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WA DRUG TRENDS 2017
Findings from the
Illicit Drug Reporting System (IDRS)

Australian Drug Trends Series No. 187

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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
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 2017, 73 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 differences were mean years of schooling falling from 11 to 10 ($p<.003$), less tertiary education falling from 44% to 21% ($p=.006$) and income levels falling from $511 per week to $ 405 ($p<.001$). The mean age remained stable at 43 years, with 60% male. The entire sample (100%) reported that English was the main language spoken at home. Most (81%) were unemployed. Identifying as heterosexual was reported by 90% and as ATSI by 10% which were roughly comparable to previous years. Currently being in drug treatment was reported by 48% and a history of prison by 41%. 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 remained 19 years. Amphetamines were the most commonly reported drug first injected reported by 57%, displacing heroin which held this position in 2016. Heroin remained the prime drug of choice in the sample reported by 62% and methamphetamines were reported as drug of choice by 25 Those reporting injecting weekly or less rose more than three times from 7% to 22% (n=16) in 2017 ($p=0.02$). However, the most common single category of injecting frequency remained '*more than weekly but less than daily*'. Numbers of respondents injecting on a daily basis or more remained unchanged at 48%. Heroin remained the drug most injected in the past month reported by 53%. For the ninth year running, heroin was the principal drug most recently injected (53%).

In 2017, over half the sample reported recent use of tobacco (89%, n=65), cannabis (73%, n=53), methamphetamines (70%, n=51), heroin (66%, n=48) and alcohol (53%, n=39).

Heroin

Most primary indicators suggest that after a continuing gradual resurgence in heroin use among the IDRS samples, in 2017 this appears to have reversed. Although few of these

changes from 2016 attained statistical significance this may be a reflection of the relatively small sample size.

Lifetime use of heroin had remained stable, reported by 66% and lifetime use of homebake was reported by 13%.

Recent use of heroin on a daily basis was reported by 19% of recent heroin users. All of these users reported injection of homebake, with no other ROA being reported. The mean days of use reported was 32 days which was not a significant increase from the 15 days reported in 2016.

White or off-white rock replaced white or off-white powder as the form most used, reported by 37% although respondents often expressed difficulty distinguishing actual '*rock'* from '*powder that has been compressed*'.

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 either a point or a one-quarter gram where prices had remained stable from the previous year. Availability was reported as either '*easy'* or '*very easy*' by 95% of respondents in 2017, compared to 88% in 2015 which unchanged from the previous year, and was generally reported as having been '*stable'*. While there was little consensus among users on the current purity of heroin in 2017, most respondents described it as '*high'* (33%) or '*medium'* (31%). There were also a substantial number (n=22) 22% in respondents who thought purity to be '*fluctuating'*. Almost half of those responding (46%) 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 90% of the sample and recent use by 70%. Lifetime use of speed powder was reported by 78% and recent use by 16%). Lifetime use of base or paste methamphetamine was reported by 29% and recent use by 7%. Lifetime use of crystal methamphetamine was reported by 88% and recent use by 69%. Use of liquid amphetamine remained uncommon. Mean days of use of any form of amphetamines in the last six months was 53%.

The median price of a point of crystal was $75 while the price of a gram of crystal was $475. The price of a point of speed was $50 but was based on a very small number of reports. The price of a gram of speed was $450 but was again based on a very small number of reports. There was insufficient data to report on price, purity or availability of base. The price of crystal was held by 33% of those responding to have been '*stable'* followed by 25% who thought it had *'increased'.* That the price of speed had remained '*stable'* was reported by 36% and that it had '*decreased'* by 27%.

There were 11 respondents reporting on availability of speed of which 64% described as '*very easy*'. Availability of crystal continued to be reported as '*very easy*' by 79% and as 'easy' by 19%. 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 (49%). Speed purity was generally rated as being of '*high'* purity by 40%, while recent purity was either described as '*fluctuating'* (60%) or '*increasing'* (30%). Purity of crystal was described by 49% as '*high'* and '*medium'* by 22%. This purity was most commonly (44%) reported to have been '*stable'*.

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 three. The most commonly used form as reported by all of those responding was powder. Only two respondents reported on the price of cocaine, citing $300-$400 for a half weight and $200 for a point. Five respondents talked about availability, but there was no consensus with opinions varying widely. There was similarly no consensus on purity. 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 92% and recent use by 73%. Mean days of use in the past six months was 91. 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 67% of those responding. These were not significantly different from data collected in 2016.

The median price of a gram of hydro remained stable at $25, while the median price of an ounce had fallen slightly from $325 in 2016 to $320 in 2017. The price of bush was reported as $250 an ounce, but was based on only five reports and should be interpreted with caution.

Hydro was generally regarded as '*very easy*' to obtain (51%). This level of availability was reported as '*stable'* by 87%. Availability of bush was reported as '*very easy*' by 40% and as 'easy' by 38%. Availability was reported as '*stable' by 57%*. Potency of hydro was described by 69% of those commenting as '*high'* while potency of bush was primarily described as '*medium'* by 60% 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 32% and recent use by 6%. Average days of recent use was 24. Use of illicit Physeptone® was less common with lifetime use reported by 19% and recent use by 3%. Only two respondents reported on days of use, one using daily and the other using on two occasions. There was no data on the current price of methadone syrup and just one respondent who reported paying eight dollars for a 5mg tablet of Physeptone®. Both respondents reported that prices for illicit methadone had remained '*stable'*. One respondent reported that obtaining illicit methadone was '*easy'* and the other as '*difficult'*. Both described availability as '*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 10% with a median of five days of use. Lifetime use of illicit buprenorphine/naloxone (Suboxone®) was reported by 27% and recent use by 16% with a mean of 66 days of use.

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

Just one respondent reported on the Perth market for 2mg illicit Suboxone® film, citing a price of $35. Another five reported the purchase of an 8mg tablet for a median price of $35. That the price had remained '*stable'* was reported by 44% (n=4), while the same number believed it had '*increased'*. Current ease of access to illicit Suboxone® film was reported as '*easy'*

(55%) or '*very easy*' (46%). Most respondents (60%) agreed that this ease of access had recently remained '*stable'*

Morphine

Lifetime use of illicit morphine was reported by 47% and recent use by 18%. Days of use in the last six months ranged from one to 180, with just two reports of use on a daily basis.

As in previous years, MS Contin® remained the most common form of morphine with a 100mg tablet reportedly carrying a median price of $50. Current availability of morphine was reported on by nine respondents. There was no consensus on current availability of morphine with equal numbers describing it as '*very easy*', '*easy'* or '*difficult'*.

Oxycodone

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®). Use of illicit generic oxycodone in the last six months was reported by 4% with four median days of use. Use of illicit OP oxycodone in the last six months was reported by 7% with 14 median days of use. Recent use of other illicit forms was reported by 7% with a median of four days.

Only a very small number (n=3) of respondents provided price and availability of oxycodone making it difficult to draw firm conclusions. A number of different purchases were reported, generally corresponding to one dollar per milligram. One notable exception was a purchase of 80 mg tablet of generic oxycodone for $60. Prices were reported as either '*stable'* or '*decreasing'*. There was no consensus on availability with one respondent describing it as '*very easy*' and the other as '*difficult'*. One respondent thought availability had become '*easier'* and the other said it had become '*more difficult*'.

Fentanyl

Lifetime use of fentanyl was reported by 18% and recent use by 7%. Days of use ranged from one to five with a mean of two days compared with the 2016 mean of 28 days, although very small numbers of respondents do not permit formal testing of significance. No respondents were able to provide price or availability data for illicit fentanyl.

Use of Tapentadol SR®

Use of illicit Tapentadol SR® was asked about for the first time in 2017. Lifetime use was reported by 5% and recent use by 4%. Median days of use was three. Just one respondent was able to provide information about the market characteristics of Tapentadol®. They were unable to cite a price, but believed it had remained '*stable'* Availability was described as '*easy'* and having remained '*stable'*.

Over the counter codeine

Lifetime use of over the counter (OTC) codeine was reported by 29% and 16% reported consuming them in the last six months which were both unchanged from 2016. Mean days of use was 40.

Other opioids (not elsewhere specified)

Lifetime history of using of other miscellaneous opioids was reported by 44% and recent use by 23%which was significantly higher than the 2016 level of 11% (p=0.04). Average days of use was 31. Other opiates mentioned included Tramadol® and Panadeine Forte®

Other drugs

Benzodiazepines

A lifetime use of any benzodiazepine was reported by 59% of the sample and recent use by 47%. Mean days of use was 94. Diazepam remained the most commonly reported form of benzodiazepine.

Use of Alprazolam (Xanax®) was specifically asked about and had been recently used by 12%. Mean days of use of prescribed alprazolam was 180 days. Conversely, mean days of use of illicit alprazolam had remained stable at 17 days.

Lifetime use of benzodiazepines, other than alprazolam, was reported by 53% and recent use by 45%. Licit benzodiazepines were used on a mean of 80 days and illicit benzodiazepines were used on a mean of 45 days.

Only four respondents provided price data reportedly paying one to, five dollars per pill of diazepam with two respondents stating that this price had remained 'stable'. Current availability was rated as '*very easy*' or '*easy'* each by two respondents All agreed that this availability had remained '*stable'*.

Pharmaceutical stimulants

Lifetime prevalence of illicit pharmaceutical stimulants by the sample was reported by 38%, and recent use by 7%. Mean days of use was five. 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 66% and recent use by 8%. The maximum days of use was two. Forms most used were equally spilt between LSD and DMT.

A lifetime history of having consumed ecstasy was reported by 64% and recent use by 18%. Ecstasy was taken on a mean of three days of use which was significantly less than the 2016 of 10 days of use ($p<.001$. 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 19% of the WA sample with no reports of recent use.

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 59. 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 34% of those responding were consuming alcohol at potentially harmful levels.

A lifetime history of having smoked tobacco was reported by 96% and recent use by 89%. Use of tobacco on a daily basis was reported by 75% of recent smokers with 163 average days of use.

Lifetime use of electronic cigarettes was reported by 37% and recent use by 21% Mean days of use was 21.

Seroquel® (Quetiapine)

A lifetime history of illicit Seroquel® was reported by 40% and recent use by 12%. Mean days of use was 47. All reported recent use was by oral dosing with no injection reported.

Synthetic cannabis

Lifetime use of synthetic cannabis was reported by 48% and recent use by 12%. Days of use ranged from one to seven with a mean of three days which was significantly less than the 2016 average of seven ($p<.001$). Data obtained from ADIS revealed calls related to synthetic cannabis fell substantially from 218 in 2015/2016 to 43.

New psychoactive substances

Lifetime use of these synthetic drugs was reported by 7%. There were just no reports of recent use and similarly no reports of recent use of synthetic drugs mimicking opiates or psychedelics.

Steroids

A lifetime history of use was reported by 4% of the sample. There were no reports 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 58%. The median number of overdoses was two times. A heroin overdose in the past year was reported by 10%. Data from the ambulance service indicated that there were 696 narcotic overdoses attended by the ambulance service in WA in the 2016/17 financial year compared with 677 the previous year. In 502 of these cases, the narcotic involved was known to be heroin, equating for 86% of the total number of overdoses attributed to any narcotic in 2016/17.

A lifetime history of overdose on any other drug was relatively rare with only two cases reported among the 2017 user sample involving methadone and morphine respectively. Individual respondents reported a recent history of overdose resulting from the use of crystal methamphetamine, benzodiazepines and ecstasy. There were also two respondents who reported an overdose from a substance that was thought to be methamphetamine at the time of administration, but in retrospect was believed to have been another unknown substance.

Calls to ADIS

Data from the WA Alcohol and Drug Information Service (ADIS) revealed a decrease in the 2016/17 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 appeared to have fallen but this was attributed to a very large number of calls in 2016 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).

Injecting risk behaviours

The median number of injections in the month prior to interview was 28. Respondents typically acquired new needles a median of two times, obtaining a median of 100 new needles in the last month of which 72% of respondents reported giving some 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.

In 2017, the vast majority (90%) 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 more than 10 times. Reporting the use of other equipment after someone else was reported by 21% of respondents. This equipment primarily involved spoons, water, tourniquets and filters. Reuse of respondents' own injecting equipment was reported by 45%.

Among the WA sample interviewed as part of the 2017 IDRS, the most commonly reported injection-related problems in the past month were difficulty injecting (n=38) and difficulty injecting (n=28) and prominent scaring and bruising (n=30). Just one reported a heroin overdose in the past month.

Mental health problems and psychological distress

Mental health problems were reported by 29% of respondents in 2017. As in previous years, the most commonly reported problems were depression and anxiety. Of those that self-reported a mental health problem, 67% reported attending a professional in relation to the problem.

According to the Kessler Scale of Psychological Distress (K10), 53% of the 57 responding in 2017 were at '*high'* or '*very high*' risk of psychological distress, and the median score of 23 was similar to the previous year.

Driving risk behavior

Having driven a vehicle in the last six months was reported by 53% of the 2017 user sample. Of these, almost one quarter had no valid license at the time of the survey. There were 13% of these 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 80% of these respondents.

Law enforcement trends

In 2017, 23% 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 38%. As in previous years, the most common form of criminal activity was dealing drugs.

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 Drug and Alcohol Program. 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 (2018).

Both IDRS and EDRS jurisdictional and national reports can be downloaded from the NDARC website: https://ndarc.med.unsw.edu.au/program/drug-trends.

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 generally used in the IDRS, primarily a quantitative survey of people who regularly inject drugs (PWID). Due to restrictions on timelines in 2017, unlike in previous years the key expert component was not utilised and analysis of secondary indicator data was kept to a minimum.

These methods provide effective means to determine drug trends. 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. 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 2017, 73 regular PWID were recruited for the WA IDRS. The 2017 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 PWID 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 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. In the 2017 IDRS due to time constraints secondary data reported upon was limited to:

- telephone advisory service data from the Alcohol and Drug Information Service (ADIS); and
- overdose-related calls attended by the WA St John Ambulance Service provided by St John Ambulance Australia WA Inc.

2.3 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. Other indicator data are reported to provide a broader overview and a basis against which trends in PWID participant data may be contextualised.

All data requiring comparison of means were analysed using t-tests with Statistical Package for the Social Sciences 24.0 (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, https://ndarc.med.unsw.edu.au/program/drug-trends.

3 DEMOGRAPHICS

3.1 Overview of the People Who Inject Drugs participants

Demographic characteristics of the 73 PWID interviewed in 2017 had no significant differences from the 71 interviewed in 2016 except for some differences in education levels and income with mean years of schooling falling from 11 to 10 years (t=-3.060, df=72, p=.003), and numbers reporting no tertiary education more than doubling from 21% to 44% (χ^2=7.44, 95%CI 0.0741-0.3658, p=0.006,). This may in turn have been a contributing factor to the fall in weekly income from $511 to $405 (t=-3.620, df=71, p<.001). English was the only primary language spoken by the 2017 sample. Demographic data are presented in Table 1.

Table 1: Demographic characteristics of PWID participants, 2012-2017

	2012 N=100	2013 N=88	2014 N=98	2015 N=89	2016 N=71	**2017 N=73**
Age (mean years, range)	41 (18-65)	42 (18-66)	43 (19-67)	44 (26-64)	44 (20-62)	**43 (19-69)**
Sex (% male)	68	65	60	63	66	**60**
Employment (%):						
Not employed	79	77	77	75	72	**81**
Full time	6	6	9	8	13	**4**
Part time/casual	12	11	6	12	10	**7**
Home duties	0	0	1	1	0	**7**
Student	2	3	7	3	3	**0**
Other	2	3	0	0	1	**1**
Received income from sex work last month	0	6	1	1	1	**8**
Aboriginal / Torres Strait Islander (%)	1	7	6	2	9	**10**
Heterosexual (%)	87	83	85	97	90	**90**
Bisexual (%)	7	10	7	3	7	**3**
Gay or lesbian (%)	3	6	3	0	3	**7**
Other (%)	3	1	5	0	0	**0**
School education (mean no. years, range)	11 (6-12)	10 (7-12)	10 (6-12)	10 (6-12)	11 (8-12)	**10 (6-12)**
Tertiary education (%):						
None						
Trade/technical	28	36	37	26	21	**44**
University/college	48	52	48	62	54	**47**
	24	11	15	12	25	**8**
Average weekly income	$414	$452	$454	$460	$511	**$405**
Currently in drug treatment^ (%)	41	59	50	36	42	**48**
Prison history (%)	54	53	51	44	37	**41**

Source: IDRS user interviews. ^Refers to any form of drug treatment, including pharmacotherapies, counselling, detoxification, etc.

3.1.1 Current and previous treatment

Some 52% (n=38) of the WA 2017 PWID sample were not currently receiving any treatment for their drug use. Among the 48% (n=35) of PWID who were currently in treatment, methadone remained the most commonly reported treatment by 51% (n=18). This was followed by 26% (n=9) currently prescribed Suboxone®, 14% (n=5) receiving naltrexone and 9% (n=3) in drug counselling. The mean duration in current treatment was 43 months (range=1-228). There were 12% (n=9) who reported having been turned away when trying to access treatment. Asked how difficult it was to access treatment, 36% (n=26) of those responding said it was '*easy'*, followed by 23% (n=17) who said it was '*difficult'*, 14% (n=10) who said it was '*very difficult* and 12% (n=9) who said it was '*very easy*. There were 15% (n=11) who didn't know. Having been in some form of treatment in the previous six months was reported by 52% (n=38).

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 32% (n=23) of respondents who reported having participated in the survey in previous years. As in previous years, the majority (64%, n=47) had been recruited to the survey via Needle and syringe programs (NSP). A further 32% (n=23) had heard about it via word of mouth. 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, 2017

Characteristic	2017 N=73
Participated in IDRS in previous years (%)	32
Where found out about IDRS survey (%):	
NSP	64
Word of mouth	32
Chemist	0
Other	0
Unknown	3
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 2017. The mean age of first injection among current PWID was 19 years, which was which was unchanged from the previous year.

Amphetamines replaced heroin as the most commonly reported drug first injected, however the 57% (n=4) reporting amphetamines in this role was not significantly greater than the 45% reported in 2016. Heroin was reported as first drug injected by 36% (n=23) compared to 52% in 2016, however, this also was found not to be significant. There were also much smaller numbers of respondents reporting their first drug injected as morphine, oxycodone or ecstasy.

Heroin remained the most commonly reported drug of choice reported by 62% (n=45) compared with 66% in 2016 although this was not a significant decrease. Methamphetamines were reported as drug of choice by 25% (n=18) which was relatively unchanged from 28% in 2016) (Figure 1).

