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Capital Territory

Kerryn Butler & Courtney Breen

ACT DRUG TRENDS 2015

Findings from the

Illicit Drug Reporting System (IDRS)

Australian Drug Trends Series No. 147

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Drug Trends

2015

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ABBREVIATIONS

ACC	Australian Crime Commission
ACT	Australian Capital Territory
AFP	Australian Federal Police
AHOD	Australian HIV Observational Database
AIHW	Australian Institute of Health and Welfare
AIVL	Australian Injecting and Illicit Drug Users League
AODTS-NMDS	Alcohol and Other Drug Treatment Services-National Minimum Dataset
ATS	Amphetamine-type stimulants
AUDIT-C	Alcohol Use Disorders Identification Test-Consumption
BBVI	Blood-borne viral infections
Bush	Outdoor-cultivated cannabis
CI	Confidence Intervals
CPR	Cardiopulmonary resuscitation
DSM-5	Diagnostic and Statistical Manual of Mental Disorders-5
EDRS	Ecstasy and Related Drugs Reporting System
GP	General Medical Practitioner
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
Hydro	Hydroponically grown cannabis
IDRS	Illicit Drug Reporting System
K10	Kessler Psychological Distress Scale
KE	Key expert(s); see Method section for further details
MSIC	Medically Supervised Injecting Centre
N (or n)	Number of participants
NDARC	National Drug and Alcohol Research Centre
NDSHS	National Drug Strategy Household Survey

NNDSS	National Notifiable Diseases Surveillance System
NPS	New psychoactive substances
NSP	Needle and syringe program(s)
OST	Opioid substitution treatment
OTC	Over the counter
PBS	Pharmaceutical Benefits Scheme
PCR	Polymerase chain reaction
PWID	Person/people who inject(s) drugs
SCID	Structural Clinical Interview for DSM
SCON	Simple Cannabis Offence Notices
SDS	Severity of Dependence scale
SPSS	Statistical Package for the Social Sciences

GLOSSARY OF TERMS

Cap	Small amount, typically enough for one injection
Half weight	0.5 gram
Illicit	Illicit refers to pharmaceuticals obtained from a prescription in someone else's name, e.g., through buying them from a dealer or obtaining them from a friend or partner
Indicator data	Sources of secondary data used in the IDRS (see Method section for further details)
Person(s) who inject(s) drugs	Also referred to as PWID. In the context of the IDRS, refers to persons participating in the PWID Survey component of the IDRS (see Method section for further details)
Key expert(s)	Also referred to as KE; persons participating in the key expert Survey component of the IDRS (see Method section for further details)
Licit	Licit refers to pharmaceuticals (e.g. methadone, buprenorphine, morphine, oxycodone, benzodiazepines, antidepressants) obtained by a prescription in the user's name. This definition does not take account of 'doctor shopping' practices; however, it differentiates between prescriptions for self as opposed to pharmaceuticals bought on the street or those prescribed to a friend or partner
Lifetime injection	Injection (typically intravenous) on at least one occasion in the participant's lifetime
Lifetime use	Use on at least one occasion in the participant's lifetime via one or more of the following routes of administration: injecting, smoking, snorting and/or swallowing
Participant	In the context of this report refers to persons who participated in the PWID survey (does not refer to key expert participants unless stated otherwise)
Point	0.1 gram although may also be used as a term referring to an amount for one injection (similar to a 'cap'; see above)
Recent injection	Injection (typically intravenous) in the six months preceding interview
Recent use	Use in the six months preceding interview via one or more of the following routes of administration: injecting, smoking, snorting and/or swallowing
Session	A period of continuous use

Use	Use via one or more of the following routes of administration: injecting, smoking, snorting and/or swallowing

↑ Significant increase ($p<0.05$) from previous year (2014) compared with current year (2015)

↓ Significant decrease ($p<0.05$) from previous year (2014) compared with current year (2015)

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 throughout the report:

- **People who inject drugs (PWID):** people who have 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 points toward 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.

KEY FINDINGS FROM THE 2014 IDRS

The Illicit Drug Reporting System (IDRS) is intended to serve as a monitoring system, identifying emerging trends of local and national concern in illicit drug markets. The IDRS consists of three components: interviews with a sentinel group of people who regularly inject drugs (PWID[1]) conducted in the capital cities of Australia; interviews with key experts (KE), professionals who have regular contact with illicit drug users through their work; and analysis and examination of indicator data sources related to illicit drugs. *Australian Drug Trends* draws largely on the PWID participant survey and indicator data components of the IDRS, while KE are relied upon to provide contextual information within jurisdictions.

DEMOGRAPHICS OF THE PARTICIPANT SAMPLE

One hundred participants were recruited to the 2015 IDRS Australian Capital Territory (ACT) ACT participant survey component. The mean age of the ACT sample was 42 years (range=20-63 years) and 72% were male. Almost the entire sample spoke English as their main language at home (97%), and 19% identified as being of Aboriginal and/or Torres Strait Islander descent. More than four-fifths (81%) of the sample were currently unemployed, half (51%) reported a previous prison history. Over half (53%) reported they were in current treatment, mainly methadone.

CONSUMPTION PATTERN RESULTS

Current drug use

- The mean age of first injection was 19 years. The drug most often reported as the first drug injected was methamphetamine powder (43%) followed closely by heroin (42%).
- Heroin was nominated by over half (58%) of the sample as their drug of choice, followed by methamphetamine (any form, 34%) and cannabis (4%).
- The drug injected most often in the last month followed the same pattern. Fifty-five percent of the sample reported injecting heroin most often in the last month, followed by methamphetamine (40%).
- Thirty-four percent of participants reported at least daily injecting.

[1] The term 'participants' is used throughout the report to refer to the IDRS participant sample. Participants completing the key expert survey are referred to as KE, or key experts (see Glossary).

Heroin

- In 2015, heroin remained the drug of choice for over half of the participants.
- Seventy-nine percent had used heroin in the previous six months.
- Heroin was used on a median of 70 days in the preceding six months (approximately two days per week).

Methamphetamine

- The vast majority (92%) of participants reported using some form of methamphetamine at least once in their lifetime and 81% reported recent use, in the past six months.
- Crystal methamphetamine remains the most common form used with 79% of the sample reporting recent use. A quarter of participants nominated crystal as their drug of choice, and this has been stable since 2013.
- In contrast to crystal methamphetamine, speed (powder) and base use have declined in recent years.

Cocaine

- Almost two-thirds of participants reported lifetime use of cocaine.
- The recent use of cocaine remained low in the ACT, with 12% reporting use in the preceding six months. The median days of use also remains low at three and a half days, ranging from one to 24 days.

Cannabis

- 81% of PWID reported recent cannabis use in 2015 (73% in 2014).
- Cannabis was the most common illicit drug used the day prior to interview (54%).
- Daily use was reported by 48% of the sample.
- Hydroponic cannabis remains the most common form of cannabis used (90% used recently).

Other opioids

- Half (50%) of the sample reported recent use of methadone (licit and illicit/liquid andtablet) and around one-quarter (21%) reported recently injecting.
- Sixteen percent of the sample reported recent use of buprenorphine (licit and illicit).
- A quarter (25%) of the sample reported recent use of buprenorphine-naloxone (licit and illicit/tablet or film).
- One fifth (20%) reported the recent use of illicit.
- Recent use of illicit oxycodone remains stable at 15% of the sample using on a median of two days in the previous six months. The most common brands used are Oxycontin® and Endone®.

Other drugs

- Small proportions report the recent use of;
  - ecstasy (8%) on a median of two days in the previous six months;
  - pharmaceutical stimulants (illicit) (10%) on a median of two days in previous six months
  - inhalants (4%); and
  - hallucinogens (3%);

- Benzodiazepine and alprazolam use remains stable, with 43% recently using benzodiazepine (licit and illicit) and 25% reporting recently using alprazolam (licit and illicit).
- The recent use of illicit Seroquel® was reported by 16% of the sample on a median of three and a half days use.
- Recent alcohol use was reported by over half (60%) of the sample at approximately weekly use.
- One in five (20%) recent drinkers reported drinking daily (20% in 2014).
- Tobacco remained common, recently used by 96% of the sample.
- Almost all (92%) participants who reported recently smoking tobacco reported being daily smokers.

DRUG MARKET: PRICE, PURITY, AVAILABILITY AND PURCHASING PATTERNS

Heroin

- Price for heroin remained stable at $50 per cap and $300 per gram.
- Eighty-five percent of those who commented reported current purity to be medium (34%) and low (51%).

Methamphetamine

- The price of speed has remained stable with reports of one point costing $50.
- Only one participant was able to comment on the price of base.
- The price of crystal has remained stable at $100 for one point.
- There were no significant differences in either the availability or reported purity of crystal, speed or base.

Cocaine

- Due to only very small numbers commenting on the price, purity and availability of cocaine, accurate information is not available. Refer to Stafford& Breen (2016) for national figures.

Cannabis

- The median cost of a gram of hydroponic cannabis (hydro) was $20.
- The median cost of an ounce of hydroponic cannabis was $300.
- The price for both forms of cannabis (bush and hydroponic) was reported as stable over the last six months.
- Participants reported the potency of hydro as high and bush medium.
- The availability of both forms of cannabis was considered very easy or easy to obtain.

Methadone

- Due to small numbers commenting on the price, purity and availability of methadone, accurate information is not available. Refer to Stafford & Breen (2016) for national figures.

Buprenorphine, buprenorphine-naloxone, morphine, and oxycodone

- Due to small numbers commenting on the price, purity and availability of buprenorphine, buprenorphine-naloxone, morphine and oxycodone, accurate information is not available. Refer to Stafford & Breen (2016) for national figures.

HEALTH-RELATED TRENDS ASSOCIATED WITH DRUG USE

Overdose and drug-related fatalities

- Fifteen percent of participants reported having overdosed on heroin in the 12 months prior to interview.
- More than four-fifths of participants (81%) had heard of the take-home naloxone program in ACT with half (51%) reporting they had completed the training in naloxone administration and obtained a prescription.
- Heroin overdoses continue to represent only a small number of the total number of ambulance call-outs to overdoses.

Drug treatment

- Fifty-three percent of participants reported being currently in treatment with 48% of the sample engaged in methadone treatment.

Hospital separations

- The number of opioid-related hospital separations continues to fluctuate with 157.94 admissions per million being reported for the 2013-14 period. Separations relating to methamphetamines is reported to be 122.84 per million admissions.

Injecting risk behaviours

- Needle and Syringe Programs were the most common source of needles and syringes in the preceding six months (91%), followed by chemists (20%) and vending machines (14%).
- The majority of IDRS participants reported last injecting in a private location (85%), with small (3%) proportions last injecting in a public location such as in a public toilet, or on the street. Two-thirds (66%) of the IDRS sample experienced an injection-related problem in the preceding month, most commonly significant scarring or bruising and difficulty injecting (e.g., in finding a vein).

Blood-borne viral infections

- In Australia, the hepatitis C virus continued to be more commonly notified than the hepatitis B virus. The prevalence of human immunodeficiency virus 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 in this population.

Alcohol Use Disorders Identification Test – Consumption

- Half (51%) of the participants who drank in the past year scored five or more on the AUDIT-C indicating the need for further assessment.

Opioid dependence

- Seventy-nine percent of those who had recently used an opioid and commented, scored five or above, indicating dependence.

Mental health problems and psychological distress

- Thirty-nine percent of the IDRS sample self-reported a mental health problem in the preceding six months, most commonly depression (69% of respondents) and/or anxiety (44%).
- Most (91%) of those who had experienced a problem reported attending a mental health professional.
- Higher levels of psychological distress, as measured by the Kessler Psychological Distress Scale (K10), were reported by the IDRS sample compared to the Australian general population, with 25% reporting very high distress (3% in the general population) and 25% reporting high distress (7% in the general population). Those reporting a very high level of distress have been identified as possibly requiring clinical assistance.

LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH DRUG USE

Reports of criminal activity

- Participant reports of criminal activity remained stable compared to previous years, with 33% of the sample reporting engagement in criminal behaviour in the preceding month. The most common types of crime committed were drug dealing and property crime.

Arrests

- Twenty-two percent of the sample reported having been arrested in the preceding 12 months.
- Cannabis arrests continued to account for the majority of all drug-related arrests in Australia.

Expenditure on illicit drugs

- Among the sample who commented, 57% reported spending money on illicit drugs the day before interview. The median amount spent by those who had purchased drugs was $100.

SPECIAL TOPICS OF INTEREST

Hepatitis C Testing

- Ninety-one percent of the ACT sample had been tested for HCV antibodies in their lifetime with 62% reporting a positive result.
- Fifty-two percent of the ACT sample who commented reported a PCR test to determine if the virus was active.
- The majority of participants demonstrated a moderately good understanding of the virus when asked to endorse a list of statements related to their perceptions of HCV as true or false.

Oxycodone use

- Almost half (46%) of the ACT IDRS sample reported ever using oxycodone.

- Of those who reported ever using oxycodone, 23% reported recently using the reformulated (tamper resistant) Oxycodone [2] tablets (either licit or illicit).

Blood donations

- Of those who commented, 49% reported that they had given blood in their lifetime. Twenty-eight percent of those that had given blood reported that they had commenced injecting drug use before donating blood.

[2] Tamper resistant formulation of controlled release oxycodone hydrochloride tablets (Reformulated OxyContin®

1 INTRODUCTION

The Illicit Drug Reporting System (IDRS) monitors trends in the illicit drug market in Australia. The IDRS was implemented nationally in Australia, following a successful pilot study in Sydney in 1996 (Hando, O'Brien, Darke et al., 1997) and trials in New South Wales, Victoria and South Australia in 1997 (Hando and Darke, 1998). In the year 2000, the IDRS study was carried out in all Australian states and territories, with each jurisdiction conducting a survey with people who inject drugs (PWID), interviewing key experts (KE) and incorporating routinely collected indicator data from secondary sources. The IDRS is conducted annually in each Australian state and territory.

The IDRS triangulates three forms of data: (a) a survey of approximately 100 PWID; (b) interviews with KE, with expert knowledge of drug markets; and (c) indicator data sources relating to illicit drug trends in the Australian Capital Territory (ACT). In 2015, the IDRS was funded by the Australian Government Department of Health.

This *ACT Drug Trends 2015* report presents findings from the 2015 ACT IDRS study. The report commences with a summary of the methodology used in data collection for the IDRS, and then provides an overview of the demographics of the PWID respondents. This is followed by an outline of the current drug use and consumption patterns of the PWID sample. The report also presents findings on recent drug use trends pertaining to the price, purity, availability and purchasing patterns of heroin, methamphetamine, cocaine, cannabis and other drugs. The report then discusses harms associated with injecting drug use, as well as mental health issues, drug driving and criminal activity among the 2015 PWID sample.

1.1 Study aims

The IDRS is a national illicit drug monitoring system designed to identify emerging trends of local and national concern in illicit drug markets in Australia. The first aim of the IDRS is to collect data to monitor the price, purity, availability and use of four major illicit drug classes – heroin, methamphetamine, cocaine and cannabis. The IDRS supplements existing sources of data on illicit drug trends, and thus supports a multifaceted approach to the task of monitoring the Australian illicit drug market. The second aim of the IDRS is to highlight issues of concern in relation to drug trends that may require further investigation.

2 METHOD

In order to document emerging trends in the illicit drug market, the IDRS collates data from three data sources: (a) a survey of PWID; (b) a semi-structured interview with KE working as professionals in the drug field; and (c) the collection of routine indicator data that provide information on illicit drug trends and other drug-related issues. These data sources are triangulated against each other to determine if the information obtained is valid, and are then compared to the results of previous years to detect the emergence of trends.

Survey of people who inject drugs

In July of 2015, a structured interview was administered face to face to 100 current PWID in the ACT. The interview collected information on the demographic characteristics and drug use history of the sample, as well as the price, purity and availability of heroin, methamphetamine, cocaine and cannabis. Survey items included demographics, drug use history, market characteristics (including price, perceived purity and perceived availability) of the main drugs investigated by the IDRS, health-related trends associated with drug use (including injection-related harms, risk behaviours, overdose and mental health) and law enforcement-related harms associated with drug use (including recent criminal activity and perceptions of police activity). In 2015, amendments were made to the questionnaire in an attempt to collect more detailed information on: Hepatitis C testing, oxycodone use, and blood donations among PWID.

The IDRS interviews were conducted by NDARC research staff and took approximately one hour to administer. Participants were recruited through Directions ACT (an organisation that provides a Needle and Syringe Program (NSP) in the ACT) and the Canberra Alliance for Harm Minimisation and Advocacy. Posters were placed at Directions ACT asking potential participants to come to Directions ACT to be screened (according to the selection criteria which required participants to have injected at least monthly in the past six months, to have lived in the ACT for the previous 12 months, and be at least 17 years of age) and, if they were eligible, make an appointment for the next week. Participants were reimbursed $40 for their time. Ethics approval for the ACT arm of the IDRS was obtained from the University of New South Wales ethics committee.

Survey of key experts

Between August and November 2015, professionals were interviewed as KE for the IDRS. As criteria for study entry, KE had had contact with a minimum of 10 different PWID in the six months prior to interview. All interviews were conducted via an online survey instrument and took approximately 20–40 minutes to administer. The interview included sections on: the demographic characteristics of illicit drug users; patterns of use; price, purity and availability of the different drugs; criminal and police activity; and health and treatment issues. Where KE comments are not reported in a chapter, this is due to low numbers reporting on a specific drug.

Other indicators

Data collected from PWID surveys and KE interviews were supplemented by routinely collected Australian indicator data sources relating to illicit drug use and other drug-related issues. The entry criteria for indicator data are listed below.

- The data should be available at least annually.
- The data should include 50 or more cases.
- The data should provide details of illicit drug use.
- The data should be collected in the main study site (i.e., the ACT).
- The data should include details on at least one of the four main illicit drugs under investigation.

The indicator data sources meeting the above criteria included in the 2015 IDRS study are described below.

- **Purity of drug seizures**. In 2015, the Australian Crime Commission (ACC) provided data on the median purity of illicit drug seizures made by local police in the ACT. This report presents the purity of drug seizures from 2003–04 to 2013–14 financial years.
- **Number and weight of drug seizures**. Data on the number and weight of drug seizures made by ACT local police were provided by the ACC. Data includes number of seizures and amount seized in grams 2003–04 financial year to 2013–14, by each drug type.
- **Drug-specific arrests**. The ACC provided data on the number of consumer (user-type offences) and provider (supply-type offences) arrests made by the Australian Federal Police (AFP) and ACT local police. This report provides the number of arrests for each drug type from 2003–04 financial year to 2013–14.
- **Simple Cannabis Offence Notices (SCON)**. Data for this report on the number of SCON issued in the ACT from 2003–04 financial year to 2013–14 were provided by the ACC.
- **Overdoses**. The number of overdoses in the ACT attended by the ACT Ambulance Service is presented. The data are provided by ACT Ambulance Service and include the number of heroin overdoses per financial year 2001–02 to 2012–14 and the data from 2015 (calendar year).
- **Hospital admissions**. The 2015 IDRS study includes data on the number of hospital admissions due to opioids, methamphetamines and cannabis among those aged 15 to 54 years from 2003-04 to 2013–14. These data are provided by the Australian Institute of Health and Welfare (AIHW) and ACT Health.
- **Blood-borne viral infections surveillance data**. Data pertaining to the prevalence of blood-borne viral infections (BBVI) in the ACT are derived from the National Notifiable Diseases Surveillance System (NNDSS) (NNDSS, 2014), and the *Australian NSP Survey National Data Report 2009-2014* provided by the Kirby Institute (previously known as the National Centre in HIV Epidemiology and Clinical Research) (May 2014) .

Data analysis

Analyses were conducted using the Statistical Package for the Social Sciences (SPSS) for Windows, Version 22.0 {IBM, 2013 #2890}. The data collected in 2015 was compared with data collected from comparable samples of PWID from 2000 onward, recruited as part of the IDRS. As

each of these samples was recruited using the same methods, meaningful comparisons can be made. Further analysis was conducted on the main drugs of focus in the IDRS to test for significant differences between 2014 and 2015 for 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). This calculation tool was an implementation of the optimal methods identified by Newcombe (1998). Significance testing using the Mann-Whitney U calculation was used to compare 2014 and 2015 median days of use for the major drug types discussed.

3 DEMOGRAPHICS

Overview of the IDRS participant sample

A total of 100 regular PWID were interviewed in the ACT in 2015. The demographic characteristics of the sample are summarised in Table 1 below. In 2015, the mean age of the sample was 42 years (range=20-63 years, SD=8.97), and 72% were male. Almost all (97%) of the respondents reported English as the main language spoken at home and 19% identified as Aboriginal and/or Torres Strait Islander. The majority of participants reported that they were single (62%), were married/in a de facto relationship (9%), or had a partner (20%).

The mean number of formal school years completed was 10 (range=6–12 years, SD=1.61). Forty-nine percent of participants reported that they had trade or technical qualifications, and 13% reported that they had university or other tertiary qualifications. Eighty-one percent of participants interviewed in 2015 were unemployed (82% in 2014), 5% were currently employed full time (9% in 2014), and 9% were employed on a casual or part-time basis (7% in 2014). The vast majority of respondents (84%) reported living in a privately owned or rented house or flat and 9% of respondents reported to have no fixed address. Half (51%) of participants reported that they had a prison history (47% in 2014).

Fifty-three percent of participants indicated that they were currently involved in some form of drug treatment. The most common form of drug treatment was methadone maintenance treatment (38%), with a further 10% of participants engaged in buprenorphine or buprenorphine-naloxone maintenance treatment. The median length of time participants had been participating in their current treatment was 36 months (range=1 month to 40 years). Of those respondents currently in treatment, 83% had been engaged in treatment for six months or more, with 26% participating in their current treatment for less than six months.

Table 1: Demographic characteristics of the PWID sample, 2014–2015

	2014 N=100	2015 N=100
Age (mean years)	41	**42**
School education (mean years)	10	**10**
Sex (% male)	75	**72**
Heterosexual (%)	92	**93**
Relationship status (%)		
Single	58	**62**
Partner	20	**20**
Married/de facto	15	**9**
Separated	2	**3**
Divorced	4	**3**
Accommodation (%)		
Own house/flat (includes renting)	92	**80**
Parent's/family house	1	**1**
Boarding house/hostel	2	**1**
Shelter/refuge	1	**7**
No fixed address/homeless	4	**9**
Employment (%)		
Not employed	82	**81**
Full-time	9	**5**
Part-time/casual	7	**9**
Home duties	1	**1**
Full time student	1	**2**
Income per week (mean)	487	**480**
English main language spoken at home (%)	97	**97**
Aboriginal and/or Torres Strait Islander (%)	13	**21**
Tertiary education (%)		
None	37	**38**
Trade/technical	49	**49**
University/college	14	**13**
Currently in drug treatment (%)	**56**	**53**
Methadone maintenance (%)	45	**38**
Buprenorphine maintenance (%)	1	**4**
Buprenorphine-naloxone (%)	6	**6**
Prison history (%)	50	**51**

Source: ACT IDRS PWID interviews, 2014–2015

4 CONSUMPTION PATTERNS

Current drug use

The injection histories of participants in the 2014 and 2015 samples are summarised in Table 2. The mean age of first injection was 19 years (range=13-41 years, SD=5.59). The first drug respondents reported ever injecting was methamphetamine powder (43%) or heroin (42%).

Heroin was nominated as the drug of choice for the majority of participants (58%) in 2015; similar proportions as reported in 2014. In 2015, the percentage of respondents nominating crystal methamphetamine as their drug of choice remained relatively stable at 28% (25% in 2014). Six percent of respondents nominated speed as their drug of choice (8% in 2014). Overall, 34% of participants nominated methamphetamine (in any form) as their drug of choice in 2015, remaining stable from 2014 (32%). Cannabis was nominated as drug of choice by 4% of participants.

Heroin was the drug injected most often in the month prior to the interview (55%) and was the last drug injected by 57% of respondents. The proportion of participants nominating crystal methamphetamine as the drug most often injected in the last month remained stable with 37% in 2015 compared to 35% in 2014.

In 2015, 20% of the sample reported a discrepancy between their drug of choice and the drug they injected most often in the previous month. Of those that reported a discrepancy (n=20), most respondents reported that this was due to availability (20%), health effects (30%), price (25%), or purity (20%).

Table 2: Injection history, drug preferences and polydrug use of PWID, 2014–2015

	2014 N=100	2015 N=100
Age first injection (mean years)	20	**19**
First drug injected (%)		
Heroin	52	**42**
Methamphetamine powder	31	**43**
Crystal methamphetamine	8	**9**
Cocaine	2	**2**
Other opioids	4	**1**
Other	2	**2**
Drug of Choice (%)		
Heroin	56	**58**
Methamphetamine - powder (speed)	8	**6**
Methamphetamine - crystal	25	**28**
Cocaine	-	**-**
Methadone	1	**1**
Cannabis	5	**4**
Other	1	**3**
Drug injected most often last month (%)		
Heroin	52	**55**
Methamphetamine – powder (speed)	4	**3**
Methamphetamine – crystal	35	**37**
Methadone	1	**1**
Buprenorphine/buprenorphine-naloxone	3	**1**
Other/have not injected in last month	1	**2**
Most recent drug injected (%)		
Heroin	47	**57**
Cocaine	0	**-**
Methamphetamine – powder (speed)	6	**2**
Methamphetamine – crystal	31	**32**
Methadone	4	**2**
Buprenorphine/buprenorphine-naloxone	3	**2**
Morphine	3	**1**
Other	6	**3**

Source: ACT IDRS PWID interviews, 2014–2015
↓↑ Statistical significance $p<0.05$

The frequency of injection reported by participants from 2011 to 2015 is presented in Table 3. In 2015, the most commonly reported frequency of injecting was 'more than weekly, less than daily' by 34% of the sample. There have been no significant differences in these patterns from 2014.

