WESTERN
AUSTRALIA

J. Fetherston and S. Lenton

WA DRUG TRENDS 2015
Findings from the
Illicit Drug Reporting System (IDRS)

Australian Drug Trends Series No. 151

WESTERN AUSTRALIAN DRUG TRENDS 2015

Findings from the Illicit Drug Reporting System (IDRS)

James Fetherston and Simon Lenton

National Drug Research Institute, Curtin University

Australian Drug Trends Series No. 151

ISBN 978-0-7334-3630-7

Suggested citation: Fetherston, J. and Lenton, S. (2016). Western Australian Australian Drug Trends 2015. Findings from the Illicit Drug Reporting System (IDRS). *Australian Drug Trend Series No. 151.* Sydney, National Drug and Alcohol Research Centre, UNSW Australia.

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.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGEMENTS

In 2015, the Illicit Drug Reporting System Project was supported by funding from the Australian Government under the Substance Misuse Prevention and Service Improvement Grants Fund. The National Drug and Alcohol Research Centre (NDARC), UNSW Australia, coordinated the IDRS. The IDRS team would like to thank the Australian Government Department of Health for their continued assistance and support throughout the year.

The authors would like to thank the Chief Investigator Dr Lucy Burns and the National Coordinators Natasha Sindicich and Jennifer Stafford for their support and assistance throughout the project, and Amanda Roxburgh for her help with access to, and analysis of indicator data.

The authors would also like to thank the many other individuals and organisations who provided assistance during the project. These included:

- the people who inject drugs (PWID) and key experts who participated in the project for sharing their knowledge and experience of the illicit drug scene in Perth;
- the Western Australian Substance Users Association (WASUA) for its continued assistance in recruitment of PWID;
- the agencies and pharmacies throughout the Perth metropolitan area that provided assistance with the recruitment of PWID for participation in the project;
- Phil Townsend (St John Ambulance Australia), Faye Thompson (Sexual Health and Blood-borne Virus Program) and Stacie Childs (Alcohol and Drug Information Service) and the other organisations and individuals who generously provided indicator data for inclusion in the report; Chelsea Bramich and Elizabeth McGechy for their assistance in conducting PWID interviews for 2015; Marina Nelson for her assistance in conducting key expert interviews; and
- all who have been involved in the IDRS in previous years, including the previous chief investigators Professor Wayne Hall, Professor Shane Darke and Professor Louise Degenhardt, the previous national coordinators Dr Libby Topp, Ms Courtney Breen, Ms Jennifer Stafford, Ms Susannah O'Brien and Ms Emma Black; and the many other research personnel around the country who also contributed greatly to the IDRS in previous years.

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
BPI	Brief Pain Inventory
CI	Confidence interval
CIDI	Composite International Diagnostic Interview
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
MCS	Mental Component Score
MDMA	3, 4-methylenedioxymethamphetamine
MDPV	Methylenedioxypyrovalerone
N (or n)	Number of participants

NCHECR	National Centre in HIV Epidemiology and Clinical Research
NCIS	National Coronial Information System
NDARC	National Drug and Alcohol Research Centre
NDSHS	National Drug Strategy Household Survey
NNDSS	National Notifiable Diseases Surveillance System
NPS	New Psychoactive Substances
NSAIDs	Non-steroidal anti-inflammatory drugs
NSP	Needle and Syringe Program(s)
OD	Over dose
OST	Opioid Substitution Therapy
OTC	Over the counter
PCS	Physical Component Score
PDI	Party Drugs Initiative
Pharm. Stim.	Pharmaceutical stimulants
PMA	para-Methoxyamphetamine
PTSD	Post traumatic stress disorder
PWI	Personal Wellbeing Index
PWID	People Who Inject Drugs
ROA	Route of administration
SD	Standard deviation
SDS	Severity of Dependence Scale
SPSS	Statistical Package for the Social Sciences
WA	Western Australia
WAPS	Western Australian Police Service
WASUA	Western Australian Substance Users Association

GLOSSARY OF TERMS

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

Guide to days of use/injection

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

*as appropriate

EXECUTIVE SUMMARY

Common terms used throughout the report

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

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

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

Median: The middle value of an ordered set of values

Mean: The average

Frequency: The number of occurrences within a given time period

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

Methodological caveat: non-representative sample

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

Demographic characteristics of injecting drug user participants

In 2015, 89 participants were recruited for the WA IDRS PWID survey. Demographic characteristics of the sample were broadly comparable to those of the previous year. The mean age was 44 years, with 63% male. Almost the entire sample (99%) reported that English was the main language spoken at home and only two respondents identified as Aboriginal or Torres Strait Islander (ATSI). Most (75%) were unemployed and, on average, had 10 years of schooling, and 63% reported having some form of post-high school education. Identifying as heterosexual was reported by 97% which was a significant increase from 85% the previous year ($p=0.01$). Currently being in drug treatment was reported by 36% and a history of prison by 44%. Methadone remained the most common form of drug treatment. The majority of respondents in 2014 were recruited via a Needle and Syringe Program.

Patterns of drug use among the IDU sample

Mean age of first injection remained 20 years. Amphetamines remained as the most common first drug injected, reported by 52% and heroin was reported in this role by 44%. Heroin remained the prime drug of choice in the sample reported by 61%. Methamphetamines were reported as drug of choice by 27% which was a significant increase from 14% in 2014 ($p=0.05$). Injecting was most commonly reported on two to three times a day by 33% which was significantly more than 18% the previous year ($p=0.04$) when '*more than weekly but not daily*' was the most common response reported by 35%. Heroin was the drug most injected in the past month (54%), and, for the seventh year running, the principal drug most recently injected (51%).

In 2015, over half the sample reported use of tobacco, alcohol, cannabis, crystal methamphetamine, any form of methamphetamine, any form of benzodiazepines, or heroin in the last six months.

Heroin

Most primary indicators suggest a continuing gradual resurgence in heroin use among the IDRS samples. Although few of these changes from 2014 attained statistical significance this is likely a reflection of the relatively small sample size. Comparisons with 2014 have been accordingly reported here even if they are not statistically significant, although this is noted.

Lifetime use of heroin had remained stable, reported by 91%. However, recent use of heroin fell from 85% to 75%, thereby returning to 2013 levels. Mean days of heroin use rose from 84 to 100 and daily use among recent heroin users was reported by 23% compared with 19% the previous year. None of these findings concerning recent use of heroin, however, attained statistical significance.

Recent use of heroin on a daily basis was reported by 31% of recent heroin users which was comparable to 25% in 2014. Recent use of homebake was reported by 28% which was not significantly different from 21% the previous year. Mean days of homebake use was 46. White or off-white powder heroin remained the form most used, reported by 46%.

The median price of recent purchases of one gram of heroin remained stable at $600. The greatest proportion of participants reported on the price of a one-quarter gram which had a median price of $150 down from $175 the previous year. Availability was reported as either '*easy'* or '*very easy*' by 88% of respondents in 2015, compared to 92% in 2014 which was not significant, and was generally reported as having been '*stable'*. There was little consensus among users on the current purity of heroin. However, numbers describing it as '*low'* fell in 2015 from 29% to 18%, which while not statistically significant was the least proportion reporting this since 2000. There were 24% describing it as '*high'* and 39% describing it as '*medium'*. There was also little consensus on whether this purity had changed in the last six months, although the most common response (33%) was that it had tended to '*fluctuate'*.

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 96% of the sample and recent use by 71%. Lifetime use of speed powder was reported by 90% and recent use by 34%. Lifetime use of base or paste methamphetamine was reported by 23% and recent use by 2%. Lifetime use of crystal methamphetamine was reported by 88% and recent use by 64%. 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 methamphetamine for both speed and crystal forms remained $100. There was insufficient data to report on price, purity or availability of base. The price of a gram of speed superficially appeared to have fallen from $700 to $475, but in practice, this figure is based on conflicting information from only two respondents and should be treated with scepticism. The median price of a gram of crystal was $700. Opinion on recent changes to the price of speed were divided with reports that it had been '*stable'* or '*decreased'* both provided by 35%. Prices of crystal were generally believed to have remained '*stable'* (58%), followed by 21% who believed it may have '*decreased'*.

The availability of speed was reported as '*easy'* by 44% of respondents whereas it had been reported as '*very easy*' by 54% in 2014. Availability of crystal continued to be reported as '*very easy*' by 56%. The vast majority of respondents reported that availability had remained '*stable'* in the preceding six months for all forms.

Current purity was rated as '*high'* by the greatest proportion of those who responded for crystal (51%). Speed purity was generally rated as being of '*high'* purity by 35%. While recent purity of speed was generally described as '*fluctuating'* (50%, there was little consensus on crystal with 34% reporting that purity had '*increased'* and 30% describing it as '*fluctuating'*.

Cocaine

Lifetime history of cocaine use was reported by 71% of the sample and recent use by 11%. Mean days of use in the last six months remained low, at two. The most commonly used form as reported by all of those responding was powder. Only one respondent reported on the price of cocaine, citing $250 for a half weight. There was no information on the price of a gram. Availability was reported on by just one respondent who described it as '*difficult'*. Similarly, just one respondent commented on purity, one describing it as '*high''*. 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 96% and recent use by 60%. Mean days of use in the past six months was 84. Use on a daily basis was reported by 31% of those who had recently used cannabis. Hydroponic cannabis remained the most commonly used form, reported by 90% of those responding.

The median price of an ounce of hydro remained stable at $350 for an ounce and $25 for a gram. The price of bush remained $250 an ounce, but the small number of respondents providing this information necessitates treating this information with caution.

Hydro was generally regarded as '*very easy*' to obtain (49%) in comparison to 2014 when 48% described it as '*easy'*. Availability of bush was generally reported '*very easy*' by 53% in contrast to 2014 when it was described as '*difficult'* by 45%. Both hydro and bush appeared to experience an increase in availability since 2014, but these changes did not attain statistical significance, although this is likely a reflection of small numbers responding. These levels of availability for both forms were largely agreed to have remained stable over the previous six months. Potency of hydro was described by 69% of those commenting as '*high'* while potency of bush was primarily described as 'medium' by 47% of those commenting. Potency of both forms was widely held to be '*stable'*.

Illicit use of pharmaceutical opioids

Methadone

Lifetime illicit use of methadone was reported by 45% and recent use by 8%. Average days of recent use was stable at 12. Use of illicit Physeptone® was less common with lifetime use reported by 27% and recent use by 6%. The average days of use during the last six months was eight. The reported price remained one dollar per one millilitre, which has been comparable to previous years, although this data was based on data from only one respondent. That respondent described obtaining illicit methadone as '*very difficult*' and 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 34% and recent use by 8% compared to 19% in 2014 ($p=0.04$), with a mean of eight days of use. Lifetime use of illicit buprenorphine/naloxone (Suboxone®) was reported by 15% and recent use by 1% with a

mean of six days of use. Lifetime use of Suboxone® film was reported by 26% and recent use by 19% with a mean of 38 days of use which was a significant decline from the 2014 mean of 93 days of use.

There were no respondents able to provide data on the price of illicit Subutex®. There were only two respondents who provided information concerning the availability of illicit Subutex®, with one describing it as '*difficult'* and the other as as '*very difficult*'.

The median price for an illicit pill of Suboxone® was $50 with availability generally described as '*easy'* or '*very easy*'. The median price of 8 mg Suboxone® film was reportedly $40 and its availability generally described as 'easy' or 'very easy', each respectively reported by 50% and 40%.

Morphine

Lifetime use of illicit morphine was reported by 65% and recent use by 19%. Days of use in the last six months ranged from one to 180, with five reports of use on a daily basis. Mean days of use was 62, which was not found to be significantly different from the 2014 mean of 21 days although this is likely an effect of the relatively small numbers of respondents who had recently consumed illicit morphine.

As in previous years, MS Contin® remained the most common form of morphine with a 100 mg tablet carrying a median price of $80. Of those responding, 50% reported morphine as currently '*easy'* to obtain. Opinion to whether access to morphine had remained 'stable' remained unchanged at 80%.

Oxycodone

Lifetime use of illicit oxycodone was reported by 62% and recent use by 18%. This was unchanged from the previous year. As in previous years, the most commonly reported brand was Oxycontin®. Mean days of use was 37 with two reports of use on a daily basis. The median price of an 80 mg tablet of original formulation Oxycontin® was $60 compared to $80 the previous year. Recent injection was reported by 18% and mean days of use was 37.There was little consensus among users concerning availability.

Fentanyl

Lifetime use of fentanyl was reported by 33% and recent use by 14%. Recent illicit use was reported by nine respondents, compared to licit use by three. Mean days of use was 11 which was significantly less than 30 the previous year ($p=0.03$). No respondents were able to provide price or availability data for illicit fentanyl.

Over the counter codeine

Lifetime use of over the counter (OTC) codeine was reported by 39% and 14% reported consuming them in the last six months. Mean days of use was 29. The only route of administration (ROA) was by oral consumption.

Other opioids (not elsewhere specified)

Lifetime history of using of other miscellaneous opioids was reported by 43% and recent use by 18%. Average days of use was 34 compared to the previous year's mean of 64 days, but the small number of cases do not allow for meaningful testing of statistical significance. Other opiates mentioned included Tramadol® and Panadeine Forte®.

Other drugs

Benzodiazepines

A lifetime use of any benzodiazepine was reported by 82% of the sample and recent use by 70%. Mean days of use was 85. Diazepam remained the most commonly reported form of benzodiazepine.

Alprazolam (Xanax®) was specifically asked about and had been recently used by 21%. Mean days of use of prescribed alprazolam was 61 days. Conversely, mean days of use of illicit alprazolam had remained stable at 13 days.

Lifetime use of benzodiazepines, other than alprazolam, was reported by 83% and recent use by 70%. Licit benzodiazepines were used on a mean of 98 days and illicit benzodiazepines were used on a mean of 24 days.

The price of most benzodiazepine tablets was reportedly one to two dollars. There was little consensus concerning current availability.

Pharmaceutical stimulants

Lifetime prevalence of illicit pharmaceutical stimulants by the sample was reported by 51%, and recent use by 11% which was significantly less than the 24% the previous year ($p=0.03$). Mean days of use was six which was significantly less than the average of 13 days of use in 2014 $p=0.008$). The main form remained dexamphetamine. The two respondents who talked about the market for illicit pharmaceutical stimulants reported paying $300-$350 for a bottle of 100 tablets. Both described ease of access as '*difficult*'.

Hallucinogens and ecstasy

Lifetime use of hallucinogens was reported by 79% and recent use by 7% for a mean of four days. The most commonly reported hallucinogen was lysergic acid diethylamine (LSD).

A lifetime history of having consumed ecstasy was reported by 76% and recent use by 9%. Ecstasy was taken on a mean of three days of use. All of this ecstasy was in pill form, with the most common ROA being oral.

Inhalants

Lifetime use of inhalants was reported by 17% of the WA sample and recent use by 3% with days of use ranging from one to three. The nature of the inhalants used was not specified.

Alcohol and tobacco

Lifetime use of alcohol was reported by 99% of the WA sample and recent use was reported by 58%. The average number of days used in the last six months was 52. There were seven respondents who reported drinking on a daily basis. Use of the Alcohol Use Disorders Identification Test-Consumption screen (AUDIT-C) revealed that 37% of those responding were consuming alcohol at potentially harmful levels.

A lifetime history of having smoked tobacco was reported by 99% and recent use by 93%. Virtually all of these respondents smoked on a daily basis with 171 average days of use.

Lifetime use of electronic cigarettes was reported by 30% and recent use by 16% Mean days of use was 31.

Seroquel® (Quetiapine)

A lifetime history of illicit Seroquel® was reported by 35% and recent use by 11%. Mean days of use was 19. There were no reports of recent Seroquel® injection.

Synthetic cannabis

Lifetime use of synthetic cannabis was reported by 20% and recent use by 7%, which was significantly less than 22% in 2014 ($p<0.01$). Days of use ranged from one to 60 with a mean of 12 days. There is some evidence that a number of users have begun referring to synthetic cannabis as "Kronic" regardless of the actual brand being consumed.

New psychoactive substances

Lifetime use of these synthetic drugs was reported by 3% compared to 11% the previous year. There were two reports of recent use. Mean days of use was four. The substances consumed were "*bath salts*" and MDPV.

Steroids

A lifetime history of use was reported by 6% of the sample (n=5) There were only two 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 45%. The median number of overdoses was three times. A heroin overdose in the past year was reported by 13%. Data from the ambulance service indicated that there were 714 narcotic overdoses attended by the ambulance service in WA in the 2014/15 financial year compared with 469 the previous year. In 530 of these cases, the narcotic involved was known to be heroin. The most recent available data from the Australian Bureau of Statistics reveals that in 2011 there were 88 fatal overdoses attributable to opioids among persons aged 15-54 in WA compared to xx in 2014. This year's figure was the highest since 72 deaths in 2000. In terms of rates per million population, this equates to 65.1 deaths, compared to the 2010 national rate of 65.9. This was the highest rate reported in Australia, followed by Victoria with 56.0 per million.

A lifetime history of overdose on any other drug was relatively rare with three self-reports of overdosing on oxycodone, two on methadone, and individual respondents reporting a lifetime history of overdosing on morphine, speed, alcohol and cannabis.

Calls to ADIS

Data from the WA Alcohol and Drug Information Service (ADIS) revealed an increase in the 2014/15 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 very low compared to the apparent surge the previous year which was attributed to a very large number of calls being made to the service by one single individual. Calls with cannabis as the primary drug of concern remained high but stable. Increases over the last few years are largely a reflection of the ADIS cannabis data now including calls to the Cannabis Intervention Requirement Scheme (CIRS).

Hospital admissions

The rate per million persons aged 15-54 years of hospital admissions in which the principal diagnosis was opioid-related in WA fell for a third year running and in 2013/14 were 299 compared to an increasing national rate of 459. Numbers of amphetamine-related hospital admissions in WA stabilised from 360 in 2012/13 to 361 in 2013/14. Compared to the national rate of 342 per million, WA continued to exhibit higher rates although the difference is rapidly diminishing. In 2013/14 there were six cocaine-related hospital admissions per million population in WA compared with the national rate of 34 per million, which although modest was the highest rate so far recorded. WA rates per million for cannabis-related hospital admissions were 138 compared with the national rate of 221, a reduction in the WA rate from a high of 173 in 2010/11 while the national rate has continued to increase since 2007/08.

Injecting risk behaviours

The median number of injections in the month prior to interview was 30. Respondents typically acquired new needles a median of two times, obtaining a median of 100 new needles in the last month of which around one-fifth were given away. Some 10% of respondents reported having difficulty accessing new needles in the past month. Needle and syringe exchanges remained the principal source of new injecting equipment. Data from the Sexual Health and Blood-borne Virus Program indicates that a total 5,445,543 needles were distributed in WA during the 2013/14 financial year, up from 5,047,054 in the previous corresponding period.

In 2013, the vast majority (92%) 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 once to more than ten. Reporting the use of other equipment after someone else was reported by 32% of respondents. There were 11% of respondents who reported that someone else had used a needle after them in the last month. That this had happened once was reported by five respondents, twice by one, three to five times by three, and more than ten times by one. Sharing of other equipment was reported by 32%. Reuse of respondents' own injecting equipment was reported by 63%.

In WA, the hepatitis C virus (HCV) continues to be more commonly notified than the hepatitis B virus (HBV). The prevalence of human immunodeficiency virus (HIV) among those people who inject drugs in Australia has also remained stable at relatively low rates over the past decade, with HCV more commonly reported. Data from the National Notifiable Diseases Surveilance System shows a slight decrease in numbers of unspecified cases of both HBV and HCV. While numbers of incident cases of HBV remained low and stable, there were 203 incident cases of HCV reported in 2015 which was the highest so far recorded per year in WA.

Among the WA sample interviewed as part of the 2015 IDRS, the most commonly reported injection-related problems in the past month were scarring/bruising (n=42) and difficulty injecting (n=28). The proportion reporting a dirty hit did not change significantly, being 9% in 2014 compared to 6% in 2015 with the most commonly implicated drugs being heroin, methamphetamine and Suboxone®.

Mental health problems and psychological distress

Mental health problems were reported by 36% of respondents in 2015. As in previous years, the most commonly reported problems were depression and anxiety. Of those that self-reported a mental health problem, 72% reported attending a professional in relation to the problem.

According to the Kessler Scale of Psychological Distress (K10), 51% of the 69 responding in 2015 were at high' or 'very high' risk of psychological distress.
That their general health was '*excellent'* as measured by self-report was reported by 6% (n=4), as '*very good*' by 10% (n=7), as '*good'* by 42% (n=29), as '*fair'* by 29% (n=20), and as '*poor'* by 13% (n=9).

Driving risk behavior
Having driven a vehicle in the last six months was reported by 67% of the 2015 user sample. Of these, 20% reported not possessing a valid drivers' license. There were no reports of having driven over the legal alcohol limit during this time. Having been random breath tested was reported by 11 respondents, all with a negative result. Driving after consuming illicit drugs was reported by 76% of these respondents on a median of 48 days. The most common drugs mentioned in this context were heroin, crystal methamphetamine, cannabis, speed and methadone. There were two reports of having been subjected to a roadside drug test, both with a negative result.

Law enforcement trends
In 2015, 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 43%. As in previous years, the most common form of criminal activity was dealing drugs.

In 2013/14, law enforcement data for WA indicated that the number of drug arrests for heroin had decreased, and arrests for amphetamine-type stimulants and cocaine had increased. Cannabis arrests appeared to have substantially increased, but this is likely due to the number of Cannabis Intervention Requirement Scheme (CIRS) not separated out from actual arrests at time of writing.

Special topics of interest

Naloxone program and distribution
Of those 74 participants responding, 92% had heard of naloxone which was generally understood to '*reverse the effects of heroin*'. Having been resuscitated with naloxone was reported by 8%. Awareness of naloxone training programs was reported by 70%, with completion of such a program reported by 12%. Of these, 36% reported having used naloxone to resuscitate another person from an opiate overdose.

Of those who had not participated in training, 66% said they would be willing to undergo training and of these, 85% indicated they would carry naloxone on their person. Those who had not completed training were asked what they would do in the event of an overdose, the most common response being to call an ambulance (95%).

Hepatitis C and treatment
Respondents were asked a series of true or false questions exploring their knowledge of HCV. For the most part the level of understanding appeared to be reasonable especially with regards to understanding that a lack of symptoms did not equate to having cleared the virus or to not being infectious. A number of respondents appeared to under estimate the effectiveness of treatment and rates of auto remittance.

Oxycontin® use and injection
In early 2014, oxycodone was reformulated with a view to rendering it uninjectable. A series of questions were appended to the IDRS survey designed to assess numbers of PWID who had tried the reformulated product and how difficult they had found it to inject compared to the original.

Although a wide range of forms of oxycodone were asked about, only Endone® 5 mg, Oxynorm®, Oxycontin® original formulation® and Oxycontin reformulation® had a substantial number of respondents with a history of having used them recently. In all cases, there were more users of non-prescribed forms of oxycodone than of those legitimately obtained. Conversely, days of use for prescribed forms were invariably higher than for non-prescribed. The most commonly used form was non-prescribed reformulated Oxycontin®. It was noted that reformulated Oxycontin® was rated as much more difficult to inject than generic oxycodone. This difficulty associated with injection was not apparent however with Oxynorm®.

1 INTRODUCTION

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

The IDRS is funded by the Australian Government Department of Health (AGDH) under the Substance Misuse Prevention and Service Improvement Grants Fund. The project is coordinated at the national level by the National Drug and Alcohol Research Centre (NDARC) at the University of New South Wales, thereby ensuring that comparable data is collected in every jurisdiction in Australia.

The IDRS commenced in New South Wales (NSW) in 1997 and has been conducted in Western Australia (WA) since 1999, with the full People Who Inject Drugs (PWID) interview component introduced the following year. This report presents the findings of the last 16 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 (2016).

Both IDRS and EDRS jurisdictional and national reports can be downloaded from the NDARC website: http://ndarc.med.unsw.edu.au

1.1 Study aims

As in previous years, the specific aims of the WA component of the 2015 IDRS were:

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

1.2 Methodological caveat – non representative sample

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

2 METHOD

Three data collection methods are used in the IDRS:

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

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

2.1 Survey of People Who Inject Drugs

The user survey consisted of face-to-face interviews with regular PWID from Perth between June and August 2015. In 2015, 89 regular PWID were recruited for the WA IDRS. Subjects were recruited through flyers distributed at Needle and Syringe Programs (NSP). Snowballing techniques were also utilised. Potential participants were screened upon contact with researchers to ensure they fulfilled the participation criteria. Criteria were having injected at least monthly in the six months prior to interview, having been resident in the Perth metropolitan area for no less than twelve months prior to interview, and being a minimum of 16 years of age. Ethics approval was granted from the Curtin University Human Research Ethics Committee (HR28/2012). This sampling strategy has produced demographic characteristics comparable to PWID interviewed in preceding years.

The interview schedule included sections on demographics; drug use history; the price, purity and availability of illicit drugs; criminal activity; injection risk-taking behaviour; health-related issues; driving risk behaviour; and experiences with law enforcement. Interviews took approximately an hour to complete and participants were reimbursed $40 for their time and travel expenses. Descriptive analyses of the quantitative data derived from the IDU survey were conducted using IBM SPSS Statistics V.22 for Windows. Confidence intervals (CI) were calculated using an Excel spreadsheet available at http://www.cebm.net/index.aspx?o=1023 (Tandberg).

2.2 Survey of Key Experts

In 2015, 13 Key Expert (KE) interviews were conducted. Eligibility for KE participation in the study was having at least weekly contact with illicit drug users in the six months prior to interview and/or contact with 10 or more illicit drug users in that time. KE interviews were either conducted in person or over the telephone subject to convenience and availability. Interviews took approximately 20-30 minutes, with KE invited to comment on drug use patterns, drug availability, criminal behaviour, health and other issues affecting the illicit drug users with whom they had contact. KE in 2015 consisted of needle exchange workers, drug treatment workers, counsellors, outreach workers, crowd controllers, emergency department workers, law enforcement workers and drug analysts for the WA Police.

2.3 Other indicators

Secondary data sources were examined to complement and validate the data collected from both the IDU and KE surveys. Data were utilised that provided indicators of illicit drug use

and related harms, and included law enforcement data, national survey data and health data.

The selection criteria to determine what sort of indicator data should be included in the IDRS were developed in the pilot study (Hando et al., 1997b). Where possible, information is provided in financial year format to cover the same time period as that covered by the study. A number of sources provided indicator data for the 2015 IDRS:

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

2.4 Data analysis

The PWID participant survey results are used as the primary basis on which to estimate drug trends. These participants provide the most comparable information on drug price, availability and use patterns in all jurisdictions and over time. However, purity of drug seizures data provided by the ACC, although not a random sample of all seizures, is an objective indicator of drug purity, and such data are also presented in this report. Other indicator data are reported to provide a broader overview and a basis against which trends in PWID participant data may be contextualised. KE data are discussed within the individual jurisdictional reports to provide a context around the quantitative data from the PWID surveys.

All data requiring comparison of means were analysed using t-tests with Statistical Package for the Social Sciences 22.0 (SPSS) for Windows. Chi square analysis was employed for categorical variables. Further analysis was conducted on the main drugs of focus in the IDRS to test for significant differences between 2014 and 2015 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, www.ndarc.med.unsw.edu.au.

3 DEMOGRAPHICS

3.1 Overview of the People Who Inject Drugs participants

Demographic characteristics of the 89 PWID interviewed in 2015 had no significant differences from the 98 interviewed in 2014 except for an increased proportion of respondents identifying as heterosexual with 97% (n=86) up from 85% in 2014 (χ^2=6.32, 95%CI=0.0353-0.2065, p=0.01). The mean age of the sample was 44 and 63% (n=56) were male. English was the principal language of 99% (n=88). There were 2% (n=2) who identified as Aboriginal or Torres Strait Islander (ATSI). The majority (75%, n=67) were unemployed and the mean weekly income of the sample was $460. Having a Government pension, allowance or benefit was reported by 76% (n=68) of respondents. There was just one respondent who reported having received any income from sex work. Mean years of schooling was 10. Having completed some form of tertiary education after school was reported by 63% (n=66). Most commonly this was a trade or technical qualification, reported by 62% (n=55) of the sample. A history of imprisonment was reported by 44% (n=35) of the 2015 PWID sample which was not significantly different from 51% in 2014. Just over a third of the sample (36%, n=32) were currently in treatment for their drug use which was not a significant drop from 50% the previous year. This data and that from previous years' samples are displayed in Table 1.

Table 1: Demographic characteristics of PWID participants, 2010-2015

	2010 N=100	2011 N=70	2012 N=100	2013 N=88	2014 N=98	**2015 N=89**
Age (mean years, range)	37 (18-63)	40 (21-63)	41 (18-65)	42 (18-66)	43 (19-67)	**44 (26-64)**
Sex (% male)	65	57	68	65	60	**63**
Employment (%):						
Not employed	77	70	79	77	77	**75**
Full time	3	6	6	6	9	**8**
Part time/casual	14	13	12	11	6	**12**
Home duties	1	0	0	0	1	**1**
Student	1	7	2	3	7	**3**
Other	4	3	2	3	0	**0**
Received income from sex work last month	1	3	0	6	1	**1**
Aboriginal / Torres Strait Islander (%)	9	4	1	7	6	**2**
Heterosexual (%)	88	83	87	83	85	**97**
Bisexual (%)	7	6	7	10	7	**3**
Gay or lesbian (%)	5	6	3	6	3	**0**
Other (%)	0	6	3	1	5	**0**
School education (mean no. years, range)	10 (6-12)	10 (7-12)	11 (6-12)	10 (7-12)	10 (6-12)	**10 (6-12)**
Tertiary education (%):						
None	53	37	28	36	37	**26**
Trade/technical	34	36	48	52	48	**62**
University/college	13	27	24	11	15	**12**
Average weekly income	$348	$465	$414	$452	$454	**$460**
Currently in drug treatment^ (%)	47	59	41	59	50	**36**
Prison history (%)	46	36	54	53	51	**44**

Source: IDRS user interviews

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

3.1.1 Current and previous treatment

Some 64% (n=57) of the WA 2015 PWID sample were not currently receiving any treatment for their drug use. Among the 36% (n=32) of PWID who were currently in treatment, methadone remained the most commonly reported treatment by 63% (n=20). This was followed by 22% (n=7) currently prescribed Suboxone® and 6% (n=2) involved in drug counselling. Individual respondents reported being prescribed naltrexone or Subutex®. The mean duration in current treatment was 76 months (range=1-312). There were 12% (n=11) reported having been turned away when trying to access treatment, most commonly due to long waiting lists. Asked how difficult it was to access treatment, 31% (n=26) of those

responding said it was '*difficult'*, followed by 30% (n=25) who said it was '*easy'*, 11% (n=9) who said it was '*very easy*' and 10% (n=8) who said it was '*very difficult*'. There were 19% (n=16) who didn't know. This situation was described as '*stable'* by 37% (n=31) of those responding, while 8% (n=7) thought it had become *'more difficult*' and 4% (n=3) who thought it had become '*easier'*. However, 49% (n=41) said they didn't know. Having been in some form of treatment in the previous six months was reported by 40% (n=36).

Data from the Australian Institute of Health and Welfare (AIHW, 2015a) reveals that in June 2014 there were 3,389 people receiving pharmacotherapy treatment for opioid use in WA compared to 3,286 in 2013. In 2014, 65% of these were receiving methadone, 31% buprenorphine-naloxone and 4% buprenorphine.

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=28) of respondents who reported having participated in the survey in previous years. As in previous years, the majority (60%, n=53) had been recruited to the survey via Needle and syringe programs (NSP). A further 28% (n=25) had heard about it via word of mouth and one other individual had heard about it through other means. Similar to previous years, IDRS recruitment advertising was primarily conducted in NSP sites.

Table 2: Source of recruitment and previous participation in IDRS and EDRS, 2015

Characteristic	2015 N=89
Participated in IDRS in previous years (%)	32
Where found out about IDRS survey (%):	
NSP	60
Word of mouth	28
Chemist	0
Other	1
Unknown	10
Participated in EDRS in previous years (%)	2

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 2015. The mean age of first injection among current PWID was 20 years, which was unchanged from the previous year.

Methamphetamines remained the most common first drug injected, reported by 52% (n=46) which was not significantly different from the 45% reporting it in 2014. Heroin was reported in this role by 44% (n=39) which was relatively unchanged from the previous year. Other substances reported by small numbers of respondents as first drug injected included morphine (n=3) and cocaine (n=1).