Those reporting injecting weekly or less rose more than three times from 7% to 22% (n=16) in

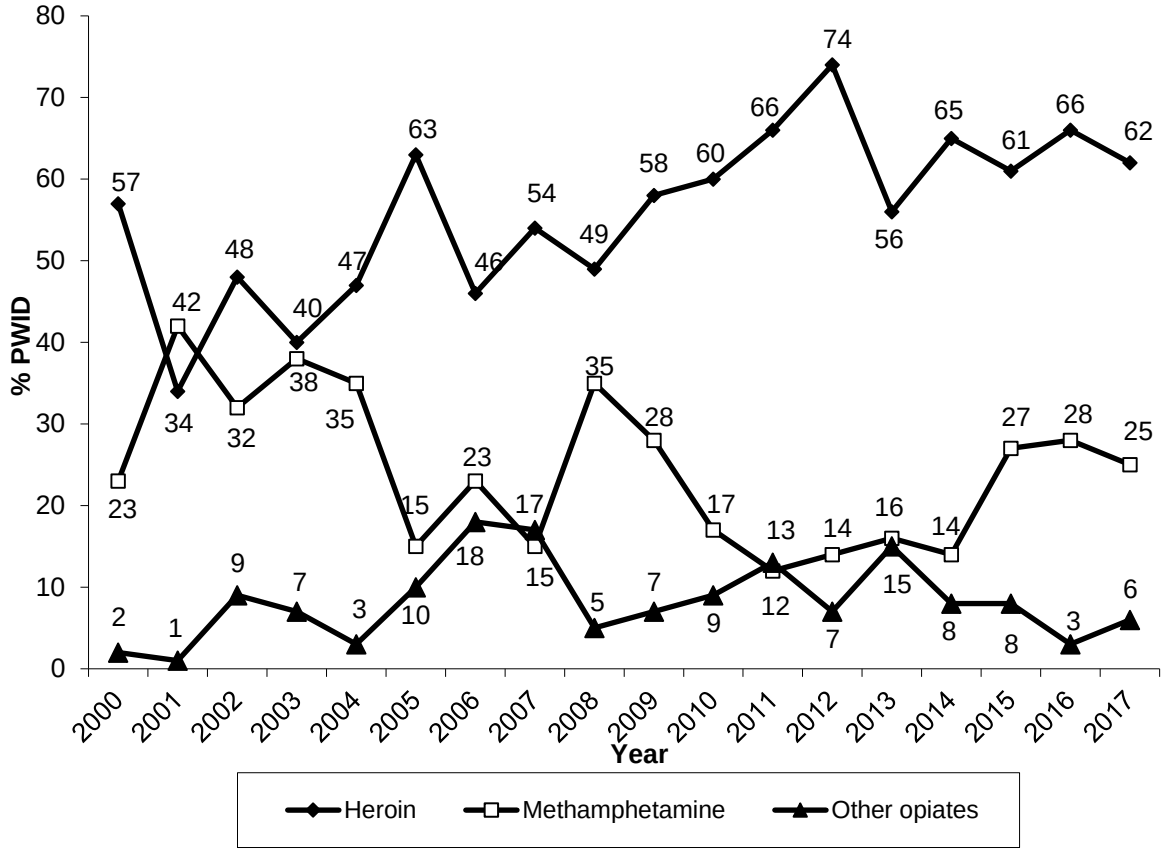
2017 (χ^2=5.25, 95% CI=0.0330-0.2635, p=0.02). However, the most common single category of injecting frequency remained '*more than weekly but less than daily*' despite a non-significant decline from 44% in 2016 to 29% (n=21) in 2017. Numbers of respondents injecting on a daily basis or more remained unchanged at 48% (n=35). (Table 3).

Table 3: Injection history, drug preferences and polydrug use of participants, 2012-2017

	2012 N=100	2013 N=88	2014 N=98	2015 N=89	2016 N=71	**2017 N=73**
Age first injection (mean years)	19	19	20	20	19	**19**
First drug injected (%)						
Heroin	36	42	43	44	52	**36**
Amphetamines	52	39	45	52	45	**57**
Morphine	4	7	3	3	1	**3**
Drug of choice (%)						
Heroin	74	56	65	61	66	**62**
Cocaine	0	1	0	0	0	**0**
Methamphetamine (any form)	14	16	14	27	28	**25**
Speed	*5*	*6*	*0*	*11*	3	**3**
Base	*1*	*0*	*0*	*0*	0	**0**
Crystal methamphetamine	*8*	*10*	*14*	*16*	25	**22**
Cannabis	3	8	5	2	1	**8**
Drug injected most last month (%)						
Heroin	52	50	55	54	63	**53**
Cocaine	0	0	0	0	0	**0**
Methamphetamine (any form)	17	20	23	27	30	**35**
Speed	*4*	*5*	*3*	*3*	0	**3**
Base	*0*	*0*	*0*	*0*	0	**0**
Crystal methamphetamine	*13*	*16*	*19*	*24*	30	**32**
Most recent drug injected (%)						
Heroin	46	47	49	51	61	**51**
Cocaine	1	0	0	0	0	**0**
Methamphetamine (any form)	18	22	28	30	31	**38**
Speed	*7*	*7*	*6*	6	1	**1**
Base	*0*	*0*	*0*	0	0	**0**
Crystal methamphetamine	*11*	*15*	*21*	25	30	**37**
Frequency of injecting in last month (%)						
Not injected in last month	1	0	0	0	1	**1**
Weekly or less	12	17	16	12	7	**22**
More than weekly, less than daily	37	44	35	21	44	**29**
Once per day	15	14	21	29	18	**18**
2-3 times a day	27	21	18	33	21	**19**
>3 times a day	8	5	9	5	9	**11**

Source: IDRS user interviews. Minor opioids are not shown

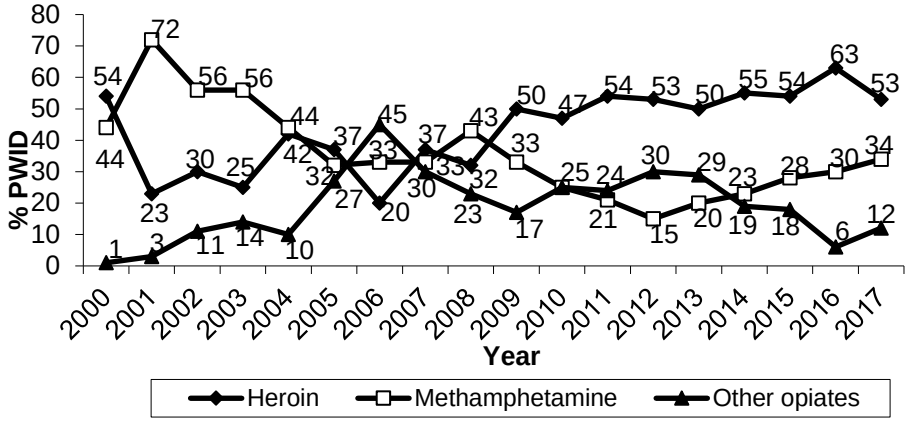
Figure 1: Drug of choice, 2000-2017



Source: IDRS user interviews

Heroin also remained the drug most injected in the month prior to interview for the ninth year running with 53% (n=39) of PWID reporting this which was comparable to 63% in 2016. Methamphetamines were reported as the most injected class of drug by 34% (n=25), which was comparable to 30% in the previous year. Other opiates were reported as the most injected class of drug by 12% (n=9) which was not a significant change from 6% the previous year (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, 2000-2017



Source: IDRS user interviews

Table 4: Drug injected most often in the last month, 2012-2017

Drug %	2012 N=100	2013 N=88	2014 N=98	2015 N=89*	2016 N=71	**2017 N=73**
Heroin	53	50	55	54	63	**53**
Methamphetamine						
Speed	4	5	3	3	0	**3**
Ice/crystal	13	16	19	24	30	**32**
Buprenorphine**	5	10	10	5	3	**7**
Morphine	12	8	5	8	1	**3**
Oxycodone	8	7	2	0	1	**0**
Cocaine	0	0	0	0	0	**0**
Miscellaneous opiates	5	5	4	3	0	**3**
Other	0	0	1	0	1	**0**

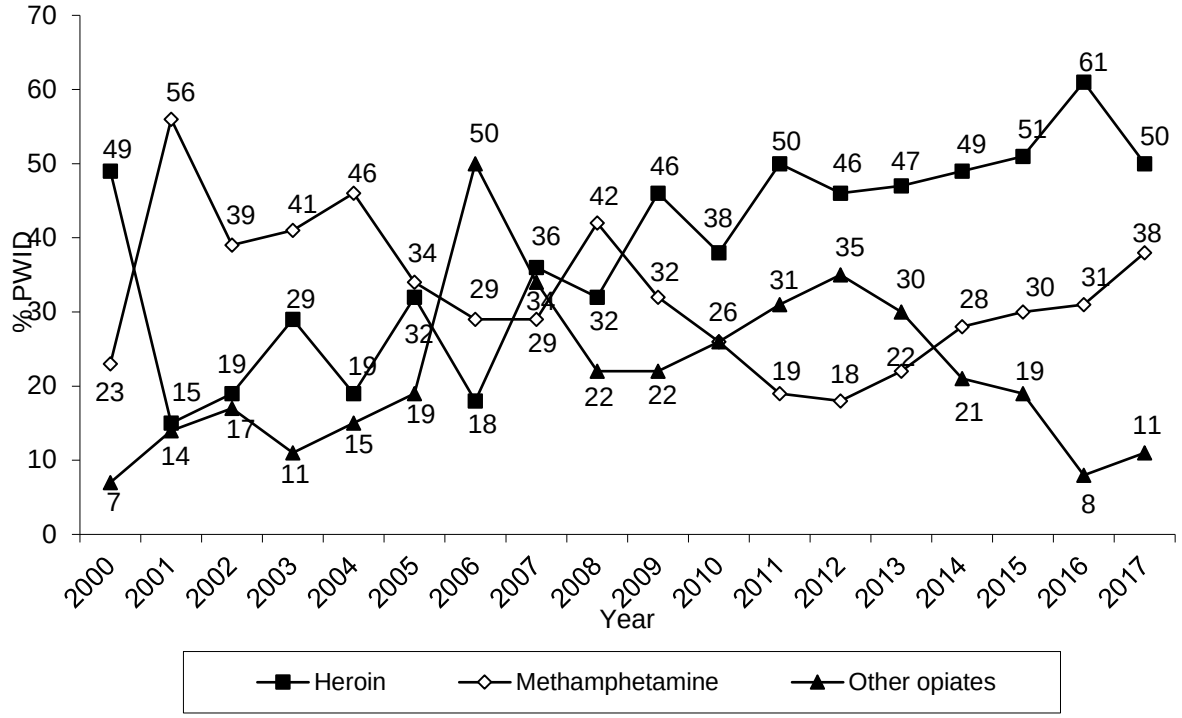
Source: IDRS user interviews

*Totals may not add to 100% due to rounding

** Includes buprenorphine-naloxone (Suboxone®)

In 2017, the greatest proportion of respondents again nominated heroin (50%, n=37) as the drug most recently injected for the eighth year running. This figure was comparable to the 61% of PWID who reported this in 2016. Methamphetamines were reported as the class of drugs most recently injected by 38% (n=28) which was comparable to 31% in 2016.Other opiates were reported in this context by 11% (n=8), compared with 8% the previous year, but this was not found to be a significant change (Figure 3).

Figure 3: Drug last injected prior to interview, 2000-2017



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 74% (n=52) in 2017, which was not significantly different to 83% in 2016. Much smaller numbers of PWID nominated other locations.

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

Location	2012	2013	2014	2015	2016	**2017**
Private home	79	84	83	81	83	**74**
Street/car park/beach	5	3	5	3	4	**1**
Car	9	9	10	14	7	**10**
Public toilet	4	3	2	3	3	**10**
Other	3	1	0	0	2	**4**

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 $650. Of those who had spent any money, the average amount was $186 which was not significantly different from the 2016 average of $196.

3.2.3 Drug use history of the PWID sample

The drug use histories of PWID participants in the WA IDRS in 2017, including route of administration (ROA), are presented in Table 6. Over one-half of the 2017 sample had used the following drugs in the last six months: tobacco (89%, n=65), cannabis (73%, n=53), methamphetamines (70%, n=51), heroin (66%, n=48) and alcohol (53%, n=39). Further discussion of the use and market characteristics of each drug type can be found under the relevant section heading in this report.

Table 6: Drug use history of the PWID sample, 2017

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	88	86	66	90(80)	6	1	1	66	89(75)
Homebake heroin	69	67	19	32(10)	0	0	0	19	32(10)
Any heroin (inc. homebake)	*88*	*86*	*67*	*96(90)*	*6*	*1*	*1*	*67*	*95(90)*
Methadone (prescribed)	51	22	1	180(180)			22	23	154(180)
Methadone (not prescribed)	32	15	3	46(46)			3	6	24(3)
Physeptone® (prescribed)	7	6	1	180(180)	0	0	0	1	180(180)
Physeptone® (not prescribed)	19	12	1	180(180)	0	0	1	3	91(91)
Any methadone (inc. Physeptone®)	*63*	*30*	*3*	*91(91)*	*0*	*0*	*23*	*26*	*138(180)*
Buprenorphine (prescribed)	21	11	0	-(-)	0	0	0	0	-(-)
Buprenorphine (not prescribed)	27	23	8	40(13)	0	0	1	10	35(5)
Any buprenorphine (exc. buprenorphine-naloxone)	*43*	*29*	*8*	*40(13)*	*0*	*0*	*1*	*10*	*35(5)*
Buprenorphine-naloxone (prescribed)	22	8	3	61(61)	0	0	12	12	87(72)
Buprenorphine-naloxone (not prescribed)	27	23	14	74(48)	0	0	8	16	66(28)
Any buprenorphine-naloxone	*44*	*27*	*15*	*78(35)*	*0*	*0*	*21*	*27*	*79(60)*
Morphine (prescribed)	16	14	4	3(2)	0	0	1	6	4(4)
Morphine (not prescribed)	47	43	18	54(22)	0	0	1	18	54(22)
Any morphine	*56*	*49*	*21*	*47(13)*	*0*	*0*	*3*	*22*	*44(7)*
Generic Oxycodone (prescribed)	10	4	0	-(-)	0	0	0	0	-(-)
Generic Oxycodone (not prescribed)	40	33	4	62(4)	0	0	0	4	62(4)
Any Generic Oxycodone	*45*	*34*	*4*	*62(4)*	*0*	*0*	*0*	*4*	*62(4)*
OP Oxycodone (prescribed)	15	3	0	-(-)	0	0	1	1	5(5)
OP Oxycodone (not prescribed)	12	7	1	14(14)	0	0	6	7	13(14)
Any OP Oxycodone	*18*	*8*	*1*	*14(14)*	*0*	*0*	*6*	*7*	
Other Oxycodone (prescribed)	12	3	0	-(-)	0	0	0	3	3(3)
Other Oxycodone (not prescribed)	29	18	3	1(1)	0	0	4	7	4(4)
Any Other Oxycodone	*36*	*19*	*3*	*1(1)*	*0*	*0*	*4*	*8*	
Any oxycodone	*59*	*43*	*7*	*40(4)*	*0*	*0*	*8*	*15*	*25(10)*
Fentanyl	18	15	6	3(3)	0	0	1	7	2(1)
Tapentadol SR (prescribed)	3		0	-(-)	0	0	0	0	-(-)
Tapentadol SR (not prescribed	5		0	-(-)	0	0	4	4	6(3)
Any Tapentadol SR	*5*		*0*	*-(-)*	*0*	*0*	*3*	*4*	*6(3)*
OTC codeine	29	3	1	2(2)	0	0	16	16	40(16)
Other opioids	44	4	1	1(1)	0	0	22	23	31(10)

Table 6: Drug use history of the PWID sample, 2017 (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	78	70	16	22(3)	6	1	0	16	22(4)
Amphetamine liquid	8	8	0	-(-)			0	0	-(-)
Base/point/wax	29	26	7	2(1)	1	0	0	7	2(2)
Ice/shabu/crystal	88	86	64	54(30)	33	4	3	69	53(27)
Any form methamphetamine[#]	*90*	*89*	*66*	*54(29)*	*36*	*4*	*3*	*70*	*53(24)*
Pharmaceutical stimulants (prescribed)	7	4	1	2(2)	0	0	1	1	180(180)
Pharmaceutical stimulants (not prescribed)	38	16	3	5(3)	0	0	4	7	5(3)
Any form pharmaceutical stimulants	*41*	*18*	*6*	*4(3)*	*0*	*0*	*1*	*10*	*30(3)*
Cocaine	62	45	6	3(3)	0	7	1	10	3(3)
Hallucinogens	66	12	3	1(1)	3	0	3	8	1(1)
Ecstasy	64	32	7	2(2)	0	1	16	18	3(2)
Alprazolam (prescribed)	*12*	6	0	-(-)	0	0	*3*	*3*	180(180)
Alprazolam (not prescribed)	*34*	1	0	-(-)	0	0	*10*	*10*	17(15)
Any Alprazolam	*43*	6	0	*-(-)*	0	0	*12*	*12*	
Other benzodiazepines (prescribed)	47	0	0	-(-)	0	0	36	36	80(24)
Other benzodiazepines (not prescribed)	41	3	0	-(-)	0	0	30	30	45(12)
Any other benzodiazepines	*53*	*3*	*0*	*-(-)*	*0*	*0*	*45*	*45*	
Any form benzodiazepines	*59*	*6*	*0*	*-(-)*	*0*	*0*	*47*	*47*	*80(29)*
Seroquel® (prescribed)	26	0	0	-(-)	0	0	12	12	119(120)
Seroquel® (not prescribed)	40	0	0	-(-)	0	0	12	12	47(7)
Any Seroquel	*55*	*0*	0	*-(-)*	*0*	*0*	*23*	*23*	*88(90)*
Alcohol	90	4	0	-(-)			53	53	59(48)
Cannabis	92				73		1	73	91(90)
Synthetic cannabis	48				11		1	12	3(1)
Emerging psychoactives	7	3	0	-(-)	0	0	0	0	-(-)
New drugs mimicking opiates	0	0	0	-(-)	0	0	0	0	-(-)
New drugs mimicking psychedelics	4	0	0	-(-)	0	0	0	0	-(-)
Inhalants	19							0	-(-)
Steroids	4	4	0	-(-)	0	0	0	0	-(-)
Tobacco	96							89	163(180)
E-cigarette	37							21	21(7)

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

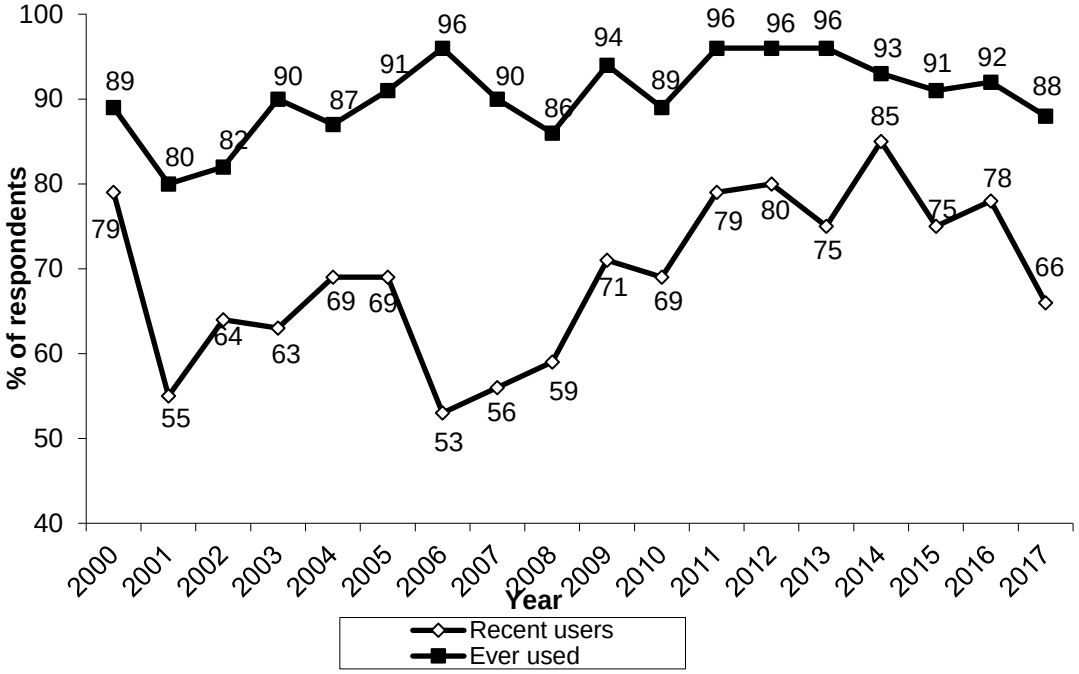
A lifetime history of heroin use was reported by 88% (n=64) of the 2017 PWID sample which was comparable to the 2016 figure of 92% (Figure 4). A lifetime history of use of homebake heroin was reported by 69% (n=50) of PWID in 2017 which was unchanged from 2016.

All respondents who had used opiates were asked to answer the Severity of Dependence Scale (SDS). Of the 54 who responded, 70% (n=38) 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 66% (n=48), which was not a significant decrease from the 78% reporting recent heroin use in 2016 (Figure 4). Of PWID who had used heroin in the last six months, all (100%, n=66) had injected heroin with the only other routes of administration (ROA) being very uncommon with smoking (n=4), snorting (n=1) and swallowing (n=1).

