C. Rainsford and S. Lenton

WA DRUG TRENDS 2009
Findings from the Illicit Drug Reporting System (IDRS)

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Candice Rainsford and Simon Lenton

National Drug Research Institute, Curtin University of Technology

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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
CIDI	Composite International Diagnostic Interview
EDRS	Ecstasy and related Drugs Reporting System
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
NDRI	National Drug Research Institute
NDSHS	National Drug Strategy Household Survey
NSP	Needle and syringe program(s)
NSW	New South Wales
PDI	Party Drugs Initiative
QLD	Queensland
ROA	Route of administration
SD	Standard deviation
UWA	University of Western Australia
WA	Western Australia
WAPS	Western Australian Police Service

EXECUTIVE SUMMARY

Demographic characteristics of injecting drug user participants

Demographic characteristics of injecting drug users (IDU) in 2009 were similar to last year's sample. The mean age was 35 years. Males again comprised approximately two-thirds of the sample (63%). Almost the entire sample reported that English was the main language spoken at home and only a small minority identified as Aboriginal or Torres Strait Islander (ATSI). Almost one-third (30%) of the sample reported currently being in drug treatment and one-half (49%) reported a prison history.

There were also no significant differences in tertiary education and employment status compared to last year's sample. The average years of education remained comparable to last year at 10 years. In 2009, 37% reported no tertiary education compared to 38% in 2008. Current unemployment was reported by 71% in 2009 compared to 61% in 2008. Further, 6% in 2009 reported full-time employment compared to 13% in 2008.

Patterns of drug use among the IDU sample

Mean age of first injection remained unchanged at 19 years. Increases in frequency of injection were observed, with 50% of this year's sample (compared to 30% in 2008) reporting injection once a day or more. Injection 'more than weekly (but less daily)' was the most commonly reported frequency of injection in 2009.

Heroin and amphetamines remained the most commonly nominated drugs first injected, with 56% nominating amphetamines in 2009 (not significantly different to 51% in 2008). The proportion nominating heroin also remained comparable at 34% in 2009 (38% in 2008). In 2009, heroin surpassed methamphetamine as the drug most often injected in the last month (50% vs. 34%) and as the most recent drug injected (46% vs. 30%). There was also a significant increase in the proportion nominating heroin as the drug of choice from 35% in 2008 to 58% in 2009. In 2009, speed was the most commonly nominated form of methamphetamine in all these contexts; this surpassed crystal methamphetamine as the most commonly nominated from in 2008.

In 2009, over half the sample reported use of tobacco, alcohol, cannabis, prescribed 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 2009, 94% of IDU reported lifetime use of heroin (86% in 2008) and 71% reported recent use (59% in 2008). However, average days of use in the last six months significantly increased to 103 in 2009 from 61 days in 2008. The proportion of daily heroin users also increased to 36% in 2009 from 15% in 2008. The proportion of IDU reporting lifetime use of homebake was not significantly different across years (57% in 2008 vs. 70% in 2009) as was recent use (23% in 2008 vs. 28% in 2009) use of homebake. Powder remained the most commonly reported form of heroin used in 2009, with 51% nominating white/off white and 44% nominating brown (44%) not significantly different to 2008.

The median price of recent purchases of one gram of heroin was $575 (not significantly different to $600 in 2008). The greatest proportion of participants reported on the price of a one-quarter gram, which had a median price of $175; this was significantly lower than $200 in 2008. In 2009, availability of heroin remained comparable to last year. Availability was reported as either easy or very easy by 87% of IDU in 2009 not significantly different to 93% in 2008. Availability over the

last six months was reported as stable by the greatest proportion of the sample (73%) which was not significantly different to last year's sample (60%). The proportion who nominated heroin purity, as 'fluctuating' increased to from 19% in 2009, significantly different to the 5% in 2008. While the proportion reporting purity as 'high' was 13% in 2009 not significantly different to the 18% in 2008 to 13% in 2009, the proportion rating purity as 'medium' purity decreased to 38% in 2009 from 56% in 2008, while ratings of 'low' purity were 28% in 2009 comparable to the 21% in 2008.

Methamphetamine

Across the last two years there were no significant differences in lifetime (95% in 2009 vs. 98% in 2008) and recent (60% in 2009 vs.74% in 2008) use of any form of methamphetamine. Similarly, lifetime and recent use of most forms remained not significantly different across the two years, with lifetime use of powder (93% in 2009 vs. 97% in 2008), crystal (84% in 2009 vs. 90% in 2008) and base (36% vs. 26%). Recent use of powder (56% in 2009 vs. 61% in 2008) and base (13% in both 2008 and 2009) also remained not significantly different. However, recent use of crystal significantly decreased to 44% in 2009 from 61% in 2008. Average days of any methamphetamine use in the last six months significantly decreased to 33 days in 2009 from 49 days in 2008.

The median price for one point of all forms of methamphetamine remained $50. Ratings of availability as either easy or very easy were reported by 79% for powder (85% in 2008), 88% for crystal (81% in 2008) and 50% for base (80% in 2008). 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 purchasing all forms of methamphetamine were from friends at an agreed public location. Purity of powder was mostly rated as low (33% in 2009 and 2008); purity of base was rated by one participant as high. Ratings of purity of crystal were reported by equal proportions (28%) as high, medium and low, compared to high being reported by 35% in 2008, although this was not statistically significant.

Cocaine

There was no significant difference in the proportion of IDU reporting lifetime use of cocaine (60% in 2009 vs. 73% in 2008). Recent use was also comparable (12% in 2009 vs. 15% in 2008), as was average days of use (nine days in 2009 vs. six days in 2008). Only one participant 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 2009 at 96%. In previous years, recent cannabis use has shown a decreasing trend over time from 80% in 2006 to 69% in 2007 to 63% in 2008; however, in 2009, the proportion reporting recent use increased to 72%, although this increase from 2008 to 2009 was not statistically significant. The proportion of daily cannabis users increased significantly to 45% in 2009 from 22% in 2008. Average days of use were 105 days in 2009 which was significantly greater than the average of 86 days in 2008. Thus, although the number of participants to recently use cannabis has not significantly differed, the number of participants using daily has increased in the IDRS sample. Hydroponic cannabis remained the most commonly used form, reported by 87% in 2009 (77% in 2008).

The median price of one ounce of hydroponic cannabis was $350, the same median price was reported in 2008 and the median price of one ounce of bush was $290 which was significantly higher than $200 in 2008, however only three participants reported on the median price for an

ounce of bush in 2008, therefore meaningful comparisons should be interpreted with caution. Ratings of availability as either 'easy' or 'very easy' were reported for hydroponic by 82% in 2009 (78% in 2008) and for bush by 88% in 2009 (71% in 2008). Reports of potency were similar to last year, with the majority rating hydroponic cannabis as high (69% in 2009 vs. 60% in 2008.) and bush as medium (55% in 2009 vs. 58% in 2008).

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 2009, recent illicit use of methadone syrup and physeptone tablets was not significantly different to that 2008. Illicit use in the last six months of methadone was reported by 10% in 2009 compared to 14% in 2008 and physeptone by 5% in 2009 compared to 7% in 2008. Average days of illicit methadone use significantly decreased from 18 days in 2008 to five days in 2009. A small number of participants reported on illicit sourcing of methadone. The reported price was one dollar per one ml and all nominated friends as the source.

Buprenorphine and buprenorphine-naloxone

Recent illicit use of buprenorphine (Subutex) was not significantly different to that last year, although recent use of buprenorphine-naloxone (Suboxone) significantly increased in 2009. Recent illicit use of Subutex was reported by 16% of IDRS respondents in 2009 (18% in 2008). Recent use of Suboxone significantly increased to 28% of IDU in 2009 compared to 12% in 2008. Mean days of illicit use of Subutex were not significantly different across the last two years, (23 days in 2009, compared to 16 days in 2008); mean days of use of illicit Suboxone were also comparable: 50 days in 2009 versus 52 days in 2008. In 2009 the median reported price of eight mg of Subutex was $40 and eight mg of Suboxone was $50, compared to $50 and $35 in 2008 respectively. 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 2009 (33%) was not significantly different to 2008 (31%). Average days of use were also comparable: 28 days in 2009 versus 35 days in 2008. MS Contin remained the most commonly reported type of morphine used. The median price for 100mg of MS Contin was $50 (same amount in 2008) and friends remained the most commonly reported source person for obtaining morphine.

Oxycodone

The proportion of respondents reporting recent illicit use of oxycodone in 2009 (29%) was not significantly different to that in 2008 (23%). Average days of use were also comparable: 24 days in 2008 versus 23 days in 2009. The most common type of oxycodone used was Oxycontin. The median price for 40mg of Oxycontin was $30 and for 80mg was $50. As with the other illicitly obtained pharmaceuticals, friends were the most commonly reported source.

Other opioids

Use of other opioids, such as codeine-based pain medication, has consistently been uncommon among IDU interviewed in the WA IDRS; however, self reported prevalence of these medications significantly increased in 2009, with 25% reporting lifetime use in that year compared to 9% in 2008. Recent use was reported by 15% of the 2009 IDU sample, which was

significantly greater than 1% in 2008. However, these increases in codeine-based medications in 2009 are more likely the result of methodological changes in particular increased questioning on the use of over the counter codeine, rather than actual increases in this practice.

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 79% in 2009 compared to 67% in 2008 and recent use by 64% in 2009 compared to 56% in 2008. The average number of days benzodiazepines were used was 100 in 2009 which was not significantly different to the 91 days in 2008. Of IDU who recently used benzodiazepines, licit use was more common and the most commonly used benzodiazepine was diazepam (Valium). All of these participants reported swallowing as the route of administration (ROA).

Pharmaceutical stimulants

Lifetime prevalence of pharmaceutical stimulants (licit or illicit) by the WA IDU sample was 50% in 2009 not significantly different to 63% in 2008; recent use was also comparable with 18% in 2009 compared to 22% in 2008. The average number of days of use among recent users was 12 days in 2009 which was comparable to six days in 2008. In 2009 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 (82%) and injecting (47%).

Hallucinogens and ecstasy

Lifetime use of hallucinogens was reported by 73% in 2009, which was the same proportion in the 2008 IDU sample. Recent use was also not significantly different in 2009 (13%) compared to 2008 (8%). In 2009 the average days of use among recent users were three and the most commonly used hallucinogen was LSD. Lifetime use of ecstasy was unchanged being reported by 77% in both 2009 and 2008. Recent use was also not significantly different being 29% in 2009 versus 25% in 2008 and the mean days of use was nine days in 2009 not significantly different to the seven in 2008.

Alcohol and tobacco

Lifetime use of alcohol was reported by 98% of the WA IDU sample in 2009 and 2008 and recent use by 71% in 2009 (65% in 2008). Lifetime use of tobacco was reported by 94% in 2009 (93% in 2008) and recent use by 85% in 2009 (87% in 2008). In 2009, the average number of days used in the last six months was 59 days for alcohol (62 days in 2008) and 176 days for tobacco (173 days in 2008).

Health-related harms

A lifetime history of heroin overdose was reported by 45% in 2009, not significantly different to 44% of IDU in 2008. Overdose in the last 12 months was reported by 11%, in 2009 which was not significantly different to 12% in 2008. A lifetime history of overdose on any other drug was reported by 22% of IDU in 2009, with 8% reporting overdose in the last 12 months.

Indicator data from the Australian Bureau of Statistics reported 266 accidental deaths nationally in 2007. The number of accidental deaths due to opioids among those aged 15 to 54 years in WA was 22 (compared to 29 deaths in 2006), representing 8% of the national total. In WA, these fatalities comprised of 17 males and five females.

In 2009, 30% of IDU reported currently being in drug treatment (37% in 2008); of these participants, 83% were receiving pharmacotherapies for opioid dependence. Methadone (43%) was the most cited pharmacotherapy, closely followed by Suboxone (40%).

Of closed treatment episodes in WA for 2007/08, amphetamines represented 26%, cannabis represented 14% and heroin represented 8%. Of total calls to the WA Alcohol and Drug Information Service (ADIS) for 2008/09, 15-21% related to amphetamines, 10-14% to cannabis and 2-4% to heroin.

Hospital admissions
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 2009, 86% of IDU reported obtaining their needles from a needle and syringe program (NSP). The vast majority (90%) 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 (10%), the majority reported only person had used the needle before them and the most common types of people were a regular sex partner and close friends. In 2009, a significant increase was observed in the number of people reporting that someone had used a needle after them in the last month, from 15% in 2008 to 29% in 2009. Use of injecting equipment after someone else was reported by 32%, with the most commonly reported equipment being spoons/mixing containers. The most common location for injection was in a private home (74%).

In WA, hepatitis C (HCV) continues to be more commonly notified than 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; however, the proportion reporting this problem decreased to 49% in 2009 from 72% in 2008. The next most common injection-related problem was difficulties injecting, reported by 38% of IDU in 2009 which was significantly less than the 55% who reported this in in 2008. The proportion reporting a dirty hit was not significantly changed being 17% in 2009 compared to 10% in 2008..

Mental health problems and psychological distress
Mental health problems were reported by 37% of IDU in 2009 (40% in 2008). As in previous years, the most commonly reported problems were depression and anxiety. Of those that self-reported a mental health problem, 78% reported attending a professional in relation to the problem.

According to the Kessler Scale of Psychological Distress, 47% of IDU in 2008 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, 30% in 2009 reported driving under the influence of alcohol (31% in 2008). In contrast, 87% of IDU in 2009 reported driving after consuming illicit drugs (83% in 2008). Of these IDU in 2009, heroin was the most commonly reported drug consumed after which participants' drove (64%). 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 not significantly changed, being 33% in 2009 compared to 28% in 2008.. However, the proportion reporting criminal activity in the last six months significantly increased to 43% in 2009 from 26% in 2008. As in previous years, the most commonly reported criminal activity was drug dealing.

In 2007/08, law enforcement data for WA as a whole indicate that the number of consumer/provider arrests for cannabis (n=5,371) and heroin (n=131) decreased, whilst the number of consumer/providers arrests for amphetamine-type stimulants (n=3,302) and cocaine (n=43) all increased compared to the previous financial year.

Special topics of interest
Personal Wellbeing Index
In 2009 IDUs interviewed as part of the ODRS were administered the Personal Wellbeing Index which asks how satisfied respondents were with various aspects of their lives. In the 2009 WA IDRS sample, participants scored lower than the general population on each domain of the wellbeing index.

Chronic physical health
2009 also saw the inclusion of a chronic conditions section in the IDRS, which addressed the physical health of IDU. The most commonly reported chronic conditions indentified in the sample were liver disease (38%), migraine (32%), and back and neck pain (30%). In comparison to the 2007-08 NDSHS findings, the proportion of REU with asthma was significantly greater than the national sample, while circulatory problems, high blood pressure and skeletal problems were significantly lower than the national sample. This is most likely due to a younger average age for the REU sample in comparison to the national sample.

Dental health
Among the IDRS national sample who reported visiting a dentist in the last 12 months (n=27), the most common reason for last visit was extractions (93%), followed by check up and fillings (both 85%). The median number of teeth lost was two. Almost two-thirds (65%) reported not visiting a dentist when required in the last year.

Gambling
A small proportion of the WA IDU sample reported gambling in the last month (9%), and these participants reported gambling a median of three times in the month prior to interview. The greatest proportion (44%) reported gambling one time in the last month. The main form of gambling was horse/dog racing (78%). Of those who recently gambled, 22% reported gambling under the influence of alcohol and 89% reported gambling under the influence of illicit drugs, with the most common drug being crystal methamphetamine. The median amount of money spent on gambling on the last occasion was $12.

Aggression

Among those (n=57) who completed the Buss-Perry Aggression Questionnaire-Short Form, the greatest proportion answered all three questions in each domain for physical aggression and verbal aggression (12% each).This was followed by 9% of the IDU sample answering all three questions in both the anger and hostility aggression domain.

Summary and Implications

Findings from the 2009 WA IDRS demonstrate little change from last years sample in some areas and in others some significant changes drug use patterns among IDU in Perth. Frequency of injection increased, with most IDU reporting injection 'more that weekly, but less than daily' compared to the greatest proportion reporting injection 'weekly or less' in 2008. Heroin surpassed methamphetamine as the drug most often injected in the last month and as the most recent drug injected, although this finding was similar to samples prior to 2008 suggesting either that the 2008 sample had an atypical number of regular methamphetamine users or that methamphetamine was more prevalent then heroin at the time.

In 2009, there were no significant differences in the proportion reporting lifetime and recent use of most methamphetamine forms, the only exception being recent use of crystal methamphetamine which significantly decreased in 2009. The average number of days of use for each form of methamphetamine significantly decreased from 2008 to 2009. Even if last years sample was atypical in terms of the high number of methamphetamine users; the results indicate an overall decrease in methamphetamine use since last year, a trend seen in a number of the indicators since 2007.

While lifetime and recent use of heroin were comparable to last year, there was a significant increase in the average days of heroin use among recent users as well as a significant increase in the proportion of the sample reporting daily heroin use. This may be related to IDU reports of increased availability of heroin or an overall decrease in the median heroin price as reported by the 2009 sample; however the price of heroin remains more expensive than prior to the shortage despite recent falls. Despite apparent increased in availability, heroin purity appears to remain modest in WA, however there are some indications that heroin purity is increasingly fluctuating and that low purity heroin is becoming more common. This can be explained by national heroin importation indicators, as there is no evidence in Australian customs detections that large shipments of heroin are getting to Australia as they were in the pre-shortage period. Whilst in recent years there has been an increase in the number of small 'scatter' importation through the post, air cargo and on air passengers (Australian Crime Commission, 2009), the net weight of detections remains far below where it was during the pre-drought years (Stafford et al., 2009).

Ambulance data indicate that the number of ambulance callouts to narcotic overdoses in WA has increased in the last two years (Figure 46). This significant increase may be due to an increase in heroin availability, a decrease in heroin price or an overall increase in the number of people using heroin daily. However, these findings remain far lower than those prior to the heroin shortage. Self reported overdoses by the IDRS samples were the highest in WA compared to the other states in 2009. The fact that overdose fatalities in WA remain low compared to the pre shortage levels is probably because overall, heroin purity appears to remain low in WA. However, in WA we have seen localized and sporadic clusters of overdoses over the last 12 months, suggesting purity has been fluctuating. 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, morphine, illicit use of methadone and physeptone. However, the average number of days illicit methadone and physeptone were used in the last six month significantly decreased. This may indicate a decrease in illicit methadone availability, although the data was based on reports from a small number of respondents. Lifetime use of oxycodone significantly increased in the 2009 sample, although recent use was not significantly different from last years' sample. The number of participants reporting recent use of illicit Suboxone significantly increased in the 2009 sample. This finding probably reflects a change in prescribing practices away from Subutex (buprenorphine only) to Suboxone (buprenorphine/naloxone combination) which is reflected in the diverted preparations available illicitly. Both these preparations are used illicitly as a heroin substitute.

While the demographics characteristics of the 2009 sample were largely similar to previous years samples, IDU in 2009 were more likely to be trade or technical trained, less likely to be university educated and less likely to be employed. These results may be due to the current economic climate. There were also more IDU reporting involvement in criminal activity in the past six months preceding interview. However, the proportion of the 2009 sample reporting being arrested in the last 12 months was comparable to last year, but this is unsurprising as many crimes go undetected.

Findings from the study have several implications for harm reduction strategies. First, the proportion of IDU reporting recent use of illicit Suboxone significantly increased in the 2009 sample; of these participants the majority were injecting these drugs. Clearly, there are potential risks associated with illicit, intravenous use of prescribed medications intended for oral administration. Secondly, there was a significant increase in the proportion of the 2009 sample reporting that someone else had used a needle after them in the last month, this is problematic among IDU as needle sharing is a primary vector for diseases which can be transmitted through the blood, particularly hepatitis and AIDS. Thirdly, 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. Finally, mental health problems were self-reported by 37% of IDU and 47% were at high or very high risk of psychological distress. 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 coordinated 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 11th 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. 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 2009 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 as 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 May and July 2009. 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. 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 17.0 for Windows.

2.2 Survey of KE

In 2009, 10 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 15-20 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 2009 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., 1997). 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 2009 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 the Emergency medicine department at the University of Western Australia (UWA);
- Data on needle and syringe distribution, provided by the Sexual Health Branch (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 virus (BBV) infection rates from the Australian NSP survey, prepared by the National Centre in HIV Epidemiology and Clinical Research.

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 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 the Statistical Package for the Social Sciences (SPSS) for Windows, Version 17.0 (SPSS inc., 2008). Further analysis was conducted on the main drugs of focus in the IDRS to test for significant differences between 2008 and 2009 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. 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 2008 and 2009 median days of use for the major drug types discussed.

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 2009 WA IDRS are presented in Table 1. The mean age of the sample was 35 years (range=19-61 years), which was different to 37 years in 2008. Sixty percent were male, which was not significantly different to last year (62%). Four percent identified as Aboriginal and/or Torres Strait Islander (ATSI) compared to 3% in 2008. Almost the entire sample (99%) reported that English was the main language spoken at home, with 1% nominating Australian Indigenous languages. The majority (81%) identified as heterosexual. In 2009, IDU were asked about current relationship status, the greatest proportion of the current sample were single (44%), next most common was partnered (29%), then married/de facto (24%). Just over one-half (51%) reported a prison history, which was not significantly different to last year (45%).

The mean years of education remained unchanged at 10 years. There were some notable differences between samples regarding tertiary education and employment status. In 2008, 20% of IDU reported completion of university/college, which significantly decreased to only 9% in 2009 (95%CI 0.01, 0.20). Conversely, 54% of the current sample reported completion of a trade/technical education not significantly different from the 42% in 2008. Some 37% of the 2009 IDU sample reported having no tertiary education which was not significantly different to the 38% in 2008. In addition, the proportion of the sample reporting current unemployment was 71% in 2009 not significantly changed from 61% in 2008. Similarly, the proportion reporting current full-time employment was 6% in 2009 not significantly different from 13% in 2008. Three percent of the 2009 sample reported receiving income from sex work in the last month compared to none of the 2008 IDU sample. Overall, compared to last year, the current sample of IDU appeared to be more trade-based or technically educated; however, less of the sample was currently employed. The average weekly income reported by the sample was $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 late-20s to late-40s. Most KE reported that the majority of IDU are male, whilst a few 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 and stated that IDU were mostly Caucasian, whereas two reported diverse cultural backgrounds. KE reported that IDU generally had an education level to Grade 10 or below and most were unemployed, although two KE reported that methamphetamine IDU were often miners or construction workers and use methamphetamines because of their short half-life. Another KE also made the statement that in previous years, tertiary educated individuals with more sophisticated knowledge in chemistry or pharmacy were the ones doing the methamphetamine 'cooking'. However, more recently, these 'cooks' have been less educated and knowledgeable in such areas and are often also the end users of their product. One KE noted that sex workers use both heroin and methamphetamine drug forms. All KE noted that some IDU had a history of previous imprisonment or criminal history. One KE commented on an increase in homelessness and the number of people losing their jobs.

Table 1: Demographic characteristics of IDU participants, 2007-2009

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

Source: IDRS IDU interviews

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

3.1.1 Current and previous treatment

Of IDU in 2009, 30% reported that they were currently in drug treatment, comparable to 37% in 2008. Of participants engaged in treatment, 43% were receiving methadone syrup and 40% were on Suboxone. Smaller proportions reported drug counselling (10%) and benzodiazepines (3%). Methadone was also the most common treatment reported in 2008. Of IDU in treatment, the mean duration in the current treatment was 26 months (range=1-96).

Participants were also asked if they had been in treatment at any time in the last six months and 44% reported that they had. Previous methadone treatment and Suboxone treatment was reported by 13% each, drug counselling by 6%, Naltrexone treatment and Narcotics Anonymous by 3% each and Subutex treatment by only 1%.

3.1.2 Recruitment

Participants were asked if they had participated in the IDRS or EDRS in previous years, as shown in Table 2. One-third of the current sample (33%) had previously participated in the IDRS and a minority (7%) had participated in the EDRS. Just less than three-quarters (74%) of current IDU were recruited via a NSP and nearly one-quarter (23%) through word of mouth. There was a significantly greater proportion of the sample recruited through NSP in 2009 (56%) than in 2008 (74%) (95%CI -0.30, -0.05). Similar to 2008, IDRS advertising and interviewing could be also be conducted at the WA NSP site; as a result, this method was both convenient and comfortable for both participants and interviewers. Overall, it was successful in attaining the required participant numbers during the scheduled recruitment time.

Table 2: Source of recruitment and previous participation in IDRS and EDRS, 2009

Characteristic	2009 N=100
Participated in IDRS in previous years (%)	33
Where found out about IDRS survey (%):	
NSP	74
Treatment provider	1
Advert in street press	1
Word of mouth	23
Chemist	1
Participated in EDRS in previous years (%)	7

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 2009. The mean age of first injection among current IDU was 19 years, which remains unchanged from the last two sample years.

Differences in frequency of injection were observed across years. The proportion reporting injection once or more a day significantly increased to 50% in 2009, from 30% in 2008 (95%CI -0.32, -0.06) to become the most commonly reported frequency of injection. The proportion reporting injection weekly or less often significantly decreased to 16% in 2009, from 38% in 2008 (95%CI 0.09, 0.33). The number reporting injecting more than weekly, but less than daily was not significantly different between survey years being 33% in 2009, compared to 31% in 2008.

Amphetamines and heroin remained the most common drugs first injected, with 56% in 2009 nominating amphetamines compared with 51% in 2008 and 34% nominating heroin compared to 38% to the previous year.

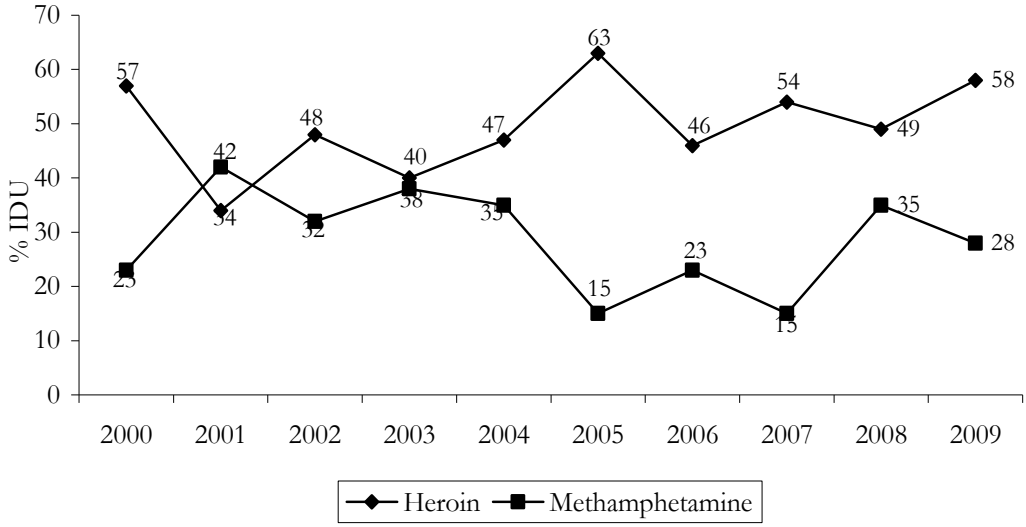
Table 3: Injection history, drug preferences and polydrug use of IDU participants, 2007-2009

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

Source: IDRS IDU interviews

Heroin remained the most commonly reported drug of choice as nominated by 58% of IDU in 2009, which was not significantly different from the 49% in 2008 (Figure 1). There was no significant change in the proportion reporting methamphetamine (speed, base and crystal) as the drug of choice which was 28% in 2009 compared to 35% in 2008.

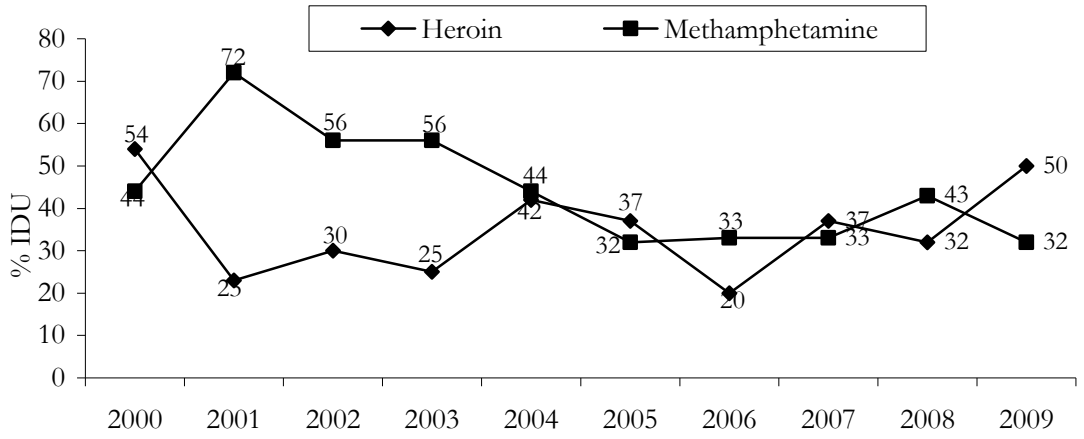
Figure 1: Drug of choice, 2000-2009



Source: IDRS IDU interviews

Increases in reports of heroin use were also apparent in response to other questions regarding injection. In 2009, there were significant increases in the proportion reporting heroin as the drug most commonly injected in the last month to 50% in 2009, from 32% in 2008 (95%CI -0.30, -0.04). (Figure 2 and Table 4). Conversely, there was a significant decrease in the proportion that reported any form of methamphetamine as the drug most often injected in the last month which fell to 32% in 2009 from 43% in 2008 (95%CI -0.02, 0.23). In 2009, only 8% reported crystal methamphetamine as the drug most often injected in the last month compared to 24% in 2008. Only small proportions of the sample reported Buprenorphine (11%), morphine (3%), oxycodone (1%), cocaine (1%), other opiates (1%) and other drugs (1%) as the drug injected most often in the last month (Refer to Table 4).

Figure 2: Drug injected most last month, 2000-2009



Source: IDRS IDU interviews

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

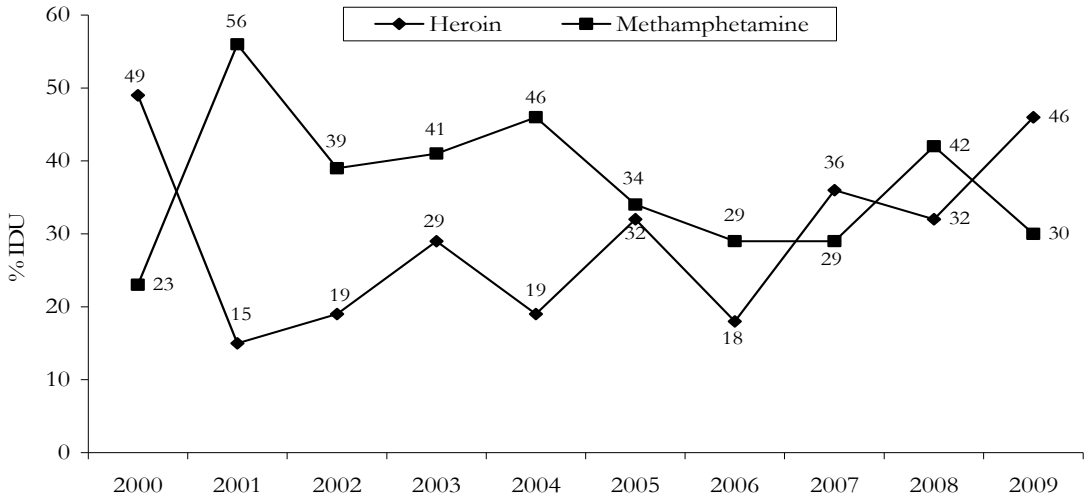
Drug	2009 N=100
Heroin	50
Methamphetamine	
Speed	24
Ice/crystal	8
Buprenorphine**	11
Morphine	3
Oxycodone	1
Cocaine	1
Other opiates	1
Other	1

Source: IDRS IDU interviews

** Includes buprenorphine-naloxone (Suboxone)

Similarly, in 2009, more respondents nominated heroin (46%) compared to methamphetamine (30%) as the drug most recently injected (Figure 3). Again, there was a significant increase in the proportion that reported heroin as the drug most recently injected, to 46% in 2009, from 32% in 2008 (95%CI -0.27, -0.00) and a significant decrease in the proportion that reported any form of methamphetamine as the drug most recently injected, to 30% in 2009, from 42% in 2008 (95%CI -0.01, 0.25).