Heroin remained the most commonly reported drug of choice reported by 61% (n=54) compared with 65% in 2014 although this was not a significant decrease. Methamphetamines were reported as drug of choice by 27% (n=24) which was a significant increase from 14% in 2014 (χ^2=0.05, 95%CI=0.0108-0.2416, p=0.05) and other opiates were reported as drug of choice by 8% (n=7) which was unchanged from the previous year

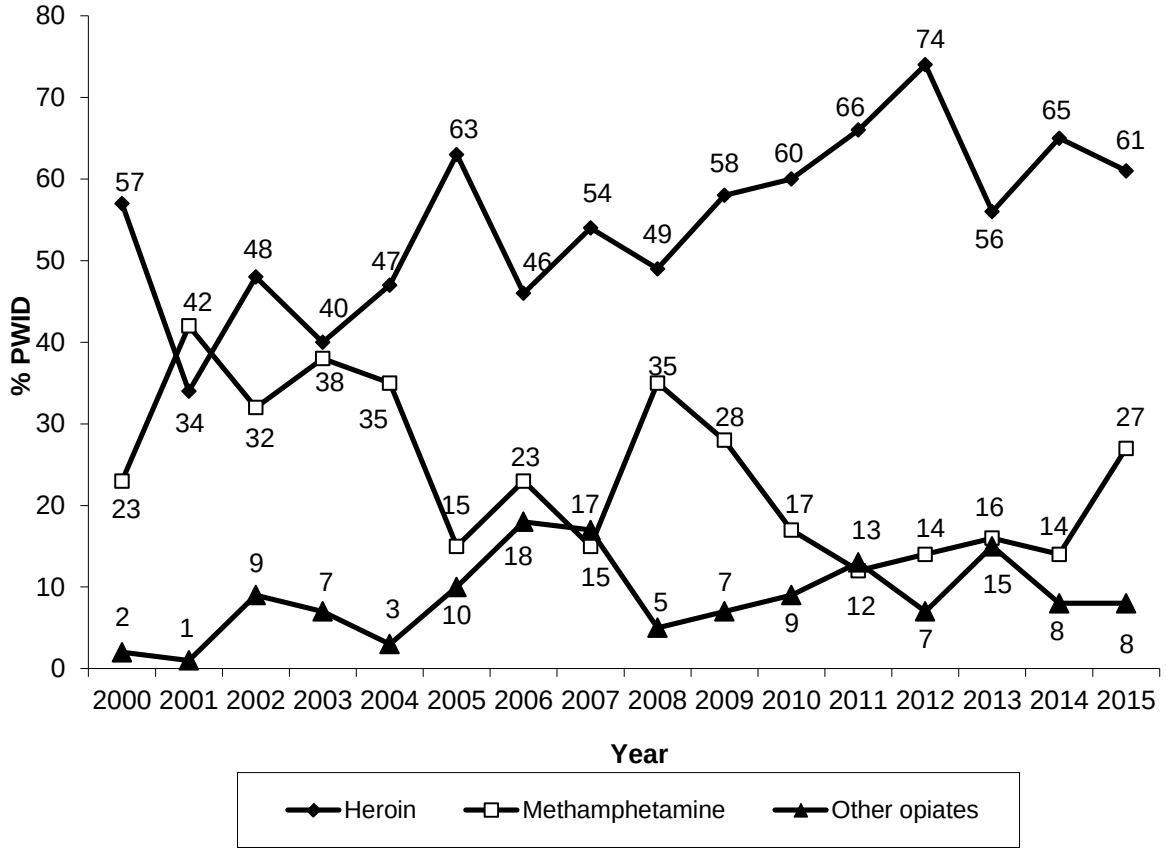
(Figure 1). Injecting two to three times a day replaced '*more than weekly but less than daily*' as the most common frequency of injection, reported by 33% (n=29) of PWID in 2015 which was significantly more than 18% in 2014 (χ^2=4.28, 95% CI=0.0174-0.2634, p=0.04). Those reporting injecting '*more than weekly but less than daily*' fell from 35% in 2014 to 21% (n=19) in 2015, but this change did not attain statistical significance.

Table 3: Injection history, drug preferences and polydrug use of participants, 2010-2015

	2010 N=100	2011 N=70	2012 N=100	2013 N=88	2014 N=98	**2015 N=89**
Age first injection (mean years)	19	20	19	19	20	**20**
First drug injected (%)						
Heroin	39	47	36	42	43	**44**
Amphetamines	53	36	52	39	45	**52**
Morphine	3	6	4	7	3	**3**
Drug of choice (%)						
Heroin	60	66	74	56	65	**61**
Cocaine	0	1	0	1	0	**0**
Methamphetamine (any form)	17	12	14	16	14	**27**
Speed	*11*	*3*	*5*	*6*	*0*	***11***
Base	*0*	*0*	*1*	*0*	*0*	***0***
Crystal methamphetamine	*6*	*9*	*8*	*10*	*14*	***16***
Cannabis	11	7	3	8	5	**2**
Drug injected most last month (%)						
Heroin	47	54	52	50	55	**54**
Cocaine	0	0	0	0	0	**0**
Methamphetamine (any form)	25	21	17	20	23	**27**
Speed	*17*	*7*	*4*	*5*	*3*	***3***
Base	*0*	*0*	*0*	*0*	*0*	***0***
Crystal methamphetamine	*8*	*14*	*13*	*16*	*19*	***24***
Most recent drug injected (%)						
Heroin	38	50	46	47	49	**51**
Cocaine	1	0	1	0	0	**0**
Methamphetamine (any form)	25	19	18	22	28	**30**
Speed	*18*	*4*	*7*	*7*	*6*	**6**
Base	*0*	*0*	*0*	*0*	*0*	**0**
Crystal methamphetamine	*7*	*14*	*11*	*15*	*21*	**25**
Frequency of injecting in last month (%)						
	0	0	1	0	0	**0**
Not injected in last month	21	24	12	17	16	**12**
Weekly or less	35	44	37	44	35	**21**
More than weekly, less than daily	10	11	15	14	21	**29**
Once per day	27	16	27	21	18	**33**
2-3 times a day	7	4	8	5	9	**5**
>3 times a day						

Source: IDRS user interviews

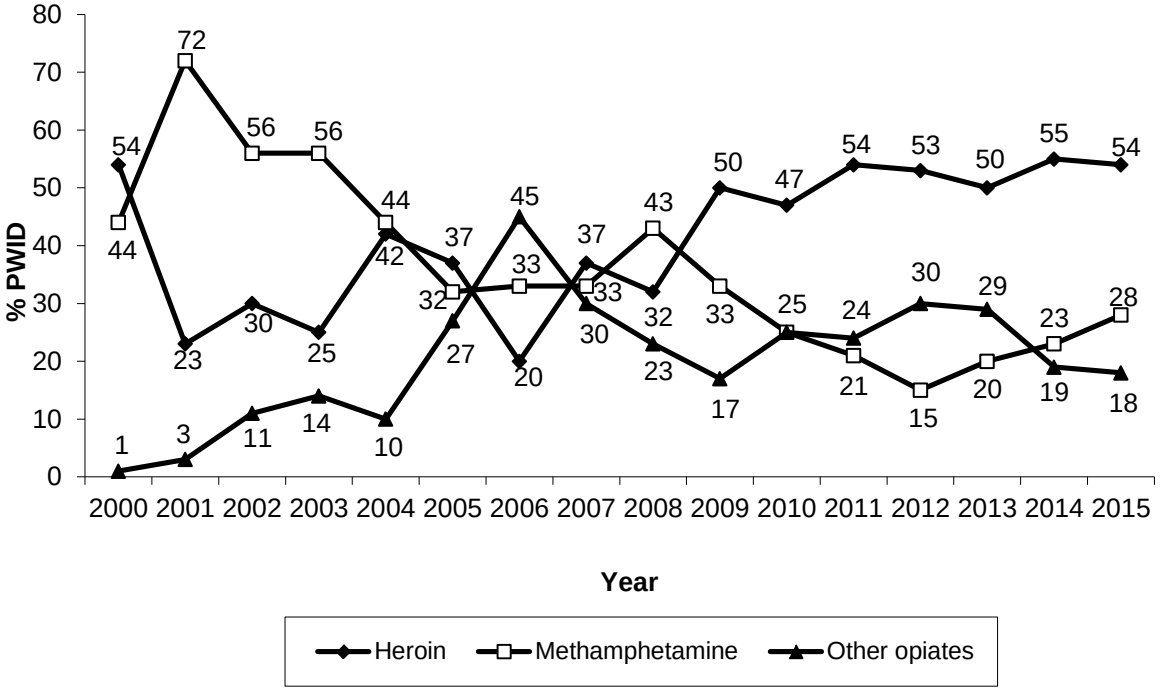
Figure 1: Drug of choice, 2000-2015



Source: IDRS user interviews

Heroin also remained the drug most injected in the month prior to interview for the sixth year running with 54% (n=48) of PWID reporting this which was comparable to 55% in 2014. Methamphetamines were reported as the most injected class of drug by 28% (n=25), which was comparable to 23% in the previous year. Other opiates were reported as the most injected class of drug by 18% (n=16) compared with 19% 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, 2000-2015



Source: IDRS user interviews

Table 4: Drug injected most often in the last month, 2010-2015

Drug %	2010 N=100	2011 N=70	2012 N=100	2013 N=88	2014 N=98	2015 N=89*
Heroin	47	54	53	50	55	**54**
Methamphetamine						
Speed	17	7	4	5	3	**3**
Ice/crystal	8	14	13	16	19	**24**
Buprenorphine**	12	10	5	10	10	**5**
Morphine	5	6	12	8	5	**8**
Oxycodone	1	4	8	7	2	**0**
Cocaine	0	0	0	0	0	**0**
Miscellaneous opiates	1	0	5	5	4	**3**
Other	6	0	0	0	1	**0**

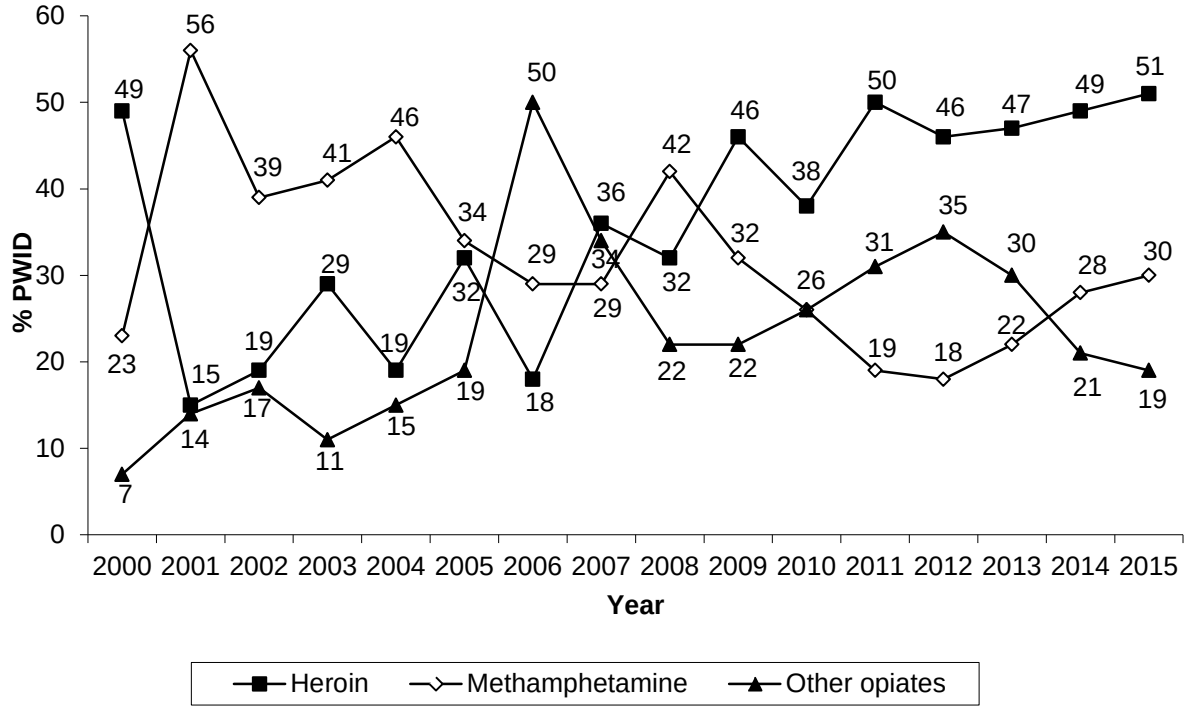
Source: IDRS user interviews

*Totals may not add to 100% due to rounding

** Includes buprenorphine-naloxone (Suboxone®)

In 2015, the greatest proportion of respondents again nominated heroin (51%, n=45) as the drug most recently injected for the seventh year running. This figure was comparable to the 49% of PWID who reported this in 2014, but was also the highest figure so far recorded by the WA PWID sample. Methamphetamines were reported as the class of drugs most recently injected by 30% (n=27) which was comparable to 28% in 2014.Other opiates were reported in this context by 19% (n=17), compared with 21% the previous year (Figure 3). These data are somewhat different from the most recent WA NSP survey figures collected the previous year which found the most common last drug injected to have been methamphetamine (35%), equal to heroin (35%), and other opiates (9%) (Iversen & Maher, 2015).

Figure 3: Drug last injected prior to interview, 2000-2015



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 81% (n=72) in 2015, which was not significantly different to 83% in 2014. Much smaller numbers of PWID nominated other locations.

Table 5: Proportion of participants reporting the last location for injection, 2010-2015

Location	2010	2011	2012	2013	2014	2015
Private home	80	75	79	84	83	**81**
Street/car park/beach	6	2	5	3	5	**3**
Car	11	11	9	9	10	**14**
Public toilet	3	6	4	3	2	**3**
Other	0	6	3	1	0	**0**

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 $1000. Of those who had spent any money, the average amount was $175 which was not significantly different from the 2014 average of $151.

3.2.3 Drug use history of the IDU sample

The drug use histories of PWID participants in the WA IDRS in 2015, including route of administration (ROA), are presented in Table 6. Over one-half of the 2015 sample had used the following drugs in the last six months: tobacco (93%, n=83), heroin (75%, n=67), methamphetamines (71%, n=63), benzodiazepines (70%, n=62), cannabis (60%, n=53), and alcohol (58%, n=52). Further discussion of the use and market characteristics of each drug type can be found under the relevant section heading in the report.

Table 6: Drug use history of the PWID sample, 2015

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 mth %	Used^ last 6 mths %	Mean (median) days used^ in last 6 mths*
Heroin	91	91	75	99 (90)	2	0	2	75	100 (95)
Homebake heroin	74	73	28	46 (8)	0	0	0	28	46 (8)
Any heroin (inc. homebake)	*92*	*92*	*75*	*114 (120)*	*2*	*0*	*2*	*75*	*114 (120)*
Methadone (prescribed)	55	15	5	43 (48)			23	23	166 (180)
Methadone (not prescribed)	45	24	2	30 (30)			6	8	12 (7)
Physeptone® (prescribed)	15	8	0	-	0	0	1	1	14 (14)
Physeptone® (not prescribed)	27	18	3	12 (3)	0	0	3	6	8 (3)
Any methadone (inc. Physeptone®)	*73*	*38*	*9*	*33 (27)*	*0*	*0*	*29*	*30*	*126 (180)*
Buprenorphine (prescribed)	29	18	3	107 (120)	0	0	3	3	117 (123)
Buprenorphine (not prescribed)	34	29	7	41 (8)	0	0	2	8	36 (8)
Any buprenorphine (exc. buprenorphine-naloxone)	*52*	*38*	*9*	*65 (16)*	*0*	*0*	*5*	*10*	*62 (12)*
Buprenorphine-naloxone tablet (prescribed)	17	9	0	-	0	0	1	1	4 (4)
Buprenorphine-naloxone tablet (not prescribed)	15	15	1	6 (6)	0	0	0	1	6 (6)
Any buprenorphine-naloxone tablet	*28*	*20*	*1*	*6 (6)*	*0*	*0*	*1*	*2*	*5 (5)*
Suboxone® film (prescribed)	*21*	*10*	*2*	*102 (102)*	*0*	*0*	*8*	*8*	*100 (90)*
Suboxone® film (not prescribed)	*26*	*20*	*16*	*43 (9)*	*0*	*0*	*7*	*19*	*38 (6)*
Any Suboxone® film	*39*	*23*	*18*	*50 (12)*	*0*	*0*	*15*	*27*	*56 (13)*
Any buprenorphine-naloxone	*42*	*25*	*18*	*59 (14)*	*0*	*0*	*16*	*28*	
Morphine (prescribed)	29	25	6	59 (14)	0	0	2	7	79 (52)
Morphine (not prescribed)	65	61	18	66 (12)	0	1	2	19	62 (12)
Any morphine	*78*	*71*	*23*	*71 (17)*	*0*	*1*	*4*	*25*	*73 (17)*
Oxycodone (prescribed)	24	17	5	60 (44)	0	0	9	9	134 (180)
Oxycodone (not prescribed)	62	54	16	31 (5)	0	0	10	18	37 (6)
Any oxycodone	*73*	*60*	*18*	*38 (5)*	*0*	*0*	*18*	*25*	*65 (21)*
Fentanyl	33	25	12	7 (5)	0	0	0	14	11 (6)
OTC codeine	39	2	0	-	0	0	14	14	29 (4)
Other opioids	43	7	0	-	0	1	18	18	34 (4)

Source: IDRS user interviews

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

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

* Use on a daily basis is 180 days

Table 6: Drug use history of the PWID sample, 2015 (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	90	88	34	43 (12)	6	6	2	34	45 (13)
Amphetamine liquid	11	10	0	-			0	0	-
Base/point/wax	23	21	2	25 (25)	1	0	0	2	25 (25)
Ice/shabu/crystal	*88*	*83*	*62*	*44 (14)*	19	0	1	*64*	*45 (14)*
Any form methamphetamine[#]	*96*	*93*	*68*	*52 (24)*	*21*	*6*	*3*	*71*	*53 (24)*
Pharmaceutical stimulants (prescribed)	10	5	1	12 (12)	0	1	2	3	129 (180)
Pharmaceutical stimulants (not prescribed)	51	23	5	5 (5)	0	0	8	11	6 (5)
Any form pharmaceutical stimulants	*55*	*27*	*6*	*6 (5)*	*0*	*1*	*10*	*13*	*34 (5)*
Cocaine	71	55	10	2 (2)	0	5	1	11	2 (2)
Hallucinogens	79	19	2	2 (2)	1	0	7	7	4 (1)
Ecstasy	76	37	2	2 (2)	0	2	7	9	3 (2)
Other benzodiazepines (prescribed)	64	5	0	-	0	0	51	51	98 (90)
Other benzodiazepines (not prescribed)	54	6	0	-	0	0	35	36	24 (9)
Any other benzodiazepines	*83*	*8*	*0*	-	*0*	*0*	*70*	*70*	
Alprazolam (prescribed)	*26*	3	0	-	0	0	*9*	*9*	*61 (45)*
Alprazolam (not prescribed)	*49*	3	0	-	0	0	*15*	*15*	*13 (10)*
Any Alprazolam	*61*	5	0	-	0	0	*21*	*21*	
Any form benzodiazepines	*82*	*10*	*0*	-	*0*	*0*	*70*	*70*	*85 (53)*
Seroquel® (prescribed)	*32*	*0*	0	-	1		*14*	*14*	*117 (180)*
Seroquel® (not prescribed)	35	0	0	-	0		11	11	19 (4)
Any Seroquel	*56*	*0*	0	-	*1*		*20*	*20*	*88 (41)*
Alcohol	99	8	0	-			58	58	52 (24)
Cannabis	96				60		6	60	84 (48)
Synthetic cannabis	20				8		0	7	12 (2)
Emerging psychoactives	3	2	2	3 (3)	0	1	0	2	4 (4)
Inhalants	17							3	2 (1)
Steroids	6	5	1	4 (4)	0	0	1	2	17 (17)
Tobacco	99							93	171 (180)
E-cigarette	30							16	31 (2)

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

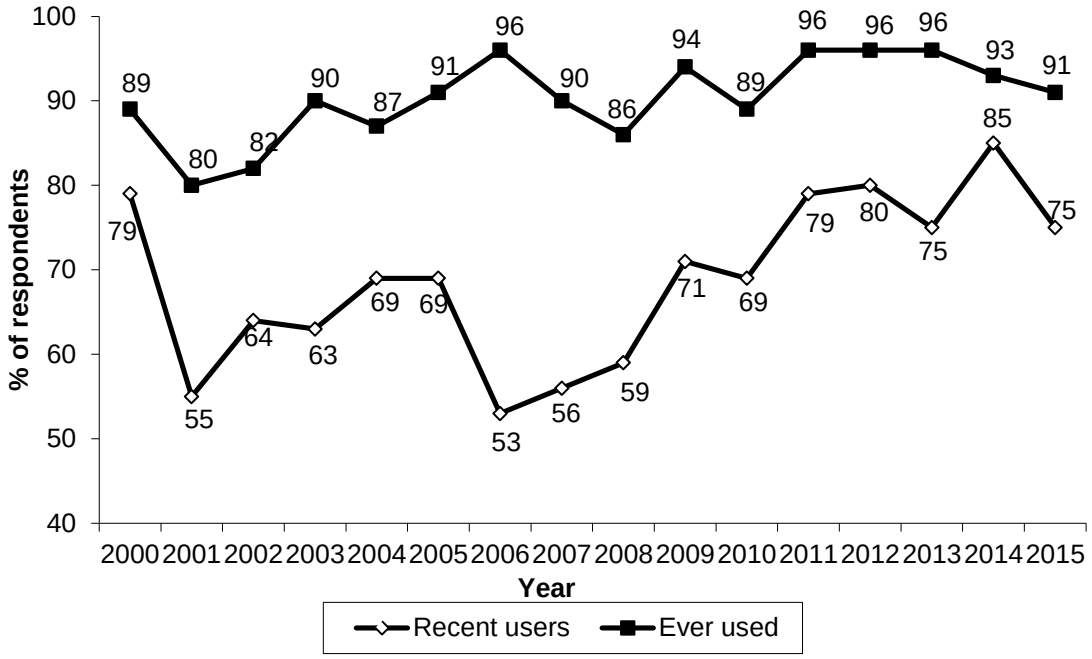
4.1.1 Lifetime history of heroin use among IDU participants

A lifetime history of heroin use was reported by 91% (n=81) of the 2015 PWID sample which was comparable to the 2014 figure of 93% (Figure 4). A lifetime history of use of homebake heroin was reported by 74% (n=66) of PWID in 2015 which was not significantly different from the 79% who reported a history of lifetime use in 2014.

4.1.2 Current patterns of heroin use

Use of heroin in the six months prior to interview was reported by 75% (n=67), which was not a significant decrease from the 85% reporting recent heroin use in 2014 (Figure 4). Of PWID who had used heroin in the last six months, all (100%, n=67) had injected heroin with the only other routes of administration (ROA) being smoking (n=2) and swallowing (n=2).

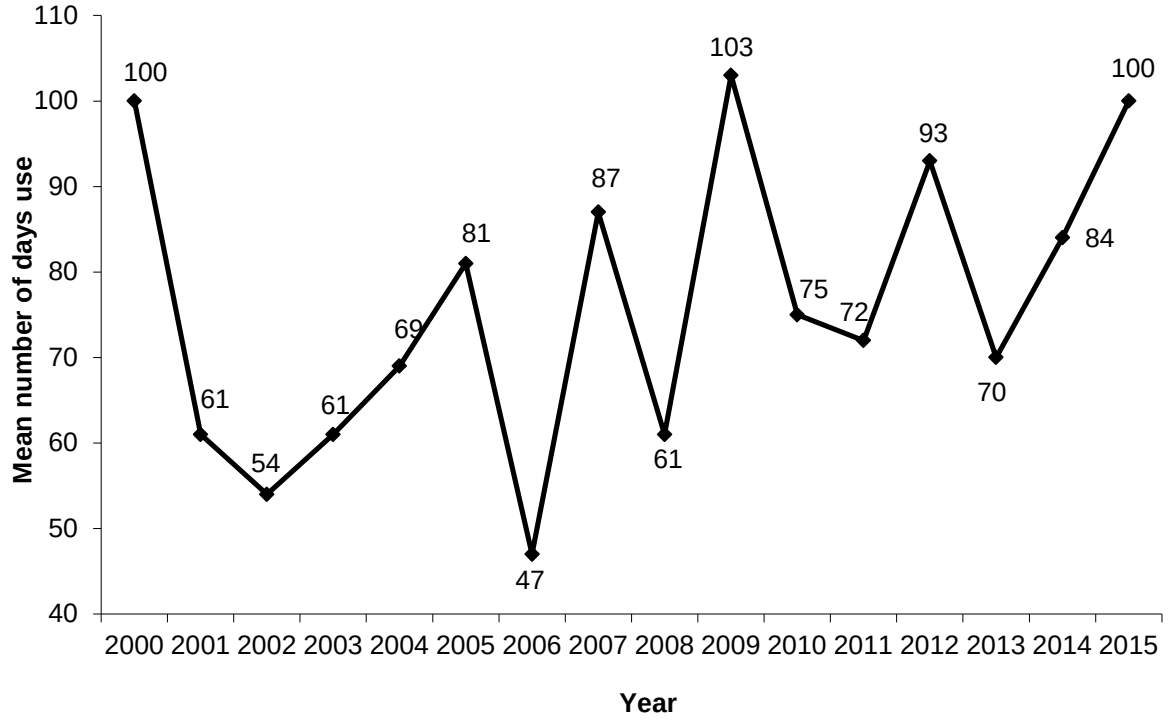
Figure 4: Lifetime and recent use of heroin, 2000-2015



Source: IDRS user interviews

Days of use in the last six months ranged from one to 180 days, with a mean of 100, which was not a significant increase from the 2014 mean of 84 days (Figure 5).

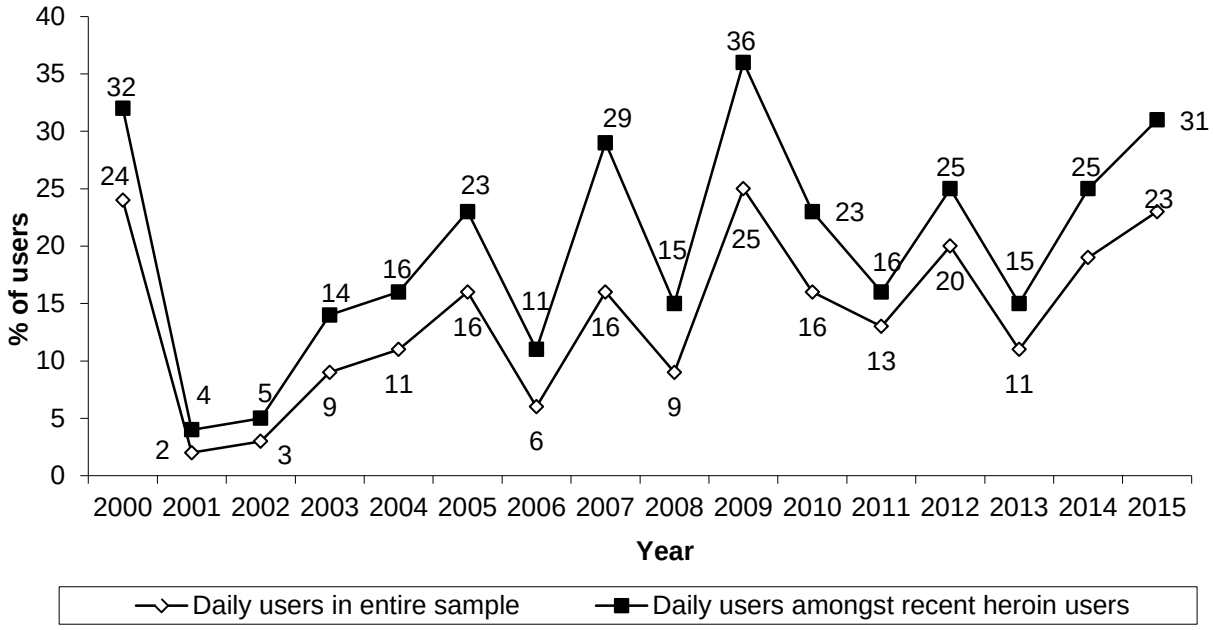
Figure 5: Mean days of heroin use in last 6 months, 2000-2015



Source: IDRS user interviews

The number of daily users of heroin among the entire sample remained comparable, from 19% in 2014 to 23% (n=20) in 2015. The number of recent heroin users reporting daily use was also comparable from 25% in 2014 to 31% (n=21) in 2015 (Figure 6).

Figure 6: Daily heroin users, 2000-2015



Source: IDRS user interviews

The proportion reporting recent use of homebake was 28% (n=25) which was comparable to the 21% in 2014. All of these users reported injection of homebake, with no other ROA being reported. The mean days of use reported was 46 days which was not a significant increase from the 21 days reported in 2014.

Of the total PWID sample, 75% (n=67) reported use of any form of heroin (including homebake) in the last six months. Of these participants, 100% reported injection as a ROA for any heroin used in the last six months.

In 2015, 67 of PWID provided information pertaining to the forms of heroin they had most used in the last six months. White or off-white powder remained the form most used, reported by 46% (n=31). This was followed by white / off-white rock, reported by 24% (n=16), brown powder (12%, n=8), and brown rock (5%, n=3). Homebake was reported as the most common form by 13% (n=9) in 2015, but in 2014 was not reported in this context at all.

The typical amounts of heroin reportedly used in a session were half to two and a half points with the most common amounts being between one and two grams (n=29). The largest amounts reported were four to five grams, but this was reported by just two individuals and does not appear to be typical.

There were three KEs who described the heroin currently available, all agreeing that it was primarily white in colour, although one noted it could occasionally be pinkish or beige. This KE also reported that it could sometimes be crystalline and was easily dissolved. Another described it as “China Rock” appearing in either a powder or rock form.

4.1.3 Heroin preparation before last injection

Participants were asked questions about the preparation of heroin for last use. Asked if they had heated the heroin mix before injecting, 67 PWID responded and of these 48% (n=32) reported that they had. Just five individuals reported having used citric acid to mix up with.

4.2 Price

The prices of most recent heroin purchases reported by PWID in the 2015 survey for the most part remained substantively unchanged from those reported in 2014. A quarter gram remained the most commonly purchased quantity with a median price of $150. The median price of a gram remained at $600. Median prices of most recent heroin purchases are presented in Table 7.

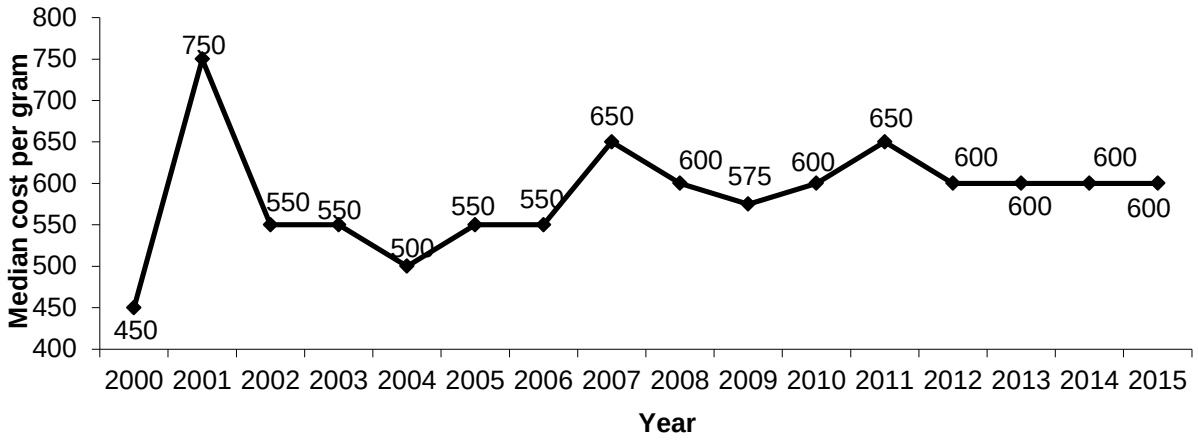
Table 7: Price of most recent heroin purchases by PWID participants, 2014-2015

Amount	Median price* $	Range $	Number of purchasers*
Cap / point	(75)100	40-100	(24) 31
Quarter gram	(175) 150	100-250	(53) 33
Half gram (Half weight)	(350) 325	150-400	(26) 16
Gram	(600) 600	350-800	(21) 16

Source: IDRS user interviews
* 2014 data are presented in brackets
^ Figures based on less than 10 reports

The median price of one gram of heroin in Perth across IDRS surveys is shown in Figure 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, 2000-2015



Source: IDRS user interviews

Participants were also asked whether the price of heroin had changed in the last six months. In 2015, 57 PWID responded to this item, with the majority (70%, n=40) reporting the price as stable. There was also 14% (n=8) who believed the price had been increasing, and small numbers who thought the price had decreased (9%, n=5) or fluctuated (7%, n=4).

Of the five KEs who commented, it was generally agreed that the price of a point of heroin was $100, although one suggested $80. Another stated that prices could range from $100 to $200, noting that "*white or clear heroin was generally more expensive than the beige or grey coloured.*" These KEs also generally agreed that the price of heroin had remained 'stable', although one believed it had decreased and another speculated that the price may be going down due to the "*large amounts of amphetamine on the market*".