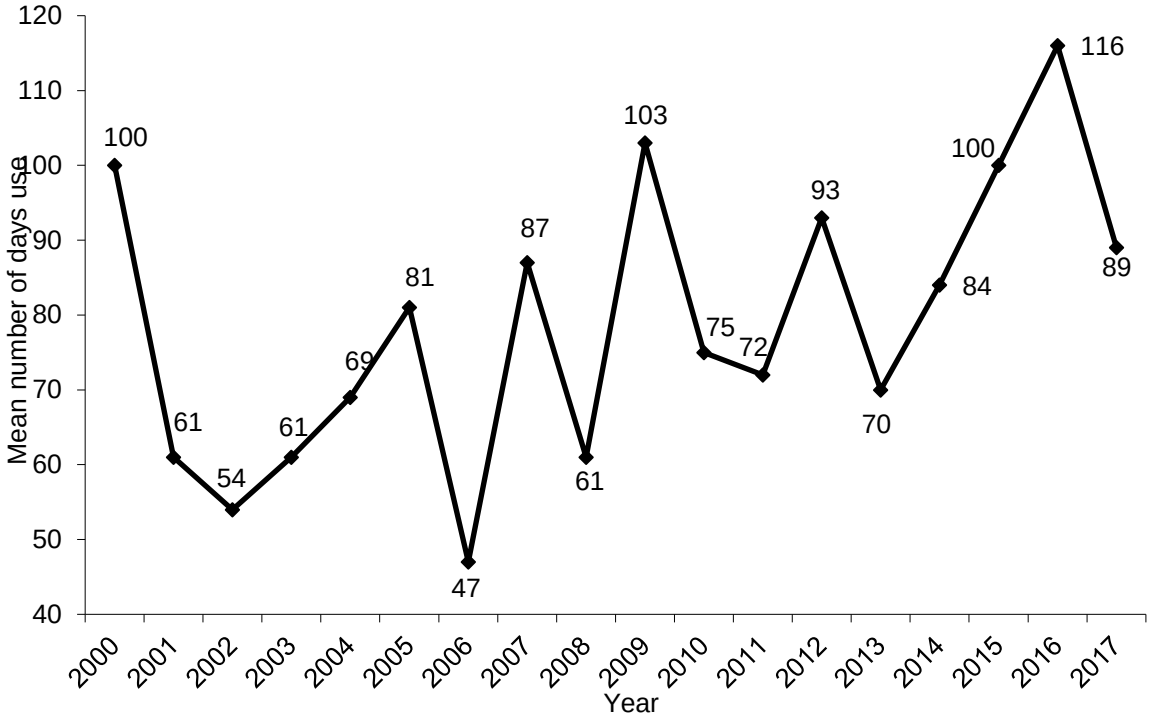
Figure 4: Lifetime and recent use of heroin, 2000-2017



Source: IDRS user interviews

Days of use in the last six months ranged from one to 180 days, with a mean of 89, which was a significant decrease from the 2016 mean of 116 days (t=-2.530, df=47, p=.015). This data is displayed in Figure 5.

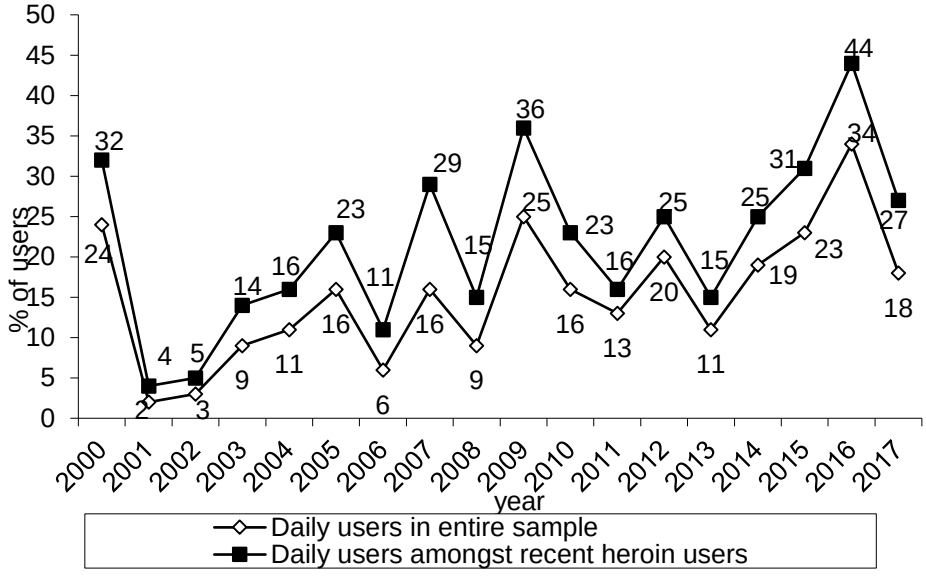
Figure 5: Mean days of heroin use in last 6 months, 2000-2017



Source: IDRS user interviews

The number of daily users of heroin among the entire sample significantly decreased, from 34% in 2016 to 18% (n=13) in 2017 (χ^2=4.02, 95% CI 0.0169-0.2958, p=.044). The number of recent heroin users reporting daily use similarly fell from 44% in 2016 to 27% (n=48) in 2017 (Figure 6).

Figure 6: Daily heroin users, 2000-2017



Source: IDRS user interviews

The proportion reporting recent use of homebake was 19% (n=9) which was not a significant increase from 13% in 2016. All of these users reported injection of homebake, with no other ROA being reported. The mean days of use reported was 32 days which was not a significant increase from the 15 days reported in 2016.

Of the total PWID sample, 67% (n=49) 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 2017, 48 of PWID provided information pertaining to the forms of heroin they had most used in the last six months. White or off-white rock replaced white or off-white powder as the form most used, reported by 37% (n=27) although respondents often expressed difficulty distinguishing actual '*rock'* from '*powder that has been compressed*'. This was followed by white / off-white powder, reported by 15% (n=11). Other forms were much less common with brown rock reported by (4%, n=3), and brown powder by (3%, n=2). Homebake was reported in this context by 7% (n=5) whereas in the 2016 survey it was not mentioned at all.

The typical (modal) amount of heroin reportedly used in a day was one point compared to one and a half points the previous year.

4.2 Price

The prices of most recent heroin purchases reported by PWID in the 2017 survey for the most part remained substantively unchanged from those reported in 2016. 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, 2016-2017

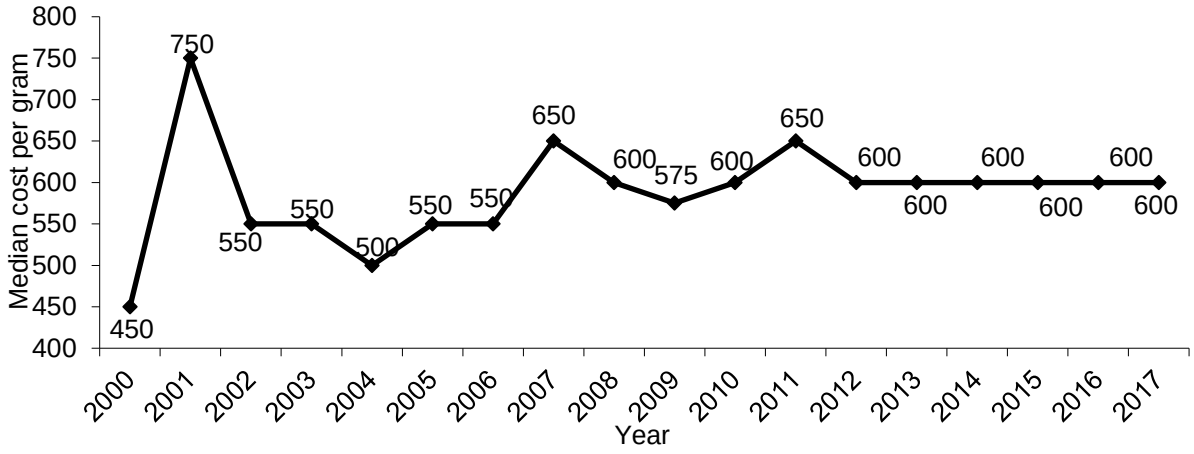
Amount	Median price* $	Range $	Number of purchasers*
Cap / point	(100) 100	30-200	(27) 24
Quarter gram	(150) 178	125-250	(42) 24
Half gram (Half weight)	(300) 350	300-400	(32) 14
Gram	(600) 600	500-900	(21) 9

Source: IDRS user interviews

* 2016 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, 2000-2017



Source: IDRS user interviews

Participants were also asked whether the price of heroin had changed in the last six months. In 2017, 45 PWID responded to this item, with the majority (78%, n=35) reporting the price as '*stable'*. There were also 11% (n=5) who believed the price had been decreasing, and small numbers who thought the price had fluctuated (7%, n=3) or increased (4%, n=2).

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 2017, 45 PWID commented on this area. The most common response remained that acquiring heroin in Perth was currently '*very easy*', reported by 64% (n=29), which was not a significant change from the 69% in 2016. Other findings were also comparable with 2016, with 31% (n=14) reporting heroin availability as '*easy'*, 2% (n=1) reporting it as '*difficult'* and 2% (n=1) describing availability as being '*very difficult*'. Asked whether the availability of heroin in Perth had changed in the previous six months, 87% (n=39) 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, 2012-2017

	2012 (N=100)	2013 (N=88)	2014 (N=98)	2015 (N=89)*	2016 (N=71)	**2017 N=73**
Current availability						
Did not respond**	29	28	21	29	19	**28**
Did respond	71	60	77	60	52	**45**
Of those who responded:						
Very easy (%)	59	53	52	50	69	**64**
Easy (%)	32	32	40	38	25	**31**
Difficult (%)	6	13	8	10	6	**2**
Very difficult (%)	3	2	0	2	0	**2**
Availability change over the last six months						
Did not respond**	29	28	21	30	20	**28**
Did respond	71	60	77	59	51	**45**
Of those who responded:						
More difficult (%)	10	18	9	10	8	**4**
Stable (%)	75	67	77	68	81	**87**
Easier (%)	9	12	12	12	10	**7**
Fluctuates (%)	6	3	3	10	0	**2**

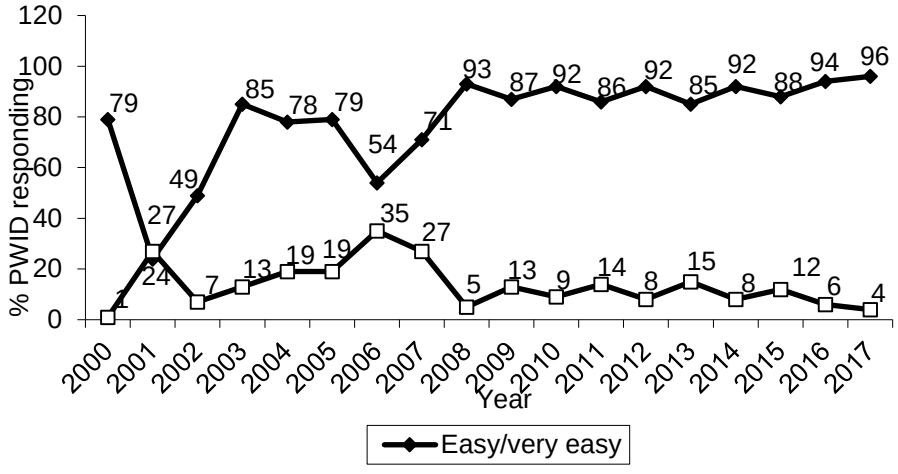
Source: IDRS User interviews

*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, 2000-2017



Source: IDRS user interviews

In 2017, 45 PWID responded to questions about persons and locations for last sourcing heroin. The most commonly nominated source of heroin of last purchase was '*known dealers*' (49%, n=22) followed by '*friends'* (31%, n=14). In 2016 '*known dealers*' and '*friends'* had both been nominated by 46%. '*Unknown dealers*' were nominated by 9% (n=4), '*street dealers*' by 7% (n=3) and individual respondents mentioned '*workmates'* and '*relatives'*.

The most commonly nominated last locations for obtaining heroin were at an '*agreed public location*' or a 'dealer's home' both nominated by 33%(n=15). A 'friend's home' was nominated by 18% (n=8), 'home delivery' by 13% (n=6) and one respondent mentioned an 'acquaintance's house'.

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 2017, 45 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 33% (n=15) describing purity as '*high'*, compared with 18% in the previous year. Although this change was not found to be significant, numbers describing purity as '*high'* displaced '*medium'* purity as the most common user perception. '*Medium'* purity was reported by 31% (n=14) compared with 50% in 2016, '*low'* purity by 13% (n=6) compared to 20% and '*fluctuating'* purity by 22% (n=10) compared to 12%. None of these shifts however were found to be significant. These trends are displayed in Figure 9.

With regards to user perceptions of changes in the purity of heroin in Perth in the last six months, 44 PID responded. Almost half (46%, n=20) believed it had remained '*stable'*. There were also 27% (n=12) saying it had '*fluctuated',* 16% (n=7) saying it had '*increased'* and 11% (n=5) saying it had *'decreased'* (Table 9).

Table 9: Participants' perceptions of heroin purity in past six months, 2012-2017

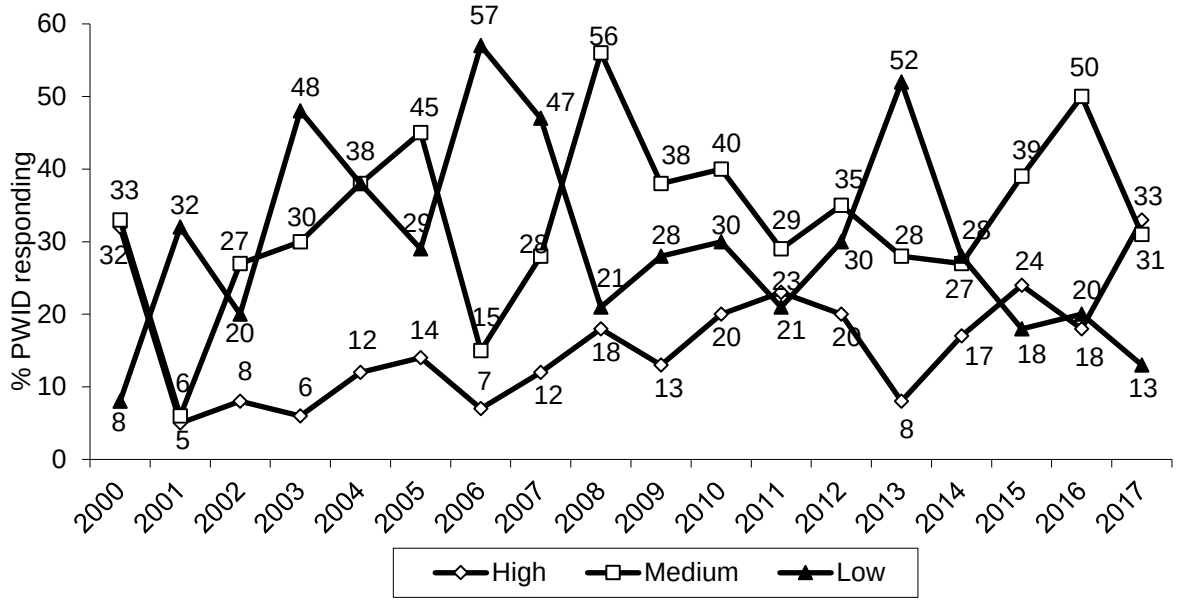
	2012 (N=100)	2013 (N=88)	2014 (N=98)	2015 (N=89)*	2016 (N=71)	**2017 (N=73)**
Current purity						
Did not respond**	29	28	21	32	21	**28**
Did respond	71	60	77	57	50	**45**
Of those who responded:						
High (%)	20	8	17	25	18	**33**
Medium (%)	35	28	27	39	50	**31**
Low (%)	30	52	29	18	20	**13**
Fluctuates (%)	13	12	27	19	12	**22**
Purity change over the last six months						
Did not respond* (%)	30	29	21	32	21	**29**
Did respond (%)	70	59	77	57	50	**44**
Of those who responded:						
Increasing (%)	14	9	25	23	20	**16**
Stable (%)	44	51	36	30	58	**46**
Decreasing (%)	16	31	26	14	8	**11**
Fluctuating (%)	20	10	9	33	14	**27**

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 9: Proportion of PWID reporting current heroin purity as 'high', 'medium' or 'low', 2000-2017



Source: IDRS user interviews

4.5 Summary of heroin trends

- Heroin remained the principal drug of choice nominated by 62% compared to 66% in 2016.
- Heroin remained the drug most injected in the previous month with 53% compared to 63% in 2016.
- Heroin remained the drug most commonly used at the most recent injection, reported by 51% compared to 61% in 2016.
- Lifetime use of heroin has remained stable, reported by 88%.
- Recent use of heroin was 66% compared to 78% in 2016.
- Mean days of heroin use was 89 compared to 116 days the previous year.
- Daily use among recent heroin users was reported by 27%, a decrease from 44% 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 '*high,* however, there was a slight increase in numbers describing it as 'fluctuating'.

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 2017, lifetime use of any form of methamphetamine was reported by 90% (n=66). Only one of these participants had no 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 78% (n=57) of the 2017 PWID sample, lifetime use of base by 29% (n=21) and lifetime use of crystal by 88% (n=64). 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, 2012-2017

Form used (%)	2012 (N=100)	2013 (N=88)	2014 (N=98)	2015 (N=89)	2016 (N=71)	**2017 (N=73)**
Speed						
Ever used	92	89	88	90	87	**78**
Used last six months	45	48	39	34	18	**16**
Base						
Ever used	27	40	46	23	31	**29**
Used last six months	6	11	8	2	3	**7**
Crystal						
Ever used	87	81	82	88	83	**88**
Used last six months	64	59	53	64	62	**69**
Liquid						
Ever used	16	21	9	11	17	**8**
Used last six months	2	3	3	0	1	**0**
Any methamphetamine						
Ever used	96	93	93	96	92	**91**
Used last six months	72	72	66	71	65	**70**

Source: IDRS user interviews

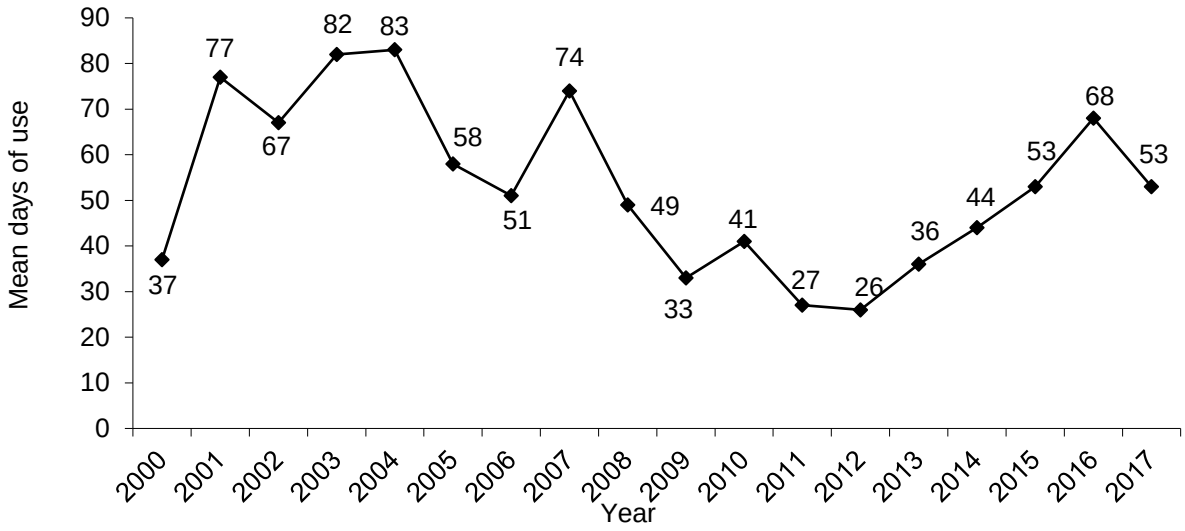
All respondents who had used stimulants were asked to complete the Severity of Dependence Scale (SDS). Of the 41 who answered, 41% (n=17) scored four or higher indicating some degree of dependency.

5.1.2 Current patterns of methamphetamine use

In 2017, 70% (n=51) of PWID reported use of any form of methamphetamine in the last six months, which was not a significant change from the 65% reported in the 2016 sample. Of these participants, 94% (n=48) had injected a form of methamphetamine during this period and 51% (n=26) reported having smoked it. Other routes of administration were uncommon.

As shown in Figure 10, the average number of days any form of methamphetamine was used during the last six months by these participants was 53 days. This was not significantly changed from the 2016 mean of 68 days.