Figure 3: Drug last injected prior to interview 2000-2009

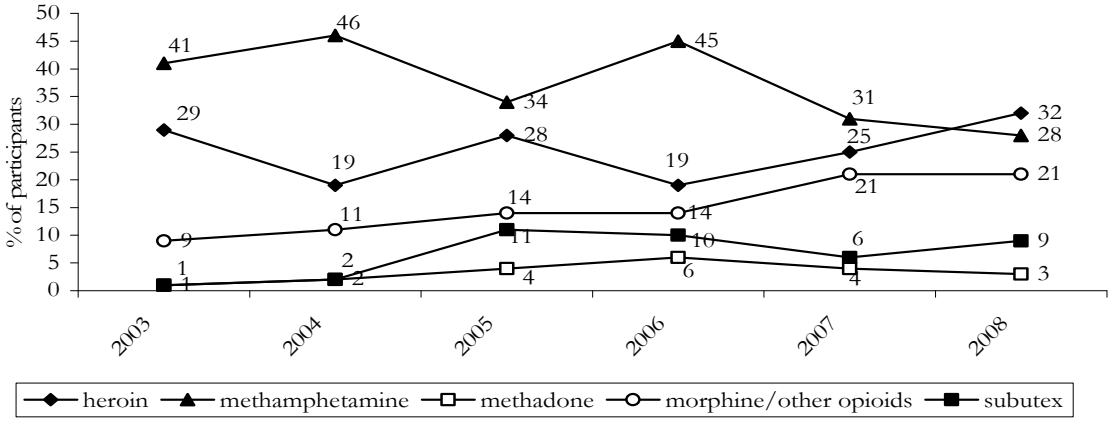


Source: IDRS IDU interviews

IDU also reported on the drugs they had consumed the day before interview and 15% reported they had not consumed any drug. The most common drugs reported in this context were cannabis (37%), heroin (36%), alcohol (27%) and benzodiazepines (23%). The median amount of money spent on drugs the day before interview was $25 (range=0-500).

Data from the NSP Survey (NCHECR, 2009), 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, for the first time since the survey was conducted, heroin exceeded methamphetamine as the drug last injected by NSP attendees.

Figure 4: Last drug injected reported by NSP attendees, WA 2003- 2008

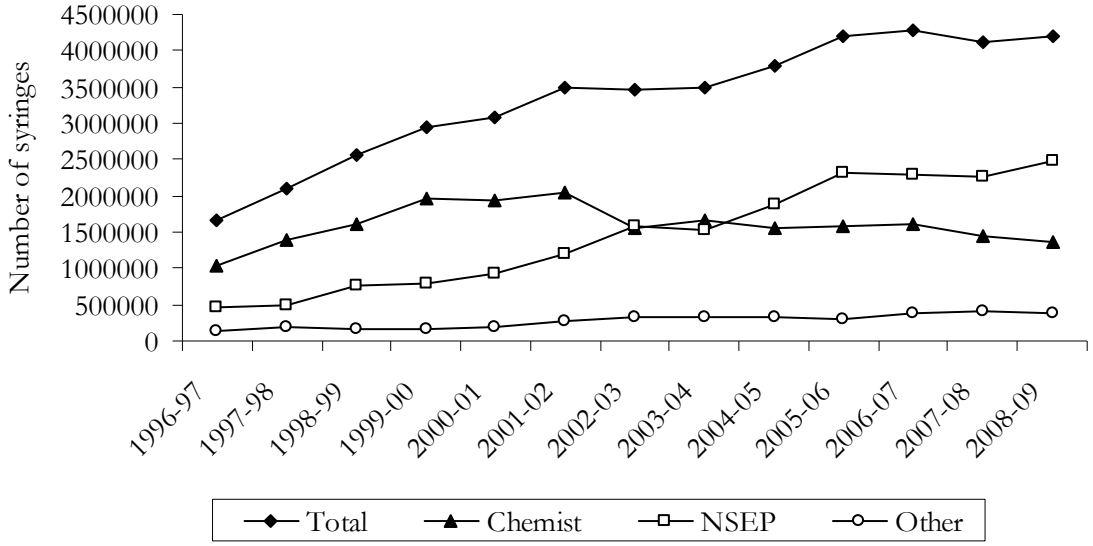


Source: Australian NSP Survey (NCHECR), 2009

Figures from the Sexual Health Branch of the Health Department of Western Australia (HDWA) show that 4,206,162 syringes were distributed in WA during the 2008/2009 financial year. As has been the case since 2003/2004, the bulk of these were distributed via NSP,

responsible for 2,468,891 in 2006/2007. Less common sources of syringes were chemists distributing 1,359,727 and other sources such as hospitals and vending machines accounting for 377,544. Data concerning syringe distribution in WA since 1996/1997 is portrayed in Figure 5

Figure 5: Sources of syringe distribution in WA 1996/1997-2008/09



Source: Sexual Health Branch, HDWA

Drug use history of the IDU sample, 2009

The drug use histories of IDU participants in the WA IDRS in 2009, including route of administration (ROA), are presented in Table 5. Over one-half of the 2009 sample had used the following drugs in the last six months: tobacco (85%), cannabis (72%), alcohol (71%), heroin (71%), speed (56%) and prescribed benzodiazepines (56%). 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, 2009

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	94	94	71	103 (96)	33	4	14	0	17	1	71		103 (96)
Homebake heroin	70	69	28	19 (8)	0	0	0	0	0	0	28		22 (8)
Any heroin (inc. homebake)	*94*	*94*	*76*	*99 (81)*	*33*	*4*	*14*	*0*	*17*	*1*	*76*		*99 (81)*
Methadone (prescribed)	38	2	1	10 (10)					37	15	15	140 (180)	140 (180)
Methadone (not prescribed)	36	17	7	6 (6)					22	2	10		5 (2)
Physeptone (prescribed)	5	0	0	0	0	0	0	0	4	0	0	0(0)	0 (0)
Physeptone (not prescribed)	21	14	4	2 (2)	0	0	0	0	9	0	5		1 (2)
Any methadone (inc physeptone)	*66*	*26*	*10*	*6 (4)*					*53*	*16*	*25*		*86 (35)*
Buprenorphine (prescribed)	19	7	1	180 (180)	0	0	0	0	18	0	1	180(180)	180 (180)
Buprenorphine (not prescribed)	36	34	16	22 (11)	0	0	0	0	8	3	16		23 (11)
Any buprenorphine (exc buprenorphine-naloxone)	*50*	*40*	*17*	*32 (12)*	*0*	*0*	*0*	*0*	*25*	*3*	*17*		*32 (12)*
Buprenorphine-naloxone (prescribed)	22	11	8	133 (179)	0	0	0	0	20	11	12	125(180)	137 (180)
Buprenorphine-naloxone (not prescribed)	38	35	27	40 (12)	1	0	0	0	9	4	28		50 (20)
Any buprenorphine-naloxone	*49*	*40*	*32*	*66 (24)*	*1*	*0*	*0*	*0*	*28*	*15*	*37*		*76 (36)*
Morphine (prescribed)	13	9	2	19 (19)	0	0	0	0	6	3	4		26 (20)
Morphine (not prescribed)	71	68	32	29 (8)	0	0	0	0	9	2	33		28 (6)
Any morphine	*76*	*72*	*34*	*29 (11)*	*0*	*0*	*0*	*0*	*13*	*5*	*37*		*28 (10)*
Oxycodone (prescribed)	10	6	1	10 (10)	0	0	0	0	4	3	4		9 (11)
Oxycodone (not prescribed)	60	58	28	24 (8)	0	0	0	0	7	3	29		23 (10)
Any oxycodone	*65*	*60*	*29*	*24 (10)*	*0*	*0*	*0*	*0*	*11*	*6*	*33*		*22 (10)*
Other opioids (not elsewhere classified)	25	4	2	9 (9)	0	0	0	0	23	14	15		71 (21)

Table 5: Polydrug use history of the IDU sample, 2009 (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	93	93	56	21 (12)	39	8	53	5	35	6	56		21 (12)
Base/point/wax	36	34	12	3 (2)	7	4	1	1	3	2	13		3(2)
Ice/shabu/crystal	84	83	44	22 (6)	39	9	20	3	19	5	44		22(6)
Amphetamine liquid	17	17	1	5 (5)					1	1	1		5(5)
Any form methamphetamine#	*95*	*95*	*72*	*33 (14)*	*55*	*13*	*56*	*6*	*39*	*8*	*63*		*33(15)*
Pharmaceutical stimulants (prescribed)	6	2	0	-	0	0	0	0	6	1	1		48(48)
Pharmaceutical stimulants (not prescribed)	46	17	8	8 (3)	2	0	3	1	38	13	17		10(6)
Any form pharmaceutical stimulants	*50*	*19*	*8*	*8 (3)*	*2*	*0*	*3*	*1*	*41*	*14*	*18*		*12(6)*
Cocaine	60	35	8	11(1)	6	0	42	4	9	2	12		9(2)
Hallucinogens	73	8	2	1 (1)	0	0	0	0	71	11	13		3 (1)
Ecstasy	77	31	20	3 (3)	0	0	8	1	72	29	29		9 (6)
Benzodiazepines (prescribed)	69	2	1	12 (12)	0	0	0	0	66	52	56		113 (180)
Benzodiazepines (not prescribed)	39	3	3	5 (2)	0	0	0	0	37	20	22		15 (10)
Any form benzodiazepines	*79*	*4*	*3*	*9 (2)*	*0*	*0*	*0*	*0*	*79*	*64*	*64*		*100(93)*
Over the counter codeine	57	1	1	1(1)	0	0	0	0	57	43	43		44(12)
Alcohol	98	4	0	-					98	71	71		59(24)
Cannabis	96										72		105(96)
Inhalants	25										7		3(2)
Tobacco	94										85		176(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 (oxblood); does not include pharmaceutical stimulants

Median days are shown in brackets

4 HEROIN

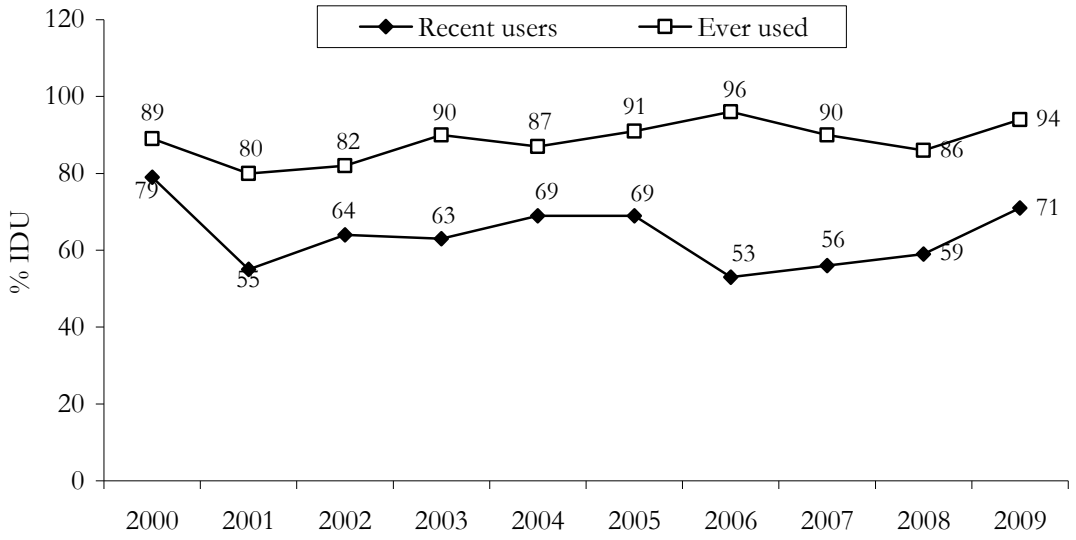
4.1 Use

4.1.1 Heroin use among IDU participants

A lifetime history of heroin use was reported by 94% of the 2009 IDU sample which was not significantly different to 86% in 2008 (95%CI -0.17, 0.00) (Figure 6). Of current IDU that reported lifetime use, 100% had injected, 36% had smoked, 18% had swallowed and 15% had snorted heroin in their lifetime.

The proportion of IDU reporting lifetime use of homebake was comparable, from 70% in 2009 to 57% in 2008 (95%CI -0.26, 0.00). Of current IDU that reported lifetime use, 99% had injected homebake and no other ROA was reported.

Figure 6: Patterns of heroin use, 2000-2009

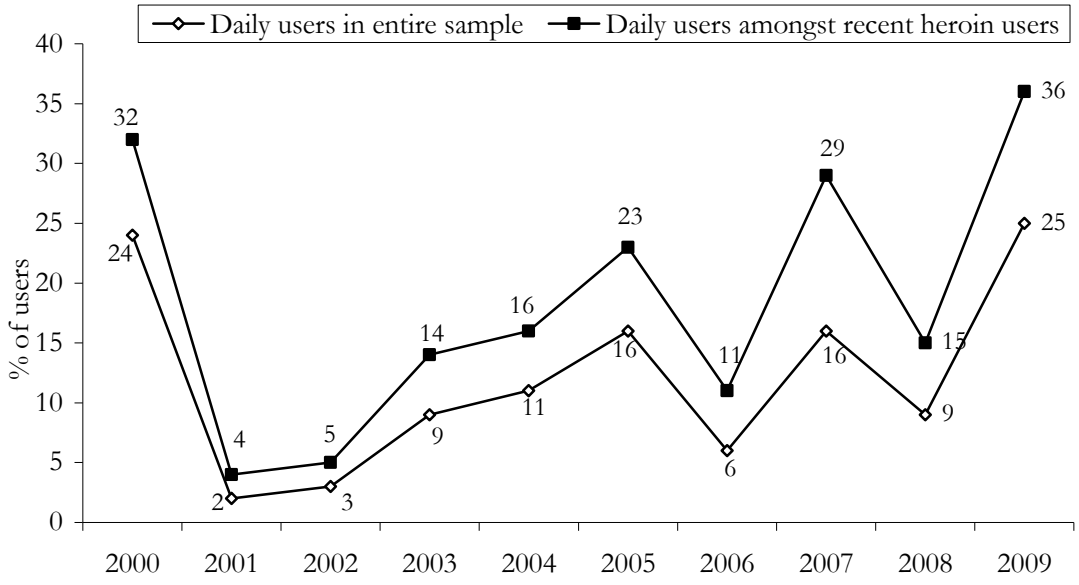


Source: IDRS IDU interviews

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 71% of the current IDU sample reporting recent heroin use compared to 59% in 2008 (95%CI -0.25, 0.01) (Figure 6). Of these participants, 100% had injected heroin in the last six months, 6% had smoked it, and 1% swallowed. Days of use ranged from one to 180 days, with a significant increases found in both the number of daily users of heroin among the entire sample from 9% in 2008 to 25% in 2009 (95%CI -0.26, -0.05) and for recent heroin users reporting daily use from 15% in 2008 to 36% in 2009 (95%CI 0.09, 0.32) (Figure 7).

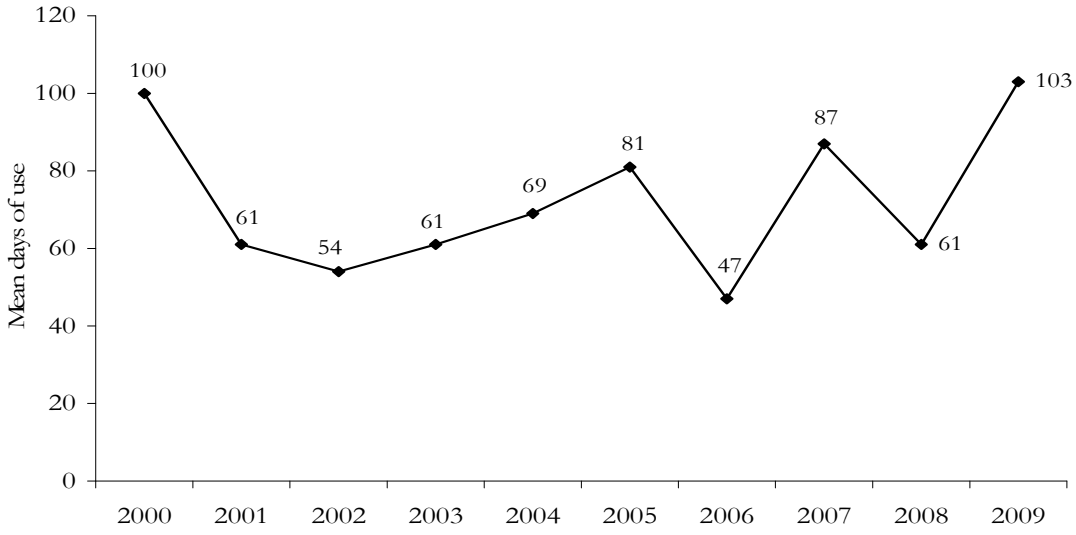
Figure 7: Daily heroin users, 2000-2009



Source: IDRS IDU interviews

The mean days of heroin use among recent users significantly increased from 61 days in 2008 to 103 in 2009 (t=5.031, df=69, p=.000) (Figure 8).

Figure 8: Mean days of heroin use in past six months, 2000-2009



Source: IDRS IDU interviews

The proportion reporting recent use of homebake was 28% in 2009 which was not significantly different to the 23% in 2008 to (95%CI -0.17, 0.07). Of these participants, 100% reported injecting homebake in the last six months and the mean days of use was 22 days which decreased from 40 days in 2008 (t=-2.633, df=27, p=.014).

Of the total IDU sample, 76% reported use of any form of heroin (including homebake) in the last six months. Of these participants, 100% reported injection as a ROA (ROA) for any heroin used in the last six months.

In 2009, 70 IDU provided information pertaining to the forms of heroin they had used in the last six months. Powder was the most common form, with 51% reporting use of white/off white powder, followed by 44% reporting use of brown powder, then 31% reporting use of brown rock and 25% reporting use of white/off white rock. There was 21% who reported use of homebake in the last six months.

In 2009, 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. Responses were received from 74 participants. White and off white powder was identified by 42% of those who commented, followed by 24% who identified brown rock, and then 15% who identified brown powder. Eleven percent reported their most common form of heroin used was homebake.

KE who commented on heroin reported solely on intravenous use. Reports of frequency of heroin use were varied, a few KE reported daily use among IDU and one KE who suspected binging on heroin occurred every second or third day. KE reported a predominance of powder over rock and some homebake. Colours of heroin reported by KE included white, beige and brown, with one KE reporting an increase in the amount of 'China white' in Perth at the time. A number of KE commented that heroin users also typically polydrug users, using any combination(s) of morphine, oxycodone, methadone, buprenorphine and benzodiazepines.

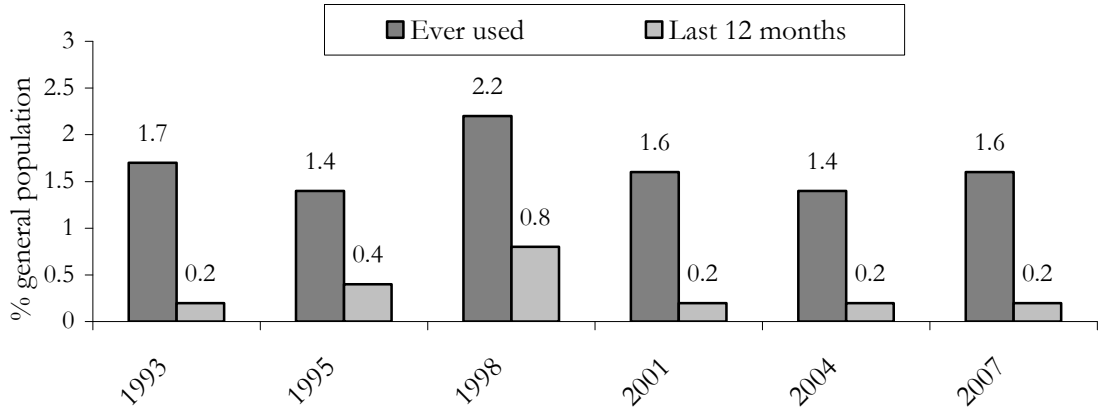
4.1.3 Heroin preparation before last injection

In 2009, IDU participants were asked questions about the preparation of heroin for last use, of which 28 participants reported using heat and citric acid to 'cook' heroin. Of these, all reported heating the heroin before their last injection and 7% (n=2) reported also using citric acid to cook their heroin before their last injection. The greatest proportion of these respondents reported having to do either preparation methods for white/off white powder or rock heroin by 46%, followed by brown powder or rock by 39%.

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 Western Australian 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=43), which had a median price of $175. This was significantly lower than last year when it had a reported median price of $200 (t=-4.322, df=42, p=.000). One-half gram of heroin was reported by 29 participants in 2009 and had a median price of $300. This was less than the median price of $350 reported in 2008. Five participants in 2009 reported on one point of heroin with a median price of $100, which was greater than the median of $50 (n=10) reported last year. One gram of heroin had a median price of $575 (n=22) in 2009 which was less than $600 in 2008 (n=7). The median price of one cap of heroin halved from $100 in 2008 (n=3) to $50 in 2009 (n=11).

Table 6: Price of most recent heroin purchases by IDU participants, 2008-2009

Amount	Median price* $	Range	Number of purchasers*
Cap	50 (100)	50-100	11 (3)
Point	100^ (50)	100-120^	5^(10)
Quarter gram	175 (200)	100-300	43 (35)
Half gram (Half weight)	300 (350)	200-600	29 (13)
Gram	575 (600)	350-1000	22 (7)

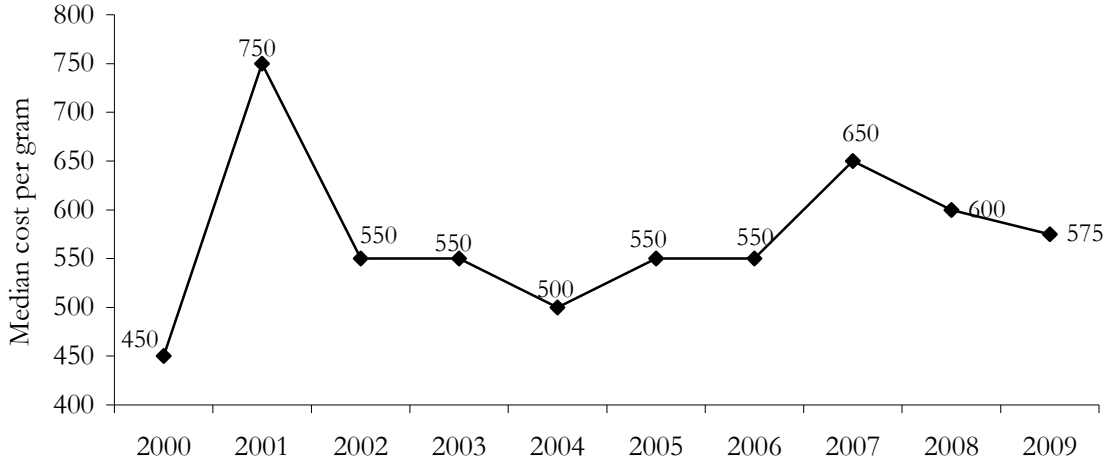
Source: IDRS IDU interviews

* 2008 data are presented in brackets

^ figures based on less than 10 reports

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 compared to $750 in 2001 and then 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. Comparisons between the 2008 and current sample were not significant.

Figure 10: Median price of one gram of heroin estimated from IDU purchases, 2000-2009



Source: IDRS IDU interviews

Participants were also asked whether the price of heroin had changed in the last six months. In 2009, 58 IDU responded to this item, with almost three-quarters (72%) reporting the price as stable. This was significantly greater than the 2008 sample with 53% of those who responded reported the price of heroin as stable over the previous six months (95%CI -0.31, -0.05). Approximately one-fifth (21%) reported the price had increased, while 7% reported it as fluctuating which were both comparable to last year's findings (11% and 5% respectively). Smaller proportions were unable to comment (3% in 2009 versus 9% in 2008) and no respondents reported the price as decreasing compared to 23% in 2008.

Only one KE reported on the price of heroin and stated that it was approximately $100 for a point. This KE also mentioned that some IDU have a $600 a day habit because of high tolerance and low quality of heroin in Perth at the moment.

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 2009, 60 IDU commented on these items compared to 57 IDU in 2008. In 2009, the greatest proportion (45%) of those who commented reported the current availability of heroin as very easy which was significantly greater compared to 28% in 2008 (95%CI -0.29, -0.36). The next greatest proportion of the 2009 sample reported current heroin availability as easy (42%) which decreased from 65% in 2008 (95%CI 0.09, 0.35). The proportion reporting current availability as difficult was reported by 13% in 2009 which was comparable to 5% in 2008. No participant in both 2008 and 2009 rated current availability as very difficult. With regard to changes in availability over the last six months, responses were largely similar across years with the greatest proportion reporting stable by 73% in 2009 which

was comparable to 60% in 2008. Together, these results indicate that IDU perceived heroin to be more easily available in 2009.

Table 7: Participants' reports of heroin availability in the past six months, 2008-2009

	2008 (N=100)	2009 (N=100)
Current availability		
Did not respond* (%)	43	40
Did respond (%)	57	60
Of those who responded:		
Very easy (%)	28%	45%
Easy (%)	65%	42%
Difficult (%)	5%	13%
Very difficult (%)	0%	0%
Don't know^	2%	0%
Availability change over the last six months		
Did not respond* (%)	43	40
Did respond (%)	57	60
Of those who responded:		
More difficult (%)	5%	8%
Stable (%)	60%	73%
Easier (%)	21%	13%
Fluctuates (%)	9%	5%
Don't know^	5%	0%

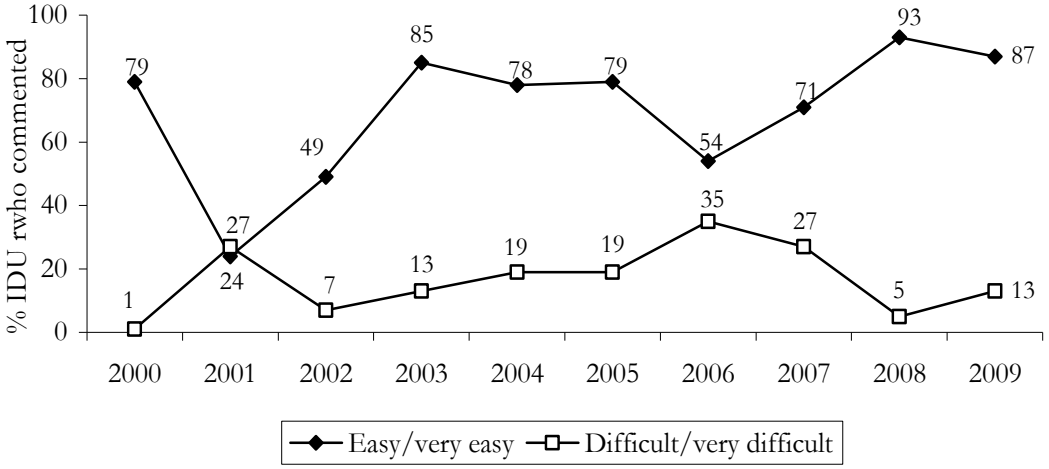
Source: IDRS IDU interviews

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

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

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, 2000-2009



Source: IDRS IDU interviews

Four KE reported an increase in the availability of heroin, with one KE noting this increase in availability was in powder form. In addition, a few health worker KE reported this increase in availability could only be assumed by an observed dramatic increase in the number of heroin-related presentations in the emergency department. One KE observed that the IDU who were forced to switch from heroin to methamphetamine in the wake of the heroin shortage are now swapping back to heroin; whether this is due to shifts in drug preferences and/or availability is unknown.

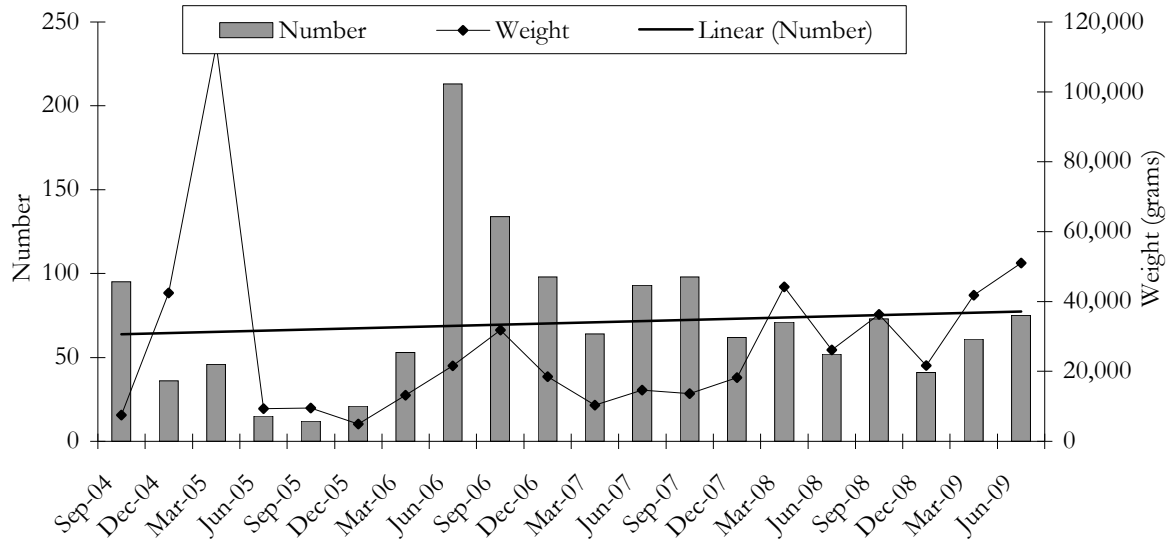
In 2009, 60 IDU responded to questions about persons and locations for sourcing heroin. Like last year, the most commonly nominated source of heroin last purchase was known dealers (37%), closely followed by friends (35%). Smaller proportions nominated acquaintances (15%), street dealers (5%) and unknown dealers (5%).

Unlike last year when the most commonly nominated location nominated by IDU was dealers' homes, in 2009, the most commonly nominated location was at an agreed public location. Of those who commented in 2009, 28% nominated an agreed public location and 22% nominated dealers' homes. This was followed by friends' homes (15%) and then home delivery (13%).

One KE from a law enforcement background reported on an increase in the number of heroin seizures detected in WA.

Figure 12 shows the number and weight of heroin seizures by ACS at the Australian border from 2004/05 to 2008/09, 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 the most recent quarters March 2009 to 41,768.54 grams and June 2009 to 51,074.98 grams. The total number of ACS heroin seizures in 2008/09 was 250 compared to 283 in 2007/08 and the total weight of seizures for this period was 150,893.26 compared to 102,258.15 grams in 2007/08.

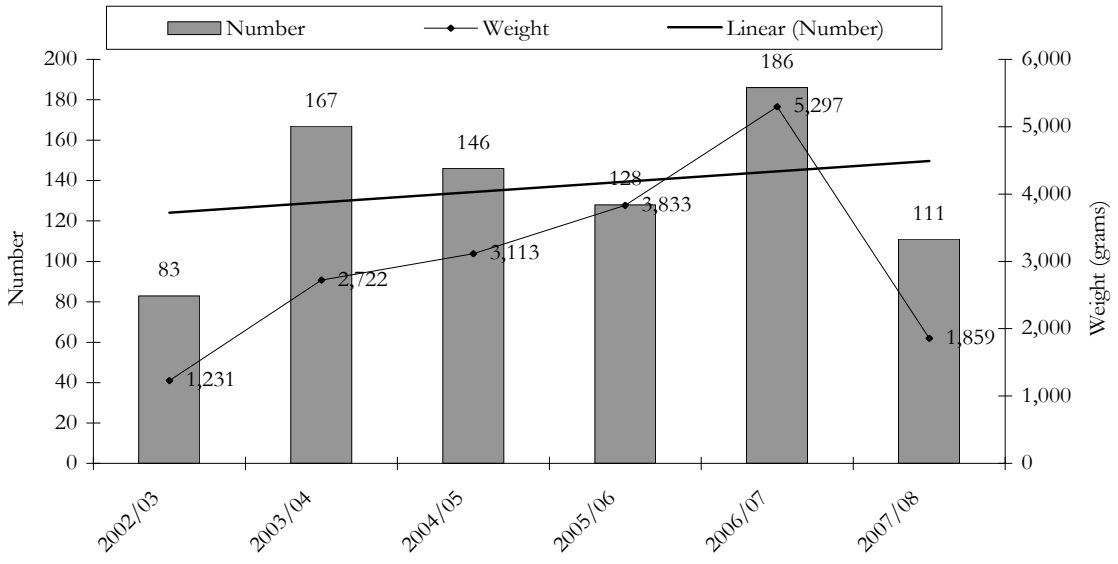
Figure 12: Number and weight of heroin seizures by ACS, 2004/05-2008/09



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 2007/08. 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 occurred from 5,297 grams to 1,859 grams in 2007/08. In 2007/08, WAPS made 170 heroin seizures in WA with a weight of 1,730 grams, while AFP made 16 heroin seizures in WA with a weight of 3,567 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 2002/03-2007/08



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 2009, 60 participants commented on purity compared to 57 in 2008. The proportion reporting current purity as medium significantly decreased to 38% in 2009, from 56% in 2008 (95%CI 0.04, 0.30). The 2009 proportions reporting current purity as high and low were not significantly different to 2008 ($p>0.05$).

With regard to changes in purity over the last six months, a similar pattern was observed (Table 6). The proportion reporting purity as increasing decreased significantly to 17% in 2009, from 33% in 2008 (95%CI 0.03, 0.27), while the proportion reporting it as decreasing (15% in 2009 versus 7% in 2008) and stable (38% in 2009 versus 42% in 2008) were comparable and no significant differences were found ($p>0.05$).