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 2015, 60 PWID commented on this area. The most common response remained that acquiring heroin in Perth was currently '*very easy*', reported by 50% (n=30), which was not a significant change from the 52% in 2014. Other findings were also comparable with 2014, with 38% (n=23) reporting heroin availability as '*easy'*, 10% (n=6) reporting it as '*difficult'* and just one individual describing availability as being '*very difficult*'. Asked whether the availability of heroin in Perth had changed in the previous six months, 68% (n=40) 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, 2010-2015

	2010 (N=100)	2011 (N=70)	2012 (N=100)	2013 (N=88)	2014 (N=98)	**2015 (N=89)***
Current availability						
Did not respond**	41	18	29	28	21	**29**
Did respond	59	52	71	60	77	**60**
Of those who responded:						
Very easy (%)	53	46	59	53	52	**50**
Easy (%)	39	40	32	32	40	**38**
Difficult (%)	7	6	6	13	8	**10**
Very difficult (%)	2	8	3	2	0	**2**
Availability change over the last six months						
Did not respond**	43	22	29	28	21	**30**
Did respond	57	48	71	60	77	**59**
Of those who responded:						
More difficult (%)	12	17	10	18	9	**10**
Stable (%)	67	69	75	67	77	**68**
Easier (%)	16	13	9	12	12	**12**
Fluctuates (%)	5	2	6	3	3	**10**

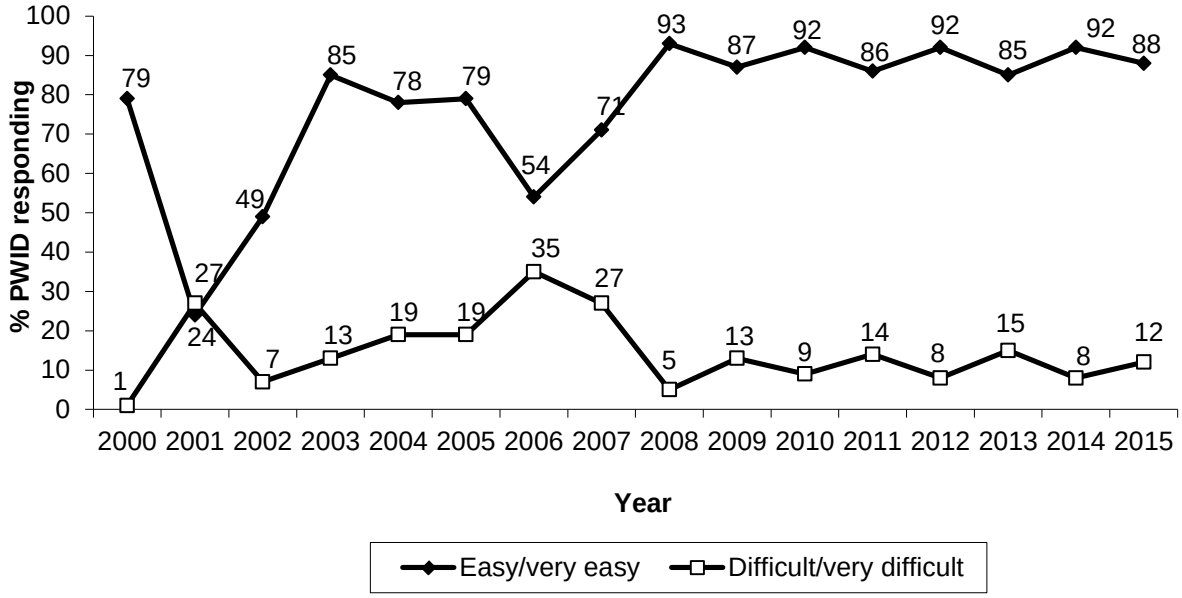
Source: IDRS User interviews

*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, 2000-2015



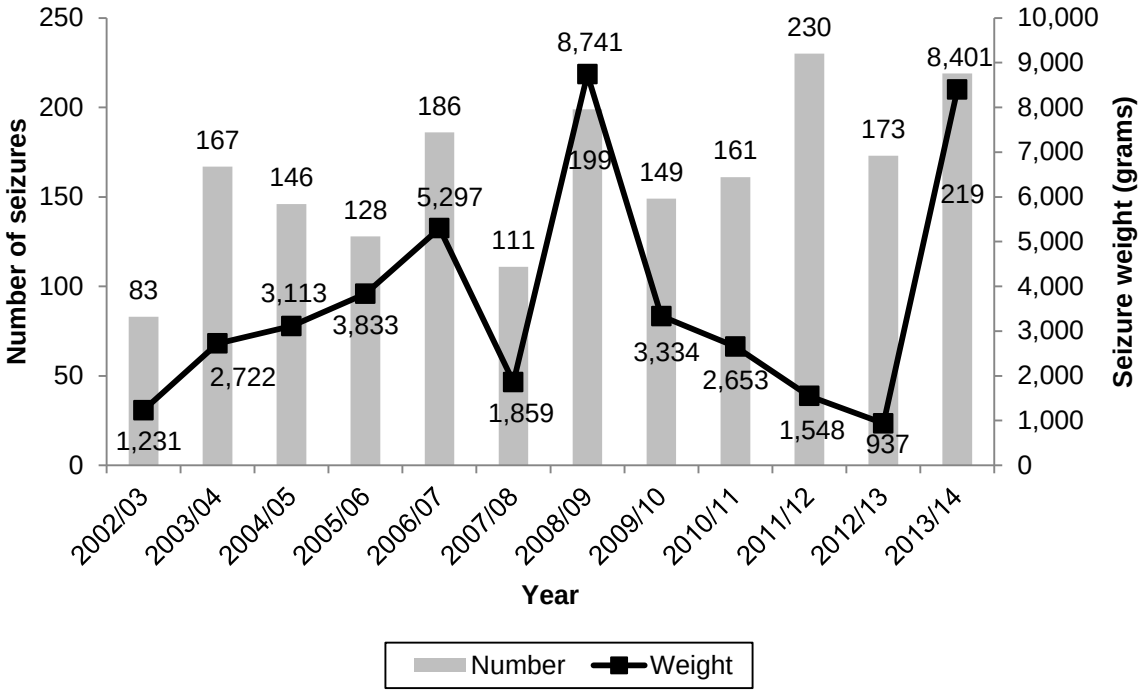
Source: IDRS user interviews

In 2015, 60 PWID responded to questions about persons and locations for last sourcing heroin. The most commonly nominated sources of heroin of last purchase remained '*friends'* (42%, n=25), followed by '*known dealers*' (37%, n=22). These proportions were comparable to 2014. '*Acquaintances'* and '*relatives'* were both nominated by 5% (n=3) and small numbers mentioned '*street dealer*' and '*partners'*.

As in 2014, the most commonly nominated last location for obtaining heroin was at an '*agreed public location*' (47%, n=28). A '*friend's home*' was nominated by 27% (n=16), a '*dealer's home*' by 12% (n=7) and '*home delivery*' by 10% (n=6). A '*street market*' was also mentioned by two individual respondents and an '*acquaintance's house*' by one.

Figure 9 presents the total number and combined weight of heroin seizures made by the West Australian Police Service (WAPS) and the Australian Federal Police (AFP) in WA from 2002/03 to 2013/14. The number of seizures has increased somewhat since 2012/13 from 173 to 219. The total weight of seizures has increased very substantially from 937 to 8,401 grams.

Figure 9: Number and weight of heroin seizures by WAPS and AFP, WA 2002/03-2013/14



Source: **Australian Crime Commission**

4.4 Purity

Participants were asked to comment on their perception of the purity of heroin and any change in purity over the last six months (Table 9). In 2015, 57 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 just 18% (n=10) describing purity as '*low'*, the smallest proportion to do so since 2000. Numbers reporting purity as '*medium'* had increased from 28% in 2014 to 39% (n=22) and numbers describing it as '*high'* increasing from 17% in 2014 to 25% (n=14) These trends are displayed in Figure 10.

User perceptions of the purity of heroin in Perth in the last six months were somewhat lacking in consensus with 33% (n=18) reporting that it '*fluctuated'* and 30% (n=17) describing it as '*stable'*. There were also 23% (n=13) saying it had '*increased'* and 14% (n=8) saying it had '*decreased*' (Table 9).

Table 9: Participants' perceptions of heroin purity in past six months, 2010-2015

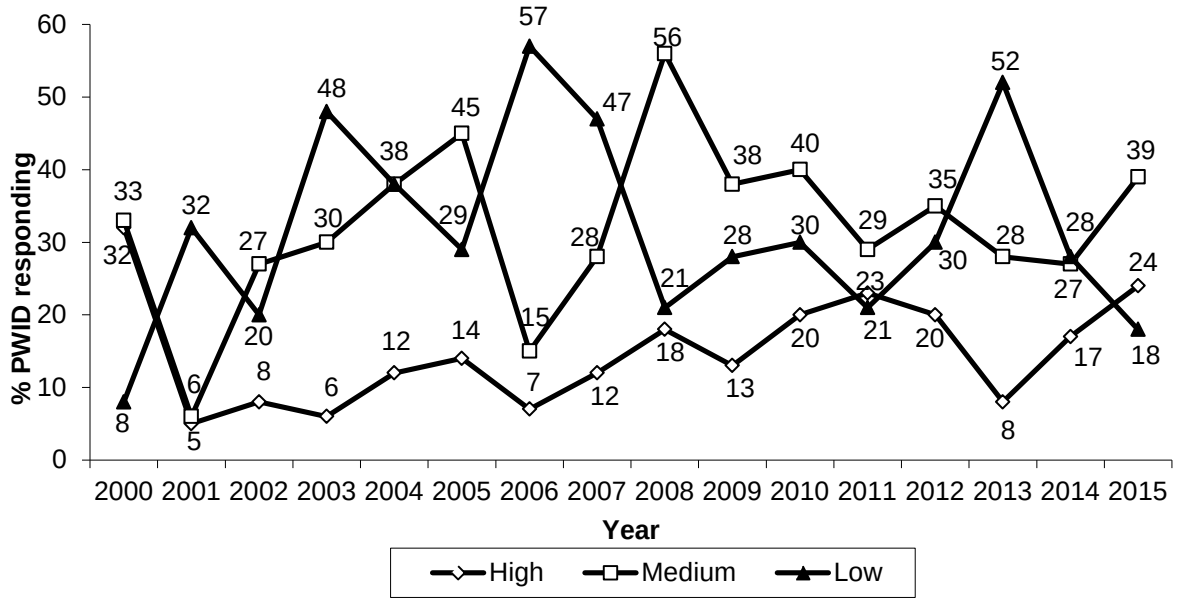
	2010 (N=100)	2011 (N=70)	2012 (N=100)	2013 (N=88)	2014 (N=98)	**2015 (N=89)***
Current purity						
Did not respond**	40	22	29	28	21	**32**
Did respond	60	48	71	60	77	**57**
Of those who responded:						
High (%)	20	23	20	8	17	**25**
Medium (%)	40	29	35	28	27	**39**
Low (%)	30	21	30	52	29	**18**
Fluctuates (%)	10	27	13	12	27	**19**
Purity change over the last six months						
Did not respond* (%)	44	24	30	29	21	**32**
Did respond (%)	56	46	70	59	77	**57**
Of those who responded:						
Increasing (%)	30	24	14	9	25	**23**
Stable (%)	27	41	44	51	36	**30**
Decreasing (%)	18	7	16	31	26	**14**
Fluctuating (%)	25	28	20	10	9	**33**

Source: IDRS user interviews

*Totals may exceed 100% due to rounding

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

Figure 10: Proportion of PWID reporting current heroin purity as 'high', 'medium' or 'low', 2000-2015



Source: IDRS user interviews

Although one KE thought heroin purity to be '*fluctuating'*, the remaining four commenting all described it as '*high'*. One observed that

"*Heroin purity is high, especially the clear or white heroin. We find that people who have used clear or white heroin take longer to wake up in resuscitation than people who have used brown or grey heroin*."

Another speculated that "*Heroin purity is high, although some may be cut with Fentanyl causing "tingly shots, pins and needles in hands, and feeling quite sick*".

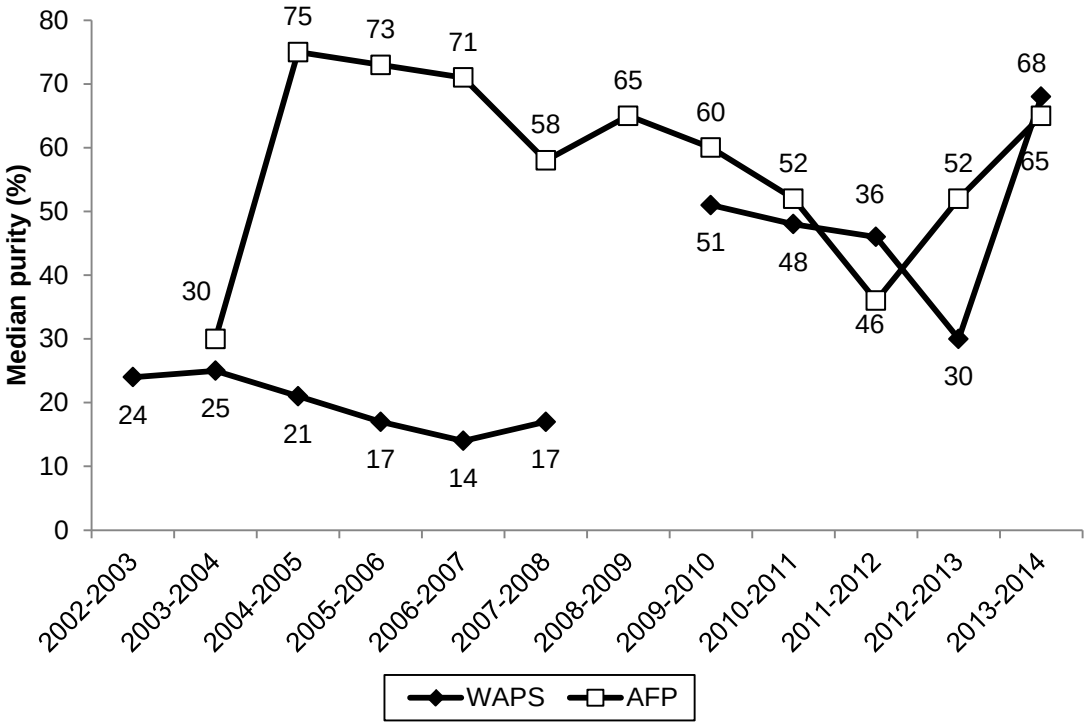
One KE working in emergency departments said that heroin purity was currently around 60-70%.

Asked whether the purity of heroin had recently changed saw two KE saying it had been '*fluctuating'*, two say it had '*increased'* and one that it had remained '*stable'*.

Figure 11 shows the median purity of heroin seizures made by WAPS and the AFP. From July 2013 to June 2014, the median purity across all WAPS seizures analysed varied between 0.2% and 84% with a median of 68%. However, just eight of these 78 seizures analysed were street-level deals (ie: <=2 grams) with a median purity of 41%, suggesting that the purity of what is generally available is probably less than Figure 11 implies. The AFP analysed just three seizures with a median purity of 65%.

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

Figure 11: Purity of heroin seizures analysed in WA, by financial year, 2002/03-2013/14



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

4.5 Summary of heroin trends

- Most primary indicators suggest the gradual trend towards increasing availability and use of heroin use among the IDRS samples has continued.
- Heroin remained the principal drug of choice nominated by 61% compared to 65% in 2014.
- Heroin remained the drug most injected in the previous month with 54% compared to 55% in 2014.
- Heroin remained the drug most commonly used at the most recent injection, reported by 51% compared to 49% in 2014.
- Lifetime use of heroin has remained stable, reported by 91%.
- Recent use of heroin returned to the 2013 figure of 75% down from the high of 85% in 2014.
- Mean days of heroin use rose from 84 to 100.
- Daily use among recent heroin users was reported by 31% compared with 25% 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 2014. Respondents generally reported heroin availability had remained stable.
- There was an apparent perception among users that the purity of heroin was improving with increased numbers describing it as '*high'* or '*medium',* while numbers describing it as '*low'* fell to 18%, the smallest proportion since 2000.

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 2015, lifetime use of any form of methamphetamine was reported by 96% (n=85) which was comparable to 93% in 2014. Of these participants, 87% (n=74) had ever injected any form of methamphetamines. With regards to lifetime use by methamphetamine form, lifetime use of speed powder was reported by 90% (n=80) of the 2015 PWID sample, lifetime use of base by 23% (n=20) and lifetime use of crystal by 88% (n=78). 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, 2010-2015

Form used (%)	2010 (N=100)	2011 (N=70)	2012 (N=100)	2013 (N=88)	2014 (N=98)	**2015 (N=89)**
Speed						
Ever used	91	86	92	89	88	**90**
Used last six months	51	43	45	48	39	**34**
Base						
Ever used	29	23	27	40	46	**23**
Used last six months	8	6	6	11	8	**2**
Crystal						
Ever used	80	81	87	81	82	**88**
Used last six months	40	46	64	59	53	**64**
Liquid						
Ever used	19	9	16	21	9	**11**
Used last six months	1	1	2	3	3	**0**
Any methamphetamine						
Ever used	99	96	96	93	93	**96**
Used last six months	64	64	72	72	66	**71**

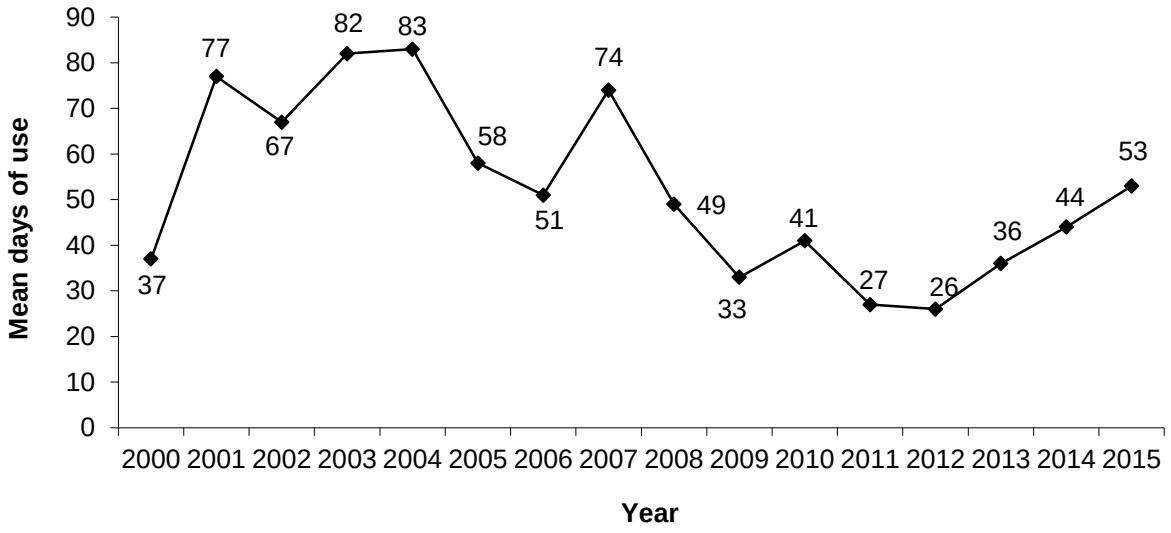
Source: IDRS user interviews

5.1.2 Current patterns of methamphetamine use

In 2015, 71% (n=65) of PWID reported use of any form of methamphetamine in the last six months, which was not a significant change from the 66% reported in the 2014 sample. Of these participants, 93% (n=61) injected a form of methamphetamine during this period and 29% (n=19) reported having smoked it. Other routes of administration were uncommon.

As shown in Figure 12, the average number of days any form of methamphetamine was used during the last six months by these participants was 53 days (median of 24 days). This was not significantly changed from the 2014 mean of 44 days. It was, however, a significant increase on the 2012 mean of 26 days (t=3.600, df=62, p=.001), suggesting that mean days of use of methamphetamines have been increasing over the last three years.

Figure 12: Mean days of use for any methamphetamine by WA PWID, 2000-2015



Source: IDRS user interviews

In 2015, recent use of speed powder was reported by 34% (n=30) of the sample which was not significantly different to the 39% of recent users in 2014. Recent injection of speed was reported by all recent users (100%, n=30).

Days of use in the last six months ranged from one to 180 days, with four reports of use of powder methamphetamine on a daily basis compared to three in 2014. Mean days of use was 45, which was not a significant increase from the 2014 average of 33 days. The typical amount of speed powder used in one session was one point. The largest amount used in one session was five points.

Recent use of base in 2014 remained low and was reported by 2% (n=2) which was not even lower than the 8% reported in 2014, although the very small numbers involved do not permit formalised testing of significance.

Injection of base in the previous six months was reported by 100% (n=2) of these respondents. Days of use ranged from one to 48; no respondents reported using base on a daily basis, which was comparable to 2014 and 2013 findings. There was little reliable information on the amount of base methamphetamine typically consumed within a session, although one respondent suggested one point.

Recent use of crystal was reported by 64% (n=57) of PWID which was not significantly different from the 53% who reported doing so the previous year. The majority of recent crystal users (96%, n=55) reported injecting crystal in the last six months and 29% (n=17) reported having smoked it. Other ROA were relatively uncommon.

Days of use ranged from one to 180, with six respondents reporting use of crystal on a daily basis (compared to four in 2014). The mean days of use were 45, which was not a significant increase from the mean of 41 days reported in 2014.

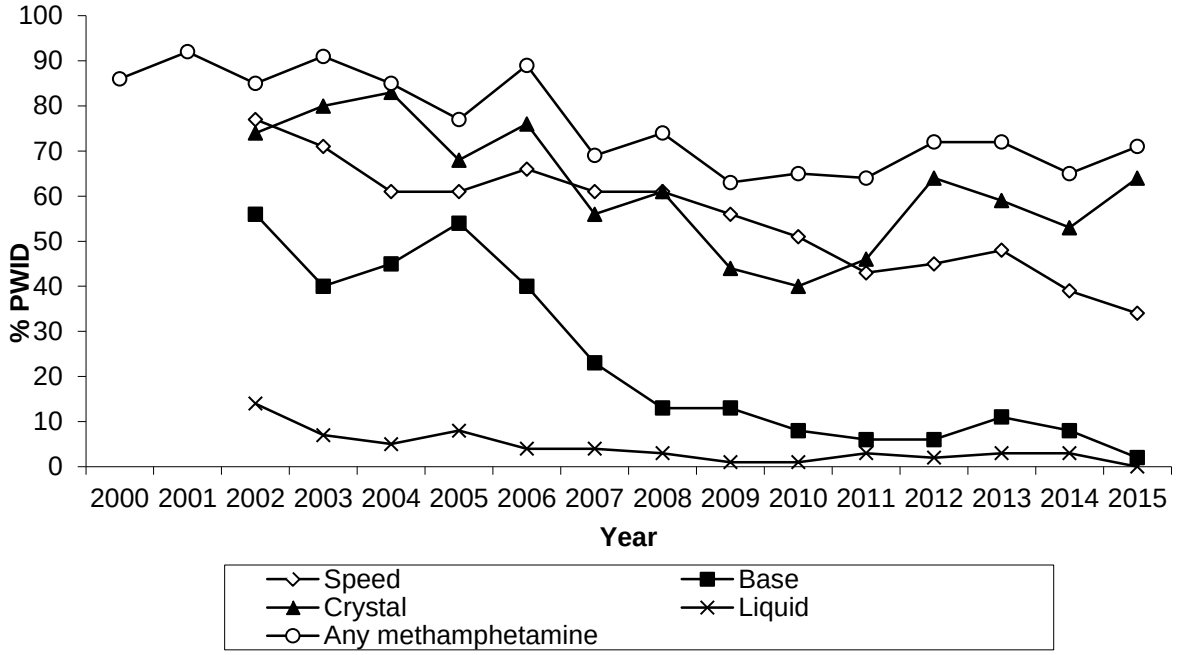
The most common amount of methamphetamine reportedly consumed in a session was one point. The largest amount of crystal methamphetamine consumed in one session reported by six respondents was five points.

There were no reports of recent use of liquid amphetamine in the last six months.

Of the 60 PWID who responded to the form of methamphetamine they had most commonly used, crystal remained the most frequently nominated by 78% (n=47), followed by 22% (n=13) who nominated powder.

Figure 13 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 13: Proportion of PWID reporting methamphetamine use in the last six months, 2000-2015



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

All KEs commenting agreed that the predominant form of methamphetamine was currently crystal. There was less of a consensus about the most common route of administration with opinion divided between smoking and injection, although this is likely an artefact arising from the types of client KEs' respective services cater to. One expressed the opinion that smoking

of methamphetamine may be increasing among younger users, while another speculated that older users may be moving onto injection due to dental damage accrued through smoking the drug.

Several KE commented on the behavioural effects of methamphetamine on users. One KE from the crowd control sector described it as "*Aggression, sometimes resulting in physical violence, causing public disturbances, ranting, swearing, carrying on*."

Another from the law enforcement sector noted that "*Because it is so addictive and the cost of that addiction is often beyond a user's earnings, the propensity to commit crimes therefore increases. Also the long term mental health effects of the drug; paranoia and incidents of violence because of that paranoia."*

A third KE noted that harms could occur across all domains including health, finances, relationships and criminal activity. The risks to mental health *"did not affect all users, but can escalate quickly and unexpectedly."*

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.

For both speed and crystal, the price of a point of methamphetamine remained unchanged from 2013 at $100.

There was some limited evidence that the price of a gram of crystal may have increased from $675 to $700, but this data comes from only six respondents who cited a very wide range of prices. The price of a half weight of crystal, appears to have remained stable at $350.

The apparent fluctuations in price of a gram of speed from $700 in 2012 to $350 in 2013 , back to $700 in 2014 and down again to $465 in 2014 is almost certainly deceptive, being based on just two respondents annually since 2013 who offered widely differing responses. As such it is unlikely to be reflective of genuine trends in prices of speed.

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

Table 11: Price of most recent methamphetamine purchases by PWID, 2014-2015

Amount	Median price* $	Range	Number of purchasers*
Speed			
Point (0.1 gram)	(100) 100^	20-100	(14) 8
Half weight (0.5 gram)	(350^) 350^	300-500	(7) 8
Gram	(700) 475^	350-600	(2) 2
Base			
Point (0.1 gram)	(75^) -	-	(2) 0
Half weight (0.5 gram)	(-) -	-	(0) 0
Gram	(-) -	-	(0) 0
Crystal			
Point (0.1 gram)	(100) 100	50-100	(24) 35
Half weight (0.5 gram)	(350) 350	270-400	(15) 11
Gram	(675^) 700^	300-800	(8) 6

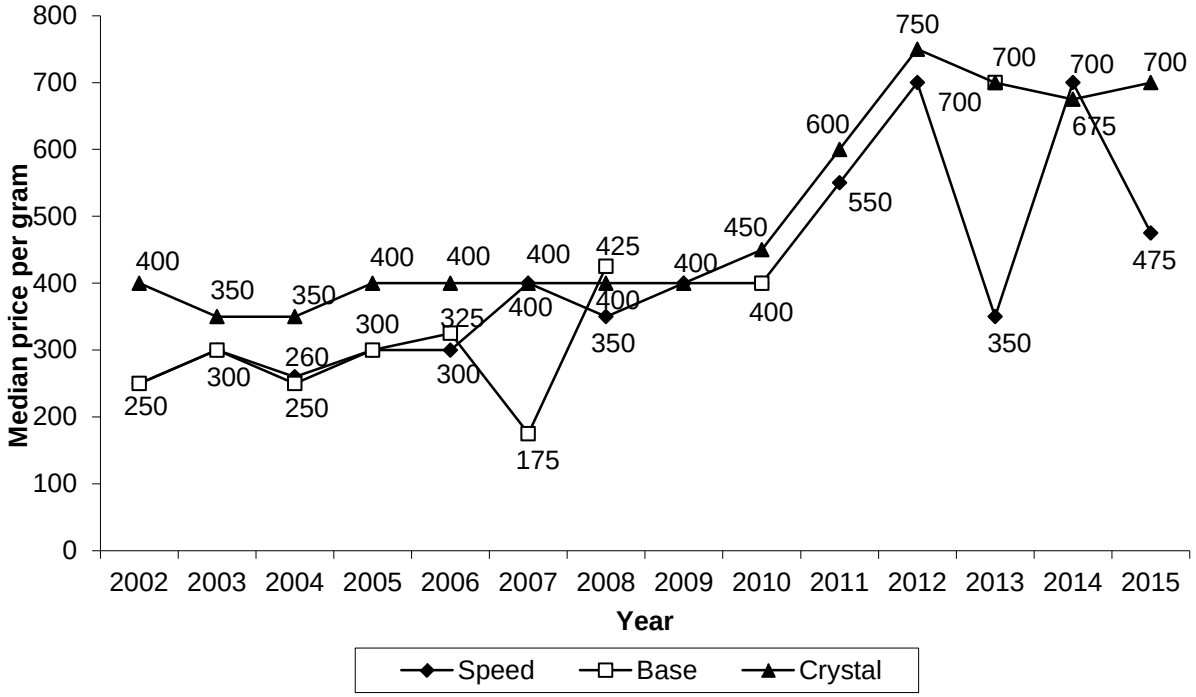
Source: IDRS user interviews

* 2014 data are presented in brackets

^ Based on small (<10) purchases

Figure 14 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 14: Median prices of methamphetamine per gram estimated from PWID purchases, 2002-2015



Source: IDRS user interviews

Participants were asked if they perceived any changes in the price of methamphetamine over the last six months. With regards to speed or powder methamphetamine, there were 17 PWID who responded, with 35%%, (n=6) reporting that the price of speed had remained '*stable'* and another 35% (n=6) reporting that it had '*decreased*'. This was followed by 18% (n=3) who thought it may have '*increased'*. Price changes to crystal were reported on by 43 respondents, with 58%, (n=25) describing it as '*stable'*, followed by 21% (n=9) who believed it may have '*decreased', 12% (n=5) who described it as 'fluctuating'* and 9% (n=4) who reported that it had *'increased'*. There were no respondents able to comment on changes to the price of base methamphetamine.

Of the eight KE who discussed the price of methamphetamine, seven agreed that a point was currently selling for around $100. The other cited a price of $80. Two KE made provisos to this, one noting that while $100 was typical for Perth, in regional areas a price of $150 was probably more realistic. The other stated that while $100 was the normal price it was possible for friends of dealers to purchase a point for $40-$50.

Some KE provided prices for much larger quantities including $300-$400 per half-weight, $600 for a gram, $1,500 for an eightball, $1,800-$2500 for half a ball, $8,000-$14,000 per ounce, and $150,000 for a kilogram. Opinion was divided among KE as to whether the price of methamphetamine had '*decreased'* or remained '*stable'*. One observed that price per gram could fluctuate greatly between $350-$700 *"depending on who you know'.* They also noted that it was common practice for people to "*buy a gram for $350, take their own supply out and on sell the remainder for profit."*

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). Speed was considered '*easy'* to obtain by 44% (n=8) whereas in 2014 it had generally been considered '*very easy*' by 54%. There were also 39% (n=7) in 2015 who considered it '*very easy*'. Availability of crystal was again generally rated as *'very easy*' by 56% (n=27) which was not significantly different from the 52% providing this response in 2014.There were also 42% (n=20) who regarded it as '*easy'*. For both speed and crystal, the vast majority of respondents reported that availability had remained '*stable'* in the preceding six months for all forms, with powder at 77% (n=13) and crystal at 71%(n=34). There were no respondents able to provide information regarding the availability of base, in comparison to just three respondents in 2014.

Table 12: Reports of methamphetamine availability in the past six months, 2014-2015

	Speed		Base		Crystal	
	2014 (N=98)	**2015 (N=89)**	2014 (N=98)	**2015 (N=89)**	2014 (N=98)	**2015 (N=89)**
Current availability						
Did not respond*	73	**71**	95	**89**	54	**41**
Did respond	24	**18**	3	**0**	44	**48**
Of those who responded:						
Very easy (%)	54	**39**	67^	**-**	52	**56**
Easy (%)	42	**44**	33^	**-**	39	**42**
Difficult (%)	4	**11**	0	**-**	9	**0**
Very difficult (%)	0	**6**	0	**-**	0	**2**
Availability change over the last six months						
Did not respond*	73	**72**	95	**89**	54	**41**
Did respond	24	**17**	3	**0**	44	**48**
Of those who responded:						
More difficult (%)	8	**6**	0	**-**	7	**2**
Stable (%)	79	**77**	100^	**-**	73	**71**
Easier (%)	12	**12**	0	**-**	21	**23**
Fluctuates (%)	0	**6**	0	**-**	0	**4**

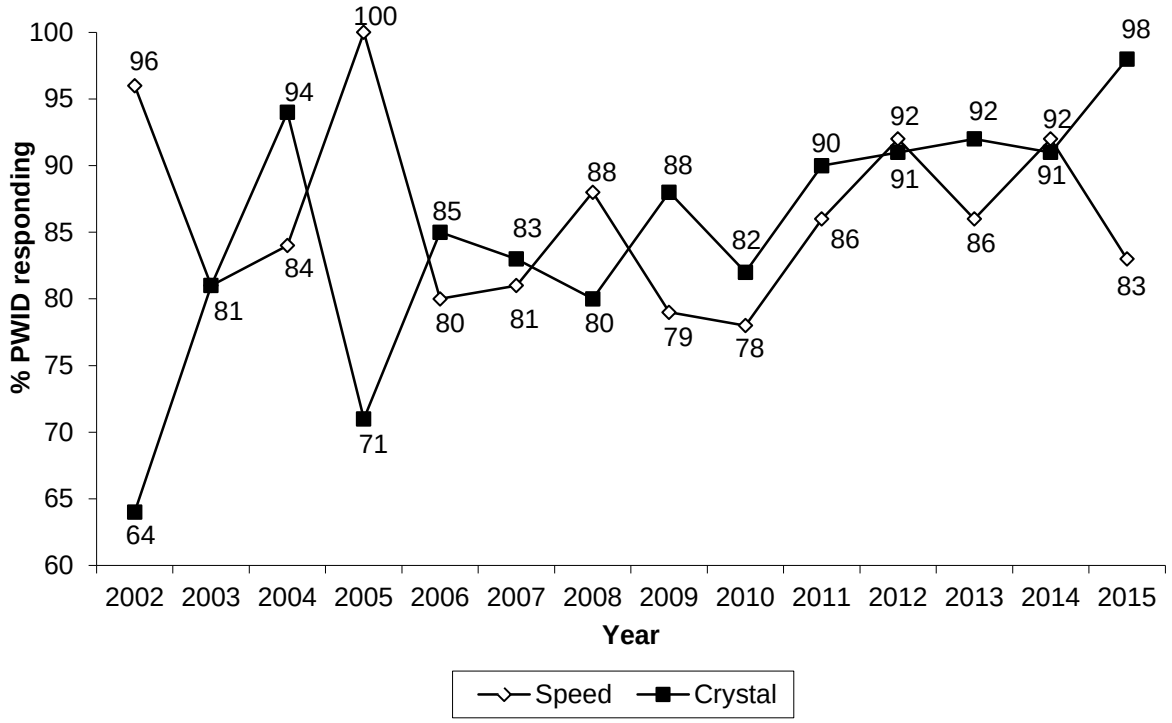
Source: IDRS user interviews

* '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 15. While availability of crystal appears to have increased considerably since 2014, and availability of powder appears to have decreased over that time, neither of these was found to be significant. Base has been excluded from this figure due to the lack of available data in recent years.

Figure 15: PWID reporting 'easy' or 'very easy' availability of methamphetamine by form in WA, 2002-2015



Source: **IDRS user interviews**

Respondents were asked about sources of each form of methamphetamine. Of the 18 participants who reported on speed, 72% (n=13) reported that the most recent source of speed had been from '*friends'*. This was followed by 17% (n=3) who had sourced it from '*known dealers*'. Other sources were uncommon. The most common venues for obtaining speed powder at the most recent occasion was a '*friend's home*' or an '*agreed public location*', both nominated by(28%, n=5), followed by *'home delivery*' (22%, n=4) and a '*dealer's home*' (17%, n=3).

