (Xanax) reported by 15% and oxazepam (Serepax), clonazepam (Rivotril) and generic temazepam each reported by 4%.

Of those that reported any use of benzodiazepines in the last six months (n=60), licit use was more common, reported by 73%. Of these participants, 96% reported swallowing as the ROA in the last six months. The median days of use was 131 and 21 participants reported daily use (compared to 30 participants in 2009).

Illicit use of benzodiazepines was not specifically asked about prior to 2007. In 2010, 27% reported illicit use of benzodiazepines in the last six months, which was comparable to 19% in 2009. Of these participants in 2010, all reported swallowing as the ROA. The median days of use was approximately 14 and one participant reported daily illicit use.

Figure 44 presents the proportion of IDU reporting any use of benzodiazepines in the six months preceding interview across IDRS surveys. This data includes both licit and illicit use, which was not explicitly asked about prior to 2007. Thus, caution is warranted in interpreting the figure since it cannot be known what types of use IDU were referring to in previous survey years. Nevertheless, it is evident that the proportion of the 2010 IDU reporting recent use and daily use of benzodiazepines only slightly decreased from 2009; however, this was not significant.

Figure 44: Proportion of IDU reporting any benzodiazepine use, daily use and injection in the preceding six months, 2000-2010



Source: IDRS IDU interviews

One KE reported that most IDU use benzodiazepines, both licitly and illicitly. The most commonly used brands are diazepam (Valium) and alprazolam (Xanax), these findings supplement IDU findings.

9.2 Pharmaceutical stimulants

Pharmaceutical stimulants refer to prescription medication such as dexamphetamine and methylphenidate (Ritalin), commonly prescribed for psychiatric disorders such as attention deficit hyperactivity disorder (ADHD).

Lifetime use of either prescribed or illicitly obtained pharmaceutical stimulants was reported by 46% in 2010 which was not significantly different to 50% in 2009. Of these participants in 2010, lifetime swallowing was reported by 87% and lifetime injection by 48%. Seventeen percent reported any use of pharmaceutical stimulants in the last six months, which was not significantly different to the 18% in 2009. All but one of these participants in 2010 reported illicit use (93%) which was comparable to the 94% reporting illicit use in 2009. Swallowing was reported by 77% and 53% reported injecting. Days of use ranged from one to 180 days, with a median of four days use in the last six months. This was not significantly different from the median of three days use among those reported illicit use in 2009. The average number of days of use was 22, which was comparable to an average of eight days in 2009. In 2010, the majority of those who reported use of pharmaceutical stimulants in the last six months reported dexamphetamine as the form of stimulant most used (93% in 2010 vs. 77% in 2009), followed by Ritalin (7% in 2010 vs. 15% in

2009). In 2010, no respondent reported using the form Attenta in the past six months (8% in 2009).

9.3 Hallucinogens

Lifetime use of hallucinogens was reported by 70% of IDU, which was comparable to 73% in the 2009 IDU sample, a difference which was not statistically significant. Across the two years, recent use was reported by 10% in 2010 compared to 13% in 2009. Among participants who reported recent use of hallucinogens in 2010, days of use ranged from one to 15, with a median of three days and an average of four days of use. These findings were comparable to 2009. Participants were asked what hallucinogen was most used in the last six months; all 10 respondents reported LSD. No respondents reported recent use of mushrooms in 2010 compared to two respondents in 2009.

9.4 Ecstasy

Lifetime use of ecstasy was reported by 73% of IDU in 2010, which was comparable to 77% in 2009. Of the 2010 participants that reported lifetime use, 95% reported ever swallowing, 22% reported ever injecting ecstasy and 7% reported ever snorting. Just over one-fifth (21%) of the sample reported use of ecstasy in the last six months, which was comparable to 29% in 2009. Of these participants in 2010, 95% reported swallowing and 24% reported injecting. Days of use ranged from one to 48, with a median of two days use and a mean of five days use in the last six months. Days of injection ranged from one to six, with a median of two days injection in the last six months. All participants reported use of ecstasy pills and one participant also reported use of ecstasy powder.

9.5 Inhalants

Lifetime use of inhalants was reported by 22% of IDU in 2010 which was comparable to 25% in 2009. Use in the last six months was reported by 6% which was also not statistically significant from the 7% recorded in 2009. Days of use ranged from one to 180, with a median of approximately two days use in the last six months. The average number of days of use was 32 days. One respondent reported using inhalants daily in 2010. The majority of participants reported using nitrous oxide (n=3) as the main form used in the last six months. Amyl nitrate was reported as the main form used by one participant.

9.6 Alcohol

Lifetime use of alcohol was reported by 97% of IDU and 63% reported use in the last six months. These proportions were similar to last year: 98% reported lifetime use and 71% reported recent use. Of participants in 2010, two respondents reported injecting alcohol in their lifetime, while no participant reported injecting alcohol in the last six months. Days of use ranged from one to 180, with a median of 24 days use (same in 2009). The mean number of days was 55 days in 2010, which was comparable to 59 days in 2009. Nine participants (14%) reported daily use of alcohol.

9.7 Tobacco

Prevalence of tobacco use was also comparable across years. In 2010, lifetime use of tobacco was reported by 92% of IDU (94% in 2009) and 85% reported use in the last six months (85% in 2009). Days of use ranged from two to 180, with a median of 180 days and a mean of 166 days, these findings were comparable to 2009. Daily tobacco use was reported by 87% (n=74) of IDU.

KE generally reported that most IDU use alcohol and tobacco. Additionally, one KE reported an observed increase in the number of homeless IDU drinking methylated spirits, which has

1,000 mg of alcohol and cost on average $4 per bottle. As a result, these individuals are coming into contact with the health system with extremely high blood alcohol levels and alcohol poisoning.

9.8 Summary of other drug trends

- Lifetime use of benzodiazepines was reported by 81% in 2010 which was not significantly different from 79% in 2009. Recent use was reported by 61% in 2010, which was comparable to 64% in 2009. The average number of days of any benzodiazepines were used was 95, which was comparable to 100 days in 2009.
- Like in previous year's samples, in 2010 the majority of recent benzodiazepine use was reported to be licit.
- Lifetime use of pharmaceutical stimulants was reported by 46% in 2010 which was not significantly different from 50% in 2009. Recent use was reported by 17% of the 2010 sample, which was comparable to 18% in 2009. Mean days of use was 22 days, which was comparable to eight days in 2009.
- Of those that reported recent pharmaceutical stimulant use in 2010, the majority reported illicit use.
- Seventy percent of the 2010 sample reported lifetime use of hallucinogens, which was comparable to 73% in 2009. Recent use was also not significantly different being 10% in 2010 to 13% in 2009. The average number of days hallucinogens were used was four.
- Lifetime use of ecstasy was reported by 73% of IDU in 2010, which was comparable to 77% in 2009. Recent use was also not significantly changed across the years: 21% on an average of five days in 2010, versus 29% on an average of nine days in 2009.
- Lifetime and recent use of inhalants has been uncommon across years.
- The majority of IDU across years reported lifetime and recent use of alcohol and tobacco.

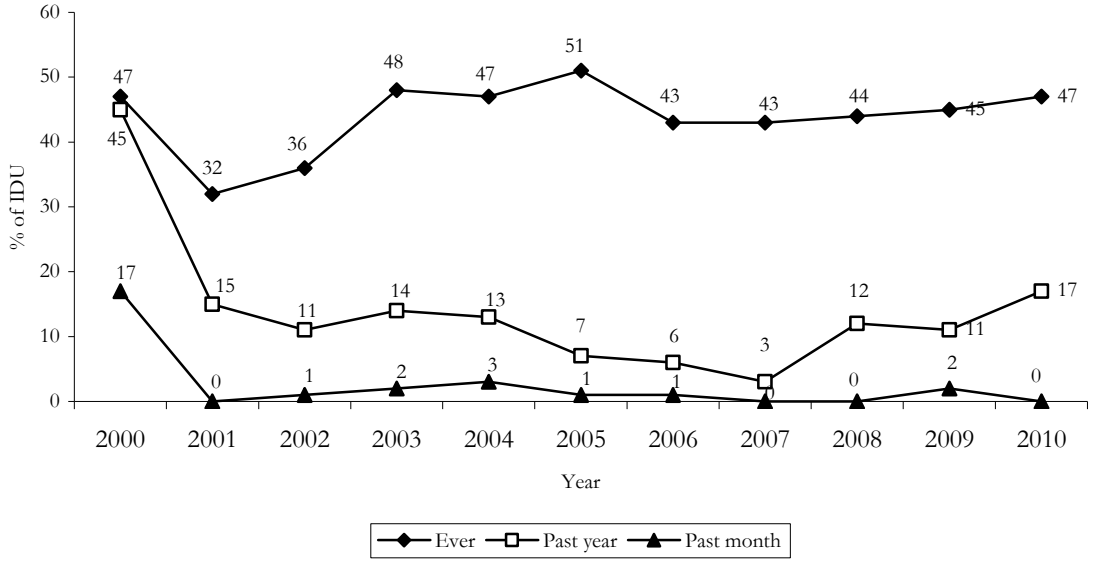
10. HEALTH-RELATED HARMS ASSOCIATED WITH DRUG USE

10.1 Overdose and drug-related fatalities

Non-fatal overdose

A lifetime history of heroin overdose was reported by 47% of IDU in 2010, which was not significantly different to 45% in 2009. The median number of times 2010 IDU reported ever overdosing on heroin was three times. Some 17% (n=8) of the 2010 sample reported overdose on heroin in the last 12 months, which was not significantly different to the 11% in 2009 (n=11). In 2010, no respondent reported overdosing on heroin in the past month prior to interview, compared to two respondents in 2009. Figure 45 presents the proportion of IDU across IDRS surveys that had overdosed on heroin.

Figure 45: Proportion of WA IDU participants who had ever overdosed, overdosed in the past 12 months and in the past month on heroin, 2000-2010



Source: IDRS IDU interviews

In 2010, participants who had overdosed on heroin in the last 12 months were asked what treatment they received at last overdose. Twelve participants responded to this question, and the most commonly reported treatment was at a hospital emergency department (n=5), followed by receiving narcan and ambulance attendance (n=4 each), receiving CPR from a friend/partner/peer (n=3), receiving CPR from a health professional (n=2); one respondent each reported seeing a psychiatrist, being monitored by friends, and don't know/can't remember as the treatment they received at last overdose. Multiple treatment responses were allowed for this question.

Two KE reported an increase in heroin overdoses, which was suspected to be due to a batch of very high purity heroin available in Perth at the time.

A lifetime history of overdose on any other drug was reported by 15% of IDU in 2010. Of these participants, 29% (n=4) reported overdosing on another drug in the last 12 months. No participant reported accidentally overdosing on another drug in the last month. Of those

participants who had overdosed in the last 12 months (n=4), two reported overdosing on pharmaceutical stimulants (dexamphetamine) and one each reported overdosing on homebake and ice/crystal. Of these participants, the median number of overdoses was approximately two (range=1-6). Of these participants who had accidentally overdosed in the last 12 months, the median length of time since last overdose was six months (range=2-9 months).

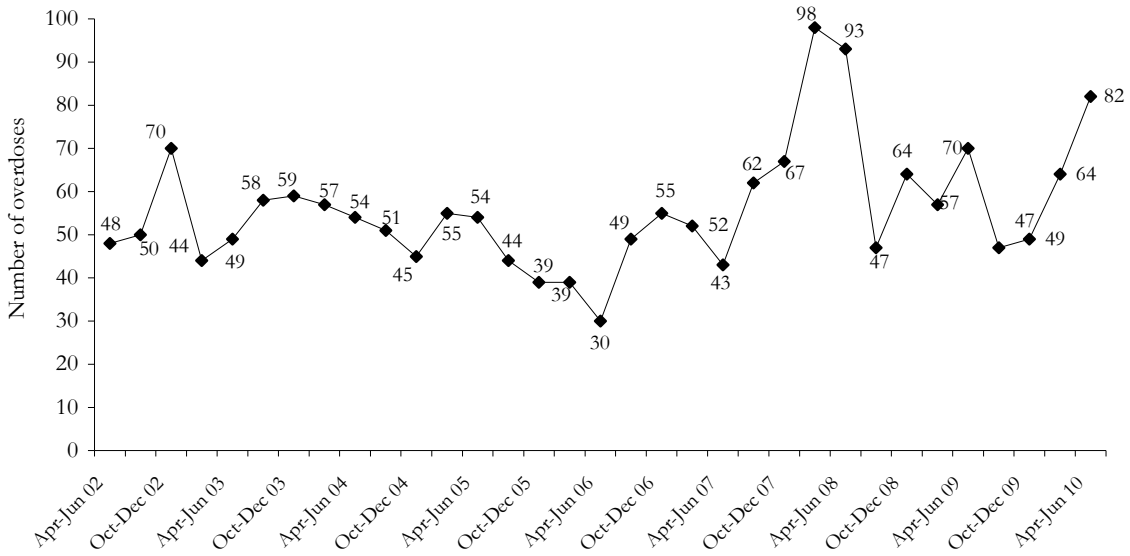
In 2010, participants who had overdosed on other drugs in the last 12 months were asked what treatment they received at last overdose. Only four participants responded to these questions, with three reporting they attended a hospital emergency department, and one each also reported calling an ambulance, and receiving CPR from a health professional and being monitored by friends. Multiple treatment responses were allowed for this question.

One KE reported an increasing number of intentional overdoses and attempted suicides occurring among recovering methamphetamine users in treatment facilities.

Figure 46 presents the number of narcotic overdoses attended by St John Ambulance from April 2002 to June 2010. It is evident that apart from a peak (n=70) in the final quarter of 2002, the number of overdoses remained relatively stable to the third quarter in 2005 (n=44). Following this, there was a decline in the number of overdoses until the third quarter of 2006 (n=49) at which time the number of overdoses returned to previous levels. Commencing in the third quarter 2007 (n=62), the number of overdoses began to increase and reached 98 overdoses in the first quarter 2008 and 93 overdoses in the second quarter 2008. During the fourth quarter of 2008, these numbers temporarily decreased to those found prior to 2008 (n=47); since then, numbers have been fluctuating per quarter and have peaked again in the second quarter of 2010 (n=82).

Overall these findings indicate that the number of ambulance callouts to narcotic overdoses in WA has increased in the last three years (see Figure 46); however, these findings remain far lower than those prior to the heroin shortage.