Figure 10: Mean days of use for any methamphetamine by WA PWID, 2000-2017



Source: IDRS user interviews

In 2017, recent use of speed powder was reported by 16% (n=12) of the sample which was not significantly less than the 18% of recent users in. Recent injection of speed was reported by all recent users (100%, 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 as was the case in 2016. Mean days of use was 22, which was not a significant change from the 2016 average of 25 days.

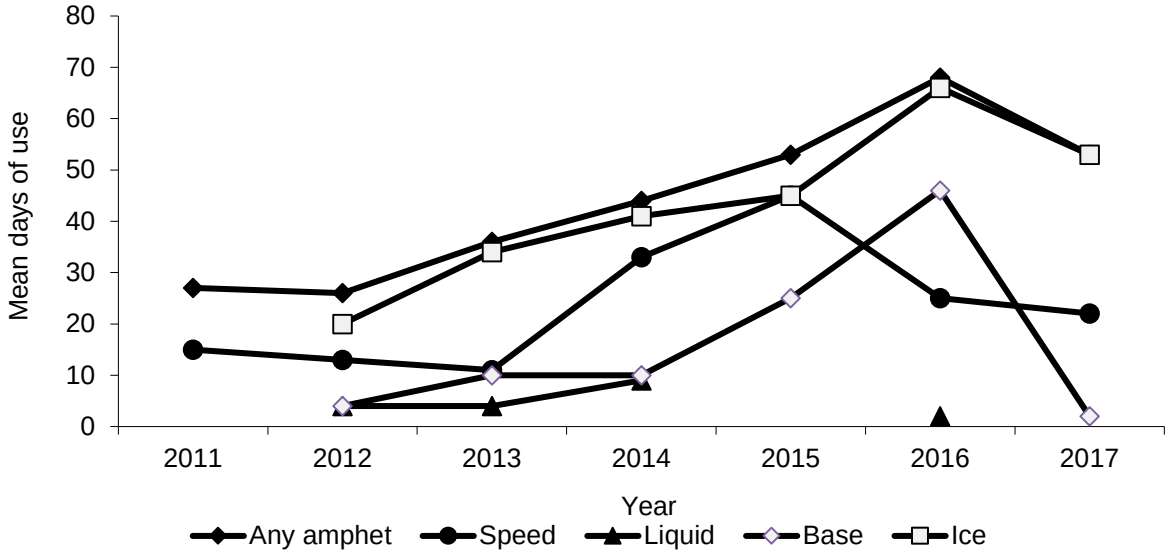
There were five reports of recent use of base compared with 2016 where recent use was reported by two respondents.

Recent use of crystal was reported by 69% (n=50) of PWID which was not significantly different from the 62% who reported doing so the previous year. The majority of recent crystal users (94%, n=47) reported injecting crystal in the last six months and 33% (n=24) reported having smoked it. Other routes of administration were uncommon.

Days of use ranged from three to 180, with six respondents reporting use of crystal on a daily basis (compared to seven in 2016). The mean days of use was 53, which was not a significant decrease from the mean of 66 days reported in 2016.

Mean days of use of any form of methamphetamine is displayed in Figure 11.

Figure 11: Mean days of use for any form of methamphetamine, WA 2012-2017



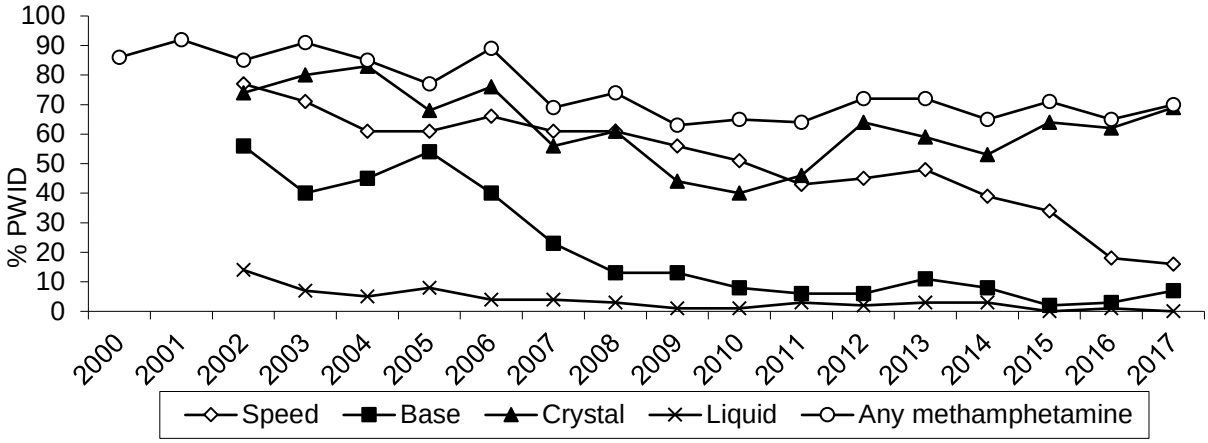
Source IDRS user interviews

There were no reports of recent use of liquid amphetamine.

Of the 51 PWID who responded to the form of methamphetamine they had most commonly used, crystal remained the most frequently nominated by 98% (n=50).

Figure 12 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 12: Proportion of PWID reporting methamphetamine use in the last six months, 2000-2017



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

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 seven respondents were able to comment on the current price of a point of speed. The price of a point was reported as $50 which was unchanged from the previous year where two respondents provided data. Just four respondents commented on the price of a gram with a median price of $450, compared to no respondents able to comment in 2016. There were also three reports of purchasing an eightball for a median price of $800 compared with $600 in 2016 and four reports of purchasing an ounce for a median price of $5,750 compared with no purchases the previous year.

The situation surrounding the price of crystal was less clear. While the median price of both a point and a half weight appeared to have fallen, the median price of a gram appeared to have increased. Statistical testing of the mean prices however, revealed no significant changes to the price of any of the three quantities, and indeed the mean price of a gram remained unchanged from 2016 at $490. There were also five respondents who suggested a median price of an eightball as $875 compared to the 2016 median provided of $900 and five who provided a median price for an ounce of ice as $6,000 compared to the 2016 price of $4,750.

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

Table 11: Price of most recent methamphetamine purchases by PWID, 2016-2017

Amount	Median price* $	Range	Number of purchasers*
Speed			
Point (0.1 gram)	(50^) 50^	50-100	(2) 7
Half weight (0.5 gram)	(200^) 250^	250-600	(1) 4
Gram	(-) 450^	300-500	(0) 4
Base			
Point (0.1 gram)	(-) -	-	(0)0
Half weight (0.5 gram)	(-) -	-	(0)0
Gram	(-) -	-	(0)0
Crystal			
Point (0.1 gram)	(100) 75	50-150	(25) 26
Half weight (0.5 gram)	(300) 250	225-600	(13) 13
Gram	(450^) 475	250-900	(5) 10

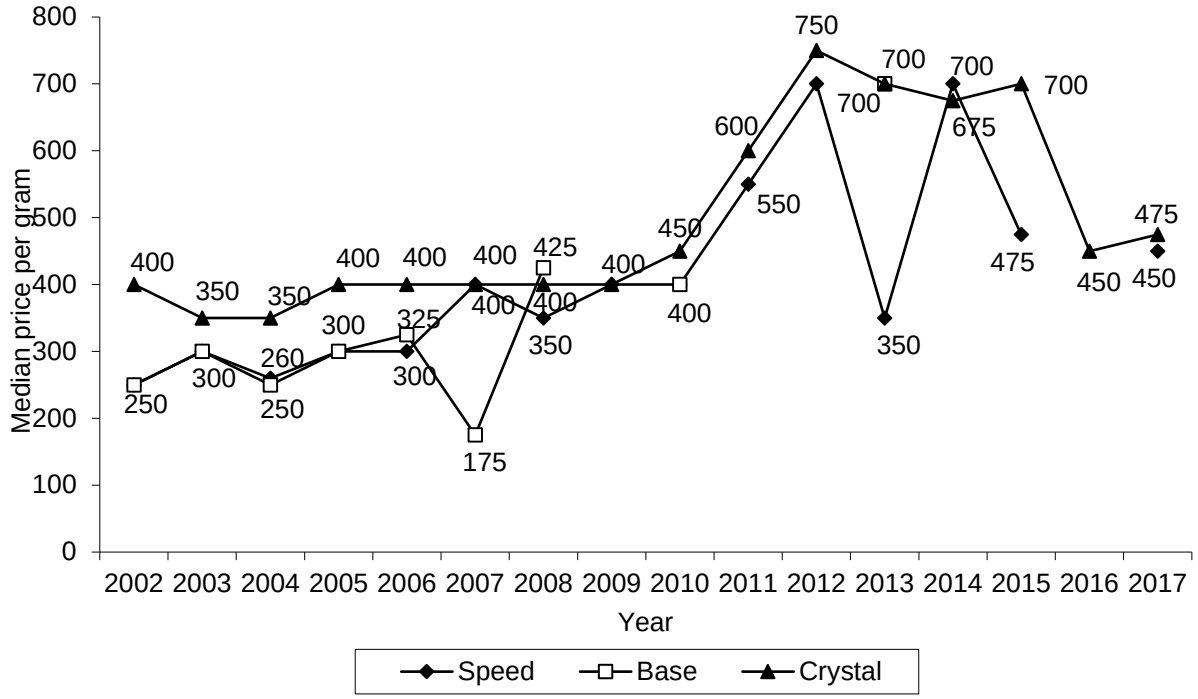
Source: IDRS user interviews

* 2016 data are presented in brackets

^ Based on small (<10) purchases

Figure 13 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 13: Median prices of methamphetamine per gram estimated from PWID purchases, 2002-2017



Source: IDRS user interviews
NB: There was no data concerning the price of a gram of speed for 2016

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 11 PWID who responded, with 36%, (n=4) reporting that the price of speed had been '*stable'* and 27% (n=3) who thought it had been '*decreasing'*. Price changes to crystal were reported on by 40 respondents, with 33%, (n=13) describing it as '*stable'*, followed by 25% (n=10) who believed it may have '*increased'.* That the price had '*decreased' was reported by 23% (n=9)* and had been '*fluctuating'* by 20% (n=8). There were no respondents able to comment on changes to the price of base methamphetamine.

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 11 respondents who commented on the availability of speed powder. Of these, 64% (n=7) described availability as '*very easy*' and 18% (n=2) *as 'easy'.* In the previous year *'very easy'* was also the most commonly nominated level of availability. Most respondents (73%, n=8) agreed that availability of speed had remained '*stable'* over the last six months followed by 18% (n=2) who thought it had become 'easier'. Availability of crystal was again generally rated as *'very easy*' by 79% (n=33) which was not significantly different from the 68% providing this response in 2016.There were also 19% (n=8) who regarded it as '*easy'*. That availability of crystal had remained '*stable'* over the previous six months was reported by 79% (n=33) followed by 12% who thought it had become '*easier'*. As in 2016, there were no respondents able to provide information regarding the availability of base.

Table 12: Reports of methamphetamine availability in the past six months, 2016-2017

	Speed		Base		Crystal	
	2016 (N=71)	**2017 (N=73)**	2016 (N=71)	**2017 (N=73)**	2016 (N=71)	**2017 (N=73)**
Current availability						
Did not respond*	67	**62**	71	**73**	34	**31**
Did respond	4	**11**	0	**0**	37	**42**
Of those who responded:						
Very easy (%)	75^	**64**	-	**-**	68	**79**
Easy (%)	0^	**18**	-	**-**	27	**19**
Difficult (%)	25^	**9**	-	**-**	5	**2**
Very difficult (%)	0^	**9**	-	**-**	0	**0**
Availability change over the last six months						
Did not respond*	67	**62**	71	**73**	34	**31**
Did respond	4	**11**	0	**0**	37	**42**
Of those who responded:						
More difficult (%)	0^	**9**	-	**-**	8	**5**
Stable (%)	77	**73**	-	**--**	71	**79**
Easier (%)	12	**18**	-	**--**	23	**12**
Fluctuates (%)	6	**0**	-	**--**	4	**5**

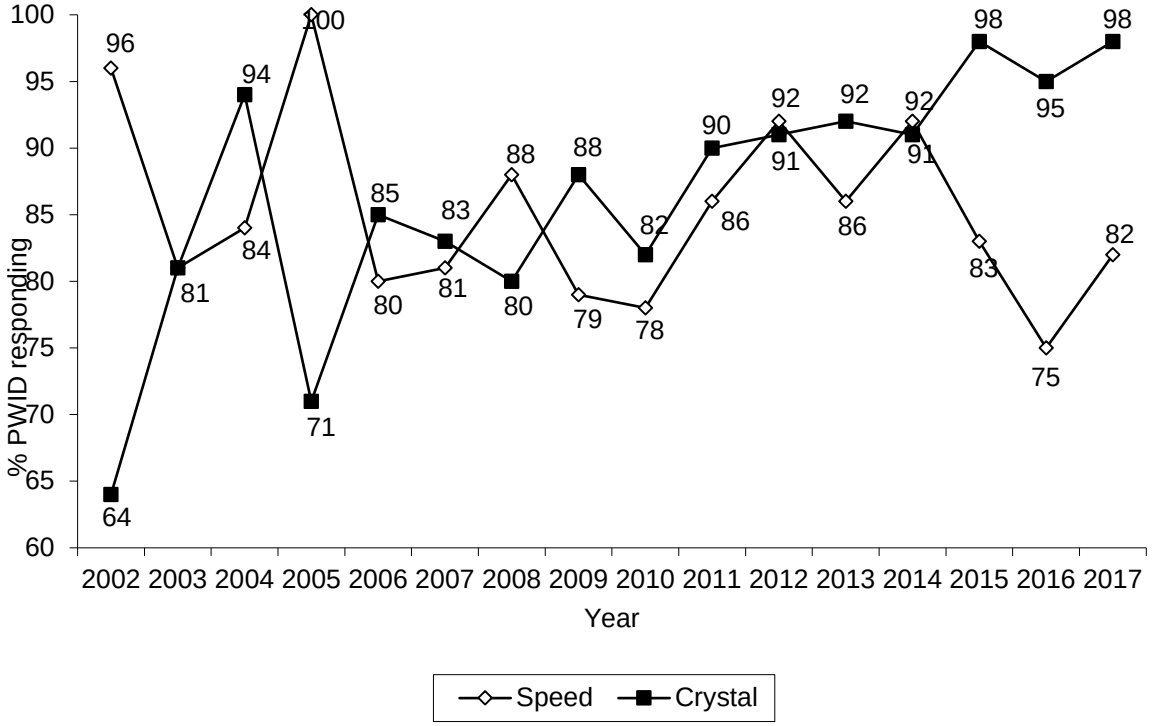
Source: IDRS user interviews

* '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 14. Changes in the availability of crystal were not found to be significant while numbers of respondents providing data on speed in 2016 were too small to permit formalised testing for significance. Base has been excluded from this figure due to the lack of available data in recent years.

Figure 14: PWID reporting 'easy' or 'very easy' availability of methamphetamine by form in WA, 2002-2017



Source: **IDRS user interviews**

Respondents were asked about sources of each form of methamphetamine. Of the 11 participants who reported on speed, 64% (n=7) reported that the most recent source of speed had been from '*friends'*. Very small numbers also reported obtaining speed powder from '*street dealers'*, '*known dealers*' and '*relatives'*. The most common venues for obtaining speed powder at the most recent occasion was a '*home delivered*, '*friend's home*' and '*agreed public location*', all nominated by 27% (n=3). Obviously, the small numbers here caution against over interpretation of these findings.

With regards to crystal methamphetamine, 42 respondents provided information concerning their most recent source. The most commonly reported source was '*friends'* (50%, n=21). This was followed by '*known dealers*' (33%, n=14). The most commonly reported venues for obtaining crystal methamphetamine were equally a '*friend's home*', "home delivered' and an 'agreed public location' all reported by 27% (n=3). A '*dealer's home*' was mentioned by 18% (n=2).

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

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 10 participants who responded regarding speed, the greatest proportion (40%, n=4) rated current purity as '*high'* which was also the most common response in 2016. There were also two respondents who described it as '*medium'*, one who described it as '*low'* and three who thought it tended to '*fluctuate'.* Asked if the purity of speed powder had changed in the last six months, 60% (n=6) thought it had '*fluctuated'* and 30% (n=3) thought it had '*increased'*. There was also one respondent who described it as '*stable'*.

With regards to current purity of crystal methamphetamine, of the 41 PWID who responded, 49% (n=20) described it as '*high'*, which was not a significant change from the 60% reporting this in 2016. There were also 22% (n=9) who reported current purity as '*medium'*, 10% (n=4) who said it was '*low'* and 20% (n=8) who thought it tended to '*fluctuate'*. Asked if this purity had changed in the last six months, the most common response (44%, n=18) was that it had remained '*stable'*. There were also 20% (n=8) who thought it had '*increased'*, 22% (n=9) who thought it had '*decreased'*, and 15% (n=6) 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, 2016-2017

	Speed		Base		Crystal	
	2016 (N=71)	**2017 (N=73)**	2016 (N=71)	**2017 (N=73)**	2016 (N=71)	**2017 (N=73)**
Current purity						
Did not respond*	67	**63**	71	**73**	34	**32**
Did respond	4	**10**	0	**0**	37	**41**
Of those who responded:						
High (%)	75^	**40**	-	**-**	60	**49**
Medium (%)	25^	**20**	-	**-**	19	**22**
Low (%)	0^	**10**	-	**-**	11	**10**
Fluctuates (%)	0^	**30**	-	**-**	11	**20**
Purity change over the last six months						
Did not respond*	67	**63**	71	**73**	33	**32**
Did respond	4	**10**	0	**0**	36	**41**
Of those who responded:						
Increasing (%)	50^	**30**	-	**-**	22	**20**
Stable (%)	0^	**10**	-	**-**	44	**44**
Decreasing (%)	0^	**0**	-	**-**	19	**22**
Fluctuating (%)	50^	**60**	-	**-**	14	**15**

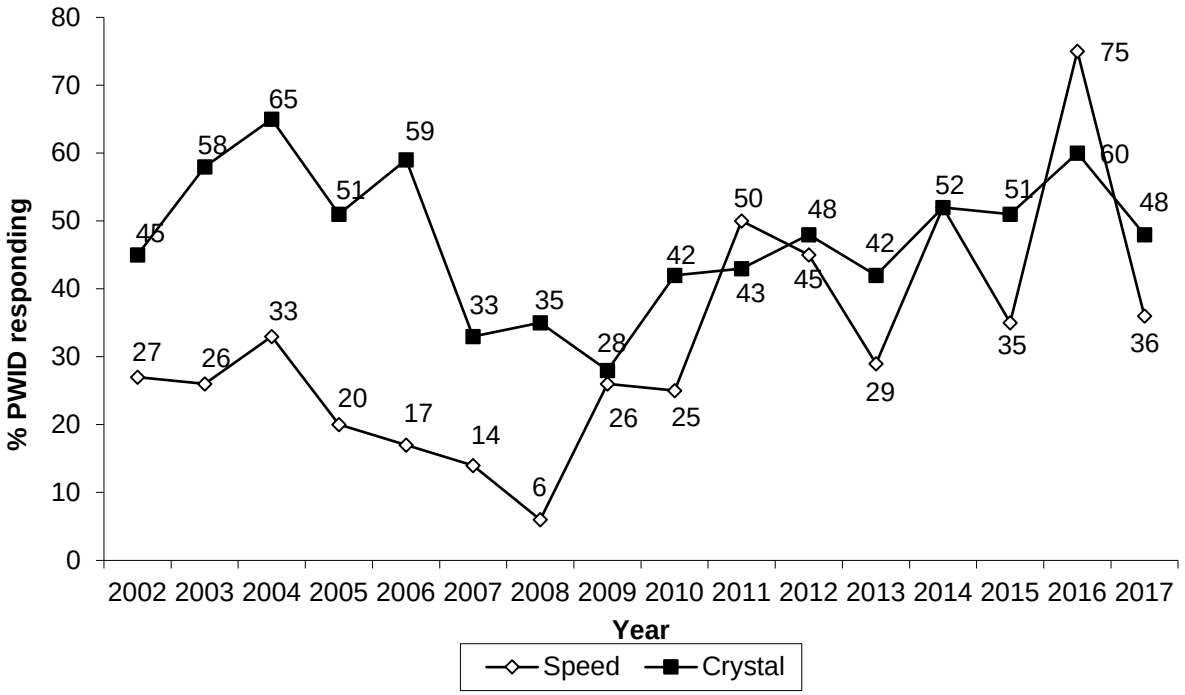
Source: IDRS user interviews

* '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 15 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 15: PWID reporting each methamphetamine by form as 'high' purity, 2002-2017



Source: IDRS user interviews

5.5 Summary of methamphetamine trends

- There was no significant change in lifetime or recent use of all forms of methamphetamine from 2016 to 2017.
- Among those who had used methamphetamine in the last six months, the average days used for all forms of methamphetamine was 53 days, which was not significantly different from the 52 days in 2016. 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 seven 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 $75. The median price for one gram of crystal was stable at $475. There was no data regarding the price of a gram of base. The greatest proportions perceived price change of speed 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 the purity of speed was mainly seen as '*fluctuating'*.