Table 3: Frequency of injection among PWID in the ACT, 2011–2015

	2011	2012	2013	2014	2015
Frequency (%)	N=98	N=99	N=100	N=100	**N=100**
Weekly or less	24	18	25	18	**17**
Daily–weekly	35	40	38	41	**34**
Daily	19	15	27	23	**14**
2–3 times daily	19	22	9	12	**25**
More than 3 times a day	4	4	1	3	**8**

Source: ACT IDRS PWID interviews, 2011–2015

POLYDRUG USE

As in previous years, the IDRS participants sampled were polydrug users. Table 4 and Table 5 show the prevalence of drug use by the ACT sample in the past six months for the most commonly used drugs investigated by the IDRS. Use of tobacco, cannabis, methamphetamine (any form) and heroin are all common.

Table 4: Drug use in the six months preceding interview, ACT, 2015

Drug class	Ever used %	Used^ last 6 months %	Median days used^ last 6 months	Injected last 6 months %	Median days injected last 6 months	Smoked last 6 months %	Snorted last 6 months %	Swallow last 6 months %
Heroin	92	79	70	79	70	6	1	2
Homebake heroin	53	15	5	15	4	2	1	1
Any heroin (inc. homebake)	92	80	71	80	71	7	2	3
Methadone (prescribed)	72	42	180	12	8.5	-	-	40
Methadone (illicit)	45	14	4	13	3	-	-	5
Physeptone (prescribed)	23	7	15	1	180	-	-	6
Physeptone (illicit)	31	4	13	4	13	-	-	1
Any methadone (incl. physeptone)	81	50	180	21	24	-	-	43
Buprenorphine (prescribed)	32	5	140	2	92.5	-	-	3
Buprenorphine (illicit)	40	11	10	10	8	-	-	2
Buprenorphine-naloxone tablet (prescribed)	21	4	47	2	3	-	-	2
Buprenorphine-naloxone tablet (illicit)	24	3	1	2	1	-	-	1
Buprenorphine-naloxone film (prescribed)	23	12	135	3	12	-	-	10
Buprenorphine-naloxone film (illicit)	22	10	17	8	32.5	-	-	2
Morphine (prescribed)	20	6	28.5	4	7.5	1	-	1
Morphine (illicit)	59	20	4.5	19	4	-	-	4
Oxycodone (prescribed)	22	2	90.5	-	-	-	-	2
Oxycodone (illicit)	56	15	2	14	2.5	-	1	2
OTC codeine	33	8	21	-	-	-	-	8
Speed powder	82	15	18	14	19	1	1	-
Amphetamine liquid	43	-	-	-	-	-	-	-
Base/point/wax	42	10	9	10	6	1	-	-
Ice/ crystal	89	79	40	74	40	33	1	3
Any form of (meth)amphetamine	93	81	32	76	40	33	2	3

Source: ACT IDRS PWID interviews, 2015

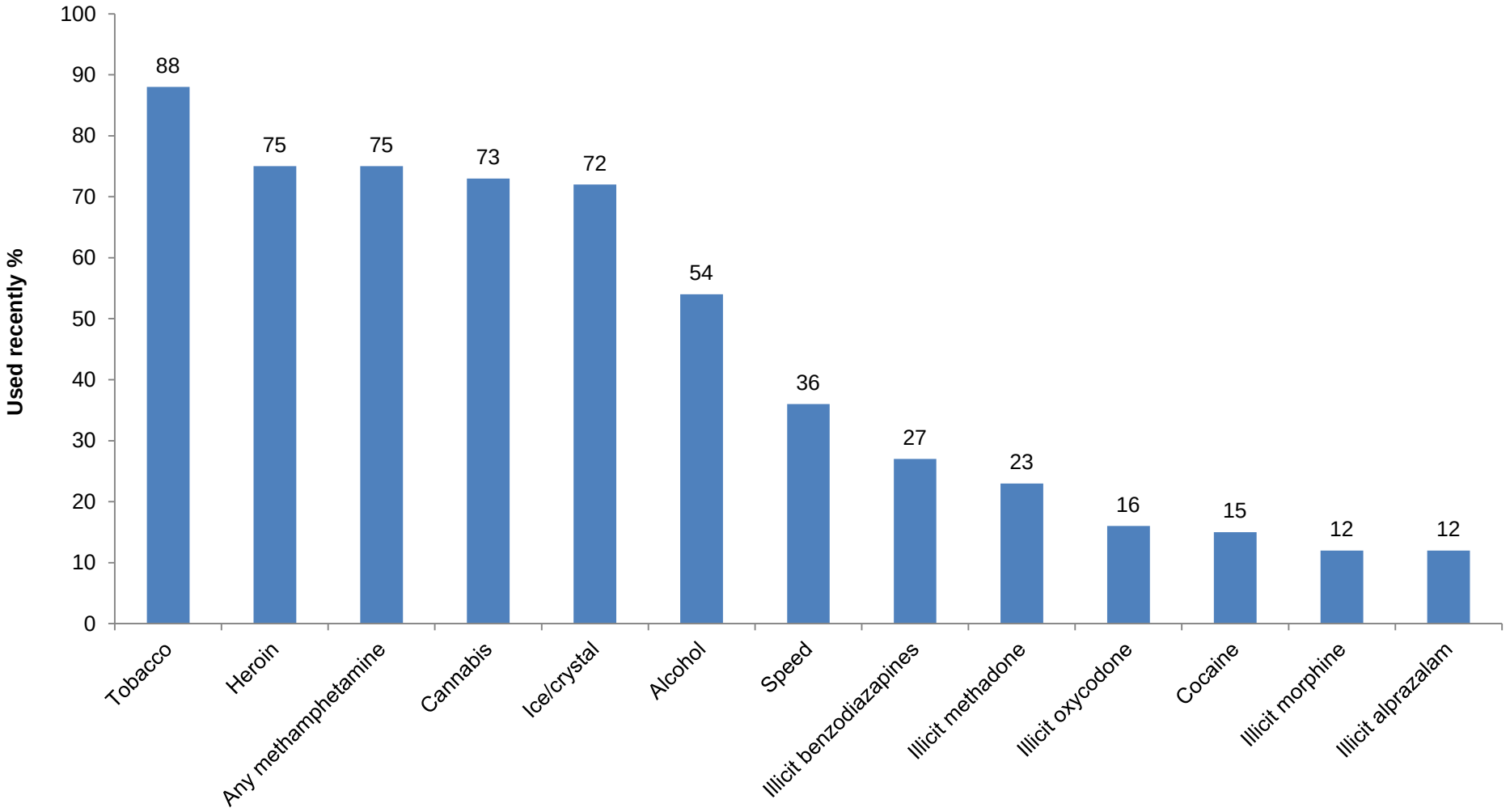
^ Refers to any route of administration, i.e., includes use via injection, smoking, swallowing, and snorting, + Refers to/includes sublingual administration of buprenorphine
* Among those who had used/injected, # Category includes speed powder, base, ice/crystal and amphetamine liquid (oxblood). Does not include pharmaceutical stimulants

Table 5: Drug use in the six months preceding interview, ACT, 2015

Drug class	Ever used %	Used^ last 6 months %	Median days used^ last 6 months	Injected last 6 months %	Median days injected last 6 months	Smoked last 6 months %	Snorted last 6 months %	Swallow last 6 months %
Pharmaceutical stimulants (prescribed)	15	3	90.5	3	90.5	-	-	4
Pharmaceutical stimulants (illicit)	35	10	2	9	2	-	-	5
Any form of pharmaceutical stimulants	42	13	2	12	2	-	-	8
Cocaine	64	12	3.5	9	3	1	3	
Hallucinogens	57	3	2	1	1	-	-	2
Ecstasy	61	8	2	4	1.5	1	-	6
Alprazolam (prescribed)	19	6	92	-	-	-	-	6
Alprazolam (illicit)	35	22	2.5	-	-	-	-	22
Any alprazolam	43	25	2.5	-	-	-	-	25
Seroquel (prescribed)	20	8	24	-	-	-	-	7
Seroquel (illicit)	32	16	3.5	-	-	1	-	16
Any Seroquel	47	22	4	-	-	1	-	21
Benzodiazepines, other (prescribed)	46	30	180	1	90	-	-	30
Benzodiazepines, other (illicit)	45	23	10	-	-	1	-	23
Any form of benzodiazepines, other	68	43	10	1	90	1	-	43
Alcohol	86	60	30	1	1			60
Cannabis	93	81	160			81	-	5
Tobacco	99	96	180			96	-	-
Steroids	5	-	-	-	-	-	-	-
Fentanyl	25	10	4	9	2	-	-	-
Synthetic cannabinoids	15	8	1			8	-	-

Source: ACT IDRS PWID interviews, 2015
^ Refers to any route of administration, i.e., includes use via injection, smoking, swallowing, and snorting, + Refers to/includes sublingual administration of buprenorphine
* Among those who had used/injected, # Category includes speed powder, base, ice/crystal and amphetamine liquid (oxblood). Does not include pharmaceutical stimulants

Figure 1: Drug use in the six months preceding interview, ACT, 2015



Source: ACT IDRS PWID interviews, 2015

Heroin

Key points

- In 2015, heroin remained the drug of choice for over half of participants.
- Seventy-nine percent had used heroin in the previous six months.
- Heroin was used on a median or 70 days in the preceding six months (approximately two days per week).

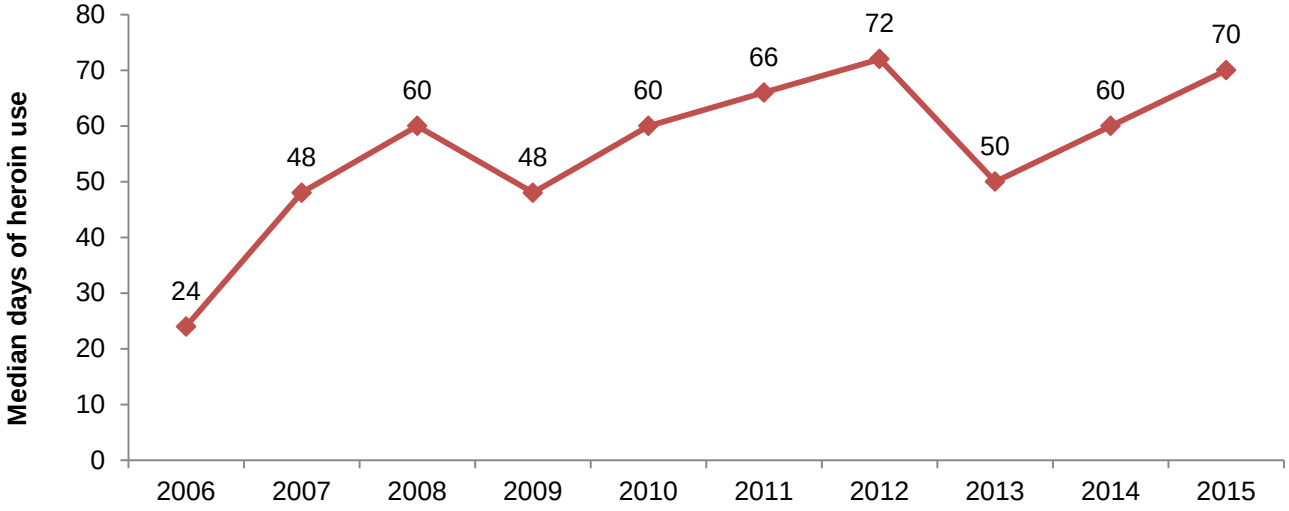
In 2015, 92% of respondents reported that they had used heroin at least once in their lifetime and more than three-quarters (79%) reported the use of heroin in the six months preceding interview.

Heroin was nominated as the drug of choice by over half of the participants in 2015 (56%), the same proportion in 2014. More than half of the respondents reported heroin as the drug most often injected in the last month (55%) and 57% reported that it was the last drug they injected.

All participants who had used heroin in the preceding six months (n=79) reported injecting it. Few participants (6%) reporting smoking heroin in the six months preceding the interview; 3% reported they had swallowed heroin in the last six months; and just one participant reported they had snorted heroin in the last six months.

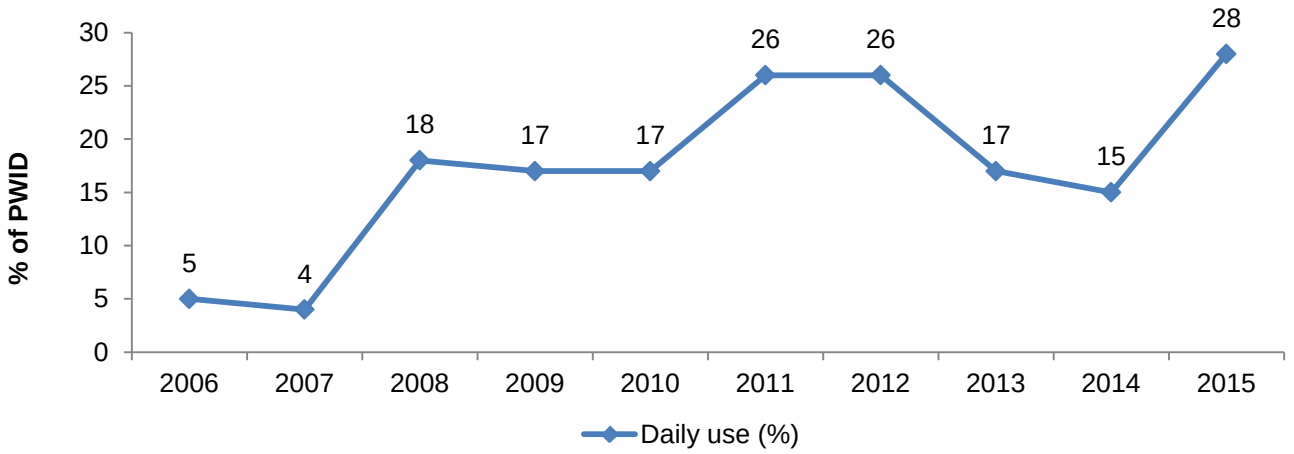
Of those participants who had used heroin in the six months prior to the interview, the median number of days of use during this period continues to trend upwards from 2013 to 70 days (60 days in 2014) as seen in Figure 2. The number of days that heroin was used in the preceding six months ranged from one day to every day.

Figure 2: Median days of recent heroin use in the ACT, 2006–2015



Source: ACT IDRS PWID interviews, 2006–2015

Figure 3: Proportion of participants reporting recent daily heroin use, in the ACT, 2005–2015



Source: ACT IDRS PWID interviews, 2006–2015

As shown in Figure 3, the proportion of participants reporting daily heroin use in the six months preceding interview has increased from 15% reporting daily use in 2014 to 28% reporting daily use in 2015. Heroin was nominated by 37% of the sample as having been used on the day prior to the interview (28% in 2014).

Homebake is a form of heroin made from pharmaceutical products and involves the extraction of diamorphine from pharmaceutical opioids such as codeine and morphine. In 2015, more than half (53%) of participants reported that they had used homebake heroin at least once in their lifetime. Fifteen percent reported the use of homebake heroin in the six months preceding interview. All of those who reported recent use of homebake heroin had injected it. In 2015, the median days of homebake heroin use was five days (range=1–180).

PREPARATION AND COLOUR

Brown heroin was first identified in New South Wales (NSW) by the Medically Supervised Injecting Centre (MSIC) in 2006. Participants in the IDRS first commented on the presence of brown heroin in the same year. In 2007, the issue was first investigated by asking participants to describe the colour forms of heroin they had used over the last six months, in addition to the form most used. In 2008, this investigation was expanded by asking participants what colour forms of heroin they used and the preparation techniques employed when using these colour forms.

Traditionally, heroin originating from the Golden Triangle (from where Australia's heroin has predominantly originated in the past) has been white or off-white in colour. This form of heroin had an acidic (acetone/hydrochloride) base and was relatively easy to prepare for injection as it was more refined and easy to dissolve in water. In contrast, heroin produced in the Golden Crescent, a region producing heroin that has traditionally been seen very rarely in Australia, was traditionally brown in colour and less refined. It required the use of heat, and often an acid, to prepare for injection, and was also more amenable to smoking as a route of administration.

More recently, however, the picture has become less clear, with at least one documented instance of white acidic heroin production occurring in Afghanistan (Zerell, Ahrens and Gerz, 2005). Furthermore, information from border seizures indicates that it is not possible to determine the geographic origin of the drug based on colour alone (AFP personal communication with the

authors). Therefore, while the following information provides an indication of the appearance of heroin used by participants of the IDRS at the street level, it is not possible to draw conclusions about its geographic origin, purity or preparation method required for injection based on these data alone.

COLOUR AND FORM

Among those PWID who had used heroin in the six months previously, 83% reported that they had used heroin powder which was white/off-white in colour (see Table 6). The next most common form used was white/off-white rock (72%). A quarter of PWID reported that they had used brown heroin powder (25%) and 14% reported using brown heroin rock in the six months preceding interview. Two-thirds (72%) percent reported that white/off-white heroin powder was the form of heroin they most used, followed by brown powder (25%), and white/off-white rock (14%).

Table 6: Forms of heroin used and most common form used recently, ACT, 2014–2015

Heroin form used in the last six months	2014 (n=75)	2015 (n=79)
Heroin powder		
White/off-white	78	**83**
Brown	23	**25**
Other colour	3	**5**
Heroin rock		
White/off-white	44	**33**
Brown	21	**14**
Other colour	1	**3**
Homebake	4	**11**
Heroin form used MOST OFTEN in last six months		
Heroin powder		
White/off-white	67	**72**
Brown	1	**8**
Other colour	0	**1**
Heroin rock		
White/off-white	24	**14**
Brown	7	**5**
Other colour	0	**0**
Homebake	1	**1**

Source: ACT IDRS PWID interviews, 2014–2015

PREPARATION

In 2015, participants reported on methods of preparation employed when using heroin (preparing with either heat or acid). Participants were asked if they had used heat or acid the last time they injected and the colour of the heroin used. Of those who had injected heroin in the past six months (n=79), 30% reported that they had used heat the last time they injected and two participants reported using acid. Fifty-eight percent (n=14) of those who had used heat or acid the last time they injected reported that the colour of heroin was white or off-white while 38% (n=9) reported that the colour was brown or beige.

Key expert comments – Heroin

The majority of KE reported that heroin was the main illicit drug used by the regular users that they had contact with.

Methamphetamine

Key points

- The vast majority (92%) of participants reported using some form of methamphetamine at least once in their lifetime and 81% reported use in the past six months.
- Crystal methamphetamine remains the most common form used with 79% of the sample reporting recent use. A quarter of participants nominated crystal as their drug of choice, stable from 2013.
  In contrast to crystal methamphetamine, speed (powder) and base use have declined in recent years.

The 2015 IDRS questionnaire collected data on three different forms of methamphetamine: methamphetamine powder (speed), base methamphetamine (base), and crystal methamphetamine (crystal).

LIFETIME USE

Any methamphetamine

In 2015, the vast majority (92%) of participants reported using some form of methamphetamine (i.e., speed, base, crystal, amphetamine liquid) at least once in their lifetime.

Speed

Eighty-two percent of participants reported using speed in their lifetime, 89% (n=73) of those participants reporting having injected speed.

Base

Forty-two percent of participants reported ever having used base, with almost all of those (95%) reporting having injected base.

Crystal

Eighty-nine percent of participants reported having ever used crystal, with the majority (94%) reporting having injected crystal.

CURRENT PATTERNS OF METHAMPHETAMINE USE

Any methamphetamine

In 2015, 81% of ACT participants reported using any methamphetamine in the six months preceding interview. Median days of use for any methamphetamine reduced to 32 days in 2015 (48 in 2014). Methamphetamine (in any form) was reported as the drug type used on first injection by 52% of the sample. Thirty-nine percent of participants reported methamphetamine to be the drug type most often injected in the last month (38% in 2014).

Speed

Fifteen percent of participants reported the use of speed in the six months preceding interview compared to 36% in 2014; a significant decrease ($p<0.01$). See Figure 4.

The most common route of administration was injection, which was reported by almost all participants who had recently used speed (94%). Of those who had recently used speed, smaller proportions reported smoking (7%), and snorting (7%) speed in the six months preceding interview.

Median days of use was eighteen days (range=2–150) and the median days of injection was nineteen days (range=2–150). This equates to approximately fortnightly use.

A third (43%) of participants reported that speed was the first drug ever injected, 3% reported speed as the drug they injected most in the last month (4% in 2014), and 2% reported speed as the most recent drug injected (6% in 2014). In 2015, 8% reported that speed was their drug of choice.

Base

Ten percent reported the recent use of base (4% in 2014; see Figure 4). Injection was the most common route of administration reported by 90% of participants who had recently used base. In 2015, one participant reported recently smoking it.

Base was used on a median of nine days (approximately monthly) and injected on a median of six days in the preceding six months.

Base was not reported as the first drug injected, the drug injected most in the last month, or the last drug injected.

Crystal

More than three-quarters of the participants (79%) reported the recent use of crystal (72% in 2014; see Figure 4). Almost all (94%) participants who had recently used crystal had done so by injection. Almost half (42%) of recent crystal users had smoked crystal in the six months prior to interview (a significant increase from 21% in 2014, $p=0.009$). Smaller proportions of the sample reported swallowing (4%) in the six months preceding interview. One participant reported recently snorting.

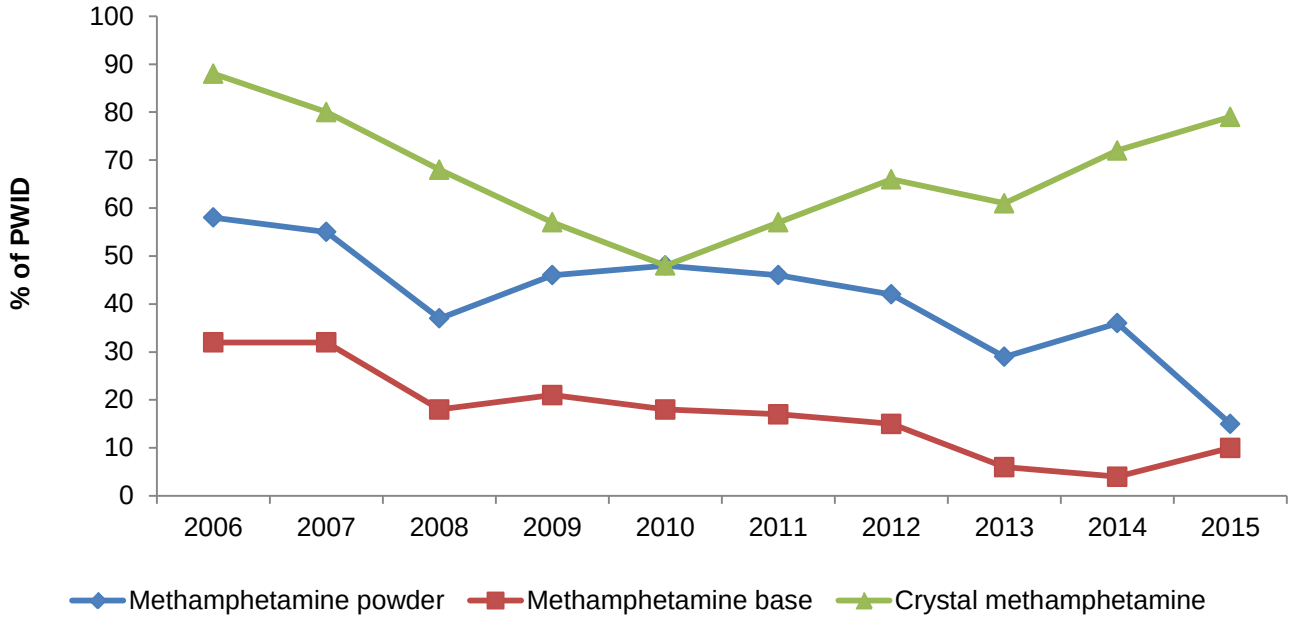
Among those who had used crystal in the previous six months, the median days of use was 40 (48 in 2014). Among recent injectors the median days of injection was 40; almost twice weekly use. Almost one in every five recent crystal users reported using daily.

Crystal was the first drug injected by 9% of participants (8% in 2014), the drug injected most often in the last month by 37% (34% in 2014), and the last drug injected by 32% (32% in 2014). A quarter (25%) of participants nominated crystal as their drug of choice, the same proportion as 2013 and 2014.

Liquid amphetamine

In 2015, 43% of participants reported that they had used liquid amphetamine at least once in their lifetime. No participants reported the recent use of liquid amphetamine.

Figure 4: Methamphetamine use in the past six months in the ACT, 2006–2015



Source: ACT IDRS PWID interviews, 2006–2015

Cocaine

Key points

- Almost two-thirds of participants reported lifetime use of cocaine.
- The recent use of cocaine remained low in the ACT, with 12% reporting use in the preceding six months. The median days of use also remained low at three and a half days, ranging from one to 24 days.