Figure 46: Number of ambulance callouts to narcotic overdoses, WA, 2nd quarter 2002-2nd quarter 2010



Source: St John Ambulance, WA

Note: Due to missing data for September 2005, that month was allocated a data value equal to the average for the 3rd quarter 2005

Fatal overdose

The ABS collates drug-related death data and from 2006 it relied solely on data contained on the National Coronial Information System (NCIS). Because of this change in methods of collating death data, comparisons to earlier overdose bulletins by NDARC (Degenhard and Roxburgh, 2007a; Degenhard and Roxburgh, 2007b) are not possible. Prior to 2006, coronial offices were also visited to manually update causes of deaths. One consequence of this difference is that, since 2006, there were higher numbers of deaths coded as 'cause unknown'. For this reason, data since 2006 cannot be compared with previous death data for 1988 to 2005. Accordingly, only drug-related deaths for 2008 are reported here. Further, the following data should be interpreted in conjunction with the ABS Technical Note 1: Coroner Certified Deaths, 3303.0 2008 (Roxburgh and Burns, in press).

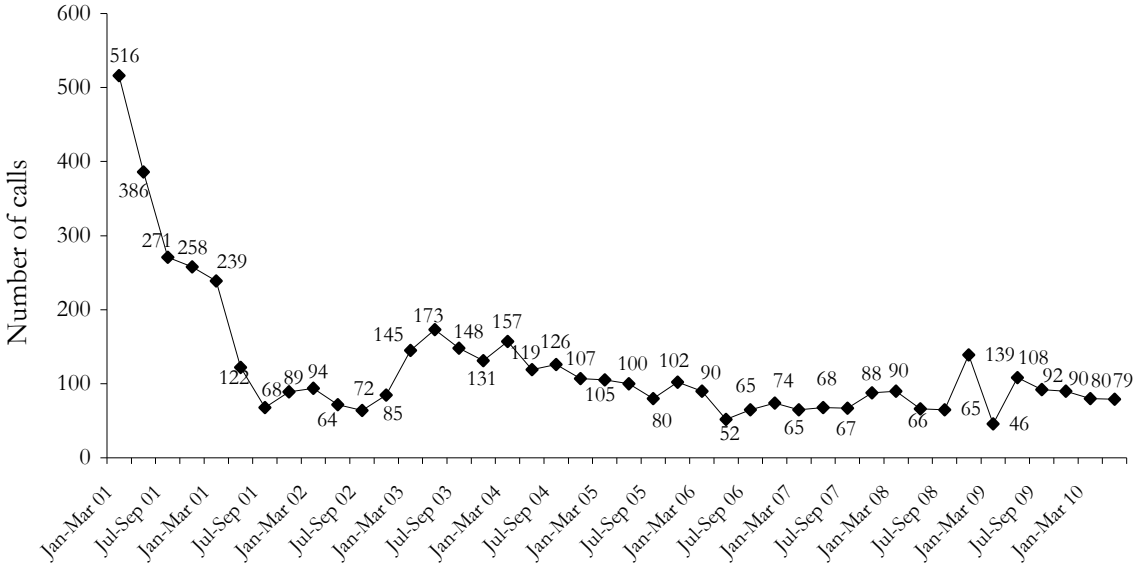
In 2008, the number of open coronial cases coded as 'unknown cause' was 16 in WA and 467 nationally, which decreased from 40 in WA and 1,027 nationally from 2007. The number of accidental deaths due to opioids among those aged 15 to 54 years in WA was 45 (compared to 22 in 2007), representing 13% of the national total (n=337). In WA, these fatalities comprised of 34 males and 11 females.

10.2 Calls to telephone help lines

Figure 47 presents the number of telephone calls to WA ADIS regarding heroin for each quarter from January 2000 to June 2009. The highest number of calls was in the first quarter of 2001 (n=516), following which there was a sharp decrease to the lowest number of calls in July-September 2002 (n=64). There was a subsequent increase in calls and then, since July-September 2006, the number of ADIS calls enquiring about heroin stabilised. In 2008/09, both increases and decreases occurred, particularly in the last quarter of 2008 when the highest number of calls (n=139) was recorded since 2004; conversely, in the first quarter of 2009, the lowest number of

calls to ADIS regarding heroin (n=46) was recorded. In the 2009/10 financial year, heroin-related calls were stable, with less variation between the number of calls in each quarter recorded since 2001.

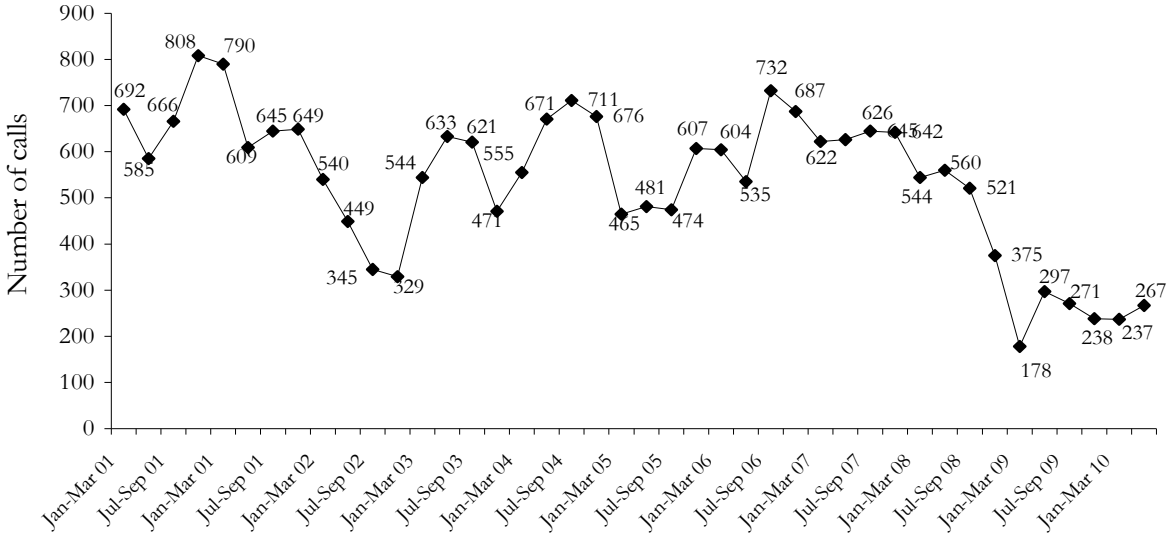
Figure 47: Number of enquiries to ADIS regarding heroin, Jan 2000-Jun 2010



Source: ADIS

Figure 48 presents the number of telephone calls to WA ADIS enquiring about amphetamines for each quarter from January 2001 to June 2009. It is evident that the number of calls regarding amphetamines has fluctuated over time. The highest number of calls was in the last quarter of 2001 (n=808) and the lowest number of calls was in the first quarter of 2009 (n=178). The latest data for the 2009/10 financial year showed signs of a slight increase January-March 2009 to April-June 2009, and has since stabilised in the most recent three quarters; however, the number of calls in the 2009/10 financial year still remains lower than numbers recorded prior to 2009.

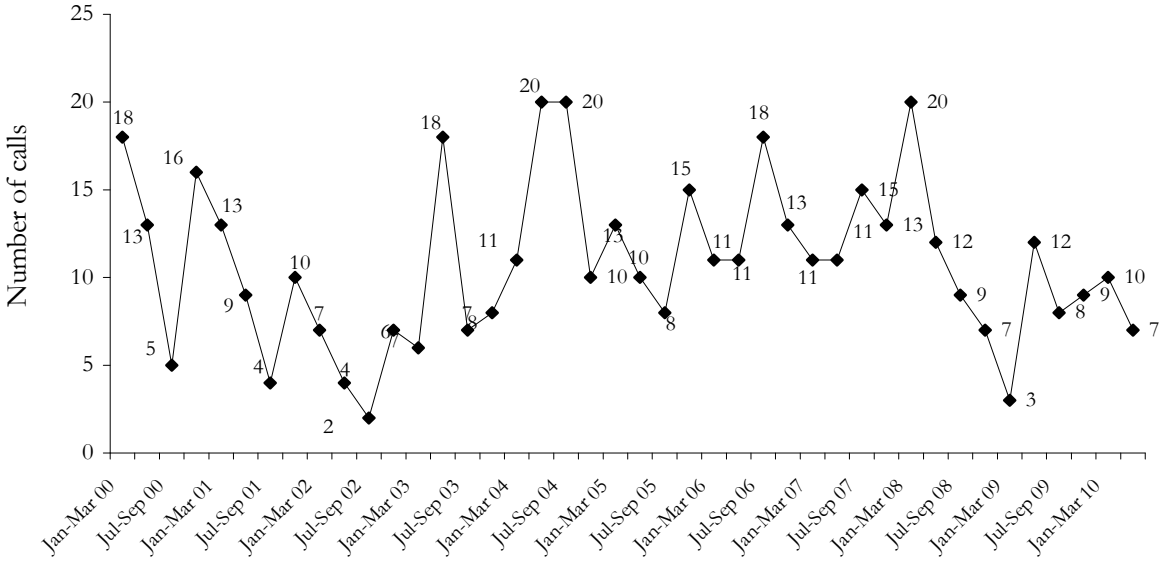
Figure 48: Number of enquiries to ADIS regarding amphetamines, Jan 2001-Jun 2010



Source: ADIS

Calls to WA ADIS concerning the use of cocaine for each quarter from January 2000 to June 2010 are shown in Figure 49. While there has been fluctuation in cocaine-related calls, the numbers remain low. The highest number of calls was in April-June 2004, July-September 2004 and April-June 2008 (n=20). The lowest number of calls was in July-September 2002 (n=2) and more recently in January-March 2009 (n=3). In the 2009/10 financial year, cocaine-related calls accounted for less than 0.1% of total calls to ADIS.

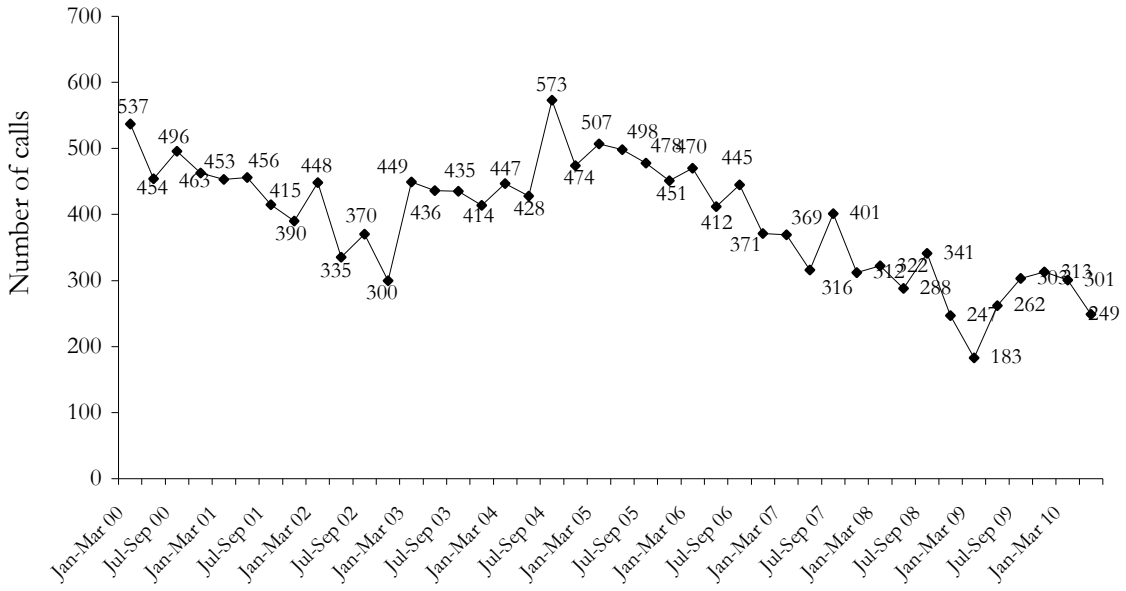
Figure 49: Number of enquiries to ADIS regarding cocaine, Jan 2000-Jul 2010



Source: ADIS

Figure 50 presents the number of cannabis-related calls received by ADIS for each quarter from January 2000 to June 2009. The highest number of calls was in July-September 2004 (n=573); following this, there has been an overall gradual decline in the number of calls regarding cannabis, with the lowest number of calls recorded in January-March 2009 (n=183). Since then, the number of cannabis-related calls has slightly increased; however, this number still remains low compared to those reported prior to 2008, suggesting that the number of cannabis-related calls to ADIS has declined over time. In 2009/10, cannabis-related calls accounted for 10%-14% of total calls to ADIS.

Figure 50: Number of enquiries to ADIS regarding cannabis, Jan 2000-Jun 2010



Source: ADIS

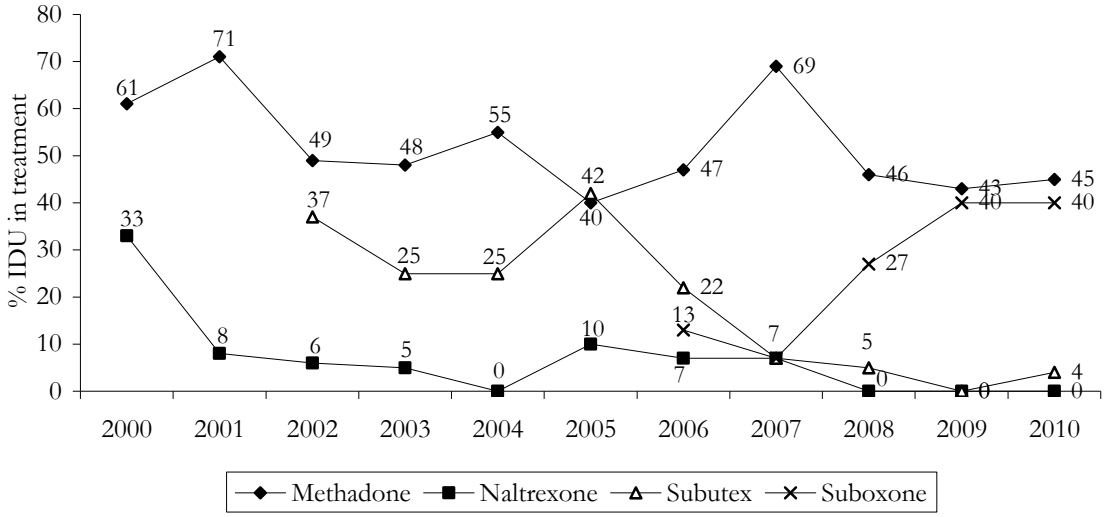
10.3 Drug treatment

10.3.1 WA IDRS sample

Pharmacotherapy treatment

In 2010, 47% (n=47) of participants reported currently being in drug treatment, which represented a significant increase from the 30% currently engaged in drug treatment in 2009 (95%CI -0.29, -0.03). As noted in the executive summary (demographics), data were weighted to control for this change in the sample. Of those in current drug treatment, 92% (n=43) were receiving pharmacotherapies for opioid dependence. Methadone remained the most common pharmacotherapy and was reported by 45% of those in current treatment, followed by Suboxone reported by 40% and Subutex reported by 4% of those in treatment. The proportion of IDU in pharmacotherapy treatment for opioid dependence across IDRS surveys is displayed in Figure 51. It is evident that the proportion of participants reporting current methadone treatment has remained stable since 2008, and the proportion reporting current Suboxone treatment has remained stable from last year. Caution is warranted in interpreting this figure as the number of participants recruited through pharmacies has decreased in recent years, which may impact on the data regarding pharmacotherapies. No respondents have reported recent Naltrexone treatment since 2008, which may in part be due to the large proportion of the IDU sample that has been recruited through the needle exchange over the past three years.