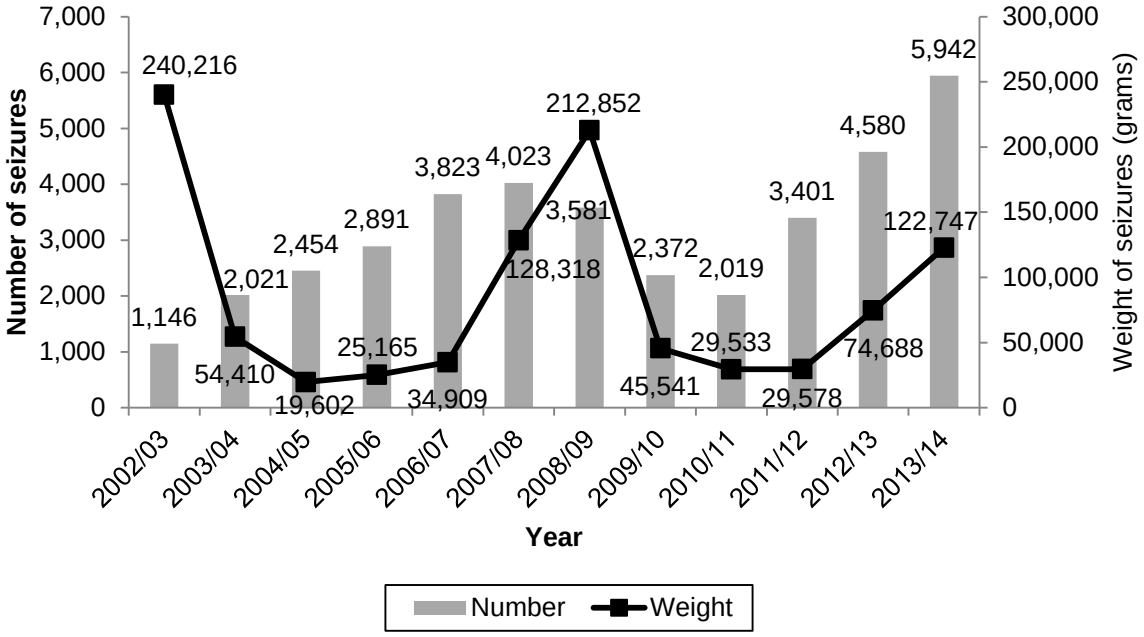
With regards to crystal methamphetamine, 46 respondents provided information concerning their most recent source. As with speed powder, the most commonly reported source was '*friends'* (61%, n=28). This was followed by '*known dealers*' (26%, n=12). Small numbers of respondents also mentioned '*street dealers*', '*acquaintances''* and '*relatives'*. The most commonly reported venue for obtaining crystal methamphetamine was an '*agreed public location*'' (38%, n=18) followed by a '*friend's home*' (23%, n=11), '*home delivered*' (19%, n=9) and 'dealer's home' (15%, n=7). Other venues mentioned by very small numbers of PWID included '*street market*' and '*other*'.

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

Figure 16 presents the total number and combined weight of amphetamine-type stimulants (ATS) (i.e. amphetamines, methamphetamine and phenythalamines) seizures made by WAPS and AFP in WA from 2002/03 to 2013/14. It is evident that the number of amphetamine seizures had increased substantially to from 4,508 in 2012/13 to 5,942 and was the highest number so far recorded by the WA IDRS. The overall combined weight of all seizures also rose somewhat to 122,747 grams compared with 74,688 grams in the previous year.

One KE from the law enforcement sector commented on crystal methamphetamine; "*It is the drug we are seizing in large quantities at the moment. Availability remains good and the price has reduced slightly.*"

Figure 16: Number and weight of amphetamine-type stimulant seizures by WAPS and AFP, WA 2002/03-2013/14



Source: **Australian Crime Commission**

One KE from the law enforcement sector commented on seizures of methamphetamines. *"The policing at the moment in WA is focusing on Chinese imports of crystal meth through the post – a lot of it is getting through and hitting the streets. In the old days there may be 1,000 kilograms in one hit, but now there are smaller amounts (like 1 kilo) sent through the post; dealers are letting postmen do all the delivery work for them. This has been very profitable to the Asian groups.*"

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 17 participants who responded regarding speed, the greatest proportion (35%, n=6) rated current purity as '*high'* which was not significantly less than the 52% in 2014. Reports of '*medium'* purity had remained relatively unchanged, reported by 24% (n=4) compared with 20% the previous year. There were also 24% (n=4) who thought purity of methamphetamine powder had '*fluctuated'* and 18% (n=3) who reported it as '*low'*. Asked if the purity of powder methamphetamine had changed in the past six months found that 50% (n=8) thought it had '*fluctuated'* with other responses from much smaller numbers.

With regards to current purity of crystal methamphetamine, of the 47 PWID who responded, 51% (n=24) described it as '*high'*, which was not a significant change from the 54% reporting this in 2014. There were also 28% (n=13) who reported current purity as '*medium'*, 9% (n=4) who said it was '*low'* and 13% (n=6) who thought it tended to '*fluctuate'*. Asked if this purity had changed in the last six months, the most common response (34%, n=15) was that it had remained '*stable'*. There were also 23% (n=10) who thought it had '*increased'*, 14% (n=6) who thought it had '*decreased'*, and 30% (n=13) who thought it had tended to '*fluctuate'*.

There were no respondents able to provide information on the purity of base, compared to just three respondents in 2014.

Table 13: Methamphetamine purity by user report, 2014-2015

	Speed		Base		Crystal	
	2014 (N=98)	**2015 (N=89)**	2014 (N=98)	**2015 (N=89)**	2014 (N=98)	**2015 (N=89)**
Current purity						
Did not respond*	73	**72**	95	**89**	54	**42**
Did respond	25	**17**	3	**0**	43	**47**
Of those who responded:						
High (%)	52	**35**	33^	**-**	54	**51**
Medium (%)	20	**24**	0	**-**	19	**28**
Low (%)	4	**18**	67^	**-**	5	**9**
Fluctuates (%)	24	**24**	0	**-**	24	**13**
Purity change over the last six months						
Did not respond*	73	**73**	95	**89**	54	**45**
Did respond	24	**16**	3	**0**	43	**44**
Of those who responded:						
Increasing (%)	29	**13**	0	**-**	28	**23**
Stable (%)	25	**19**	67^	**-**	35	**34**
Decreasing (%)	21	**19**	33^	**-**	14	**14**
Fluctuating (%)	25	**50**	0	**-**	23	**30**

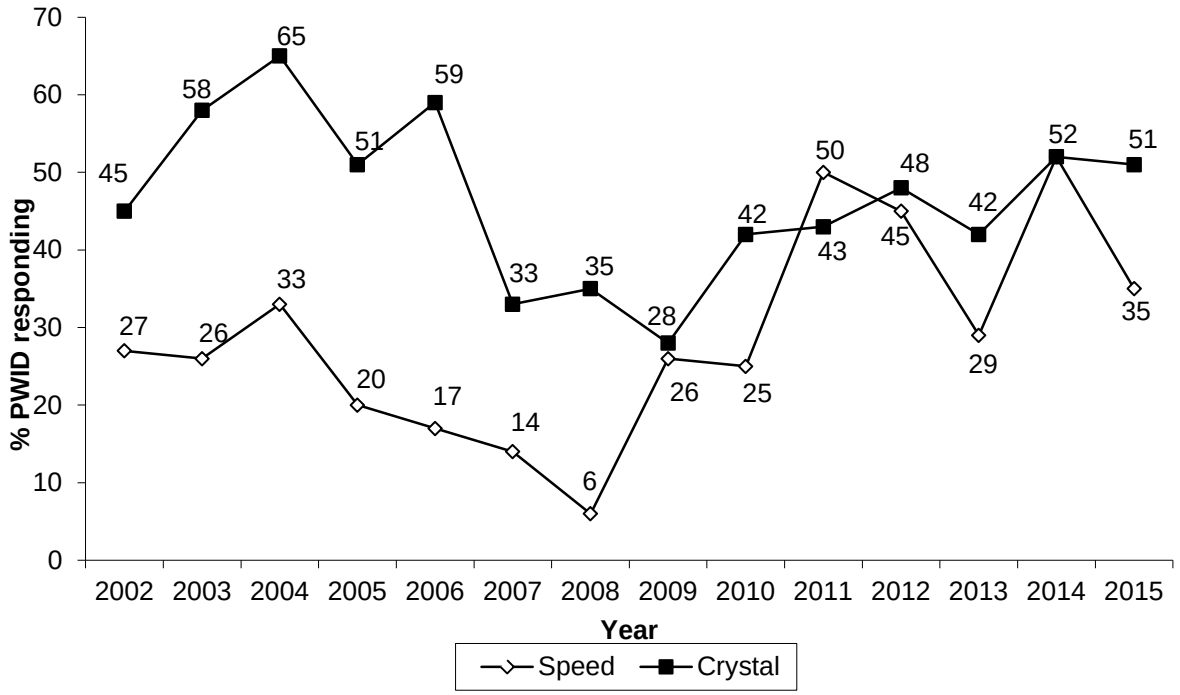
Source: IDRS user interviews

* '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 17 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, crystal methamphetamine has been considerably more stable in this regard. Base has been excluded from this graph due to the lack of data in the last few years.

Figure 17: PWID reporting each methamphetamine by form as 'high' purity, 2002-2015

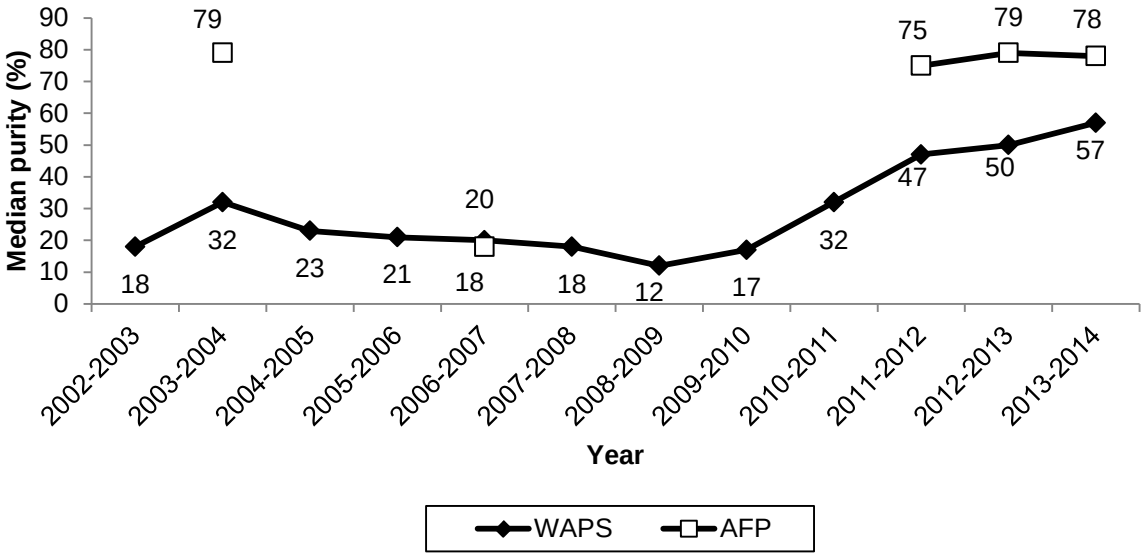


Source: IDRS user interviews

Figure 18 shows the median purity of methamphetamine seizures by WAPS since 2002/03. Purity levels found during 2013/14 ranged widely from 0.2% to 88%, with a median of 57%. Median purity of seizures analysed by the AFP tended to be somewhat higher at 78%.

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

Figure 18: Purity of methamphetamine seizures analysed by WAPS in WA, by quarter, 2002/03-2013/14



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

All KE responding described the current purity of methamphetamine as '*high'*. Two KE from the law enforcement sector reported purity rates of 50-80%. Another KE attributed the high level of purity to diminished availability of speed and base forms but increased amounts of crystal. One specifically noted that this very high purity was causing mental health issues and other problems in communities. Opinion was evenly divided among responding KE as to whether the purity of methamphetamine had recently '*increased'* or remained '*stable'*.

One KE from the law enforcement sector reported that "*the number of manufacturing labs in WA has decreased but there are no changes in the method of manufacture.*"

5.5 Summary of methamphetamine trends

- There was no significant change in lifetime or recent use of all forms of methamphetamine from 2013 to 2014.
- 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 44 days in 2014. 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.
- The median price for one point for speed or crystal remained $100. The median price for one gram of crystal was $700. There was insufficient data to draw conclusions regarding the price of a gram of speed or base. The greatest proportions perceived price change of speed and crystal as 'stable'. There were no respondents able to comment on changes to the price of base methamphetamine.
- Speed was generally reported as being '*easy*' to obtain while crystal was generally considered '*very easy*'. The greatest proportion of respondents reported availability for both forms as '*stable'* in the last six months. There were no respondents able to comment on base.
- Current purity was mostly rated as '*high'* for both crystal and speed. Purity of crystal was mostly viewed as 'stable' while purity of speed was most viewed as 'fluctuating'.

6 COCAINE

6.1 Use

6.1.1 Cocaine use among IDU participants

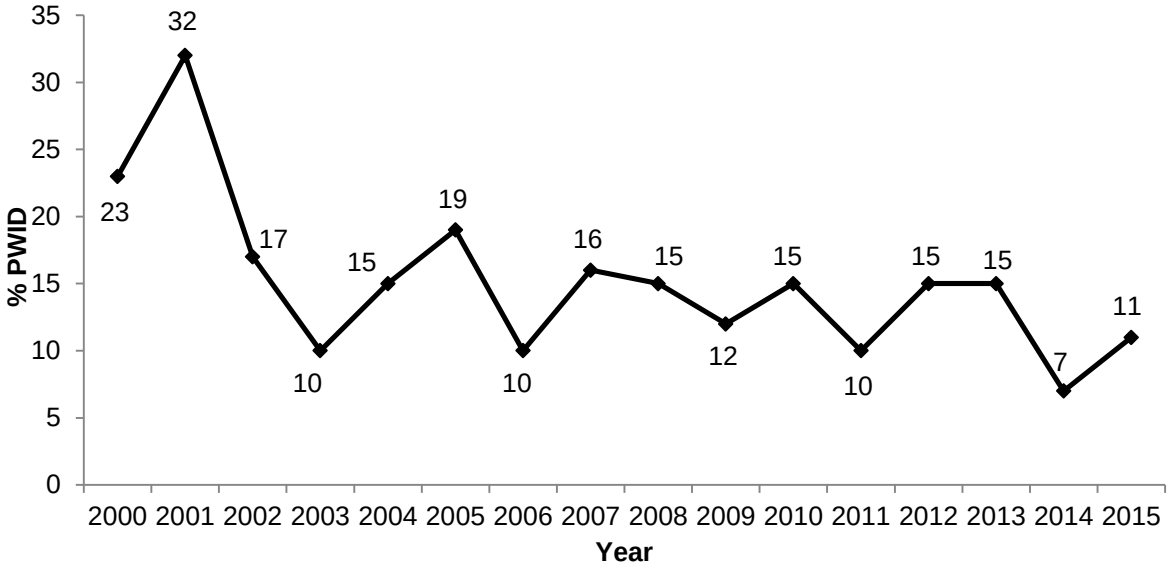
In 2015, lifetime use of cocaine was reported by 71% (n=63) of PWID, which was not significantly different to the 59% reported in 2014.

6.1.2 Current patterns of cocaine use

Use of cocaine in the six months preceding interview was reported by 11% (n=10) of the 2015 sample, which was not significantly more than the 7% reported in 2014 (Figure 19). Of these participants, 90% (n=9) reported having injected cocaine in the last six months, 40% (n=4) had snorted it and one individual reported oral consumption.

Days of use ranged from one to 6, with an average of two days of use in the last six months, compared to 11 in 2014. 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 19 and shows that it has remained at low prevalence since 2002.

Figure 19: Cocaine use in the past six months, 2000-2015



Source: IDRS user interviews

Of the nine respondents who provided information, seven reported that the form most used was powder cocaine and the remaining two reported having mainly used rock. There were just three respondents who provided information on the amount of cocaine used in a single session. Amounts ranged from half a point to two and a half points.

There were no KEs who commented on cocaine as a major drug of concern, most observing that it was rarely seen in their client load. One observed *"We see this very infrequently, and have only seen four people in the last year, three of whom I suspect had actually used methamphetamine because they said the effect lasted for a long time which is not typical of cocaine.*"

Another KE noted that cocaine was not common as a principal drug among clients, but sometimes manifested as a secondary drug of concern.

6.2 Price

In 2015, there was only one PWID who provided data on the price of cocaine, citing $250 for half a gram, compared to one report of $300 for half a gram in 2014. There was no information available on the price of a gram. There was no information concerning recent price changes to cocaine in Perth. With only one PWID responding, and only one PWID to compare with in the previous year, this data needs to be interpreted with great caution. Numbers reporting in previous years' WA IDRS studies have also been low.

Just three KE commented on the price of cocaine, one reporting it as $500 per half gram and another describing it as "*similar to methamphetamine*". The third reported that there had been no change to the price of the drug.

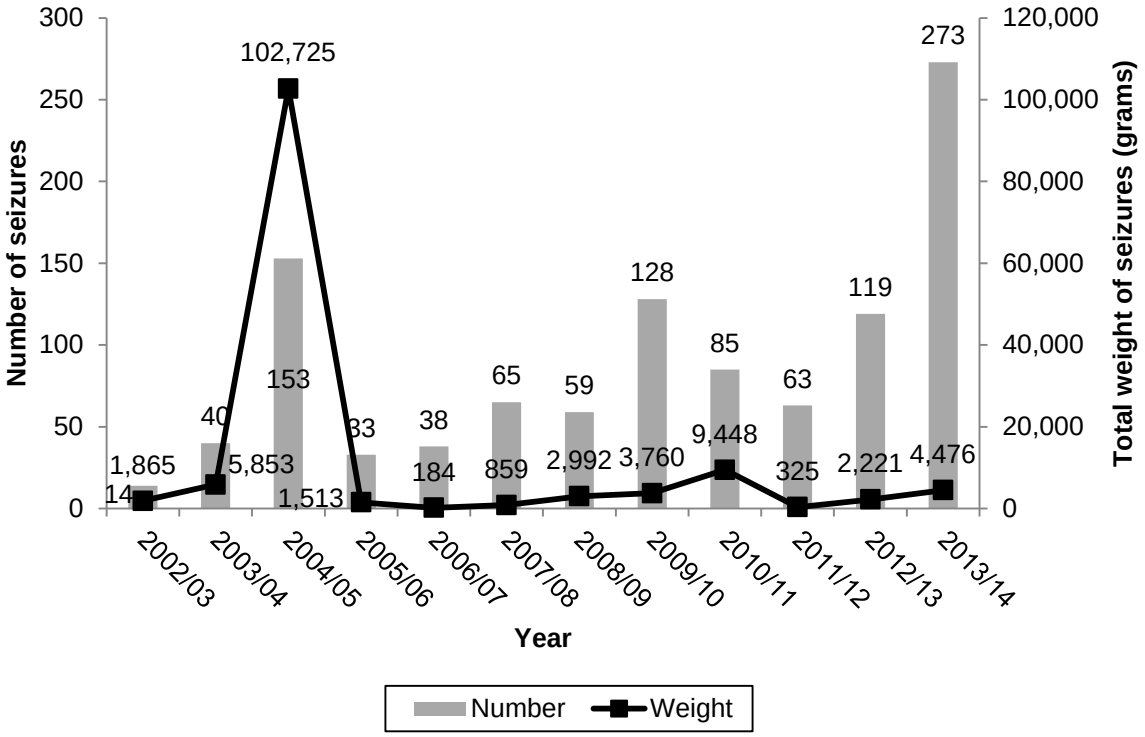
6.3 Availability

Just one respondent in 2015 reported on the current availability of cocaine in Perth, describing it as '*difficult'*. This can be compared with the two respondents who commented on the availability of cocaine in 2014, one describing current availability as '*very easy*' and the other as '*difficult'*. There was no information on recent changes in availability. Two respondents commented on who they had last obtained cocaine from, citing '*friends'* and '*acquaintances'* respectively. The source venues mentioned for obtaining cocaine were reported by one as an '*acquaintances home*' and by the other as an *'agreed public location*'. Due to the extremely small number of respondents that reported, these findings should be interpreted with caution.

Two KE reported that there had perhaps been a slight increase in cocaine availability. One from the law enforcement sector reported that they had been seizing a "*large amount*" from Asia recently. Another observed that there had been more "*chatter*" which was "*probably normal as summer and Schoolies season approaches".* A third described availability of cocaine as *"scarce".*

Figure 20 presents the total number and combined weight of cocaine seizures made by WAPS and AFP in WA from 2002/03 to 2013/14. The number of seizures rose substantially from 119 in 20012/13 to 273 in 2013/14, the last year for which data are available. The total weight of seizures also increased from 2,221 grams to 4,476 grams in 2013/14.

Figure 20: Number and weight of cocaine seizures by WAPS and AFP, WA 2002/03-20013/14



Source: **Australian Crime Commission**

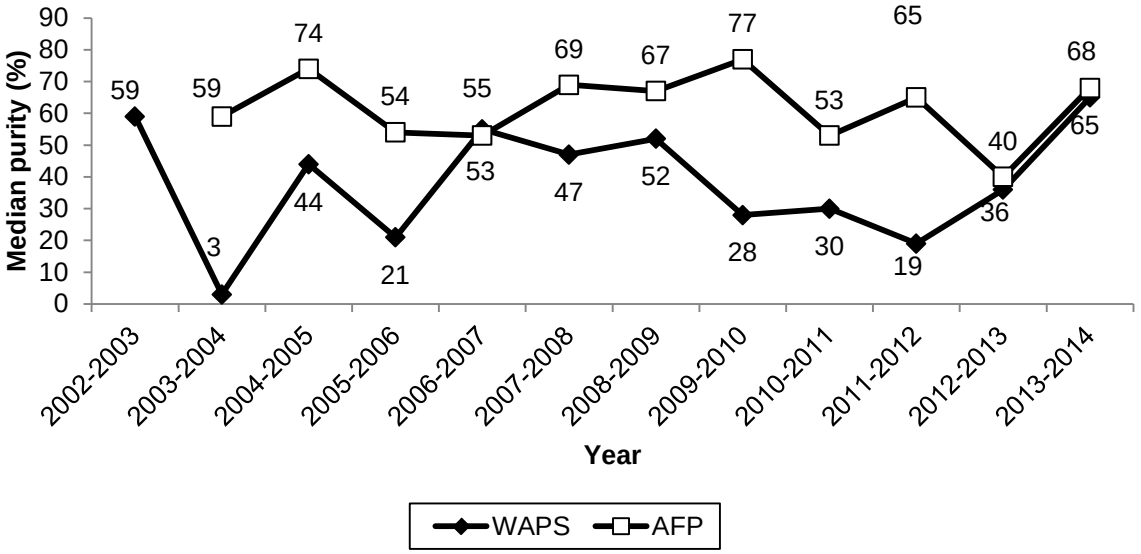
6.4 Purity

As with availability, only one respondent commented on purity of cocaine, describing it as '*high'*, compared with two respondents the previous year who described purity as '*medium'* or '*low'*. There was no information concerning recent changes to purity. Again, due to the small sample reporting on purity, these findings should be interpreted with caution.

Figure 21 shows the median purity of cocaine seizures by both WAPS and AFP has fluctuated over time. In 2013/14 the median purity of cocaine analysed by WAPS was 65% compared to 36%% in the previous period while the median purity analysed by AFP was 68%%, up from 40%.

It must be noted that the seizures and accompanying purity data reported here is not a truly random sample of all seizures made by these agencies as they make operational decisions about which seizures they will subject to analysis to determine purity. As a result it is not possible to say the extent to which the purities reported here are representative of all seizures made by these law enforcement agencies in WA. It should further be noted, that the AFP median is based on analysis of only 10 seizures, and the WAPS median is based on analysis of only four street-level (ie:<=2 grams) seizures.

Figure 21: Purity of cocaine seizures analysed in WA, by quarter, 2002/03-2013/14



Source: Australian Crime Commission

Just three KEs commented on cocaine purity. One from the law enforcement sector reported it as around 50-60%. Another described it as '*low'* and a third as '*stable'*.

6.5 Summary of cocaine trends

- Lifetime use of cocaine by IDU was reported by 71% of the 2015 sample, which was not significantly different from the 59% who reported lifetime use in 2014.
- Recent use was reported by 11% of the 2014 sample, which was not significantly different from the 7% reported the previous year.
- Frequency of cocaine use in 2015 was an average of 2 compared to the average of 11 days in 2014.
- Only one respondent commented on the price of cocaine, citing a price of $250 for half a gram.
- Only one participant reported on availability and purity of cocaine, therefore, making it difficult to draw conclusions about the cocaine market in WA.

7 CANNABIS

7.1 Use

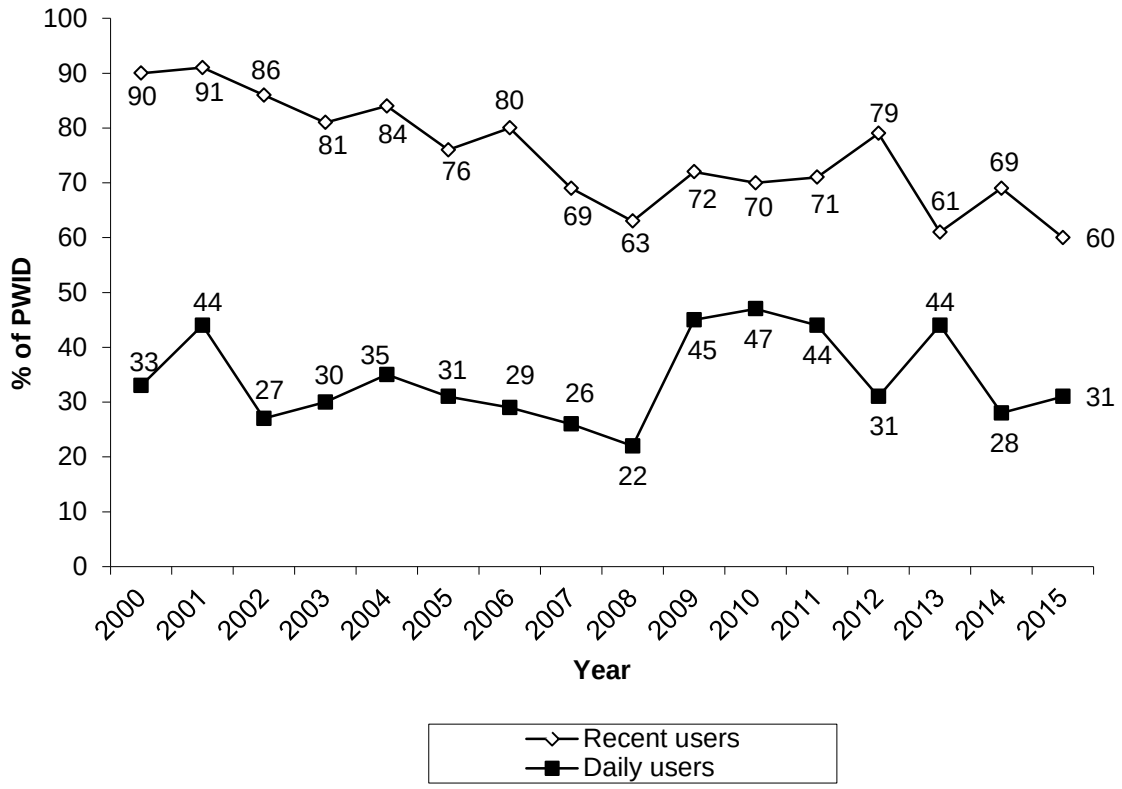
7.1.1 Cannabis use among IDU participants

In 2015, lifetime use of cannabis was reported by 96% of PWID, which was comparable to 97% from the previous two years.

7.1.2 Current patterns of cannabis use

Use of cannabis in the last six months was reported by 60% (n=53) which was not a significant decrease from the 69% in 2014. In 2015, days of use ranged from one to 180, with 31% (n=16) of all recent users reporting use of cannabis on a daily basis, which was not significantly different to the 28% reported in 2014. The proportion of PWID reporting any use and daily use of cannabis in the last six months is presented in Figure 22.

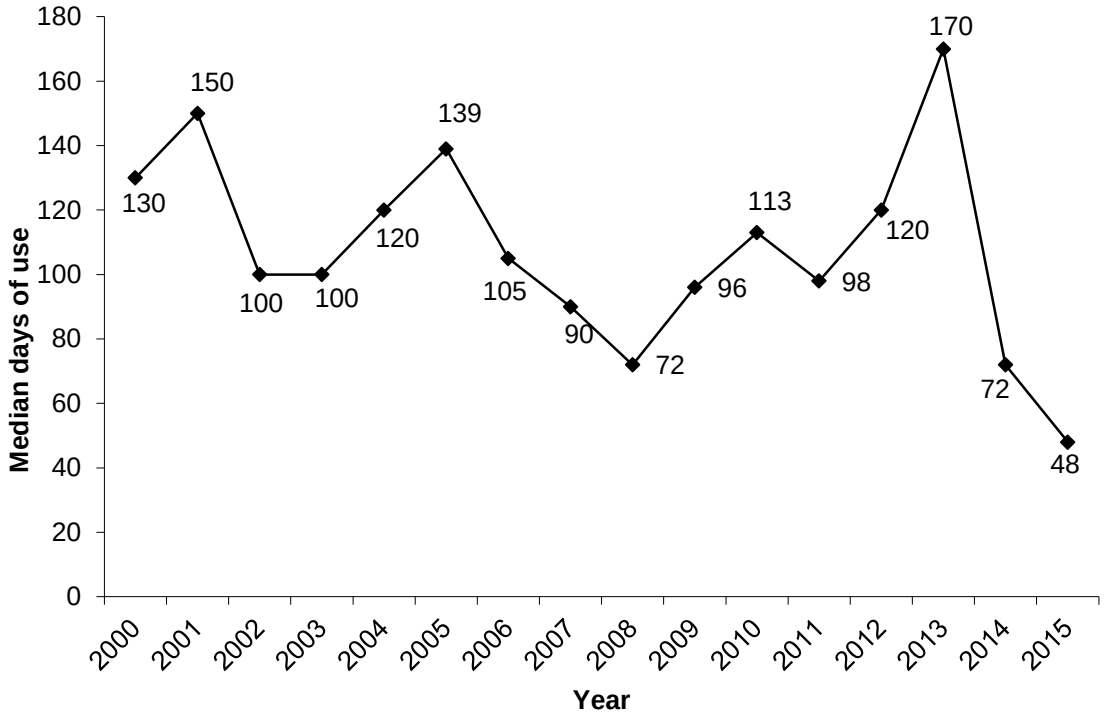
Figure 22: Recent use and daily use of cannabis among recent users in the past six months, 2000-2015



Source: IDRS user interviews

Figure 23 shows the median number of days cannabis was used among IDU across IDRS surveys. The median days of use had substantially decreased from 72 days in 2014 to 48 days in 2015. The mean days of use was 84 which was not significantly less than the 2014 mean of 86 days.

Figure 23: Median days of cannabis use in the past six months, 2000-2015



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 (90%, n=45) reported that hydroponic cannabis had been the form most commonly used, and just 10% (n=5) nominated bush. There were no mentions of either hashish or hash oil in this context, although small numbers (n=4) did mention using either hash or hash oil at some point during the last six months. The most commonly nominated amounts of cannabis consumed in a typical session ranged from half to 20 cones/joints with the most commonly mentioned quantity being one cone. The most commonly nominated amount smoked in a heavy session remained one cone, but some (n=3) respondents reported up to 20 or 30 cones.

Although no KE spoke about cannabis as a principle drug of concern, many nevertheless did make some comments concerning its use and the characteristics of people who do use it. These included:

"Most clients (80%) also using pot but it is not viewed as problematic."

"Lots of use, but largely non-problematic. Often cannabis is used to potentiate the effects of meth or to ease comedown."

"Ongoing use, often for dealing with pain relief. Some requests for detox."

"Very common in mental health referral cases and younger clients with 13% as principal drug of concern, but used by perhaps 50% of methamphetamine users."

"Not too much among opioid users"

"Lots of use among ATSI clients."

Finally, one KE from the crowd control sector noted that there was *"more use among 30-50 year olds and often mixed with alcoholism, but doesn't cause a security issue."*

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 in Perth had been stable over the last year with the price of an ounce of hydro remaining at $350.

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) and an ounce ($250) appear to have remained unchanged since 2014. However, as all these median prices were calculated from ten or less respondents, caution must be exercised in interpreting these findings.

