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WA DRUG TRENDS 2016
Findings from the
Illicit Drug Reporting System (IDRS)

Australian Drug Trends Series No. 169

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Please note that as with all statistical reports there is the potential for minor revisions to data in this report over its life. Please refer to the online version at www.ndarc.med.unsw.edu.au.

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ABBREVIATIONS

2CI	2,5-dimethoxy-4-iodophenethylamine
ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ADHD	Attention deficit hyperactivity disorder
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AGDH	Australian Government Department of Health
AIHW	Australian Institute of Health and Welfare
AOD	Alcohol and other drugs
ATS	Amphetamine-type stimulant
ATSI	Aboriginal or Torres Strait Islander
AUDIT-C	Alcohol Use Disorders Identification Test/Consumption
BBV	Blood-borne virus
CI	Confidence interval
CIN	Cannabis Infringement Notice
CIRS	Cannabis Intervention Requirement Scheme
CPR	Cardiopulmonary resuscitation
DAO	Drug and Alcohol Office
DMT	Dimethyltryptamine
DPMP	Drug Policy Modelling Program
ED	Emergency department
EDRS	Ecstasy and related Drugs Reporting System
EPS	Emerging psychoactive substances
FIFO	Fly in, fly out
GHB	Gamma-Hydroxybutyric acid
GP	General practitioner(s)
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HDWA	Health Department of Western Australia
HIV	Human immunodeficiency virus
Hydro	Hydroponically grown cannabis
IDRS	Illicit Drug Reporting System
K10	Kessler Psychological Distress Scale
KE	Key expert(s)
LSD	Lysergic acid diethylamine
MDMA	3, 4-methylenedioxymethamphetamine
MDPV	Methylenedioxypyrovalerone
N (or n)	Number of participants
NCIS	National Coronial Information System
NDARC	National Drug and Alcohol Research Centre
NDSHS	National Drug Strategy Household Survey
NNDSS	National Notifiable Diseases Surveillance System
NPS	New Psychoactive Substances

NSAIDs	Non-steroidal anti-inflammatory drugs
NSP	Needle and Syringe Program(s)
OD	Over dose
OST	Opioid Substitution Therapy
OTC	Over the counter
PCS	Physical Component Score
PDI	Party Drugs Initiative
Pharm. Stim.	Pharmaceutical stimulants
PMA	para-Methoxyamphetamine
PTSD	Post traumatic stress disorder
PWI	Personal Wellbeing Index
PWID	People Who Inject Drugs
ROA	Route of administration
SD	Standard deviation
SDS	Severity of Dependence Scale
SPSS	Statistical Package for the Social Sciences
WA	Western Australia
WAPS	Western Australian Police Service
WASUA	Western Australian Substance Users Association

GLOSSARY OF TERMS

Cap	Small amount, typically enough for one injection
Compared	Not statistically significant (p=>0.05)
Eight ball	Weighs an eighth of an ounce
Half weight	0.5 gram
Homebake	Homemade “heroin” produced by processing pharmaceutical drugs containing morphine or codeine
Illicit	Illicit refers to drugs prohibited under law (e.g. heroin) and to pharmaceuticals obtained from a dealer, or by theft, or from a prescription in someone else’s name (e.g. through buying them or obtaining them from a friend or partner)
Indicator data	Sources of secondary data used in the IDRS (see Method section for further details)
Key expert(s)	Also referred to as KE; persons participating in the Key Expert Survey component of the IDRS (see Method section for further details)
Licit	Licit refers to pharmaceuticals (e.g. methadone, buprenorphine, morphine, oxycodone, benzodiazepines, anti-depressants) obtained by a prescription in the user’s name. This definition does not take account of ‘doctor shopping’ practices; however, it differentiates between prescriptions for self as opposed to pharmaceuticals bought on the street or those prescribed to a friend or partner
Lifetime injection	Injection (typically intravenous) on at least one occasion in the participant’s lifetime
Lifetime use	Use on at least one occasion in the participant’s lifetime via one or more of the following routes of administration: injecting, smoking, snorting and/or swallowing
NBOMe	A series of synthetic hallucinogens
People who inject drugs	Also referred to as PWID. In the context of the IDRS, refers to persons participating in the users survey component of the IDRS (see Method section for further details)
Point	0.1 gram although may also be used as a term referring to an amount for one injection (similar to a ‘cap’; see above)
Recent injection	Injection (typically intravenous) in the six months preceding interview
Recent use	Use in the six months preceding interview via one or more of the following routes of administration: injecting, smoking, snorting and/or swallowing
Respondent	In the context of this report, refers to persons who participated in the users survey
Use	Use via one or more of the following routes of administration: injecting, smoking, snorting and/or swallowing

Guide to days of use/injection

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

*as appropriate

EXECUTIVE SUMMARY

Common terms used throughout the report

Regular PWID: Injected a drug on six or more separate occasions in the previous six months

Recent use: Used at least once in the previous six months

Sentinel group: A surveillance group that point towards trends and harms

Median: The middle value of an ordered set of values

Mean: The average

Frequency: The number of occurrences within a given time period

Throughout this executive summary comparisons to the previous year have generally only been reported when changes of statistical significance were found.

Methodological caveat: non-representative sample

It needs to be noted that the IDRS is not a representative sample of people who inject drugs (PWID), but rather it comprises annual samples of sentinel groups of PWID who are recruited in the same way each year with the aim of producing samples with similar characteristics from year to year. This allows trends in drug use patterns and perceptions of drug markets to be tracked in these sentinel groups over time. The IDRS cannot be used to infer rates of drug use among PWID, nor in the general population more broadly.

Demographic characteristics of injecting drug user participants

In 2016, 71 participants were recruited for the WA IDRS PWID survey. Demographic characteristics of the sample were broadly comparable to those of the previous year. The only significant difference was mean years of schooling rising from 10 to 11 ($p<.001$).The mean age remained 44 years, with 66% male. Almost the entire sample (97%) reported that English was the main language spoken at home. Most (72%) were unemployed and 79% reported having some form of post-high school education. Identifying as heterosexual was reported by 90% and as ATSI by 9% which were roughly comparable to 2014 and previous years, suggesting that the 2015 sample with 97% identifying as heterosexual and just 2% as ATSI was unusual with respect to these, but the numbers involved were too small to permit testing of significance. Currently being in drug treatment was reported by 42% and a history of prison by 37%. Methadone remained the most common form of drug treatment. The majority of respondents in 2016 were again recruited via a Needle and Syringe Program.

Patterns of drug use among the IDU sample

Mean age of first injection was 19 years which was significantly less than the mean of 20 reported in 2015 ($p=.023$). Heroin was the most commonly reported drug first injected reported by 52%, displacing methamphetamines which held this position in 2015. Heroin remained the prime drug of choice in the sample reported by 66% and methamphetamines were reported as drug of choice by 28%. Injecting was most commonly reported on a frequency of '*more than weekly but less than daily'* by 44% up from 21% in 2015 ($p=.004$). This is in contrast to 2015 when '*two to three times a day*' reported by 33% was most common. Those reporting injecting daily or more fell significantly from 67% in 2015 to 48% ($p=0.02$). Heroin remained the drug most injected in the past month reported by 63%, while other opiates were reported as the most injected class of drug by 6% which was a significant decline from 18% the previous year ($p=0.04$). For the eighth year running, heroin was the principal drug most recently injected (61%), the highest figure so far recorded by the WA PWID sample. This is considerably different from findings of the annual NSP Survey in which the drug most recently injected in recent years has generally been methamphetamine.

In 2016, over half the sample reported recent use of tobacco (85%), heroin (78%), cannabis (70%), alcohol (68%) methamphetamines (65%) and benzodiazepines (56%).

Heroin

Most primary indicators suggest a continuing gradual resurgence in heroin use among the IDRS samples. Although few of these changes from 2015 attained statistical significance this is likely a reflection of the relatively small sample size. Comparisons with 2015 have been accordingly reported here even if they are not statistically significant, although this is noted.

Lifetime use of heroin had remained stable, reported by 92% and lifetime use of homebake was reported by 69%. However, recent use of heroin rose from 75% to 78%, thereby continuing the generally upwards trend seen in heroin use since 2006, although this was not significant. Mean days of heroin use rose from 100 to 116 although this was not significant, and daily use among recent heroin users was reported rose from 23% to 34% (p=.006).

Recent use of heroin on a daily basis was reported by 44% *of recent heroin users* which was not significantly different from 31% in 2015. Recent use of homebake was reported by 13% which was unchanged from the previous year. Mean days of homebake use was 15 which was a significant decrease from 46 days the previous year (p=.001). White or off-white powder heroin remained the form most used, reported by 57%.

The median price of recent purchases of one gram of heroin remained stable at $600. The greatest proportion of participants reported on the price of a one-quarter gram which had a median price of $150 unchanged from the previous year. Availability was reported as either '*easy'* or '*very easy*' by 94% of respondents in 2016, compared to 88% in 2015 which was not significant, and was generally reported as having been '*stable'*. While there was little consensus among users on the current purity of heroin in 2015, in 2016 50% of those responding described it as '*medium'*. There were also 18% describing it as 'high', 20% as 'low' and 12% stating that purity 'fluctuated'. More than half of those responding (58%) thought purity in the six months preceding the survey had been 'stable'.

Methamphetamine

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

Lifetime use of any form of methamphetamine was reported by 92% of the sample and recent use by 65%. Lifetime use of speed powder was reported by 87% and recent use by 18% which was a significant fall from 34% the previous year (p<.001). Lifetime use of base or paste methamphetamine was reported by 31% and recent use by 3%. Lifetime use of crystal methamphetamine was reported by 83% and recent use by 62% which was not significantly different from the previous year. Use of liquid amphetamine remained uncommon. Mean days of use of any form of amphetamines in the last six months was 68, which was not significantly greater than the 2015 mean of 53, but represents the fourth consecutive year in which average days of methamphetamine use has trended upwards.

The median price of a point of crystal remained stable at $100. The price of a gram of crystal on face value appeared to have fallen to $450 from $700 in 2015, but this was based on only five reports in 2016. The price of a point of speed also appeared to have fallen from $100 to $50 but again was based on a very small number of reports. There were no respondents able to comment on the price of a gram of speed. There was insufficient data to report on price, purity or availability of base. The price of crystal was held by 50% of those responding to have been '*stable' followed by 33% who thought it had 'decreased'.* Although 75% of those responding believed that the price of speed had been *'decreasing',* this was based on just three reports.

There were just four respondents reporting on availability of speed of which 75% described as '*very easy*'. Availability of crystal continued to be reported as '*very easy*' by 68%. The vast majority of respondents reported that availability had remained '*stable'* in the preceding six months for both speed and crystal.

Current purity was rated as '*high'* by the greatest proportion of those who responded for crystal (60%). Speed purity was generally rated as being of '*high'* purity by 75% although this was based on only four reports. While recent purity of speed was either described as '*fluctuating'* (50%) or '*increasing'*, while crystal was described by 44% as 'stable' and 'increasing' by 22%.

Cocaine

Lifetime history of cocaine use was reported by 62% of the sample and recent use by 10%. Mean days of use in the last six months remained low, at seven. The most commonly used form as reported by all of those responding was powder. Only two respondents reported on the price of cocaine, citing $400 for a gram and $1,300 for an eightball respectively. Both of these respondents described availability as being either '*very easy*' or '*easy'*. Their opinions on cocaine purity differed markedly, with one describing it as 'high' and the other as 'low'. These extremely small numbers of respondents both in the current sample and in previous years, along with the non-representative nature of the IDRS sample make it inappropriate to make inferences as to the state of the cocaine market in Western Australia.

Cannabis

A lifetime history of cannabis use was reported by 89% and recent use by 70%. Mean days of use in the past six months was 81 not significantly different from the previous year's mean of 84. Use on a daily basis was reported by 22% of those who had recently used cannabis. Hydroponic cannabis remained the most commonly used form, reported by 86% of those responding.

The median price of a gram of hydro remained stable at $25, while the median price of an ounce had fallen slightly from $350 in 2015 to $325 in 2016. The price of bush was reported as $350 an ounce, but was based on only one report and should be interpreted with caution.

Hydro was generally regarded as '*very easy*' to obtain (60%) in comparison to 2015 when 49% described it as '*very easy'*. This level of availability was reported as 'stable' by 97%. Availability of bush was reported as '*very easy*' by 43% in contrast to 2015 when it was described as '*very easy'* by 53%. There were another 53% who reported availability of bush as '*easy*'. Availability of both types were reported as '*stable'*. Potency of hydro was described by 67% of those commenting as '*high'* while potency of bush was primarily described as '*medium'* by 43% of those commenting. Potency of both forms was widely held to be '*stable'*.

Illicit use of pharmaceutical opioids

Methadone

Lifetime illicit use of methadone syrup was reported by 49% and recent use by 11%. Average days of recent use was five down from 12 the previous year (p=.007). Use of illicit Physeptone® was less common with lifetime use reported by 31% and recent use by 3%. The average days of use during the last six months was six. The reported median price remained one dollar per one millilitre, which has been comparable to previous years, although this data was based on data from only three respondents. All three agreed that obtaining illicit methadone was '*easy'* to obtain and availability was '*stable'*. This very low level of response makes it impossible to draw any conclusions concerning the illicit market for methadone in Perth.

Buprenorphine and buprenorphine-naloxone

Lifetime use of illicit buprenorphine (Subutex®) was reported by 27% and recent use by 9% with a median of 10 days of use. Lifetime use of illicit buprenorphine/naloxone (Suboxone®) was reported by 20% and recent use by 7% with a mean of 58 days of use.

There was only one respondent able to provide data on the price of illicit Subutex® reporting $30 for an 8mg tablet. This respondent reported that illicit Subutex® was '*difficult'* to obtain.

There were no respondents able to provide data on price or availability of illicit Suboxone® tablets.

Information from seven respondents suggests that the median price of 8 mg Suboxone® film was reportedly $30 and a further two respondents discussed paying $20 for 2mg. The price of film was generally regarded as 'stable' and its availability generally described as 'easy' or 'very easy', each respectively reported by 38%.

Morphine

Lifetime use of illicit morphine was reported by 65% and recent use by 16%. Days of use in the last six months ranged from one to 180, with just one report of use on a daily basis. Mean days of use was 31.

As in previous years, MS Contin® remained the most common form of morphine with a 100mg tablet reportedly carrying a median price of $85. Of those responding, 50% reported morphine as currently '*very easy'* to obtain as opposed to 2015 where it was generally described as '*easy'*. All respondents described this availability as '*stable'*.

Oxycodone

For the first time in 2016, data on the use of oxycodone was collected separately for generic oxycodone, OP (i.e. reformulated oxycodone) and other forms of oxycodone (e.g.: Endone®). It should be noted that this renders making comparisons with user data from previous years unfeasible. Use of illicit generic oxycodone in the last six months was reported by 11% (n=8) with 12 median days of use. Use of illicit OP oxycodone in the last six months was reported by 9% (n=6) with 14 median days of use. Use of other illicit forms was reported by 9% (n=6) with a median of five days.

Only a very small number of respondents provided price and availability of oxycodone making it difficult to draw firm conclusions. There were individual reports of a 20mg tablet of Oxynorm® for $15, a 40mg tablet of generic oxycodone for $35 and an 80mg tablet of generic oxycodone for $65. There were also two reports of 40/20mg Targin of $25. All three respondents described these prices as '*stable'*. Two respondents reported availability as '*very easy*' and the other as '*easy'*. Two reported that availability had been 'stable' while the third stated that it had become '*easier'*.

Fentanyl

Lifetime use of fentanyl was reported by 34% and recent use by 17%. Mean days of use was 28 which was not significantly more than 11 days the previous year. No respondents were able to provide price or availability data for illicit fentanyl.

Over the counter codeine

Lifetime use of over the counter (OTC) codeine was reported by 39% and 14% reported consuming them in the last six months which were both unchanged from 2015. Mean days of use was 16.

Other opioids (not elsewhere specified)

Lifetime history of using of other miscellaneous opioids was reported by 37% and recent use by 11%. Average days of use was 50 compared to the previous year's mean of 34 days, but the small number of cases do not allow for meaningful testing of statistical significance. Other opiates mentioned included Tramadol® and Panadeine Forte®

Other drugs

Benzodiazepines

A lifetime use of any benzodiazepine was reported by 73% of the sample and recent use by 56%. Mean days of use was 94. Diazepam remained the most commonly reported form of benzodiazepine.

Alprazolam (Xanax®) was specifically asked about and had been recently used by 20%. Mean days of use of prescribed alprazolam was 92 days. Conversely, mean days of use of illicit alprazolam had remained stable at 15 days.

Lifetime use of benzodiazepines, other than alprazolam, was reported by 72% and recent use by 55%. Licit benzodiazepines were used on a mean of 111 days and illicit benzodiazepines were used on a mean of 29 days.

Only one respondent provided price data reportedly paying one dollar per pill of diazepam and stating that this price had remained stable. Current availability was rated as 'very easy' and this had also remained stable.

Pharmaceutical stimulants

Lifetime prevalence of illicit pharmaceutical stimulants by the sample was reported by 49%, and recent use by 17%. Mean days of use was six which was unchanged from the previous year. The main form remained dexamphetamine. There were no respondents able to provide information concerning price or availability.

Hallucinogens and ecstasy

Lifetime use of hallucinogens was reported by 79% and recent use by 10% for a mean of six days. The most commonly reported hallucinogen was lysergic acid diethylamine (LSD).

A lifetime history of having consumed ecstasy was reported by 68% and recent use by 14%. Ecstasy was taken on a mean of 10 days of use. The most common form consumed was pills.

There were no respondents able to provide information concerning the price or availability of these drugs.

Inhalants

Lifetime use of inhalants was reported by 29% of the WA sample and recent use by 6% with days of use ranging from one to 50. The main form used was nitrous oxide.

Alcohol and tobacco

Lifetime use of alcohol was reported by 90% of the WA sample and recent use was reported by 68%. The average number of days used in the last six months was 45. There were four respondents who reported drinking on a daily basis. Use of the Alcohol Use Disorders Identification Test-Consumption screen (AUDIT-C) revealed that 51% of those responding were consuming alcohol at potentially harmful levels.

A lifetime history of having smoked tobacco was reported by 93% and recent use by 85%. Virtually all (90%) of these respondents smoked on a daily basis with 168 average days of use.

Lifetime use of electronic cigarettes was reported by 32% and recent use by 24% Mean days of use was 31.

Seroquel® (Quetiapine)

A lifetime history of illicit Seroquel® was reported by 35% and recent use by 11%. Mean days of use was 16.

Synthetic cannabis

Lifetime use of synthetic cannabis was reported by 38% and recent use by 9%. Days of use ranged from one to 60 with a mean of seven days.

New psychoactive substances

Lifetime use of these synthetic drugs was reported by 6.There were three reports of recent use. Mean days of use was four. The substance consumed was reportedly MDPV (aka: "*bath salts*").

Steroids

A lifetime history of use was reported by 4% of the sample. There was only one report of recent use. It should be noted however that recruitment methods used by the IDRS do not aim to capture primary steroid users and as several KE in previous years observed, steroid users tend not to identify as drug users and, therefore, would be unlikely to respond to recruitment attempts by an illicit drug survey.

Health-related harms

A lifetime history of heroin overdose was reported by 55%. The median number of overdoses was three times. A heroin overdose in the past year was reported by 18%. Data from the ambulance service indicated that there were 677 narcotic overdoses attended by the ambulance service in WA in the 2015/16 financial year compared with 714 the previous year. In 518 of these cases, the narcotic involved was known to be heroin. The most recent available data from the Australian Bureau of Statistics reveals that in 2012 there were 90 fatal overdoses attributable to opioids among persons aged 15-54 in WA compared to 88 in 2011. The 2012 figure was the highest since 72 deaths in 2000. In terms of rates per million population, this equates to 64.4 deaths, compared to the 2012 national rate of 39.3. This was the highest rate reported in Australia, followed by Queensland with 50.5 per million.

A lifetime history of overdose on any other drug was relatively rare with only one case reported among the 2016 user sample involving crystal methamphetamine.

Calls to ADIS

Data from the WA Alcohol and Drug Information Service (ADIS) revealed an increase in the 2015/16 financial year in calls with heroin as the primary drug of concern. A substantial increase in calls relating to amphetamines was also observed with the highest number of amphetamine-related calls in a single financial year so far recorded. Numbers of calls dealing with cocaine were unusually high which was attributed to a very large number of calls being made to the service by one single individual. Calls with cannabis as the primary drug of concern remained high but stable. Increases over the last few years are largely a reflection of the ADIS cannabis data now including calls to the Cannabis Intervention Requirement Scheme (CIRS).

Hospital admissions

The rate per million persons aged 15-54 years of hospital admissions in which the principal diagnosis was opioid-related in WA in 2014/15 was 317 compared to an increasing national rate of 476. Numbers of amphetamine-related hospital admissions in WA rose from 361 in 2013/14 to 487, roughly equal to the national rate of 485. In 2014/15 there were eight cocaine-related hospital admissions per million population in WA compared with the national rate of 54 per million. WA rates per million for cannabis-related hospital admissions were 175 compared with the national rate of 242.

Injecting risk behaviours

The median number of injections in the month prior to interview was 30. Respondents typically acquired new needles a median of two times, obtaining a median of 100 new needles in the last month of which around one-fifth were given away. Some 9% of respondents reported having difficulty accessing new needles in the past month. Needle and syringe exchanges remained the principal source of new injecting equipment. Data from the Sexual Health and Blood-borne Virus Program indicates that a total 6,018,538 needles were distributed in WA during the 2015/16 financial year, up from 5,445,543 in the previous corresponding period.

In 2016, the vast majority (94%) of the sample reported that they had not used a needle after someone else in the last month. Of the six respondents that did report using a needle after someone else, instances ranged from one to five times. Reporting the use of other equipment after someone else was reported by 25% of respondents. There were 14% of respondents who reported that someone else had used a needle after them in the last month. That this had happened once was reported by three respondents, twice by three, three to five times by two, six to ten times by one and more than ten times by one. Reuse of respondents' own injecting equipment was reported by 40%.

In WA, the hepatitis C virus (HCV) continues to be more commonly notified than the hepatitis B virus (HBV). The prevalence of human immunodeficiency 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. Data from the National Notifiable Diseases Surveillance System shows an increase in numbers of unspecified cases of both HBV and HCV. While numbers of incident cases of HBV remained low and stable, there were 121 incident cases of HCV reported in 2016 down from the ten year high of 203 the previous year.

Among the WA sample interviewed as part of the 2016 IDRS, the most commonly reported injection-related problems in the past month were scarring/bruising (n=29) and difficulty injecting (n=28). The proportion reporting 'a dirty hit' did not change significantly, being 6% in 2015 compared to 8% in 2016 with the most commonly implicated drugs being heroin, oxycodone, methamphetamine and Methadone.

Mental health problems and psychological distress

Mental health problems were reported by 34% of respondents in 2016. As in previous years, the most commonly reported problems were depression and anxiety. Of those that self-reported a mental health problem, 79% reported attending a professional in relation to the problem.

According to the Kessler Scale of Psychological Distress (K10), 53% of the 64 responding in 2016 were at '*high'* or '*very high*' risk of psychological distress, and the median score was unchanged from the previous year.
That their general health was '*excellent'* as measured by self-report was reported by 2% (n=1), as '*very good*' by 16% (n=11), as '*good'* by 40% (n=27), as '*fair'* by 34% (n=23), and as '*poor'* by 8% (n=5).

Driving risk behavior

Having driven a vehicle in the last six months was reported by 64% of the 2016 user sample. There were 9% (n=4) who reported having driven over the legal alcohol limit during this time. Driving within three hours after consuming illicit or non-prescribed drugs was reported by 81% of these respondents.

Law enforcement trends

In 2016, 24% of respondents reported that they had been arrested in the past twelve months. Involvement in any criminal activity in the past month was reported by 45%. As in previous years, the most common form of criminal activity was dealing drugs.

In 2014/15, law enforcement data for WA indicated that the number of drug arrests for heroin had substantially increased to 226 up from 138 the previous year, and arrests for amphetamine-type stimulants had also increased to 5,287 up from 3,756. Arrests related to cocaine remained uncommon but had increased from 108 to an unprecedented 142. Cannabis arrests appeared to have remained relatively stable at 7,942 compared to 8,286 the previous year.

Special topics of interest

Naloxone program and distribution

Of those 70 participants responding, 91% had heard of naloxone which was generally understood to '*reverse the effects of heroin*'. Of these, there were 10% who reported having been revived with naloxone. Awareness of naloxone training programs was reported by 73%, with completion of such a program reported by 26%. Of these, 67% reported having used naloxone to resuscitate another person from an opiate overdose.

Respondents were asked if they were aware that naloxone was now available over the counter from pharmacists without requiring a prescription. There were 24% of those responding who indicated that they knew about this. There were four respondents who reported having been resuscitated using naloxone obtained in this manner. Respondents were asked how much they would be prepared to pay for over-the-counter naloxone. The most common response from 67% was that it should be free of charge followed by 14% who thought $10 would be reasonable.

With regards to their attitudes towards naloxone, 77% said they would be willing to buy it over the counter, and 61% said they would carry it on their person. Asked if they would administer naloxone to someone who had overdosed saw 95% in agreement and 95% said they would stay with someone to whom they had administered naloxone.

Blood Donations

Of the 66 PWID who responded, 12% (n=8) reported having ever donated blood. Of these, there were 38% (n=3) who reported that they had commenced injecting prior to ever donating blood.

Days elapsed between the last time blood was donated and the most recent injection prior to donation ranged from 168 days (i.e.: ~6 months) up to 2,190 days (i.e.: 6 years) with a median of 1,095 days (i.e.: 3 years).

Homelessness

In 2016, the IDRS included a module on homelessness which revealed the high lifetime of homelessness among the IDRS participants (56%, n=40), with 20% (n=7) of these reporting

being homeless at the time of the survey and a further 17% (n=6) respondents reporting that they had been homeless within the past 12 months.

For those seven respondents who reported being currently homeless the duration of the current episode ranged from under one month up to two years with a median of two months. For those who had ever experienced being homeless, the total duration ranged from less than six months up to in excess of ten years. The most common manifestations of homelessness in the last six months were living with friends (17%, n=12) and sleeping rough on the streets (13%, n=9).

Unfair Treatment

Of the 61 PWID who responded in the 2016 WA IDRS, 71% (n=43) reported a history of having ever been treated unfairly as a result of being perceived as a person who injects drugs and 57% (n=35) having experienced such treatment in the past year.

It was notable that the most common context in which unfair treatment was perceived to occur was '*when getting help for physical health problems*' (33%, n=14) with the most common setting being a pharmacy (26%, n=11), and the most commonly mentioned type of person responsible for the unfair behaviour were pharmacists (26%, n=11).

1 INTRODUCTION

The Illicit Drug Reporting System (IDRS) aims to provide a national coordinated 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 (AGDH) under the Substance Misuse Prevention and Service Improvement Grants Fund. 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 1997 and has been conducted in Western Australia (WA) since 1999, with the full People Who Inject Drugs (PWID) interview component introduced the following year. This report presents the findings of the last 17 years 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 drugs. A separate study monitoring trends in ecstasy and related drug use (the Ecstasy and related Drugs Reporting System, or EDRS, formerly known as the Party Drugs Initiative, or PDI) commenced in NSW in 2000 and has been conducted nationally since 2003. The findings from this study are reported elsewhere in Nelson and Lenton (2017).

Both IDRS and EDRS jurisdictional and national reports can be downloaded from the NDARC website: http://ndarc.med.unsw.edu.au/resource/illicit-drug-reporting-system-idrs-key-findings-conference-handout-2016

1.1 Study aims

As in previous years, the specific aims of the WA component of the 2016 IDRS were:

- to document the price, purity, availability and patterns of use of the four main illicit drug classes in Perth, WA, primarily focusing on heroin, methamphetamine, cocaine and cannabis;
- to document risks and harms associated with drug use; and
- to detect and document emerging drug trends of national and state significant findings that require further and more detailed investigation.

1.2 Methodological caveat – non representative sample

It needs to be noted that the IDRS is not a representative sample of people who inject drugs (PWID), but rather it comprises annual samples of sentinel groups of PWID who are recruited in the same way each year with the aim of producing samples with similar characteristics from year to year. This allows trends in drug use patterns and perceptions of drug markets to be tracked in these sentinel groups over time. The IDRS cannot be used to infer rates of drug use among PWID, nor in the general population more broadly.

2 METHOD

Three data collection methods are used in the IDRS:

- a quantitative survey of people who regularly inject drugs (PWID);
- a semi-structured interview with key experts (KE) who worked with illicit drug users; and
- analyses of indicator data sources related to illicit drug use.

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 (PWID) are surveyed because they are regarded as a sentinel group for detecting illicit drug trends due to their increased exposure to many types of illicit drugs. Irrespective of their drug of choice, PWID 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 People Who Inject Drugs

The user survey consisted of face-to-face interviews with regular PWID from Perth in June 2016. In 2016, 71 regular PWID were recruited for the WA IDRS. The 2016 sample size was somewhat smaller than in previous years due to a shorter than usual timeframe for recruitment as a consequence of project funding issues. Subjects were recruited through flyers distributed at 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 twelve months prior to interview, and being a minimum of 16 years of age. Ethics approval was granted from the Curtin University Human Research Ethics Committee (HR28/2012). This sampling strategy has produced demographic characteristics comparable to PWID 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 an hour to complete 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 IBM SPSS Statistics V.22 for Windows. Confidence intervals (CI) were calculated using an Excel spreadsheet available at
http://www.cebm.net/index.aspx?o=1023 (Tandberg).

2.2 Survey of Key Experts

In 2016, 13 Key Expert (KE) interviews were conducted. Eligibility for KE 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 subject to convenience and availability. Interviews took approximately 20-30 minutes, with KE invited to comment on drug use patterns, drug availability, criminal behaviour, health and other issues affecting the illicit drug users with whom they had contact. KE in 2016 consisted of needle exchange workers, drug treatment workers, counsellors, outreach workers, crowd controllers, emergency department workers, law enforcement workers and drug analysts for the WA Police.

2.3 Other indicators

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

The selection criteria to determine what sort of indicator data should be included in the IDRS were developed in the pilot study (Hando et al., 1997b). Where possible, information is provided in financial year format to cover the same time period as that covered by the study. A number of sources provided indicator data for the 2016 IDRS:

- Australian Crime Commission (ACC) for information on drug seizures and arrests;
- telephone advisory service data from the Alcohol and Drug Information Service (ADIS);
- Australian Bureau of Statistics (ABS) for overdose data;
- overdose-related calls attended by the WA St John Ambulance Service provided by St John Ambulance Australia WA Inc.;
- data on needle and syringe distribution, provided by the Sexual Health Branch, Health Department of Western Australia (HDWA);
- rates of unspecified and incident cases of the hepatitis B virus (HBV) and the hepatitis C virus (HCV) from the Communicable Diseases Network, Australia, National Notifiable Diseases Surveillance System database (NNDSS); and
- blood-borne viral (BBV) infection rates from blood testing carried out as part of the Australian Needle and Syringe (NSP) survey, prepared by the Kirby Institute, University of New South Wales.

2.4 Data analysis

The PWID 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, although not a random sample of all seizures, is an objective indicator of drug purity, and such data are also presented in this report. Other indicator data are reported to provide a broader overview and a basis against which trends in PWID participant data may be contextualised. KE data are discussed within the individual jurisdictional reports to provide a context around the quantitative data from the PWID surveys.

All data requiring comparison of means were analysed using t-tests with Statistical Package for the Social Sciences 22.0 (SPSS) for Windows. Chi square analysis was employed for categorical variables. Further analysis was conducted on the main drugs of focus in the IDRS to test for significant differences between 2015 and 2016 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. Confidence intervals were only included in the report if findings were statistically significant ($p=<0.05$). This calculation tool was an implementation of the optimal methods identified by Newcombe (1998).

More detailed analyses on specific issues may be found in other IDRS literature, including quarterly bulletins and peer-reviewed articles produced by the project, details of which may be found on the NDARC website, http://ndarc.med.unsw.edu.au/resource/illicit-drug-reporting-system-idrs-key-findings-conference-handout-2016

3 DEMOGRAPHICS

3.1 Overview of the People Who Inject Drugs participants

Demographic characteristics of the 71 PWID interviewed in 2016 had no significant differences from the 89 interviewed in 2015 except for mean years of schooling which had risen from 10 to 11 years ($t=3.755$, $df=70$, $p<.001$). English was the primary language spoken by 97% (n=69). Although there appear to have been substantial shifts in numbers identifying as heterosexual (from 97% in 2015 to 90% in 2016) and numbers identifying as ATSI (from 2% in 2015 to 9% in 2016), these numbers were too small to permit statistical testing of significance. However, the 2016 figures for these characteristics appear broadly similar to those observed prior to 2015, suggesting that 2015 may have been anomalous in these respects. This data and that from previous years' samples are displayed in Table 1.

Table 1: Demographic characteristics of PWID participants, 2011-2016

	2011 N=70	2012 N=100	2013 N=88	2014 N=98	2015 N=89	**2016 N=71**
Age (mean years, range)	40 (21-63)	41 (18-65)	42 (18-66)	43 (19-67)	44 (26-64)	**44 (20-62)**
Sex (% male)	57	68	65	60	63	**66**
Employment (%):						
Not employed	70	79	77	77	75	**72**
Full time	6	6	6	9	8	**13**
Part time/casual	13	12	11	6	12	**10**
Home duties	0	0	0	1	1	**0**
Student	7	2	3	7	3	**3**
Other	3	2	3	0	0	**1**
Received income from sex work last month	3	0	6	1	1	**1**
Aboriginal / Torres Strait Islander (%)	4	1	7	6	2	**9**
Heterosexual (%)	83	87	83	85	97	**90**
Bisexual (%)	6	7	10	7	3	**7**
Gay or lesbian (%)	6	3	6	3	0	**3**
Other (%)	6	3	1	5	0	**0**
School education (mean no. years, range)	10 (7-12)	11 (6-12)	10 (7-12)	10 (6-12)	10 (6-12)	**11 (8-12)**
Tertiary education (%):						
None	37	28	36	37	26	**21**
Trade/technical	36	48	52	48	62	**54**
University/college	27	24	11	15	12	**25**
Average weekly income	$465	$414	$452	$454	$460	**$511**
Currently in drug treatment^ (%)	59	41	59	50	36	**42**
Prison history (%)	36	54	53	51	44	**37**

Source: IDRS user interviews

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

3.1.1 Current and previous treatment

Some 58% (n=41) of the WA 2016 PWID sample were not currently receiving any treatment for their drug use. Among the 42% (n=30) of PWID who were currently in treatment, methadone remained the most commonly reported treatment by 60% (n=18). This was followed by 23% (n=7) currently prescribed Suboxone® and 7% (n=2) involved in drug counselling and the same number currently being prescribed Subutex®. One individual respondent reported being involved in a detoxification program. The mean duration in current treatment was 58 months (range=1-240). There were 11% (n=8) who reported having been turned away when trying to access treatment. Asked how difficult it was to access treatment,

33% (n=23) of those responding said it was '*difficult*', followed by 30% (n=21) who said it was '*easy*', 17% (n=12) who said it was '*very easy*' and 11% (n=8) who said it was '*very difficult*'. There were 9% (n=6) who didn't know. Having been in some form of treatment in the previous six months was reported by 48% (n=34).

