

South Australia

A. Hordern and C. Breen

**South Australia DRUG TRENDS 2015
Findings from the
Illicit Drug Reporting System (IDRS)**

Australian Drug Trends Series No. 150

South Australian Drug Trends 2015



Findings from the Illicit Drug Reporting System (IDRS)

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Australian Drug Trends Series No. 150

ISBN 978-0-7334-3627-7

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Suggested citation: Hordern, A & Breen C. (2016) *South Australian Drug Trends 2015. Findings from the Illicit Drug Reporting System (IDRS)*. Australian Drug Trends Series No. 150. Sydney: National Drug & Alcohol Research Centre, UNSW Australia

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ACKNOWLEDGEMENTS

In 2015, the Illicit Drug Reporting System (IDRS) was supported by funding from the Australian Government under the Substance Misuse Prevention and Service Improvement Grants Fund. The National Drug and Alcohol Research Centre (NDARC), UNSW Australia, co-ordinated the IDRS. The IDRS team would like to thank the Australian Government Department of Health for their continued assistance and support throughout the year. The authors would like to thank the national co-ordinators, Natasha Sindicich and Jennifer Stafford, for their continued support and guidance. Finally, the authors would like to thank Karla Heese, Nancy White, Robyn Via, Emma Black, Robert Ali and Rachel Sutherland, the previous South Australian IDRS co-ordinators for their hard work on the project, as well as Amanda Roxburgh for her help with access to and analysis of indicator data.

The authors also wish to acknowledge and thank:

- staff at the various Community Health Centres around Adelaide who gave generously of their time and resources in facilitating this process;
- staff at the Clean Needle Program sites around Adelaide who assisted in the recruitment of participants, allowed advertising of the project and provided telephone facilities for use by prospective participants;
- staff at Mission Australia who gave generously of their time and resources by assisting in recruitment of participants;
- the four research interviewers who conducted the interviews with people who inject drugs: Elizabeth Fontaine, Firona Roth, Natalie Matthews, and David Unsworth;
- the 16 key experts who willingly provided their time, effort and experience to contribute to the IDRS in 2015; and
- the organisations that generously provided various indicator data, or advice where indicator data were not available at the time of publication, including the Australian Bureau of Statistics, the Australian Crime Commission, the Australian Institute of Health and Welfare, the Royal Adelaide Hospital, the South Australian Alcohol and Drug Information Service, and the Drug and Alcohol Services South Australia.

Finally, the authors wish to thank the 102 people who participated in the IDRS survey in 2015, and who shared their experiences.

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ADHD	Attention deficit hyperactivity disorder
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AIHW	Australian Institute of Health and Welfare
AUDIT-C	Alcohol Use Disorders Identification Test – Consumption
AVO	Apprehended Violence Order
BBVI	Blood-borne viral infection(s)
CI	Confidence interval(s)
CNP	Clean Needle Program
DASSA	Drug and Alcohol Service South Australia
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders IV
DMT	Dimethyltryptamine
EDRS	Ecstasy and related Drugs Reporting System
GP	General Practitioner
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
Hydro	Hydroponically grown cannabis
ICD-9	International Classification of Diseases, 9th Revision
ICD-10	International Classification of Diseases, 10th Revision
IDRS	Illicit Drug Reporting System
K10	Kessler Psychological Distress Scale
KE	Key expert(s); see <i>Method</i> section for further details
LSD	Lysergic acid diethylamide
MDMA	3,4-methylenedioxymethamphetamine
N (or n)	Number of participants
NCIS	National Coronial Information System
NDARC	National Drug and Alcohol Research Centre
NDSHS	National Drug Strategy Household Survey
NNDSS	National Notifiable Diseases Surveillance System
NPS	New psychoactive substances
NSP	Needle and Syringe Program(s)
NSW	New South Wales
OCD	Obsessive compulsive disorder
OST	Opioid substitution treatment
OTC	Over the counter
PCR	Polymerase chain reaction
PDI	Party Drug Initiative
PWID	Person/people who inject drugs
QLD	Queensland
RAH	Royal Adelaide Hospital
ROA	Route of administration
SA	South Australia
SAPOL	South Australia Police
SCID	Structured Clinical Interview for DSM
SDS	Severity of Dependence Scale
SPSS	Statistical Package for the Social Sciences
VIC	Victoria
WA	Western Australia
WHO	World Health Organization

GLOSSARY OF TERMS

Cap	Small amount, typically enough for one injection.
Daily use	Use occurring on each day in the past six months, based on a maximum of 180 days.
Diverted/Diversion	Selling, trading, giving or sharing of one's medication to another person, including through voluntary, involuntary and accidental means.
Eightball	3.5 grams.
Halfweight	0.5 grams.
Illicit	Illicit obtainment 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. The definition does not distinguish between the inappropriate use of licitly obtained pharmaceuticals, such as the injection of methadone syrup or benzodiazepines, and appropriate use.
Licit	Licit obtainment of pharmaceuticals 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.
Point	0.1 grams.
Recent injection	Injection (typically intravenous) on at least one occasion in the last six months.
Recent use	Use in the last six months via one or more of the following routes of administration: injecting, smoking, snorting and/or swallowing.
Session	Period of continuous use.

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

Demographic characteristics of IDRS participants

Demographic characteristics for the 2015 Illicit Drug Reporting System (IDRS) in South Australia (SA) were similar to previous years. Sixty-six percent of the sample were male, over four-fifths (81%) were unemployed and 46% had a history of previous imprisonment. The median number of years spent at school was 10, with over half (57%) reporting post-secondary qualification (primarily a trade or technical qualification). Thirty-one percent of the sample was currently in treatment for drug use, most commonly pharmacotherapy. There were no significant changes in the demographic characteristics of the IDRS sample from 2014 to 2015.

Patterns of drug use

The median age of first injection among the IDRS sample was 18 years. The first drug ever injected by participants was methamphetamine (66%), and heroin (28%). Methamphetamine remained the preferred drug of choice among participants and the drug injected most often in the last month.

Polydrug use was common among participants in 2015, a consistent finding from all years of the IDRS. There were significant increases in the lifetime use of fentanyl and 'any' (licit or illicit) morphine, and a significant decrease was observed for lifetime use of illicit alprazolam. In regards to recent use, there was a significant increase in the recent use of homebake, inhalants and fentanyl, and a significant decrease in the use of illicit pharmaceutical stimulants.

Heroin

In 2015, just under half (49%) of the sample reported recent use of heroin on a median of 72 days (108 days in 2014). Daily heroin use remained relatively stable at 30% (of recent heroin users). White powder or rock continued to be the most common form of heroin used by participants in the six months prior to interview.

The median price paid for heroin at last purchase remained stable in 2015, at \$200 for a half weight and \$50 for a cap. Forty-three percent of participants able to comment reported that heroin purity was low, with over two-fifths (42%) reporting that purity had remained stable over the preceding six months. Availability seemingly was easy (37%) and very easy (49%), and this had reportedly remained stable over the preceding six months.

Data from the SA Alcohol and Drug Information Service (ADIS) revealed that telephone calls relating to any opioid substance decreased in the 2014/15 financial year. In contrast, data from Drug & Alcohol Services SA (DASSA) revealed a slight increase in the proportion of clients nominating heroin as their primary drug of concern from 7.0% in 2013/2014 to 8.5% in 2014/2015.

Methamphetamine

In 2015, over three-quarters of participants (76%) had used some form of methamphetamine in the six months preceding interview (75% in 2014). Considered separately, the most commonly used form of methamphetamine was crystal methamphetamine (70%), followed by speed (32%), base (26%) and then liquid amphetamine (5%). The frequency of use for powder methamphetamine remained stable on a median of 12 days in 2015 (12 days in 2014). Base was used on a median of 12 days (24 days in 2014), and crystal methamphetamine was used on a median of 45 days (24 days in 2014). Injecting remained the main route of administration for all forms of methamphetamine.

In 2015, the median price paid for base and crystal methamphetamine was \$100 for a point, whereas one point of methamphetamine powder was \$50. Few participants were able to comment on the current price for a gram of methamphetamine. The majority of participants able to answer reported that the price of methamphetamine had remained stable over the preceding six months.

Reports regarding the current purity of the three main forms of methamphetamine were mixed. The purity of base methamphetamine, as perceived by participants, was largely reported as high (45%), although almost equal proportions of the remaining participants reported it as medium (20%) or fluctuating (25%), with 10% reporting it as being of low purity. Similarly, the purity of methamphetamine powder was largely reported as medium (53%), with the remaining participants reporting it as high and low, (23% respectively). In regards to crystal methamphetamine, purity was perceived as high (57%), with one-quarter reporting that the purity was medium. Purity had largely remained stable for all three forms of methamphetamine in the preceding six months and all forms were considered easy or very easy to obtain in 2015. Availability had reportedly remained stable over the preceding six months.

The number of methamphetamine-related calls received by ADIS in SA increased slightly in 2015. Similarly, the proportion of DASSA clients nominating amphetamines as their primary drug of concern also increased somewhat, from 18.5% in 2013/2014 to 21.1% in 2014/2015, as did the number of clients admitted to DASSA inpatient (detox) services with amphetamine as the primary drug of concern, which rose from 119 clients in 2013/2014 to 215 in 2014/2015.

Cocaine

Cocaine use remained low and infrequent in SA with 13 participants reporting that they had used cocaine on a median of one day within the preceding six months. Eight of these recent users had injected cocaine within the preceding six months. The form most commonly used was powder (n=9), followed by rock (n=4). No participants reported using 'crack' cocaine.

In 2015, the median price paid by participants was \$400 for a gram of cocaine, though this should be interpreted with caution due to the small number of participants commenting. The majority of those who responded believed the purity of cocaine to be medium to high, and this had generally remained stable in the preceding six months. There were varying reports of cocaine availability, with three participants reporting it to be very easy, three participants believing it to be easy, and another three participants believing it to be difficult to obtain.

Cannabis

Cannabis, though generally not the drug of choice among participants, was used by just under three-quarters (74%) of the sample in the six months prior to interview – this remained stable from 2014 (75%). Frequency of use occurred on a median of 90 days in a six month period, and 36% reported daily use (46% in 2014). The majority of cannabis users reported that hydro was the form they had used most in the preceding months but bush cannabis was also commonly used.

In 2015, the price last paid for a bag of both hydro and bush remained stable at \$25, as it has done for many years. There were mixed reports regarding the potency of hydro versus bush cannabis; most of those who were able to comment perceived the potency of hydro to be high and those commenting on bush perceived the potency to be medium. These reports had remained stable in the six months preceding interview. Both hydro and bush cannabis were considered easy or very easy to obtain, and the availability had remained stable.

The number of calls to ADIS concerning cannabis remained stable in 2015, though the proportion of DASSA clients who nominated cannabis as their primary drug of concern decreased slightly from 13.3% in 2013/2014 to 11.6% in 2014/2015.

Opioids

In 2015, 64% of people who inject drugs (PWID) reported recent use of some type of illicit opioid, excluding heroin. Twenty percent of participants reported they had used illicit morphine in the six months prior to interview on a median of 10 days (range: 1–180). According to participant comments, the price of illicit morphine appeared to remain stable in 2015. Due to small numbers, no real comparison can be made with 2014 data. The largest proportion of participants (35%) reported that the availability of illicit morphine was difficult (48% in 2014). As in previous years, the majority of morphine users reported use by injecting and they had mainly used illicit supplies of Kapanol[®] and MS Contin[®].

The recent use of illicit oxycodone also remained stable in 2015. More specifically, 25 participants reported recent use of illicit oxycodone on a median of six days (range: 1–72) in the six months prior to interview. The main brands of illicit oxycodone used in the six months preceding interview were OxyContin[®] (60%), followed by Endone[®] (28%).

Similarly, the recent use of illicit methadone syrup remained stable in 2015 at 7% (9% in 2014), as did the frequency of use. Six participants reported the recent use of illicit Physeptone[®] tablets on a median of five and a half days in the last six months (range: 2–12). A quarter (25%) of PWID reported recent use of ‘any’ (licit and illicit) methadone (22% in 2014).

Compared to 2014, the number of participants reporting recent use of illicit buprenorphine, Suboxone[®] tablets and over the counter codeine remained relatively stable. Fifteen percent reported use of illicit Suboxone[®] film in 2015 (8% in 2014).

Other drugs

Tobacco use remains highly prevalent among PWID, with 89% of the sample reporting that they had consumed tobacco on a median of 180 days in the six months preceding interview (range: 20–180). More specifically, 96% of PWID who had recently used tobacco reported daily use of tobacco. About two thirds (67%) of the sample reported alcohol use on a median of 24 days in the past six months (range: 1–180). Seven participants reported daily use of alcohol. Alcohol and tobacco use remained stable from 2014.

Twelve percent of IDRS participants had used ecstasy and 9% had used some type of hallucinogen in the six months prior to interview, with both recent use and frequency of use remaining stable compared to 2014.

In 2015, thirty-six percent of PWID reported recent use of any illicit benzodiazepines, (37% in 2014).

The recent use of illicit pharmaceutical stimulants remained low in 2015, with only five participants reporting use over the preceding six months.

Seven participants reported recently using illicit Seroquel[®], compared to four participants in 2014, and they had done so on a median of six days within the six months preceding interview (range: 1–72).

Health-related issues

Ten participants reported overdosing on heroin in the previous 12 months (n=5 in 2014) and six participants had accidentally overdosed on another drug within the preceding 12 months. Thirty-one percent of the IDRS sample reported being in treatment at the time of interview, and they had been in treatment for a median of 30 months. The predominant form of treatment was maintenance pharmacotherapy treatment.

In 2015, IDRS participants were asked questions from the Severity of Dependence Scale (SDS) for the use of stimulants and opioids. Of those who recently used a stimulant drug (mainly methamphetamine) and commented, the median SDS score was three, with 47% scoring four or above indicative of methamphetamine dependence. Of those who recently used an opioid drug and commented, the median SDS score was six, with 56% scoring five or above, an indication of opioid dependence.

In 2015, 51% of participants reported experiencing a mental health problem (other than drug dependence) in the six months preceding interview. This was a significant increase from 2014 (30%). Among those who had experienced a mental health disorder, depression and anxiety continued to be the most commonly reported problems. Sixty-nine percent of those who had experienced a mental health problem reported that they had sought professional help for such problems.

Using the Kessler Psychological Distress Scale (K10) (Kessler and Mroczek 1994), just under half of the SA sample (49%) were at a high or very high risk of psychological distress. This was stable from 2014, and continues to be much higher than the population norms.

For the fifth year running, participants of the IDRS have been asked the AUDIT-C as a valid measure of identifying heavy drinking. In 2015, among those who drank alcohol recently, the mean score on the AUDIT-C was 4.7. Almost half (46%) of males and 35% of females scored five or more on the AUDIT-C indicating the need for further assessment of drinking behaviour.

In 2015, IDRS participants were also asked a series of questions about take-home naloxone and naloxone more generally. Three quarters of the sample had heard of naloxone, and among these participants, almost two-thirds (61%) reported that naloxone was used to 'reverse heroin'; while 32% believed that it was used to 're-establish consciousness'. In addition, among those who responded, 39% reported that they had heard of the take-home naloxone program. Five participants reported that they had been resuscitated with naloxone by somebody who had been trained through the take-home naloxone program, and seven participants had completed training in naloxone administration. All of those who commented who had not completed training in naloxone administration had reported that if trained they would stay with someone after giving them naloxone and 94% would want their peers to give them naloxone if they overdosed.

Risk behaviours

The number of participants who reported 'borrowing' needles remained low and stable in 2015 (n=2), as did the number of participants who had lent a used needle to someone else (n=7). The proportion of participants who had shared injecting equipment (other than needles) was 30% (18% in 2014). Spoons/mixing containers and tourniquets were the most commonly shared items. Re-use of one's own needles (27%) had declined significantly in 2015 (43% in 2014).

In 2015, 62% of the sample reported experiencing at least one type of injecting-related health problem in the month prior to interview (50% in 2014). By far the most commonly

experienced problem was prominent scarring/bruising around the injection site (65%), followed by difficulty injecting (58%).

Law enforcement

The prevalence of self-reported criminal activity in the month preceding interview remained stable in 2015 (28%), as did the prevalence of past year arrest (25%). Drug dealing and property crime remained the most commonly committed crimes. Furthermore, the proportion of participants who reported a prison history also remained stable in 2015.

In 2015, the median expenditure on illicit drugs the day before interview remained stable at \$100.

Special topics of interest

Hepatitis C

The majority of the sample (91%) had been tested for HCV antibodies (anti-HCV) in their lifetime with 55% reporting a positive result. The majority of PWID reported that the antibody test had been ordered by their regular GP (53%). Sixty-three percent of PWID who commented reported a PCR test to determine whether the virus was active, and 42% had reported that the PCR test has been ordered by their regular GP. Thirty-three percent of those who commented remember discussing the impact of dietary choices on HCV with a health professional, and 26% had discussed the long term effects of HCV. Judging by the perceptions of HCV that participants provided, most participants had a moderately good understanding of the virus.

Oxycodone

In 2015, participants were asked about their use of the original OxyContin[®], in addition to the Reformulated OxyContin[®]. Of the ninety-nine respondents, 58% reported ever using licit or illicit oxycodone. Of the 57 participants who reported recent use, the majority (n=40) reported using the Reformulated Oxycodone tablets, either licit or illicit. Over one tenth reported recently using the Original Oxycodone tablets (n=11).

Blood donations

Of the ninety-one participants who commented, 18% reported that they had given blood in their lifetime. Of those that had given blood seven participants reported that they had commenced injecting drug use before donating blood.

Implications

The findings from the 2015 SA IDRS have policy and research implications. Several of these issues may have already received attention and/or may be in the process of further investigation.

- Methamphetamine continued to be the most commonly used illicit drug among PWID, as well as the drug injected most often in the past month. Indeed, methamphetamine seems to be retaining favour among PWID in SA, with methamphetamine overtaking heroin as the preferred drug of choice for the third year running. Given the negative health effects that are associated with prolonged methamphetamine use, it is essential that education and harm reduction strategies continue to be disseminated among this population; and that existing treatment services are accessible, and appropriate for those who are dependent on methamphetamine or require assistance.
- The proportion of participants who had borrowed or lent needles and syringes in the past month remained low and stable in 2015, though the sharing of other injecting equipment (such as mixing containers and filters) was much more

common. Re-use of one's own needles and equipment also remained common practice, as did past month experience of injection-related problems. As such, it is imperative that information regarding safe injection practices continue to be disseminated.

- Tobacco use remains alarmingly high among PWID, with 96% of the sample reporting that they were smoking daily and 89% reporting any use in the six months preceding interview. This is in stark contrast to the general community, where the prevalence of smoking has been steadily decreasing. Interventions targeted specifically towards this group are required.
- Participants of the SA IDRS continue to have poorer mental and physical health than the general population. Services and strategies to cater for those with substance use and mental health problems continue to be developed and implemented.

1 INTRODUCTION

The Illicit Drug Reporting System (IDRS) was trialled in 1997 under the auspices of the National Drug and Alcohol Research Centre (NDARC) to examine drug trends in three Australian jurisdictions. This work was commissioned and supported by the Australian Government Department of Health. The trial consisted of conducting the complete IDRS in New South Wales (NSW), Victoria (VIC) and South Australia (SA) (see Hando, Darke et al. (1998) for a national comparison; and Cormack, Faulkner et al. (1998) for the SA findings). The 'core' IDRS incorporated a triangulated approach to data collection on drug trends, and consisted of a survey of injecting drug users, a semi-structured survey of key experts (KE), who had regular contact with injecting drug users, and secondary data sources or indicators relevant to drug use.

The IDRS process was repeated in 1998 in the same three jurisdictions, and in 1999 all states and territories were involved. For a review of the history and progression of the IDRS nationally up to 2000, see Darke (2000). Two thousand and fifteen marks the 19th year in which the IDRS has been conducted in SA, and the 17th year it has included all states and territories (see Stafford and Breen (2016) for a national comparison of the 2015 findings).

The IDRS provides a co-ordinated and ongoing monitoring system predominantly focusing on heroin, methamphetamine, cocaine and cannabis. The IDRS is a sensitive and timely indicator of drug trends both nationally and by jurisdiction. As well as drug trends, the findings highlight areas where further research is required, or where changes may need to be made in terms of education, health promotion, treatment services and policy. The IDRS provides direction for more detailed data collection on specific issues such as those listed above.

The 2015 *South Australian Drug Trends Report* summarises information collected by the SA component of the national IDRS. The information comes from three sources: a survey of people who inject drugs (PWID; the participants); Key Expert (KE) interviews with professionals working in the drug and alcohol or related fields; and existing and up-to-date data indicators relating to drugs and drug use. The three sources complement each other, each having its own strengths and weaknesses. It should be noted that PWID participants are recruited as a sentinel group that are active in illicit drug markets. The information from the IDRS survey is not representative of illicit drug use in the general population, nor is it indicative of all illicit drug use or of all people who inject drugs, but identifies emerging trends that require further monitoring. The results are summarised by drug type in tables designed to provide the reader with a 'snapshot' overview of drug trends in SA.

1.1 Study aims

The aim of the SA component of the 2015 IDRS is to provide information on drug trends in SA (specifically the Adelaide metropolitan area), particularly focusing on the 12 months between mid-2014 and mid-2015.

2 METHOD

A triangulated approach was utilised for this study, with information on drug trends coming from three primary sources. This approach is based on a procedure outlined by Hando, Darke et al. (1998). The three sources were as follows:

- a survey of a sample of current regular illicit drug users who use injection as a route of administration and who represent a population likely to be aware of trends in illicit drug markets;
- a semi-structured survey of KE who work in the drug and alcohol area, or some related field, and who have regular contact with or knowledge of people who use drugs by injection; and
- an examination of existing and current indicators (other indicators) relating to drugs, drug use and drug-related issues.

2.1 Participants

The sample consisted of people who had regularly used illicit drugs and used injection as a route of administration (N=102) in the six months prior to interview. Participants were recruited through Clean Needle Program (CNP) sites across Adelaide. Clients of the service were invited to participate by a study flyer, displayed at CNP sites, or were recruited on site. Informed consent was sought and gained from all participants, who were interviewed individually. Ethics approval was also granted prior to commencement of the study.

2.2 Procedure

Participants were interviewed in mid-2015. Criteria for entry into the study were having injected drugs at least once a month in the previous six months, being over 18 years of age and living (not incarcerated) in the Adelaide metropolitan area for at least the 12 months prior to interview.

In order to be consistent with the IDRS data collection procedures in other jurisdictions, trained research interviewers conduct the interviews with participants. In 2015, four research interviewers with a sound working knowledge of issues related to illicit and injecting drug use were trained on administration of the survey instrument. The purpose and content of the survey was fully explained, and informed consent was obtained from participants prior to the interviews being conducted. Interviews were conducted at a time convenient to the participant and generally in a room provided by the agency associated with the CNP or at an agreed location nearby. Participants were compensated \$40 for their time and travel.

The structured interview was based on previous research conducted at NDARC (Darke, Hall et al. 1992; Darke 1994). The survey consists of sections designed to collect information including participant demographic details; lifetime and recent drug use; knowledge of price, purity and availability of drugs (e.g., heroin, methamphetamine, cocaine, cannabis, morphine and methadone); criminal behaviour patterns; engagement in risk-taking behaviours; health-related issues; and general trends in drug use. In general, participants were asked to consider changes on the above parameters over the six to 12 months prior to interview (mid-2014 to mid-2015).

2.3 Survey of KE

The KE interview was semi-structured and took approximately 30 minutes to administer via telephone. The instrument used was based on previous research conducted at NDARC for the World Health Organization (WHO) (Hando and Flaherty 1993) and included sections on

demographics, drug use patterns, drug price, purity and availability, criminal behaviour, police activity and health issues. In general, KE were asked to consider changes on the above parameters over the six to 12 months prior to interview (mid-2014 to mid-2015). The responses to the semi-structured interview were transcribed and analysed for content and trends. Information gained from these interviews was largely qualitative in nature.

Entry criteria for the KE were at least weekly contact with illicit drug users in the previous six months, or contact with 10 or more illicit drug users in the previous six months, or specialist knowledge of drug markets in SA. All KE were paid or volunteer workers in drug treatment agencies, other health and community services, drug user advocacy groups, South Australia Police (SAPOL), or research organisations. KE were recruited based on their participation in previous IDRS surveys, and on recommendations made by existing KE and colleagues. Potential KE were contacted via telephone, and/or email and assessed for suitability according to the criteria. A mutually convenient time was made via the telephone. Informed consent was sought and gained from all KE, who were interviewed individually.

In 2015, 16 KE were interviewed from June to October 2015. The majority of KE worked in the health sector, including in drug diversion, community drug and alcohol work, drug treatment services, mental health services, health promotion/information and emergency treatment. There were five KE from the law enforcement sector.

2.4 Other indicators

To complement and validate data collected from the participants and KE surveys, a range of secondary data sources was utilised including population surveys and other health and law enforcement data. The pilot study for the IDRS (Hando, O'Brien et al. 1997) recommended that secondary indicator data should:

- Be available at least annually;
- Include 50 or more cases;
- Provide brief details of illicit drug use;
- Be located in the main study site (Adelaide or SA for the present study); and
- Include details of the four main illicit drugs under investigation.

Data sources that fulfilled the above criteria and were included in the report were:

- Telephone advisory data provided by the Alcohol and Drug Information Service (ADIS) of South Australia;
- Australian Needle and Syringe Program (NSP) survey data;
- Admissions data from Drug and Alcohol Services South Australia (DASSA);
- Drug-related attendances to the Royal Adelaide Hospital (RAH) Emergency Department;
- State-wide and national rates of amphetamine, cocaine and opioid-related fatalities provided by the Australian Bureau of Statistics (ABS);
- Purity of drug seizures made by South Australia Police (SAPOL) and the Australian Federal Police (AFP) provided by the Australian Crime Commission (ACC);
- Data on consumer and provider arrests by drug type provided by the ACC;
- Drug-related hospital admissions data (state and national) provided by the Australian Institute of Health and Welfare (AIHW); and
- National Notifiable Diseases Surveillance System (NNDSS) data, from the Australian Government Department of Health.

2.5 Data analysis

Statistical analyses (descriptive and inferential) were performed using the Statistical Package for the Social Sciences (SPSS) for Windows, Version 22.0. Continuous, normally distributed variables were analysed using *t*-tests and means reported. Where continuous variables were skewed, medians were reported and the Mann-Whitney *U*-test, a non-parametric analogue of the *t*-test (Siegel and Castellan 1988) was employed. 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).

2.6 Notes

2.6.1 Methamphetamine

Prior to 2001, IDRS reports used the overarching term 'amphetamines' to refer to both amphetamine and methamphetamine. Amphetamine is used to denote the sulphate of amphetamine, which throughout the 1980s was the form of illicit amphetamine most available in Australia (Chesher 1993). Chemically, amphetamine and methamphetamine differ in molecular structure but are closely related. In Australia today, the powder traditionally known as 'speed' is almost exclusively methamphetamine rather than amphetamine. The more potent forms of this family of drugs – known by terms such as ice/crystal, shabu, crystal meth, base and paste – had been identified as becoming more widely available and used in all jurisdictions in the early years of the IDRS (Topp and Churchill 2002). These forms are also methamphetamine. Therefore, the term 'methamphetamine' was used from 2001 onward to refer to the drugs available that were previously termed 'amphetamines'. The terms are used interchangeably within this report unless specifically noted within the text. For a further discussion of this issue, see White, Breen et al. (2003).

2.6.2 Price, purity and availability

It should be noted that the price, purity and availability sections of the participant survey were not restricted to users of the particular drug but to those who felt confident of their knowledge of these parameters of the market. In addition, participants may answer any or all price, purity and availability sections, thereby the sample sizes (n) per section may fluctuate for any given drug. In addition, people who answered 'don't know' to the initial question for each of the price, purity and availability sections were eliminated from the sample for these sections to increase the validity of remaining categories. The sample sizes are therefore reported in each table. Furthermore, within the text of these sections, findings may also be expressed as a percentage of the entire sample to highlight the fact that the proportion answering was not equivalent to the whole IDRS participant sample. Care should be taken in interpreting category percentages that may be associated with small sample sizes.

3 DEMOGRAPHICS

Key Findings

- The median age of the 2015 sample was 45 years.
- Two thirds of the sample was male (66%, 59% in 2014), and over four fifths (81%) were unemployed (80% in 2014).
- Just under half of the sample (46%) reported a previous history of imprisonment (51% in 2014).
- Almost half of the sample (48%) had completed Year 11 and/or 12 (27% in 2014). Forty-three percent of the sample had no tertiary qualifications, 46% had a trade/technical qualification and 11% had a university education.
- Just under one third of the sample (31%) reported being in current drug treatment, primarily opioid substitution treatment (27% in 2014).
- The majority of the sample (91%) received a government allowance/pension (93% in 2014), with 88% of the sample reporting it to be their main source of income.
- Just under three quarters of the sample (72%) lived in rental accommodation.

3.1 Overview of the IDRS participant sample

The demographic characteristics of the 102 participants interviewed in 2015 are summarised in Table 1. There was some overlap of the 2015 participant sample with previous years' samples, with 35% reporting that they had participated in the IDRS previously. More specifically, 51% percent of the sample stated that they had participated in the 2014 IDRS; 31% in 2013; 20% in 2012; 9% in 2011; 3% 2010, 2009 and 2008; 6% in 2005 and 2004; 3% in 2000 and 3% in 1995 (participants could nominate more than one year). Two participants reported that they could not remember if they had participated in the IDRS previously.

The median age of the sample remained stable in 2015 at 45 years (range: 20–62). Two thirds of the sample was male (66%), four-fifths (81%) were unemployed and 48% had a history of previous imprisonment. These figures are similar to participant reports in 2014. The median number of years spent at school was 10 (range: 8–12), with almost half of the sample (48%) reporting completion of years 11 and/or 12. Forty-three percent of the sample reported having no tertiary qualifications; this is slightly below what participants reported in 2014. Of those who did report having a tertiary qualification, most had completed a technical or trade qualification (46%), while 11% had completed a university qualification.

In 2015, just under one-third of the sample (31%) was in drug treatment at the time of the interview, with the majority of participants in maintenance pharmacotherapy treatment. More specifically, 17% reported being on a methadone program (15% in 2014) and 9% reported being on a buprenorphine program, including those receiving Suboxone[®] treatment (8% in 2014). One participant was receiving drug and alcohol counselling at the time of interview, and one was undergoing detoxification. Four participants did not specify what treatment they were receiving.

In regards to income, the majority of participants (88%) reported some form of government pension, allowance or benefit as their main source of income in the month prior to interview; (93% in 2014). The remaining participants reported that their main source of income was a wage (8%) or criminal activity (2%). Two participants did not specify their main source of income in the month prior to interview.

The majority of the participant sample resided in rental accommodation (72%). A further 10% of the sample reported residing in their own house/flat, followed by living at their family/parent's home (7%). Seven participants did not specify their type of accommodation, four participants reported having no fixed address/homeless, and one participant reported living in a boarding house/hostel.

Just under half of the sample (49%) was single at the time of interview, one-quarter were married or in a de facto relationship (26%), 15% had a regular partner and 5% were separated. Four participants reported being divorced, and one participant was a widow.

In summary, compared to 2014, the 2015 sample characteristics remained relatively stable.

Table 1: Demographic characteristics of IDRS sample, 2011–2015

Characteristic	2011	2012	2013	2014	2015
	(N=100)	(N=93)	(N=100)	(N=106)	(N=102)
Age (median in years)	39	39	42	43	45
Range	(21-57)	(22-58)	(22-62)	(24-60)	(20-62)
Sex (% male)	59	59	56	59	66
Sexual Identity (%)					
Heterosexual	83	85	90	92	91
Gay male	4	1	2	0	1
Lesbian	0	4	1	0	3
Bisexual	12	9	6	8	5
Other	1	1	1	1	0
English speaking (%)	96	97	94	96	96
A&TSI (%)	10	11	9	9	14
Employment (%)					
Not employed	67	61	75	80	81
Full time	7	4	5	3	5
Part time/casual	15	13	6	5	6
Full time student	0	2	0	1	0
Both studying and employed	2	1	1	0	1
Home duties	5	15	9	9	0
Other	4	3	3	3	6
Median income per week (\$)	368	365	363	393	383
School education (median in years)	11	11	10	10	10
Range	(7-12)	(4-12)	(3-12)	(7-12)	(8-12)
Tertiary education (%)					
None	42	40	43	48	43
Trade/technical	39	41	50	46	46
University/college	19	19	7	6	11
Prison history (%)	48	50	52	51	46
Current drug treatment (%)*	40	32	31	27	31

Source: IDRS participant interviews.

*Includes all types of pharmacotherapy treatment and drug counselling, detoxification, therapeutic community and narcotics anonymous.