LIFETIME USE

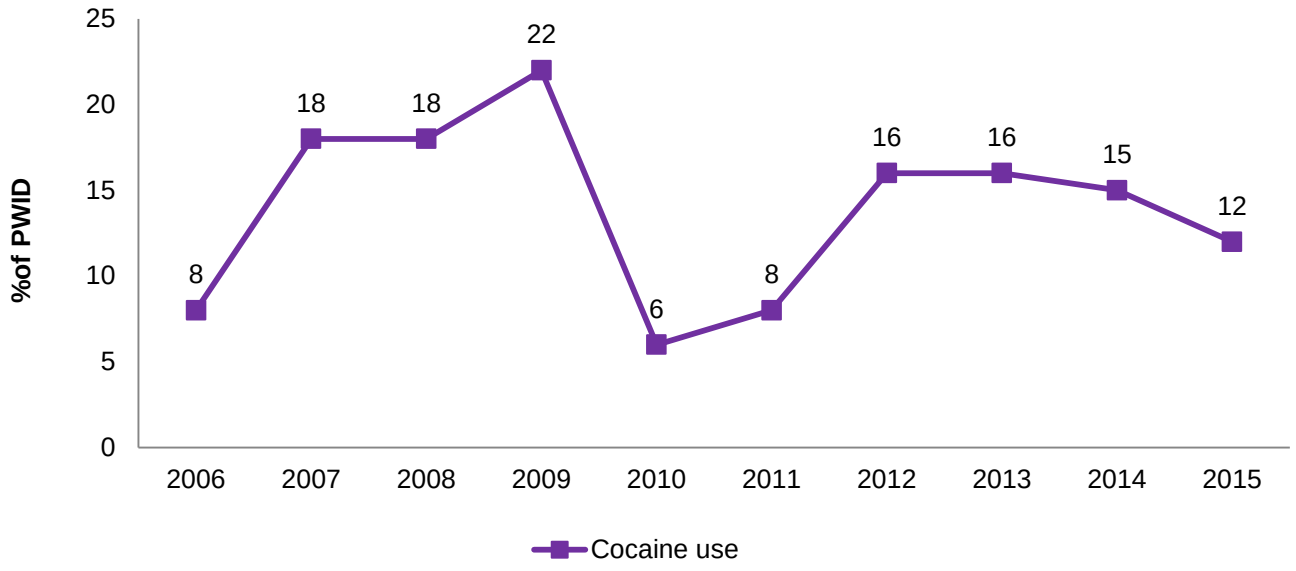
In 2015, 64% of participants reported that they had used cocaine at least once in their lifetime (55% in 2014). Over three-quarters (77%) of those PWID who had ever used cocaine reported having injected cocaine.

CURRENT PATTERNS OF COCAINE USE

In 2015, the proportion of participants reporting recent use of cocaine remained stable at 12% (Figure 5). Among recent cocaine users, the most common route of administration in 2015 was injection (75%). In the preceding six months, 25% of participants had snorted cocaine and one participant had smoked it.. The median days of cocaine use remained low at three and a half days, ranging from one day to 24 days.

Just 2% of participants reported that cocaine was the first drug they had ever injected (2% in 2014). No participants nominated cocaine as their drug of choice, the drug they injected most often last month, or as the last drug injected.

Figure 5: Proportion of PWID reporting cocaine use in the past six months in the ACT, 2006–2015



Source: ACT IDRS PWID interviews, 2006–2015

Cannabis

Key points

- 81% of PWID reported recent cannabis use in 2015 (73% in 2014).
- Cannabis was the most common illicit drug used the day prior to interview (54%).
- Daily use was reported by 48% of the sample.
- Hydroponic cannabis remained the most common form of cannabis used (90% used recently).

LIFETIME USE

In 2015, the vast majority of participants (93%; 88% in 2014) reported using cannabis at least once in their lifetime.

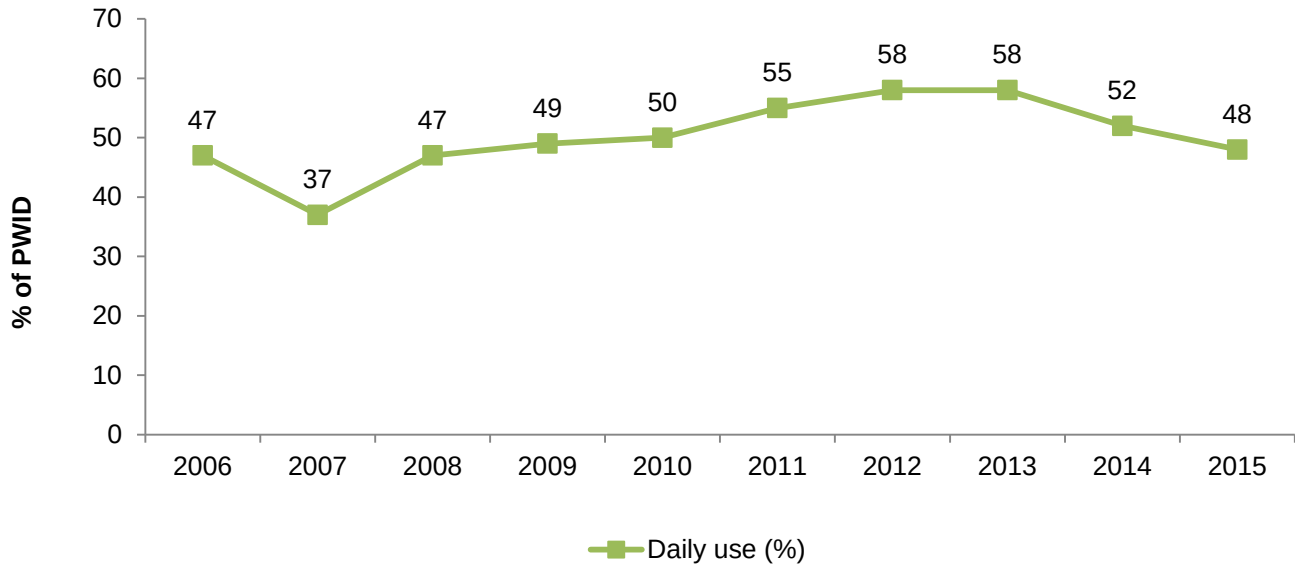
CURRENT PATTERNS OF CANNABIS USE

Eighty-one percent of participants reported having used cannabis in the six months preceding interview (73% in 2014). The median number of days of use in the previous six months was 160 which equates to almost daily use. As can be seen from Figure 6, the proportion of participants reporting daily cannabis use has declined slightly since 2013 (48%; 52% in 2014). Five percent of participants nominated cannabis as their drug of choice in 2015 (same as 2014).

Recent cannabis users were asked how much cannabis they had smoked on the last day of use, as measured by the number of cones or joints used on that occasion, either by themselves, or shared with others. Among those who responded, cannabis had typically been smoked in cones (67%) rather than joints (14%). Among those who had smoked cones, the median number used on the last day was five (range=1-30 cones) and the number of joints smoked was two (range=0.5–5.0 joints). Daily users of cannabis had smoked a median of 10 cones (range=2-30) on the last day of use.

Of those respondents who had used cannabis in the past six months, 90% had used hydroponic cannabis (hydro) (90% in 2014), 49% had used bush (43% in 2014), 7% had used hashish (12% in 2014), and 4% reported using hashish oil (4% in 2014). Hydro was the form of cannabis used most often 90% of respondents in 2015 (90% in 2014).

Figure 6: Recent daily cannabis use, 2006–2015



Source: ACT IDRS PWID interviews, 2006–2015

Key expert comments – Cannabis

Most KE reported that cannabis use was common and used frequently by, many PWID.

Other opioids

Key points

- Half (50%) of the sample reported recent use of methadone (licit or illicit) and around one-quarter (21%) reported recently injecting.
- Sixteen percent of the sample reported recent use of buprenorphine (licit or illicit).
- A quarter (25%) of the sample reported recent use of buprenorphine-naloxone (licit and illicit).
- One fifth (20%) reported the recent use of illicit morphine on median of four and a half days.
- Recent use of illicit oxycodone remains stable at 15% of the sample using on a median of two days in the previous six months. The most common brands used are Oxycontin® and Endone®.

The IDRS investigates the use patterns, harms and market characteristics of a number of pharmaceutical opioids, including methadone, buprenorphine, buprenorphine-naloxone, morphine and oxycodone. In this section, licit use is defined as use of pharmaceuticals obtained with one's own prescription and used as prescribed. Illicit use is defined as use of pharmaceuticals obtained from a prescription in someone else's name.

METHADONE

Methadone is prescribed for the treatment of opioid dependence, usually as a syrup preparation and is often dosed under supervised conditions. Take-away doses are available for some patients. Physeptone tablets (a pill form of methadone) are less common in Australia and are usually prescribed for people in methadone treatment who are travelling, or, in a minority of cases, where the methadone syrup is not tolerated. As mentioned previously, illicit use of methadone and physeptone was defined as the use of medication not obtained with a prescription in the participant's name. The participant may have bought the medication on the street or obtained it from a friend or acquaintance.

Licit methadone and physeptone

The proportion of participants indicating that they had ever used licit methadone was 72% (64% in 2014). Forty-two percent of participants in 2015 reported recent use of licit methadone (46% in 2014). In 2015, 95% of participants who had recently used licit methadone reported having swallowed it. In addition, 29% of participants reported having used licit methadone by injection in the six months prior to interview, which is a return to previous levels seen prior to 2014 (13% in 2014 and 27% in 2013). Among those who reported using licit methadone in the preceding six months, 76% reported daily use. The median number of days of use for licit methadone was 180 indicating daily use.

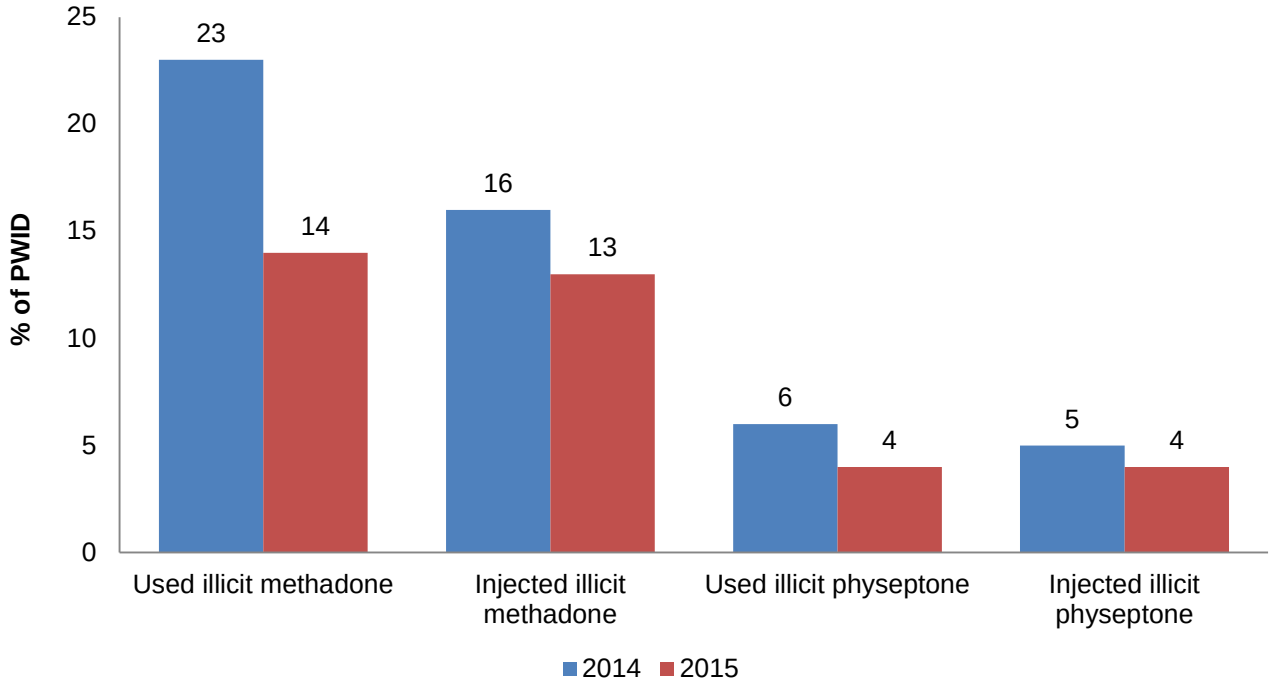
Twenty-three percent of participants reported ever using licit physeptone (18% in 2014) and seven percent reported use of licit physeptone in the preceding six months. Most of the recent licit physeptone users reported swallowing it (n=6) and four participants reported having injected in the preceding six months.

Illicit methadone and physeptone

In 2015, the self-reported lifetime use of illicit methadone amongst participants remained stable at 45% of participants (45% in 2014). As can be seen in Figure 7, the proportion of participants reporting recent use of illicit methadone is 14%. Thirteen percent of participants reported recently injecting illicit methadone. The median number of days of use for illicit methadone remained stable at four days (range=1-90).

In 2015, 31% reported ever using illicit physeptone (23% in 2014) and 4% of participants reported recent use of illicit physeptone. The four participants who recently used illicit physeptone reported injecting it.

Figure 7: Recent use and injection of illicit methadone and illicit physeptone among PWID, 2014-2015



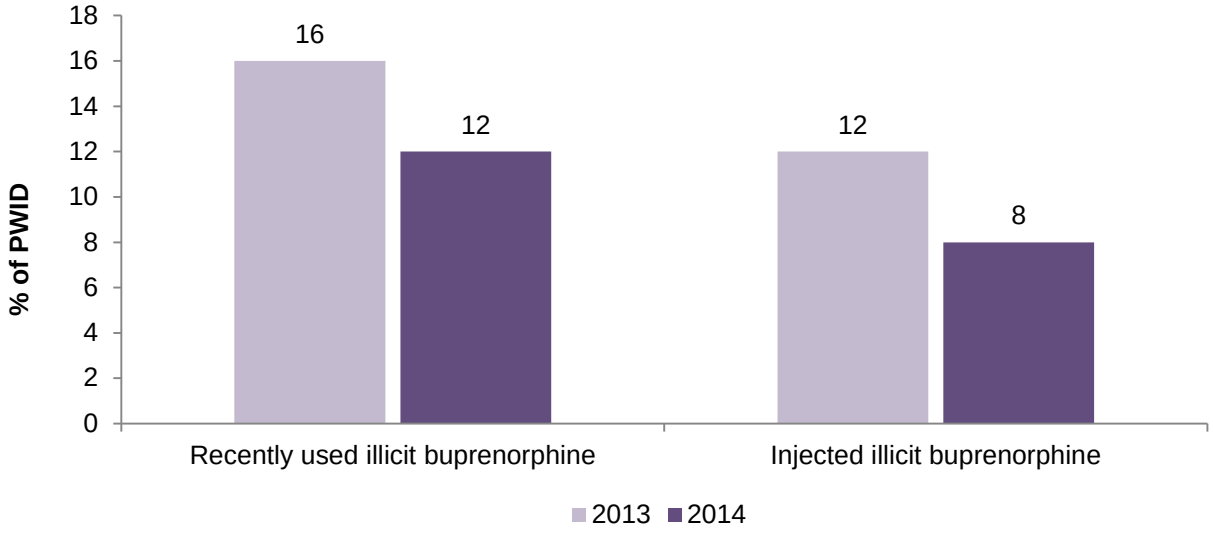
Source: ACT IDRS PWID interviews, 2014-2015
NB: interpret with caution, n=<10

BUPRENORPHINE[3]

In 2015, 32% of participants reported that they had ever used licit buprenorphine, i.e., buprenorphine prescribed to them (30% in 2014). Use of prescribed buprenorphine in the six months preceding interview remains low at 5% (5% in 2014). Most participants who reported recent use of prescribed buprenorphine reported having swallowed the drug and two participants reporting injecting it. Among those who had used licit buprenorphine in the preceding six months, the median number of days of use was 140 days in 2015.

Forty percent of participants reported the lifetime use of illicit buprenorphine (36% in 2014). The proportion of participants who had used illicit buprenorphine in the six months prior to interview also remained stable in 2015 (11%; 12% in 2014) (see Figure 8). In terms of route of administration, most PWID who recently used illicit buprenorphine reported injecting it in the six months preceding interview (91% of recent users, n=10). In 2015, the median number of days of use for illicit buprenorphine was ten days.

Figure 8: Recent use and injection of illicit buprenorphine among PWID, 2014–2015



Source: ACT IDRS PWID interviews, 2014-2015

[3] Buprenorphine has been available for opioid substitution therapy (OST) in Australia since 2001. Initially mono-buprenorphine sublingual tablets (marketed as Subutex®) were introduced, followed by buprenorphine-naloxone sublingual tablets (marketed as Suboxone®) from 2006, and buprenorphine-naloxone (Suboxone®) sublingual film from October 2011. There is jurisdictional variation in the policy regarding prescribing and uptake of the different forms (Larance et al 2015). The film dissolves faster under the tongue compared to the tablet, reducing the opportunity for clients to remove the dose from the mouth and misuse it (Therapeutic Goods Administration, March 2000 http://www.tga.gov.au/pdf/auspar/auspar-suboxone.pdf).

BUPRENORPHINE-NALOXONE (SUBOXONE®)

Participants were asked about the use of buprenorphine-naloxone tablet (available since 2006) and buprenorphine-naloxone film which became available on the Pharmaceutical Benefits Scheme (PBS) to treat opiate dependence in late 2011.

In the ACT, six percent of PWID reported recently using any form of buprenorphine-naloxone tablet on a median of three days in the past six months. In 2015, 22% of PWID reported recently using any form of buprenorphine-naloxone film on a median of 55 days in the last six months.

Tablet

Licit use – the number of participants who reported that they had ever used licit buprenorphine-naloxone (tablet form) remained stable at 21% (17% in 2014). Four percent reported the use of prescribed buprenorphine-naloxone in the six months preceding interview (1% in 2014).

Illicit use – 24% of participants reported that they had ever used illicit buprenorphine-naloxone (tablet form) and three participants reported using buprenorphine-naloxone (tablet) in the six months prior to interview.

Film

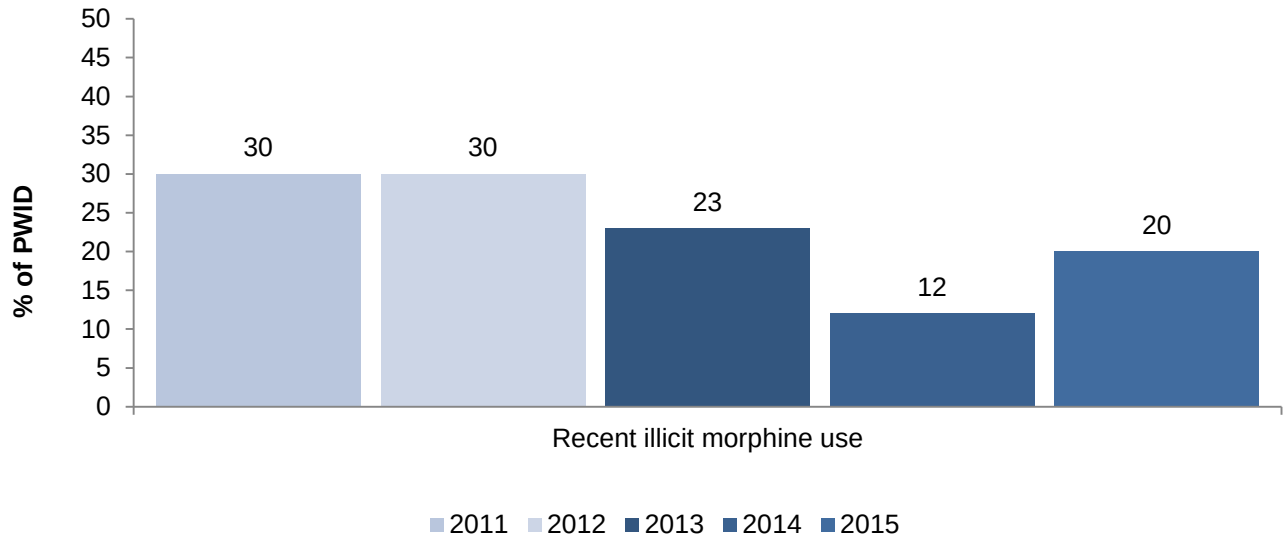
Licit use – Twenty-three percent of participants reported that they had ever used licit buprenorphine-naloxone film and 12% reported the recent use of prescribed buprenorphine-naloxone film. Median days use in the previous six months is 135 days, almost every day.

Illicit use – Twenty-two percent of PWID reported that they had ever used illicit buprenorphine-naloxone film with ten percent reporting the recent use of illicit buprenorphine-naloxone film. The film was used on a median of 17 days in the previous six months.

MORPHINE

Fifty-nine percent of participants reported using illicit morphine at least once in their lifetime and one in five (20%) participants reported recent use (see Figure 9). Of those participants who had recently used illicit morphine, the most common route of administration was injecting (95%, 83% in 2014). In 2015, the median number of days of use for illicit morphine was four and half days, suggesting low and sporadic use. MS Contin® was the preferred brand of morphine for half (54%, 88% in 2014) of recent morphine users.

Figure 9: Recent use of illicit morphine among PWID in the last six months, 2011–2015

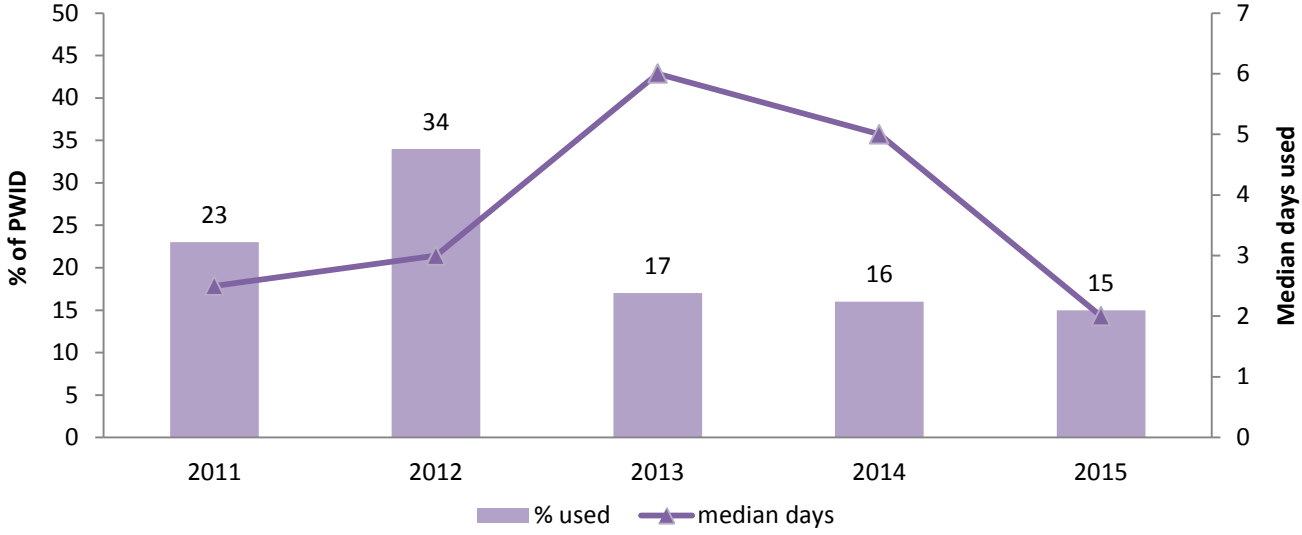


Source: ACT IDRS PWID interviews, 2011–2015

OXYCODONE

Fifty-six percent of participants reported that they had used illicit oxycodone at least once in their lifetime (52% in 2014). The initial upward trend of recent use of illicit oxycodone seen from 2010 to 2012 has not continued with 15% of participants reporting using illicit oxycodone in the previous six months. The median number of days of illicit oxycodone has decreased to two days (see Figure 10). Most (93%) recent users reported injecting illicit oxycodone in the previous six months. The most common brands used were Oxycontin® (36%), and Endone (36%).

Figure 10: Recent illicit oxycodone use and median days of use, 2011–2015



Source: ACT IDRS PWID interviews, 2011–2015

OVER THE COUNTER CODEINE

A third (33%) of participants reported that they had ever used over the counter (OTC) codeine and 8% of participants reported that they had used OTC codeine in the six months prior to interview on a median of 21 days. This is a significant decrease (p=0.002) in the proportion reporting recent use (26% in 2014). All recent OTC codeine users had swallowed it and no participants reported injection of OTC codeine. Brands commonly reported were Nurofen Plus®, Panadeine®, as well as doxylamine succinate with brand name, Dolased® and Chemists Own pain tablet/capsule. The median number of pills taken by participants on the last occasion that OTC codeine was used was two (indicative of using the medication as directed/prescribed).

FENTANYL

In 2015, the IDRS survey included questions on the use of fentanyl. A quarter (25%) of participants reported that they had ever used fentanyl. One in ten (10%) PWID reported using fentanyl in the last six months. The median number of days of use in the past six months was four days, indicating that use is low and sporadic. The majority of recent fentanyl users had injected it (90%).

Other drugs

Key points

- Small proportions report the recent use of;
  - ecstasy (8%) on a median of two days in the previous six months;
  - pharmaceutical stimulants (illicit) (10%) on a median of two days in previous six months;
  - inhalants (4%); and
  - hallucinogens (3%);
- Benzodiazepine and alprazolam use remains stable, with 43% recently using benzodiazepine (any form) and 25% reporting recently using alprazolam (as per previous suggested changes to exec summary).
- The recent use of illicit Seroquel® was reported by 16% of the sample on a median of three and a half days use.
- Recent alcohol use was reported by over half (60%) of the sample at approximately weekly use.
- One in five (20%) recent drinkers reported drinking daily (20% in 2014).
- Tobacco remained common, recently used by 96% of the sample.
  Almost all (92%) participants who reported recently smoking tobacco reported being daily smokers.

ECSTASY

In 2015, sixty-one percent of PWID reported lifetime use of ecstasy (53% in 2014), and 8% reported recent use (10% in 2014) (see Table 7). Half of recent ecstasy users reported injecting ecstasy in the previous six months. Use of ecstasy by participants in the ACT was infrequent, with the median number of days used in the six months prior to interview remaining low at two days.

Table 7: Patterns of ecstasy use among participants in the last six months in the ACT, 2011–2015

	2011 N=98	2012 N=99	2013 N=100	2014 N=100	2015 N=100
Recent use (%)	14	12	6	10	**8**
Recent injecting (%)	3	3	3	4	**4**
Median days used*	2	3.5	1	2	**2**

Source: ACT IDRS PWID interviews, 2011–2015
***Among those that reported recent use.

HALLUCINOGENS

Fifty-seven percent of participants reported having used hallucinogens at some stage in their lifetime (57% in 2014) and recent use (i.e., in the preceding six months) was low, with 3% reporting use in the six months preceding interview.

BENZODIAZEPINES (EXCLUDING ALPRAZOLAM) [4]

Sixty-four percent of participants had reported the use of any form (46% licit and 45% illicit) of benzodiazepines (excluding alprazolam) at some stage in their lifetime. Two-fifths (43%) reported the recent use of any form (30% licit and 23% illicit). Illicit benzodiazepines were used on a median of 10 days in the last six months.