3.1.2 Recruitment

Participants were asked if they had participated in the IDRS or EDRS in previous years, as shown in Table 2. There were 49% (n=35) of respondents who reported having participated in the survey in previous years. As in previous years, the majority (68%, n=48) had been recruited to the survey via Needle and syringe programs (NSP). A further 25% (n=18) had heard about it via word of mouth and one other individual had heard about it through other means. Similar to previous years, IDRS recruitment advertising was primarily conducted in NSP sites.

Table 2: Source of recruitment and previous participation in IDRS and EDRS, 2016

Characteristic	2016 N=71
Participated in IDRS in previous years (%)	49
Where found out about IDRS survey (%):	
NSP	68
Word of mouth	25
Chemist	0
Other	1
Unknown	6
Participated in EDRS in previous years (%)	3

Source: IDRS user interviews

3.2 Drug use history and current drug use

Table 3 presents injection history, drug preferences and polydrug use of PWID in 2016. The mean age of first injection among current PWID was 19 years, which was which was significantly less the previous year's average of 20 (t=-2.329, df=70, p=.023).

Heroin replaced methamphetamines as the most commonly reported drug first injected, however the 52% (n=4) reporting heroin in this role was not significantly greater than the 44% reported in 2015. Methamphetamines were reported as first drug injected by 45% (n=32) compared to 52% (n=46) in 2015, however, this also was found not to be significant. There was also on individual who reported that the first drug they had injected as morphine.

Heroin remained the most commonly reported drug of choice reported by 66% (n=47) compared with 61% in 2015 although this was not a significant increase. Methamphetamines were reported as drug of choice by 28% (n=20) which was relatively unchanged from 27% in 2015) (Figure 1).

Those reporting injecting daily or more fell significantly from 67% in 2015 to 48% (n=34) in 2016 (χ^2=5.43, 95% CI=0.0416-0.3380, p=0.02). However, the most common single category of injecting frequency was '*more than weekly but less than daily*' which was returned as the most common frequency of injection, reported by 44% (n=31) of PWID in 2016 which was significantly more than 21% in 2015 (χ^2=8.13, 95% CI=0.0777-0.3596, p=.004).

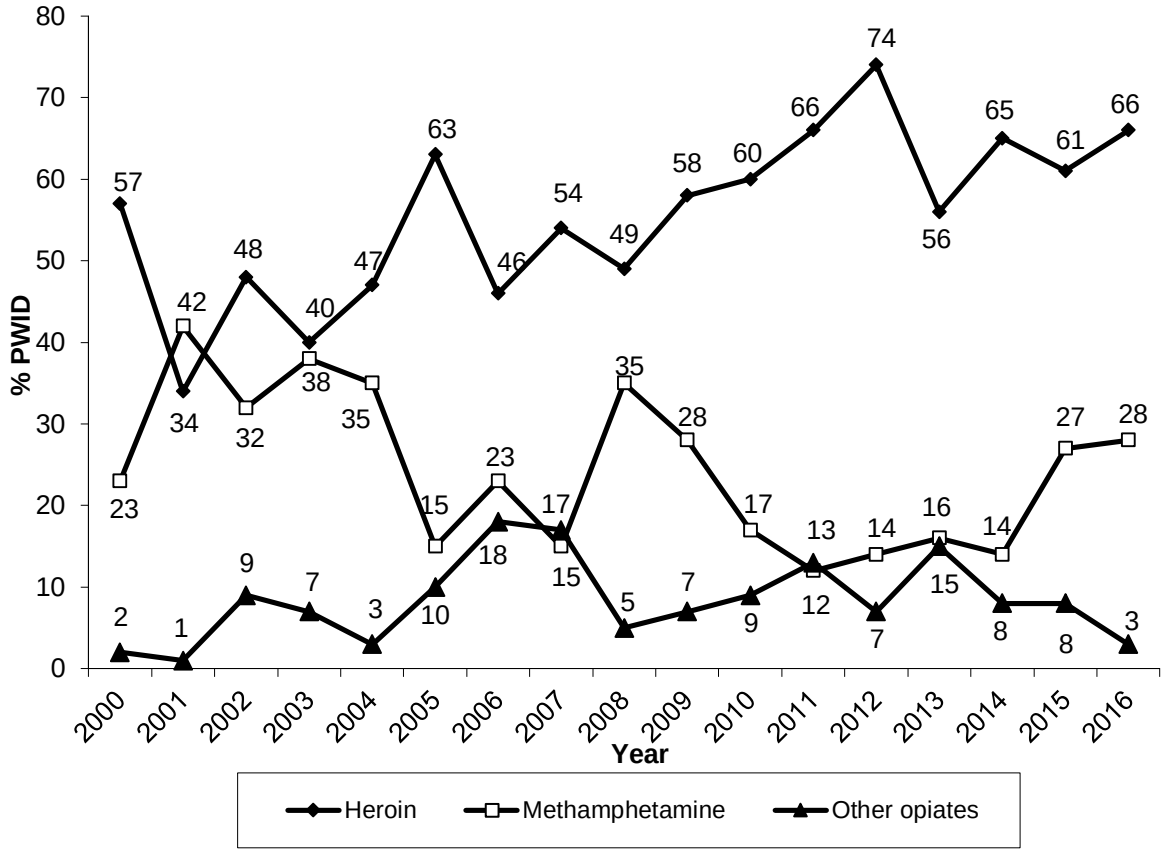
Table 3: Injection history, drug preferences and polydrug use of participants, 2011-2016

	2011 N=70	2012 N=100	2013 N=88	2014 N=98	2015 N=89	**2016 N=71**
Age first injection (mean years)	20	19	19	20	20	**19**
First drug injected (%)						
Heroin	47	36	42	43	44	**52**
Amphetamines	36	52	39	45	52	**45**
Morphine	6	4	7	3	3	**1**
Drug of choice (%)						
Heroin	66	74	56	65	61	**66**
Cocaine	1	0	1	0	0	**0**
Methamphetamine (any form)	12	14	16	14	27	**28**
Speed	*3*	*5*	*6*	*0*	*11*	**3**
Base	*0*	*1*	*0*	*0*	*0*	**0**
Crystal methamphetamine	*9*	*8*	*10*	*14*	*16*	**25**
Cannabis	7	3	8	5	2	**1**
Drug injected most last month (%)						
Heroin	54	52	50	55	54	**63**
Cocaine	0	0	0	0	0	**0**
Methamphetamine (any form)	21	17	20	23	27	**30**
Speed	*7*	*4*	*5*	*3*	*3*	**0**
Base	*0*	*0*	*0*	*0*	*0*	**0**
Crystal methamphetamine	*14*	*13*	*16*	*19*	*24*	**30**
Most recent drug injected (%)						
Heroin	50	46	47	49	51	**61**
Cocaine	0	1	0	0	0	**0**
Methamphetamine (any form)	19	18	22	28	30	**31**
Speed	*4*	*7*	*7*	*6*	6	**1**
Base	*0*	*0*	*0*	*0*	0	**0**
Crystal methamphetamine	*14*	*11*	*15*	*21*	25	**30**
Frequency of injecting in last month (%)						
Not injected in last month	0	1	0	0	0	**1**
Weekly or less	24	12	17	16	12	**7**
More than weekly, less than daily	44	37	44	35	21	**44**
Once per day	11	15	14	21	29	**18**
2-3 times a day	16	27	21	18	33	**21**
>3 times a day	4	8	5	9	5	**9**

Source: IDRS user interviews

- **Minor opioids are not shown**

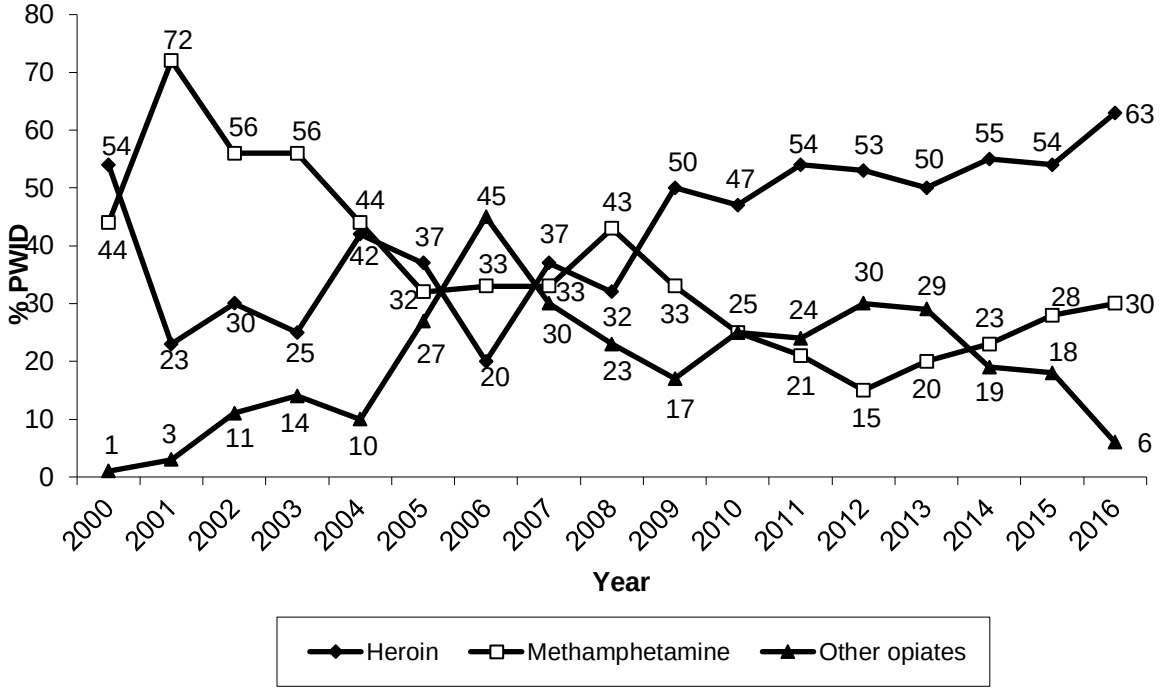
Figure 1: Drug of choice, 2000-2016



Source: IDRS user interviews

Heroin also remained the drug most injected in the month prior to interview for the seventh year running with 63% (n=45) of PWID reporting this which was comparable to 54% in 2015. Methamphetamines were reported as the most injected class of drug by 30% (n=21), which was comparable to 28% in the previous year. Other opiates were reported as the most injected class of drug by 6% (n=4) which was a significant decline from 18% the previous year (χ^2 =4.43108, 95% CI 0.0199-0.2220, p=0.04) (Figure 2). More details of drugs most injected in the month prior to interview are provided in Table 4 below.

Figure 2: Drug injected most last month, 2000-2016



Source: IDRS user interviews

Table 4: Drug injected most often in the last month, 2011-2016

Drug %	2011 N=70	2012 N=100	2013 N=88	2014 N=98	2015 N=89*	2016 N=71
Heroin	54	53	50	55	54	**63**
Methamphetamine						
Speed	7	4	5	3	3	**0**
Ice/crystal	14	13	16	19	24	**30**
Buprenorphine**	10	5	10	10	5	**3**
Morphine	6	12	8	5	8	**1**
Oxycodone	4	8	7	2	0	**1**
Cocaine	0	0	0	0	0	**0**
Miscellaneous opiates	0	5	5	4	3	**0**
Other	0	0	0	1	0	**1**

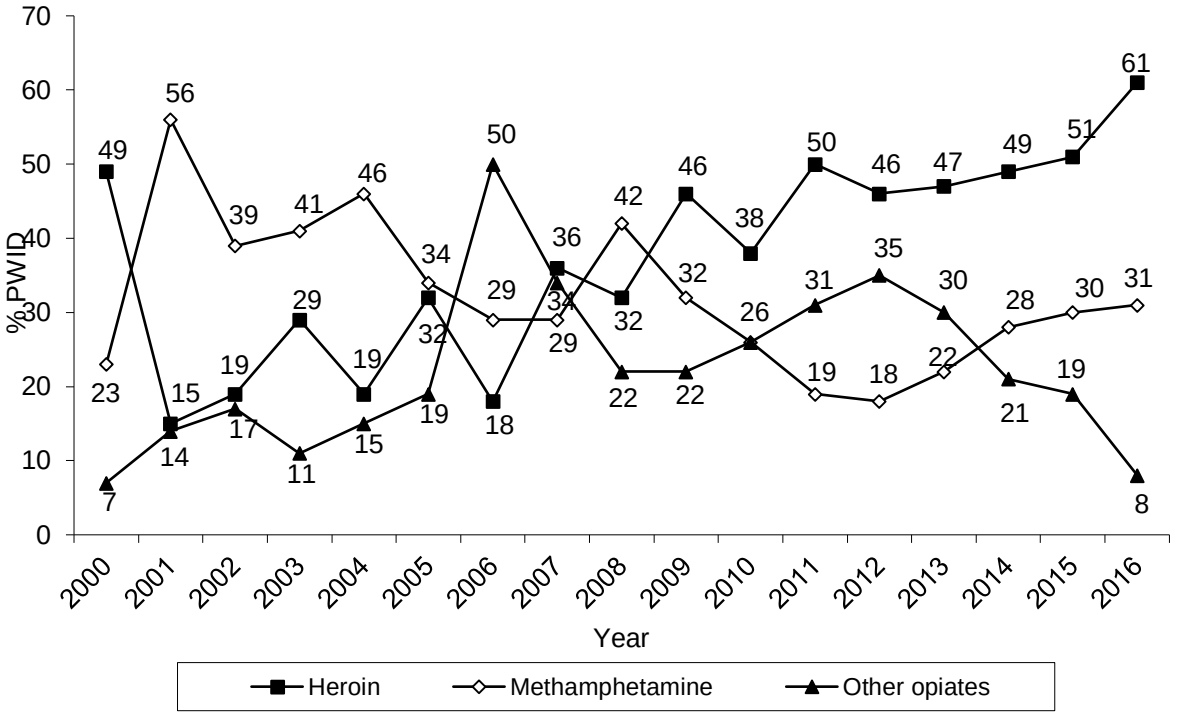
Source: IDRS user interviews

*Totals may not add to 100% due to rounding

** Includes buprenorphine-naloxone (Suboxone®)

In 2016, the greatest proportion of respondents again nominated heroin (61%, n=43) as the drug most recently injected for the eighth year running. This figure was comparable to the 51% of PWID who reported this in 2015, but was also the highest figure so far recorded by the WA PWID sample. Methamphetamines were reported as the class of drugs most recently injected by 31% (n=22) which was comparable to 30% in 2015.Other opiates were reported in this context by 8% (n=6), compared with 19% the previous year, but this was not found to be a significant change (Figure 3). These data are somewhat different from the most recent WA NSP survey figures collected the previous year which found the most common last drug injected to have been methamphetamine (45%), heroin (29%), and other opiates (16%) (Memedovic et al., 2016).

Figure 3: Drug last injected prior to interview, 2000-2016



Source: IDRS user interviews

3.2.1 Locations of injection

Participants were asked about the location of last injection (Table 5). By far the most commonly nominated last location of injection remained at a private home, reported by 83% (n=59) in 2016, which was not significantly different to 81% in 2015. Much smaller numbers of PWID nominated other locations.

Table 5: Proportion of participants reporting the last location for injection, 2011-2016

Location	2011	2012	2013	2014	2015	2016
Private home	75	79	84	83	**81**	**83**
Street/car park/beach	2	5	3	5	**3**	**4**
Car	11	9	9	10	**14**	**7**
Public toilet	6	4	3	2	**3**	**3**
Other	6	3	1	0	**0**	**2**

Source: **IDRS user interviews**

3.2.2 Money Spent on Drugs

Asked how much money they had spent on drugs yesterday produced responses ranging from none through to $1,350. Of those who had spent any money, the average amount was $196 which was not significantly different from the 2015 average of $175.

3.2.3 Drug use history of the IDU sample

The drug use histories of PWID participants in the WA IDRS in 2016, including route of administration (ROA), are presented in Table 6. Over one-half of the 2015 sample had used the following drugs in the last six months: tobacco (85%, n=60), heroin (78%, n=55), cannabis (70%, n=50), alcohol (68%, n=48) methamphetamines (65%, n=46) and benzodiazepines (56%, n=40). Further discussion of the use and market characteristics of each drug type can be found under the relevant section heading in the report.

Table 6: Drug use history of the PWID sample, 2016

Drug class	Ever used%	Ever injected %	Injected last 6 mths %	Mean (median) days injected in last 6 mths*	Smoked last 6 mths %	Snorted last 6 mths %	Swallowed last 6 mths %	Used^ last 6 mths %	Mean (median) days used^ in last 6 mths*
Heroin	92	90	78	115 (100)	7	3	3	78	116 (100)
Homebake heroin	69	69	13	15 (7)	0	0	0	13	15 (7)
Any heroin (inc. homebake)	*92*	*90*	*78*	*117(110)*	*7*	*3*	*3*	*78*	*117(126)*
Methadone (prescribed)	55	23	4	23 (24)			24	24	154 (180)
Methadone (not prescribed)	49	28	6	8 (5)			7	11	5 (4)
Physeptone® (prescribed)	13	10	0	-	0	0	1	1	5 (5)
Physeptone® (not prescribed)	31	25	1	10 (10)	0	0	1	3	6 (6)
Any methadone (inc. Physeptone®)	*75*	*52*	*9*	*19 (13)*	*0*	*0*	*28*	*31*	*120 (178)*
Buprenorphine (prescribed)	28	21	1	24 (24)	0	0	3	4	54 (24)
Buprenorphine (not prescribed)	30	27	7	14 (6)	0	0	6	7	14 (10)
Any buprenorphine (exc. buprenorphine-naloxone)	*48*	*39*	*9*	*15 (8)*	*0*	*0*	*9*	*13*	*27 (10)*
Buprenorphine-naloxone (prescribed)	24	10	3	168 (168)	0	0	13	13	99 (90)
Buprenorphine-naloxone (not prescribed)	20	17	7	55 (48)	0	0	1	7	58 (48)
Any buprenorphine-naloxone	*38*	*21*	*10*	*87 (100)*	*0*	*0*	*14*	*20*	*85 (90)*
Morphine (prescribed)	25	23	1	3 (3)	0	0	3	4	15 (19)
Morphine (not prescribed)	65	61	16	31 (10)	0	0	0	16	31 (10)
Any morphine	*70*	*66*	*16*	*30 (10)*	*0*	*0*	*3*	*17*	*30 (10)*
Generic Oxycodone (prescribed)	13	10	1	180 (180)	0	0	0	1	180 (180)
Generic Oxycodone (not prescribed)	47	44	11	9 (10)	0	0	1	11	16 (12)
Any Generic Oxycodone	*51*	*47*	*13*		*0*	*0*	*1*	*13*	
OP Oxycodone (prescribed)	3	3	0	-	0	0	0	0	-
OP Oxycodone (not prescribed)	23	14	9	19 (7)	0	0	0	9	24 (14)
Any OP Oxycodone	*23*	*14*	*9*	*19 (7)*	*0*	*0*	*0*	*9*	*24 (14)*
Other Oxycodone (prescribed)	18	13	4	20 (7)	0	0	0	4	63 (7)
Other Oxycodone (not prescribed)	38	32	9	35 (5)	1	0	0	9	35 (5)
Any Other Oxycodone	*45*	*37*	*11*	*40 (11)*	*1*	*0*	*0*	*11*	*46 (13)*
Any oxycodone	*68*	*62*	*20*		*1*	*0*	*0*	*20*	
Fentanyl	34	21	11	34 (11)	2	0	0	17	28 (9)
OTC codeine	32	4	1	7 (7)	0	0	4	6	16 (5)
Other opioids	37	13	3	4 (4)	0	0	9	11	50 (23)

- **Source: IDRS user interviews**

Table 6: Drug use history of the PWID sample, 2016 (continued)

Drug class	Ever used %	Ever injected %	Injected last 6 mths %	Mean (median) days injected in last 6 mths*	Smoked last 6 mths %	Snorted last 6 mths %	Swallowed last 6 mths %	Used^ last 6 mths %	Mean (median) days used^ in last 6 mths*
Speed powder	87	82	17	26 (10)	6	3	1	18	25 (10)
Amphetamine liquid	17	17	1	2 (2)			0	1	2 (2)
Base/point/wax	31	30	3	46 (46)	0	0	0	3	46 (46)
Ice/shabu/crystal	83	82	61	*57 (30)*	27	0	0	62	*66 (47)*
Any form methamphetamine#	*92*	*92*	*63.*	*59 (26)*	*27*	*3*	*1*	*65*	*68 (47)*
Pharmaceutical stimulants (prescribed)	13	3	0	-	01	0	3	3	45 (45)
Pharmaceutical stimulants (not prescribed)	49	18	6	4 (2)	1	3	11	17	6 (5)
Any form pharmaceutical stimulants	*55*	*20*	*6*	*4 (2)*	*1*	*3*	*13*	*18*	*13 (5)*
Cocaine	62	47	6	9 (7)	1	7	0	10	7 (5)
Hallucinogens	79	18	1	14 (14)	1	0	9	10	6 (5)
Ecstasy	68	34	4	6 (5)	0	3	13	14	10 (5)
Alprazolam (prescribed)	*18*	3	0	-	0	0	*3*	*3*	*92 (92)*
Alprazolam (not prescribed)	*49*	6	0	-	0	0	*18*	*18*	*15 (7)*
Any Alprazolam	*56*	6	0	-	0	0	*20*	*20*	
Other benzodiazepines (prescribed)	58	7	1	42 (432)	0	0	41	41	111 (180)
Other benzodiazepines (not prescribed)	54	9	1	1 (1)	0	0	30	30	29 (24)
Any other benzodiazepines	*72*	*10*	*3*		*0*	*0*	*55*	*55*	
Any form benzodiazepines	*73*	*14*	*3*	*22 (22)*	*0*	*0*	*56*	*56*	*94 (58)*
Seroquel® (prescribed)	*18*	*0*	0	-	0		*10*	*10*	*92 (40)*
Seroquel® (not prescribed)	35	0	0	-	0		11	11	16 (5)
Any Seroquel	*49*	*0*	0	-	*0*		*21*	*21*	*51 (24)*
Alcohol	90	6	0	-			68	68	45 (24)
Cannabis	89				70		4	70	81 (60)
Synthetic cannabis	38				9		0	9	7 (3)
Emerging psychoactives	6	3	3	4 (4)	0	0	3	3	4 (4)
Inhalants	28							6	22 (18)
Steroids	4	4	0	-	0	0	1	1	28 (28)
Tobacco	93							85	168 (180)
E-cigarette	32							24	31 (4)

Source: IDRS user interviews

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

Category includes speed powder, base, ice/crystal and amphetamine liquid; does not include pharmaceutical stimulants

* Use on a daily basis is 180 days

4 HEROIN

4.1 Use

4.1.1 Lifetime history of heroin use among IDU participants

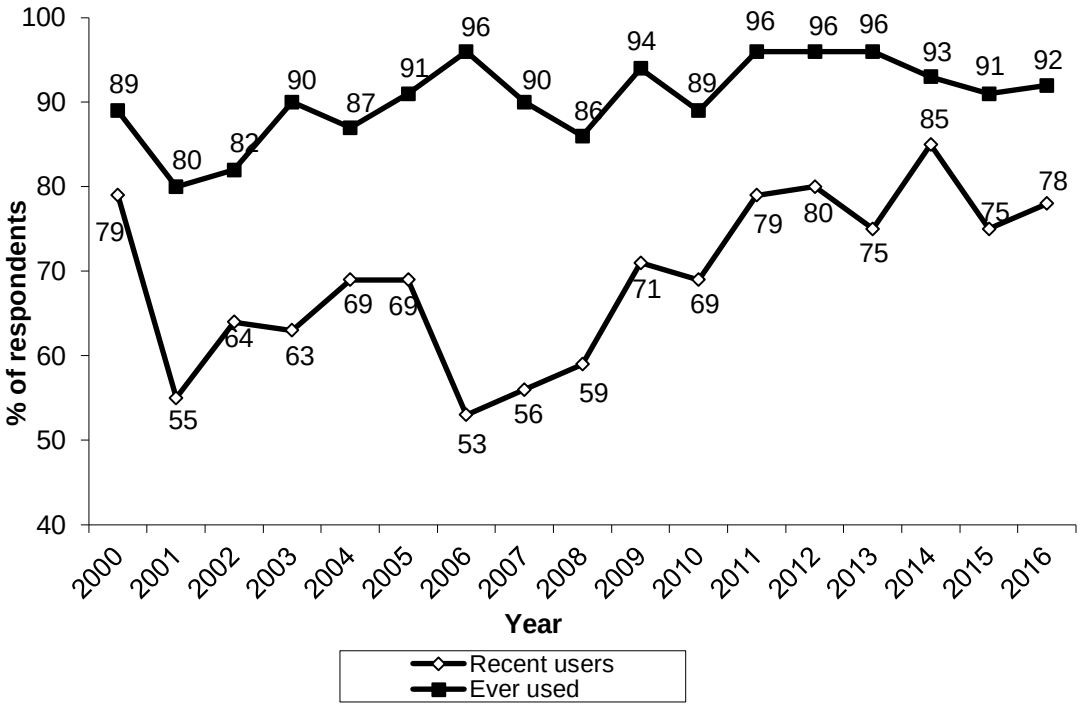
A lifetime history of heroin use was reported by 92% (n=65) of the 2016 PWID sample which was comparable to the 2015 figure of 91% (Figure 4). A lifetime history of use of homebake heroin was reported by 69% (n=49) of PWID in 2016 which was not significantly different from the 74% who reported a history of lifetime use in 2015.

All respondents who had used opiates were asked to answer the Severity of Dependence Scale (SDS). Of the 60 who responded, 87% (n=52) scored five or higher indicating some degree of dependency.

4.1.2 Current patterns of heroin use

Use of heroin in the six months prior to interview was reported by 78% (n=55), which was not a significant increase from the 75% reporting recent heroin use in 2015 (Figure 4). Of PWID who had used heroin in the last six months, all (100%, n=55) had injected heroin with the only other routes of administration (ROA) being smoking (n=5), snorting (n=2) and swallowing (n=2). Both KEs who discussed methods of heroin use agreed that the principle ROA was by injection.

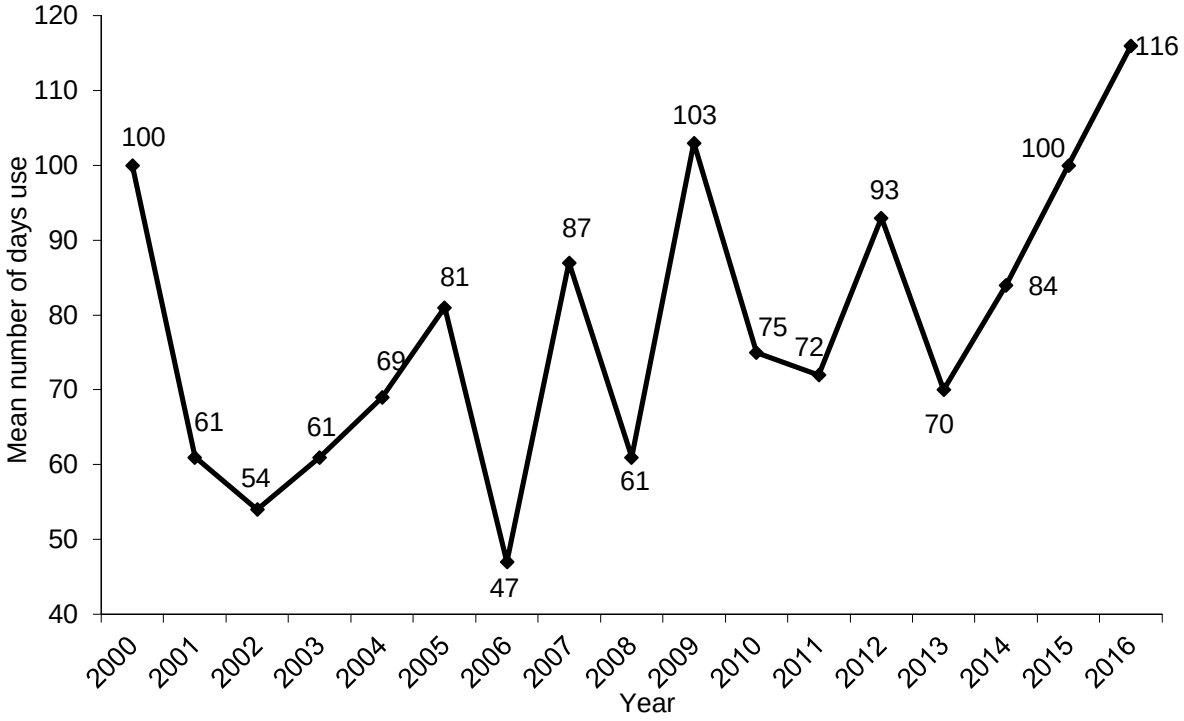
Figure 4: Lifetime and recent use of heroin, 2000-2016



Source: IDRS user interviews

Days of use in the last six months ranged from one to 180 days, with a mean of 116, which was not a significant increase from the 2015 mean of 100 days (Figure 5).

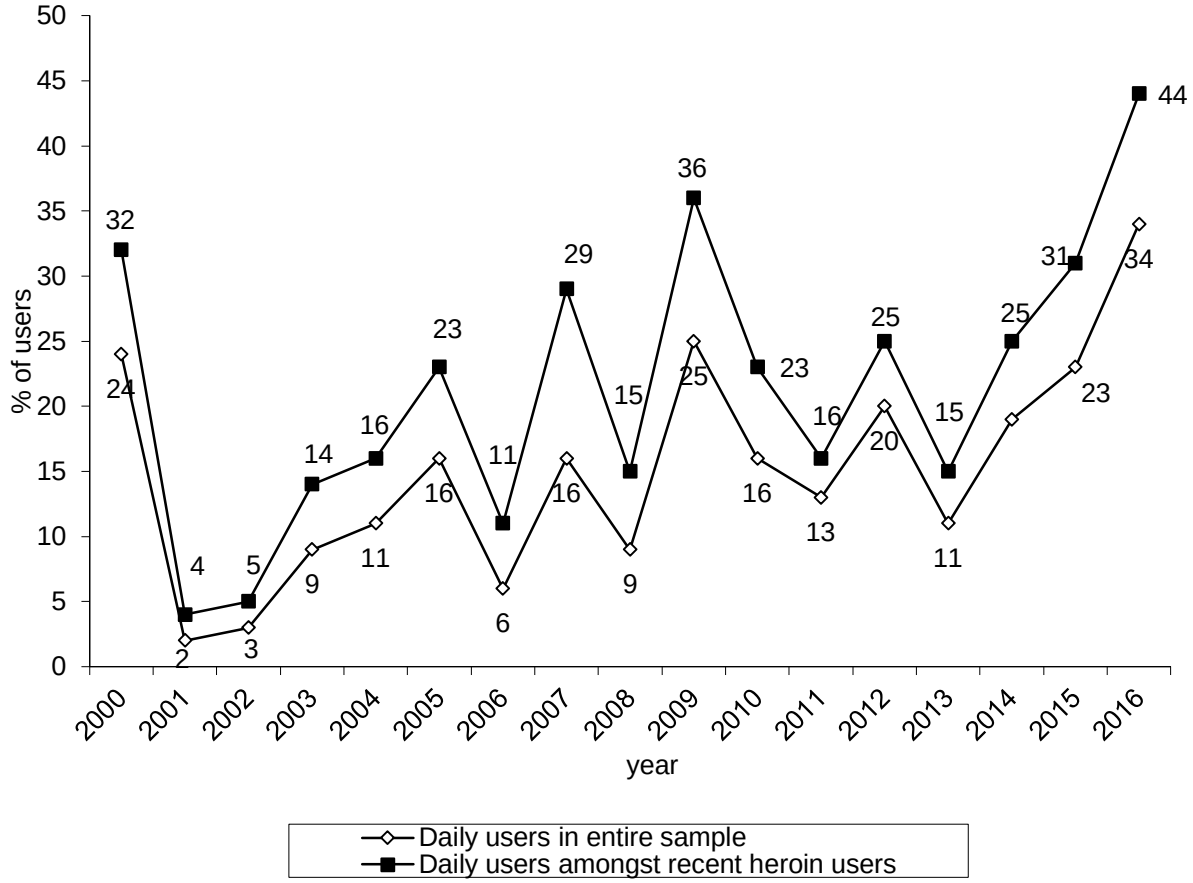
Figure 5: Mean days of heroin use in last 6 months, 2000-2016



Source: IDRS user interviews

The number of daily users of heroin among the entire sample significantly increased, from 23% in 2015 to 34% (n=24) in 2016 (χ^2=7.44, 95% CI 0.0705-0.3597, p=.006). The number of recent heroin users reporting daily use similarly rose from 31% in 2015 to 44% (n=24) in 2016 (Figure 6).

Figure 6: Daily heroin users, 2000-2016



Source: IDRS user interviews

The proportion reporting recent use of homebake was 13% (n=9) which was unchanged 2015. All of these users reported injection of homebake, with no other ROA being reported. The mean days of use reported was 15 days which was a significant decrease from the 46 days reported in 2015 (t=-5.557, df=8, p=.001).