Table 8: Participants' perceptions of heroin purity in the past six months, 2008-2009

	2008 (N=100)	2009 (N=100)
Current purity		
Did not respond* (%)	43	40
Did respond (%)	57	60
Of those who responded:		
High (%)	18	13
Medium (%)	56	38
Low (%)	21	28
Fluctuates (%)	5	18
Don't know# (%)	0	2
Purity change over the last six months		
Did not respond* (%)	43	40
Did respond (%)	57	60
Of those who responded:		
Increasing (%)	33	17
Stable (%)	42	37
Decreasing (%)	7	15
Fluctuating (%)	16	23
Don't know# (%)	2	8

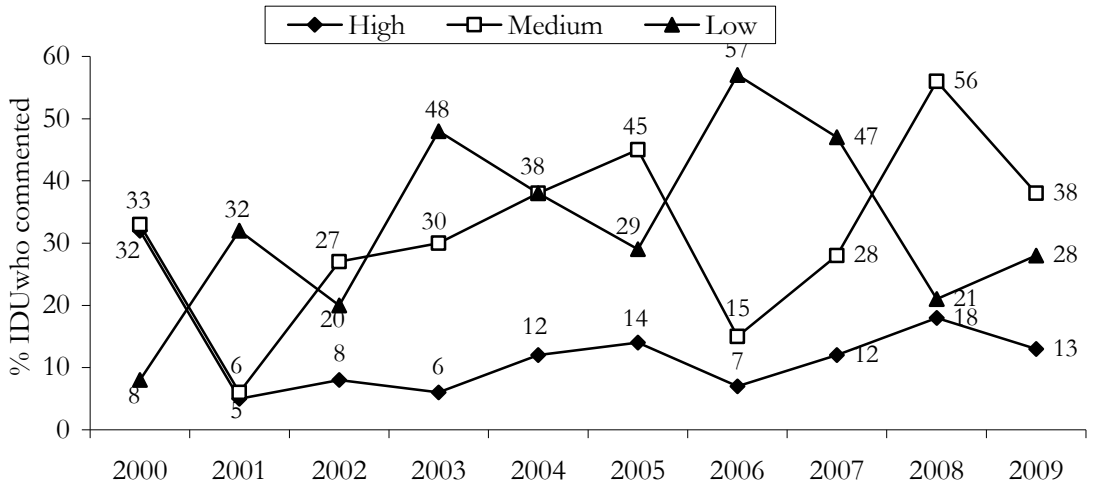
Source: IDRS IDU interviews

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

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

Figure 14 presents reports of current purity across IDRS surveys from 2000 to 2009. It was evident in 2008 that there was an increasing trend in reports of purity as medium and a decreasing trend in reports of purity as low since 2006; however, more recently, reports of purity as medium significantly decreased from 56% in 2008 to 38% in 2009 (95%CI 0.04, 0.30). The proportions reporting purity as either high and low remained comparable to 2008, suggesting that heroin purity appears to remain modest in WA.

Figure 14: Proportion of IDU reporting current heroin purity as high, medium or low, 2000-2009

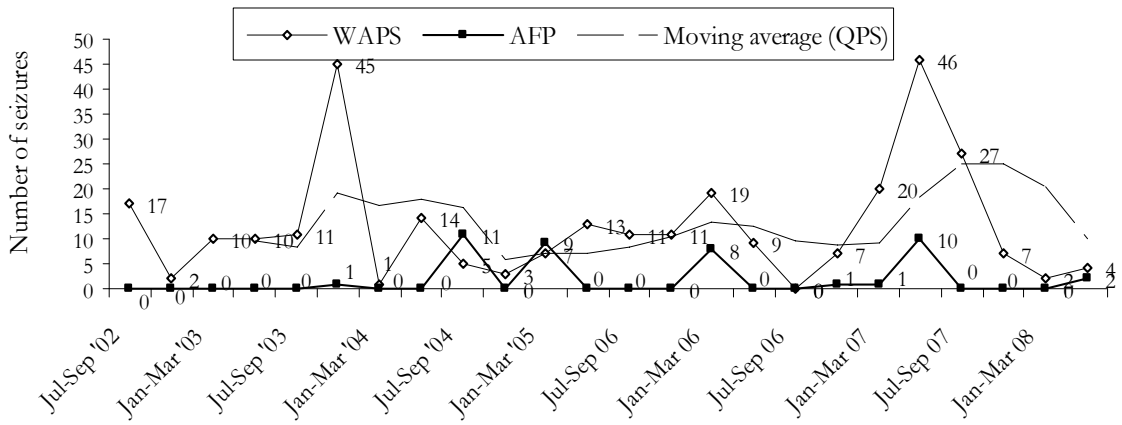


Source: IDRS IDU interviews

Two KE reported on the increasing purity of heroin which is resulting in an increase in the number of overdoses and presentations in emergency departments across Perth (refer to Figure 46).

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 2007/08. It is apparent that, overall, WAPS has been responsible for the majority of heroin seizures analysed in WA, with the AFP often recording no seizures in a quarter. WAPS seizures have fluctuated over time, with a sharp increase seen in the number of seizures (n=56) analysed in the April-June 2007 quarter; however, this has been on the decline since. In 2007/08, WAPS made a total of 106 heroin seizures and AFP made a total of 13 seizures in WA.

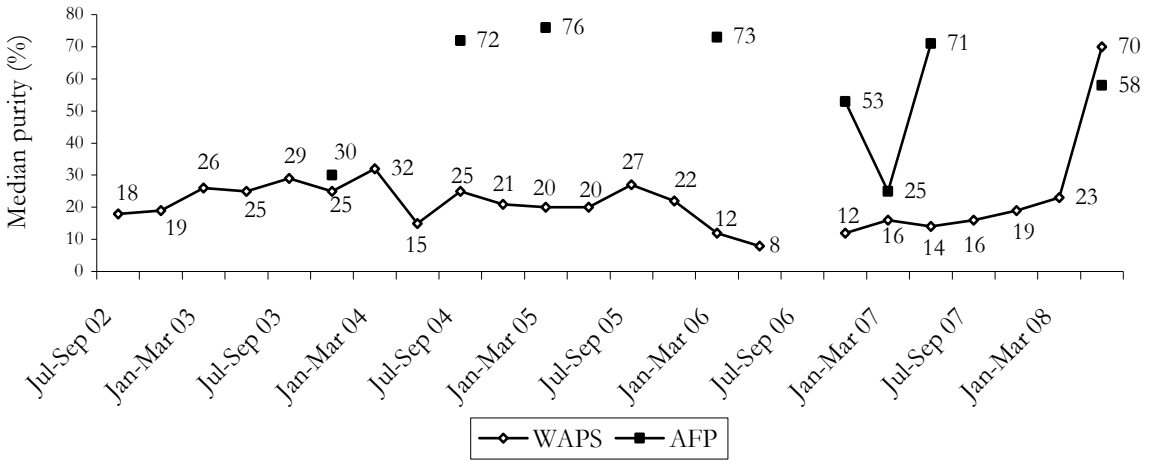
Figure 15: Number of heroin seizures analysed in WA, by quarter, 2002/03-2007/08



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 the most recent quarter April-June 2008 quarter to a median purity of 70%; this is the highest reported median purity recorded by WAPS since 2002. The median purity of seizures made by the AFP has previously been higher than those of WAPS, although the most recent quarter April-June 2008 of the WAPS seizures purity has superseded this trend. From July 2007 to June 2008, the median purity across all WAPS seizures analysed was 32%, while the median purity across all AFP seizures analysed was 58%.

Figure 16: Purity of heroin seizures analysed in WA, by quarter, 2002/03-2007/08



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. Lifetime use was reported by 94% of IDU (86% in 2008) and recent use by 71% (59% in 2008).
- Frequency of recent use significantly increased to 103 days in the last six months in the 2009 sample from an average of 61 days among the 2008 sample.
- Furthermore, the proportion of daily heroin users increased 36% in 2009, from 15% in 2008.
- The median reported price for one gram of heroin was $575 in 2009 compared to $600 in 2008. 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 87% of participants in 2009 compared to 93% in 2008.
- Current purity was rated as high by 13% in 2009 compared to 18% in 2008, and as medium by 38% in 2009 compared to 56% in 2008.
- In sum, IDU reports in 2009 suggest that frequency of heroin use has increased with more people using daily. Price of heroin has slightly decreased, whereas availability and purity have both remained stable.

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 are asked about their use of this form, but due to its rarity, IDU are not questioned about its market. For the other forms, IDU are asked if they are able to comment on market aspects such as price, purity and availability.

5.1 Use

5.1.1 Methamphetamine use among IDU participants

In 2009, lifetime use of any form of methamphetamine was reported by 98%, which was not significantly different to last year (93%) (95%CI -0.12, 0.01). Of these participants, 95% had ever injected, 23% had ever smoked, 22% had ever snorted and 12% had ever swallowed a form of methamphetamine.

Specific to form, 93% reported lifetime use of speed (97% in 2008), 36% reported lifetime use of base (26% in 2008), 84% reported lifetime use of crystal (90% in 2008) and 17% reported lifetime use of liquid amphetamine (7% in 2008). There were no significant differences between lifetime use of speed (95%CI -0.02, 0.11), base (95%CI -0.22, 0.02) and crystal (95%CI -0.03, 0.15); lifetime use of liquid significantly increased (95%CI -0.2, -0.01). 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, 2008-2009

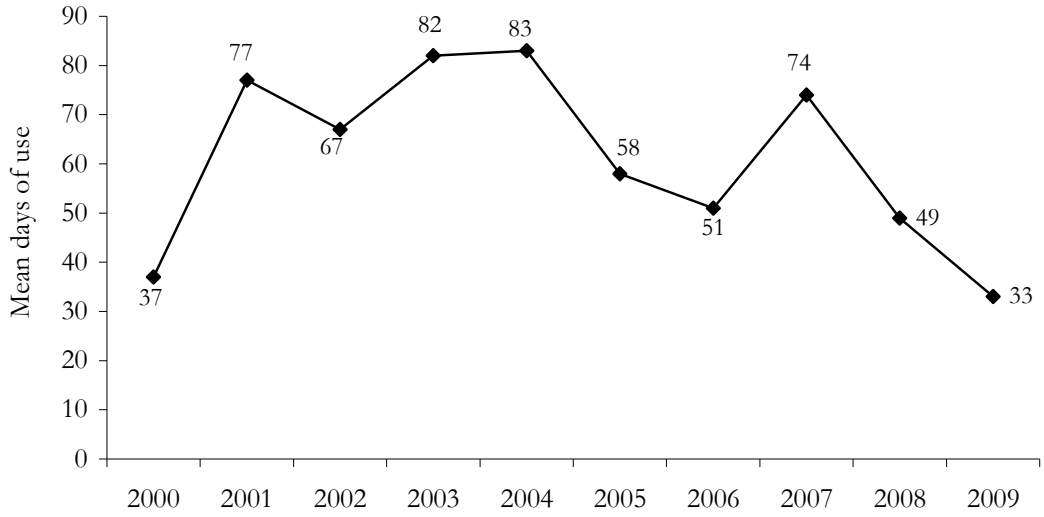
Form used (%)	2008 (N=100)	2009 (N=100)
Speed		
Ever used	97	93
Used last six months	61	56
Base		
Ever used	26	36
Used last six months	13	13
Crystal		
Ever used	90	84
Used last six months	61	44
Liquid		
Ever used	7	17
Used last six months	3	1
Any methamphetamine		
Ever used	98	95
Used last six months	74	60

Source: IDRS IDU interviews

5.1.2 Current patterns of methamphetamine use

In 2009, 70% of IDU reported use of any form of methamphetamine in the last six months, which was not significantly different to last year (74%) (95%CI -0.08, 0.16). Of these participants, 100% 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 33 days (median of 15 days). This represents a significant decrease in frequency of use compared to last year's sample, which had an average of 49 days' use (t=-3.276, df=59, p<.002).

Figure 17: Mean days of use for any methamphetamine by WA IDU 2000-2009



Source: IDRS IDU interviews

In 2009 recent use of speed (powder) was reported by 56% of the sample, which was not significantly different to the 61% who did so in the 2008 sample. In 2009 all of these participants reported injecting speed in the last six months. Days of use ranged from one to 96 days; no respondent used speed on a daily basis (compared to two respondents in 2008). Mean days of use was 21, which represented a significant decrease from 30 average days reported in 2008 (t=-3.11, df=60, p=.003).

Recent use of base was reported by 13% of IDU in 2009, which was the same as last year's sample. All recent users reported injecting base in the last six months. Days of use ranged from one to 10, no respondents reported using base on a daily basis (compared to one in 2008). Mean days of use was three, which was significantly less than an average of 26 days reported in 2008 (t=-27.513, df=11, p=.000).

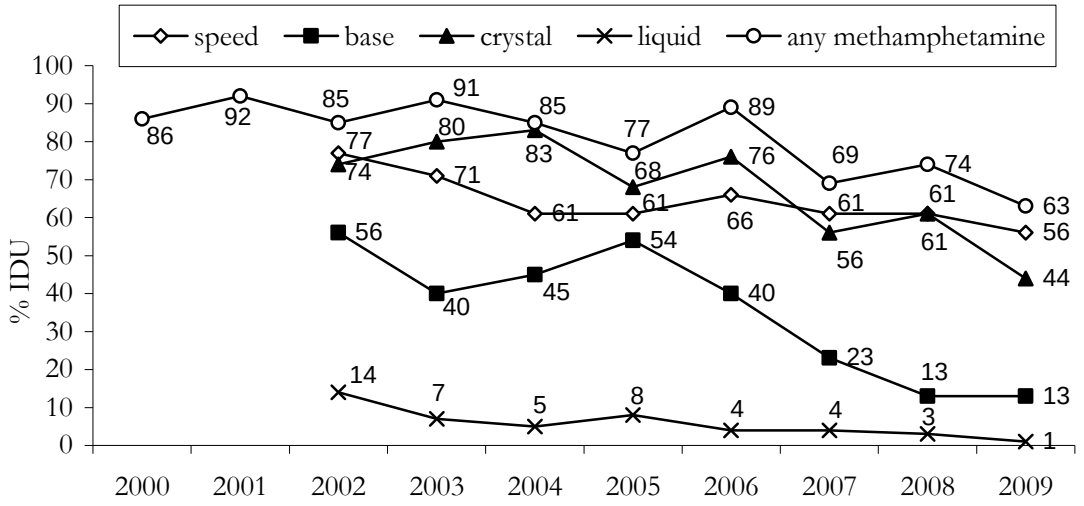
Recent use of crystal was reported by 44% of IDU, which significantly decreased from 61% in 2008 (p=0.02, CI difference 0.03, 0.30). All recent users reported injecting crystal in the last six months. Twenty one percent of recent users of crystal reported smoking crystal in the last six months; this was followed by 12% also reporting swallowing crystal and 7% reporting snorting crystal in the last six months. Days of use ranged from one to 160, with no IDU reporting use of crystal on a daily basis (compared to two in 2008). Mean days of use was 22, which significantly decreased from an average of 37 days in 2008 (t=-2.905, df=42, p=.006).

Recent use of liquid methamphetamine remained uncommon; only 1% of IDU reported use in 2009 (three percent in 2008). The one respondent who reported using liquid amphetamine had both injected and swallowed in the last six months, on a total of five days.

With regards to the form most commonly used in the 2009 sample, 60% nominated speed and 40% nominated crystal. No participant in 2009 nominated base. Crystal was the most commonly used form in 2008 with 62% nominating it as the form most commonly used, followed by speed with 38%. No participant nominated base in 2008.

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 (except for crystal) has been relatively stable in the last six months. Use of crystal has significantly decreased since 2008.

Figure 18: Proportion of IDU reporting methamphetamine use in the last six months, 2000-2009



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

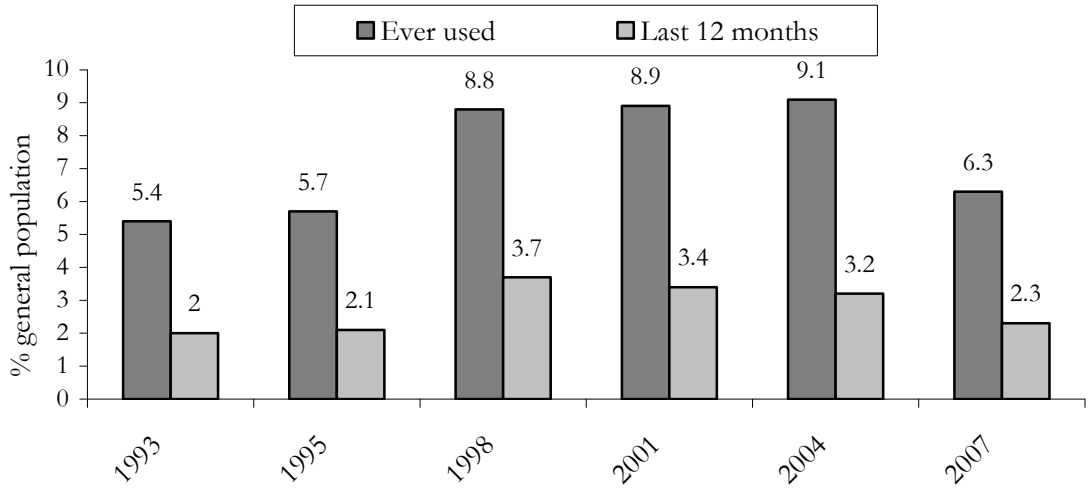
KE reported that methamphetamine was used in powder and crystal (rock). Two KE each reported on injection and smoking as ROA for methamphetamine, and one KE commented that younger users tend to smoke crystal as it is more socially acceptable, whilst older users prefer to inject. Reports on frequency of methamphetamine use varied from daily to weekly and three KE reported on binge use of methamphetamine. A few KE from health backgrounds emphasised how difficult methamphetamine users are to deal with in a hospital setting. With KE reporting that extensive methamphetamine use can cause individuals to act out violently, often towards those who are trying to help or treat them. As a result, hospital staff are fearful and hesitant to treat patients under the influence of methamphetamine.

5.2 Meth/amphetamine 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 meth/amphetamine (7.7% vs. 4.9%) and to have used meth/amphetamine 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 meth/amphetamine use (16%) and use in the previous 12 months (7.3%).

Figure 19: Prevalence of meth/amphetamine 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 at the time of 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 2009, 26 participants reported on the price of one point of speed with a median of $50 and 16 participants reported on the price of one gram of speed with a median of $400. The median price of last purchase for one point of speed was $50 (n=26) and for one gram of speed it was $400 (n=16). There were 25 participants who reported on the price of a half weight of speed, with a median of $200 and 13 participants reported on the price of an eight ball of speed with a median price of $1,100. Prices for smaller quantities were comparable to those reported last year, while prices for one gram and an eight ball were greater than last year; however, these are based on the reports of a larger number of participants from last year.

In 2009, no participants reported on the price of any quantity of base. In 2008, only a small number of participants reported on the price of base, two participants reported one point of base at a price of $50 and two participants reported on the price of one gram of base with a median of $400. There were four participants who reported on the price of a half weight of base, with a median of $200 and no participant reported on the price of an eight ball of base.

In 2009, 18 participants reported on the price of one point of crystal with a median of $50 and 11 participants reported on the price of one gram of crystal with a median of $400. The median price of last purchase for one point of crystal was $50 (n=18) and for one gram of crystal it was $400 (n=11). There were 15 participants who reported on the price of a half weight of crystal,

with a median of $200 and seven participants reported on the price of an eight ball of crystal with a median of $1,200. These prices were comparable to those reported last year.

Table 10: Price of most recent methamphetamine purchases by IDU participants, 2009

Amount	Median price* $	Range	Number of purchasers*
Speed			
Point (0.1 gram)	50 (50)	50-200	26 (12)
Half weight (0.5 grams)	200 (200)	100-300	25 (11)
Gram	400 (350)	350-600	16 (6)
Eight ball (3.5 grams)	1100 (700)	120-1200	13 (2)
Base			
Point	- (50)	-	0 (2)
Half weight (0.5 grams)	- (200)	-	0 (4)
Gram	- (475)	-	0 (2)
Eight ball (3.5 grams)	- (-)	-	0(0)
Crystal			
Point (0.1 gram)	50 (50)	50-100	18 (15)
Half weight (0.5 grams)	200 (200)	100-400	15 (24)
Gram	400 (400)	350-600	11 (8)
Eight ball (3.5 grams)	1200^ (1200)	650-1300	7 (5)

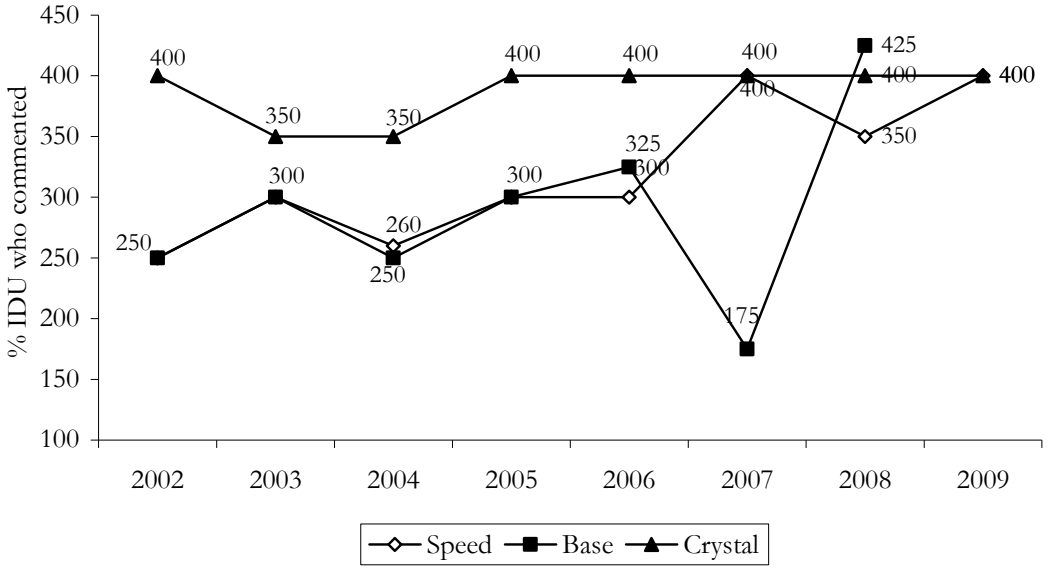
Source: IDRS IDU interviews

* 2008 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 has remained stable at $400 since 2005. The median price of one gram of speed increased from $350 in 2008 to $400 in 2009. No participant commented on price for any quantity of base in 2009.

Figure 20: Median prices of methamphetamine per gram estimated from IDU purchases, 2002-2009



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 40 IDU who responded about speed with 60% reporting the price as stable, followed by 33% reporting it as increasing. Only one IDU responded regarding base, reporting the price as stable. Of the 22 IDU responding about crystal, 59% reported the price as stable, 32% as increasing, and 5% each as fluctuating and decreasing. Overall, the price of all forms of methamphetamine was perceived by the majority of those that commented as stable.

KE reported that methamphetamine was bought in points at a price of $50 and at $250-$500 for one point. A few KE reported that the price of methamphetamine fluctuated depending on purity, while another two KE reported it was stable.

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 42 participants who commented on speed, the majority (55%) rated current availability as easy, followed by 24% rating it as very easy. Two-thirds (67%) rated the availability of speed over the last six months as stable. Only two participants commented on base, with one rating current availability as very easy and one respondent saying he or she didn't know. There were also two who reported availability over the last six months, one as stable and one not knowing. Of the 25 participants who commented on crystal, more than half (60%) rated current availability as easy, followed by 28% rating it as very easy. Availability over the last six months was rated by over two-thirds (72%) as stable.

Table 11: Participants' reports of methamphetamine availability in the past six months, 2007-2009

	Speed		Base		Crystal	
	2008 (N=100)	2009 (N=100)	2008 (N=100)	2009 (N=100)	2008 (N=100)	2009 (N=100)
Current availability						
Did not respond* (%)	67	**58**	95	**98**	49	**75**
Did respond (%)	33	**42**	5	**2**	51	**25**
Of those who responded:						
Very easy (%)	24	**24**	20	**50**	26	**28**
Easy (%)	61	**55**	60	**0**	55	**60**
Difficult (%)	12	**21**	20	**0**	10	**4**
Very difficult (%)	0	**0**	0	**0**	0	**0**
Don't know (%)	3	**0**	0	**50**	0	**8**
Availability change over the last six months						
Did not respond* (%)	67	**58**	95	**98**	49	**75**
Did respond (%)	33	**42**	5	**2**	51	**25**
Of those who responded:						
More difficult (%)	12	**17**	0	**0**	22	**4**
Stable (%)	64	**67**	80	**50**	69	**72**
Easier (%)	15	**5**	0	**0**	6	**12**
Fluctuates (%)	6	**10**	20	**0**	4	**4**
Don't know (%)	3	**2**	0	**50**	0	**8**

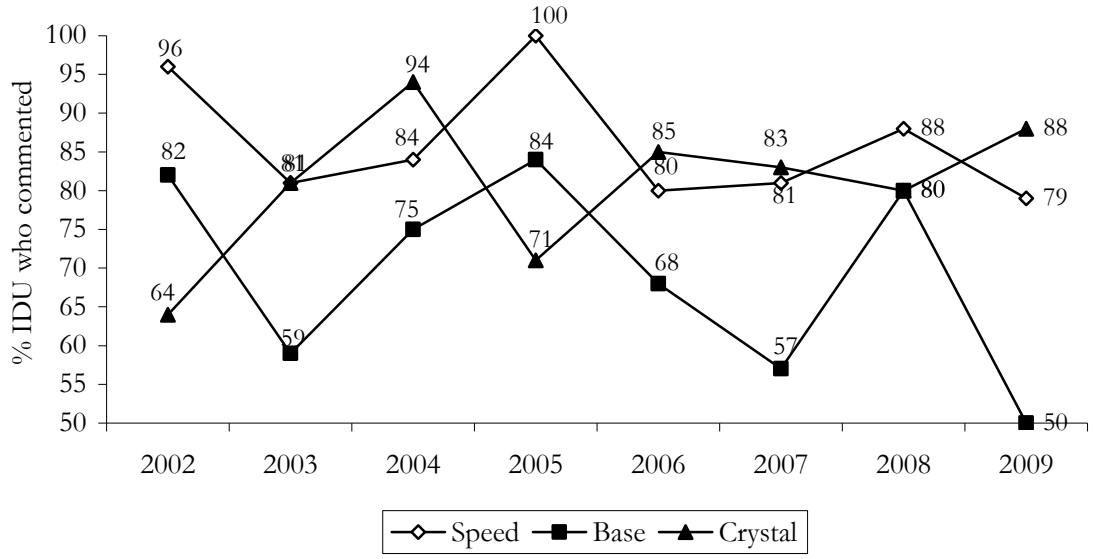
Source: IDRS IDU interviews

* '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, but this is likely due to the small

number of participants who commented on base each year. There was no reported availability for base as either easy or very easy in 2009.

Figure 21: IDU reporting easy or very easy availability of methamphetamine by form in WA 2002-2009



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

KE reports of availability of methamphetamine were varied, with responses including that it was easy to access, availability was stable and another that availability was decreasing.

IDU were asked about sources of each form of methamphetamine. Of the 40 participants who reported on speed, just over half (55%) nominated friends as the person from whom speed was obtained. A further one-quarter (20%) nominated known dealers, less than a quarter nominated acquaintances (18%) and smaller proportions nominated street dealers (5%) and unknown dealers (3%). With regards to locations of purchase, 25% reported home delivery, 18% each reported an agreed public location and dealers' homes, 15% each reported friends' homes and a street market, and 10% reported acquaintances' houses.

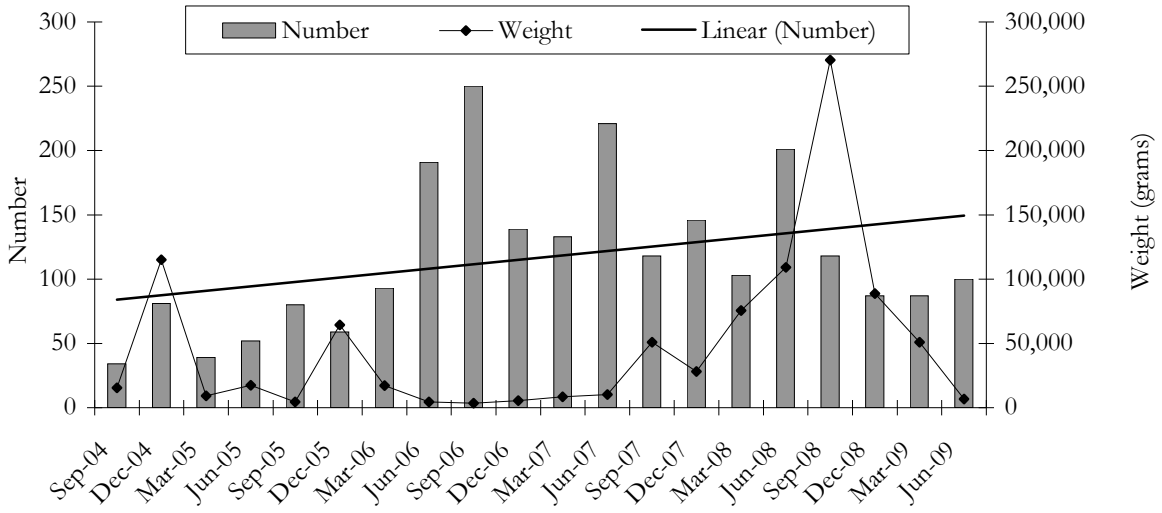
Only two participants responded for base: one nominated friends and one nominated street dealers as sources of base. With regards to locations, both participants nominated an agreed public location.

There were 24 participants who reported on source persons and locations for crystal. Of these more than half (54%) nominated friends followed by 17% nominating known dealers. Another 13% reported acquaintances as a common source of crystal and nine percent each nominated street dealers and unknown dealers. An agreed public location was reported by 25% as a common location of purchase, followed by 21% reporting home delivery; 17% reported friends' homes and street markets. Smaller proportions of 13% nominated acquaintances' houses and 8% for dealers' homes.

Overall, friends and an agreed public location were the most common persons and locations for sourcing methamphetamine.

Figure 22 shows the number and weight of amphetamine-type stimulants (ATS) seizures by ACS at the Australian border from 2004/05 to 2008/09, 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), although there are signs of decreasing seizures in the most recent quarters. The total number of ACS ATS seizures in 2007/09 was 392 which decreased from 568 in 2007/08; the total weight of seizures for this period was 115,345.06 grams compared to 263,452.11 in 2007/08.

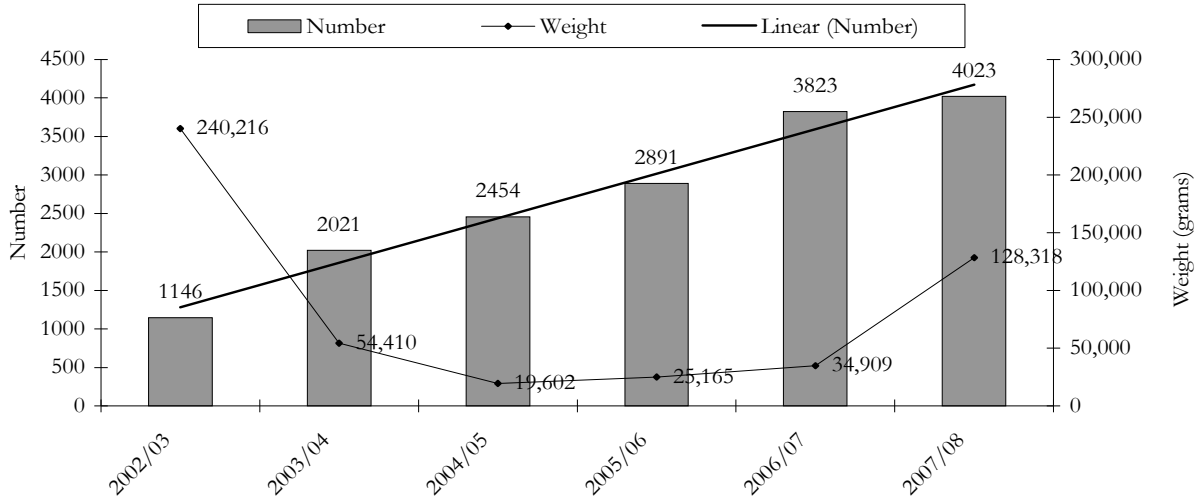
Figure 22: Number and weight of methamphetamine seizures by ACS, 2004/05-2008/09



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 2007/08. It is evident that while the number of seizures increased across time, the weight of seizures sharply decreased from 2002/03 to 2003/04 and then stabilised. This suggests that police are making a greater number of seizures of smaller weights. In 2007/08, WAPS and the AFP made 4,023 ATS seizures in WA with a weight of 128,318 grams.

Figure 23: Number and weight of amphetamine-type stimulant seizures by WAPS and AFP, WA 2002/03-2007/08



Source: **ACC**

One KE commented on changing trends in the distinctions between persons who manufacture methamphetamine, as currently an increase has been observed in the number of people who are manufacturing, i.e. cooking small amounts with high purity for personal use. These people were reported to be in their mid-20s to late-40s and of low socioeconomic and cultural backgrounds. The KE reported that methamphetamine manufacture in WA no longer tends to involve 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.