ALPRAZOLAM

Similar proportions of participants reported the lifetime use of some form of alprazolam with 43% (44% in 2014) reporting use of either licit or illicit alprazolam (19% licit and 35% illicit). One in four (25%) reported recently using any form of alprazolam (6% licit and 22% illicit). Illicit alprazolam was used on a median of two and a half days in the last six months.

PHARMACEUTICAL STIMULANTS

Pharmaceutical stimulants include drugs such as dexamphetamine and methylphenidate, medications most commonly prescribed for attention deficit hyperactivity disorder.

Licit – 15% of participants reported ever using licit pharmaceutical stimulants (those prescribed to them), which was the same as 2014. Only three participants reported using licit pharmaceutical stimulants in the preceding six months.

Illicit – 35% of participants reported using illicit pharmaceutical stimulants at least once in their lifetime (29% in 2014). Ten percent reported using illicit pharmaceutical stimulants over the preceding six months (11% in 2014). The median days of use of illicit pharmaceutical stimulants declined in 2015 to two days in the six months preceding interview (range 1-7).

Recent use of any pharmaceutical stimulants (licit and illicit) was reported by 13% of the total sample in 2015. Recent injection of pharmaceutical stimulants (both licit and illicit) was reported by 12% of the sample in 2015 (Table 8). The median number of days of any use (licit and illicit) was two days (range=1–180).

[4] It was recognised that alprazolam was a benzodiazepine that was potent and may be prone to abuse. The IDRS research team decided to collect data separately for alprazolam from 2011. The abuse liability was recognised nationally with the rescheduling of alprazolam from Schedule 4 to Schedule 8 from February 1 2014 http://www.tga.gov.au/book/part-scheduling-proposals-referred-march-2013-meeting-acms. From 2011 onwards participants were asked separately about the use of alprazolam and other benzodiazepines use (see below).

Table 8: Recent pharmaceutical stimulant use (licit/illicit) among participants in the ACT, 2011–2015

	2011 N=97	2012 N=99	2013 N=100	2014 N=100	2015 N=100
Recent use (%)	29	13	8	12	**13**
Recent injecting (%)	26	11	4	10	**12**
Median days used*	6	5	5	7.5	**2**

Source: ACT IDRS PWID interviews, 2011–2015
***Among those that reported recent use. Maximum=180 days

SEROQUEL® (QUETIAPINE)

Forty-seven percent of participants reported lifetime use of Seroquel® (quetiapine) (20% licit, 32% illicit). Less than a quarter (22%) had used Seroquel® in the last six months (8% licit, 16% illicit).

Licit use of Seroquel® had been used on a median of 24 days (range=10–180) compared to three and a half days (range=1–12) for illicit use.

INHALANTS

Twenty-eight percent of participants reported ever having inhaled volatile substances such as amyl nitrate, petrol, glue and/or lighter fluid. Four per cent of participants reported use in the six months preceding interview.

ALCOHOL AND TOBACCO

The majority (86%) of participants in 2015 reported having used alcohol at least once during their lifetime. In 2015, 60% of participants reported the recent use of alcohol (Table 9). The median days of alcohol use in the six months prior to interview was 30 days in 2015 (just over twice weekly) and 20% of those who had used alcohol in the past six months reporting being daily drinkers.

Use of tobacco was almost universal among participants in the ACT in 2015. Almost all participants (99%) reported ever having used tobacco and 96% reported recent tobacco use, as shown in Table 9. The median days of tobacco use has remained stable over the last nine years at 180 days. (i.e. daily smokers). There were no significant differences in use from 2014 to 2015.

Table 9: Patterns of recent alcohol and tobacco use among PWID in the ACT, 2011–2015

	2011 N=98	2012 N=99	2013 N=100	2014 N=100	2015 N=100
Recent use (%)					
Alcohol	70	65	61	54	**60**
Tobacco	96	94	89	88	**96**
Median days used *					
Alcohol	16	54	24	44	**30**
Tobacco	180	180	180	180	**180**

Source: ACT IDRS PWID interviews, 2011–2015
***Among those that reported recent use. Maximum=180 days

5 DRUG MARKET: PRICE, PURITY, AVAILABILITY AND PURCHASING PATTERNS

Heroin

Key points

- Price for heroin remained stable at $50 per cap and $300 per gram.
- Eighty-five percent of those who commented reported current purity to be medium (34%) and low (51%).

In this section, the patterns of use, price, purity and availability of heroin are discussed. The data on heroin markets presented below reflect information provided by 85 participants who commented on heroin trends in the ACT in 2015.

PRICE

Participants were asked to comment on the price for the last time they purchased heroin in the six months prior to interview. The median reported prices of heroin in 2015 were similar to the prices reported by participants in 2014. In both 2014 and 2015, the median price of a cap of heroin was reported to be $50 and the median price of a gram was $300. The median price for a quarter-gram of heroin also remained stable at $80 as did the median price for a half-gram ($150).

Table 10 presents participant reports of changes in the price of heroin in the six months preceding the interview. Consistent with purchase prices, the majority (87%) of those who commented on heroin trends in 2015 reported that the price had remained stable in the previous six months.

Table 10: Participants' reports of heroin price changes in the last six months, 2014–2015

Price change	2014 n=85	2015 n=76
Increasing (%)	7	**1**
Stable (%)	86	**87**
Decreasing (%)	1	**5**
Fluctuating (%)	5	**7**

Source: ACT IDRS PWID interviews, 2014–2015

AVAILABILITY

Table 11 presents participant reports of the current availability of heroin in the ACT. The majority of participants who commented on the availability of heroin in the ACT reported that it was very easy (52%) or easy (40%) to obtain. Participants were also asked to comment on changes in the availability of heroin in the ACT in the six months prior to interview. In 2015, the majority of participants believed heroin availability had remained stable (76%).

Table 11: Participants' reports of heroin availability in the past six months, 2014–2015

Current availability	2014 n=83	2015 n=75
Of those who responded:		
Very easy (%)	39	**52**
Easy (%)	46	**40**
Difficult (%)	16	**8**
Very difficult (%)	-	**-**
Availability change over the last six months		
Of those who responded:		
More difficult (%)	7	**10**
Stable (%)	78	**76**
Easier (%)	12	**7**
Fluctuates (%)	2	**8**

Source: ACT IDRS PWID interviews, 2014–2015
↑↓ Statistical significance $p<0.05$

In 2015, the majority (62%) of participants who reported purchasing heroin in the six months prior to interview last bought it from a known dealer. Twenty-six percent reported last purchasing heroin from a friend and 4% reported purchasing heroin from a street dealer. The most commonly reported places for the last purchase of heroin were a dealer's home (38%), an agreed public location (26%), home delivery (16%), and a friend's home (14%).

PERCEIVED PURITY

Participants were asked to comment on the perceived purity of heroin in the ACT (Table 12). In 2015, 51% of participants nominated the current purity as low (55% in 2014). The perceived purity of heroin as medium (34%) and high (8%) was also similar to 2014 reports. About half of the participants (53%) reported the purity over the preceding six months to have been stable

Table 12: Participants' perceptions of heroin purity in the past six months, 2014–2015

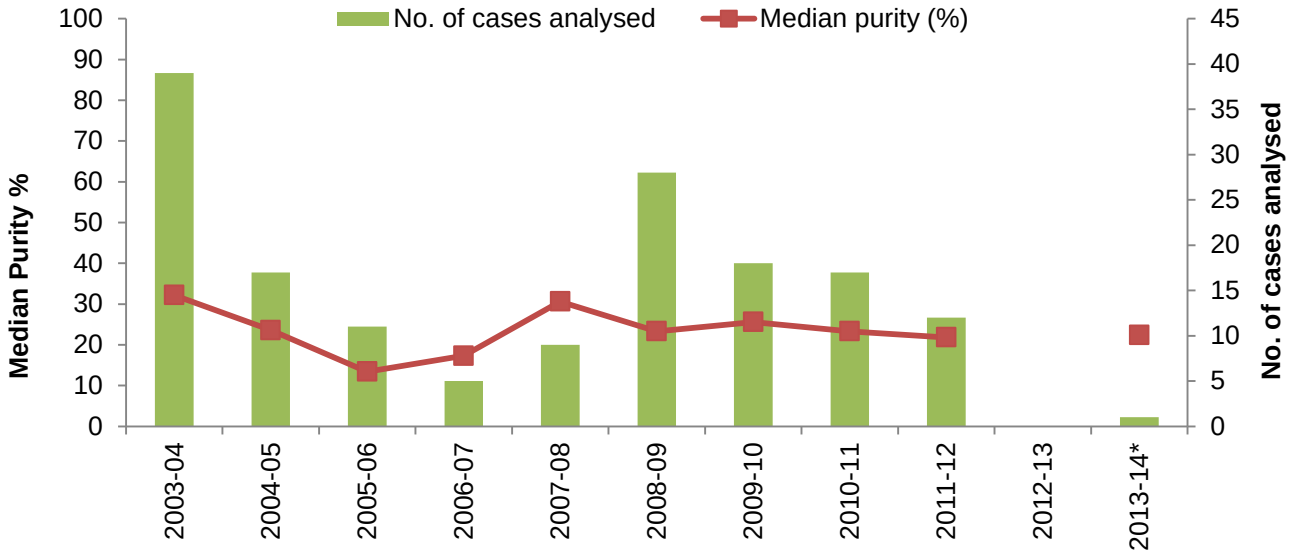
Current purity	2014 n=78	2015 n=73
Of those who responded:		
High (%)	8	**8**
Medium (%)	32	**34**
Low (%)	55	**51**
Fluctuates (%)	5	**7**
Purity change over the last six months		
Of those who responded:		
Increasing (%)	14	**12**
Stable (%)	48	**53**
Decreasing (%)	20	**18**
Fluctuating (%)	18	**16**

Source: ACT IDRS PWID interviews, 2014–2015
↑↓ Statistical significance $p<0.05$

SEIZURE PURITY DATA

Figure 11 presents data from the ACC on the purity of heroin seizures[5] made by ACT local police, by financial year, from July 2003 to June 2014. Only one seizure, made by the AFP in Canberra was analysed during the last reported period. Caution is advised when interpreting data due to low number of cases analysed. Data were not available at the time of printing for more recent seizure purity estimates.

Figure 11: Median purity of heroin seizures by ACT local police, July 2003 to June 2014



Source: Illicit Drug Data Report, ACC, 2004–2015 (*2013-2014 data depicts AFP case)

[5] Figures do not represent the purity levels of all heroin seizures – only those that have been analysed at a forensic laboratory.

Methamphetamine

Key points

- The price for speed has remained stable with reports of one point costing $50.
- Only one participant was able to comment on the price of base.
- The price of crystal has remained stable at $100 for one point.
- There were no significant differences in either the availability or reported purity of crystal, speed or base.

PRICE

Speed (Methamphetamine powder)

In 2015, the median price for a point (0.1 grams) of speed remained stable from 2014 at $50 (see Table 13). The price of a gram of speed was $250 in 2015. Low numbers commented on the price of a half-weight (0.5 gram). The most common amount of speed purchased was a point, with 59% of participants who commented on speed reporting that they had bought a point of speed in the six months preceding interview. Of those participants that commented on speed in 2015, 88% believed the price to have been stable in the six months preceding interview, similar to 2014 proportions.

Table 13: Price and changes in price for methamphetamine powder, ACT, 2014–2015

Median price – speed	2014	2015
Point (0.1 gram)	$50	**$50**
(range)	(50-100)	**(30-100)**
Half-weight (0.5 gram)	$120^	**$105^**
(range)	(70-150)	**(40-300)**
Gram	$275	**$250^**
(range)	(50-850)	**(30-700)**
Change in price	**n=25**	**n=17**
% Increasing	16	**0**
% Stable	80	**88**
% Decreasing	0	**12**
% Fluctuating	4	**-**

Source: ACT IDRS PWID interviews, 2014–2015
^ Small numbers reporting (n<10); interpret with caution

Base

Due to the very small number reported on the availability of base (n=1) jurisdictional findings will not be presented. For national findings please refer to Stafford & Breen, (2016).

Crystal

In 2015, the median price of a point of crystal purchased by participants remained stable at $100. The median price of a half-weight was $250 in 2015. The price of a gram remains stable at $500.

The most common amount of crystal purchased was a point, with 87% of participants who commented on crystal reporting that they had bought this amount in the past six months.

Of those who commented, the majority (780%) reported the price to have remained stable in the six months preceding the interview.

Table 14: Price and changes in price for crystal methamphetamine, ACT, 2014–2015

Median price – crystal	2014	2015
Point (0.1 gram)	$100	**$100**
(range)	(50-200)	**(15-100)**
Half-weight (0.5 gram)	$300	**$250**
(range)	(50-500)	**(50-500)**
Gram	$500	**$500**
(range)	(50-900)	**(100-700)**
Of those that responded	**n=60**	**n=68**
% Increasing	17	**10**
% Stable	70	**78**
% Decreasing	3	**4**
% Fluctuating	10	**7**

Source: ACT IDRS PWID interviews, 2014–2015
^ Small numbers reporting (n<10); interpret with caution

AVAILABILITY

Participants were asked to comment on the current availability, as well as any changes in availability, of the different methamphetamine forms in the ACT in 2015. Findings are presented separately for powder, and crystal in Table 15 and Table 16.

Speed

Of those who commented on the current availability of speed (n=18), most (89%) reported speed to be easy (28%) or very easy (61%) to obtain.

Two-thirds (67%) of the participants that commented on speed thought that the availability had remained stable in the six months prior to interview.

Participants who bought speed (n=18) reported that they obtained it through: known dealers (n=9), friends (n=5) and street dealers (n=1). The most commonly reported places of speed purchases were at a friend's home (n=6), a dealer's home (n=4), or home delivered (n=2).

Table 15: Availability of methamphetamine powder, ACT, 2014–2015

Availability – speed	2014	2015
Responded	n=27	**n=18**
Very easy	30	**61**
Easy	67	**28**
Difficult	4	**6**
Very difficult	0	**0**
Change in availability		
% More difficult	4	**11**
% Stable	82	**67**
% Easier	11	**11**
% Fluctuates	4	**6**

Source: ACT IDRS PWID interviews, 2014–2015

Base

Due to the very small number reported on the availability of base (n=1) jurisdictional findings will not be presented. For national findings, please refer to Stafford & Breen(2016).

Crystal

Of those who commented on the current availability of crystal (n=70), the majority reported it to be very easy (50%) or easy (46%) to obtain in the ACT in 2015.

In 2015, almost three-quarters (70%) of participants reported that crystal availability had remained stable. Fourteen percent reported that crystal was easier to obtain and 9% reported that it was more difficult in the past six months.

Forty-four percent of the participants who reported that they had bought crystal (n=69) said they obtained it from a known dealer. Forty-two percent reported that they had obtained crystal from friends, and 4% reported that they had obtained it through a street dealer or an acquaintance. The most common venues where participants had last purchased crystal from included: a dealer's home (32%), a friend's home (27%), or had it home delivered (22%).

Table 16: Availability of crystal methamphetamine, ACT, 2014–2015

Availability – crystal	2014	2015
Responded	n=61	**n=70**
Very easy	48	**50**
Easy	44	**46**
Difficult	8	**1**
Very difficult	0	**0**
Change of availability	**2014**	**2015**
% More difficult	2	**9**
% Stable	78	**70**
% Easier	8	**14**
% Fluctuates	12	**4**

Source: ACT IDRS PWID interviews, 2014–2015

PERCEIVED PURITY

Speed

In 2015, reports of perceived purity were mixed. Thirty-five percent reported purity to be high followed by 24% reporting purity to be medium or fluctuating followed by 18% reporting purity to be low. Likewise, reports of the change in purity also varied with 38% reporting purity was stable or fluctuating and 25% reporting purity had decreased.

Base

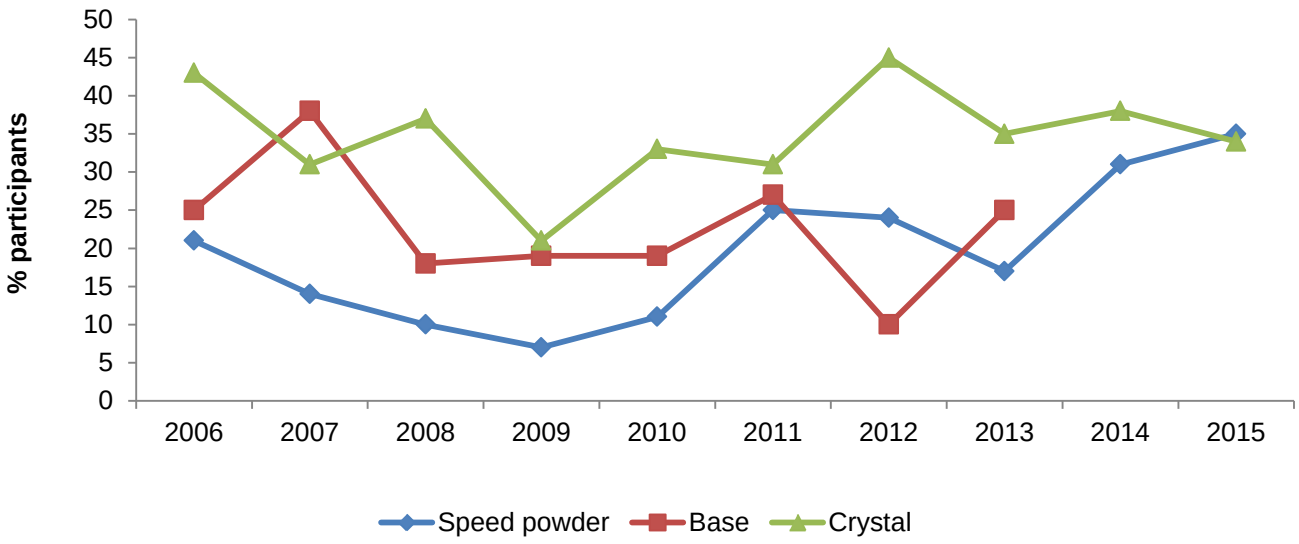
In 2015, only one participant reported on the purity of base. Due to the extremely low number of participants who responded, jurisdictional findings will not be presented; for national findings, please refer to Stafford & Breen (2016).

Crystal

In 2015, among those who commented on the perceived purity of crystal (n=64), results were mixed. Thirty-four percent reported purity to be high, followed by 30% reporting purity to be medium, 20% reporting purity to be low and 15% reporting purity was fluctuating.

Similarly, there were mixed reports from participants concerning the change in purity of crystal over the preceding six months. Thirty-two percent of participants who commented reported that the purity of crystal was stable, 17% reported that purity had increased, 24% reported it had decreased and 27% reported it had fluctuated.

Figure 12: Proportion of participants reporting methamphetamine purity as high, 2006–2015



Source: ACT IDRS PWID interviews, 2006–2015
No data for base for 2014 and 2015 as very few participants commented

Cocaine

In 2015, 5% of participants (n=5) were able to comment on the price, purity and availability of cocaine. Due to small numbers reporting, caution is advised when interpreting these results. For more accurate information please refer to Stafford & Breen (2016) for national figures.

PRICE

In 2015, the median reported price for purchased values of a gram of cocaine was $300. Four out of five of the participants who commented believed that the price of cocaine had remained stable in the six months preceding interview.

PERCEIVED PURITY

Reports on perceived purity were mixed. Two participants believed that cocaine purity was currently high while medium, low, and fluctuating were nominated by one participant each.

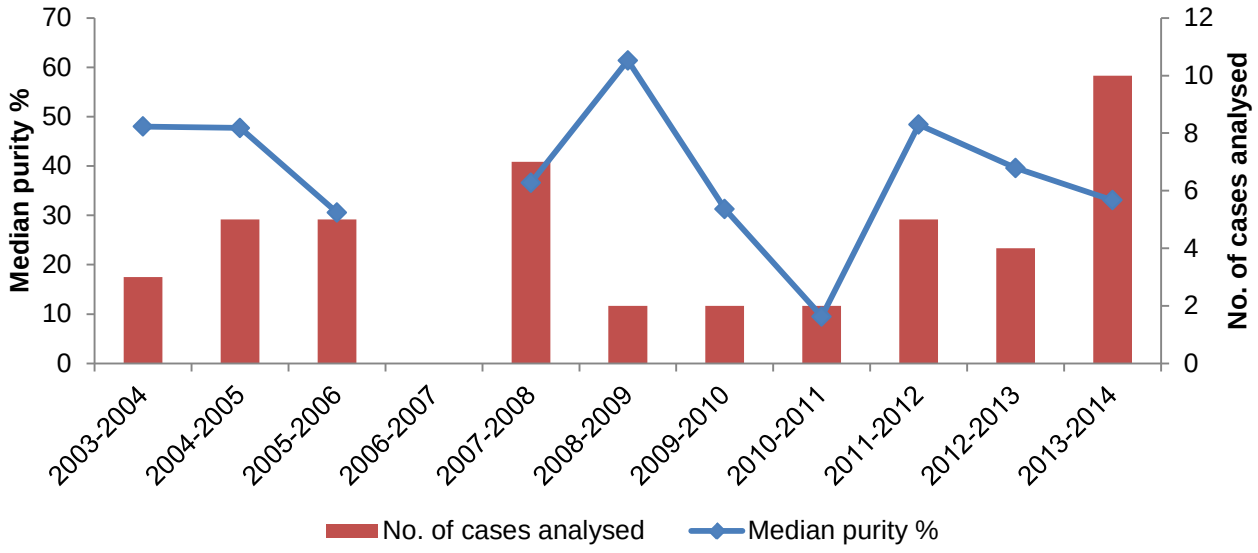
AVAILABILITY

Cocaine was reported to be very easy (n=3), easy (n=1), and very difficult (n=1) to obtain. All of those who commented believed that availability had remained stable in the six months preceding interview.

SEIZURE PURITY DATA

Figure 13 presents data from the ACC on the purity of cocaine seizures[6] made by ACT local police, by financial year, from July 2003 to June 2014. Caution is advised when interpreting data due to low number of cases analysed in some years. Data were not available at the time of printing for more recent seizure purity estimates.

Figure 13: Median purity of cocaine seizures by ACT local police, July 2003 to June 2014



Source: Illicit Drug Data Report, ACC, 2004–2015

[6] Figures do not represent the purity levels of all cocaine seizures – only those that have been analysed at a forensic laboratory.

Cannabis

Key points

- The median cost of a gram of hydroponic cannabis was $20.
- The median cost of an ounce of hydroponic cannabis was $300.
- The price for both forms of cannabis (bush and hydroponic) was reported as stable over the last six months.
- Participants reported the potency of hydro as high and bush medium.
- The availability of both forms of cannabis was considered very easy or easy to obtain.

Participants were asked to comment on the price, purity and availability of two different forms of cannabis: outdoor-cultivated cannabis (bush) and indoor-cultivated cannabis (hydro). Over half of the participants (53%) commented on trends in hydro in the ACT and 31% reported on bush cannabis.

PRICE

The median prices for hydroponic cannabis and the reported changes are presented in Table 17. The median prices for bush cannabis and the reported changes in price are shown in Table 18.

Hydro

The median price of a gram of hydro purchased by participants in 2015 remained stable at $20. The most common amount of hydro purchased was a gram, with 41 participants reporting that they had bought a gram in the six months preceding the interview. The majority of those who commented reported the price of hydro to have been stable in the six months preceding interview.

Table 17: Price and changes in price for hydroponic cannabis, ACT, 2014–2015

Median price – cannabis (hydro)	2014	2015
Gram	$20	**$20**
(range)	(10-80)	(10-25)
Quarter-ounce	$90	**$85**
(range)	(70-160)	(55-800)
Half-ounce	$160	**$150**
(range)	(50-250)	(70-300)
Ounce	$280	**$300**
(range)	(200-400)	(250-350)
Change in price	**n=57**	**n=50**
% Increasing	5	**8**
% Stable	77	**78**
% Decreasing	7	**2**
% Fluctuating	11	**12**

Source: ACT IDRS PWID interviews, 2014–2015
^ Interpret with caution, n=<10

Bush

The median price of a gram of bush cannabis purchased by participants was $20 in 2015. Bush cannabis was reported by fewer participants with just 17 participants commenting. As can be seen in Table 18, of those that commented on bush cannabis in 2015, the majority (77%) reported that the price of bush had remained stable in the six months preceding interview.

Table 18: Price and changes in price for bush cannabis, ACT, 2014–2015

Median price – cannabis (bush)	2014	2015
Gram	$15	**$20**
(range)	(10-80)	(10-20)
Quarter-ounce	$80	**$80**
(range)	(50-100)	(50-100)
Half-ounce	$115	**$150**
(range)	(100-150)	(130-180)
Ounce	$210	**$250**
(range)	(50-300)	(100-320)
Change in price	n=11	n=17
% Increasing	0	12
% Stable	82	77
% Decreasing	0	12
% Fluctuating	18	-

Source: ACT IDRS PWID interviews, 2014–2015
^ Interpret with caution, n=<10

AVAILABILITY

Participants were asked to comment on the current availability and any changes in availability, of both hydro and bush in the ACT in 2015. Findings are presented separately for each type of cannabis.

Hydro

Of those that commented on the current availability of hydro (n=52), the majority reported it to be very easy (64%) and easy (27%) to obtain as shown in Table 17. There were no significant differences between 2014 and 2015 ($p>0.05$).

The majority (73%) of participants commenting on hydro thought that the availability had remained stable in the six months prior to interview. Recent hydro users who bought hydro predominantly reported last purchasing it from a friend (56%) or a known dealer (27%). The most common places for purchasing hydro were from a dealer's home (28%), a friend's home (22%), or home delivered (22%).

