

South Australia

R. Sutherland and Dr L. Burns

SA DRUG TRENDS 2013
Findings from the
Illicit Drug Reporting System (IDRS)

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SOUTH AUSTRALIAN DRUG TRENDS 2013



Findings from the Illicit Drug Reporting System (IDRS)

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TABLE OF CONTENTS

LIST OF TABLES	iii
LIST OF FIGURES	v
ACKNOWLEDGEMENTS	vii
ABBREVIATIONS	viii
GLOSSARY OF TERMS	x
EXECUTIVE SUMMARY	xi
1 INTRODUCTION	1
1.1 Study aims	1
2 METHOD	2
2.1 Participants	2
2.2 Procedure	2
2.3 Survey of KE	3
2.4 Other indicators	3
2.5 Data analysis	4
2.6 Notes	4
3 DEMOGRAPHICS	5
3.1 Overview of the IDRS participant sample	5
4 CONSUMPTION PATTERNS	8
4.1 Lifetime and current drug use	8
4.2 Heroin use	16
4.3 Methamphetamine	20
4.4 Cannabis	26
4.5 Opioids	29
4.6 Other drugs	35
5 PRICE, PURITY AND AVAILABILITY	38
5.1 Heroin	38
5.2 Methamphetamine	44
5.3 Cannabis	51
5.4 Morphine	57
5.5 Methadone	60
5.6 Oxycodone	61
5.7 Other drugs	61
6 HEALTH-RELATED TRENDS ASSOCIATED WITH DRUG USE	62
6.1 Overdose and drug-related fatalities	63
6.2 Drug treatment	66
6.3 Hospital admissions	75

6.4	Emergency department attendances	79
6.5	Mental and physical health problems and psychological distress.....	80
6.6	Alcohol Use Disorders Identification Test.....	83
7	RISK BEHAVIOURS.....	85
7.1	Injecting risk behaviour	85
7.2	Blood-borne viral infections (BBVI)	90
8	LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH DRUG USE.....	93
8.1	Reports of criminal activity among participants	93
8.2	Arrests	95
8.3	Expenditure on illicit drugs	99
8.4	Driving risk behaviour	100
9	SPECIAL TOPICS OF INTEREST	103
9.1	Pharmaceutical opioids.....	104
9.2	Brief Pain Inventory	105
9.3	Opioid and stimulant dependence.....	107
9.4	OST medication injection	108
9.5	Hepatitis C virus testing and treatment	108
9.6	Naloxone program and distribution	109
9.7	Oral Health Impact Profile.....	111
9.8	Discrimination	112
10	REFERENCES	114
	APPENDIX: SUBSTANCE-RELATED ADMISSIONS TO HOSPITALS IN SOUTH AUSTRALIA AND AUSTRALIA	120

LIST OF TABLES

Table 1: Demographic characteristics of IDRS sample, 2009-2013	6
Table 2: Injecting drug history, 2012-2013	8
Table 3: Injecting drug preferences, 2012-2013	10
Table 4: Polydrug use, 2012-2013	11
Table 5: Drug use history and routes of administration of the sample, 2013 (% of total sample; N=100)	13
Table 6: Recent heroin use of IDRS participants, 2012-2013	16
Table 7: Reports of heroin forms used in the last six months among those who had recently used heroin, 2012-2013	18
Table 8: Preparation of heroin, 2012-2013	19
Table 9: Change in price of heroin over last six months, 2012-2013	38
Table 10: Current purity/strength of heroin, 2012-2013	39
Table 11: Change in purity/strength of heroin in last six months, 2012-2013	40
Table 12: Availability of heroin currently, 2012-2013	41
Table 13: Change in availability of heroin over the last six months, 2012-2013	42
Table 14: Source person and source venue last time obtained heroin in the last six months, 2012-2013	43
Table 15: Reported price of all forms of methamphetamine, 2012-2013	45
Table 16: Change in price of methamphetamine over last six months, 2012-2013 ..	45
Table 17: Purity/strength of methamphetamine currently, 2012-2013	46
Table 18: Change in purity/strength of methamphetamine in last six months, 2012-2013	46
Table 19: Availability of methamphetamine currently, 2012-2013	48
Table 20: Change in availability of methamphetamine over the last six months, 2012-2013	49
Table 21: Last usual source person and venue used for obtaining various forms of methamphetamine in the last six months, 2013	50
Table 22: Price of last cannabis purchases, 2012-2013	52
Table 23: Change in price of cannabis over the last six months, 2012-2013	52
Table 24: Current potency/strength of cannabis, 2012-2013	53
Table 25: Change in potency/strength of cannabis in last six months, 2012-2013 ..	53
Table 26: Availability of cannabis currently, 2012-2013	54
Table 27: Change in availability of cannabis over the last six months, 2012-2012...	54
Table 28: Source person and source venue of last purchase of hydro and bush cannabis, 2013	56
Table 29: Price of morphine at last purchase by participants, 2012-2013	57
Table 30: Availability of illicit morphine currently, 2012-2013	58
Table 31: Change in availability of illicit morphine over the last six months, 2012-2013	58
Table 32: Usual source person and source venue used to obtain illicit morphine in the last six months, 2012-2013	59
Table 33: Lifetime experience of heroin overdose, 2009-2013	63
Table 34: Primary drug of concern nominated by clients of DASSA as a percentage of total number of clients, 2008/09-2012/13	68
Table 35: Number of clients to DASSA inpatient detoxification treatment services, by primary drug of concern, 2008/09-2012/13	70
Table 36: Number of attendances to the emergency department at the Royal Adelaide Hospital, SA, from 2003/04-2012/13 (per drug or diagnosis)	80
Table 37: Mental health problem reported by participants, 2012-2013	81
Table 38: AUDIT-C among PWID, 2012-2013	84
Table 39: Main sources of needles and syringes in the preceding six months, 2013	86

Table 40: Sharing of injecting equipment (other than needles) among participants in the month preceding interview, 2012-2013	87
Table 41: Location when last injected in the month preceding interview, 2012-2013	88
Table 42: Injecting-related health problems experienced in the month preceding interview, 2012-2013	89
Table 43: Criminal activity as reported by participants, 2012-2013	94
Table 44: Under the influence of drugs and/or alcohol at the time of last offence, 2013	94
Table 45: Expenditure on illicit drugs on the day preceding interview, 2012-2013 ...	99
Table 46: Driving behaviour amongst PWID, 2012-2013	100
Table 47: Illicit drugs involved in most recent drug driving episode, 2012-2013.....	101
Table 48: Pharmaceutical opioids use among people who inject drugs, 2013	105
Table 49: Brief Pain Inventory (BPI) among participants who had used pharmaceutical opioids for pain relief, 2013.....	107
Table 50: Hepatitis C testing and treatment, 2013.....	109
Table 51: Take-home naloxone program and distribution, 2013	111
Table 52: Oral Health Impact Profile 14 short form (OHIP-14) score, 2013	112
Table 53: Discrimination among people who inject drugs, 2013	113

LIST OF FIGURES

Figure 1: Trend for drug of choice, 2004-2013.....	9
Figure 2: Trend for drug injected most in last month, 2004-2013.....	10
Figure 3: Recent drug use, percentage of the participants to have used each substance type in the last six months, 2012-2013.....	11
Figure 4: Heroin, recent use and median number of days used, 2004-2013.....	17
Figure 5: Methamphetamine, percentage of participants that used in the last six months, 2004-2013.....	21
Figure 6: Methamphetamine, median number of days used in the last six months, 2004-2013.....	22
Figure 7: Methamphetamine, recent use and median number of days used, 2004-2013	23
Figure 8: Methamphetamine, percentage that used daily in the last six months, 2004-2013	24
Figure 9: Cannabis, recent use and median number of days used, 2004-2013	27
Figure 10: Recent use of opioids amongst PWID, 2012-2013	30
Figure 11: Median price of a gram of heroin, last purchase, 2004-2013	39
Figure 12: Perception of current purity of heroin, 2004-2013	40
Figure 13: Number of heroin seizures analysed and median heroin purity in SA 2005/06-2011/12	41
Figure 14: Availability of heroin as easy or very easy in the last six months, 2004-2013	42
Figure 15: Number of seizures: amphetamine-type stimulants, 2002/03-2011/12....	47
Figure 16: Number of methamphetamine seizures analysed and median methamphetamine purity in SA, 2007/08-2011/12	48
Figure 17: Availability of methamphetamine in the last six months, easy or very easy, 2004-2013.....	49
Figure 18: Availability of cannabis in the last six months, easy or very easy, 2004-2013	55
Figure 19: Experience of lifetime and past 12 month heroin overdose, as a proportion of participants that had ever used heroin, 2004-2013	64
Figure 20: Number of accidental deaths due to opioids among those aged 15-54 years in SA, 2000-2009	65
Figure 21: Number of drug-related calls to ADIS per quarter, by selected drug type, July 2008-June 2013.....	67
Figure 22: Percentage of total DASSA clients with opioid as the primary drug of concern, 2003/04-2012/13.....	69
Figure 23: Number of clients to DASSA inpatient detoxification treatment services per year, with heroin or other opioid as the primary drug of concern, 2003/04-2012/13.....	71
Figure 24: Percentage of total DASSA clients with amphetamines as the primary drug of concern, 2003/04-2012/13	72
Figure 25: Number of clients to DASSA inpatient detoxification treatment services, with amphetamines as the primary drug of concern, 2003/04-2012/13	73
Figure 26: Percentage of total DASSA clients with cannabis as the primary drug of concern, 2003/04-2012/13	74
Figure 27: Number of admissions to DASSA inpatient detoxification treatment services, with cannabis as the primary drug of concern, 2003/04-2012/13	75
Figure 28: Rate of opioid-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 2002/03-2011/12	76
Figure 29: Rate of amphetamine-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 2002/03-2011/12.....	77