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 42 participants who responded regarding speed, the greatest proportion (33%) rated current purity as low, followed by just over one-quarter (26%) rating it as high. This represents an increase in the proportion rating purity as high compared to last year (6%), with corresponding decreases in proportions rating it as medium (42% in 2008 to 21% in 2009). Only two participants responded for base, with one participant reporting 'don't know' and the other reporting purity as high. Of the 25 participants who responded for crystal, equal proportions of approximately one-quarter rated purity as high (28%), medium (28%) and low (28%). These ratings for crystal were mostly similar to last year with the exception of observed increases in reported low purity from 18% in 2008 to 28% in 2009 and decreases in those reporting purity as fluctuating from 14% in 2008 to 4% in 2009 (see Table 10).

Table 12: Methamphetamine purity by user report 2008-2009

	Speed		Base		Crystal	
	2008 (N=100)	2009 (N=100)	2008 (N=100)	2009 (N=100)	2008 (N=100)	2009 (N=100)
Current purity						
Did not respond* (%)	67	58	95	98	49	75
Did respond (%)	33	42	5^	2^	51	25
Of those who responded:						
High (%)	6	26	20^	50^	35	28
Medium (%)	42	21	40^	0	33	28
Low (%)	33	33	20^	0	18	28
Fluctuates (%)	18	19	20^	0	14	4
Don't know# (%)	0	0	0^	50^	0	12

Source: IDRS IDU interviews

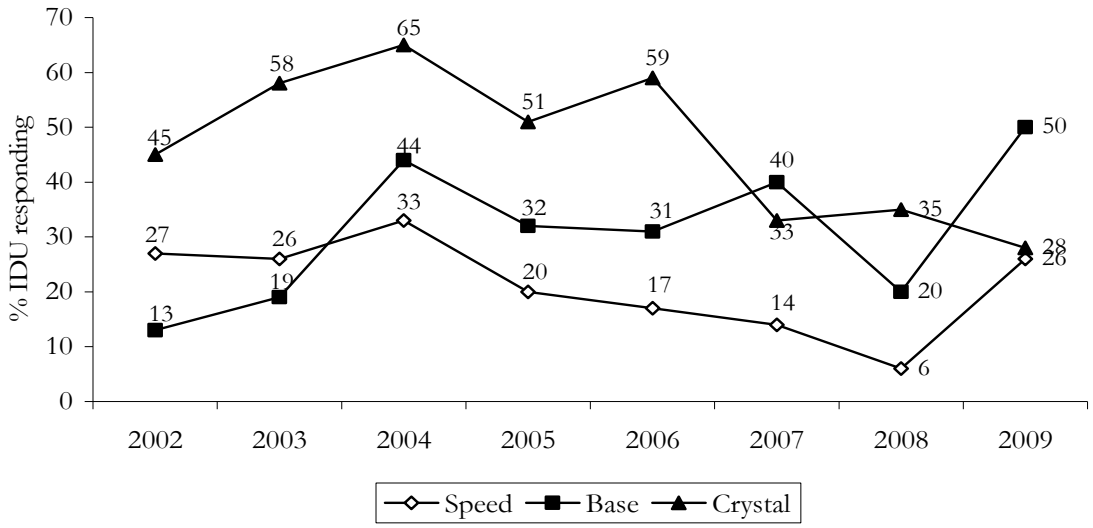
* 'Did not respond' refers to participants who did not feel confident enough in their knowledge of the market to respond to survey items

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

^ Based on less than 10 participants

Figure 24 presents the proportion of IDU commenting on methamphetamine who rated each form as high across IDRS surveys. After decreasing sharply from 2006 to 2007, ratings of crystal purity as high have since stabilised. Ratings of both speed and base as high decreased in 2008 but have since sharply increased in 2009. Extreme caution is warranted in interpreting ratings for base, given that only one participant commented.

Figure 24: Proportion of IDU reporting methamphetamine by form as high, 2002-2009



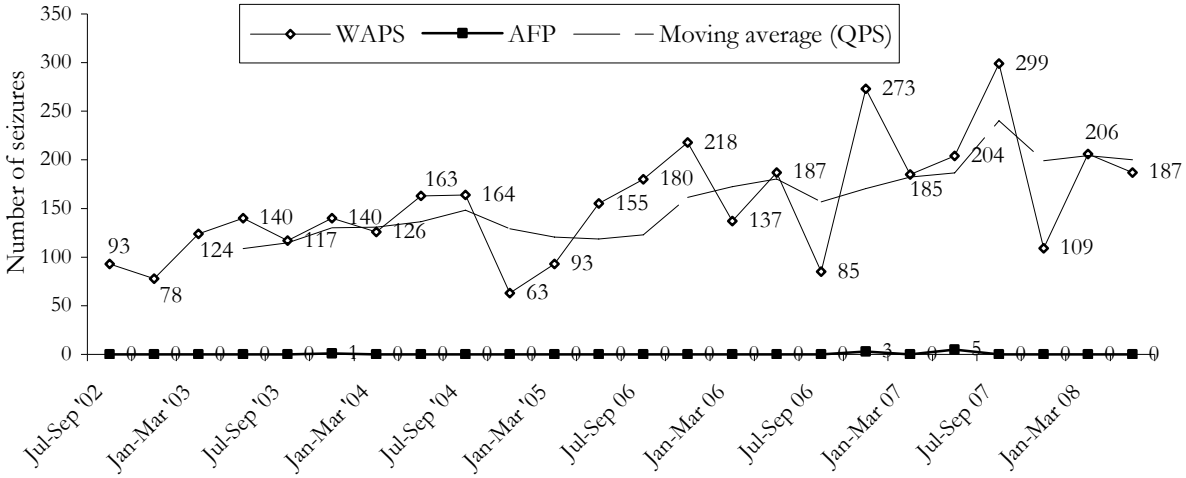
Source: IDRS IDU interviews

Asked whether the purity of speed had changed in the six months prior to interview, the greatest proportion reported it was decreasing (53%). This was followed by 23% who rated it as stable and 20% as fluctuating. With regards to base, only one participant responded and rated it as stable. The greatest proportion (46%) of those who commented on crystal rated it as decreasing, followed by 23% rating it as stable. Smaller proportions rated purity of crystal over the last six months as fluctuating (14%) and increasing (18%).

As with availability, KE reports of methamphetamine purity were varied, with opinions that purity was high, medium, stable and fluctuating and that it often depended on the form.

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 2007/08. 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 2007/08, WAPS and AFP made a total of 4,023 methamphetamine seizures analysed in WA.

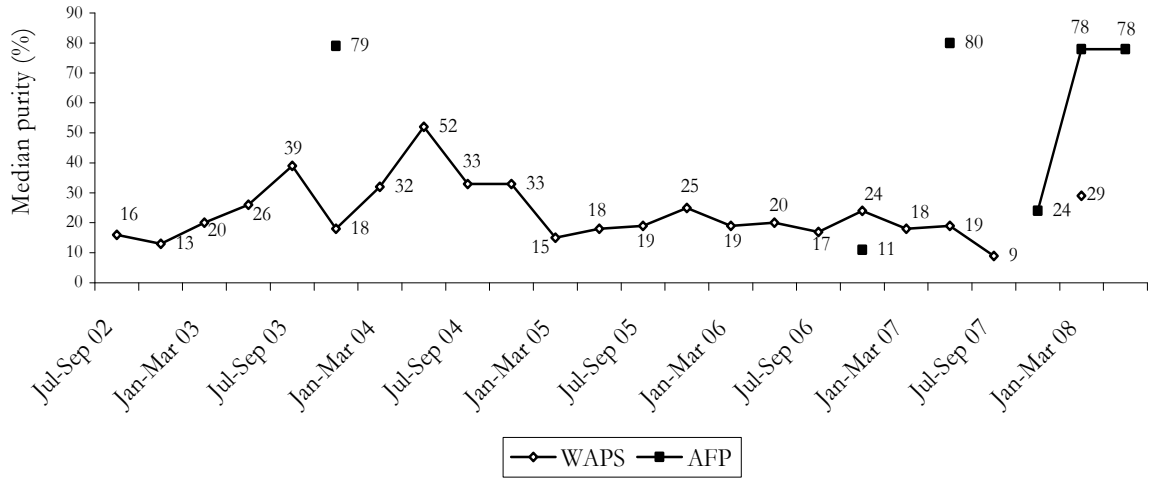
Figure 25: Number of methamphetamine seizures analysed in WA, by quarter, 2002/03-2007/08



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 from July-September 2002 to January-March 2005, but has since stabilised. All AFP seizures from 2007/08 were of much greater purity than the WAPS seizures. From July 2007 to June 2008, the median purity across all WAPS seizures analysed was 19%, while the median purity across all AFP seizures analysed was 67%.

Figure 26: Purity of methamphetamine seizures analysed in WA, by quarter, 2002/03-2007/08



Source: ACC

5.6 Summary of methamphetamine trends

- Lifetime use of speed decreased from 97% in 2008 to 93% in 2009, as did recent use; from 61% in 2008 to 56% in 2009.
- Lifetime use of crystal also decreased from 90% of IDU in 2008 to 84% in 2009; recent use also significantly decreased from 61% in 2008 to 44% in 2009.
- There was no significant change in lifetime or recent use of base between 2008 and 2000. Lifetime use was 26% in 2008 and 36% in 2009 while recent use was reported by 13% in both 2008 and 2009.
- Among those who had used methamphetamine in the last six months, the average days used for all forms of methamphetamine significantly decreased from 2008 to 2009. Speed was used an average of 21 days compared to 30 days in 2008, base was used an average of three days (although based on a small sample size) compared to 26 days in 2008 and crystal an average of 22 days compared to 37 in 2008.
- The median price for one point of all forms of methamphetamine remained $50. The median price for one gram of speed was $400, for crystal was also $400 and no one reported on price for base. The greatest proportion of IDU reported the price for all forms was stable in the last six months.
- Current availability was rated as very easy or easy by 79% of those who commented on speed, 50% for base (n=1) and 88% for crystal. The greatest proportion of IDU reported availability for all forms was stable in the last six months.
- Current purity was rated as low by the greatest proportion of those who responded for speed (33%) and current purity of crystal was rated as high, medium and low by 28% each. No participant commented on availability of base.

6. COCAINE

6.1 Use

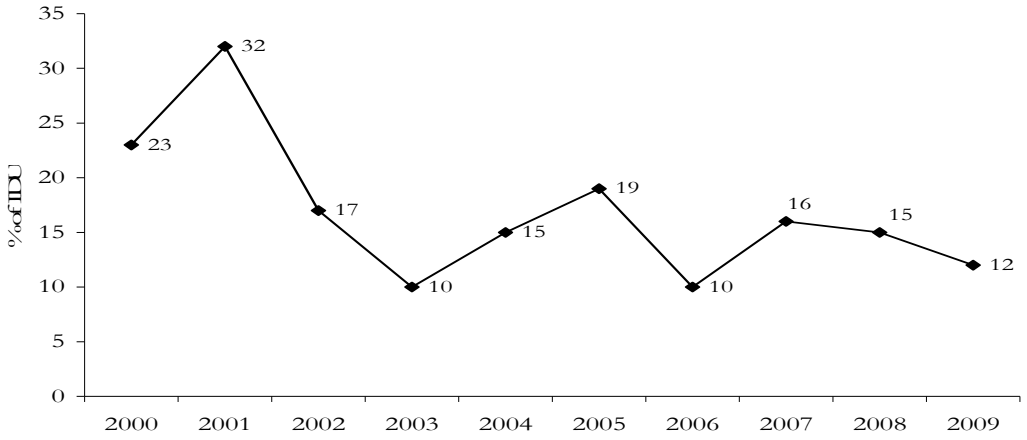
6.1.1 Cocaine use among IDU participants

In 2009, lifetime use of cocaine was reported by 60% of IDU, which was comparable to 73% reported in 2008 (95%CI -0.00, 0.25). Of these participants in 2009, 59% reported lifetime injection of cocaine and 71% 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 12% of IDU, which was not significantly different to the 15% who reported recent use in 2008. Of these participants, 67% reported injecting cocaine in the last six months and 33% reported snorting. Days of use ranged from one to 72, with an average of nine days (six days in 2008). 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, 2000-2009



Source: IDRS IDU interviews

Of the 12 IDU who provided information on the forms of cocaine used, 83% reported that the form most used was powder cocaine, whilst two participants (17%) reported use of rock cocaine as the most commonly used form.

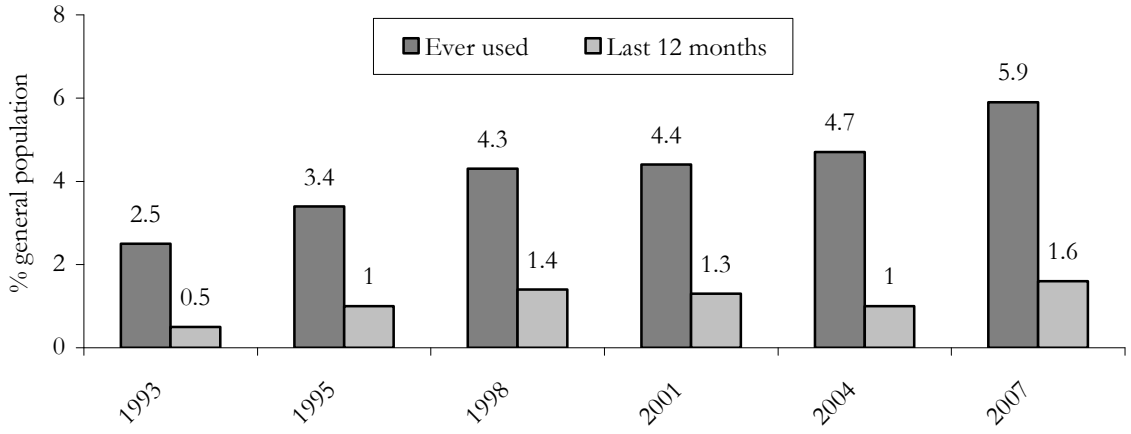
On KE commented on cocaine, reporting that in the 10 years of running a health service; 20,500 patients had been seen and only 25 of these people were positive for genuine cocaine use. This KE believed that it was more likely a purer cleaner form of methamphetamine that was being marketed as cocaine in Perth.

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 report 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 2009, only one participant reported on the price of cocaine. One gram of cocaine was reported to cost $450, one-quarter gram was reported to cost $180 and a half gram was reported to cost $360 (Table 13).

Table 13: Price of most recent cocaine purchases by IDU participants, 2009

Amount	Median price* $	Number of purchasers*
Cap	- (-)	0 (0)^
Quarter gram	180 (100)	1 (1)^
Half gram (halfweight)	360 (220)	1 (1)^
Gram	450 (-)	1 (-)^

Source: IDRS IDU interviews

* 2008 data are presented in brackets

^ Based on a small number of purchases

The one participant who commented on price change for cocaine in the last six months reported that the price was increasing.

6.4 Availability

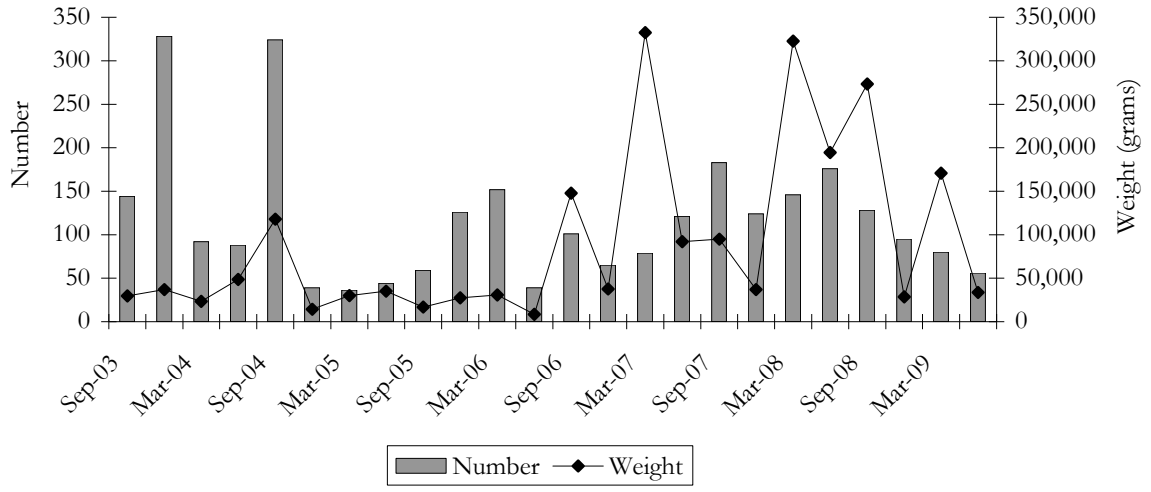
Only two participants commented on availability of cocaine;, both reported the current availability of cocaine as easy and one participant reported availability in the last six months was stable and the other said it was easier.

When asked about usual source of cocaine, one participant reported purchasing cocaine from friends and the other through acquaintances. This was purchases via home delivery and at an agreed public location.

These participants reported usually purchasing cocaine for themselves and others.

The number and weight of cocaine seizures by the ACS from 2003/04 to 2008/09 is shown in Figure 29. There has been considerable fluctuation in the number and weight of cocaine seizures across time. There have been three significant peaks in weight in March 2007 (332,599.06 grams), March 2008 (322,761.87 grams) and September 2008 (273,412.38 grams). The total number of cocaine seizures for 2008/09 was 359 and the total weight of seizures for this period was 506,291.97 grams.

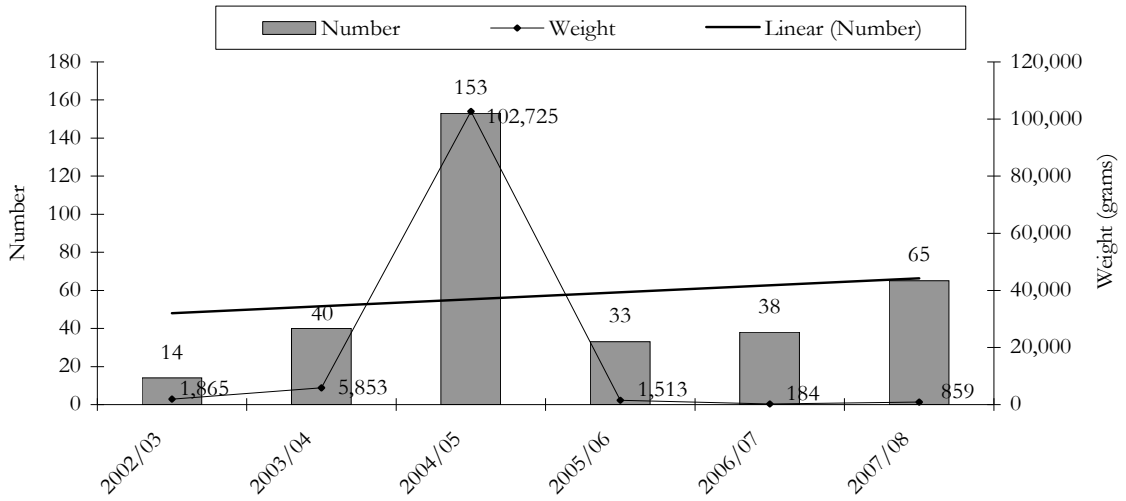
Figure 29: Number and weight of cocaine seizures by ACS, 2003/04-2008/09



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 2007/08. 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 2007/08, WAPS and AFP made 65 cocaine seizures in WA with a weight of 859 grams.

Figure 30: Number and weight of cocaine seizures by WAPS and AFP, WA 2002/03-2007/08



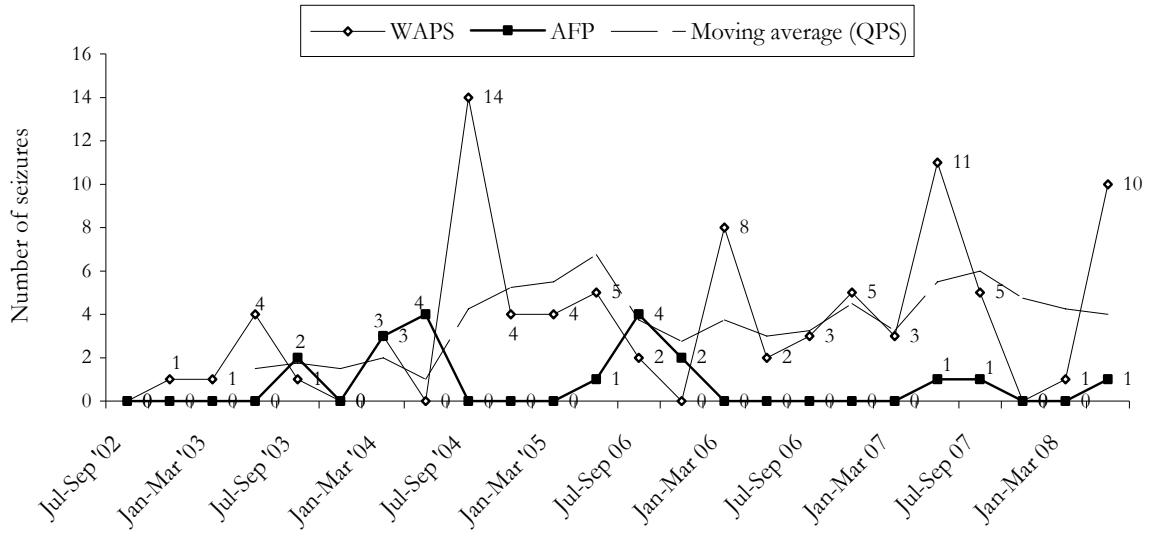
Source: **ACC**

6.5 Purity

As with price and availability, only one IDU commented on purity of cocaine. This participant reported current purity as medium and purity over the last six months as stable.

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 2007/08. 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 seizures of other drugs such as amphetamines and cannabis in WA. In 2006/07, WAPS made a total of 15 cocaine seizures and AFP made a total of two seizures analysed in WA.

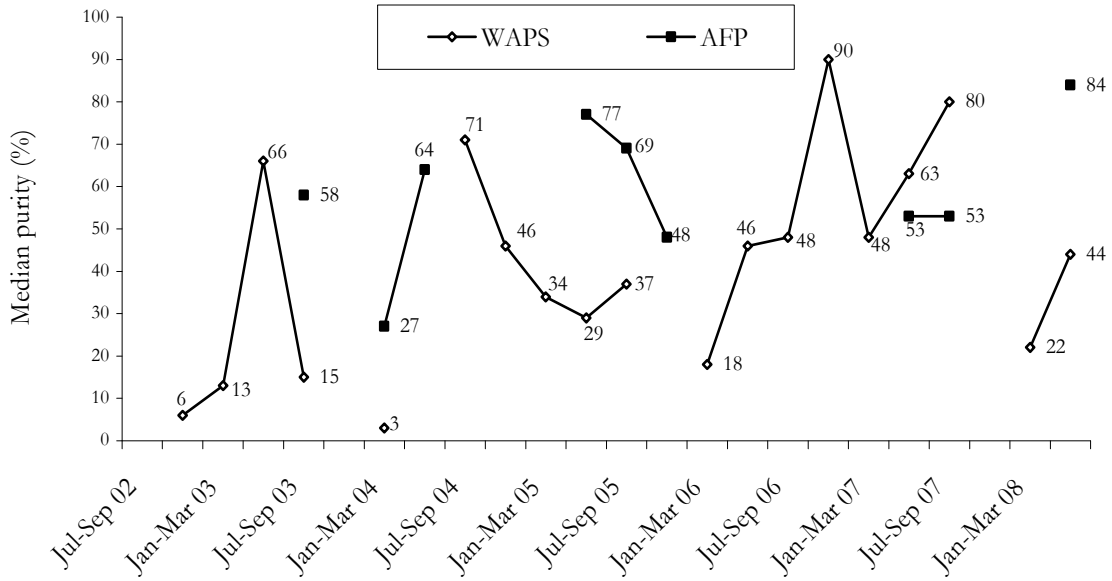
Figure 31: Number of cocaine seizures analysed in WA, by quarter, 2002/03-2007/08



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 WAPS fluctuated from July-September 2002 to January-March 05, but has since stabilised. Two out of three of the AFP seizures were of much greater purity than the WAPS seizures. From July 2007 to June 2008, the median purity across all WAPS seizures analysed was 47%, while the median purity across all AFP seizures analysed was 69%.

Figure 32: Purity of cocaine seizures analysed in WA, by quarter, 2002/03-2007/08



Source: ACC

6.6 Summary of cocaine trends

- Lifetime use of cocaine by IDU was reported by 60% of the 2009 sample which was not significantly different from the 73% who reported lifetime use in 2008.
- Recent use was reported by 12% of the 2009 sample which was not significantly different from the 15% in 2008.
- Frequency of cocaine use was also similar, with an average of nine days among recent users in 2009 compared to six days in 2008.
- Only one participant commented on the price of cocaine, with one gram reported to cost $450.
- Only two participants reported on availability and purity of cocaine making it difficult to draw conclusions about the market in WA.

7. CANNABIS

7.1 Use

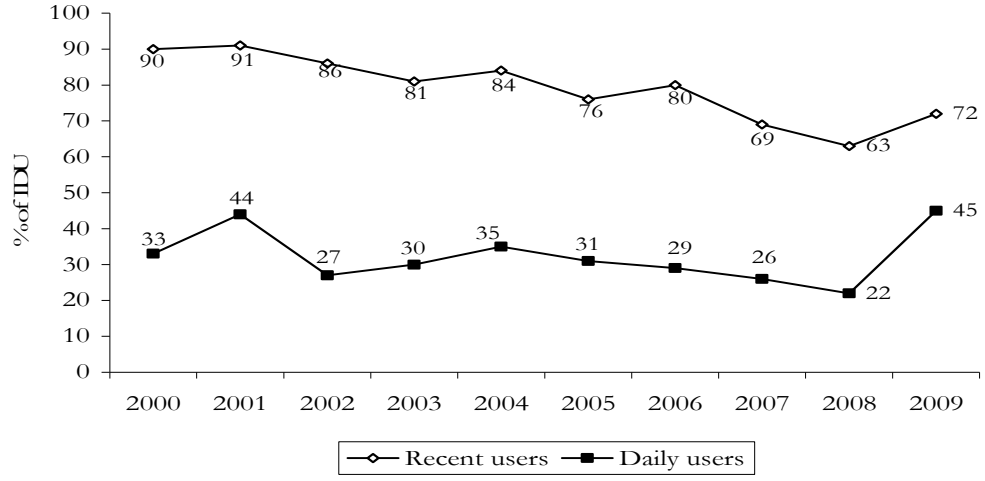
7.1.1 Cannabis use among IDU participants

In 2009, lifetime use of cannabis was reported by 96% of IDU, which was not significantly different from the 95% who reported lifetime use in 2008.

7.1.2 Current patterns of cannabis use

Use of cannabis in the last six months was reported by 72% of IDU in 2009, which was not significantly different from the 63% who reported recent use in 2008. In 2009 days of use ranged from one to 180, with 45% of the total IDU sample reporting use of cannabis on a daily basis (22% in 2008); this proportion represents the highest number of daily cannabis users since IDRS data collection began. Mean days of use was 105, which was significantly greater than the average of 86 days in 2008 (t=-2.205, df=68, p=.031). The proportion of IDU reporting any use and daily use of cannabis in the last six months is presented in Figure 33.

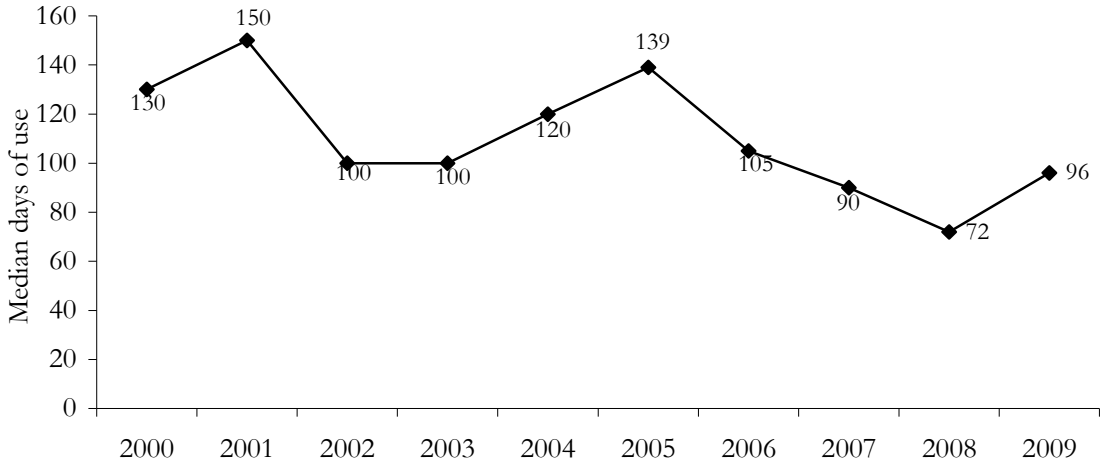
Figure 33: Recent use and daily users of cannabis in the past six months, 2000-2009



Source: IDRS IDU interviews

Figure 34 shows the median days of cannabis use among IDU across IDRS surveys and again suggests that use of cannabis by IDU has been decreasing since 2005, although median number of days increased to 96 in 2009, which was more comparable to samples prior to 2008.

Figure 34: Median days of cannabis use in the past six months, 2000-2009



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. In 2009, 69 participants responded, with 87% reporting that hydro was the form they mostly used while 13% 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-eight participants said they used cones, with a median of three cones smoked (range=0.5-20 cones). Nine participants smoked joints, with a median of two joints smoked (range=0.5-13 joints).

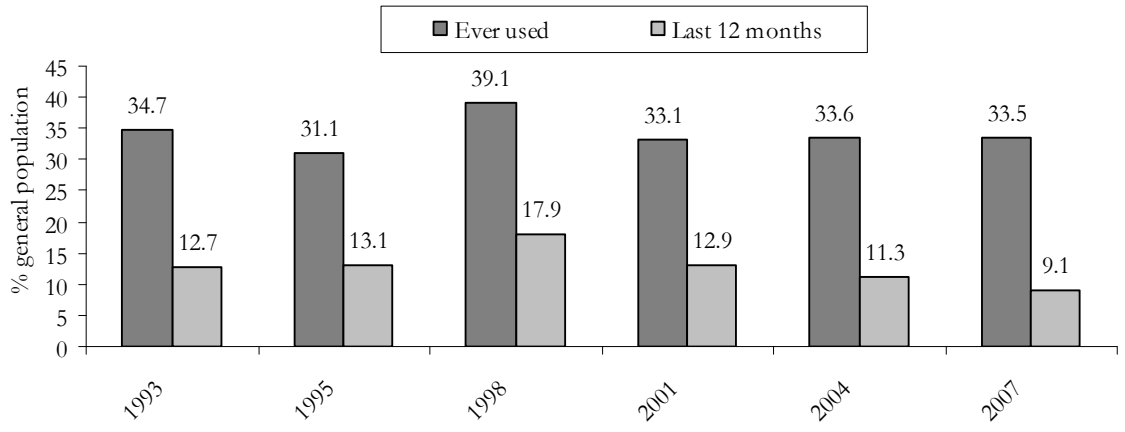
KE made only a few comments regarding cannabis use among IDU. KE reported that most IDU use cannabis and no changes were observed in use patterns. One KE commented that cannabis use can often be problematic for individuals more predisposed to mental health problems such as schizophrenia and psychosis, and that often the combination between methamphetamine use and cannabis can be particularly dangerous.

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 from 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 12. The greatest number of participants (n=30) reported on the last price paid for one ounce of hydro, which had a median price of $350 (range=$250-$400). Eighteen participants reported on the price of one gram of hydro, with a median of $25 (range=$20-$30) and 17 participants reported on the price of one half ounce of hydro, with a median of $150 (range=$110-$200). These prices were comparable to those reported last year.

Bush

Only a few participants reported on price at last purchase of bush (Table 14). Twelve participants reported on the current price of one ounce of bush, which had a median price of $290 (range=$250-$350). Five participants reported on the price of one 'bag' of bush, with a median of $25 (range=$25-$50) and five participants also reported on the price of one half of an ounce of bush, with a median of $125 (range=$110-$200). However, caution must be exercised in interpreting this difference given the small number of participants who responded.

Three participants reported on the price of hash or hash oil in 2009, the median price for a gram was $75 (range=$55-$300).