Figure 51: Proportion of participants reporting current pharmacotherapy, 2000-2010



Source: IDRS IDU interviews
Note: Suboxone was not reported prior to 2006

Of the total sample in 2010, 26% reported licit use of methadone in the last six months, with a median of 180 days used/in treatment (range=3-180 days), which was comparable to 15% in 2009 on a median of 180 days used. Only one participant reported licit use of physeptone in the last six months with a median of 14 days used/in treatment, compared to no participants in 2009. Five participants reported licit use of Subutex in the last six months with a median of 180 days used/in treatment (range=20-180), and only one participant had used licit Subutex in 2009 which was on a daily basis. Licit use of Suboxone was reported by 20%, with a median of 180 days used/in treatment (range=3-180 days), which was comparable to 12% with a median of 180 days in 2009.

Two KE reported an increase in pharmaceutical treatment among IDU users, with one KE reporting an increasing number of IDU obtaining Suboxone for treatment. In addition, two KE reported the difficulty in treating methamphetamine-dependent individuals, largely because there is no clear treatment, or agonist drug, currently available. One KE suggested prescription amphetamine be used as a maintenance drug for methamphetamine-dependent users.

10.3.2 Drug treatment in WA

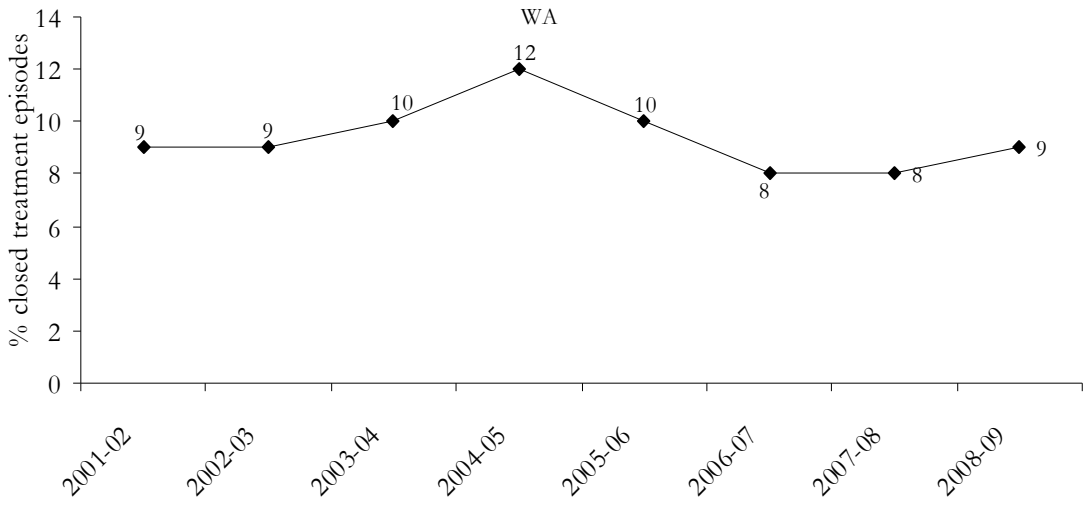
Data from the Drug and Alcohol Office showed that in WA in 2008/09, there were 16,915 closed treatment episodes in WA (based on the date of commencement), representing a decrease of seven treatment agencies and around 1,800 treatment episodes compared to 2007/08. Treatment episodes by principal drug of concern, where relevant to the IDRS, are presented below.

Heroin

Figure 52 presents the percentage of closed treatment episodes for heroin in WA from 2001/02 to 2008/09. Following a peak in 2004/05 (12%), the percentage of closed treatment episodes where heroin was the principal drug of concern steadily decreased until it stabilised in 2006/2007 and 2007/08 to the lowest percentage reported (8%); since then, there has been a slight increase

to 9% in 2008/09. In 2008/09, heroin represented 9% of closed treatment episodes in WA compared to 10% nationally.

Figure 52: Percentage of closed treatment episodes where heroin was the principal drug of concern, WA, 2001/02-2008/09

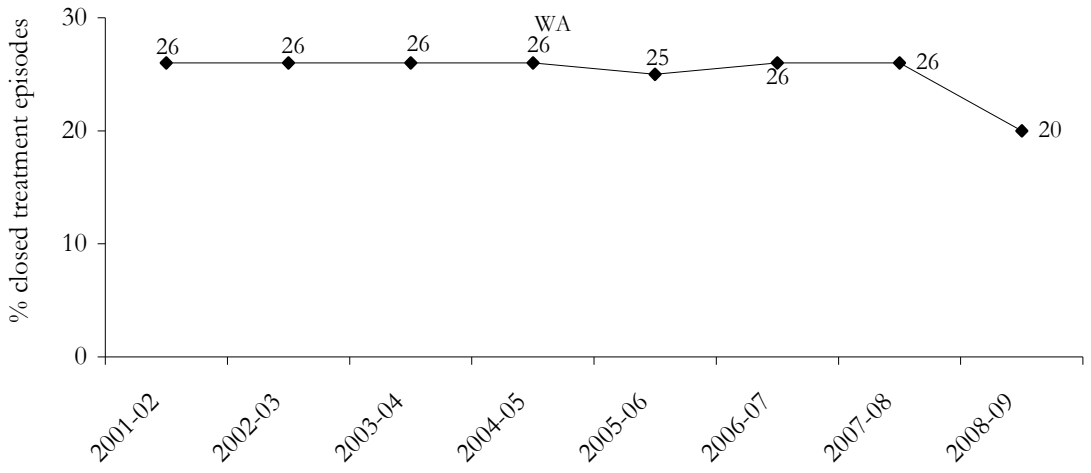


Source: 2008/09 National Minimum Data Set, AIHW and WA Drug and Alcohol Office

Amphetamines

Figure 53 presents the percentage of closed treatment episodes for amphetamines in WA from 2001/02 to 2008/09. It is evident that up until 2008/09, the percentage attributed to amphetamines has shown little variation across time, accounting for around one-quarter of closed episodes in each year. However, in 2008/09, amphetamines accounted for only one-fifth of closed episodes each year which was the lowest proportion observed since 2001/02. In 2008/09, amphetamines represented 20% of closed treatment episodes in WA compared to 9% nationally.

Figure 53: Percentage of closed treatment episodes where amphetamines was the principal drug of concern, WA, 2001/02-2008/09

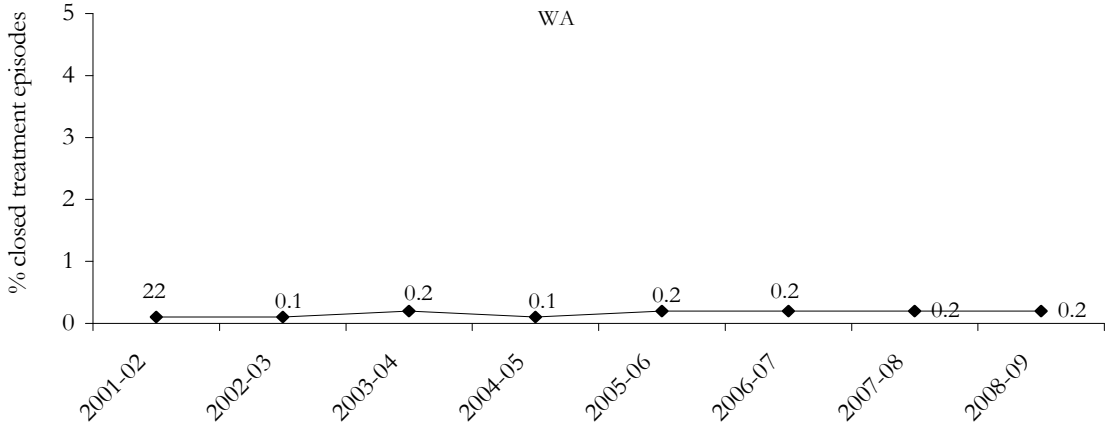


Source: 2008/09 National Minimum Data Set, AIHW and WA Drug and Alcohol Office

Cocaine

Figure 54 presents the percentage of closed treatment episodes for cocaine in WA from 2001/02 to 2008/09. It is evident that cocaine-related treatment episodes have been consistently below 1%.

Figure 54: Percentage of closed treatment episodes where cocaine was the principle drug of concern, WA 2001/02-2008/09

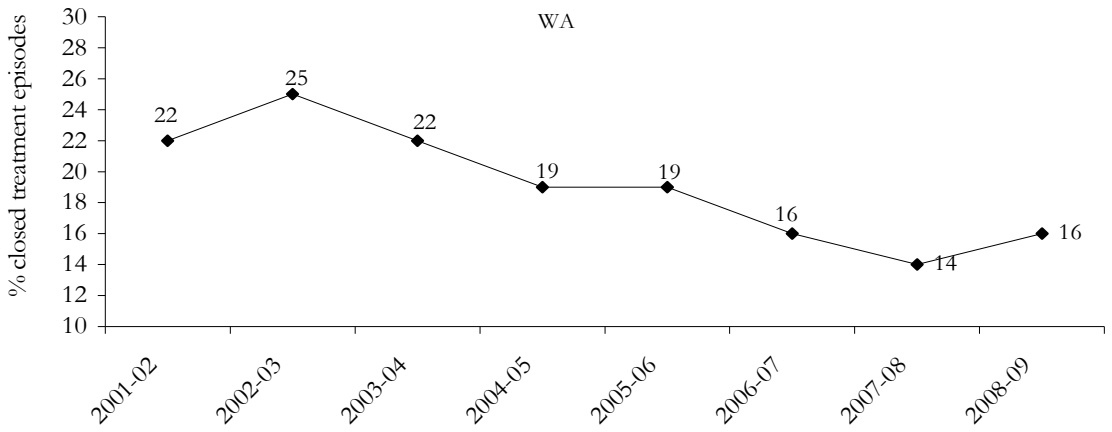


Source: **2008/09 National Minimum Data Set, AIHW, and WA Drug and Alcohol Office**

Cannabis

Figure 55 presents the percentage of closed treatment episodes for cannabis in WA from 2001/02 to 2008/09. Following an initial increase from 2001/02 to 2002/03, the percentage of closed episodes attributed to cannabis has steadily decreased over time. However, a slight increase was observed from 2007/08 (14%) to 2008/09 (16%). In 2008/09, cannabis represented 16% of closed treatment episodes in WA compared to 23% nationally.

Figure 55: Percentage of closed treatment episodes where cannabis was the principal drug of concern, WA, 2001/02 -2008/09

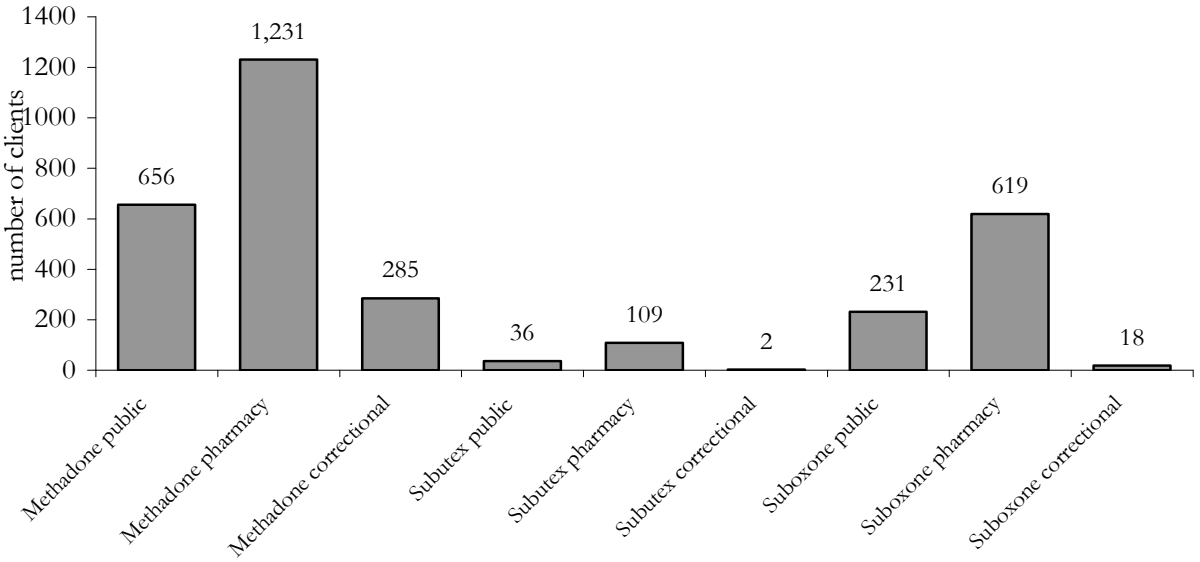


Source: 2008/09 National Minimum Data Set, AIHW and WA Drug and Alcohol Office

Pharmacotherapy treatment

With regards to pharmacotherapy treatment, the National Opioid Pharmacotherapy Statistics Annual Data Collection conducted in 2009 provides information about clients accessing this form of treatment. Figure 56 presents the estimated number of pharmacotherapy clients by pharmacotherapy drug type and dosing site in WA. It is evident that the most common form of pharmacotherapy treatment in WA is methadone administered at a pharmacy (n=1,231). Following this is methadone administered at a public clinic (n=656), then Suboxone administered in a pharmacy (n=619), then methadone administered at a correctional facility (n=285) and Suboxone administered at a public clinic (n=231). Small numbers were reported for Subutex administered in a pharmacy (n=109), in public (n=36) and in correction facilities (n=2), and for Suboxone correctional (n=18).