Figure 30 Rate of cocaine-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 2002/03-2011/12	78
Figure 31: Rate of cannabis-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 2002/03-2011/12	79
Figure 32: K10 scores in the NDSHS (2010) and the SA IDRS interviews, 2013.....	82
Figure 33: SF-12 scores for SA IDRS participants compared with the general Australian population (ABS), 2013	83
Figure 34: Sharing of needles and injecting equipment by participants in the month preceding interview, 2004-2013	87
Figure 35: Experience of injection-related problems by participants in the month preceding interview, 2004-2013.....	90
Figure 36: Notifications for HBV infections, South Australia, 2004-2013.....	91
Figure 37: Notifications for HCV infections, South Australia 2004-2013.....	91
Figure 38: HIV and HCV antibody prevalence among NSP survey participants, SA, 2003-2012.....	92
Figure 39: Self-reported involvement in crime, by offence type, in the month prior to interview, 2004-2013	95
Figure 40: Number of heroin and other opioid consumer and provider arrests, 2002/03-2011/12	96
Figure 41: Number of amphetamine-type stimulants consumer and provider arrests, 2002/03-2011/12.....	97
Figure 42: Number of cocaine consumer and provider arrests, 2002/03-2011/12....	98
Figure 43: Number of cannabis consumer and provider arrests, 2002/03-2011/12..	99

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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
ANSPS	Australian Needle and Syringe Program Survey
AODTS-NMDS	Alcohol and Other Drug Treatment Services-National Minimum Dataset
A&TSI	Aboriginal and/or Torres Strait Islander
AUDIT-C	Alcohol Use Disorders Identification Test – Consumption
AVO	Apprehended Violence Order
BBVI	Blood-borne viral infection(s)
BMI	Body Mass Index
CI	Confidence interval(s)
CNP	Clean Needle Program
CRUFAD	Clinical Research Unit for Anxiety and Depression
DASSA	Drug and Alcohol Service South Australia
DPMP	Drug Policy Modelling Program
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders IV
ED	Emergency department
EDRS	Ecstasy and related Drugs Reporting System
GP	General practitioner
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
HSI	Heavy Smoking Index
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
IRID	Injection-related injuries and diseases
K10	Kessler Psychological Distress Scale
KE	Key expert(s); see <i>Method</i> section for further details
LSD	Lysergic acid diethylamide
MCS	Mental component score
MDMA	3,4-methylenedioxymethamphetamine
N (or n)	Number of participants
NCHECR	National Centre in HIV and Epidemiology Clinical Research
NCIS	National Coronial Information System
NDARC	National Drug and Alcohol Research Centre
NDSHS	National Drug Strategy Household Survey
NNDSS	National Notifiable Diseases Surveillance System
NSALD	Non-steroidal anti-inflammatory drug(s)
NSP	Needle and Syringe Program(s)
NSW	New South Wales
OCD	Obsessive compulsive disorder
OST	Opioid substitution treatment
OTC	Over the counter
PCS	Physical component score
PDI	Party Drug Initiative
PO	Pharmaceutical opioids
PTSD	Post traumatic stress disorder

PWI	Personal Wellbeing Index
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
SF-12	Short Form 12 Item Health Survey
SF-36	Short Form 36 Item Health Survey
SPSS	Statistical Package for the Social Sciences
STI	Sexually transmitted disease
VIC	Victoria
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.

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

Sample characteristics for the 2013 Illicit Drug Reporting System (IDRS) in South Australia (SA) were generally similar to previous years. Fifty-six percent of the sample were male, three-quarters (75%) were unemployed and over half (52%) had a history of previous imprisonment. The median number of years spent at school was 10, with over half (57%) reporting some kind of post-secondary qualification (primarily a trade or technical qualification). Thirty-one percent of the sample were currently undertaking some form of treatment for drug use, most commonly pharmacotherapy. These characteristics were largely unchanged from 2012.

Indeed, the only significant differences from 2012 were: a lower proportion of the 2013 sample reported that they had completed university or college (19% in 2012 versus 7% in 2013), and a greater proportion of the 2013 sample reported some form of government pension, allowance or benefit as their main source of income in the month prior to interview (78% in 2012 versus 90% in 2013).

Patterns of drug use

The median age of first injection among the IDRS sample was 19 years, which was stable from 2012. The first drug ever injected by participants was primarily methamphetamine (70%), followed by heroin (27%). Interestingly, for the first time in over a decade, methamphetamine overtook heroin as the preferred drug of choice amongst participants, and it also remained the drug injected most often in the last month.

Polydrug use was common among participants in 2013, and has remained consistently so across all years of the IDRS. There were significant declines in the lifetime use of licit Suboxone® tablets, other opioids, OTC codeine and an inverse increase in the lifetime use of inhalants. There were also significant declines in the recent use of 'any' Suboxone® tablets, OTC codeine and amphetamine liquid.

Heroin

In 2013, there was a non-significant decline in the proportion of SA participants who reported recent use of heroin (52% in 2012 versus 41% in 2013). However, the frequency of use increased to a median of 72 days in a six month period, whilst daily heroin use remained relatively stable at 20% (of recent heroin users). White powder or rock continued to be the most common form of heroin used by participants.

The median price paid for heroin at last purchase remained stable in 2013, at \$200 for a half weight and \$100 for a cap. Fifty-eight percent of participants able to comment reported that heroin purity was low, with two-fifths reporting that purity had decreased over the preceding six months. Availability, however, remained easy (45%) and very easy (41%), and this had reportedly remained stable over the preceding six months.

Experience of lifetime heroin overdose remained stable in 2013; however, only one participant reported that they had overdosed in the preceding year. Data from the SA Alcohol & Drug Information Service revealed that telephone calls relating to any opioid substance remained relatively stable in the 2012/13 financial year. Data from Drug & Alcohol Services SA (DASSA) also showed that the proportion of clients nominating heroin as their primary drug of concern remained stable in 2012/13.

Methamphetamine

In 2013, three-quarters of participants (75%) had used some form of methamphetamine in the six months preceding interview; this was stable from 2012. Considered separately, the most commonly used form of methamphetamine was ice/crystal (57%), followed by speed (40%), base (31%) and then liquid amphetamine (3%). There were significant increases in the frequency of use for powder and base methamphetamine, whilst the frequency of crystal methamphetamine use remained stable in 2013. Injecting remained the main route of administration for all forms of methamphetamine.

In 2013, the median price paid for all three forms of methamphetamine (speed, base and ice) was \$100 for a point. 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; however, across all three forms of methamphetamine, there was a decrease in the proportion of participants who reported that the price had increased.

Reports regarding the current purity of the three forms of methamphetamine were extremely mixed. The purity of base methamphetamine, as perceived by participants, was largely reported as medium (46%), although almost equal proportions of the remaining participants reported it as low (20%), high (17%) or fluctuating (17%). Similarly, the purity of methamphetamine powder was largely reported as medium (36%), with almost equal proportions of the remaining participants reporting it as low (24%), high (20%) or fluctuating (20%). In regards to crystal methamphetamine, purity was perceived as high (40%), medium (30%) or low (19%). All forms of methamphetamine were considered easy or very easy to obtain in 2013, and availability had reportedly remained stable over the preceding six months.

The number of methamphetamine-related calls received by the Alcohol and Drug Information Service (ADIS) in SA remained stable in 2013, and represents a plateauing of the upward trend observed from 2009-2012. Similarly, the proportion of DASSA clients nominating amphetamines as their primary drug of concern also remained stable, as did the number of clients admitted to DASSA inpatient (detox) services with amphetamine as the primary drug of concern.

Cannabis

Cannabis, though generally not the drug of choice among participants, was used by three-fifths of the sample – stable from 2012. Frequency of use increased to a median of 180 days in a six month period; however, daily use remained stable at 57% of recent cannabis users. Whilst the majority of cannabis users reported that hydro was the form they had used most in the preceding months, bush cannabis was also commonly used.

In 2013, the price last paid for a bag of both hydro and bush remained stable at \$25, as it has done for many years. Most of those who were able to comment perceived the potency of bush cannabis as 'medium' and hydro cannabis as 'high'. Both hydro and bush cannabis were considered very easy or easy to obtain, and availability was stable.