Table 14: Price of most recent cannabis purchases by IDU participants, 2009

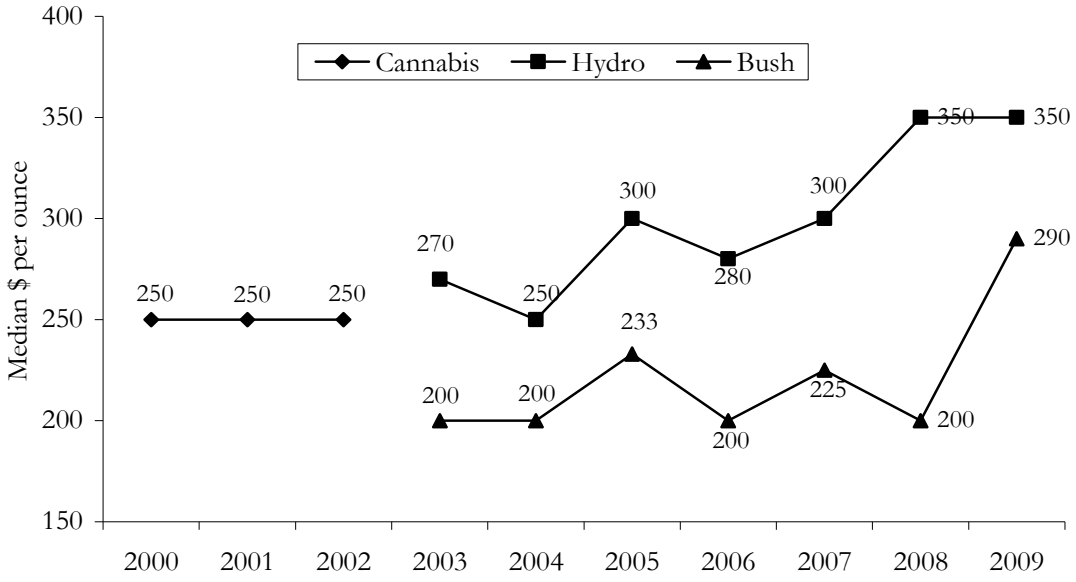
Amount	Median price* $	Range	Number of purchasers*
Hydro			
Gram	25 (25)	20-30	18 (11)
Half Ounce	150 (150)	110-200	17 (5)
Ounce	350 (350)	250-400	30 (9)^

Bush			
Gram	25 (28)	20-25	4 (2)
Half Ounce	125 (130)	110-200	5 (3)^
Ounce	290 (200)	250-350	12 (3)^

Source: IDRS IDU interviews
* 2008 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 since 2008. Conversely, it appears that the price of hydro is stabilising.

Figure 36: Median prices of cannabis estimated from IDU participant purchases, 2000-2009



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, 44 participants responded regarding hydro and 22 reported on bush. Regarding the price of hydro, 48% reported it as increasing and 46% reported it as stable. For bush, 68% reported the price as stable and 23% reported it 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 2009, just less than two-thirds (61%) of participants who commented reported current availability of hydro as easy, while approximately one-quarter (27%) rated it as very easy these findings were not significantly different to 2008. Nine percent rated current availability as

difficult and 2% as very difficult. With regard to availability over the last six months, 73% rated it as stable which was significantly greater than 59% reporting in 2008. There was a decrease in the proportion rating it as easier from 15% in 2008 to 5% in 2009.

Bush

In 2009, more than half (64%) of those who commented reported current availability of bush as easy. Equal proportions of 18% each rated current availability as very easy and difficult, while no respondents reporting current availability as very difficult. With regard to availability over the last six months, 62% rated it as stable, while almost one-fifth (19%) rated it as more difficult both findings were comparable to last year (54% and 17% respectively). Fourteen percent said that it had fluctuated, which was significantly greater than last year (4%) (95%CI 0.02, 0.18). Five percent reported that availability had become easier, decreasing from 25% in 2008 (95%CI 0.10, 0.29). These findings suggest that there is a perceived decrease in availability of bush cannabis and that an increase in market fluctuations have been occurring in the last six months preceding interview.

Table 15: Participants' reports of cannabis availability in the past six months, 2008-2009

Current availability	Hydro		Bush	
	2008 (N=100)	2009 (N=100)	2008 (N=100)	2009 (N=100)
Did not respond* (%)	60	66	76	78
Did respond (%)	40	44	24	22
Of those who responded:				
Very easy (%)	25	27	25	18
Easy (%)	53	61	46	64
Difficult (%)	15	9	25	18
Very difficult (%)	5	2	4	0
Don't know^ (%)	3	0	0	0
Availability change over the last six months				
Did not respond* (%)	61	66	76	79
Did respond (%)	39	44	24	21
Of those who responded:				
More difficult (%)	10	5	17	19
Stable (%)	59	73	54	62
Easier (%)	15	5	25	5
Fluctuates (%)	13	18	4	14
Don't know^ (%)	3	0	0	0

Source: IDRS IDU interviews

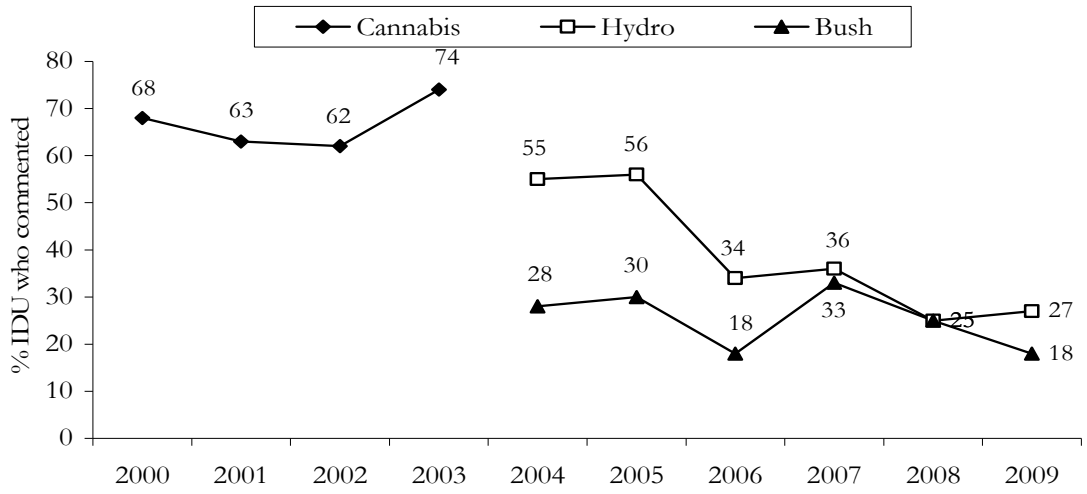
* 'Did not respond' refers to participants who did not feel confident enough in their knowledge of the market to respond to survey items

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

Figure 37 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 gradually decreasing in very easy availability. In contrast, ratings of

hydroponic cannabis as very easy have steadily decreased over time indicating that it is becoming less easily accessible.

Figure 37: Participant reports of current cannabis availability as very easy, 2000-2009



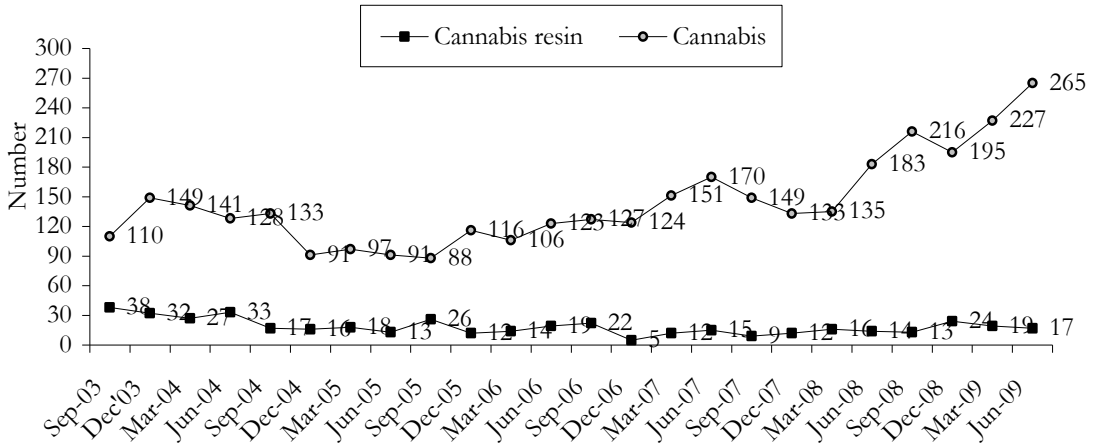
Source: IDRS IDU interviews
Note: A distinction between hydro and bush cannabis was introduced in 2004; prior to this time, survey items referred to any form of cannabis.

Of the 41 IDU responding to questions about who was the last person they obtained hydro from, 59% indicated that it came from friends which was also the most common response in previous years. Other common responses were known dealers, nominated by 20%, and acquaintances (15%). The most common location for last obtaining cannabis was friends' homes nominated by 27%, followed by home delivery by 22%. Also common were street markets (17%) and dealers' homes (15%).

There were 21 IDU who provided information concerning where they last obtained bush cannabis from. As with hydro, the most common last source was friends nominated by 67%, followed by acquaintances nominated by 14% and known dealers and unknown dealers, each nominated by 10%. The most common last location for scoring was home delivery nominated by 33%. This was followed by friends' homes (24%), dealers' homes (14%) and street markets (14%). Smaller proportions nominated acquaintances' houses (10%) and at an agreed public location (5%).

Figure 38 shows the number of cannabis and cannabis resin seizures by ACS from July 2003 to June 2009. 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. Seizures of cannabis resin have remained consistently low. The most common form of cannabis seized by ACS is cannabis seed. The total number of cannabis seizures for 2008/09 was 971 and the total number of cannabis resin seizures was 73.

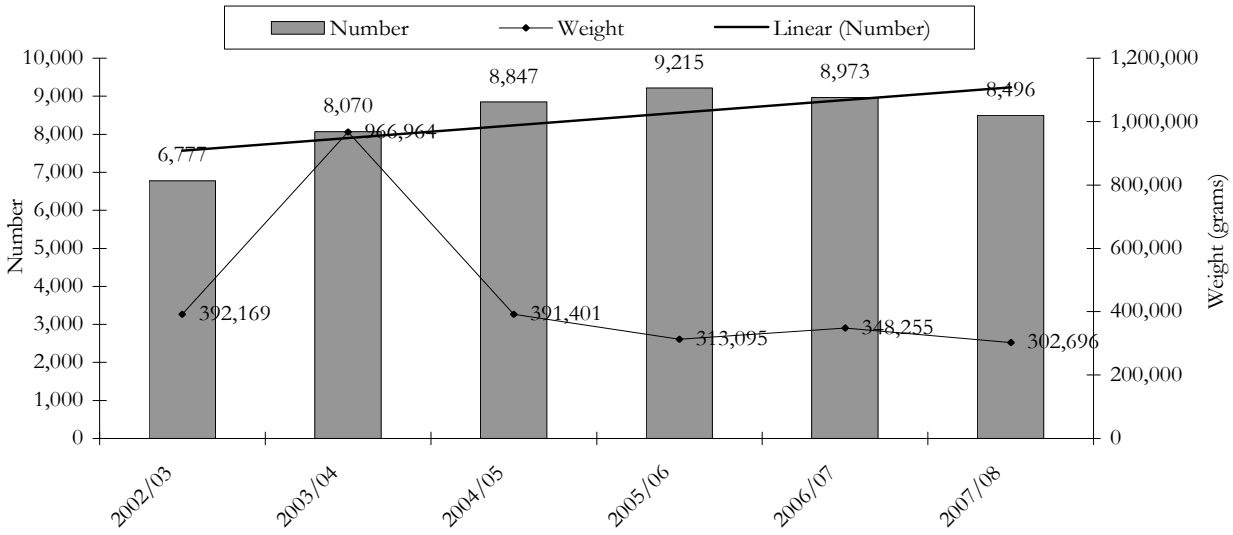
Figure 38: Number of cannabis seizures by ACS, 2003/04-2008/09



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 2006/08. 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 2007/08, WAPS and AFP made 8,496 cannabis seizures in WA with a weight of 302,696 grams.

Figure 39: Number and weight of cannabis seizures by WAPS and AFP, WA 2002/03-2007/08



Source: **ACC**

7.5 Potency

IDU were asked about the current potency of cannabis and any change in potency over the last six months (Table 16). Fort-two IDU commented on hydro, with the majority (69%) nominating current potency as high, followed by 21% nominating it as medium. With regard to changes in potency over the last six months, three-quarters (75%) reported potency as stable. Smaller

proportions reported it as fluctuating (13%), increasing (10%) and decreasing (3%), which were all comparable to last year.

Twenty-two IDU responded for bush cannabis, with the majority (55%) nominated current potency as medium, this was followed by 32% nominating current potency of bush as high, both these findings were comparable to last year. Smaller proportions nominated bush purity as low (9%) compared to last year (21%) (95%CI 0.02, 0.22) and only 5% said that bush purity had fluctuated. With regard to changes in potency of bush over the last six months, three-quarters (75%) rated it as stable. Smaller proportions rated it as decreasing (15%) and fluctuating (10%).

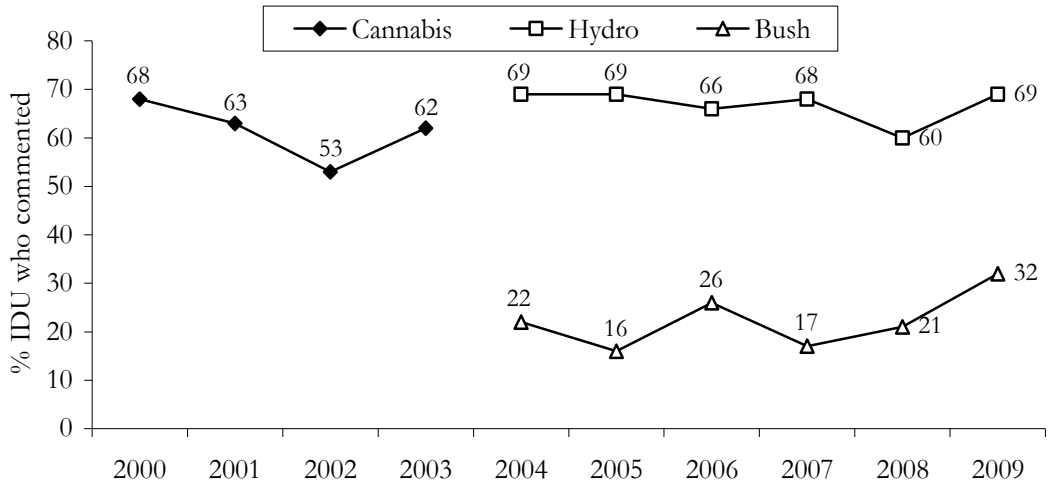
Table 16: IDU estimates of cannabis potency 2008-2009

Current potency	Hydro		Bush	
	2008 (N=100)	2009 (N=100)	2008 (N=100)	2009 (N=100)
Did not respond* (%)	60	58	76	78
Did respond (%)	40	42	24	22
Of those who responded:				
High (%)	60	69	21	32
Medium (%)	28	21	58	55
Low (%)	5	0	21	9
Fluctuates (%)	5	10	0	5
Don't know^ (%)	3	0	0	0
Potency change over the last six months				
Did not respond* (%)	60	60	76	80
Did respond (%)	40	40	24	20
Of those who responded:				
Increasing (%)	10	10	13	0
Stable (%)	65	75	54	75
Decreasing (%)	10	3	17	15
Fluctuating (%)	13	13	17	10
Don't know^ (%)	3	0	0	0

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, with a slight decrease in 2008. 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 (32%) was the greatest since data collection for bush cannabis began.

Figure 40: Participant reports of current cannabis potency as high, 2000-2009



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: 72% in 2009 and 63% in 2008. While frequency of use among recent cannabis users increased from an average of 86 days in 2008 to 105 days in 2009, the number if participants reporting daily use of cannabis also significantly increased from 22% to 45% in 2009.
- The reported price of hydro was comparable to last year, with the median price for an ounce being $350 in both 2008 and 2009. The median price of one ounce of bush increased from last year, with a median price of $200 in 2008 compared to $290 in 2009.
- Current availability was rated as very easy or easy by 88% in 2009 (78% in 2008) for hydro and by 82% in 2009 (71% in 2008) for bush.
- Current potency of hydro was rated as high by 69% of those who responded in 2009 (60% in 2008). Current potency of bush was rated as medium by 55% of those who responded in 2009 (58% in 2008).

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). 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 36% of IDU; of these 47% reported ever injecting and 61% reported ever swallowing illicit methadone. The proportion reporting illicit use of methadone in the last six months was 10% in 2009, not significantly different to the 14% in 2008. Of these participants, 70% reported injecting and 20% reported swallowing in the last six months. Days of use ranged from one to 24, with two median days use. There was a significant decrease in mean days of use from 18 in 2008 to five in 2009 (t=-5.147, df=8, p=.001). Mean days of injection in the last six months also significantly decreased from 23 in 2008 to six in 2009 (t=-5.385, df=6, p=.002).

Lifetime illicit use of physeptone was reported by 21% of IDU; of these, 67% reported ever injecting and 43% reported ever swallowing. The proportion reporting illicit use of physeptone in the last six months was 5% which was not significantly different to the 7% in 2008. Of these participants, 80% reported injecting and no participants reported swallowing in the last six months. Days of use ranged from one to two days, with a median of two days used. Mean days of use was approximately two –a significant decrease from eight days in 2008 (t=-25, df=3, p=.000). Mean days of injection also significantly decreased from 13 days in 2008 compared to approximately two in 2009 (t=-45.00, df=3, p=.000).

In 2009, IDU were asked about the reasons for illicitly using methadone and four IDU responded. The most commonly reported reason was as a substitute for heroin/opiates (n=4). Three participants also nominated self treatment as a reason for illicitly using methadone.

8.1.2 Market characteristics

Price data per ml of methadone syrup were not commonly provided by IDU in 2009, as in previous years. Of the four participants who provided information, the illicit price of methadone was reported to be approximately $1.00 per one millilitre, which reflects the findings of previous years. Two of these four participants reported changes in methadone price to be stable (50%), the remaining two participants reported that they didn't know. No participants reported on the illicit price of 5mg or 10mg physeptone tablets.

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

Of the four participants who reported that they illicitly bought methadone in the last six months, three nominated friends as the source and the remaining participant nominated acquaintances.

There were four participants who reported on last location for illicitly sourcing methadone, two nominated friends' homes, one nominated home delivery and one nominated an agreed public location.

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 36% of IDU; 34% reported ever injecting and 8% reported ever swallowing. Illicit use in the last six months was reported by 16%, which was not significantly different to 18% reported in 2008. Of these participants, all reported injecting which was not significantly different to 2008 (89%) and 19% reported swallowing in the last six months, which significantly decreased from 50% in 2008. Days of use ranged from one to 120, with a median of 11 days, which was significantly greater than six days in 2008. The mean number of days of use was 23 days which was not significantly different to the 16 in 2008. Mean days of injection was 23 days in 2009 which was not significantly different to 17 days in 2008.

Lifetime illicit use of Suboxone was reported by 38% of IDU; 35% reported ever injecting and nine percent reported ever swallowing. Illicit use in the last six months was reported by 28%, which was significantly greater than 12% in 2008 (95%CI -0.27, -0.05). Of these participants, 96% reported injecting in the last six months. Days of use ranged from one to 180, with a median of 20 days use. Mean days of use was 50, which was not significantly different from 52 days in 2008. Mean days of injection was 40 days in 2009 which was not significantly different to the 36 days in 2008.

In 2009, IDU were asked about the reasons for illicitly using Subutex and seven participants responded. The most commonly reported reasons were self treatment (n=4), being away from home (n=3) and as a substitute for heroin/opiates (n=2). Reasons for illicit use of Suboxone were provided by 14 IDU and the most common reason was being away from home (n=10) followed by self treatment (n=9). More than one response could be chosen for this question.

8.2.2 Market characteristics

There were two participants who reported on the illicit price of 2mg Subutex, with a median of $7.50 (range=$5-$10). Seven participants reported on the illicit price of 8mg Subutex, with a median of $40 (range=$20-$50). Four participants reported on the illicit price of 2mg Suboxone and both reported $15. Twelve participants reported on the illicit price of 8mg Suboxone, with a median of $50 (range=$35-$50).

In 2009, seven participants reported on availability of illicitly obtained Subutex. Current availability was reported by four participants as easy, two participants as difficult and one participant as very easy. Availability over the last six months was rated by four participants as stable and by three participants as more difficult. Fourteen participants reported on availability of illicitly obtained Suboxone. Current availability was rated by nine participants as very easy, three as easy and one each as difficult and 'don't know'. Availability over the last six months was rated by 10 participants as stable, two participants as easier and one participant each as more difficult and 'don't know'.

Two KE reported as that Suboxone had replaced Subutex in WA, the use of Suboxone was increasing among IDU; these findings were observed in the currently sample. One KE reported

that 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=7), five nominated friends as the last source person followed by acquaintances (n=1) and unknown dealers (n=1). Fourteen participants reported on the main way they had illicitly obtained Subuxone in the last six months. Of those participants that reported on the last source person, eight nominated friends as the source person, followed by acquaintances (n=4) and known dealers (n=2).

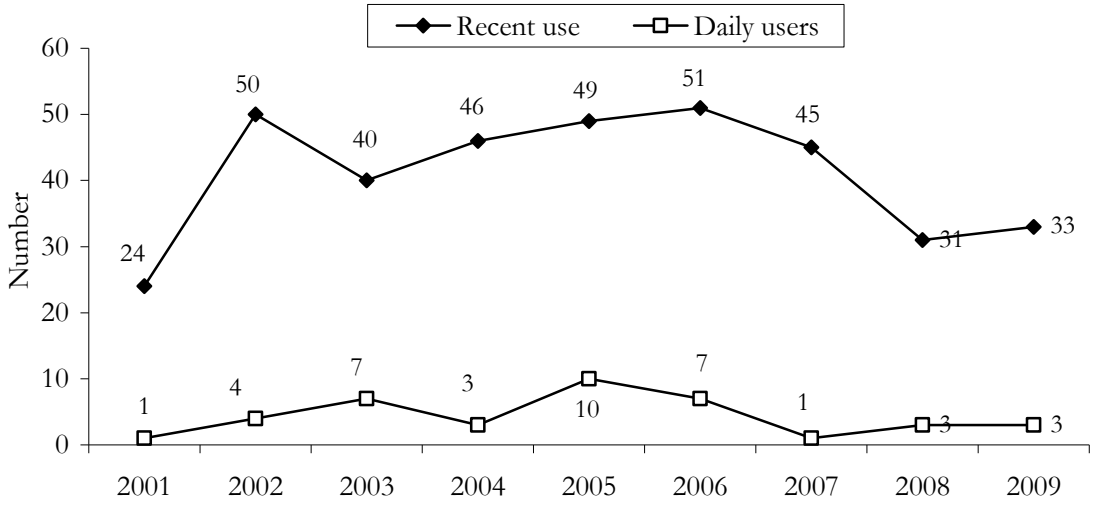
8.3 Morphine

8.3.1 Use patterns

Lifetime illicit use of morphine was reported by 71% of the 2009 IDRS sample which was not significantly different to the 58% of IDU in 2008; of the current sample, 68% reported ever injecting which was significantly greater than 50% in 2008 (95%CI -0.31, -0.04) and 9% reported ever swallowing which was not significantly different to the 13% in 2008. The proportion reporting illicit use of morphine in the last six months was 33% which was not significantly different to the 31% in 2008. Of these participants, 97% reported injecting (same proportion in 2008) and 6% reported swallowing in the last six months which was significantly less than 42% in 2008 (95%CI 0.24, 0.46). Days of use ranged from one to 180, with a median of six days. Mean days of use was 28, which was comparable to 35 days reported in 2008. Mean days of injection was 29 days, which was again comparable to last year's average of 34 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 and also stabilised in the last year.

Figure 41: Proportion of IDU reporting recent and daily illicit morphine use in the past six months 2001-2009



Source: IDRS IDU interviews

Thirteen participants reported on the reasons for illicitly using morphine. The two most common reasons were self treatment (n=10) and intoxication (n=8).

Thirty-seven IDU reported any use of morphine in the last six months and of these, 89% reported illicit use was the more common type of use compared to 79% in 2008. Of these participants, MS Contin was the most common brand used, reported by 87% (n=32). 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. Sixteen participants reported on the price of a 100mg tablet, with a median of $50 (range=$30-$100). Eight participants reported on the price of 60mg, with a median of $30 (range=$20-$40). Twenty-one participants reported on any perceived change in the illicit price of morphine in the last six months. Of these participants, 67% rated it as stable (n=14), 19% as increasing (n=4), 10% as fluctuating (n=2), and 5% didn't know (n=1).

Twenty-one participants also reported on the availability of illicitly obtained morphine in the last six months. Current availability was rated by 38% as difficult (n=8), followed by 29% as easy (n=6) and 24% as very easy (n=5) and 10% didn't know (n=2). Availability over the last six months was rated by 57% as stable (n=12). Nineteen percent rated it as more difficult (n=4) and 14% said that it fluctuates (n=3). Two of these respondents (10%) reported that they didn't know.

Twenty-one participants reported on the last source person and last location of illicitly obtained morphine. Friends were the most commonly reported source person (38%) and an agreed public location (43%) was the most commonly reported last source location.

8.4 Oxycodone

8.4.1 Use patterns

Lifetime illicit use of oxycodone was reported by 60% of the 2009 IDRS sample which was a significant increase from 42% in 2008 (95%CI -0.30, -0.04); 58% reported ever injecting and 7% reported ever swallowing. The proportion reporting use in the last six months was 29% in 2009 which was not significantly different to the 23% in 2008. Of these participants, 97% reported injecting compared to 100% in 2008 and 10% reported swallowing in the last six months compared to 26% in 2008. Days of use ranged from one to 180, with a median of 10 days. The mean days of use were 23, which was comparable to a mean of 24 days in 2008. Mean days of injection was 24, which was only slightly higher than a mean of 22 days in 2008.

Nineteen participants reported on the reasons for illicitly using oxycodone. The most common reasons were being away from home (n=11), as a substitute for heroin/opiates (n=9) and self treatment (n=5).

Thirty-three participants reported any use of oxycodone in the last six months and of these, 88% 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 94%. The remainder reported using generic oxycodone.

One KE reported that drug dealers are currently manipulating and preying on weak people who get prescribed pain medications, such as oxycodone. This KE reported that, often, a circle of

IDU gets infiltrated by one main dealer who convinces IDU to exchange their prescriptions for a much lower cost drug. The dealer will then sell on the original prescriptions.

8.4.2 Market characteristics

In 2009, 10 participants reported on the price of 40mg, with a median of $30 (range=$20-$45). Sixteen participants reported on the price of 80mg, with a median of $50 (range=$40-$100). Of the 19 participants who were able to comment on any perceived change in price over the last six months, 13 participants rated it as stable (68%), four as increasing (21%), and one each for fluctuating and 'don't know' (5% each).

Nineteen participants were able to report on the current availability of illicitly obtained oxycodone. Eleven participants reported it was easy (58%), while six reported it was difficult (32%) and two as very easy (11%). Nineteen participants were also able to report on availability over the last six months, with thirteen rating it as stable (68%), three as more difficult and fluctuating (16% each).

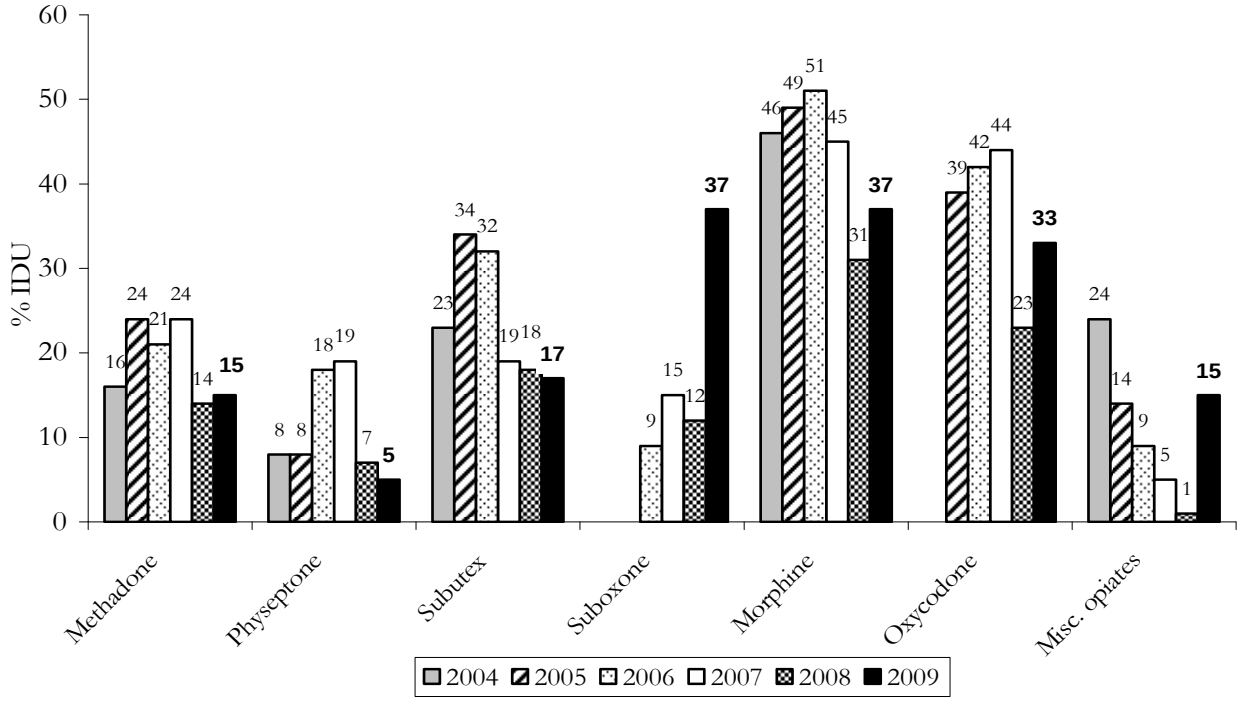
Eighteen participants reported on the last source person and last location for illicitly obtained oxycodone. The most common source person was friends with 47% (n=9) and the most common location was friends' homes with 26% (n=5).

8.5 Other opioids

Other opioids typically refer to the use of analgesic medications, such as codeine-based preparations. Lifetime use of other opioids was reported by 25% of the 2009 IDRS sample which increased significantly from 9% in 2008 (95%CI -0.26, -0.06). Four percent reported ever injecting and 23% percent reported ever swallowing. Use in the last six months was reported by 15% which was significantly greater than the 1% recorded in 2008 (95%CI -0.22, -0.07). Of those participants who had used in the last six months (n=15), 14 participants reported swallowing and two reported injecting other opioids in the last six months.

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 proportion reporting illicit use of all other opioid drugs decreased in 2008. With the exception of Suboxone, the proportions in 2008 were the lowest reported since 2004.

Figure 42: Recent use of opioids other than heroin by IDU survey respondents 2004-2009



Source: IDRS IDU interviews

8.6 Summary of opioid trends

- Recent illicit use of methadone was reported by 10% of the sample in 2009, not significantly different to the 14% in 2008. However, average days of use significantly decreased from 18 days in 2008 to five days in 2009.
- Recent illicit use of physeptone was reported by 5% of the sample in 2009, not significantly different to the 7% in 2008. The average days of use decreased from eight days in 2008 to two in 2009.
- Recent illicit use of Subutex was not significantly different across the last 2 years: 16% in 2009 and 18% in 2008. In 2009 the average days of use were 23 days, not significantly different from 16 days in 2008.
- Recent illicit use of Suboxone significantly increased from 12% in 2008 to 28% in 2009, the average days of use were not significantly different across the years: 50 in 2009 and 52 days in 2008..
- Recent illicit use of morphine was reported by 33% of the sample in 2009, not significantly different to the 31% in 2008. In 2009 the average days of use were 28 , not significantly different to the 35 days in 2008.
- Recent illicit use of oxycodone not significantly different across the last 2 years: 29% in 2009 and 23% in 2008. In 2009 the average days of use were 23 days compared with: 24 days in 2008.
- In sum, recent illicit use of other opioids have remained relatively stable, except for significant increases in recent illicit use of Suboxone, and decreased prevalence and/or frequency of use of illicit methadone and physeptone.

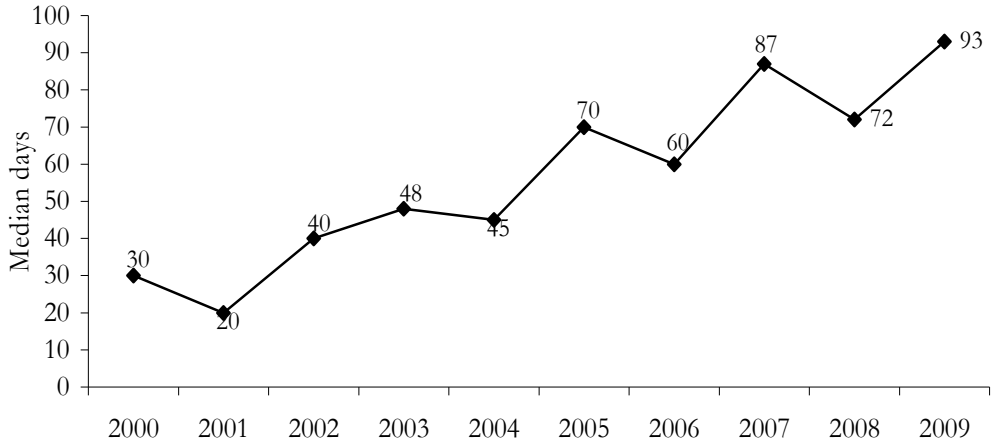
9. OTHER DRUGS

9.1 Benzodiazepines

Lifetime use of either prescribed or illicitly obtained benzodiazepines was reported by 79% of the 2009 sample, which was not significantly different to the 67% in the 2008 sample. Of these participants in 2009, 80% reporting swallowing, while injection was rare (7%). Use of any benzodiazepine in the last six months was reported by 64% of the 2009 sample, which was not significantly different to 56% in 2008. Of those that reported recent use in 2009, 65% reported swallowing.