Figure 56: Estimated number of pharmacotherapy clients by pharmacotherapy drug type and dosing site, WA, 2009



Source: National Opioid Pharmacotherapy Statistics annual data collection (2009), AIHW

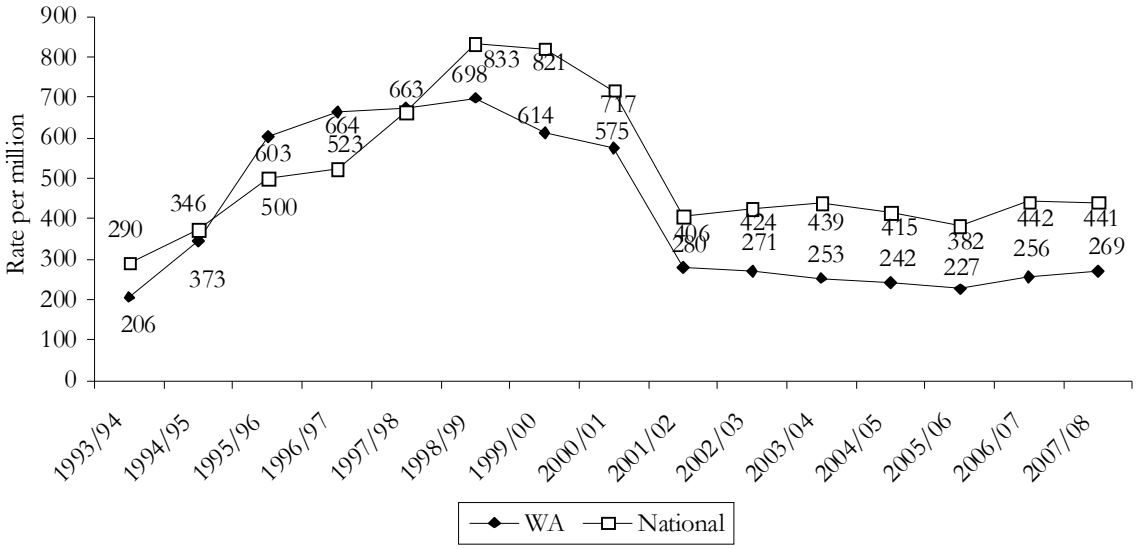
10.4 Hospital admissions

At the time of printing, hospital admissions data from the AIHW for the 2008/09 period was not available.

10.4.1 Opioids

The rate per million persons aged 15-54 years of hospital admissions in which the principle diagnosis was opioid related is shown in Figure 57. A principle diagnosis that is opioid-related is recorded where opioids are established (after discharge) to be chiefly responsible for occasioning the person's episode of care. It is evident that WA has followed a similar trend to the national rate, with the exception of 1995/96 (n=602) to 1996/97 (663) when WA overtook national rates. National rates peaked in 1998/99 (832) to 1999/00 (820) and decreased sharply in 2001/02 (405). Since this time, both WA and national rates have stabilised.

Figure 57: Rate per million persons of principle opioid-related hospital admissions among people aged 15-54 years, WA and nationally, 1993/94-2007/08

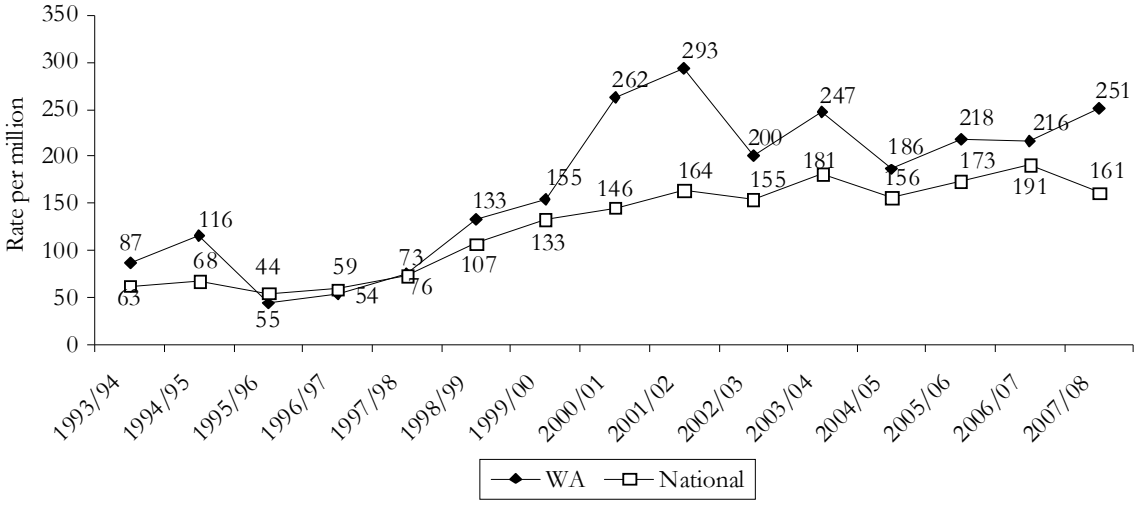


Source: AIHW

10.4.2 Amphetamines

The rate per million persons aged 15-54 years of hospital admissions in which the principle diagnosis was amphetamine related is shown in Figure 58. While national rates have followed a steady, increasing trend over time, rates for WA have fluctuated. WA rates have consistently been higher than national rates with the exception of 1995/96 (44 vs. 55) to 1996/97 (54 vs. 59). WA rates increased from this time to peak in 2001/02 (293). Since this time, WA rates have decreased and showed some stability from 2004/05 to 2006/07. Increases have been observed in the most recent data collection with WA hospital admission rates increasing and national hospital admissions rates decreasing.

Figure 58: Rate per million persons of principle amphetamine-related hospital admissions among people aged 15-54 years, WA and nationally, 1993/94-2007/08

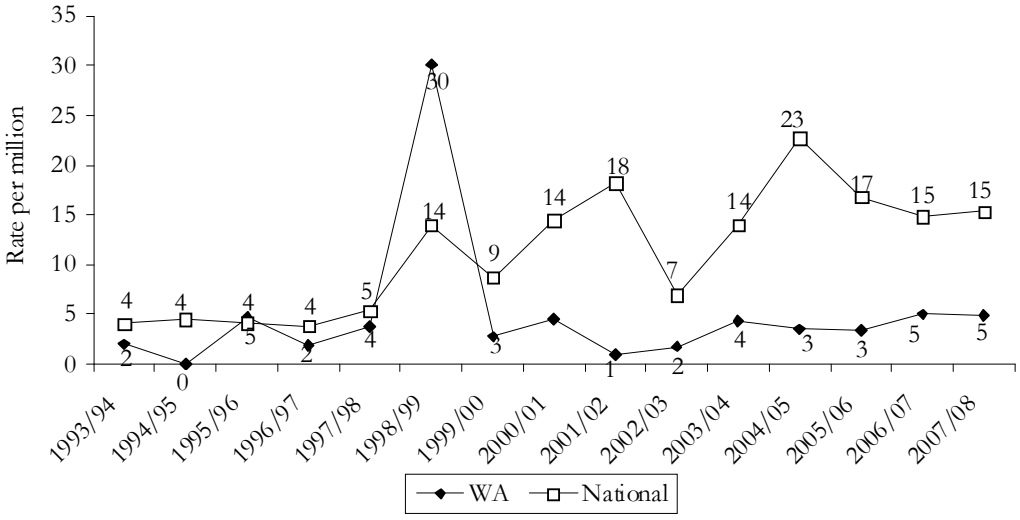


Source: AIHW

10.4.3 Cocaine

The rate per million persons aged 15-54 years of hospital admissions in which the principle diagnosis was cocaine related is shown in Figure 59. WA rates have been consistently low across time, with the exception of 1998/99 when the rate peaked at 30. National rates have fluctuated across time and have been consistently higher than WA rates, with the exception of the WA peak in 1998/99.

Figure 59: Rate per million persons of principle cocaine-related hospital admissions among people aged 15-54 years, WA and nationally, 1993/94-2007/08

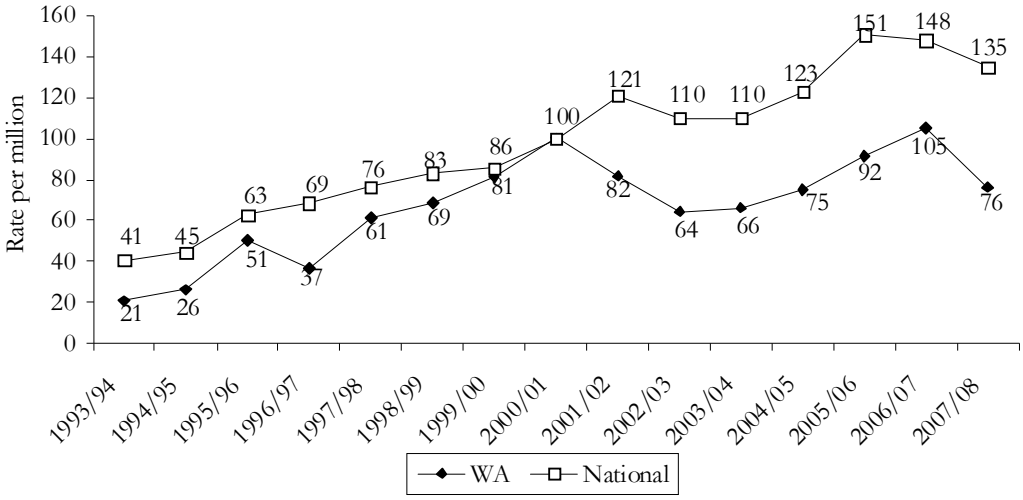


Source: AIHW

10.4.4 Cannabis

The rate per million persons aged 15-54 years of hospital admissions in which the principal diagnosis was cannabis related is shown in Figure 60. Both national and WA rates have shown an increasing trend over time, with national rates consistently higher than those for WA. WA rates have been gradually increasing reaching a peak of 105 in 2006/07; however, a decrease was observed in the most recent financial year.

Figure 60: Rate per million persons of principle cannabis-related hospital admissions among people aged 15-54 years, WA and nationally, 1993/94 -2007/08



Source: AIHW

10.5 Injecting risk behaviours

10.5.1 Sharing of needles by IDU participants

Participants were asked from what sources they obtained their needles in the last six months (more than one response was allowed). The majority (91%) reported obtaining needles from a NSP; chemist was reported by 19%, 11% reported from friends, 8% reported from their dealer, and 6% reported from an outreach/peer worker. The high proportion of respondents reporting NSP as their source of needles may in part be affected by the large proportion of the IDRS sample recruited through NSP. NSP was also the most common source of needles/syringes in the last month in the NSP Survey in WA, reported by 60% (NCHECR, 2010). Proportions in the NSP survey that reported obtaining needles/syringes from a chemist/pharmacy or from a friend/dealer were greater than the 2009 IDRS sample; 36% and 20% respectively.

With regard to sharing needles, the vast majority (92%) reported that they had not used a needle after someone else in the last month. Of those that did (n=8), two participants each reported using a needle once, twice and three to five times after someone else; of the remainder, one participant reported doing so six to 10 times and another reported doing so more than 10 times in the last month. Of those who reported using a needle after someone else, all (n=8) reported only one person had used the needle before them. The most common people to use a needle before were a regular sex partner (n=6), a casual sex partner and a close friend (n=1 each).

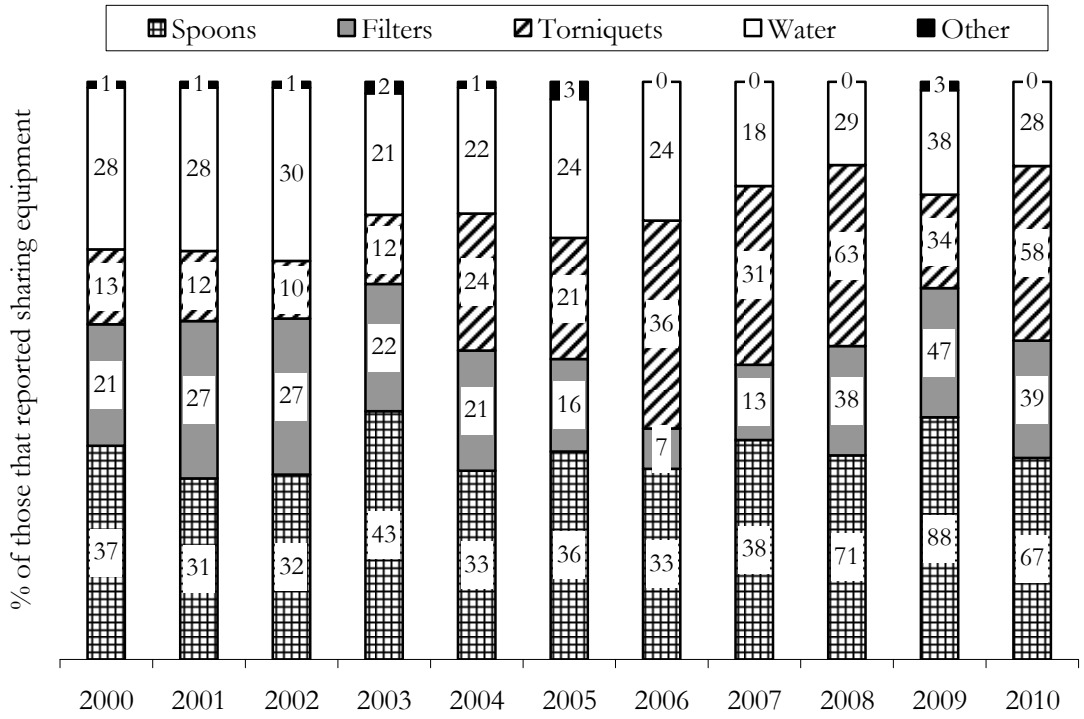
In 2010, 16% of IDU reported that someone else had used a needle after them in the last month; this was significantly less than the 29% reported in 2009 (95%CI 0.01, 0.24). All participants were asked how many times in the last month they had re-used their own needles and 57%

reported never. Re-use of own needle once was reported by 21%, twice by 28%, three to five times by 26%, six to 10 times by 12%, and more than 10 times by 14%.

10.5.2 Sharing of other injecting equipment

In 2010, participants were asked if they had used injecting equipment after someone else in the last month and almost one-third (36%) of the sample reported that they had, which was comparable to 32% in 2009. Of these participants, 67% reported using spoons/mixing containers, 58% reported using tourniquets, 39% reported using filters and 28% reported using water. Figure 61 presents the proportions sharing each type of equipment among those that reported sharing equipment across IDRS surveys.