Table 14: Price of most recent cannabis purchases by participants, 2014-2015

Amount	Median price* $	Range $	Number of purchasers
Hydro			
Gram	(25) 25^	25-30	(15) 7
Half ounce	(190^) 175	150-200	(8) 7
Ounce	(350) 350	300-400	(21) 13
Bush			
Gram	(25^) -	-	(5) 0
Half ounce	(163^) 163^	150-175	(6) 2
Ounce	(250^) 250^	50-320	(7) 6

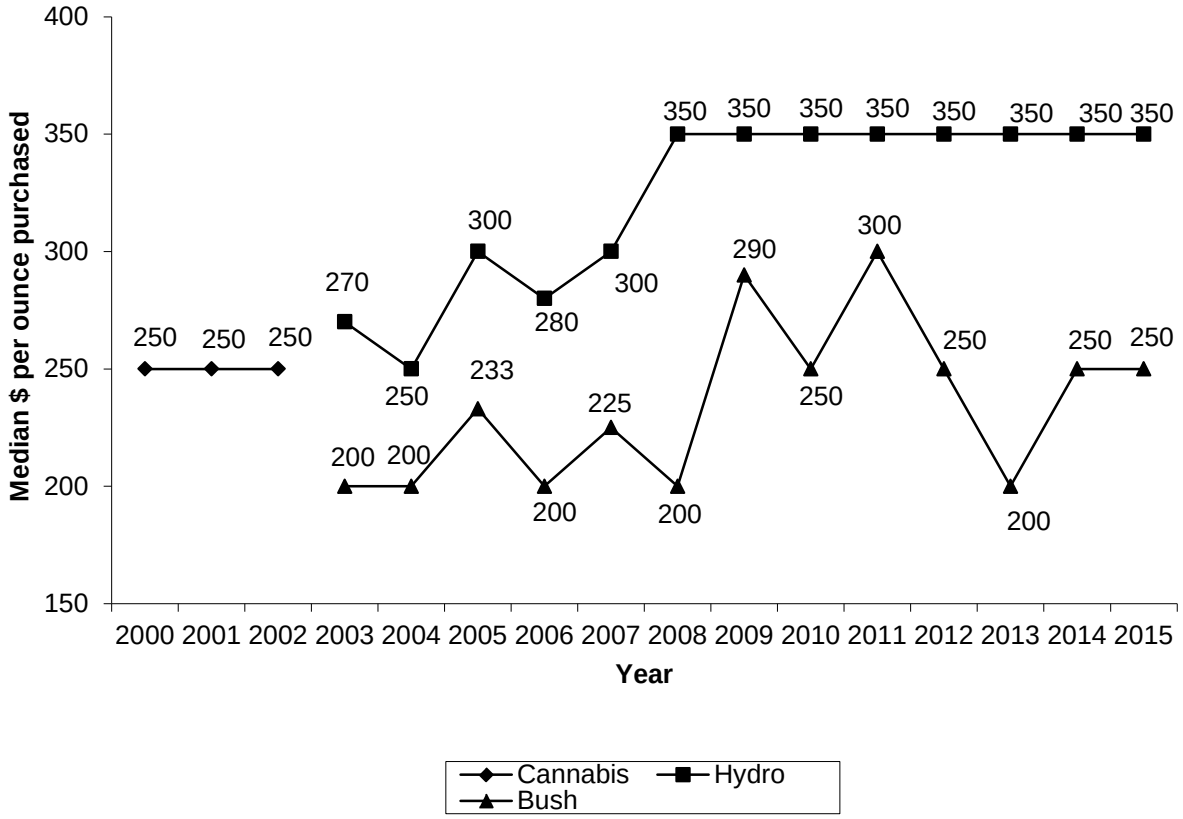
Source: IDRS user interviews

* 2014 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 24. 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 24: Median prices ($) of an ounce of cannabis estimated from PWID participant purchases, 2000-2015



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, 32 participants reported on hydro and 15 reported on bush. Regarding the price of hydro, 78% (n=25) reported it as '*stable'*, and 19% (n=6) reported it as '*increasing'*. For bush, 87% (n=13) reported the price as '*stable'*, 13% (n=2) believed that it was 'increasing'.

Just two KE commented on the price of cannabis, one reporting that the current price of an ounce was $500, and the other reporting that price, potency and purity had all remained '*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 2015, there were 33 participants who commented on the current availability of hydro. The majority of these (49%, n=16) reported that it was '*very easy*', in contrast to the previous year when the most common response by 48% was that availability was '*easy'*. This was followed by 39% (n=13) who described it as '*easy'*, and 12% (n=4) who reported it as '*difficult'*.

There were no reports that current availability of hydro was '*very difficul*t'. With regard to change in availability over the last six months, 79% (n=26) rated it as '*stable'*, with very small numbers suggesting otherwise.

Bush

In 2015, current availability of bush was most commonly described as '*very easy*' by 53% (n=9) of the 17 PWID responding in contrast to 2014 when it was most commonly described as '*difficult'*, reported by 45%. This was followed by 35% (n=6) who described it as '*easy'*, and 12% (n=2) who described it as '*difficult'*. There were no reports that current availability of bush was '*very difficult*'. Asked about changes to availability in the previous six months, 88% (n=14) of those responding reported it had been '*stable'*. This data is presented in Table 15.

Table 15: Participants' reports of cannabis availability in the past six months, 2014-2015

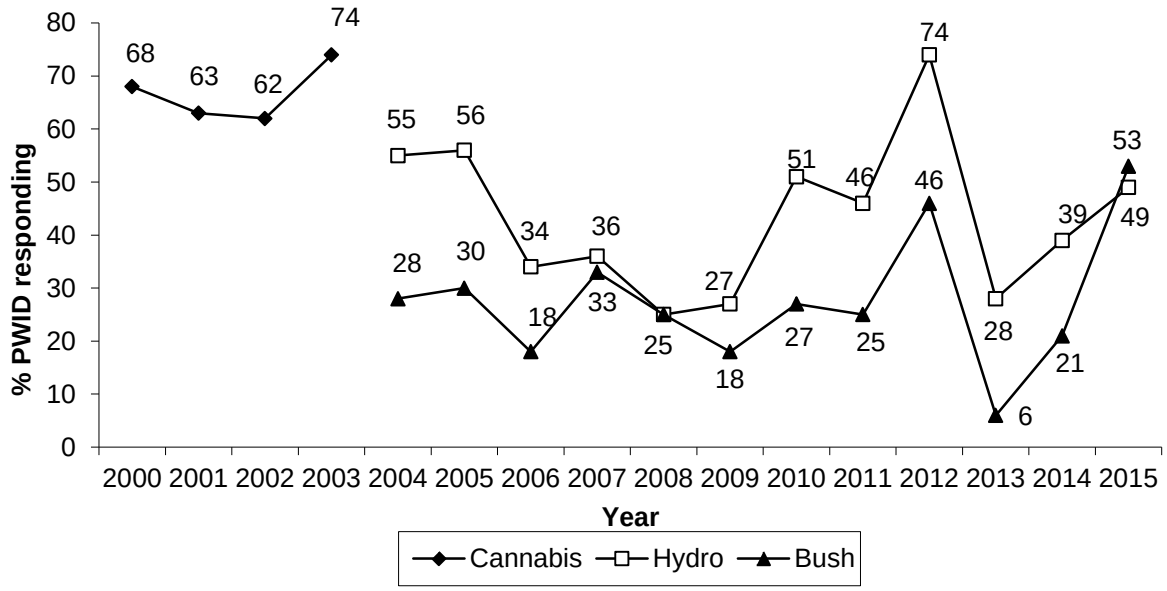
Current availability	**Hydro**		**Bush**	
	2014 (N=98)	**2015 (N=89)**	2014 (N=98)	**2015 (N=89)**
Did not respond*	39	**56**	69	**72**
Did respond	59	**33**	29	**17**
Of those who responded:				
Very easy (%)	39	**49**	21	**53**
Easy (%)	48	**39**	35	**35**
Difficult (%)	14	**12**	45	**12**
Very difficult (%)	0	**0**	0	**0**
Availability change over the last six months				
Did not respond*	39	**56**	69	**73**
Did respond	59	**33**	28	**16**
Of those who responded:				
More difficult (%)	12	**6**	18	**6**
Stable (%)	78	**79**	75	**88**
Easier (%)	3	**9**	7	**6**
Fluctuates (%)	7	**6**	0	**0**

Source: IDRS user interviews

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

Figure 25 presents the proportion of PWID, who commented, that rated current availability of cannabis as '*very easy*'. Both hydro and bush appeared to experience an increase in availability since 2014, but these changes did not attain statistical significance, although this is likely a reflection of small numbers responding. Although bush for the first time had a higher proportion than hydro nominating its availability as '*very easy*', it should be noted that this finding is based on only nine reports.

Figure 25: Participant reports of current cannabis availability as 'very easy', 2000-2015



Source: IDRS user interviews

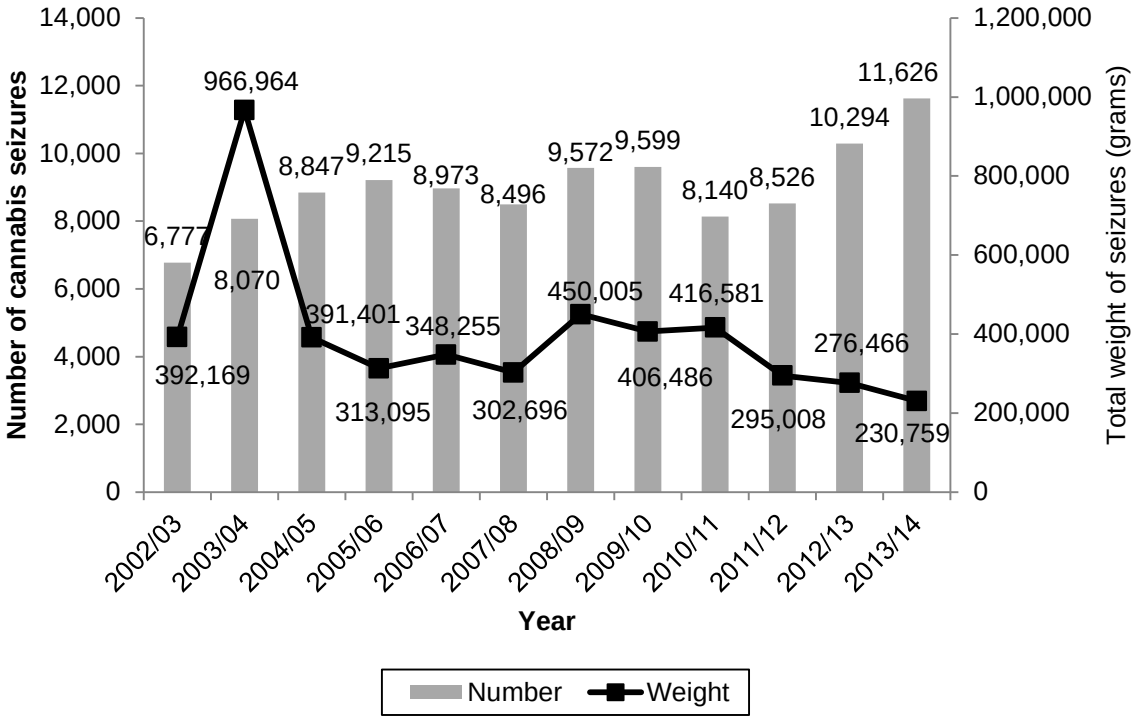
Note: A distinction between hydro and bush cannabis was introduced in 2004; prior to this time, survey items referred to any form of cannabis

Of the 32 PWID responding to questions about who was the last person they obtained hydro from, 63% (n=20) indicated that it came from '*friends'*, which was also the most common response in previous years. Other common responses included '*known dealers*' (16%, n=5), and '*relatives'* (9%, n=3). The most common venue for obtaining hydro remained at '*friend's home*' (38%, n=12). Next most commonly mentioned were '*agreed public location*' (19%, n=6), *'home delivered*', mentioned by 16% (n=5) and '*dealer's home*' by 16% (n=5). Other locations were reported by very small numbers of respondents. The most common source venue for bush was '*friend's home*' (29%, n=5) followed by '*home delivery*' (24%, n=4), and '*agreed public location*' (18%, n=3)

There were 17 PWID who provided information concerning where they last obtained bush cannabis from. As with hydro, the most common last source was '*friends'* nominated by 59% (n=10), followed by 12% (n=2) who had obtained it from '*known dealers*'. Individual respondents reported other sources.

Figure 26 presents the total number and combined weight of cannabis seizures made by WAPS and AFP in WA from 2002/03 to 2012/13. The number of seizures rose substantially from 10,294 in 2012/13 to 11,626 in 2013/14 making this the largest number of cannabis seizures yet reported in the WA IDRS. However, the total weight of seizures continued to fall from 276,466 grams to 230,759 grams during the corresponding period.

Figure 26: Number and weight of cannabis seizures by WAPS and AFP, WA 2002/03-2013/14



Source: Australian Crime Commission

7.4 Potency

Respondents were asked about the current potency of cannabis and any change in potency over the last six months (Table 16). Thirty-two PWID commented on hydro, with the majority (69%, n=22) nominating current potency as '*high'*, which was comparable to last year. This was followed by 16% (n=5) reporting purity as '*medium'*. With regard to changes in potency over the last six months, the greatest proportion (55%, n=17) reported potency as '*stable'*, followed by 26% (n=8) who reported that it had been '*increasing'* and 19% (n=6) who described it as '*fluctuating'*.

Seventeen respondents provided information regarding the potency of bush cannabis. The majority (47%, n=8) nominated its current potency as '*medium'*, which was largely unchanged from the 48% reporting this in 2014. There were 29% (n=5) who reported current potency as 'high' compared with 30% in 2014. That potency was either '*low'* or '*fluctuating'* were both reported by two individuals. With regard to changes in potency of bush over the last six months, the greatest proportion (65%, n=11) rated it as '*stable'* with other opinions being relatively uncommon.

Table 16: Participant estimates of cannabis potency, 2013-2015

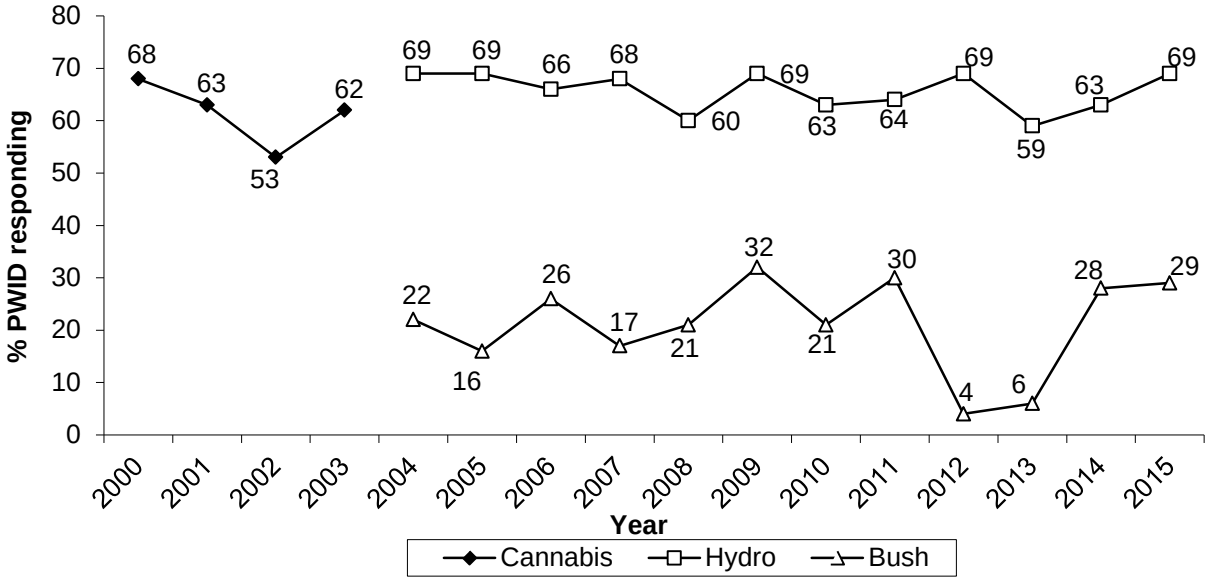
Current potency	Hydro		Bush	
	2014 (N=98)	**2015 (N=89)**	2014 (N=98)	**2015 (N=89)**
Did not respond*	41	**57**	71	**72**
Did respond	57	**32**	27	**17**
Of those who responded:				
High (%)	65	**69**	30	**29**
Medium (%)	25	**16**	48	**47**
Low (%)	4	**3**	11	**12**
Fluctuates (%)	7	**13**	11	**12**
Potency change over the last six months				
Did not respond* (%)	45	**58**	72	**72**
Did respond (%)	53	**31**	26	**17**
Of those who responded:				
Increasing (%)	17	**26**	12	**12**
Stable (%)	68	**55**	73	**65**
Decreasing (%)	6	**0**	4	**12**
Fluctuating (%)	9	**19**	12	**12**

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 27.

Figure 27: Participant reports of current cannabis potency as 'high', 2000-2015



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.

7.5 Summary of cannabis trends

- Similar to previous years, the vast majority of PWID sample (96%) reported lifetime use of cannabis.
- Recent use of cannabis was reported by 60% which was not significantly different to 69% in 2014.
- Frequency of use among recent cannabis users was 84 mean days which was not a significant decline from 86 mean days of use in 2014. The number of recent cannabis users reporting daily use of cannabis was 31% which was comparable, with 28% in 2014.
- The reported price of hydro was identical to past years, with the median price for an ounce being $350 since 2008. The median price of one ounce of bush remained unchanged at $250. However, only a small number of respondents commented on the price of an ounce of bush, making it difficult to draw firm conclusions. Prices for both forms were generally reported as stable.
- Current availability of both forms was described as '*very easy*' compared to 2014 when hydro was generally rated as '*easy'* and bush as '*difficult'*. Availability of both forms was reportedly '*stable'* in the six months prior to the survey.
- Current potency of hydro was rated as '*high'* by 69% of those who responded in 2015 (65% in 2014). Current potency of bush continued to be rated as '*medium'* by 47% of those who responded in 2014 compared to 48% 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).

One KE, a clinical nurse reported that *"Opiates were the third most common presentation. The situation is still very much about diverted opiates. Heroin appears occasionally, but mostly homebake and pills."* Another reported that their service had recently experienced a small increase in clients concerned about narcotic analgesics.

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 45% (n=40) of respondents. The proportion reporting illicit use of methadone in the last six months was 8% (n=7) in 2015, which was not significantly different from the 12% in 2014. Recent injection of illicit methadone was reported by 2% (n=2) of the sample, and oral consumption by 6% (n=5). Days of use ranged from one to 48, mean days of use was 12 which was not significantly less than the 2014 mean of 16 days. The quantity of illicit methadone used at the last occasion ranged from 10 to 90 mls with an average of 47 mls.

Lifetime illicit use of Physeptone® was reported by 27% (n=24) of respondents. The proportion reporting illicit use of Physeptone® in the last six months was 6% (n=5), which was not a significant change from 9% in 2014. Recent injection of illicit Physeptone® was reported by 3% (n=3) of the 2015 sample and recent oral consumption by 6% (n=5). There were no other reported routes of administration. Days of use ranged from one to 30 days, with a mean of eight, which was not significantly different from the 2014 mean of four days. The average amount of Physeptone® used on the last occasion ranged from 20 to 80 mg, with an average of 48 mg.

8.1.2 Market characteristics

There was just one respondent who provided information on the current market for illicit methadone in Perth. This person had spent $100 at their most recent purchase of 100ml of methadone. There was no data on recent changes to the price of illicit methadone or regarding purchases of illicit Physeptone®.

The one respondent who commented on the availability of methadone described it as *'very difficult'* to obtain and that this had remained '*stable'*. It had last been obtained from '*acquaintances'* at '*an agreed public location*', the original source being '*someone else's take away dose*'.

Obviously, the information provided by just one respondent cannot be assumed to be representative of the actual state of the situation, and this lack of data makes it impossible to draw any conclusions concerning the illicit market for methadone in Perth.

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 34% (n=30) of respondents. Illicit use in the last six months was reported by 8% (n=7), which was significantly less than the 19% reported in 2014 (χ^2=4.25539, 95% CI 0.0153-0.2130, p=0.04). Recent injection was reported by 7% (n=6) of the sample and recent oral consumption by 2% (n=2) with no other routes of administration reported. Days of use ranged from one to 180, with a median of eight days, compared to two days in 2014. The average amount used at the last occasion ranged from 1 to 8 mg with a median of 8 mg. Only one respondent reported using heat the last time they injected. All (100%, n=7) reported having used a filter, most commonly a cigarette filter (n=3), or cotton wool (n=3) and one report of using a wheel filter.

Lifetime illicit use of Suboxone® was reported by 15% (n=13) of respondents. Illicit use in the last six months was reported by just 1% (n=1) compared to the 4% in 2014. Recent injection was reported by just one individual with no other routes of administration reported. Days of use reported by this individual was six which does not appear dissimilar from the previous year's mean of seven, but the small number of cases do not allow for meaningful testing of significance. The amount used on the last location was six milligrams. The injection was not heated and cotton wool was used as the filter.

A history of lifetime use of illicit Suboxone® film was reported by 26% (n=23) of respondents. Recent use was reported by 19% (n=17) which was not substantially different from 16% in 2014. Recent injection of illicit Suboxone® film was reported by 16% (n=14) of the sample and recent oral consumption by 7% (n=6). Days of use ranged from one to 180 with a median of six and a mean of 38, which was a significant decrease on the mean of 93 days reported in 2014 (t=-3.483, df=16, p=.003). Typical amounts consumed ranged from 1 to 8 mg with a median of 2mg. Heating prior to injection was uncommon and reported by only four respondents. Filtering was typical, most commonly with a cigarette filter (n=6), or with cotton wool (n=5) or other less common methods. There were just two respondents who did not filter during their last injection.

8.2.2 Market characteristics

There were no respondents able to provide data on the price of illicit Subutex®, the only two respondents providing data in this section both receiving their Subutex® for free from '*friends'* or '*relatives'*. Neither was able to comment on whether the price had recently changed. With regards to availability, one respondent thought it '*difficult'* and the other '*very difficult*'. Only one commented on whether availability had changed in the last six months, reporting that it had become '*more difficult*'. Asked about the original source of the Subutex®, one reported that it was someone else's takeaway dose and the other that it had originally been obtained by theft. The only reasons given for use of illicit Subutex® were '*self-treatment*' and '*to stop using cannabis*'.

Just two respondents reported on the Perth market for illicit Suboxone® tablets, both reporting buying 8mg tablets for $50. There was also one report of purchasing four 1mg tablets for $20.Both agreed that the price of illicit Suboxone® tablets had remained unchanged. It was also agreed that the availability of the drug had remained unchanged with one respondent describing it as '*easy'* and the other as '*very easy*'. Both reported obtaining the tablets from '*friends'* from either the '*friend's home*' or an '*agreed public locatio*n'. The only reasons provided for use were '*intoxication'* and '*as a substitute for heroin*'.

While there were no respondents able to comment on the price of 2 mg illicit Suboxone® film, 10 were able to report on the price of 8mg Suboxone® film. Prices ranged from $30-$50 with a median price of $40 which was unchanged from prices in 2014. The majority of these

respondents (78%, n=7) believed the price of film had remained '*stable'*, although two believed it had '*increased'*. Current ease of access to illicit Suboxone® film was generally reported as '*very easy*' (50%, n=5), or '*easy'* (40%, n=4), with one remaining respondent describing it as '*difficult'*. It was generally agreed that this ease of access had recently remained '*stable'* (80%, n=8), although two respondents thought it had become '*easier''*. The most common source of illicit Suboxone® film was from '*friends'* reported by 56% (n=5) respondents. Another two reported that they had most often obtained it from '*unknown dealers*' and one respondent from '*acquaintances'*. The most common source venue was a '*agreed public location*' (56%, n=5). Much smaller numbers mentioned '*home delivery*', '*friend's home*' and '*street markets*'. Of those responding, most (67%, n=6) reported having paid cash at the most recent purchase, while 33% (n=3) had been given the drug for free. The most common original source was '*someone else's takeaway dose*'. Main reasons given for the use of illicit Suboxone film were '*as a substitute for heroin*' and '*intoxication'*.

One KE working in a needle exchange reported that around 10% of their clients were injecting opiate substitute medications and then topping up with heroin. They also noted a substantial move from Subutex® use to Suboxone®.

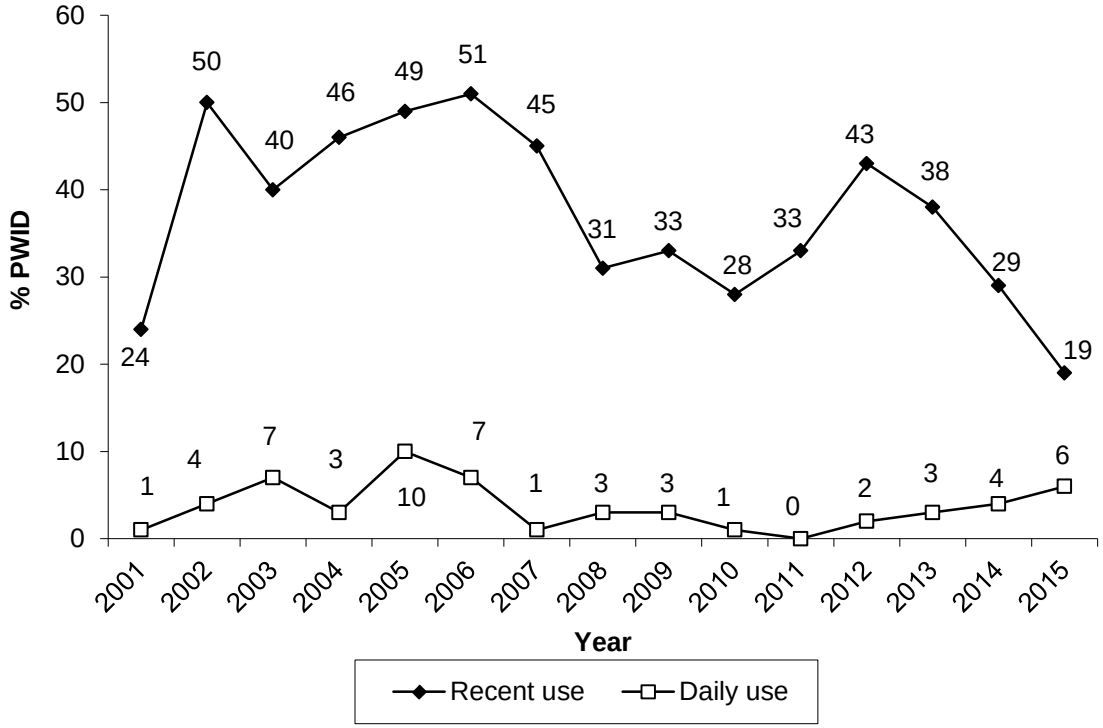
8.3 Morphine

8.3.1 Use patterns

Lifetime illicit use of morphine was reported by 65% (n=58) of the 2015 IDRS sample. The proportion reporting illicit use of morphine in the last six months was 19% (n=17), which was not significantly different to the 27% reported in 2014. Recent injection of illicit morphine was reported by 18% (n=16) of the sample and recent oral consumption by 2% (n=2). The only other reported route of administration was one respondent who reported snorting it. Days of use in the last six months ranged from one to 180, with five reports of use on a daily basis. Mean days of use was 62, which was not found to be significantly different from the 2014 mean of 21 days although this is likely an effect of the relatively small numbers of respondents who had recently consumed illicit morphine.

Figure 28 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 28: Proportion reporting recent and daily illicit morphine use in the past six months, 2001-2015



Source: IDRS user interviews

Asked if they had heated the mixture at the most recent injection, 70% (n=14) of those responding reported having done so. There were two respondents who reported not using a filter. Of those who did use a filter, the most common type remained a cigarette filter (50%, n=10), followed by cotton wool (20%, n=4) and by wheel filters (10%, n=2).

As in previous years, MS Contin® remained the most common brand of illicit morphine consumed with 95% (n=19) of those responding reporting this as their main brand.

One KE noted that among heroin users there was increasing intravenous use of diverted opiates like MS Contin® and Oxycontin®.

8.3.2 Market characteristics

As in previous years, the most commonly reported form of illicitly purchased morphine was MS Contin®. Thirteen participants reported on the price of a 100 mg tablet, (range=$50-$80) with a median price of $80 which was unchanged from the previous year. Fifteen participants reported on the price of 60 mg (range=$25-$50) with a median of $43 compared with $40 the previous year. The mean price was $41 which was unchanged from the previous year. There were just two respondents who reported on the price for 30 mg MS Contin® with a median price of $23. There were two respondents who had purchased 100 mg Kapanol® for a median price of $60 (range $40-$80). Purchasing 30 mg Anamorph® was reported by just one respondent for $30. More than two thirds (79%, n=11) of the respondents believed the price of morphine had remained '*stable"* in the past six months, followed by 21% (n=3) who believed that it had '*increased'*.

Current availability of morphine was reported on by 14 respondents with 50% (n=7) describing it as '*easy*' remaining the most common response. This was followed by 29%

(n=4) who described it as '*very easy*'. There were also two individuals who described it as '*very difficult*' and one as '*difficult'*. Although 80% (n=12) thought recent ease of access to illicit morphine had remained '*stable'*, 13% (n=2) thought it had become '*more difficult*' and one thought it had become '*easier'*.

The source person for obtaining illicit morphine was most commonly identified as a '*friend'* by 57% (n=8) of respondents, followed by *'known dealers*' (21%, n=3). Small numbers of respondents mentioned '*unknown dealers*' and 'acquaintances'. The most common venues for obtaining illicit morphine remained *'friend's home*' (43%, n=6), '*agreed public location*' (36%, n=5) and '*street marke*t' (14%, n=2).One respondent mentioned *'dealer's home*' in this context.

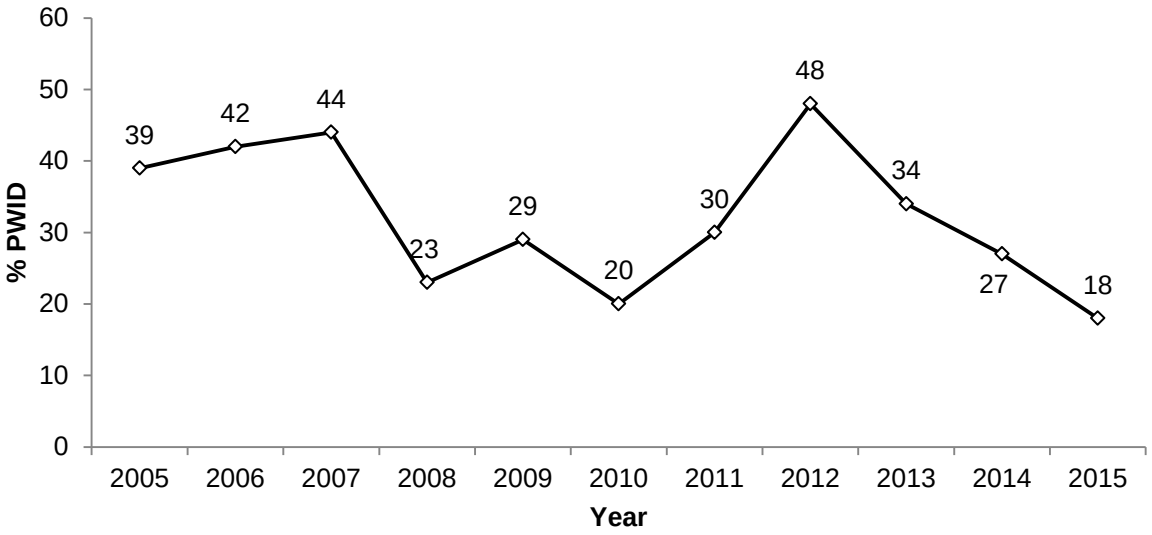
The most common reasons given for the use of illicit morphine was 'a*s a substitute for heroin*', '*intoxication'*, '*self-treatment*', *'pain relief*' and in the manufacture of homebake.

8.4 Oxycodone

8.4.1 Use patterns

Lifetime illicit use of oxycodone was reported by 62% (n=55) of the 2015 IDRS sample. The proportion reporting use in the last six months was 18% (n=16) in 2015, which was not a significant change from 27% in 2014 (Figure 29).

Figure 29: Recent use of illicit oxycodone in the past six months 2005-2015



Source: WA IDRS user interviews

There were 18% (n=14) of the sample who reported recent injection which was not significantly less than the 27% who reported doing so the previous year. There were also 10% (n=9) respondents who reported recent oral consumption as a recent ROA. Days of use ranged from one to 180, with two respondents using on a daily basis. The mean days of use was 37, which was comparable to a mean of 29 days in 2014. The most commonly reported brand used was Oxycontin® by 40% (n=8) of those responding. Other less common brands included mentioned Endone®, generic oxycodone Targin® and OxyNorm®. The typical amount used ranged from 5mgs to 480mgs with a median of 40 mgs.

Asked if they had heated the mix last time they injected illicit oxycodone, 94% (n=15) of those responding indicated that they had. Asked if they had used a filter at the last injecting

occasion, all (100%, n=16) of those responding indicated that they had. This was most commonly a cigarette filter (69%, n=11), or cotton wool (25%, n=4).

One KE commented on oxycodone, noting that there had been *"a big increase in people buying oxycodone. Amphetamine users are reporting using it at the end of the night; these are people who would never have touched it before."* Another reported high levels of use even after the reformulation. A third noted the need to provide specific advice against the injection of Targin® due to the risk of precipitated withdrawal.

8.4.2 Market characteristics

There were just five respondents who proved price data on illicit oxycodone making it difficult to draw firm conclusions about current prices The most common purchase (n=4) was for 40mg of reformulated Oxycontin® with prices ranging from $25-$40 with a median of $35 compared to $40 the previous year. The next most common were three purchases of 80mg reformulated Oxycontin® with prices ranging from $60-$80 and a median of $60 compared to $80 in 2014. There were also three purchases of 30mg reformulated Oxycontin® for $20-$25. Smaller quantities purchased included two purchases of 20mg Oxycontin® for $10-$15, one of 10mg Oxycontin® for $5, one of 15mg Oxycontin® for $10 , and one purchase of an unknown strength tablet of OxyNorm® for $25.

Asked if prices of Oxycontin® had recently changed saw 71% (n=5) reporting that they had been '*stable'* while other individual respondents thought it had either '*increased'* or been '*fluctuating'*.

There was little consensus of the current availability of oxycodone with 38% (n=3) describing it as '*very easy*', 25% (n=2) describing it as '*easy'*, 25% (n=2) saying it was '*difficult'* and 13% (n=1) saying it was '*very difficult*'. There was however near total agreement (78%, n=7) that this availability had remained '*stable'* over the last six months.

The most common source of illicit oxycodone remained '*friends'* reported by 89% (n=8) with just one respondent saying '*acquaintaces'*. Unsurprisingly, the most common locations for sourcing the drug was '*friend's homes*' (67%, n=6). This was followed by '*agreed public location*' (33%, n=3).