4. CONSUMPTION PATTERNS

Key Findings

- The median age of first injection was 18 years.
- The majority of participants reported that methamphetamine was the first drug injected.
- Methamphetamine remained the preferred drug of choice among participants.
- Methamphetamine was the drug injected most often in the last month and the most recent drug injected.
- Polydrug use over the last six months was common among the sample.
- In 2015, there were significant increases in the lifetime use of fentanyl and (licit or illicit) morphine. A significant decrease was noted for the use of illicit alprazolam.
- There was a significant increase in the recent use of homebake, inhalants and fentanyl, and a significant decrease in the recent use of illicit pharmaceutical stimulants.

4.1 Lifetime and current drug use

Patterns of lifetime (i.e. ever having used a drug) and recent (last six months) use of all drugs monitored in the IDRS are shown in Table 5. Routes of administration (ROA), including injecting, swallowing, snorting and smoking/inhaling are also provided.

As shown in Table 2, the median age of first injection by the participant sample was 18 years (range: 10–47). The drug most commonly first injected by the sample was methamphetamine (66%), followed by heroin (28%). When first injection of methamphetamine is examined according to type, methamphetamine powder (57%) is the most commonly first injected drug, with smaller numbers reporting first injection of methamphetamine base (3%) and crystal methamphetamine (6%).

Table 2: Injecting drug history, 2014-2015

	2014 (N=106)	2015 (N=102)
Median age first injected in years (range)	19 (12-45)	18 (10-47)
Mean age first injected	21	21
First drug injected (%)		
Heroin	23	28
Methamphetamine*	68	66
Cocaine	2	1
Morphine	4	3
Methadone	2	0
Buprenorphine**	1	0
Other	1	1

Source: IDRS participant interviews.

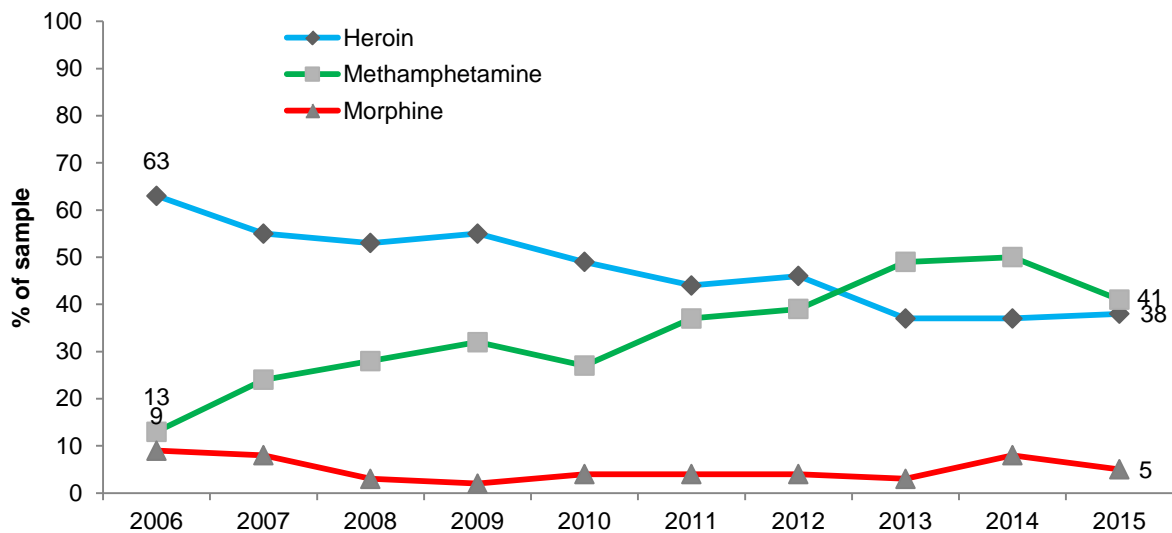
*Collapsed categories: powder, base and crystal forms.

** Excludes buprenorphine-naloxone (Suboxone®).

4.1.1 Drug of choice

In 2014, methamphetamine overtook heroin as the preferred drug of choice among PWID and this continued in 2015. Methamphetamine remained the drug of choice for 41% of PWID in 2015 (50% in 2014). Looking at Figure 1, it can be seen that this follows the long-term trends that have been observed from 2006 onwards. Since 2006 there has been a downward trend in the proportion of PWID who nominated heroin as their drug of choice and an upward trend in those nominating methamphetamine as their drug of choice.

Figure 1: Trend for drug of choice, 2006–2015



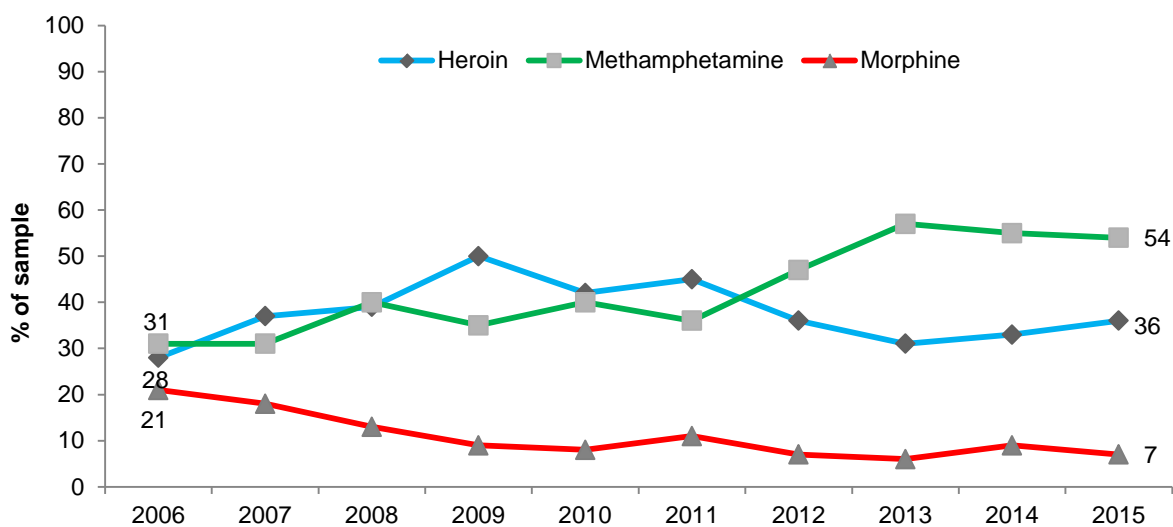
Source: IDRS Participant interviews.

4.1.2 Drug last injected and injected most often in the last month

Over half of the sample (54%) reported that methamphetamine was the drug most frequently injected in the month preceding interview and just over one-third (36%) reported heroin as the drug most injected in the last month (see Figure 2). This remained stable from 2014.

Similarly, 55% of PWID reported that methamphetamine was the drug they had injected most recently and 35% reported that heroin was the last drug injected (see Table 3). Again, this remained stable from 2014.

Figure 2: Trend for drug injected most in last month, 2006–2015



Source: IDRS participant interviews.

Table 3: Injecting drug preferences, 2014–2015

	2014 (N=106)	2015 (N=102)
Drug injected most often in last month (%)		
Heroin	33	36
Methamphetamine#	55	54
Cocaine	0	0
Morphine	9	7
Methadone	3	1
Buprenorphine**	0	1
Oxycodone	1	0
Other	0	1
Most recent drug injected (%)		
Heroin	34	35
Methamphetamine#	55	55
Morphine	9	7
Methadone	1	1
Buprenorphine**	0	1
Oxycodone	0	0
Other	1	1
Frequency of injecting in last month (%)		
Weekly or less	14	29
More than weekly but less than daily	54	40
Once a day	17	18
2-3 times a day	11	13
>3 times a day	3	0

Source: IDRS participant interviews.

Collapsed categories: powder, base and crystal forms.

** Includes buprenorphine (Subutex[®]) and buprenorphine-naloxone (Suboxone[®]).

Frequency of injecting any drug in the last month was greater than weekly for 71% of the sample, with 31% reporting they had injected at least once a day during that period.

Table 4: Polydrug use, 2014–2015

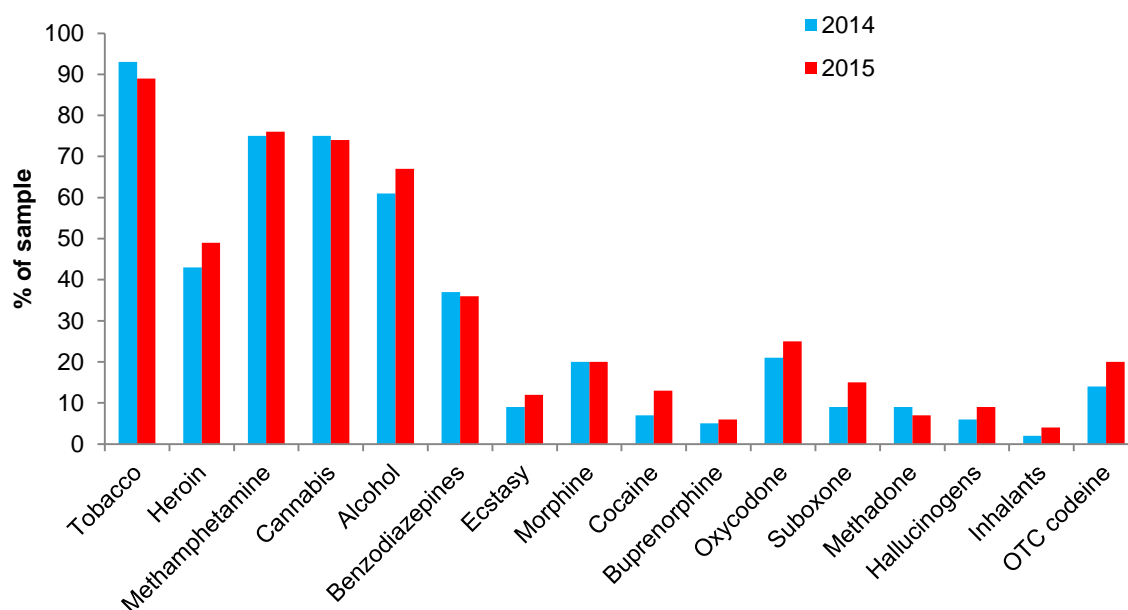
Polydrug use (median)	2014 (N=106)	2015 (N=102)
Number of drug classes ever used	11 (3-22)	14 (3-24)
Number of drug classes used in last 6 months	5 (1-16)	6 (2-15)

Source: IDRS participant interviews.

Polydrug use was common in 2015, and has remained consistently so across the years. In 2015, participants were asked about their history of use of 25 separate substances. Only illicit use of a drug was analysed. The total number of possible injected drug types was 20¹. In 2015, participants reported use of a median of 14 (range: 3–24) drug types across their lifetime and a median of six (range: 2–15) during the six months prior to interview; this was stable from 2014 (see Table 4).

The drugs most commonly used among the participants in the last six months were tobacco, ‘any’ methamphetamine, cannabis, alcohol and heroin (see Figure 3). This order remained stable from 2014.

Figure 3: Recent drug use, percentage of the participants to have used each substance type in the last six months, 2014–2015



Source: IDRS participant interviews.

Note: use of pharmaceutical drugs (e.g. of methadone, morphine etc.) relates to illicit use.

In 2015, there were a number of significant changes in the lifetime and recent use of certain drugs. In regards to lifetime use, there were significant increase in the use of fentanyl ($p < 0.01$; 95% CI: -0.27 - -0.07), and any (licit or illicit) morphine ($p < 0.05$; 95% CI: -0.28 - -0.03). There was a significant decrease in the use of illicit alprazolam ($p < 0.05$; 95% CI: 0.02 - 0.28).

In regards to recent use, there was a significant increase in the use of homebake ($p < 0.01$; 95% CI: -0.41 - -0.09), inhalants ($p < 0.05$; 95% CI: -0.29 - -0.02) and fentanyl ($p < 0.000$; 95% CI: -0.42 - -0.09). A significant decrease was found for recent use of illicit pharmaceutical stimulants ($p < 0.05$; 95% CI: -0.36 - -0.03). A more detailed history of participants’ drug use can be found in Table 5.

¹ Drug types were heroin, illicit morphine, illicit methadone (including physeptone), illicit buprenorphine, homebake, other opioids, illicit oxycodone, amphetamines (powder, base, crystal and liquid), illicit pharmaceutical stimulants, cocaine, hallucinogens, ecstasy, OTC codeine, seroquel®, alcohol, illicit benzodiazepines, illicit Suboxone®, steroids, fentanyl and NPS.

Table 5: Drug use history and routes of administration of the sample, 2015 (% of total sample; N=102)

<i>Drug class</i>	Ever used %	Ever inject %	Use last 6 mths %	Inject last 6 mths %	Smoke last 6 mths%	Snort last 6 mths %	Swallow last 6 mths %	Days used in last 6 mths ^{^*}	Days injected in last 6 mths [*]
Heroin	79	78	49	49	2	2	1	72	72
Homebake	31	30	10	10	0	1	2	4	9
Any heroin	79	78	49	49	2	2	2	72	72
Methadone – licit	42	21	16	4			15	180	72
Methadone – illicit	37	20	7	6			3	4	9
Physeptone – licit	8	6	1	1	0	0	1	180	96
Physeptone – illicit	23	15	6	5	0	0	4	6	6
Any methadone (inc. physeptone)	62	32	25	12	0	0	21	180	19
Buprenorphine – licit	22	13	2	1	0	0	1	63	6
Buprenorphine – illicit	25	17	6	4	0	0	4	2	4
Any buprenorphine (exc. suboxone)	35	24	7	4	0	0	5	2	4
Suboxone tablet – licit	12	5	0	0	0	0	0	0	0
Suboxone tablet – illicit	15	11	0	0	0	0	0	0	0
Any suboxone tablet	23	13	0	0	0	0	0	0	0
Suboxone film – licit	20	8	12	5	2	0	12	156	4
Suboxone film – illicit	22	11	15	8	3	0	11	4	6
Any suboxone film	31	15	23	10	4	0	20	20	7
Any suboxone (inc. tablet and film)	39	20	23	10	4	0	20		
Oxycodone – licit	32	16	6	3	0	0	4	18	15
Oxycodone – illicit	54	40	25	15	2	0	15	6	10
Any oxycodone	62	43	28	16	2	0	17	12	12

Source: IDRS Participant interviews.

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

^{*} Among those who had used/injected.

[#] Includes buprenorphine (Subutex[®]) and buprenorphine-naloxone (Suboxone[®]).

Table 5: Drug use history and routes of administration of the sample, 2015 (% of total sample; N=102) (continued)

<i>Drug Class</i>	Ever used %	Ever inject %	Use last 6 mths %	Inject last 6 mths %	Smoke last 6 mths %	Snort last 6 mths %	Swallow last 6 mths %	Days used in last 6 mths ^{^*}	Days injected in last 6 mths ^{^*}
Morphine – licit	35	23	10	3	0	0	9	180	72
Morphine – illicit	51	46	20	13	1	1	8	10	14
Any morphine	71	57	26	13	1	1	15	47	50
Other opioids	76	5	40	3	0	0	38	10	1
OTC codeine	39	4	20	3	1	0	19	9	3
Methamphetamine powder (speed)	83	79	32	32	6	2	3	12	20
Methamphetamine base (paste/point/wax)	47	46	26	26	10	0	4	12	12
Crystalline methamphetamine (ice)	80	77	70	68	31	0	8	45	24
Amphetamine liquid	46	43	5	5			1	2	2
Any form methamphetamine[#]	90	89	76	74	31	2	11	48	48
Pharmaceutical stimulants – licit	10	3	1	0	0	0	1	48	0
Pharmaceutical stimulants – illicit	23	9	5	3	0	0	5	5	10
Any pharmaceutical stimulants	28	10	6	3	0	0	6	8	10
Cocaine	58	34	13	8	1	10	2	1	1
Hallucinogens	76	17	9	3	0	0	7	1	1
Ecstasy	66	27	12	3	0	1	9	2	1
Alprazolam – licit	18	5	6	1	0	0	5	17	3
Alprazolam – illicit	33	8	13	1	0	1	13	4	1
Any alprazolam	43	9	17	2	0	1	16		

Source: IDRS Participant interviews.

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

^{*} Among those who had used/injected.

[#] Category includes speed powder, base, ice/crystal and amphetamine liquid (oxblood), but does not include pharmaceutical stimulants.

Table 5: Drug use history and routes of administration of the sample, 2015 (% of total sample; N=102) (continued)

<i>Drug Class</i>	Ever used %	Ever inject %	Use last 6 mths %	Inject last 6 mths %	Smoke last 6 mths %	Snort last 6 mths %	Swallow last 6 mths %	Days used in last 6 mths ^{^*}	Days injected in last 6 mths [*]
Other benzodiazepines – licit (exc. alprazolam)	68	4	44	0	0	0	44	72	0
Other benzodiazepines – illicit (exc. alprazolam)	50	5	30	1	0	0	30	6	2
Any other benzodiazepines (exc. alprazolam)	77	7	54	1	0	0	54		
Any benzodiazepines (inc. alprazolam)	81	15	56	3	0	1	56	33	2
Seroquel – licit	15	0	9	0	0	0	9	150	0
Seroquel – illicit	21	0	7	0	0	0	7	6	0
Any seroquel	31	0	16	0	0	0	16	35	0
Alcohol	97	7	67	0			67	24	0
Cannabis	97		74		73		7	90	
Tobacco	97		89					180	
E-cigarettes	33		19					4	
Inhalants	28		4					8	
Steroids	4	2	2	0	0	0	2	100	0
Fentanyl	27	19	7	5	0	0	1	1	2
NPS	4	2	2	2	0	0	0	2	2
Synthetic cannabis	11		4		4	0	0	1	

Source: IDRS Participant interviews.

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

^{*}Among those who had used/injected.

4.2 Heroin use

Key Findings

- In 2015, almost half of the sample (49%) reported recent use of heroin (43% in 2014).
- Heroin was used on a median of 72 days within a six month period (108 days in 2014). Daily use remained stable (30%).
- Brown rock and white/off white powder were the most commonly used forms of heroin used by participants in 2015.

4.2.1 Heroin use among PWID

Forty-nine percent of the IDRS participants interviewed in 2015 had used heroin in the six months prior to interview (see Table 6). In addition, the proportion of PWID who nominated heroin as their drug of choice (38%), the drug injected most often in the past month (36%) and the last drug injected (35%) remained stable from 2014 (see Figure 4).

Heroin was used on a median of 72 days in the preceding six months (108 days in 2014). A sharp downward trend was observed which was last detected from 2011 to 2012 (see Figure 4). All recent heroin users reported injecting heroin within the preceding six months (100%), and the median number of injection days was 72 (range: 1–180). Among recent users of heroin, daily use remained relatively stable at 30%.

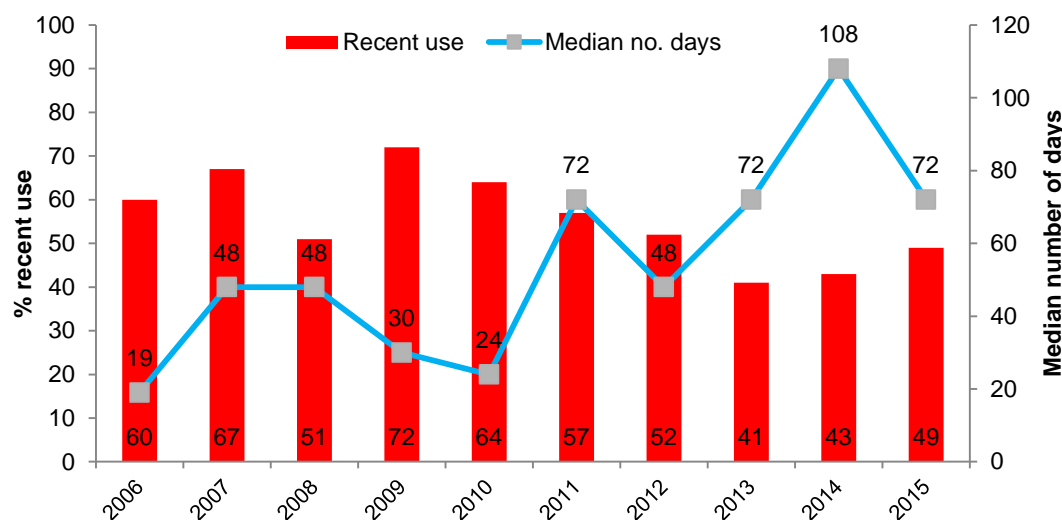
Table 6: Recent heroin use of IDRS participants, 2014–2015

	2014	2015
Recent use (%)	43	49
Median days of use*	108	72
Daily use * (%)	33	30

Source: IDRS participant interviews.

*Among those who had used. Maximum number of days, i.e. daily use, is 180. See page ix for guide to days of use/injection.

Figure 4: Heroin: recent use and median number of days used, 2006–2015



Source: IDRS participant interviews.

4.2.2 Forms of heroin used

As in previous years, participants were asked about the forms of heroin they had used over the preceding six months. Of the 50 participants who had recently used heroin, 74% (n=37) reported use of a white/off-white powder or rock form of heroin, and 70% (n=35) reported using a brown powder or rock. This was stable from 2014. The forms most used in the last six months varied from 2014, with 52% using mostly white/off-white powder or rock (67% in 2014) and 40% using brown powder or rock most often (30% in 2014). One participant reported homebake as the form most used in the preceding six months (see Table 7).

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, almost a third (31%) of participants reported that they had used homebake heroin at least once in their lifetime. Ten percent reported the use of homebake heroin in the six months preceding interview. All participants who reported recent use of homebake heroin had injected it. In 2015, homebake heroin was used for a median of 4 days (range: 1–180) in the preceding six months.

Table 7: Reports of heroin forms used in the last six months among those who had recently used heroin, 2014–2015

	2014	2015
Used last 6 months (%)	(n=46)	(n=50)
White/off-white powder or rock	80	74
Brown powder or rock	67	70
Form most used last 6 months	(n=46)	(n=50)
White powder or rock	67	52
Brown powder or rock	30	40
Homebake	2	2
Other colour	0	6

Source: IDRS participant interviews.

4.2.3 Heroin preparation method

Traditionally, Australia's heroin has originated from the Golden Triangle (Myanmar, Laos PDR and Thailand) (Ciccarone 2009) and 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 quite refined and water soluble. In contrast, heroin produced in the Golden Crescent region (Afghanistan and Pakistan) is rarely seen in Australia (Ciccarone 2009), and is usually brown in colour and less refined. Typically brown heroin is alkaline and therefore requires heating and often citric or ascorbic acid to make it water soluble for injection. It is also considered more amenable to smoking as a ROA.

It has been demonstrated that heroin colour is not a reliable determinant of geographic origin (Zerell, Ahrens et al. 2005). Therefore, while the following information provides an indication of the appearance of heroin used by participants of the IDRS, it is not possible to draw conclusions about its geographic origin, purity or the preparation method required for its injection based on these data alone. Further research into this area is required before firmer conclusions can be drawn.

Brown heroin was first identified in NSW in 2006. Participants in the IDRS first commented on the presence of brown heroin in the same year. From 2007, the issue was 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 2015, participants were again asked if they had used heat and/or acid to prepare heroin for injection on the last occasion of injection. Forty-six percent reported using heat on the last occasion of injecting (40% in 2014), and 12% reported using acid (2% in 2014) (see Table 8).

Participants were also asked to identify the colour of the heroin on the last occasion of injection where heat and/or acid had been used in preparation. Of those who reported using heat or acid on the last occasion, three quarters (75%) of respondents described the colour of heroin as brown/beige and the other quarter (25%) described it as white/off-white in colour.

Table 8: Preparation of heroin, 2014–2015

	2014	2015
Heated in the last injection (%)	(n=45)	(n=50)
	40	46
Acid in the last injection (%)	(n=44)	(n=50)
	2	12
Main colour	(n=19)	(n=24)
White	42	25
Brown	58	75
Other	0	0

Source: IDRS participant interviews.

KE Comments

- The majority of KE reported that though heroin is still available, it is not as extensive and prevalent as it once was.
- Some KE commented that heroin is used predominantly by the 'older' population, i.e. mid to late 30s and onwards.
- One KE noted that the problems with methamphetamine have overtaken the problems with heroin. Heroin overdoses are still occurring but they are not nearly as frequent as the behavioural disturbances associated with methamphetamine use.

4.3 Methamphetamine

Key Findings

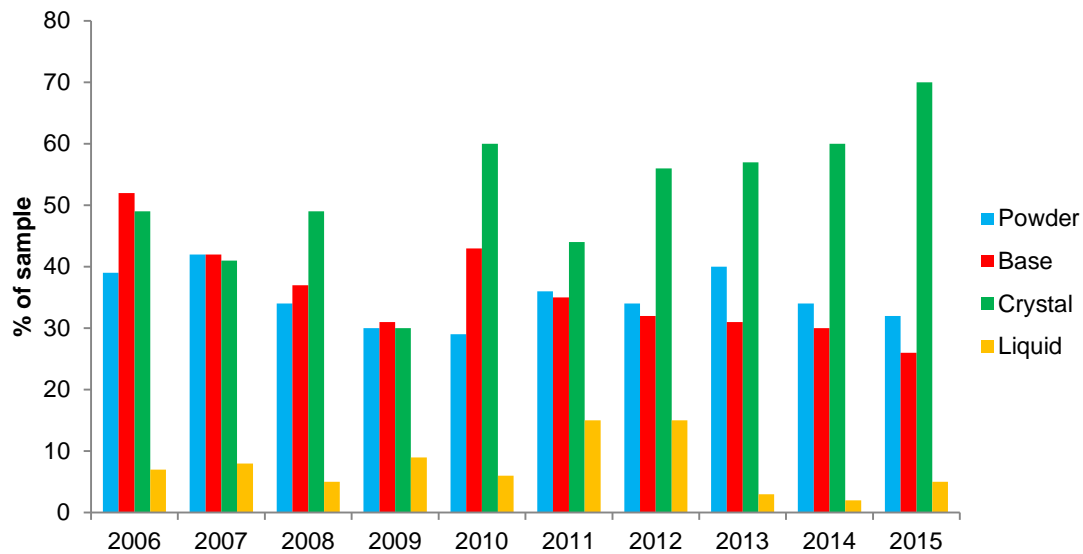
- The recent use of powder, base and liquid methamphetamine remained stable in 2015.
- Recent use of crystal methamphetamine was reported by 70% of the sample (60% in 2014).
- Powder methamphetamine was used on a median of 12 days in 2015 (12 days in 2014), as was base (24 days in 2014). Crystal methamphetamine was used on a median of 45 days (24 days in 2014).
- The majority of participants using all forms of methamphetamine reported having done so by injection in the six months prior to interview.
- Eight percent of recent users reported using methamphetamine on a daily basis.
- Minimal use of liquid amphetamine ('oxblood') was noted.

Data is collected for three different forms of methamphetamine: methamphetamine powder (referred to here as 'speed' or 'speed powder'); methamphetamine base ('base'); and crystal methamphetamine ('ice' or 'crystal'). 'Speed' can sometimes be used as a generic term for methamphetamine; however, here it refers only to the powder form. It is typically a fine-grained powder, generally white or off-white in colour, but may range from white through to beige or pink due to differences in the chemicals used to produce it. Base (which can also be known as 'pure', 'wax' or 'point') is the paste methamphetamine that is 'moist', 'oily' or 'waxy' and is often brownish in colour. It can be difficult to dissolve for injection due to its oily consistency. Crystal methamphetamine comes in crystalline form, in either translucent or white crystals (sometimes with a pink, green or blue hue) that vary in size. A fourth form, liquid amphetamine or 'oxblood', has also been identified, and is typically red/brown in colour. However, as it is used infrequently, PWID are not surveyed regarding its price, purity or availability. Previous research indicated that participants were able to differentiate between these forms when surveyed (Breen, Degenhardt et al. 2003), and clarification was made with participants that they and the interviewer were referring to the same forms of methamphetamine.

4.3.1 Use of methamphetamine

In 2015, over three-quarters of participants (76%) had used any form of methamphetamine in the six months preceding interview. Considered separately, the most commonly used form of methamphetamine was crystal methamphetamine (70%) followed by speed (32%) and then base (26%). Liquid amphetamine (also known as 'oxblood') remained considerably less common, with only 5% of participants reporting use in the last six months (2% in 2014) (see Figure 5).

Figure 5: Methamphetamine, percentage of participants that used in the last six months, 2006–2015



Source: IDRS participant interviews.

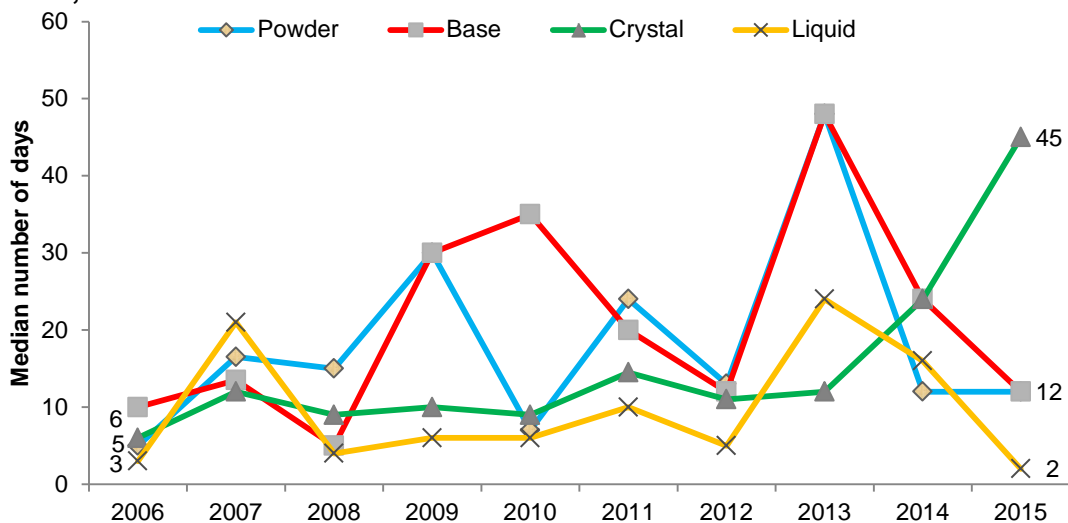
Note: Liquid methamphetamine; n ≤ 10 results should be interpreted with caution.

4.3.2 Methamphetamine frequency of use

The frequency of use for powder methamphetamine (as measured by the median number of days used in the six months prior to interview) remained stable in 2015. Participants reported using powder on a median of 12 days (range: 1-140) (12 days in 2014).

As can be seen from Figure 6, there have been changes in the median days of different forms of methamphetamine over time. The decline in the frequency of base and powder from 2013 corresponds with an increase in the frequency of crystal use (from 24 days in 2014 to 45 in 2015).

Figure 6: Methamphetamine, median number of days used in the last six months, 2006–2015



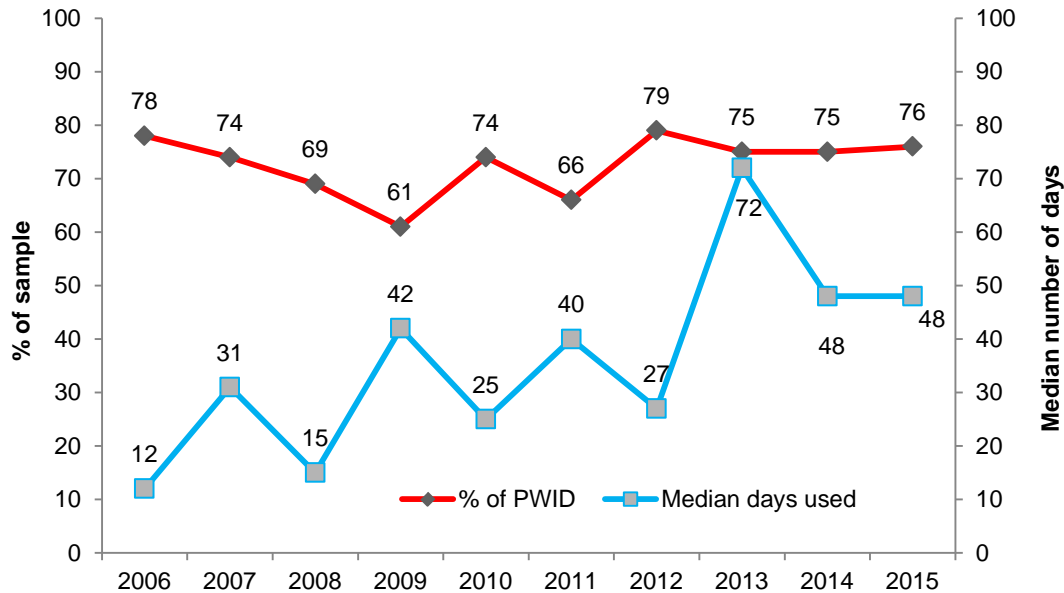
Source: IDRS participant interviews.

Note: Used by those participants who reported use of each form in the six months prior to interview.