6 COCAINE

6.1 Use

6.1.1 Cocaine use among IDU participants

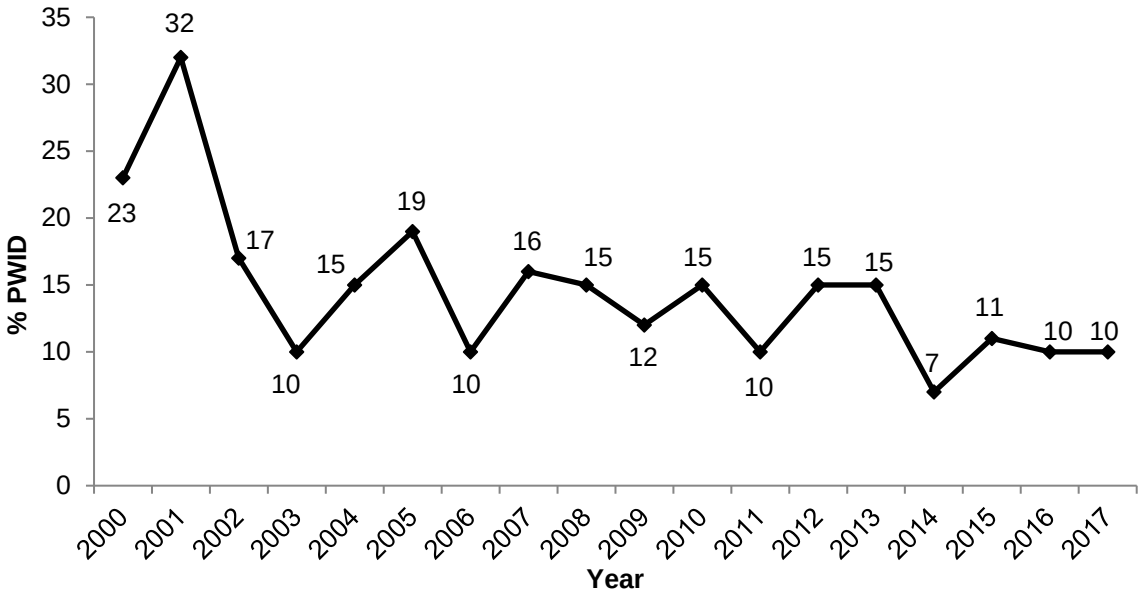
In 2017, lifetime use of cocaine was reported by 62% (n=45) of PWID, which was unchanged from 2016.

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 2017 sample, which was unchanged from numbers reporting this in 2016 (Figure 20). Of these participants, 70% (n=7) reported having snorted cocaine in the last six months, 60% (n=6) had injected it and one individual reported oral consumption.

Days of use ranged from one to six, with an average of three days of use in the last six months, compared to seven in 2016. 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 16 and shows that it has remained at low prevalence since 2002.

Figure 16: Cocaine use in the past six months, 2000-2017



Source: IDRS user interviews

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

6.2 Price

In 2017, there were only two respondents who provided data on the price of a half gram of cocaine, with the price ranging from $300-$400. There was one report of purchasing a point of cocaine for $200. There were no respondents providing data on any other quantities. With regards to recent changes in price, four respondents described it as '*stable'* compared with 2016 where one described it as '*stable'* and the other as '*decreasing'*. With these very small

number of respondents, this data needs to be interpreted with great caution. Numbers reporting in previous years' WA IDRS studies have also been low.

6.3 Availability

Just five respondents in 2017 reported on the current availability of cocaine in Perth, although opinions differed markedly with two describing it as 'difficult' and individual respondents describing it as '*very easy*', '*easy'* and '*very difficult*'. This can be compared with the two respondents who commented on the availability of cocaine in 2016, describing current availability as '*easy'* or '*very easy*'. Cocaine was either most recently obtained from 'friends' or 'known dealers', but actual locations for obtaining cocaine differed considerably. *easy' and 'very easy'*. With regards to recent changes in availability, all five reported it as '*stable'*. Due to the extremely small number of respondents that reported, these findings should be interpreted with caution.

6.4 Purity

There was no consensus on current purity of cocaine with two respondents describing it as 'low', two as 'medium' and one a 'high'. This can be compared with the two respondents who commented on purity of cocaine in 2016, one describing it as '*high'*, and the other as '*low'*. Only three respondents commented on recent changes to cocaine purity, all reporting that it had been 'stable'. Again, due to the small sample reporting on purity, these findings should be interpreted with caution.

6.5 Summary of cocaine trends

- Lifetime use of cocaine by IDU was reported by 71% of the 2017 sample, which was unchanged from the 71% who reported lifetime use in 2016.
- Recent use was reported by 10% of the 2017 sample, which was unchanged from the previous year.
- Frequency of cocaine use in 2017 was an average of three days in the previous six months compared to the average of seven days in 2016. But small numbers necessitate caution in interpreting these results.
- Only three respondents commented on the price of cocaine, citing prices of $300-$400 for a half gram and one of $200 for a point. Again, small numbers necessitate caution in interpreting these results.
- Only small numbers reported on availability and purity of cocaine with little consensus in the information provided, therefore, making it difficult to draw conclusions about the cocaine market in WA.

7 CANNABIS

7.1 Use

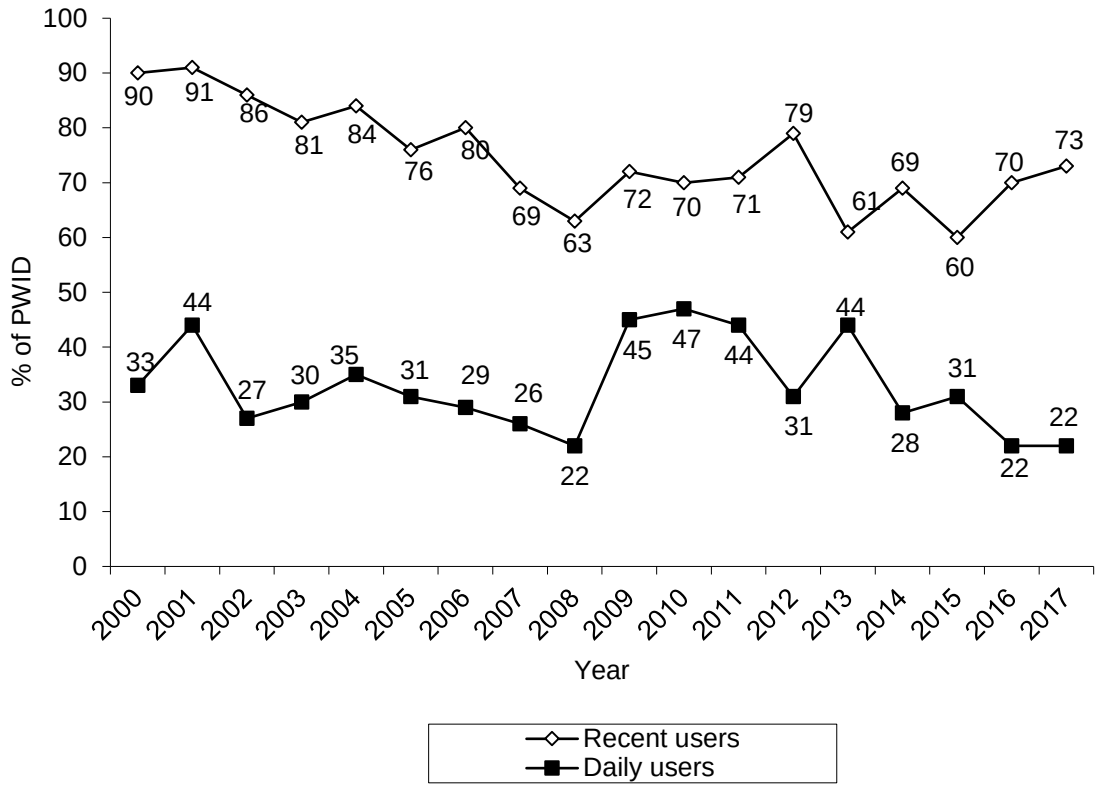
7.1.1 Cannabis use among PWID participants

In 2017, lifetime use of cannabis was reported by 92% (n=63) of PWID, which was comparable to 89% in 2016.

7.1.2 Current patterns of cannabis use

Use of cannabis in the last six months was reported by 73% (n=53) which was not a significant change from the 70% in 2016. In 2017, days of use ranged from one to 180, with 22% (n=12) of all recent users reporting use of cannabis on a daily basis, which was unchanged from 2016. The proportion of PWID reporting any use and daily use of cannabis in the last six months is presented in Figure 17.

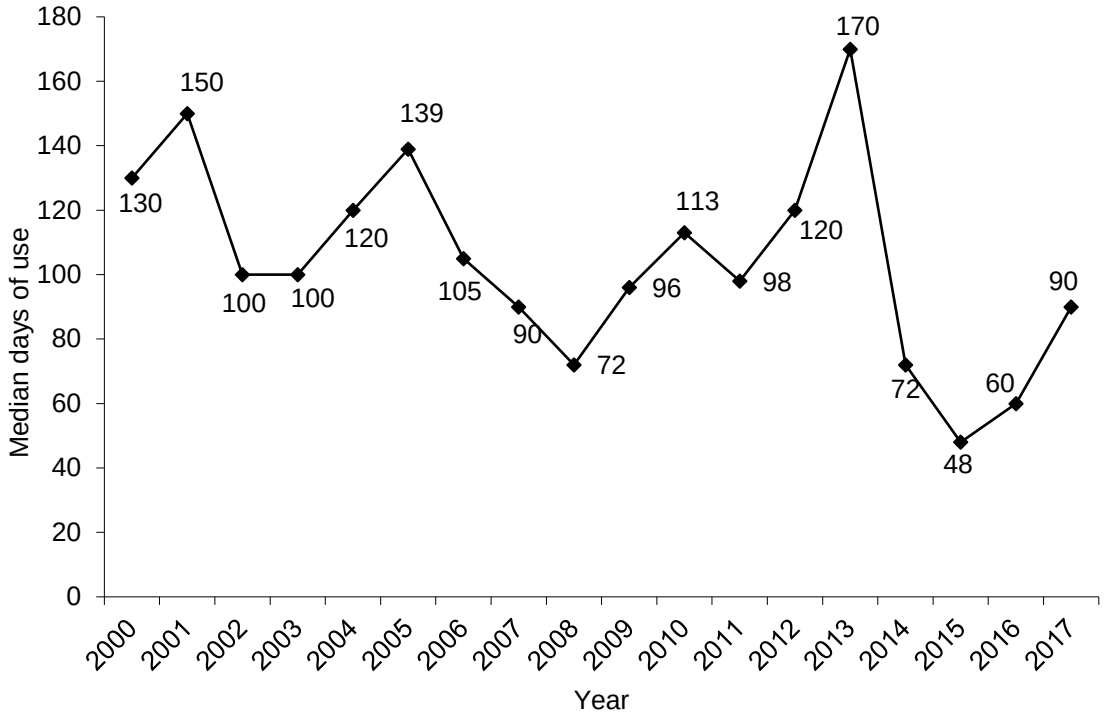
Figure 17: Recent use and daily use of cannabis among recent users in the past six months, 2000-2017



Source: IDRS user interviews

Figure 18 shows the median number of days cannabis was used among PWID across IDRS surveys. The median days of use had substantially increased from 60 days in 2016 to 90 days in 2017. The mean days of use was 91 which was not significantly more than the 2016 mean of 81 days.

Figure 18: Median days of cannabis use in the past six months, 2000-2017



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 (67%, n=49) reported that hydroponic cannabis had been the form most commonly used, and just 6% (n=3) nominated bush. There were no mentions of either hashish or hash oil in this context, although having used either hashish or hash oil at some point during the last six months were each mentioned by three respondents. The most commonly nominated amounts of cannabis consumed in a typical session ranged from one to 30 cones or one to four joints with the most commonly mentioned quantity being four cones.

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 $320 compared with $325 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 ($163) superficially appeared to have risen from $85 and an ounce ($250) to have fallen from $350. However, as these median prices were calculated from just five or less respondents, caution must be exercised in interpreting these findings.

Table 14: Price of most recent cannabis purchases by participants, 2016-2017

Amount	Median price* $	Range $	Number of purchasers
Hydro			
Gram	(25) 25	20-50	(11)13
Half ounce	(175^) 175	150-250	(7)10
Ounce	(325) 320	200-350	(16)15
Bush			
Gram	(25^) 25^	25-25	(3)3
Half ounce	(85^)163^	150-175	(2) 2
Ounce	(350^) 250^	200-250	(1) 5

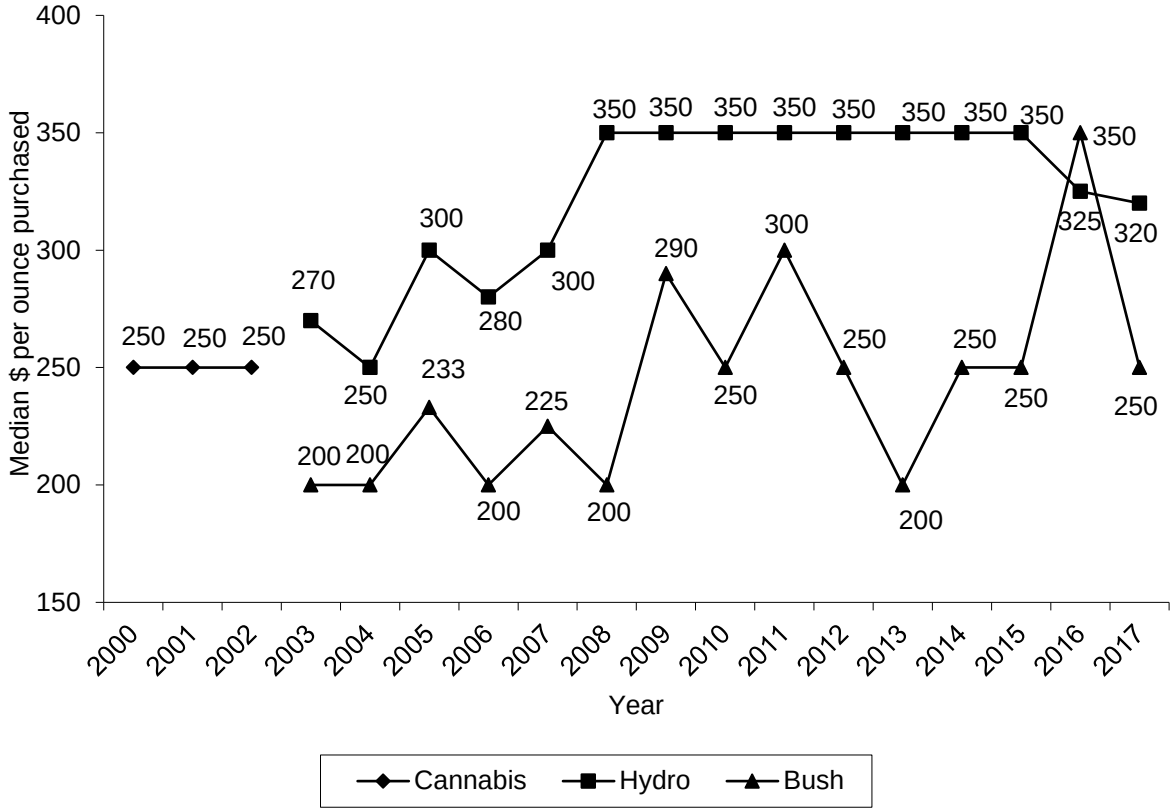
Source: IDRS user interviews

* 2016 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 19. 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 19: Median prices ($) of an ounce of cannabis estimated from PWID participant purchases, 2000-2017



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, 45 participants reported on hydro and 14 reported on bush. Regarding the price of hydro, 91% (n=41) reported it as '*stable'*. For bush, 86% (n=12) reported the 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 2017, there were 47 participants who commented on the current availability of hydro. As in the previous year, the majority of these (51%, n=24) reported that it was '*very easy*' compared with 60% in 2016. This was followed by 38% (n=18) who described it as '*easy'*, There were 10% (n=5) reports describing it as '*difficult'* and none as '*very difficult'*.

With regard to change in availability over the last six months, 87% (n=40) rated it as '*stable'*.

Bush

In 2017, availability of bush was reported on by 15 respondents. The prevailing opinion was that it was '*very easy*' to obtain (40%, n=6). This was followed by 33% (n=5) who described it as '*difficult'* and 27% (n=4) who described it as '*easy'*. This stands in contrast to 2016 were availability was reported as either '*very easy*' or '*easy'* by 86% and as '*difficult'* by just 14%. As in 2016, the prevailing opinion (57%, n=8) was that availability over the last six months had remained '*stable'*. This data is presented in Table 15.

Table 15: Participants' reports of cannabis availability in the past six months, 2016-2017

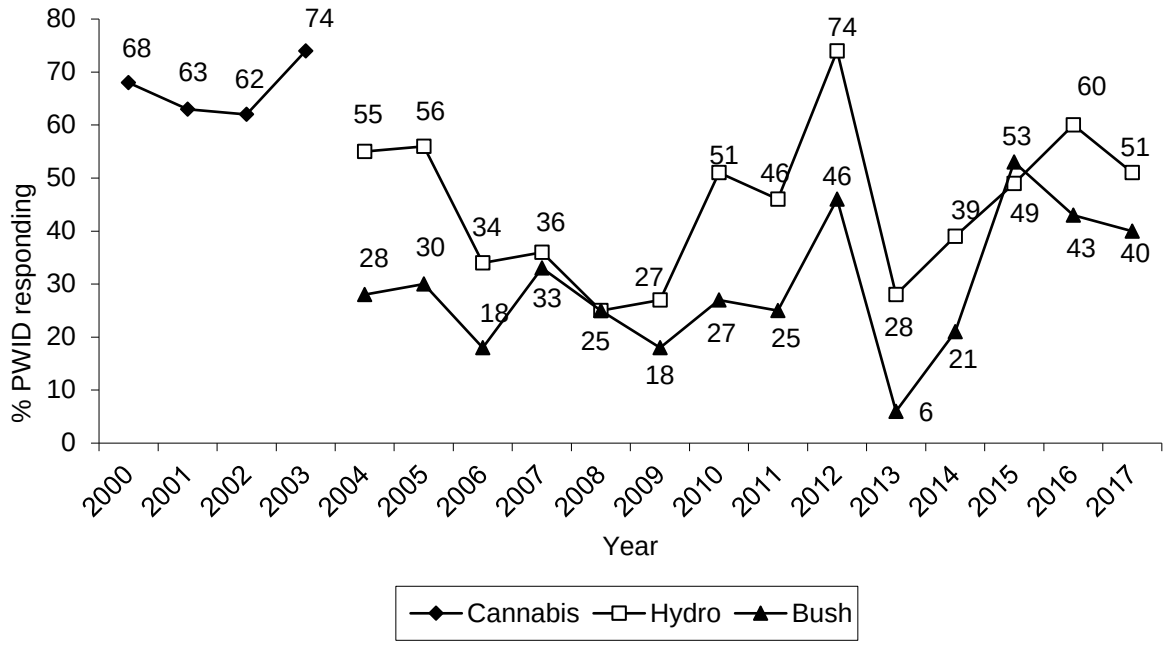
	Hydro		**Bush**	
	2016 (N=71)	**2017 (N=73)**	2016 (N=71)	**2017 (N=73)**
Current availability				
Did not respond*	41	**26**	64	**58**
Did respond	30	**47**	7	**15**
Of those who responded:				
Very easy (%)	60	**51**	43	**40**
Easy (%)	40	**38**	43	**27**
Difficult (%)	0	**11**	14	**33**
Very difficult (%)	0	**0**	0	**0**
Availability change over the last six months				
Did not respond*	41	**27**	65	**59**
Did respond	30	**46**	6	**14**
Of those who responded:				
More difficult (%)	3	**2**	0	**14**
Stable (%)	97	**87**	86	**57**
Easier (%)	0	**7**	0	**29**
Fluctuates (%)	0	**4**	0	**0**

Source: IDRS user interview '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 20 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 20: Participant reports of current cannabis availability as 'very easy', 2000-2017



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, 68% (n=32) indicated that it came from '*friends'*, which was also the most common response in previous years. Other common responses included '*known dealers*' (15%, n=7), and '*acquaintances'* (6%, n=3). Bush was most commonly sourced from '*friends'* (67%, n=10) followed by 'known dealers' (13%, n=2) with individual respondents reporting that they obtained it from '*street dealers', 'unknown dealers'* or *'relatives'*.