Reasons given for using illicit oxycodone included '*self treatment*', '*pain relief*', '*as a substitute for heroin*' and '*intoxication'*.

8.5 Fentanyl

A lifetime history of use was reported by 33% (n=29). Recent use in the last six months was reported by 14% (n=12) which was not a significant increase on the 11% the previous year. The most common recent ROA was by injection reported by all 11 recent users, two of which also reported using a transdermal patch. Days of use ranged from one to 60 with a mean of 11 days which was significantly less than the 2014 mean of 30 days (t=-3.892, df=11, p=.003). Recent illicit use was reported by nine respondents, compared to licit use by three. Ten respondents reported on their average amount used which ranged from 5mg to 100 mgs with a median of 50mgs. The most commonly reported type of filter used was a cigarette filter reported buy 50% (n=5) of those responding followed by cotton wool reported by 30% (n=3).

There were no respondents in 2015 able to provide price or availability data for illicit fentanyl.

Just one KE commented specifically about fentanyl. The predominant form was primarily patches with occasional liquid. All administration was by injection with no other routes of administration. Price was said to fluctuate, but was generally around $80 for 1/16th of a generic patch. This KE also noted overdose issues surrounding how there was "*misinformation about how to use diverted patches, including dosing issues, how it is dispersed throughout the patch, differences in size/strength of generic and brand name patches, and that various extraction techniques can produce unpredictable strength of results."*

8.6 Use of over the counter codeine

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

In 2015, 39% (n=35) of respondents reported a lifetime use of OTC codeine and recent use by 14% (n=12) which was not significantly different from 20% reporting recent use in 2014. Days of use ranged from one to 180 with a mean of 29 days which was not significantly more than the 2014 mean of 17. The only reported ROA was by oral consumption. Main brands used included Mersyndol®, Neurofen Plus®, Panadeine®, Panafen Plus® and Panadeine Extra®. Average amounts typically used ranged from two to ten tablets or capsules with a mean of four.

One KE noted that OTCs *"continue to be problematic."*

8.7 Other opioids (not elsewhere specified)

Other opioids include (but are not limited to) drugs such as opium and pethidine. In 2015, lifetime use of other opioids was reported by 43% (n=38) of the WA IDRS sample. Recent use was reported by 18% (n=16) compared with 9% in 2014. Average days of use was 34 compared to the previous year's mean of 64 days, but the small number of cases do not allow for meaningful testing of statistical significance. That this use was licit was reported by 60% (n=9) of those responding and illicit by the remaining 40% (n=6). The brands involved were rarely mentioned but included Tramadol®, and Panadeine Forte®.

8.9 Summary of opioid trends

- The proportion reporting illicit use of methadone in the last six months was 8% (n=7) in 2015, which was not significantly different from the 12% in 2014. Days of use ranged from one to 48, mean days of use was 12 which was not significantly less than the 2014 mean of 16 days.
- The proportion reporting illicit use of Physeptone® in the last six months was 6% (n=5), which was not a significant change from 9% in 2014. Days of use ranged from one to 30 days, with a mean of eight, which was not significantly different from the 2014 mean of four days.
- Illicit use in the last six months of illicit Subutex® was reported by 8% (n=7), which was significantly less than the 19% reported in 2014. Days of use ranged from one to 180, with a median of eight days, compared to two days in 2014.
- Illicit use of illicit Suboxone® tablets in the last six months was reported by 1% (n=1), compared to 4% in 2014. These very small numbers render it difficult to draw firm conclusions.
- Recent use of Suboxone® film was reported by 19% (n=17) which was not significantly different from 16% 2014. Days of use ranged from one to 180 with a mean of 38, which was a significant decreased on the mean of 93 days reported in 2014.
- The proportion reporting illicit use of morphine in the last six months was 19% (n=17), which was not significantly different to the 27% reported in 2014. Mean days of use was 62, which was not found to be significantly different from the 2014 mean of 21 days although this is likely an effect of the relatively small numbers of respondents.
- The proportion reporting use of illicit oxycodone in the last six months was 18% (n=16) in 2015, which was not a significant change from 27% in 2014. Days of use ranged from one to 180, with two respondents using on a daily basis. The mean days of use was 37, which was comparable to a mean of 29 days in 2014.
- Recent use in the last six months of fentanyl was reported by 12% (n=11) which was not a significant increase on 11% in 2014. Days of use ranged from one to 60 with a mean of 11 days which was a significant decrease on 30 days in 2014.
- Recent use of OTC codeine was reported by 14% (n=12) compared to 20% in 2014. Days of use ranged from one to 180 with a mean of 29 days which was not significantly more than 17 days in 2013.
- Recent use of other opioids was reported by 18% (n=16) compared with 9% in 2014. Average days of use was 34 compared with 64 in 2014, but the small number of cases did not permit analysis of statistical significance.

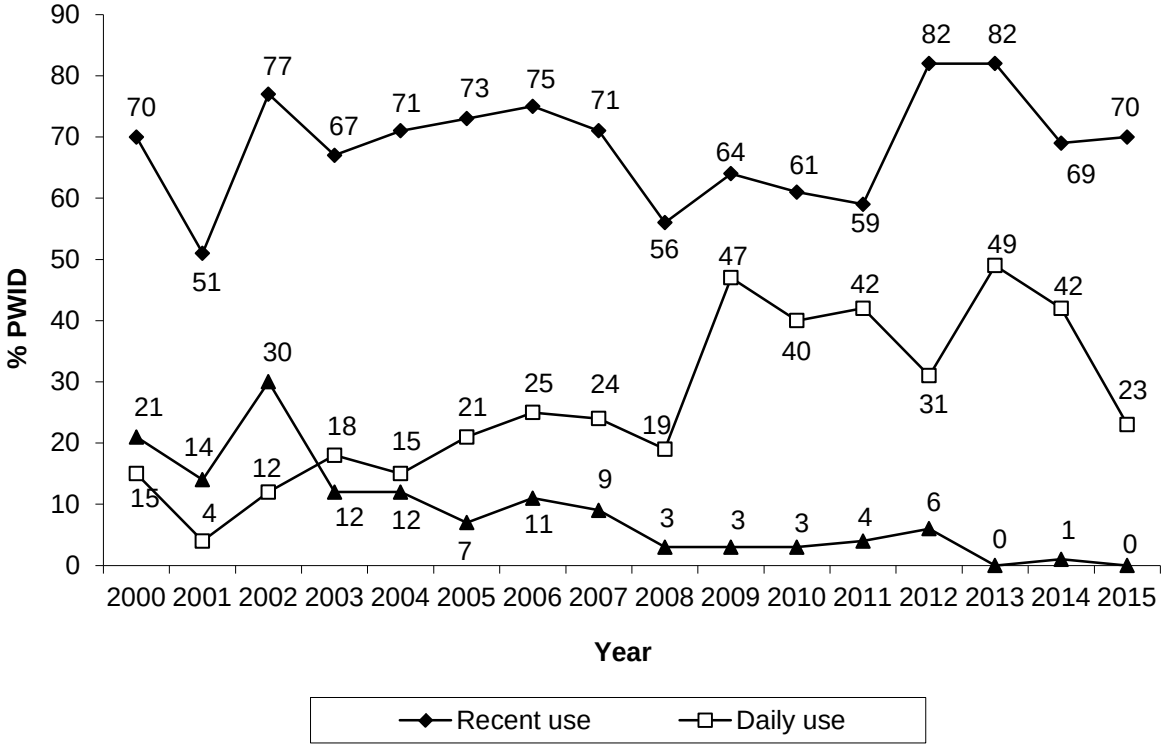
9 OTHER DRUGS

9.1 Benzodiazepines

The majority (82%, n=73) 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 70% (n=62) which was comparable to the 69% reported in 2014.

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

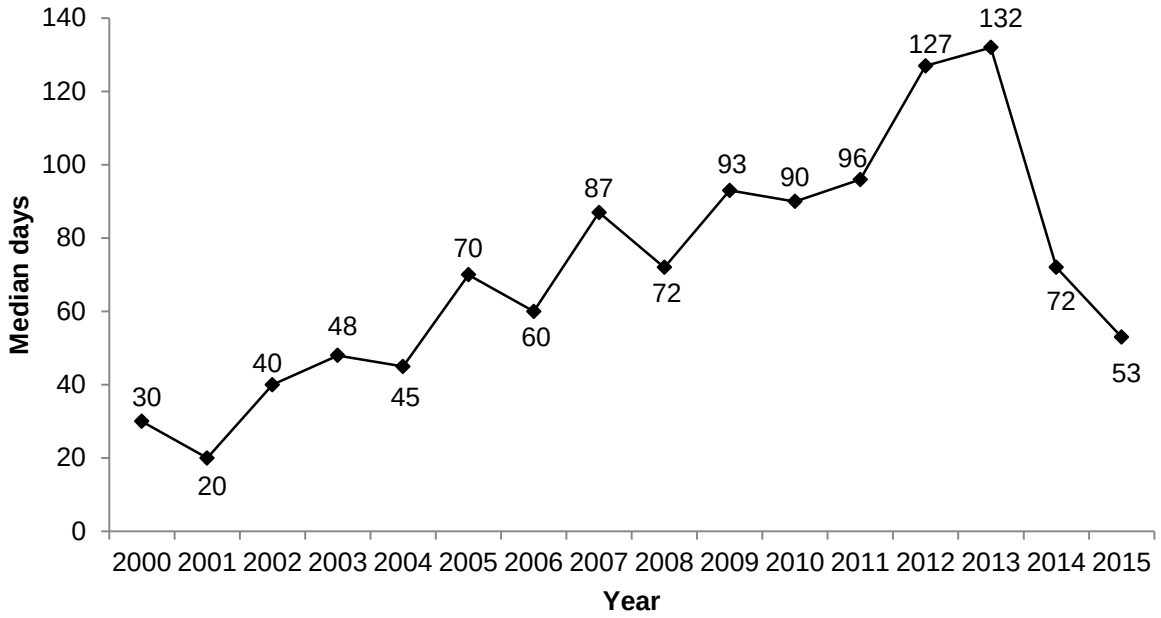
Figure 30: Proportion of PWID reporting any benzodiazepine use (licit or illicit), daily use and injection in the preceding six months, 2000-2015



Source: IDRS user interviews

Days of use ranged from one to 180. Mean days of use of any benzodiazepines was 85 which was not significantly different from the 95 days the previous year. Median days of use are displayed in Figure 31. Of recent users of benzodiazepines, there were 32% (n=20) who reported using benzodiazepines on a daily basis which was comparable to the 42% using daily in the 2014 sample.

Figure 31: Median days use of any benzodiazepines (licit or illicit) in the past six months, 2000-2015



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 61% (n=54) of the 2015 sample (26% licit, 49% illicit). Recent use of any form of alprazolam was reported by 21% (n=19) (9% licit, 15% illicit) which was not significantly less than the 35% in 2014. Mean days of use of prescribed alprazolam was 61 which was not significantly less than 71 in 2014, while mean days of use of illicitly obtained alprazolam was 13 which was not significantly different from the 22 days the previous year.

9.1.2 Other benzodiazepines

Lifetime use of benzodiazepines, other than alprazolam, was reported by 83% (n=74) of the 2015 sample (64% licit, 54% illicit). Recent use of other benzodiazepines was reported by 70% (n=62) (51% licit, 36% illicit) which was not significantly different than the 69% reporting recent use of other benzodiazepines in 2014. Licit benzodiazepines were used on a mean of 98 days which was not a significantly change from the 2014 mean of 113. Illicit benzodiazepines were used on a mean of 24 days which was not a significant change from the 32 days in 2014. By far the most common form of recently used benzodiazepine was diazepam reported by 73% (n=43) of those who responded. Much smaller numbers reported the use of oxazepam, clonazepam, and temazepam.

There were just six respondents who commented on the market for illicit benzodiazepines in Perth. The price of most benzodiazepine tablets was reportedly one to two dollars, although the one respondent reporting on alprazolam suggested a price of ten dollars. Four of these respondents believed that the price of benzodiazepines had '*increased'* while the remaining two believed it had been '*stable'*. There was little consensus concerning the current availability of benzodiazepines with three respondents describing it as '*difficult'*, two as '*easy'*

and one as '*very easy*'. This availability was considered to have been '*stable'* by four and to have become *'more difficult*' by two. The most common source of illicit benzodiazepines was from '*friends'* although one respondent reported obtaining them from their '*known dealers'*. Source venues included 'friends home', 'agreed public location' and 'home delivered'. Of the six commenting, five reported that the last occasion they had obtained benzodiazepines that they paid for them whereas in 2014 most had been given them for free. The original source of illicit benzodiazepines was invariably 'somebody else's prescription'.

One KE commented *"A lot less people reporting pharmaceutical use in response to wider availability of heroin. Benzos are commonly used along with opiates, or to ameliorate meth comedown."* Another however, reported substantial use of alprazolam.

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 51% (n=45) of respondents. Recent use in the last six months was reported by 11% (n=10) which was significantly less than the 24% reported in 2014 (χ^2=4.65, 95%CI=0.0216-0.2388, p=0.03). Of these recent users, 70% reported recently swallowing illicit prescription stimulants, and 40% (n=4) reported recent injecting. Days of use ranged from one to 24 with a mean of six days which was significantly less than the mean of 13 days reported in 2014 (t=-3.416, df=9, p=0.008). The main form used remained dexamphetamine reported by 10 recent users (both licit and illicit). There were also two respondents who reported their main form to be Ritalin®. Only two respondents reported heating the mixture during their most recent injection. The most commonly used filters were cigarette filters.

Just two respondents provided information on the Perth market for illicit pharmaceutical stimulants, both referring to dexamphetamine. Prices ranged from $300-$350 for a bottle of 100 pills. One believed this price had remained '*stable'*, while the other didn't know. Both described ease of access as '*difficult'*, but differed in opinion as to whether this access had remained '*stable'* or '*fluctuated'*. The only reported source was from '*acquaintances'* and originally *'someone else's prescription'.*

9.3 Hallucinogens

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

Lifetime use of hallucinogens was reported by 79% of respondents. Recent use was reported by 7% (n=6) which was not significantly different from the 10% reported in 2014. All (100%) of these respondents reported swallowing hallucinogens. Two respondents also reported recent injection, and one reported smoking. Days of use ranged from one to 15 with a mean of four days which was comparable to five days the previous year. The hallucinogen reported as most used was LSD.

Just two respondents provided information about the market for hallucinogens in Perth, one speaking specifically about LSD and one about DMT. The last time they had obtained LSD, they had paid $20 for a trip. Potency was reported as '*high'* but with a tendency to '*fluctuate'*. Access was reported as 'difficult' and this availability had recently been '*stable'*. The drug had last been sourced from 'friends', either at their home or home delivered.

Relatively few KE commented on LSD. One observed that there were "*more trips around*."

and another reported that their service had recently seen around a dozen presentations with LSD as a secondary drug of concern. A third KE from the law enforcement sector reported that LSD currently cost between $12 and $25 per tab. This KE also added that police were detecting more DMT although this was probably due to police actively looking for it. They also added that DMT appeared to be "*related to the hippy/bush doof/rave scene*".

Another KE also commented that the availability of DMT seemed to have recently increased.

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 76% of respondents. Recent use in the last six months was reported by 9% (n=8) which was comparable to the 10% reporting recent consumption of the drug in the previous year. The most common ROA was oral, reported by 78% (n=6) of recent users. There were two respondents who reported having injected ecstasy in the last six months and two of having snorted it. Days of use ranged from one to six with a mean of three which was not substantially different from the previous year's mean of four days of use. The most common form consumed was pills.

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

A number of KE made a variety of comments about ecstasy. These included:

"Large amounts of ecstasy, particularly tablets coming into WA. Last year purity was on the rise but now it is stable at 15-25%"

"Increase in the amount of people we have seen related to ecstasy use in the last 12 months. We have seen 29 people in the last 12 months and it unusual for us to see that many. The bulk of people that we see with ecstasy is around the summer months when festivals are on."

"Very available at the moment. Users are not complaining about the quality of pills; purity/standard is high. The bulk price for 1000 pills has dropped slightly to $15 (previously it was 17-18)."

Two KE made very specific comments concerning the contents of pills sold as "*ecstasy*":

"We have noticed many reports from users that ecstasy is high quality. There are not as many dud pills as there were maybe six months ago. The price is around $35-40. 'Tripstasy' is ecstasy that is mixed with hallucinogens; we are getting reports of this. Tripstasy looks like ecstasy (it has the same colours and markings), so it is not possible to distinguish the two. If people are not expecting tripstasy it can be scary for users when they take it."

"A lot of misconceptions around what is being sold as MDMA but is actually probably meth or NBOMe."

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 17% of the 2014 sample. Use of inhalants in the last six months was reported by just 3% of the 2015 sample (n=3), which was comparable to 6%% in the previous year. Number of days used ranged from one to three. The forms used were not specified.

9.6 Alcohol

Lifetime use of alcohol was reported by 99% (n=88) of respondents which was identical to 2014 findings, and recently consumed by 58% (n=52) and 63% (n=62) reported use in the last six months, which was comparable to 63% the previous year. All respondents who had recently consumed alcohol had swallowed it. Although there were eight 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 seven respondents consuming alcohol on a daily basis. Mean days of use was 52 which was comparable to 55 mean days of use reported in 2014. The Alcohol Use Disorders Identification Test-Consumption (AUDIT-C) screen (Bush, et al., 1998) was administered to 62 respondents and revealed that, of the 2015 PWID sample, 37% (n=23) were consuming alcohol at hazardous levels.

Several KE, while discussing illicit drug users made reference to alcohol. One of these, a clinical nurse specialist reported that *"70% of all work is alcohol – intoxication, liver disease, Gastro-intestinal bleeds, withdrawal seizures and self-harm."*

Another observed that while alcohol was *"Rarely at problematic levels among methamphetamine users it remained the most common primary presenting drug" in their client load."*

A third noted that *"There is also a population of street present youth who mix alcohol with heroin. They are not employed and using heroin to get by; they are often dealing with a history of trauma."*

Another commented "*The focus in the media is on ice, but realistically people are getting into trouble such as being assaulted and causing assaults because they are using alcohol. Problems also occur because people mix alcohol with other drugs*."

Similarly, another KE noted that a lot of older injectors don't drink due to issues surrounding hepatitis C. Another however, did observe that alcohol was used by opioid users to both *"potentiate the drugs' effects, but also to manage withdrawal."* An NSP worker also noted that while alcohol was not really an issue with most of their clients, that there had been occasional instances of clients drunk driving to the exchange.

During 2013-14, alcohol continued to be the most common primary presenting drug in episodes in WA, accounting for 36% of treatment episodes and 37% of clients. (AIHW, 2015b)

9.7 Tobacco & E-cigarettes

Lifetime use of tobacco was reported by 99% (n=88)of the 2015 sample and recent use by 93% (n=83), which was largely unchanged from the previous year. Days of use ranged from

one to 180 with 94% (n=78) of recent smokers reporting smoking on a daily basis. Mean days of use was 171 which was unchanged from findings in 2014.

Lifetime use of electronic cigarettes was reported by 30% (n=27) of the 2015 sample and recent use by 16% (n=14) compared with 18% in the previous year. Days of use ranged from one to 180 with a mean of 31 days which was not a significant increase on the 13 day average of 2014. Of the eight who responded, 75% (n=6) indicated that their e-cigarette contained cannabis, one that it contained nicotine and one that it contained both. There was only one respondent who indicated that they were using e-cigarettes as an aid to ceasing smoking.

9.8 Seroquel® (quetiapine)

Lifetime use of illicit Seroquel® was reported by 35% (n=31) of the 2015 sample and recent use was reported by 11% (n=10) which was unchanged from 2014. All reported recent use was by oral dosing with no injection reported. Days of use for illicit Seroquel® ranged from two to 90 with a mean of 19 days which was not a significant change from the mean of 12 days in 2014. One KE reported high rates of Seroqual® use.

9.9 Synthetic cannabis

Lifetime use of these synthetic cannabis was reported by 20% (n=18) and recent use by 7% (n=6) which was a significant decrease on the 22% in the previous year (χ^2=7.85, 95%CI=0.0558-0.2560, p<0.01). Days of use ranged from one to 60 with a mean of 12 days which was not significantly different from the 2014 average of 21 days. Just four brands were identified compared to 13 in 2014 when use was more widespread. Interestingly, the most commonly mentioned brand remained Kronic, despite this brand having been unavailable for some considerable time (The last entry on the timeline of Kronic's official Facebook page is dated 8th February 2012 https://www.facebook.com/Kronic-167362236708466/). This may suggest that the word "*Kronic*" has become an umbrella term for synthetic cannabis in general, in much the same way that "*Google*" has become an umbrella term for internet searches or that "*Xerox*" was once used as an umbrella term for photocopying. One KE supported this idea in noting that "*Synthetic cannabis is used among young street present ATSI. It's called "Kronic" but not actually clear what it is.*"

Other KE made a variety of remarks concerning synthetic cannabis including:

"Synthetic cannabis is the principal drug in 3% of cases and 10% of younger users & mental health referrals."

"Synthetic pot more of an issue than cannabis itself. Clients are presenting with extreme aggression and irrational, almost psychotic behaviour."

"Clients are presenting with psychosis arising from synthetic pot."

"We have seen more cases involving synthetic cannabis in the past 18 months. They compartmentalise into four areas - people come in primarily with 1. Thought disorder/anxiety or 2. Chest pain/palpitations or 3. Seizures or 4. Vomiting."

Although one KE thought use of synthetic cannabis may be increasing, three other KE made observations to the effect that they believed that use of synthetic cannabis had declined over the last year.

A KE from the law enforcement sector commented on the origins of synthetic cannabis:

"Synthetic cannabis often comes out of china in powder, then being sprayed onto plant matter."

There were no respondents in the user survey able to provide price, potency or availability data concerning synthetic cannabis.

Data obtained from ADIS revealed calls related to synthetic cannabis remained relatively stable from 258 in 2013/2014, to 292 in 2014/2015.

9.10 New psychoactive substances

Lifetime use of these synthetic drugs was reported by 3%% (n=3) compared to 11% respondent the previous year. There were just two reports of recent use compared to five in 2014. The substances used were identified as 'bath salts' and MDPV. Days of use were low ranging from one to six with a mean of four. The most commonly reported ROA was by injection, however, given the very small number of respondents reporting these findings must be interpreted with caution.

Only three KE commented on new psychoactive substances.

The first noted that their service *"very rarely sees other users of new psychoactive substances. We have seen one case of meow meow (methedrone), and sometimes see people who have taken something but don't know what it was."*

The second reported seeing some *"novel stimulants and hallucinogens, especially from the NBOMe series, and ongoing emergence of substituted cathinones (eg: MDPV) referred to on the street as "Flacka" or "Gravel".*

The third commented upon W-18, a fentanyl analogue described as *"many times stronger than morphine. While not yet found in Perth, but there are concerns about its potential to be used to cut heroin with resulting increased risk of overdose."*

9.11 Steroids

A lifetime history of use was reported by 6% of the sample (n=5) There were only two 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.

One KE from the crowd control sector voiced their opinion that violent incidents associated with alcohol quite often involved steroids as well. Another also noted an increased number of steroid users.

9.12 Miscellaneous substances

Very small numbers of respondents (n=9) talked about lifetime use of other drugs not elsewhere described, most notably ketamine (n=5). Other drugs ever used were mentioned by individual respondents and included barbiturates, DMT, GHB, Palfium, Phenergan and salvia.

9.13 Summary of other drug trends

- Recent use of any form of benzodiazepines (licit or illicit) was reported by 70% (n=62) which was comparable to the 69% reported in 2014. Mean days of use of any benzodiazepines was 85 which was not significantly different from the 95 days the previous year. Reports of recent injection of benzodiazepines remained very low with no reports in 2015. Recent use of any form of alprazolam was reported by 21% (n=19) (8% licit, 15% illicit) which was not significantly less than the 35% in 2014. Mean days of use of prescribed alprazolam was 61 which was not significantly less than 71 in 2014, while mean days of use of illicitly obtained alprazolam was 13 which was not significantly different from the 22 days the previous year.
- Recent use in the last six months of illicit pharmaceutical stimulants was reported by 11% (n=10) which was significantly less than the 24% reported in 2014. Mean days of use was six days which was significantly less than the mean of 13 days reported in 2014.
- Recent use of hallucinogens was reported by 7% (n=6) which was not significantly different from the 10% reported in 2014. Days of use ranged from one to 15 with a mean of four days which was comparable to five days the previous year.
- Recent use of ecstasy was reported by 9% (n=8) which was comparable to the 10% reporting recent consumption of the drug in the previous year. Mean days of use was three which was not substantially different from the previous year's mean of four days of use.
- Recent use of inhalants remained uncommon in the sample, reported by just 3% of the 2015 sample (n=3), which was comparable to 6%% in the previous year. Number of days used ranged from one to three.
- The majority of IDU across years reported lifetime and recent use of alcohol and tobacco.
- The recent use of illicit Seroquel® (quetiapine) was reported by 11% (n=10) which was unchanged from 2014. Mean days of use was 19 days which was not a significant change from the mean of 12 days in 2014.
- Recent use of synthetic cannabis was reported by 7% (n=6) which was a significant decrease on the 22% in the previous year. Mean days of use was 12 days which was not significantly different from the 2014 average of 21 days.
- References to the use of new psychoactive substances, steroids and other miscellaneous drugs were made by small numbers of respondents.

10 HEALTH-RELATED HARMS ASSOCIATED WITH DRUG USE

10.1 Overdose and drug-related fatalities

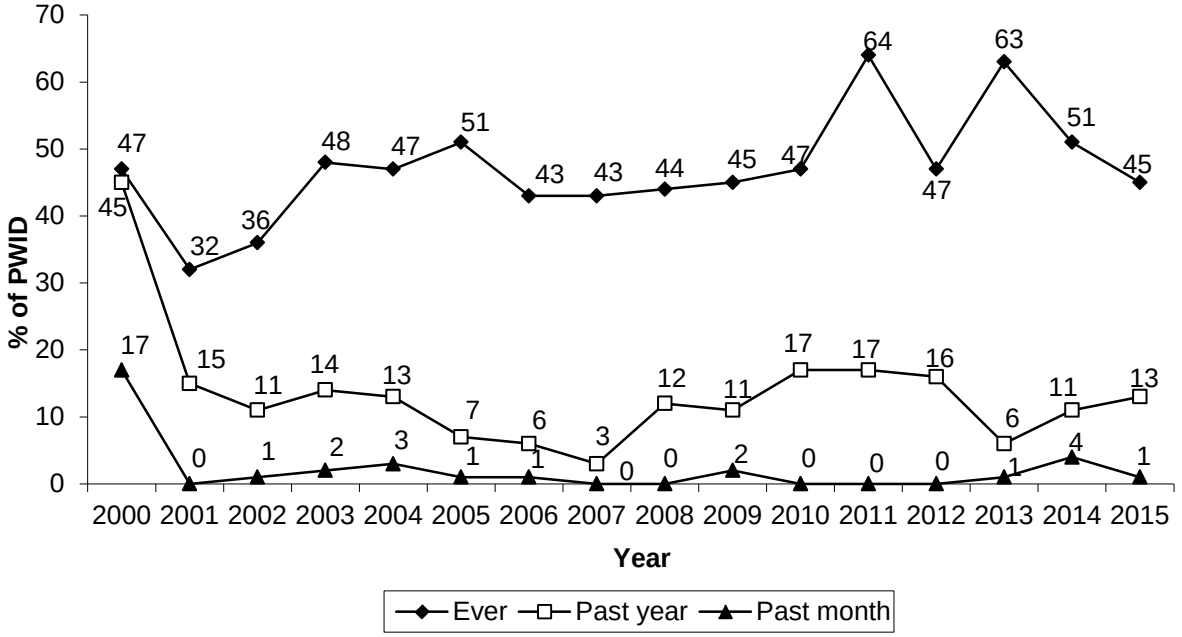
10.1.1 Heroin and other opioids

10.1.1.1 Non-fatal opioid overdose

The IDRS participants were asked how many times they had overdosed on heroin and the length of time since their last heroin overdose. A lifetime history of heroin overdose was reported by 45% (n=40) which was not significantly less than the 51% reported in 2014. Having received naloxone at the most recent overdose event was reported by 38% (n=15) of those with a history of heroin overdose. The median number of times respondents reported ever overdosing on heroin was three (range 1-20) compared to two in 2014. Time since the most recent heroin overdose ranged from one month up to 36 years.

There were 13% (n=12) of respondents who had overdosed within the previous twelve months which was not significantly more than the 11% in 2014. Of these, five reported having received ambulance attendance and two receiving naloxone as a response to their most recent overdose. There were five reports of having received Cardiopulmonary resuscitation (CPR) from a friend, partner or peer, but none from a health professional. Three respondents reported having been transported to hospital. None of these recent overdose cases reported seeking post-overdose treatment or information. There was just one report of experiencing a heroin overdose in the month prior to survey compared with three in 2013. Overdose data since 2000 is displayed in Figure 32.

Figure 32: Proportion of WA participants who had ever overdosed, overdosed in the past 12 months and in the past month on heroin, 2000-2015



Source: IDRS user interviews

Several KE commented on recent increases in the number of heroin overdoses. One KE noted that "*There has been a flood of heroin on to the market; availability and purity are both high which has led to a lot of overdoses. There is still a lot of miseducation amongst dealers*

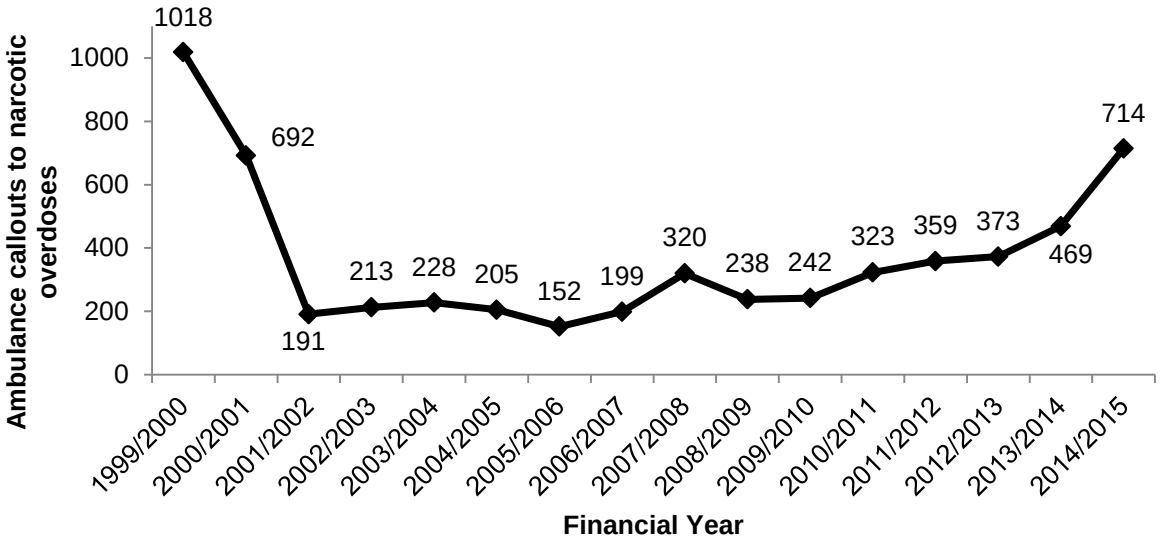
around the consequences of dropping people off at an ER if they overdose; people are still scared of getting in trouble and so we try to educate people on the truth about this."

Another commented on the challenges tailored educational information on overdose saying there needs to be *"more messages towards OD while deliberately not trying to send the wrong message to users by saying that purity is currently high."*

There were two KEs who specifically connected the increase in overdoses to the fluctuating purity of heroin. Another observed that some users of methamphetamine were starting to move onto opioids and experiencing overdoses due to a lack of familiarity with these drugs.

Figure 33 presents the number of narcotic overdoses attended by St John Ambulance by quarter from April 2002 to June 2015. There were 714 overdoses attributed to narcotic drugs attended by ambulance during the 2014/15 period compared to 469 in the previous financial year. For the first time, St John Ambulance data reported on the narcotic involved in these overdoses. This revealed that 530 were attributed to heroin, thereby exceeding the total number of overdoses attributed to any narcotic in 2013/14.

Figure 33: Number of ambulance callouts to narcotic overdoses, WA, 1999/2000-2014/2015



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

Several KE also reported this recent increase in heroin overdoses, one specifically noting issues associated with lasting neurological damage due to oxygen deprivation while unconscious.

10.1.1.2 Fatal opioid overdose

Analysis of data from the Australian Bureau of Statistics by NDARC reveals that in 2011 there were 88 fatal overdoses attributable to accidental opioid overdose among persons aged 15-54 in WA which was comparable to 87 in 2010. This was the highest figure seen since 72 in 2000. In terms of rates per million, this equates to 65.1 deaths, compared to the national rate of 49.5. This was the highest rate reported in Australia, followed by Victoria with 56.0 per million.