The number of calls to ADIS concerning cannabis remained stable in 2013, as did the proportion of DASSA clients who nominated cannabis as their primary drug of concern.

Opioids

In 2013, 49% of PWID reported recent use of some type of illicit opioid substance, excluding heroin; this was stable from 2012. Twenty-two percent of participants reported they had used illicit morphine in the six months prior to interview on a median of 22 days (range: 2-180) which was similar to 2012 reports. The price of illicit morphine appeared to remain stable in 2013; however, due to small numbers no real comparison can be made with 2012 data. The majority of participants reported that the availability of illicit morphine was easy to very easy, and that this had remained stable over the preceding six months. As in previous years, the majority of morphine users reported use by injecting and they had mainly used illicit supplies of MS Contin® and Kapanol®.

The recent use of illicit oxycodone also remained stable in 2013. More specifically, 18 participants reported recent use of illicit oxycodone on a median of 18 days (range: 1-180) in the six months prior to interview. The main brands of illicit oxycodone used in the six months preceding interview were Oxycontin® (81%), followed by Endone® (13%).

Similarly, the recent use of illicit methadone syrup remained stable in 2013 (13% in 2012 vs. 15% in 2013), as did the frequency of use. Seven participants reported the recent use of illicit Physeptone® tablets, and frequency was low at a median of two days in the last six months (range: 1-24).

Compared to 2012, the number of participants reporting recent use of illicit buprenorphine and other opiates remained stable. There were, however, significant declines in the recent use of Suboxone® (licit and illicit) and OTC codeine (non-medicinal use).

Other drugs

Fifteen percent of IDRS participants had used ecstasy and 6% 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 2012.

In 2013, over one-third of PWID (35%) reported recent use of any illicit benzodiazepines, which is similar to participant reports in 2012. Prevalence and frequency of recent cocaine use remained stable in 2013, with nine participants reporting that they had used cocaine on a median of three days within the preceding six months.

The recent use of illicit pharmaceutical stimulants was relatively stable in 2013, with only four participants reporting use over the preceding six months. Seven participants reported recently using illicit Seroquel®, and they had done so on a median of two days within the six months preceding interview (range: 1-10).

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 (i.e. daily use). Alcohol use was less common, with 64% of the sample reporting use on a median of 24 days in the past six months. Both alcohol and tobacco use remained stable from 2012.

Health-related issues

In 2013, 47% of participants reported experiencing a mental health problem (other than drug dependence) in the six months preceding interview; this was stable from 2012 (47%). Among those who had experienced a mental health disorder,

depression and anxiety continued to be the most commonly reported problems. Interestingly, there was a significant increase in the proportion of these participants who had sought professional help for such problems (75% versus 34% in 2012).

Using the Kessler Psychological Distress Scale (K10) (Kessler & Mroczek, 1994), it was found that over half of the SA sample (53%) were at a high or very high risk of psychological distress. Similarly, using the SF-12, IDRS participants scored lower than the Australian population, indicating that IDRS participants had poorer mental and physical health than the population average.

For the fourth year running, participants of the IDRS have been asked the AUDIT-C as a valid measure of identifying heavy drinking. In 2013, among those who drank alcohol recently, the mean score on the AUDIT-C was 5.9. More specifically, 70% of males and 41% of females scored 5 or more on the AUDIT-C, indicating the need for further assessment.

Risk behaviours

The number of participants who reported 'borrowing' needles remained low and stable in 2013 (n=3), as did the number of participants who had lent a used needle to someone else (n=6). The proportion of participants who had shared injecting equipment (other than needles) also remained stable in 2013 (15%), although it is important to note that there has been a sharp decline in such behaviours from 2010 onwards. Re-use of one's own needles (41%) and equipment (46%) was much more common.

In 2013, 66% of the participants reported experiencing at least one type of injecting-related health problem in the month prior to interview. By far the most commonly experienced problem was prominent scarring/bruising around the injection site (49%), followed by difficulty injecting (40%). Interestingly, there was a significant decline in the proportion of PWID who had experienced a dirty hit in the preceding month (37% in 2012 versus 14% in 2013).

Law enforcement

The prevalence of self-reported criminal activity in the month preceding interview remained stable in 2013 (39%), as did the prevalence of past year arrest (30%). 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 2013.

Driving a car while under the influence of alcohol was reported by 28% of participants who had driven in the preceding six months. Eighty percent reported driving under the influence of an illicit drug during that time, mainly methamphetamines, heroin and cannabis.

In 2013, the median expenditure on illicit drugs remained stable at \$100.

Special topics of interest

Pharmaceutical opioids

In 2013, participants were asked questions about the use of pharmaceutical opioids and pain. Fifty-eight percent of the sample reported that they had used pharmaceutical opioids within the preceding year. The most common reason for the use of pharmaceutical opioids was pain relief, and of these the majority (86%) had

obtained pharmaceutical opioids using their own script. Only one participant reported being refused pharmaceutical medications due to their injecting history.

Brief Pain Inventory

In 2013, the Brief Pain Inventory (BPI) was asked to examine the association between injecting drug use and the legitimate therapeutic goals of pharmaceutical opioids (e.g. pain management). Amongst those who had used pharmaceutical opioids for pain relief, 81% reported that they had experienced pain (other than everyday pain) on the day of interview; this was most commonly non-cancer pain (71%), followed by acute pain (24%). The mean 'pain severity score' was 5.6, the mean 'pain interference score' was 6.3 and the mean score for 'relief from pain medication' was 5.1.

Opioid and stimulant dependence

Participants in the IDRS were also 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 3, with 46% scoring 4 or above. Of those who recently used an opioid drug and commented, the median SDS score was 6, with 62% scoring 5 or above.

Opioid substitution treatment medication injection

Due to the introduction of buprenorphine-naloxone film in 2011, questions were included in the 2013 IDRS survey asking about the recent injection of opioid substitution treatment medications. Twelve percent of PWID reported recently injecting methadone, 7% buprenorphine-naloxone 'film', 5% buprenorphine and 1% buprenorphine-naloxone 'tablet'.

Hepatitis C virus testing and treatment

In 2013, participants were asked a number of questions regarding HCV diagnosis and treatment. The majority of the sample reported that they had been tested for HCV in their lifetime, and 53% reported a positive result for HCV antibodies. In addition, forty-three percent of the sample reported undergoing further testing for HCV, with two-thirds reporting a polymerase chain reaction (PCR) test to see if the virus was active. Amongst those who received a PCR test and had an active virus (n=5), only two participants reported that they had received HCV medical/antiviral treatment and one reported that the treatment was successful.

Naloxone program and distribution

In 2012, a take-home naloxone program commenced in the ACT through which naloxone was made available to peers and family members of people who inject drugs as part of a comprehensive overdose response package. The program has since expanded to other states, and in 2013 IDRS participants were asked a series of questions about take-home naloxone and naloxone more generally.

Almost two-thirds of the sample had heard of naloxone, and amongst these participants three-fifths (61%) reported that naloxone was used to 'reverse heroin', whilst 27% believed that it was used to 're-establish consciousness'. In addition, 40% reported that they had heard of the take-home naloxone program and two-thirds reported that they would 'strongly support' an expansion of the take-home naloxone program. Nine participants reported that they had been resuscitated with naloxone by somebody who had been trained through the take-home naloxone program, and ten participants had completed training in naloxone administration. Ninety-one percent of those who had not completed training in naloxone administration reported that if

trained they would stay with someone after giving them naloxone and 90% would want their peers to give them naloxone if they overdosed.

Oral Health Impact Profile

In 2013, participants were asked a number of questions regarding the impact of their oral health on his or her well-being. The mean OHIP-14 total score was 14.3, with 26% of those who commented scoring 'zero'. Participants can have an overall OHIP-14 total score ranging from zero to 56 with higher scores indicating poorer oral health-related quality of life.

Discrimination

Ninety-three percent of the sample commented on the discrimination section, of which 44% reported discrimination within the last 12 months. The main location of the discrimination took place at a pharmacy, followed by the police or a doctor/prescriber. The majority reported the main reason (perceived) for the discrimination was 'because I'm an injecting drug user (or people think I am)'. The majority did not try to resolve the discrimination

Implications

The findings from the 2013 SA IDRS have policy and research implications, and a number of recommendations are outlined below. However, it is worth noting that there were very few changes from 2012 and, as such, the number of recommendations have been kept to a minimum. In addition, 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 gaining favour amongst PWID, with methamphetamine overtaking heroin as the preferred drug of choice in 2013. In addition, the frequency of powder and base methamphetamine use increased significantly in 2013, although prevalence remained stable. 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.
- ◆ The proportion of participants who had 'borrowed' or 'lent' needles and syringes in the past month remained low and stable in 2013, as did the sharing of other injecting equipment (such as mixing containers and filters). However, re-use of one's own needles and equipment remained common practice (41% and 46% respectively), as did past month experience of injection-related problems (66%). As such, it is imperative that information regarding safe injection practices and vein care continue to be disseminated.
- ◆ Tobacco use remains alarmingly high among PWID, with 84% 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. As such, it is a *continuing* recommendation that health campaigns be targeted specifically towards this group.