Of the total PWID sample, 78% (n=55) reported use of any form of heroin (including homebake) in the last six months. Of these participants, 100% reported injection as a ROA for any heroin used in the last six months with other routes being uncommon.

In 2016, 67 of PWID provided information pertaining to the forms of heroin they had most used in the last six months. White or off-white powder remained the form most used, reported by 57% (n=31). This was followed by white / off-white rock, reported by 24% (n=13), brown rock (13%, n=7), and brown rock (6%, n=3). Homebake was not reported in this context at all.

Only one KE made reference to the current forms of heroin available, describing it as "*white or beige*".

The typical amount of heroin reportedly used in a day was one and a half points.

4.2 Price

The prices of most recent heroin purchases reported by PWID in the 2016 survey for the most part remained substantively unchanged from those reported in 2015. A quarter gram remained the most commonly purchased quantity with a median price of $150. The median price of a gram remained at $600. Median prices of most recent heroin purchases are presented in Table 7.

Table 7: Price of most recent heroin purchases by PWID participants, 2015-2016

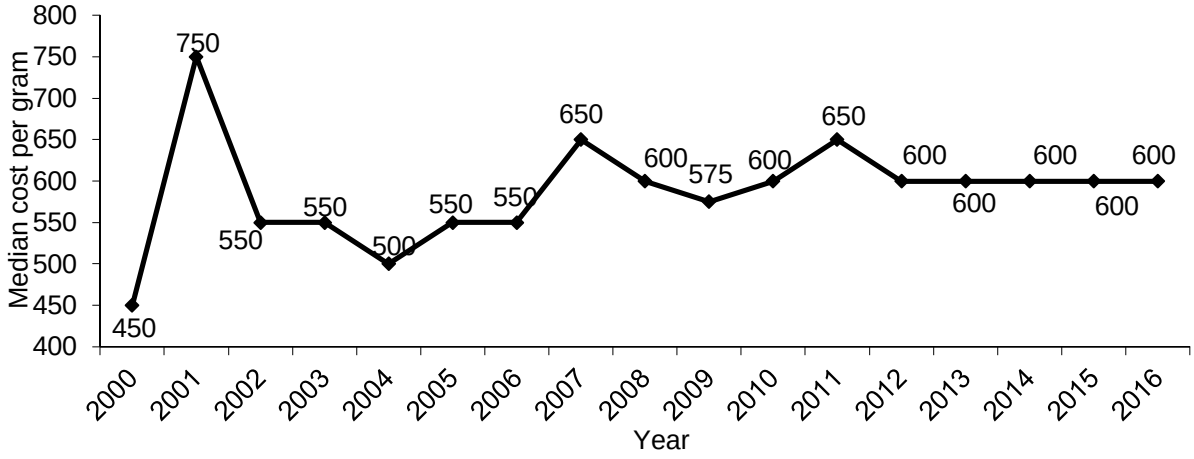
Amount	Median price* $	Range $	Number of purchasers*
Cap / point	(100)100	50-100	(31) 27
Quarter gram	(150) 150	20-100	(33) 42
Half gram (Half weight)	(325) 300	120-350	(16) 32
Gram	(600) 600	450-680	(16) 21

Source: IDRS user interviews

* 2015 data are presented in brackets

The median price of one gram of heroin in Perth across IDRS surveys is shown in Figure 7. In 2000, the median price was $450, which increased to $750 the following year, likely in response to the disruption of the heroin supply that occurred that year. Since then, it fell to around $550 per gram through to 2006, before rising to prices ranging from $575 to $650 with the median price of a gram of heroin stabilising at $600 in 2012.

Figure 7: Median price of one gram of heroin estimated from PWID purchases, 2000-2016



Source: IDRS user interviews

Participants were also asked whether the price of heroin had changed in the last six months. In 2016, 50 PWID responded to this item, with the majority (82%, n=41) reporting the price as stable. There was also 8% (n=4) who believed the price had been increasing, and small numbers who thought the price had decreased (6%, n=3) or fluctuated (4%, n=2).

Only two KEs commented on the price of heroin, one suggesting a range of $500-$800 per gram, but noting that it varied "depending on who you know", and the other a range of $80-$100 per point.

4.3 Availability

Participants were asked about the current availability of heroin and any change in availability over the last six months (Table 8). In 2016, 52 PWID commented on this area. The most common response remained that acquiring heroin in Perth was currently '*very easy*', reported by 69% (n=36), which was not a significant change from the 50% in 2015. Other findings were also comparable with 2015, with 25% (n=13) reporting heroin availability as '*easy'*, 6% (n=3) reporting it as '*difficult'* and no respondents describing availability as being '*very difficult*'. Asked whether the availability of heroin in Perth had changed in the previous six months, 82% (n=42) indicated that this had been '*stable'*. Other responses were much less common and are displayed in Table 8.

Table 8: Participants' reports of heroin availability in past six months, 2011-2016

	2011 (N=70)	2012 (N=100)	2013 (N=88)	2014 (N=98)	**2015 (N=89)***	**2016 (N=71)**
Current availability						
Did not respond**	18	29	28	21	29	**19**
Did respond	52	71	60	77	60	**52**
Of those who responded:						
Very easy (%)	46	59	53	52	50	**69**
Easy (%)	40	32	32	40	38	**25**
Difficult (%)	6	6	13	8	10	**6**
Very difficult (%)	8	3	2	0	2	**0**
Availability change over the last six months						
Did not respond**	22	29	28	21	30	**20**
Did respond	48	71	60	77	59	**51**
Of those who responded:						
More difficult (%)	17	10	18	9	10	**8**
Stable (%)	69	75	67	77	68	**81**
Easier (%)	13	9	12	12	12	**10**
Fluctuates (%)	2	6	3	3	10	**0**

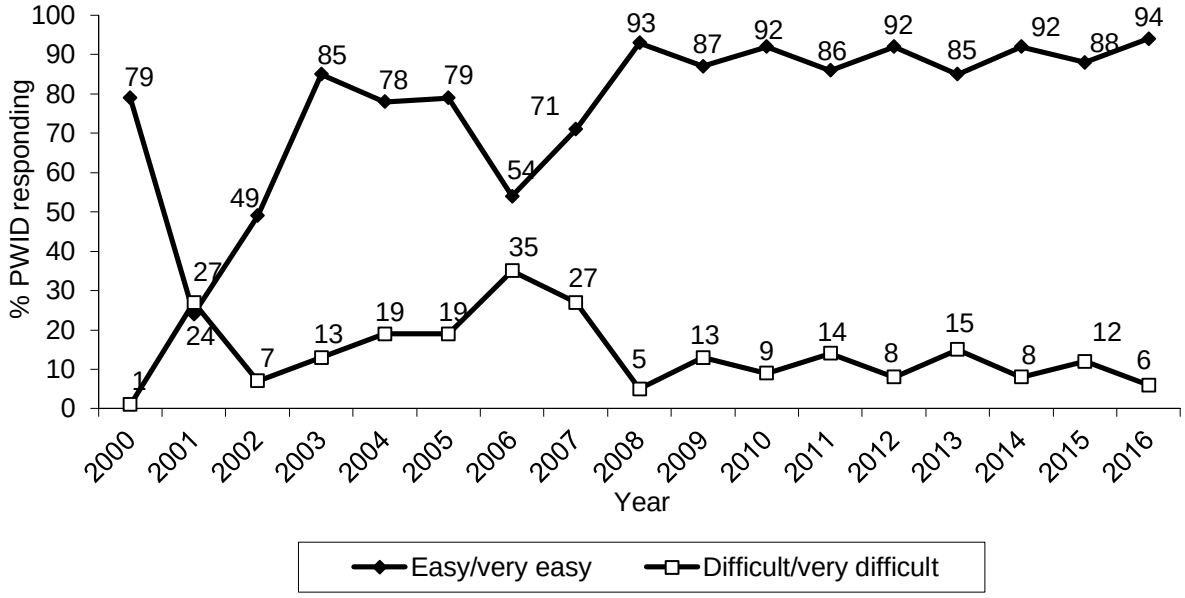
Source: IDRS User interviews

*Totals may exceed 100% due to rounding

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

Reports of current availability of heroin across surveys are shown in Figure 8 and illustrate a trend towards increased self-reported availability from 2006 to 2008 followed by '*easy / very easy'* availability remaining stable thereafter.

Figure 8: PWID reports of current heroin availability, 2000-2016



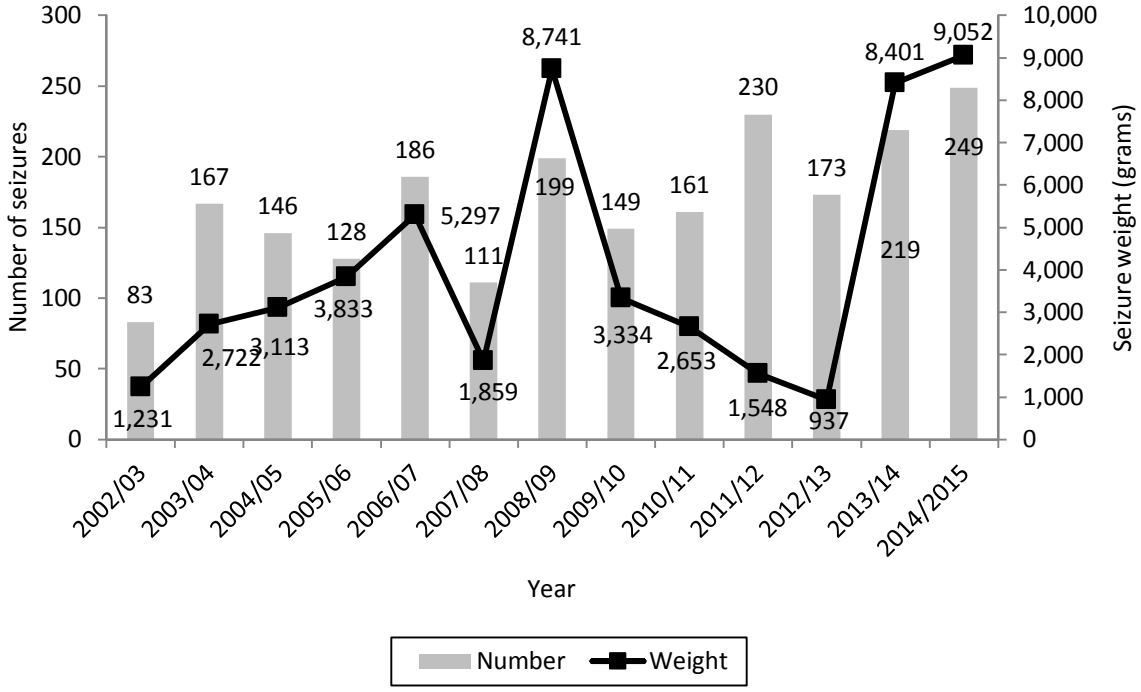
Source: IDRS user interviews

In 2016, 52 PWID responded to questions about persons and locations for last sourcing heroin. The most commonly nominated sources of heroin of last purchase remained '*friends'* (46%, n=24), equalled by '*known dealers*' (46%, n=24). '*Relatives'* were nominated by 4% (n=1) and individuals mentioned '*street dealer*' and '*acquaintances*.

As in 2015, the most commonly nominated last location for obtaining heroin was at an '*agreed public location*' (37%, n=19). 'Home delivery' was nominated by 23% (n=12), a '*friend's home*' was nominated by 21% (n=11), and a '*dealer's home*' by 15% (n=8). A '*street market*' and an '*acquaintance's house*' were both mentioned by one individual respondent.

Figure 9 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 2014/15. The number of seizures has increased somewhat since 2013/14 from 219 to 249. The total weight of seizures has increased from 8,401 to 9,052 grams.

Figure 9: Number and weight of heroin seizures by WAPS and AFP, WA 2002/03-2014/15



Source: Australian Criminal Intelligence Commission

4.4 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 9). In 2016, 50 participants commented on current levels of purity. There appeared to be a perception among the sample that heroin purity in Perth had improved somewhat with 50% (n=24) describing purity as '*medium*, compared with 39% in the previous year, however, this change was not found to be significant. Numbers reporting purity as '*high'* or *'low'* remained small at 18% (n=9) and 20% (n=10) respectively. These trends are displayed in Figure 10.

With regards to user perceptions of changes in the purity of heroin in Perth in the last six months, 50 PID responded. Over half (58%, n=29) believed it had remained '*stable'*. There were also 20% (n=10) saying it had '*increased'* and 14% (n=7) saying it had '*fluctuated'* and 8% (n=4) saying it had *'decreased'* (Table 9).

Table 9: Participants' perceptions of heroin purity in past six months, 2011-2016

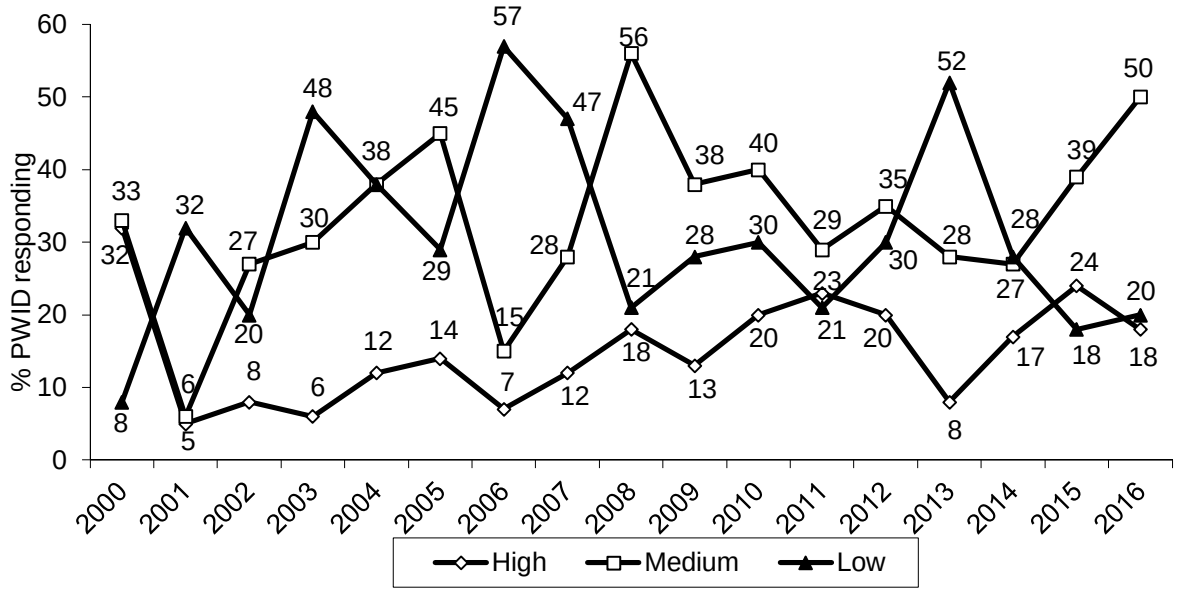
	2011 (N=70)	2012 (N=100)	2013 (N=88)	2014 (N=98)	2015 (N=89)*	**2016 (N=71)**
Current purity						
Did not respond**	22	29	28	21	32	**21**
Did respond	48	71	60	77	57	**50**
Of those who responded:						
High (%)	23	20	8	17	25	**18**
Medium (%)	29	35	28	27	39	**50**
Low (%)	21	30	52	29	18	**20**
Fluctuates (%)	27	13	12	27	19	**12**
Purity change over the last six months						
Did not respond* (%)	24	30	29	21	32	**21**
Did respond (%)	46	70	59	77	57	**50**
Of those who responded:						
Increasing (%)	24	14	9	25	23	**20**
Stable (%)	41	44	51	36	30	**58**
Decreasing (%)	7	16	31	26	14	**8**
Fluctuating (%)	28	20	10	9	33	**14**

Source: IDRS user interviews

*Totals may exceed 100% due to rounding

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

Figure 10: Proportion of PWID reporting current heroin purity as 'high', 'medium' or 'low', 2000-2016

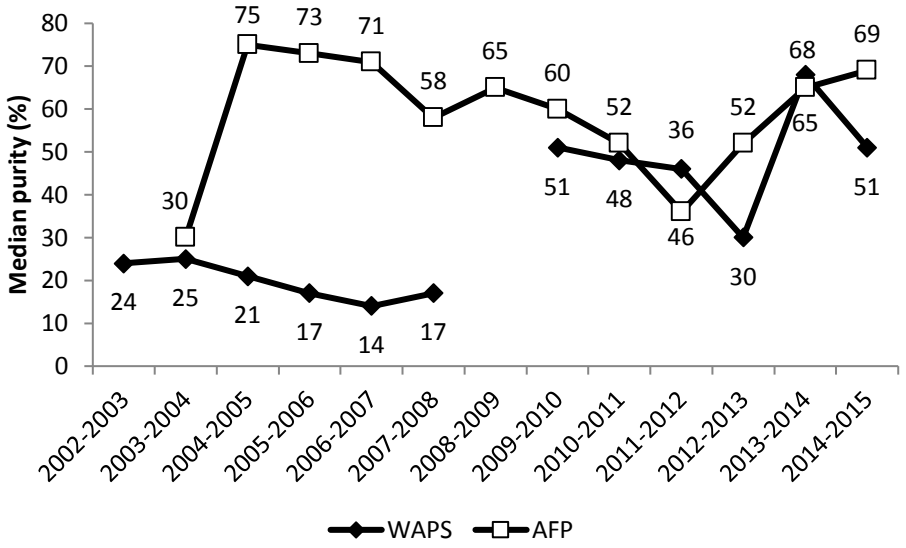


Source: IDRS user interviews

Figure 11 shows the median purity of heroin seizures made by WAPS and the AFP. From July 2013 to June 2015, the median purity across all WAPS seizures analysed varied between 12% and 88% with a median of 51% which was somewhat less than 68% the previous year. The AFP analysed just four seizures with a median purity of 73%.

It must also be noted that the seizures and accompanying purity data reported here is not a truly random sample of all seizures made by these agencies as they make operational decisions about which seizures they will subject to analysis to determine purity. As a result it is not possible to say the extent to which the purities reported here are representative of all seizures made by these law enforcement agencies in WA.

Figure 11: Purity of heroin seizures analysed in WA, by financial year, 2002/03-2014/15



Source: Australian Criminal Intelligence Commission
Note: Where there are no data points, no seizures were analysed

Just two KEs commented on the purity of heroin, the first noting that while purity tended to '*fluctuate'*, cheaper was not necessarily weaker, and purity could sometimes be "*extremely strong and sold without cutting with resultant overdoses.*" This situation was described as having been '*stable'* throughout the first six months of 2016. The other KE commented that the heroin around was "*better quality and more available*".

4.5 Summary of heroin trends

- Most primary indicators suggest the gradual trend towards increasing availability and use of heroin use among the IDRS samples has continued.
- Heroin remained the principal drug of choice nominated by 66% compared to 61% in 2015.
- Heroin remained the drug most injected in the previous month with 63% compared to 54% in 2015.
- Heroin remained the drug most commonly used at the most recent injection, reported by 61% compared to 51% in 2015.
- Lifetime use of heroin has remained stable, reported by 92%.
- Recent use of heroin was 78% compared to 75% in 2015.
- Mean days of heroin use remained stable at 100.
- Daily use among recent heroin users was reported by 44%, an increase from 31% the previous year.
- The median reported price for one gram of heroin remained at $600. The majority of those who responded reported the price of heroin as '*stable'* over the last six months.
- Current availability of heroin continued to be rated as '*very easy*' or '*easy'* which was comparable to findings in 2015. Respondents generally reported heroin availability had remained '*stable'*.
- The dominant perception among users was that the purity of heroin was '*medium',* however, numbers describing it as '*high'* or '*low'* remained relatively small.

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

5.1 Use

5.1.1 Methamphetamine use among IDU participants

In 2016, lifetime use of any form of methamphetamine was reported by 92% (n=65). All of these participants, had a history of having ever injected any form of methamphetamines. With regards to lifetime use by methamphetamine form, lifetime use of speed powder was reported by 87% (n=62) of the 2016 PWID sample, lifetime use of base by 31% (n=22) and lifetime use of crystal by 83% (n=59). Patterns of lifetime and recent use of methamphetamine across years are shown in Table 10.

Table 10: Patterns of methamphetamine use in last six months by form, 2011-2016

Form used (%)	2011 (N=70)	2012 (N=100)	2013 (N=88)	2014 (N=98)	2015 (N=89)	2016 (N=71)
Speed						
Ever used	86	92	89	88	90	**87**
Used last six months	43	45	48	39	34	**18**
Base						
Ever used	23	27	40	46	23	**31**
Used last six months	6	6	11	8	2	**3**
Crystal						
Ever used	81	87	81	82	88	**83**
Used last six months	46	64	59	53	64	**62**
Liquid						
Ever used	9	16	21	9	11	**17**
Used last six months	1	2	3	3	0	**1**
Any methamphetamine						
Ever used	96	96	93	93	96	**92**
Used last six months	64	72	72	66	71	**65**

Source: IDRS user interviews

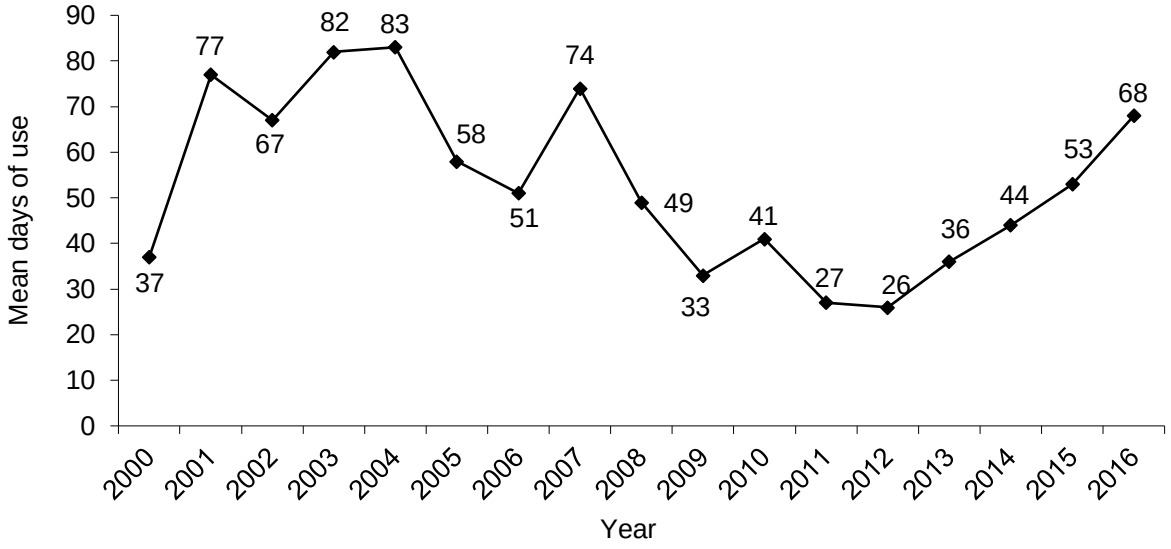
All respondents who had used stimulants were asked to complete the Severity of Dependence Scale (SDS). Of the 41 who answered, 46% (n=19) scored four or higher indicating some degree of dependency.

5.1.2 Current patterns of methamphetamine use

In 2016, 65% (n=46) of PWID reported use of any form of methamphetamine in the last six months, which was not a significant change from the 71% reported in the 2015 sample. Of these participants, 98% (n=45) had injected a form of methamphetamine during this period and 41% (n=19) reported having smoked it. Other routes of administration were uncommon.

As shown in Figure 12, the average number of days any form of methamphetamine was used during the last six months by these participants was 68 days. This was not significantly changed from the 2015 mean of 52 days. It was, however, a significant increase on the 2012 mean of 26 days (t=4.272, df=45, p<.001), suggesting that mean days of use of methamphetamines have been increasing over the last four years.

Figure 12: Mean days of use for any methamphetamine by WA PWID, 2000-2016



Source: IDRS user interviews

In 2015, recent use of speed powder was reported by 18% (n=13) of the sample which was significantly less than the 34% of recent users in 2015 (χ^2=4.01, 95% CI=0.0156-0.2802, p=.045). Recent injection of speed was reported by virtually all recent users (92%, n=12).

Days of use in the last six months ranged from one to 180 days, with one report of use of powder methamphetamine on a daily basis compared to four in 2015. Mean days of use was 25, which was not a significant increase from the 2015 average of 45 days.

Recent use of base in 2016 remained low and was reported by 3% (n=2) which was compatible to the 2% reported in 2015.

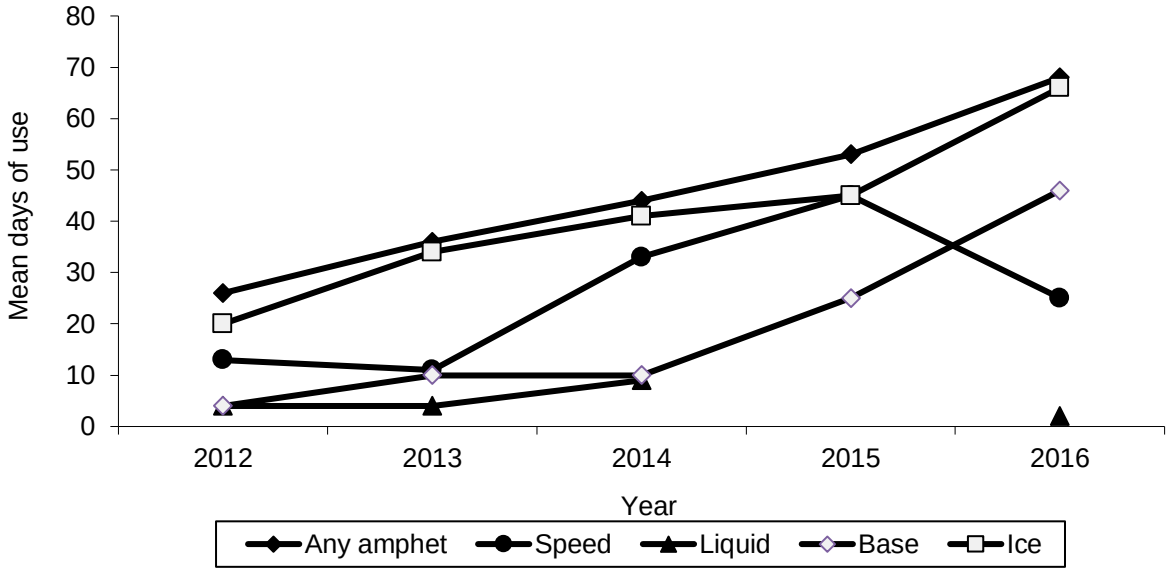
Injection of base in the previous six months was reported by 100% (n=2) of these respondents. Days of use ranged from two to 90; no respondents reported using base on a daily basis, which was comparable to findings in recent years.

Recent use of crystal was reported by 62% (n=44) of PWID which was not significantly different from the 64% who reported doing so the previous year. The majority of recent crystal users (98%, n=43) reported injecting crystal in the last six months and 43% (n=19) reported having smoked it. No other routes of administration were reported.

Days of use ranged from three to 180, with seven respondents reporting use of crystal on a daily basis (compared to six in 2015). The mean days of use was 66, which was a significant increase from the mean of 45 days reported in 2015 (t=2.142, df=43, p=.038).

Mean days of use of any form of methamphetamine is displayed in Figure 13.

Figure 13: Mean days of use for any form of methamphetamine, WA 2012-2016



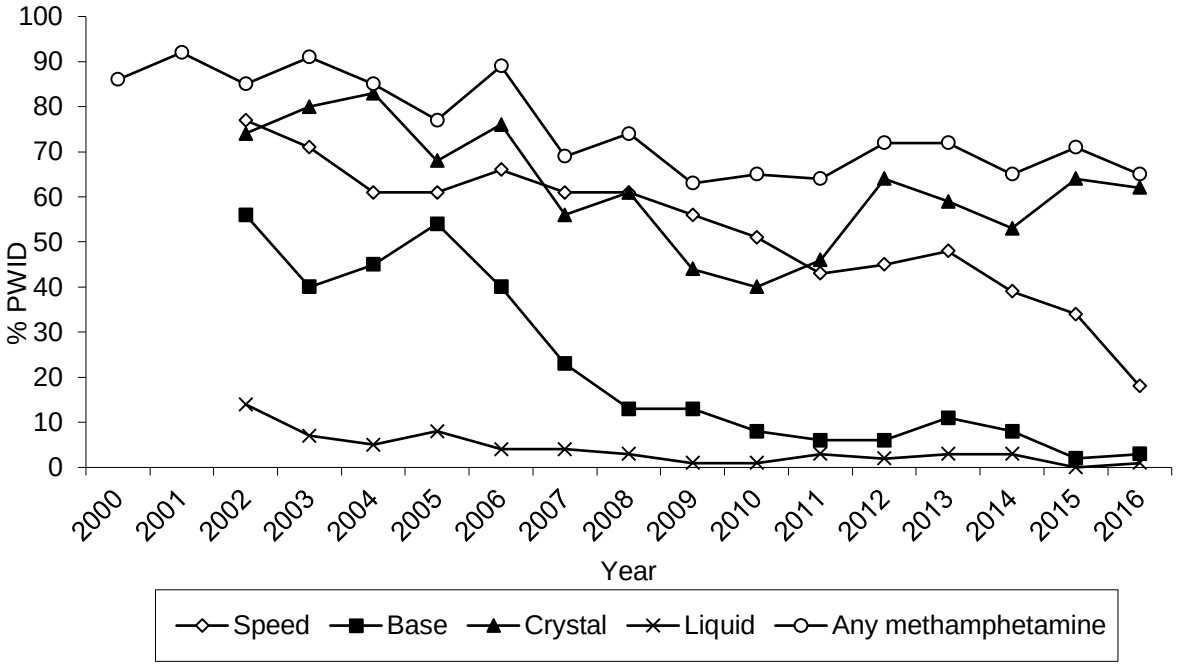
Source IDRS user interviews

There was only one report of recent use of liquid amphetamine. This individual reported injecting liquid amphetamine on two days in the last six months.

Of the 46 PWID who responded to the form of methamphetamine they had most commonly used, crystal remained the most frequently nominated by 96% (n=44), followed by 4% (n=2) who nominated powder.

Figure 14 shows the relative proportions of PWID in Perth reporting use of the various forms of methamphetamine in the last six months across IDRS surveys.

Figure 14: Proportion of PWID reporting methamphetamine use in the last six months, 2000-2016



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

There were 12 KEs who provided information on the current forms of methamphetamine in circulation. All agreed that the predominant form was "*crystal or rock*". Just one of these indicated that "*powder was sometimes available*." Similarly, there was unanimous agreement that the predominant routes of administration were intravenous or smoked, with most mentioning both of these.

These KEs also described a wide range of reasons why they considered methamphetamine use to be problematic. These included behavioural issues such as violence, aggression, threatening and unpredictability. Mental health issues following prolonged use were frequently mentioned as was the dependence-forming nature of the drug leading to involvement in criminal activity and sex work in order to fund ongoing use. A "*lack of self-care*", poor nutrition, self-harm, suicidal ideation, STIs and homelessness were also mentioned. One KE from a nursing background specifically discussed issues related to treatment observing that "*Users were often resistant to engaging in treatment, experienced high rates of relapse, there is no effective treatment, it is difficult for users to engage in schedule of appointments and people's ability to plan is impaired after a period of time.*" Another KE, also from a nursing background noted that in addition to these more common problems, users could also experience serious health problems such as strokes and heart attacks.

A KE working in outreach described the issues faced by methamphetamine users seeking treatment; "*Some view their own ice use as problematic and want help but can't escape it because it's everywhere. There's a sense of helplessness and awareness that they are treated differently.*"

One KE from the crowd control sector described the challenges of when users of methamphetamines required eviction from a venue due to their behaviour; "*We (venue*

security) approach the users with caution as a group. Never one on one. Sometimes they have to be restrained on the street until the police arrive. We try talking them down, but often the situation cannot be resolved in a peaceful way."

5.2 Price

Participants in the WA IDRS were asked what different amounts of the various forms of methamphetamine cost and how much they paid for their most recent purchase. The latter is presented in Table 11 and median prices for one gram of each form of methamphetamine are presented in Figure 14. In many instances, the very small numbers of PWID providing this information necessitate caution in the interpretation of this data.

Just four respondents were able to comment on the current price of speed. The price of a point was reported as $50 compared to $100 the previous year by two respondents. The price of a half weight was reported by one respondent as $200 compared to $350 in 2015. There no respondents able to comment on the price of a gram.

There were 25 respondents commenting on the price of a point of crystal, suggesting that the median price has remained stable at $100. There was some limited evidence that the price of a gram of crystal may have increased from $700 to $450, but this data comes from only five respondents who cited a very wide range of prices. The median price of a half weight of crystal, appears to have fallen from $350 to $300 according to 13 respondents. There were also nine respondents who suggested a median price of an eightball as $900 compared to the 2015 median provided by five respondents of $1,400, and two who provided a median price for an ounce of ice as $4,750 compared to the one respondent the previous year who reported a price of $8,000.

There were no respondents providing information concerning the price of base.