Note: Liquid methamphetamine; n ≤ 10 results should be interpreted with caution.

The long-term trend in the use any form of methamphetamine is depicted in Figure 7. Overall in 2015, 76% of participants had used some form of methamphetamine (powder, base, crystal, and liquid) in the six months prior to interview; this remained stable from 2014. Recent users of methamphetamine reported that they had used on a median of 48 days (range: 1-180) in a six month period, which was identical to the median days of use reported in 2014.

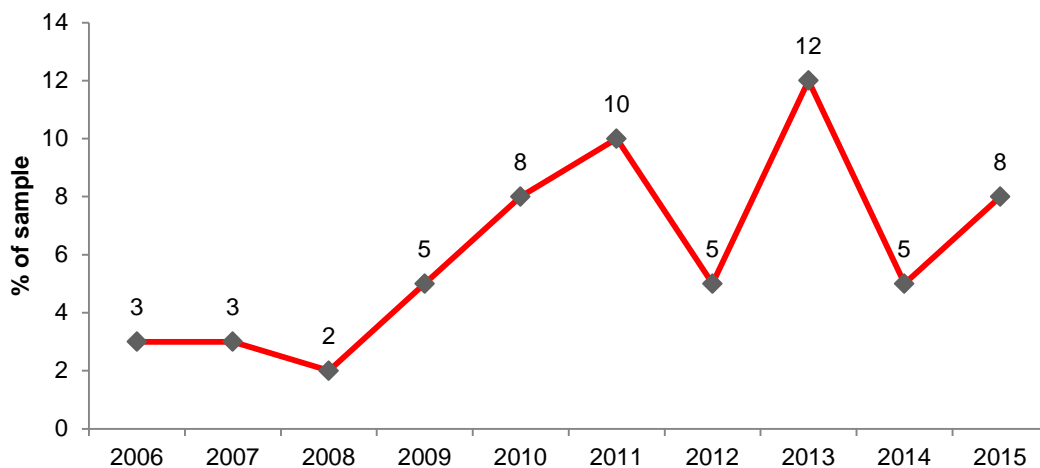
Figure 7: Recent use and median number of days used of any form of methamphetamine, 2006–2015



Source: IDRS participant interviews.
Note: Results of those reporting recent use in the previous six months.

Of the 77 participants who reported using some form of methamphetamine in the last six months, six participants (8%) reported daily use during that period (n=4 in 2014). The long-term trend for the percentage of participants using some form of methamphetamine on a daily basis is depicted in Figure 8. As shown, the prevalence of daily methamphetamine use has fluctuated over the past 10 years; however, numbers remain relatively small.

Figure 8: Methamphetamine, percentage that used daily in the last six months[#], 2006–2015



Source: IDRS participant interviews.
[#] Among those who had used methamphetamine in the past six months.

The majority of participants using all forms of methamphetamine reported having done so by injecting in the six months prior to interview. Under one-third of the sample (32%) had injected powder (32% in 2014), 26% had injected base (29% in 2014), 68% had injected crystal (54% in 2014) and 5% had injected amphetamine liquid (2% in 2014). Six percent of participants reported smoking powder, 2% reported snorting and 3% had swallowed powder in the preceding six months. This was stable from 2014. Ten percent of the sample reported smoking base methamphetamine, and 4% had swallowed it in the preceding six months. Thirty-one percent reported smoking crystal methamphetamine in the past six months, while the proportion of participants who reported swallowing crystal remained low (8%) (Table 5).

KE Comments

- The majority of KE noted the prevalence of methamphetamine use is very high.
- The majority of KE perceived crystal methamphetamine to be the most common/popular form of methamphetamine, followed by base. Many KE noted that the powder form of methamphetamine is not as prevalent as it once was.
- The majority of KE considered methamphetamine to be the most problematic drug at the present time. The reasons for this were varied and ranged from the fact that it was highly prevalent and addictive, to the physical (sleep deprivation, poor dental health), mental (e.g. aggression, psychosis) and social impacts (e.g. financial problems, relationship problems, criminal activity) it can have on the individual and their family/friends.
- A number of KE mentioned an increase in strength of crystal methamphetamine as opposed to base or powder form. One KE commented that this appeared to be triggering severe episodes of psychosis and other mental health issues, depression and anxiety being the two most common disorders.
- Several KE also noted that there are limited treatment options for methamphetamine dependence, making it very difficult to successfully treat those who seek help. The ability to refer users on to further support has decreased because of the reduction in services available.
- A number of KE stated that there has been an increase in methamphetamine users contemplating suicide or having suicidal ideation. It was noted this is associated with the wider effects of drug use relating to social issues including financial loss, child custody issues and relationship breakdowns.
- There were mixed reports regarding the way in which methamphetamine is used. KE reported that most users smoke or inject methamphetamine and that in the last few years smoking has become more prominent. It was noted that crystal methamphetamine was on the rise and this form is easier to smoke than inject.

4.4 Cannabis

Key Findings

- Lifetime and recent use of cannabis remained stable in 2015.
- Cannabis was used on a median of 90 days in the past six month period (120 days in 2014).
- Thirty-six percent of recent cannabis users (n=27) stated that they had used on a daily basis in the last six months.
- Of the participants who had used cannabis recently, 92% (n=69) reported the use of hydro and 75% (n=56) reported the use of bush within that period, which was stable from 2014.

The current legal approach to cannabis use in SA is one of 'prohibition with civil penalties'. Under this approach, the production, possession or use of cannabis is illegal. Any cultivation of a cannabis plant by hydroponic means (hydro) will result in the accused being arrested/reported and required to attend court. A single cannabis plant grown in the ground, i.e. not grown hydroponically, will attract an expiation fee. In cases where more than one cannabis plant is grown outdoors (bush cannabis), the accused is arrested and required to attend court. There are varying penalties for possession of cannabis offences and these penalties are dependent on the amount the person is located with. Under the Cannabis Expiation Notice Scheme, police issue the offender with an 'on-the-spot' fine notice. If the offender disagrees with any aspect of the charge, he or she can elect to go to court and defend the case rather than pay the expiation fee. Failure to pay the prescribed fee within the expiation period results in a summons being issued for the offender to appear in court. The original expiation fee becomes the fine, with the additional court costs. Changes to the legislation were introduced in 2007 codifying trafficking offences.

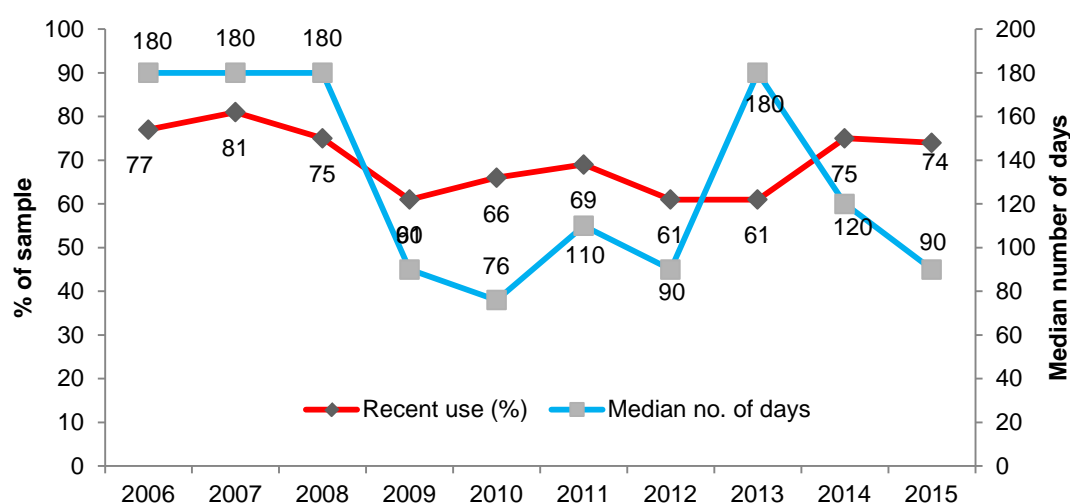
4.4.1 Current patterns of cannabis use

It is worth noting that participants were recruited on the basis of their injecting drug use (rather than use of illicit drugs in general), therefore the following data may not be representative of cannabis users in general. That is, the IDRS reports on cannabis use by a sample of PWID only.

In 2015, the proportion of PWID who reported lifetime use of cannabis remained stable at 97%. Of those who had ever used cannabis, 74% reported having used cannabis in the preceding six months (75% in 2014). Cannabis was used on a median of 90 days (range: 1-180), indicating use every second day (120 days in 2014) (see Figure 9).

Thirty-six percent of recent cannabis users (n=27) stated they had used on a daily basis in the last six months (46% in 2014).

Figure 9: Cannabis, recent use and median number of days used, 2006–2015



Source: IDRS participant interviews.

Note: Results from those reporting recent use in the previous six months.

Participants who had used cannabis in the six months prior to interview were asked to report the number of cones and joints they used on the last day they smoked. Readers should note that the term ‘cone’ refers to the indentation in a pipe/bong or a pipe/bong attachment in which cannabis is inserted to be ignited. The term ‘cones’, in the context of the question, refers to the number of times the ‘cone’ was filled and the contents smoked on the last day the participant used. A ‘bong’ is a water-pipe apparatus which enables the filtering of cannabis smoke through a chamber. The majority of participants reported smoking cannabis in ‘cones’ (n=61; 81%) the last time they used and had smoked a median of two cones (range: 0.25–50). Five participants reported smoking a median of one joint (range: 0.5–4) the last time they used cannabis. Among daily users, the median number of cones and joints smoked on the last occasion of use was three (range: 1–50) and one (range: 1-1) respectively.

Among participants who had used cannabis recently, 68% reported use of hydro and 55% reported use of bush. In addition, 22% reported use of ‘hash’ (cannabis resin) and 9% reported use of ‘hash oil’. Over half (58%) of recent cannabis users reported that hydro was the form they had used the most, and 13% reported that bush was the form they had used most in the six months preceding interview.

KE Comments

- There was a general consensus among KE that the price, prevalence and availability of cannabis has remained stable.
- Two KE nominated cannabis as the most problematic drug at the moment, although the vast majority of KE believed that it was the second most problematic drug after methamphetamine. Furthermore, some KE stated that cannabis use is commonly associated with methamphetamine use.
- KE commented that cannabis use is problematic as it decreases motivation, increases anxiety levels and creates memory and concentration problems. It also impacts on an individual’s capacity to broaden social networks.
- KE noted the strong correlation between cannabis use and mental health issues.

4.5 Cocaine

Key Findings

- Cocaine use remained low among PWID in 2015.

Thirteen participants reported the use of cocaine on a median of one day (range: 1-60) in the six months prior to interview (seven participants in 2014). Eight participants reported that they had injected cocaine on a median of one day (range: 1-60) during that time. The main forms of cocaine used by PWID were powder (n=9), followed by rock (n=4).

These results indicate that cocaine use among PWID in Adelaide remains relatively rare.

KE Comments

- The majority of KE reported that cocaine use had remained low among their clients over the preceding 12 months. Due to its expense, cocaine use is mainly confined to a particular occupation group, mainly being 'white collar' workers.
- One KE commented that 'the clientele who use cocaine have a disposable income, they can afford the drug, therefore, they are not so commonly associated with crime and (thus) they don't come under the same scrutiny as other drug users do.'

4.6 Opioids

Key Findings

- Eighty percent of participants reported that they had used an opioid (licit and illicit use) in the six months prior to interview (74% in 2014).
- Heroin was the most common opioid recently used by participants (49%) (43% in 2014), followed by 'other opioids' (e.g. Panadeine Forte[®]) (40%), oxycodone (28%), morphine (26%) and methadone (25%).
- The use of 'other opioids' (i.e. those not elsewhere classified) increased significantly from 21% in 2014 to 40% in 2015.

The IDRS investigates the use patterns, harms and market characteristics of a number of pharmaceutical opioids including methadone, buprenorphine, buprenorphine-naloxone, morphine, oxycodone, fentanyl, over the counter codeine, and other opioids (not specified elsewhere). Use of these substances is broadly split into the following categories:

Use

1. Use of licitly obtained opioids, i.e. use of opioids obtained by a prescription in the user's name, through any ROA (includes the use of these medications as prescribed).
2. Use of illicitly obtained opioids, i.e. those obtained from a prescription in someone else's name, through any ROA ('illicit use').
3. Use of 'any' opioids, i.e. includes both licit and illicit obtained opioids.

Injection

1. Injection of licitly obtained opioids.
2. Injection of illicitly obtained opioids.
3. Injection of 'any' opioids.

Note on interpretation: The IDRS documents the use of opioid medications, licitly obtained or otherwise, among a sentinel sample of PWID. These include opioids prescribed for OST – i.e. methadone, buprenorphine and buprenorphine-naloxone maintenance treatments – in addition to opioids prescribed for pain relief (including morphine and oxycodone). It is important to note that while a proportion of the 2015 sample were in treatment at the time of interview, responses are not representative of all clients engaged in drug treatment services.

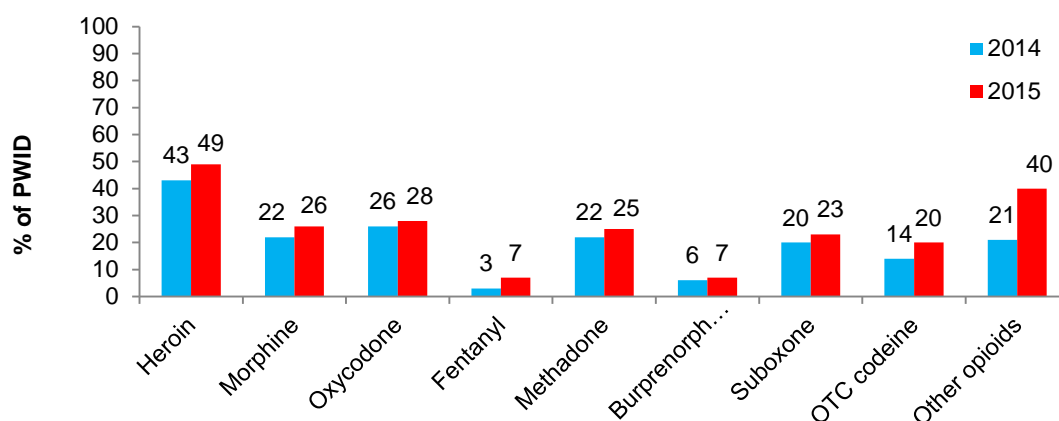
4.6.1 Overview of opioid use among participants

Table 5 provides data on the recent use and route of administration of opioids for the 2015 participant sample.

Heroin use among participants is described in detail in section 4.2, with the focus on the use of other opioids described in this section. Data is presented for illicit use only, except for fentanyl and other opioids which do not distinguish between licit and illicit use. It should be noted that some of the sample sizes for these sections were relatively small and should be interpreted with caution.

As can be seen in Figure 10, heroin was the most commonly used opioid in the six months prior to interview (49%), followed by 'other opioids' (e.g. Panadeine Forte[®]) (40%), licit or illicit oxycodone (28%), licit or illicit morphine (26%) and licit or illicit methadone (25%). The use of 'other opioids' increased significantly in 2015 (21% in 2014 vs. 40% in 2015; $p < 0.01$; 95% CI: -0.3--0.1).

Figure 10: Recent use of opioids amongst PWID, 2014–2015



Source: IDRS participant interviews.

Note: these figures include licit and illicit use, except for heroin and OTC codeine which include illicit/non-medical use only.

Note: Other opioids include opioids not specified elsewhere (e.g. Panadeine Forte®).

When all the opioid substance categories are collapsed (i.e. heroin, methadone, morphine, other opioids, OTC codeine, oxycodone, fentanyl, buprenorphine and buprenorphine-naloxone), 80% of participants had used some type of opioid substance (including licit and illicit use) in the six months prior to interview (74% in 2014). Excluding licit use of methadone, morphine, buprenorphine, buprenorphine-naloxone and oxycodone, over three-quarters of the sample (76%) had used opioids illicitly in 2015 (67% in 2014).

4.6.2 Use of illicit morphine

Twenty percent of participants reported they had used illicit morphine in the six months prior to interview on a median of 10 days (range: 1–180), and on the last occasion of use had used a median of 67.5mg (range: 10–140). Thirteen participants reported that they had injected illicit morphine in the preceding six months, and they had done so on a median of 14 days (range: 2–180).

The majority of all morphine users (62%, n=16) reported that the type they had used most during the last six months was illicit. The main brand of morphine used in that time was Kapanol® (75%, n=18).

4.6.3 Use of illicit oxycodone

Twenty-five participants reported recent use of illicit oxycodone on a median of six days (range: 1–72) in the six months prior to interview, and had used a median of 77.5mg on the last occasion of use (range: 10–240). Of those, 15% reported injecting illicit oxycodone on a median of ten days (range: 1–72). These figures are largely stable compared to 2014.

The majority of all oxycodone users (89%; n=24) reported that the type they had used most during the last six months was illicit. The main brands of oxycodone used in the six months preceding interview were OxyContin® (60%; n=15) and Endone® (28%; n=7).

4.6.4 Use of fentanyl (licit and illicit)

Seven participants reported using fentanyl on a median of one day (range: 1–20) in the six months preceding interview, and on the last occasion of use had used a median of 30mg (range: 10–50). Five participants who reported recent use of fentanyl had done so by injection on a median of two days (range: 1–20).

4.6.5 Over the counter (OTC) codeine

Codeine is a mild opioid. In Australia, OTC codeine is readily available in pharmacies. It is mainly used for the relief of mild to moderate pain. OTC codeine medications vary in codeine quantity and are only available in combination (usually with analgesics or decongestants). There are associated health concerns with the prolonged use of OTC codeine, most notably the risk of liver damage. There are also health risks associated with the overdose of combination drugs such as paracetamol.

Since 2009, participants have been asked about their use of OTC codeine (from 2012 onwards participants were asked about non-medicinal use only). These questions were included to investigate the extra-medical use of OTC codeine, frequency of use, main brands used and the amount of tablets/capsules used per dose. For more information on the harms associated with OTC codeine use, see Dutch (2008) and Dyer, Martin et al. (2004).

In 2015, 39% of participants reported ever using OTC codeine for non-medicinal purposes (30% in 2014). Twenty percent reported use within the preceding six months (14% in 2014) on a median of nine days (range: 1-160) (median of 24 days in 2014). The average amount used in a session remained stable at three pills/tablets (range: 1-100). Three participants reported that they had injected OTC codeine in the six months preceding interview, and they had done so on a median of three days (range: 3-7).

4.6.6 Use of illicit methadone

In 2015, for the 13th year running, IDRS survey participants were asked to provide separate information on the use of licit and illicit methadone syrup and Physeptone[®] tablets.

Seven participants reported having used illicit methadone syrup on a median of four days (range: 1-180) in the last six months, and the average amount recently used was a median of 40ml (range: 5-160). Of those, six participants reported injecting illicit methadone syrup on a median of nine days (range: 1-180).

Six participants reported having used illicit Physeptone[®] tablets on a median of 5.5 days in the last six months (range: 2-12), and the average amount recently used was a median of 45mg (range: 10-100). Of those, five participants reported injecting illicit Physeptone[®] tablets and had done so on a median of six days (range: 2-10).

4.6.7 Use of illicit buprenorphine²

Six participants reported having used illicit buprenorphine on a median of two days (range: 1-11) in the six months prior to interview, and on the last occasion of use had used a median of 8mg (range: 2-16). Of those, four participants reported injecting illicit buprenorphine and had done so on a median of four days (range: 1-10).

The majority of all buprenorphine users (71%, n=5) reported that the type they had used most during the last six months was illicit.

² 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, B., P. Dietze, et al. (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: 610.1111/dar.12277.

4.6.8 Use of illicit Suboxone®

In September 2011, Suboxone® became available as a sublingual film, and from 2012 onwards participants have been asked to distinguish between Suboxone® tablets and Suboxone® film.

Fifteen participants reported that they had used illicit Suboxone® tablets in their lifetime, but participants reported no recent use.

Fifteen participants reported recent use of illicit Suboxone® film on a median of four days (range: 1–20) in the six months prior to interview, and on the last occasion of use had used 7mg (range: 2–16). Eight participants who reported illicit use of Suboxone® film did so by injection, and they had done so on a median of six days (range: 1–48).

Just over half of all Suboxone® film users (52%, n=12) reported that the type they had used most during the last six months was illicit.

4.6.9 Use of other opiates (not elsewhere specified) (licit and illicit)

Forty-one participants reported that they had used other opiates in the six months preceding interview, and they had done so on a median of 10 days (range: 1–180). Three participants reported recent injection of other opiates.

Among those who recently used other opiates, the form most used was licit (64%; 34% illicit), and the majority of participants reported that Panadeine Forte® (n=33, 89%) was the main brand used.

KE Comments

- KE responses regarding other opioid use were mixed. Half the KE believed there to be a decrease and the other half believed there to be an increase in the use of other opioids.
- A few KE noted that the misuse of prescribed opioids was still a problem; not so much in terms of overdoses or patients presenting with behavioural disturbance, but more in terms of the clinical management of general health issues that result from opioid abuse. Where individuals inappropriately use analgesics, particularly for chronic pain issues, there is a distortion between true therapeutic use of the opioid and recreational use.
- The use of OTC codeine was considered to be an ongoing problem by many KE. Currently, OTC codeine is too easy to obtain and more people are being treated for codeine dependency.

4.7 Other drugs

Key Findings

- Twelve percent of IDRS participants had used ecstasy and 9% had used a hallucinogen in the six months prior to interview; this remained stable from 2014. Frequency of use was low, with a median of one and a half days and one day, respectively.
- In 2015, there was a significant decrease from 2014 in the main brand of 'other benzodiazepines' being used, diazepam (Valium®), though this still remained the most common brand.
- Recent use of illicit pharmaceutical stimulants and Seroquel® remained low, at 5% and 7% respectively.
- Alcohol had reportedly been consumed by 97% of participants in their lifetime, with two-thirds having consumed alcohol in the preceding six months.
- As in previous years, tobacco use remains highly prevalent among PWID, with 89% reporting use within the six months preceding interview. Ninety-six percent of PWID who had recently used tobacco reported smoking daily.
- One third of the sample reported lifetime use of e-cigarettes, with 19% reporting e-cigarette use in the last six months.
- The prevalence and frequency of new psychoactive substances (NPS), synthetic cannabinoids, steroids and inhalants remained low in 2015.

4.7.1 Ecstasy and Hallucinogens

Details regarding the use of ecstasy (3,4-methylenedioxymethamphetamine – MDMA), hallucinogens, including lysergic acid diethylamide (LSD) or 'trips', and naturally occurring compounds such as magic mushrooms are provided in Table 5.

The majority of participants reported that they had used ecstasy (66%) and hallucinogens (76%) within their lifetime. Twelve percent of the sample had used ecstasy and 9% had used some type of hallucinogen in the six months prior to interview, although neither had been consumed frequently. Ecstasy had been consumed on a median of one and a half days (range: 1–30) and hallucinogens on a median of one day (range: 1–7). The use and frequency of both ecstasy and hallucinogens remained stable when compared to 2014. Both ecstasy and hallucinogens had mainly been consumed orally (ecstasy: 75%; hallucinogens: 78%), although three ecstasy users also reported that they had injected ecstasy on a median of one day (range: 1–3) and three participants reported injecting hallucinogens during the past six months on a median of one day (range: 1-1). The main forms of ecstasy used by PWID were pills (n=10), followed by powder (n=1) and capsule (n=1). The main forms of hallucinogens used by PWID were LSD/trips (n=5), followed by mushrooms (n=2).

Since 2000, the use of ecstasy and related drugs among a separate sample of primarily non-injecting drug users has been examined on an annual basis. This was previously done as a module of the IDRS, but is currently conducted as a separate study known as the Ecstasy and Related Drugs Reporting System (EDRS) – formerly the Party Drugs Initiative (PDI). State and national reports are produced annually: see <http://ndarc.med.unsw.edu.au/group/drug-trends>

4.7.2 Pharmaceutical stimulants

Since 2004, participants have been asked about their use of pharmaceutical stimulants. This includes drugs such as Dexamphetamine® and methylphenidate,

which are medications most commonly prescribed for attention deficit hyperactivity disorder (ADHD). From 2006, the IDRS has asked about licit and illicit forms of pharmaceutical stimulants.

In 2015, 23% of the sample reported using illicit pharmaceutical stimulants at least once in their lifetime (35% in 2014). However, only five participants reported use within the preceding six months (6% in 2014), and they reported using on a median of five days (range: 2-15). Recent injection of illicit pharmaceutical stimulants was reported by three participants on a median of 10 days (range: 2-15).

Among those who had used illicit pharmaceutical stimulants, most participants reported that the most common brand used was Dexamphetamine[®] (n=4).

4.7.3 Illicit benzodiazepines³

In 2015, participants were asked to distinguish between their use of alprazolam (Xanax[®]) and other benzodiazepines. Thirteen percent of PWID reported recent illicit use of alprazolam on a median of four days (range: 1-173); and 30% reported illicit use of other benzodiazepines on a median of six days (range: 2-180) within the preceding six months.

All participants who had used illicit alprazolam and other illicit benzodiazepines reported use by swallowing; one participant also reported injecting illicit alprazolam on one day and similarly, the injection of other benzodiazepines was reported by one participant on a median of two days in the preceding six months.

Among those who had used 'other benzodiazepines' in the preceding six months, the main brand used was diazepam (Valium[®]) (43%; n=24). This represents a significant decrease from 2014 (72%; p<0.01; 95% CI: 0.05 – 0.30).

4.7.4 Seroquel[®] (quetiapine)

In 2015, participants were asked about their use of Seroquel[®]; an antipsychotic which is used to treat major psychotic and depression disorders. Twenty-one percent of the sample reported lifetime use of illicit Seroquel[®], whilst seven participants reported using illicit Seroquel[®] on a median of six days (range: 1-72) in the six months preceding interview. Swallowing was the only ROA for illicit Seroquel[®], with no participants reporting injection within the preceding six months.

4.7.5 Alcohol, tobacco and e-cigarettes

The majority of participants reported that they had consumed alcohol within their lifetime (97%). Two-thirds of the sample (67%) had used alcohol in the six months preceding interview; and they had done so on a median of 24 days (range: 1-180). Seven participants reported daily use of alcohol.

Tobacco remains highly prevalent among PWID, with 97% of the sample reporting lifetime use and 89% reporting use in the six months preceding interview. The median days of use among those who had recently used tobacco, was 180 days (range: 20-180). The vast majority (96%) of PWID who had recently used tobacco reported daily use of tobacco.

³ 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>

One-third (33%) of the sample reported lifetime use of e-cigarettes, and 19 participants reported using e-cigarettes on a median of four days (range: 1–90) in the six months preceding interview.

4.7.6 New psychoactive substances

Four percent of the sample reported lifetime use of new psychoactive substances (NPS) such as synthetic cathinones (e.g. mephedrone), tryptamines (e.g. dimethyltryptamine [DMT]) and phenethylamines (e.g. 2C-x class). Two participants (2%) reported recent use of NPS on a median of two days (range: 1-3) and both participants reported injecting NPS in the six months preceding interview.

4.7.7 Synthetic cannabinoids

Eleven percent of the sample (n=11) reported lifetime use of synthetic cannabinoids (e.g. K2, Spice). Four participants reported recent use of synthetic cannabinoids on a median of one day (range: 1-2) in the six months preceding interview.

4.7.8 Steroids

Four participants reported lifetime use of steroids, and two participants reported using steroids on a median of 100 days (range: 20–180) in the past six months.

4.7.9 Inhalants

Twenty-nine participants reported lifetime use of inhaling dangerous substances, such as amyl nitrate, petrol, glue and/or lighter fluid. Four participants reported using inhalants on a median of eight days (range: 1-75) in the preceding six months.

KE Comments

- Most KEs reported that the ecstasy market had remained stable over the preceding 12 months, though some commented that there had been a mild increase and there was 'plenty of it around'.
- The presence of other drugs in 'ecstasy' pills continued to be raised as a concern by KE.
- Alcohol use was generally reported as prevalent and stable with no real changes over the preceding 12 months.
- Five KE nominated alcohol as the drug they considered most problematic at the time of interview. Of particular concern was the widespread use and social acceptability of alcohol consumption, as well as bingeing behaviours and problems associated with intoxication and dependence, as well as behavioural inhabitation issues.
- Some KE commented that benzodiazepines were often misused and used in combination with other drugs.
- Tobacco use was reported to have remained highly prevalent and stable among PWID clients.

5 PRICE, PURITY AND AVAILABILITY

Key Findings

- The median price of heroin was reported to be \$50 for a cap and \$200 for a half weight, with the price reported as stable over the preceding six months.
- The purity of heroin was largely perceived as low to medium, with the majority (82%) of those that commented reporting that purity had remained stable over the preceding six months.
- The majority of participants reported that heroin was very easy to obtain, and that availability had remained stable over the preceding six months.
- Almost half of the sample obtained heroin from a known dealer, most commonly at an agreed public location.

5.1 Heroin

5.1.1 Price of heroin

Among those who could comment on the price of heroin, the majority of participants reported price per cap/point, or per half weight. The median price at last purchase for a cap of heroin was \$50 (range: \$50–\$100; n=31) and the last purchase price for a half weight of heroin was \$200 (range: \$100–\$300; n=19). This remained stable from 2014.

Of those participants who were confident to report on the current price of heroin (n=52), 92% reported the price as stable over the last six months (see Table 9) (85% in 2014).

Table 9: Change in price of heroin over last six months, 2014–2015

Reported price status	% able to answer	
	2014 (n=41)	2015 (n=52)
Increasing	12	2
Stable	85	92
Decreasing	0	6
Fluctuating	2	0

Source: IDRS participant interviews.

Note: 'Don't know' was excluded.

Long-term trends in the median price paid for a gram of heroin are shown in Figure 11. Despite a decrease being observed in 2008, it can be seen that the median price paid for a gram of heroin at last purchase has remained relatively stable since 2006. As mentioned above, data has generally been based on small sample sizes (n=10 in 2015), with most participants buying heroin in 'caps'.

Figure 11: Median price of a gram of heroin, last purchase, 2006–2015



Source: IDRS participant interviews.
 Note: $n \leq 10$ results should be interpreted with caution.

5.1.2 Purity of heroin – participant reports

Table 10 and Table 11 summarise the current purity of heroin and the changes in heroin purity over the last six months, as reported by participants. In 2015, the largest proportion of those able to answer ($n=49$) reported that the current purity of heroin was low (43%), with under two-fifths (39%) reporting that the purity was medium, and twelve percent reporting that the purity was high. This remained relatively stable from 2014. Of those able to answer ($n=48$), 42% reported that the purity of heroin had remained stable over the preceding six months, with 19% reporting that it had decreased and 19% reporting that it had increased in purity. About one fifth of participants (21%) believed that the purity had fluctuated in the last six months.

Table 10: Current purity/strength of heroin, 2014–2015

How pure would you say heroin is at the moment?	% able to answer	
	2014 ($n=41$)	2015 ($n=49$)
High	7	12
Medium	34	39
Low	49	43
Fluctuates	10	6

Source: IDRS participant interviews.
 Note: 'Don't know' was excluded.

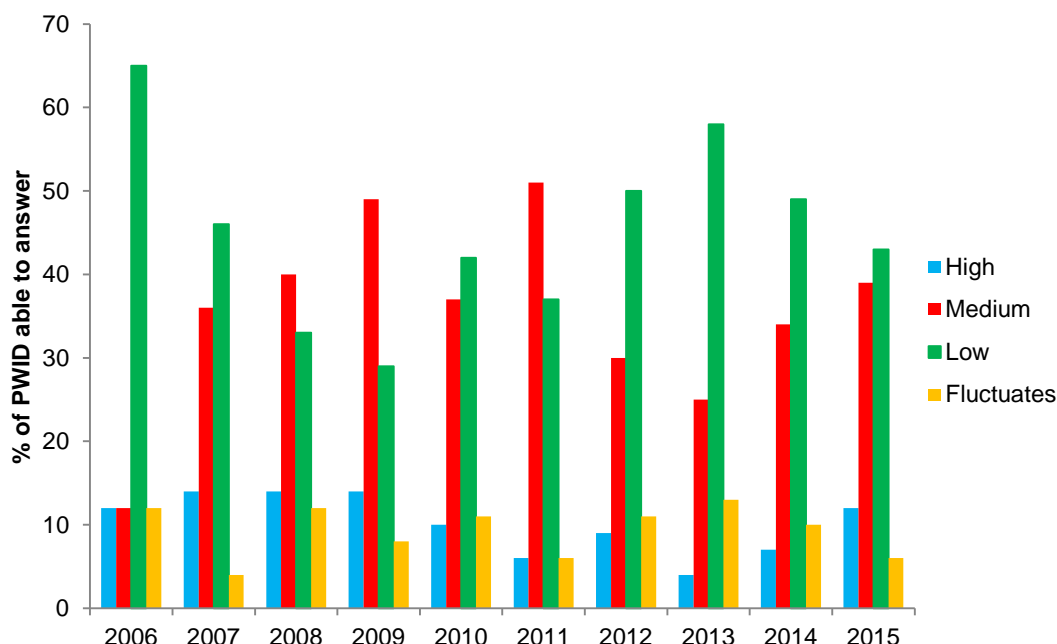
Table 11: Change in purity/strength of heroin in last six months, 2014–2015

Has the purity of heroin changed in the last 6 months?	% able to answer	
	2014 (n=41)	2015 (n=48)
Increasing	5	19
Stable	42	42
Decreasing	37	19
Fluctuating	17	21

Source: IDRS participant interviews.
Note: 'Don't know' was excluded.