10.1.2 Other drugs

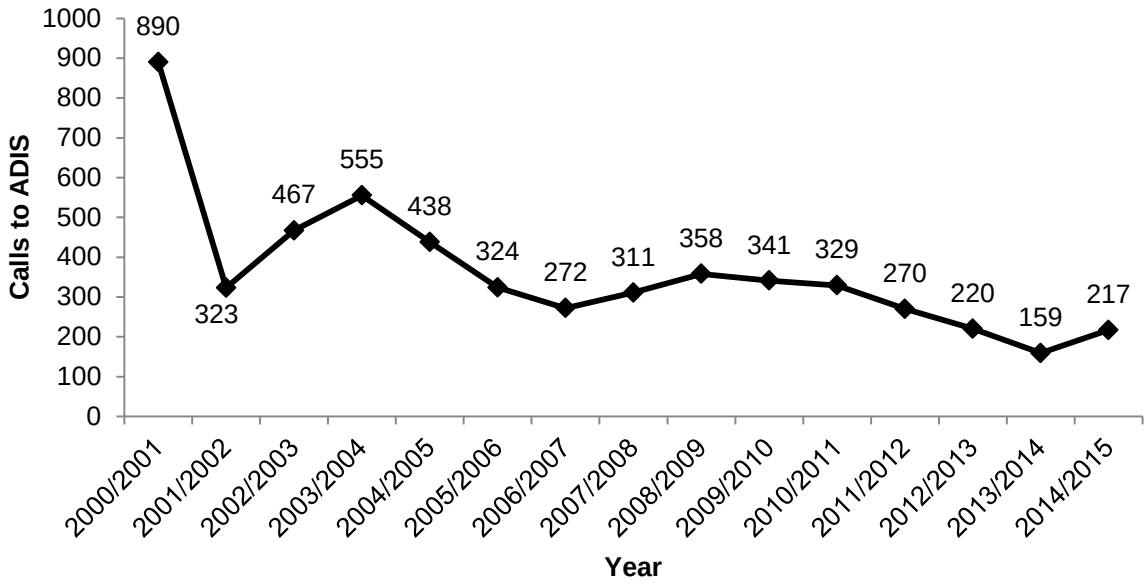
10.1.2.1 Non-fatal overdose

In addition to heroin overdose, participants were asked whether they considered themselves to have ever accidentally overdosed on any other drug(s). A lifetime history of overdose on any other drug was relatively rare with three self-reports of overdosing on oxycodone, two on methadone, and individual respondents reporting a lifetime history of overdosing on morphine, speed, alcohol and cannabis.

10.2 Calls to telephone help lines

Figure 33 presents the number of telephone calls to the WA ADIS regarding heroin from 2000/2001 to 2014/2015. There were 217 calls to the service with heroin as the primary drug of concern and accounting for 0.9% of all calls received. This represents the first time since 2008/2009 when the number of heroin related calls actually increased. This data is shown in Figure 34.

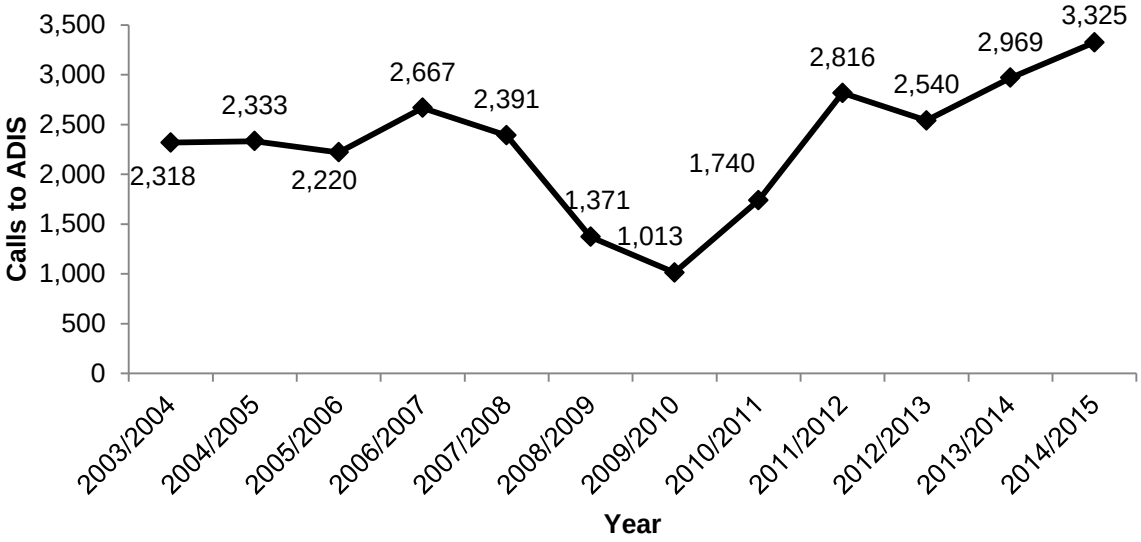
Figure 34: Number of enquiries to ADIS regarding heroin, 2000/2001- 2014/2015



Source: Alcohol and Drug Information Service

Figure 35 presents the number of telephone calls to WA ADIS regarding amphetamines from 2003/2004 to 2014/2015. It is evident that the number of calls regarding amphetamines has tended to increase since 2009/2010. In the last financial year there were 3,325 calls with amphetamines as the primary drug of concern compared to 2,969 in the previous year, making this the highest number so far recorded. In 2014/2015 amphetamines accounted for 13.9% of calls to ADIS.

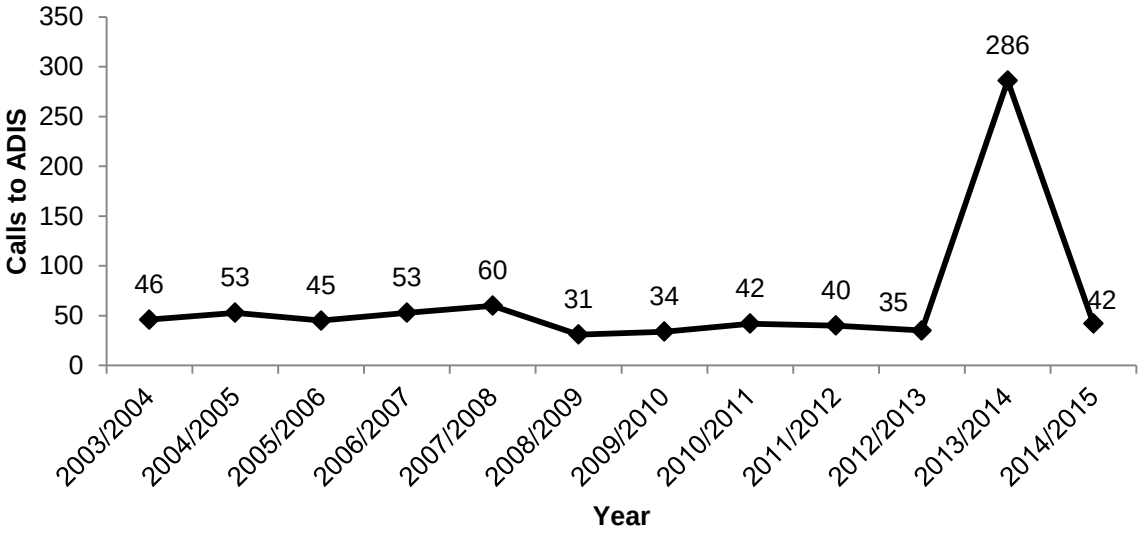
Figure 35: Number of enquiries to ADIS regarding amphetamines, 2003/2004-2014/2015



Source: Alcohol and Drug Information Service

Figure 36 presents the number of telephone calls to WA ADIS regarding cocaine from 2003/2004 to 2014/2015. In the last financial year there 42 calls concerning cocaine, reflective of levels of 2012/2013 and earlier. A KE from the service reported that "*we get very few calls about this*". While there appears to have been a massive surge in calls involving cocaine as the primary drug of concern during 2013/2014, the service notes that this is largely accounted for by multiple calls from a single individual and as such, this figure should be interpreted with scepticism.

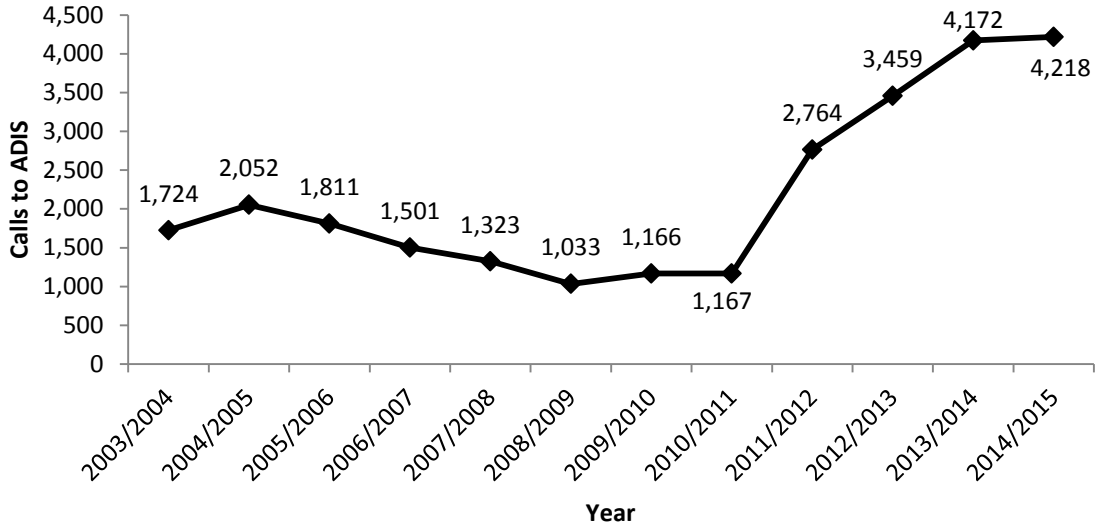
Figure 36: Number of enquiries to ADIS regarding cocaine, 2003/2004 - 2014/2015*



Source: Alcohol and Drug Information Service
*It should be noted that the large spike in calls during 2013/2014 was attributed to multiple calls from an individual client.

Figure 37 presents the number of cannabis-related calls received by ADIS from 2003/2004 to 2014/2015. During the 2014/15 financial year calls to ADIS with cannabis as the primary drug of concern continued to increase. In that year there were 4,218 calls compared to 4,172 in the corresponding period the previous year, accounting for 17.6% 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 37: Number of enquiries to ADIS regarding cannabis, 2003/2004-2014/2015*



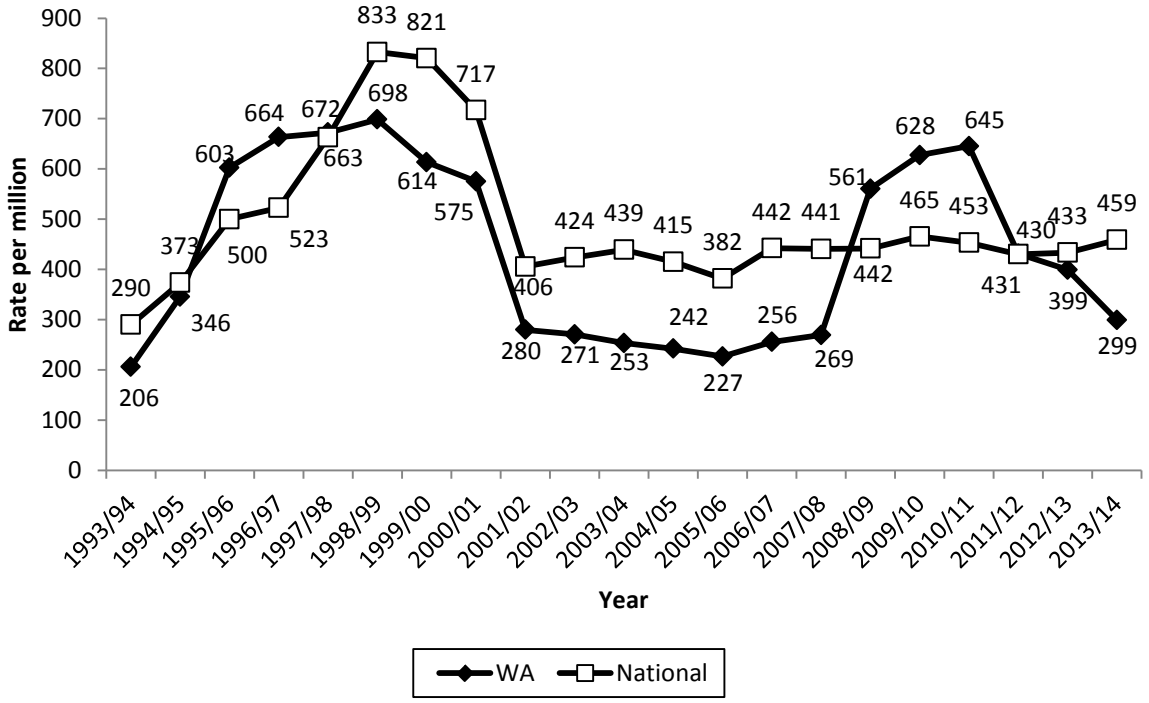
Source: Alcohol and Drug Information Service
* Data collected since 2011 also includes calls to the Cannabis Intervention Requirement Scheme (CIRS) as well as cannabis as primary drug of concern.

10.3 Hospital admissions

10.3.1 Opioids

The rate per million persons aged 15-54 years of hospital admissions in which the principal diagnosis was opioid-related is shown in Figure 38. A principal diagnosis that is opioid-related is recorded where opioids are established (after discharge) to be chiefly responsible for occasioning the person's episode of care. WA rates per million fell for a third year running and in 2013/14 were 299 compared to a national rate of 459.

Figure 38: Rate per million persons of principal opioid-related hospital admissions among people aged 15-54 years, WA and nationally, 1993/94- 2013/14

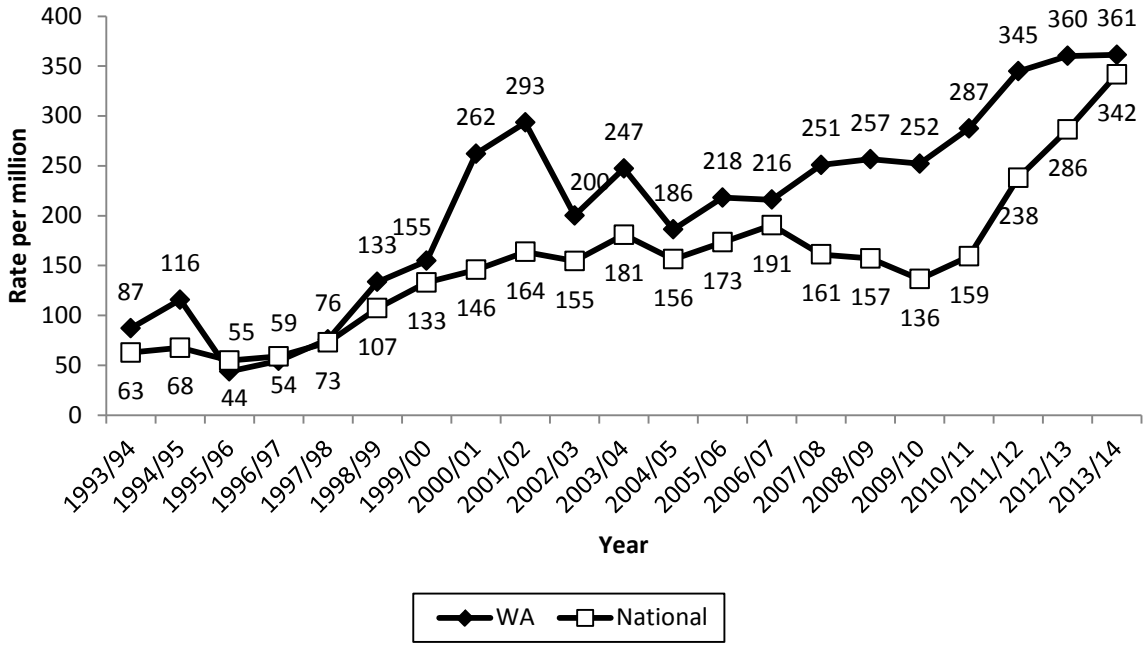


Source: Roxburgh & Breen (2016)

10.3.2 Amphetamines

The rate per million persons aged 15-54 years of hospital admissions in which the principal diagnosis was amphetamine-related is shown in Figure 39. Numbers of amphetamine-related hospital admissions in WA remained stable at from 361 per million in 2013/14 compared to 360 in 2012/13. Compared to the national rate of 342 per million, WA continued to exhibit slightly higher rates.

Figure 39: Rate per million persons of principal amphetamine-related hospital admissions among people aged 15-54 years, WA and nationally, 1993/94-2013/14



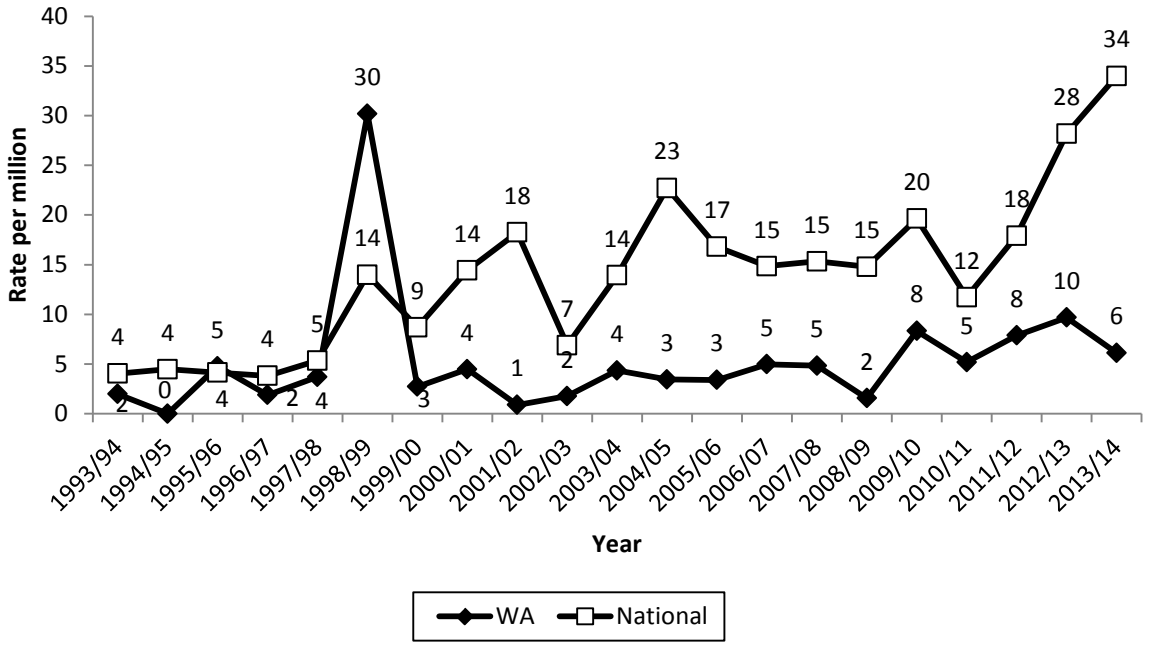
Source: Roxburgh & Breen (2016)

One KE working in emergency departments noted both an increase in amphetamine-related admissions, but also the changing nature of amphetamine-related presentations in hospitals, reporting that explosions in clandestine laboratories manufacturing methamphetamines now required staff specialising in illicit drugs to regularly liaise with staff from the burns unit. A number of KEs described other harms associated with methamphetamine presentations. These included agitation, drug induced psychosis, sepsis, acute intoxication, cellulitis, poor oral hygiene and diet, skin picking, heart attack and strokes. It was also noted that the behaviours of patients on admission were often "*Psychotic, irrational and difficult to manage and commonly brought in by police."*

10.3.3 Cocaine

The rate per million persons aged 15-54 years of hospital admissions in which the principle diagnosis was cocaine-related is shown in Figure 40. WA rates have been consistently low since 1998/99 when the rate peaked at 30. National rates have fluctuated across time and have been consistently higher than WA rates, with the exception of the WA peak in 1998/99. In 2013/14 there were six cocaine-related hospital admissions per million population in WA compared with the national rate of 34 per million.

Figure 40: Rate per million persons of principal cocaine-related hospital admissions among people aged 15-54 years, WA and nationally, 1993/94-2013/14

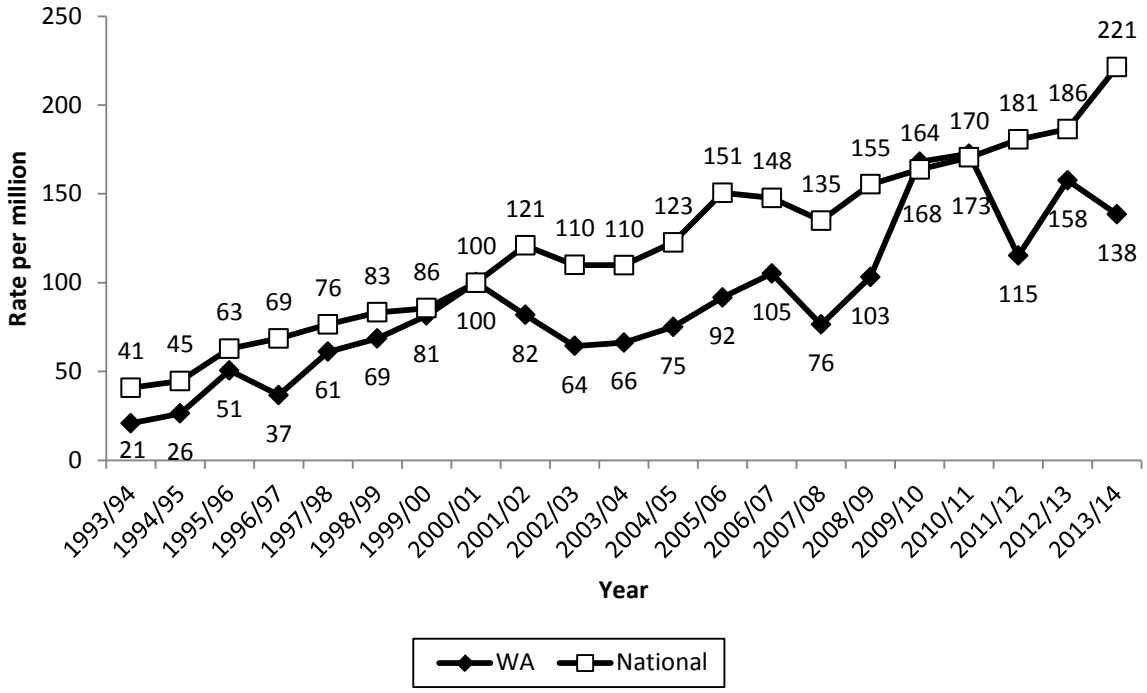


Source: Roxburgh & Breen (2016)

10.3.4 Cannabis

The rate per million persons aged 15-54 years of hospital admissions in which the principal diagnosis was cannabis related is shown in Figure 41. WA rates per million were 138 compared with the national rate of 221, a decrease from the WA rate of 158 per million the previous year.

Figure 41: Rate per million persons of principal cannabis-related hospital admissions among people aged 15-54 years, WA and nationally, 1993/94 -2013/14



Source: Roxburgh & Breen (2016)

10.4 Injecting risk behaviours

10.4.1 Access to needles and syringes

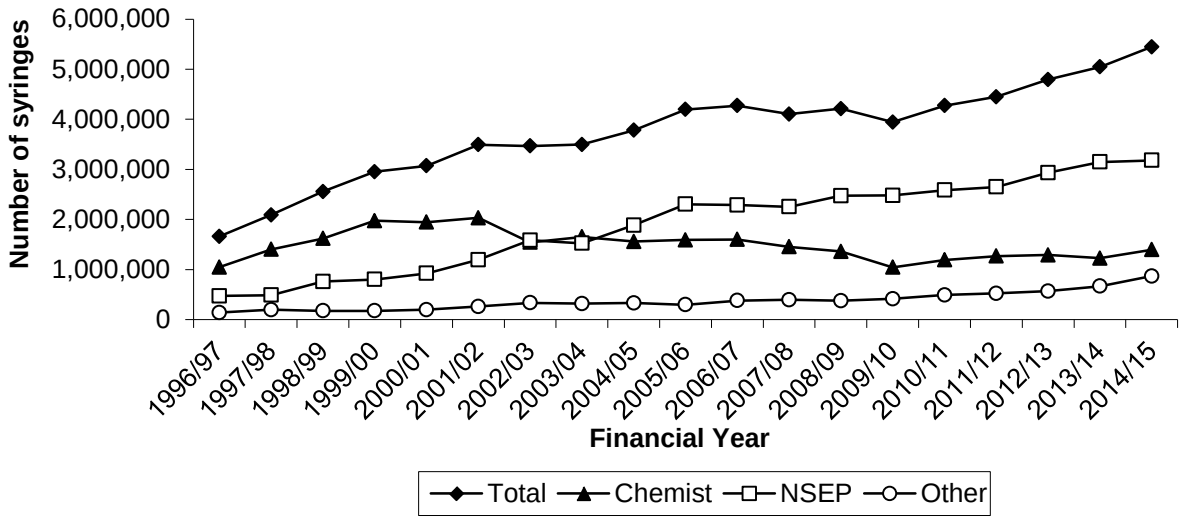
IDRS participants were asked to report on the frequency of injecting and frequency of obtaining needles and syringes over the month preceding interview. Of the 74 PWID responding, number of injections in the last month ranged from two to 200 with a median of 30. The number of times in the last month respondents went to obtain new needles and syringes ranged from zero to 60 with a median of two times. The actual number of needles and syringes acquired ranged from zero to over 1,000 with a median of 100. Asked how many needles and syringes they had sold or given away in the last month saw a range from zero to 550 with a median of 20. Asked how many needle and syringe units they had stored away produced a range from zero to over 1,000 with a median of 30. There were 10% (n=9) who reported experiencing any difficulty accessing needles and syringes in the past month and 5% (n=4) who reported difficulty accessing filters.

NSP remained the most common source of injecting equipment in the last month reported by 82% (n=61) of those responding, followed by chemists, (23%, n=17). Much smaller numbers reported '*partners'*, '*friends'* '*dealers'* and *'outreach workers'*. Asked about the availability of filters at these outlets, 57% (n=33) reported being able to access cotton filters (eg: Sterafit), 47% (n=27) wheel filters, 10% (n=6) cigarette filters, and 14% (n=8) reported being able to access other unspecified types of filter.

The most commonly reported injecting equipment used in the month prior to interview remained a 1ml syringe (91%, n=67). Much smaller numbers reported the use of wheel filters (n=5), cotton filters (n=4), infusions (n=3), detachable needle tips (n=3), 5ml needle and syringe (n=3), 10ml needle and syringe (n=1) and 20ml needle and syringe (n=1).

Figures from the Sexual Health Branch of the Health Department of Western Australia show that 5,445,543 syringes were distributed in WA during the 2013/14 financial year compared to 5,047,054 in the 2013/14 period. As has been the case since 2003/04, the bulk of these were distributed via NSP, accounting for more than half of all syringes in 2014/15 with 3,180,950 units. Less common sources of syringes were chemists distributing 1,395835 and other sources such as hospitals and vending machines accounting for 868,758. Data concerning syringe distribution in WA since 1996/97 is portrayed in Figure 42.

Figure 42: Sources of syringe distribution in WA 1996/97-2014/15



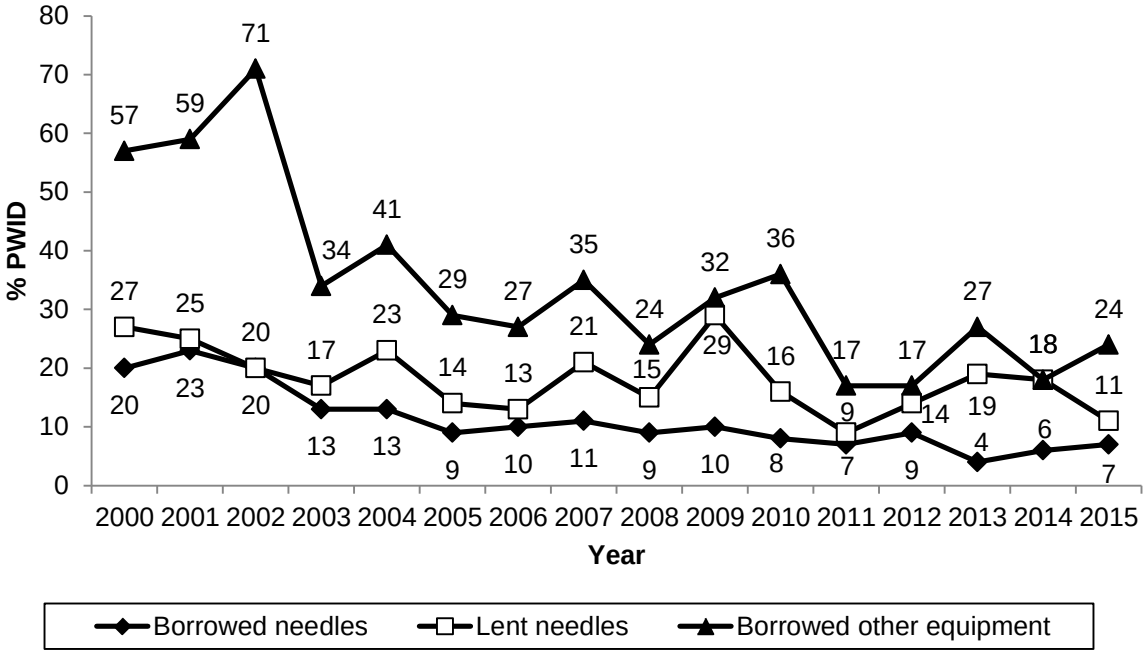
Source: Sexual Health Branch, Health Department of Western Australia

10.4.2 Sharing of needles and equipment by IDU participants

With regard to sharing needles, the vast majority of those responding (92%, n=68) 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 (8%, n=6), with instances ranging from two respondents who reported using a needle once after someone else, up to two respondents reported doing so more than 10 times. Individual respondents reported doing so twice or three to five times. In all cases (n=6) the only one person had used the needle before the respondent. This person was reportedly either '*a regular sex partner*' (n=2), '*a close friend*' (n=2) or '*a sibling*' (n=2). The use of other equipment after someone else was reported by 32% (n=24) of respondents. Most commonly, this other equipment consisted of spoons (n=7), tourniquets (n=11), water (n=6), and filters (n=2). There were 10 respondents who reported that someone else had used a needle after them in the last month. That this had happened once was reported by five respondents, twice by one, three to five times by three, and more than ten times by one.

Figure 43 presents the proportion of 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 practice of lending needles to others was reported by 11% (n=10) which was comparable to the 18% reported in the previous year. The sharing of other injecting equipment was reported by 24% (n=21) which was not significantly different to the 18% reported in 2014.

Figure 43: Proportion of PWID reporting sharing injecting equipment in the month preceding interview, 2000-2015



Source: IDRS user interviews

Asked if they had reused their own needles in the last month, 63% (n=46) of those responding indicated that they had not which was comparable to the 55% in 2014. Having done so once was reported by 3% (n=2), twice by 8% (n=6), three to five times by 14% (n=10), six to ten times by 8% (n=6) and more than 10 times by 4% (n=3). The most commonly reused type of needle and syringe was a 1 ml (n=23), a 0.5 ml syringe (n=4), and a 3ml barrel (n=2). Other commonly reused equipment included spoons or mixing containers (n=34), tourniquets (n=20), water (n=7), other filters (n=7), swabs (n=1) and wheel filters (n=3).

The most common injection sites reported at the last injecting event among those responding were the arm (69%, n=51), the hand or wrist (14%, n=10) and the leg (8%, n=6). Much smaller numbers reported that the last injection site had been the neck, the foot, neck, or the groin. The most commonly reported location for the last injection remained a 'private home' (81%, n=60) followed by 'in a car' (14%, n=10), 'a street or park' (3%, n=2) and 'a public toilet' (3%, n=2).

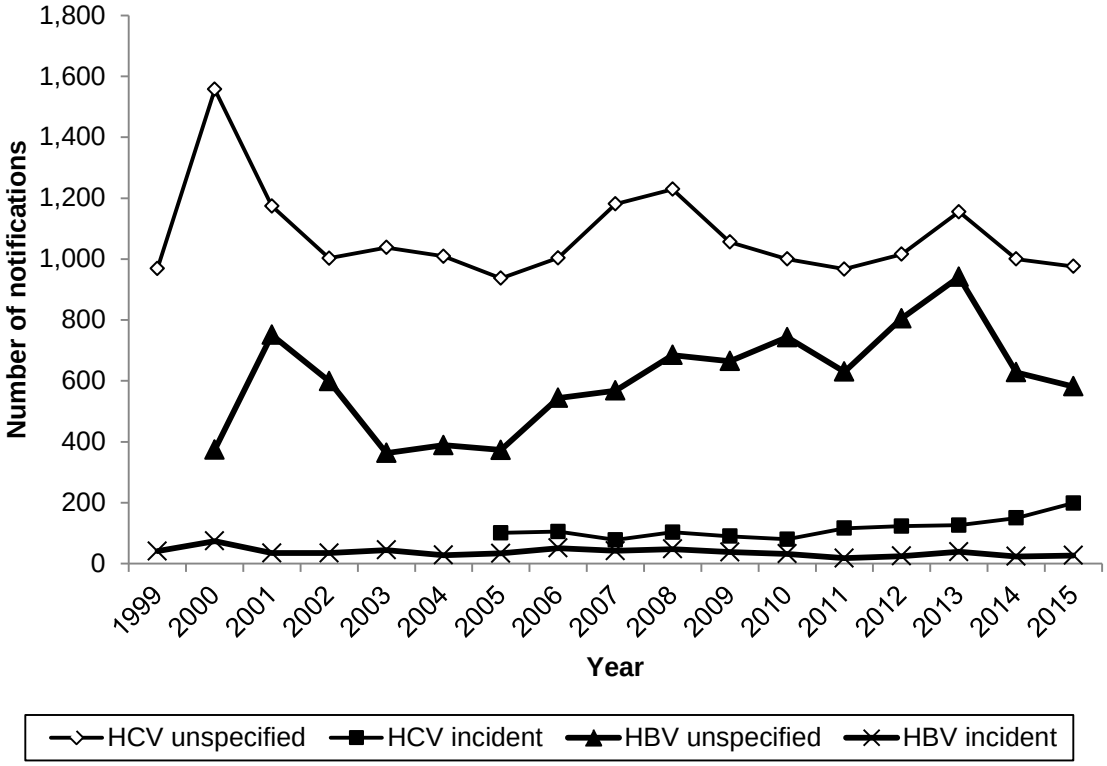
10.4.3 Blood-borne viral infections

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

Figure 44 presents data from the National Notifiable Diseases Surveillance System (NNDSS) for cases of unspecified and incident HBV and HCV for WA from 1999 to 2015. Incident or newly acquired infections, and unspecified infections (i.e. where the timing of the disease acquisition is unknown) are presented. Incident cases of HBV remained very low with just 28 cases reported in 2015 compared to 24 in 2014. Incident cases of HCV continued to rise from 150 in 2014 to 203 in 2015, although this is likely a reflection of increasing awareness of the desirability of regular testing. Despite slight falls, numbers of unspecified cases of both HBV (from 628 in 2014 to 582 in 2015) and HCV (from 1,000 in 2014 to 947 in 2015) remained relatively stable.