Table 11: Price of most recent methamphetamine purchases by PWID, 2015-2016

Amount	Median price* $	Range	Number of purchasers*
Speed			
Point (0.1 gram)	(100^) 50^	50-50	(8) 2
Half weight (0.5 gram)	(350^) 200	200-200	(8) 1
Gram	(475^) -	-	(2) 0
Base			
Point (0.1 gram)	(-) -	-	(0)0
Half weight (0.5 gram)	(-) -	-	(0)0
Gram	(-) -	-	(0)0
Crystal			
Point (0.1 gram)	(100) 100	50-100	(35) 25
Half weight (0.5 gram)	(350) 300	250-500	(11) 13
Gram	(700^) 450^	300-700	(6) 5

Source: IDRS user interviews

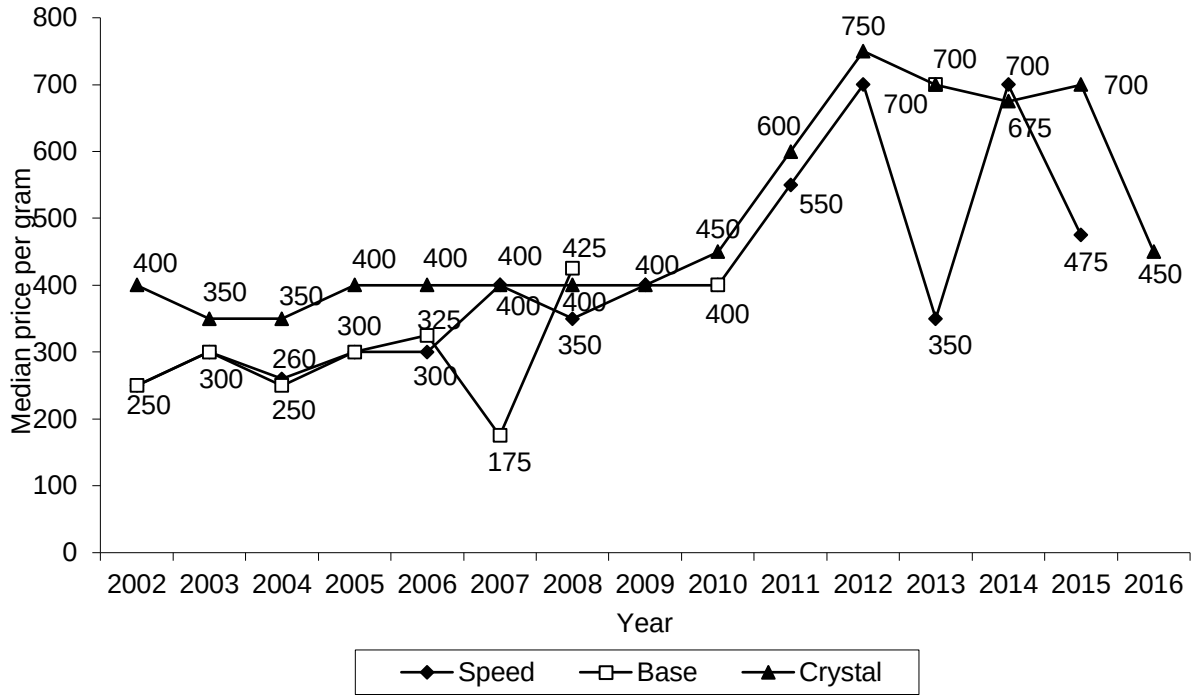
* 2015 data are presented in brackets

^ Based on small (<10) purchases

Figure 15 presents the median prices ($) per gram of most recent purchase for each methamphetamine form across years. Despite the superficial appearance of large changes in the median prices of speed and crystal in recent years, this needs to be viewed in light of the fact that these figures are based on very small numbers of reports. (See Table 11 above).

Similarly, there are several years when no respondents at all provided prices for base methamphetamine. As such, some scepticism is advised when considering if these apparent decreases and fluctuations in price of methamphetamines are in fact genuine trends.

Figure 15: Median prices of methamphetamine per gram estimated from PWID purchases, 2002-2016



Source: IDRS user interviews

Participants were asked if they perceived any changes in the price of methamphetamine over the last six months. With regards to speed or powder methamphetamine, there were four PWID who responded, with 75%, (n=3) reporting that the price of speed had been '*decreasing*. Price changes to crystal were reported on by 36 respondents, with 50%, (n=18) describing it as '*stable'*, followed by 33% (n=12) who believed it may have '*decreased'.* That the price had either '*increased'* or had been '*fluctuating'* were both reported by 8% (n=3). There were no respondents able to comment on changes to the price of base methamphetamine.

There were seven KEs who expressed a range of views on the current price of methamphetamines. The price of a point was most commonly reported as $100 (n=3), but prices as low as $40 a point were also mentioned, especially if the buyer was "*well connected*". Most of these KEs reported that prices had been stable although two thought they had decreased.

There was also a KE from the law enforcement sector who provided information on much larger deals, citing price ranges from $120,000 to $150,000 per kilo. This KE noted that while the prices for small deals had remained 'stable' prices for large deals had substantially decreased from between $190,000 and $220,000 the previous year.

5.3 Availability

Respondents were asked about the current availability of each form of methamphetamine and any changes in availability over the last six months (Table 12). There were just four respondents who commented on the availability of speed powder. Of these, 75% (n=3) described availability as '*very easy*' and the other respondent as '*difficult'*. In the previous year '*easy'* was the most commonly nominated level of availability. All four respondents (100%) agreed that availability of speed had remained '*stable'* over the last six months. Availability of crystal was again generally rated as *'very easy*' by 68% (n=27) which was not significantly different from the 56% providing this response in 2015.There were also 27% (n=10) who regarded it as '*easy'*. For both speed and crystal, the vast majority of respondents reported that availability had remained '*stable'* in the preceding six months for all forms, with powder at 100% (n=4) and crystal at 76%(n=28). As in 2015, there were no respondents able to provide information regarding the availability of base.

Table 12: Reports of methamphetamine availability in the past six months, 2015-2016

	Speed		Base		Crystal	
	2015 (N=89)	2016 (N=71)	2015 (N=89)	2016 (N=71)	2015 (N=89)	2016 (N=71)
Current availability						
Did not respond*	71	**67**	89	**71**	41	**34**
Did respond	18	**4**	0	**0**	48	**37**
Of those who responded:						
Very easy (%)	39	**75^**	-	**-**	56	**68**
Easy (%)	44	**0^**	-	**-**	42	**27**
Difficult (%)	11	**25^**	-	**-**	0	**5**
Very difficult (%)	6	**0^**	-	**-**	2	**0**
Availability change over the last six months						
Did not respond*	72	**67**	89	**71**	41	**34**
Did respond	17	**4**	0	**0**	48	**37**
Of those who responded:						
More difficult (%)	6	**0^**	-	**-**	2	**8**
Stable (%)	77	**100^**	-	**-**	71	**76**
Easier (%)	12	**0^**	-	**-**	23	**14**
Fluctuates (%)	6	**0^**	-	**-**	4	**3**

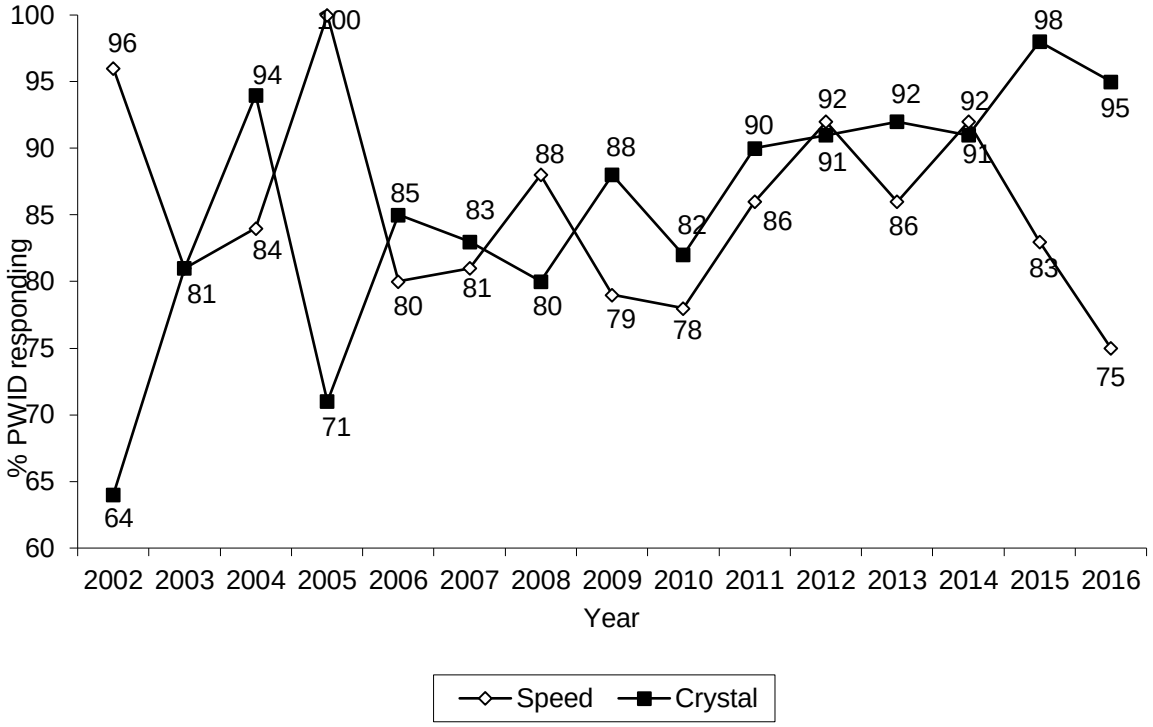
Source: IDRS user interviews

* 'Did not respond' refers to participants who were not confident in their knowledge of the market. 'Don't know' responses were excluded from this table.

^ Based on very small numbers of reports (<10)

The proportion of PWID who rated current availability as '*easy'* or '*very easy*' for speed and crystal across IDRS surveys is presented in Figure 16. While availability of crystal appears to have decreased since 2015, and availability of powder also appears to have decreased over that time, neither of these was found to be significant. Base has been excluded from this figure due to the lack of available data in recent years.

Figure 16: PWID reporting 'easy' or 'very easy' availability of methamphetamine by form in WA, 2002-2016



Source: **IDRS user interviews**

Respondents were asked about sources of each form of methamphetamine. Of the four participants who reported on speed, 50% (n=2) reported that the most recent source of speed had been from '*known dealers*. This was followed individual respondents who reported obtaining it from '*friends'* or '*acquaintances'*. The most common venues for obtaining speed powder at the most recent occasion was a '*home delivered*' (50%, n=2) with individual respondents nominating an '*agreed public location*', or a *'friend's home*'. Obviously, the small numbers here caution against over interpretation of these findings.

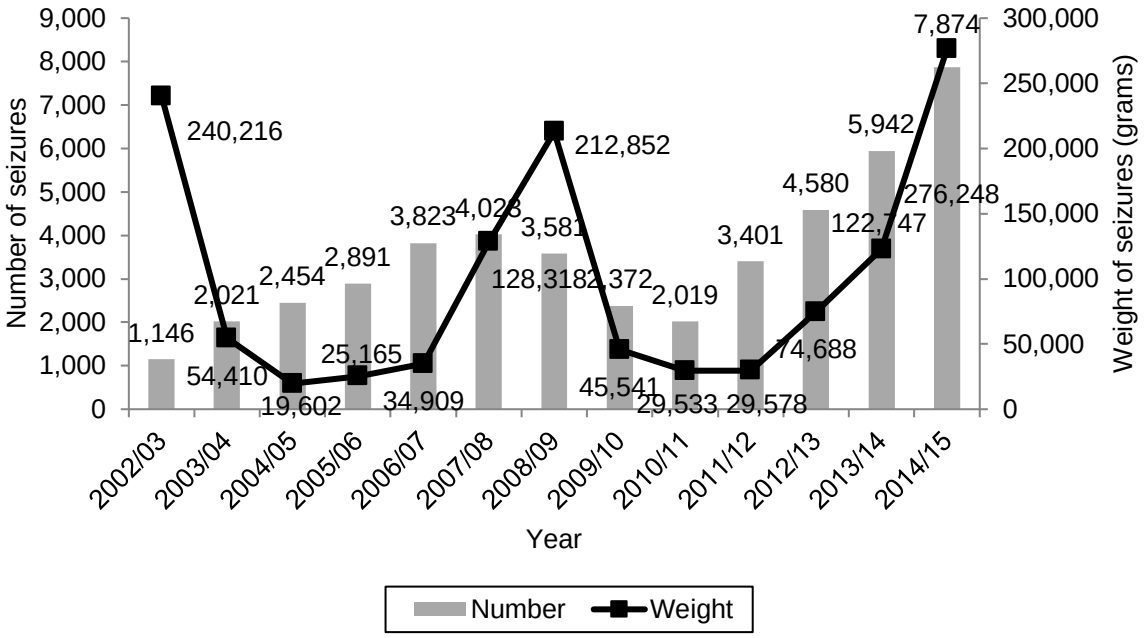
With regards to crystal methamphetamine, 37 respondents provided information concerning their most recent source. The most commonly reported source was '*friends'* (43%, n=16). This was followed by '*known dealers*' (38%, n=14) and '*acquaintances'* (14%, n=5). Individual respondents also mentioned '*street dealers*', and '*relatives'*. The most commonly reported venue for obtaining crystal methamphetamine was a '*friend's home*' (24%, n=9) followed by 'agreed public location' (24%, n=9), '*home delivered*' (22%, n=8), and '*dealer's home*' (19%, n=7) and 'dealer's home' (15%, n=7). Other venues mentioned by very small numbers of PWID included '*street market*' and '*acquaintance's home'*.

There were no respondents providing information on the source of base methamphetamine.

Figure 17 presents the total number and combined weight of amphetamine-type stimulants (ATS) (i.e. amphetamines, methamphetamine and phenythalamines) seizures made by WAPS and AFP in WA from 2002/03 to 2014/15. It is evident that the number of seizures of amphetamine-type had increased substantially to from 5,942 in 2013/14 to 7,874 and was the highest number so far recorded by the WA IDRS. The overall combined weight of all seizures also rose somewhat from 122,747 grams to with 276, 248 grams. It should be considered that

these figures are not only reflective of the amount of ATS available, but also of the amount of police activity being directed at the issue.

Figure 17: Number and weight of amphetamine-type stimulant seizures by WAPS and AFP, WA 2002/03-2014/15



Source: **Australian Criminal Intelligence Commission**

5.4 Purity

PWID were asked about the current purity of each form of methamphetamine and perceived changes in purity over the last six months (Table 13). Of the four participants who responded regarding speed, the greatest proportion (75%, n=3) rated current purity as '*high' which was also the most common response in 2015.* The remaining individual described it as medium. Asked if the purity of powder methamphetamine had changed in the past six months found that 50% (n=2) thought it had 'increased' and 50% (n=2+ thought it had '*fluctuated'.*

With regards to current purity of crystal methamphetamine, of the 37 PWID who responded, 60% (n=22) described it as '*high'*, which was not a significant change from the 51% reporting this in 2015. There were also 19% (n=7) who reported current purity as '*medium'*, 11% (n=4) who said it was '*low'* and 11% (n=4) who thought it tended to '*fluctuate'*. Asked if this purity had changed in the last six months, the most common response (44%, n=16) was that it had remained '*stable'*. There were also 22% (n=8) who thought it had '*increased'*, 19% (n=7) who thought it had '*decreased'*, and 14% (n=5) who thought it had tended to '*fluctuate'*.

There were no respondents able to provide information on the purity of base.

Table 13: Methamphetamine purity by user report, 2015-2016

	Speed		Base		Crystal	
	2015 (N=89)	**2016 (N=71)**	2015 (N=89)	**2016 (N=71)**	2015 (N=89)	**2016 (N=71)**
Current purity						
Did not respond*	72	**67**	89	**71**	42	**34**
Did respond	17	**4**	0	**0**	47	**37**
Of those who responded:						
High (%)	35	**75^**	-	**-**	51	**60**
Medium (%)	24	**25^**	-	**-**	28	**19**
Low (%)	18	**0^**	-	**-**	9	**11**
Fluctuates (%)	24	**0^**	-	**-**	13	**11**
Purity change over the last six months						
Did not respond*	73	**67**	89	**71**	45	**33**
Did respond	16	**4**	0	**0**	44	**36**
Of those who responded:						
Increasing (%)	13	**50^**	-	**-**	23	**22**
Stable (%)	19	**0^**	-	**-**	34	**44**
Decreasing (%)	19	**0^**	-	**-**	14	**19**
Fluctuating (%)	50	**50^**	-	**-**	30	**14**

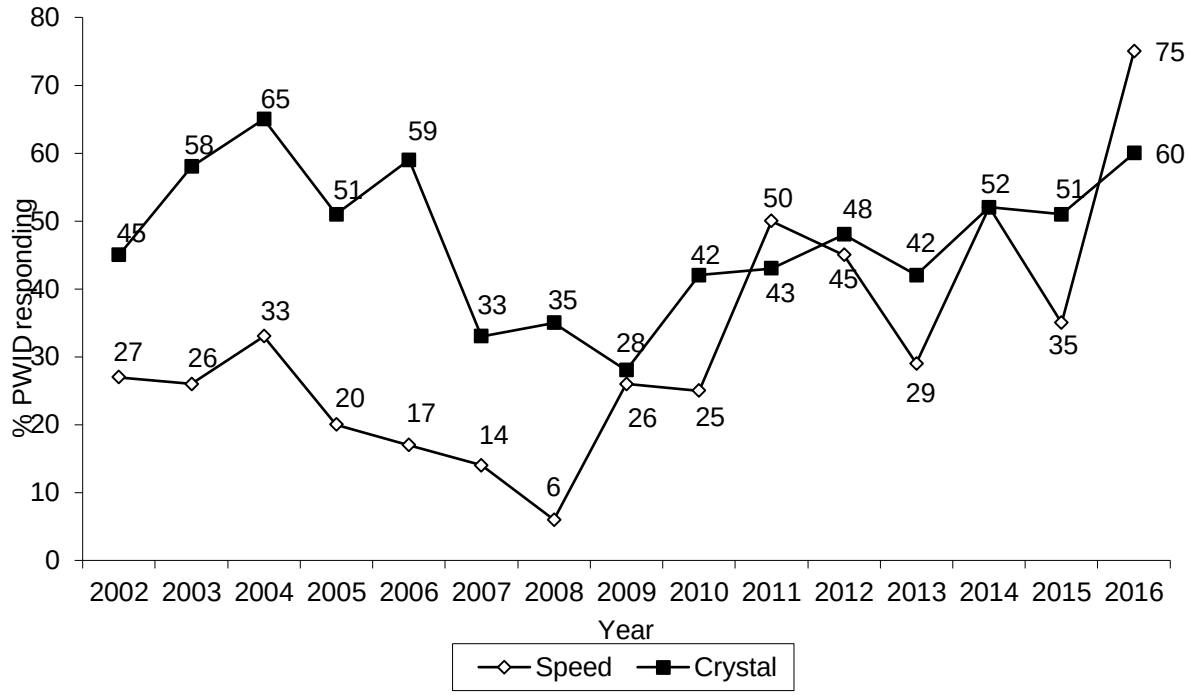
Source: IDRS user interviews

* 'Did not respond' refers to participants who did not feel confident in their knowledge of the market to respond to survey items. 'Don't know' responses were excluded from this table.

^ Based on very small number of responses (<10)

Figure 18 presents the proportion of PWID commenting on methamphetamine who rated each form as '*high*' purity across IDRS surveys. While numbers reporting '*high'* purity for speed powder appears to have undergone considerable fluctuation since 2012 these average ratings are based on a very small number of participants.In contrast, ratings of crystal methamphetamine purity have been considerably more stable. Base has been excluded from this graph due to the lack of data in the last few years.

Figure 18: PWID reporting each methamphetamine by form as 'high' purity, 2002-2016

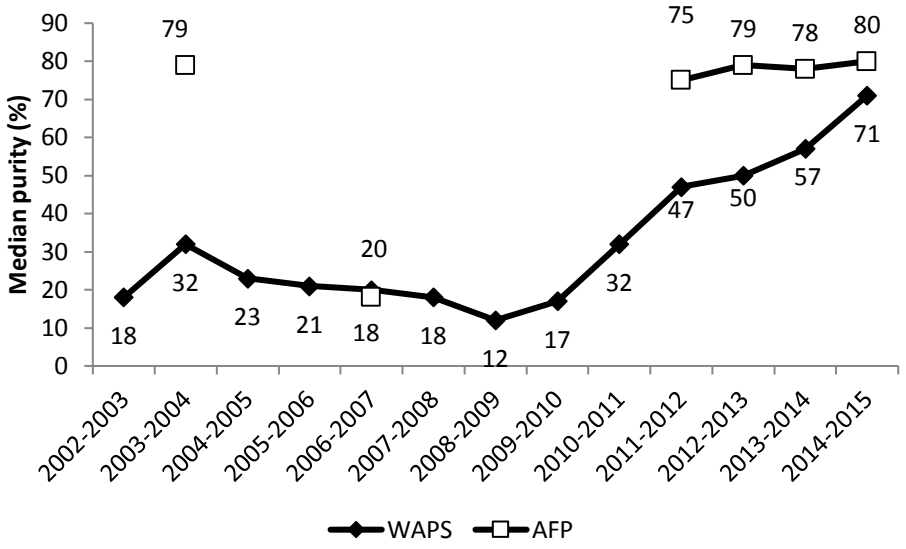


Source: IDRS user interviews

Figure 19 shows the median purity of methamphetamine seizures by WAPS since 2002/03. Purity levels found during 2015/16 ranged widely from 0.1% to 91%, with a median of 71%. Median purity of seizures analysed by the AFP tended to be somewhat higher at 80%.

It must be noted that the seizures and accompanying purity data reported here are not a truly random sample of all seizures made by these agencies as they make operational decisions about which seizures they will subject to analysis to determine purity. As a result it is not possible to say the extent to which the purities reported here are representative of all seizures made by these law enforcement agencies in WA.

Figure 19: Purity of methamphetamine seizures analysed by WAPS in WA, by quarter, 2002/03-2014/15



Source: Australian Criminal Intelligence Commission
Note: the seizure of 79% recorded by the AFP in 2003/04 was based on a single seizure and is unlikely to be representative of purity at the time.

There were eight KEs who commented on purity of methamphetamine most of whom described it as '*high'* with two providing purity figures of 70-80%. There were also two KEs who thought purity to be '*fluctuating'*. Most KEs responding believed recent purity of methamphetamine had remained '*stable'*, but two thought it had '*fluctuated*' and one reported that it had '*increased*'. One KE observed in regards to psychotic episodes that "*Increase in purity has had an impact, but not as wide spread as media suggests.*"

5.5 Summary of methamphetamine trends

- There was no significant change in lifetime or recent use of all forms of methamphetamine from 2014 to 2015.
- Among those who had used methamphetamine in the last six months, the average days used for all forms of methamphetamine was 68 days, which was not significantly different from the 52 days in 2015. Days of use of speed and crystal remained stable. Mean days of use of base methamphetamine remained very low but was based on very small numbers of respondents.
- Only four respondents were able to provide information on price, purity and availability of speed powder. There were no respondents able to provide this information for base.
- The median price for one point for speed was reported as $50, but this was based on a very small number of reports. The median price of a point of crystal was stable at $100. The median price for one gram of crystal was $450, but again was based on a very small number of respondents. There was no data regarding the price of a gram of speed or base. The greatest proportions perceived price change of speed as '*decreasing'* and crystal as '*stable'*.
- Speed and crystal were generally reported as being '*very easy* to obtain. The greatest proportion of respondents reported availability for both forms as '*stable'* in the last six months.
- Current purity was mostly rated as '*high'* for both crystal and speed. Purity of crystal was mostly viewed as '*stable'* while views on the purity of speed were evenly split between '*increasing'* and '*fluctuating'*.

6 COCAINE

6.1 Use

6.1.1 Cocaine use among IDU participants

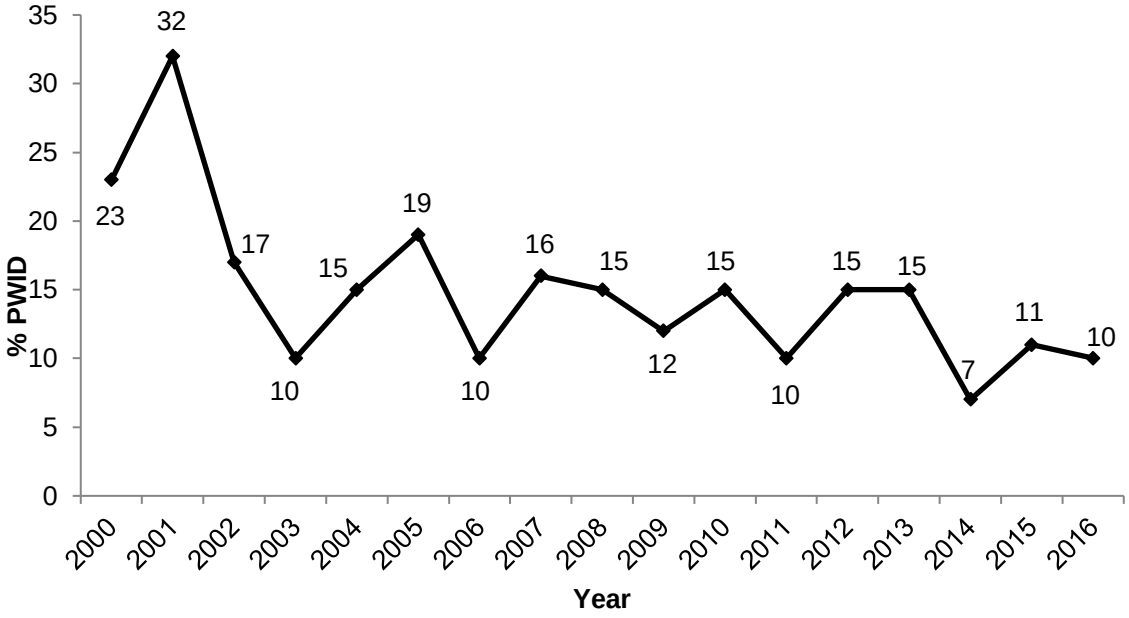
In 2016, lifetime use of cocaine was reported by 62% (n=44) of PWID, which was not significantly different to the 71% reported in 2015.

6.1.2 Current patterns of cocaine use

Use of cocaine in the six months preceding interview was reported by 10% (n=7) of the 2016 sample, which was not significantly more than the 11% reported in 2015 (Figure 19). Of these participants, 71% (n=5) reported having snorted cocaine in the last six months, 57% (n=4) had injected it and one individual reported smoking.

Days of use ranged from one to 20, with an average of seven days of use in the last six months, compared to two in 2015. The very low number of respondents (n=7) in 2014 makes testing this difference for statistical significance unfeasible. Recent cocaine use by PWID across IDRS surveys is presented in Figure 20 and shows that it has remained at low prevalence since 2002.

Figure 20: Cocaine use in the past six months, 2000-2016



Source: IDRS user interviews

Of the seven respondents who provided information, five reported that the form most used was powder cocaine and the remaining two reported having mainly used rock.

There were four KE who commented briefly on cocaine, all agreeing that it was not a drug they commonly encountered in the course of their work with use being "*isolated cases*" or "*opportunistic*". Two other KEs were more expansive, the first noting that "*Cocaine remains a drug for 'professionals' to use, with not as much stigma as meth, and more socially acceptable.*" The other reported a "*slight increase in availability recently, but the price has*

been stable. My sense is that people are not experiencing harms at a level where they would present to the service regarding cocaine."

6.2 Price

In 2016, there were only two respondents who provided data on the price of cocaine, one citing $400 for a gram. There was one report of purchasing an "eightball" of cocaine for $1,300. There were no respondents providing data on the price of a half gram to allow for comparisons to the one report of $250 for half a gram in 2015. With regards to recent changes in price, one respondent described it as '*stable'* and the other as '*decreasing'*. With only two PWID responding, and only one PWID to compare with in the previous year, this data needs to be interpreted with great caution. Numbers reporting in previous years' WA IDRS studies have also been low.

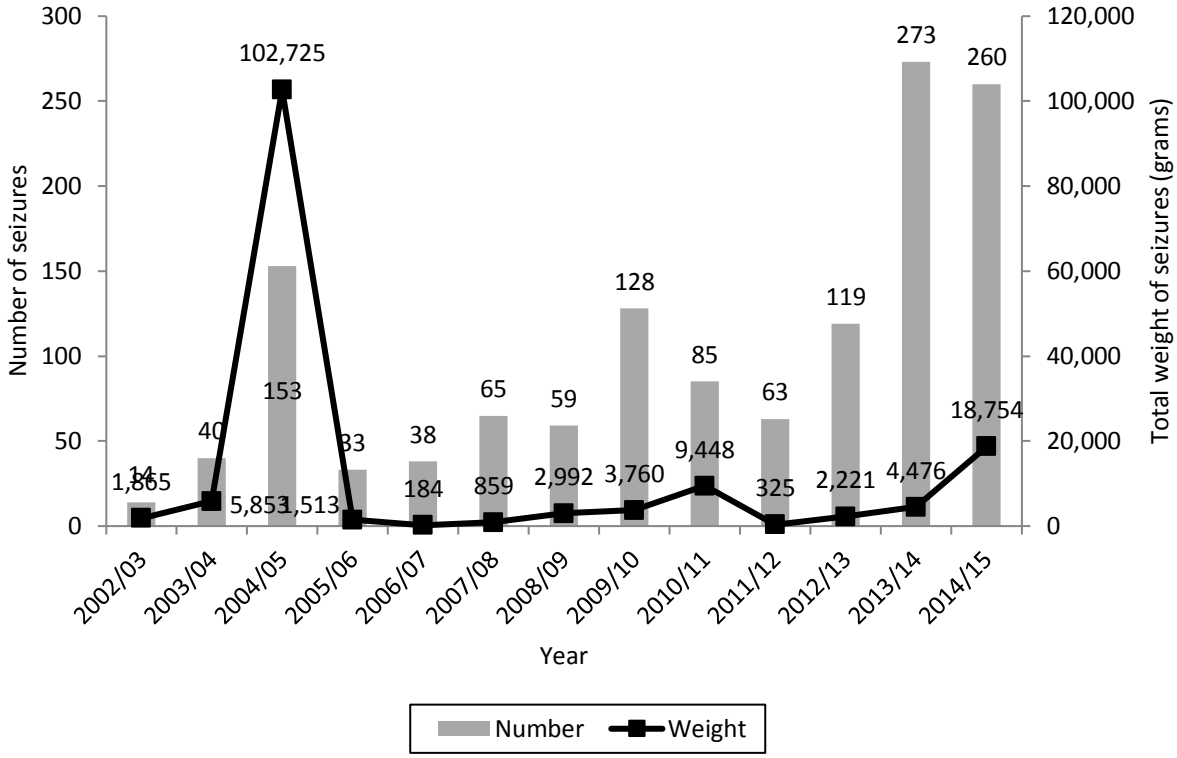
There was just one KE who commented on the purity of cocaine in Perth, suggesting it was 'high' at around 50%.

6.3 Availability

Just two respondents in 2016 reported on the current availability of cocaine in Perth, describing it as '*easy' and 'very easy'*. This can be compared with the one respondent who commented on the availability of cocaine in 2015, describing current availability as '*difficult'*. With regards to recent changes in availability, one respondent described it as '*easier'* and the other as '*stable'*. Both reported that they had last obtained cocaine from '*friends' at a 'friend's home'.* Due to the extremely small number of respondents that reported, these findings should be interpreted with caution.

Figure 21 presents the total number and combined weight of cocaine seizures made by WAPS and AFP in WA from 2002/03 to 2014/15. While the number of seizures fell slightly substantially from 273 in 2013/14 to 260, the total weight of seizures increased substantially from 4,476 grams in 2013/14 to in 18,754 in 2014/15.

Figure 21: Number and weight of cocaine seizures by WAPS and AFP, WA 2002/03-20014/15



Source: **Australian Criminal Intelligence Commission**

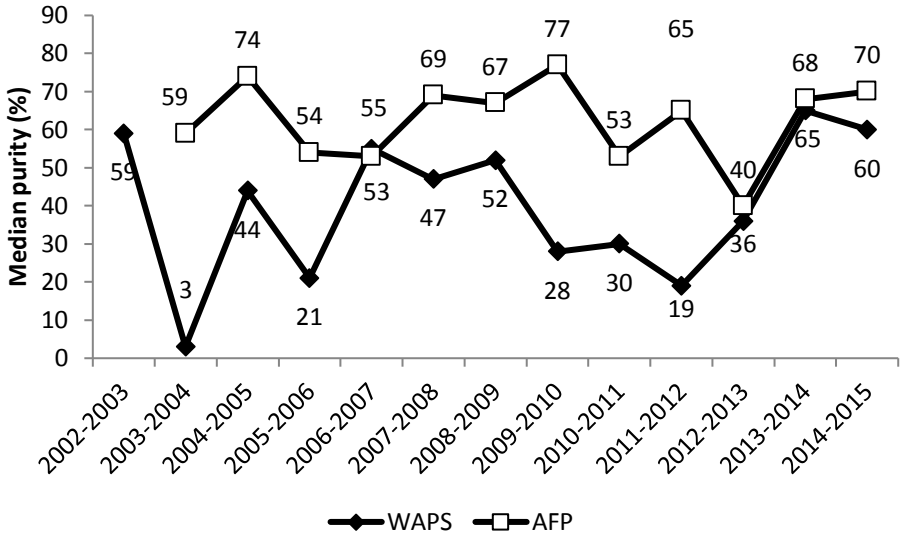
6.4 Purity

As with availability, only two respondents commented on purity of cocaine, one describing it as '*high*', and the other as '*low'*. This can be compared with the one respondent the previous year who described purity as '*high".* One of these believed that purity had '*increased'*, while the other reported it as '*stable'*. Again, due to the small sample reporting on purity, these findings should be interpreted with caution.

Figure 22 shows the median purity of cocaine seizures by both WAPS and AFP has fluctuated over time. In 2014/15 the median purity of cocaine analysed by WAPS was 60% compared to 65% in the previous period while the median purity analysed by AFP was 70%, up from 68%.

It must be noted that the seizures and accompanying purity data reported here is not a truly random sample of all seizures made by these agencies as they make operational decisions about which seizures they will subject to analysis to determine purity. As a result it is not possible to say the extent to which the purities reported here are representative of all seizures made by these law enforcement agencies in WA. It should further be noted, that the AFP median is based on analysis of only nine seizures, and the WAPS median is based on analysis of only nine street-level (i.e.:<=2 grams) seizures.

Figure 22: Purity of cocaine seizures analysed in WA, by quarter, 2002/03-2014/15



Source: Australian Criminal Intelligence Commission

6.5 Summary of cocaine trends

- Lifetime use of cocaine by IDU was reported by 62% of the 2016 sample, which was not significantly different from the 71% who reported lifetime use in 2015.
- Recent use was reported by 10% of the 2015 sample, which was not significantly different from the 11% reported the previous year.
- Frequency of cocaine use in 2016 was an average of seven compared to the average of two days in 2015. But small numbers necessitate caution in interpreting these results.
- Only two respondents commented on the price of cocaine, citing prices of $400 for a gram and $1,300 for an eightball. Again, small numbers necessitate caution in interpreting these results.
- Only two participants reported on availability and purity of cocaine, therefore, making it difficult to draw conclusions about the cocaine market in WA.