Figure 12 shows the trend in purity of heroin, as perceived by participants, from 2006 onwards. Despite various fluctuations over the years, it can be seen that purity has generally been reported as medium or low. Few participants have reported that heroin was of high purity at the time of interview.

Figure 12: Perception of current purity of heroin, 2006–2015



Source: IDRS participant interviews.
Note: 'Don't know' was excluded from 2009 onwards.

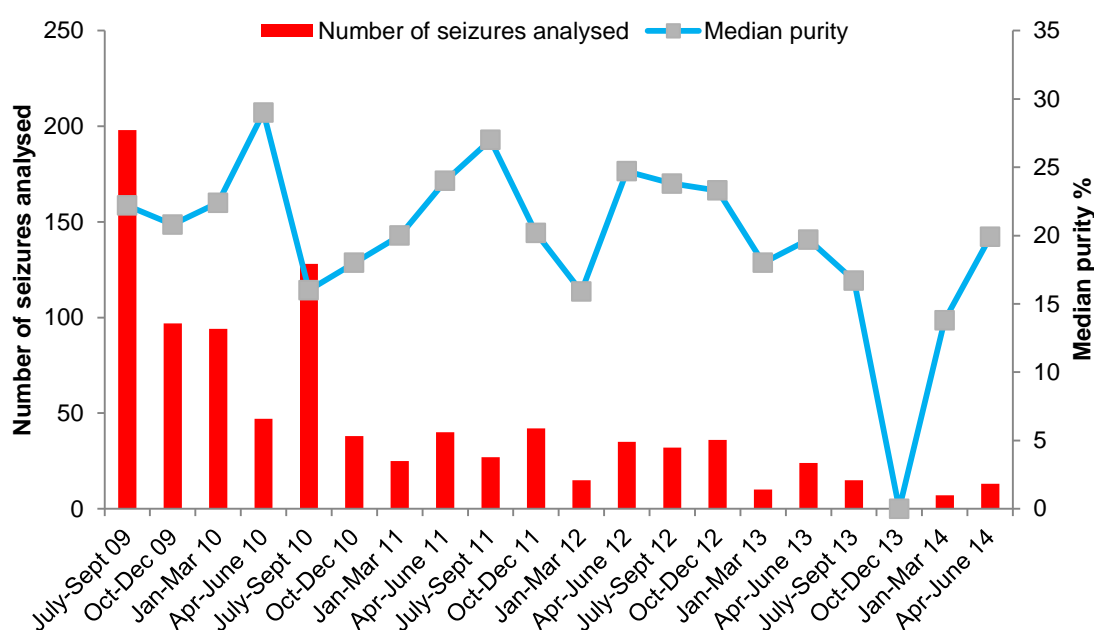
5.1.3 Purity of heroin – drug seizure data

Participant reports of purity are subjective and depend on a number of factors including the health and tolerance of the individual. A more objective measure of purity is derived from the analysis of drug seizures. The purity figures reported below are provided by the Australian Crime Commission (ACC) and there are some important issues to consider when examining purity measures. These data do not reflect the total weight of a particular drug seized in each year, but only those samples and seizures submitted for analysis. They relate to an unrepresentative sample of the illicit drugs available in Australia, and this should be considered when drawing conclusions from the purity data presented. In addition, there is typically a lag of several months between the seizure and receipt of profiling results (Australian Crime Commission 2015).

ACC data were unavailable for 2014/15 at the time of publication and the data provided by the ACC only relates to the purity data on heroin seized in SA during the last financial year: 2013/14 (Australian Crime Commission 2014). Figure 13 shows the number of seizures received and analysed by the state forensic laboratory per quarter, and the median purity of those seizures, from 2009/10 to 2013/14.

Despite quarterly variation, and variation in the number of seizures, the median purity of South Australia Police (SAPOL) heroin seizures remained relatively stable in 2013/14 at 17% (22% in 2012/13). However, the total number of seizures received and analysed decreased considerably to 35 (102 in 2012/13). The majority of SAPOL seizures analysed (n=26) were less than two grams.

Figure 13: Number of heroin seizures analysed and median heroin purity in SA 2009/10–2013/14



Source: (Australian Crime Commission 2009; Australian Crime Commission 2010; Australian Crime Commission 2011; Australian Crime Commission 2012; Australian Crime Commission 2013; Australian Crime Commission 2014; Australian Crime Commission 2015).

5.1.4 Availability of heroin

Table 12 and Table 13 summarise the current availability of heroin and changes in heroin availability over the last six months, as perceived by participants. Of those who were able to answer questions regarding the availability of heroin (n=51), the majority reported it was either easy or very easy to obtain heroin (86%), with only 14% reporting that it was difficult to obtain. Almost three-quarters (72%) of those able to answer (n=50) perceived that heroin availability had remained stable in the six months preceding interview; this was stable from 2014.

Table 12: Availability of heroin currently, 2014–2015

How easy is it to get heroin at the moment?	% able to answer	
	2014 (n=41)	2015 (n=51)
Very easy	46	49
Easy	44	37
Difficult	7	14
Very difficult	2	0

Source: IDRS participant interviews.
 Note: 'Don't know' was excluded.

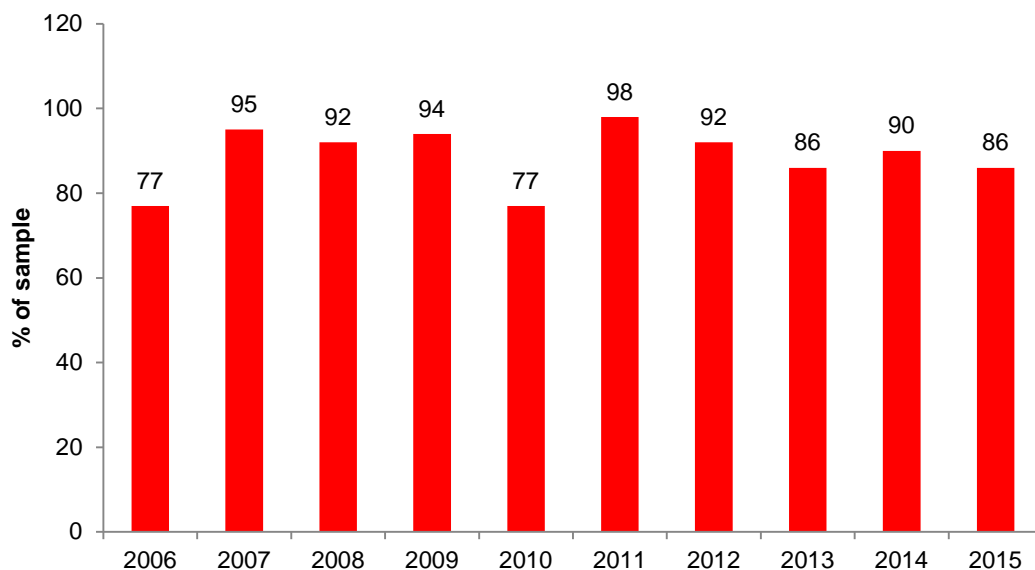
Table 13: Change in availability of heroin over the last six months, 2014–2015

Has availability changed in the last 6 months?	% able to answer	
	2014 (n=41)	2015 (n=50)
More difficult	12	10
Stable	85	72
Easier	2	12
Fluctuates	0	6

Source: IDRS participant interviews.
 Note: 'Don't know' was excluded.

Long-term trend data for the availability of heroin are presented in Figure 14. As can be seen, the proportion of participants who reported that heroin was very easy or easy to obtain in the six months prior to interview has remained relatively high over the past decade. In 2015, 86% of participants able to answer reported that heroin was easy or very easy to obtain (90% in 2014).

Figure 14: Availability of heroin as easy or very easy in the last six months, 2006–2015



Source: IDRS participant interviews.
 Note: 'Don't know' was excluded from 2009 onwards.

Participants were also asked about the person from whom, and the location from where, they had last obtained heroin (see Table 14). The largest proportion of participants who provided information on the source of their heroin in the six months prior to interview (n=48) reported they usually obtained heroin from known dealers (46%), a significant increase from 2014, (27%; p<0.05; 95% CI: -0.21 - -0.01). About a quarter (23%) obtained heroin from a friend in 2015 (37% in 2014).

An agreed public location was the most commonly reported last purchase venue (38%) and a quarter (25%) reported the heroin being delivered to their home.

Table 14: Source person and source venue last time obtained heroin in the last six months, 2014–2015

Last source person and venue	2014 (n=41)	2015 (n=48)
Person		
Street dealer	12	4
Known dealer	27	46
Friends	37	23
Acquaintances	7	13
Mobile dealer	17	6
Unknown dealer	0	6
Partner	-	2
Venue	(n=41)	(n=48)
Home delivery	27	25
Dealer's home	12	8
Friend's home	17	13
Acquaintance's home	2	8
Agreed public location	37	38
Street market	5	6
Other	0	2

Source: IDRS participant interviews.

KE Comments

- It was largely reported that the heroin market had remained steady and constant, though probably not as extensive and prevalent as it once was.

5.2 Methamphetamine

Key Findings

- The median price for a point of methamphetamine base and methamphetamine crystal was \$100 and the median price for a point of methamphetamine powder was \$50. All three forms were largely reported to have remained stable in the six months preceding interview.
- The majority of those commenting considered all three forms of methamphetamine to be of medium to high purity.
- The availability of all forms of methamphetamine was reported as easy or very easy to obtain, and this had remained stable over the preceding six months.
- Participants reported obtaining all forms of methamphetamine from friends, most commonly from a friend's home.

5.2.1 Price of methamphetamine

5.2.1.1 *Methamphetamine – powder*

The last reported price paid for a point of methamphetamine powder was a median of \$50 (range: \$25-\$100; n=25). Eleven participants commented on the price for a half weight of powder, with the median price being \$300 (range: \$100-\$500) and two participants commented on the price for a gram (\$450; range: \$400-\$500). Four participants commented on the price of an 'eightball' of methamphetamine powder, with the median price being \$1300 (range: \$750-\$2500) (see Table 15).

5.2.1.2 *Methamphetamine – base*

The last reported price paid for a point of base was a median of \$100 (range: \$25-\$100, n=20), which remained relatively stable from 2014. Eleven participants commented on the price for a half weight of base with the last reported price being a median of \$250 (range: \$200-\$350) and four participants commented on the price for a gram, with the last reported price being a median of \$450 (range: \$400-\$700). Three participants commented on the price for an 'eightball' with the last reported price being a median of \$1400 (range: \$1200-\$3500) (see Table 15).

5.2.1.3 *Methamphetamine – crystal*

The last reported price paid for a point of crystal was a median of \$100 (range: \$50-\$100; n=53) which was stable from 2014 (\$100; range: \$50-\$100; n=54). The median price for a half weight of crystal was \$287.50 (range: \$100-\$500; n=28), and \$450 for a gram (range: \$350-\$700; n=15). The median price for an 'eightball' was \$1025 (range: \$800-\$1500; n=6) (see Table 15).

Table 15: Reported price of all forms of methamphetamine, 2014–2015

	2014	2015
Price (\$) SPEED		
Per point	100	50
Per gram	600 [^]	450 [^]
Price (\$) BASE		
Per point	100	100
Per gram	550 [^]	450 [^]
Price (\$) CRYSTAL		
Per point	100	100
Per gram	600	450

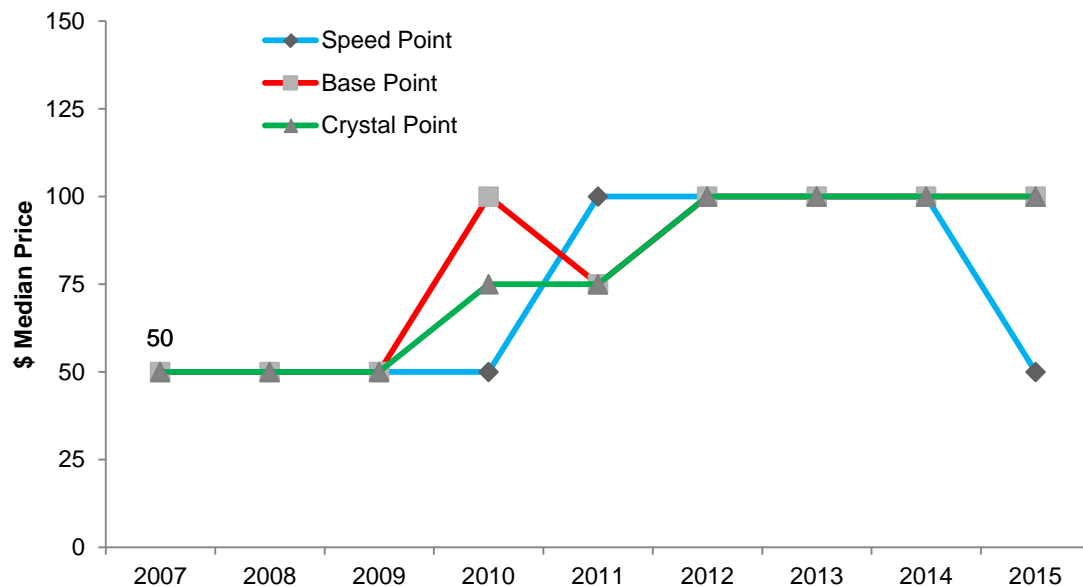
Source: IDRS participant interviews.

[^]Small numbers reporting (n<10); interpret with caution.

Note: 'Don't know' was excluded.

Table 15 shows price data for 2014 and 2015. It is important to note that long-term changes in the last purchase price of a gram for the different forms of methamphetamine have been difficult to gauge, mainly due to the fact that few participants have been able to comment.

Figure 15: Median price of points per form of methamphetamine, 2007-2015



Source: IDRS participant interviews.

Figure 15 shows median price data from 2007 to 2015 for three forms of methamphetamine by points. It can be seen that crystal methamphetamine and base commenced an upward trend from 2009, with speed powder following in 2010 and all forms plateauing from 2012 to 2014, until the median price of speed powder decreased in 2015.

Table 16 summarises participant reports of recent changes in the price of the three forms of methamphetamine. In 2015, the majority of participants answering this section reported the price of all forms of methamphetamine to be stable.

Table 16: Change in price of methamphetamine over last six months, 2014–2015

Reported price status	Powder		Base		Crystal	
	% able to answer					
	2014 (n=31)	2015 (n=33)	2014 (n=31)	2015 (n=21)	2014 (n=58)	2015 (n=68)
Increasing	13	27	23	14	26	13
Stable	77	67	71	67	71	66
Decreasing	3	6	0	19	2	18
Fluctuating	7	0	7	0	2	3

Source: IDRS participant interviews.
Note: 'Don't know' was excluded.

5.2.2 Purity of methamphetamine - participant reports

Table 17 and Table 18 summarise the current purity of the three forms of methamphetamine and the changes in methamphetamine purity over the last six months. As can be seen, participant reports were quite varied. In regards to methamphetamine powder, the largest proportion of participants perceived current purity as medium for two years running. In 2015, the largest proportion of those able to comment regarded methamphetamine base to be of high purity. In regards to crystal methamphetamine, over half (57%) of participants continued to describe current purity as high and approximately one-quarter reported the purity to be of medium quality.

Table 17: Purity/strength of methamphetamine currently, 2014–2015

How pure would you say powder/base/crystal is at the moment?	Powder		Base		Crystal	
	% able to answer					
	2014 (n=31)	2015 (n=30)	2014 (n=31)	2015 (n=20)	2014 (n=60)	2015 (n=67)
High	23	23	29	45	50	57
Medium	52	53	42	20	27	25
Low	16	23	7	10	12	8
Fluctuates	10	0	23	25	12	10

Source: IDRS participant interviews.
Note: 'Don't know' was excluded.

Reports regarding changes in the purity of methamphetamine were also quite mixed. Across all three forms of methamphetamine the largest proportion of participants reported that purity had remained stable in the six months preceding interview.

Table 18: Change in purity/strength of methamphetamine in last six months, 2014–2015

Has the purity of powder/base/crystal changed in the last 6 months?	Powder		Base		Crystal	
	% able to answer					
	2014 (n=30)	2015 (n=28)	2014 (n=30)	2015 (n=21)	2014 (n=57)	2015 (n=65)
Increasing	13	11	7	10	12	17
Stable	43	64	60	43	46	52
Decreasing	17	21	13	14	21	8
Fluctuating	27	4	20	33	21	23

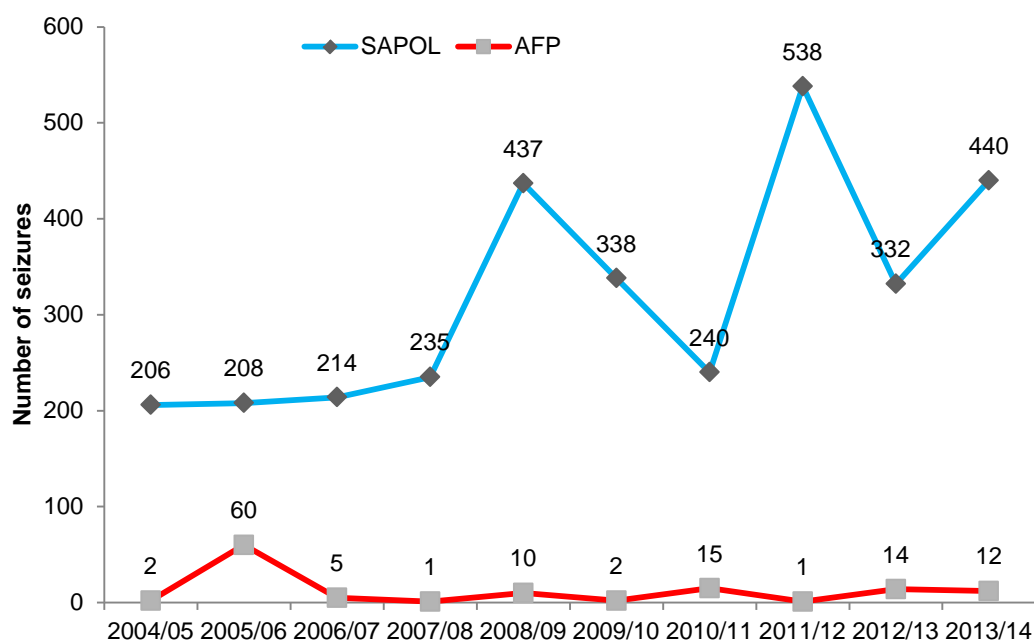
Source: IDRS participant interviews.
Note: 'Don't know' was excluded.

5.2.3 Purity of methamphetamine - drug seizure data

The ACC provides purity data for state/territory police and AFP seizures that have been analysed for methylamphetamine. There are important caveats (in addition to those already discussed within the heroin section) to consider when interpreting these data. The purity of methylamphetamine fluctuates widely in Australia as a result of a number of factors, including the type and quality of chemicals used in the production process and the expertise of the ‘cooks’ involved, as well as whether the seizure was locally manufactured or imported. During 1999/00 and 2013/14, forensic analysis of seizures of methylamphetamine in Australia revealed purity levels ranging from less than 1% to 83.6%, with higher purity often relating to one single seizure rather than being representative of a large number of seizures. This wide range in both purity and numbers of seizures analysed should be considered when looking at the median purity figures presented.

The ACC data were unavailable for 2014/15 at the time of publication. As such, data provided by the ACC relates to methamphetamine seizures in SA during the last financial year: 2013/14 (Australian Crime Commission 2015) (Figure 16). SAPOL seizures increased in 2013/14, although it is important to note that the weight of the seizures decreased (14,265 grams in 2013/14 vs. 22,281 grams in 2012/13). There were 12 seizures reported by the AFP in 2013/14 (14 in 2012/13), with the weight of the seizures also decreasing (10,809 grams in 2013/14 vs. 31,078 grams in 2012/13).

Figure 16: Number of seizures: amphetamine-type stimulants, 2004/05–2013/14

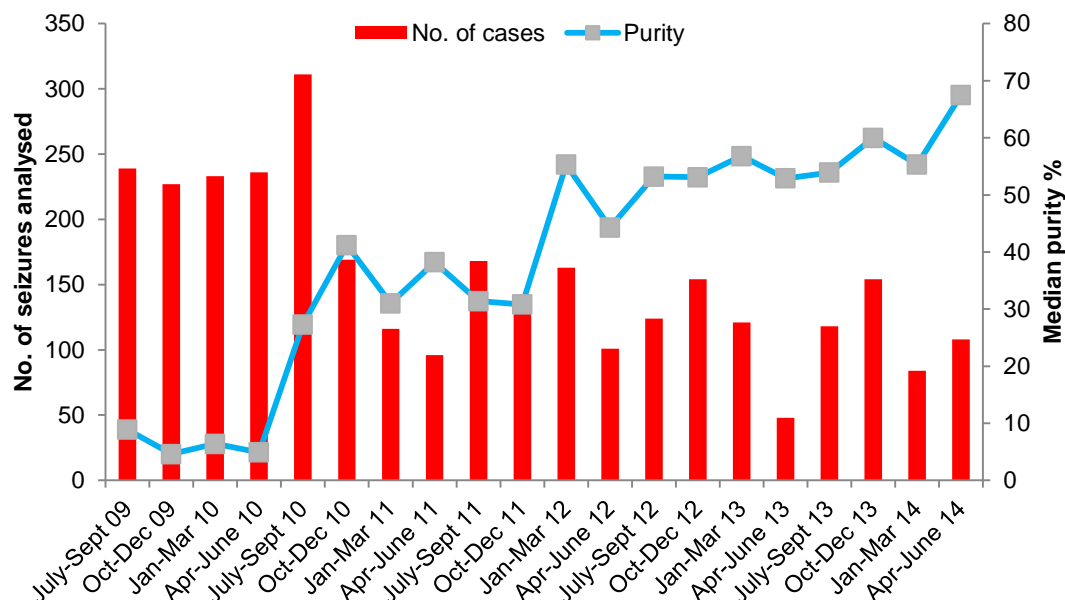


Source: (Australian Crime Commission 2005; Australian Crime Commission 2006; Australian Crime Commission 2007; Australian Crime Commission 2008; Australian Crime Commission 2009; Australian Crime Commission 2010; Australian Crime Commission 2011; Australian Crime Commission 2012; Australian Crime Commission 2013; Australian Crime Commission 2014; Australian Crime Commission 2015).

Figure 17 shows the number of methamphetamine seizures received and analysed by the state forensic laboratory (within the quarter depicted) and the median purity per quarter of those seizures from 2009/10 to 2013/14. The total number of SAPOL methamphetamine seizures analysed from July 2013 to June 2014 was 464, which was stable from the 2012/13 financial year (447). The overall median purity of the

seizures analysed was 59.7% (54.6% in 2012/13). The majority of seizures analysed were more than 2 grams (n=291).

Figure 17: Number of methamphetamine seizures analysed and median methamphetamine purity in SA, 2009/10–2013/14



Source: (Australian Crime Commission 2009; Australian Crime Commission 2010; Australian Crime Commission 2011; Australian Crime Commission 2012; Australian Crime Commission 2013; Australian Crime Commission 2014; Australian Crime Commission 2015).

5.2.4 Availability of methamphetamine

Table 19 and Table 20 summarise the current availability of the three main forms of methamphetamine and the changes in availability over the last six months, as reported by participants. In 2015, all three types of methamphetamine were largely reported as easy or very easy to obtain. The majority of those able to comment also reported that the availability of all three forms of methamphetamine had remained stable over the preceding six months.

Table 19: Availability of methamphetamine currently, 2014–2015

How easy is it to get powder/base/crystal at the moment?	Powder		Base		Crystal	
	% able to answer					
	2014 (n=30)	2015 (n=32)	2014 (n=31)	2015 (n=23)	2014 (n=57)	2015 (n=70)
Very easy	30	47	36	44	46	63
Easy	53	31	52	30	47	36
Difficult	17	19	13	22	7	1
Very difficult	0	3	0	4	0	0

Source: IDRS participant interviews.
Note: 'Don't know' was excluded.

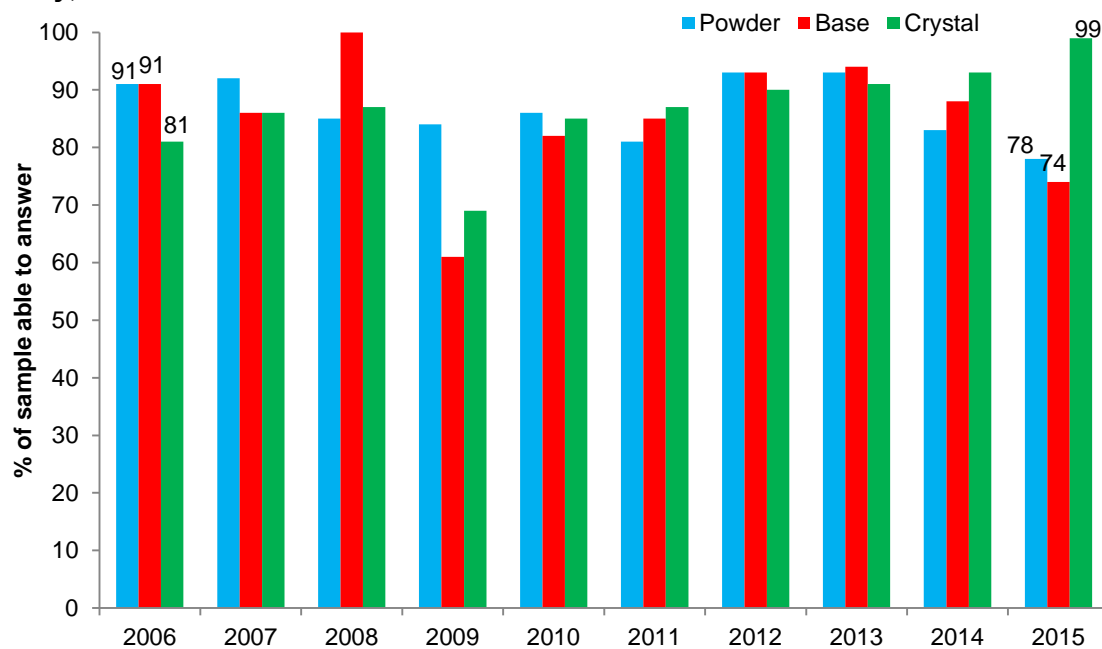
Table 20: Change in availability of methamphetamine over the last six months, 2014–2015

Has availability changed in the last 6 months?	Powder		Base		Crystal	
	% able to answer					
	2014 (n=31)	2015 (n=30)	2014 (n=31)	2015 (n=21)	2014 (n=56)	2015 (n=70)
More difficult	7	23	13	14	9	0
Stable	74	67	77	76	73	79
Easier	10	7	3	10	14	19
Fluctuates	10	3	7	0	4	3

Source: IDRS participant interviews.
Note: 'Don't know' was excluded.

Long-term trend data depicting the availability of methamphetamine from 2006 onwards, as reported by participants, are presented in Figure 18. As shown, methamphetamine has generally been considered easy or very easy to obtain across all years and for all forms (for figures prior to 2006, please see previous editions of the IDRS SA report).

Figure 18: Availability of methamphetamine in the last six months, easy or very easy, 2006–2015



Source: IDRS participant interviews.
Note: 'Don't know' was excluded.

Participants were asked about both the source and location from which they had last obtained the various forms of methamphetamine.

Table 21 shows that the majority of methamphetamine users who were able to answer reported obtaining all forms of methamphetamine from friends and known dealers.

The location/venue from which participants most commonly obtained methamphetamine powder and methamphetamine crystal were a friend's home, though methamphetamine base was most commonly obtained from an agreed public location.

Table 21: Last usual source person and venue used for obtaining various forms of methamphetamine in the last six months, 2015

Usual source person and venue of those able to answer (%)	Powder	Base	Crystal
Person#	n=30	n=22	n=68
Street dealer	7	0	2
Friend	50	41	50
Known dealer	20	27	31
Workmates	0	0	2
Acquaintances	13	23	10
Unknown dealer	3	5	3
Mobile dealers	0	0	2
Other	7	5	2
Venue#	n=30	n=21	n=67
Home delivery	30	14	16
Dealer's home	10	19	15
Friend's home	33	24	37
Acquaintance's home	10	10	6
Street market	3	0	2
Agreed public location	3	33	18
Work	3	0	2
Other	7	0	5

Source: IDRS participant interviews.

Only one response allowed.

KE Comments

- The price of methamphetamine varied among KE, with one reporting \$50-\$70 per point depending on 'who you get it from', two KE reporting \$100 per point, and another KE reporting \$70-\$80 per point. KE reported that in their opinion the price had remained stable.
- KE commented that methamphetamine was 'very available' and that one could obtain it 'from any corner of the town'.
- Reports regarding the purity of methamphetamine were mixed: three KE reported that the purity was high; one KE reported that it was fairly reasonable, and another reported that it was consistent in purity but was unsure of how pure it was. All KE who commented stated that the purity had increased in the past six months.
- KE revealed that there was increasing emphasis on the direct importation of drugs over the internet, including methamphetamine.

5.3 Cannabis

Key Findings

- The price for both hydro and bush cannabis remained stable in 2015 at \$25 for a bag.
- The potency of hydro cannabis was reported to be high and bush cannabis purity was reported as medium. This has largely remained stable over the preceding six months.
- Availability of hydro cannabis was reported as being very easy and bush cannabis was reported as being easy to obtain. Availability had remained stable over the preceding six months.
- Participants obtained cannabis primarily from friends, most often from a friend's home.

From 2003, to ensure more detailed information was collected on the different forms of cannabis, the cannabis section was separated into hydro (hydroponically grown) and bush (grown outdoors).

The following sections refer to a bag as a standard measure (particular to the SA cannabis market). A detailed investigation of the weight/content of a bag of cannabis was undertaken in 2002 (Longo 2003). Briefly, in the 2002 survey, 33 participants gave a single value of the average weight of cannabis bags sold in SA; the results yielded a median of two grams and a mean of two and a half grams. A further 19 gave both a lower and upper weight range for cannabis bags. The median lower range was two grams (mean=2.1) and the median upper range was three grams (mean=2.9). It can be understood, therefore, that the amount of cannabis in a bag may fluctuate, but that a bag in SA generally conveys a weight of cannabis between two and three grams.

5.3.1 Price of cannabis

Participants reported the price for their last purchase to be a median of \$210/ounce for hydro (range: \$100-\$250, n=25) and \$220/ounce for bush (range: \$100-\$250, n=15). The most common amount purchased in the last six months was a bag and the reported median price paid by participants at last purchase was \$25, for both hydro (range: \$20-\$25, n=33) and bush (range: \$20-\$25, n=22). That is, there was no difference in the reported price of a bag of hydro compared to bush cannabis (see Table 22).

Table 22: Price of last cannabis purchases, 2014–2015

	2014	2015
Price (\$) HYRDO		
Per quarter ounce	60	60
Per ounce	210	200
Per bag	25	25
Price (\$) BUSH		
Per quarter ounce	50	50^
Per ounce	190	220
Per bag	25	25

Source: IDRS participant interviews.

^Small numbers (n<10).

The price of both hydro and bush cannabis was generally reported as stable over the last six months (see Table 23).

Table 23: Change in price of cannabis over the last six months, 2014–2015

Reported price status	% able to answer			
	Hydro		Bush	
	2014 (n=58)	2015 (n=63)	2014 (n=41)	2015 (n=44)
Increasing	21	11	12	11
Stable	69	79	88	75
Decreasing	0	2	0	5
Fluctuating	10	8	0	9

Source: IDRS participant interviews.

Note: 'Don't know' was excluded.

5.3.2 Potency of cannabis

Table 24 and Table 25 summarise the current potency of cannabis and the changes in cannabis potency over the last six months, according to participant reports. In 2015, the strength of hydro was reported as high by the majority of participants, and most participants reported the potency of bush cannabis to be medium. The majority of participants reported that the potency of both hydro and bush cannabis had remained stable over the last six months, consistent with 2014 reports.

Table 24: Current potency/strength of cannabis, 2014–2015

How strong would you say cannabis is at the moment?	% able to answer			
	Hydro		Bush	
	2014 (n=60)	2015 (n=66)	2014 (n=43)	2015 (n=47)
High	65	62	33	40
Medium	30	27	51	49
Low	0	8	7	9
Fluctuates	5	3	9	2

Source: IDRS participant interviews.