The most common venue for obtaining hydro remained at '*friend's home*' (40%, n=19). Next most commonly mentioned were *'home delivered*', mentioned by 30% (n=14), '*agreed public location*' (17%, n=8) and '*dealer's home*' by 11% (n=5). The most common source venues for bush was '*friend's home*' (47%, n=7) followed by '*home delivery*' (33%, n=5) and '*agreed public location*' (13%, n=2).

7.4 Potency

Respondents were asked about the current potency of cannabis and any change in potency over the last six months (Table 16). Forty-seven PWID commented on hydro, with the majority (68%, n=32) nominating current potency as '*high'*, which was compatible with 69% last year. This was followed by 21% (n=10) reporting purity as '*medium'*. With regard to changes in potency over the last six months, the greatest proportion (67%, n=29) reported potency as '*stable'*, followed by 14% (n=6) who described it as '*fluctuating'* and12% (n=5) who reported that it had been '*increasing'*.

Fifteen respondents provided information regarding the potency of bush cannabis. The majority (60%, n=9) nominated its current potency as '*medium'*, compared to the 43% reporting this in 2016. These numbers however were too small to permit meaningful analysis

of significance. There were 33% (n=5) who reported current potency as '*high'* which was similar to 29% in 2015. With regard to changes in potency of bush over the last six months, the greatest proportion (71%, n=10) rated it as '*stable'* with other opinions being relatively uncommon.

Table 16: Participant estimates of cannabis potency, 2016-2017

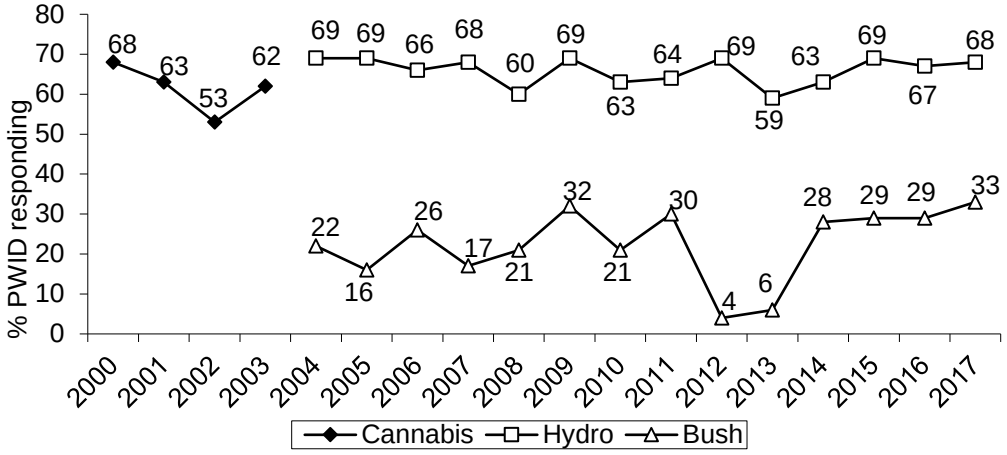
Current potency	Hydro		Bush	
	2016 (N=71)	**2017 (N=73)**	2016 (N=71)	**2017 (N=73)**
Did not respond*	42	**26**	64	**58**
Did respond	29	**47**	7	**15**
Of those who responded:				
High (%)	67	**68**	29	**33**
Medium (%)	23	**21**	43	**60**
Low (%)	0	**2**	14	**0**
Fluctuates (%)	7	**9**	14	**7**
Potency change over the last six months				
Did not respond* (%)	42	**30**	64	**59**
Did respond (%)	29	**43**	7	**14**
Of those who responded:				
Increasing (%)	17	**12**	14	**14**
Stable (%)	63	**67**	71	**71**
Decreasing (%)	7	**7**	0	**7**
Fluctuating (%)	10	**14**	14	**7**

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 21.

Figure 21: Participant reports of current cannabis potency as 'high', 2000-2017



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.

7.5 Summary of cannabis trends

- Similar to previous years, the vast majority of PWID sample (92%) reported lifetime use of cannabis.
- Recent use of cannabis was reported by 73% which was not significantly different to 70% in 2016.
- Frequency of use among recent cannabis users was 91 mean days which was not a significant increase from 81 mean days of use in 2016. The number of recent cannabis users reporting daily use of cannabis was 22% which was unchanged from 2016.
- The reported price of hydro was relatively unchanged from past years, with the median price for an ounce being $320 compared to $325 in 2016. The median price of one ounce of bush was reported as $250. However, this was based on only five reports making it difficult to draw firm conclusions. Prices for both forms were generally reported as stable.
- As in 2016, current availability of hydro was again described as '*very easy*'. Bush was also rated as '*very easy*' to obtain compared to 2016 when it 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.
- Current potency of hydro was rated as '*high'* by 68%, relatively unchanged from 2016. Current potency of bush continued to be rated as '*medium'* by 60% of those who responded in 2017 compared to 43% the previous year. Potency for both forms was generally agreed to be '*stable'*.

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).

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 32% (n=23) of respondents. The proportion reporting illicit use of methadone in the last six months was 6% (n=4) in 2017, which was not significantly different from the 11% in 2016. Recent injection of illicit methadone was reported by 3% (n=2) of the sample, and oral consumption by 3% (n=2). Days of use ranged from one to 90, mean days of use was 24 which was not significantly more than the 2016 mean of five days. The quantity of illicit methadone used at the last occasion ranged from 20 to 150 mls with a median of 120 mls.

Lifetime illicit use of Physeptone® was reported by 19% (n=14) of respondents. The proportion reporting illicit use of Physeptone® in the last six months was 3% (n=2), which was unchanged from the previous year. 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. One respondent reported daily use and the other on just two days in the last six months. Asked about the amount typically used, one respondent reported 2 mg and the other 80mg.

8.1.2 Market characteristics

There were just two respondents who provided information on the current market for illicit methadone in Perth. There was no data on the current price of methadone syrup and just one respondent who reported paying eight dollars for a 5mg tablet of Physeptone®. Both respondents reported that prices for illicit methadone had remained '*stable'*.

One respondent described current availability as *'easy'* to obtain and the other as '*difficult'*. Both thought that this had remained '*stable'*. The only reported source was from '*friends'* making a 'home delivery'.

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 10% (n=7), which was not significantly different from the 9% reported in 2016. Recent injection was reported by 8% (n=6) of the sample and recent oral consumption by just one respondent with no other routes of administration reported. Days of use ranged from one to 180, with a median of five days, compared to 10 days in 2016.

Lifetime illicit use of Suboxone® was reported by 27% (n=20) of respondents. Illicit use in the last six months was reported by 16% (n=12) which was not a significant increase on the 7% in 2016. Recent injection was reported by 14% (n=10) and oral administration by 8% (n=6).

Days of use ranged from one to 180 with a mean of 66 which was not found to be a significant increase from the previous year's mean of 58, 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 were no respondents reporting recent purchases of illicit Subutex®.

Just one respondent reported on the Perth market for 2mg illicit Suboxone® film, citing a price of $35. Another five reported the purchase of an 8mg tablet for a median price of $35. That the price had remained '*stable'* was reported by 44% (n=4), while the same number believed it had '*increased'*. One individual thought it had '*decreased'*. Current ease of access to illicit Suboxone® film was reported as '*easy'* (55%, n=6) or '*very easy*' (46%, n=5). Most respondents (60%, n=6) agreed that this ease of access had recently remained '*stable'* followed by 30% (n=3) who thought it had become 'easier' and one individual who described it as 'fluctuating'. The most common source of illicit Suboxone® film was from '*friends'* reported by 90% (n=9) respondents. One individual respondent reported that they had most often obtained it from '*known dealers*'. The most common source venue was a '*friend's home'* (40%, n=4) followed by 'home delivery' and 'agreed public location', both reported by 30% (n=3).

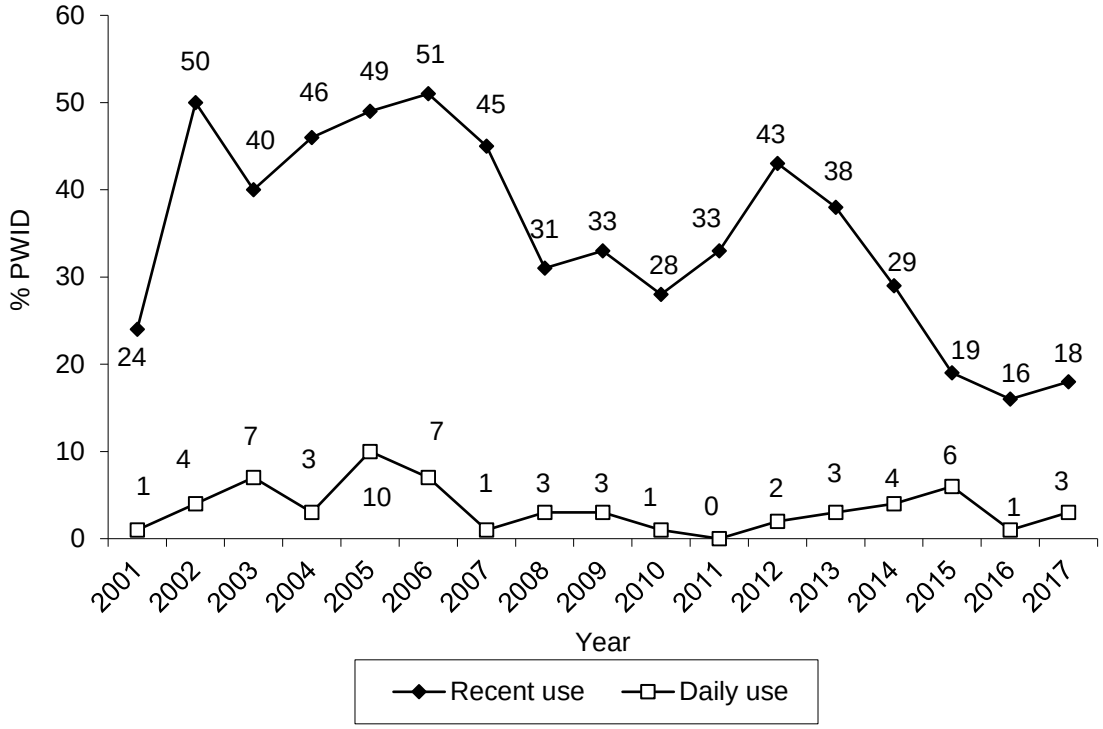
8.3 Morphine

8.3.1 Use patterns

Lifetime illicit use of morphine was reported by 47% (n=34) of the 2017 IDRS sample. The proportion reporting illicit use of morphine in the last six months was 18% (n=13), which was not significantly different to the 16% reported in 2016. Recent injection of illicit morphine was reported by all recent users with just one individual reporting oral consumption. Days of use in the last six months ranged from one to 180, with just two reports of use on a daily basis. Mean days of use was 54, which was not found to be significantly different from the 2016 mean of 31 days although this is likely an effect of the relatively small numbers of respondents who had recently consumed illicit morphine.

Figure 22 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 22: Proportion reporting recent and daily illicit morphine use in the past six months, 2001-2017



Source: IDRS user interviews

As in previous years, MS Contin® remained the most commonly named brand of illicit morphine consumed with 46% (n=6) of those responding reporting this however, another six respondents nominated generic morphine in this regard. Just one individual mentioned Kapanol®.

8.3.2 Market characteristics

Five participants reported on the price of a 100 mg tablet of MS Contin®, (range=$50-$80) with a median price of $50 compared to $85 the previous year. Individual respondents reported on the price of 60 mg for $50 which was unchanged from the previous year and on the price of a 30mg for $10 compared with $30 in 2016. There was just one report of purchasing 100 mg Kapanol® for a median price of $70 compared to the previous year's median of $85. There were no reports of purchasing any other form of morphine. Almost all (86%, n=6) of the respondents believed the price of morphine had remained '*stable''* in the past six months. Just one thought it had 'increased'.

Current availability of morphine was reported on by nine respondents. There was no consensus on current availability of morphine with equal numbers describing it as '*very easy'*, '*easy'* or '*difficult*'. This can be compared to the 2016 sample where the most common response by three respondents was that availability was 'very easy'. Most, (75%, n=6) 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=6) of respondents. Very small numbers respondents also nominated '*known dealers'* or *'acquaintances'*. The most common venues for obtaining illicit morphine was *'home delivery*' (33%, n=3), with very small numbers of respondents nominating a range of other venues.

8.4 Oxycodone

8.4.1 Use patterns

A lifetime history of having ever used illicit generic oxycodone was reported by 40% (n=29). Use in the last six months was reported by 4% (n=3), which was not significantly different from the 11% in 2016. All three respondents reported recent injection of the drug with no other routes of administration. Days of use ranged from three to 180 with a median of four compared to the previous year's 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 12% (n=9). Use in the last six months was reported by 7% (n=5) 9% (n=6) which was not significantly different than the 9% reported in 2016. As OP oxycodone is designed to be tamper resistant to prevent injection, it is unsurprising that only one respondent reported attempting this in the last six months. The only other reported route of administration was oral. Days of use ranged from five to 24 with a median of 14, which was unchanged from with the previous year. Amounts typically consumed ranged from 30mg to 300mg with a median 0f 40.

A lifetime history of having ever used other forms of illicit oxycodone was reported by 29% (n=21). Use in the last six months was reported by 7% (n=5) which was not significantly different than the 9% reported in 2016. Recent injection was reported by 3% (n=2) with the only other route of administration being oral. Number of days used ranged from one to 10 with a median of four days compared with five in 2016. Amounts typically consumed ranged from 10mg to 30mg with a median of 25mg.

8.4.2 Market characteristics

Just two respondents provided data on price and availability of generic oxycodone and just three for reformulated OP oxycodone. The limited number of respondents renders it difficult to draw firm conclusions about current prices.

A number of different purchases were reported, generally corresponding to one dollar per milligram. One notable exception was a purchase of 80 mg tablet of generic oxycodone for $60. Prices were reported as either '*stable'* or '*decreasing'*. There was no consensus on availability with one respondent describing it as '*very easy*' and the other as '*difficult'*. One respondent thought availability had become '*easier'* and the other said it had become '*more difficult*'. The only reported source of generic oxycodone was from '*friends'* at their home while reformulated oxycodone was purchased from either known or unknown '*dealers'* at the '*dealer's home*'.

8.5 Fentanyl

A lifetime history of use was reported by 18% (n=13). Recent use in the last six months was reported by 7% (n=5) compared with 17% the previous year. The most common recent ROA was by injection reported by all 80% (n=4) of all recent users, and one individual reported oral consumption. Days of use ranged from one to five with a mean of two days compared with the 2016 mean of 28 days, although very small numbers of respondents do not permit formal testing of significance. All recent use was reported to have been illicit. Five respondents reported on their average amount used which ranged from 12.5mg to 25 mgs with a median of 19 mgs.

There were no respondents in 2017 able to provide price or availability data for illicit fentanyl.

8.6 Use of Tapentadol SR®

Use of illicit Tapentadol SR® was asked about for the first time in 2017.Lifetime use was reported by 5% (n=4) and recent use by 4% (n=3). The only reported route of administration was oral. Days of use for ranged from two to 12 with a median of three. Just one respondent was able to provide information about the market characteristics of Tapentadol®. They were unable to cite a price, but believed it had remained '*stable'* Availability was described as '*easy'* and having remained '*stable'*. There was no data concerning the source of the drug.

8.7 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 2017, 29% (n=21) of respondents reported a lifetime use of OTC codeine and recent use by 16% (n=12) compared to 6% reporting recent use in 2016. Days of use ranged from two to 180 with a mean of 40 days compared to the 2016 mean of 16 but this was not found to be significant. All respondents reported oral consumption and one of these also reported injecting on two occasions in the previous six months.

8.8 Other opioids (not elsewhere specified)

Other opioids include (but are not limited to) drugs such as opium and pethidine. In 2017, lifetime use of other opioids was reported by 44% (n=33) of the WA IDRS sample. Recent use was reported by 23% (n=17) which was significantly higher than 11% in 2016 (chi sq=4.268, 95% CI 0.0210-0.2915, p=0.04). Average days of use was 31 compared to the previous year's mean of 50 days, but this was not a significant decrease. That this use was licit was reported by 59% (n=10) of those responding and illicit by the remaining 10% (n=7). 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 6% (n=4) in 2016, which was not significantly different from the 11% in 2015. Days of use ranged from one to 90, mean days of use was 24 which was not significantly more than the 2016 mean of five days.
- The proportion reporting illicit use of Physeptone® in the last six months was 3% (n=2), which was unchanged from 2016 This was too small to permit testing for significance.
- Illicit use in the last six months of illicit Subutex® was reported by 10% (n=7), which was not significantly different than the 9% reported in 2016. Days of use ranged from one to 180, with a median of five days, compared to 10 days in 2016.
- Illicit use of illicit Suboxone® in the last six months was reported by 16% (n=12), compared to 7% in 2015. These very small numbers render it difficult to draw firm conclusions. Days of use ranged from one to 180 with a mean of 66.
- The proportion reporting illicit use of morphine in the last six months was 18% (n=13), which was not significantly different to the 16% reported in 2016. Mean days of use was 54, which was not found to be significantly different from the 2016 mean of 31 days although this is likely an effect of the relatively small numbers of respondents.
- Use of illicit generic oxycodone in the last six months was reported by 4% (n=3) which was not significantly different from the 11% in 2016. Median days of use was four compared with 12 the previous year. Use of illicit OP oxycodone in the last six months was reported by 7% (n=5) compared to 9% in 2016. There was a median of 14 days of use. Use of other illicit forms was reported by 7% (n=5) compare to 9% the previous year. The median days of use was four.
- Recent use in the last six months of fentanyl was reported by 7% (n=5) which was not a significant decrease on 17% in 2016. Days of use ranged from one to five with a mean of two days.
- Tapentadol SR® was asked about for the first time in 2017. Recent use was reported by 3% (n=2) with days of use ranging from two to 12 with a median of three.
- Recent use of OTC codeine was reported by 29% (n=21) compared to 6% in 2016. Days of use ranged from two to 180 with a mean of 40 days compared to the 2015 mean of 16 but this was not found to be significant.
- Recent use of other opioids was reported by 23% (n=17) which was significantly higher than the 11% reported in 2016. Average days of use was 31 compared to the previous year's mean of 50 days, but this was not a significant decrease.