7 CANNABIS

7.1 Use

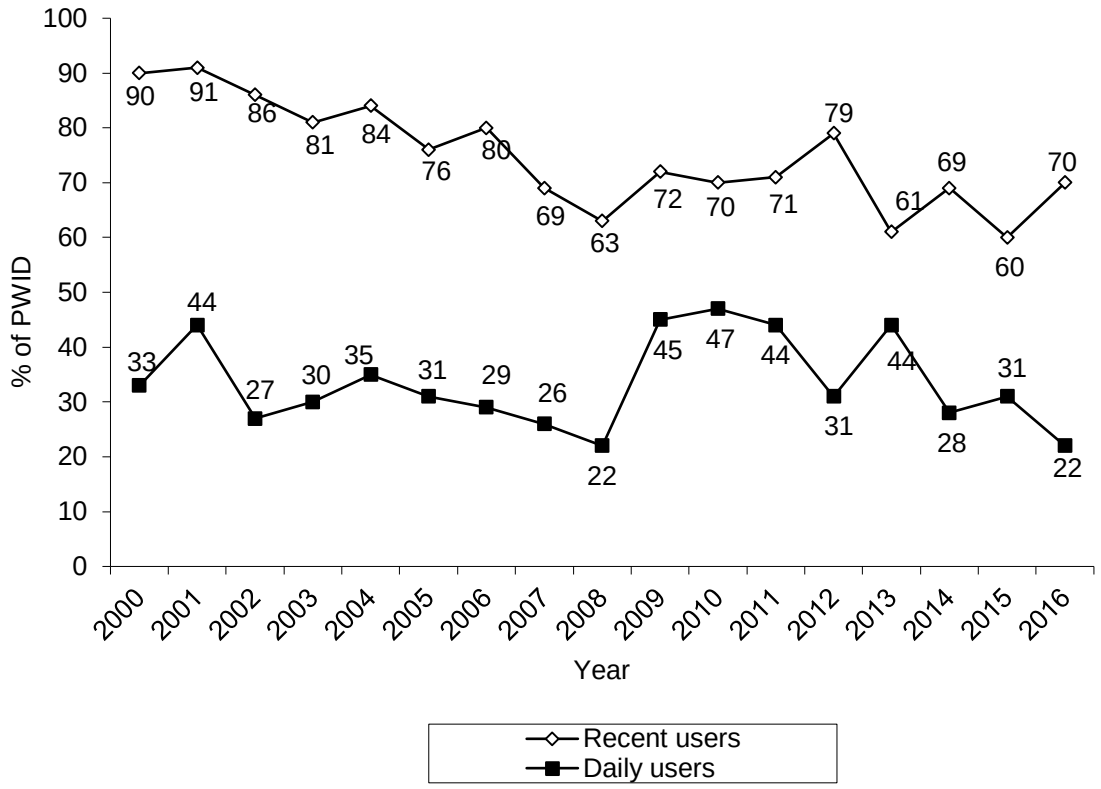
7.1.1 Cannabis use among PWID participants

In 2016, lifetime use of cannabis was reported by 89% (n=63) of PWID, which was comparable to 96% from the previous two years.

7.1.2 Current patterns of cannabis use

Use of cannabis in the last six months was reported by 70% (n=50) which was not a significant change from the 60% in 2015. In 2016, days of use ranged from one to 180, with 22% (n=11) of all recent users reporting use of cannabis on a daily basis, which was not significantly different to the 31% (n=16) reported in 2015. The proportion of PWID reporting any use and daily use of cannabis in the last six months is presented in Figure 23.

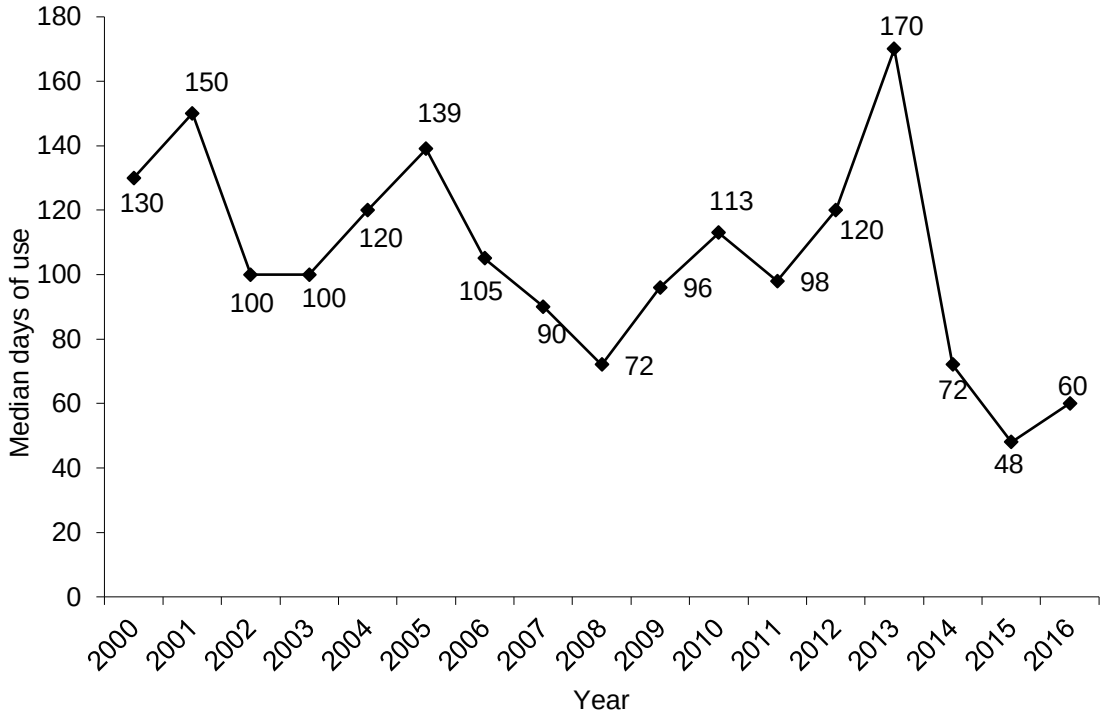
Figure 23: Recent use and daily use of cannabis among recent users in the past six months, 2000-2016



Source: IDRS user interviews

Figure 24 shows the median number of days cannabis was used among PWID across IDRS surveys. The median days of use had substantially increased from 48 days in 2015 to 60 days in 2016. The mean days of use was 81 which was not significantly less than the 2015 mean of 84 days.

Figure 24: Median days of cannabis use in the past six months, 2000-2016



Source: IDRS user interviews

PWID who reported use of cannabis were asked about forms of cannabis they had most commonly used in the last six months. As in past years, the vast majority of those responding (86%, n=43) reported that hydroponic cannabis had been the form most commonly used, and just 14% (n=7) nominated bush. There were no mentions of either hashish or hash oil in this context, although small numbers (n=3 and n=2 respectively) did mention using either hashish or hash oil at some point during the last six months. The most commonly nominated amounts of cannabis consumed in a typical session ranged from one to 15 cones or one to two joints with the most commonly mentioned quantity being two cones.

Just one KE made specific reference to the forms of cannabis currently available, mentioning both hydroponic and bush. They also noted that smoking continued to be the principle route of administration.

Although not speaking about cannabis as a principle drug of concern, many KEs nevertheless did make some comments concerning it. The majority of these were comments to the effect that cannabis use was widespread with factors like price and availability remaining stable although one did comment that "*Pot is expensive and its availability was not that great in some areas.*" Use was generally viewed as "*not problematic*".

Two KEs commented on use of cannabis in the context of other drugs. The first of these observed that cannabis was "*often used as a tide-over until they can score*." The second KE, working specifically with PWID noted that "*Pot mostly goes hand in hand to either reboost or come down from meth.*"

7.2 Price

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

Hydro

Prices paid at last purchase are shown in Table 14. There were no substantive changes in median prices, suggesting that the price of hydroponic cannabis paid for by the IDRS samples has been relatively stable over the last year with the price of an ounce of hydro being $325 compared with $350 the previous year.

Bush

As in previous years, only a small number of participants reported on price at last purchase of bush (Table 14). The median price of a half ounce ($85) superficially appeared to have fallen from $163 and an ounce ($350) to have risen from $250. However, as these median prices were calculated from two or less respondents, caution must be exercised in interpreting these findings.

Table 14: Price of most recent cannabis purchases by participants, 2015-2016

Amount	Median price* $	Range $	Number of purchasers
Hydro			
Gram	(25^)25	25-25	(7) 11
Half ounce	(175^) 175^	160-300	(7) 7
Ounce	(350) 325	200-500	(13)16
Bush			
Gram	(-) 25^	25-25	(0) 3
Half ounce	(163^)85^	70-100	(2) 2
Ounce	(250^) 350^	350-350	(6) 1

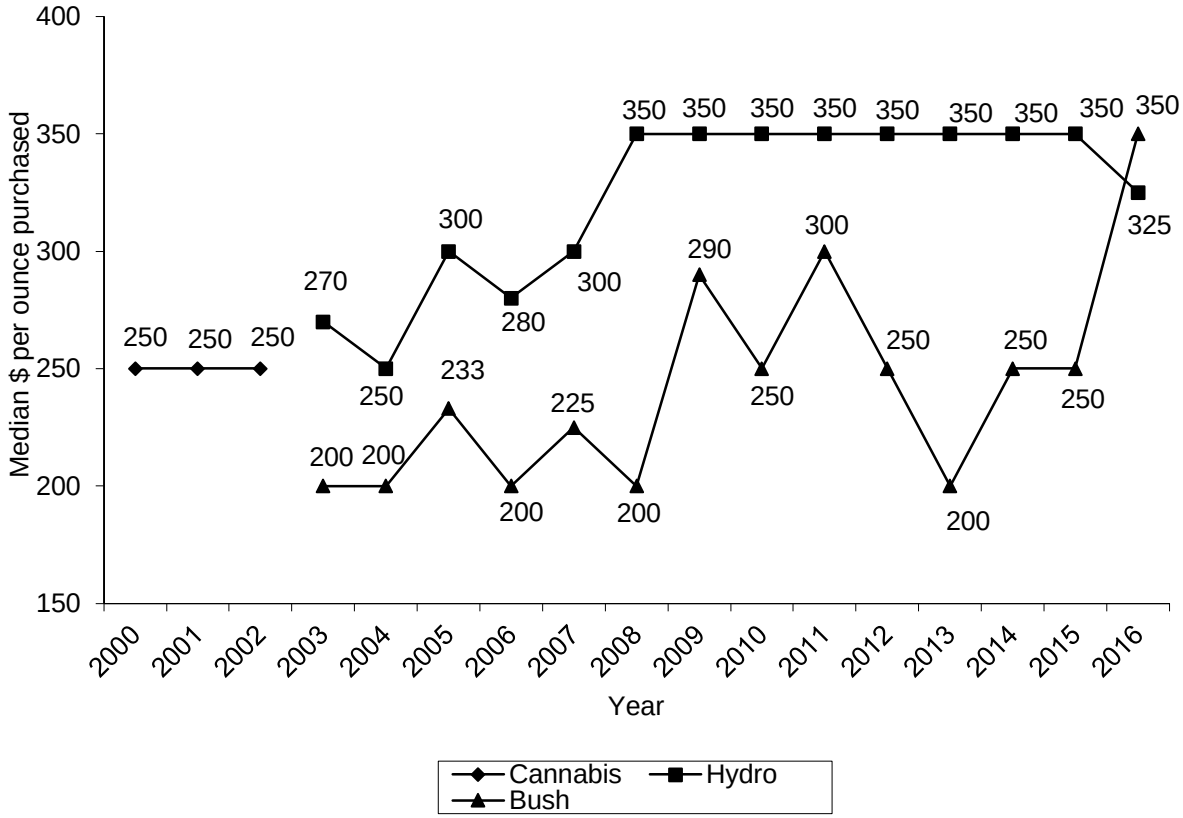
Source: IDRS user interviews

* 2015 data are presented in brackets.

^ Based on small (<10) purchases

The median price of one ounce of cannabis as reported by PWID across IDRS surveys is presented in Figure 25. Hydro has consistently been more expensive than bush across time. While the median price of an ounce of hydro has been stable since 2008, the price of an ounce of bush has exhibited considerably more fluctuation. It must be considered, however, that the median price of bush in recent years has only been calculated from small numbers of reports, necessitating some caution in accepting the accuracy of this price data.

Figure 25: Median prices ($) of an ounce of cannabis estimated from PWID participant purchases, 2000-2016



Source: IDRS user 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, 30 participants reported on hydro and seven reported on bush. Regarding the price of hydro, 80% (n=24) reported it as '*stable'*, and 10% (n=3) reported it as '*increasing'*. For bush, 100% (n=7) reported the price as '*stable'*.

Just three KE commented on the price of cannabis, one reporting that the current price of an gram was $50-$100, while the other two reported on the price of a stick, one providing a price range of $20-$25, and the other a standard price of $25. The two KE able to respond both described this price as '*stable'*.

7.3 Availability

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

Hydro
In 2016, there were 30 participants who commented on the current availability of hydro. As in the previous year, the majority of these (60%, n=18) reported that it was '*very easy*' compared with 49% in 2015. This was followed by 40% (n=12) who described it as '*easy'*, There were no reports describing it as '*difficult'* or '*very difficult*'.

With regard to change in availability over the last six months, 97% (n=29) rated it as '*stable'*.

Bush

In 2016, availability of bush was reported on by seven respondents. Opinion was evenly split (43%, n=3 each) as to whether current availability was 'easy' or 'very easy'. This can be compared to 2015, when the availability of bush was most commonly described as '*very easy*' by 53%. The remaining respondent described availability as 'difficult'. This was followed by 35% (n=6) who described it as '*easy'*, and 12% (n=2) who described it as '*difficult'*. Asked about changes to availability in the previous six months, all respondents reported it had been '*stable'*. This data is presented in Table 15.

Table 15: Participants' reports of cannabis availability in the past six months, 2014-2016

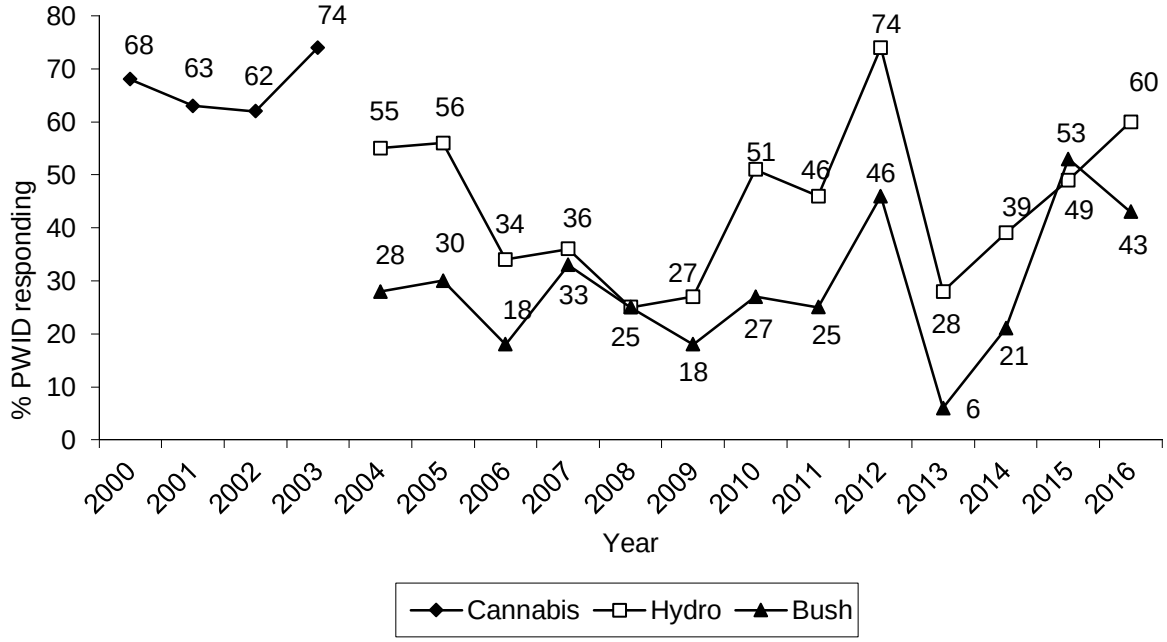
	Hydro		Bush	
	2015 (N=89)	**2016 (N=71)**	**2015 (N=89)**	**2016 (N=71)**
Current availability				
Did not respond*	56	**41**	72	**64**
Did respond	33	**30**	17	**7**
Of those who responded:				
Very easy (%)	49	**60**	53	**43**
Easy (%)	39	**40**	35	**43**
Difficult (%)	12	**0**	12	**14**
Very difficult (%)	0	**0**	0	**0**
Availability change over the last six months				
Did not respond*	56	**41**	73	**65**
Did respond	33	**30**	16	**6**
Of those who responded:				
More difficult (%)	6	**3**	6	**0**
Stable (%)	79	**97**	88	**86**
Easier (%)	9	**0**	6	**0**
Fluctuates (%)	6	**0**	0	**0**

Source: IDRS user 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' responses were excluded from this table.

Figure 26 presents the proportion of PWID, who commented, that rated current availability of cannabis as '*very easy*'. Both hydro and bush appeared to experience considerable shifts since 2014, but in the case of hydro, these changes did not attain statistical significance, and in the case of bush the numbers responding were too small to allow for formal analysis.

Figure 26: Participant reports of current cannabis availability as 'very easy', 2000-2016



Source: IDRS user interviews

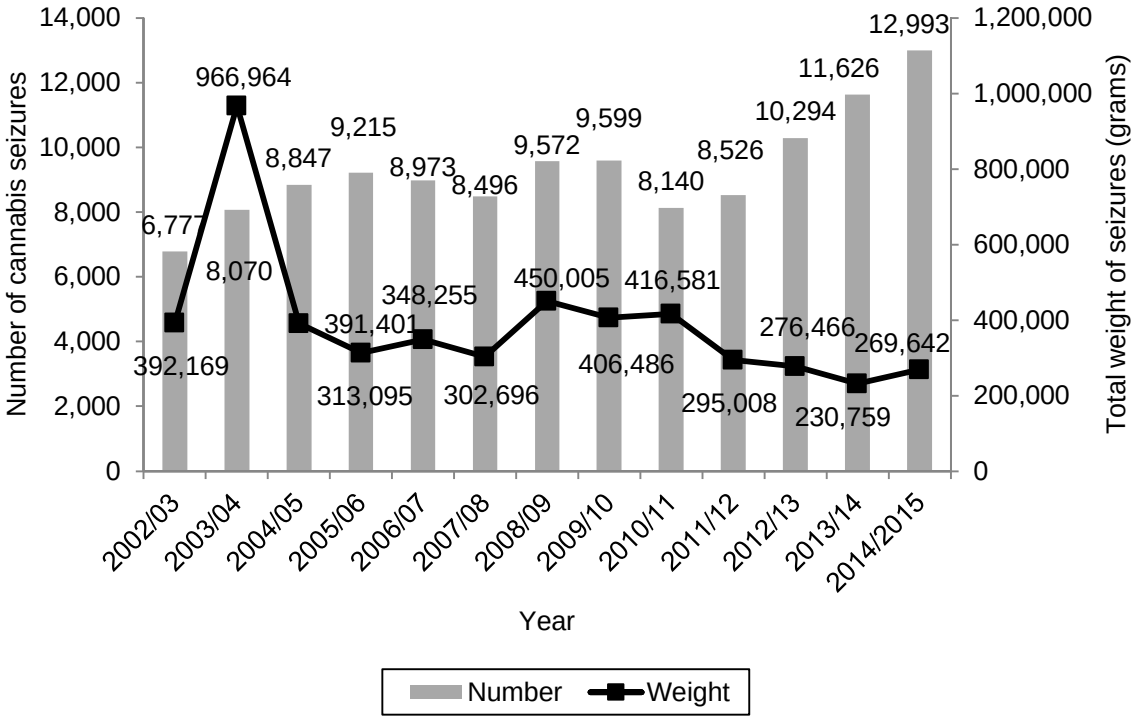
Note: A distinction between hydro and bush cannabis was introduced in 2004; prior to this time, survey items referred to any form of cannabis. The small number of respondents reporting on bush necessitate some caution in interpreting this data.

Of the 30 PWID responding to questions about who was the last person they obtained hydro from, 67% (n=20) indicated that it came from '*friends'*, which was also the most common response in previous years. Other common responses included '*known dealers*' (17%, n=5), and '*relatives'* (10%, n=3). Virtually all bush was sourced from '*friends'* (86%, n=6), with just one respondent reporting that they obtained it from '*a known dealer*'.

The most common venue for obtaining hydro remained at '*friend's home*' (37%, n=11). Next most commonly mentioned were '*home delivered*', mentioned by 33% (n=10), '*dealer's home*' by 13% (n=4) and '*agreed public location*' (10%, n=3). Other locations were reported by very small numbers of respondents. The most common source venues for bush was '*friend's home*' (43%, n=3) followed by '*home delivery*' (29%, n=2).

Figure 27 presents the total number and combined weight of cannabis seizures made by WAPS and AFP in WA from 2002/03 to 2014/15. The number of seizures rose substantially from 11,626 in 2013/14 to 12,993 making this the largest number of cannabis seizures yet reported in the WA IDRS. However, the total weight of seizures rose by just 39 kilos, suggesting that many of these seizures may have been relatively small.

Figure 27: Number and weight of cannabis seizures by WAPS and AFP, WA 2002/03-2014/15



Source: Australian Criminal Intelligence Commission

7.4 Potency

Respondents were asked about the current potency of cannabis and any change in potency over the last six months (Table 16). Twenty-nine PWID commented on hydro, with the majority (69%, n=20) nominating current potency as '*high'*, which was unchanged from last year. This was followed by 24% (n=7) reporting purity as '*medium'*. With regard to changes in potency over the last six months, the greatest proportion (66%, n=19) reported potency as '*stable'*, followed by 17% (n=5) who reported that it had been '*increasing'* and 10% (n=3) who described it as '*fluctuating'*.

Seven respondents provided information regarding the potency of bush cannabis. The majority (43%, n=3) nominated its current potency as '*medium'*, which was largely unchanged from the 47% reporting this in 2015. There were 29% (n=2) who reported current potency as '*high'* which was unchanged from 2015. With regard to changes in potency of bush over the last six months, the greatest proportion (71%, n=5) rated it as '*stable'* with other opinions being relatively uncommon.

Table 16: Participant estimates of cannabis potency, 2015-2016

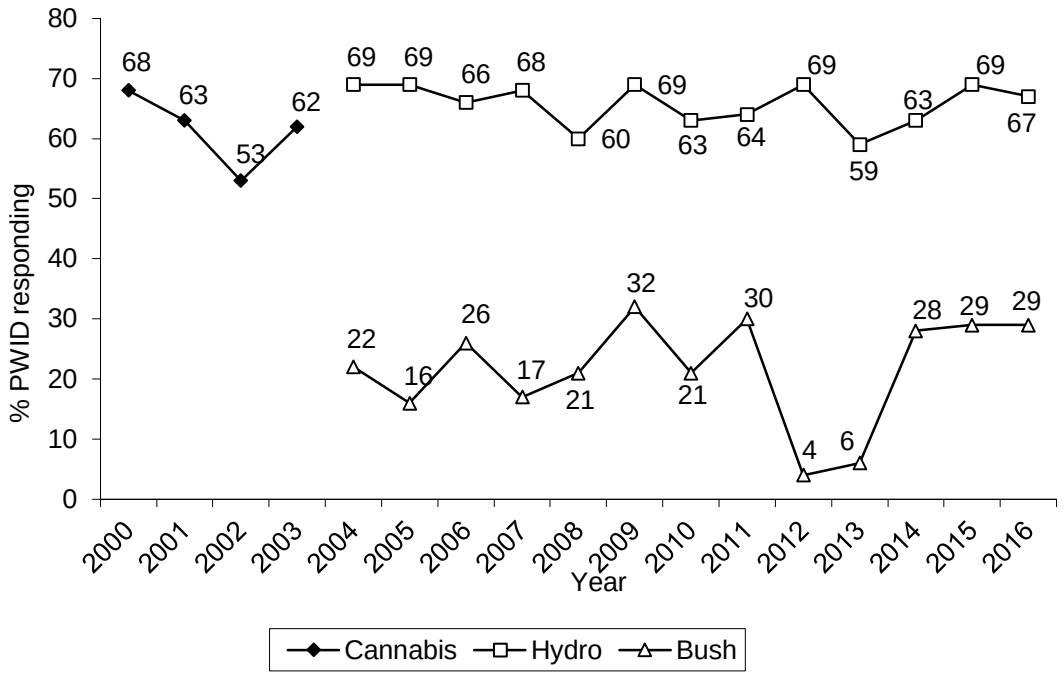
Current potency	Hydro		Bush	
	2015 (N=89)	2016 (N=71)	2015 (N=89)	2016 (N=71)
Did not respond*	57	**42**	72	**64**
Did respond	32	**29**	17	**7**
Of those who responded:				
High (%)	69	**67**	29	**29**
Medium (%)	16	**23**	47	**43**
Low (%)	3	**0**	12	**14**
Fluctuates (%)	13	**7**	12	**14**
Potency change over the last six months				
Did not respond* (%)	58	**42**	72	**64**
Did respond (%)	31	**29**	17	**7**
Of those who responded:				
Increasing (%)	26	**17**	12	**14**
Stable (%)	55	**63**	65	**71**
Decreasing (%)	0	**7**	12	**0**
Fluctuating (%)	19	**10**	12	**14**

Source: IDRS user 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' responses were excluded from this table.

The proportion of participants who rated the current purity of cannabis as '*high'* since 2000 is displayed in Figure 28.

Figure 28: Participant reports of current cannabis potency as 'high', 2000-2016



Source: IDRS user interviews The small number of respondents reporting on bush necessitate some caution in interpreting this data.

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

Two KEs provided information concerning the potency of cannabis, one describing it as '*medium and stable*', and the other stating that it had tended to '*fluctuate'* throughout the first six months of 2016.7.5

7.5 Summary of cannabis trends

- Similar to previous years, the vast majority of PWID sample (89%) reported lifetime use of cannabis.
- Recent use of cannabis was reported by 70% which was not significantly different to 60% in 2015.
- Frequency of use among recent cannabis users was 81 mean days which was not a significant decline from 84 mean days of use in 2015. The number of recent cannabis users reporting daily use of cannabis was 22% which was not significantly different from 31% in 2015.
- The reported price of hydro was relatively unchanged from past years, with the median price for an ounce being $325 compared to $350 in the past eight years. The median price of one ounce of bush was reported as $350. However, this was based on only one report making it difficult to draw firm conclusions. Prices for both forms were generally reported as stable.
- As in 2015, current availability of hydro was again described as '*very easy*'. Bush was equally rated as '*easy'* and '*very easy*' compared to 2015 its availability was generally rate as '*very easy'*. Availability of both forms was reportedly '*stable'* in the six months prior to the survey. However, low numbers reporting on bush necessitate caution in interpreting these findings.
- Current potency of hydro was rated as '*high'* by 69%, unchanged from 2015. Current potency of bush continued to be rated as '*medium'* by 43% of those who responded in 2016 compared to 47% the previous year. Potency for both forms was generally agreed to be '*stable'*. However, low numbers reporting on bush necessitate caution in interpreting these findings.

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, buprenorphine, buprenorphine-naloxone) and for pain relief (i.e. morphine, oxycodone, and over-the-counter (OTC) codeine).

Several KEs made general comments about opioids other than heroin. One of these noted that there are "*lots of pharmaceuticals around. Some are diverted but mainly they are valid prescriptions intended for oral use being injected. Some people running out of their medication by on-selling of their scripts."*

Another KE observed that "*People are moving onto pharmaceuticals when heroin isn't available.*"

Two other KEs reported that use of other opioids was returning, but the principle brands were not specified. One KE noted that sometimes these other opioids were smoked, but did not specify the forms of opioid to which they were referring.

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 syrup was reported by 49% (n=35) of respondents. The proportion reporting illicit use of methadone in the last six months was 11% (n=8) in 2016, which was not significantly different from the 8% in 2015. Recent injection of illicit methadone was reported by 6% (n=4) of the sample, and oral consumption by 7% (n=5). Days of use ranged from two to 15, mean days of use was five which was significantly less than the 2015 mean of 12 days (t=-4.050, df=6, p=.007). The quantity of illicit methadone used at the last occasion ranged from five to 90 mls with an average of 35 mls.

Lifetime illicit use of Physeptone® was reported by 31% (n=22) of respondents. The proportion reporting illicit use of Physeptone® in the last six months was 3% (n=2), compared to 6% in 2015. Recent injection of illicit Physeptone® was reported by 1% (n=1) of the 2016 sample and recent oral consumption by 1% (n=1). There were no other reported routes of administration. Days of use ranged from one to 10 days, with a mean of six, compared to the 2015 mean of eight days although numbers responding were too small to permit testing for significance. Only one respondent provided data on the amount of illicit Physeptone typically used, citing 30mg.

8.1.2 Market characteristics

There were just three respondents who provided information on the current market for illicit methadone in Perth. Prices per millilitre ranged from approximately 50 cents to one two dollars with a median price of one dollar. All respondents reported that prices for illicit methadone had remained '*stable'*. There was no data on recent changes to the price of illicit methadone or regarding purchases of illicit Physeptone®.

All three respondents who commented on the availability of methadone described it as *'easy'* to obtain and that this had remained '*stable'*. All reported that it had last been obtained from '*friends'* either at *'friend's home'* or at '*an agreed public location*', the original source being '*someone else's take away dose*'.

8.2 Use of illicit buprenorphine

Buprenorphine is sold under the brand name of Subutex® and buprenorphine-naloxone as Suboxone®. More recently Suboxone® has become available as a sub-lingual film that is dissolved in the mouth.

8.2.1 Use patterns

Lifetime illicit use of Subutex® was reported by 27% (n=19) of respondents. Illicit use in the last six months was reported by 9% (n=6), which was not significantly different from the 8% reported in 2015. Recent injection was reported by 7% (n=5) of the sample and recent oral consumption by 6% (n=4) with no other routes of administration reported. Days of use ranged from one to 48, with a median of 10 days, compared to eight days in 2015. The average amount used at the last occasion ranged from 2 to 8 mg with a median of 4 mg.

Lifetime illicit use of Suboxone® was reported by 20% (n=14) of respondents. Illicit use in the last six months was reported by just 7% (n=5) compared to the 1% in 2015. Recent injection was reported by 7% (n=5) and oral administration by 7% (n=5). Days of use ranged from one to 123 with a mean of 58 which was not found to be a significant increase from the previous year's mean of seven, but the small number of cases do not allow for meaningful testing of significance. The median amount used on the last location was eight milligrams.

8.2.2 Market characteristics

There was only one respondent able to provide data on the price of illicit Subutex®, reporting a price of $30 for an 8mg tablet and stating that this price had recently '*increased'*. With regards to availability, the respondent thought it '*difficult'* and this was believed to have been '*stable'*. This respondent reported having purchased illicit Subutex® from '*friends'* who '*home delivered*' it.

There were no respondents able to comment on the price or availability of illicit Suboxone® tablets.

Just two respondents reported on the Perth market for 2mg illicit Suboxone® film, both with a median price of $20. Another seven reported the purchase of an 8mg tablet for a median price of $30. The majority of these respondents (86%, n=6) believed the price of film had remained '*stable'*, with the remaining respondent believing it had '*fluctuated'*. Current ease of access to illicit Suboxone® film was reported as '*very easy*' (38%, n=3), or '*easy'* (38%, n=3), with two other respondents describing it as '*difficult'*. It was generally agreed that this ease of access had recently remained '*stable'* (83%, n=5), although one respondent thought it had become '*more difficult'*. The most common source of illicit Suboxone® film was from '*friends'* reported by 63% (n=5) respondents. Individual respondents reported that they had most often obtained it from '*known dealers*', '*street dealers'* and '*relatives'*. The most common source venue was a '*friend's home'* (36%, n=3) and '*street market'* (25%, n=2). Individual respondents also mentioned '*home delivery*', '*acquaintance's house*' and '*an agreed public location*'.

8.3 Morphine

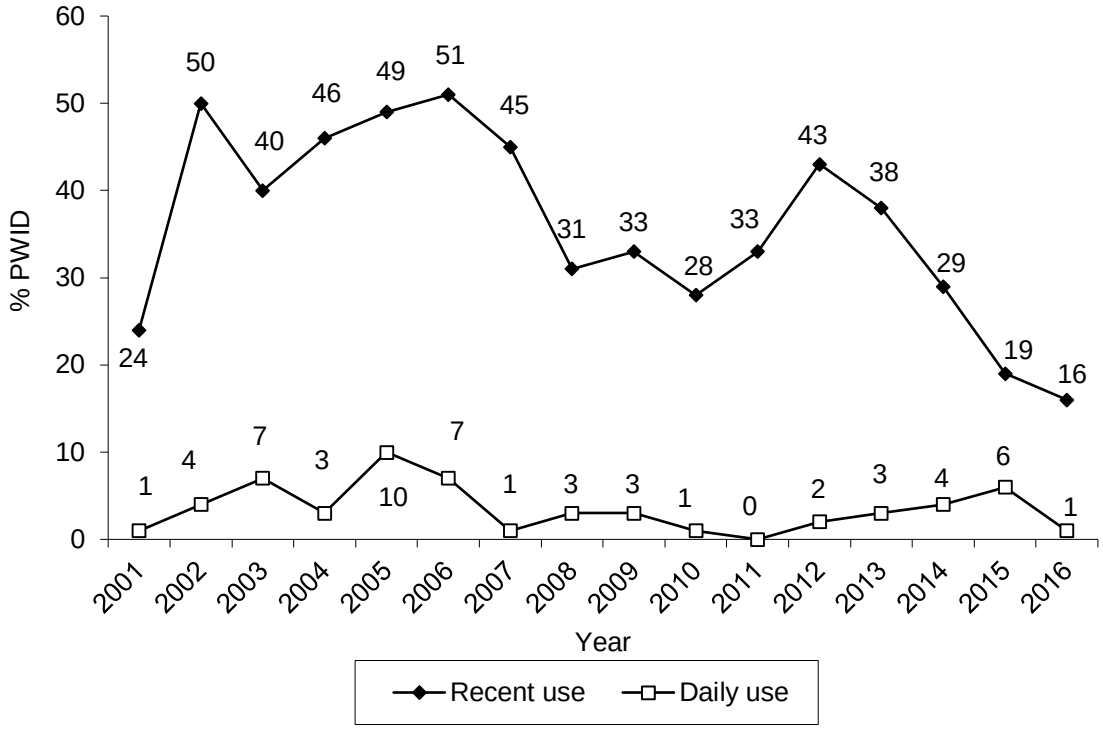
8.3.1 Use patterns

Lifetime illicit use of morphine was reported by 65% (n=46) of the 2016 IDRS sample. The proportion reporting illicit use of morphine in the last six months was 16% (n=11), which was not significantly different to the 19% reported in 2015. Recent injection of illicit morphine was reported by 16% (n=11) of the sample with no other ROA reported. Days of use in the last six months ranged from one to 180, with just one report of use on a daily basis. Mean days of use

was 31, which was not found to be significantly different from the 2015 mean of 62 days although this is likely an effect of the relatively small numbers of respondents who had recently consumed illicit morphine.