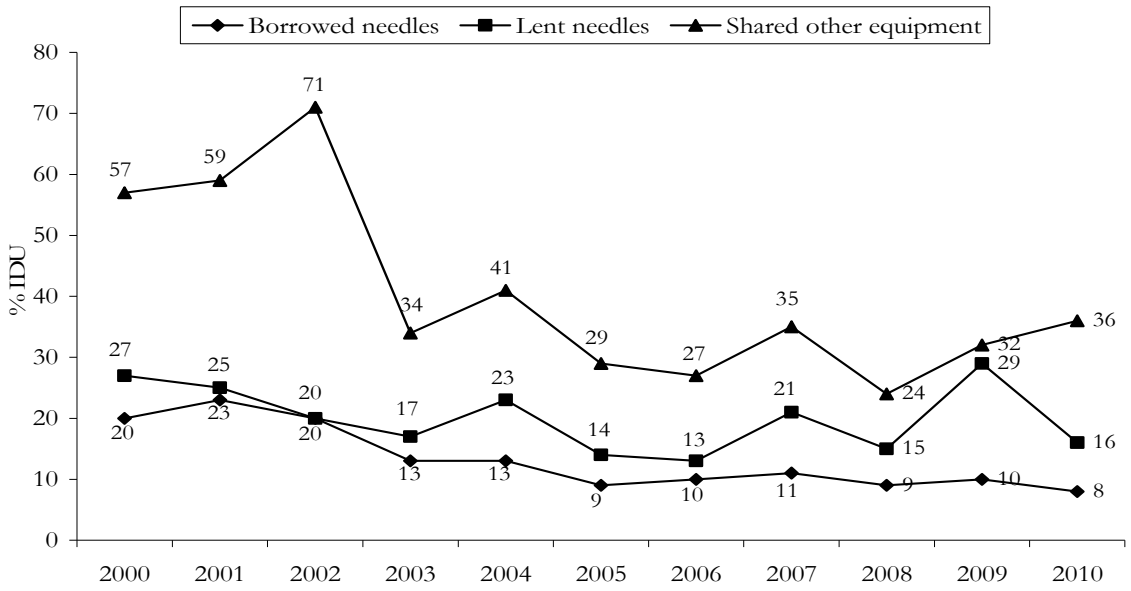
Figure 61: Proportion of IDU reporting sharing each type of injecting equipment among those that shared equipment, 2000-2010



Source: IDRS IDU interviews

Figure 62 presents the proportion of IDU across IDRS surveys that reported sharing needles and injecting equipment in the month before interview. Those that used a needle after someone else are referred to as 'borrowed needles' and those who had someone else use a needle after them are referred to as 'lent needles'. It is evident that proportions in the categories lent needles have significantly decreased from 2009 and shared equipment appears to be gradually increasing since 2008. The proportion reporting borrowing a needle in the last month has remained relatively stable.

Figure 62: Proportion of IDU reporting sharing injecting equipment in the month preceding interview, 2000-2010



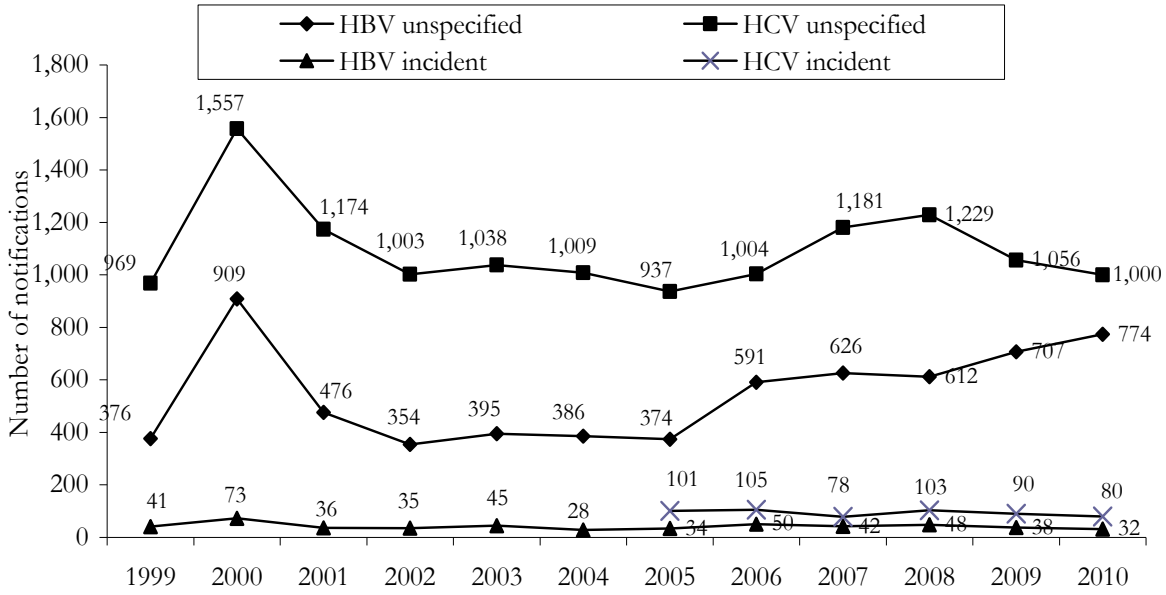
Source: IDRS IDU interviews

A number of KE from health care backgrounds reported an alarming increase in unsafe and poor injecting practices among IDU recently, with abscesses and infections from injection being more frequently treated in hospitals and treatment services. One KE reported that for IDU, access to clean needles and filters can be challenging both geographically (for those who live in the outer suburbs) and financially, since clean needles and filters are sometimes costly. Another KE reported an emerging trend in the increasing number of 'early career' drug users going straight to injecting without any background knowledge on safe injecting practices, which is often a complex issue because, during this stage, these individuals are not usually in regular contact with outreach programs or NSEP. This emerging trend has implications for harm reduction strategies involving educating the individual users and their peer groups on safe injecting practices.

10.5.3 Blood-borne viral infections

Figure 63 presents' data from the National Notifiable Diseases Surveillance System (NNDSS) for cases of unspecified and incident HBV and HCV for WA from 1999 to 2010. It is evident that unspecified cases far exceed incident cases for both types of BBVI. There was a peak in both HBV and HCV in 2000, following which cases decreased and stabilised. From 2005, there is some indication of an increase in notifications of both HBV and HCV; however, HCV appears to be decreasing since 2008, whereas there is some indication that HBV has been gradually increasing since 2005. In 2010, the number of HCV unspecified cases decreased slightly from 1,056 in 2009 to 1,000 in 2010, whilst the number of HBV unspecified cases increased to 774, representing the greatest number of cases since 2000. However, these fluctuations in unspecified cases are more likely the result of a push for people to get tested. The number of HBV (n=32) and HCV (n=80) incident cases in 2010 have remained relatively stable over time.

Figure 63: Total notifications for unspecified and incident HBV and HCV infection, WA, 1999-2010

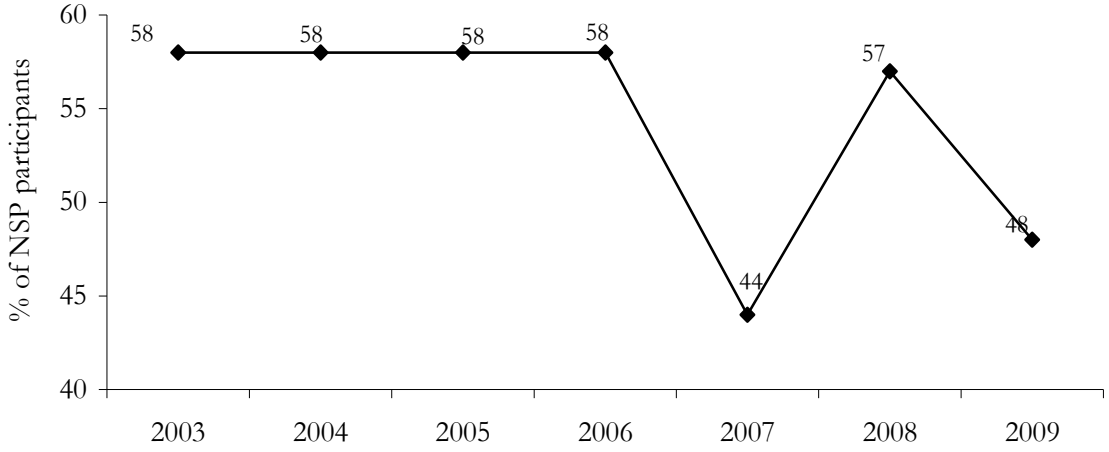


Source: Communicable Diseases Network – Australia – NNDSS[1]
Note: Data for HCV incident for WA was not available prior to 2005

As part of the Australian Needle and Syringe Program Survey (ANSPS) all clients attending selected NSP sites across Australia during a specified two-week survey period are asked to complete a brief self-administered questionnaire and to provide a capillary blood sample for HIV and HCV antibody testing. Figure 64 presents the percentage of NSP participants in WA from 2003 to 2009 testing positive for HCV infection. It is evident that the proportion of NSP participants testing positive for HCV antibodies was stable at 58% from 2003 to 2006; there was then a decrease in 2007 to 44% followed by an increase in 2008 to 57%, and more recently, another decrease to 48% in 2009.

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

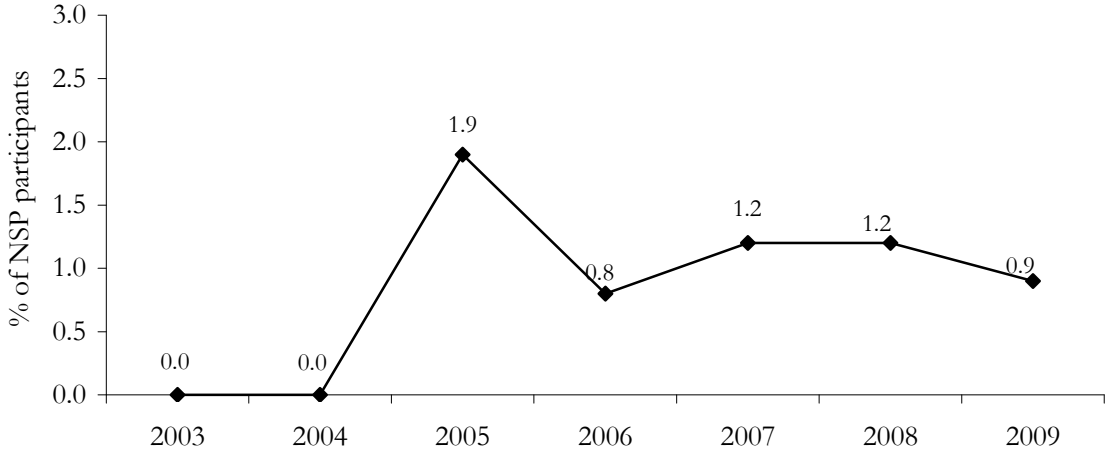
Figure 64: Percentage of NSP participants in WA testing positive for HCV antibody, 2003-2009



Source: **NCHECR, 2010**

Figure 65 presents human immunodeficiency virus (HIV) prevalence among NSP participants in WA from 2003 to 2009. Following two years of no reports of HIV, three NSP participants tested positive for HIV in 2005, one NSP participant each tested positive for HIV in 2006 and 2007, and two NSP participants were positive for HIV in 2008 and 2009.

Figure 65: Percentage of NSP participants in WA testing positive for HIV antibody, 2003-2009



Source: **NCHECR, 2010**

10.5.4 Locations of injection

Participants were asked about the location of last injection (Table 17). The most commonly nominated last location of injection was at a private home, reported by 80% in 2010 which was not significantly different to 74% in 2009. Following this, 11% nominated a car as last location of injection compared to 10% in 2009. Smaller proportions nominated street/car park/beach (6%) and public toilet (3%).

Table 17: Proportion of IDU participants reporting the last location for injection, 2009-2010

Location	2009	2010
Private home	74	80
Street/car park/beach	5	6
Car	10	11
Public toilet	8	3

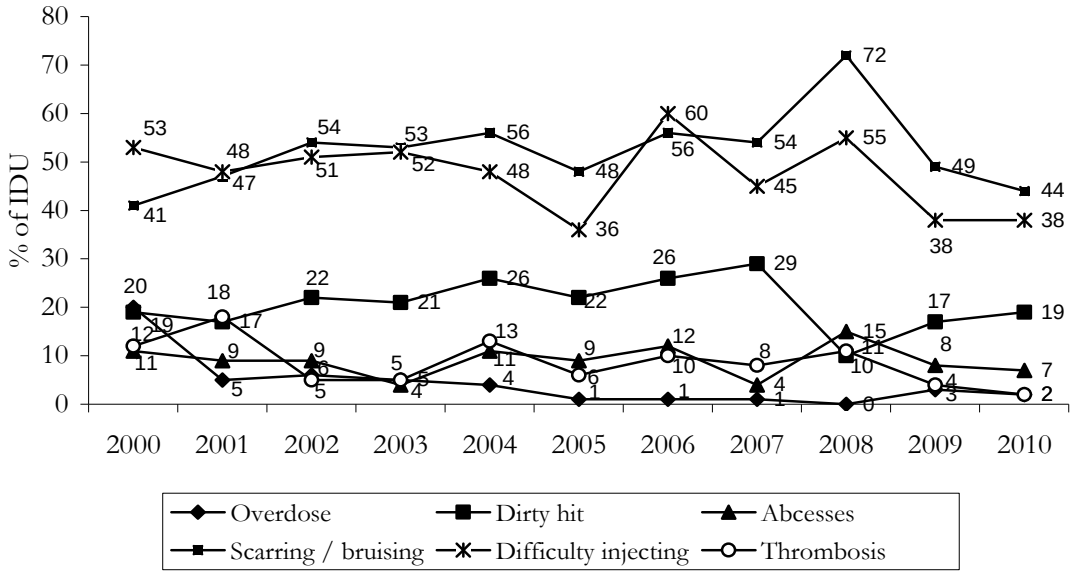
Source: **IDRS IDU interviews**

10.5.5 Injection-related health problems

Participants were asked about injection-related health problems they experienced in the month prior to interview. In 2010, two participants reported overdose in this time compared to three participants in 2009. Nineteen percent of the 2010 sample reported experiencing a dirty hit, which was not significantly different to the 17% in 2009. The most commonly reported injection problem remained prominent scarring/bruising reported by 44% in 2010; this was comparable to 49% in 2009. This was followed by difficulty injecting, reported by 38% in both 2010 and 2009. Smaller proportions in 2010 reported abscesses/infections from injecting (7%) and thrombosis (2%).