Figure 43 shows the median days of use across IDRS surveys. Days of use among recent users in 2009 ranged from one to 180 days, with a median of 93 days. In 2009, 29 IDU reported daily benzodiazepine use which was greater than 19 IDU in 2008.

Figure 43: Median days use of any benzodiazepines in the past six months, 2000-2009



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 74%. Following this was Oxazepam (Serepax) reported by 7% and Alprazolam (Xanax) and Diazepam both reported by 5%.

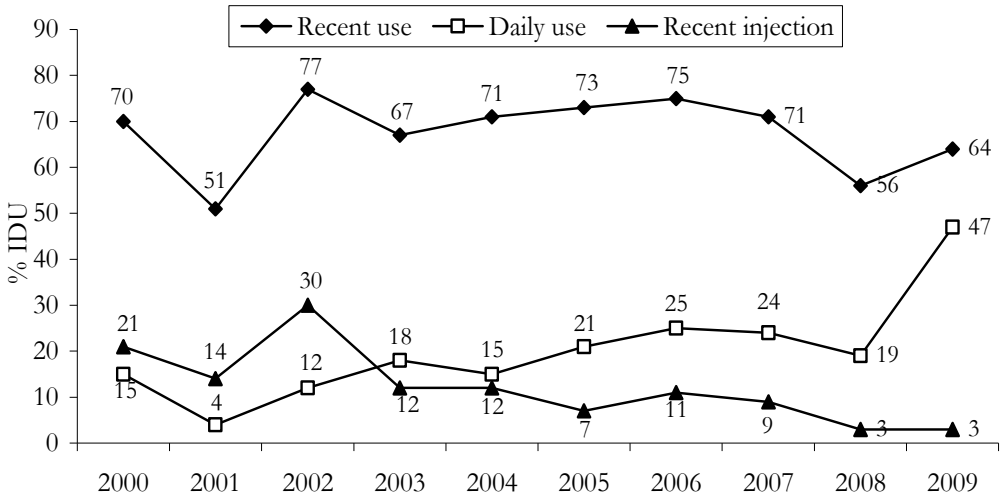
Of those that reported any use of benzodiazepines in the last six months (n=62), licit use was more common, reported by 81%. Of these participants, all reported swallowing as the ROA. The median days of use was 180 and 30 participants reported daily use (compared to 16 participants in 2008).

Illicit use of benzodiazepines was not specifically asked about prior to 2007. In 2009, 19% reported illicit use of benzodiazepines in the last six months, which significantly decreased from 35% in 2008 (95%CI 0.04, 0.28). Of these participants in 2009, all but two reported swallowing as the ROA. The median days of use was 10 and no participants 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 IDU reporting use of benzodiazepines has increased in the 2009 sample, particularly in the number of participants reporting daily use from 19% in 2008 to 47% in 2009.

Figure 44: Proportion of IDU reporting any benzodiazepine use, daily use and injection in the preceding six months, 2000-2009



Source: IDRS IDU interviews

Two KE reported that most IDU use benzodiazepines, both licitly and illicitly. One KE reported that there are more people seeking benzodiazepines to alleviate withdrawal symptoms due to an increased difficulty in obtaining opiates because of current high demand.

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 50% in 2009 which was not significantly different from 63% in 2008. Of these participants in 2009, lifetime swallowing was reported by 83% and lifetime injection by 38%. Eighteen percent reported any use of pharmaceutical stimulants in the last six months, which was not statistically significant to the 22% in 2008. All but one of these participants in 2009 reported illicit use (94%) compared to 100% reporting illicit use in 2008. Swallowing was reported by 82% and 47% reported injecting. Days of use ranged from one to 24 days, with a median of three days use in the last six months. This was not significantly different from the median of five days use among those reported illicit use in 2008. In 2009, the majority of those who reported use of pharmaceutical stimulants in the last six months reported dexamphetamine as the form of stimulant most used (77%), followed by Ritalin (15%) and Attenta (8%). In 2008, all users reported dexamphetamine as the most common form used of pharmaceutical stimulant used.

9.3 Hallucinogens

Lifetime use of hallucinogens was reported by 73% of IDU, which was the same proportion in the 2008 IDU sample. Recent use was not statistically significant. Across the two years: 13% in 2009 compared to 8% in 2008. Among participants who reported recent use of hallucinogens in 2009, days of use ranged from one to 10, with a median of one day. Participants were asked what hallucinogen was most used in the last six months; 11 reported LSD and two reported mushrooms.

9.4 Ecstasy

Lifetime use of ecstasy was reported by 77% of IDU in both 2009 and 2008. Of the 2009 participants that reported lifetime use, 93% reported ever swallowing, 40% reported ever injecting ecstasy and 11% reported ever snorting. Just over one-quarter (29%) of the sample reported use of ecstasy in the last six months, this was comparable to 25% in 2008. Of these participants in 2009, 96% reported swallowing and 68% reported injecting. Days of use ranged from one to 40, with a median of six days use in the last six months. Days of injection ranged from one to 15, with a median of three days injection in the last six months. All participants reported use of ecstasy pills and no participant reported use of ecstasy powder.

9.5 Inhalants

Lifetime use of inhalants was reported by 25% of IDU in 2009 which was significantly greater than 6% in 2008 of IDU (95%CI -0.28, -0.09) and use in the last six months was reported by 7% which was not statistically significant from the 1% recorded in 2008. Days of use ranged from one to 10, with a median of two days in the last six months. The majority of participants reported using nitrous oxide (n=4) as the main form used in the last six months. Amyl nitrate, glue and butane gas were reported as the main form used by one participant each.

9.6 Alcohol and tobacco

Lifetime use of alcohol was reported by 98% of IDU and 71% reported use in the last six months. These proportions were similar to last year: 98% reported lifetime use and 65% reported recent use. Of participants in 2009, 4% 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. Fifteen participants reported daily use of alcohol.

Prevalence of tobacco use was also comparable across years. In 2009, lifetime use of tobacco was reported by 94% of IDU (93% in 2008) and 85% reported use in the last six months (87% in 2008). Days of use ranged from 24 to 180, with a median of 180 days. Daily tobacco use was reported by 81% of IDU.

KE generally reported that most IDU use alcohol and tobacco. However, one KE reported that alcohol is particularly problematic among Indigenous injectors, as often these individuals are bought into emergency unconscious with very shallow breathing.

9.7 Summary of other drug trends

- Lifetime use of benzodiazepines was reported by 79% in 2009 which was not statistically significant. to 67% in 2008; The proportion reporting recent use was also not significantly changed being 64% in 2009 compared to 56% in 2008
- Of those who reported recent benzodiazepine use in 2009, the majority reported licit use.
- Lifetime use of pharmaceutical stimulants was reported by 50% in 2009 which was not significantly different from 63% in 2008, Recent use was reported by 18% of the 2009 sample not significantly different from 22% in 2008.
- Of those that reported recent pharmaceutical stimulant use in 2009, the majority reported illicit use.
- Some 73% of the samples reported lifetime use of hallucinogens in both 2008 and 2009. Recent use was also not significantly changed being 13% in 2009 and 8% in 2008.
- Lifetime use of ecstasy was reported by 77% of both the 2008 and 2009 samples. Recent use was also not significantly changed across the years being: 29% in 2009 versus 25% in 2008.
- 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.

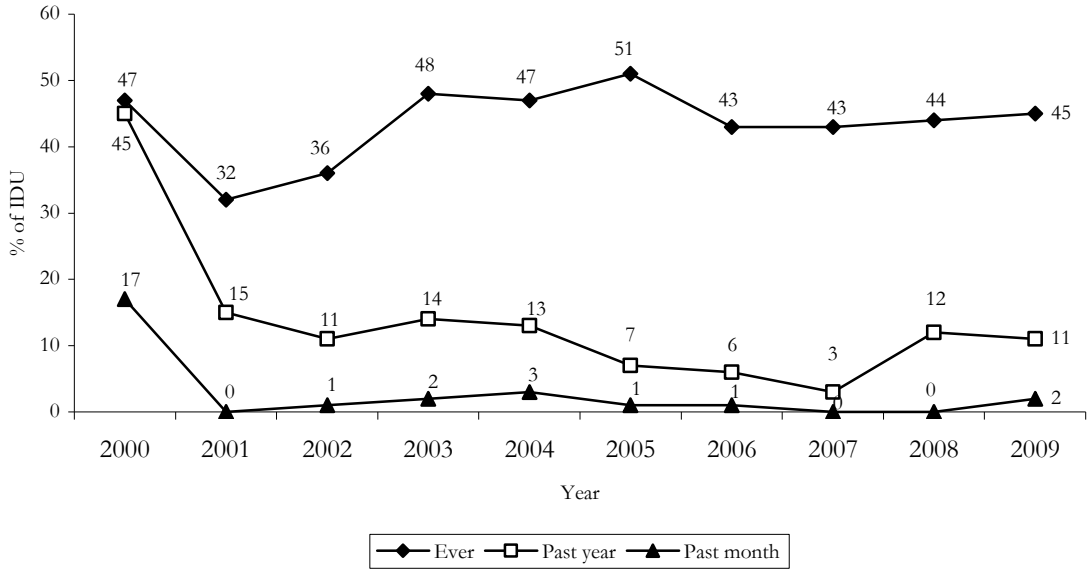
10. HEALTH-RELATED HARMS ASSOCIATED WITH DRUG USE

10.1 Overdose and drug-related fatalities

Non-fatal overdose

A lifetime history of heroin overdose was reported by 45% of IDU in 2009, which was not significantly different to 44% in 2008. Some 11% (n=11) of the 2009 sample reported overdose on heroin in the last 12 months was not significantly different to the 12% in 2008 (n=12). A slight increase was seen in the proportion of IDU who had overdosed in the past month prior to interview, from no participants in 2008 to two participants 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, 2000-2009



Source: IDRS IDU interviews

In 2009, 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, with the most commonly reported treatment was receiving narcan (n=7), followed by going to the hospital emergency department (n=6), calling an ambulance (n=5), receiving CPR from a health professional (n=3), receiving CPR from a friend/partner/peer (n=2) and seeing a psychologist (n=1). Multiple treatment responses were allowed for this question.

Three KE reported on an increase in heroin overdoses, including an increase in fatal overdoses in WA over the last 12 months. One KE commented that overdoses are due to fluctuating purity of heroin, as currently there is a fluctuating amount of purer 'China white' heroin available.

A lifetime history of overdose on any other drug was reported by 22% of IDU in 2009 with 8% reporting overdosing on another drug in the last 12 months. No participant report overdosing on another drug in the last month. Of these participants who had overdosed in the last 12 months (n=8), four had reported overdosing on benzodiazepines, two had overdosed on ecstasy,

one on morphine and one reported overdosing on anticonvulsive medication. Of these participants, the median number of overdoses was one (range=1-20). Of these participants who had overdosed in the last 12 months, the median length of time since last overdose was seven months (range=2-12 months).

In 2009, participants who had overdosed on other drugs in the last 12 months were asked what treatment they received at last overdose. Only eight participants responded to these questions, with three reporting they received no treatment, three reporting they attended hospital emergency department, two each also reported calling an ambulance, and receiving CPR from a health professional and receiving CPR from a friend/partner/peer.

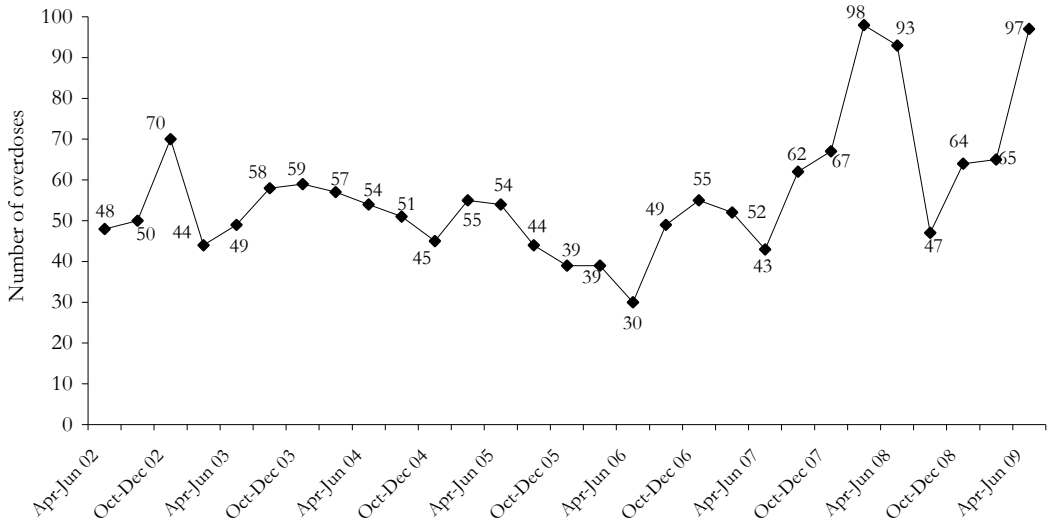
One KE reported an increasing number of overdoses on benzodiazepines, and that these overdoses are occurring daily. This KE suggested that more safeguards need to be put in place to avoid high amount of doctor shopping[1] that occurs in WA.

Figure 46 presents the number of narcotic overdoses attended by St John Ambulance from April 2002 to June 2009. 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=42), since then numbers have been gradually increasing and have peaked again in the second quarter on 2009 (n=97).

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

[1] Doctor shopping refers to the practice of a patient requesting care from multiple physicians, often simultaneously, without making efforts to coordinate care or informing the physicians of the multiple caregivers. This usually stems from a patient's addiction to, or reliance on, certain prescription drugs or other medical treatment (Wikipedia, 2010).

Figure 46: Number of ambulance callouts to narcotic overdoses, WA, 2nd quarter 2002-2nd quarter 2009



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

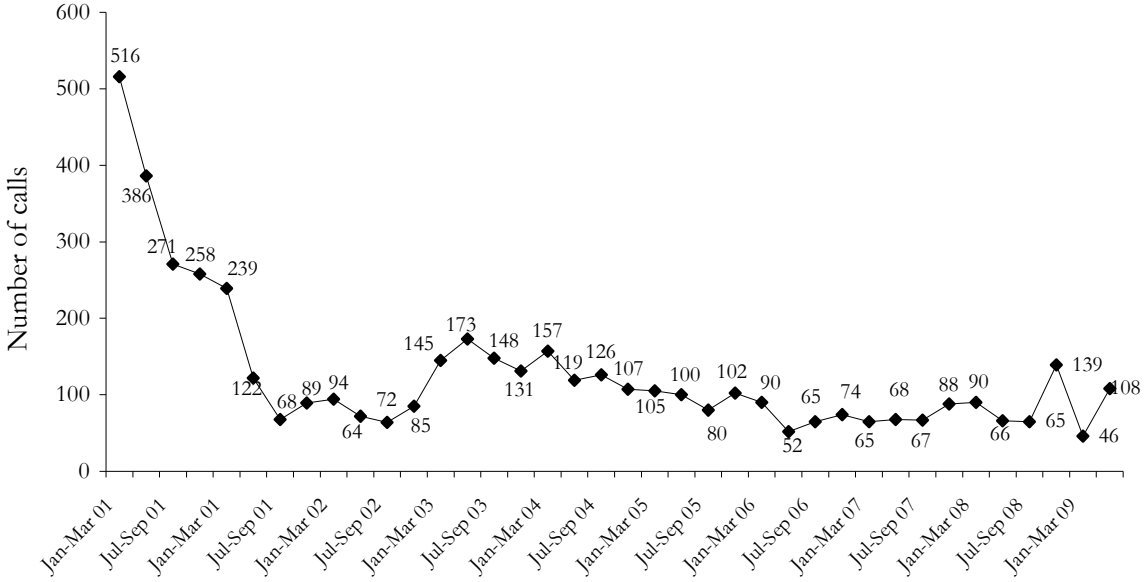
The ABS collates drug-related death data and, from 2006, it relied solely on data contained on the National Coronial Information System (NCIS). Because of this change in methods of collating death data, comparisons to earlier overdose bulletins by NDARC (Degenhard and Roxburgh, 2007a; Degenhard and Roxburgh, 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 deaths data for 1988 to 2005. Accordingly, only drug-related deaths for 2007 are reported here. Further, the following data should be interpreted in conjunction with the ABS Technical Note 2: Coroner Certified Deaths, 3303.0 2007 (Roxburgh and Burns, 2009).

In 2007, the number of open coronial cases coded as unknown cause was 40 in WA and 1027 nationally. The number of accidental deaths due to opioids among those aged 15 to 54 years in WA was 22 (compared to 29 in 2006), representing 8% of the national total (n=266). In WA, these fatalities comprised of 17 males and five females.

10.2 Calls to telephone helplines

Figure 47 presents the number of telephone calls to WA Alcohol and Drug Information Service (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, then, since July-September 2006, the number of ADIS calls enquiring about heroin stabilised. In the 2008/09 financial year, heroin-related calls fluctuated, with both increases and decreases occurring, 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.

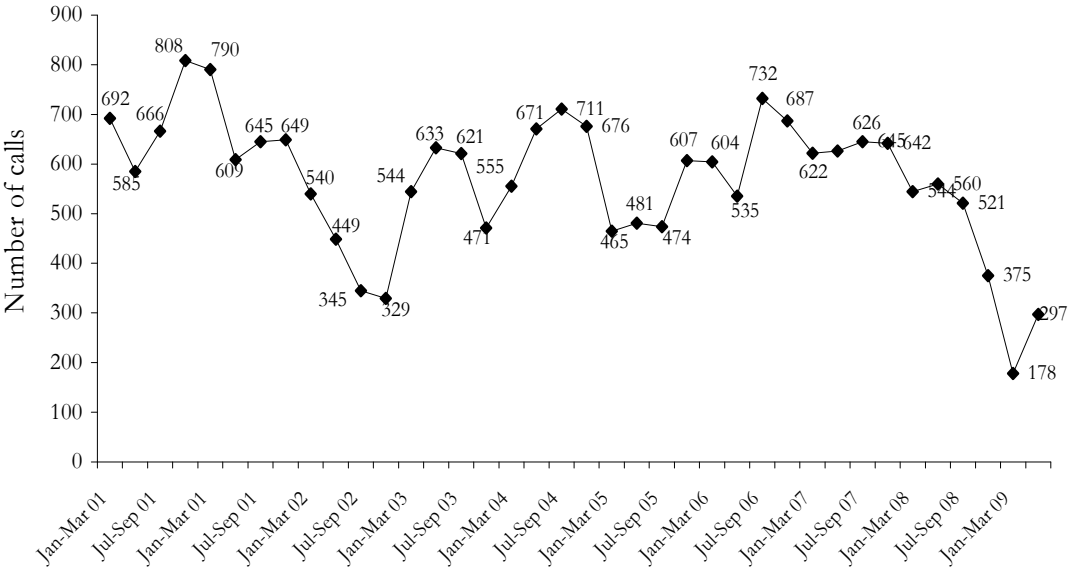
Figure 47: Number of enquiries to ADIS regarding heroin, Jan 2000-Jun 2009



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 2000 (n=808) and the lowest number of calls was in the first quarter of 2009 (n=178). The latest data for the 2008/09 financial year shows a sharp decline in the number of ADIS calls regarding amphetamines, with the most recent two quarters representing the lowest number of enquiries regarding amphetamine since ADIS data was collected for the IDRS.

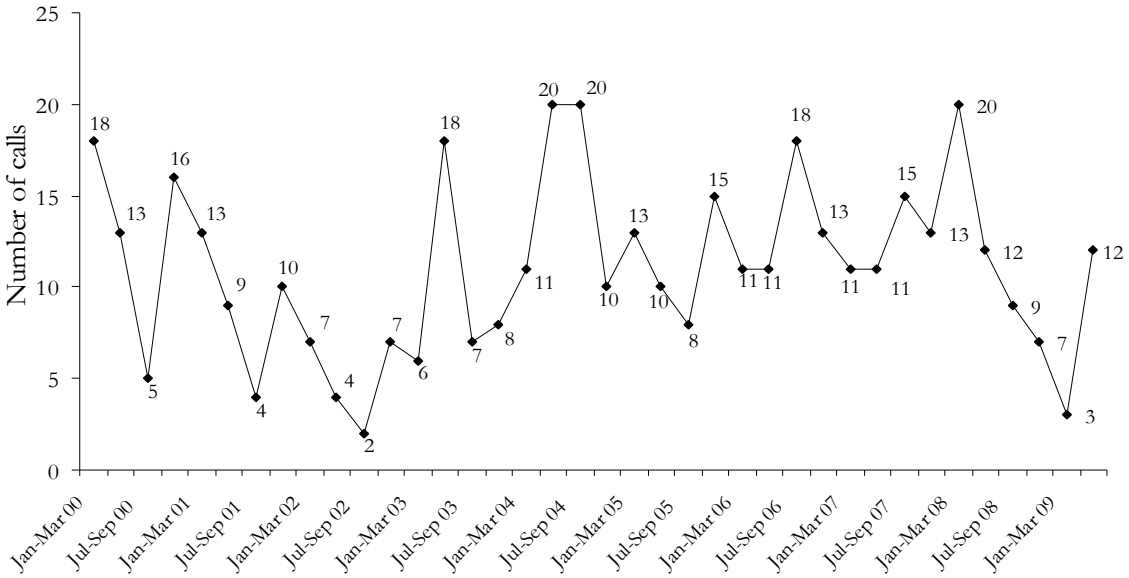
Figure 48: Number of enquiries to ADIS regarding amphetamines, Jan 2001-Jun 2009



Source: ADIS

Calls to WA ADIS concerning the use of cocaine for each quarter from January 2000 to June 2009 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 2008/09 financial year, cocaine-related calls accounted for less than 0.1% of total calls to ADIS.

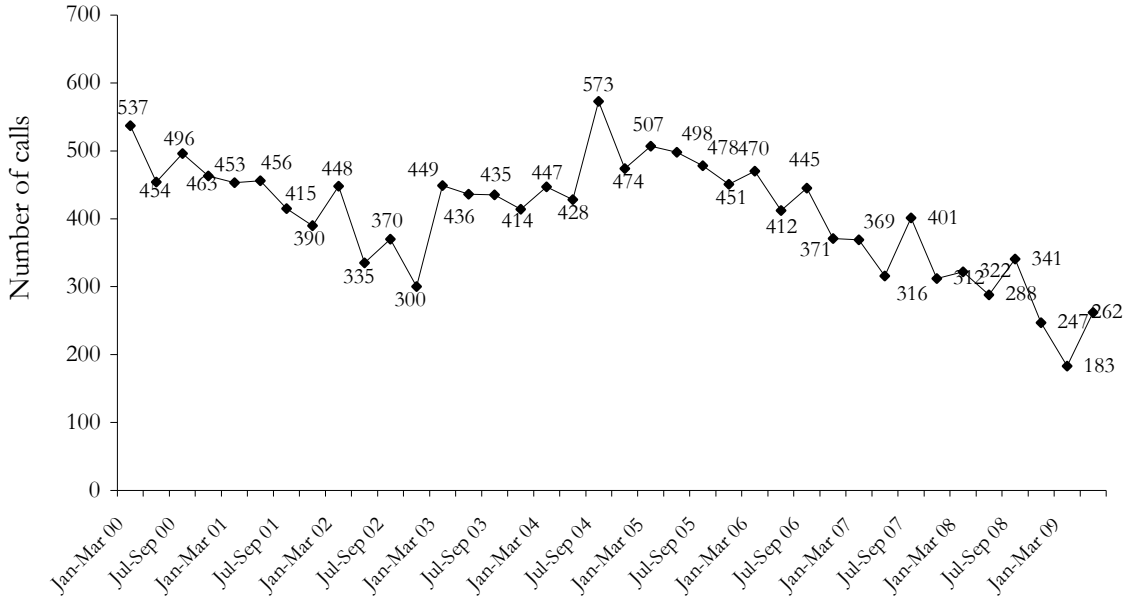
Figure 49: Number of enquiries to ADIS regarding cocaine, Jan 2000-Jul 2009



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 which there has been a decreasing number of calls regarding cannabis, particularly observed in the most recent financial year. The lowest number was in the most recent quarter of January-March 2009 (n=183). In the financial year 2008/09, cannabis-related calls accounted for 10-14% of total calls to ADIS.

Figure 50: Number of enquiries to ADIS regarding cannabis, Jan 2000-Jun 2009



Source: ADIS

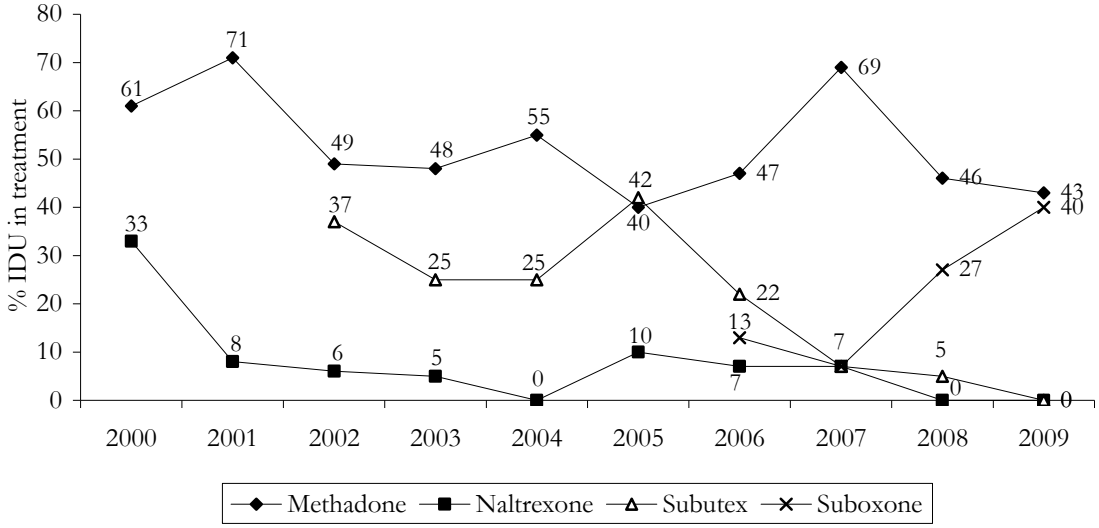
10.3 Drug treatment

10.3.1 WA IDRS sample

Pharmacotherapy treatment

In 2009, 30% (n=30) of participants reported currently being in drug treatment. Of these, 83% (n=25) were receiving pharmacotherapies for opioid dependence. Methadone remained the most common pharmacotherapy and was reported by 43% of those in current treatment, followed by Suboxone which was reported by 40% 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, while the proportion reporting current Suboxone treatment has increased. 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. The fact that no IDU interviewed in the IDRS in 2008 and 2009 reported recent Naltrexone treatment may in part be due to the large proportion of the sample that have been recruited through the needle exchange in the past 2 years.

Figure 51: Proportion of participants reporting current pharmacotherapy, 2000-2009



Source: IDRS IDU interviews
Note: Suboxone was not asked about prior to 2006.

Of the total sample in 2009, 15% reported licit use of methadone in the last six months, with a median of 180 days used/in treatment (range=7-180 days). No participant reported licit use of physeptone in the last six months. One participant reported licit use of Subutex with this participant using daily. Licit use of Suboxone was reported by 12%, with a median of 180 days used/in treatment (range=3-180 days).

Two KE reported an increase in pharmaceutical treatment among IDU users, with one KE nominating an increasing number of IDU obtaining benzodiazepines for treatment. One KE noted an increase in IDU seeking information regarding naltrexone implants (naltrexone is an opioid receptor antagonist that blocks the effects of opioids) and Suboxone.

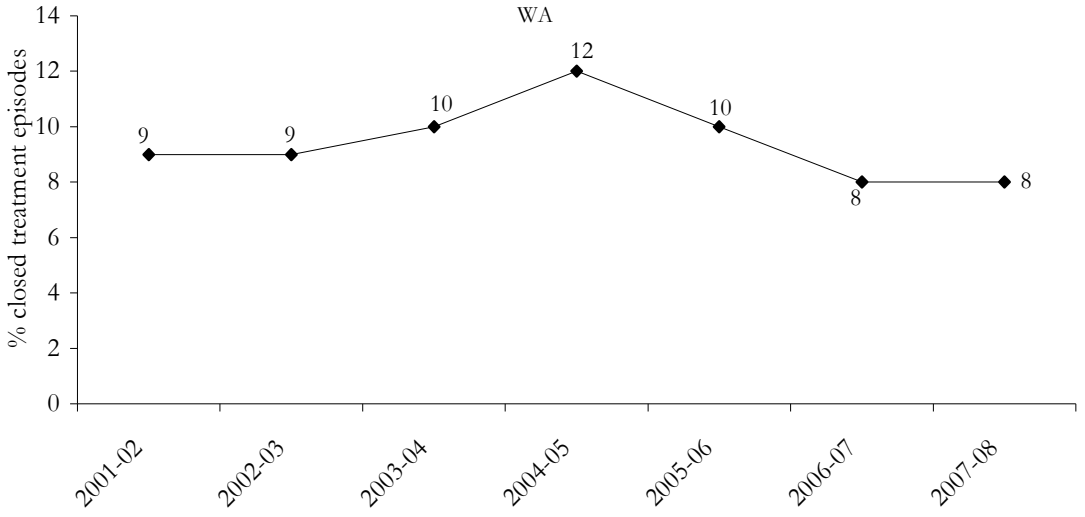
10.3.2 Drug treatment in WA

In 2007/08, there were 18,705 closed treatment episodes in WA (based on the date of commencement), representing an increase of seven treatment agencies and around 1,000 treatment episodes compared to 2006/07. 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 2007/08. Following a peak in 2004/05 (12%), the percentage of closed treatment episodes where heroin was the principal drug of concern steadily decreased then stabilised to the lowest percentage (8%) reported from 2001/02 to 2007/08. As in 2006/07, in 2007/08, heroin represented 8% of closed treatment episodes in WA compared to 11% nationally.

Figure 52: Percentage of closed treatment episodes where heroin was the principal drug of concern, WA 2001/02-2007/08

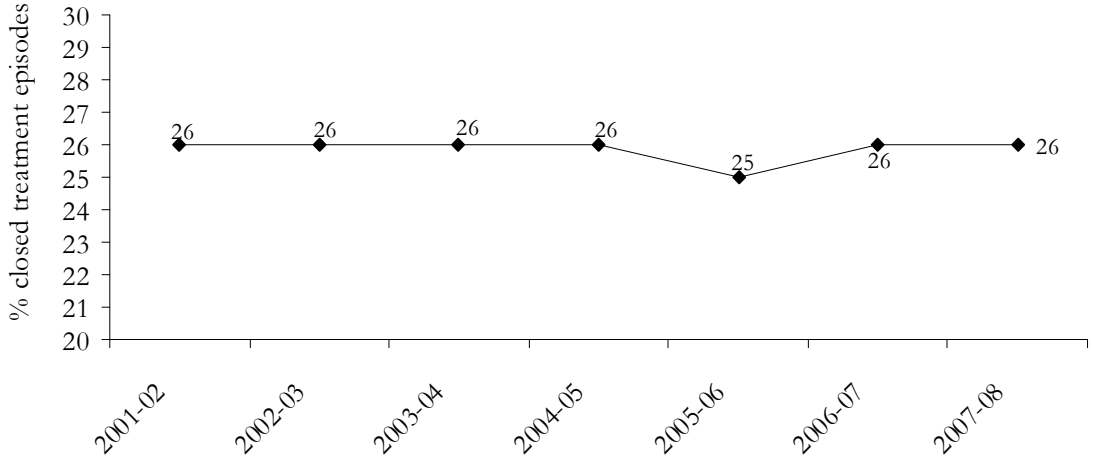


Source: 2007/08 National Minimum Data Set, AIHW and WA Drug and Alcohol Office

Amphetamines

Figure 53 presents the percentage of closed treatment episodes for amphetamines in WA from 2001/02 to 2007/08. It is evident that the percentage attributed to amphetamines has shown little variation across time, accounting for around one-quarter of closed episodes in each year. In 2007/08, amphetamines represented 26% of closed treatment episodes in WA compared to 11% nationally.