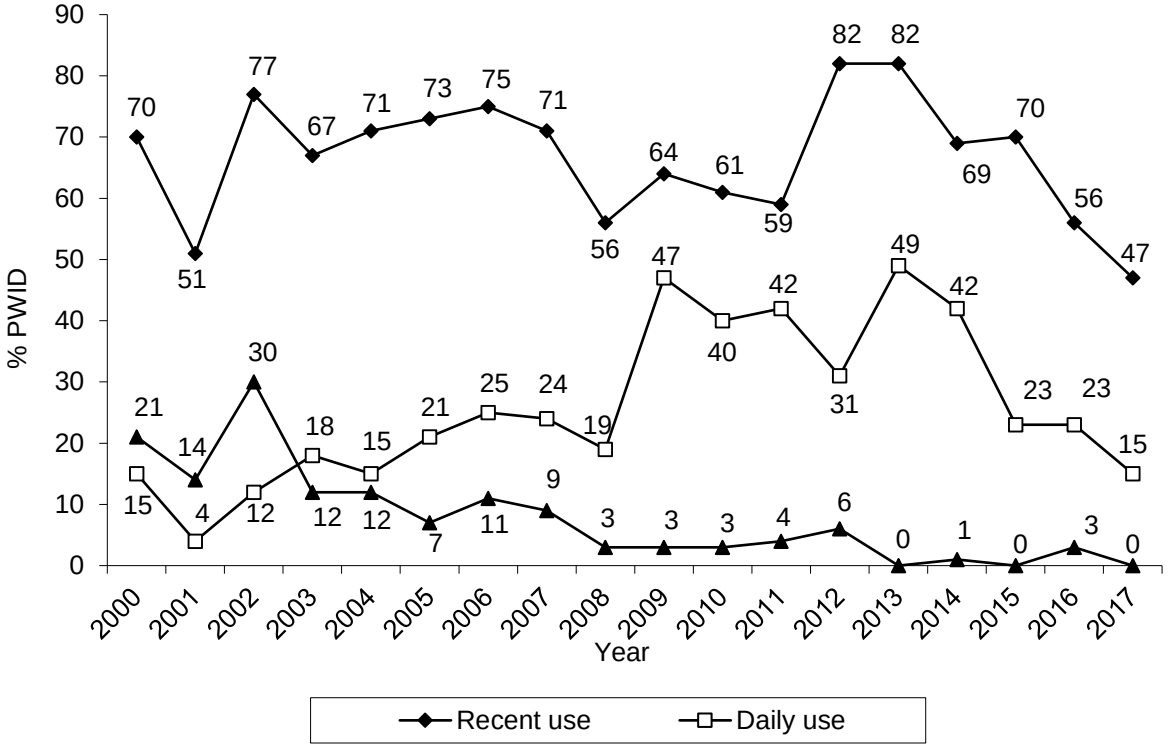
9 OTHER DRUGS

9.1 Benzodiazepines

The majority (59%, n=43) 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 47% (n=34) which not significantly different to the 56% reported in 2016.

Figure 23 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.

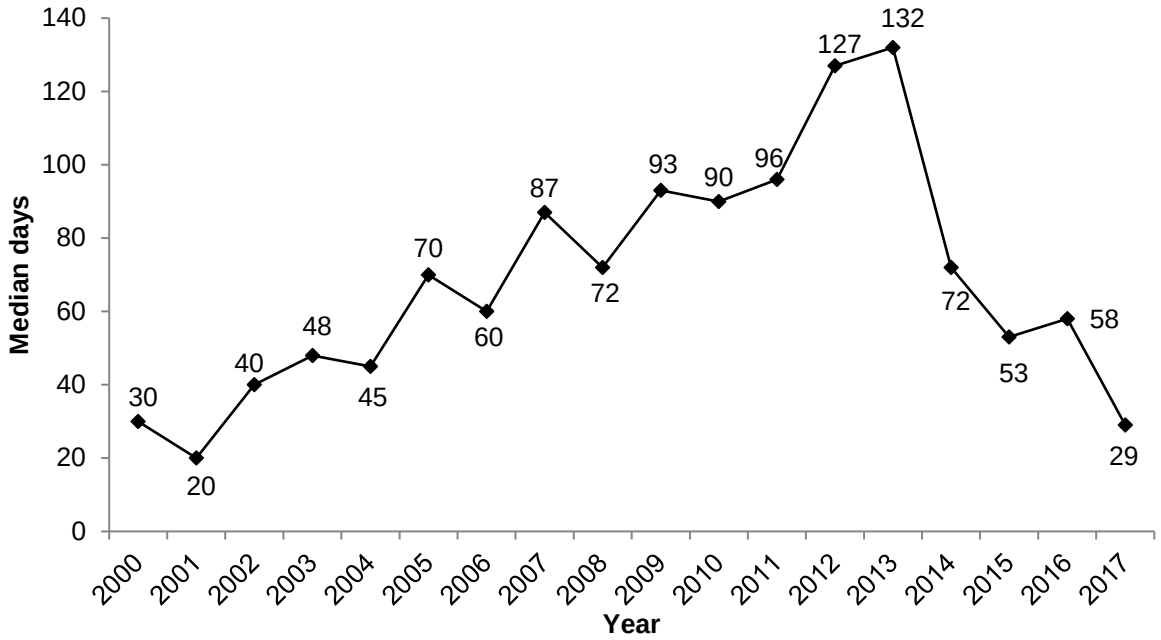
Figure 23: Proportion of PWID reporting any benzodiazepine use (licit or illicit), daily use and injection in the preceding six months, 2000-2017



Source: IDRS user interviews

Days of use ranged from one to 180. Mean days of use of any benzodiazepines was 80 which was not significantly different from the 94 days the previous year. Median days of use are displayed in Figure 24. Of recent users of benzodiazepines, there were 32% (n=11) who reported using benzodiazepines on a daily basis which was comparable to the 40% using daily in the 2016 sample.

Figure 24: Median days use of any benzodiazepines (licit or illicit) in the past six months, 2000-2017



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 43% (n=40) of the 2017 sample (12% licit, 34% illicit). Recent use of any form of alprazolam was reported by 12% (n=9) (3% licit, 10% illicit) which was not significantly less than the 20% in 2016. Mean days of use of prescribed alprazolam was 180, almost twice that of 92 in 2016, but the very small number of recent users do not permit testing of statistical significance. Mean days of use of illicitly obtained alprazolam was 17 which was not significantly different from the 15 days the previous year.

9.1.2 Other benzodiazepines

Lifetime use of benzodiazepines, other than alprazolam, was reported by 53% (n=39) of the 2017 sample (47% licit, 41% illicit). Recent use of other benzodiazepines was reported by 45% (n=39) (36% licit, 30% illicit) which was not significantly different than the 55% reporting recent use of other benzodiazepines in 2016. Licit benzodiazepines were used on a mean of 80 days which was not a significant change from the 2016 mean of 111. Illicit benzodiazepines were used on a mean of 45 days which was not a significant change from the 29 days in 2016. By far the most common form of recently used benzodiazepine was diazepam reported by 90% (n=28) followed by oxazepam (10%, n=3).

There were just four respondents who commented on the market for illicit benzodiazepines in Perth. Prices ranged from one to five dollars per pill of diazepam. There was also one mention of $25 for a bottle of 50 pills. Two respondents thought this price had remained stable while another thought it had increased. Ease of access was described as '*very easy*' or '*easy'*, each nominated by two respondents. All agreed that this availability had remained '*stable'*. In all four cases the benzodiazepines had been obtained from '*friends'*, either '*home delivered'* or from 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 38% (n=28) of respondents. Recent use in the last six months was reported by 7% (n=5) which was not significantly different than the 17% reported in 2016. Of these recent users, four reported recently swallowing illicit prescription stimulants, but there were also three reporting recent injection. Days of use ranged from one to 10 with a mean of five days which was not significantly different from six days in 2016. The main form used remained dexamphetamine with just one respondent reporting their main form to be Ritalin®.

There were no respondents able to provide information on the price or availability of pharmaceutical stimulants in the 2017 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 66% (n=48) of respondents. Recent use was reported by 8% (n=6) which was not significantly different from the 10% reported in 2016. Reported routes of administration were diverse with injecting, smoking and oral consumption each reported by two respondents. Days of use ranged from one to two, but the small number of respondents do not permit for statistical comparisons to the previous year. Forms most used were equally spilt between LSD and DMT, both being nominated by three respondents.

There were no respondents able to provide information concerning price, purity or availability of hallucinogens in the 2017 sample.

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 64% of respondents. Recent use in the last six months was reported by 18% (n=13) which was comparable to the 14% reporting recent consumption of the drug in the previous year. The most common ROA was oral, reported by 92% (n=12) of recent users. There were seven respondents who reported having injected ecstasy in the last six months and one of having snorted it. Days of use ranged from one to 10 with a mean of three which was significantly less than the previous year's mean of 10 days of use ($t=-8.800$, $df=12$, $p<.001$). The most common form consumed was pills.

There was no information provided by users on price, purity or availability 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 19% of the 2017 sample. There were no reports of recent use.

9.6 Alcohol

Lifetime use of alcohol was reported by 90% (n=66) of respondents. Recent consumption was reported by 53% (n=39) which was comparable to 68% the previous year. All respondents who had recently consumed alcohol had swallowed it. Although there were three 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 59 which was comparable to 45 mean days of use reported in 2016. The Alcohol Use Disorders Identification Test-Consumption (AUDIT-C) screen (Bush, et al., 1998) was administered to 54 respondents and revealed that, of the 2017 PWID sample, 34% (n=25) were consuming alcohol at hazardous levels.

9.7 Tobacco & E-cigarettes

Lifetime use of tobacco was reported by 96% (n=70)of the 2017 sample and recent use by 89% (n=65), which was largely unchanged from 85%the previous year. Days of use ranged from 10 to 180 with 75% (n=55) of recent smokers reporting smoking on a daily basis. Mean days of use was 163 not significantly different from 168 in 2016. Lifetime use of electronic cigarettes was reported by 37% (n=27) of the 2017 sample and recent use by 21% (n=15) compared with 24% in the previous year. Days of use ranged from one to 180 with a mean of 21 days which not significantly changed from 31 in 2016. Of these, there were six (43%) of respondents who indicated that they were using e-cigarettes as an aid to ceasing smoking. There were 14 respondents who indicated what their E-cigarette contained. Of these, 79% (n=11) indicated that their e-cigarette contained nicotine, one that it contained nicotine and cannabis, and two that it contained neither.

9.8 Seroquel® (quetiapine)

Lifetime use of illicit Seroquel® was reported by 40% (n=29) of the 2017 sample and recent use was reported by 12% (n=9) compared to 11% in 2016. All reported recent use was by oral dosing with no injection reported. Days of use for illicit Seroquel® ranged from one to 180 with a mean of 47 days which was not a significant change from the mean of 16 days in 2016. It should be considered however, that this may be a false negative arising from a small number of recent users.

9.9 Synthetic cannabis

Lifetime use of synthetic cannabis was reported by 48% (n=35) and recent use by 12% (n=9) which was not a significant change from the 9% in the previous year. Days of use ranged from one to seven with a mean of three days which was significantly less than the 2016 average of seven days ($t=-6.100$, $df=8$, $p<.001$).

Data obtained from ADIS revealed calls related to synthetic cannabis fell substantially from 218 in 2015/2016 to 43.

9.10 New psychoactive substances

Lifetime use of these synthetic drugs was reported by 7% (n=5) compared to 6% of respondents the previous year. There were just no reports of recent use compared to three in 2016. There were similarly no reports of recent use of new synthetic drugs mimicking opiates or of new synthetic drugs mimicking psychedelics.

9.11 Steroids

A lifetime history of use was reported by 4% of the sample (n=3) There were no reports 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.

9.12 Summary of other drug trends

- Recent use of any form of benzodiazepines (licit or illicit) was reported by 47% (n=34). Mean days of use of any benzodiazepines was 80. Reports of recent injection of benzodiazepines remained very low with no reports in 2017. Recent use of any form of alprazolam was reported by 12% (n=9) (3% licit, 10% illicit). Mean days of use of prescribed alprazolam was 180. Mean days of use of illicitly obtained alprazolam was 17. Recent use of other benzodiazepines was reported by 45% (n=39) (36% licit, 30% illicit). Illicit benzodiazepines were used on a mean of 45 days. The most common form remained diazepam.
- Recent use in the last six months of illicit pharmaceutical stimulants was reported by 7% (n=5) which was not significantly less than the 17% reported in 2016. Mean days of use was five days which was not significantly less than the mean of six days reported in 2016.
- Recent use of hallucinogens was reported by 8% (n=6) which was not significantly different from the 10% reported in 2016. Days of use ranged from one to two with a mean of six days but the small number of respondents do not permit for statistical comparisons to the previous year. The hallucinogen reported as most used was LSD.
- Recent use of ecstasy was reported by 18% (n=13) which was comparable to the 14% reporting recent consumption of the drug in the previous year. Mean days of use was three which was substantially different from the previous year's mean of ten days of use. The most common form consumed was pills.
- There were no reports of recent use of inhalants.
- 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 12% (n=9) which was not significantly changed from 11% in 2016. Mean days of use was 47 days which was not a significant change from the mean of 16 days in 2016. However, that this may be a false negative arising from a small number of recent users.
- Recent use of synthetic cannabis was reported by 12% (n=9) which was not a significant change from the 9% in the previous year. Mean days of use was three days which was not significantly different from the 2016 average of seven days.
- There were no references to recent use of new psychoactive substances.

10 HEALTH-RELATED HARMS ASSOCIATED WITH DRUG USE

10.1 Overdose and drug-related fatalities

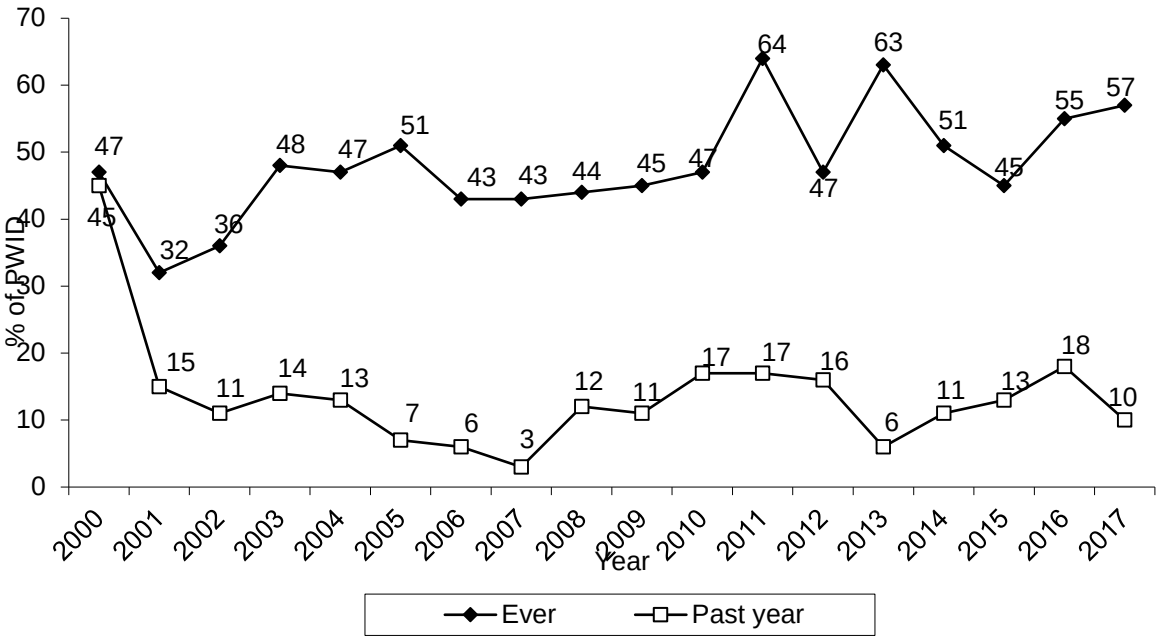
10.1.1 Heroin and other opioids

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 58% (n=42) which was not significantly more than the 55% reported in 2016. Having received naloxone at the most recent overdose event was reported by 54% (n=15) of those with a history of heroin overdose. The median number of times respondents reported ever overdosing on heroin was two compared to three the previous year (range 1-45). Time since the most recent heroin overdose ranged from six months up to 25 years.

There were 10% (n=7) of respondents who had overdosed within the previous twelve months which was not significantly less than the 18% in 2016. Of these, five reported having received naloxone as a response to their most recent overdose. Overdose data since 2000 is displayed in Figure 25.

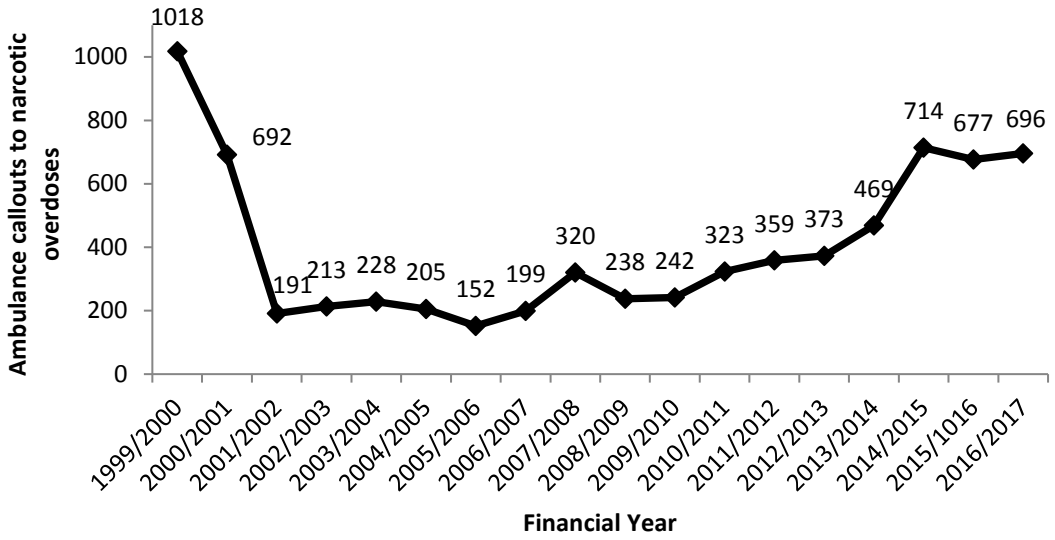
Figure 25: Proportion of WA participants who had ever overdosed, and overdosed in the past 12 months, 2000-2017



Source: IDRS user interviews

Figure 26 presents the number of narcotic overdoses attended by St John Ambulance by financial year from 1999/2000 to 2016/2017. There were 696 overdoses attributed to narcotic drugs attended by ambulance during the 2016/17 period compared to 677 in the previous financial year. Of these narcotic overdoses, 502 were attributed to heroin, thereby accounting for 86% the total number of overdoses attributed to any narcotic in 2016/17.

Figure 26: Number of ambulance callouts to narcotic overdoses, WA, 1999/2000-2016/2017



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

10.1.2 Other drugs

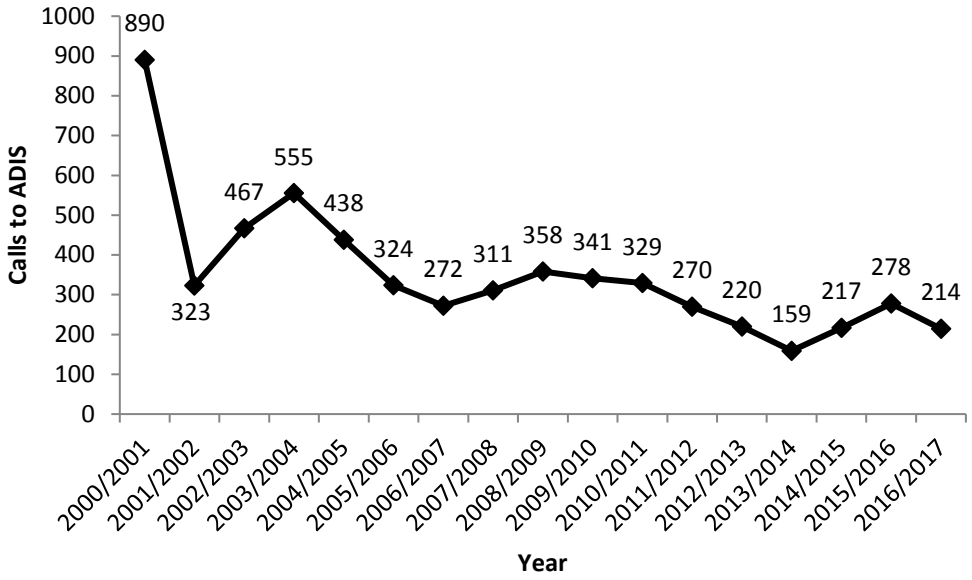
10.1.2.1 Non-fatal overdose

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 opiates was relatively rare with two individuals who had ever overdosed on methadone, and one self-report of overdosing twice on morphine, being the only cases reported. Individual respondents reported a recent history of overdose resulting from the use of crystal methamphetamine, benzodiazepines and ecstasy. There were also two respondents who reported an overdose from a substance that was thought to be methamphetamine at the time of administration, but in retrospect was believed to have been another unknown substance.