Figure 66 presents the proportion of IDU who reported injection-related problems across IDRS surveys. It is evident that scarring/bruising has consistently been the most commonly reported problem (with the exception of 2006) and increased to its highest level in 2008; it has since stabilised to rates more comparable to samples prior to that year. Difficulty injecting has consistently been the second most common problem (with the exception of 2006). Reports of a dirty hit had been stable across survey years, but decreased to the lowest proportion recorded in 2008 and has since increased to rates more comparable to previous years' samples in 2010.

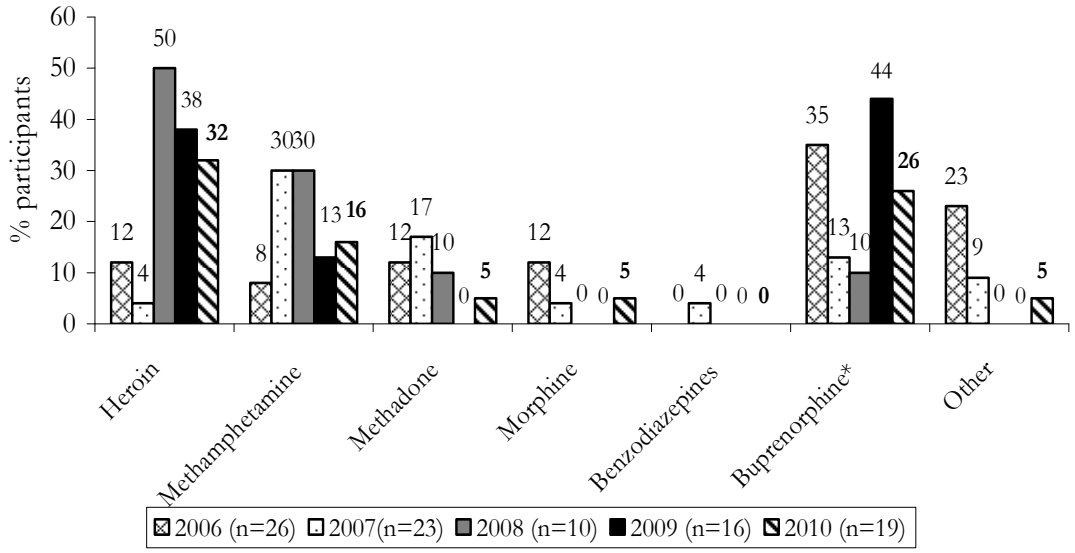
Figure 66: Proportion of IDU reporting injection-related problems in past month, by problem type, 2000-2010



Source: IDRS IDU interviews

Of the 19 participants in 2010 that reported experiencing a dirty hit, six each nominated heroin as the main drug, three each nominated methamphetamine and Suboxone, two each nominated Oxycodone and Subutex, and one each nominated methadone, morphine and 'other'. Figure 67 presents the main drugs nominated by participants who reported a dirty hit across IDRS surveys.

Figure 67: Main drug causing dirty hit of those that reported a dirty hit in last month, 2005-2010



Source: **IDRS IDU interviews**

* Buprenorphine includes both Subutex and Suboxone

10.6 Mental and physical health problems and psychological distress

10.6.1 Self-reported mental health problems

In 2010, the IDRS included items regarding self-reported experience of mental health problems and health service utilisation for such problems, including obtaining prescription medications. It is important to note that the following data refer to participants' perception of their mental health and were not confirmed by a formal diagnosis (although the participant may have received such a diagnosis from a health professional in the course of treatment).

In 2010, 51% of IDU reported experiencing a mental health problem in the last six months, which was not significantly different to the 37% in 2009. As in previous years, the most commonly reported mental health problems were depression (67%, n=34) and anxiety (33%, n=17). Seven participants reported post traumatic stress disorder, five participants each reported bipolar disorder and panic, three each reported paranoia, schizophrenia and phobias, and two each reported drug-induced psychosis and ADHD. One participant reported obsessive compulsive disorder.

Of those reporting a mental health problem (n=51), 77% reported attending a professional in relation to the problem. These participants (n=39) were asked about prescription medications and six reported taking no medication. Of the remaining participants (n=33), 61% reported taking an antidepressant of which the most common were Lexapro (escitalopram) (n=3) and Endep (amitriptyline), Avanza (mirtazapine) and Efexor (venlafaxine) (n=2 each). Of those prescribed medication for their mental health problem, 14 participants reported taking benzodiazepines with the most common type being Valium (diazepam) (n=6). Nine participants reported taking antipsychotics (29%); the most common was Seroquel (quetiapine) and Zyprexa (olanzepine) (n=3).

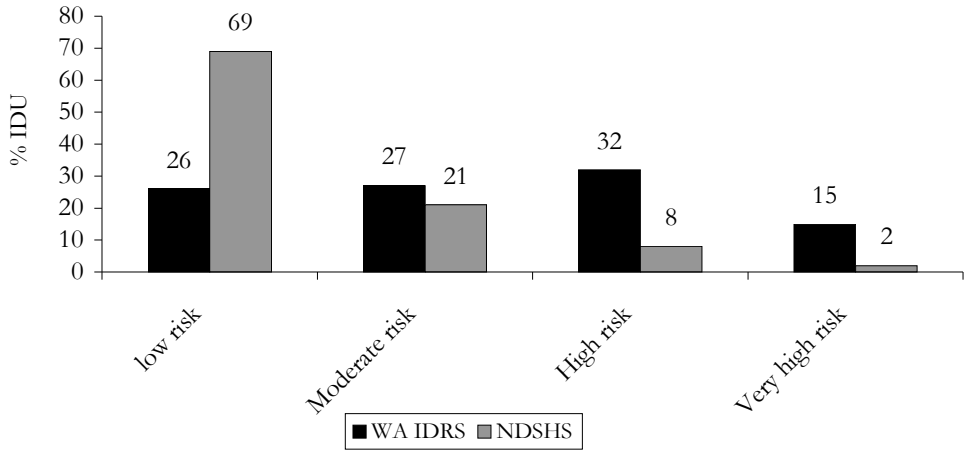
Numerous KE reported a large proportion of IDU have mental health and behavioural issues. Four KE reported an increase in mental health problems among methamphetamine users, with problems observed to be severe and increasing, often leading to a psychotic episode which can be traumatic for the individual but also dangerous for hospital staff and health care workers. Other mental health problems identified were schizophrenia, paranoia, depression and anxiety.

10.6.2 The K10 psychological distress scale

The Kessler Psychological Distress Scale or K10 (Kessler & Mroczek, 1994) was designed as a screening tool for assessing psychological distress. It is comprised of 10 items measuring the level of anxiety and depressive symptoms a person may have experienced during the previous four weeks. A five-point Likert scale is used to measure responses from all of the time to none of the time with a maximum possible score of 50. The K10 can be scored according to four distress categories: low=10-15, moderate=16-21, high=22-29, and very high=30-50. The K10 has been shown to have sound psychometric properties and demonstrated validity in identifying anxiety and affective disorders, as assessed by the Composite International Diagnostic Interview or CIDI (Andrews and Slade, 2001).

In 2010, 75 participants completed the K10 and scores are presented by risk category in Figure 68. The median total score in 2010 was 21 (range=10-42). In 2010, 26% scored at low risk, 27% scored at moderate risk, 32% scored at high risk and 15% scored at very high risk.

Figure 68: Total K10 scores by risk category among IDU, WA 2010



Source: IDRS IDU interviews

K10 scores for IDU in 2010 can be compared to the general population using data from the 2007 NDSHS (AIHW, 2008). Persons aged 18 years or older completed the K10 as part of the 2007 NDSHS. Low risk was obtained by 69%, moderate risk by 21%, high risk by 8% and very high risk by 2%. Thus, compared to the general population, IDU are substantially more likely to be at risk of psychological distress, with 47% scoring at high or very high risk compared to 10% of the general population scoring at these levels.

10.7 Driving risk behaviour

10.7.1 Driving and alcohol

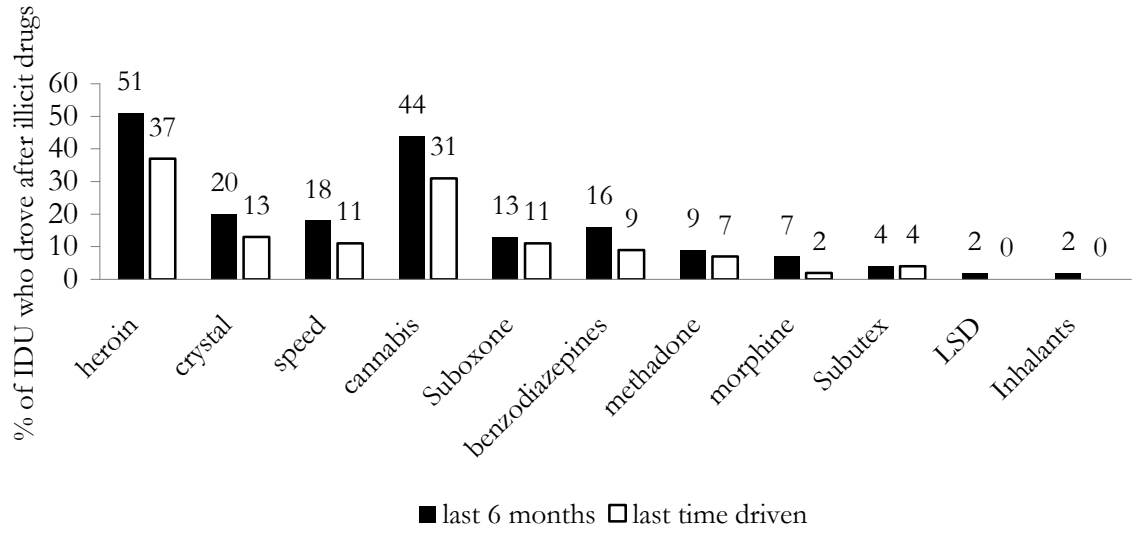
In 2010, 54% of the sample reported driving a vehicle in the six months preceding interview (56% in 2009). Of these participants, 19% reported driving under the influence of alcohol during that time, which was not significantly different to the 30% who did so in 2009. In 2010, six participants reported driving over the legal limit for blood alcohol content. The median number of times these participants had driven over the legal limit was three and a half (range=1-20).

10.7.2 Driving and illicit drugs

In 2010, 83% of those who had driven a vehicle in the last six months reported driving after consuming illicit drugs (87% in 2009). The median number of times these participants had driven after taking drugs was 50 (range=1-180). Participants were asked how many minutes after consuming drugs they had driven on the last occasion, with a median of 15 minutes (range=1-240 minutes).

The most common drug after which these participants had driven after consuming was heroin, reported by 51%. This was followed by cannabis (44%), crystal (20%), speed (18%) and benzodiazepines (16%). Smaller proportions reported oxycodone and Suboxone (13%), methadone (9%), morphine (7%), Subutex (4%), LSD and inhalants (2% each). Heroin was also the drug reported by the greatest proportion as the drug last driven under the influence of, reported by 36%. Cannabis was reported by 31%, crystal by 13%, Suboxone and speed each by 11%, benzodiazepines by 9%, methadone by 7% and Subutex by 4%. Figure 69 presents the proportion of IDU that drove after consuming each drug type in the last six months and on the last driving occasion.

Figure 69: Driving under the influence of illicit drugs by drug type, WA, 2010



Source: IDRS IDU interviews

Participants who had driven after taking illicit drugs were asked how impaired they believed their driving ability to have been the last time they drove under the influence. The majority of participants (57%) reported it had had no impact. Following this, 37% reported that they were slightly impaired and smaller proportions reported that they were slightly improved and quite improved (2% each).

Fourteen participants in 2010 reported they had been drug driving tested before: nine participants had been tested once and five had been tested for drug driving more than once. Eleven of these participants commented on the most recent result of their last drug driving test, with four reporting a negative result, one reporting a positive result, one reporting an inconclusive result and the remaining five reporting they did not get given the result. The one respondent who tested positive reported that opiates and benzodiazepines were the drugs positively identified in the drug driving test.

11. LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH DRUG USE

11.1 Reports of criminal activity among IDU participants

11.1.1 Criminal activity

In 2010, 31% of the sample reported they had been arrested in the last 12 months, which was not significantly different to the 33% who did so in 2009. Unlike previous years' samples when use/possession of drugs was the most commonly reported reason for arrest, in 2009 and 2010, the greatest proportion of those who had been arrested in the last 12 months was for property crime (44%). This was followed by six participants reporting use/possession drugs, five participants for 'other offences', four participants for driving offenses, two for violent crimes, and one each for fraud, alcohol and driving and dealing/trafficking offences.

Participants were asked what crimes they had engaged in during the last month (Table 18). The crime section is divided into four crimes: property crimes, dealing, fraud and crimes involving violence. In 2010, 51% of IDU reported involvement in any crime in the last six months; this was comparable to the 43% reporting any crime in 2009. As in previous years, the most common type of criminal activity was drug dealing, reported by 36 participants in 2010. Of those that reported dealing, 13 participants reported engaging in this activity less than once a week, five participants reported once a week, eight participants reported more than once a week but not daily, and 10 participants reported daily. Twenty-six participants reported engaging in property crime in the last month, with 18 reporting less than once a week, two reporting once a week, five reporting more than once a week but less than daily, and one reporting daily. Three participants reported engaging in fraud, with all three participants reporting doing so less than once a week. Three participants reported engaging in violent crime, and all three reported doing so less than once a week.

Table 18: Criminal activity as reported by IDU participants, 2009-2010

Criminal activity (%)	2009 N=100	2010 N=100
Criminal activity in last month:		
Dealing	38	37
Property crime	22	25
Fraud	6	3
Violent crime	5	3
Any crime	43	51
Arrested in last 12 months	33	31

Source: IDRS IDU interviews

KE reports of criminal activity varied from some to all IDU being involved in criminal activity of some kind. One KE observed an increase in drug dealing and methamphetamine manufacturing.