- ◆ Participants of the SA IDRS continue to have poorer mental and physical health than the population average. It is therefore of paramount importance that services and strategies that 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, Victoria and South Australia (SA) (see Hando et al., 1998 for a national comparison; and Cormack 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 Western Australia, Northern Territory, Australian Capital Territory, Queensland (QLD) and Tasmania joined them. For a review of the history and progression of the IDRS nationally up to 2000, see Darke, Hall & Topp (2000). 2013 marks the 17th year in which the IDRS has been conducted in SA, and the 15th year it has included all states and territories (see Stafford & Burns (2014) for a national comparison of the 2013 findings).

The IDRS provides a co-ordinated and ongoing monitoring system predominantly focusing on heroin, methamphetamine, cocaine and cannabis, and contributes as an early warning system for emerging illicit drug problems. The IDRS is a sensitive and timely indicator of drug trends both nationally and by jurisdiction; it is simple to execute and cost effective. 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 2013 *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 (the participants); 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. 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 2013 IDRS is to provide information on drug trends in SA (specifically the Adelaide metropolitan area), particularly focusing on the 12 months between mid-2012 and mid-2013.

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 (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=100) in the 6-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 June and July 2013. Criteria for entry into the study were having injected drugs at least once a month in the previous six months, being over 16 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 2013, seven 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 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 et al., 1992; Darke et al., 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 (for example, 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-2012 to mid-2013).

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 & 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-2012 to mid-2013). 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 2013, eleven KE were interviewed from September to October 2013. 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 was one 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 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 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 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 18.0 (2009). 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 & 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 – have been identified as becoming more widely available and used in all jurisdictions (Topp & 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 & Degenhardt (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 feel 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 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 2013 sample was 42 years.
- ◆ Over half of the sample were male (56%) and three-quarters (75%) were unemployed, similar to that reported in 2012.
- ◆ Over half of the sample reported a previous history of imprisonment, similar to that reported in 2012.
- ◆ One-third of the sample (34%) had completed Year 11 and/or 12. Forty-three percent of the sample had no tertiary qualifications, 50% had a trade/technical qualification and 7% had a university education.
- ◆ About a third of the sample (31%) reported being in current drug treatment, primarily maintenance pharmaceutical treatment.
- ◆ The majority of the sample (90%) received a government allowance/pension and the majority lived in rental accommodation.

3.1 Overview of the IDRS participant sample

The demographic characteristics of the 100 participants interviewed in 2013 are summarised in Table 1. There was some overlap of the 2013 participant sample with previous years' samples, with one-third (33%) reporting that they had participated in the IDRS previously. More specifically, 19% percent of the sample stated that they had participated in the 2012 IDRS; 8% in 2011; 4% in 2010; 4% in 2009; 3% in 2008; 2% in 2007; 1% in 2006; 2% in 2005; 1% in 2004 and 1% in 2003 (participants could nominate more than one year). An additional 6% of the sample reported that they had participated in the IDRS previously, but couldn't remember in what year.

The median age of the sample increased in 2013 (albeit non-significantly) to 42 years (range: 22-62 years). Over half of the sample were male (56%), three-quarters (75%) were unemployed and 52% had a history of previous imprisonment; this is similar to participant reports in 2012. The median number of years spent at school was 10 (range: 3-12 years), with one-third of the sample (34%) reporting completion of years 11 and/or 12. Forty-three percent of the sample reported having no tertiary qualifications; this is stable from 2012. Of those who did report having a tertiary qualification, most had completed a technical or trade qualification (50%), whilst there was a significant decline in those who had completed a university qualification (19% in 2012 versus 7% in 2013; $p<0.05$; 95% CI: 0.03-0.22).

In 2013, approximately one-third of the sample (31%) were in drug treatment at the time of the interview, with the majority of participants in maintenance pharmacotherapy treatment. More specifically, 20% reported being on a methadone program (compared to 16% in 2012) and 8% reported being on a buprenorphine program, including those receiving suboxone treatment (compared to 15% in 2012). Three participants were receiving drug and alcohol counselling at the time of interview.

In regards to income, there was a significant increase in the proportion of participants who reported some form of government pension, allowance or benefit as their main source of income in the month prior to interview (78% in 2012 versus 90% in 2013; $p<0.05$; 95% CI: -0.22 - -0.01). The remaining participants reported their main source of income was a wage (9%) or criminal activity (1%).

The majority of the participant sample resided in rental accommodation (74%). A further 10% of the sample reported living at their family/parent's home, followed by residing in their own house/flat (6%) or at a boarding house/hostel (4%). Six participants reported having no fixed address/homeless.

Half of the sample (50%) were single at the time of interview, over one-quarter had a regular partner (28%), 16% were married or in a de facto relationship and three percent were divorced.

Table 1: Demographic characteristics of IDRS sample, 2009-2013

Characteristic	2009 (N=100)	2010 (N=97)	2011 (N=100)	2012 (N=93)	2013 (N=100)
Age (median in years)	40	37	39	39	42
(range)	(20-60)	(18-56)	(21-57)	(22-58)	(22-62)
Sex (% male)	66	56	59	59	56
Sexual identity (%)					
Heterosexual	89	88	83	85	90
Gay male	4	3	4	1	2
Lesbian	4	1	0	4	1
Bisexual	3	7	12	9	6
Other	0	1	1	1	1
English speaking (%)	99	97	96	97	94
A&TSI (%)	3	4	10	11	9
Employment (%)					
Not employed	67	63	67	61	75
Full-time	9	8	7	4	5
Part-time/casual	21	20	15	13	6
Full-time student	1	1	0	2	0
Both studying & employed	1	1	2	1	1
Home duties	1 [#]	4 [#]	5	15	9
Other	0	3	4	3	3
Median income per week (\$)	259	350	368	365	363
School education (median in years)	11	11	11	11	10
(Range)	(7-12)	(7-12)	(7-12)	(4-12)	(3-12)
Tertiary education (%)					
None	38	52	42	40	43
Trade/technical	49	40	39	41	50
University/college	13	8	19	19	7*
Prison history (%)	40	43	48	50	52
Current drug treatment (%)	45	37	40	32	31

Source: IDRS participant interviews

[#]One participant reported being a full-time carer

* $p<0.05$

In summary, compared to 2012, the 2013 sample characteristics were largely unchanged. Indeed, the only significant differences were: a lower proportion of the 2013 sample reported that they had completed university or college (19% in 2012

versus 7% in 2013; $p<0.05$; 95% CI: 0.03–0.22), and a greater proportion of the 2013 sample reported some form of government pension, allowance or benefit as their main source of income in the month prior to interview (78% in 2012 versus 90% in 2013; $p<0.05$; 95% CI: -0.22 – -0.01). In addition, there was a non-significant increase in the proportion of IDRS participants who were unemployed at the time of interview (61% in 2012 versus 75% in 2013; $p>0.05$).

4 CONSUMPTION PATTERNS

Key findings

- ◆ The median age of first injection among the sample was 19 years.
- ◆ The majority of participants reported that methamphetamine was the first drug injected.
- ◆ For the first time in over a decade, methamphetamine overtook heroin as the preferred drug of choice amongst participants.
- ◆ Methamphetamine was the drug injected most often in the last month, as well as the most recent drug injected.
- ◆ Polydrug use over the last six months was common among the sample.
- ◆ In 2013, there were significant declines in the lifetime use of licit Suboxone® tablets, other opioids, OTC codeine and an inverse increase in the lifetime use of inhalants.
- ◆ There were also significant declines in the recent use of 'any' Suboxone® tablets, OTC codeine and amphetamine liquid.

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, including injecting, swallowing, snorting and smoking/inhaling are also provided in some detail.

As shown in Table 2, the median age of first injection by the participant sample was 19 years (range: 11-43). The drug most commonly first injected by the sample was methamphetamine (70%), followed by heroin (27%). When first injection of methamphetamine is examined according to type, methamphetamine powder (58%) was by far the most commonly first injected drug, with smaller numbers reporting first injection of crystal methamphetamine (7%) and methamphetamine base (5%).