Table 19: Availability of hydro cannabis, ACT, 2014–2015

Availability – hydroponic cannabis	2014	2015
Responded	n=58	**n=52**
% Very easy	64	**64**
% Easy	33	**27**
% Difficult	3	**10**
% Very difficult	0	**0**
Changes in availability	**n=58**	**n=52**
% More difficult	3	**8**
% Stable	90	**73**
% Easier	3	**10**
% Fluctuates	3	**10**

Source: ACT IDRS PWID interviews, 2014–2015

Bush

The majority of those that commented on the current availability of bush cannabis (n=17) reported that bush was very easy (35%) or easy (41%) to obtain. About half (53%) reported that bush availability had remained stable in the six months preceding interview, as shown in Table 20.

The majority of bush purchases were through a friend (65%), or a known dealer (18%). Purchases most often occurred at a friend's home (59%) or from a dealer's home (18%).

Table 20: Availability of bush cannabis, ACT, 2014–2015

Availability – bush cannabis	2014	2015
Responded	n=12	**n=17**
% Very easy	50	**35**
% Easy	33	**41**
% Difficult	16	**18**
% Very difficult	0	**6**
Change in availability	**n=12**	**n-17**
% More difficult	8	**18**
% Stable	92	**53**
% Easier	0	**12**
% Fluctuates	0	**18**

Source: ACT IDRS PWID interviews, 2014–2015

PERCEIVED POTENCY

Respondents were asked (based on their experience) to estimate the current strength or potency of hydro and bush cannabis, as well as to report perceived change in potency of both hydro and bush. Results are presented below separately for each form (Figure 14 and Figure 15).

Hydro

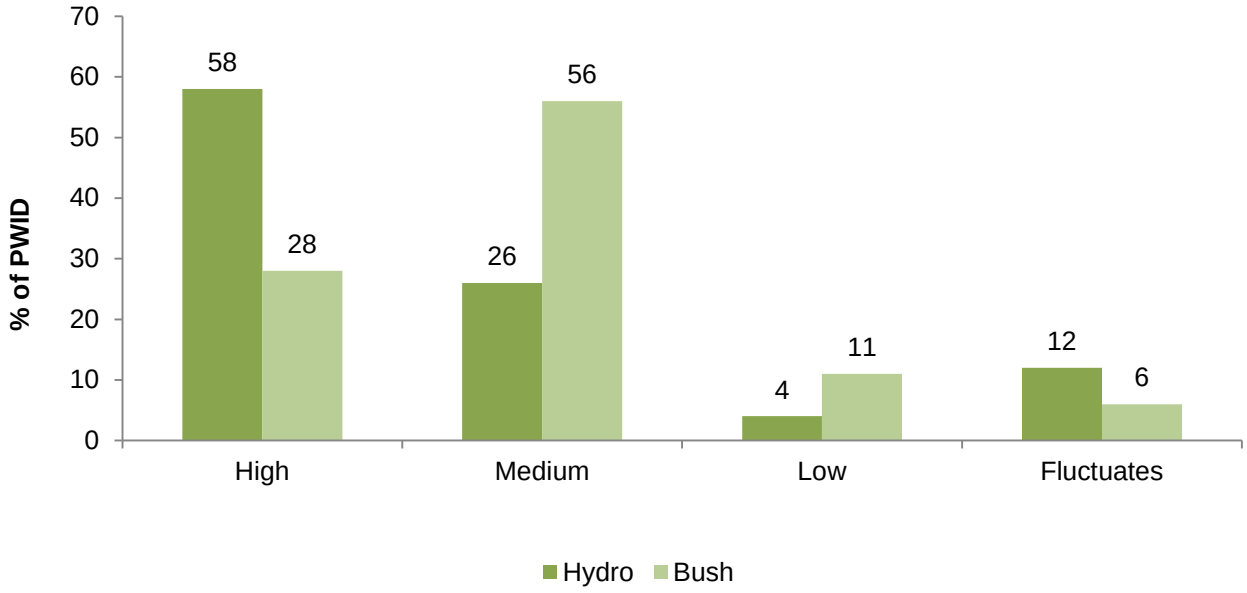
The majority of those who commented (58%), indicated that the perceived potency of hydro was high in the six months preceding interview (see Figure 14). A quarter (26%) reported that hydro potency was medium. Around half (55%) reported that the potency of hydro had remained stable in the last six months.

Bush

The potency of bush cannabis was generally reported to be medium (56%) and 28% reported it to be high. No significant differences were found between 2014 and 2015.

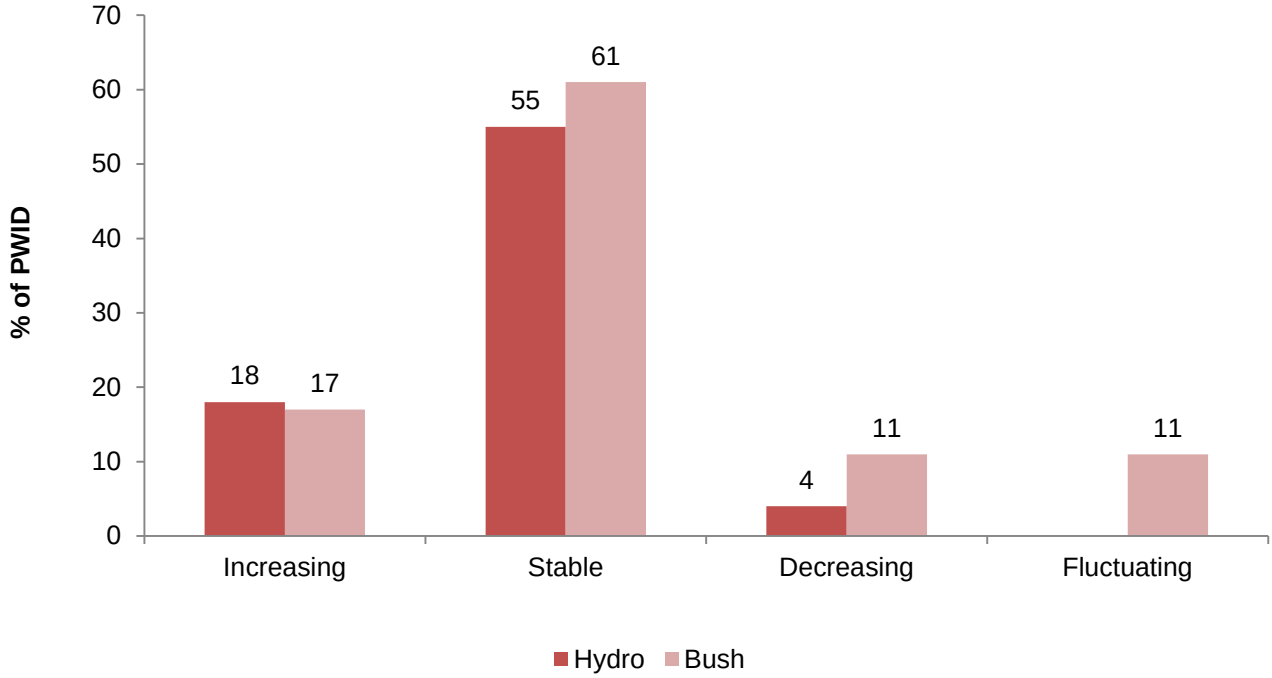
As can be seen in Figure 15, the majority (61%) of respondents who commented on bush cannabis reported that the potency had remained stable in the six months prior to the interview.

Figure 14: Perceived potency of cannabis among those who responded, 2015



Source: ACT IDRS PWID interviews, 2015

Figure 15: Change in perceived cannabis potency, ACT 2015



Source: ACT IDRS PWID interviews, 2015

Methadone

PRICE

In 2015, nine participants commented on the current price of street (illicit) methadone in the ACT. Due to the small numbers reporting, caution is advised when interpreting these results. For more accurate information please refer to Stafford & Breen (2016) for national figures.

The median price reported for a millilitre of methadone was $1.00 in 2015. All participants who commented reported that the price of methadone remained stable over the six months preceding interview.

AVAILABILITY

Participants were asked to comment on the current availability of illicit methadone and if there had been any change in availability in the six months preceding interview. As can be seen in Table 21, reports on the current availability of illicit methadone varied. Five participants reported that the availability of methadone had remained stable in the past six months. There were no significant differences between 2014 and 2015 in regards to the reported availability or change in availability of methadone (p>0.05).

Table 21: Reported availability of illicit methadone, ACT, 2014–2015

Availability – illicit methadone	2014	2015
Responded	n=16	**n=6**
% Very easy	19	**17**
% Easy	50	**67**
% Difficult	31	**0**
% Very difficult	0	**17**
Change in availability		
% More difficult	6	**17**
% Stable	88	**83**
% Easier	0	**0**
% Fluctuates	6	**0**

Source: ACT IDRS PWID interviews, 2014–2015

In 2015, of participants who reported that they had bought methadone (n=5), four reported that they had obtained it through a friend, and one had obtained it from a known dealer.

Buprenorphine

In 2015, participants were asked to comment on the price and availability of buprenorphine. Due to small numbers (n<10) jurisdictional findings will not be presented. National findings can be found in Stafford & Breen (2016).

Buprenorphine-naloxone

In 2015, participants were asked to comment on the price and availability of illicit buprenorphine-naloxone (Suboxone®). Due to small numbers (n<10) jurisdictional findings will not be presented and national findings can be found in Stafford & Breen (2016).

Morphine

In 2015, participants were asked to comment on trends in price and availability of illicitly obtained morphine in the ACT. Due to small numbers (n<10) jurisdictional findings will not be presented; for national findings, please refer to Stafford & Breen (2016).

Oxycodone

In 2015, participants were asked to comment on the price and availability of illicit oxycodone. However, due to small numbers (n<10) jurisdictional findings will not be presented for the price of illicit oxycodone; for national findings, please refer to Stafford & Breen (2016).

6 HEALTH-RELATED TRENDS ASSOCIATED WITH DRUG USE

Overdose and drug-related fatalities

HEROIN AND OTHER OPIOIDS

Non-fatal overdose

In 2015, 52% of participants reported having overdosed on heroin at least once at some point in their lives. Of participants who reported ever having overdosed on heroin the median number of times overdosed was two (range=1–25).

In 2015, 15% of participants reported having overdosed on heroin in the year prior to the interview compared to 13% in 2014 (Figure 16). One participant reported overdosing on heroin in the past month.

Figure 16: Proportion of PWID reporting heroin overdose in the year preceding interview, 2006–2015

Source: ACT IDRS PWID interviews, 2006–2015

In 2015, participants who reported overdosing on heroin in the previous year (n=8) were asked what treatment they received immediately after the overdose. Most participants (75%) reported receiving no treatment or information in relation to their overdose. Treatments that *were* reported as being provided included; ambulance attendance, Narcan®, and/or cardiopulmonary resuscitation (CPR).

NALOXONE PROGRAM

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 working under the auspices of 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 PWID for the reversal of opioid overdose as part of a comprehensive overdose response package.)

Since 2013, the IDRS included a series of questions about take-home naloxone and naloxone more broadly. Participants in the ACT demonstrated a high level of awareness regarding the use and effects of naloxone. Of those who commented (n=94), 94% had heard of naloxone. Most (76%) of those who had heard of naloxone (n=86) reported that naloxone was used to 'reverse heroin' and 20% reported the use of naloxone to 're-establish consciousness'. Eleven per cent said naloxone was used to 'help start breathing'. (Table 22).

Participants were then asked if they had heard about take-home naloxone programs. Of those who commented (n=94), eighty-one percent reported that they had heard of the take-home naloxone program), while 18% had not (Table 22).

Of those who commented (n=94), fifty-one percent reported that they had completed training in naloxone administration along with a prescription for naloxone. Of those who had completed the course (n=48), 35% (n=17) had used the naloxone to resuscitate someone who had overdosed, on an average of two people (range=1-20 people).

Participants who had not completed training in naloxone administration were asked what they would do if they witnessed someone having an overdose or found someone they had suspected had overdosed. The majority (98%) of those who commented (n=46) reported that they would call 000 and 50% reported that they would perform mouth-to-mouth and/or CPR (Table 22).

Participants who had not completed training in naloxone administration but who still commented were also asked if naloxone were available would they participate in a naloxone program. Of those who commented (n=46), 76% reported that they would participant. Those participants who reported that they would participant in a naloxone program (n=35) were asked if they would (a) carry naloxone if trained in its use; (b) administer naloxone after witnessing someone overdose; (c) want peers to give them naloxone if they overdosed; and (d) stay with someone after giving them naloxone. Almost all (97%) reported that they would stay with someone after giving them naloxone, all would administer naloxone after witnessing someone overdose, 97% would want their peers to give them naloxone if they overdosed, and 79% reported that they would carry naloxone on them (Table 22).

Table 22: Take-home naloxone program and distribution, 2015

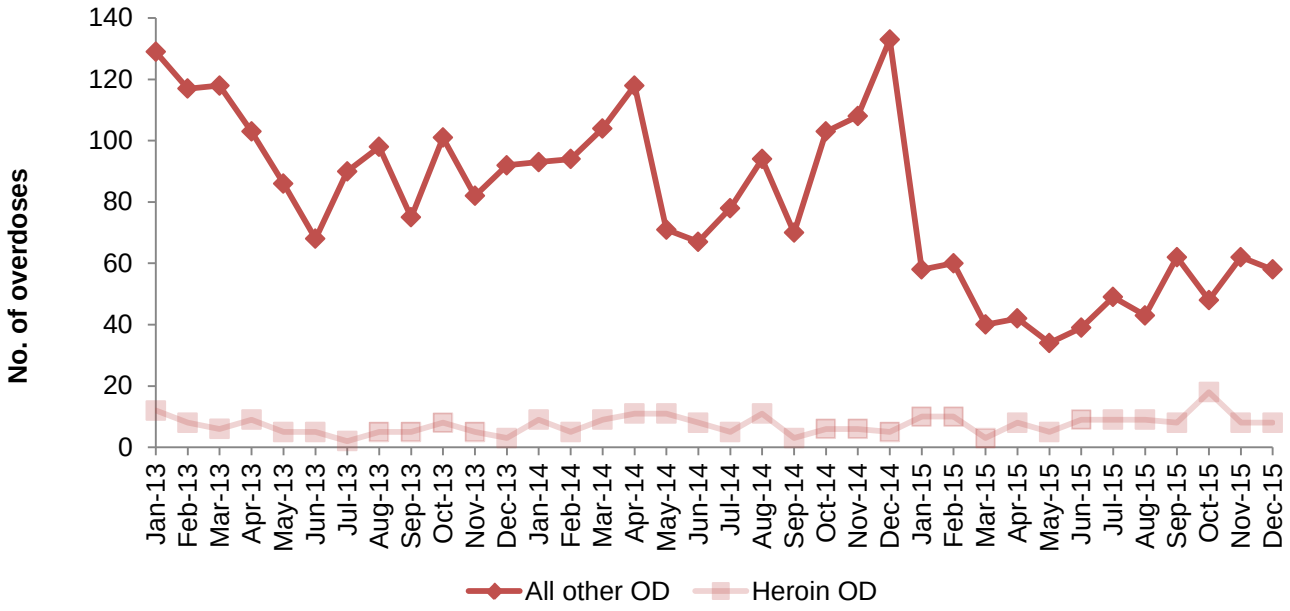
	2015 (n=94)
Heard of naloxone (%)	94
Naloxone description (%)	**n=86**
Reverses heroin	76
Help start breathing	11
Re-establish consciousness	20
Heard of the take-home naloxone program (%)	
Yes	81
No	18
Witness overdose (%)	**n=46**
Turn victim on side	26
Mouth-to-mouth CPR	50
Call 000	98
Stay with victim	24
Other remedies	15
If naloxone was available would you: (%)	**n=35**
Carry naloxone if trained	79
Administer naloxone after overdose	100
Want peers to give you naloxone	97
Stay after giving naloxone	97

Source: ACT IDRS PWID interviews, 2015

AMBULANCE ATTENDANCES FOR OVERDOSE IN ACT

Figure 17 and Figure 18 present data pertaining to ambulance calls in the ACT to reported overdoses. In 2015, 700 ambulance calls to attend overdoses in the ACT were recorded. As can be seen from Figure 18, ambulance calls relating to heroin overdoses represented only a small proportion of the total number of ambulance calls for overdoses in the ACT.

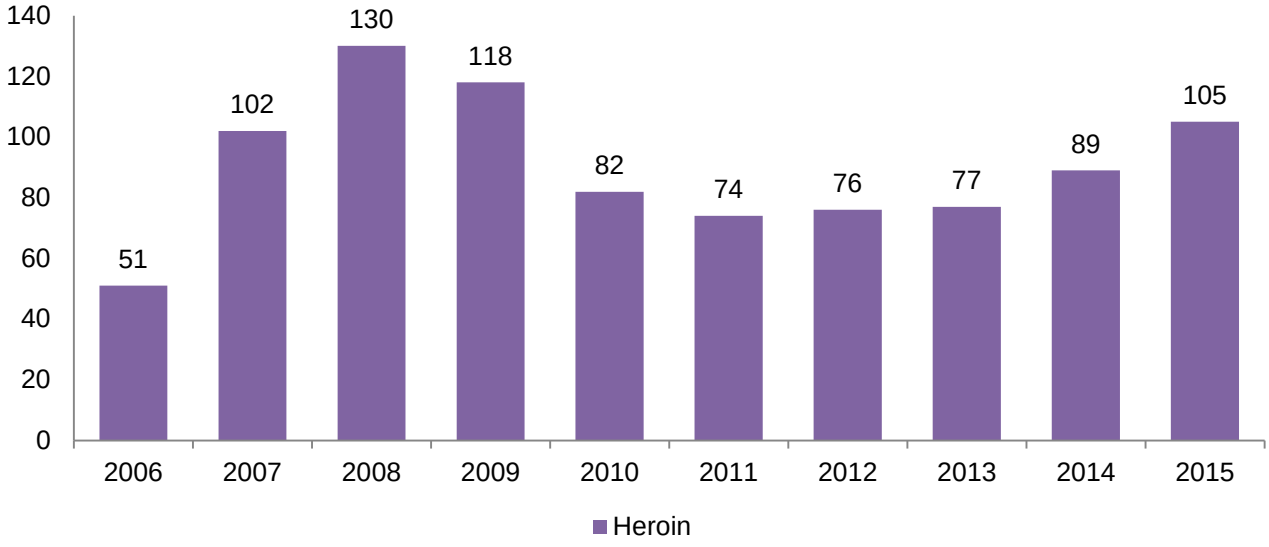
Figure 17: Overdoses attended by ACT Ambulance Service, by month, 2013–2015



Source: ACT Ambulance Service, 2013–2014

As can be seen from Figure 18, in 2015, there was a total of 105 heroin overdoses attended by the ACT Ambulance Service.

Figure 18: Heroin overdoses attended by ACT Ambulance Service, 2006–2015



Source: ACT Ambulance Service, 2006–2015

OTHER DRUGS

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).

One-fifth (20%) of participants reported overdosing on a drug other than heroin at some point in their life on a median of one time. Substances most commonly reported were crystal methamphetamine (20%), other opiates (10%), benzodiazepines (10%), and alcohol (5%).

Drug treatment

IDRS PARTICIPANT SURVEY

Participants interviewed for the IDRS who were currently in treatment (53%) were asked a number of questions about their reported treatment. Participants reported a median of 36 months (ranging from less than one month to 40 years) in any current treatment. Those in current opioid substitution treatment (OST) (48% of the total sample) reported a median of 48 months (ranging from less than one month to 40 years). One-quarter (26%) of participants in current treatment reported that they had been in treatment for 12 months or less.

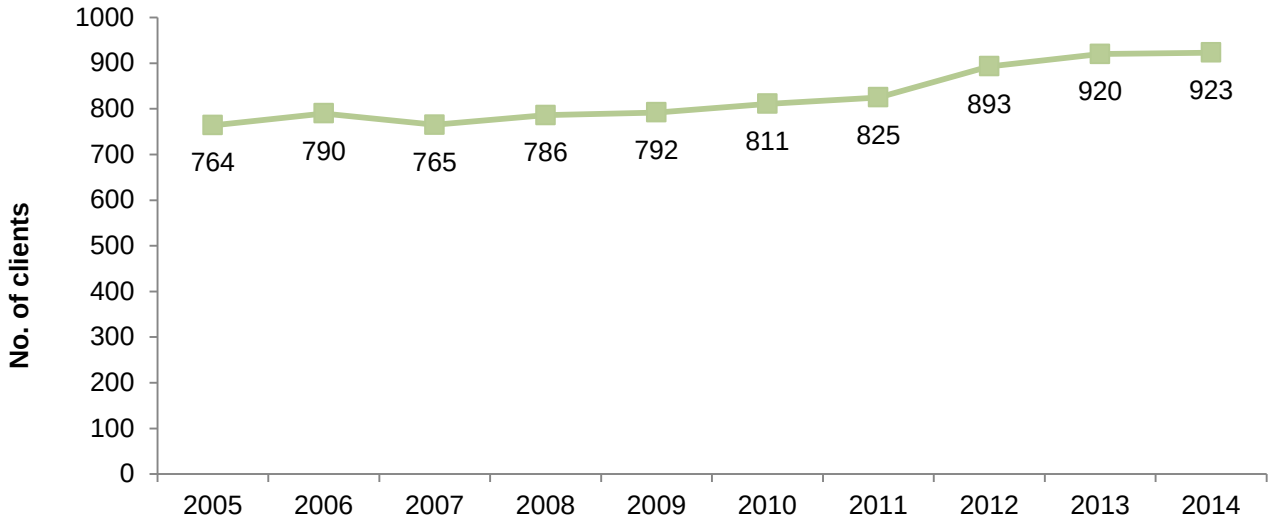
Seventy-nine percent of those in opioid substitution treatment were receiving methadone maintenance, 8% reported buprenorphine treatment and 13% buprenorphine-naloxone treatment.

PHARMACOTHERAPY

Opioid substitution treatment

Methadone maintenance treatment is an established form of OST in all jurisdictions in Australia. In 2000, Subutex® (buprenorphine hydrochloride) was registered in Australia and listed on the PBS in March 2001. Suboxone® (buprenorphine-naloxone) was registered in Australia in 2005 and listed on the PBS in April 2006. The total number of clients registered in OST has steadily increased over the years. Clients receiving OST in the ACT reached its highest number in 2014 with 923 clients registered for OST on a snap-shot day in 2014 (Figure 19). Figures for 2015 have not yet been released.

Figure 19: Clients receiving OST in the ACT 2004–2014



Source: AIHW, 2015

The majority (79%) of OST clients in ACT were registered for methadone treatment, 18% were registered for buprenorphine-naloxone and three percent were registered for buprenorphine treatment on a snap-shot day in 2014.

Over two-thirds (73%) of OST clients in ACT were dosed at a pharmacy, followed by 16% who were dosed at a public clinic. Twelve percent of OST clients in ACT were dosed at a correctional facility.

OTHER TREATMENT TYPES

Treatment statistics collected by the Alcohol and Other Drug Treatment Services – National Minimum Data Set (AODTS-NMDS) provide a measure of service utilisation for clients of alcohol and other drug treatment services. This collection provides ongoing information on the demographics of clients who use these services, the treatment they receive, and the drug of concern for which they are seeking treatment. In 2013–14, 4,545 episodes of treatment were reported of clients seeking treatment for their own drug use in the ACT. The principal drug of concern refers to the main substance that the client stated led them to seek treatment from the alcohol and other drug treatment agency. Only clients seeking treatment for their own substance use are included in the analysis involving principal drug of concern. Data for 2014/15 is not yet available.

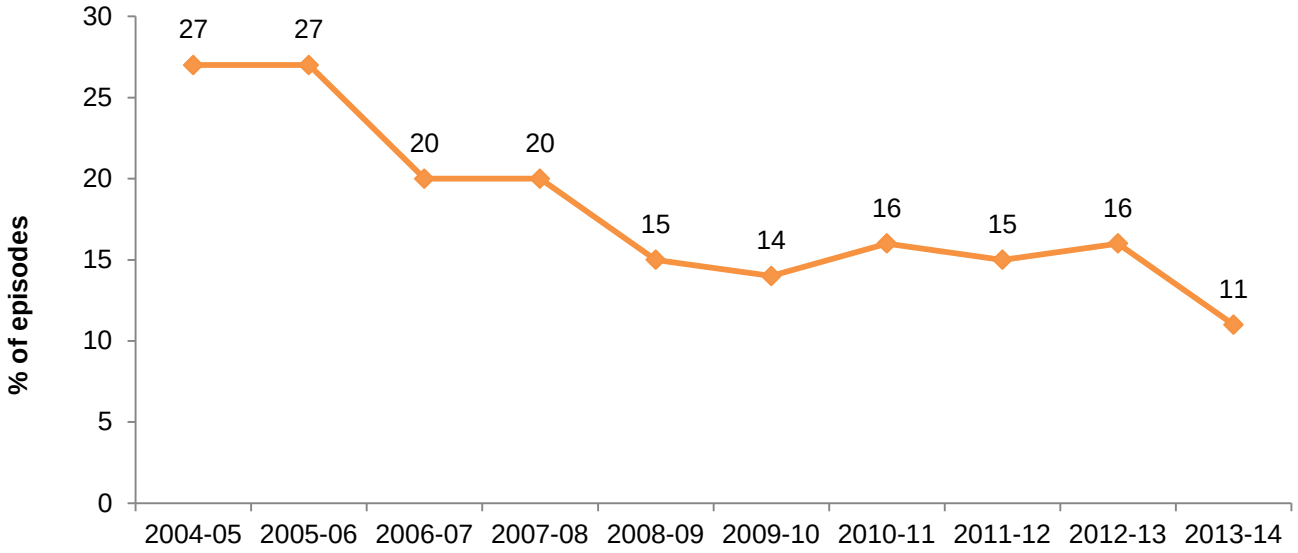
Alcohol

In 2013-14, alcohol accounted for almost half (47%, n=2,123) of all closed treatment episodes.

Heroin

Figure 20 shows that heroin has remained the third most common drug, after alcohol and cannabis, for clients seeking treatment in the ACT, accounting for 11% (n=510) of episodes.