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 2016/2017. There were 214 calls to the service with heroin as the primary drug of concern and accounting for 1.03% of all calls received. This can be compared to 2016 when 278 calls were received. This data is shown in Figure 27.

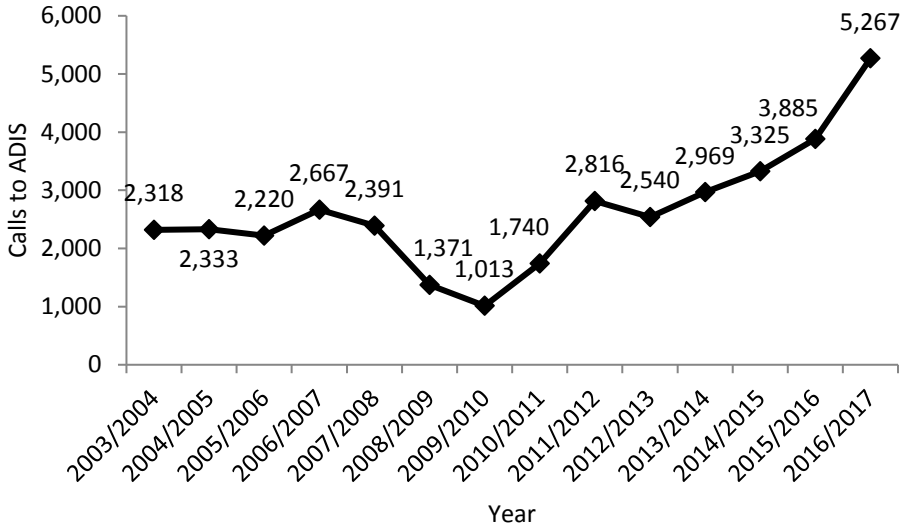
Figure 27: Number of enquiries to ADIS regarding heroin, 2000/2001- 2016/2017



Source: Alcohol and Drug Information Service

Figure 28 presents the number of telephone calls to WA ADIS regarding amphetamines and methamphetamines from 2003/2004 to 2016/2017. It is evident that the number of calls regarding amphetamines has tended to increase since 2009/2010. In the last financial year there were 5,267 calls with amphetamines as the primary drug of concern compared to 3,885 in the previous year, making this the highest number so far recorded. In 2016/2017 amphetamines accounted for 25.4% of calls to ADIS.

Figure 28: Number of enquiries to ADIS regarding amphetamines, 2003/2004-2016/2017

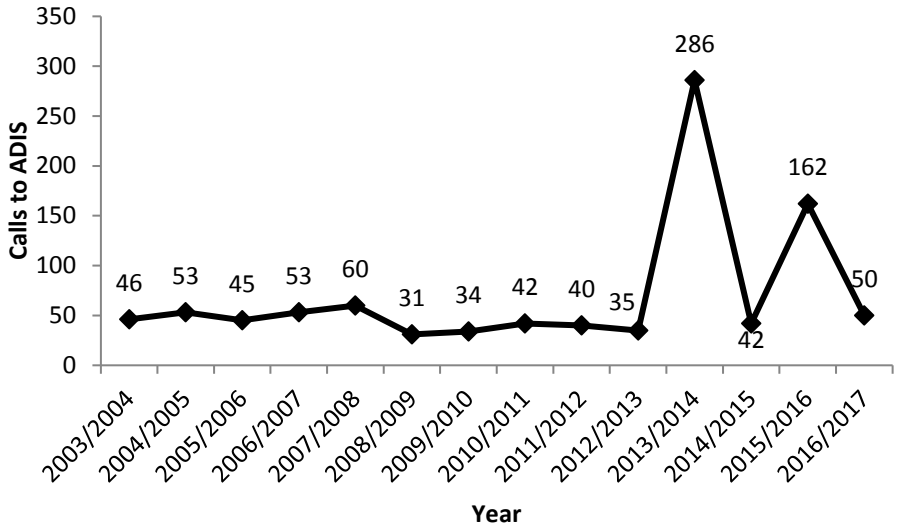


Source: Alcohol and Drug Information Service

Figure 29 presents the number of telephone calls to WA ADIS regarding cocaine from 2003/2004 to 2016/2017. In the last financial year there 50 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.

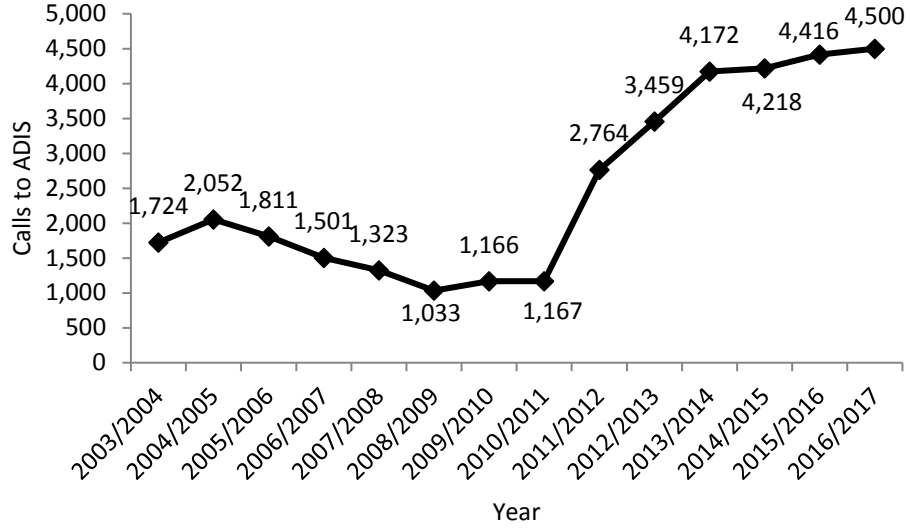
Figure 29: Number of enquiries to ADIS regarding cocaine, 2003/2004 - 2016/2017*



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 30 presents the number of cannabis-related calls received by ADIS from 2003/2004 to 2016/2017. During the 2016/17 financial year calls to ADIS with cannabis as the primary drug of concern continued to increase. In that year there were 4,500 calls compared to 4,416 in the corresponding period the previous year, accounting for 21.7% of all calls received. 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 30: Number of enquiries to ADIS regarding cannabis, 2003/2004-2016/2017*



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 Injecting risk behaviours

10.3.1 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.

Numbers of injecting episodes ranged from twice to 400 with a median of 28 times. The number of occasions for obtaining new needles and syringes ranged from no times to 80 with a median of two times. The number of new needles and syringes obtained ranged from none up to 900 with a median of 100. Only 9% (n=6) reported having trouble obtaining new needles and syringes when they needed them. Having given away or sold needles and syringes to other people was reported by 72% (n=47). The most common injection sites reported at the last injecting event among those responding were the arm (71%, n=52), the hand or wrist (13%, n=9), the leg (6%, n=4) and the neck (4%, n=3). One respondent reported injecting into their chest. The most commonly reported location for the last injection remained a 'private home' (71%, n=52) followed by 'in a car' (10%, n=7), and a public toilet (10%, n=7). Individual respondents also mentioned injecting in 'a car park', 'a hotel room' and 'at work.'

The most common source for new needles in the previous six months was from a needle and syringe exchange, reported by 86% (n=63) of those responding. This was followed by 13% (n=9) who had obtained them from pharmacies, from friends and dealers both reported by 4% (n=3) and individual reports of sourcing needles from relatives, outreach workers, hospitals and from an Aboriginal health service.

A 1ml needle and syringe was by far the most commonly used item of injecting equipment, reported by 92% (n=67) of those responding. Other equipment used in the month preceding the interview are shown in table 17. Despite the low numbers reporting the use of filters during the previous month, 80% (n=58) of those responding indicated that they had access to filters if they wanted them.

Table 17: Items of injecting equipment used in the previous month

Item	n	%
0.5ml needle and syringe	2	3
1ml needle and syringe	67	92
3ml needle and syringe	6	8
5ml needle and syringe	3	4
10ml needle and syringe	6	9
20ml needle and syringe	1	1
50ml needle and syringe	0	0
Detachable needle (tip)	5	7
Winged vein infusion set	2	3
Wheel filter	2	3
Other commercial cotton filter	4	6

10.3.2 Sharing of needles and equipment by IDU participants

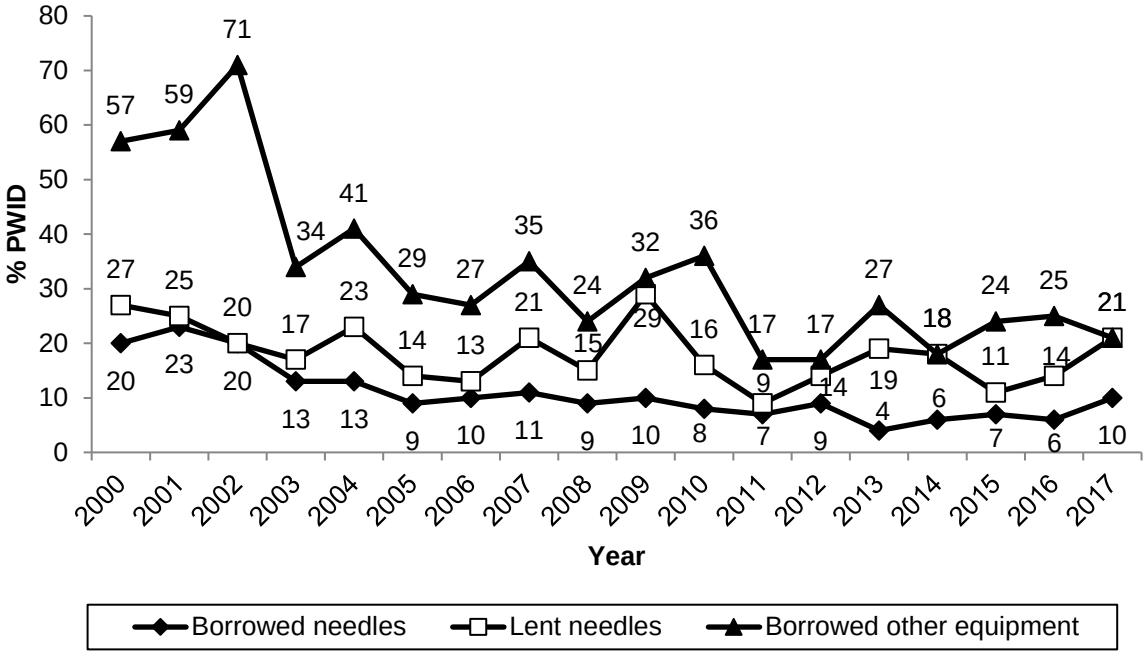
With regard to sharing needles, the vast majority of those responding (90%, n=63) reported that they had not used a needle after someone else in the last month. Of those that did report using a needle after someone else (10%, n=7), reported instances ranging from one respondent who reported using a needle once after someone else, up to one respondent who reported doing so more than ten times. In most cases (n=6) only one person had used the needle before the respondent and in the remaining case the needle had previously been used by two people. This person was reportedly either '*a regular sex partner*' (n=4), '*a relative*' (n=2) or '*a close friend'* (n=1).

The use of other equipment after someone else was reported by 21% (n=15) of respondents. Most commonly, this other equipment consisted of spoons (n=9), water (n=5), tourniquets (n=4), and filters (n=3).

There were 21% (n=15) 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 four, three to five times by three, six to ten times by two and more than ten times by three.

Figure 31 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 21% (n=15) which was not significantly different to the 25% reported in 2016.

Figure 31: Proportion of all PWID reporting sharing injecting equipment in the month preceding interview, 2000-2017



Source: IDRS user interviews

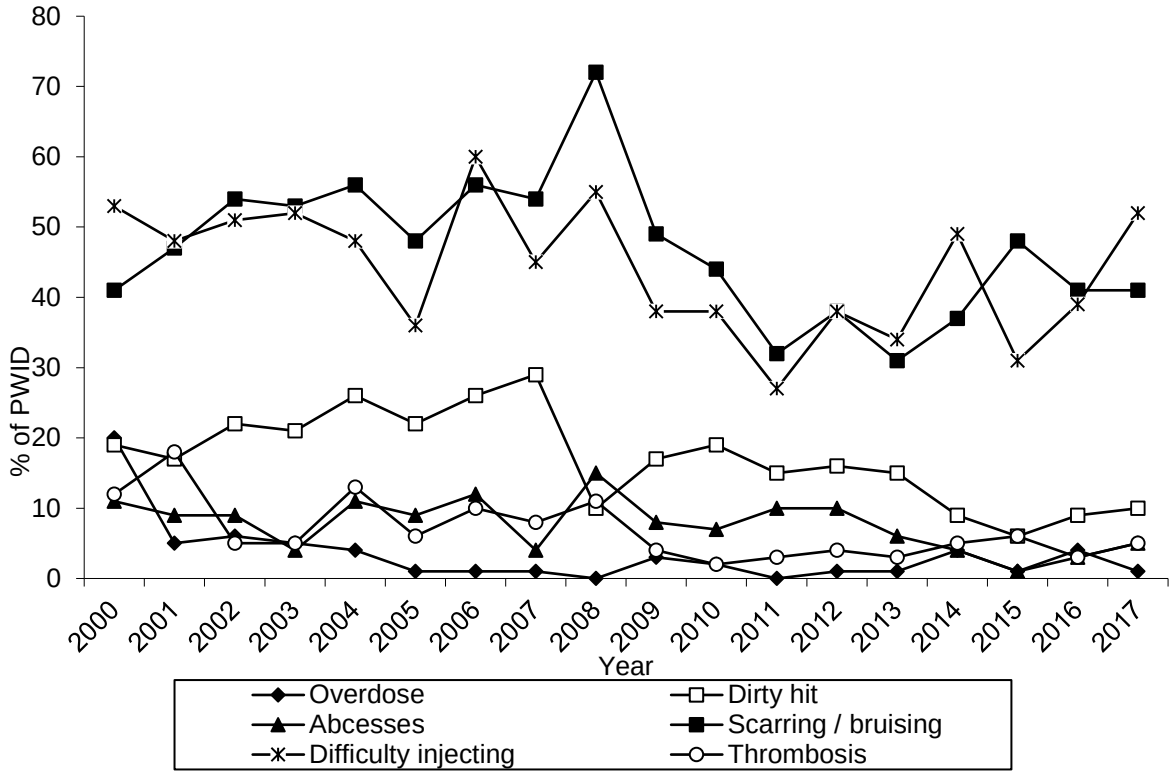
Asked if they had reused their own needles in the last month, 45% (n=33) of those responding indicated that they had which was comparable to the 40% in 2016. The most commonly reused type of needle and syringe was a 1 ml (n=31).

Respondents were asked if they had injected a partner or friend after injecting themselves. Of those who responded, 70% (n=51) said they had not, 21% (n=15) said they had with a new needle, 4% (n=3) said they had with a used needle and one respondents said they had done so with both new and used needles. There were 18% (n=10) of those responding who indicated that someone else had injected them after injecting themselves. In eight cases this was with a new needle and individual respondents reported having been injected with either a used needle or with both new and used needles.

10.3.4 Injection-related health problems

Participants were asked about injection-related health problems they experienced in the month prior to interview. In 2017, just one respondent reported an overdose in the month prior to interview compared with three during the previous year. This overdose was attributed to methamphetamine. Ten percent (n=7) of the 2017 sample reported experiencing a dirty hit, which was not significantly different to the 8% in 2016. The drug most commonly implicated in a dirty hit was methamphetamine (n=4), with individual respondents mentioning heroin, morphine and buprenorphine. The other most commonly reported injection problems remained difficulty injecting (n=38) and prominent scarring/bruising (n=30). Smaller numbers reported thrombosis or blood clots (n=4) and abscesses or infections from injecting (n=4). The relative incidence of these injection-related problems since 2000 is presented in Figure 32.

Figure 32: Proportion of PWID reporting injection-related problems in past month, by problem type, 2000-2017



Source: IDRS user interviews

10.4 Mental and physical health problems and psychological distress

10.4.1 Self-reported mental health problems

In 2017, 29% (n=21) of respondents self-reported experiencing a mental health problem in the last six months, which was not significantly less than the 36% in 2016. As in previous years, the most commonly reported mental health problems were depression and anxiety, both reported by 71% (n=15) of those responding. Less common self-reported problems included bipolar disorder (33%, n=7), post-traumatic stress disorder (19%, n=4), panic (14%, n=3), drug-induced psychosis (14%, n=3), paranoia (10%, n=2) and any personality disorder (10%, n=2).

Of those reporting a mental health problem, 67% (n=14) reported attending a professional in relation to the problem. These health professionals were most commonly a general practitioner (n=10), a counsellor (n=4) or a psychiatrist (n=3). Asked if they had been prescribed medication for their condition, 62% (n=13) said they had. Most commonly, these medications were a wide variety of antidepressants, most commonly mirtazapine (n=8), benzodiazepines, primarily diazepam (n=4), and antipsychotics, primarily seroquel (n=7).

10.4.2 The K10 psychological distress scale

The Kessler Psychological Distress Scale or K10 (Kessler & Mroczek, 1994) was designed as a screening tool for assessing psychological distress. It is comprised of 10 items measuring the level of anxiety and depressive symptoms a person may have experienced during the previous four weeks. A five-point Likert scale is used to measure responses from all of the time to none of the time with a maximum possible score of 50. The K10 can be scored according to four distress categories: low=10-15, moderate=16-21, high=22-29, and very

high=30-50. The K10 has been shown to have sound psychometric properties and demonstrated validity in identifying anxiety and affective disorders, as assessed by the Composite International Diagnostic Interview or CIDI (Andrews & Slade, 2001).

In 2017, 70 participants completed the K10 and scores are presented by risk category. The median total score in was 23 which was comparable to 22 from the previous year (range=10-47). In 2017, using the interpretation scheme suggested by Andrews and Slade (2001), 26% (n=16) scored at low or no distress, 17% (n=12) scored at moderate distress, 31% (n=22) scored at high distress and 26% (n=18) scored at very high distress.

10.5 Drugs and Driving

Asked if they had driven a vehicle in the last six months saw 53% (n=39) PWID report that they had done so which was not significantly different from 64% the previous year. Of these, almost a quarter (23%, n=9) had no valid driver's license at the time of the interview. Having driven while over the legal alcohol limit during this time was reported by 13% (n=5) reported having driven while over the legal blood alcohol limit during this time compared with 9% in 2016. The number of days of doing so ranged from one to five. There were 80% (n=31) who reported having driven within three hours of consuming illicit or non-prescribed drugs which was also compatible to the 81% reporting this in 2015. The number of days of doing so ranged from one to 180 (i.e.: every day) with a mean of 82 days. There were five respondents (13%) who reported having been subjected to a roadside drug test in the last six months, but no reports of a positive result. Having been breath tested for alcohol was reported by 41% (n=16), but with only one positive result.

11 Law enforcement-related trends associated with drug use

11.1 Reports of criminal activity among IDU participants

In 2017, 23% (n=17) of respondents reported having been arrested in the past twelve months which was not significantly less than the 24% reported in the previous year. Most commonly, this arrest was for use or possession of drugs (n=7), property crime (n=6), or crimes involving violence (n=3).

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 38% (n=28) which was not significantly different than the 45% reported in 2016. Involvement in dealing drugs was once again the most common class of crime reported by 30% (n=22). Involvement in property crime was reported by 22% (n=16), violent crime by 6% (n=4) and fraud by 11% (n=8). None of these crime categories were found to have significantly changed from in 2015 (Table 18).

Table 18: Criminal activity as reported by PWID participants, 2013-2017

Criminal activity (%)	2013 (N=88)	2014 (N=98)	2015 (N=89)	2016 (N=71)	**2017 (N=73)**
Criminal activity in last month:					
Dealing	34	37	35	39	**30**
Property crime	17	19	14	17	**22**
Fraud	1	5	5	3	**11**
Violent crime	3	7	1	6	**6**
Any crime	40	49	43	45	**38**
Arrested in last 12 months	25	38	25	24	**23**

Source: IDRS user interviews

Frequency of criminal acts was analysed by computing a crime total which at a mean score of 1.23 was not a significant change from the 2016 mean of 1.42, indicating that the frequency of criminal activity by participants in the PWID survey has remained stable since 2016.

Asked if they had recently been a victim of violent crime in the past six months saw 7 % (n=5) indicating that they had and 80% (n=4) of these reported that this had occurred on a less than weekly basis.

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