Table 2: Injecting drug history, 2012-2013

	2012 (N=93)	2013 (N=100)
Median age first injected in years (range)	18 (7-39)	19 (11-43)
First drug injected (%)		
Heroin	28	27
Methamphetamine*	65	70
Cocaine	2	0
Morphine	2	1
Other	3	2

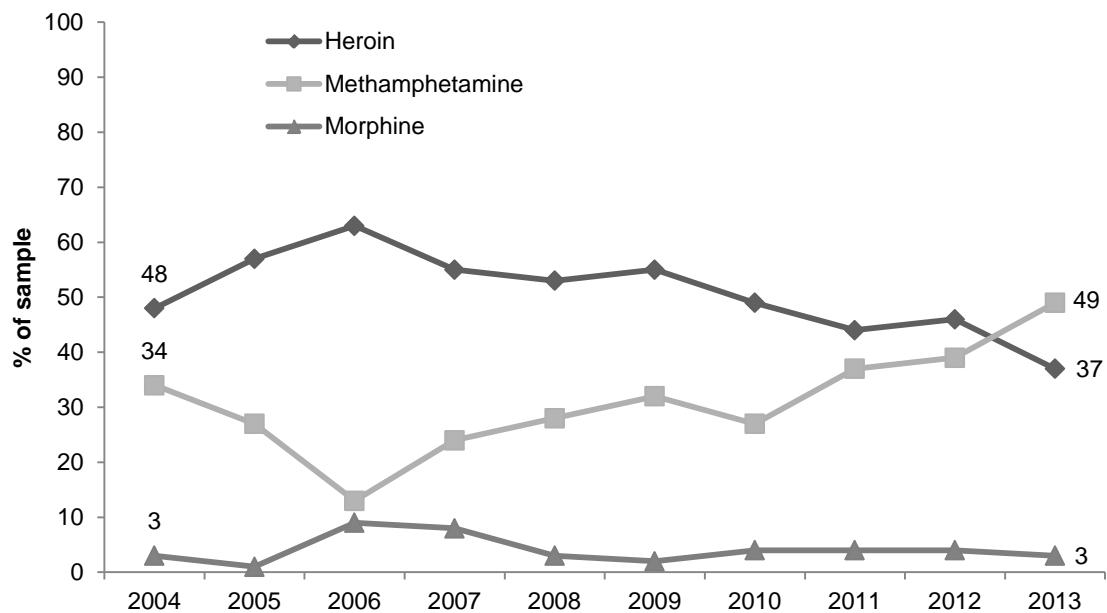
Source: IDRS participant interviews

*Collapsed categories: powder, base and crystal forms

4.1.1 Drug of choice

In 2013, methamphetamine overtook heroin as the preferred drug of choice amongst PWID. Looking at Figure 1, it can be seen that this follows the long-term trends that have been observed from 2006 onwards. More specifically, since 2006 there has been a downward trend in the proportion of PWID who nominated heroin as their drug of choice; inversely, in the same time period, there has been an upward trend in those nominating methamphetamine as their drug of choice.

Figure 1: Trend for drug of choice, 2004-2013



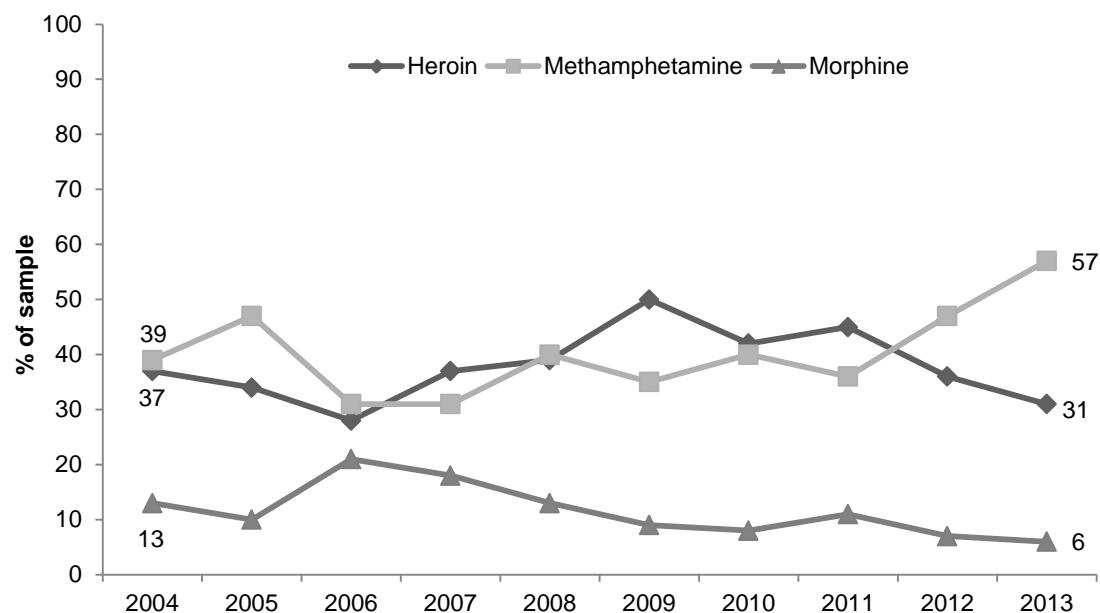
Source: IDRS Participant interviews

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

Although there were no significant changes from 2012, the proportion of the sample who reported heroin as the drug most frequently injected in the last month decreased slightly in 2013 (36% in 2012 versus 31% in 2013) (see Figure 2). Inversely, the proportion of participants reporting methamphetamine as the drug most injected in the last month increased (47% in 2012 versus 57% in 2013). This represents a continuation of the trends that have been observed over the past couple of years.

Interestingly, this trend was mirrored in terms of the most recently injected drug. More specifically, there was a slight decrease in the proportion of PWID who reported that heroin was the drug they had injected most recently and an increase in the proportion who reported that methamphetamine was the last drug injected. However, as found above, neither of these changes reached statistical significance (see Table 3).

Figure 2: Trend for drug injected most in last month, 2004-2013



Source: IDRS participant interviews

Table 3: Injecting drug preferences, 2012-2013

	2012 (N=93)	2013 (N=100)
Drug injected most often in last month (%)		
Heroin	36	31
Methamphetamine [#]	47	57
Cocaine	1	0
Morphine	7	6
Methadone	2	2
Buprenorphine	0	0
Suboxone	0	0
Oxycodone	4	3
Other	3	1
Most recent drug injected (%)		
Heroin	35	30
Methamphetamine [#]	50	58
Morphine	5	3
Methadone	1	3
Suboxone	2	1
Oxycodone	4	4
Methadone	1	3
Other	4	1
Frequency of injecting in last month (%)		
Weekly or less	27	18
More than weekly but less than daily	33	57**
Once a day	12	8
2-3 times a day	22	12
>3 times a day	7	5

Source: IDRS participant interviews

[#] Collapsed categories: powder, base and crystal forms

** p<0.01

Frequency of injecting any drug in the last month was greater than weekly for 82% of the sample, with 25% reporting they had injected at least once a day during that period. In 2013, there was a significant decline in the proportion of the sample who

reported injecting more than weekly, but less than daily (33% in 2012 versus 57% in 2013; $p<0.01$; 95% CI: -0.36 – -0.10).

Table 4: Polydrug use, 2012-2013

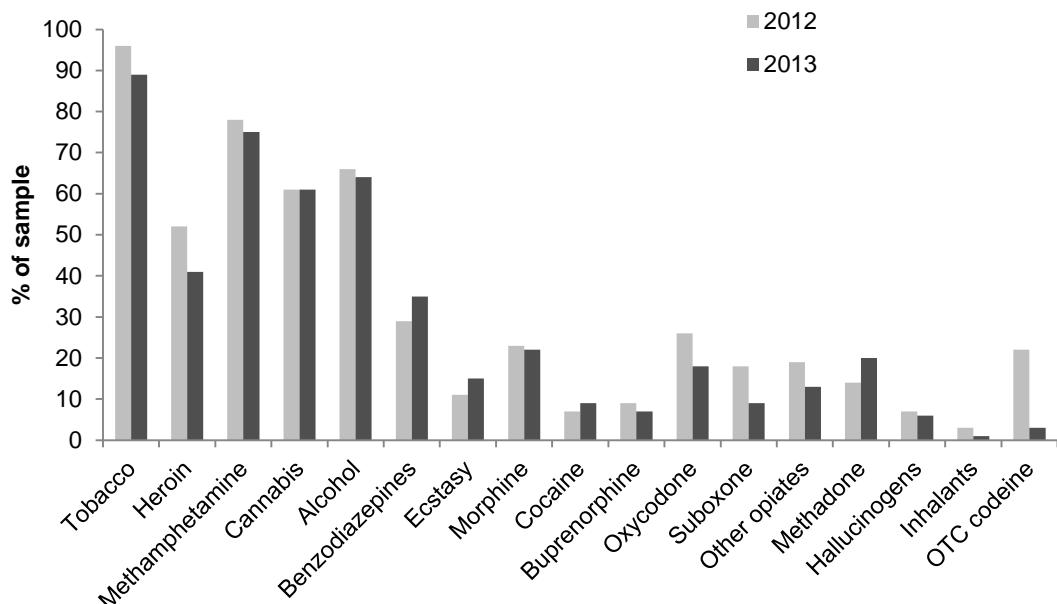
	2012 (N=93)	2013 (N=100)
Polydrug use (median)		
Number of drug classes ever used	10 (4-18)	9 (2-18)
Number of drug classes used in last 6 months	5 (1-15)	5 (1-18)
Number of drug classes ever injected	4 (1-11)	3 (1-13)
Number of drug classes injected in last 6 months	2 (1-8)	1 (1-11)

Source: IDRS participant interviews

Participant polydrug use was common in 2013, and has remained consistently so across the years. In 2013, participants were asked about their history of use of 21 separate substances.¹ Only illicit use of a drug was analysed. The total number of possible injected drug types was 18. In 2013, participants reported use of a median of nine (range: 2-18) drug types across their lifetime and a median of five (range 1-18) during the six months prior to interview; this was stable from 2012.