Figure 29 presents the proportion of IDU who reported illicit use of morphine in the last six months and daily illicit use across IDRS surveys. The proportion reporting daily use has remained low since data collection began in 2001.

Figure 29: Proportion reporting recent and daily illicit morphine use in the past six months, 2001-2016



Source: IDRS user interviews

As in previous years, MS Contin® remained the most common brand of illicit morphine consumed with 80% (n=2) of those responding reporting this as their main brand. Another two individuals mentioned Kapanol® in this regard. The small number of respondents reporting necessitate some caution in interpreting this data.

8.3.2 Market characteristics

Four participants reported on the price of a 100 mg tablet of MS Contin®, (range=$70-$100) with a median price of $85 compared to $80 the previous year. Individual respondents reported on the price of 60 mg for $50 compared with $43 the previous year and on the price of a 30mg for $30 compared with $23 in 2015. The mean price was $41 which was unchanged from the previous year. There were just two respondents who reported on the price for 30 mg MS Contin® with a median price of $23. There were two respondents who had purchased 100 mg Kapanol® for a median price of $85 (range $70-$100) compared to the previous year's median of $60. Another five respondents had purchased 50mg of Kapanol®, all for $50. Purchasing 30 mg Anamorph® was reported by just one respondent for $20 compared with $30 the

previous year. All (100%, n=6) of the respondents believed the price of morphine had remained '*stable''* in the past six months.

Current availability of morphine was reported on by 14 respondents with 50% (n=3) describing it as '*very easy'*, replacing '*easy'* as the most common response. This was followed by 33% (n=2) who described it as '*easy' and one respondent who described it as* as '*difficult'*. All (100%, n=5) thought recent ease of access to illicit morphine had remained '*stable'*.

The source person for obtaining illicit morphine was most commonly identified as a '*friend'* by 67% (n=4) of respondents. Individual respondents also nominated '*street dealer*' and '*known dealers'*. The most common venues for obtaining illicit morphine remained *'friend's home*' (33%, n=2), with individual respondents nominating a range of other venues.

8.4 Oxycodone

8.4.1 Use patterns

For the first time in 2016, data on the use of oxycodone was collected separately for generic oxycodone, OP (i.e.: reformulated oxycodone) and other forms of oxycodone (e.g.: Endone®). It should be noted that this renders making comparisons with user data from previous years unfeasible.

A lifetime history of having ever used illicit generic oxycodone was reported by 47% (n=33). Use in the last six months was reported by 11% (n=8), as was recent injection. Days of use ranged from one to 50 with a median of 12. Amounts typically consumed ranged from 80 to 200mg with a median of 80mg.

A lifetime history of having ever used illicit OP oxycodone was reported by 23% (n=16). Use in the last six months was reported by 9% (n=6) as was recent injection. Days of use ranged from one to 72 with a median of 14. Amounts typically consumed ranged from 2mg to 200mg with a median 0f 80mg.

A lifetime history of having ever used other illicit oxycodone was reported by 38% (n=27). Use in the last six months was reported by 9% (n=6) as was recent injection. There was also one report of having recently smoked it. Number of days used ranged from one to 180 with a median of five days. Amounts typically consumed ranged from 10mg to 160mg with a median of 70mg.

8.4.2 Market characteristics

The limited number of respondents who proved price data on the various forms of illicit oxycodone renders it difficult to draw firm conclusions about current prices.

With regards to generic oxycodone and miscellaneous forms, a number of different purchases were reported. There was one purchase of a 20mg tab of Oxynorm® for $15, one purchase of 40mg generic oxycodone for $35 and one purchase of 80mg generic oxycodone for $65. There were also two purchases of 40/20mg Targin® for a median price of $25.

All three respondents who replied to if the price of illicit generic or miscellaneous forms of oxycodone had recently changed reported that it had remained '*stable'*. Availability of these drugs was described as '*very easy'* by two respondents and as '*easy'* by one. That availability had remained '*stable'* was reported by two respondents while one individual thought it had

become '*easier'*. All three respondents reported having obtained these drugs from 'friends' either at a 'friend's house (n=2) or 'home delivery' (n=1).

There were just two reported purchases of reformulated oxycodone, one of $15 for 40mg and one of $60 for 80mg. One of these described availability as '*very easy*' and the other as '*easy'*. Both agreed that recent availability had remained '*stable'* with both reporting having purchased from *'friends'*, either at a '*friend's house'* or '*home delivery'*.

8.5 Fentanyl

A lifetime history of use was reported by 34% (n=24). Recent use in the last six months was reported by 17% (n=12) which was not a significant increase on the 14% the previous year. The most common recent ROA was by injection reported by all 67% (n=8) of all recent users, and two individuals reported smoking it. Days of use ranged from one to 180 with a mean of 28 days which was not significantly more than the 2015 mean of 11 days. Recent illicit use was reported by eight respondents, compared to licit use by four. Five respondents reported on their average amount used which ranged from 1mg to 100 mgs with a median of 25mgs.

There were no respondents in 2016 able to provide price or availability data for illicit fentanyl. One KE suggested a price of $80 for 1/16 of a transdermal patch and that the most common forms in circulation were these patches, but also some liquid.

Several KEs expressed concerns surrounding an increasing availability of fentanyl and a trend of using fentanyl as a cutting agent for heroin resulting an increased overdose risk.

8.6 Use of over the counter codeine

In Australia, codeine available over the counter (OTC) is combined with simple analgesics including paracetamol and non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen and aspirin. Prolonged use of codeine has the potential to produce tolerance and create a dependence liability, often leading to dose escalation (Sproule et al., 1999). National Prescribing Service Ltd, 2009)

In 2016, 39% (n=23) of respondents reported a lifetime use of OTC codeine and recent use by 6% (n=4) compared to 14% reporting recent use in 2015. Days of use ranged from two to 50 with a mean of 16 days compared to the 2015 mean of 29 but the small number of cases do not allow for meaningful testing of statistical significance. All respondents reported oral consumption and one of these also reported injecting on four occasions in the previous six months.

8.7 Other opioids (not elsewhere specified)

Other opioids include (but are not limited to) drugs such as opium and pethidine. In 2016, lifetime use of other opioids was reported by 37% (n=26) of the WA IDRS sample. Recent use was reported by 11% (n=8) compared with 18% in 2015. Average days of use was 50 compared to the previous year's mean of 34 days, but the small number of cases do not allow for meaningful testing of statistical significance. That this use was licit was reported by 71% (n=5) of those responding and illicit by the remaining 29% (n=2). The brands involved included Tramadol®, and Panadeine Forte®.

8.9 Summary of opioid trends

- The proportion reporting illicit use of methadone in the last six months was 11% (n=8) in 2016, which was not significantly different from the 8% in 2015. Days of use ranged from two to 15, mean days of use was five which was significantly less than the 2015 mean of 12 days.
- The proportion reporting illicit use of Physeptone® in the last six months was 3% (n=2), which was not a significant change from 6% in 2015. Days of use ranged from one to 10 days, with a mean of six, compared to the 2015 mean of eight days although numbers responding were too small to permit testing for significance.
- Illicit use in the last six months of illicit Subutex® was reported by 9% (n=6), which was not significantly different than the 8% reported in 2015. Days of use ranged from one to 48, with a median of 10 days, compared to eight days in 2014.
- Illicit use of illicit Suboxone® in the last six months was reported by 7% (n=5), compared to 1% in 2015. These very small numbers render it difficult to draw firm conclusions. Days of use ranged from one to 123 with a mean of 58.
- The proportion reporting illicit use of morphine in the last six months was 16% (n=11), which was not significantly different to the 19% reported in 2015. Mean days of use was 31, which was not found to be significantly different from the 2015 mean of 62 days although this is likely an effect of the relatively small numbers of respondents.
- For the first time in 2016, data on the use of oxycodone was collected separately for generic oxycodone, OP (i.e.: reformulated oxycodone) and other forms of oxycodone (e.g.: Endone®). It should be noted that this renders making comparisons with user data from previous years unfeasible. Use of illicit generic oxycodone in the last six months was reported by 11% (n=8) with 12 median days of use. Use of illicit OP oxycodone in the last six months was reported by 9% (n=6) with 14 median days of use. Use of other illicit forms was reported by 9% (n=6) with a median of five days.
- Recent use in the last six months of fentanyl was reported by 17% (n=12) which was not a significant increase on 14% in 2015. Days of use ranged from one to 180 with a mean of 28 days which was not a significant increase on 11 days in 2015.
- Recent use of OTC codeine was reported by 6% (n=4) compared to 14% in 2015. Days of use ranged from two to 50 with a mean of 16 days compared to the 2015 mean of 29 but the small number of cases do not allow for meaningful testing of statistical significance.
- Recent use of other opioids was reported by 11% (n=8) compared with 18% in 15. Average days of use was 50 compared to the previous year's mean of 34 days, but the small number of cases do not allow for meaningful testing of statistical significance.

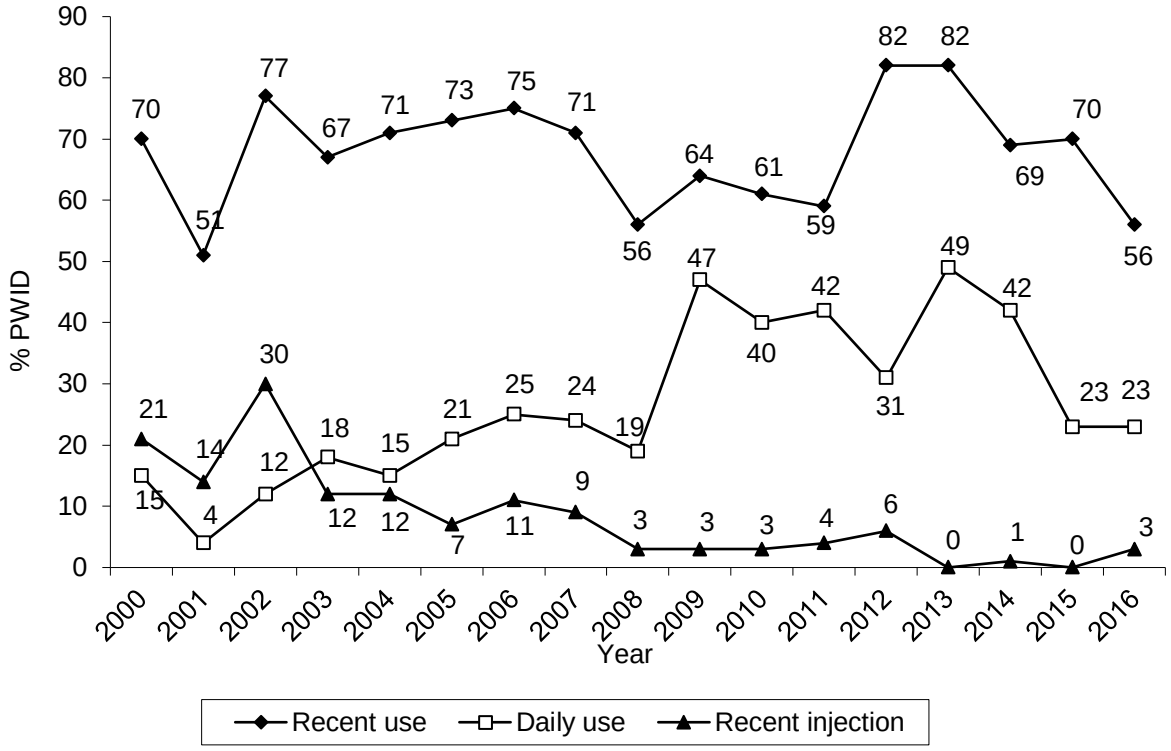
9 OTHER DRUGS

9.1 Benzodiazepines

The majority (73%, n=52) of the WA IDRS sample had reported the use of any form (licit or illicit) benzodiazepines at some stage in their lifetime. Recent use of any form was reported by 56% (n=40) which not significantly different to the 70% reported in 2015.

Figure 30 presents the proportion of PWID reporting any use of benzodiazepines in the six months preceding interview across IDRS surveys. This data includes both licit and illicit use, a distinction which was not explicitly drawn prior to 2007. It is notable that numbers reporting recent injection as an ROA have remained very low.

Figure 30: Proportion of PWID reporting any benzodiazepine use (licit or illicit), daily use and injection in the preceding six months, 2000-2016

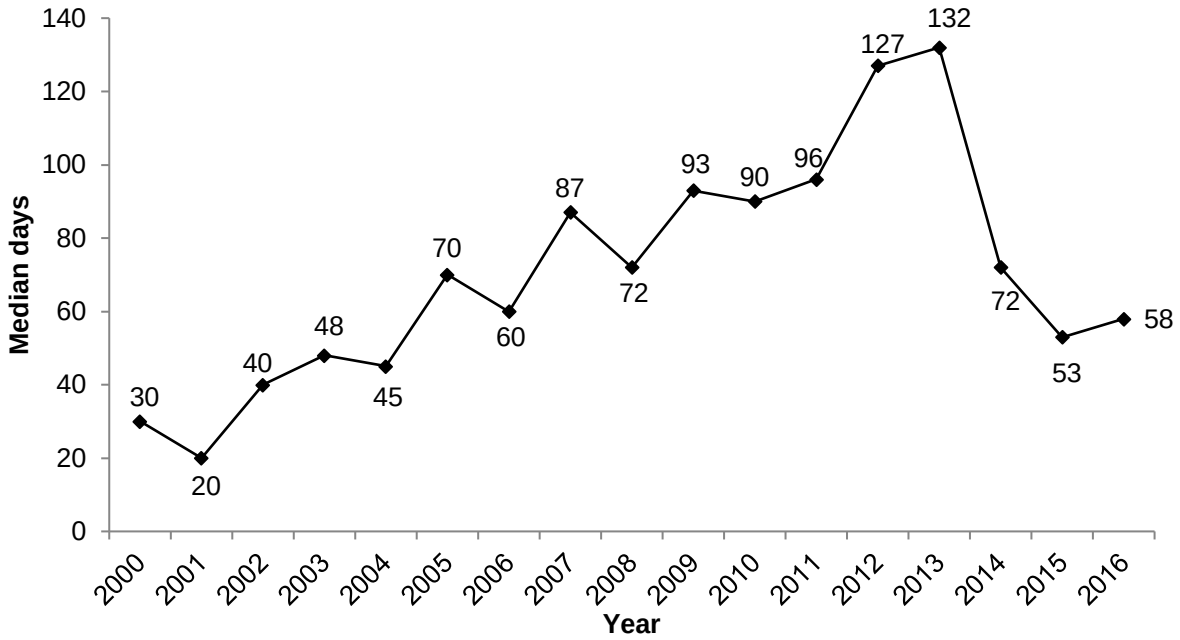


Source: IDRS user interviews

Days of use ranged from one to 180. Mean days of use of any benzodiazepines was 94 which was not significantly different from the 85 days the previous year. Median days of use are displayed in Figure 31. Of recent users of benzodiazepines, there were 40% (n=16) who reported using benzodiazepines on a daily basis which was comparable to the 32% using daily in the 2015 sample.

One KE noted an increased level in use of benzodiazepines with specific reference to alprazolam.

Figure 31: Median days use of any benzodiazepines (licit or illicit) in the past six months, 2000-2016



Source: IDRS user interviews

From 2011, participants were asked separately about the use of alprazolam and other benzodiazepine use.

9.1.1 Alprazolam (Xanax®)

Lifetime use of any form of alprazolam was reported by 56% (n=40) of the 2016 sample (18% licit, 49% illicit). Recent use of any form of alprazolam was reported by 20% (n=14) (3% licit, 18% illicit) which was not significantly less than the 21% in 2015. Mean days of use of prescribed alprazolam was 92 which was not significantly greater than 61 in 2015, while mean days of use of illicitly obtained alprazolam was 15 which was not significantly different from the 13 days the previous year.

9.1.2 Other benzodiazepines

Lifetime use of benzodiazepines, other than alprazolam, was reported by 72% (n=51) of the 2016 sample (58% licit, 54% illicit). Recent use of other benzodiazepines was reported by 55% (n=39) (41% licit, 30% illicit) which was not significantly different than the 70% reporting recent use of other benzodiazepines in 2015. Licit benzodiazepines were used on a mean of 111 days which was not a significant change from the 2015 mean of 98. Illicit benzodiazepines were used on a mean of 29 days which was not a significant change from the 24 days in 2015. By far the most common form of recently used benzodiazepine was diazepam reported by 80% (n=31) followed by oxazepam (15%, n=6) and clonazepam (5%, n=2) of those who responded.

There was just one respondent who commented on the market for illicit benzodiazepines in Perth. This respondent reported paying one dollar per pill of diazepam and that this price had remained '*stable'*. Current availability was rated as '*very easy*' and this also was considered to have been '*stable'*. This illicit diazepam was obtained from '*friends'* at the 'friend's home'.

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 illicit pharmaceutical stimulants was reported by 49% (n=35) of respondents. Recent use in the last six months was reported by 17% (n=12) which was not significantly different than the 11% reported in 2015. Of these recent users, 66% (n=8) reported recently swallowing illicit prescription stimulants, 33% (n=4) reported recent injecting and 17% (n=2) had snorted. Days of use ranged from one to 21 with a mean of six days which was unchanged from2015. The main form used remained dexamphetamine reported by nine recent users (both licit and illicit). There were also three respondents who reported their main form to be Ritalin®.

There were no respondents able to provide information on the price or availability of pharmaceutical stimulants in the 2016 sample.

9.3 Hallucinogens

Hallucinogens refer primarily, but not exclusively, to drugs such as LSD and psilocybin mushrooms.

Lifetime use of hallucinogens was reported by 79% of respondents. Recent use was reported by 10% (n=7) which was not significantly different from the 11% reported in 2015. Almost all recent use (n=6) was by oral administration. There were however individual reports of recent administration by injection and by smoking. Days of use ranged from one to 14 with a mean of six days which was comparable to four days the previous year. The hallucinogen reported as most used was LSD.

There were no respondents able to provide information concerning price, purity or availability of hallucinogens in the 2016 sample.

Several KEs made comments regarding hallucinogens, one observing that "*Purity of LSD can fluctuate because of evaporation of the drug during the time it dries on the tab during production. Also, LSD may be mixed with NBOMe / other drugs."* Another noted that LSD (and also ketamine and GHB) were "*Still around and often used to supplement other drugs such as alcohol, cannabis and methamphetamine."* Two others also reported that these drugs were *"still around"* but infrequently encountered, one noting that *"everyone seems to have moved onto alcohol and methamphetamine."* One other KE stated that there was some DMT in circulation, but described its use as *"not problematic".*

9.4 Ecstasy

'Ecstasy' refers to both 3, 4-methylenedioxymethamphetamine (MDMA) and also to substances sold purporting to be MDMA.

Lifetime use of ecstasy was reported by 68% of respondents. Recent use in the last six months was reported by 14% (n=10) which was comparable to the 9% reporting recent consumption of the drug in the previous year. The most common ROA was oral, reported by 90% (n=9) of recent users. There were three respondents who reported having injected ecstasy in the last six months and two of having snorted it. Days of use ranged from one to 40 with a mean of 10 which was not substantially different from the previous year's mean of three days of use. The most common form consumed was pills.

There was no information provided by users on price, purity or availability of ecstasy.

One KE working in the crowd control sector observed that ecstasy was sometimes used by "*more affluent venue goers but doesn't cause trouble. If everyone was on ecstasy, I'd be happy*". Another noted that there were anecdotal reports that ecstasy was currently of high purity. Two other KEs stated that the majority of ecstasy use was "*recreational*" or "*not problematic*" and its use "*largely associated with weekends and festivals*."

Two other KEs provided information concerning the current prices of ecstasy. The first reported that it was *"$30 per pill but the price goes up to $50 if there is a festival or in a club."* This person also noted a trend for antihistamines to be sold as "ecstasy". The second reported $30-$40 per pill, but also noted that pills were often adulterated with other substances, particularly NBOMe. Two KEs observed that there had been a move away from ecstasy in pill form towards powder in capsules or crystal. One of these also noted that "*misrepresentation*" (i.e.: the selling of other drugs masquerading as "ecstasy".) was common.

There was one KE who observed a trend among clients to crush up and inject ecstasy pills, but as this client group was taken from a needle and syringe exchange it is unlikely that this route of administration is widespread among most users of ecstasy.

9.5 Inhalants

Inhalants refers to a variety of substances that are sniffed or 'huffed' including, but not restricted to solvents, paint, petrol, butane, amyl nitrate ('rush' or 'poppers') and nitrous oxide ('laughing gas' or 'nangs').

Lifetime use of inhalants was reported by 29% of the 2015 sample. Use of inhalants in the last six months was reported by just 6% of the 2016 sample (n=4), which was comparable to 3% in the previous year. Number of days used ranged from one to 50. All four respondents reported the main form used as nitrous oxide.

9.6 Alcohol

Lifetime use of alcohol was reported by 90% (n=64) of respondents. Recent consumption was reported by 68% (n=48) which was comparable to 58% the previous year. All respondents who had recently consumed alcohol had swallowed it. Although there were four respondents with a history of lifetime injection of alcohol, there were no recent reports of injection. Days of use ranged from one to 180 with four respondents consuming alcohol on a daily basis. Mean days of use was 45 which was comparable to 52 mean days of use reported in 2015. The Alcohol Use Disorders Identification Test-Consumption (AUDIT-C) screen (Bush, et al., 1998) was administered to 69 respondents and revealed that, of the 2016 PWID sample, 51% (n=27) were consuming alcohol at hazardous levels.

Large numbers of KEs commented about alcohol, mostly to the effect that it was one of the most common drugs seen in client loads and that this was relatively unchanged. One suggested that there may have been a slight drop in overall use but that problematic use requiring medical detox had increased. Another working in emergency medicine reported that alcohol accounted for 70% of drug-related client load with presentations of intoxication, liver disease and trauma.

One KE working with police detainees observed that "*Alcohol seems to be a predominant factor with detainees, with some lower end offenders only in detention because of impulsive*

or disorderly behaviour while intoxicated. Also, alcohol is popular with homeless people and there has been an increase in cider drinkers."

Another KE from the crowd control sector made the interesting observation that "*Australia's strict responsible service laws often confuse foreign backpackers who often get aggressive when refused service.*"

With specific regard to alcohol use by PWID, one KE working in needle and syringe exchange noted that "*many of our clients don't actually drink*."

9.7 Tobacco & E-cigarettes

Lifetime use of tobacco was reported by 93% (n=66)of the 2016 sample and recent use by 85% (n=60), which was largely unchanged from 93%the previous year. Days of use ranged from three to 180 with 90% (n=53) of recent smokers reporting smoking on a daily basis. Mean days of use was 168 which was unchanged from 171 in 2015.

Lifetime use of electronic cigarettes was reported by 32% (n=23) of the 2016 sample and recent use by 24% (n=17) compared with 16% in the previous year. Days of use ranged from one to 180 with a mean of 31 days which was unchanged from 2015. Of these, there were seven (41%) of respondents who indicated that they were using e-cigarettes as an aid to ceasing smoking. There were 15 respondents who indicated what their E-cigarette contained. Of these, 87% (n=13) indicated that their e-cigarette contained nicotine, one that it contained nicotine and cannabis, and one that it contained neither.

9.8 Seroquel® (quetiapine)

Lifetime use of illicit Seroquel® was reported by 35% (n=25) of the 2016 sample and recent use was reported by 11% (n=8) which was unchanged from 2015. All reported recent use was by oral dosing with no injection reported. Days of use for illicit Seroquel® ranged from 0ne to 60 with a mean of 16 days which was not a significant change from the mean of 19 days in 2015.

9.9 Synthetic cannabis

Lifetime use of these synthetic cannabis was reported by 38% (n=27) and recent use by 9% (n=6) which was not a significant change from the 7% in the previous year. Days of use ranged from one to 24 with a mean of seven days which was not significantly different from the 2015 average of 12 days.

Data obtained from ADIS revealed calls related to synthetic cannabis remained relatively stable from 292 in 2014/2015, to 218 in 2015/2016.

Several KEs reported that use of synthetic cannabis appeared to be decreasing, one speculating that this may be "due to legislative changes" and another two that the decrease may be attributable to the declining numbers of fly in – fly out (FIFO) workers among whom synthetic cannabis had previously been a popular choice of drug due to its unlikelihood of been detected by workplace drug testing programs. A third attributed this decline in used to synthetic cannabis having acquired an "*adverse reputation*". Another two KEs however noted the ongoing popularity of synthetic cannabis with more marginalised groups such as homeless and ATSI due to difficulties in accessing actual cannabis.

Another noted that use of synthetic cannabis was sometimes associated with patients presenting with "*extreme agitation, violence and psychosis*". This KE opined that "*users would*

be better off using actual cannabis as the available analogues get further and further away from the real thing."

9.10 New psychoactive substances

Lifetime use of these synthetic drugs was reported by 6% (n=4) compared to 3% of respondents the previous year. There were just three reports of recent use compared to two in 2015. The substances used were identified as MDPV, commonly known as '*gravel'*. Days of use were low ranging from one to six with a mean of four which was unchanged from the previous year. All three recent users reported both injection and oral administration, however, given the very small number of respondents reporting these findings must be interpreted with caution.

One KE observed that the most common forms of NPS available in Perth were Alpha PVP (known as "flacka" or "gravel") and MDPV (known as "bath salts"). A second KE noted that *"Regardless of whether they are considered legal or not, (many users) will not touch synthetic forms of drugs, because there seems to be more adverse effects with their use."* Another suggested that there was now less use of MDPV among primary methamphetamine users than a few years ago.

9.11 Steroids

A lifetime history of use was reported by 4% of the sample (n=3) There was only one report of recent use. It should be noted however that recruitment methods used by the IDRS do not aim to capture primary steroid users and as several KE in previous years observed, steroid users tend not to identify as drug users and, therefore, would be unlikely to respond to recruitment attempts by an illicit drug survey. One KE in 2016 however did note that primary steroid users were increasingly using needle and syringe exchange services.

9.12 Miscellaneous substances

Very small numbers of respondents (n=6) talked about lifetime use of other drugs not elsewhere described, most notably ketamine (n=3) and GHB (n=3). Other drugs ever used were mentioned by individual respondents and included barbiturates and DMT.

9.13 Summary of other drug trends

- Recent use of any form of benzodiazepines (licit or illicit) was reported by 56% (n=62) which was not significantly different from the 70% reported in 2015. Mean days of use of any benzodiazepines was 94 which was not significantly different from the 85 days the previous year. Reports of recent injection of benzodiazepines remained very low with only three reports in 2016. Recent use of any form of alprazolam was reported by 20% (n=14) (3% licit, 18% illicit) which was not significantly less than the 21% in 2015. Mean days of use of prescribed alprazolam was 91 which was not significantly greater than 61 in 2015, while mean days of use of illicitly obtained alprazolam was 15 which was not significantly different from the 13 days the previous year. Recent use of other benzodiazepines was reported by 55% (n=39) (41% licit, 30% illicit) which was not significantly different than the 70% reporting recent use of other benzodiazepines in 2015. Licit benzodiazepines were used on a mean of 111 days which was not a significant change from the 2015 mean of 98. Illicit benzodiazepines were used on a mean of 29 days which was not a significant change from the 32 days in 2015. The most common form remained diazepam.

- Recent use in the last six months of illicit pharmaceutical stimulants was reported by 11% (n=10) which was significantly less than the 24% reported in 2014. Mean days of use was six days which was significantly less than the mean of 13 days reported in 2014. Recent use in the last six months was reported by 17% (n=12) which was not significantly different than the 11% reported in 2015. Days of use ranged from one to 21 with a mean of six days which was unchanged from 2015.
- Recent use of hallucinogens was reported by 10% (n=7) which was not significantly different from the 11% reported in 2015. Days of use ranged from one to 14 with a mean of six days which was comparable to four days the previous year. The hallucinogen reported as most used was LSD.
- Recent use of ecstasy was reported by 14% (n=10) which was comparable to the 9% reporting recent consumption of the drug in the previous year. Mean days of use was 10 which was not substantially different from the previous year's mean of three days of use. The most common form consumed was pills.
- Recent use of inhalants remained uncommon in the sample, reported by just 6% of the 2015 sample (n=4), which was comparable to 3% in the previous year. Number of days used ranged from one to 50.
- The majority of IDU across years reported lifetime and recent use of alcohol and tobacco.
- The recent use of illicit Seroquel® (quetiapine) was reported by 11% (n=8) which was unchanged from 2015. Mean days of use was 16 days which was not a significant change from the mean of 19 days in 2015.
- Recent use of synthetic cannabis was reported by 9% (n=6) which was not a significant change from the 7% in the previous year. Mean days of use was seven days which was not significantly different from the 2015 average of 12 days.
- References to the use of new psychoactive substances, steroids and other miscellaneous drugs were made by small numbers of respondents.

10 HEALTH-RELATED HARMS ASSOCIATED WITH DRUG USE

10.1 Overdose and drug-related fatalities

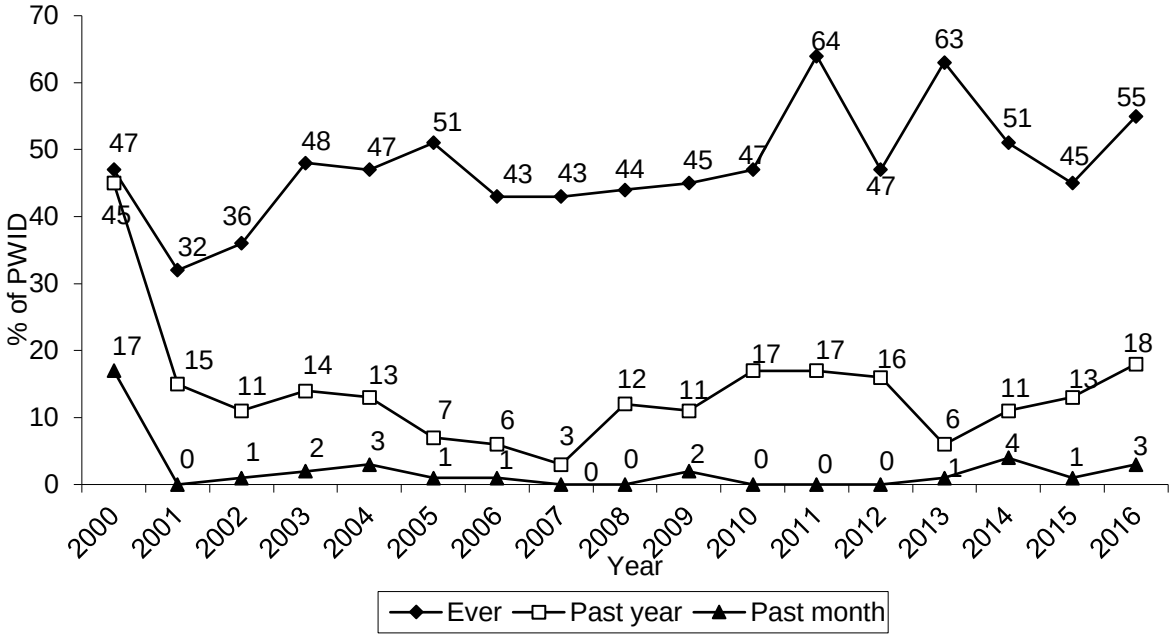
10.1.1 Heroin and other opioids

10.1.1.1 Non-fatal opioid overdose

The IDRS participants were asked how many times they had overdosed on heroin and the length of time since their last heroin overdose. A lifetime history of heroin overdose was reported by 55% (n=39) which was not significantly more than the 45% reported in 2015. Having received naloxone at the most recent overdose event was reported by 47% (n=18) of those with a history of heroin overdose. The median number of times respondents reported ever overdosing on heroin remained unchanged at three (range 1-70). Time since the most recent heroin overdose ranged from one month up to 29 years.

There were 18% (n=13) of respondents who had overdosed within the previous twelve months which was not significantly more than the 13% in 2015. Of these, eight reported having received ambulance attendance and six receiving naloxone as a response to their most recent overdose. There were seven reports of having received cardiopulmonary resuscitation (CPR) from a friend, partner or peer, but only one from a health professional. Six respondents reported having been transported to hospital and two of having been administered oxygen. Only three of these recent overdose cases reported seeking post-overdose treatment or information, either from a counsellor or generalist health service. There were just three reports of experiencing a heroin overdose in the month prior to survey compared with one in 2015. Overdose data since 2000 is displayed in Figure 32.