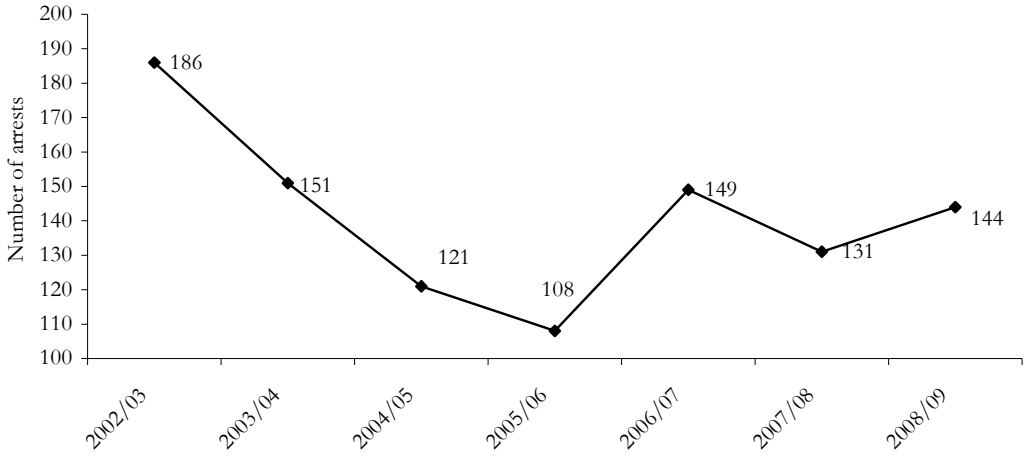
11.2 Arrests

11.2.1 Heroin

The number of heroin arrests made in WA by WAPS and AFP from 2002/03 to 2008/09 is shown in Figure 70. It is evident that the number of heroin arrests steadily decreased over time until 2006/07, which showed a sharp increase in arrests (n=149) followed by a decrease in

2007/08 (n=131), then a slight increase again in 2008/09 (n=144). Heroin arrests in WA for 2008/09 represented 5% of the national total, with the greatest proportion of heroin arrests occurring in Victoria (50%).

Figure 70: Number of heroin consumer/provider arrests, WA, 2002/03-2008/09

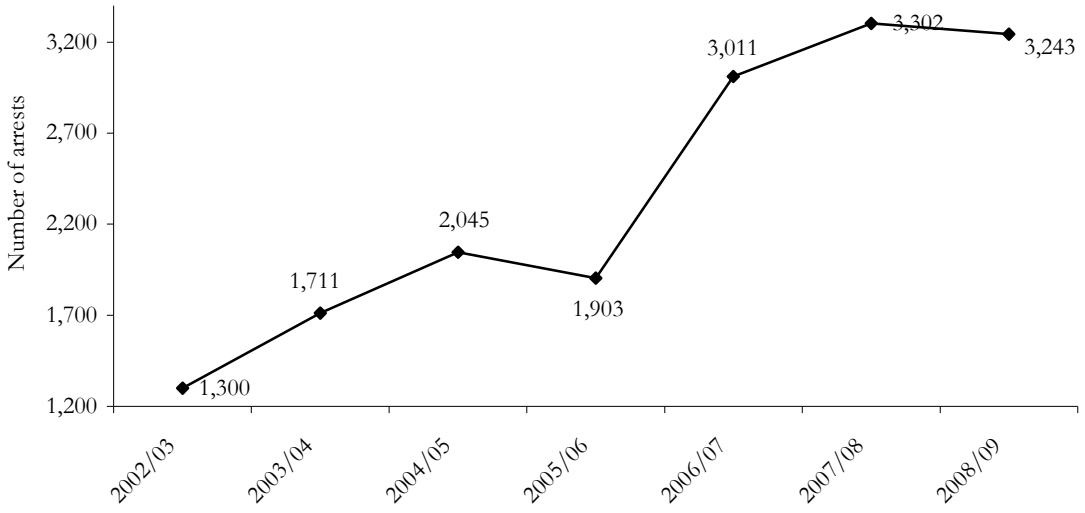


Source: **ACC**

11.2.2 ATS

The number of ATS arrests made in WA by WAPS and AFP from 2002/03 to 2008/09 is shown in Figure 71. It is evident that the number of ATS arrests have steadily increased over time, with the exception of a slight decrease from 2004/05 (n=2,045) to 2005/06 (n=1,903). Following this, there continued to be a sharp increase in both 2006/07 (n=3,011) and 2007/08 (n=3,302) to over double the number of arrests made in 2002/03 (n=1,300); this trend has remained stable in the most recent data, with 3,243 arrest in 2008/09 in WA. ATS arrests in WA for 2008/09 represented 20% of the national total, with the greatest proportion of ATS arrests occurring in Queensland (26%).

Figure 71: Number of ATS consumer/provider arrests, WA, 2002/03-2008/09

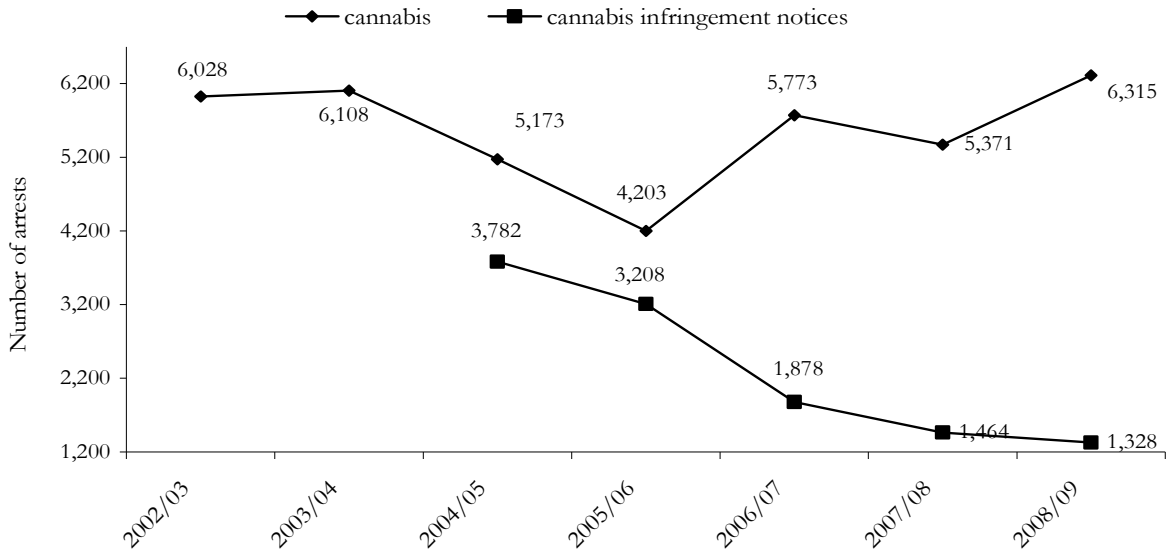


Source: **ACC**

11.2.3 Cannabis

The number of cannabis arrests made in WA by WAPS and AFP from 2002/03 to 2008/09 is shown in Figure 72. The number of cannabis arrests was initially stable then decreased until 2006/07 (n=5,773), which returned to numbers similar to those obtained in 2002/03 (n=6,028), following this, the number of cannabis arrests decreased in 2007/08 (n=5,371). In 2008/09, the number of cannabis arrests increased (n=6315), representing the greatest number of cannabis arrest recorded since 2002/03. Cannabis infringement notices were introduced in March 2004 after the passage of the *Cannabis Control Act 2003* (WA), but their use has continued to decrease over time and they have effectively not been used since the election of the Barnett Liberal Government in October 2008, which eventually repealed the Act in 2010. Cannabis arrests in WA for 2008/09 represented 11% of the national total, with the greatest proportion of arrests occurring in Queensland (30%).

Figure 72: Number of cannabis consumer/provider arrests, WA, 2002/03-2008/09

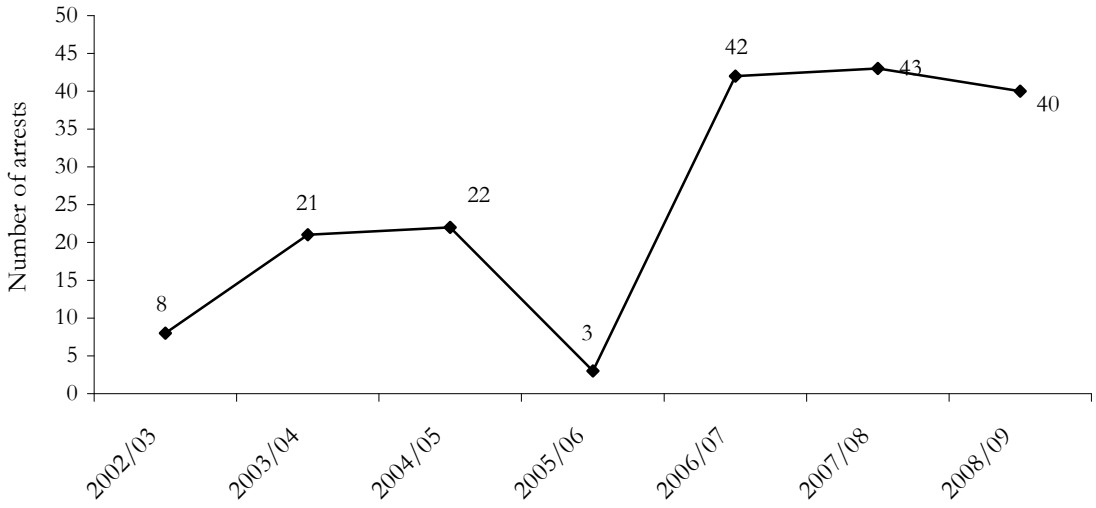


Source: **ACC**

11.2.4 Cocaine

The number of cocaine arrests made in WA by WAPS and AFP from 2002/03 to 2008/09 is shown in Figure 73. It is evident that the number of cocaine arrests has remained low across time, but increased to the highest level at the three most recent data points in 2006/07 (n=42), 2007/08 (n=43) and in 2008/09 (n=40). Cocaine arrests in WA for 2008/09 represented 5% of the national total, with the greatest proportion of cocaine arrests occurring in NSW (56%).

Figure 73: Number of cocaine consumer/provider arrests, WA, 2002/03-2008/09

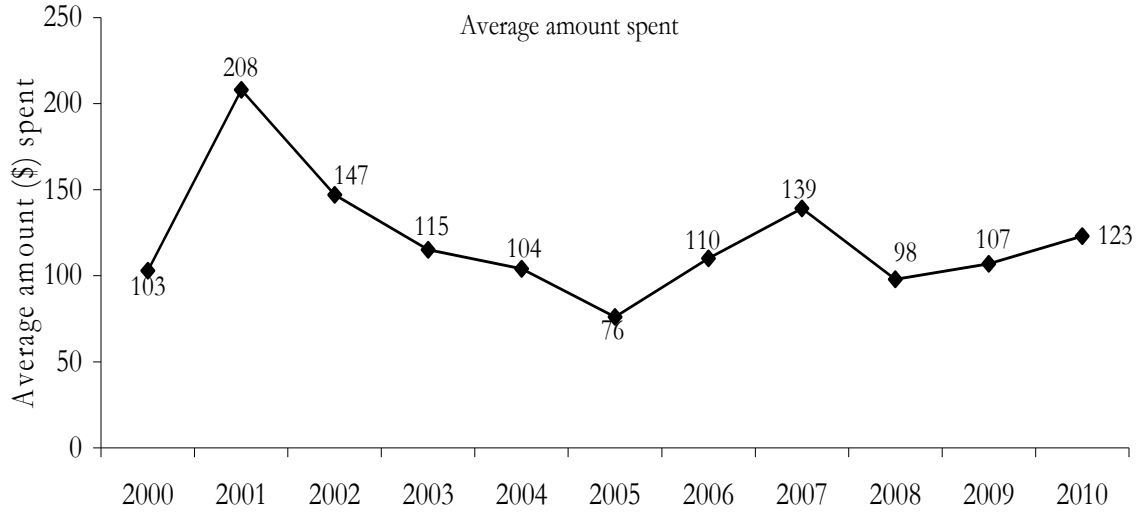


Source: **ACC**

11.3 Expenditure on illicit drugs

IDU were asked how much money they had spent on drugs the day before interview. Forty-six IDU reported spending no money on drugs the previous day, while one IDU did not respond. Of the remaining 53 IDU, the mean amount spent was $123 (range=$20-$600), which was not significantly different to the average of $107 spent on drugs the day before interview in 2009. The median amount spent in 2010 was $100. Figure 75 presents the average amount spent on drugs among IDU who had spent some money on drugs the day before the interview across IDRS surveys.

Figure 74: Expenditure on illicit drugs on day prior to interview by IDU who reported spending money on drugs, WA, 2000-2010



Source: IDRS IDU interviews

12 SPECIAL TOPICS OF INTEREST

12.1 Personal Wellbeing Index

The Personal Wellbeing Index (PWI) was created from the Comprehensive Quality of Life Scale (ComQol) (Cummins, McCabe et al. 1994). The PWI was included in the IDRS survey for the first time in 2009. It consisted of questions asking participants how satisfied they were with various aspects of their life, including standard of living, health, personal achievement, personal relationships, personal safety, feeling a part of the community, future security, and life as a whole. Participants were asked to answer on a 0-10 scale of satisfaction (0=very unsatisfied and 10=very satisfied). Scores were then combined across the seven domains to produce an overall index score and adjusted to have a range between 0-100 points (Cummins et al., 2007). Table 20 shows the 2009 and 2010 mean WA IDRS scores compared to the Australian general population.

Mean scores between the 2009 and 2010 IDRS have been mostly comparable in each domain, with the only exception being a significant decrease in the community connection domain, from an average score of 59 in 2009 to 44 in 2010 (t=-4.249, df=88, p=.000). Overall it appears that 2009 and 2010 IDU participants' scores have consistently been lower than the general population on each domain (Table 19). In addition, the total PWI mean score for the 2010 WA IDRS sample (54%) was significantly less than the 2008 national mean (75%) (t=-383.885, df=97, p=.000). Cummins et al. (2007) reported that at normal levels of wellbeing (average scores lie between 70 and 80 points), people often feel good about themselves, are motivated to conduct their lives and have a strong sense of optimism. In comparison, individuals with scores below 50 points are at higher risk of depression.

Table 19: Personal Wellbeing Index mean scores amongst WA IDU sample, 2009- 2010

Personal Wellbeing Index	2009 WA IDRS mean scores N=66	2010 WA IDRS mean scores N=87	2008 general population's mean scores
1. Standard of living	59	57	77
2. Health	55	53	74
3. Achieving in life	49	48	72
4. Personal relationships	63	57	80
5. How safe you feel	74	70	80
6. Community connection	59	44	71
7. Future security	55	48	70
8. Life as a whole	58	52	77
TOTAL	**59**	**54**	**75**

Source: IDRS IDU interviews

12.2 Social networks

Interaction with other people is vital to human development. Social relationships and networks can act as protective factors against the onset or reoccurrence of mental illness and enhance recovery of mental disorders (World Health Organization, 2003, World Health Organization, 2005). For example, marital status has been shown to be related to a person's physical and mental health, with results indicating married people experience less negative effects associated with these areas. Regular drug users, particularly regular injectors, are a group that tend to be marginalised by society and experience many hardships including homelessness, social and financial disadvantage and physical health problems all of which may contribute to a mental health condition therefore implying social networks would be a vital area of support for this group.