The drugs most commonly used among the participants in the last six months were tobacco, 'any' methamphetamine, alcohol, cannabis and heroin (Figure 3). This order of commonality remained stable from 2012.

Figure 3: Recent drug use, percentage of the participants to have used each substance type in the last six months, 2012-2013



Source: IDRS participant interviews

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

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

In 2013, there were a number of significant changes in the lifetime and recent use of certain drugs. In regards to lifetime use, there were significant declines in the use of licit Suboxone® tablets ($p<0.05$; 95% CI: 0.04–0.26), other opioids ($p<0.05$; 95% CI: 0.03–0.29), OTC codeine ($p<0.001$; 95% CI: 0.24–0.47) and an inverse increase in the lifetime use of inhalants ($p<0.01$; 95% CI: -0.26 – -0.05). In regards to recent use, there were significant declines in the use of 'any' Suboxone® tablets ($p<0.01$; 95% CI: 0.05–0.22), OTC codeine ($p<0.001$; 95% CI: 0.01–0.28) and amphetamine liquid ($p<0.01$; 95% CI: 0.04–0.21). Interestingly, there was also a non-significant decline in recent heroin use, which continues an overall downward trend that has been observed over the past five years. A more detailed history of participants' drug use can be found in Table 5.

Table 5: Drug use history and routes of administration of the sample, 2013 (% of total sample; N=100)

Drug class	Ever used %	Ever inject %	Use last 6 mths %	Inject last 6 mths %	Ever smoke %	Smoke last 6 mths %	Ever snort %	Snort last 6 mths %	Ever swallow %	Swallow last 6 mths %	Days used in last 6 mths ^{^*}	Days injected in last 6 mths*
Heroin	77	75	41	41	23	7	7	0	8	0	72	72
Homebake	24	23	6	6	1	0	0	0	0	0	4	4
Any heroin	77	75	41	41	23	7	7	0	8	0	72	72
Methadone – licit	43	14	20	4	-	-	-	-	42	20	180	36
Methadone – illicit	37	17	15	8	-	-	-	-	25	9	3	7
Physeptone – licit	7	3	2	2	0	0	0	0	7	2	102	48
Physeptone – illicit	18	12	7	6	0	0	0	0	9	2	2	2
Any methadone (inc. physeptone)	64	27	36	15	0	0	0	0	61	30	180	20
Buprenorphine – licit	19	9	3	1	0	0	0	0	18	3	30	72
Buprenorphine – illicit	23	11	7	5	4	0	0	0	12	3	48	72
Any buprenorphine	33	14	8	5	4	0	0	0	24	4	51	72
Suboxone tablet – licit	12	4	0	0	0	0	0	0	12	0	-	-
Suboxone tablet – illicit	14	6	2	1	3	0	0	0	7	1	7	12
Any suboxone tablet	20	6	2	1	3	0	0	0	15	1	7	12
Suboxone film – licit	12	5	8	3	0	0	0	0	12	8	69	26
Suboxone film – illicit	16	9	8	5	1	1	0	0	11	4	9	34
Any suboxone film	23	11	14	7	1	1	0	0	19	10	41	41
Any suboxone	30	13	15	7	4	1	0	0	25	11	-	-
Oxycodone – licit	18	5	13	2	0	0	0	0	16	12	15	26
Oxycodone – illicit	39	32	18	14	1	0	0	0	12	7	18	20
Any oxycodone	51	35	27	15	1	0	0	0	25	16	18	24

Source: IDRS Participant interviews

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

*Among those who had used/injected

Table 5: Drug use history and routes of administration of the sample, 2013 (% of total sample; N=100) (continued)

Drug Class	Ever used %	Ever inject %	Use last 6 mths %	Inject last 6 mths %	Ever smoke %	Smoke last 6 mths %	Ever snort %	Snort last 6 mths %	Ever swallow %	Swallow last 6 mths %	Days used in last 6 mths ^{^*}	Days injected in last 6 mths*
Morphine – licit	27	20	9	5	0	0	0	0	14	5	10	2
Morphine – illicit	46	42	22	20	0	0	0	0	13	5	22	27
Any morphine	59	52	27	23	0	0	0	0	22	8	20	20
Other opioids	26	2	13	1	2	0	0	0	24	13	7	1
OTC codeine	9	3	3	1	0	0	0	0	8	2	6	48
Methamphetamine powder (speed)	86	77	40	40	14	4	38	1	37	4	48	48
Methamphetamine base (paste/point/wax)	55	54	31	30	11	6	3	0	11	4	48	48
Crystalline methamphetamine (ice)	76	75	57	56	31	18	8	3	13	6	12	12
Amphetamine liquid	27	24	3	3	-	-	-	-	6	0	24	24
Any form methamphetamine[#]	93	91	75	74	37	21	40	3	42	11	72	72
Pharmaceutical stimulants – licit	6	1	1	0	0	0	0	0	5	1	17	-
Pharmaceutical stimulants – illicit	19	4	4	1	1	1	0	0	16	2	25	48
Any pharmaceutical stimulants	23	4	5	1	1	1	0	0	20	3	17	48
Cocaine	51	22	9	4	9	2	33	4	6	0	3	2
Hallucinogens	56	6	6	0	4	0	4	0	55	6	2	-
Ecstasy	58	25	15	2	3	0	7	1	52	14	2	16
Alprazolam – licit	14	1	7	1	0	0	0	0	14	7	120	1
Alprazolam – illicit	31	3	23	3	0	0	0	0	29	20	5	2
Any alprazolam	41	4	28	4	0	0	0	0	40	26	-	-

Source: IDRS Participant interviews

[^] Refers to any route of administration, 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, 2013 (% of total sample; N=100) (continued)

Drug Class	Ever used %	Ever inject %	Use last 6 mths %	Inject last 6 mths %	Ever smoke %	Smoke last 6 mths %	Ever snort %	Snort last 6 mths %	Ever swallow %	Swallow last 6 mths %	Days used in last 6 mths^*	Days injected in last 6 mths*
Other benzodiazepines – licit	51	1	32	0	1	0	0	0	51	32	51	-
Other benzodiazepines – illicit	42	4	23	1	1	0	0	0	40	22	6	5
Any other benzodiazepines	67	4	47	1	1	0	0	0	65	46	-	-
Any benzodiazepines	73	7	56	4	1	0	0	0	72	55	56	4
Seroquel – licit	12	1	6	0	0	0	0	0	12	6	150	-
Seroquel – illicit	18	0	7	0	0	0	0	0	18	7	2	-
Any seroquel	28	1	12	0	0	0	0	0	28	12	6	-
Alcohol	93	6	64	0	-	-	-	-	93	64	24	-
Cannabis	88	-	61	-	88	60	-	-	44	10	180	-
Tobacco	94	-	89	-	-	-	-	-	-	-	180	-
Inhalants	25	-	1	-	-	-	-	-	-	-	7	-
Steroids	8	7	0	0	0	0	0	0	1	0	-	-
Fentanyl	17	15	9	9	0	0	0	0	2	0	1	1
EPS	6	3	3	1	2	1	0	0	2	1	10	4
Synthetic cannabis	4	0	4	0	4	4	0	0	0	0	2	-

Source: IDRS Participant interviews

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

*****Among those who had used/injected

4.2 Heroin use

Key findings

- ◆ In 2013 just over two-fifths of the sample reported recent use of heroin; this was a non-significant decline from 2012.
- ◆ However, the frequency of heroin use increased to a median of 72 days within a six month period (compared to 48 days in 2012); daily use remained stable.
- ◆ White rock and powder continued to be the most commonly used forms of heroin in 2013.

4.2.1 Heroin use among PWID

Forty-one percent of the IDRS participants interviewed in 2013 had used heroin in the six months prior to interview. This represents a non-significant decline from 2012 (52%), and continues the downward trend that has been observed from 2009 onwards (see Figure 4). In addition, there were non-significant declines in the proportion of PWID who nominated heroin as their drug of choice (37%), the drug injected most often in the past month (31%) and the last drug injected (30%).

However, the frequency of recent heroin use (median number of days used in a six month period) increased, from 48 days in 2012 to 72 days in 2013. All recent heroin users reported injecting heroin within the preceding six months, and the median number of injection days was also 72 (range 1-180). Among recent users of heroin, daily use remained relatively stable at 20%.