Figure 20: Closed treatment episode, principal drug - heroin, 2003–04 to 2014–14

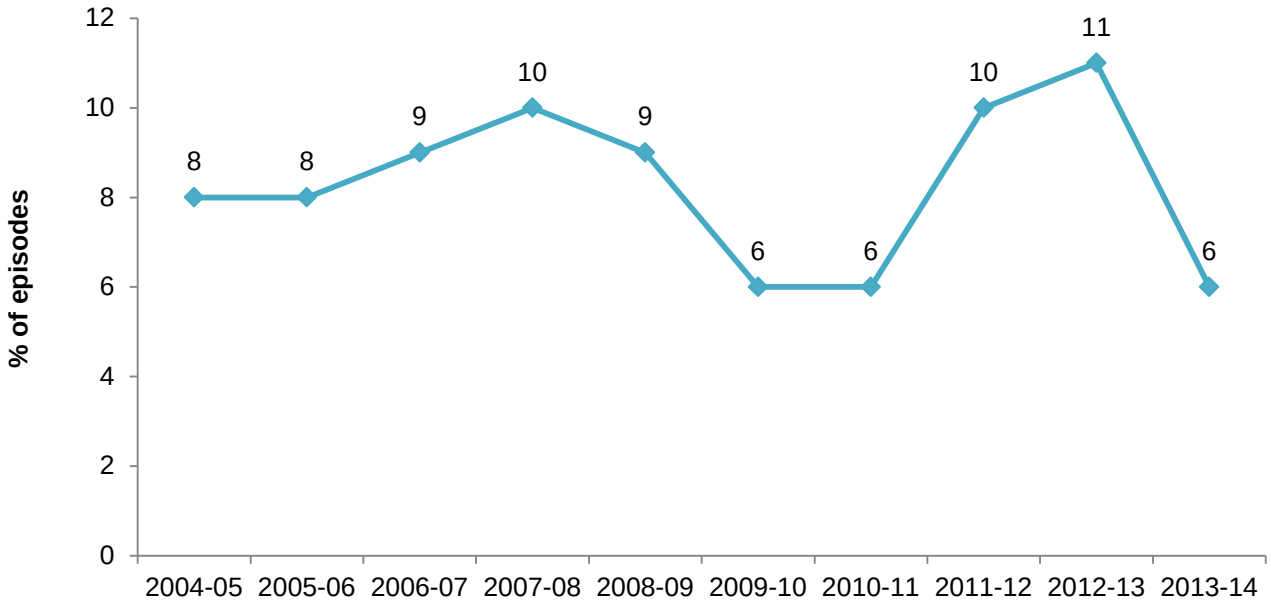


Source: AIHW, 2015

Methamphetamine

As can be seen in Figure 21, methamphetamine was identified as the principal drug of concern in 6% (n=279) of closed treatment episodes.

Figure 21: Closed treatment episodes, principal drug - methamphetamine, 2003–04 to 2013-14

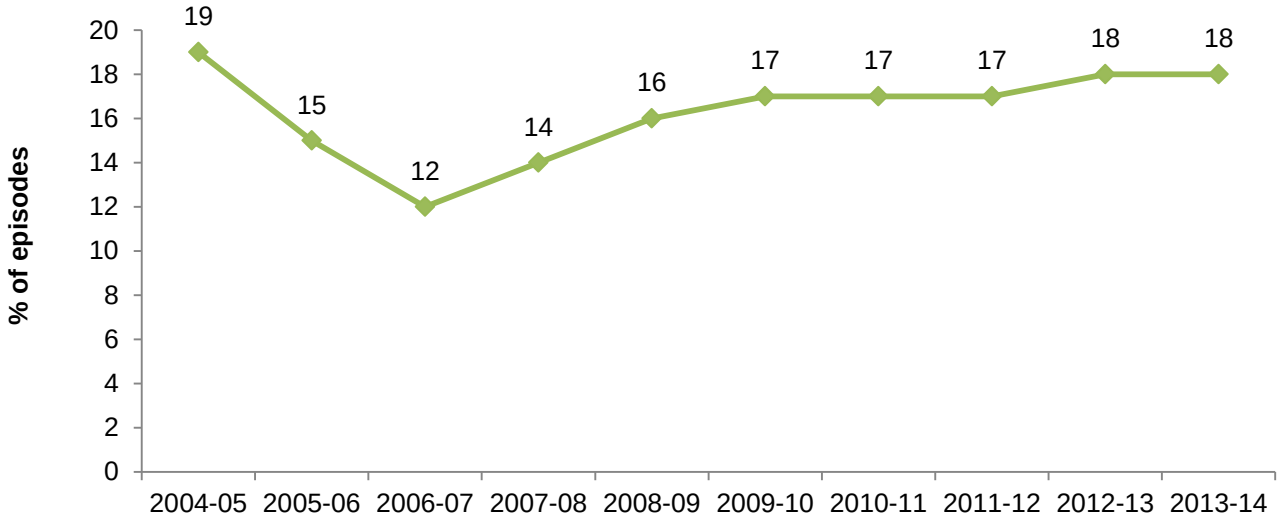


Source: AIHW, 2015
Note: these figures include amphetamine and methamphetamine

Cannabis

As can be seen from Figure 22 the proportion of closed treatment episodes where cannabis was identified as the principal drug of concern has remained stable for the previous six years. In 2013-14, cannabis accounted for 18% (n=825) of all closed treatment episodes.

Figure 22: Closed treatment episodes, principal drug - cannabis, 2003–04 to 2013-14

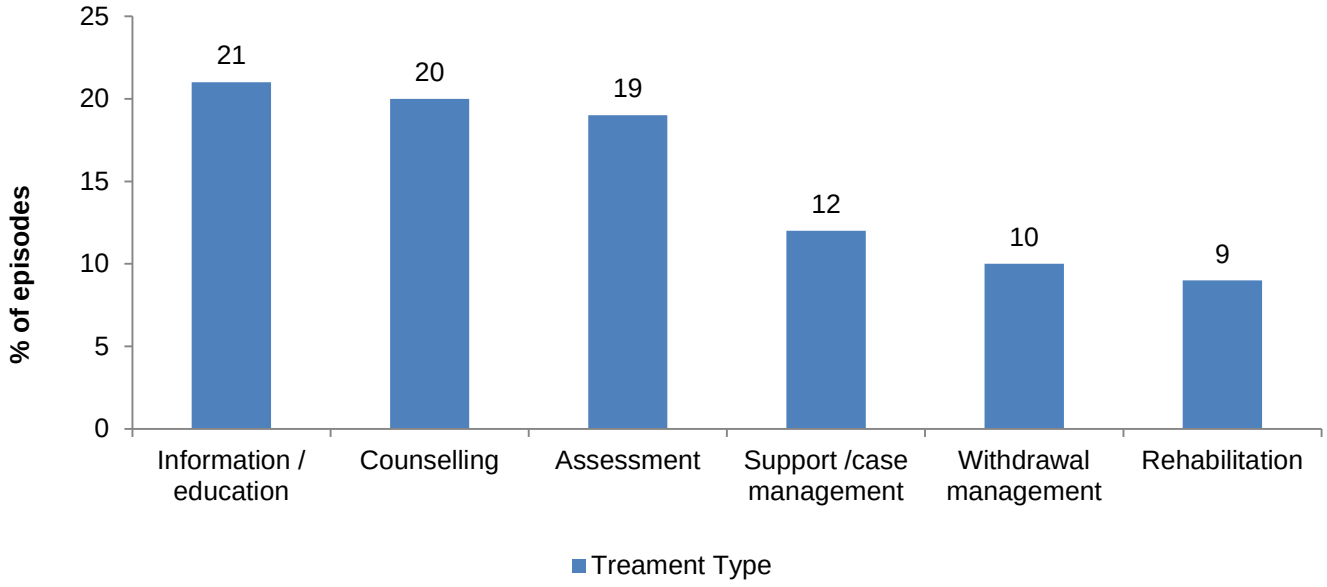


Source: AIHW, 2015

TREATMENT TYPES

In 2013-14, the main type of treatment reported was information and education (21%), followed by counselling (20%), assessment only (19%), and support and case management (12%). Withdrawal management accounted for 10% in 2013-14. Nine percent of closed treatment episodes were for rehabilitation (Figure 23).

Figure 23: Type of treatment provided, ACT, 2013-14



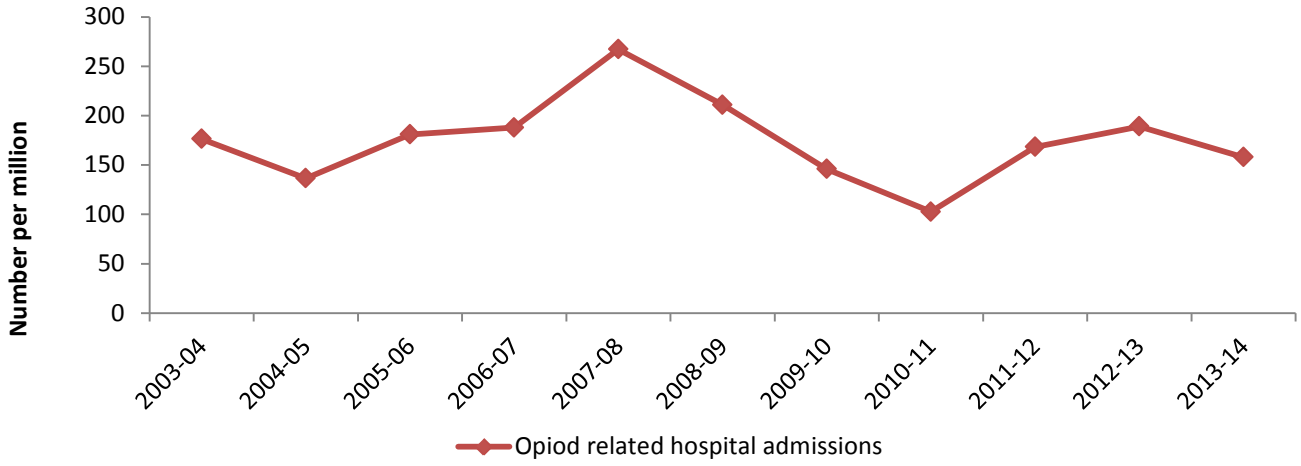
Source: AIHW, 2015

Hospital admissions

HEROIN INCLUDING OTHER OPIOIDS

The number per million persons of inpatient hospital admissions among persons aged 15–54 years, with a principal diagnosis relating to opioids, is shown in Figure 24. The AIHW defines primary diagnosis as the diagnosis established to be chiefly responsible for occasioning the patient's episode of care in hospital. As can be seen from Figure 24, the number of opioid-related hospital admissions in 2013–14 is 157.94 per million persons. At the time of print the 2014–15 data for hospital admissions were not available.

Figure 24: Hospital admissions, opioids, ACT, 2003–04 to 2013–14

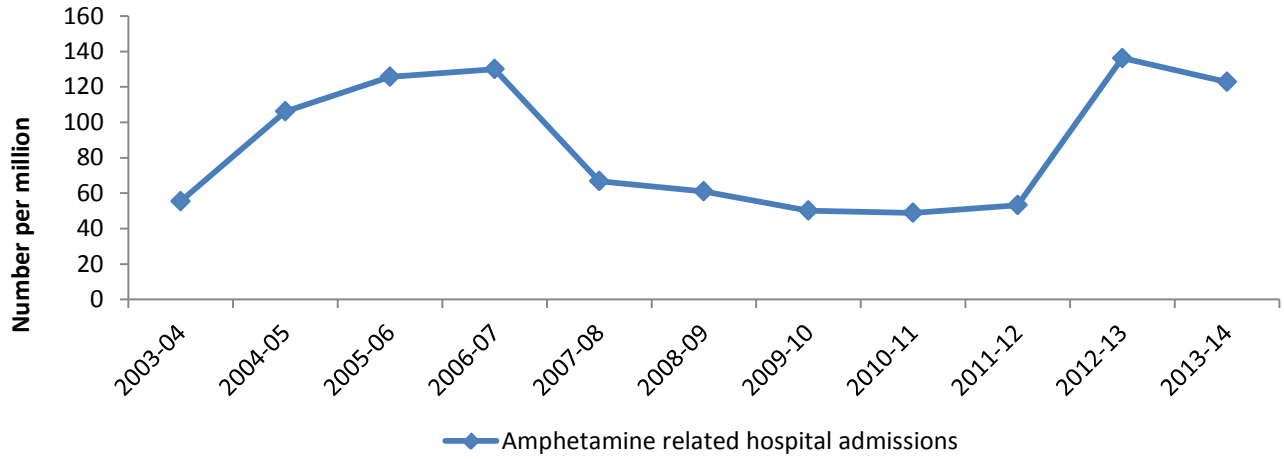


Source: AIHW; ACT Department of Health; Roxburgh and Breen, (2016).

METHAMPHETAMINE

Figure 25 shows the number of hospital admissions in the ACT, of persons aged 15–54 years, where amphetamine was implicated in the primary diagnosis. The number of amphetamine-related hospital admissions in the ACT in 2013-14 is 122.84 per million persons. At the time of print the 2014–15 data for hospital admissions were not available.

Figure 25: Hospital admissions, amphetamine, ACT, 2003–04 to 2013–14.



Source: AIHW; ACT Department of Health; Roxburgh and Breen (2016)

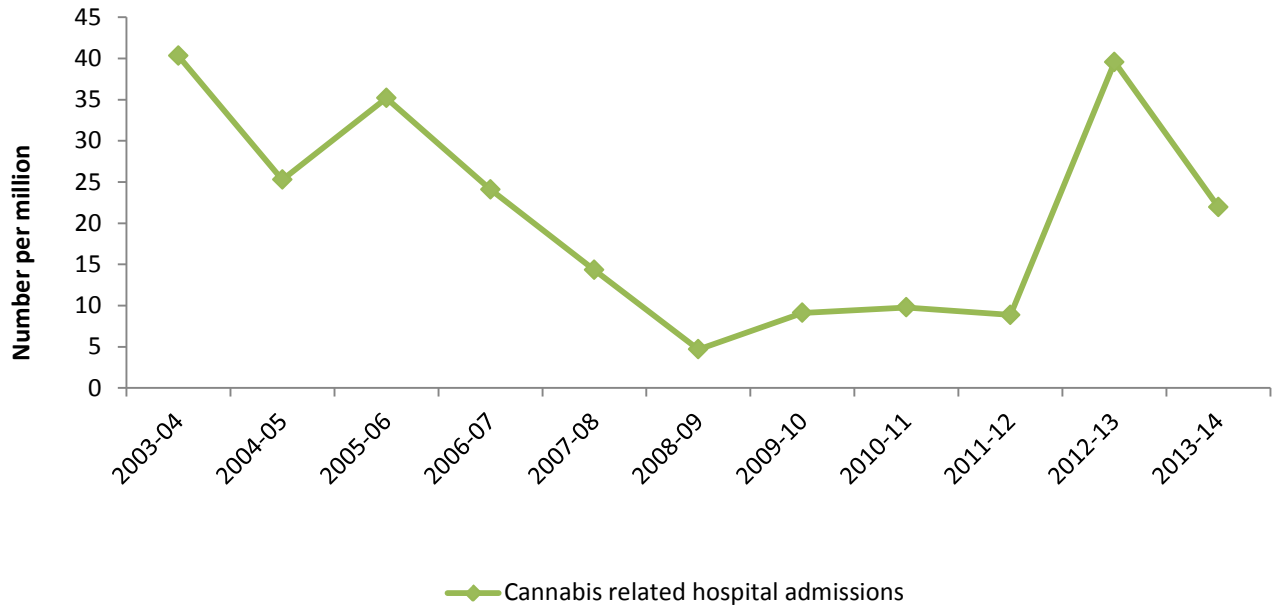
COCAINE

Numbers of hospital admissions in the ACT where cocaine was implicated in the primary diagnosis have remained lower than 10 per million persons aged 15–54 years in the last 20 years. In 2013–14, there were 8.77 cocaine-related hospital admissions per million persons recorded in the ACT. At the time of print the 2014-15 data for hospital admissions were not available.

CANNABIS

As can be seen from Figure 26, the number of cannabis-related hospital admissions per million persons has fluctuated over the last 10 years. In 2013-14, there were 21.94 cannabis-related hospital admissions per million persons recorded in the ACT continuing the recent 5 years trend of less than 10 admissions per million. At the time of print the 2014–15 data for hospital admissions were not available.

Figure 26: Hospital admissions, cannabis, ACT, 2003–04 to 2013–14



Source: AIHW; ACT Department of Health; Roxburgh and Breen (2016).

Injecting risk behaviour

ACCESS TO NEEDLES AND SYRINGES

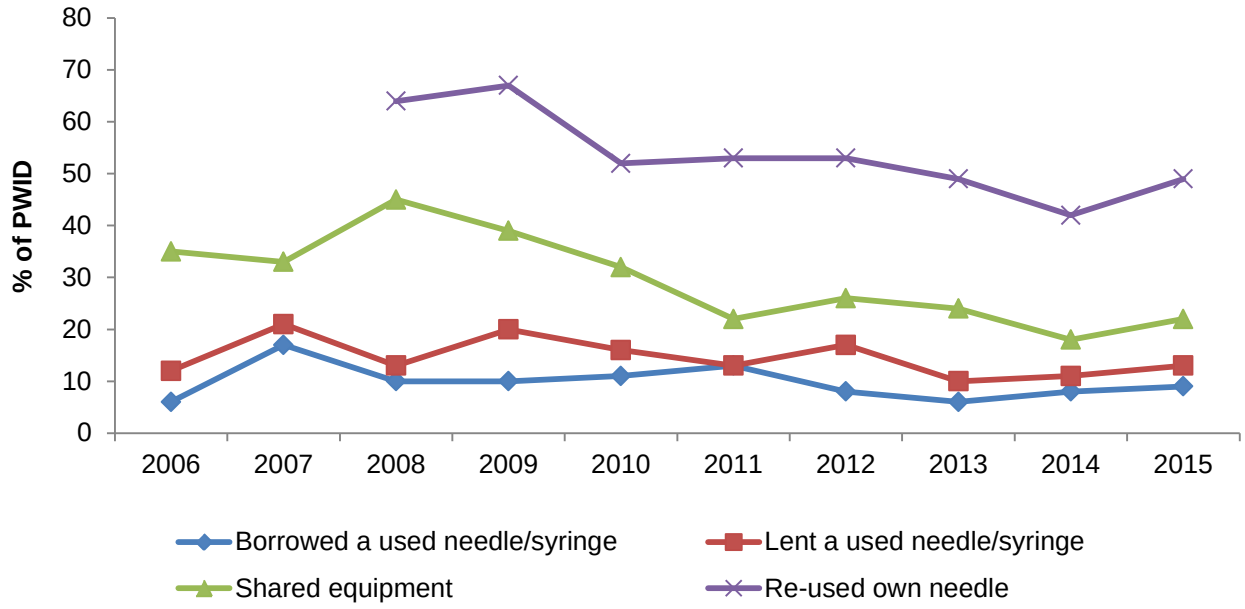
Needle and syringe programs were by far the most common source of needles and syringes in the preceding six months (91%), followed by chemists (20%). NSP vending machines were used by 14% of participants. Obtaining needles and syringes from a friend (11%), and/or a partner (3%) was observed at lower proportions. Outreach/peer workers were also accessed. Thirteen percent of participants reported having trouble accessing needles and syringes in the previous month.

SHARING OF INJECTING EQUIPMENT AMONG PWID

Figure 27 presents the proportion of participants over time who reported recently sharing injecting equipment. In 2015, 9% (n=9) of participants had injected with syringes that had already been used

by someone else in the month preceding interview. The proportion of participants who reported lending used needles remained stable at 13% in 2015 (11% in 2014).

Figure 27: Proportion of PWID reporting sharing injecting equipment, 2006–2015



Source: ACT IDRS PWID interviews, 2006–2015

As well as sharing needles and syringes, participants may also share other injecting equipment such as spoons and other mixing containers, swabs, tourniquets and water. In 2015, 22% of the sample reported having used other injecting equipment after it had been used by someone else. The proportion of participants reporting using a spoon/mixing container after someone else was 17% in 2015. As can be seen in Table 23, 5% of participants reported using water after someone else and 3% reported using tourniquet after someone else.

Table 23: Proportion of PWID reporting sharing other injecting equipment by type, 2011–2015

Injecting equipment used after someone else:	2011	2012	2013	2014	2015
	N=98	N=99	N=100	N=100	**N=100**
Spoon/mixing container (%)	17	15	15	18	**17**
Filter (%)	5	5	4	6	**2**
Tourniquet (%)	7	2	5	17	**3**
Water (%)	11	3	7	17	**5**
Swabs	2	0	0	11	**0**

Source: ACT IDRS PWID interviews, 2011–2015

Participants in the 2015 IDRS were also asked questions about the site on their body where they had last injected. The vast majority (79%) of participants reported that they last injected in their arm. Twelve percent of participants reported last injecting in their hand or wrist, 7% in their leg, and 2% in their neck.

LOCATION OF INJECTIONS

Table 24 presents a summary of the last location of drug injection among the ACT IDRS samples from 2011 to 2015. In 2015, the majority (85%) of participants reported that their last location of injection was a private home. Three percent reported a public toilet as their last location of injection and 3% reported a public place (such as a street or a park or public stairwell). No participants reported a car as the last location for injection in 2015.

Table 24: Location of last injection in the month preceding interview, ACT, 2011–2015

	2011	2012	2013	2014	2015
Location of last injection (%)	N=98	N=99	N=100	N=94	**N=98**
Private home	79	90	83	85	**85**
Public toilet	6	5	9	9	**3**
Street/park/beach	3	3	2	2	**3**
Car	7	2	3	1	**0**

Source: ACT IDRS PWID interviews, 2011–2015

SELF-REPORTED INJECTION-RELATED HEALTH PROBLEMS

In 2015, 66% of participants reported having experienced at least one injection-related health problem in the month preceding interview. As can be seen from Table 25, the most commonly experienced injection-related problem in 2015 was scarring/bruising of injection sites (71%) followed by difficulty injecting (65%).

Table 25: Injection-related health problems, ACT, 2011–2015

Injection-related health problems in past month (%)	2011	2012	2013	2014	2015
	n=66	n=61	n=53	n=56	**n=66**
Problem: (%)					
Scarring/bruising*	30	65	74	70	**71**
Difficulty injecting*	21	53	57	68	**65**
'Dirty hit'*	22	24	13	14	**6**
Infections/abscesses*	7	9	8	9	**9**
Overdose*	10	2	2	5	**4**

Source: ACT IDRS PWID interviews, 2011–2015
*Among those who reported an injection problem

Blood-borne viral infections

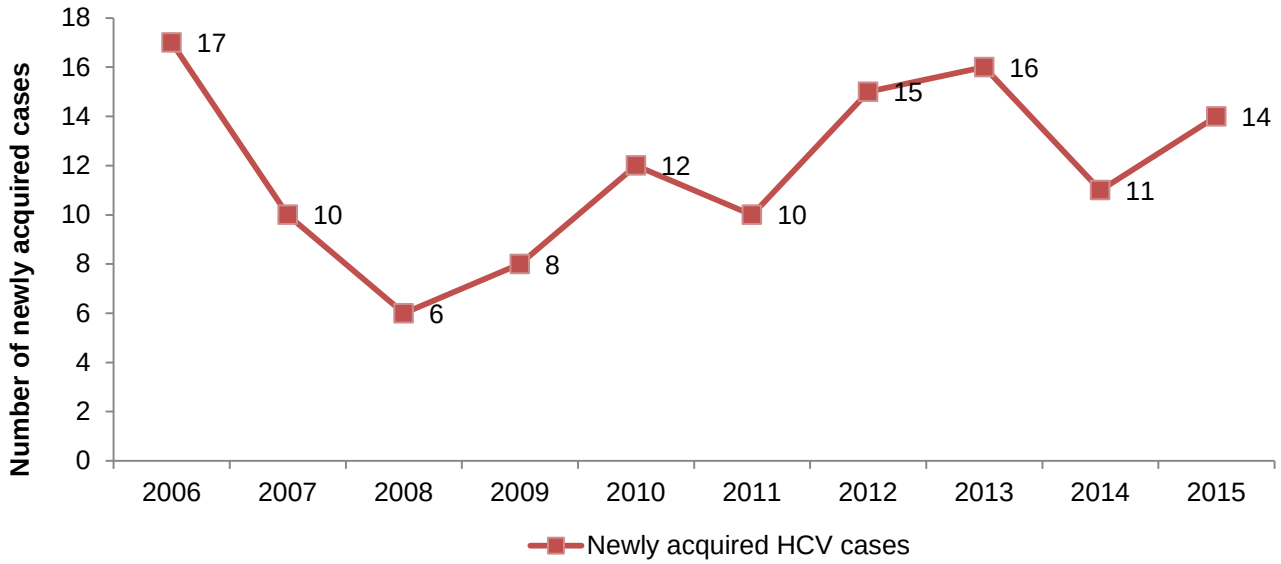
Data presented in this section are derived from the National Notifiable Diseases Surveillance System (NNDSS) (2015) and the Australian HIV Observational Database (AHOD).

The human immunodeficiency virus (HIV) prevalence among participants in the ACT remains low reflecting the prevalence among Australian PWID as a whole (The Kirby Institute, September 2015). From 2009 to 2014, there have been no new HIV positive cases in the ACT sample surveyed for the annual NSP survey (The Kirby Institute, July 2015) .

In 2015, there were 455 new cases of the hepatitis C virus (HCV) reported nationally, of which 14 were reported in the ACT. This is a slight increase from the 11 cases of newly acquired HCV

reported in 2014 (NNDSS, 2016). Figure 28 presents the number of newly diagnosed cases of HCV in the ACT from 2006 to 2015.

Figure 28: Number of newly diagnosed HCV cases in the ACT, 2006–2015



Source: Data accessed on 1 February 2016: NNDSS, 2015

In 2015, there were no new notifiable cases of the hepatitis B virus (HBV) in the ACT (NNDSS, 2016).