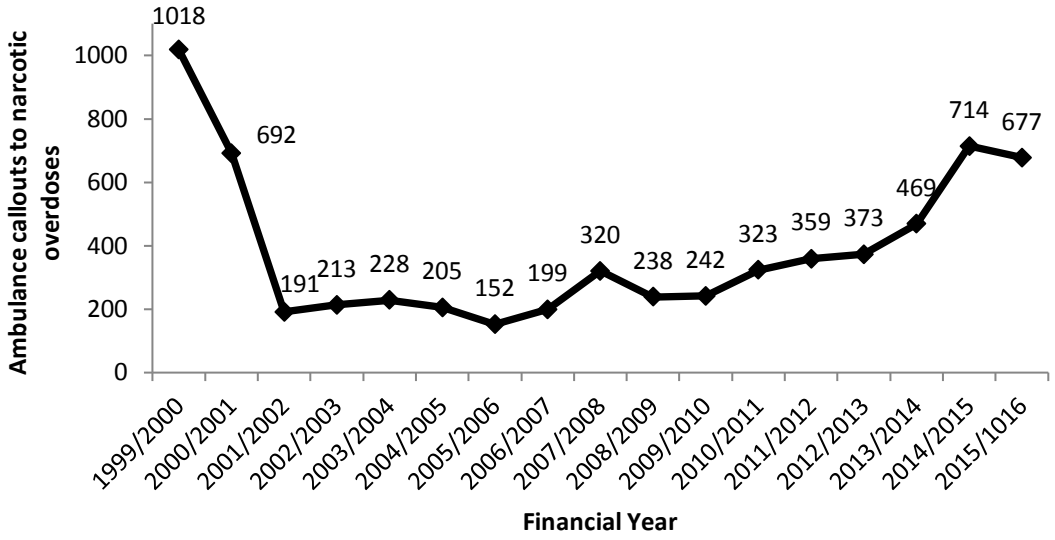
Figure 32: Proportion of WA participants who had ever overdosed, overdosed in the past 12 months and in the past month on heroin, 2000-2016



Source: IDRS user interviews

Figure 33 presents the number of narcotic overdoses attended by St John Ambulance by quarter from April 2002 to June 2016. There were 677 overdoses attributed to narcotic drugs attended by ambulance during the 2015/16 period compared to 714 in the previous financial year. Of these narcotic overdoses, 518 were attributed to heroin, thereby accounting for 77% the total number of overdoses attributed to any narcotic in 2015/16.

Figure 33: Number of ambulance callouts to narcotic overdoses, WA, 1999/2000-2015/2016



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 third quarter 2005

Of the three KEs who identified heroin as a '*problematic drug'* encountered by their service, all nominated overdose as the major problem associated with the drug. One KE noted an increasing trend towards combining heroin use with that of other drugs, notably benzodiazepines resulting in an increased risk of overdose. Another three spoke about the link between overdoses increasing and when heroin purity increases.

10.1.1.2 Fatal opioid overdose

Analysis of data from the Australian Bureau of Statistics by NDARC reveals that in 2012 there were 90 fatal overdoses attributable to accidental opioid overdose among persons aged 15-54 in WA which was comparable to 88 in 2011. This was the highest figure seen since 2000. In terms of rates per million, this equates to 64.4 deaths, compared to the national rate of 39.3. This was the highest rate reported in Australia, followed by Queensland with 50.5 per million.

10.1.2 Other drugs

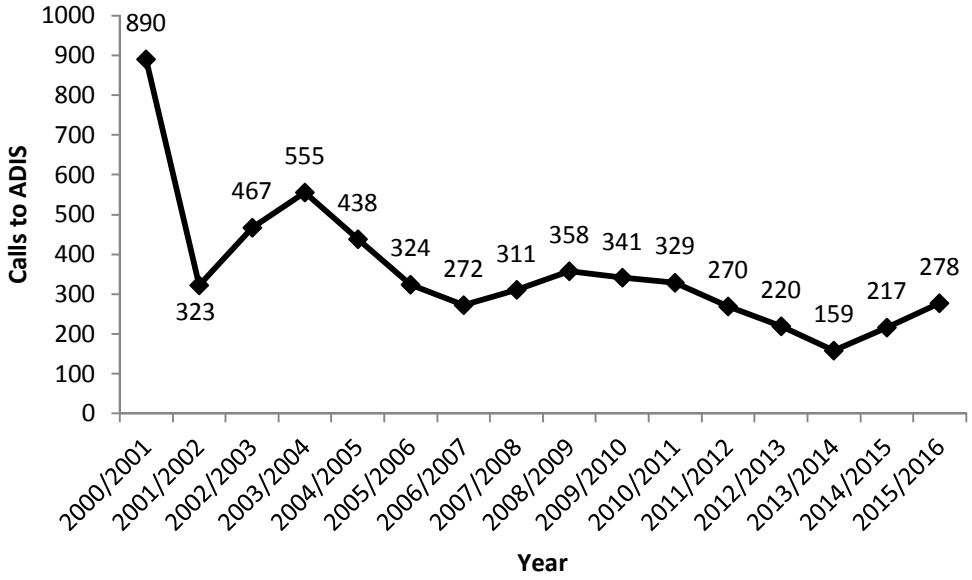
10.1.2.1 Non-fatal overdose

In addition to heroin overdose, participants were asked whether they considered themselves to have ever accidentally overdosed on any other drug(s). A lifetime history of overdose on any other drug was relatively rare with one self-report of overdosing on crystal methamphetamine, being the only case reported.

10.2 Calls to telephone help lines

Figure 34 presents the number of telephone calls to the WA ADIS regarding heroin from 2000/2001 to 2015/2016. There were 278 calls to the service with heroin as the primary drug of concern and accounting for 1.2% of all calls received. This represents the second year since 2008/2009 when the number of heroin related calls actually increased. This data is shown in Figure 34.

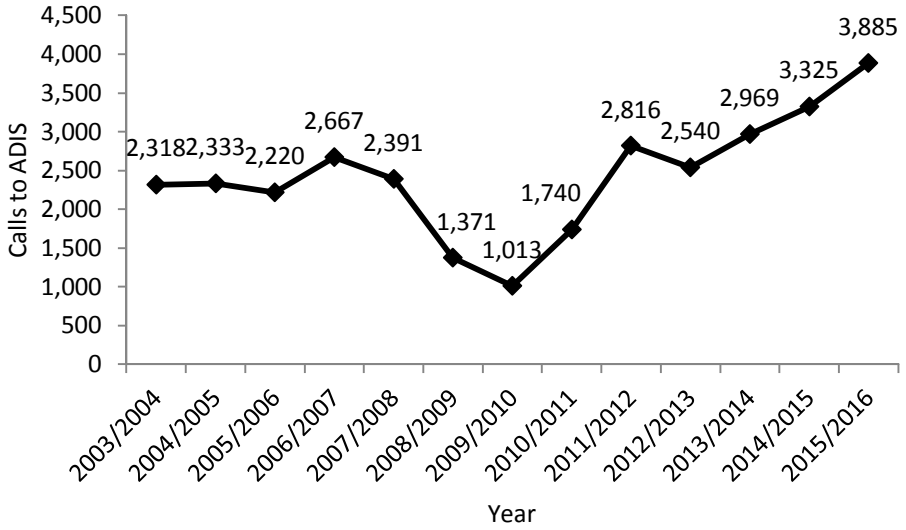
Figure 34: Number of enquiries to ADIS regarding heroin, 2000/2001- 2015/2016



Source: Alcohol and Drug Information Service

Figure 35 presents the number of telephone calls to WA ADIS regarding amphetamines and methamphetamines from 2003/2004 to 2015/2016. It is evident that the number of calls regarding amphetamines has tended to increase since 2009/2010. In the last financial year there were 3,885 calls with amphetamines as the primary drug of concern compared to 3,325 in the previous year, making this the highest number so far recorded. In 2015/2016 amphetamines accounted for 13.1% of calls to ADIS. One KE working for the service stated that along with alcohol, crystal methamphetamine was the principle drug of concern behind most calls received by ADIS.

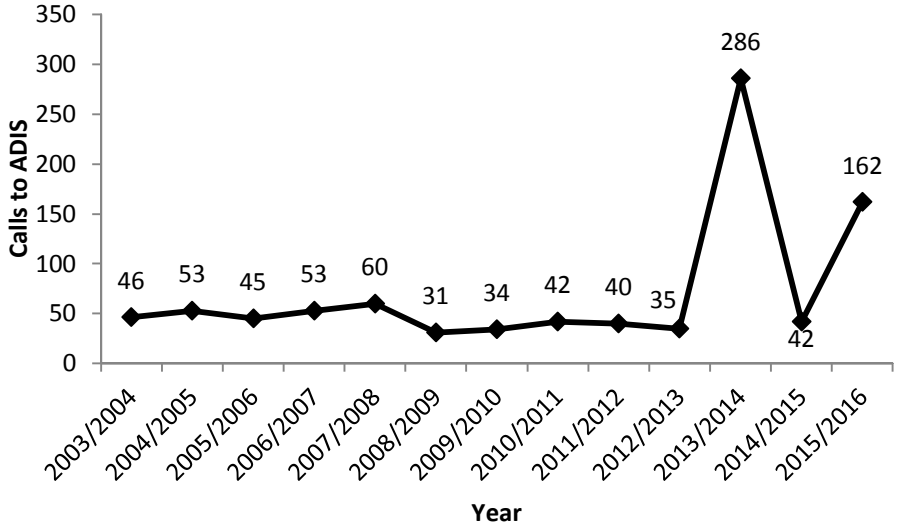
Figure 35: Number of enquiries to ADIS regarding amphetamines, 2003/2004-2015/2016



Source: Alcohol and Drug Information Service

Figure 36 presents the number of telephone calls to WA ADIS regarding cocaine from 2003/2004 to 2015/2016. In the last financial year there 162 calls concerning cocaine. While there appears to have been massive surges in calls involving cocaine as the primary drug of concern during 2013/2014 and 2015/2016 the service notes that this is largely accounted for by multiple calls from single individuals and as such, this figure should be interpreted with scepticism.

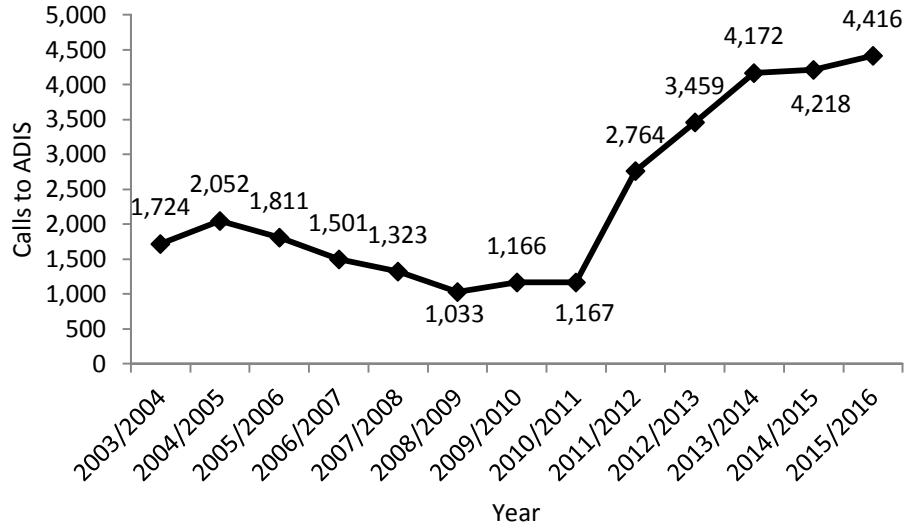
Figure 36: Number of enquiries to ADIS regarding cocaine, 2003/2004 - 2015/2016*



Source: Alcohol and Drug Information Service
*It should be noted that the large spikes in calls during 2013/2014 and 2015/2016 were attributed to multiple calls from individual clients.

Figure 37 presents the number of cannabis-related calls received by ADIS from 2003/2004 to 2015/2016. During the 2015/16 financial year calls to ADIS with cannabis as the primary drug of concern continued to increase. In that year there were 4,416 calls compared to 4,218 in the corresponding period the previous year, accounting for 18.6% of all calls received making it the most commonly reported primary drug of concern, exceeding even alcohol. The apparent increase in calls with cannabis as the primary drug of concern in recent years is likely not a reflection of a new trend, but rather of ADIS changing the methods of recording this data which since the start of 2012 has also included booking calls to the Cannabis Intervention Requirement Scheme (CIRS).

Figure 37: Number of enquiries to ADIS regarding cannabis, 2003/2004-2015/2016*



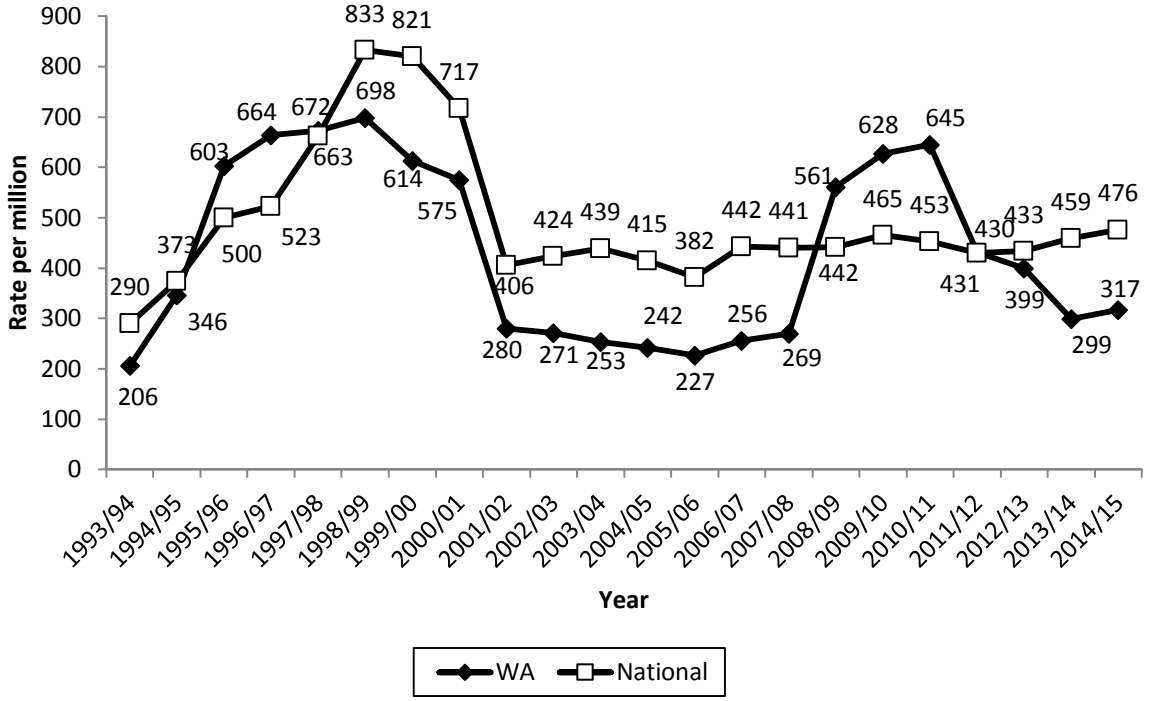
Source: Alcohol and Drug Information Service
* Data collected since 2011 also includes calls to the Cannabis Intervention Requirement Scheme (CIRS) as well as cannabis as primary drug of concern.

10.3 Hospital admissions

10.3.1 Opioids

The rate per million persons aged 15-54 years of hospital admissions in which the principal diagnosis was opioid-related is shown in Figure 38. A principal 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. WA rates per million rose slightly in 2014/15 from 299 to 317. This can be compared to the national rate of 476 per million.

Figure 38: Rate per million persons of principal opioid-related hospital admissions among people aged 15-54 years, WA and nationally, 1993/94- 2014/15

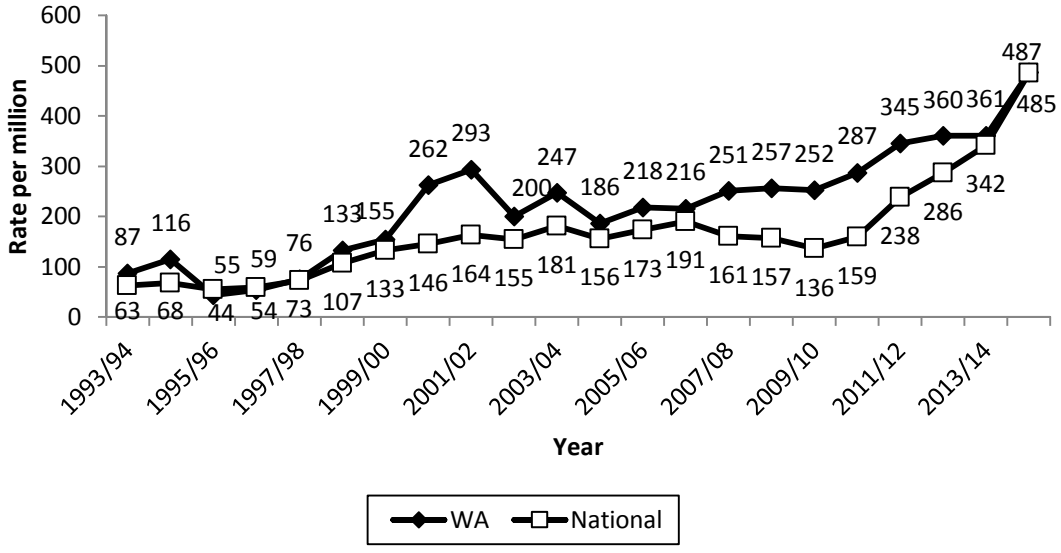


Source: Roxburgh & Breen (2017)

10.3.2 Amphetamines

The rate per million persons aged 15-54 years of hospital admissions in which the principal diagnosis was amphetamine-related is shown in Figure 39. Numbers of amphetamine-related hospital admissions in WA rose somewhat from 361 per million in 2013/14 to 487, making them roughly equal to the national rate of 485 per million.

Figure 39: Rate per million persons of principal amphetamine-related hospital admissions among people aged 15-54 years, WA and nationally, 1993/94-2014/15



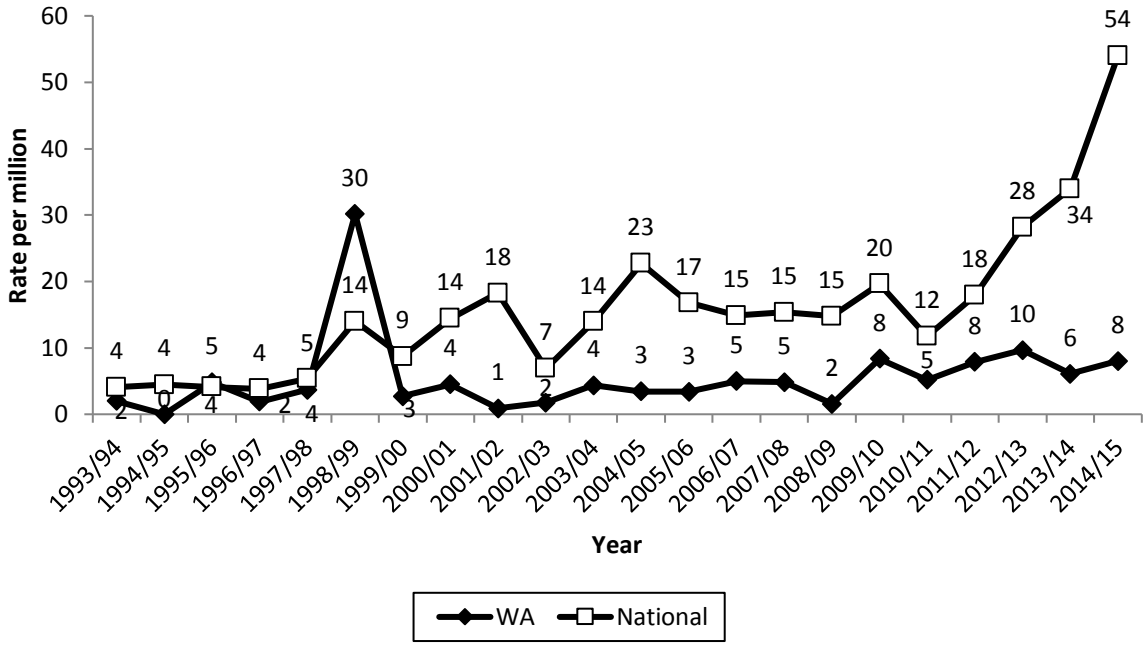
Source: Roxburgh & Breen (2017)

One KE working in emergency departments noted that levels of aggression among amphetamine-related hospital admissions had increased as had levels of intoxication. This was requiring more time dealing with out of control behaviours and a high risk of injury or assault by patients. More rehab beds had been installed to deal with this patient load. A second KE from the nursing sector noted that "*methamphetamine remains the number two drug for presentations, but colleagues working in rehab now have more methamphetamine patients than alcohol.*"

10.3.3 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 40. WA rates have been consistently low since 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. In 2014/15 there were eight cocaine-related hospital admissions per million population in WA compared with the national rate of 54 per million.

Figure 40: Rate per million persons of principal cocaine-related hospital admissions among people aged 15-54 years, WA and nationally, 1993/94-2014/15

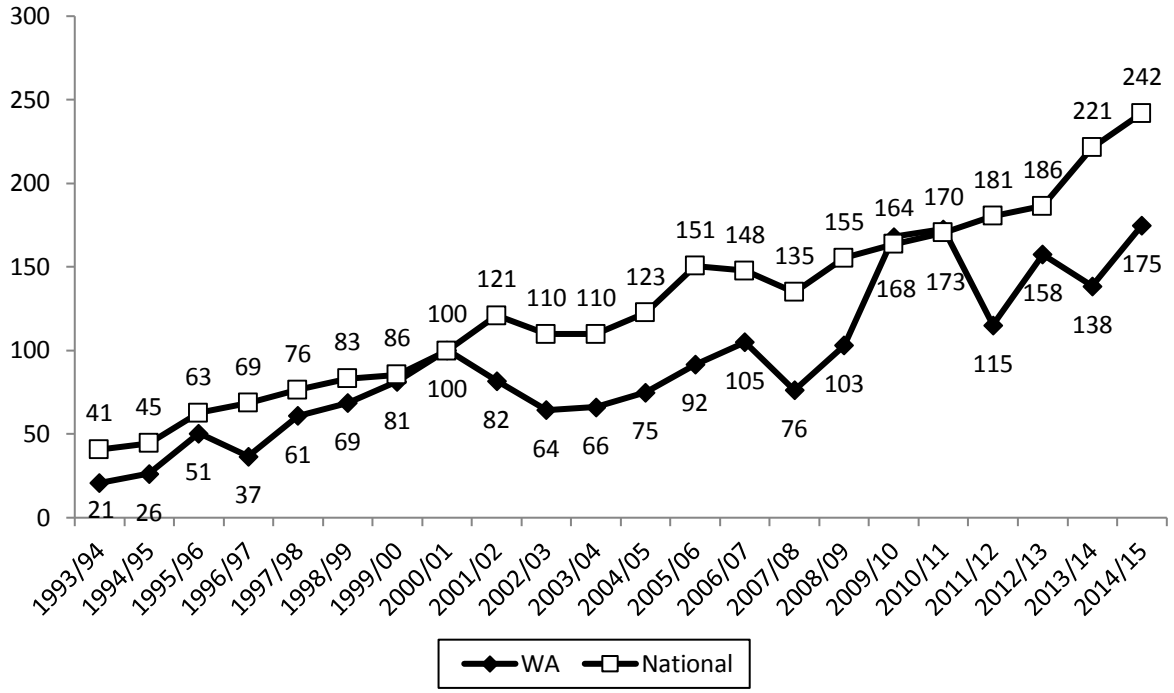


Source: Roxburgh & Breen (2017)

10.3.4 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 41. WA rates per million were 175 compared with the national rate of 242, an increase from the WA rate of 138 per million the previous year.

Figure 41: Rate per million persons of principal cannabis-related hospital admissions among people aged 15-54 years, WA and nationally, 1993/94 -2014/15



Source: Roxburgh & Breen (2017)

10.4 Injecting risk behaviours

10.4.1 Access to needles and syringes

IDRS participants were asked to report on the frequency of injecting and frequency of obtaining needles and syringes over the month preceding interview. Of the 67 PWID responding, number of injections in the last month ranged from two to 540. The one respondent reporting 540 injecting occasions appears to be an outlier, with the next highest injecting frequency being 180 times. Despite this, the median number of injecting occasions was 30 which was unchanged from 2015. The number of times in the last month respondents went to obtain new needles and syringes ranged from zero to 30 with a median of two times which was unchanged from 2015. The actual number of needles and syringes acquired ranged from zero to 500 with a median of 100. Asked how many needles and syringes they had sold or given away in the last month saw a range from zero to 800 with a median of 20 which was unchanged since the previous year. Asked how many needle and syringe units they had stored away produced a range from zero to over 600 with a median of 40 compared with 30 the previous year. There were 9% (n=6) who reported experiencing any difficulty accessing needles and syringes in the past month and 3% (n=2) who reported difficulty accessing filters.

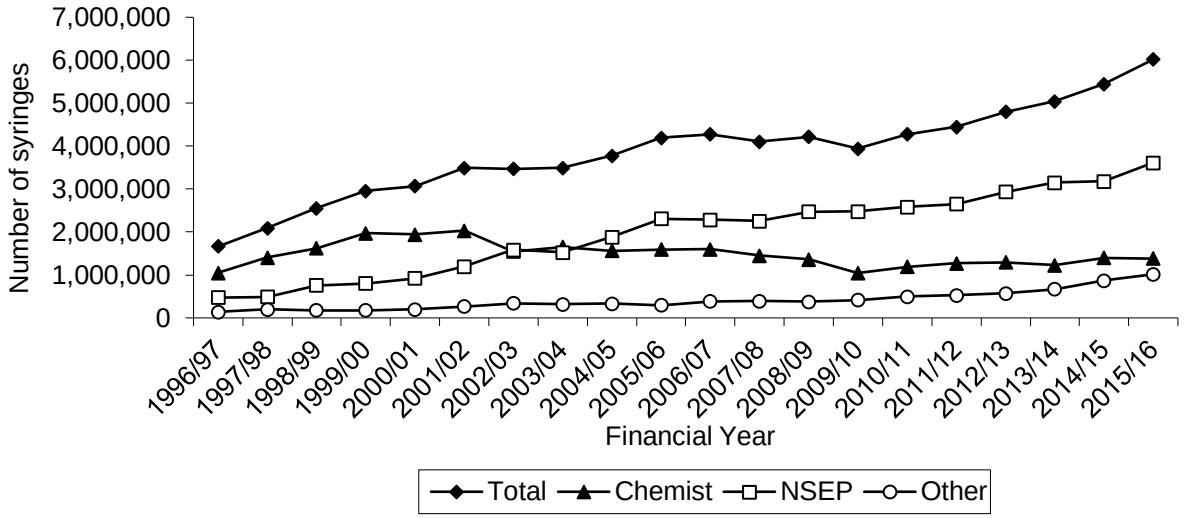
NSP remained the most common source of injecting equipment in the last month reported by 91% (n=63) of those responding, followed by chemists, (17%, n=12). Much smaller numbers reported '*partners'*, '*friends'* and '*dealers'*. Asked about the availability of filters at these outlets, 61% (n=37) reported being able to access cotton filters (eg: Sterafit), 57% (n=35) wheel filters, 10% (n=7) cigarette filters, and 48% (n=29) reported being able to access other types of filter, generally cotton wool.

One KE working in NSP observed that "*Change in purity of meth and more opiate use has made service busier. People are more comfortable in returning their dirties and often stay and have a chat.*"

The most commonly reported injecting equipment used in the month prior to interview by those responding remained a 1ml syringe (96%, n=68). Much smaller numbers reported the use of infusions (n=10), 3ml syringes (n=9) cotton filters (n=7), wheel filters (n=6), detachable needle tips (n=4), 20ml syringe (n=2), 50ml syringe (n=2), and individual reports of using 5ml syringe and 10ml syringe.

Figures from the Sexual Health Branch of the Health Department of Western Australia show that 6,018,538 syringes were distributed in WA during the 2015/16 financial year compared to 5,445,543 in the 2014/15 period. As has been the case since 2003/04, the bulk of these were distributed via NSP, accounting for more than half of all syringes in 2015/16 with 3,615752 units. Less common sources of syringes were chemists distributing 1,386,353 and other sources such as hospitals and vending machines accounting for 1,016433. Data concerning syringe distribution in WA since 1996/97 is portrayed in Figure 42.

Figure 42: Sources of syringe distribution in WA 1996/97-2015/16



Source: Sexual Health Branch, Health Department of Western Australia

10.4.2 Sharing of needles and equipment by IDU participants

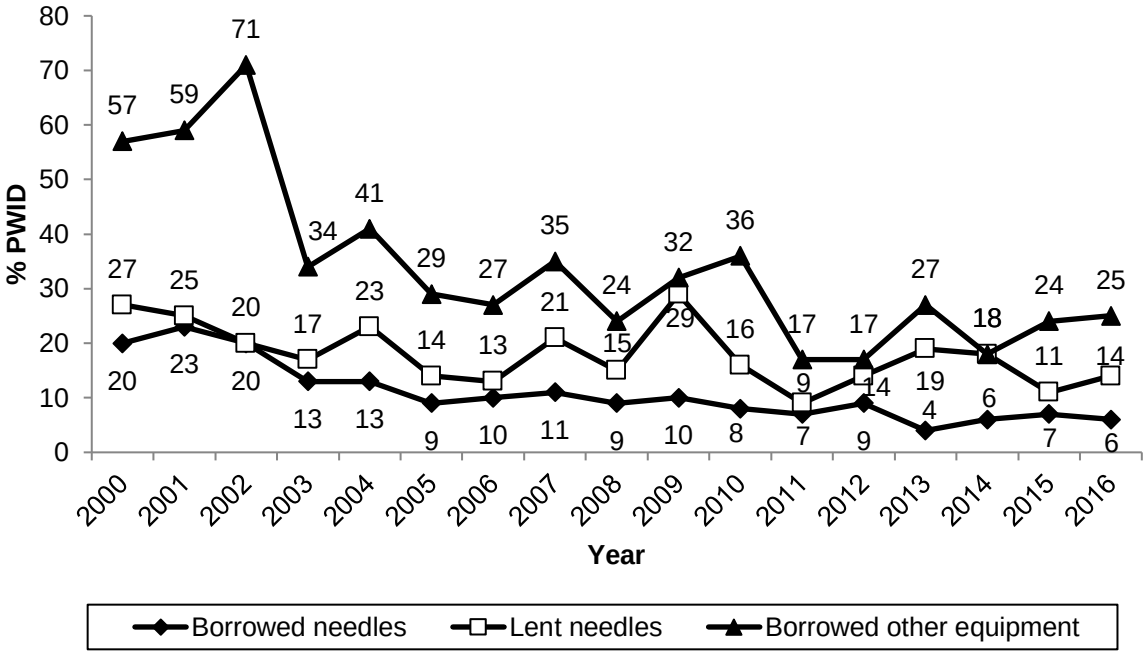
With regard to sharing needles, the vast majority of those responding (94%, n=65) reported that they had not used a needle after someone else in the last month. Of those that did report using a needle after someone else (6%, n=4), reported instances ranging from one respondent who reported using a needle once after someone else, up to two respondents reported doing so three to five times. In all cases (n=4) the only one person had used the needle before the respondent. This person was reportedly either '*a regular sex partner*' (n=1), '*a close friend*' (n=2) or '*an ex-partner*' (n=1).

The use of other equipment after someone else was reported by 25% (n=17) of respondents. Most commonly, this other equipment consisted of spoons (n=13), tourniquets (n=5), water (n=3), and filters (n=5).

There were 14% (n=10) respondents who reported that someone else had used a needle after them in the last month. That this had happened once was reported by three respondents, twice by three, three to five times by two, six to ten times by one and more than ten times by one.

Figure 43 presents the proportion of all respondents across IDRS surveys that reported sharing needles and injecting equipment in the month before interview. The proportion reporting borrowing a needle since 2005 has remained relatively stable. The sharing of other injecting equipment was reported by 25% (n=18) which was not significantly different to the 24% reported in 2015.

Figure 43: Proportion of all PWID reporting sharing injecting equipment in the month preceding interview, 2000-2016



Source: IDRS user interviews

Asked if they had reused their own needles in the last month, 60% (n=42) of those responding indicated that they had not which was comparable to the 63% in 2014. Having done so once was reported by 9% (n=6), twice by 7% (n=5), three to five times by 13% (n=9), six to ten times by 6% (n=4) and more than 10 times by 3% (n=2). The most commonly reused type of needle and syringe was a 1 ml (n=25). Reuse of a 3ml syringe was reported by two respondents and reuse of a 5ml syringe, a 10 ml syringe and a detachable needle were all reported by individual respondents. Other commonly reused equipment included spoons or mixing containers (n=33), tourniquets (n=18), water (n=4), other filters (n=6), swabs (n=1) and wheel filters (n=2).

Respondents were asked if they had injected a partner or friend after injecting themselves. Of those who responded, 64% (n=44) said they had not, 33% (n=23) said they had with a new needle, and individual respondents said they had done so with a used needle, or both new and used needles. There were 11 (16%) of those responding who indicated that someone else had injected them after injecting themselves. In all cases this was with a new needle.

The most common injection sites reported at the last injecting event among those responding were the arm (73%, n=50), the hand or wrist (15%, n=10) and the neck (9%, n=6). Much smaller numbers reported that the last injection site had been the neck, the leg, or the groin. The most commonly reported location for the last injection remained a ‘private home’ (83%, n=57) followed by ‘in a car’ (7%, n=5), ‘a street or park’ (4%, n=3) and ‘a public toilet’ (3%, n=2).