Figure 53: Percentage of closed treatment episodes where amphetamines was the principal drug of concern, WA 2001/02-2007/08

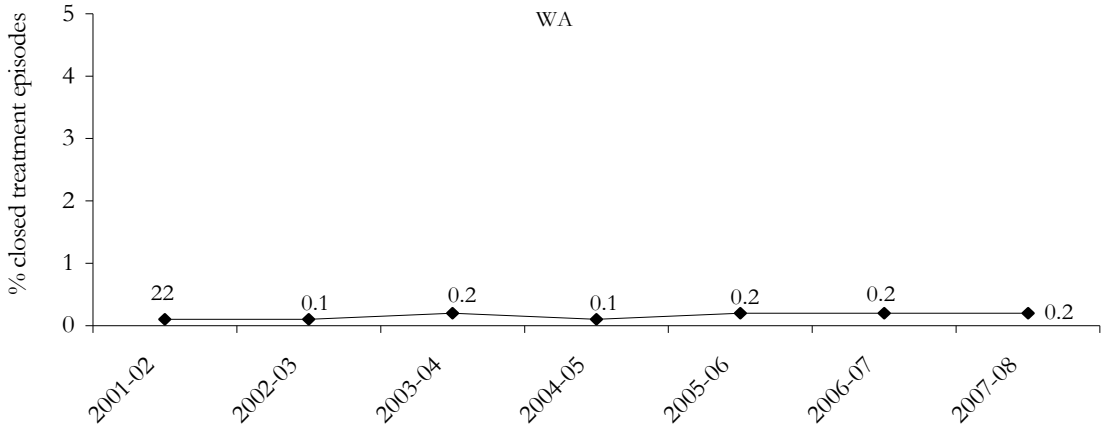


Source: 2007/08 National Minimum Data Set, AIHW and WA Drug and Alcohol Office

Cocaine

Figure 54 presents the percentage of closed treatment episodes for cocaine in WA from 2001/02 to 2007/08. 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 2001/02-2007/08

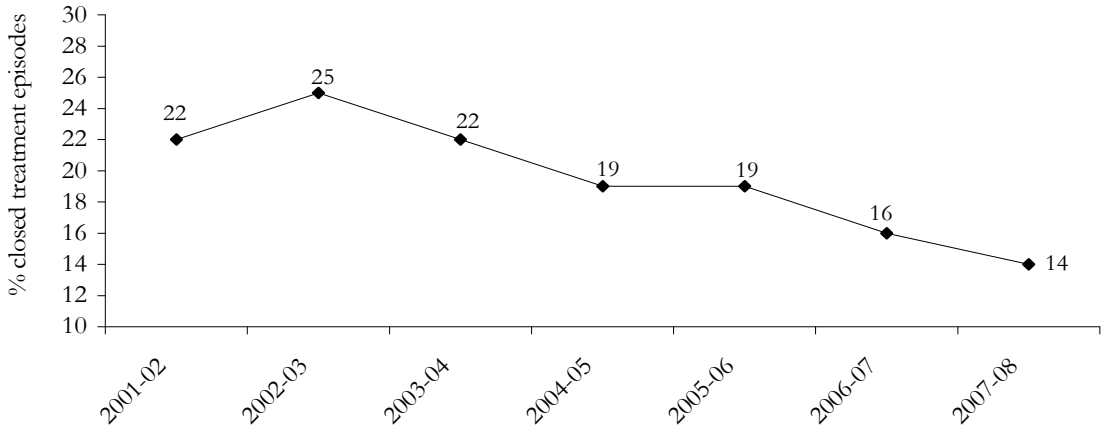


Source: **2007/08 National Minimum Data Set, AIHW, and WA Drug and Alcohol Office**

Cannabis

Figure 55 presents the percentage of closed treatment episodes for cannabis in WA from 2001/02 to 2007/08. Following an initial increase from 2001/02 to 2002/03, the percentage of closed episodes attributed to cannabis has steadily decreased over time. In 2007/08, cannabis represented 14% of closed treatment episodes in WA compared to 22% nationally.

Figure 55: Percentage of closed treatment episodes where cannabis was the principal drug of concern, WA 2001/02 -2007/08



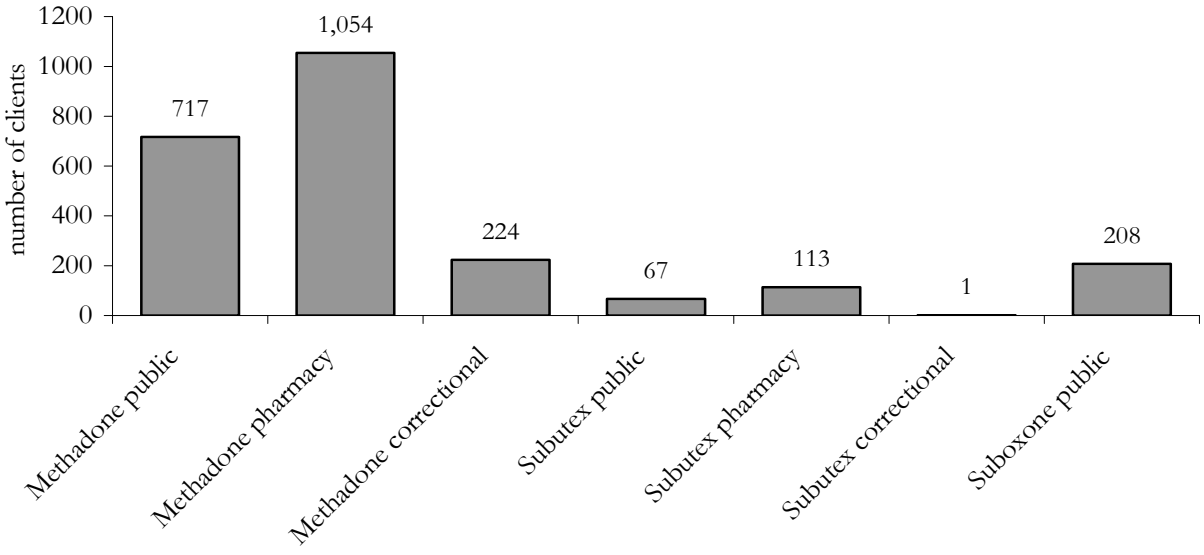
Source: 2007/08 National Minimum Data Set, AIHW and WA Drug and Alcohol Office

Pharmacotherapy treatment

With regards to pharmacotherapy treatment, the National Opioid Pharmacotherapy Statistics Annual Data Collection conducted in 2008 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=1,054). Following this is methadone administered at a public clinic (n=717), then correctional facility (n=224) and Subutex administered at a public clinic (n=208). Small numbers were reported for Subutex.

Figure 56: Estimated number of pharmacotherapy clients by pharmacotherapy drug type and dosing site, WA, 2008



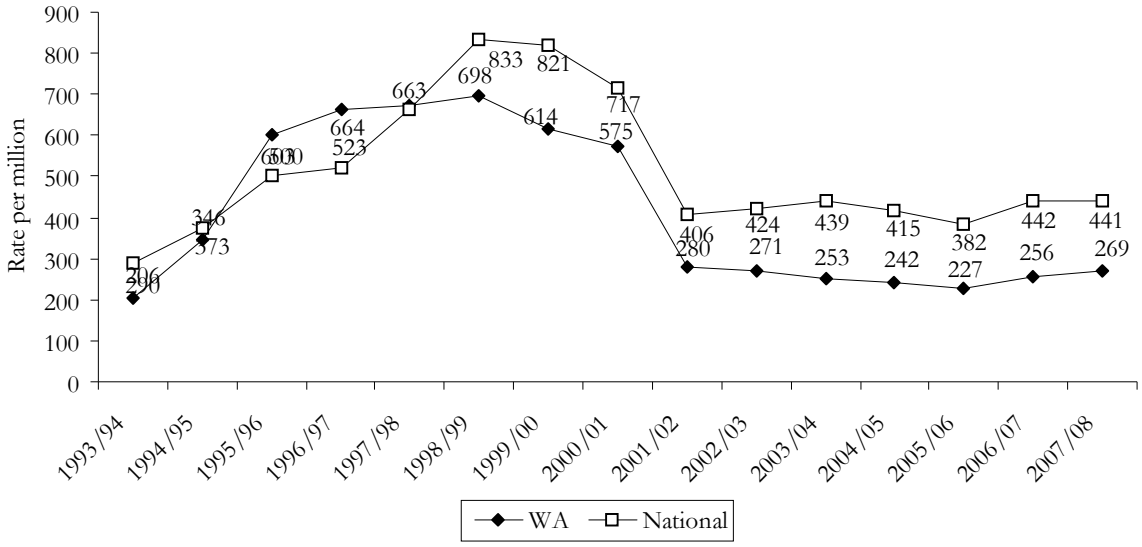
Source: National Opioid Pharmacotherapy Statistics annual data collection (2008), AIHW

10.4 Hospital admissions

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

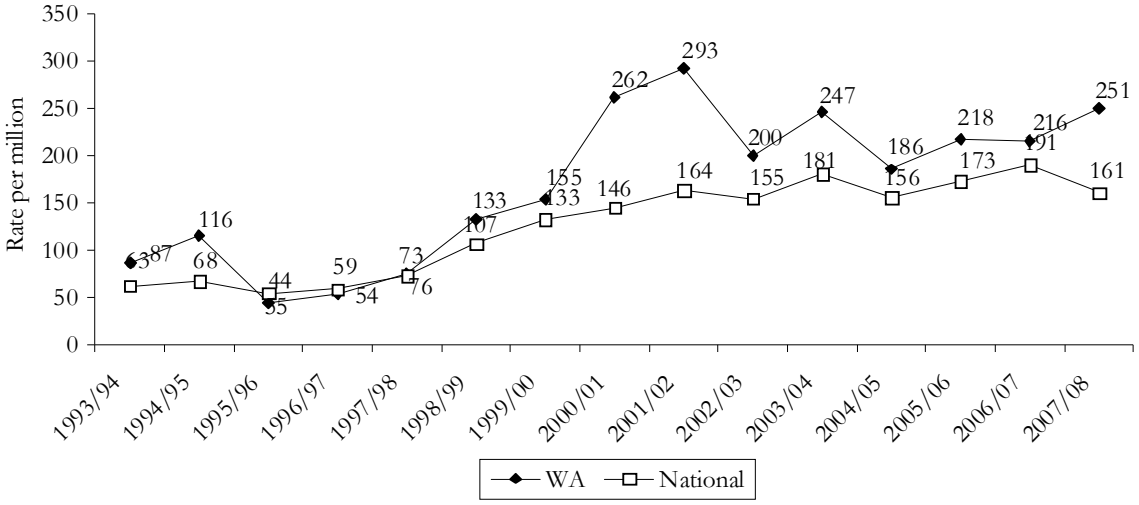


Source: National Hospital Morbidity Database

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

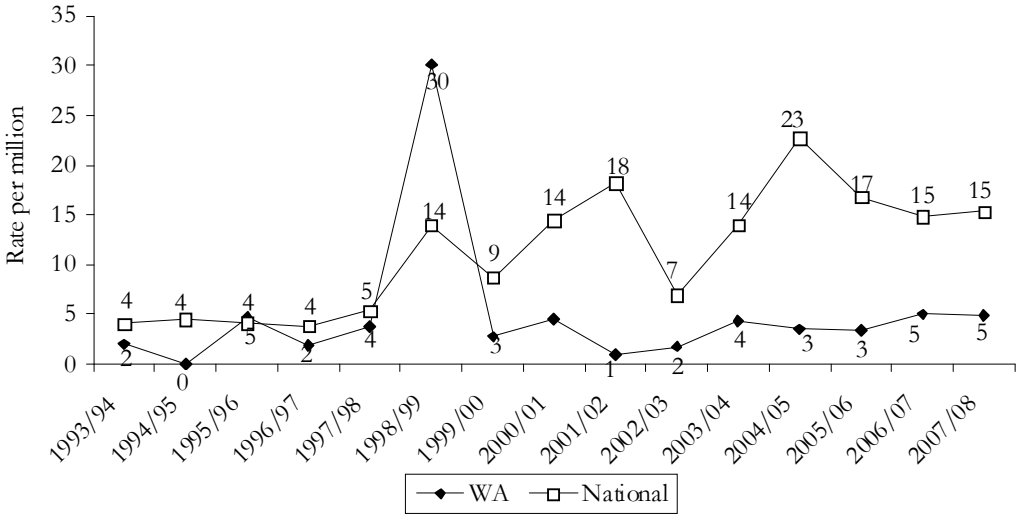


Source: AIHW

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

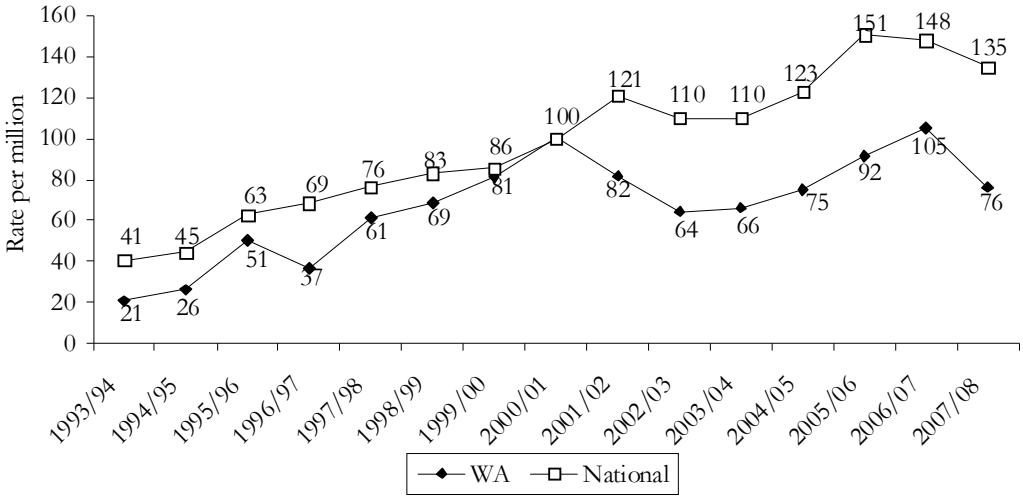


Source: AIHW

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 injecting equipment 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 (86%) reported obtaining needles from a NSP; chemist was reported by 21%, 15% reported from friends and 6% reported from their dealer. 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 66% (NCHECR, 2008). 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; 46% and 44% respectively.

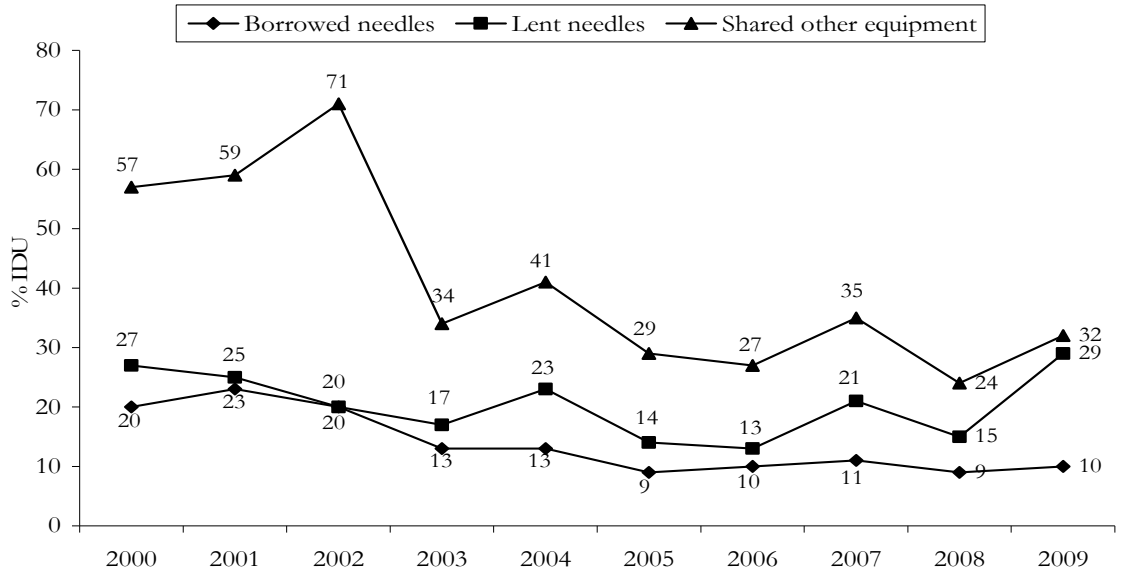
With regard to sharing needles, the vast majority (90%) reported that they had not used a needle after someone else in the last month. Of those that did (n=10), three participants each reported using a needle once, twice and three to five times after someone else and one participant reported doing so more than 10 times in the last month. The majority reported only one person had used the needle before them (n=8), with two participants reporting two different people had used a needle before them in the last month. The most common people to use a needle before were a regular sex partner and a close friend (n=5 each).

In 2009, 29% of IDU reported that someone else had used a needle after them in the last month, this was significantly greater than the 15% reported in 2008 (95%CI -0.25, -0.02). All participants were asked how many times in the last month they had re-used their own needles and 44%

reported never. Re-use of own needle once was reported by 18%, twice by 32%, three to five times by 27%, six to 10 times by 9% and more than 10 times by 14%.

Figure 61 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 and shared equipment have increased from 2008.

Figure 61: Proportion of IDU reporting sharing injecting equipment in the month preceding interview, 2000-2009

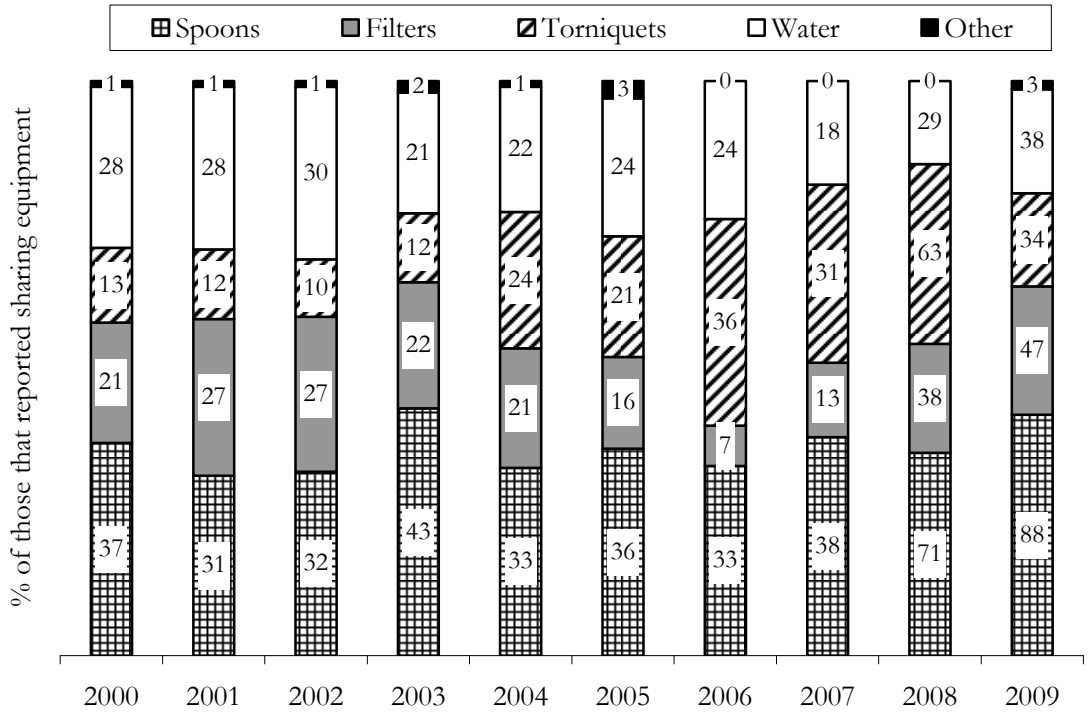


Source: IDRS IDU interviews

Participants were also asked if they had used injecting equipment after someone else in the last month and almost one-third (32%) of the sample reported that they had. Of these participants, 88% reported using spoons/mixing containers, 47% reported using filters, 34% reported using tourniquets, 38% reported using water and 3% reported using other equipment. Figure 62 presents the proportions sharing each type of equipment among those that reported sharing equipment across IDRS surveys.

A number of KE from health care backgrounds have observed increasing unsafe and poor injecting practices among IDU, with abscesses and infections from injection being more frequently treated in hospitals and treatment services. Another KE reported on the increasing amount of skin/vein and heart problems caused by injecting without using a filter. 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, as clean needles and filters are sometimes costly.

Figure 62: Proportion of IDU reporting sharing each type of injecting equipment among those that shared equipment, 2000-2009

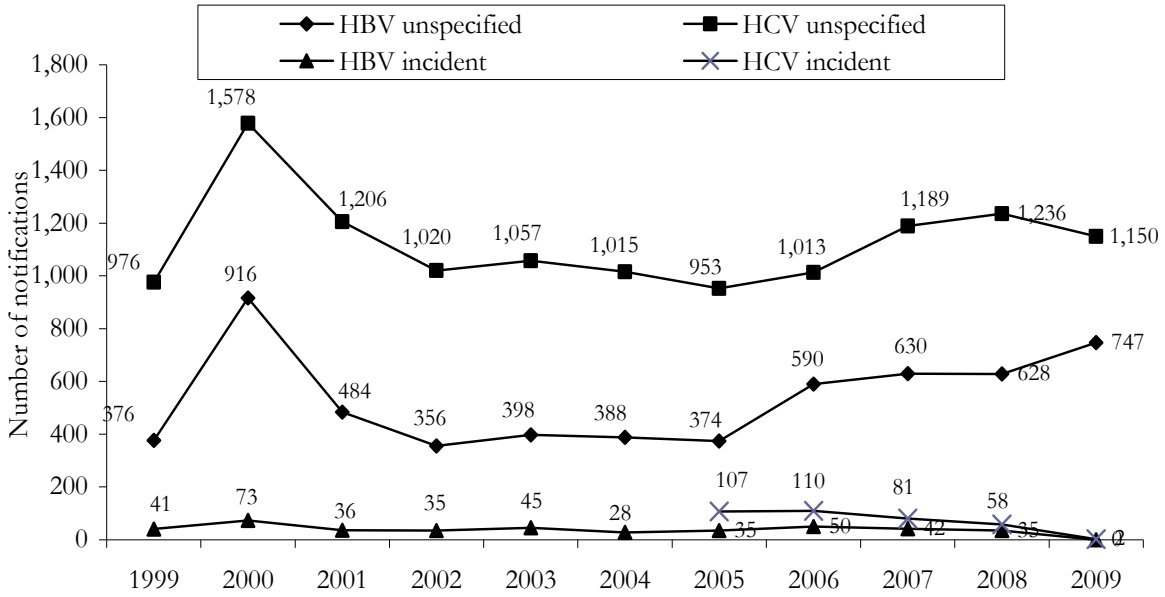


Source: IDRS IDU interviews

10.5.2 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 2008. It is evident that unspecified cases far exceed incident cases for both types of BBV. 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, these stabilised from 2007 to 2008. In 2009, the number of HCV unspecified cases decreased slightly from 1,236 in 2008 to 1,150 in 2009, whilst the number of HBV unspecified cases increased to 747, 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=0) and HCV (n=2) incident cases in 2009 was the lowest recorded since NNDSS data collection began.

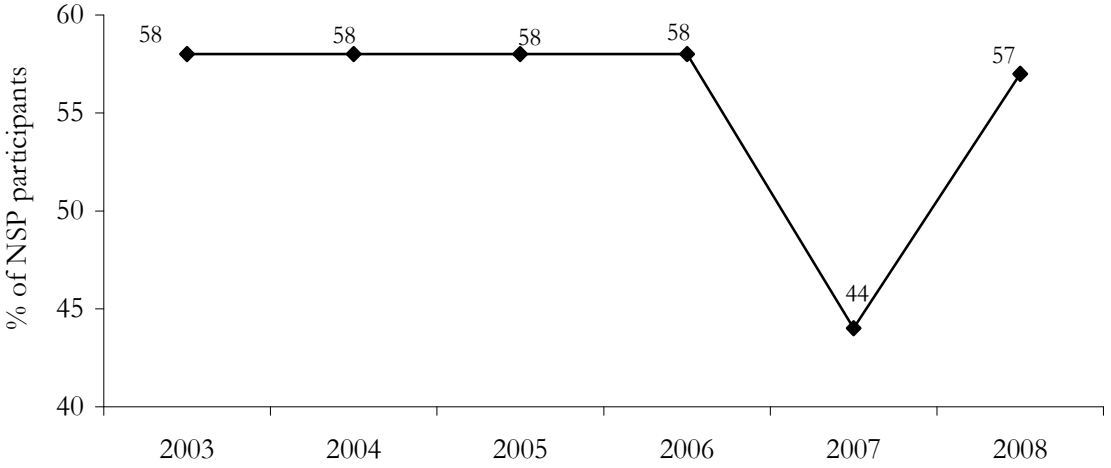
Figure 63: Total notifications for unspecified and incident HBV and HCV infection, WA 1999-2009



Source: Communicable Diseases Network – Australia – NNDSS[2]
Note: Data for HCV incident for WA was not available prior to 2005.

Figure 64 presents the percentage of NSP participants in WA from 2003 to 2008 reporting HCV infection. It is evident that the proportion of participants reporting 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% which was comparable to findings prior to 2007.

Figure 64: Percentage of NSP participants in WA reporting HCV antibody, 2003-2008

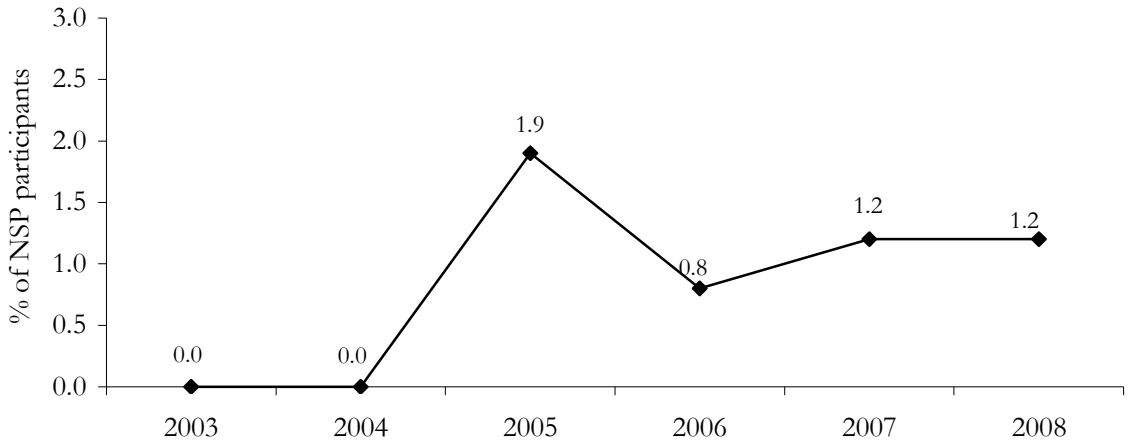


Source: **NCHECR**

[2] 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 65 presents human immunodeficiency virus (HIV) prevalence among NSP participants in WA from 2003 to 2008. Following two years of no reports of HIV, three participants reported HIV in 2005, and one participant reported HIV in 2006, 2007 and 2008.

Figure 65: Percentage of NSP participants in WA reporting HIV antibody, 2003-2008



Source: **NCHECR**

10.5.3 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 74% in 2009 which was not significantly different to 75% in 2008. Following this, 10% nominated a car as last location of injection compared to 14% in 2008. Smaller proportions nominated a public toilet (8%), a street/car park/beach (5%) and 'other' (2%).

Table 17: Proportion of IDU participants reporting the last location for injection, 2008-2009

Location	2008	2009
Private home	75	74
Street/car park/beach	6	5
Car	14	10
Public toilet	2	8
Other	3	2

Source: **IDRS IDU interviews**

In 2009, participants were asked about injecting behaviour while in prison. Around half of the WA sample reported a prison history in their lifetime. Of those with a prison history, 49% reported ever injecting while in prison. Seventeen percent of participants with a history of injecting while in prison reported injecting in the last year while in prison.

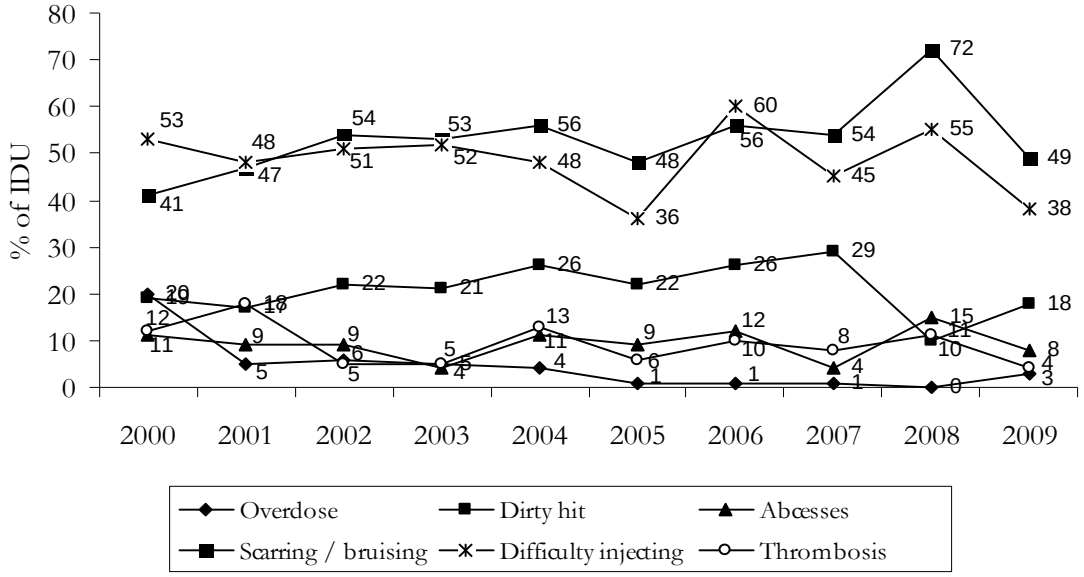
10.5.4 Injection-related health problems

Participants were asked about injection-related health problems they experienced in the month prior to interview. In 2009, three participants reported overdose in this time compared to no participants in 2008. Seventeen percent of the 2009 sample reported experiencing a dirty hit, which was not significantly different to the 10% in 2008. The most commonly reported injection problem remained prominent scarring/bruising; however, the proportion reporting this problem

decreased from 72% in 2008 to 49% in 2009 (95%CI 0.13, 0.39). This was followed by difficulty injecting, reported by 38% in 2009 which was significantly less than 55% in 2008 (95%CI 0.29, 0.03). Smaller proportions in 2008 reported abscesses/infections from injecting (8%) and thrombosis (4%).

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. 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 2009.

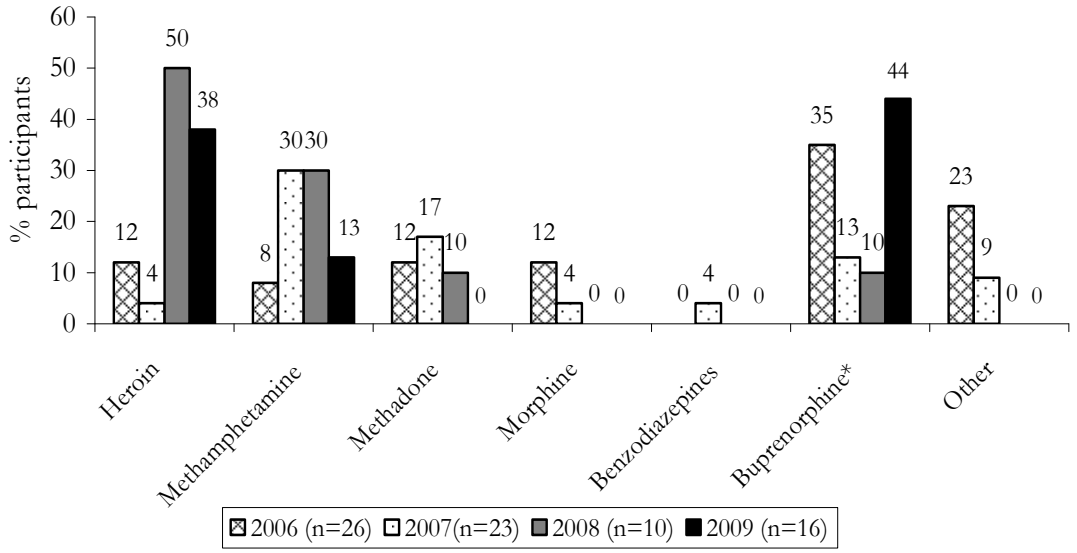
Figure 66: Proportion of IDU reporting injection-related problems in past month, by problem type, 2000-2009



Source: IDRS IDU interviews

Of the 16 participants in 2009 that reported experiencing a dirty hit, six each nominated heroin and Suboxone as the main drug, two nominated methamphetamine and one each nominated cocaine and Subutex. Figure 67 presents the main drugs nominated by participants who reported a dirty hit across IDRS surveys. There was an apparent increase in the proportion nominating buprenorphine in 2009; however, this is based on a very small number of participants.

Figure 67: Main drug causing dirty hit of those that reported a dirty hit in last month, 2005-2009



Source: **IDRS IDU interviews**

* Buprenorphine includes both Subutex and Suboxone

10.7 Mental and physical health problems and psychological distress

10.7.1 Self-reported mental health problems

In 2009, 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 2009, 37% of IDU reported experiencing a mental health problem in the last six months, which was not significantly different to the 40% who did so in 2008. As in previous years, the most commonly reported mental health problems were depression (n=28) and anxiety (n=14). Three participants reported schizophrenia and PTSD and two each reported bipolar disorder, panic, OCD, paranoia, personality disorder, and psychosis. One each reported drug induced psychosis, phobias and mania.