Alcohol Use Disorders Identification Test

People who regularly inject drugs are particularly at risk for alcohol related harms due to a high prevalence of the HCV. Over half (54%) of the participants interviewed in the Australian NSP Survey 2014 (N=2,203) were found to have HCV antibodies (Iversen, Chow and Maher, 2015). Given that the consumption of alcohol has been found to exacerbate HCV infection and to increase the risk of both non-fatal and fatal opioid overdose and depressant overdose (Darke, 2000; Schiff and Ozden, 2004; Coffin, Tracy, Bucciarelli et al., 2007; Darke, Duflouand Kaye, 2007) it is important to monitor risky drinking among PWID.

The information on alcohol consumption currently available in the IDRS includes the prevalence of lifetime and recent use, number of days of use over the preceding six months. Participants in the IDRS were asked the Alcohol Use Disorders Identification Test-Consumption (AUDIT-C) as a valid measure of identifying heavy drinking (Bush, Kivlahan, McDonell et al., 1998). The AUDIT-C is a three-item measure, derived from the first three consumption questions in the AUDIT. Dawson and colleagues (2005) reported on the validity of the AUDIT-C finding that it was a good indicator of alcohol dependence, alcohol use disorder and risky drinking.

Among IDRS participants in the ACT who drank alcohol in the past year, the overall mean score on the AUDIT-C was 5.5 (median=5, range 1-12). Males did not score significantly higher than females. According to Dawson and colleagues (2005) and Haber and colleagues' (2009) *Guidelines for the Treatment of Alcohol Problems*, a cut-off score of five or more indicated that further assessment was required.

About half (51%) of the participants who drank in the past year scored five or more on the AUDIT-C. Fifty-two percent of males and 47% females scored five or more indicating the need for further assessment (Table 26).

Table 26: AUDIT-C among people who inject drugs and drank alcohol in the past year, 2014–2015

	ACT 2014 n=57	2015 n=78
Score of 5 or more		
All participants (%)	53	**51**
Males (%)	53	**52**
Females (%)	47	**47**

Source: IDRS ACT PWID interviews, 2014–2015

Opioid and stimulant dependence

In 2015, the participants in the IDRS were asked questions from the Severity of Dependence Scale (SDS) for the use of stimulants and opioids. Understanding whether participants are dependent is an important predictor of harm, and provides information to complement quantity and frequency of use measures.

The SDS is a five-item questionnaire designed to measure the degree of dependence on a variety of drugs. The SDS focuses on the psychological aspects of dependence, including impaired control of drug use, preoccupation with, and anxiety about use. The SDS appears to be a reliable measure of the dependence construct. It has demonstrated good psychometric properties with heroin, cocaine, amphetamine, and methadone maintenance patients across five samples in Sydney and London (Dawe, Loxton, Hides et al., 2002). Previous research has suggested that a cut-off of four is indicative of dependence for methamphetamine users (Topp and Mattick, 1997) and a cut-off value of three for cocaine (Kaye and Darke, 2002). No validated cut-off for opioid dependence exists; however, researchers typically use a cut-off value of 5 for the presence of dependence.

Of those who had recently used an opioid and commented (n=91), the median SDS score was seven (mean 7.1, range 0-15), with 79% scoring five or above. Of those who scored five or above and commented (n=72), 65% reported specifically attributing responses to heroin, 10% methadone, 4% buprenorphine, and 2% oxycodone.

Mental health problems and psychological distress

SELF-REPORTED MENTAL HEALTH PROBLEMS

In 2015, 32% of participants interviewed self-reported having had a mental health problem other than drug dependence in the six months preceding interview. Of those who self-reported a mental health problem and commented (n=32), the most common problems were depression (69%), anxiety (44%), and Post-traumatic Stress Disorder, PTSD, (25%) (see Table 27).

Most (91%) of those who self-reported mental health problems reported that they had attended a mental health professional in the previous six months. In 2015, participants were asked whether they were prescribed any medication from the mental health professional for their self-reported mental health problems. Of those who reported attending a mental health professional in the previous six months (n=29), half (55%) reported they had been prescribed an anti-depressant, 31%

reported being prescribed an anti-psychotic, and 34% report being prescribed a benzodiazepine. A little less than a third (28%) of those who had attended a health professional in the preceding six months were not prescribed any medication (see Table 27).

Table 27: Summary of mental health problems experienced by PWID in the ACT, 2014–2015

	2014	2015
Self-reported mental health problem last six months (%)	34	**32**
Self-reported mental health problems (%)*	(n=33)	**(n=32)**
Depression (%)	64	**69**
Anxiety (%)	52	**44**
Bipolar disorder (%)	12	**19**
Panic (%)	9	**16**
Phobias (%)	3	**3**
Paranoia (%)	12	**9**
Schizophrenia (%)	24	**13**
Drug-induced psychosis (%)	9	**9**
Post-traumatic Stress Disorder – PTSD (%)	15	**25**
Attended mental health professional (%)*	74	**91**
No medication (%)**	30	**28**
Prescribed anti-depressant (%)**	32	**55**
Prescribed anti-psychotic (%)**	52	**31**
Prescribed benzodiazepines (%)**	46	**34**

Source: ACT IDRS PWID interviews, 2014–2015
* Of those who reported a mental health problem in the preceding six months
** Of those who attended a mental health professional (n=29)
↓↑ Statistical significance at $p<0.05$

KESSLER PSYCHOLOGICAL DISTRESS SCALE

The Kessler 10 (K10) was administered in 2015 to obtain a measure of psychological distress. It is a 10-item standardised measure that has been found to have good psychometric properties and to identify clinical levels of psychological distress as measured by the Diagnostic and Statistical Manual of Mental Disorders 5 (DSM-5)/the Structured Clinical Interview for DSM disorders (SCID) (Kessler and Mroczek, 1994; Kessler, Andrews, Colpe et al., 2002; American Psychiatric Association, 2013). The K10 relates to the level of anxiety and depressive symptoms a person may have felt in the preceding four-week period (AIHW, 2014b).

The minimum score was 10 (indicating no/low distress) and the maximum was 50 (indicating very high psychological distress) (Andrews and Slade, 2001) . Among participants who completed the full scale (n=100), the mean score was 23.2 (median=22; SD=10.3; range=10-50). The 2013 National Drug Strategy Household Survey (NDSHS) (AIHW, 2014b) provided the most recent Australian population norms available for the K10, and used four categories to describe degree of distress: scores from 10-15 were considered to be low; 16-21 as moderate; 22-29 as high; and 30-50 as very high. Using these categories, IDRS participants reported greater levels of high and very high distress compared to the general population (AIHW, 2014b) (Table 28).

Table 28: K10 scores in the 2010 NDSHS and the ACT IDRS interviews, 2014–2015

K10 Score	Level of psych. distress	National Drug Strategy Household Survey	2014 ACT IDRS (N=95)	2015 ACT IDRS
10–15	No/low distress	69	28	**28**
16–21	Moderate distress	21	20	**22**
22–29	High distress	7	25	**25**
30–50	Very high distress	3	26	**25**

Source: AIHW, 2014b; ACT IDRS PWID interviews, 2014–2015

Participants were also asked, in general, if they would rate their health as excellent, very good, good, fair or poor. Of those who commented (n=100), 2% reported their health as excellent, 21% very good, 38% good, 24% fair, and 15% poor. This compares to 17.2% of the general population reporting their health as excellent, 38.2% reporting it as very good, 32.1% as good, 10.6% as fair and 2% as poor (AIHW, 2014b).

Driving risk behaviour

Participants were asked about driving behaviour following the use of alcohol or drugs. More than a third of the IDRS sample (35%, n=35) reported having driven a vehicle in the six months preceding interview. Of those, 66% had a full unrestricted license and 26% had no current license. Of those who had driven in the previous six months, 20% reported having driven while over the limit of prescribed concentration of alcohol on a medium of six times in the past six months.

Twenty-four participants (67% of those who had driven in the past six months) reported that they had driven after taking drugs during that time. Participants reported that they had driven soon after taking drugs on a median of 15 times (range=2–180) during the preceding six months. The median time between taking drugs and driving was 30 minutes (range=1–240).

The most common drugs used before driving were heroin (54%), crystal methamphetamine (42%), and cannabis (25%).

7 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH DRUG USE

Reports of criminal activity

As can be seen in Table 29, in 2015, 22% of participants reported that they had been arrested in the last 12 months (23% in 2014).

The proportion of participants in 2015 that reported engaging in at least one act of criminal activity in the month prior to interview was 33% (22% in 2014). Twenty-seven percent of participants reported being involved in drug dealing and 13% of participants reported committing property crime in the previous month.

Table 29: Criminal activity among participants, ACT, 2014–2015

	2014	2015
	N=100	**(N=100)**
Arrested last 12 months (%)	23	**22**
Crime arrested for (%)	n=20	**n=22**
Property crime	25	**20**
Dealing	5	**0**
Fraud	-	**0**
Violent crime	45	**30**
Driving offence (incl drug driving and drink driving)	15	**15**
Committed at least one crime in the last month (%)	22	**33**
Crime committed (%)		
Property crime	10	**13**
Dealing	14	**27**
Fraud	3	**0**
Violent crime	3	**5**

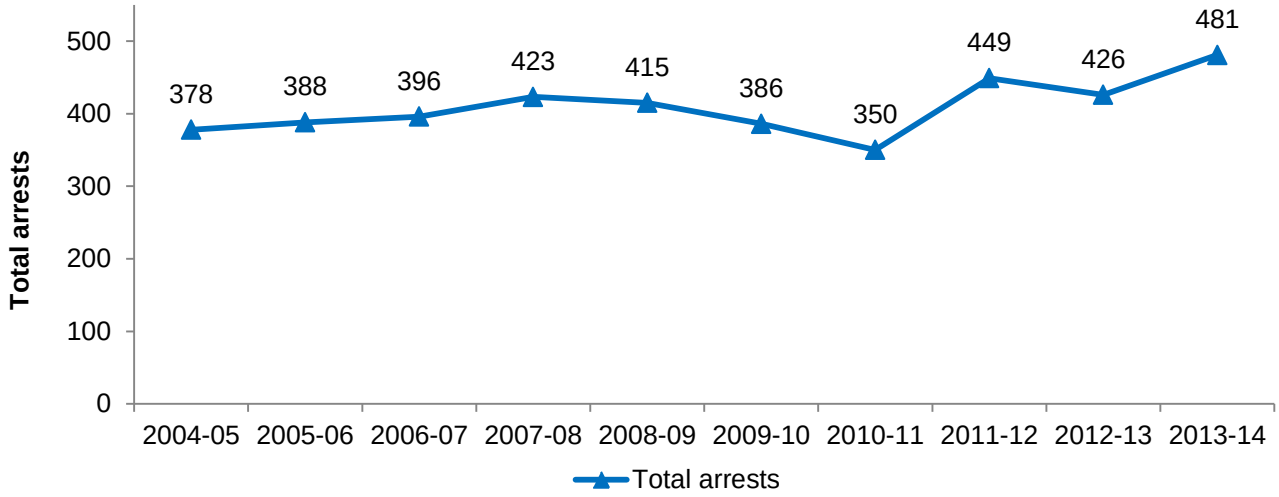
Source: ACT IDRS PWID interviews, 2014–2015

ARRESTS- POLICE DATA

ALL DRUGS

As can be seen in Figure 29, presents the number of drug-specific arrests made by ACT police. In 2013-14, 83% of all the people arrested for drug-related offences in the ACT were males.

Figure 29: Number of drug-specific arrests for all drugs, ACT, 2004-05 to 2013-14



Source: ACC, 2003–2015
NB: Data not available for the 2014-2015 financial year

The ACC classifies offenders who are charged with user-type offences (e.g., possession of illicit drugs and illicit drug use) as consumers. Offenders who are charged with supply-type offences (such as trafficking, selling, manufacture or cultivation) are categorised as providers.

As can be seen in Table 30, the numbers of consumer and provider arrests are higher for males than females. The total number of consumer arrests in the ACT in 2013-14 was 363 (298 male and 65 female). The total number of provider arrests in 2013-14 was 118, an increase from 77 in 2012-13.

Table 30: Number of consumer and provider arrests for all drugs, ACT, 2004–05 to 2013–14

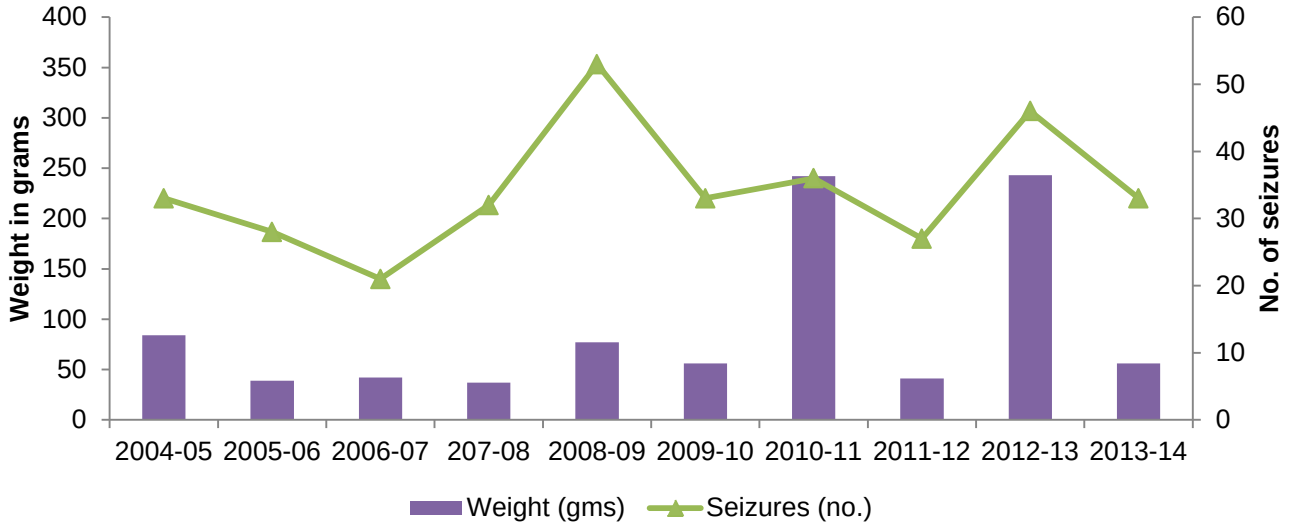
Year	Consumer		Provider		Total arrests
	Male	Female	Male	Female	
2004–2005	236	36	87	19	378
2005–2006	254	51	79	4	388
2006–2007	274	59	57	6	396
2007–2008	283	74	57	9	423
2008–2009	282	79	44	10	415
2009–2010	278	54	49	5	386
2010–2011	256	53	31	10	350
2011–2012	303	57	78	11	449
2012–2013	289	60	67	10	426
2013-2014	**298**	**65**	**100**	**18**	**481**

Source: ACC, 2003–2015
NB: Data not available for the 2014-2015 financial year

HEROIN

The number of heroin seizures[7] and total weight seized for each financial year period from 2004-05 is presented in Figure 30. In the 2013-14 reporting period, 33 seizures totalling 56 grams were recorded.

Figure 30: Number and weight of heroin seizures in the ACT, 2003-04 to 2013-14



Source: ACC, 2003–2015
NB: Data not available for the 2014-2015 financial year

Table 31 summarises the number of heroin and other opioids consumer and provider arrests in the ACT from 2004-05 to 2013-14 (more recent data were not available at the time of printing). The ACC classifies consumers as offenders who are charged with user-type offences (e.g. possession and use of illicit drugs), whereas providers are offenders who are charged with supply-type offences (e.g., trafficking, selling, manufacture or cultivation). The total number of heroin-related arrests in 2013-14 (17 arrests) continues a downward trend from 48 arrests in 2008-2009.

[7] Includes only those seizures for which a drug weight was recorded. No adjustment has been made to account for double counting data from joint operations between the AFP and state/territory police.

Table 31: Number of heroin consumer and provider arrests, ACT, 2004–05 to 2013–14

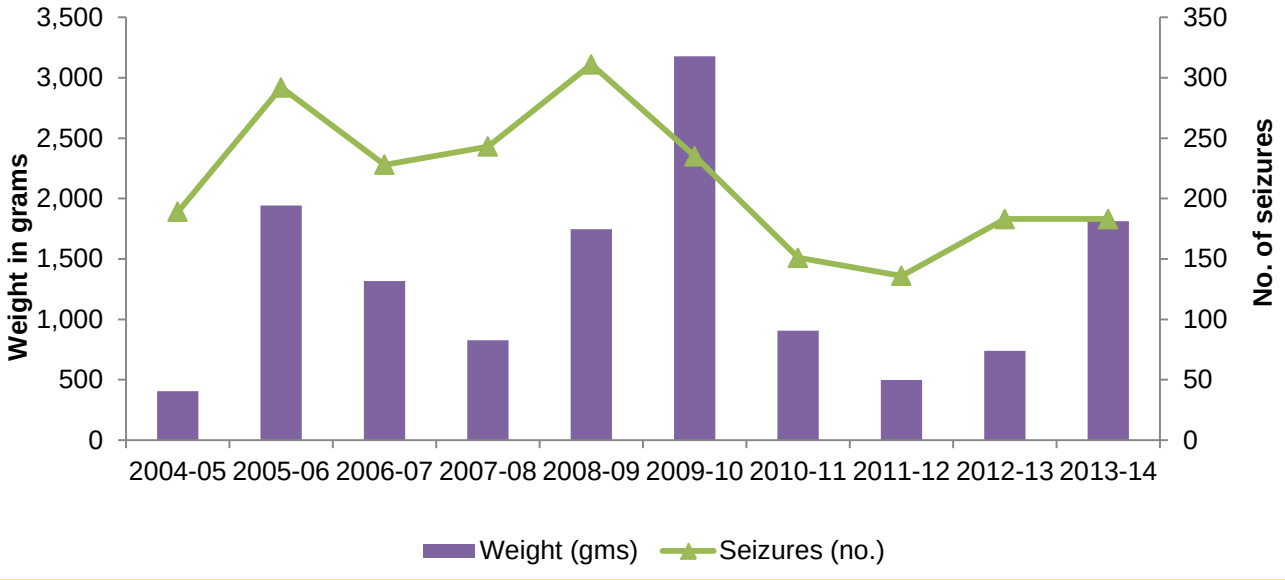
Year	Consumer		Provider		Total arrests
	Male	Female	Male	Female	
2004–2005	18	4	13	0	35
2005–2006	18	2	8	0	28
2006–2007	14	2	5	1	22
2007–2008	28	8	7	2	45
2008–2009	26	9	10	3	48
2009–2010	16	5	9	0	30
2010–2011	15	7	9	2	33
2011–2012	9	11	6	2	28
2012-2013	10	4	4	2	20
2013-2014	**6**	**3**	**5**	**3**	**17**

Source: ACC, 2004–2015
NB: Data not available for the 2014–15 financial year

METHAMPHETAMINE

Figure 31 shows the number and weight of amphetamine-type stimulant seizures in the ACT from 2004-05 to 2012-13[8]. Amphetamine-type stimulants include amphetamines, methamphetamines and phenethylamines. In 2013-14, the number of seizures remains stable at 183 (183 in 2012-13). The weight of seizures increased from 738 grams of amphetamine-type stimulants to 1,813 grams seized in 2013-14.

Figure 31: Number and weight of amphetamine-type stimulant seizures, ACT, 2004-05 to 2013-14



Source: ACC, 2004–2015
NB: Data not available for the 2014–15 financial year

[8] Includes only those seizures for which a drug weight was recorded. No adjustment has been made to account for double counting data from joint operations between the AFP and state/territory police

Table 32 presents the number of consumer and provider arrests for amphetamine-type stimulants (ATS) made in the ACT between 2004-05 and 2013-14. ATS include amphetamine, methamphetamine and phenethylamines. The ACC classifies consumers as offenders who are charged with user-type offences (e.g. possession and use of illicit drugs), whereas providers are offenders who are charged with supply-type offences (e.g., trafficking, selling, manufacture or cultivation). An increase was seen in the number of consumer and provider arrests in 2013-14, with a total of 157 arrests recorded, compared to 105 arrests in 2012-13.

Table 32: Amphetamine-type stimulants consumer and provider arrests, ACT, 2004-05 to 2013–14

Year	Consumer		Provider		Total arrests
	Male	Female	Male	Female	
2004–2005	51	7	27	9	94
2005–2006	50	9	46	1	106
2006–2007	77	22	30	3	132
2007–2008	77	23	28	5	133
2008–2009	68	19	20	3	110
2009–2010	64	12	21	3	100
2010–2011	42	9	7	2	60
2011–2012	88	14	16	6	124
2012–2013	72	9	23	1	105
2013-2014	**82**	**16**	**53**	**6**	**157**

Source: ACC, 2004–2015
NB: Data not available for the 2014–15 financial year

COCAINE

Figure 32 shows the number and weight of cocaine seizures in the ACT from July 2004 to June 2014[9]. In 2013-14, the number of seizures was 30 and the weight was 1,099 grams.

[9] Includes only those seizures for which a drug weight was recorded. No adjustment has been made to account for double counting data from joint operations between the AFP and state/territory police

Figure 32: Number and weight of cocaine seizures in the ACT, 2004-05 to 2013-14

Source: ACC, 2004–2015
NB: Data not available for the 2014–15 financial year

In 2013-14 there were 16 consumer arrests for cocaine and 8 provider arrests recorded (Table 33).

Table 33: Number of cocaine consumer and provider arrests, ACT, 2004–05 to 2013–14

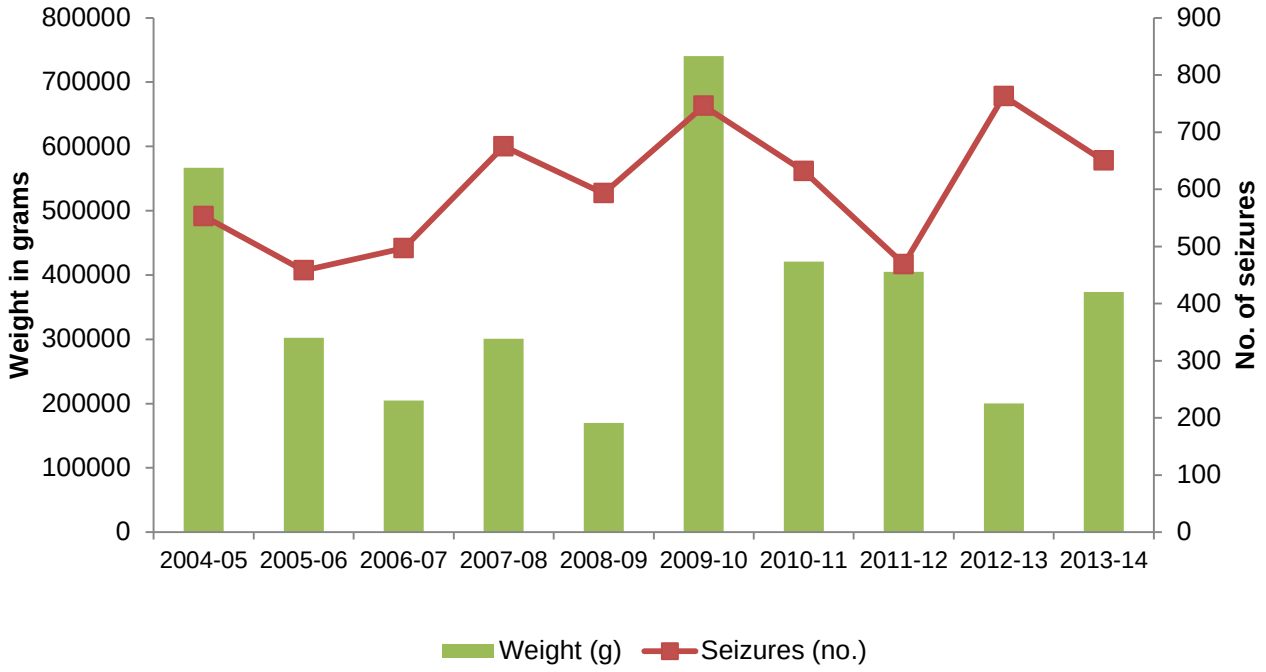
Year	Consumer		Provider		Total arrests
	Male	Female	Male	Female	
2004–2005	2	1	4	0	7
2005–2006	2	0	3	0	5
2006–2007	7	0	0	0	7
2007–2008	3	0	1	0	4
2008–2009	10	1	3	0	14
2009–2010	8	0	0	0	8
2010–2011	5	1	7	5	18
2011–2012	9	0	1	0	10
2012–2013	6	0	7	4	17
2013-2014	**15**	**1**	**7**	**1**	**24**

Source: ACC, 2004–2015
NB: Data not available for the 2014–15 financial year

CANNABIS

Figure 33 shows the number and weight of cannabis seizures in the ACT from 2004 to 2014[10]. In 2013-14, there were 650 cannabis seizures. The weight of cannabis seizures for 2013-was 373,382 grams.

Figure 33: Number and weight of cannabis seizures by ACT local police, 2004-05 to 2013-14



Source: ACC, 2004–2015
NB: Data not available for the 2014–15 financial year

Table 34 summarises the number of cannabis consumer and provider arrests in the ACT from 2004 to 2014. In the ACT, the greatest numbers of drug-specific arrests are due to cannabis offences. The number of males charged with consumer-type offences remains stable at 191 in 2013-14. The number of females charged with supply-type offences has remained relatively low and stable since 2005–06.