Note: 'Don't know' was excluded.

Table 25: Change in potency/strength of cannabis in last six months, 2014–2015

Has the strength of cannabis changed in the last 6 months?	% able to answer			
	Hydro		Bush	
	2014 (n=60)	2015 (n=65)	2014 (n=42)	2015 (n=44)
Increasing	12	9	12	5
Stable	68	71	71	84
Decreasing	7	9	5	2
Fluctuating	13	11	12	9

Source: IDRS participant interviews.
Note: 'Don't know' was excluded.

5.3.3 Availability of cannabis

Table 26 and Table 27 summarise the current availability of cannabis and the changes in cannabis availability over the last six months, according to participant reports. In 2015, the majority of participants reported both types of cannabis as easy or very easy to obtain; 94% for hydro and 73% for bush. The majority of participants who were able to answer (85%) reported that the availability of hydro was stable in the last six months. Almost three-quarters of those able to answer also reported the availability of bush to be stable (69%).

Table 26: Availability of cannabis currently, 2014–2015

How easy is it to get cannabis at the moment?	% able to answer			
	Hydro		Bush	
	2014 (n=61)	2015 (n=65)	2014 (n=43)	2015 (n=48)
Very easy	41	54	23	27
Easy	44	40	47	46
Difficult	13	6	28	21
Very difficult	2	0	2	6

Source: IDRS participant interviews.
Note: 'Don't know' was excluded.

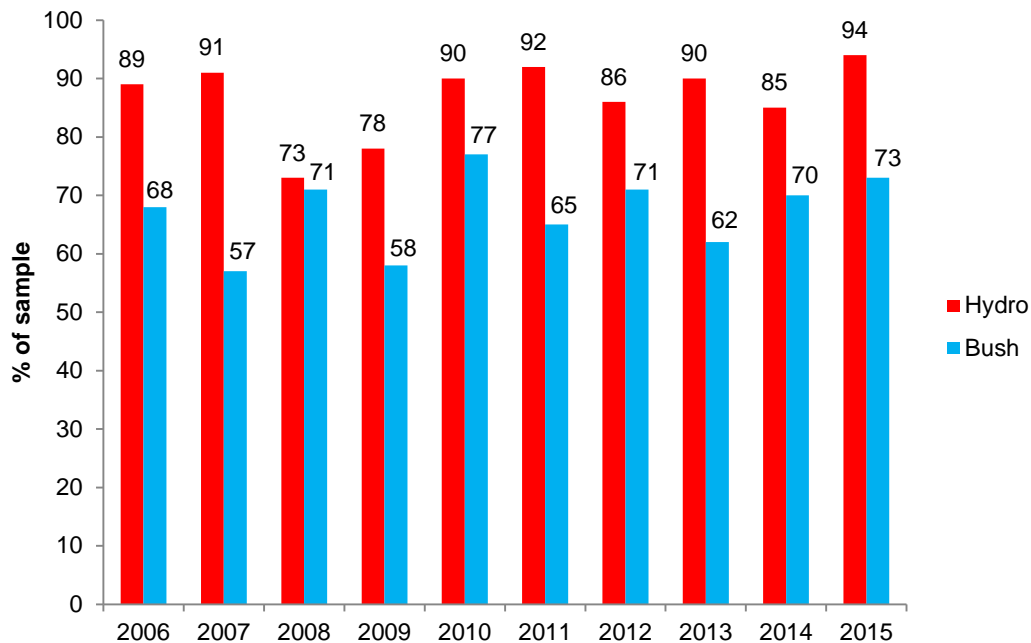
Table 27: Change in availability of cannabis over the last six months, 2014–2015

Has availability changed in the last 6 months?	% able to answer			
	Hydro		Bush	
	2014 (n=61)	2015 (n=65)	2014 (n=43)	2015 (n=48)
More difficult	10	5	16	6
Stable	77	85	67	69
Easier	5	6	7	15
Fluctuates	8	5	9	10

Source: IDRS participant interviews.
Note: 'Don't know' was excluded.

Figure 19 shows the long-term trend in the proportion of participants reporting availability of cannabis as easy or very easy, from 2006 onwards. As can be seen, the reported ease of availability has fluctuated over the years, although it has generally remained high. In 2015, the majority of the sample reported that both hydro and bush cannabis were easy or very easy to obtain. This was mostly stable from 2014.

Figure 19: Availability of cannabis in the last six months, easy or very easy, 2006–2015



Source: IDRS participant interviews.

Note: 'Don't know' was excluded from 2009 onwards.

Table 28 presents information collected from participants on the source (both person and venue) from which participants had last obtained cannabis. In 2015, the majority of participants who were able to comment reported that they usually obtained cannabis from a friend (hydro: 57%; bush: 59%) in the six months prior to interview. Participants reported that the venue they had usually obtained cannabis from was a friend's home (hydro: 41%; bush: 36%) or home delivery (hydro: 20%; bush: 18%).

Table 28: Source person and source venue of last purchase of hydro and bush cannabis, 2015

Usual source or method of obtainment of those able to answer (%)	Hydro	Bush
Person#	n=62	n=44
Street dealer	2	0
Friend	57	59
Known dealer	24	18
Mobile dealer	0	0
Acquaintances	11	16
Unknown dealer	2	0
Partner	0	0
Other	4	7
Venue#	n=61	n=44
Home delivery	20	18
Dealer's home	13	14
Friend's home	41	36
Acquaintance's home	8	9
Street market	3	2
Agreed public location	8	11
Other	7	10

Source: IDRS participant interviews.

Only one response allowed.

KE Comments

- The majority of KE agreed that the price, purity and availability of cannabis had remained stable in the 12 months preceding interview. The price of cannabis was reported to have remained stable at \$25 per bag. The price may fluctuate if one buys by the ounce, though this is uncommon.

- A few KE commented that cannabis remained readily available and was grown extensively in SA. One other KE stated that cannabis is 'still their number one drug' due to its widespread use.

5.4 Morphine

Key Findings

- The median last purchase price for 100mg of MS Contin[®] was \$45 and 100mg of Kapanol[®] was \$50; this had generally remained stable in the six months preceding interview.
- Illicit morphine was mostly reported as difficult to obtain (35%), though 26% reported it as being easy to attain. The majority of those able to answer reported that availability had remained stable.
- Participants most commonly obtained illicit morphine through friends at an agreed public location.

In 2015, 24% of the sample was confident enough to complete survey items relating to the illicit morphine market.

5.4.1 Price of morphine

In 2015, the median price paid by participants at last purchase was \$50 for 100mg of Kapanol[®]. This was stable from 2014. The median price paid for 100mg of MS Contin[®] at last purchase was \$45 (see Table 29). Readers should note the small number of participants commenting on prices.

Table 29: Price of morphine at last purchase by participants, 2014–2015

Amount bought	Median price paid (\$)	
	2014	2015
MS Contin [®] – 60mg	30 [^]	30 [^]
MS Contin [®] – 60mg	50 [^]	45 [^]
Kapanol [®] – 50mg	25 [^]	25 [^]
Kapanol [®] – 100mg	50	50 [^]

Source: IDRS participant interviews.

[^] Small numbers: n<10.

Twenty-one participants were able to comment on whether the price of morphine had changed in the six months prior to interview. Almost three quarters (71%; n=15) reported that the price had remained stable, five participants reported that the price had increased, and one participant reported that it had fluctuated. Comparisons were not made with 2014 due to small numbers.

5.4.2 Availability of morphine

Table 30 and Table 31 summarise the current availability of morphine and the changes in its availability over the last six months, according to participant reports. Among those able to comment, eight participants reported that illicit morphine was difficult to obtain while on the other hand, seven participants reported that illicit morphine was very easy to obtain. Six participants reported that illicit morphine was easy to obtain, and two participants reported that it was very difficult to obtain. More than half of those able to comment (n=13) reported that the availability of morphine had remained stable over the past six months, with under two-fifths (n=9) reporting that it had become more difficult to obtain.

Table 30: Availability of illicit morphine currently, 2014–2015

How easy is it to get morphine at the moment?	% able to answer	
	2014 (n=23)	2015 (n=23)
Very easy	9	30
Easy	35	26
Difficult	48	35
Very difficult	9	9

Source: IDRS participant interviews.
Note: 'Don't know' was excluded.

Table 31: Change in availability of illicit morphine over the last six months, 2014–2015

Has availability changed in the last 6 months?	% able to answer	
	2014 (n=23)	2015 (n=23)
More difficult	44	39
Stable	52	57
Easier	0	4
Fluctuates	4	0

Source: IDRS participant interviews.
Note: 'Don't know' was excluded.

Table 32 presents information collected from participants on the person(s) from whom they had bought morphine, and the venues from which they had normally obtained morphine in the six months prior to interview. Of those who were able to answer (n=17), the majority of participants reported that they had obtained morphine from a friend (65%), followed by an acquaintance (24%) and a known dealer (12%).

One third of participants (33%) reported that the venue they had usually obtained morphine from was an agreed public location, followed by a friend's home (28%). Participants were also asked to nominate the reasons for using illicit morphine. The main reasons given were self-treatment (n=6), substitution for heroin/other opiates (n=5) and intoxication (n=4).

Table 32: Usual source person and source venue used to obtain illicit morphine in the last six months, 2014–2015

Usual source person and venue of able to answer (%)	2014	2015
Person#	n=21	n=17
Street dealer	5	0
Friend	57	65
Known dealer	5	12
Mobile dealer	0	0
Acquaintances	33	24
Unknown dealer	0	0
Partner	-	-
Other	0	0
Venue#	n=21	n=18
Home delivery	14	17
Dealer's home	5	0
Friend's home	29	28
Acquaintance's home	10	6
Street market	5	0
Agreed public location	29	33
Other	10	17

Source: IDRS participant interviews.
Only one response allowed.

5.5 Oxycodone

Key findings

- The median price of a 40mg tablet of Reformulated OxyContin[®] and a 40mg tablet of the generic controlled-release OxyContin[®] was \$20, respectively.
- The majority of those who answered reported that the price of oxycodone had remained stable, though there were equal proportions reporting that the price had either increased or decreased in the six months preceding interview (21% respectively).
- The availability of illicit oxycodone was largely reported as 'difficult' to obtain, with participants reporting that this had remained stable over the past six months. In saying this, 38% of participants believed that it had become more difficult to obtain.
- Participants obtained oxycodone most commonly through friends and at either a friend's home or at an agreed public location.

In 2014, OxyContin[®] (oxycodone) tablets were reformulated with physicochemical properties in order to make them harder to crush for unsanctioned ROA, such as snorting and injecting. These changes took effect from 1 April 2014. IDRS participants were subsequently asked to distinguish between existing non-formulated OxyContin[®] and reformulated OxyContin[®]. Following the introduction of Reformulated OxyContin[®], a newer generic formulation of oxycodone (Oxycodone Sandoz[®]) was released in Australia in September 2014. This generic formulation does not have tamper resistant or "abuse deterrent" properties and is available in tablet sizes similar to the Original OxyContin[®] product. Given the changes in the types of oxycodone products that became available in late 2014, IDRS participants in 2015 were subsequently asked about their use of Original OxyContin[®] and Reformulated OxyContin[®], as well as the generic Oxycodone Sandoz[®].

In 2015, 25% of the sample was confident enough to complete survey items relating to the illicit oxycodone market. The most commonly purchased amounts were 40mg tablets (Reformulated OxyContin[®]), with the median purchase price being \$20 for Reformulated OxyContin[®] (range: \$6 - \$50; n=10) and \$20 for a 40mg generic controlled-release OxyContin[®] (range: \$10 - \$50; n=3). The median purchase price for an 80mg Reformulated OxyContin[®] was \$40 (range: \$20 - \$40; n=3). There were insufficient purchases of Endone[®], OxyNorm[®], Proladone[®] or Targin[®] to report on prices. Reports regarding changes in the price of oxycodone were mixed, with equal proportions reporting that the price had either increased or decreased in the six months preceding interview (21% respectively). Over half (58%; n=11) reported that the price had remained stable in the six months preceding interview.

In regards to availability, the majority of those able to comment reported that oxycodone was difficult (52%) to very difficult (4%; n=1) to obtain. Six participants found it easy to obtain, and five participants found it very easy. Oxycodone was reported by the majority (58%) to have remained stable over the past six months, which was a significant increase from 2014 (17%; p<0.05; 95% CI: -0.63 - -0.07).

Oxycodone was most commonly purchased from friends (76%), followed by acquaintances (14%), which presented no significant difference from 2014. The most commonly cited locations for purchase were a friend's home and an agreed public location (29% respectively), followed by home delivery (24%).

The main reasons reported for using illicit oxycodone were: as a substitute for heroin/other opiates (n=9), intoxication (n=4) and self-treatment (n=3).

5.6 Benzodiazepines

Key Findings

- The price of illicit benzodiazepines was predominantly reported as being stable in the preceding six months.
- Two-thirds of participants reported that illicit benzodiazepines were easy to very easy to obtain, and changes to availability had remained stable in the six months prior to interview.
- The majority of participants obtained benzodiazepines through friends, and primarily from a friend's home or home delivery.

As with other drug types, all participants were asked about the illicit benzodiazepine market. Seventeen participants were able to comment on the price and/or availability of illicit benzodiazepines. Among these participants, the majority of participants (31%; n=5) had used Valium[®] in the preceding six months, followed by Xanax[®] (25%; n=4). The median purchase price for one diazepam pill was \$11 (range: \$2 - \$20; n=2), and the median price paid for alprazolam, per pill, was \$6 (range: \$2 - \$10; n=4).

In response to the question 'Has the price of illicit benzodiazepines changed in the past six months?' the majority of those commenting (77%; n=10) reported that the price had remained stable, whilst 23% (n=3) reported that the price had increased over the preceding six months.

With regards to the current availability of street benzodiazepines, two thirds of those who commented said that it was very easy (29%) to easy (35%) to obtain. Five participants reported that it was difficult to obtain, and one participant reported that it was very difficult to attain. When asked whether availability had changed over the preceding six months, the majority of those commenting (77%; n=13) reported that it had remained stable, whilst 24% (n=4) reported that it had become more difficult to access.

Among those that had recently bought illicit benzodiazepines, the majority of participants reported purchasing from friends (81%), with the most common venues equally being a friend's home and home delivery (38%). Furthermore, just over half of those able to answer reported that on the last occasion of use they had been given benzodiazepines for free (53%), whilst 41% had bought illicit benzodiazepines. In the majority of cases, the original source was reported to be someone else's prescription (82%).

5.7 Cocaine

Key Findings

- A very small number of participants were able to comment on the price, purity and availability of cocaine, thus no comparisons were made with 2014.
- The median price of a gram of cocaine was \$400, which was reported as having remained stable in the six months prior to interview.
- The majority of participants reported the purity of cocaine to be medium to high.
- Though the numbers were low, there was wide variance with how easy or difficult cocaine was to obtain.
- Among those who recently used cocaine, the majority of participants stated that the availability had remained stable, yet one fifth of participants commented that it had become more difficult to obtain.

In 2015, 10% of the sample was confident enough to complete survey items relating to the cocaine market.

5.7.1 Price of cocaine

In 2015, the median price paid by participants at last purchase was \$400 for a gram of cocaine (see Table 33). Readers should note the small number of participants commenting on prices, and as such, comparisons were not made with 2014.

Table 33: Price of cocaine at last purchase by participants, 2014–2015

Amount bought	Median price paid (\$)	
	2014	2015
Median price (\$) per gram	-	400 [^]
Median price (\$) per cap	-	
% Price changes (n)	n=1 [^]	n=9 [^]
Increased	-	11
Stable	100 [^]	67
Decreased	-	22
Fluctuated	-	0

Source: IDRS participant interviews.

[^] Small numbers: n<10.

Nine participants were able to comment on whether the price of cocaine had changed in the six months prior to interview: six participants reported that the price had remained stable; two reported that it had decreased and one participant reported that it had increased.

5.7.2 Purity of cocaine

Of the ten participants who commented, eight participants reported the purity of cocaine to be medium to high, while only a small number reported the purity to be low (n=2). Five participants reported that the purity of cocaine had remained stable over the last six months and two participants reported that it had decreased.

5.7.2 Availability of cocaine

Among those able to comment, three participants (30%) reported that cocaine was very easy, easy and difficult to obtain, respectively. One participant (10%) reported that it was very difficult to acquire. Among those who recently used cocaine, eight

participants stated that the availability had remained stable and two participants commented that it had become more difficult to attain.

5.8 Other drugs

The number of participants who answered questions relating to the ecstasy, hallucinogens, illicit buprenorphine (Subutex[®]), illicit buprenorphine-naloxone (Suboxone[®]), illicit methadone, illicit antidepressants, illicit antipsychotics, illicit pharmaceutical stimulants, steroids and fentanyl markets were extremely low ($n \leq 10$). Data from these sections will not be presented.

6 HEALTH-RELATED TRENDS ASSOCIATED WITH DRUG USE

Key Findings

Overdose and Drug-Related Fatalities

- Ten participants reported overdosing on heroin in the previous 12 months, (n=5 in 2014) and one participant had overdosed in the past month.

Drug Treatment

- Thirty-one percent of the SA IDRS sample reported being in drug treatment at the time of interview, and they had been in treatment for a median of 30 months. The predominant form of treatment being received was maintenance pharmacotherapy treatment. Specifically, 17% reported being on a methadone program, and 9% reported being on a buprenorphine or buprenorphine/-naloxone program.

Health Service Use

- Telephone calls to ADIS decreased for alcohol and opioids and increased slightly for amphetamines, though calls regarding cannabis remained relatively stable. Cocaine and ecstasy related calls continued to remain very low.

- Consistent with 2014 reports, alcohol continues to dominate as the primary drug of concern for the largest proportion of total clients to DASSA treatment services, followed by amphetamines, cannabis, opioid analgesics and heroin. Both ecstasy and cocaine accounted for only a very small fraction of the total attendances.

- The substances most commonly involved in a primary diagnosis for SA drug-related hospital admissions were opioids (heroin, morphine, methadone etc.), followed by amphetamines, cannabis and cocaine.

- Drug-related attendances to the RAH emergency department were largely alcohol-related. Of the illicit drugs, amphetamines accounted for the largest number of drug-related attendances, followed by heroin.

Opioid and Stimulant Dependence

- Almost half (47%) of those who recently used a stimulant drug (mainly methamphetamine) and completed the Severity of Dependence Scale (SDS) scored 4 or above, indicative of methamphetamine dependence.

- Over half (56%) of those who recently used an opioid drug and commented, scored 5 or more on the SDS for opioids, indicative of opioid dependence.

Mental Health

- About half of the sample (51%) self-reported mental health problems in the six months preceding interview, which was a significant increase from 2014 (30%). Among those who had suffered from a mental health problem, depression and anxiety continued to be the most commonly reported disorders.

- Among those who had recently experienced a mental health problem, three-fifths (60%) reported that they had attended a professional for such problems.

- About half of the IDRS sample (49%) was assessed as having high to very high levels of psychological distress. This was much higher than what has been reported among the general population.

Alcohol Use Disorders Identification Test

- Forty-six percent of males and 35% of females scored 5 or more on the AUDIT-C, indicating the need for further assessment.

Naloxone Program and Distribution

- Three-quarters of the sample had heard of naloxone, which was substantially lower than what was reported at the national level (75% vs 87%). Among those who had heard of naloxone, over three-fifths (61%) reported that naloxone was used to 'reverse heroin'; while 32% believed that it was used to 're-establish consciousness'.
- Over half (58%) reported that they had not heard of the take-home naloxone program.
- Seven participants reported that they had completed training in naloxone administration. Five participants reported that they had been resuscitated with naloxone by somebody who had been trained through the take-home naloxone program.
- The majority of those participants who had not completed training in naloxone administration stated that they would call 000 if they found someone they had suspected had overdosed.
- One hundred percent of those who commented reported that they would stay with someone after giving them naloxone, 98% reported that they would administer naloxone after witnessing someone overdose, and 94% would want their peers to give them naloxone if they overdosed.

6.1 Overdose and drug-related fatalities

6.1.1 Heroin and other opioids

6.1.1.1 Non-fatal overdose

Of the eighty-one participants who reported lifetime use of heroin, thirty (39%) also reported that they had overdosed on heroin on a median of three occasions (range: 1–40). Of these, 80% (n=24) had overdosed six times or less, with the majority reporting that they had overdosed just the one time (n=11; 37%).

Among participants who had ever overdosed on heroin, 33% (n=10) had done so in the past 12 months and one participant (3%) had overdosed in the past month (see Table 34).

Table 34: Lifetime experience of heroin overdose*, 2011–2015

Heroin overdose variable	2011 (n=38)	2012 (n=34)	2013 (n=36)	2014 (n=30)	2015 (n=30)
Overdosed once (%)	53	35	53	40	37
Overdosed twice (%)	21	21	22	30	10
Overdosed 3 times or more (%)	26	44	25	30	53

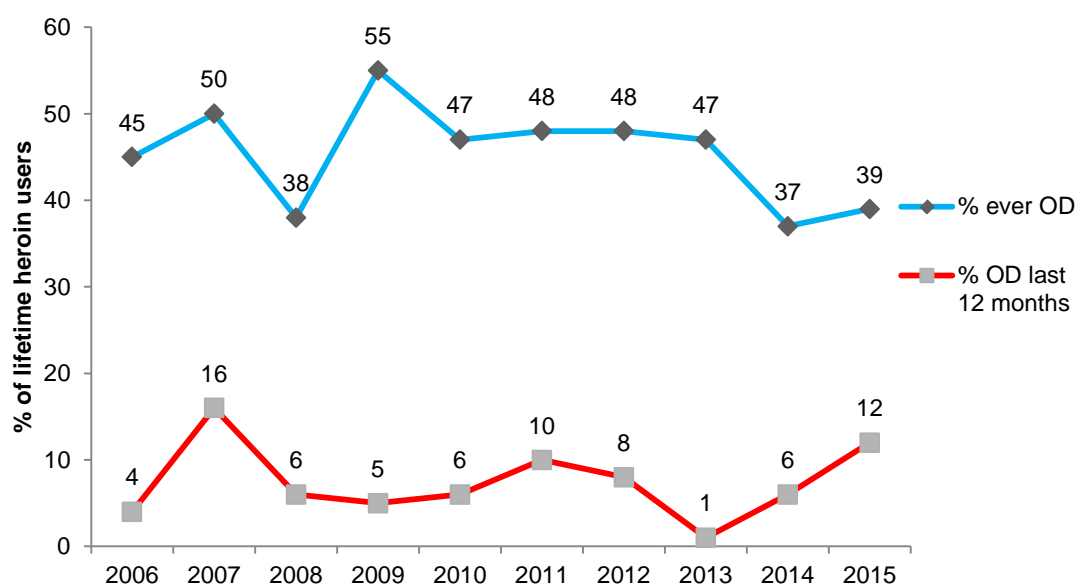
Source: IDRS participant interviews.

*Of those who had ever overdosed on heroin.

Long-term trends in the experience of lifetime and past 12 month overdose, among those who had ever used heroin, is depicted in Figure 20. As can be seen, following a sharp rise in 2007, heroin overdoses in the past 12 months declined in 2008 and remained fairly low and stable until 2012. A decline in overdoses was noted again in 2013 and the number of overdoses doubled from 2014 to 2015.

In regards to lifetime heroin overdose, prevalence fluctuated considerably between 2006–2009, before stabilising from 2010–2013. In 2015, the proportion of heroin users who reported lifetime experience of overdose (39%) remained stable from 2014 (37%).

Figure 20: Experience of lifetime and past 12 month heroin overdose, as a proportion of participants that had ever used heroin, 2006–2015



Source: IDRS Participant interviews.

Participants were asked if they had been administered the opioid antagonist naloxone (Narcan®) for heroin overdose. In 2015, questions relating to the use of Narcan® referred only to the last time the participants overdosed. Three participants reported having received Narcan® the last time they had overdosed.

6.1.2 Fatal opioid overdose

The Australian Bureau of Statistics (ABS) collates and manages the national causes of death database, utilising information from the National Coronial Information System (NCIS). Prior to 2003, ABS staff visited coronial offices to manually update information about the cause of death for records that had not yet been loaded onto the NCIS. Since 2003, the ABS has progressively ceased visiting jurisdictional coronial offices, therefore ceasing manual updates of deaths that were not already included on the NCIS.

In 2006, the ABS relied solely on the data contained on the NCIS at the time the ABS ceased processing the deaths data. Since 2007, the causes of death data have been subject to a revisions process. The preliminary data is released and then two successive revisions are released 12 months apart from the date of the release of preliminary data. The 2006 data were not subject to this revision process, and are therefore likely to be incomplete. This is likely to result in an underestimate of the number of opioid induced deaths recorded in 2006. We have tried to offset this underestimate by analysing the changes between preliminary and final findings for

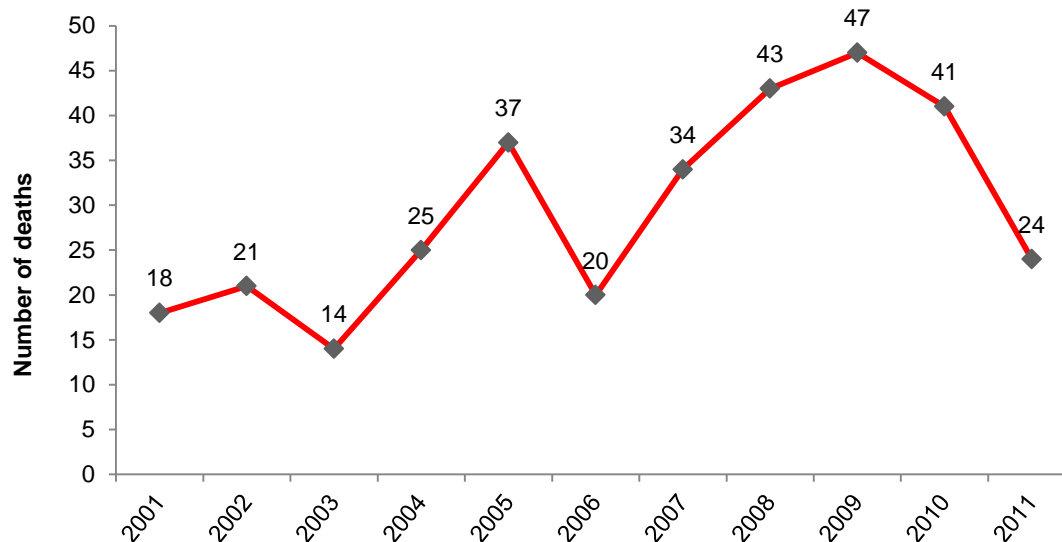
both 2007 and 2008. We have averaged the changes across both years, and applied it to the 2006 figures. This data should be interpreted with caution.

Data for the years 2007–2010 represent the second and final revision of each dataset, and are therefore methodologically comparable. Again these data should be interpreted with caution as figures may change. The result of the revisions process is a longer time from the reporting of a death to finalisation by the coroner. These revisions will most likely result in an increase in the number of deaths. This is particularly true for deaths that are drug related, as coronial investigations can be complex and lengthy in nature.

The ABS has implemented a number of additional strategies, including examination of death certificates and coroners reports, to ensure that as many of the deaths as possible have a cause of death coded at the time the data file is closed.

In 2011, there were 617 accidental deaths due to opioids at a national level. Most of these deaths occurred in New South Wales (n=176) and Victoria (n=175), with 24 deaths being recorded in SA (4% of the total number of deaths). This reflected a decrease from 2010, in which SA recorded 41 deaths due to accidental opioid overdose (see Figure 21). It should be noted that the deaths reported are opioid-related and not necessarily heroin overdose deaths. Note that 2011 has the most recent available data.

Figure 21: Number of accidental deaths due to opioids among those aged 15-54 years in SA, 2001–2011



AMANDA Source: ABS causes of death data (Roxburgh and Burns 2015).

Note: The 2006 data will be underestimated and not necessarily reflective of a downward trend (given that enhanced methodology was not introduced until 2007); the 2007-2010 data are the final figures after two revisions.

6.1.3 Accidental overdose (other drugs)

Participants were asked to specify how many times they had accidentally overdosed on any other drug (not including heroin, morphine, methadone or oxycodone), how long since that had happened, and which drugs were involved. Eighteen percent (n=18) reported that they had accidentally overdosed on another drug within their lifetime, and they had done so on a median of one occasion (range: 1–35). Of these, six participants had overdosed in the past 12 months, and one participant had overdosed in the last month.

6.2 Drug treatment

6.2.1 IDRS participant survey

As mentioned in section 3.1, thirty-one percent of the sample was in drug treatment at the time of the interview, with the majority of participants in maintenance pharmacotherapy treatment. More specifically, 17% reported being on a methadone program (15% in 2014) and 9% reported being on a buprenorphine or buprenorphine/naloxone program (8% in 2014).

Participants who were in treatment at the time of interview reported having been in that treatment for a median of 30 months (range: 1–336 months).

In 2015, 14% of participants reported that at some stage throughout their life they had sought treatment, but had not received it (9% in 2014). Participants attempted to access a range of services including: a psychologist (n=4), rehab/therapeutic community (n=3), an opiate substitution program (n=2), a general practitioner (GP) (n=2), an ATOD worker (n=1), a counsellor (n=1) and a psychiatrist (n=1).

6.2.2 Treatment services

The following drug treatment data for SA comes from two sources: telephone calls to ADIS and DASSA. In order to provide a clearer picture of trends in the number of individuals seeking treatment for various illicit substances, DASSA data will be presented in terms of clients per drug type. For information regarding episodes of treatment per drug type – which gives a more accurate measure of demand, or total load, on treatment services – the reader is directed to the Alcohol and Other Drugs Treatment Services report (Australian Institute of Health and Welfare 2015). This report details findings from DASSA and other non-government treatment agencies in SA.

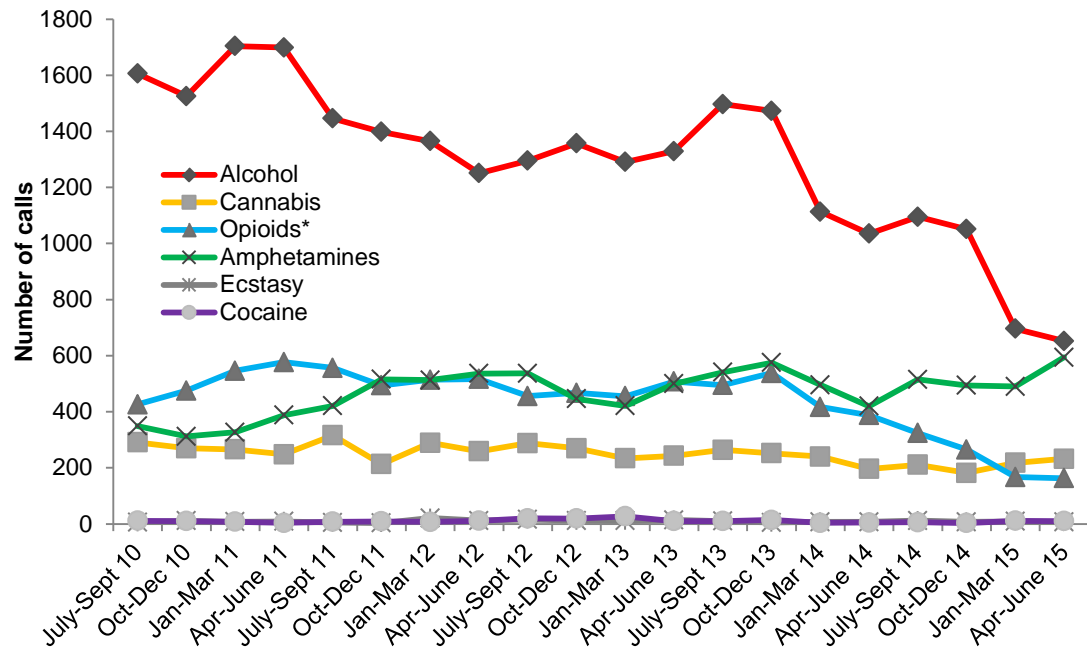
6.2.3 Heroin and other opioids

6.2.3.1 *Treatment services – ADIS*

Telephone calls to ADIS regarding any opioid substance accounted for 8.75% of the total coded telephone contacts (drug-related) in the 2014/15 financial year (n=10,499) (12.41% of 14,812 calls in 2013/14). For the first time in eleven years, a breakdown of number of calls per opioid substance category (e.g. heroin, methadone) became available. Opioid Pharmacotherapies accounted for the largest amount of calls in the 2014/2015 financial year (n=307), though calls regarding Opioid Pharmacotherapies were only received between July and December 2014.