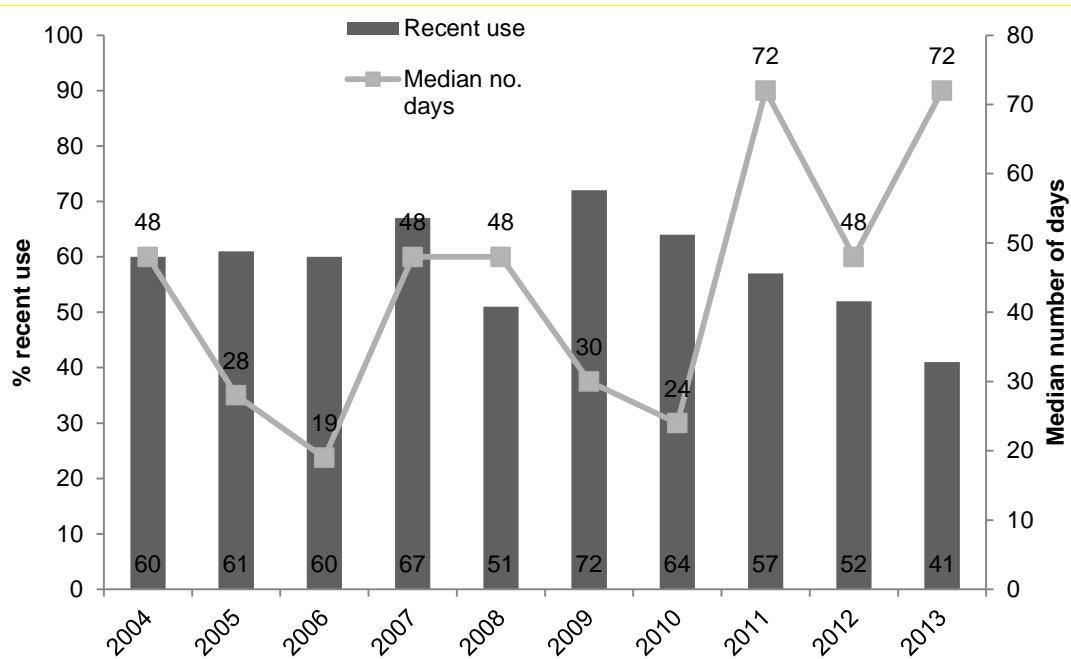
Table 6: Recent heroin use of IDRS participants, 2012-2013

	2012	2013
Recent use (%)	52	41
Median days of use*	48	72
Daily use* (%)	29	20

Source: IDRS participant interviews

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

Figure 4: Heroin, recent use and median number of days used, 2004-2013



Source: IDRS participant interviews

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 2013, a quarter (24%) of participants reported that they had used homebake heroin at least once in their lifetime. Six 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, with no other routes of administration reported. In 2013, homebake heroin was used for a median of four days (range: 1-180 days).

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 41 participants who had recently used heroin, 78% (n=32) reported use of a white/off-white powder or rock form of heroin, and 66% (n=27) reported using a brown powder or rock. This was relatively stable from 2012. The forms most used in the last six months showed a similar pattern to 2012, with 59% using mostly white/off-white powder or rock and 37% using brown powder or rock most often. Five percent (n=2) reported homebake as the form most used in the preceding six months (see Table 7).

Table 7: Reports of heroin forms used in the last six months among those who had recently used heroin, 2012-2013

	2012	2013
Used last 6 months (%)	(n=48)	(n=41)
White/off-white powder or rock	81	78
Brown powder or rock	50	66
Form most used last 6 months	(n=47)	(n=41)
White powder or rock	72	59
Brown powder or rock	23	37
Homebake	0	5
Other colour	4	0

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; UNODC, 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 route of administration.

More recently it has been demonstrated that heroin colour is not a reliable determinant of geographic origin (Zerell, Ahrens, & Gerz, 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. In 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 2013, participants were again asked if they had used heat and/or citric/ascorbic/acetic acid to prepare heroin for injection on the last occasion of injection. Forty-nine percent reported using heat on the last occasion of injecting, and 13% reported using any form of citric/ascorbic/acetic acid. This was stable from 2012.

Participants were also asked to identify the colour of the heroin on the last occasion of injection where heat and/or citric/ascorbic/acetic acid had been used in preparation. Of those who reported using heat or acid on the last occasion, the majority (61%) of respondents described the colour of heroin as white/off-white and approximately one-third (30%) described it as brown/beige in colour. Of the two participants who reported

an 'other' colour, one reported that the heroin was clear whilst the other reported that it was speckled.

Table 8: Preparation of heroin, 2012-2013

	2012	2013
Heated in the last injection (%)	(n=45) 38	(n=41) 49
Acid in the last injection (%)	(n=45) 13	(n=38) 13
Main colour	(n=18)	(n=23)
White	56	61
Brown	39	30
Other	6	9

Source: IDRS participant interviews

KE comments

- ◆ The majority of KE reported that the prevalence of heroin had remained stable over the preceding 12 months. One KE did note that there had been a fairly big heroin seizure in February 2013, which resulted in a temporary reduction of use.
- ◆ It was reported by one KE that they were receiving more calls from people wanting to enter detoxification for their heroin use, particularly amongst the Asian community.
- ◆ One KE had heard reports of heroin being cut with methamphetamine in order to make it more addictive to the consumer.

4.3 Methamphetamine

Key findings

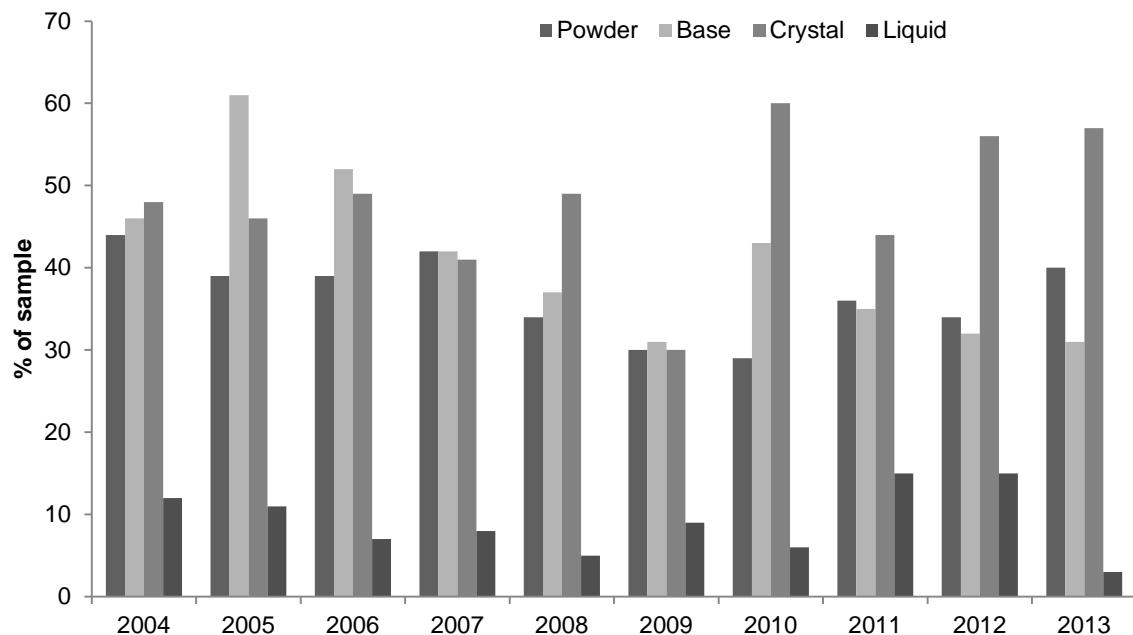
- ◆ The recent use of powder, base and crystal methamphetamine all remained stable in 2013, whilst the use of liquid methamphetamine remained low.
- ◆ There were, however, significant increases in the frequency of use for powder and base methamphetamine. The frequency of crystal methamphetamine use remained stable in 2013.
- ◆ The majority of participants using all forms of methamphetamine reported having done so by injection in the six months prior to interview.
- ◆ There was a non-significant increase in the proportion of recent methamphetamine users who reported using on a daily basis (from 5% in 2012 to 12% in 2013).

In response to the increasing diversification of the methamphetamine markets identified by the 2001 IDRS (Topp et al., 2002), data has since been 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. Ice/crystal 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 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 methamphetamines

In 2013, three-quarters of participants (75%) had used any form of methamphetamine in the six months preceding interview. Considered separately, the most commonly used form of methamphetamine was ice/crystal (57%), followed by speed (40%) and then base (31%). These figures were stable from 2012. Liquid amphetamine (also known as 'oxblood') remained considerably less common, with only 3% of participants reporting use in the last six months (versus 15% in 2012).