[10] Includes only those seizures for which a drug weight was recorded. No adjustment has been made to account for double counting data from joint operations between the AFP and state/territory police

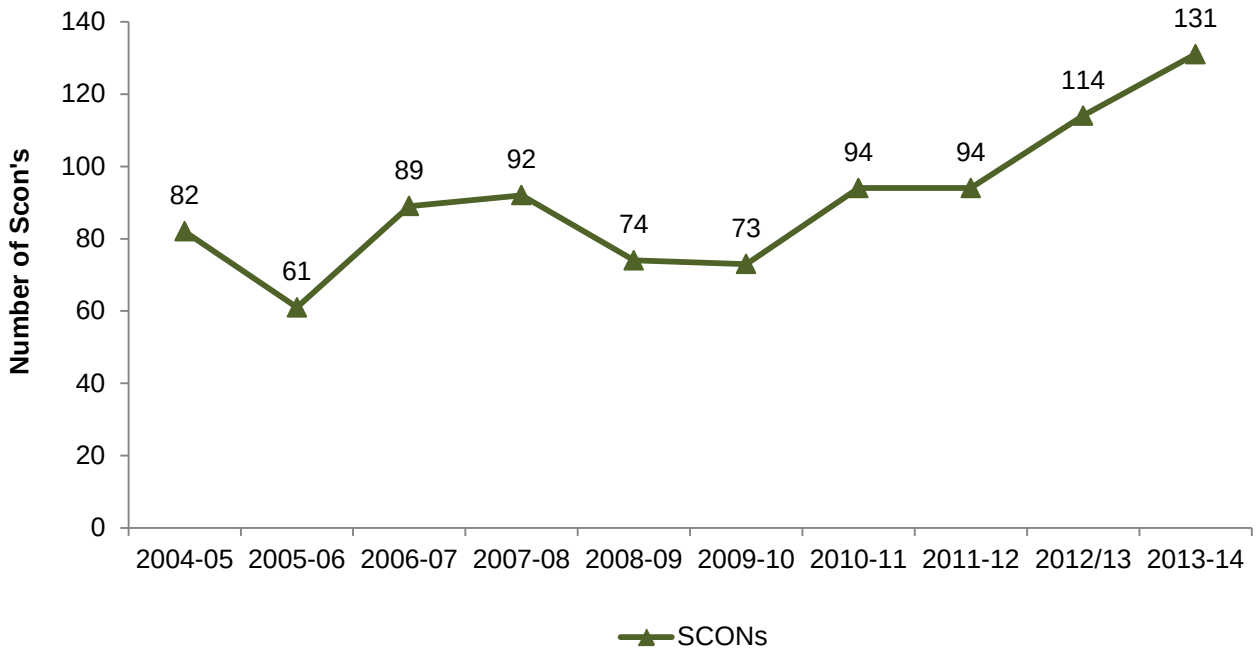
Table 34: Number of cannabis consumer and provider arrests, ACT, 2004–05 to 2013–14

Year	Consumer/user		Provider/supplier		Total arrests
	Male	Female	Male	Female	
2004–2005	156	22	40	10	228
2005–2006	177	40	20	3	240
2006–2007	168	35	19	2	224
2007–2008	166	41	18	2	227
2008–2009	165	50	10	3	228
2009–2010	187	36	19	2	244
2010–2011	192	36	8	1	237
2011–2012	193	32	37	3	265
2012–2013	200	47	27	3	277
2013-2014	**191**	**45**	**22**	**8**	**266**

Source: ACC, 2004–2015
NB: Data not available for the 2014–15 financial year

In the ACT, a Simple Cannabis Offence Notice (SCON) and a small fine are used to deal with minor cannabis offences, whereby the offence is expiated on payment of the fine. If the fine is paid within 60 days, no criminal record will be recorded. Figure 34 presents the total number of SCONs given out in the ACT from 2004 to 2014. The number of SCONs for 2013-14 is 131.

Figure 34: Number of Simple Cannabis Offence Notices, ACT, 2004-05 to 2013-14



Source: ACC, 2004–2015
NB: Data not available for the 2014–15 financial year

Expenditure on illicit drugs

In 2015, 57% of participants reported having spent a median of $100 on illicit drugs on the day prior to interview. (Table 35).

Table 35: Expenditure on illicit drugs on the day prior to interview, ACT, 2011–2015

	2011	2012	2013	2014	2015
	N=98	N=99	N=100	N=100	**N=99**
Nothing	32	31	41	45	**43**
Less than $20	6	5	0	7	**7**
$20-$49	13	8	11	11	**8**
$50-$99	19	24	20	16	**12**
$100-$199	22	20	17	13	**15**
$200-$399	7	12	7	6	**11**
$400 or more	1	0	4	2	**4**
Median expenditure ($)	90	80	80	80	**100**

Source: ACT IDRS PWID interviews, 2011–2015

8 SPECIAL TOPICS OF INTEREST

8.1 Hepatitis C Testing

Hepatitis C 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. 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 PWID with HCV (Iversen and Maher, 2015) .

Testing for HCV antibodies 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 have 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 not receiving adequate 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.

The majority (91%) of the ACT IDRS 2015 sample had been tested for HCV antibodies in their lifetime with 62% reporting a positive result. The median number of anti-HCV tests was reported to be three (range 1-180 times). The majority of PWID reported the test had been ordered by their regular General Medical Practitioner (GP) (75%). Fifteen percent reported tests being ordered by health professionals engaged with ‘other’ services, including hospital (4%), treatment services (4%) or correctional centres (8%). Six percent were unsure who ordered the tests. (Table 36).

Fifty-two percent of the ACT sample who commented (N=52) reported a PCR test to determine if the virus was active with the median number of PCR tests being three (range 1-70). The majority of PWID reported the PCR test had been ordered by their regular GP (72%), a liver specialist (8%), ‘other’ including a doctor at a correctional centre (8%), or at hospital 3% (Table 36).

All participants who had screened positive to an antibody test or a PCR test were asked what they remember discussing with the health professional at the time of diagnosis. Over a third (37%) remember discussing the impact of dietary choices on HCV, 15% the long term effects of HCV, 11% the types of tests needed, 9% the available treatments for HCV, 4% the benefit of limiting alcohol intake, and 4% the different strains of HCV (genotypes). Eleven percent can’t remember what they were told. (Table 36).

Table 36: Hepatitis C testing among PWID, ACT, 2015

	ACT n=92
% Ever tested for HCV	91
% Antibody positive result	(n=84)
Yes	62
No	36
Unsure	2
% Ordered the anti-body test	(n=52)
Regular GP	75
OST clinic	2
OST doctor	2
Liver specialist	0
Other	15
Unsure	6
Median number of times tested for antibodies ever (range)#	3 (1-180)
% Screened or tested for RNA (PCR test)	(n=52)
Yes	71
No	21
Unsure	8
% Ordered the PCR test	(n=37)
Regular GP	73
OST clinic	3
OST doctor	3
Liver specialist	8
Other	8
Unsure	5
Median number of times tested for RNA ever (range)*	3 (1-70)
% Discussed by a health professional when told HCV antibody or RNA positive	(n=46)
Long term effects of HCV	15
Genotypes	4
Different tests	11
Available treatments	9
Alcohol intake	4
Dietary choices	37
Other	2
Don't know/ can't remember	11

Source: IDRS participant interviews
Among those who were ever HCV tested and commented, * Among those who were ever PCR tested and commented

Participants were also asked to endorse a list of statements related to their perceptions of HCV as either true or false. Questions included: Don't feel sick I must have cleared HCV; I don't have symptoms I can't pass on HCV; Treatment for HCV only works for a few people; If I already have HCV, I can't get it again; If I wait, HCV will clear up on it's own; I can wait until I feel really sick before seeking treatment and I can't get HCV treatment if I am still injecting drugs. The majority of participants believed the statements to be false indicating most participants had a moderately good understanding of the virus (Table 37).

Table 37: Perceptions of HCV, ACT, 2015

	ACT
% Don't feel sick I must have cleared HCV	(n=94)
True	11
False	83
Unsure	6
% Don't have symptoms I can't pass on HCV	(n=94)
True	12
False	85
Unsure	3
% Treatment for HCV works only for a few people	(n=94)
True	33
False	56
Unsure	11
% I have HCV, I can't get it again	(n=94)
True	14
False	81
Unsure	5
% If I wait, HCV will clear up on it's own	(n=94)
True	16
False	80
Unsure	4
% I can wait until I feel real sick before seeking treatment	(n=94)
True	16
False	81
Unsure	3
% I can't get HCV treatment if still injecting drugs	(n=94)
True	15
False	75
Unsure	11

Source: IDRS participant interviews

8.2 Oxycodone use

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, Perarsonand Haber, 2014) . The rise in opioid utilisation – 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 have 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, Lintzeris et al., 2015; Larance, Lintzeris, Bruno et al., 2015; Peacock, Degenhardt, Hordern et al., 2015; Peacock, Degenhardt, Larance 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®.

In 2015, of the ACT sample who commented (N=98), nearly half (46%) reported ever using oxycodone (either licit or illicit). Of those who reported ever using oxycodone (N=45), the majority (23%) reported recently using the Reformulated Oxycodone ‘OP” tablets (either licit or illicit), while 16% percent reported recently using the Original Oxycodone ‘OC’ tablets (Table 38).

Table 38: Lifetime and recent use of oxycodone (licit/illicit), ACT, 2015

	n=98
% Ever used oxycodone	46
Recent use of oxycodone (licit or illicit)*	(n=45)
% Endone	12
% Generic controlled released Oxycodone	12
% Reformulation Oxycodone 'OP"	23
% OxyNormtabs	11
% OxyNormliquid	0
% OxyNorm Solution	0
% Targin	0
% Proladone	0
% Original Oxycodone 'OC'	16

Source: IDRS participant interviews
*Among those who reported ever using oxycodone.

8.3 Blood donations

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

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

Of those who commented (N=94), 19% reported that they had given blood in their lifetime. A quarter (28%) of those that had given blood (n=5) reported that they had commenced injecting drug use before donating blood.

9 REFERENCES

AMERICAN PSYCHIATRIC ASSOCIATION (2013) *Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition),* Washington, DC, American Psychiatric Association.

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 BUREAU OF CRIMINAL INTELLIGENCE (2000) Australian Illicit Drug Report 1998-99. Canberra, Australian Bureau of Criminal Intelligence.

AUSTRALIAN BUREAU OF CRIMINAL INTELLIGENCE (2001) Australian Illicit Drug Report 1999-2000. Canberra, Australian Bureau of Criminal Intelligence.

AUSTRALIAN BUREAU OF CRIMINAL INTELLIGENCE (2002) Australian Illicit Drug Report 2000-2001. Canberra, Australian Bureau of Criminal Intelligence.

AUSTRALIAN BUREAU OF STATISTICS (2007) National Survey of Mental Health and Wellbeing: Summary of Results. Canberra, Australian Bureau of Statistics.

AUSTRALIAN CRIME COMMISSION (2003) Australian Illicit Drug Report 2001-02. Canberra, Australian Crime Commission.

AUSTRALIAN CRIME COMMISSION (2004) Australian Illicit Drug Data Report 2002-03. Canberra, Australian Crime Commission.

AUSTRALIAN CRIME COMMISSION (2005) Australian Illicit Drug Data Report 2003-04. Canberra, Australian Crime Commission.

AUSTRALIAN CRIME COMMISSION (2006) Australian Illicit Drug Data Report 2004-05. Canberra, Australian Crime Commission.

AUSTRALIAN CRIME COMMISSION (2007) Australian Illicit Drug Data Report 2005/06. Canberra, Australian Crime Commission.

AUSTRALIAN CRIME COMMISSION (2008) Australian Illicit Drug Data Report 2006-07. Canberra, Australian Crime Commission.

AUSTRALIAN CRIME COMMISSION (2009) Illicit Drug Data Report 2007-08. 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 2009-10. Canberra, Australian Crime Commission.

AUSTRALIAN CRIME COMMISSION (2012) Illicit Drug Data Report 2010-11. Canberra, Australian Crime Commission.

AUSTRALIAN CRIME COMMISSION (2013) Illicit Drug Data Report 2011-12. Canberra, Australian Crime Commission.

AUSTRALIAN CRIME COMMISSION (2014) Illicit Drug Data Report 2012-13. Canberra, Australian Crime Commission.

AUSTRALIAN CRIME COMMISSION (2015) Illicit Drug Data Report 2013-14. Canberra, Australian Crime Commission.

AUSTRALIAN CUSTOMS BORDER AND PROTECTION SERVICE (2015) Australian Customs and Border Protection Service Annual Report 2014-15. Commonwealth of Australia, Australian Customs and Border Protection Service.

AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE (2014) National Drug Strategy Household Survey detailed report 2013. Drug supplementry tables. *Drug statistics series no. 28. Cat. no. PHE 183.* Canberra, AIWH.

AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE (2015a) Alcohol and other drug treatment services in Australia 2013-14. Drug supplementry tables. *Drug treatment series no. 25. Cat. no. HSE 158.* Canberra, AIHW.

AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE (2015b) National Opioid Pharmacotherapy statistics 2014. Drug supplementry tables. *AIHW bulletin no. 128. Cat. no. AUS 190.* Canberra, AIHW.

BLACK, E., ROXBURGH, A., DEGENHARDT, L., BRUNO, R., CAMPBELL, G., DE GRAAFF, B., FETHERSTON, J., KINNER, S., MOON, C., QUINN, B., RICHARDSON, M., SINDICICH, N. & WHITE, N. (2008) Australian Drug Trends 2007: Findings from the Illicit Drug Reporting System (IDRS). Australian Drug Series No. 1. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

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

BREEN, C., DEGENHARDT, L., ROXBURGH, A., BRUNO, R., DUQUEMIN, A., FETHERSTON, J., FISCHER, J., JENKINSON, R., KINNER, S., LONGO, M. & RUSHFORTH, C. (2003) Australian Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS). . Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

BREEN, C., DEGENHARDT, L., ROXBURGH, A., BRUNO, R., FETHERSTON, J., FISCHER, J., JENKINSON, R., KINNER, S., MOON, C., WARD, J. & WEEKLEY, J. (2004) Australian Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS). . Sydney, National Drug and Alcohol Research Centre, University of NSW.

BUSH, K., KIVLAHAN, D. R., MCDONELL, M. B., FIHN, S. D. & BRADLEY, K. A. (1998) The AUDIT Alcohol Consumption Questions (AUDIT-C). *Arch Intern Med,* 158**,** 1789-1795.

BUTLER, K., DAY, C., DIETZE, BRUNO, R., ALATI, R. & BURNS, L. (2015) The potential reach of opioid substitution settings to deliver HCV care to people who inject drugs in Australia. *Journal of Substance Abuse Treatment,* 58**,** 90-94.

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.

COFFIN, P. O., TRACY, M., BUCCIARELLI, A., OMPAD, D. C., VLAHOV, D. & GALEA, S. (2007) Identifying Injection Drug Users at Risk of Nonfatal Overdose. *Academic Emergency Medicine,* 14**,** 616-623.

DARKE, S. (1994) The use of benzodiazepines among injecting drug users. *Drug and Alcohol Review,,* 13**,** 63-69.

DARKE, S., DUFLOU, J. & KAYE, S. (2007) Comparative toxicology of fatal heroin overdose cases and morphine positive homicide victims. *Addiction,* 102**,** 1793-1797.

DARKE, S., HALL, W., WODAK, A., HEATHER, N. & WARD, J. (1992) Development and validation of a multi-dimensional instrument for assessing outcomes of treatment among opiate users: The Opiate Treatment Index. *British Journal of Addiction,* 87**,** 733-742.

DARKE, S., HALL, W. & TOPP, L. (2000) The Illicit Drug Reporting System (IDRS): 1996-2000. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

DAWE, S., LOXTON, N. J., HIDES, L., KAVANAGH, D. J. & MATTICK, R. P. (2002) Review of diagnoistic screening instruments for alcohol and other drug use and other psychiatric disorders. Canberra, Commonwealth Department of Health and Ageing.

DAWSON, D. A., GRANT, B. F., STINSON, F. S. & ZHOU, Y. (2005) Effectiveness of the Derived Alcohol Use Disorders Identification Test (AUDIT-C) in Screening for Alcohol Use Disorders and Risk Drinking in the US General Population. *Alcoholism: Clinical and Experimental Research,* 29**,** 844-854.

DEGENHARDT, L., BRUNO, R., LINTZERIS, N., ALI, R., FARRELL, M. & LARANCE, B. (2015) The introduction of a potentially abuse deterrent oxycodone formulation: Early findings from the Australian National Opioid Medication Abuse Deterrence (NOMAD) study. *Drug and Alcohol Dependence,* 151**,** 56-67.

DEGENHARDT, L., CONROY, E., GILMOUR, S. & COLLINS, L. (2005) The effect of a reduction in heroin supply in Australia upon drug distribution and acquisitive crime. *British Journal of Criminology,* 45**,** 2-24.

DEGENHARDT, L., LARANCE, B., BRUNO, R., LINTZERIS, N., ALI, R. & FARRELL, M. (2015) 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,,* 110**,** 1-12.

FURUKAWA, T. A., KESSLER, R. C., SLADE, T. & ANDREWS, G. (2003) The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of Mental Health and Well-being. *Psychological Medicine,* 33**,** 357-362.

HABER, P., LINTZERIS, N., PROUDE, E. & LOPATKO, O. (2009) Guidelines for the Treatment of Alcohol Problems. Canberra, Australian Government Department of Health and Ageing.

HANDO, J., DARKE, S., O'BRIEN, S., MAHER, L. & HALL, W. (1998) The development of an early warning system to detect trends in illicit drug use in Australia: the Illicit Drug Reporting System. *Addiction Research,* 6**,** 97-113.

HANDO, J., O'BRIEN, S., DARKE, S., MAHER, L. & HALL, W. (1997) The Illicit Drug Reporting System Trial : Final Report. Monograph Number 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.

IBM (2013) SPSS for Windows version 22.0. 20.0 ed. New York.

IVERSEN, J., CHOW, L. & MAHER, L. (2014) Australian Needle and Syringe Program National Data Report 2009-2013. . The Kirby Institute, Univerity of New South Wales.

IVERSEN, J. & MAHER, L. (2015) Australian Needle and Syringe Program National Data Report 1995-2014. . The Kirby Institute, Univerity 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.

KAYE, S. & DARKE, S. (2002) Determining a diagnostic cutt-off on the Severity of Dependence Scale (SDS) for cocaine dependence. *Addition,* 97**,** 727-731.

KESSLER, R. & MROCZEK, D. (1994) Final Version of our Non-specific Psychological Distress Scale [memo dated 10/3/94]. Ann Arbort (MI): Survey Research Center of the Institute for Social Research, University of Michigan.

KESSLER, R. C., ANDREWS, G., COLPE, L. J., HIRIPI, E., MROCZEK, D. K., NORMAND, S.-L. T., WALTERS, E. E. & ZASLAVSKY, A. M. (2002) Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine,* 32**,** 959-976.

LARANCE, B., DIETZE, P., ALI, R., LINTZERIS, N., WHITE, N., JENKINSON, R. & DEGENHARDT, L. (2015) The introduction of buprenorphine-naloxone film in opioid substitution therapy in Australia: Uptake and issues arising from changing buprenorphine formulations. *Drug and Alcohol Review,* 34**,** 603–610 DOI: 10.1111/dar.12277.

LARANCE, B., LINTZERIS, N., BRUNO, R., PEACOCK, A., CAMA, E., ALI, R., KIHAS, I., HORDERN, A., WHITE, N. & DEGANHARDT, L. (2015) The characteristics of a cohort who tamper with prescribed and diverted opioid medications. *J Subst Abuse Treat,* 58**,** 51-61.

MCKETIN, R., DARKE, S., HUMENIUK, R., DWYER, R., BRUNO, R., FLEMING, J., KINNER, S., HARGREAVES, K. & RYSAVY, P. (2000) Australian Drug Trends 1999: Findings from the Illicit Drug Reporting System (IDRS). NDARC Monograph Number 43. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

NATIONAL CENTRE IN HIV EPIDEMIOLOGY AND CLINICAL RESEARCH (2002) Australian NSP Survey National Data Report 1995 - 2001. Sydney, National Centre in HIV Epidemiology and Clinical Research, University of New South Wales.

NATIONAL CENTRE IN HIV EPIDEMIOLOGY AND CLINICAL RESEARCH (2005) Australian NSP Survey: National Data Report 2000-2004. Sydney, National Centre in HIV Epidemiology and Clinical Research, University of New South Wales.

NATIONAL CENTRE IN HIV EPIDEMIOLOGY AND CLINICAL RESEARCH (2009) Australian NSP Survey National Data Report 2004-2008. Sydney, National Centre in HIV Epidemiology and Clinicial Research, The University of New South Wales.

NATIONAL CENTRE IN HIV EPIDEMIOLOGY AND CLINICAL RESEARCH (2010) Australian NSP Survey National Data Report 2005-2009. Sydney, National Centre in HIV Epidemiology and Clinicial Research, The University of New South Wales.

NEWCOMBE, R., G (1998) Interval Estimination for the Difference Between Independent Proportions: Comparison of Eleven Methods. *Statisitics in Medicine,* 17**,** 873-890.

O'BRIEN, S., BLACK, E., ROXBURGH, A., DEGENHARDT, L., BRUNO, R., CAMPBELL, G., FETHERSTON, F., JENKINSON, R., KINNER, S., NEWMAN, J. & WHITE, N. (2007) Australian Drug Trends 2006: Findings from the Illicit Drug Reporting System (IDRS). NDARC Monograph 60. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

PEACOCK, A., DEGENHARDT, L., HORDERN, 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. *The International Journal of Drug Policy,* 26**,** 1265-1272.

PEACOCK, A., DEGENHARDT, L., LARANCE, B., CAMA, E., LINTZERIS, N., ALI, R. & BRUNO, R. (2015) A typology of people who tamper with pharmaceutical opioids: responses to introduction of a tamper-resistant formulation of controlled-release oxycodone. *Pharmacoepidemiology & Drug Safety,* September.

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

ROXBURGH, A. & BURNS, L. (2013) Accidental drug-induced deaths due to opioids in Australia, 2009. Sydney, National Drug and Alcohol Research Centre.

ROXBURGH, A. & BURNS, L. (2014a) Accidental drug-induced deaths due to opioids in Australia, 2010. Sydney, National Drug and Alcohol Research Centre.

ROXBURGH, A. & BURNS, L. (2014b) Cocaine and methamphetamine related drug-induced deaths in Australia, 2010. Sydney, National Drug and Alcohol Research Centre.

ROXBURGH, A. & BURNS, L. (in press) Drug-related hospital stays in Australia, 1993-2012. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

SCHIFF, E. R. & OZDEN, N. (2004) Hepatitis C and Alcohol. *Publications.* Bethesda, National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health.

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., BARTELSON, B. B., DAVIS, J. M., MUNOZ, A., SCHNEIDER, M. F., CHILCOAT, H., COPLAN, P., SURRATT, H. & DART, R. C. (2013) Reduced Abuse, Therapeutic Errors, and Diversion Following Reformulation of Extended-Release Oxycodone in 2010. . *The Journal of Pain*.

SINDICICH, N. & BURNS, L. (2015) Australian Trends in Ecstasy and Related Drug Markers 2014: Findings from the Ecstasy and Related Drugs Reporting System. *Australian Drug Trends Series. no. 136.* Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

STAFFORD, J. & BURNS, L. (2010) Australian Drug Trends 2009: Findings from the Illicit Drug reporting System. *Australian Drug Trends Series.* Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

STAFFORD, J. & BURNS, L. (2011) Australian Drug Trends 2010: Findings from the Illicit Drug Reporting System. *Australian Drug Trends Series.* Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

STAFFORD, J. & BURNS, L. (2012) Australian Drug Trends 2011: Findings from the Illicit Drug Reporting System (IDRS). *Australian Drug Trends Series. no.73.* Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

STAFFORD, J. & BURNS, L. (2013) Australian Drug Trends 2012: Findings from the Illicit Drug Reporting System (IDRS). *Australian Drug Trends Series. no.91.* Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

STAFFORD, J. & BURNS, L. (2014) Australian Drug Trends 2013: Findings from the Illicit Drug Reporting System (IDRS). *Australian Drug Trends Series. no.109.* Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

STAFFORD, J. & BURNS, L. (2015) Australian Drug Trends 2014: Findings from the Illicit Drug Reporting System (IDRS). *Australian Drug Trends Series. no.127.* Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

STAFFORD, J., DEGENHARDT, L., BLACK, E., BRUNO, R., BUCKINGHAM, K., FETHERSTON, J., JENKINSON, R., KINNER, S., MOON, C. & WEEKLEY, J. (2005) Australian Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS). Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

STAFFORD, J., DEGENHARDT, L., BLACK, E., BRUNO, R., BUCKINGHAM, K., FETHERSTON, J., JENKINSON, R., KINNER, S., NEWMAN, J. & WEEKLEY, J. (2006) Australian Drug Trends 2005: Findings from the Illicit Drug Reporting System (IDRS). Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

STAFFORD, J., SINDICICH, N., BURNS, L., CASSAR, J., COGGER, S., DE GRAAFF, B., GEORGE, J., MOON, C., PHILLIPS, B., QUINN, B. & WHITE, N. (2009) Australian Drug Trends 2008: Findings from the Illicit Drug Reporting System (IDRS). *Australian Drug Trends Series.* Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

TANDBERG, D. Improved confidence intervals for the difference between two proportions and number needed to treat (NNT). 1.49 ed.

THE KIRBY INSTITUTE (2015) HIV, viral hepatitis and sexually transmissible infections in Australia. . *Annual Surveillance Report 2015.* Sydney NSW 2052, The Kirby Institute, UNSW Australia.

THERAPEUTIC GOODS ADMINISTRATION (March 2011) Australian Public Assessment Report for Buprenorphine/Naloxone (Suboxone Sublingual Film). Canberra, Commonwealth of Australia.

TOPP, L., DARKE, S., BRUNO, R., FRY, C., HARGREAVES, K., HUMENIUK, R., MCALLISTER, R., O'REILLY, B. & WILLIAMS, P. (2001) Australian Drug Trends 2000: Findings from the Illicit Drug Reporting System (IDRS). Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

TOPP, L., KAYE, S., BRUNO, R., LONGO, M., WILLIAMS, P., O'REILLY, B., FRY, C., ROSE, G. & DARKE, S. (2002) Australian Drug Trends 2001. Findings from the Illicit Drug Reporting System (IDRS). Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

TOPP, L. & MATTICK, R. (1997) Choosing a cut-off on the Severity of Dependence Scale (SDS) for amphetamine users. *Addiction,* 92**,** 839-845.