Figure 22 depicts the number of opioid-related calls, per quarter, for the last five financial years compared to calls related to other drug types. It can be seen that the majority of drug-related calls to SA ADIS across the time period depicted have been alcohol-related, though the number of alcohol-related calls have been declining over the past two financial years, as have calls regarding opioids. Calls regarding amphetamines and cannabis appear to have remained relatively stable in 2014/15. Calls relating to ecstasy or cocaine have constituted less than 1% of the total coded calls to SA ADIS across all years depicted.

Figure 22: Number of drug-related calls to ADIS per quarter, by selected drug type, July 2010–June 2015



Source: SA ADIS.

* 'Opioids' includes all calls coded under the categories heroin, methadone, buprenorphine, naltrexone, opioid pharmacotherapies and other opioids.

6.2.3.2 Treatment services – DASSA

The primary drug of concern nominated by DASSA clients, as a proportion of the total number of clients, is presented in Table 35. In 2014/15, the proportion of clients nominating heroin as their primary drug of concern (8.5%) increased slightly from 2013/14 (7.0%). In saying this though, the proportion of total DASSA clients nominating heroin as their primary drug of concern was lower than that for opioid analgesics (8.9%), cannabis (11.6%) amphetamines (21.1%) and substantially less than that for alcohol (42.9%).

Table 35: Primary drug of concern nominated by clients of DASSA as a percentage of total number of clients, 2010/11–2014/15

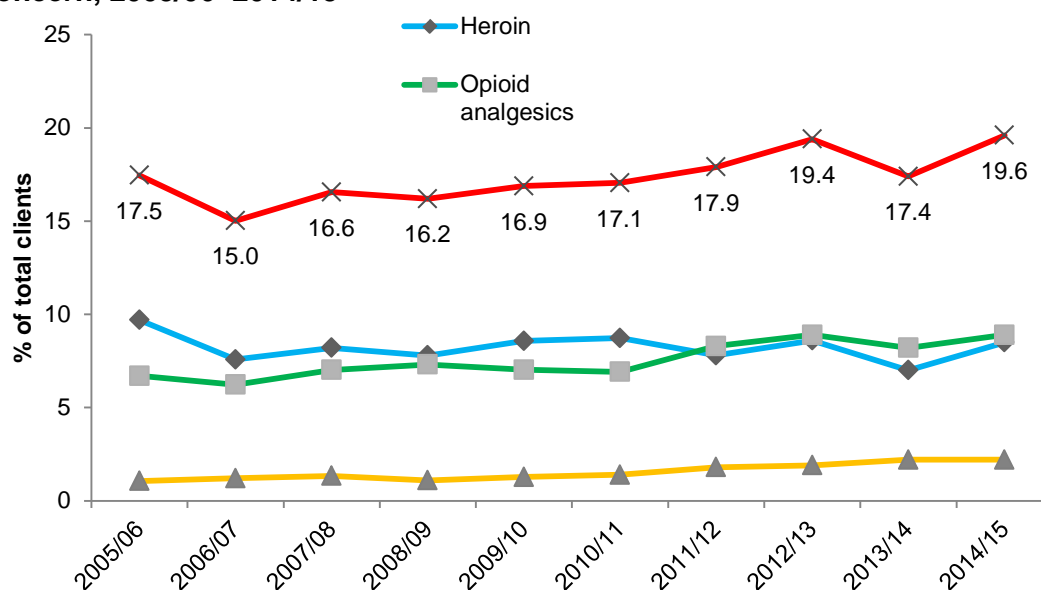
Drug Type (%)	2010/11	2011/12	2012/13	2013/14	2014/15
	N=5,430	N=5,438	N=5,262	N=4,932	N=4,604
Alcohol	54.7	49.4	47.5	47.1	42.9
Amphetamines	16	19.4	19.1	18.5	21.1
Heroin	8.7	7.8	8.6	7	8.5
Opioid analgesics	6.9	8.3	8.9	8.2	8.9
Cannabis	11.4	13.9	13.9	13.3	11.6
Benzodiazepines	1.9	1.9	2	1.9	1.9
Ecstasy	1	0.5	0.3	0.5	0.2
Cocaine	0.2	0.2	0.2	0.2	0.2
Tobacco	0.7	0.5	0.5	0.4	0.5
Unknown	0.1	0.3	0.1	0.4	0.2
Buprenorphine	1.4	1.8	1.9	2.2	2.2
Other	2.1	1.2	3	0.4	0.9

Source: DASSA.

Note: Total percentages for each year may not equal 100% as clients may have presented with more than one primary drug of concern within that time.

As can be seen in Figure 23, the percentage of DASSA clients nominating heroin as their primary drug of concern has remained relatively stable over the past decade, from 9.7% in 2005/06 to a current level of 8.5%. In contrast, there has been a slight but overall upward trend in those nominating opioid analgesics as their primary drug of concern, from 6.7% in 2005/06 to 8.9% in 2014/15. The nomination of buprenorphine as a primary drug of concern has remained low and relatively stable apart from a very slight increase from 1.06 in 2005/06 to 2.2% currently. In 2014/15, the proportion of clients nominating ‘any’ type of opioid substance as their primary drug of concern was 19.6%, a visible increase from 2013/14 (17.4%).

Figure 23: Percentage of total DASSA clients with opioid as the primary drug of concern, 2005/06–2014/15



Source: DASSA.

Table 36 depicts the number of clients (individuals) who have been admitted to DASSA's inpatient detoxification services over the last five financial years. It can be seen that attendance at these services was by far the most common for alcohol-related treatment, and this has remained consistent across all five years. Aside from alcohol, in 2014/15 the greatest number of clients attended inpatient detoxification services for treatment related to amphetamines, followed by cannabis, opioid analgesics and heroin, similar to 2013/14. Interestingly, when compared to 2013/14 data, there was a substantial increase in the number of clients attending inpatient detoxification services for amphetamines, which almost doubled.

Table 36: Number of clients to DASSA inpatient detoxification treatment services, by primary drug of concern, 2010/11–2014/15

Drug Type	2010/11	2011/12	2012/13	2013/14	2014/15
Alcohol	524	494	478	511	534
Amphetamines	83	111	116	119	215
Heroin	61	74	44	46	59
Opioid analgesics	60	78	76	77	82
Cannabis	99	121	87	111	134
Benzodiazepines	23	30	26	27	16
Cocaine	3	2	5	4	6
Tobacco	0	0	0	0	0
Buprenorphine	15	18	7	9	16
Unknown	-	0	1	0	0
Other	19	10	10	15	5
TOTAL	852	896	807	867	1067

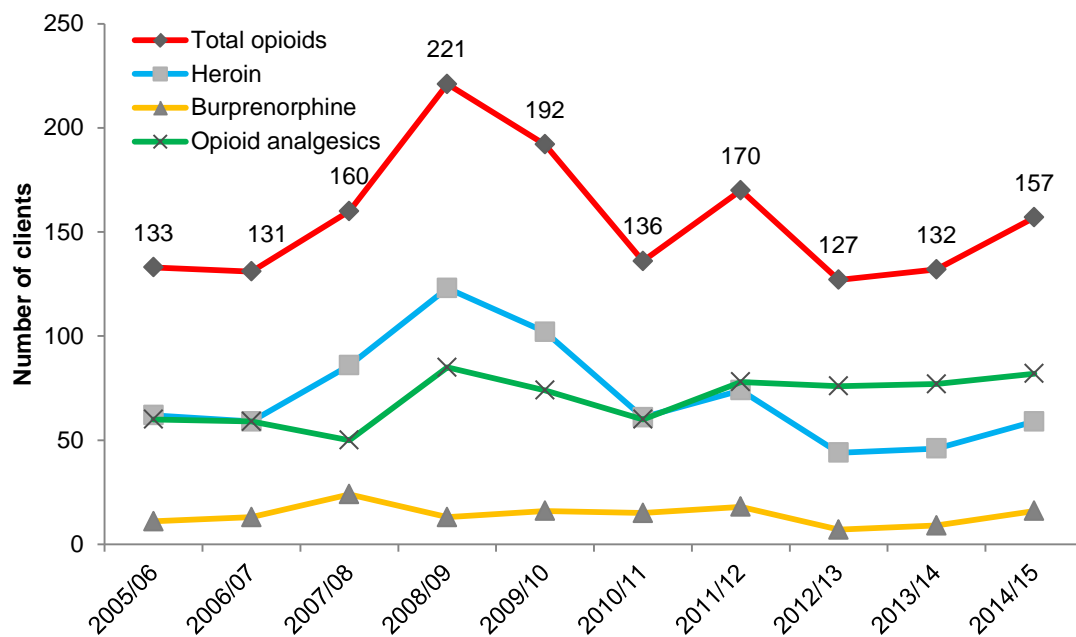
Source: DASSA.

Note: Results show the number of clients, i.e. the number of individuals who started one or more new episodes of treatment during the period; Totals for each year may exceed the sum of clients per drug type as an individual client may have attended detox for more than one drug within the given year.

Figure 24 presents the number of clients admitted to DASSA's inpatient detoxification treatment services for heroin, opioid analgesics or buprenorphine, from 2005/06 to 2014/15. As can be seen, the number of clients nominating heroin as their primary drug of concern remained generally stable in 2014/15 apart from a very slight increase. The number of clients nominating buprenorphine (9 in 2013/14 vs. 16 in 2014/15) or opioid analgesics (77 in 2013/14 vs. 82 in 2014/15) as their primary drug of concern also remained stable.

In 2014/15 the number of inpatient admissions for amphetamines (215) far exceeded that for heroin (59). Furthermore, when the data was analysed in terms of whether the primary drug of concern was amphetamines or *any* opioid substance (heroin or other opioid), it was found that the total number of clients entering treatment for *any* opioid substance (141) was still less than that for amphetamines (215).

Figure 24: Number of clients to DASSA inpatient detoxification treatment services per year, with heroin or other opioid as the primary drug of concern, 2005/06–2014/15



Source: DASSA.

6.2.4 Methamphetamine

6.2.4.1 Treatment services – ADIS

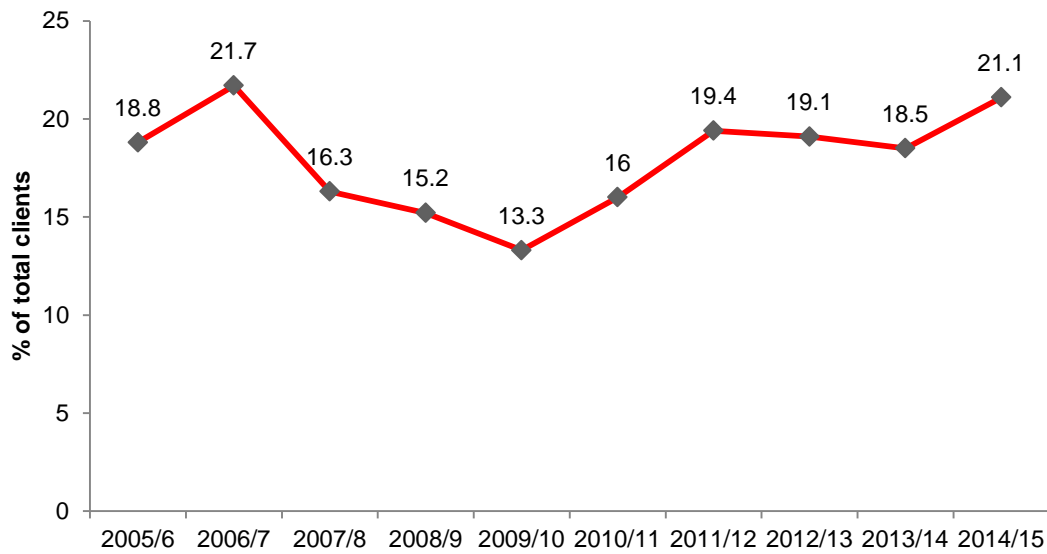
Telephone calls to ADIS regarding amphetamines accounted for 19.94% (n=2,093) of the 10,499 total drug-related calls in the 2014/15 financial year. This was an increase from the previous financial year (13.7% of a total 14,812 calls). Figure 22 depicts the number of amphetamine-related calls per quarter for the last five financial years compared to calls related to other drug types. As can be seen, in 2014/15 calls related to methamphetamine continued to be higher than those for cannabis and opioids, and calls regarding opioids were very similar to amphetamine-related calls in the previous financial year.

6.2.4.2 Treatment services – DASSA

The proportion of clients nominating amphetamines as their primary drug of concern increased in 2014/15, indicating that an upward trend originally observed from 2009/10 – 2011/12 may continue following the little variation detected from 2011/12 – 2013/14 (see Figure 25).

In 2014/15, amphetamines (21.1%) were the second most commonly nominated drug of concern by DASSA clients, and dominated as the most common illicit drug of concern, double that of cannabis (11.6%).

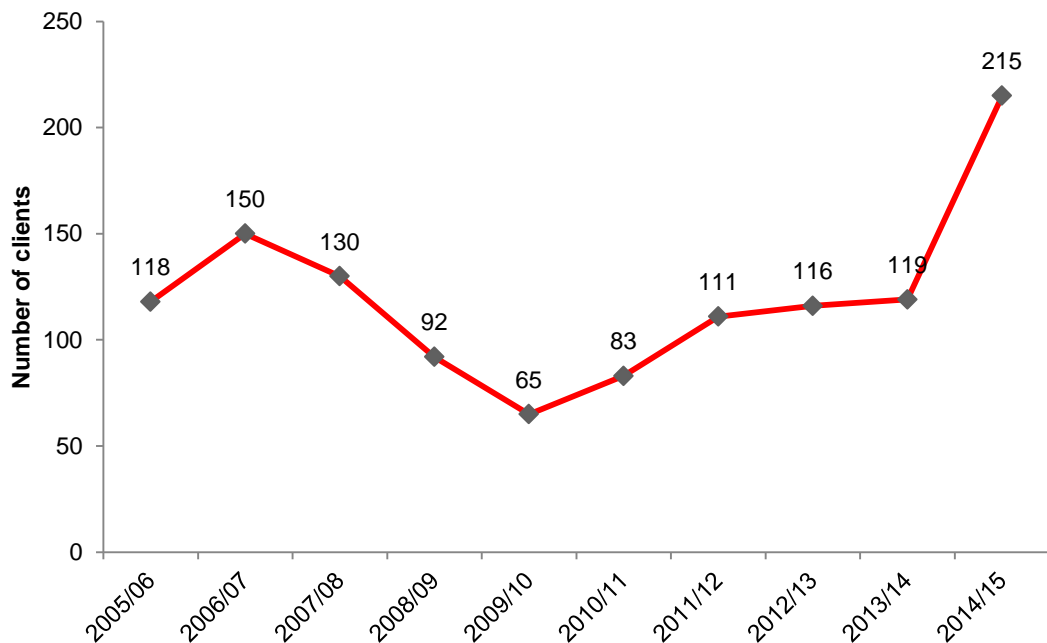
Figure 25: Percentage of total DASSA clients with amphetamines as the primary drug of concern, 2005/06–2014/15



Source: DASSA.

Figure 26 presents the number of clients attending DASSA’s inpatient detoxification treatment services for amphetamines from 2005/06 to 2014/15. The number of inpatient detoxification clients who nominated amphetamines as their primary drug of concern rose dramatically in 2014/15 to 215 clients (119 clients in 2013/14).

Figure 26: Number of clients to DASSA inpatient detoxification treatment services, with amphetamines as the primary drug of concern, 2005/06–2014/15



Source: DASSA.

6.2.5 Cocaine

6.2.5.1 Treatment services – ADIS

Telephone calls to ADIS regarding cocaine accounted for only 0.3% (n=30) of total drug-related telephone calls in 2014/15, stable from 2013/14 (0.2%; n = 33). Figure 22 depicts the number of cocaine-related calls per quarter for the last five financial years compared to calls related to other drug types. As can be seen, the number of calls regarding cocaine has remained consistently low over the years.

6.2.5.2 Treatment services – DASSA

The proportion of clients nominating cocaine as their primary drug of concern has remained stable and low across all years reported (Table 35). Of the clients attending any DASSA treatment services in 2014/15, 0.24% (n=11 of 4,604 individuals) nominated cocaine as their primary drug of concern.

6.2.6 Cannabis

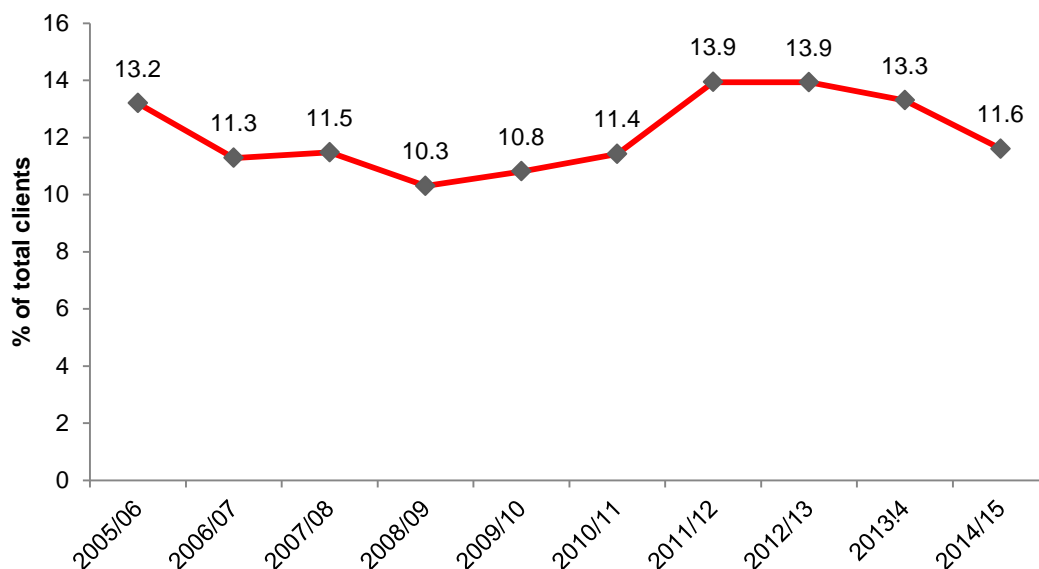
6.2.6.1 Treatment services – ADIS

Telephone calls to ADIS regarding cannabis accounted for 8% (n=843) of the total coded telephone contacts (drug-related) in the 2014/15 financial year (6.4%; n=952 in 2013/14). Figure 22 depicts the number of cannabis-related calls per quarter for the last five financial years compared to calls related to other drug types. As can be seen, the number of cannabis-related calls has remained relatively stable over the past five years.

6.2.6.2 Treatment services – DASSA

The proportion of clients nominating cannabis as their primary drug of concern decreased in 2014/15. Of clients to all DASSA treatment services, 11.64% (n=536 of 4,604 individuals) nominated cannabis as their primary drug of concern in 2014/15 (see Figure 27). This represents a plateauing of the upward trend observed from 2008/09–2011/12.

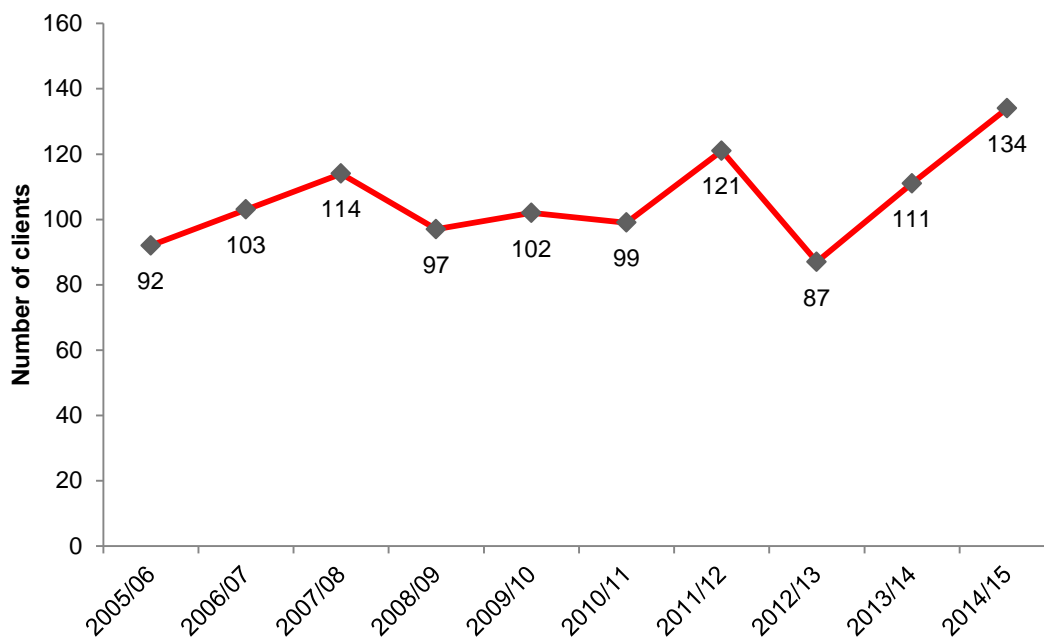
Figure 27: Percentage of total DASSA clients with cannabis as the primary drug of concern, 2005/06–2014/15



Source: DASSA.

Figure 28 presents the number of DASSA clients attending inpatient detoxification treatment services for cannabis, from 2005/06 onwards. In 2014/15, the number of cannabis-related clients attending inpatient detoxification increased to 134 (compared to 111 in 2013/14). In addition, the number of clients entering inpatient detoxification for cannabis continued to be higher than those entering treatment for heroin and opioid analgesics.

Figure 28: Number of admissions to DASSA inpatient detoxification treatment services, with cannabis as the primary drug of concern, 2005/06–2014/15



Source: DASSA.

6.3 Hospital admissions

An analysis of data from the National Hospital Morbidity Dataset (NHMD) (provided by the AIHW for the period 1997/98 to 2013/14) was undertaken by NDARC. This data reports on both state-specific and national drug-related hospital admissions⁴ for the four main illicit drug classes (see Appendix 2 for national data). The data is adjusted so that all years reflect International Classification of Diseases, 9th Revision (ICD-9) classifications for comparability across this time period. Readers should note that the major impact of this adjustment is the exclusion of admissions for drug-related psychosis and withdrawal, due to incomparability between ICD-9 and International Classification of Diseases, 10th Revision (ICD-10) coding for these conditions.⁵ It should also be noted that these data lag behind other indicators by one year. At the time of printing, data was not available for 2014/2015.

The substances most commonly involved in a primary diagnosis for SA drug-related hospital admissions were opioids (heroin, morphine, methadone, etc.), followed by amphetamines, cannabis and cocaine. Ecstasy-related admissions are not specifically coded. Interestingly, SA data differed quite substantially to the trends observed at the national level (see Appendix).

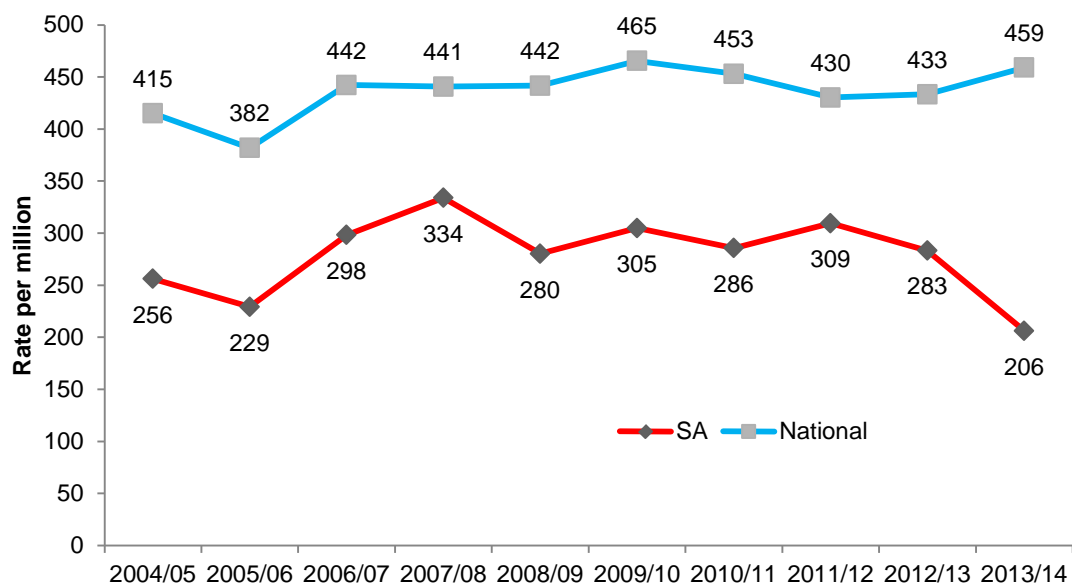
⁴ The National Hospital Morbidity Dataset includes admissions data from public and private hospitals across metropolitan, regional and remote locations.

⁵ ICD-9 coding for drug-related psychosis and withdrawal was non-specific for drug type, where ICD-10 coding is specific for drug type.

6.3.1 Opioid-related hospital admissions

Figure 29 shows the rates of opioid-related admissions from 2004/05 onwards. In 2013/14, there was quite a considerable decrease in admissions; from 283 per million in 2012/13 to 206 per million. At the national level, opioid-related admissions have remained relatively stable over the past several years.

Figure 29: Rate of opioid-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 2004/05–2013/14



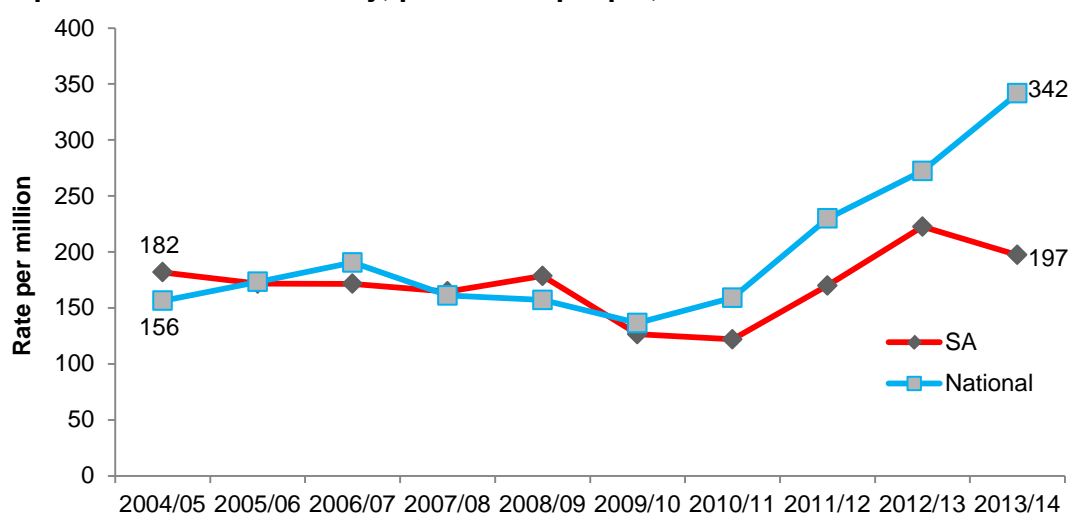
Source: Australian Institute of Health and Welfare, SA Health, (Roxburgh and Breen in press).

Note: Results are for persons aged between 15 and 54 years, excluding opioid withdrawal and psychosis admissions. A 'primary diagnosis' was given when opioids were considered chiefly responsible for the patient's episode of care in hospital.

6.3.2 Amphetamine-related hospital admissions

Figure 30 shows the long-term trend of amphetamine-related hospital admissions, from 2004/05 onwards. Admissions with amphetamines as a primary diagnosis increased sharply in 2013/14 at the national level; from 272 per million in 2012/13 to 341 per million. This continues an upward trend that has been observed from 2009/10 onwards. SA admissions remained relatively stable, from 222 per million in 2012/13 to 197 per million. Readers are reminded that this figure does not include amphetamine-related psychosis or withdrawal admissions.

Figure 30: Rate of amphetamine-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 2004/05–2013/14



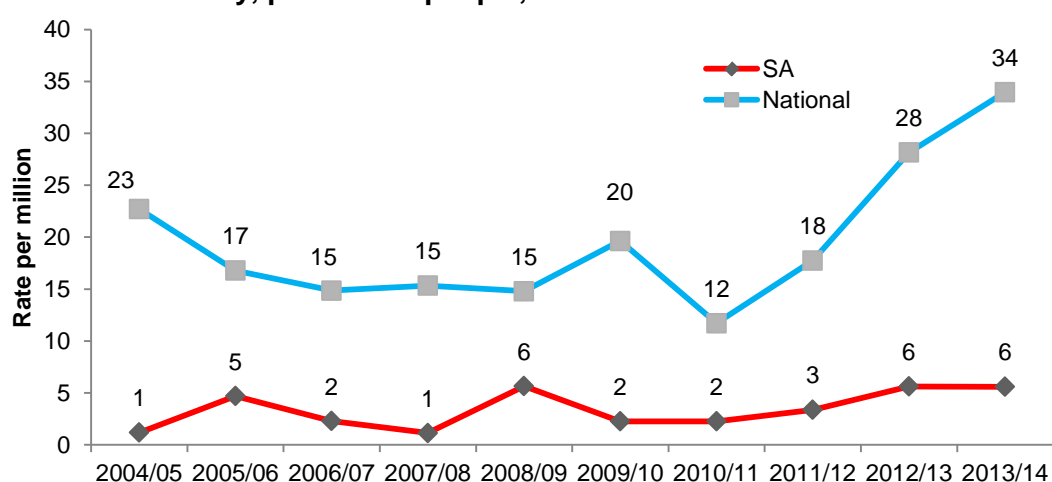
Source: Australian Institute of Health and Welfare, SA Health, (Roxburgh and Breen in press).

Note: Results are for persons aged between 15 and 54 years, excluding amphetamine withdrawal and psychosis admissions. A 'primary diagnosis' was given when amphetamines were considered chiefly responsible for the patient's episode of care in hospital.

6.3.3 Cocaine-related hospital admissions

Figure 31 shows that the rates of cocaine-related hospital admissions have fluctuated considerably over the years, both nationally and in South Australia. However, the national rate of cocaine-related admissions has remained consistently higher than what has been observed in SA. Admissions with cocaine as a primary diagnosis continued to increase at the national level, from 28 per million in 2012/13 to 34 per million in 2013/14. Cocaine-related admissions remained stable in South Australia at 6 per million in 2013/14, consistent with 2012/13.

Figure 31: Rate of cocaine-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 2004/05–2013/14



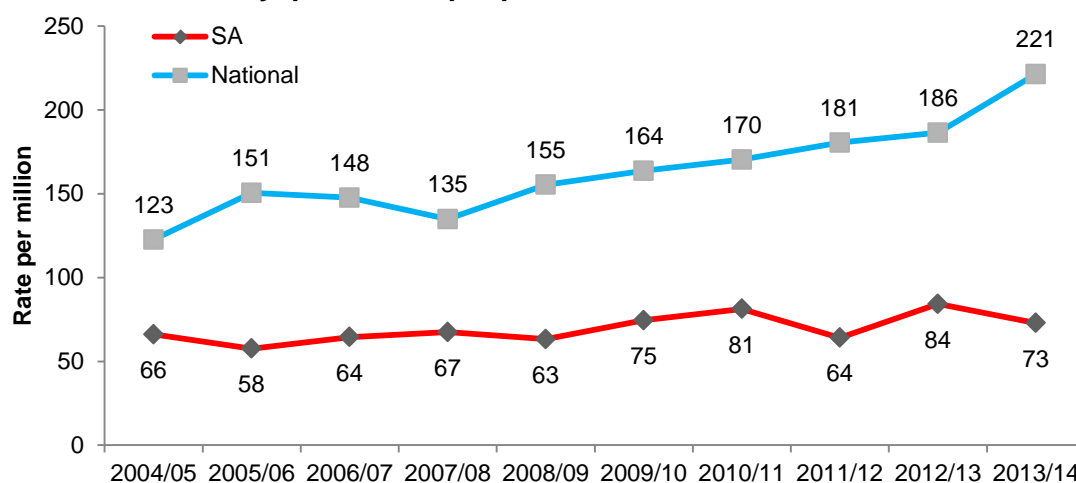
Source: Australian Institute of Health and Welfare, SA Health, (Roxburgh and Breen in press).

Note: For persons aged between 15 and 54 years, excluding cocaine withdrawal and psychosis admissions. A 'primary diagnosis' was given when cocaine was considered chiefly responsible for the patient's episode of care in hospital.

6.3.4 Cannabis-related hospital admissions

Figure 32 depicts the long-term trend in cannabis-related hospital admissions (primary diagnosis), both nationally and in South Australia from 2004/05 onwards. As can be seen, national rates have been trending upwards over the last decade, whilst SA rates have remained relatively stable. Interestingly, in 2013/14 the rates of admissions observed at the national level increased quite considerably (from 186 per million in 2012/13 to 221 per million), whilst in SA, admissions decreased slightly (from 84 per million in 2012/13 to 73 per million). Readers are reminded that this figure does not include cannabis-related psychosis or withdrawal admissions.

Figure 32: Rate of cannabis-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 2004/05–2013/14



Source: Australian Institute of Health and Welfare, SA Health, (Roxburgh and Breen in press).