Data collected from the annual NSP Survey (Iversen & Maher, 2015) found in its WA sample a HCV prevalence of 55% in 2014 compared with 46% in 2012. HIV prevalence was 0.5% compared to 3% the previous year.

Figure 44: Total notifications for unspecified and incident HBV and HCV infection, WA, 1999-2015



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

One KE commented on the recent increase in new HCV infections, reporting that their service had recently been incorporating more BBV-related messages into their educational material and increasingly referring clients to Hepatitis WA.

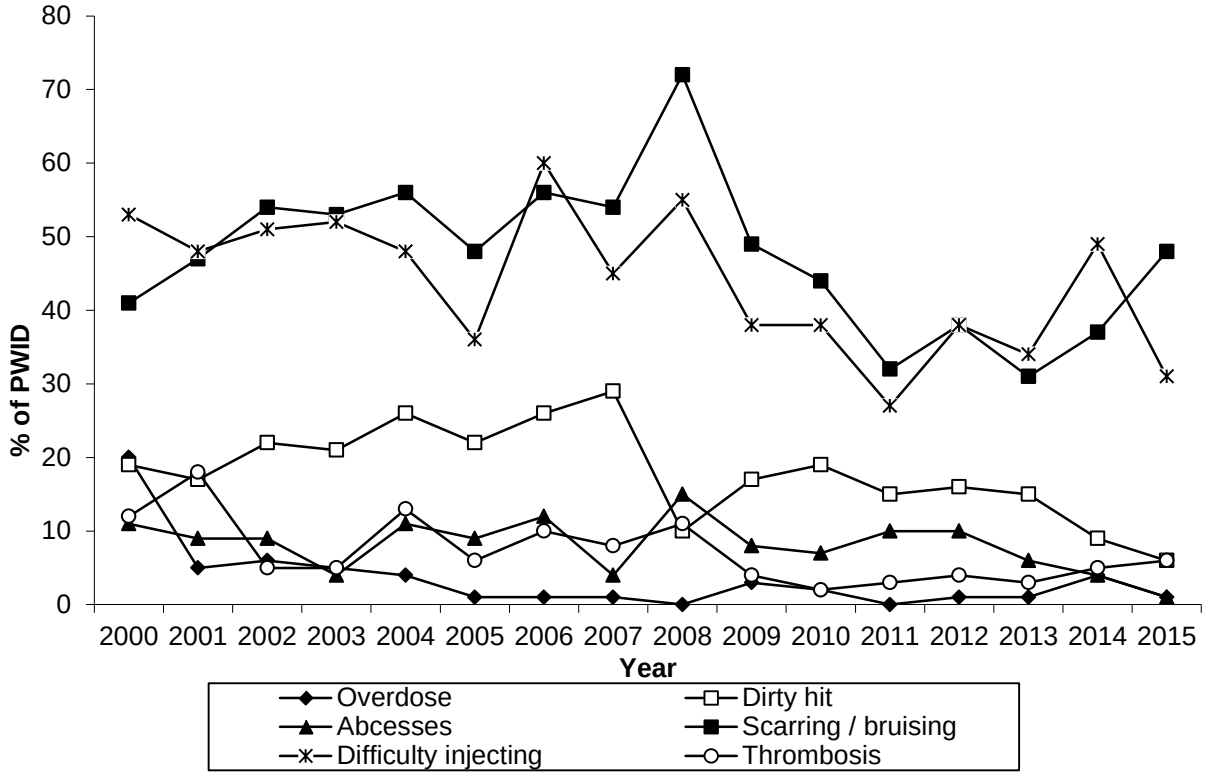
10.4.4 Injection-related health problems

Participants were asked about injection-related health problems they experienced in the month prior to interview. In 2015, just one respondent reported an overdose in the month prior to interview compared with four during the previous year. This overdose was attributed to morphine. Seven percent (n=5) of the 2015 sample reported experiencing a dirty hit, which was not significantly different to the 15% in 2014. The drugs most commonly implicated in a dirty hit were heroin (n=2), methamphetamine (n=2) and Suboxone® (n=1). It

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

should be noted, however, that this is not solely a reflection of these drugs' potential to result in a dirty hit, but also of the frequency with which they are consumed by the 2014 PWID sample. The most commonly reported injection problems remained difficulty injecting (n=27) and prominent scarring/bruising (n=42). Smaller numbers reported thrombosis or blood clots (n=5) and abscesses or infections from injecting (n=1). The relative incidence of these injection-related problems since 2000 is presented in Figure 45.

Figure 45: Proportion of PWID reporting injection-related problems in past month, by problem type, 2000-2015



Source: IDRS user interviews

One KE working with a peer-based agency reported responding to issues surrounding poor injection techniques by releasing low-literacy educational resources dealing with these issues. Another reported increased emphasis on education surrounding filtering techniques and the importance of using sterile water. Other injection-related harms described by a range of KEs included abscesses, non-viral injuries, soft tissue damage, dirty hits, endocarditis, and poor filtering and swabbing techniques.

10.5 Mental and physical health problems and psychological distress

10.5.1 Self-reported mental health problems

In 2015, 36% (n=32) of respondents self-reported experiencing a mental health problem in the last six months, which was not significantly less. As in previous years, the most commonly reported mental health problems were depression, reported by 72% (n=23) of those responding, followed by anxiety, reported by 47% (n=15). Less common self-reported problems included post-traumatic stress disorder (n=6), schizophrenia (n=4) bipolar disorder (n=3), phobias (n=2), panic (n=2) and individual reports of drug induced psychosis and other psychosis.

Of those reporting a mental health problem, 72% (n=23) reported attending a professional in relation to the problem. These health professionals were most commonly a general practitioner (n=17), a psychologist (n=7), a psychiatrist (n=5), a counsellor (n=3) or a hospital emergency department (n=1). Asked if they had been prescribed medication for their condition, 50% (n=16) said they had. Most commonly, these medications were a wide variety of antidepressants, most commonly mirtazapine (n=11), benzodiazepines (n=8), and antipsychotics (n=4).

One KE noted *"It's important for there to be more education around the increased likelihood of mental health issues (e.g., paranoia/anxiety/depression) for people who are using drugs."*

10.5.2 The K10 psychological distress scale and SF 12

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

In 2015, 69 participants completed the K10 and scores are presented by risk category. The median total score in 2015 was 22 (range=10-47). In 2015, using the interpretation scheme suggested by Andrews and Slade (2001), 28% (n=19) scored at low or no distress, 22% (n=15) scored at moderate distress, 32% (n=22) scored at high distress and 19% (n=13) scored at very high distress.

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

That their general health was '*excellent'* was reported by 6% (n=4), as '*very good*' by 10% (n=7), as '*good'* by 42% (n=29), as '*fair'* by 29% (n=20), and as '*poor'* by 13% (n=9).

10.5.3 Driving risk behavior

Having driven a vehicle in the last six months was reported by 67% (n=49) of the 2015 user sample. Of these, 20% (n=10) reported not possessing a valid drivers' license. There were no reports of having driven over the legal alcohol limit during this time. Having been random breath tested was reported by 11 respondents, all with a negative result. Driving after consuming illicit drugs however, was commonplace, reported by 76% (n=37) of these

respondents on a median of 48 days (range 1-180). The most common drug mentioned in this context was heroin (n=23), followed by crystal methamphetamine (n=11), cannabis (n=10), speed (n=6) and non-prescribed methadone (n=2). Individual respondents also mentioned non-prescribed Subutex®, non-prescribed morphine, non-prescribed oxycodone, and non-prescribed benzodiazepines. There were only two reports of having been subjected to a roadside drug test, both with a negative result.

11 Law enforcement-related trends associated with drug use

11.1 Reports of criminal activity among IDU participants

11.1.1 Criminal activity

In 2015, 23% (n=20) respondents reported having been arrested in the past twelve months which was not significantly less than the 37% reported in the previous year (χ^2=4.44529, 95%CI=0.0207-0.2765, p=0.03). 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 43% (n=38) which was not significantly different than the 49% reported in 2014. Involvement in dealing drugs was once again the most common class of crime reported by 35% (n=31). Involvement in property crime was reported by 14% (n=12), violent crime by 1% (n=1) and fraud by 5% (n=4). None of these crime categories were significantly changed from in 2013 (Table 17).

Table 17: Criminal activity as reported by PWID participants, 2012-2015

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

Source: IDRS user interviews

Frequency of criminal acts was analysed by computing a crime total which at a mean score of 1.82 was not a significant change from the 2014 mean of 1.42, indicating that the frequency of criminal activity by participants in the PWID survey has remained stable since 2014.

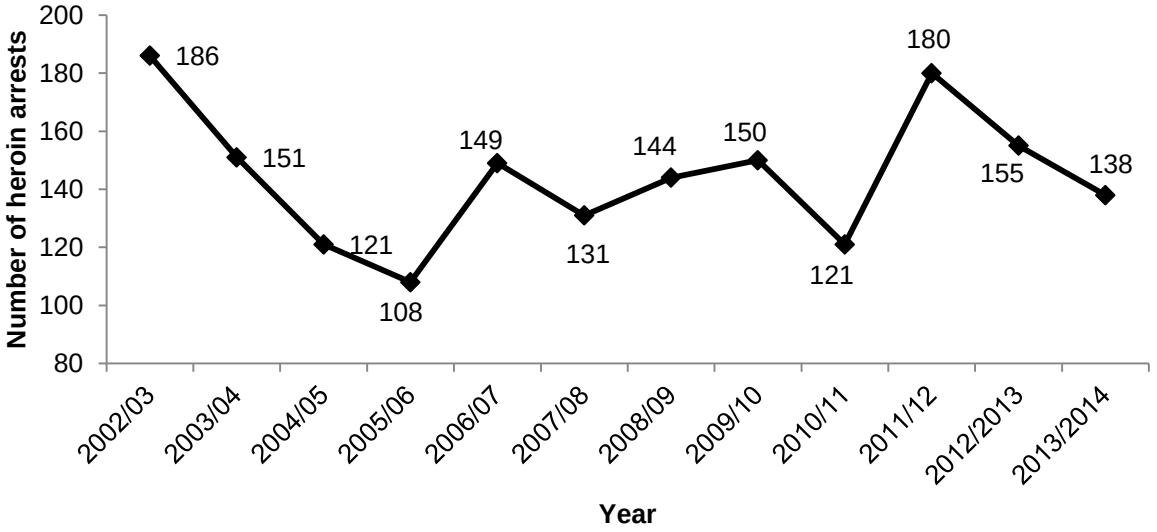
Asked if they had recently been a victim of violent crime in the past six months saw 12 % (n=11) indicating that they had. Five of these believed that the perpetrator had been under the influence of alcohol or drugs at the time.

11.2 Arrests

11.2.1 Heroin

The number of arrests for heroin and other opioids made in WA by WAPS and AFP from 2002/03 to 20013/14 is shown in Figure 46. There were a total of 138 heroin-related arrests in WA in 2013/14, which was somewhat lower than the previous reporting period of 155. These included 76 consumer arrests and 62 provider arrests.

Figure 46: Total number of heroin consumer/provider arrests, WA, 2002/03-2013/14

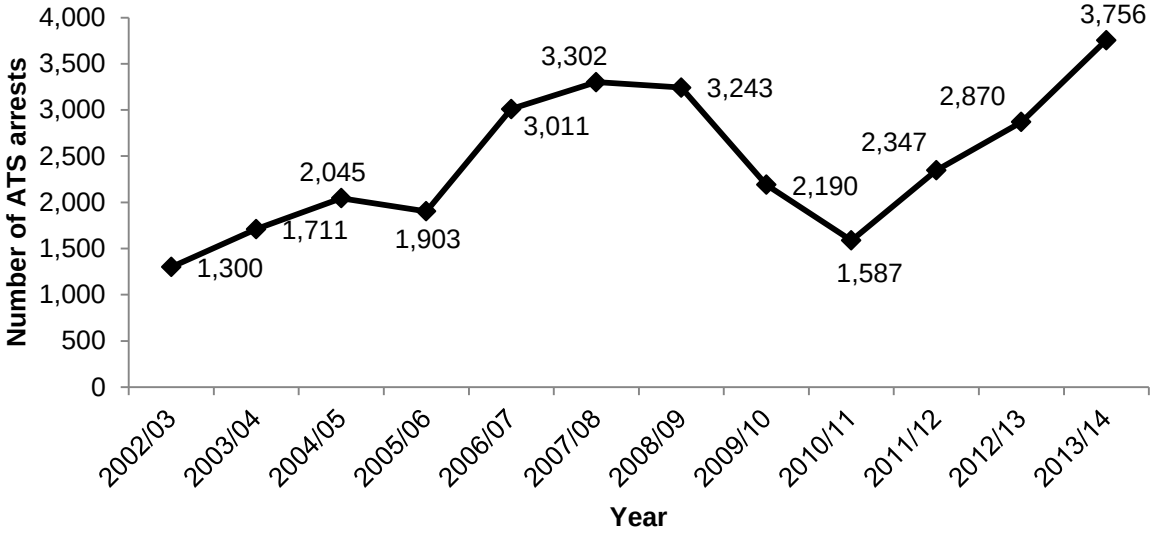


Source: **Australian Crime Commission**

11.2.2 Amphetamine type stimulants (ATS)

The number of ATS arrests made in WA by WAPS and AFP from 2002/03 to 2013/14 is shown in Figure 47. It is evident that the number of ATS arrests have risen for the third year running with 3,756 ATS related arrests. These arrests included 2,079 consumer arrests and 1,047 provider arrests.

Figure 47: Total number of ATS consumer/provider arrests, WA, 2002/03-2013/14



Source: **Australian Crime Commission**

Two KEs were critical of the current government public health advertisements concerning methamphetamine use. One observed; **"***The ads on television are too unrealistic or shocking. We need to make sure users know about the side effects of drugs and how to use them in a safer way; for example, if you are using meth, don't use every day and take*

breaks, and at the first signs of psychological stress, seek help. The ads on telly scare the daylights out of loved ones and users laugh at them because they don't ring true."

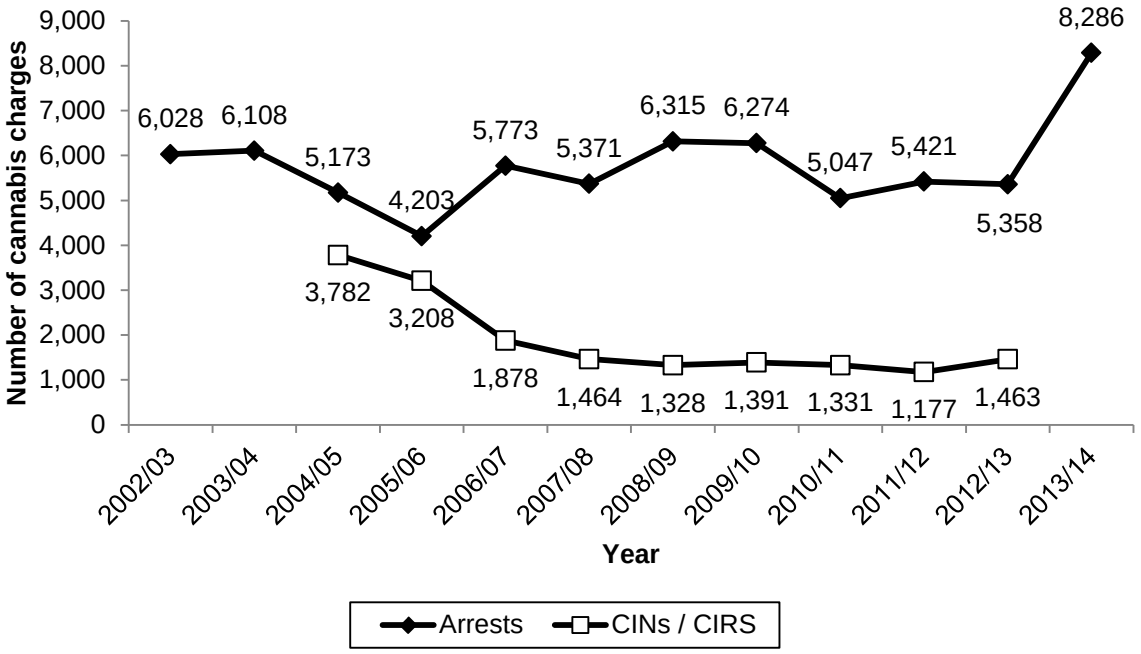
Another stated; *"The government needs to settle down on advertising the ice epidemic. There also needs to be more rehab and offers of help instead of incarcerating. If a youth is locked up because of intoxication, maybe look at that intoxication instead of just punishing them for their actions while they were intoxicated."*

A third KE from the law enforcement sector commented that "*While the media is up in arms about ice, this is not a new problem. It has been happening for a number of years and it is only now that people are deciding they want to do something to address it.*"

11.2.3 Cannabis

The number of cannabis arrests made in WA by WAPS and AFP from 2002/03 to 2013/14 is shown in Figure 48. Cannabis arrests have increased substantially in the last year with 8,286 arrests in 2013/14. These arrests included 7,329 consumer arrests, up from 4,165, and 957 provider arrests down from 1,193. Cannabis Infringement Notices (CINs) were introduced in March 2004 after the passage of the *Cannabis Control Act 2003* (WA), but their use has continued to decrease over time and they were replaced by the Cannabis Intervention Requirement Scheme (CIRS) in August 2011. At time of writing there was no available data on number of CIRS issued for the 2013/14 period.

Figure 48: Total number of cannabis consumer/provider arrests, WA, 2002/03-2013/14



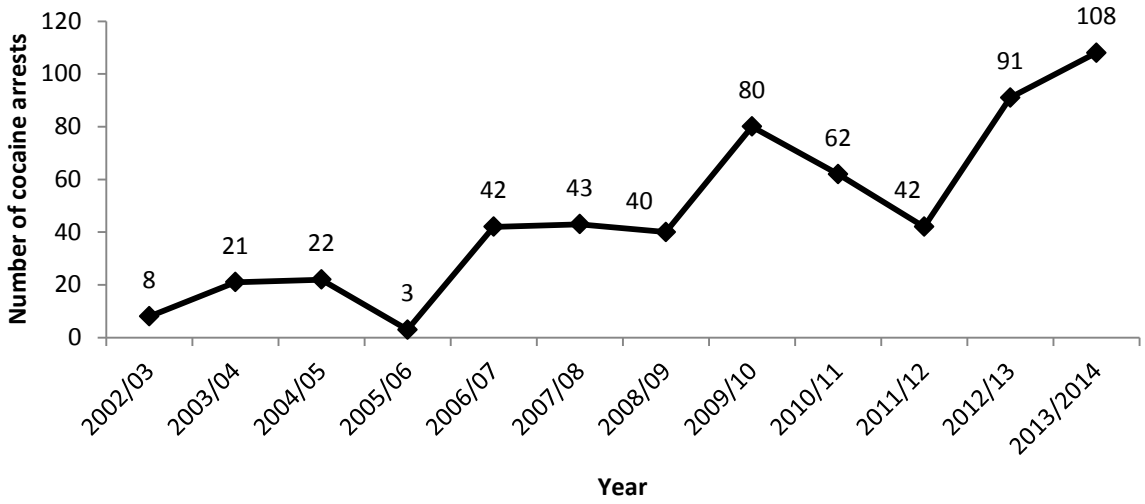
Source: **Australian Crime Commission**

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

11.2.4 Cocaine

The number of cocaine arrests made in WA by WAPS and AFP from 2002/03 to 2013/14 is shown in Figure 49. In 2013/14, the number of cocaine arrests rose from 91 to 108 which was the largest number so far recorded by the IDRS. These arrests included 57 consumer arrests and 51 provider arrests.

Figure 49: Total number of cocaine consumer/provider arrests, WA, 2002/03-2013/14



Source: **Australian Crime Commission**

12 SPECIAL TOPICS OF INTEREST

12.1 Naloxone program and distribution

Naloxone is a short-acting opioid antagonist that has been used for over 40 years to reverse the effects of opioids. It is the frontline medication for the reversal of heroin and other opioid overdose in particular. In Australia, naloxone has largely only been available for use by medical doctors (or those auspiced by medical doctors such as nurses and paramedics) for the reversal of opioid effects. In 2012, a take-home naloxone program commenced in the ACT through which naloxone was made available to peers and family members of people who inject drugs for the reversal of opioid overdose as part of a comprehensive overdose response package. Shortly after, a similar program started in NSW and some other states have followed suit (for more information refer to http://www.cahma.org.au/Naloxone.html and/or http://www.naloxoneinfo.org/). A program commenced in WA in April 2013, run by WASUA and auspiced and funded by the Drug and Alcohol Office (DAO) (Lenton, S. et al, in press).

Respondents were asked about their opinions and awareness of naloxone (Narcan®). Of the 74 respondents to the WA IDRS sample who responded, 92% (n=68) had heard of naloxone which was generally understood to '*reverse the effects of heroin*' (49%, n=33), to 're-establish consciousness' (19%, n=13) or 'to help someone start breathing' (7%, n=5). There were 8% (n=6) of those responding who reported having been resuscitated with naloxone.

There were 70% (n=52) who said they were aware of the existence of naloxone programs. Having been trained under such a program and received a prescription for naloxone was reported by 12% (n=11). Of these 11 respondents, 36% (n=4) reported that since completing their training that they had used naloxone to resuscitate between two to ten other people with a median of three people resuscitated.

Those respondents who had not undertaken naloxone training were asked additional questions about their response to overdose. The most common responses were that they would 'call an ambulance' (95%, n=57), followed by 'administering mouth to mouth and CPR' (48%, n=29). Less common responses included 'turning the victim on their side' (20%, n=12), and 'staying with the victim' (7%, n=4).

Only one respondent provided a reason for why they wouldn't call an ambulance in response to an overdose situation, that being '*fear of police involvement*'.

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

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

12.2 Hepatitis C and treatment

Hepatitis C (HCV) is a major public health problem in Australia. Recent estimates report 230,000 people living in Australia have chronic HCV, with up to 95% of newly diagnosed HCV infections occurring due to injecting risk behaviour (The Kirby Institute, 2015).

Treatment options for HCV are currently experiencing rapid developments, however, despite efforts to improve access to anti-viral therapy for HCV infection, and hence treatment outcomes; uptake for chronic HCV infection treatment remains low among people who inject drugs with HCV (Iversen and Maher, 2015) .

Testing for HCV antibodies (anti-HCV) reveals whether the patient has ever been exposed to the virus. Once a person tests positive for antibodies they will always have the antibodies present in their blood. However, this test cannot distinguish between an active infection or a previous infection. A HCV RNA (ribonucleic acid the genetic material of the virus) test is required to confirm an active virus. These tests are commonly called PCR tests or a polymerase chain reaction test.

Previous IDRS national survey data (Stafford and Burns, 2014) regarding Hepatitis C testing reveals a large minority (41%) of people who test positive for HCV antibodies (anti-HCV) have either not had their status confirmed by PCR testing or are unsure. This low level of testing suggests that a large proportion of the IDRS national sample are still receiving inadequate testing (Butler, Day, Dietze et al., 2015).

The aim of this module was to a) determine rates of, and referrals to PCR testing, and b) determine the extent of knowledge PWID possess regarding HCV transmission.

Respondents were asked a series of true or false questions exploring their knowledge of HCV. For the most part the level of understanding appeared to be reasonable although a number of respondents appeared to under estimate the effectiveness of treatment and rates of auto remittance. This data is presented in table 18.

Table 18: Responses to true or false questions concerning HCV treatment (n=69)

Item	True	False
If I don't feel sick, I must have cleared the virus	6%	94%
If I don't have symptoms I can't pass on HCV	0%	100%
Treatment for HCV only works for a few people	43%	57%
If I already have HCV, I can't get it again	16%	84%
If I wait, HCV will clear up on its own	9%	91%
I can wait until I feel really sick before seeking treatment	12%	88%
I can't get HCV treatment if I am still injecting drugs	32%	68%

Source: WA user interviews 2015

12.3 Oxycodone use and injection

Over the past decade there has been a considerable rise in the prescribing of pharmaceutical opioids in Australia with a 15 fold increase in the number of pharmaceutical opioid dispensing episodes in Australia from 1992-2012 (Blanch, Perarson and Haber, 2014) . The rise in opioid utlisation – including oxycodone - has seen a concurrent increase in extra-medical use of these medications among groups such as of PWID. This includes tampering with opioid medications (e.g. crushing, chewing, snorting, smoking, injecting or dissolving/drinking opioid medications intended for oral administration) to allow a larger quantity of the active ingredient to become available and increase euphoric effects (Katz, Dart, Bailey et al., 2011) .

In response, pharmaceutical companies have developed formulations that are less prone to tampering. Oxycodone is a semi-synthetic opioid agonist prescribed for the treatment of moderate to severe chronic pain. A tamper resistant formulation of controlled release oxycodone hydrochloride tablets (Reformulated OxyContinC) was released onto the Australian market 1st April 2014 (rapidly replacing the original version, OxyContinV). The

tablets are designed to be bioequivalent to the original formulation, and employ a controlled release technology (that makes them difficult to crush) with a hydro-gelling matrix. This makes the tablet develop into a viscous gel when dissolved in water (Sellers, Perrino, Colucci et al., 2013). Early U.S. surveillance of the reformulation suggests that there have been reductions in misuse (Butler, Cassidy, Chilcoat et al., 2013; Havens, Leukefeld, Deveaugh-Geiss et al., 2014) , street price (Sellers, Perrino, Colucci et al., 2013) and OxyContin® poisonings (Severtson, Bartelson, Davis et al., 2013) .

Following the introduction of Reformulated OxyContin®, a newer generic formulation of oxycodone (Oxycodone Sandoz®) was released in Australia 1st September, 2014 and listed with public subsidy (on the Pharmaceutical Benefits Scheme) 1st December, 2014. This generic formulation is not tamper resistant and is available in tablet sizes similar to the original OxyContin® product.

Post-marketing surveillance of the Reformulated OxyContin® and generic oxycodone formulations is underway in Australia (Degenhardt, Larance, Bruno et al., 2015). Early findings indicate that there has been a decline in national pharmacy sales of 80mg OxyContin® (the dose most commonly used and injected among people who inject drugs), as well as a reduction in prevalence of overall use and injection, street price and attractiveness for misuse via tampering among a prospective cohort of people who tamper with pharmaceutical opioids (Degenhardt, Bruno, Ali et al., 2015; Larance, Lintzeris, Bruno et al., 2015; Peacock, Degenhardt, Hordern et al., 2015).

Given the concerns regarding the extra-medical use of oxycodone and the changes in the types of oxycodone available, the aim of the oxycodone module was to examine the use and misuse of oxycodone products. Participants were asked about their use of the original OxyContinC, in addition to Reformulated OxyContin®.

A series of questions were appended to the 2015 IDRS survey designed to assess numbers of PWID who had tried the reformulated product and how difficult they had found it to inject compared to the original. Respondents were asked to rate ease of injection on a scale of one to ten, with ‘one’ being impossible to inject and ‘ten’ being extremely easy.

Although a wide range of forms of oxycodone were asked about, only Endone® 5 mg, Oxynorm®, Oxycontin® original formulation® and Oxycontin reformulation® had a substantial number of respondents with a history of having used them. There was no reported use of Proladone®. In all cases, there were more users of non-prescribed forms of oxycodone than of those legitimately obtained. Conversely, days of use for prescribed forms were invariably higher than for non-prescribed. The most commonly used form was non-prescribed reformulated Oxycontin®. It was noted that reformulated Oxycontin® was rated as being much more difficult to inject than generic oxycodone. This difficulty associated with injection was not apparent however with Oxynorm®.

This data is shown in Table 20.

Table 20: Oxycodone use and relative ease of injection (N=20)

Brand	Ever used	Recent use	Mean (median) Days used in last six months	Ever inject	Recent injection	Mean (median) Days injected in last six months	Ever swallow	Recently swallowed	Mean (median) Days swallowed in last six months	Ease of injection (Any form)	Mean (median) Days used (Any form)
Endone 5 mg prescribed	1	1	180 (180)	1	1	6 (6)	1	1	174 (174)	1	68 (12)
Endone 5 mg not prescribed	6	5	6 (2)	6	1	11 (11)	2	1	2 (2)		
Generic oxycodone prescribed	3	3	143 (160)	1	1	150 (150)	3	3	93 (90)	8	63 (5)
Generic oxycodone not prescribed	6	4	3 (3)	6	4	3 (2)	6	2	2 (2)		
Oxycodone reformulated prescribed	2	2	102 (102)	1	1	24 (24)	1	1	180 (180)	2	42 (8)
Oxycodone reformulated not prescribed	8	8	36 (3)	6	6	32 (2)	5	5	24 (12)		
Oxynorm prescribed	1	1	180 (180)	1	1	28 (28)	0	0	-	8	42 (4)
Oxynorm not prescribed	5	4	8 (3)	4	4	8 (3)	2	1	1 (1)		
Targin prescribed	1	1	90 (90)	0	0	-	1	1	90 (90)	-	69 (47)
Targin not prescribed	4	3	62 (4)	2	1	1 (1)	3	3	62 (3)		
Proladone prescribed	1	0	-	0	0	-	-	0	-	-	-
Proladone not prescribed	2	0	-	0	0	-	0	0	-		

Source: WA user interviews, 2015

- Not applicable or missing data

13 REFERENCES

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

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

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

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

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

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

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

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

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

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

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

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

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

Australian Institute of Health and Welfare. (2015a). *National Opioid Pharmacotherapy Statistics Annual Data Collection: 2014*. Drug treatment series no. 23. Canberra: Australian Institute of Health and Welfare.

Australian Institute of Health and Welfare (2015b) Alcohol and other drug treatment services in Australia 2013-2014

Blanch, B., Pearson, S.A., & Haber, P.S. (2014). An overview of the patterns of prescription opioid use, costs and related harms in Australia. *British Journal of Clinical Pharmacology*, 78, 1159-1166.

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

Butler, S.F., Cassidy, T.A., Chilcoat, H., Black, R.A., Landau, C., Budman, S.H. & Coplan, P.M. (2013). Abuse rates and routes of administration of reformulated extended-release oxycodone: initial findings from a sentinel surveillance sample of individuals assessed for substance abuse treatment. *Journal of Pain*, 14, 351-358.

Degenhardt, L., Bruno, R., Ali, R., Lintzeris, N., Farrell,M., & Larance, B. (2015) The introduction of a potentially abuse deterrent oxycodone reformulation: Early findings from the Australian National Opioid Medications Abuse Deterrence (NOMAD) study. Submitted to *Drug and Alcohol Dependence.*

Degenhardt, L., Larance, B., Bruno, R., Lintzeris, N., Ali, R.,& Farrell,M. (In press) Evaluating the potential impact of a reformulated version of oxycodone upon tampering, non-adherence and diversion of opioids: the National Opioid Medications Abuse Deterrence (NOMAD) study protocol. *Addiction*, advance online, 1-12.

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

Havens, J.R., Leukefeld, C.G., Deveaugh-Geiss, A.M., Coplan, P & Chilcoat, H.D. (2014). The impact of a reformulation of extended-release oxycodone designed to deter abuse in a sample of prescription opioid abusers. *Drug and Alcohol Dependence,* 139**,** 91.

IBM Corporation and others (2012). IBM SPSS Statistics Version 21. IBM Corporation.

Iversen, J. & Maher, L. (2015). *Australian NSP Survey 20 Year National Data Report 1995-2014.* Sydney: The Kirby Institute, University of New South Wales.

Katz, N., Dart, R.C., Bailey, E.J., Trudeau, J., Osgood, E., & Paillard, F. (2011). Tampering with prescription opioids: Nature and extent of the problem, health conequences, and solutions. *The American Journal of Drug and Alcohol Abuse,* 37**,** 205-217.

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

Larance, B., Lintzeris, N., Bruno, R.,Peacock, A., Cama, E., Ali, R., Kihas, I., Horden, A., White, N., & Degenhardt, L. (In press). The characteristics of a cohort who tamper with prescribed and diverted opioid medications. Submitted to *Drug and Alcohol Dependence*.

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

Nelson, M. & Lenton, S. (2015). *Western Australian Ecstasy and Related Drug Trends: Findings from the 2014 Ecstasy and Related Drugs Reporting System.* Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

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

Peacock, A., Degenhardt, L., Horden, A., Larance, B., Cama, E., White, N., Kihas, I., Bruno,

R. (2015), Methods and predictors of tampering with a tamper-resistant controlled-release oxycodone formulation. International Journal of Drug Policy, 26, 12, 1265-1272.

Roxburgh, A. & Burns, L .(2015). *Accidental drug-induced deaths due to opioids in Australia, 2011.* Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Roxburgh, A. & Breen, C.(2016). *Drug-related hospital stays in Australia, 1993-2014*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales

Sellers, E.M., Perrino, P.J., Colucci, S.V. & Harris, S.C. (2013). Attractiveness of reformulated Oxycontin® tablets: assessing comparative preferences and tampering potential. *Journal of Psychopharmacology,* 27**,** 808-816.

Severtson, S.G., Bartleson, B.B., Davis, J.M., Munoz, A., Scneider, M.F., Chilcoat, H., Coplan, P.M., Surratt, H. & Dart, R.C. (2013). Reduced Abuse, Therapeutic Errors, and Diversion Following Reformulation of Extended-Release Oxycodone in 2010. *The Journal of Pain*.

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

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