Results from the 2007 National Survey of Mental Health and Well-being demonstrated that the prevalence of a 12-month mental health disorder was very similar for people who did and did not have contact with family members; however, results differed for those who had contact with friend and those who did not. Of the 15.7 million people who had contact with their friends, one in five (20%) has a 12-month mental disorder but for the 352,500 who had no contact with friends or no friends, 38% had a 12-month mental health disorder.

In 2010, the IDRS asked participants questions in relation to social networks. Of the WA sample, around one-third (30%) reported contact with a family member nearly every day, while 15% reported no contact or family. The majority (56%) were able to rely on one or two family members (Table 20).

Over half (51%) reported contact with friends nearly every day. The majority (51%) were able to rely on one or two friends. Around one-third (33%) reported that they could rely on their partner/spouse 'a lot'. Over half (57%) of the sample were single (Table 20).

Table 20: Social networks among WA IDU, 2010

	WA N=100
How often are you in contact with any family member?	
Nearly every day (%)	30
3-4 days a week (%)	12
1-2 days a week (%)	17
1-3 days a month (%)	12
< once a month (%)	11
Never (%)	11
No family (%)	4
How many family members can you rely on*?	n=64
1-2 family members (%)	56
3-4 family members (%)	36
5 or more family members (%)	8
How often are you in contact with any of your friends?	
Nearly every day (%)	51
3-4 days a week (%)	9
1-2 days a week (%)	17
1-3 days a month (%)	6

< once a month (%)	4
Never (%)	3
No friends (%)	8
How many friends can you rely on** **?**	n=70
1-2 friends (%)	51
3-4 friends (%)	26
5 or more friends (%)	23
How much can you rely on your spouse/partner for help (for a serious problem)?	
A lot (%)	33
Some (%)	6
A little (%)	2
Not at all (%)	1
Don't know (%)	0
Currently single (%)	57

Source: IDRS participant interviews

* among those in contact with a family member, ** among those in contact with friends

12.3 General medical practitioner service use

Literature has shown that the regular IDU population is a group that experience a variety of physical and mental health problems. However, due to the marginalised status and concealed nature of this group, it can be difficult to ensure that this group obtain the public health care access they require and that targeted health care strategies reach them. This group also experience barriers to treatment due to a lack of knowledge regarding available services, long wait times and limited operating hours (Neale et al., 2007). Also due to the nature of the addiction, the time spent obtaining and consuming drugs may cause delays in seeking treatment (McCoy et al., 2001, Drumm et al., 2005) which often lead to over dependence on acute crisis and emergency interventions (Kerr et al., 2004).

The IDRS sought to investigate this issue of access to services further and identify the services which IDU have utilised most often offering a resource for treatment providers and policy initiatives. This section focused on general medical practitioner (GP or doctor) and not their opiate prescriber.

Among the WA sample, 84% reported visiting a GP in the last 12 months for a physical or mental health problem, on a median of nine occasions in the last 12 months. Among those who reported visiting a GP in the last 12 months, more than one-fifth (21%) of participants reported visiting a GP in a hospital outpatient or emergency department, while only 2% reported a visit from the GP at home (Table 22). These findings were comparable to those from the national general population (ABS, 2007).

Fifty-two percent of those who reported a GP visit in the past year, visited for problems with their mental health on an average of five occasions. Which was significantly greater than the 25% of the general population who visited a GP for a lifetime mental disorder with 12-month symptoms (95%CI -0.39, -0.14) (ABS, 2007). Of those who commented, the majority (84%) reported visiting the 'same' GP for a problem with their mental health. Of those who saw a 'different' GP (n=7), over half (57%) reported seeing a 'different' GP at a 'different' practice, with a median of three 'different' practices (range 2-5) visited in the past 12 months. Of those who visited a GP for a problem with their mental health, one-third (33%) were referred to a GP

by another GP. The mean age first visited a GP for a problem with their mental health was 23 years (range=8-50 years) (Table 21).

Table 21: GP visits among WA IDU, 2010

	WA
Visited a GP last 12 months (%)	**84**
Median no. of GP's visits last 12 months*	n=84 9
Visited GP at home* (%)	2
GP visits in hospital OP or ED* (%)	21
GP visit for mental health problem* (%)	52
Visited the same GP for mental health** (%)	n=43 84
Referred to GP from another GP for mental health problem** (%)	33
Mean age first visited GP for mental health problem** (%)	n=43 23

Source: IDRS participant interviews
* among those who had visited a GP in the last 12 months
** among those who visited a GP for mental health

12.4 Alcohol Use Disorders Identification Test

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 HCV. Half of the participants interviewed in the Australian NSP Survey 2009 (n=2,697) were found to have HCV antibodies (NCHECR, 2010). 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; Schiff and Ozden, 2004; Darke et al., 1996; Darke et al., 2007), it is important to monitor risky drinking among IDU.

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. In 2010, participants were asked to complete the Alcohol Use Disorders Identification Test-Consumption (AUDIT-C) as a valid measure of identifying heavy drinking (Bush et al., 1998). The AUDIT-C is a three item measure, derived from the first three consumption questions in the AUDIT. Dawson et al (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 the WA sample, the overall mean score on the AUDIT-C was 3.5 (SD=3.8, median=3, range=0-12). There was no significant difference between the male and female mean AUDIT total scores. According to Dawson et al (2005) and the AGDH&A's Guidelines for the Treatment of Alcohol Problems (Haber et al., 2009) and a cut-off score of 5 or more indicated that further assessment is required.

Over one-third of the WA sample scored 5 or over on the AUDIT-C. Thirty-nine percent of males and 26% females scored 5 or more indication the need for further assessment (Table 22).

Table 22: AUDIT-C among people who inject drugs, WA IDRS, 2010

	WA
Mean AUDIT-C score, SD (range)	3.5, 3.8 (0-12)
Score of 5 or more (%)	34
Males (%, n=588)	39
Females (%, n=307)	26

Source: IDRS participant interviews

12.5 Stimulant Severity of Dependence Scale

Stimulant and opioid dependence

Understanding whether participants are dependent is an important predictor of harm, and typically demonstrates stronger relationships than simple frequency of use measures. In 2010, 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 et al., 2002).

Previous research has suggested that a cut-off of 4 is indicative of dependence for methamphetamine users ((Topp and Mattick, 1997) and a cut-off value of three for cocaine (Kaye and 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 a stimulant, the median SDS score was 1.5 (range=0-13), with 35% scoring four or above. There were no significant differences regarding gender and median stimulant SDS score, or regarding gender and those who scored 4 or above. Of those who scored four or above and commented, all reported specifically attributing responses to methamphetamines, 10% pharmaceutical stimulants and 5% other. More than one attributing drug type could be reported.

Of those who had recently used an opioid, the median SDS score was 6 (range=0-15), with 69% scoring five or above. There were no significant differences regarding gender and median stimulant SDS score, or regarding gender and those who scored four or above. Of those who scored five or above and commented, 80% reported specifically attributing responses to heroin, 24% reported buprenorphine, 11% reported morphine, and 6% each reported methadone, oxycodone and 'other'. Again, more than one attributing drug type could be reported.

12.6 Height, weight and Body Mass Index

Eating disorders and drug use disorders are significant public health problems. However, epidemiologic research examining their associations yields ambiguous results. Evidence on the

relationship between obesity and alcohol use is found in some studies (Wannamethee et al., 2005). As to the relationships between overweight/obesity and nicotine dependence, some studies have found overweight and obese men, but not women, were more likely to be former daily smokers than non-smokers (John et al., 2006; Zimlichman et al., 2005). In a nationally representative sample, overweight, obesity and extreme obesity were associated with lower risk for past-year nicotine dependence in men but not in women (Pickering et al., 2007).

Relationships between body mass index (BMI) and illicit drug use disorders are unclear. For instance, marijuana can stimulate appetite whereas cocaine is a stimulant and appetite suppressant, but one study found similar prevalence of being overweight in individuals with illicit drug use disorders as that found in the general population (Rajs et al., 2004) and another study found both positive and negative associations of BMI with various substance use disorders, and significant gender differences in those relationships (Barry and Petry, 2009). Finally, BMI and drug use are both associated with mental health problems (Kemp et al., 2009).

In 2010, for the first time, participants were asked their height and weight. With this information, BMI was calculated among the national sample to determine the relationship between BMI, drug use and the risk of disease. BMI is calculated from height and weight information, using the formula weight (kilograms) divided by the square of height (metres). BMI is divided into four groups: (1) 'underweight' – less than 18.5; (2) 'normal weight' – 18.5 to less than 25; (3) 'overweight' – 25 to less than 30; or (4) 'obesity' – 30 and greater, in adults to measure prevalence. BMI values are grouped according to the groups reported by the World Health Organization (WHO, http://apps.who.int/bmi/index.jsp?introPage=intro_3.html).

Among the WA IDRS sample the mean height was 1.76 metres and weight was 75.9 kilograms. The mean BMI for the national sample was 24.4. Of those who commented, 7.1% had a BMI which was considered 'underweight' (BMI<18.5), this compares to 2.6% of the general population aged 18-64 years (ABS, 2009). Females in the WA IDRS sample were more likely to be 'underweight' compared to males (15.4% versus 3.4%). The greatest proportion of both males and females in the WA IDRS sample were in the 'normal range' (56.9% and 42.3% respectively), which for males was significantly greater than those in the normal range in the general population (35.8%) (95%CI -0.33, -0.07). Both genders reported a higher percentage as 'underweight' and a smaller percentage as 'obese' compared to the general population (Table 23).

Table 23: Self-reported height, weight and BMI by WA IDU, 2010

	National Health Survey 2007-2008	WA IDRS
Mean height (metres)	-	n=94 1.76
Mean weight (kilograms)	-	n=87 75.9
Mean BMI	-	n=84 24.4
BMI males (%)		n=58
Underweight	1.4	3.4
Normal range	35.8	56.9
Overweight	40.2	31.0
Obese	22.6	8.6
BMI females (%)		n=26
Underweight	3.7	15.4

Normal range	49.1	42.3
Overweight	27.2	26.9
Obese	20.0	15.4
BMI (all) (%)		n=84
Underweight	2.6	7.1
Normal range	42.2	52.4
Overweight	33.9	29.8
Obese	21.3	4.7

Source: IDRS participant interviews, 2010; (ABS, 2009)

It may be important to note that findings that suggest a link between illicit drug use and abnormal BMI ranges should be interpreted with extreme caution because participants' reports of individual height and weight were often rough estimations or even vastly over/or under exaggerated due to the sensitive nature of these questions. In addition, the BMI as a method of assessing fatness is likely to misclassify individual fatness because the 'body mass' aspect of the ratio measures muscle and bone as well as fat. As a consequence, big framed and muscular respondents are likely to be wrongly branded as overweight or obese.

12.7 Sexual health

Population studies have shown that younger age groups had engaged in sexual relationships with more partners in their lifetime than older age groups (Johnson et al., 2001). Amongst the regular ecstasy user sample, participants of a younger age have been found to be more likely to engage in risky behaviours (Cogger and Kinner, 2008). Furthermore, studies have shown that younger individuals who frequent nightclubs are likely to report multiple sexual partners and incidences of sexually transmitted infections (STI) (Wells et al., 2010).

In Australia, approximately 10% of young women and 3% of young men (aged under 30 years) report having been tested for chlamydia (Kong et al., in press). The issues surrounding sexual health prompted questions to be developed for the IDRS survey to investigate reasons why or why not participants choose to have STI screening. The responses to these questions were formulated by considering results of previous research (Dixon-Woods et al., 2001; Tilson et al., 2004; Balfe and Brugha, 2009).

Participants in the IDRS were first asked if they had been tested for a STI in the last two years. Among the 2010 WA sample, over half (55%) reported that they had been tested in the last two years for a STI by means of a blood test, urine sample or swab, while almost a third (30%) reported 'no', i.e. that they didn't think about been tested (Table 24).

Among those who were tested (n=54), the main reasons given for testing were: as part of a 'routine check-up', health provider suggested it and had unprotected sex (17% each), to make sure they were clear of infection after a relationship and before starting a new relationship (15% each) and part of a 'general check-up'. The majority of participants (56%) were tested by a GP (Table 24).

Over half (53%) of the female sample reported a pap smear test in the last two years. The main reason given for no pap smear test was 'didn't think of it' by 43%, followed by 'don't like them' (21%), 'embarrassed/uncomfortable' (14%), 'no symptoms' (14%) and 'wasn't sexually active' (13%). The main reasons for having a pap smear test were; 'due for a test' by 65% followed by 'health provided suggested' (35%). The majority these participants (82%) were tested by a GP (Table 24).

Table 24: Sexual health, WA IDRS, 2010

	WA n=100
Tested for a sexually transmitted infection (STI) last two years? (%)	
No, don't think about it	30
No, I didn't want to be tested	4
No, another reason	10
Yes, I was tested by means of a blood test, urine sample or swab	55
Reason for test[*] (%)	n=54
Clear of infection after relationship	15
Clear of infection before starting relationship	15
Unprotected sex	17
Symptoms of infection	6
Health provider suggested	17
Friend suggested	2
Partner suggested	4
Partner had symptoms	2
Ex-partner told me to get tested	2
Clinic access was easy	7
Other[@]	39
Place last tested for STI[*] (%)	n=52
Sexual health clinic	8
GP	56
Hospital	4
Other	33
Had a pap smear test last two years[**] (%)	n=30 53
Reasons for no pap smear test[#] (%)	n=14
Wasn't sexually active	13
No symptoms	14
Don't like them	21
Didn't think of it	43
Embarrassed/uncomfortable	14
Financial cost	0
Other[†]	36
Reasons for having a pap smear test[##] (%)	n=17
Symptoms	0
Reminder letters	0
Health provider suggested	35
Friend suggested	0
Due for a test	65
Family history of cervical cancer	6
Other[@]	0
Place last tested for pap smear[##] (%)	n=17
Sexual health clinic	18
GP	82
Hospital	0
Other	0

Source: IDRS participant interviews

* among those who were tested for a STI in the last two years
** among females only
# among those who had not had a pap smear test in the last two years
among those who had a pap smear test in the last two years
@ 'other' – most reported for a 'routine check-up'
† 'other' – most reported for 'lifestyle restrictions', 'lazy, 'hysterectomy' and 'pregnant'

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