Note: Results include persons aged between 15 and 54 years, excluding cannabis withdrawal and psychosis admissions. A 'primary diagnosis' was given when cannabis was considered chiefly responsible for the patient's episode of care in hospital.

6.4 Emergency department attendances

Information on drug-related attendances to the emergency department was provided by the Royal Adelaide Hospital (RAH), the largest central public hospital in Adelaide, and is presented in Table 37. It is important to note that these data were likely to be an underestimate of drug-related emergency department presentations. Drug involvement may not always be coded accurately, and coding accuracy is also dependent on accurate self-report of those presenting. Data should be interpreted with these caveats in mind. Readers are also warned that these are 'uncleaned' data and should be interpreted with caution. They are included here to give a picture of trends over time, rather than to provide precise numbers.

It can be seen that alcohol has continued to account for the largest portion of attendances across all years, with the number of alcohol-related attendances remaining relatively stable in 2014/15. Attendances regarding heroin increased in 2014/15 to 51 after a decline in 2013/14, whereby 35 attendances were observed. Amphetamines continued to dominate as the most common illicit drug-related attendances, though the number of amphetamine-related attendances decreased slightly from 136 attendances in 2013/14 to 121 in 2014/15. In addition, if the diagnosis 'drug-induced psychosis' (which includes amphetamine-induced psychosis) is examined, it can be seen that the number of attendances with this diagnosis had decreased slightly from 37 in 2006/07 to 28 in 2007/08, and decreased dramatically

with no attendances recorded for 2008/09–2014/15. The number of attendances in relation to cannabis have remained stable and low across the years depicted.

Table 37: Number of attendances to the emergency department at the Royal Adelaide Hospital, SA, from 2005/06–2014/15 (per drug or diagnosis)

	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015
Amphetamines	61	82	67	58	61	61	83	109	136	121
Cocaine	6	4	1	4	5	1	2	4	4	3
LSD	3	2	3	7	7	3	2	2	1	6
GHB	38	14	15	15	17	20	20	17	25	10
Alcohol	1,409	1,559	1,554	1,585	2,078	2,119	1,835	1,860	1,739	1,636
Cannabis	13	15	15	13	11	14	22	14	16	19
Heroin	32	39	44	66	51	66	63	55	35	51
Other opioid**	68	59	28	38	36	38	40	47	21	32
Benzodiazepines	122	174	145	151	169	162	147	117	130	135
Antidepressants	55	74	78	67	58	71	73	67	60	51
Antipsychotics	0	0	0	0	0	0	0	0	0	2
Drug addiction[#]	28	17	8	1	0	0	0	0	0	0
Drug-induced psychosis[#]	31	37	28	0	0	0	0	0	0	0
Drug withdrawal[#]	19	20	0	0	0	0	0	0	0	0
Other^{##}	360	579	528	464	480	471	439	448	446	447
TOTAL	2,245	2,675	2,514	2,469	2,973	3,026	2,726	2,740	2,613	2,513

Source: RAH Emergency Department.

Note: Results show attendances coded as drug- or poisoning-related.

** Includes opium, methadone, other narcotics (morphine, codeine, pethidine, etc.) and opioid withdrawal.

[#] Not otherwise specified.

^{##} Includes all other poisonings related to food, drug (medical and non-medical), chemical and other toxins.

6.5 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, and 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 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 as indicative of dependence.

Of those who had recently used a stimulant and commented ($n=78$), the median SDS score was three (mean 4.3, range: 0–14), with 47% scoring four or above. Females reported a non-significant higher mean stimulant SDS score than males (5.0 vs. 4.0; $p>0.05$). Additionally, there was no significant difference regarding gender and those who scored four or above (54% vs. 44%; $p>0.05$). Of those who scored four or above ($n=37$), 95% reported specifically attributing their responses to methamphetamine.

Of those who had recently used an opioid and commented ($n=72$), the median SDS score was six (mean 6.1, range: 0–15), with 54% scoring five or above. Regarding gender and those who scored five or above, significantly more males (65%) than females (38%) scored five or more ($p<0.05$). Of those who scored five or above ($n=40$), 60% reported specifically attributing their responses to heroin, 18% to methadone, 10% to morphine, 5% to oxycodone and 3% to buprenorphine.

6.6 Mental and physical health problems and psychological distress

6.6.1 Self-reported mental health problems

In 2015, 51% of participants reported experiencing a mental health problem (other than drug dependence) in the six months preceding interview. This was a significant increase from 2014 (30%; $p<0.01$; 95% CI: -0.34 - -0.07). Among those who had experienced a mental health disorder, depression and anxiety continued to be the most commonly reported problems (see Table 38).

Table 38: Mental health problem reported by participants, 2014–2015

Mental health problem (%)	2014	2015
	(n=32)	(n=42)
Depression	75	69
Mania	0	0
Manic depression	16	7
Anxiety	44	52
Phobias	3	2
Panic	19	17
Obsessive compulsive disorder (OCD)	9	0
Paranoia	3	12
Personality disorder	6	7
Drug-induced psychosis	6	10
Other psychosis	0	0
Schizophrenia	13	10
Post-traumatic stress disorder	13	17
Other	22	14

Source: IDRS participant interviews.

Note: Percentages in each column do not total 100% as participants could report more than one mental health problem.

Among those who had experienced a mental health problem in the preceding six months, just over two thirds (69%; n=29) reported that they had attended a professional for such problems; this was stable from 2014 (63%). Of those who reported attending a mental health professional, 72% reported visiting a GP, 35% visited a psychiatrist, 28% a psychologist and 7% a mental health nurse.

Twenty-nine participants reported that they had been prescribed medication for their mental health disorder in the preceding six months; predominantly antidepressants (n=20), followed by benzodiazepines (n=16), antipsychotics (n=11) and mood stabilisers (n=3).

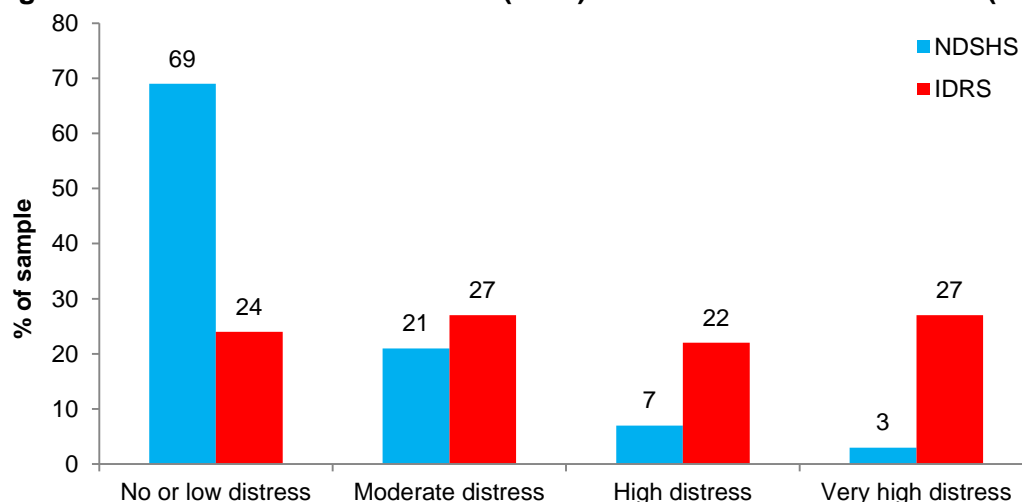
Reasons for not attending a health professional for self-reported mental health problems in the last six months (n=13) were varied and included: didn't think it was serious enough (n=3), self-treated (n=2), previous bad experience (n=1), it was too expensive (n=1), participant felt fine (n=1), and stigma (n=1).

6.6.2 Psychological distress

The Kessler Psychological Distress Scale (K10) was also administered to participants in order to obtain a measure of psychological distress. The K10 is a 10-item standardised measure with good psychometric properties that identifies clinical levels of psychological distress as measured by the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV) and the Structured Clinical Interview for DSM disorders (SCID) (Andrews and Slade 2001; Kessler, Andrews et al. 2002). The K10 asks about the level of anxiety and depressive symptoms that a person may have experienced in the preceding four week period (Australian Institute of Health and Welfare 2014). It should be noted that the K10 does not require that individuals give reasons for the psychological distress reported in the previous month, nor whether this was an unusual or normal month for the individual.

The minimum score that can be obtained is 10 (indicating no distress) and the maximum is 50 (indicating very high psychological distress) (Andrews and Slade 2001). The 2013 National Drug Strategy Household Survey (NDSHS) (Australian Institute of Health and Welfare 2014) 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 (see Figure 33).

Figure 33: K10 scores in the NDSHS (2013) and the SA IDRS interviews (2015)



Source: IDRS participant interviews; (Australian Institute of Health and Welfare 2014).

Note: The extent to which cut-offs derived from population samples can be applied to the IDRS population is yet to be established and, therefore, these findings should be taken as a guide only. NDSHS findings refer to participants aged 18 and older.

Twenty-four percent of the IDRS sample had scores between 10 and 15 on the K10 (low risk), 27% scored between 16 and 21 (moderate distress), 22% scored from 22 to 29 (high distress), and 27% scored from 30–50 (very high distress). The median total score for the sample was 21 (range: 10–49).

When asked to rate their health, 4% of the sample reported that their health was excellent, 11% reported that it was very good, 40% reported it as good, 29% said it was fair and 14% reported that it was poor.

6.7 Alcohol Use Disorders Identification Test

PWID are at particular risk of alcohol-related harms due to a high prevalence of the hepatitis C virus (HCV). HCV antibody prevalence was stable at between 41% and 52% over the period 2010 to 2014, according to the Australian NSP Survey, annually undertaken by the Kirby Institute (Iversen 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, Ross et al. 1996; Schiff and Ozden 2004; Coffin, Tracy et al. 2007), it is important to monitor risky drinking among PWID.

The information on alcohol consumption available from the IDRS includes the prevalence of lifetime and recent use, and number of days of use over the preceding six months. Ninety-seven percent of PWID had used alcohol in their lifetime, and 67% had used alcohol in the six months preceding interview, on a median of 24 days. Participants of the IDRS were asked the Alcohol Use Disorders Identification Test-

Consumption (AUDIT-C) as a valid measure of identifying heavy drinking (Bush, Kivlahan et al. 2005). The AUDIT-C is a three item measure, derived from the first three consumption questions in the AUDIT. Dawson, Grant et al. (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.

In 2015, the overall mean score on the AUDIT-C was 4.7 (SD=3.3, range: 1–12). There was no significant difference between male and female scores. According to Dawson, Grant et al. (2005) and the Australian Government Department of Health’s Guidelines for the Treatment of Alcohol Problems (Haber, Lintzeris et al. 2009), a cut-off score of five or more indicates the need for further assessment.

Forty-two percent of the sample scored five or more on the AUDIT-C (51% in 2014); about half (46%) the males and over a third of females (35%) (Table 39).

Table 39: AUDIT-C among PWID, 2014–2015

	2014 (n=75)	2015 (n=81)
Mean AUDIT-C score* (SD; range)	5.2 (3.4; 1-12)	4.7 (3.3; 1-12)
Score of 5 or more* (%)	51	42
Males	51	46
Females	52	35

Source: IDRS participant interviews.

* Amongst participants who had consumed alcohol in the past 12 months.

6.8 Naloxone program and distribution

Naloxone is a short-acting opioid antagonist that has been used for over 40 years to reverse the effects of opioids. It is the frontline medication for the reversal of heroin and other opioid overdose in particular. In Australia, naloxone has largely only been available for use by medical doctors (or those auspiced by medical doctors such as nurses and paramedics) for the reversal of opioid effects. In 2012, a take-home naloxone program commenced in the Australian Capital Territory 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.

In 2015, similar programs exist in NSW, VIC, QLD and WA, though it has not yet been implemented in SA (for more information, refer to <http://www.copeaustralia.com.au/wp-content/uploads/Take-Home-Naloxone-Programs-in-Australia-April-2015.pdf> and/or, <http://www.cahma.org.au/Naloxone.html>).

Since 2013, the IDRS included a series of questions about take-home naloxone and naloxone more broadly. Of those who commented in 2015 (n=97) 75% had heard of naloxone, which is substantially lower than what was reported at the national level (87%; Table 40). Participants were asked to describe what they thought naloxone was; of those who responded (n=71), over three-fifths (61%) reported that naloxone was used to ‘reverse heroin’ and 32% believed that it was used to ‘re-establish consciousness’. Four per cent said naloxone was used to ‘help start breathing’ and 18% gave ‘other’ descriptions of what they believed naloxone did.

Participants were then asked if they had heard about take-home naloxone programs. Of those who commented (n=97), 39% reported that they had heard of the take-home naloxone program and 61% had not. Five participants reported that they had

been resuscitated with naloxone by somebody who had been trained through the take-home naloxone program.

Seven participants reported that they had completed training in naloxone administration and had received a prescription for Narcan[®]. Of these participants, one had reported that they had used Narcan[®] to resuscitate somebody.

Participants who had not completed training in naloxone administration were asked what they would do if they witnessed someone overdose or found someone they had suspected had overdosed. The majority of those who commented reported that they would call 000 (89%), while 33% reported that they would perform mouth-to-mouth cardiopulmonary resuscitation (Table 40). Of those who would not call an ambulance, one participant commented that it was out of fear of police involvement, and one participant responded that it was not necessary. Six participants gave 'other' reasons as to why they would not call an ambulance.

Participants were also asked if naloxone was available, would they: (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. Fifty-seven per cent (n=51) of participants reported that they would participate in a Narcan/Naloxone program. One hundred percent of the sample reported that they would stay with someone after giving them naloxone, 94% would want their peers to give them naloxone if they overdosed, 98% reported that they would administer naloxone after witnessing someone overdose, and 81% reported that they would carry naloxone on them (Table 40).

Table 40: Take-home naloxone program and distribution, by jurisdiction, 2015

	National (N=796)	SA (n=97)
% Heard of naloxone	87	75
% Naloxone description	(N=675)	(n=71)
Reverses heroin	60	61
Help start breathing	12	4
Re-establish consciousness	31	32
Other	23	18
% Heard of the take-home naloxone program	(N=796)	(n=97)
No	48	61
Yes	52	39
% Witness overdose	(N=649)	(n=90)
Turn victim on side	34	17
Mouth-to-mouth CPR	41	33
Call 000	95	89
Stay with victim	31	26
Other remedies	19	32
% If naloxone was available, would you:	(n=448)	(n=51)
Carry naloxone if trained	89	80
Administer naloxone after overdose	99	98
Want peers to give you naloxone	96	94
Stay after giving naloxone	99	100

Source: IDRS participant interviews.

7 RISK BEHAVIOURS

Key Findings

- Receptive sharing (borrowing) and lending of needles/syringes remained low in 2015, at 2% and 7% respectively, consistent with 2014 reports. Sharing of injecting equipment such as mixing containers (e.g. spoons), tourniquets and filters was more common.
- Twenty-seven percent of the sample reported re-using their own needles in the last month, a significant decline from 2014. Sterile needles and syringes were most commonly obtained from a NSP, although a range of other sources were also used. The majority of participants (88%) reported that they had last injected in a private home.
- Two-thirds of the sample reported experiencing an injection-related problem in the preceding month (50% in 2014). The most common problems experienced were prominent scarring/bruising around the injection site and difficulty injecting (e.g. in finding a vein).
- In Australia, HCV continued to be more commonly notified than Hepatitis B (HBV). The prevalence of human immunodeficiency virus (HIV) among PWID in Australia remained low and stable.
- Over half (56%) of participants had reported that they had driven a vehicle in the six months prior to interview.
- Five percent of those who had recently driven (n=3) reported driving while over the legal alcohol limit.
- Forty-two recent drivers reported driving after the consumption of illicit drugs in the six months prior to interview, and believed that they were still under the influence.
- Thirty-four percent of participants had been tested for drug driving by the police roadside saliva testing at least once in the six months preceding interview, and seven participants tested positive for illicit drugs.

7.1 Injecting risk behaviour

7.1.1 Access to needles and syringes

Participants reported that they had obtained needles and syringes on a median of two occasions in the month preceding interview (range: 0–90; n=100). In addition, the median number of needles and syringes obtained within the preceding month was 55 (range: 0–500; n=98), with participants reporting that they had given away or sold a median of five needles or syringes (range: 0–300; n=98). The median number of needles and syringes collected for oneself the last time they were obtained was 20 (range: 0–400; n=100) and the median number participants had stored away was 10 (range: 0–500; n=98). Six participants reported that they had experienced difficulty in obtaining needles/syringes in the preceding month. Participants had injected on a median of 15 days in the preceding month (range: 1–250; n=99), which was consistent with 2014 reports. The median number of needles required to successfully inject each hit was 1 (range: 1–4; n=100), though the majority of participants (91%) needed only one needle to successfully inject a hit.

In 2015, participants were also asked if they were able to access filters from the same place from which they obtained their needles and syringes. The majority (92%) of those who answered reported that they were able to obtain filters if they wanted

them. The main filters comprised of wheel filters (50%), followed by cotton filters (36%) and cigarette filters (18%). Thirty percent of those who commented did not know what filters they were able to access.

NSPs were by far the most common source of needles and syringes in the preceding six months (97%), followed by a chemist (17%) and NSP vending machines and friends (11%, respectively). As can be seen in Table 41, a range of other sources were also used.

Table 41: Main sources of needles and syringes in the preceding six months, 2015

Accessing from (%)	2015 (n=100)
NSP	97
NSP vending machine	11
Chemist	17
Partner	5
Friend	11
Dealer	6
Hospital	2
Outreach/peer worker	0

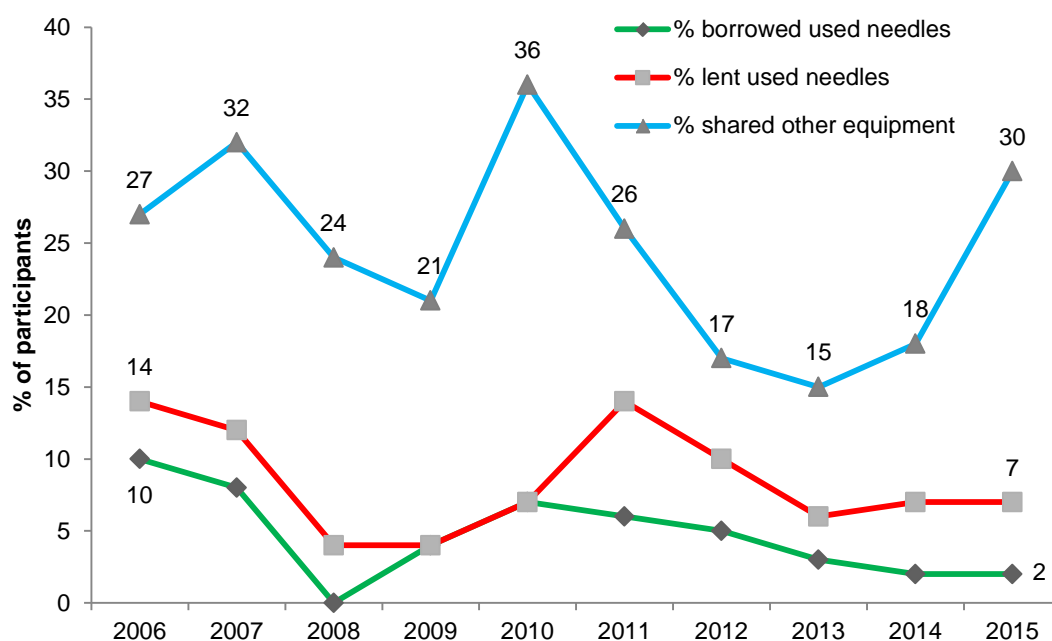
Source: IDRS participant interviews.

Note: Multiple responses allowed.

7.1.2 Sharing of injecting equipment

The sharing of injecting equipment remains an issue of concern due to the risk of transmission of blood-borne viral infections (BBVI) such as HIV and HCV. In 2015, two participants reported that they had used a needle after someone else ('borrowed'). This was stable from 2014 (n=2). In comparison, seven participants reported that they had used a needle *before* someone else in the month prior to interview ('lent'). This was stable from 2014 (n=7) (see Figure 34). ..

Figure 34: Sharing of needles and injecting equipment by participants in the month preceding interview, 2006–2015



Source: IDRS participant interviews.

Thirty percent of the sample reported that they had shared injecting equipment other than needles and syringes in the preceding month, the details of which are displayed in Table 42. As can be seen from Figure 34, the sharing of used needles remained low, yet relatively stable in 2015, although there has been an increase in the sharing of other equipment during the last year. Spoons/mixing containers and tourniquets were the most commonly shared items.

Table 42: Sharing of injecting equipment (other than needles) among participants who shared equipment in the month preceding interview, 2014–2015

Injecting equipment	2014 (n=19)	2015 (n=31)
% Spoons/mixing container	53	36
% Filters	11	13
% Tourniquet	42	39
% Water	26	10
% Swabs	0	0
% Other	0	3

Source: IDRS participant interviews.
Note: Multiple responses allowed.

Twenty-seven per cent of the sample had re-used their own needle in 2015, a significant decline from 2014 (43%; $p < 0.05$; 95% CI: 0.04-0.30). Twelve participants re-used their own needle once, eleven participants re-used twice, two participants re-used 3-5 times and one participant re-used their own needles more than ten times. The most common syringe size which was re-used was 1ml (19%; $n=19$).

7.1.3 Location of injecting

In 2015, the majority of participants reported that the last location in which they had injected drugs was a private home (88%), with very small proportions reporting use in public locations (see Table 43). The last location of injecting was unchanged compared to 2014.

Table 43: Location when last injected in the month preceding interview, 2014–2015

Location when injecting	2014 (N=106)	2015 (n=100)
% Private home	88	88
% Street / car park / beach	2	0
% Car	9	6
% Public toilet	2	2
% Other	-	2

Source: IDRS participant interviews.

Not surprisingly, the majority of participants reported that their last injection ‘site’ was their arm (78%), followed by their hand/wrist (8%), neck (3%) and leg, foot and groin (2%, respectively). Five percent reported ‘other’ as their injection site.

7.1.4 Self-reported injecting-related health problems

Participants were asked if they had experienced any of six different injecting-related health problems in the last month (as listed in Table 44). In 2015, 62% of the sample reported experiencing at least one type of injection-related health problem in the month prior to interview (50% in 2014). By far the most commonly experienced problems were prominent scarring or bruising around the injection site (65%) and difficulty injecting (58%), both of which were stable with 2014 reports. The majority of participants reported that they required only one needle to successfully inject themselves (91%), whereas six participants required two needles, two participants required three needles, and one participant reported needing four needles for their last successful injection.

Table 44: Injecting-related health problems experienced in the month preceding interview, 2014–2015

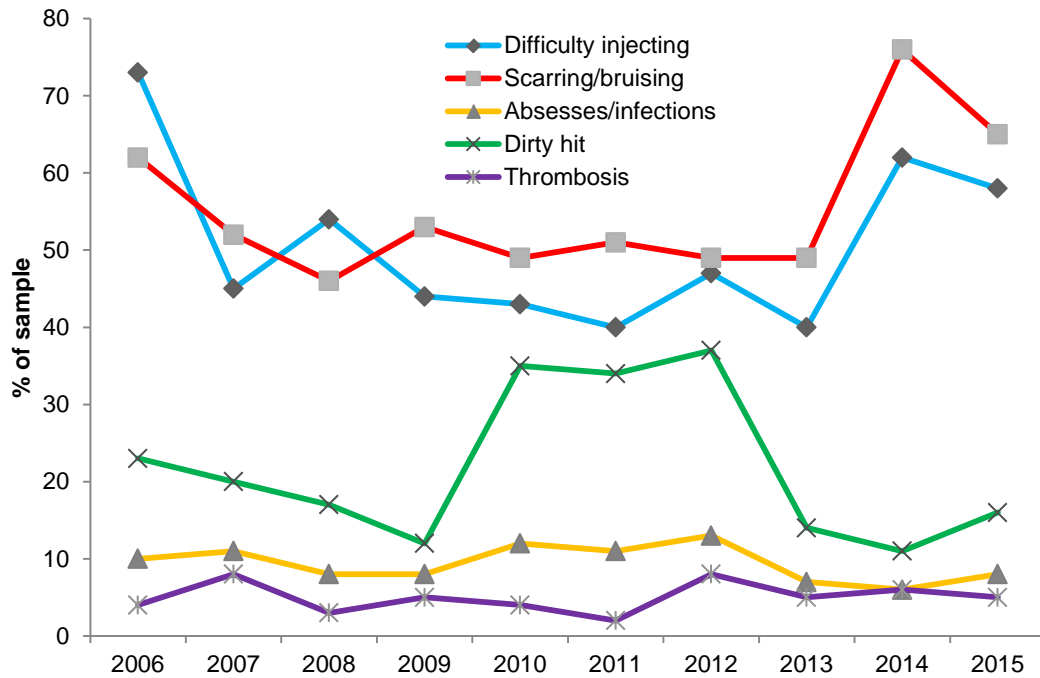
Reported injection related health problems (%)	2014 (N=106)	2015 (n=100)
Problem	n=53	n=62
Overdose	0	3
Dirty hit	11	16
Abscesses/infections	6	8
Prominent scarring/bruising	76	65
Difficulty injecting	62	58
Thrombosis	6	5
Any problems (%)	50	62

Source: IDRS participant interviews.

Among those who had experienced a ‘dirty’ hit in the last month (n=10), methamphetamine (n=5), heroin (n=2), oxycodone (n=2) and methadone (n=1) were reported as the drugs participants had overdosed on.

Figure 35 depicts the long-term trends for experience of injection-related problems from 2006 onwards. It can be seen that, despite some fluctuations over the years, particularly for a 'dirty' hit, prominent scarring/bruising and difficulty injecting have remained the most common across all years depicted, while thrombosis and abscesses/infections have remained relatively low.

Figure 35: Experience of injection-related problems by participants in the month preceding interview, 2006–2015



Source: IDRS participant interviews.

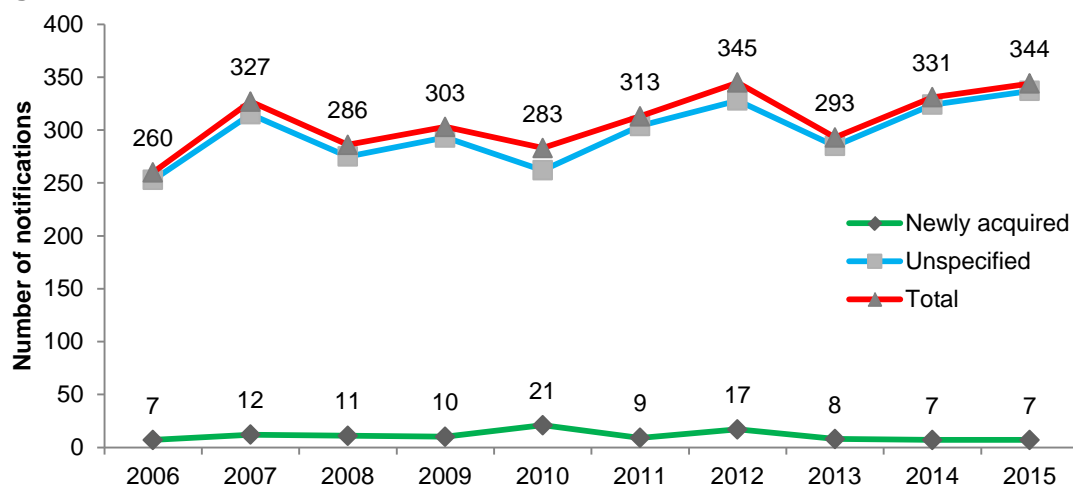
7.2 Blood-borne viral infections

PWID are at significantly greater risk of acquiring HBV, HCV⁶ and HIV because BBVI can be transmitted via the sharing of needles, syringes and equipment.

Figure 36 and

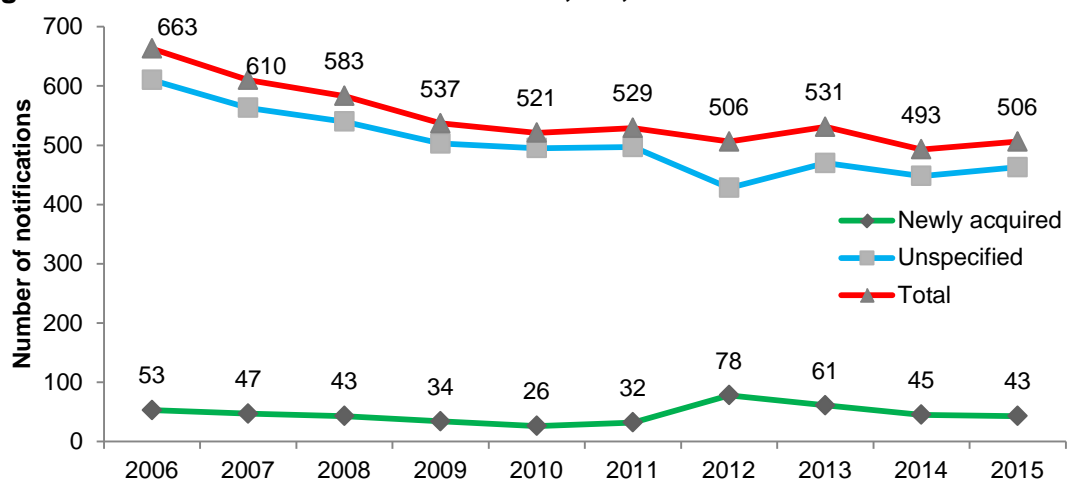
Figure 37 present the total number of notifications for HBV and HCV in Australia from the Communicable Diseases Network – National Notifiable Diseases Surveillance System (NNDSS). Incident or newly acquired infections, and unspecified infections (i.e. where the timing of the disease acquisition is unknown) are presented. In 2015, HCV continued to be more commonly notified than HBV, although there were increases in both HBV and HCV infections.

Figure 36: Notifications for HBV infections, SA, 2006–2015



Source: Communicable Disease Network – Australia - National Notifiable Diseases Surveillance System (NNDSS).

Figure 37: Notifications for HCV infections, SA, 2006–2015



Source: Communicable Diseases Network – Australia - (NNDSS)⁷.

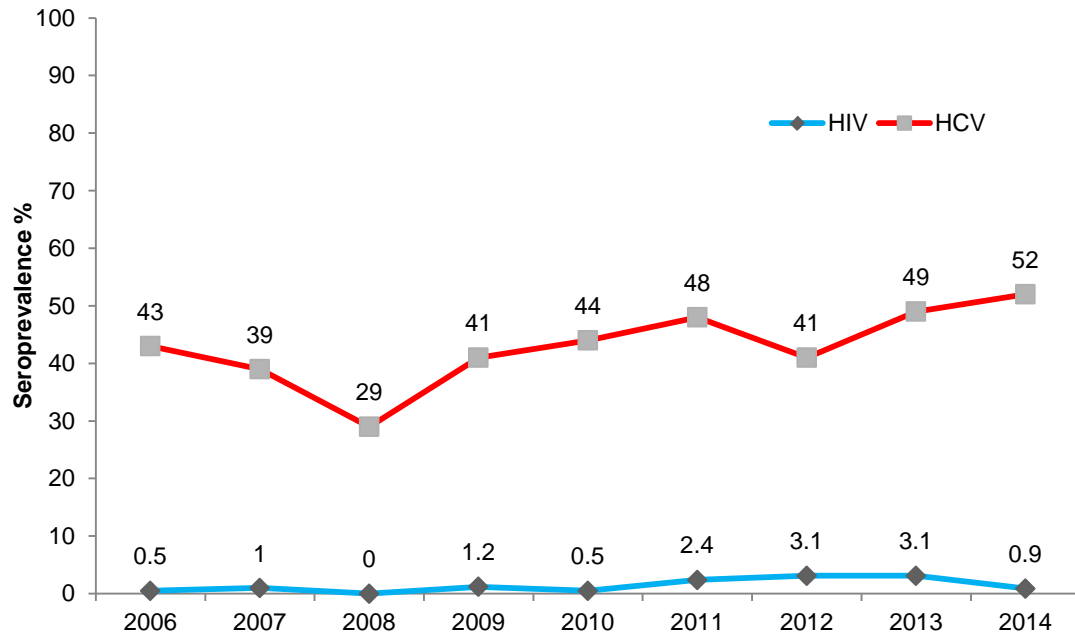
Note: Data accessed on 14 March 2016. Figures are updated on an ongoing basis.

⁶ HCV antibody testing has only been available since 1990.

⁷ Notes on interpretation: There are several caveats to the NNDSS data that need to be considered. As no personal identifiers are collected, duplication in reporting may occur if patients move from one jurisdiction to another and are notified in both. In addition, notified cases are likely to only represent a proportion of the total number of cases that occur, and this proportion may vary between diseases, between jurisdictions, and over time.