Of those reporting a mental health problem (n=36), 78% reported attending a professional in relation to the problem. These participants (n=28) were asked about prescription medications and five reported taking no medication. Of the remaining participants (n=23), 95% reported taking an antidepressant of which the most common were Efexor (venlafaxine) (n=4) and Avanza (mirtazapine) (n=3). Twenty-two percent reported taking benzodiazepines and the most common was Xanax (alprazolam). Eight participants reported taking antipsychotics (35%); the most common was Seroquel (quetiapine) and Zyprexa (olanzepine).

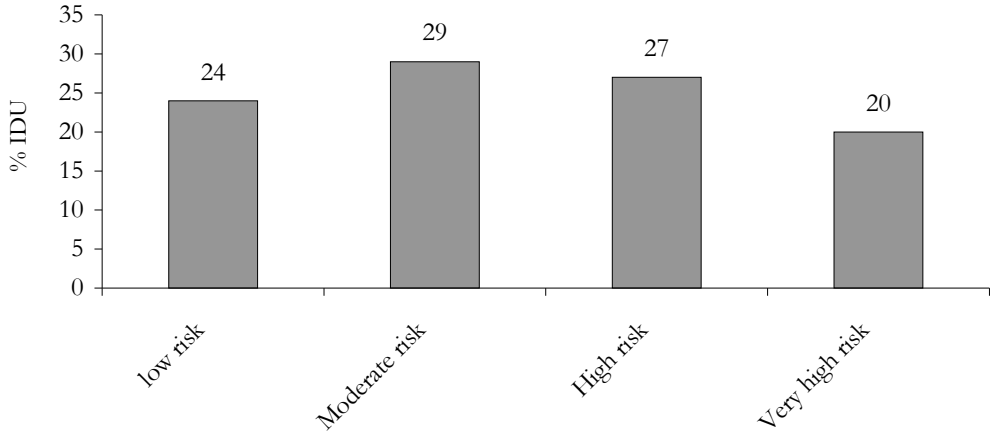
Numerous KE reported a large proportion of IDU have mental health and behavioural issues. Two KE reported an increase in mental health problems among methamphetamine users, with problems observed to be severe and increasing, often leading to a psychotic episode which can be traumatic for the individual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

10.7.2 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 (CIDI) (Andrews and Slade, 2001).

In 2009, 75 participants completed the K10 and scores are presented by risk category in Figure 68. The median total score in 2009 was 21 (range=10-40). In 2009, 24% scored at low risk, 29% scored at moderate risk, 27% scored at high risk and 20% scored at very high risk.

Figure 68: Total K10 scores by risk category among IDU, WA 2009

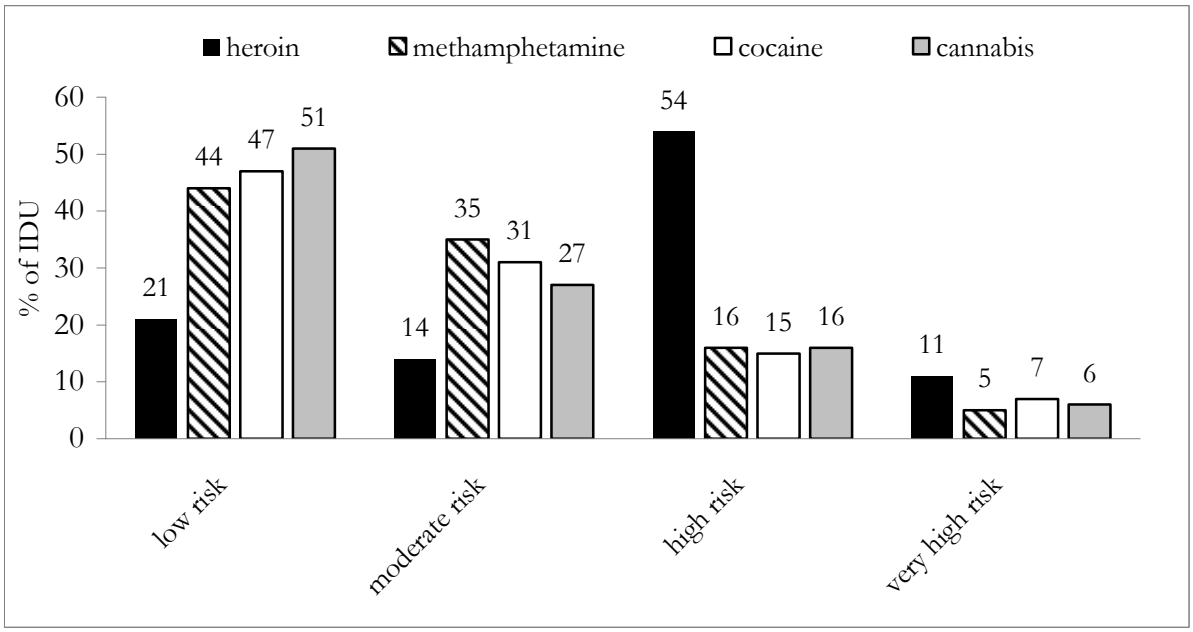


Source: IDRS IDU interviews

K10 scores for IDU in 2009 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.

K10 results for the 2007 NDSHS can also be interpreted according to drug use in the last month. The proportions scoring in each risk category for drugs of relevance to the IDRS are presented in Figure 69. The proportions for IDRS IDU and NDSHS past month heroin users are mostly comparable: 24% IDU versus 21% heroin users in low category, 29% IDU versus 14% heroin users in moderate category, 27% IDU and 54% heroin users in high category and 20% IDU versus 11% heroin users in very high category. It is evident that the proportion of past month heroin users in the high risk category is far greater than the proportion of users of other drugs.

Figure 69: Total K10 scores by risk category among general population aged 18 years and older according to past month drug use, 2007 NDSHS



Source: 2007 NDSHS

10.8 Driving risk behaviour

10.8.1 Driving and alcohol

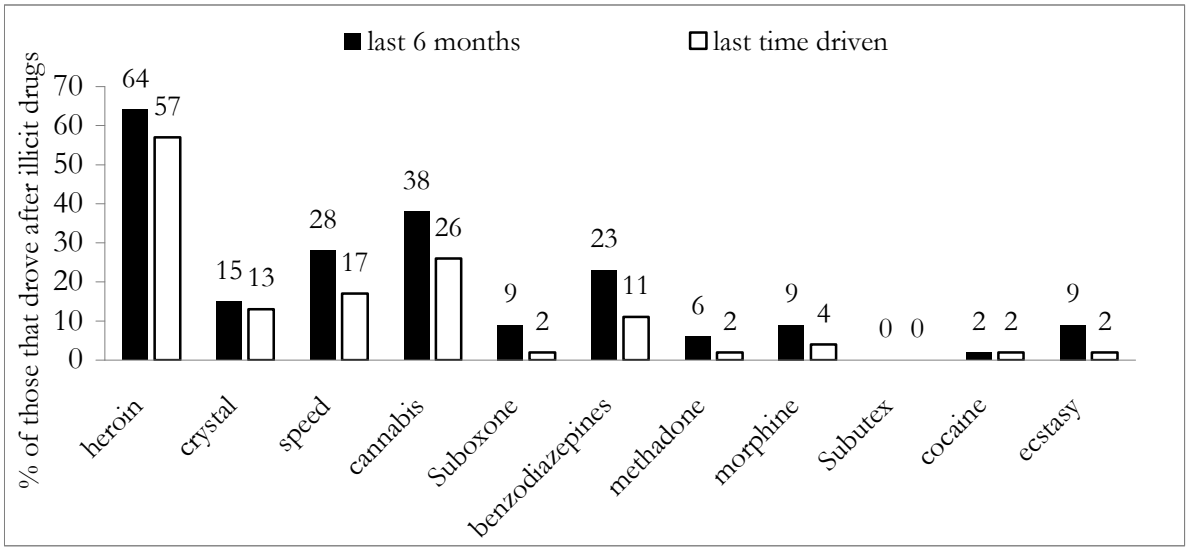
In 2009, 56% of the sample reported driving a vehicle in the six months preceding interview (65% in 2008). Of these participants, 30% reported driving under the influence of alcohol during that time, which was not significantly different to the 31% who did so in 2008. In 2009, 10 participants reported driving over the legal limit for blood alcohol content. The median number of times these participants had driven over the legal limit was seven (range=1-20).

10.8.2 Driving and illicit drugs

In 2009, 87% of those who had driven a vehicle in the last six months reported driving after consuming illicit drugs (83% in 2008). The median number of times these participants had driven after taking drugs was 24 (range=1-180). Participants were asked how many minutes after consuming drugs they had driven on the last occasion, with a median of 10 minutes (range=1-360 minutes).

The most common drug after which these participants had driven after consuming was heroin, reported by 64%. This was followed by cannabis (38%), speed (28%) and benzodiazepines (23%). Smaller proportions reported crystal (15%), Suboxone (9%), morphine (9%), ecstasy (9%) and methadone (6%). Heroin was also the drug reported by the greatest proportion as the drug last driven under the influence of, reported by 57%. Cannabis was reported by 26%, speed by 17%, crystal by 13%, benzodiazepines by (11%), morphine by (4%) and Suboxone, methadone, cocaine and ecstasy by 2% each. Figure 70 presents the proportion of IDU that drove after consuming each drug type in the last six months and on the last driving occasion.

Figure 70: Driving under the influence of illicit drugs by drug type, WA, 2009



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, 26% reported that they were slightly impaired and smaller proportions reported that they were quite impaired (11%), slightly improved (4%) and quite improved (2%).

Six participants in 2009 reported they had been drug driving tested before, four participants had been tested once and two had been tested for drug driving twice before.

11. LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH DRUG USE

11.1 Reports of criminal activity among IDU participants

11.1.1 Criminal activity

In 2009, 33% of the sample reported they had been arrested in the last 12 months, which was not significantly different to the 28% who did so in 2008. Unlike previous years' samples when use/possession of drugs was the most commonly reported reason for arrest, in 2009, the greatest proportion of those who had been arrested in the last 12 months was for property crime (47%). This was followed by four participants reporting use/possession drugs.

Participants were asked what crimes they had engaged in during the last month (Table 18). In 2009, 43% of IDU reported involvement in any crime in the last six months, which was significantly greater than the 26% reported doing crime in 2008 (95%CI -0.29, -0.03). As in previous years, the most common type of criminal activity was drug dealing, reported by 37 participants in 2009. Of those that reported dealing, 13 participants reported engaging in this activity less than once a week, two participants reported once a week, 12 participants reported more than once a week-but not daily, and 10 participants reported daily. Twenty-one participants reported engaging in property crime in the last month, with 13 reporting less than once a week, one reporting once a week, three reporting more than once a week, less than daily and four reporting daily. Six participants reported engaging in fraud, with four of these participants reporting doing so less than once a week and two reporting daily. Five participants reported engaging in violent crime, three reporting doing so less than once a week, one participant once a week and one participant daily.

Table 18: Criminal activity as reported by IDU participants, 2007-2009

Criminal activity (%)	2007 N=80	2008 N=100	2009 N=100
Criminal activity in last month:			
Dealing	44	18	38
Property crime	22	5	22
Fraud	4	2	6
Violent crime	5	1	5
Any crime	48	26	43
Arrested in last 12 months	41	28	33

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 drug manufacturing.

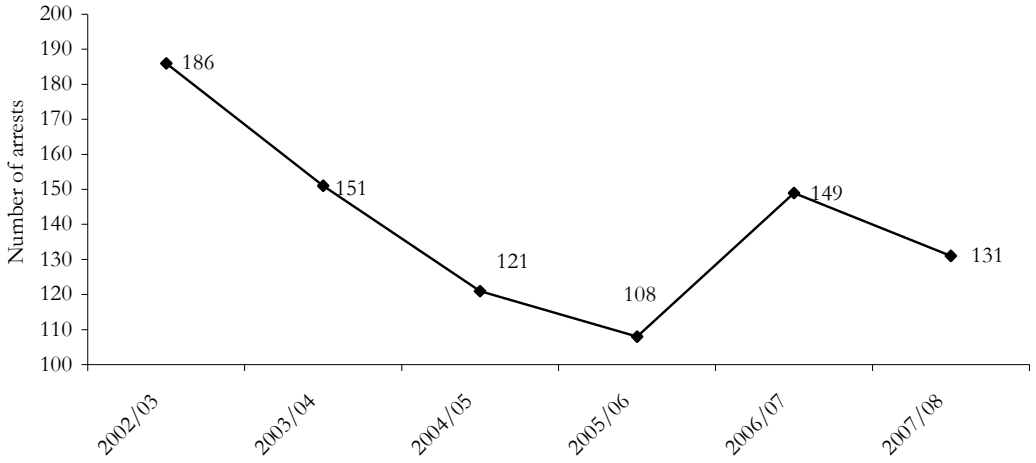
11.2 Arrests

11.2.1 Heroin

The number of heroin arrests made in WA by WAPS and AFP from 2002/03 to 2006/07 is shown in Figure 71. It is evident that the number of heroin arrests steadily decreased over time until the most recent data in 2006/07 and 2007/08, which showed a sharp increase in arrests (n=149) followed by a decrease in 2007/08 (n=131). Heroin arrests in WA for 2006/07

represented 6% of the national total, with the greatest proportion of heroin arrests occurring in Victoria (51%).

Figure 71: Number of heroin consumer/provider arrests, WA 2002/03-2007/08

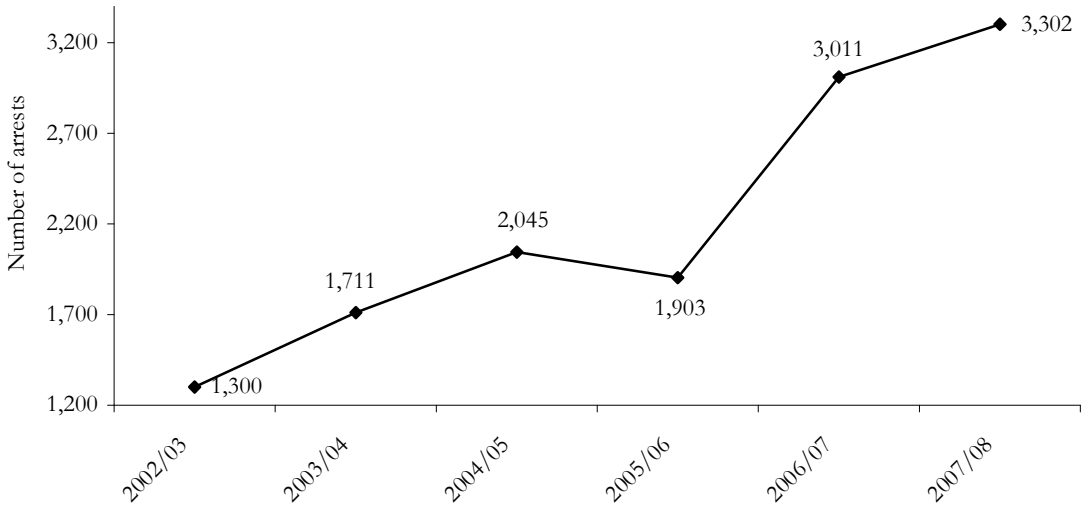


Source: **ACC**

11.2.2 ATS

The number of ATS arrests made in WA by WAPS and AFP from 2002/03 to 2007/08 is shown in Figure 72. It is evident that the number of ATS arrests steadily increased over time, then stabilised from 2004/05 (n=2,045) to 2005/06 (n=1,903). Following this, there was 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). ATS arrests in WA for 2007/08 represented 21% of the national total, with the greatest proportion of ATS arrests occurring in Queensland (27%).

Figure 72: Number of ATS consumer/provider arrests, WA 2002/03-2007/08

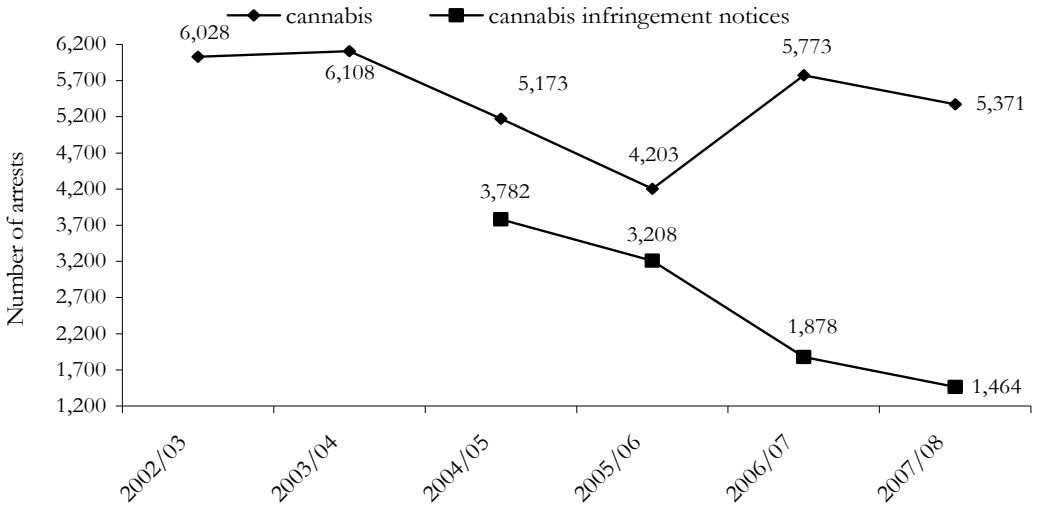


Source: **ACC**

11.2.3 Cannabis

The number of cannabis arrests made in WA by WAPS and AFP from 2002/03 to 2007/08 is shown in Figure 73. The number of cannabis arrests was initially stable then decreased until the most recent data in 2006/07 (n=5,773), which returned to numbers similar to those obtained in 2002/03 (n=6,028), more recently the number of cannabis arrests has decreased in WA (n=5,371). Cannabis infringement notices were introduced in 2004/05 and have continued to decrease over time and have not been used since the election of the Barnett Liberal Government in October 2008, which has pledged to repeal the Cannabis Control Act 2003 which enacted the CIN scheme. Cannabis arrests in WA for 2007/08 represented 10% of the national total, with the greatest proportion of arrests occurring in Queensland (33%).

Figure 73: Number of cannabis consumer/provider arrests, WA 2002/03-2007/08

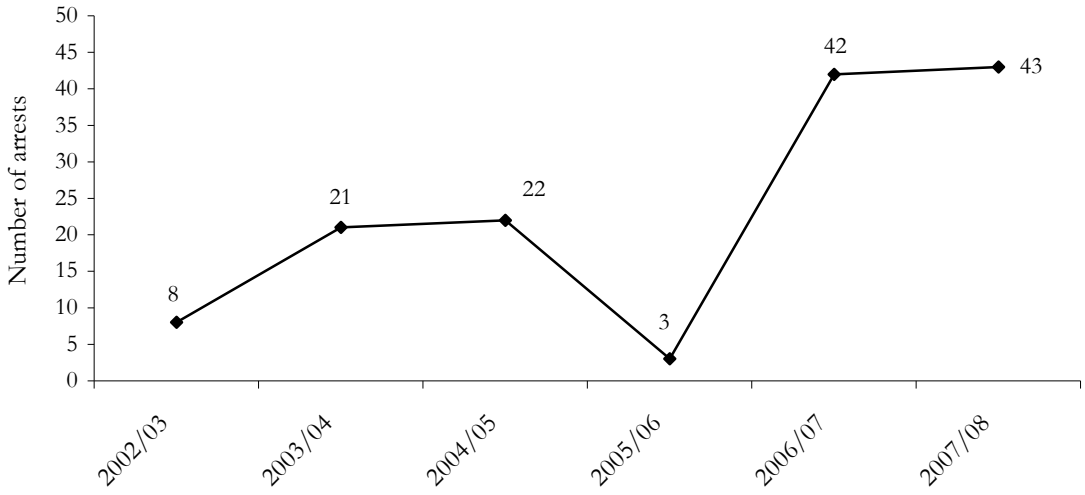


Source: **ACC**

11.2.4 Cocaine

The number of cocaine arrests made in WA by WAPS and AFP from 2002/03 to 2007/08 is shown in Figure 74. It is evident that the number of cocaine arrests has remained low across time, but increased to the highest level at the two most recent data points in 2006/07 and 2007/08 (n=43). Cocaine arrests in WA for 2007/08 represented 6% of the national total, with the greatest proportion of cocaine arrests occurring in NSW (57%).

Figure 74: Number of cocaine consumer/provider arrests, WA 2002/03-2007/08

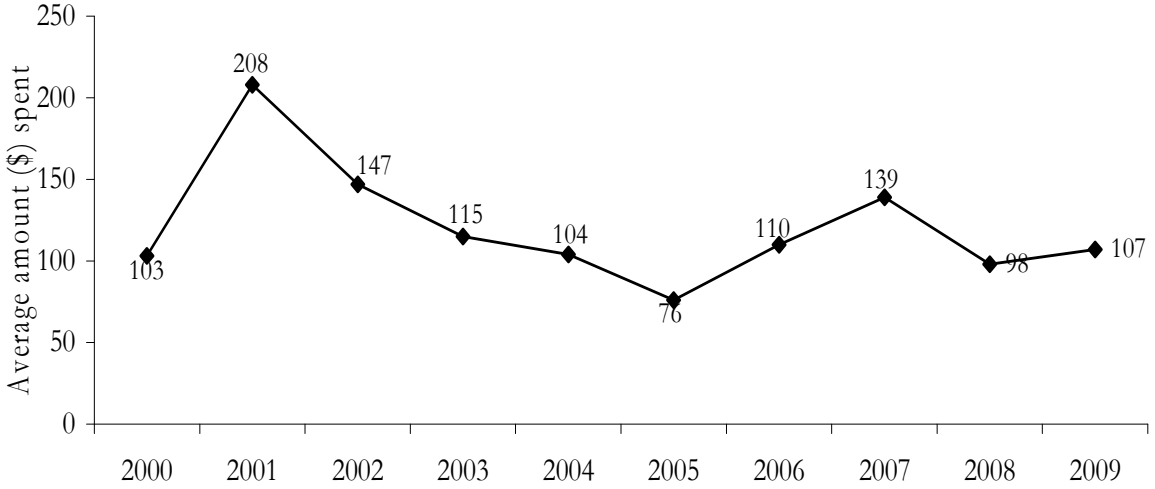


Source: **ACC**

11.3 Expenditure on illicit drugs

IDU were asked how much money they had spent on drugs the day before interview. Forty-one IDU reported spending no money on drugs the previous day, while one IDU did not respond. Of the remaining 58 IDU, the mean amount spent was $107 (range=$10-$500), which was not significantly different to the average of $98 spent on drugs the day before interview in 2008. The median amount spent in 2009 was $60. Figure 75 presents the average amount spent on drugs among IDU who had spent some money on drugs the day before interview across IDRS surveys.

Figure 75: Expenditure on illicit drugs on day prior to interview by IDU who reported spending money on drugs, WA 2000-2009



Source: IDRS IDU interviews

12 SPECIAL TOPICS OF INTEREST

12.1 Personal Wellbeing Index

The Personal Wellbeing Index (PWI) (Cummins et al., 2007) was included in the IDRS survey 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 18 shows the mean WA IDRS scores compared to the Australian general population.

Overall it appears that IDU participants' scores were lower than the general population on each domain (Table 19). In addition, the total PWI mean score for the WA IDRS sample (59%) was significantly less than the 2008 national mean (75%) (t=-7.510, df=65, 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

Personal Wellbeing Index	2009 WA IDRS Mean scores N=66	2008 General Populations mean scores
1. Standard of living	59	77
2. Health	55	74
3. Achieving in life	49	72
4. Personal relationships	63	80
5. How safe you feel	74	80
6. Community connect	59	71
7. Future security	55	70
8. Life as a whole	58	77
TOTAL	**59**	**75**

Source: IDRS IDU interviews

12.2 Chronic physical health

In 2009, participants in the IDRS were asked whether they had ever been diagnosed with a range of physical conditions, how old they were when diagnosed and if they had received treatment in the previous 12 months. Among the WA sample, more than one-third reported a lifetime diagnosis (by a doctor) for liver disease (38%), followed by migraine (32%) then asthma (20%). The median age of first diagnosis and percent of those receiving treatment for each condition is displayed in Table 20 below.

When comparing IDU physical health problems with the 2007/08 NDSHS findings, the proportion of the IDU sample with asthma was significantly greater than the national sample. However, IDU respondents diagnosed with circulatory problems (stroke and other heart conditions) was significantly lower than the national sample. The decreased proportion of the national sample with these conditions may be explained by the more diverse age range of the NHS, as older people are more predisposed to such conditions, whereas the IDU sample is typically younger (with a mean age 35 years) and therefore has less age-related health problems. Comparisons between the proportions of respondents diagnosed with cancer, high blood pressure, joint/muscular/skeletal conditions did not significantly differ across IDRS and national samples. This data is shown in Table 19 below.

Table 20: Chronic Physical Health, 2009

Condition	% Participants ever diagnosed	Median age (years) first diagnosed*	% Participants receiving treatment in past 12 months*	% NHS Participants ever diagnosed (N= Approx. 20,800)	Comparisons of % diagnosed in EDRS and NHS
Asthma	20	10	42	10	95%CI -0.28, -0.13*
Cancer	2	24	0	2	95%CI -0.06, -0.00
Stroke	2	32	50	16	95%CI -0.12, -0.02*
Other heart or circulatory condition	4	15	25		
Gout, rheumatism, or arthritis	4	22	75	-	-
Diabetes or high blood sugar levels	3	22	33	-	-
Epilepsy	2	24	0	-	-
Skin problems	16	15	33	-	-
Vision problems	16	14	56	-	-
Hearing problems	7	41	20	-	-
Diabetes	2	18	2	4	-
High blood pressure	13	32	14	9	95%CI -0.20, -0.07
Liver disease	38	26	24	-	-
Respiratory disease	2	30	0	-	-

Joint/muscular/skeletal	11	19	67	15 - Arthritis 3 - Oesteoporosis	95%CI -0.18, -0.06
Human papilloma virus	2	30	0	-	-
Septacemia	4	25	50	-	-
Cellulitis	5	30	33	-	-
Hay fever	13	15	29	-	-
Sinus or sinus allergy	7	11	25	-	-
Emphysema	4	36	0	-	-
Bronchitis	11	16	17	-	-
Anaemia	9	19	40	-	-
Fluid problems/fluid retention/oedema	0	0	0	-	-
Hernias	0	0	0	-	-
Kidney problems	4	34	50	-	-
Psoriasis	5	30	33	-	-
Stomach ulcer or other gastrointestinal ulcer	9	18	80	-	-
Thyroid trouble/goiter	2	29	100	-	-
Tuberculosis	0	0	0	-	-
Back or neck pain or back or neck problems	30	26	65	-	-
Migraine	32	18	44	-	-

Source: IDRS IDU interviews

12.3 Dental care

In 2009, among the IDRS WA sample who reported visiting a dentist in the last 12 months (n=27) (Table 21), the vast majority of the sample (93%) reported visiting for an extraction, followed by 85% each reporting visiting for check ups and for fillings. Almost half (46%) reported visiting a dentist for relief of pain.

Among the WA sample who commented, more than half (55%) reported paying for their last dental visit. The medium number of teeth lost was two ranging from zero to 28 (all teeth excluding wisdom teeth). Almost two-thirds (65%) reported not visiting a dentist when required in the last year. The median number of visits to a dentist in the last 12 months was zero.

Table 21: Self reported dental health issues in the preceding 12 months, 2009

	N=27
Reason for last dentist visit (%)	
Check up	85
Relief of pain	46
Fillings	85
Extractions	93
Other procedure	65
Paid for last visit (n, %)	55
Median number of teeth lost (range)*	2 (0-28)
Did not attend a dentist when required last 12 months (%)	65
Median number of visits to dentist in last 12 months (range)	0 (0-15)

Source: IDRS IDU interviews

* Maximum number of teeth (not including wisdom teeth) is 28

12.4 Gambling

For the first time in 2009, participants were asked about their gambling experiences in the month prior to interview (Table 22). A small proportion of the WA IDU sample (9%) had gambled on a median of three times (range=1-25) in the month prior to interview. Forty-four percent had gambled one time in last month preceding interview, with no participants gambling daily.

Among those who had recently gambled, usual forms of gambling were horse/dog racing (78%), followed by smaller proportions reporting casino (22%), poker machines (11%) and other forms of gambling (22%).

Of those who had gambled in the last month, nearly one-quarter reported gambling while under the influence of alcohol. Whilst the majority (89%) reported gambling while under the influence of an illicit drug, mainly crystal methamphetamine (38%), followed by cannabis and speed (25% each). The median amount of money spent on gambling on the last occasion was $12 among those who commented.

Table 22: Gambling behaviour amongst IDU, 2009

Gambling	2009 N=96
Gambled in the last 30 days	**9**
Usual form of gambling	n=9
Casino	22
Horse/dog racing	78
Poker machines	11
Other	22
Last form of gambling	
Casino	22
Horse/dog racing	56
Poker machine	0
Other	22
Median number of days gambled in last 30 days	3
Under the influence of alcohol when last gambled (%)	22
Under the influence of illicit drugs when last gambled (%)	89

Source: IDRS IDU interviews

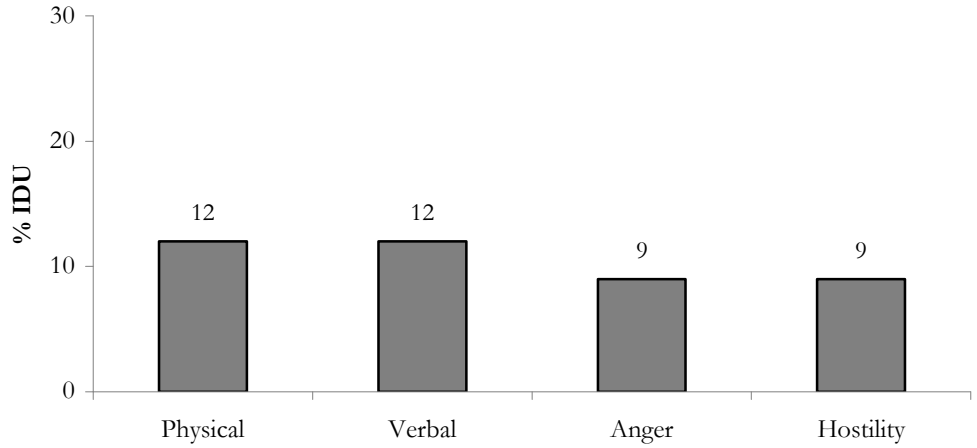
* Under the influence

12.5 Aggression

In 2009, the IDRS included a new module investigating the presence of trait aggression among IDU. Involvement in obtaining/using drugs, the use of other illicit substances such as cocaine and other stimulants as well as the high prevalence of cannabis use have all been associated with aggression (Murray et al., 2008). To investigate aggression amongst IDU, sample participants were administered the Buss-Perry Aggression Questionnaire – Short Form (BPAQ-SF). This self-report measure addresses three major components of aggression: the motor components (physical and verbal aggression), the emotional component (anger), and the cognitive component (hostility). This questionnaire provides a valid and reliable measure of dispositional aggression which correlates well with the original 29-item Buss-Perry Aggression Questionnaire (Bryant and Smith, 2001).

In 2009, participants were administered the BPAQ-SF. The measure consists of four domains: physical aggression, verbal aggression, anger, and hostility. IDU were asked to report on a Likert scale from one (very characteristic of me) to six (very un-characteristic of me). Each domain consists of three questions used to measure the specific domain of aggression. Figure 76 shows the proportion of participants who answered each of the three questions related to a domain as characteristic of them (n=57). The greatest proportions were reported for physical aggression and verbal aggression with 12% each (n=7) of IDU in the WA sample. This was followed by 9% (n=5) of the IDU sample answering all three questions in both the anger and hostility aggression domain.

Figure 76: IDU reporting the degree to which they perceived aggression domains as applicable to themselves, WA, 2009



Source: IDRS IDU interviews 2009
Note: Results represent those participants who endorsed all three questions within each domain.

Respondents were also asked to report on whether they would have answered the BPAQ-SF any differently if they were under the influence of any drugs (Table 23). Of the WA IDRS sample, 26% believed they would have answered differently if under the influence of any drugs, with heroin the most common drug reported to alter aggression responses (40%, n=6). Of those who felt their responses would have changed if under the influence of any drugs, half believed their level of aggression would have been the same (54%, n=31).

Table 23: Aggression under the influence of other drugs, WA, 2009

Aggression	**2009 (n=57)**
Under the influence of drugs would have answered differently?	**26**
Under the influence of which drugs would have answered differently?	**N= 15**
Heroin	**40**
Alcohol (%)	**13**
Speed (%)	**33**
Ice/crystal (%)	**13**
Aggression level if under the influence of any drug	**N=57**
Lower (%)	**21**
The same (%)	**54**
Higher (%)	**25**

Source: IDRS IDU interviews

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