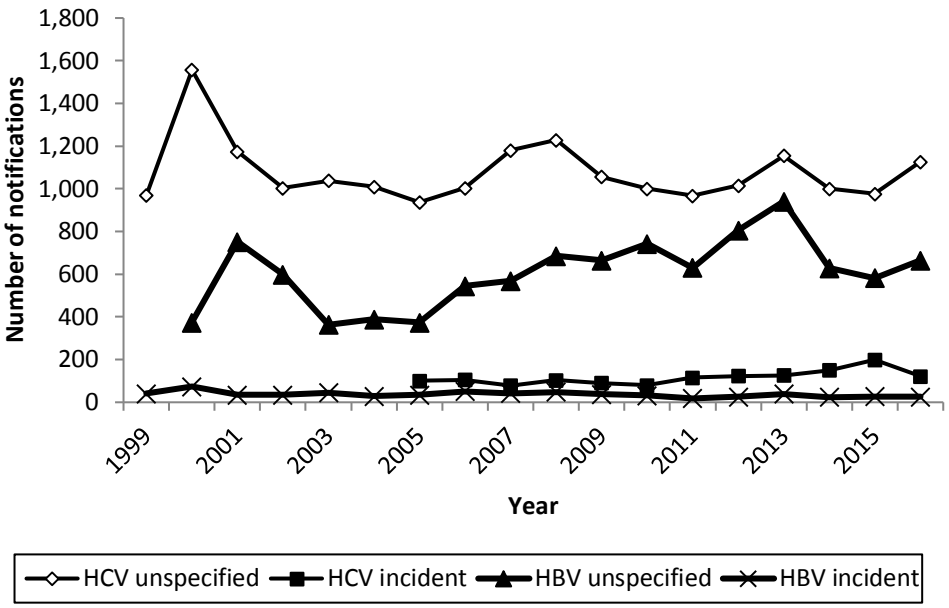
10.4.3 Blood-borne viral infections

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

Figure 44 presents data from the National Notifiable Diseases Surveillance System (NNDSS) for cases of unspecified and incident HBV and HCV for WA from 1999 to 2016. Incident or newly acquired infections, and unspecified infections (i.e. where the timing of the disease acquisition is unknown) are presented. Incident cases of HBV remained very low with just 26 cases reported in 2016 compared to 28 in 2015. Incident cases of HCV have fallen from 203 in 2015 to 121 in 2016. There were increases in numbers of unspecified cases of both HBV (from 582 in 2015 to 665 in 2016) and HCV (from 947 in 2015 to1,127 in 2016).

Data collected from the annual NSP Survey (Memedovic et al. 2016) found in its WA sample a HCV prevalence of 51% in 2014 compared with 44% in 2014. HIV prevalence was 1% compared to 0% the previous year.

Figure 44: Total notifications for unspecified and incident HBV and HCV infection, WA, 1999-2016



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

A KE working in needle exchange reported that their service had started their own clinic in response to demand for the new generation of HCV treatments.

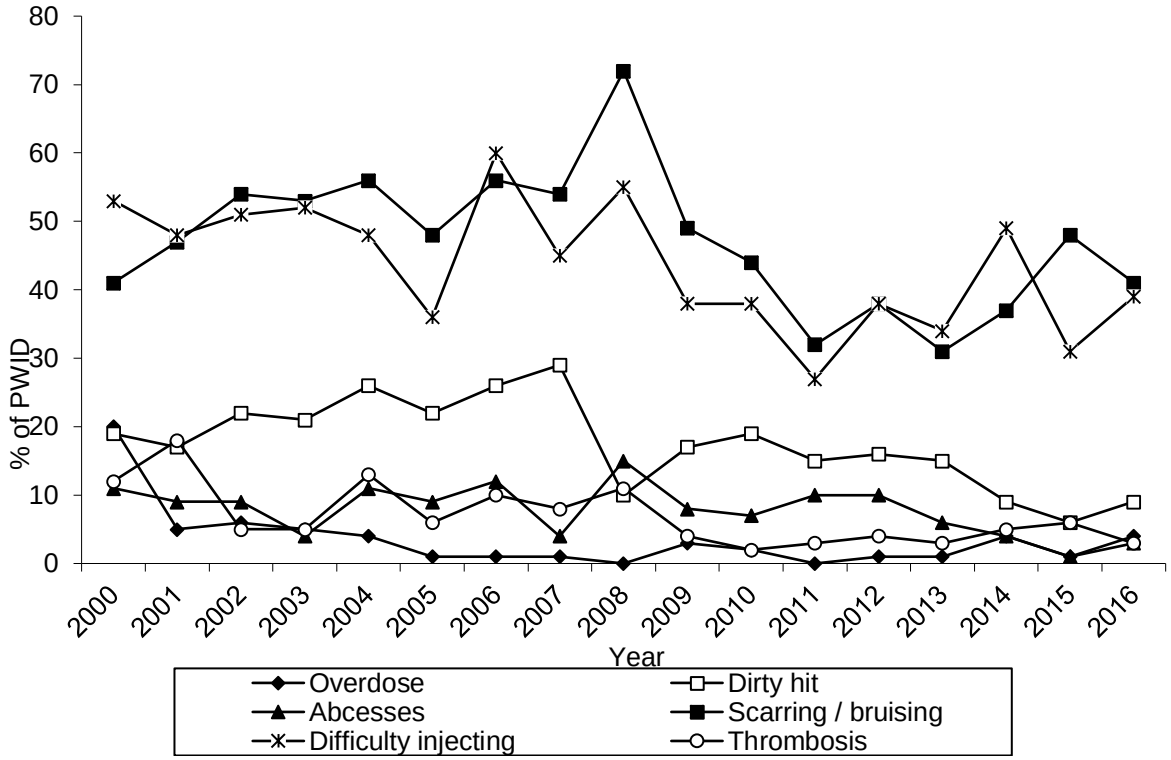
10.4.4 Injection-related health problems

Participants were asked about injection-related health problems they experienced in the month prior to interview. In 2016, just three respondents reported an overdose in the month

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

prior to interview compared with one during the previous year. These overdoses were all attributed to heroin, two of which also involved benzodiazepines nominated as a secondary drug. Eight percent (n=6) of the 2016 sample reported experiencing a dirty hit, which was not significantly different to the 7% in 2015. The drugs most commonly implicated in a dirty hit were heroin (n=2), oxycodone (n=2), methamphetamine (n=1) and methadone (n=1). It should be noted, however, that this is not solely a reflection of these drugs' potential to result in a dirty hit, but also of the frequency with which they are consumed by the 2016 PWID sample. The other most commonly reported injection problems remained difficulty injecting (n=28) and prominent scarring/bruising (n=29). Smaller numbers reported thrombosis or blood clots (n=2) and abscesses or infections from injecting (n=2). The relative incidence of these injection-related problems since 2000 is presented in Figure 45.

Figure 45: Proportion of PWID reporting injection-related problems in past month, by problem type, 2000-2016



Source: IDRS user interviews

Two KEs discussing problems specifically related to methamphetamine injection mentioned abscesses, swollen limbs, endocarditis, and sores and skin infections on the face and limbs due to skin picking. It was noted that "*the nature of methamphetamine doesn't lend itself to clean injecting practices.*"

Another KE observed that *"There is some suspicion that methamphetamine may dissolve plungers in syringes. There have also been issues with damaged injecting equipment, some brands of needles have become quite substandard."*

10.5 Mental and physical health problems and psychological distress

10.5.1 Self-reported mental health problems

In 2016, 34% (n=24) of respondents self-reported experiencing a mental health problem in the last six months, which was not significantly less than the 36% in 2015. As in previous years, the most commonly reported mental health problems were depression, reported by 71% (n=17) of those responding, followed by anxiety, reported by 63% (n=15). Less common self-reported problems included post-traumatic stress disorder (38%, n=9), panic and bipolar disorder each with 33% (n=8), drug-induced psychosis, paranoia and obsessive compulsive disorder, each with 17% (n=4), and personality disorders (13%, n=3).

Of those reporting a mental health problem, 79% (n=19) reported attending a professional in relation to the problem. These health professionals were most commonly a general practitioner (n=16), a psychologist (n=4), or a counsellor (n=4). Asked if they had been prescribed medication for their condition, 67% (n=16) said they had. Most commonly, these medications were a wide variety of antidepressants, most commonly mirtazapine (n=12), benzodiazepines, primarily diazepam (n=7), and antipsychotics, primarily seroquel (n=6).
One KE noted increased mental health concerns surrounding methamphetamine, specifically psychosis, suicidal ideation, anxiety and homelessness.

10.5.2 The K10 psychological distress scale and SF 12

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

In 2016, 64 participants completed the K10 and scores are presented by risk category. The median total score in was 22 which was unchanged from the previous year (range=10-45). In 2016, using the interpretation scheme suggested by Andrews and Slade (2001), 25% (n=16) scored at low or no distress, 22% (n=14) scored at moderate distress, 34% (n=22) scored at high distress and 19% (n=12) scored at very high distress.

Respondents to this section were also asked a self-report question regarding how they perceived their current state of general health.

That their general health was '*excellent'* was reported by 2% (n=1), as '*very good*' by 16% (n=11), as '*good'* by 40% (n=27), as '*fair'* by 34% (n=23), and as '*poor'* by 8% (n=5).

10.5.3 Drugs and Driving

Asked if they had driven a vehicle in the last six months saw 64% (n=44) PWID report that they had done so which was not significantly different from 67% the previous year. Of these, 9% (n=4) reported having driven while over the legal blood alcohol limit during this time compared with none in 2015. There were 81% (n=35) who reported having driven within three hours of consuming illicit or non-prescribed drugs which was also compatible to the 76% reporting this in 2015.

11 Law enforcement-related trends associated with drug use

11.1 Reports of criminal activity among IDU participants

11.1.1 Criminal activity

In 2016, 24% (n=17) of respondents reported having been arrested in the past twelve months which was not significantly less than the 25% reported in the previous year. Respondents were asked about the types and frequency of crimes they had been involved in in the month prior to the survey. Involvement in any form of criminal activity was reported by 45% (n=32) which was not significantly different than the 43% reported in 2015. Involvement in dealing drugs was once again the most common class of crime reported by 39% (n=28). Involvement in property crime was reported by 17% (n=12), violent crime by 6% (n=4) and fraud by 3% (n=2). None of these crime categories were significantly changed from in 2015 (Table 17).

Table 17: Criminal activity as reported by PWID participants, 2012-2016

Criminal activity (%)	2012 (N=100)	2013 (N=88)	2014 (N=98)	2015 (N=89)	**2016 (N=71)**
Criminal activity in last month:					
Dealing	31	34	37	35	**39**
Property crime	16	17	19	14	**17**
Fraud	4	1	5	5	**3**
Violent crime	5	3	7	1	**6**
Any crime	47	40	49	43	**45**
Arrested in last 12 months	25	25	38	25	**24**

Source: IDRS user interviews

Frequency of criminal acts was analysed by computing a crime total which at a mean score of 1.42 was not a significant change from the 2015 mean of 1.82, indicating that the frequency of criminal activity by participants in the PWID survey has remained stable since 2015.

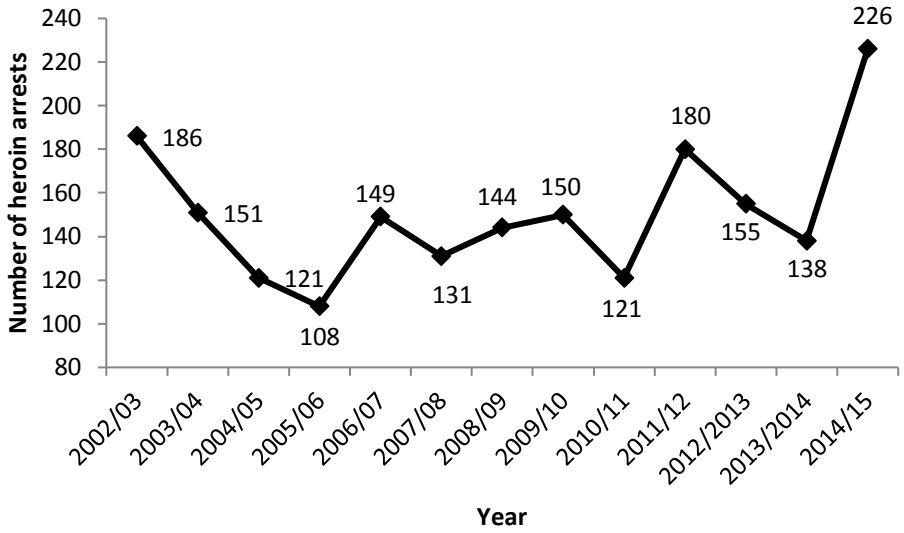
Asked if they had recently been a victim of violent crime in the past six months saw 10 % (n=7) indicating that they had and 86% (n=6) of these reported that this had occurred on a less than weekly basis. Five of these (83%) believed that the perpetrator had been under the influence of alcohol or drugs at the time.

11.2 Arrests

11.2.1 Heroin

The number of arrests for heroin and other opioids made in WA by WAPS and AFP from 2002/03 to 20014/15 is shown in Figure 46. There were a total of 226 heroin-related arrests in WA in 2014/15, which was considerably higher than the previous reporting period of 138. This increase was accounted for by an increase from 76 consumer arrests in 2013/14 to 164 in 2014/15 to 164 in 2014/15 while provider arrests have remained unchanged at 62.

Figure 46: Total number of heroin consumer/provider arrests, WA, 2002/03-2014/15

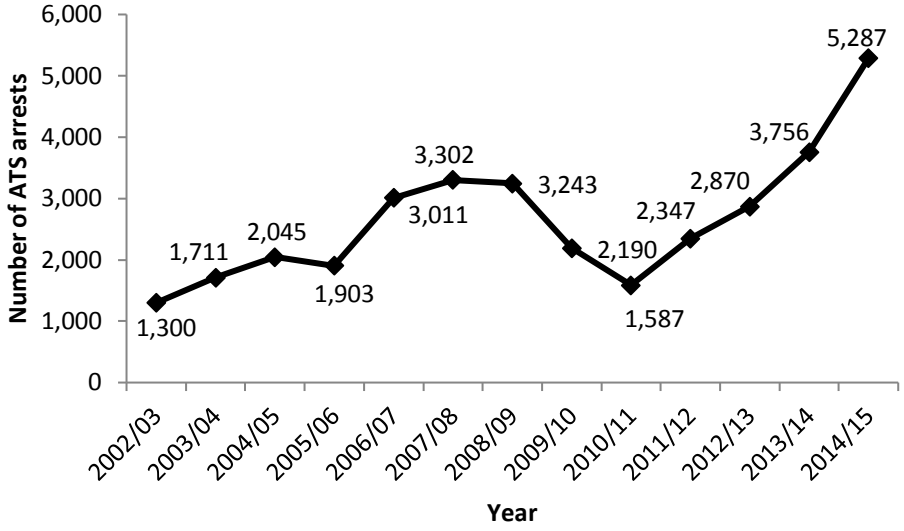


Source: **Australian Criminal Intelligence Commission**

11.2.2 Amphetamine type stimulants (ATS)

The number of ATS arrests made in WA by WAPS and AFP from 2002/03 to 2014/15 is shown in Figure 47. It is evident that the number of ATS arrests have risen for the fourth year running with 5,287 ATS related arrests. These arrests included 3,942 consumer arrests and 1,345 provider arrests. It should be considered that this apparent increase is not only reflective of the level of activity in use and dealing of ATS, but also likely affected by the amount of police attention currently directed to the issue.

Figure 47: Total number of ATS consumer/provider arrests, WA, 2002/03-2014/15



Source: **Australian Criminal Intelligence Commission**

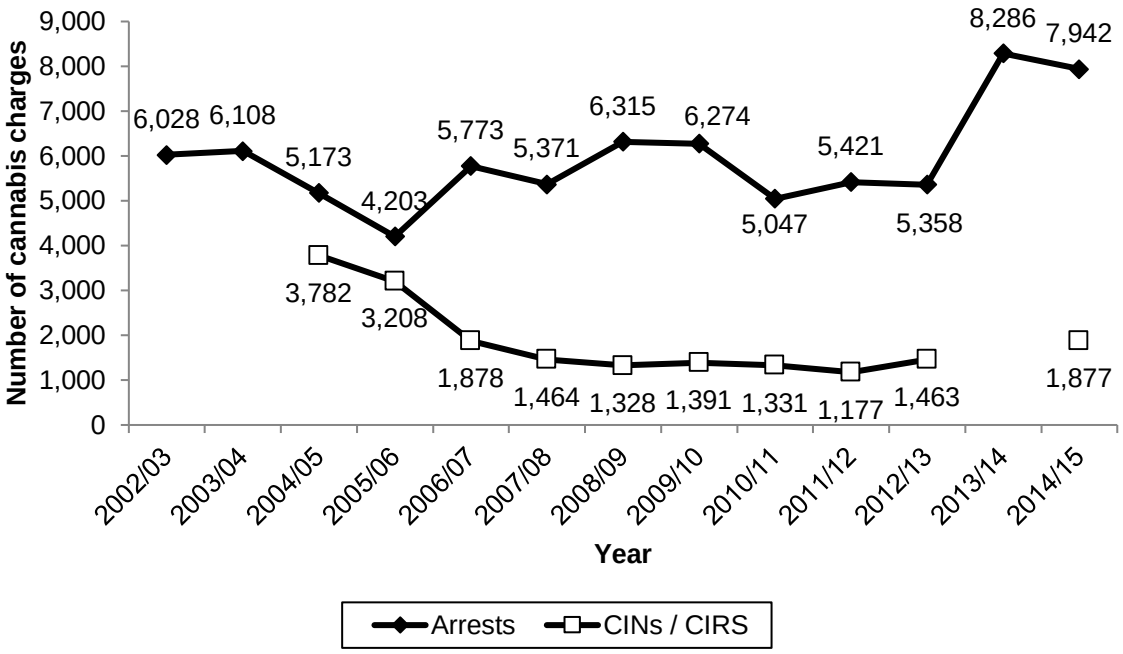
One KE from the law enforcement sector commented on challenges posed by new technologies in apprehending mid-level dealers of methamphetamine; "*increases in the use of smart phones (e.g. Blackberry) and encryption. The use of various apps – such as Wickr that are not subject to*

phone intercept. Because of the encryption, all the phones have passwords or automatic deletes on them – that is becoming more and more common." This same KE also indicated that at the present point in time the focus of WA police was on methamphetamine due to *"the sheer volume of meth that is coming into the state makes it problematic, and the price has fallen dramatically, indicating an excessive supply. There are also the associated crimes and social issues that spin off from use of meth."*

11.2.3 Cannabis

The number of cannabis arrests made in WA by WAPS and AFP from 2002/03 to 2014/15 is shown in Figure 48. Cannabis arrests fell slightly in the last year with 7,942 arrests in 2014/15. These arrests included 6,824 consumer arrests, and 1,118 provider arrests. Cannabis Infringement Notices (CINs) were introduced in March 2004 after the passage of the *Cannabis Control Act 2003* (WA), but their use has continued to decrease over time and they were replaced by the Cannabis Intervention Requirement Scheme (CIRS) in August 2011. There were 1,877 CIRs issued in 2014/15.

Figure 48: Total number of cannabis consumer/provider arrests, WA, 2002/03-2014/15



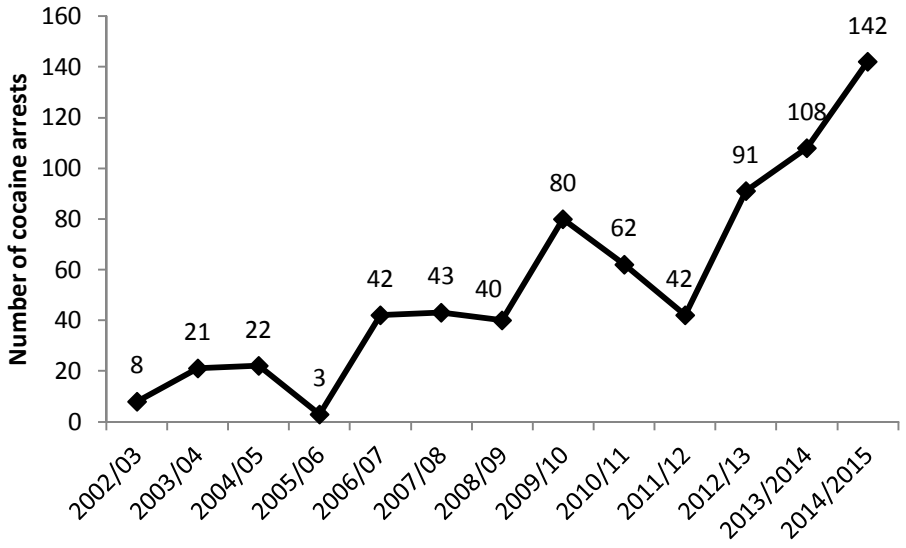
Source: **Australian Criminal Intelligence Commission**

Note: CIRS figures for 2013/14 were not available at time of writing

11.2.4 Cocaine

The number of cocaine arrests made in WA by WAPS and AFP from 2002/03 to 2014/15 is shown in Figure 49. In 2014/15, the number of cocaine arrests rose from 108 to 142 which was the largest number so far recorded. These arrests included 83 consumer arrests and 59 provider arrests.

Figure 49: Total number of cocaine consumer/provider arrests, WA, 2002/03-2014/15



Source: **Australian Criminal Intelligence Commission**

12 SPECIAL TOPICS OF INTEREST

12.1 Naloxone program and distribution

Naloxone is a short-acting opioid antagonist that has been used for over 40 years to reverse the effects of opioids, particularly in the case of overdose. In Australia, naloxone has largely only been available for use by medical doctors (or those auspiced by medical doctors such as nurses and paramedics) for overdose response. In 2012 a take-home naloxone program commenced in the ACT through which naloxone was made available to peers and family members of people who inject drugs for the reversal of opioid overdose as part of a comprehensive overdose response package. This program was shortly followed by similar programs in NSW, VIC, and WA. In early 2016, the Australian Therapeutic Goods Administration (TGA) effectively placed 'naloxone when used for the treatment of opioid overdose' on a dual listing of Schedule 3 and Schedule 4, meaning naloxone can be purchased over-the-counter (OTC) at pharmacies without a prescription (Lenton et al., 2016) but dual listing means it is still available at reduced cost via prescription.

Since 2013, the IDRS has included a series of questions about take-home naloxone and naloxone more broadly.

Respondents were asked about their opinions and awareness of naloxone (Narcan®). Of the 70 respondents to the WA IDRS sample who responded, 91% (n=64) had heard of naloxone which was generally understood to '*reverse the effects of heroin*' (47%, n=30), to '*re-establish consciousness*' (19%, n=12) or '*to help someone start breathing'* (8%, n=5). There were seven respondents who reported having been resuscitated with naloxone.

There were 73% (n=51) who said they were aware of the existence of naloxone programs. Having been trained under such a program and received a prescription for naloxone was reported by 26% (n=18). Of these respondents, 67% (n=12) reported that since completing their training that they had used naloxone to resuscitate between one to twelve other people with a median of three people resuscitated.

Respondents were asked if they were aware of the rescheduling of naloxone to make it available at pharmacies without a prescription. Of those who answered, 24% (n=16) indicated that they were aware of this.

All respondents were asked what they would be prepared to pay for over the counter naloxone at a pharmacy. By far the most common response (67%, n=24) was that it should be free of charge. This was followed by 14% (n=5) who thought $10 would be a reasonable price and 11% (n=4) who were prepared to pay $30. There were also 6% (n=2) who suggested $20 and 3% (n=1) who suggested $5.

There were 6% (n=4) of those responding who reported that they had personally been resuscitated using naloxone purchased over the counter, and two respondents who reported that they had accessed naloxone without a prescription, but neither had used it to resuscitate anyone.

Respondents who had never purchased over the counter naloxone were asked a series of questions to assess their attitudes towards the medication. Asked if they would be willing to purchase naloxone over the counter was agreed to by 77% (n=49) and 61% (n=23) said they would be willing to carry naloxone on their person. It should be noted that a substantial but unquantifiable number of those respondents who disagreed with these two statements were primary methamphetamine users for whom naloxone had little relevance. Asked if they would administer naloxone to someone who had overdosed saw 95% (n=35) of those responding in

agreement and 95% (n=35) also agreed that they would stay with someone to whom they had administered naloxone.

Having had the nature of naloxone training programs explained to them, of the respondents who had not undertaken training, 66% (n=41) of those responding said they would be willing to participate in a naloxone training program and of these, 85% (n=35) said they would carry naloxone on their person and all said they would be willing to administer naloxone in an overdose situation. Asked if they would want peers to give them naloxone if they had overdosed, 90% (n=37) agreed. Asked if they would stay with someone after administering naloxone to them, all agreed that they would.

A KE involved in outreach reported that their peer-based organization had recently expanded their naloxone training program.

12.2 Blood Donations

In Australia and most other territories around the world (excluding Japan), people with a history of injecting drug use comprise a 'risk group' who are permanently excluded from donating blood and blood products due to the high risk of infection from BBVI and sexually transmitted infections such as HCV and HIV (regardless of past injecting drug use 'remoteness' and current BBVI status).

In 2014 the Australian Red Cross Blood Service commissioned the Burnet Institute to conduct a review of international literature and guidelines to evaluate the appropriateness of their current eligibility criteria around blood donation and injecting drug use. One of the review's main outcomes was the paucity of data on prevalence of lifetime blood donation among PWID, which precludes calculations of estimates of the risk associated with changing the exclusion/deferral period from permanent to a reduced timeframe (e.g., 5 years).

Of the 66 PWID who responded, 12% (n=8) reported having ever donated blood. Of these, there were 38% (n=3) who reported that they had commenced injecting prior to ever donating blood.

Days elapsed between the last time blood was donated and the most recent injection prior to donation ranged from 168 days (ie: ~6 months) up to 2,190 days (i.e: 6 years) with a median of 1,095 days (i.e.: 3 years).

12.3 Homelessness

A notable proportion of people who are homeless experience higher rates of mental health disorders compared to the general population. Specifically, substance use disorders have been repeatedly recorded as the most common mental health diagnosis amongst homeless populations throughout Western countries (Fazel et al., 2008). Whilst research examining substance use among homeless populations has been undertaken, very few studies have looked at the relationship of homelessness amongst heavy substance users, including PWID. The aim of this module was to obtain information on the lifetime and recent homelessness experiences amongst PWID. To better understand the risk factors associated with different degrees of homelessness severity, four questions from the 2014 module were repeated in 2016.

In 2016, the IDRS included a module on homelessness which revealed the high lifetime of homelessness among the IDRS participants (56%, n=40), with 20% (n=7) of these reporting being homeless at the time of the survey and a further 17% (n=6) respondents reporting that they had been homeless within the past 12 months.

For those seven respondents who reported being currently homeless the duration of the current episode ranged from under one month up to two years with a median of two months. For those who had ever experienced being homeless, the total duration ranged from less than six months up to in excess of ten years.

Homelessness was found to manifest in a variety of ways. In terms of ever having been homeless, the most common situation reported was '*In a medium or long term accommodation provided by an agency*' (51%, n=11) followed by '*Living with relatives, friends or acquaintances*' (45%, n=32), '*sleeping rough*' (41%, n=29), '*in crisis or emergency accommodation*' (32%, n=23), *'in boarding rooms, rooming houses or hostels*' (25%, n=18) and '*in caravan parks*' (24%, n=17). A complete breakdown of ever and recent situations of homelessness is displayed in Table 18. It should be considered that these various scenarios may not necessarily be considered as being "homeless" per se by individual respondents.

Table 18: Frequency of homeless situations among the 2016 WA PWID sample (n=71)

Homelessness Situation	Ever	In the last six months
Slept rough (e.g.: on the streets, in parks etc.)	41% (n=29)	13% (n=9)
In crisis or emergency accommodation	32% (n=23)	6% (n=4)
In medium/long term agency accommodation	51% (n=11)	3% (n=2)
Living with relatives, friends or acquaintances	45% (n=32)	17% (n=12)
In boarding, rooming houses or hostels	25% (n=18)	6% (n=4)
In caravan parks (other than on holiday)	24% (n=17)	1% (n=1)

12.4 Unfair Treatment

Being discriminated against is a common event for people who use illicit drugs, particularly those who inject drugs. The IDRS provided an opportunity to obtain important insights into the multiple origins and impacts of unfair treatment against PWID.

The questions included in the IDRS aimed to clarify the relationships between unfair treatment, mental and physical health issues and quality of life as well as help to inform policy and improve the quality of services. The questions also aimed to identify the location in which PWID are most likely to experience unfair treatment to help reduce future occurrences of this.

The 'Unfair Treatment' questions are based on previous 2013 IDRS questions, developed in conjunction with the Australian Injecting and Illicit Drug Users League (AIVL) (Stafford and Burns, 2014), and two validated and well-accepted scales. The personal well-being index (PWI-A) (International Wellbeing Group, 2013) has been previously used in the IDRS and was well-accepted by participants, while the DISC-12 has been used to evaluate discrimination against people with mental health disorders (Thornicroft et al., 2009).

Of the 61 PWID who responded in the 2016 WA IDRS, 71% (n=43) reported a history of having ever been treated unfairly as a result of being perceived as a person who injects drugs and 57% (n=35) having experienced such treatment in the past year.

It was notable that the most common context in which unfair treatment was perceived to occur was '*when getting help for physical health problems*' (33%, n=14) with the most common setting being a pharmacy (26%, n=11), and the most commonly mentioned type of person responsible for the unfair behaviour were pharmacists (26%, n=11). A complete breakdown of the contexts in which episodes of unfair treatment were perceived to have occurred is presented in Table 19.

Table 19: Contexts of unfair treatment experienced by WA PWID

% Treated Unfairly	
Never	30
Not in the last 12 months	13
Monthly	21
Weekly but not daily	18
Daily or more	18
% Treated unfairly last 12 months:	(n=42)
In making or keeping friends	17
By people in neighbourhood	21
In housing	10
By your family	24
By the police	17
When getting help for physical health problems	33
In getting welfare/disability benefits	10
In school/education	5
At work/in your career	17
% Most frequent venue treated unfairly:	(n=43)
Public location	19
Employment/work place	2
Pharmacy	26
General Practitioner practice	12
Other health care service	7
Government institution	2
Home	9
Other	23
% Mainly treated unfairly in venue by:	(n=43)
Police	2
Family member	9
Member of public	21
Pharmacist	26
General Practitioner	12
Other service provider	2
Other	28

13 REFERENCES

Andrews, G. & Slade, T. (2001). Interpreting scores on the Kessler Psychological Distress Scale (K10). *Australian and New Zealand Journal of Public Health*, *25*, 494-497.

Australian Crime Commission. (2004). *Illicit Drug Data Report 2002-03*. Canberra: Australian Crime Commission.

Australian Crime Commission. (2005). *Illicit Drug Data Report 2003-04*. Canberra: Australian Crime Commission.

Australian Crime Commission. (2006). *Illicit Drug Data Report 2004-05*. Canberra: Australian Crime Commission.

Australian Crime Commission. (2007). *Illicit Drug Data Report 2005-06*. Canberra: Australian Crime Commission.

Australian Crime Commission. (2008). *Illicit Drug Data Report 2006-07*. Canberra: Australian Crime Commission.

Australian Crime Commission. (2009). *Illicit Drug Data Report 2007-2008.* Canberra: Australian Crime Commission.

Australian Crime Commission. (2010). *Illicit Drug Data Report 2008-09.* Canberra: Australian Crime Commission.

Australian Crime Commission. (2011). *Illicit Drug Data Report 2009-2010*. Canberra: Australian Crime Commission.

Australian Crime Commission. (2012). *Illicit Drug Data Report 2010-2011*. Canberra: Australian Crime Commission.

Australian Crime Commission. (2013). *Illicit Drug Data Report 2011-2012*. Canberra: Australian Crime Commission.

Australian Crime Commission. (2014). *Illicit Drug Data Report 2012-2013*. Canberra: Australian Crime Commission.

Australian Crime Commission. (2015). *Illicit Drug Data Report 2013-2014*. Canberra: Australian Crime Commission.

Australian Criminal Intelligence Commission (2016) *Illicit Drug Data Report 2014-2015*. Canberra: Australian Criminal Intelligence Commission

Bush, K., Kivlahan, D. R., McDonell, M. B., Fihn, S. D. & Bradley, K. A. (1998). The AUDIT Alcohol Consumption Questions (AUDIT-C). *Archives of Internal Medicine, 158*, 1789-1795.

Fazel, S., Khosla, V., Doll, H., Geddes, J (2008) The prevalence of mental disorders among the homeless in western countries: Systematic review and meta-regression analysis. http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.0050225

Hando, J., O'Brien, S., Darke, S., Maher, L. & Hall, W. (1997b). *The Illicit Drug Reporting System Trial: Final Report.* Monograph No. 31. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

IBM Corporation and others (2016). IBM SPSS Statistics Version 21. IBM Corporation.

International Wellbeing Group (2013) Personal Wellbeing Index. http://www.oecd.org/site/progresskorea/44119446.pdf

Kessler, R. & Mroczek, D. (1994). *Final version of our Non-specific Psychological Distress Scale*. Survey Research Centre of the Institute for Social Research, University of Michigan.

Lenton, S., Dietze, P., Olsen, A., Wiggins, N., McDonald, D., & Fowlie, C. (2016). Working together: Expanding the availability of naloxone for peer administration to prevent opioid overdose deaths in the Australian Capital Territory and beyond. *Drug and Alcohol Review,* 34, 404-411.

Memedovic S, Iversen J, Geddes L, and Maher L. Australian Needle Syringe Program Survey National Data Report 2011-2015: Prevalence of HIV, HCV and injecting and sexual behaviour among NSP attendees. Sydney: Kirby Institute, UNSW Australia

Nelson, M. & Lenton, S. (2017). *Western Australian Ecstasy and Related Drug Trends: Findings from the 2016 Ecstasy and Related Drugs Reporting System.* Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Newcombe, R. G. (1998). Interval Estimation for the Difference between Independent Proportions: Comparison of Eleven Methods. *Statistics in Medicine*, 17, 873-890.

Roxburgh, A. & Breen, C. (2016). *Accidental drug-induced deaths due to opioids in Australia, 2012.* Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Roxburgh, A. & Breen, C. (2017). *Drug-related hospital stays in Australia, 1993-2015*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales

Sproule, B. A., Busto, U. E., Somer, G., Romach, M. & Sellers, E. (1999). Characteristics of dependent and nondependent regular users of codeine. *Journal of Clinical Psychopharmacology*, 19, 367-372.

Stafford, J. & Burns (2014) *Australian Drug Trends 2013: Findings from the Illicit Drug Reporting System (IDRS).* Sydney: National Drug and Alcohol Research Centre, University of New South Wales**.**

Tandberg, D. Improved confidence intervals for the difference between two proportions and numbers needed to treat (NNT). http://www.cebm.net/index.aspx?o=1023

Thornicroft, G., Brohan, E., Rose, D., Sartorius, N., Leese, M. (2009) *Global pattern of experienced and anticipated discrimination against people with schizophrenia: a cross sectional survey.* The Lancet, 373, 408-415