In 2014, the prevalence of HIV among PWID in Australia remained low and decreased slightly from 3.1 to 0.9. HCV prevalence among this group was much higher at 52%, which was only a marginal increase from 2013 (49%) (see Figure 38).

Figure 38: HIV and HCV antibody prevalence among NSP survey participants, SA, 2006–2014



Source: Australian NSP Survey (Iversen and Maher 2015).

7.3 Driving

7.3.1 Self-reported driving under the influence of alcohol and illicit drugs

Random breath testing assesses blood alcohol content, whilst roadside saliva drug testing looks for the presence of cannabis, methamphetamine and MDMA. Drivers undergo confirmatory laboratory testing if found to be positive. Random breath testing (RBT) for alcohol has been widely implemented in Australia for some time; saliva drug testing is becoming more common. Roadside drug testing was first introduced in South Australia (SA) in July 2006.

Fifty-six participants reported that they had driven a vehicle in the six months prior to interview ('recent drivers'). Among these participants, 68% (n=38) had their full license, 9% (n=5) held a provisional license, yet 23% (n=13) did not hold a valid licence. Three participants (5%) had driven over the legal alcohol limit and of these, they had done so on a median of two occasions (range: 1-96) (see Table 45).

Table 45: Driving behaviour amongst PWID, 2015

	2015 (n=95)
Driven in the last six months (%)	59
Driven while over the legal limit of alcohol* (%)	5
Driven soon after using an illicit drug(s) last six months* (%)	75
Drug(s) taken LAST occasion before driving in the last six months** (n)	(n=41)
% Heroin	32
% Methadone	0
% Buprenorphine	2
% Bup-naloxone	0
% Morphine	2
% Oxycodone	2
% Speed	5
% Base	2
% Ice/crystal	37
% Cocaine	2
% Benzodiazepines	0
% Cannabis	39

Source: IDRS participant interviews.

*Among those who had driven a car in the last six months.

**Among those who had driven soon after taking a drug. Refers to drug driving episodes within the six months preceding interview.

In 2015, 45% (n=25) of the sample had been tested for drink driving by the police at least once in the six months preceding interview. Of those who answered, the majority tested negative for drink driving (92%; n=11) and one participant tested positive. On the other hand, 34% (n=19) of participants had been tested for drug driving by the police roadside saliva testing at least once in the six months preceding interview. Seven participants tested positive for illicit drugs. Ten participants responded to the question 'If your most recent result was positive, what drug(s) were detected?' Nine participants tested positive for methamphetamine, five tested positive for cannabis and two tested positive for MDMA. These results suggest that there were instances of poly-drug use.

Forty-two recent drivers reported driving after the consumption of illicit drugs in the six months prior to interview, and they had done so on a median of 20 occasions (range 1-180). These participants believed that they were still under the influence. In addition, eight participants reported driving under the influence of drugs on a daily basis. Methamphetamine (any form) (86%; n=36), followed by cannabis (52%; n=22) and heroin (41%; n=17) were the most common illicit drugs consumed by recent drivers who had driven under the influence (see Table 47).

The last time participants drove under the influence of any illicit drug, methamphetamine (any form) was the most commonly used drug (44% n=18), followed by cannabis (39%; n=16) and heroin (32%, n=13). The median amount of time between consumption and operation of a motor vehicle was 45 minutes (range: 1-960 minutes).

8 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH DRUG USE

Key Findings

- Self-reported criminal activity remained stable in 2015 at 28%, with drug dealing being the most commonly reported crime.
- The proportion of the sample who had been arrested in the preceding 12 months remained relatively stable at 25%.
- Lifetime prison history also remained stable, with 46% of the sample reporting that they had been incarcerated at some point throughout their life.
- The median expenditure on illicit drugs the day before interview was \$100, stable from 2014.

8.1 Reports of criminal activity among participants

In 2015, 28% reported involvement in any type of crime during the last month, stable from 2014 (31%). The most commonly reported types of crime also remained stable from 2014, with participants primarily reporting involvement in drug dealing (22%), followed by property crime (11%), and small numbers reporting fraud (4%) and violent crime (2%). In 2015, the number of participants who reported having ever been in prison remained stable (46%; n=47).

Similarly, the proportion of participants who reported being arrested in the 12 months prior to interview also remained relatively stable at 25% (see Table 46). Of the 24 participants who had been arrested in the preceding 12 months, five participants were arrested for property crime and five for a driving offence, four participants reported violent crime, and one breaching an apprehended violence order (AVO). Two participants reported being arrested for drink driving and two participants were arrested for drug driving. Other reasons for arrest included receiving stolen goods and disorderly behaviour.

Table 46: Criminal activity as reported by participants, 2014–2015

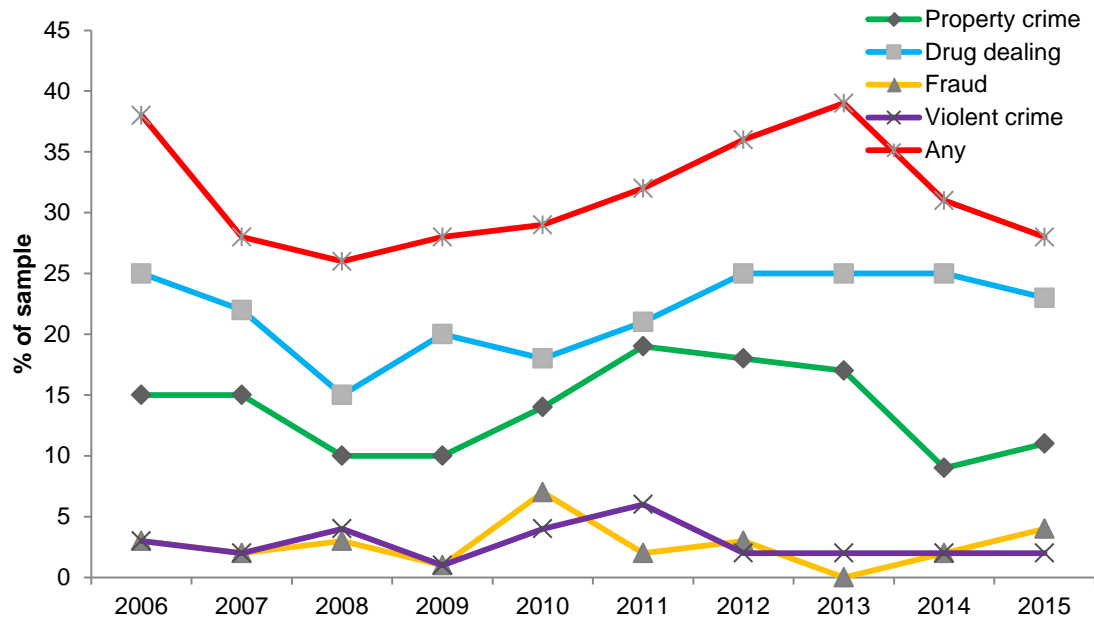
Criminal behaviour (%)	2014 (N=106)	2015 (n=97)
Criminal activity in last month		
Property crime	9	11
Drug dealing	25	23
Fraud	2	4
Violent crime	2	2
<i>Any crime</i>	31	28
Arrested in last 12 months	21	25
Every in prison	(n=99) 52	(n=98) 46

Source: IDRS participant interviews.

Figure 39 shows the long-term trends in criminal activity, by offence type, from 2006 onwards. It can be seen that prevalence rates declined sharply from 2006–2008. From 2013, there has been a declining trend in the prevalence of past month criminal activity among PWID, which ended the gradual upward trend observed from 2008.

The two most prominent types of criminal activity across all years are drug dealing and property crime, while fraud and violent crime remained consistently low.

Figure 39: Self-reported involvement in crime, by offence type, in the month prior to interview, 2006–2015



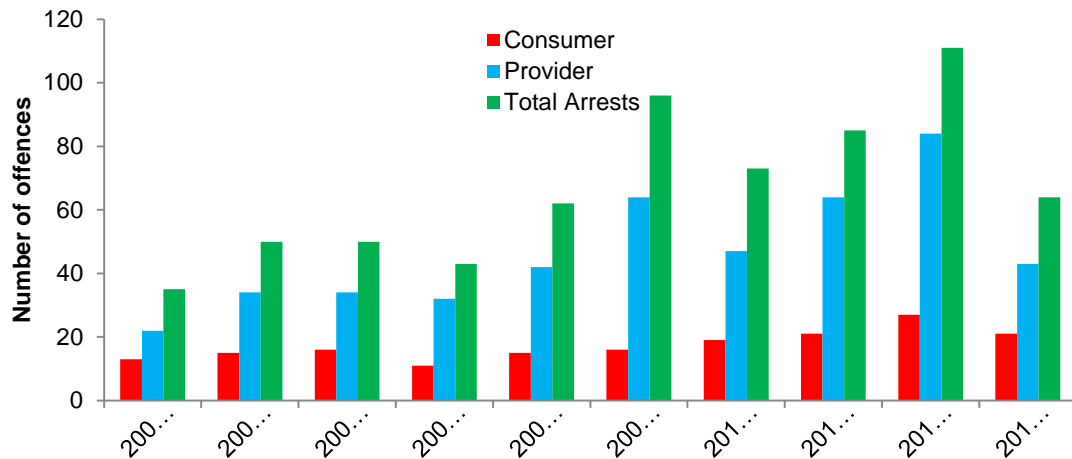
Source: IDRS participant interviews.

8.2 Arrests

8.2.1 Heroin and other opioids

Figure 40 presents the number of consumer and provider arrests for heroin and other opioids made in SA between 2004/05 and 2013/14. ‘Heroin and other opioids’ include opioid analgesics such as heroin, methadone and pethidine and opiate analgesics including codeine, morphine and opium. 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). In 2013/14, the number of consumer arrests remained relatively stable at 21, compared with 27 consumer arrests in 2012/13, yet the number of provider arrests decreased from 84 in 2012/13 to 43 in 2013/14.

Figure 40: Number of heroin and other opioid consumer and provider arrests, 2004/05–2013/14



Source: (Australian Crime Commission 2005; Australian Crime Commission 2006; Australian Crime Commission 2007; Australian Crime Commission 2008; Australian Crime Commission 2009; Australian Crime Commission 2010; Australian Crime Commission 2011; Australian Crime Commission 2012; Australian Crime Commission 2013; Australian Crime Commission 2014; Australian Crime Commission 2015).

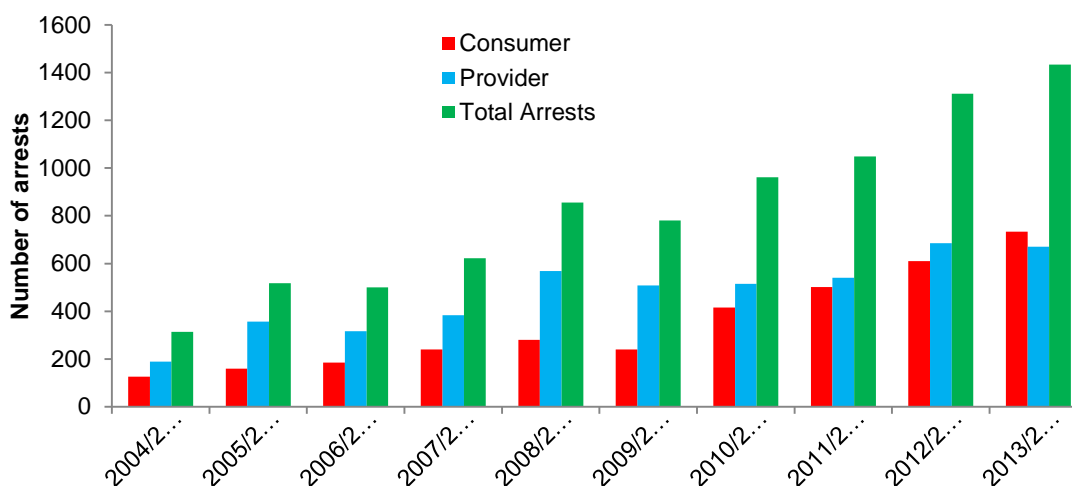
Note: Data not available for the 2014/2015 financial year. Also, total arrests include those offenders for whom consumer/provider status was not stated and thus may exceed the sum of consumer and provider arrests.

Please also note that in previous reports, data from SAPOL was used for the number of illicit drug-related possession and provision offences. However, in 2012–2013, SAPOL changed the way they collect their data (i.e. they no longer break the offences down by drug type) and hence the SA IDRS will now present data from the Illicit Drug Data Report (ACC).

8.2.2 Amphetamine-type stimulants

Figure 41 presents the number of consumer and provider arrests for amphetamine-type stimulants made in SA between 2004/05 and 2013/14. Amphetamine-type stimulants include amphetamine, methamphetamine and phenethylamines. The number of total arrests increased in 2013/14 from 1,312 in 2012/13 to 1,434 arrests, continuing an overall upward trend that has been observed since 2004/05.

Figure 41: Number of amphetamine-type stimulants consumer and provider arrests, 2004/05–2013/14



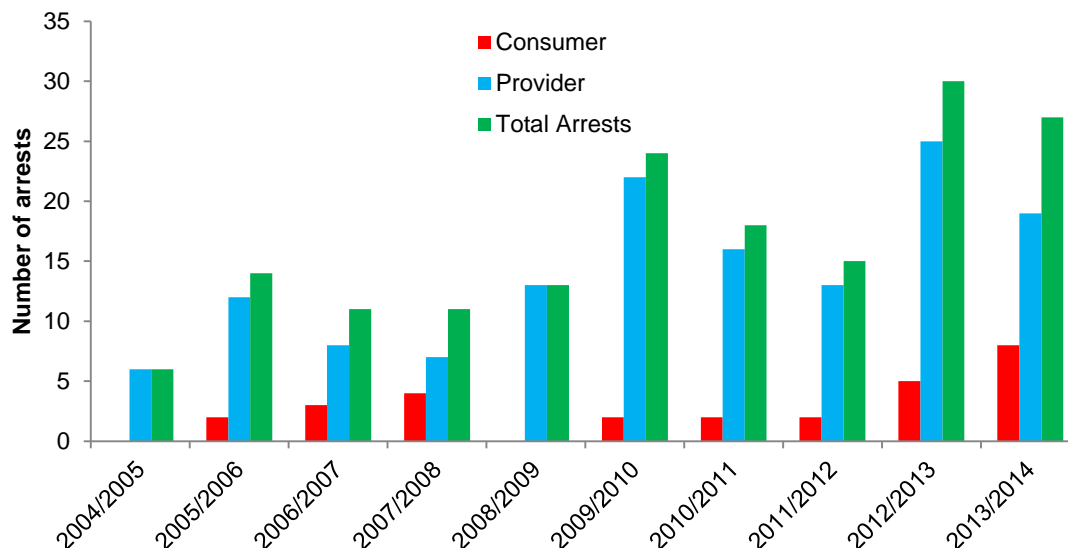
Source: (Australian Crime Commission 2005; Australian Crime Commission 2006; Australian Crime Commission 2007; Australian Crime Commission 2008; Australian Crime Commission 2009; Australian Crime Commission 2010; Australian Crime Commission 2011; Australian Crime Commission 2012; Australian Crime Commission 2013; Australian Crime Commission 2014; Australian Crime Commission 2015).

Note: Data not available for the 2014/2015 financial year. Also, total arrests include those offenders for whom consumer/provider status was not stated and thus may exceed the sum of consumer and provider arrests.

8.2.3 Cocaine

In 2013/2014, consumer arrests remained low at eight, (five in 2012/13). Provider arrests decreased from 25 to 19. There were a total of 27 cocaine-related arrests in 2013/14 (30 in 2012/13) (see Figure 42).

Figure 42: Number of cocaine consumer and provider arrests, 2004/05–2013/14



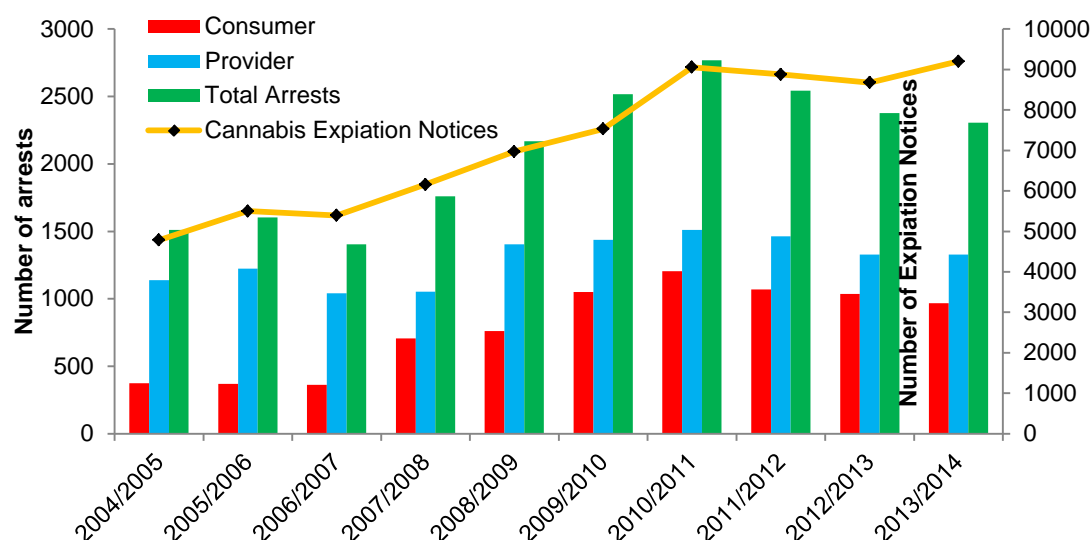
Source: (Australian Crime Commission 2005; Australian Crime Commission 2006; Australian Crime Commission 2007; Australian Crime Commission 2008; Australian Crime Commission 2009; Australian Crime Commission 2010; Australian Crime Commission 2011; Australian Crime Commission 2012; Australian Crime Commission 2013; Australian Crime Commission 2014; Australian Crime Commission 2015).

Note: Data not available for the 2014/2015 financial year. Also, total arrests include those offenders for whom consumer/provider status was not stated and thus may exceed the sum of consumer and provider arrests.

8.2.4 Cannabis

Figure 43 presents the number of cannabis consumer and provider arrests in SA from 2004/05 to 2013/14. It also presents the total number of Cannabis Expiation Notices, which is a small fine used to deal with minor cannabis offences, whereby the offence is expiated on payment of the fine. In SA, a higher number of drug-specific arrests were due to provider-type cannabis offences. Total cannabis arrests remained relatively stable in 2013/14, yet an overall decrease has been noted since 2011/12, perhaps signifying a downward trend and thus a reversal of the upward trend observed from 2006/07–2010/11. On the other hand, the number of Cannabis Expiation Notices issued in SA increased, from 8,677 in 2012/13 to 9,204 in 2013/2014.

Figure 43: Number of cannabis consumer and provider arrests, 2004/05–2013/14



Source: (Australian Crime Commission 2005; Australian Crime Commission 2006; Australian Crime Commission 2007; Australian Crime Commission 2008; Australian Crime Commission 2009; Australian Crime Commission 2010; Australian Crime Commission 2011; Australian Crime Commission 2012; Australian Crime Commission 2013; Australian Crime Commission 2014; Australian Crime Commission 2015).

Note: Data not available for the 2013/2014 financial year. Also, total arrests include those offenders for whom consumer/provider status was not stated and thus may exceed the sum of consumer and provider arrests.

8.3 Expenditure on illicit drugs

Fifty-four participants had purchased illicit drugs on the day prior to interview. Among these participants, the median amount spent on illicit drugs was \$100 (range: \$1–\$600). This was stable from 2014 (\$100; range: \$20–\$800). Table 47 presents the breakdown of the amounts spent on illicit drugs (i.e., excluding alcohol, tobacco and licit supplies of prescription medications) by the whole sample on the day before interview.

Table 47: Expenditure on illicit drugs on the day preceding interview, 2014–2015

Expenditure (%)	2014 (n=105)	2015 (n=101)
Nothing	44	47
Less than \$20	0	5
\$20-\$49	7	4
\$50-\$99	12	13
\$100-\$199	25	22
\$200-\$399	7	7
\$400 or more	4	3
Median expenditure* (\$)	\$100	\$100

Source: IDRS participant interviews.

*Among those who had spent money on drugs.

9 SPECIAL TOPICS OF INTEREST

Key Findings

Hepatitis C Testing

- The majority of the sample had been tested for HCV antibodies (anti-HCV) in their lifetime with just over half reporting a positive result.
- The median number of anti-HCV tests was reported to be three and a half.
- Participants reported the test had been ordered by their regular GP (53%), 'other' individuals (26%) and a liver specialist (6%).
- Sixty-three percent of the sample who commented reported a PCR test to determine if the virus was active with the median number of PCR tests being two and a half.
- The majority reported the PCR test had been ordered by their regular GP (42%), 'other' individuals (31%) and a liver specialist (19%).
- Thirty-three percent remember discussing the impact of dietary choices on HCV and 26% the long term effects of HCV.

Oxycodone Use

- Of those who commented, 58% reported ever using any form of oxycodone (either licit or illicit).
- Of those who reported ever use oxycodone, two-fifths reported recently using the Reformulated Oxycodone 'OP' tablets (either licit or illicit), and over one tenth reported recently using the Original Oxycodone 'OC' tablets.

Blood Donations

- Of those who commented, 18% reported that they had given blood in their lifetime.
- Just over two-fifths of those who had given blood reported that they had commenced injecting drug use before donating blood.

9.1 Hepatitis C Testing

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

Treatment options for HCV are currently experiencing rapid developments. 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 (anti-HCV) reveals whether the patient has ever been exposed to the virus. Once a person tests positive for antibodies they will always have the antibodies present in their blood. 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 polymerase chain reaction or PCR tests.

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

The majority (91%) of the sample had been tested for HCV antibodies (anti-HCV) in their lifetime with 55% reporting a positive result. The median number of anti-HCV tests was reported to be three and a half (range: 1-80). The majority of PWID reported the test had been ordered by their regular GP (53%), other (including a prison doctor and upon admission to hospital / emergency department) (26%), a liver specialist (6%), opioid substitution treatment (OST) prescribing doctor (4%) and OST clinic (2%) (Table 48).

Sixty-three percent of the sample who commented (n=43) reported a PCR test to determine if the virus was active with the median number of PCR tests being two and a half (range: 1-40). The majority of PWID reported the PCR test had been ordered by their regular GP (42%), other (including a prison doctor, upon admission to hospital, a HIV specialist and a Hep C clinic) (31%), a liver specialist (19%) and OST prescribing doctor (4%) (Table 48).

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. A third (33%) remember discussing the impact of dietary choices on HCV, 26% the long term effects of HCV, 7% the types of tests needed, 7% the benefit of limiting alcohol intake, 7% the different strains of HCV (genotypes), 7% the available treatments for HCV and 4% could not remember what they were told (see Table 48).

Table 48: Hepatitis C testing among PWID, 2015

	2015 (n=97)
% Ever tested for HCV	91
% Antibody positive result	(n=87)
Yes	55
No	44
Unsure	1
% Ordered the anti-body test	(n=47)
Regular GP	53
OST clinic	2
OST doctor	4
Liver specialist	6
Other	26
Unsure	9
Median number of times tested for antibodies ever (range)#	3.5; (1-80)
% Screened or tested for RNA (PCR test)	(n=43)
Yes	63
No	37
Unsure	0
% Ordered the PCR test	(n=26)
Regular GP	42
OST clinic	0
OST doctor	4
Liver specialist	19
Other	31
Unsure	4
Median number of times tested for RNA ever (range)*	2.5; (1-40)
% Discussed by a health professional when told HCV antibody or RNA positive	(n=46)
Long terms effects of HCV	26
Genotypes	7
Different tests	7
Available treatments	7
Alcohol intake	7
Dietary choices	33
Other	4
Don't know/can't remember	4

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: I 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 its 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. Participants believed that most of the statements were false, with the exception of two statements; almost half of those responding (43%) believed it to be true that treatment for HCV works only for a few people, and almost one quarter (23%) believed it to be true that if one has HCV, one cannot get it again. The responses indicate that most participants had a moderately good understanding of the virus (see Table 49).

Table 49: Perceptions of HCV among PWID, 2015

	2015
% Don't feel sick I must have cleared HCV	(n=97)
True	8
False	92
Unsure	0
% Don't have symptoms I can't pass on HCV	(n=95)
True	4
False	96
Unsure	0
% Treatment for HCV works only for a few people	(n=90)
True	43
False	57
Unsure	0
% I have HCV, I can't get it again	(n=89)
True	23
False	78
Unsure	0
% If I wait, HCV will clear up on its own	(n=95)
True	10
False	91
Unsure	0
% I can wait until I feel real sick before seeking treatment	(n=97)
True	7
False	93
Unsure	0
% I can't get HCV treatment if still injecting drugs	(n=84)
True	14
False	86
Unsure	0

Source: IDRS participant interviews.

9.2 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, Perarson et al. 2014). The rise in opioid utilisation - including oxycodone - has seen a concurrent increase in extra-medical use of these medications among groups such as 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 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 OxyContin[®]) was released onto the Australian market on 1st April 2014 (rapidly replacing the original version, OxyContin[®]). 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 et al. 2013). Early U.S. surveillance of the reformulation suggests that there have been reductions in misuse (Butler, Cassidy et al. 2013; Havens, Leukefeld et al. 2014), street price (Sellers, Perrino et al. 2013) and OxyContin[®] poisonings (Severtson, Bartelson et al. 2013).

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

Post-marketing surveillance of the Reformulated OxyContin[®] and generic oxycodone formulations is underway in Australia (Degenhardt, Larance 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 et al. 2015; Larance, Lintzeris et al. 2015; Peacock, Degenhardt et al. 2015; Peacock, Degenhardt 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 OxyContin[®], in addition to Reformulated OxyContin[®].

In 2015, of those who commented, (n=99), 58% reported ever using oxycodone (either licit or illicit) (see Table 50). Of those who reported using oxycodone in the preceding six months (n=57), the majority reported recently using the Reformulated Oxycodone 'OP' tablets (either licit or illicit), while over one tenth reported recently using the Original Oxycodone 'OC' tablets. The original OxyContin[®] brand was reported to be used on a median of 1.5 days in the last six months and injected on a median of 1.5 days. In 2015, the Reformulated OxyContin[®] was reported to be used on a median of 2 days in the last six months.

Table 50: Lifetime and recent use of oxycodone (any form), 2015

	2014 (n=105)	2015 (n=99)
Ever used oxycodone (any form)	52	58
Recent use of oxycodone (licit or illicit)*	n=55	n=57
% Endone [®]	18	16
% Generic controlled released Oxycodone	0	9
% Reformulation Oxycodone 'OP'	15	40
% OxyNorm [®] tabs	2	9
% OxyNorm [®] liquid	0	2
% OxyNorm [®] Solution	0	0
% Targin [®]	6	4
% Proladone [®]	0	0
% Original Oxycodone 'OC'	38	11

Source: IDRS participant interviews.

*Among those who reported ever using oxycodone.

9.3 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. five years).

Of those who commented, (n=91), 18% reported that they had given blood in their lifetime. Seven participants that had given blood reported that they had commenced injecting drug use before donating blood.

Participants were asked about their most recent episode between injection and blood donation, though participants in SA did not comment on this.

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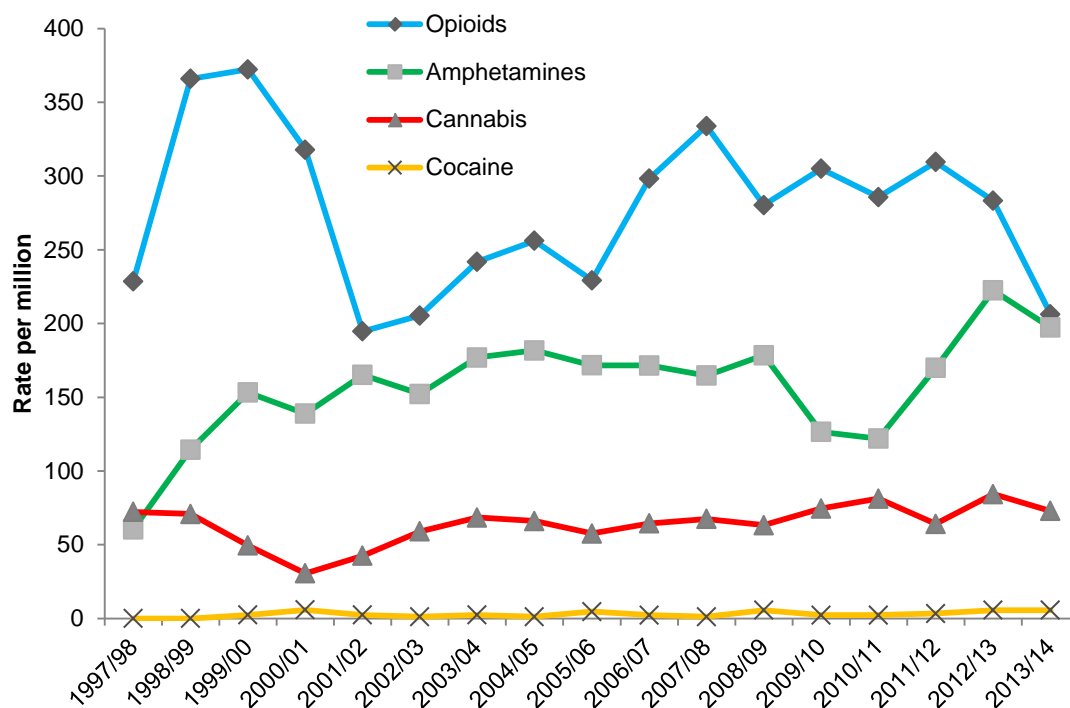
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APPENDIX: SUBSTANCE-RELATED ADMISSIONS TO HOSPITALS IN SOUTH AUSTRALIA AND AUSTRALIA

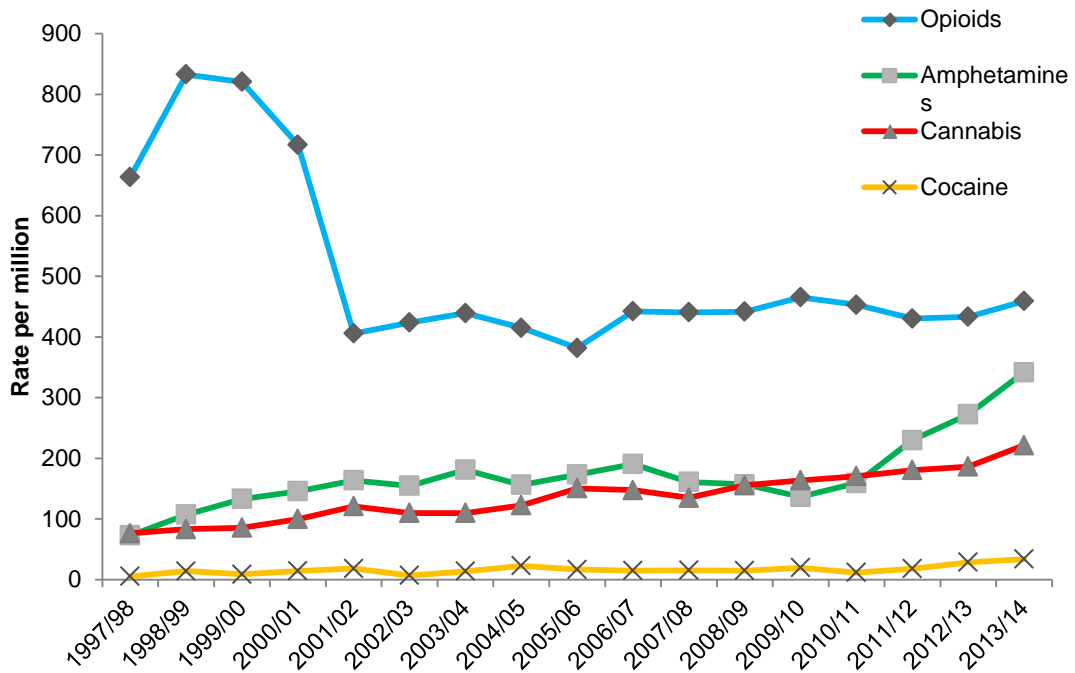
Appendix 1: Rate of substance-related admissions (primary diagnosis) to hospitals in South Australia, 1997/98–2013/14



Source: Australian Institute of Health and Welfare, SA Health (Roxburgh and Breen in press).

Note: Results relate to persons aged between 15 and 54 years; 'Primary diagnosis' was given to those admissions where the substance was considered the primary reason for the patient's episode of care.

Appendix 2: Rate of substance-related admissions (primary diagnosis) to hospitals in Australia, 1997/98–2013/14



Source: Australian Institute of Health and Welfare, SA Health (Roxburgh and Breen in press).

Note: Results relate to persons aged between 15 and 54 years; 'Primary diagnosis' was given to those admissions where the substance was considered the primary reason for the patient's episode of care.