Figure 5: Methamphetamine, percentage of participants that used in the last six months, 2004-2013

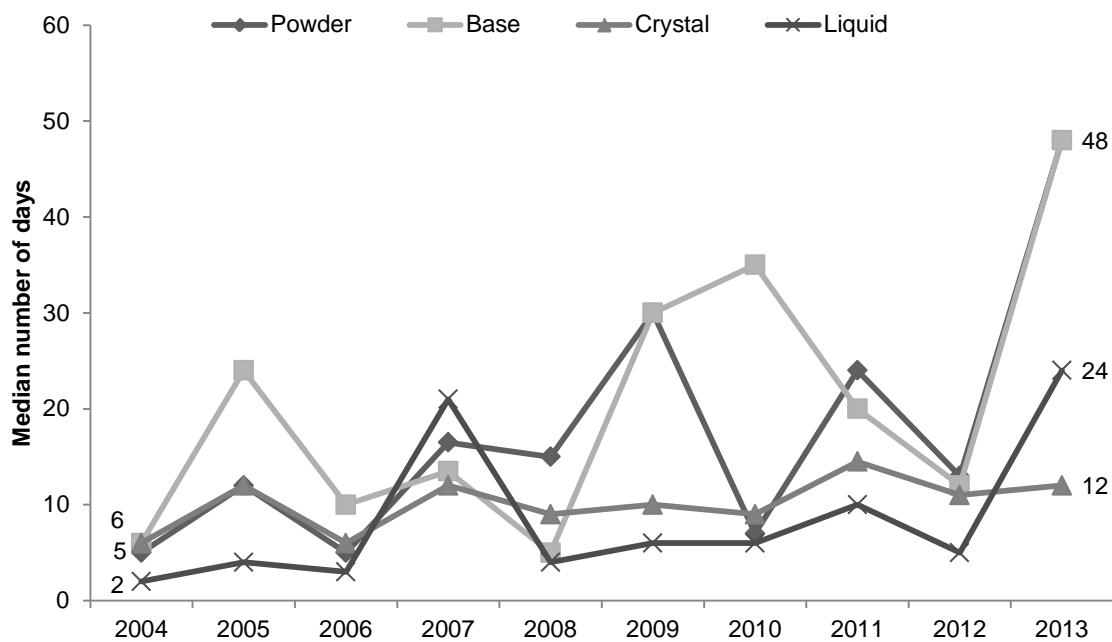


Source: IDRS participant interviews

4.3.2 Methamphetamine frequency of use

In 2013, there were significant increases in the frequency of use for powder and base methamphetamine (as measured by the median number of days used in the six months prior to interview). That is, in 2013, participants reported using powder on a median of 48 days (range: 1-180) compared to 13 days in 2012 ($p<0.05$); and base on a median of 48 days (range: 3-180) compared to 12 days in 2012 ($p<0.05$). The use of amphetamine liquid also increased to a median of 24 days (versus 5 days in 2012); however, due the small numbers reporting in 2013 ($n<5$) this finding must be viewed with caution. The frequency of crystal use remained stable at 12 days in the preceding six months (versus 11 days in 2012).

Figure 6: Methamphetamine, median number of days used in the last six months, 2004-2013

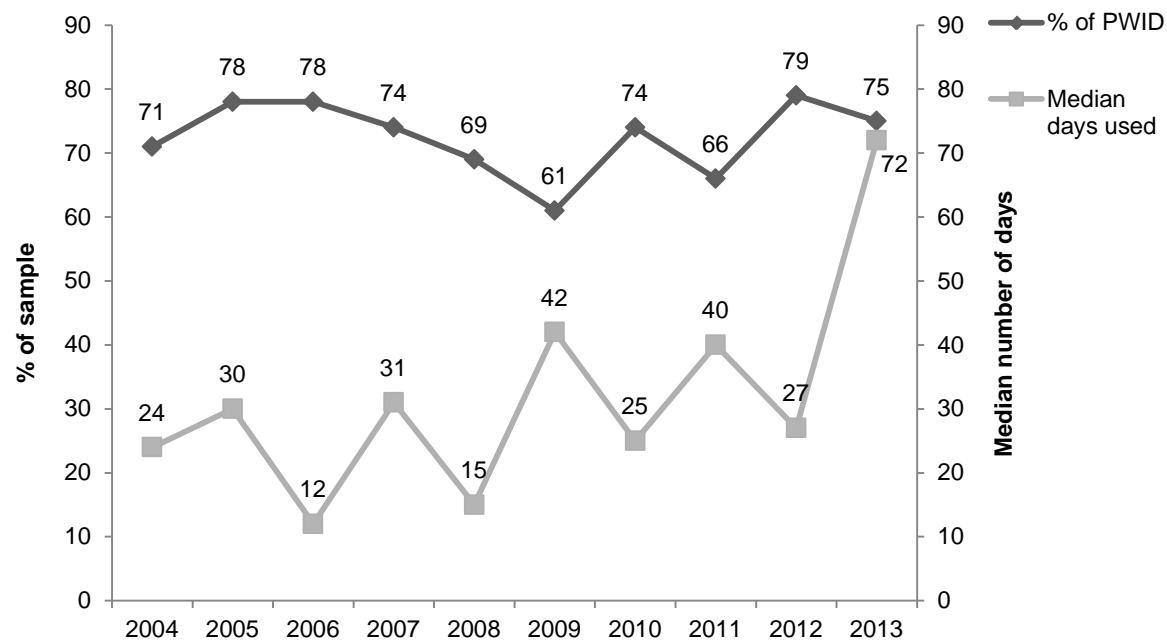


Source: IDRS participant interviews

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

The long-term trend in the parameters of use is depicted in Figure 7. Overall, in 2013 75% of participants had used some form of methamphetamine (powder, base, crystal, and liquid); this remained stable from 2012 (79%). However, the frequency of methamphetamine use increased significantly with recent methamphetamine users reporting that they had used on a median of 72 days (range: 1-180) in a six month period (compared to 27 days in 2012).

Figure 7: Methamphetamine, recent use and median number of days used, 2004-2013

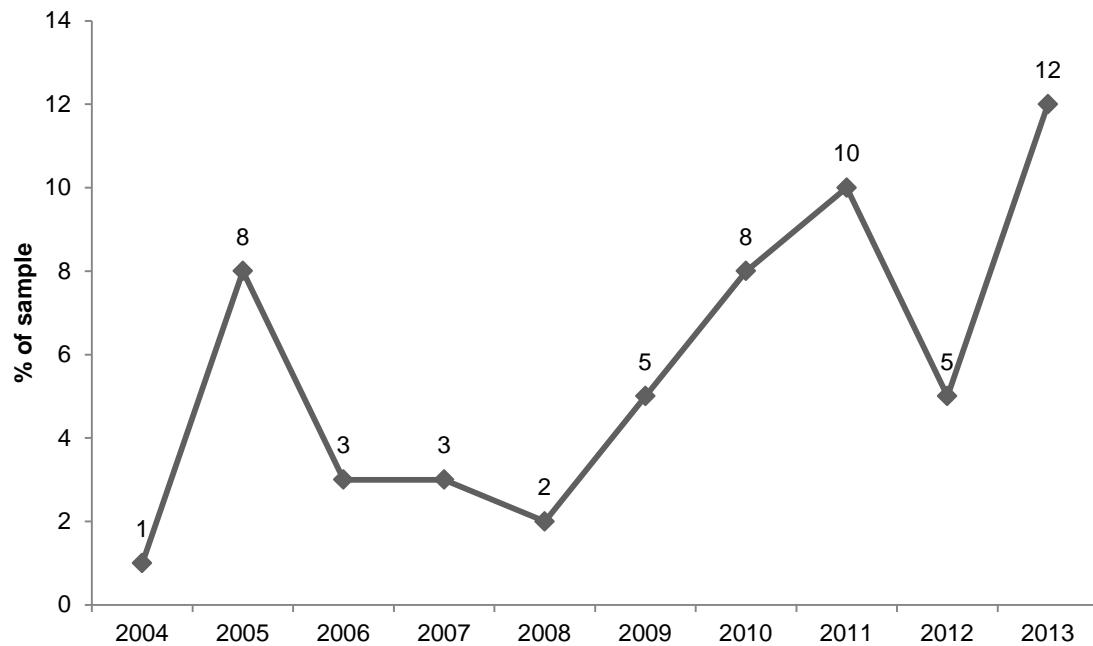


Source: IDRS participant interviews

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

Of the 75 participants who reported using some form of methamphetamine in the last six months, nine participants reported daily use during that period. This was slightly higher than the number of methamphetamine users reporting daily use of any methamphetamine ($n=4$) in 2012. 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 considerably over the past 10 years; however, numbers remain relatively small.

Figure 8: Methamphetamine, percentage that used daily in the last six months, 2004-2013



Source: IDRS participant interviews

As would be expected of a sample of PWID, the majority of participants using all forms of methamphetamine reported having done so by injecting in the six months prior to interview. Two-fifths of the sample (40%) had injected powder (stable from 2012), 31% had injected base (compared to 32% in 2012), 56% had injected crystal (54% in 2012) and 3% had injected amphetamine liquid (15% in 2012). Four percent of participants reported smoking powder, 1% reported snorting and 4% had swallowed powder in the preceding six months; this remained relatively stable compared to 2012. Six percent of the sample reported smoking base methamphetamine, whilst 4% had swallowed it in the preceding six months; again this was stable from 2012. Recent smoking of crystal decreased significantly to 18% (versus 33% in 2012; $p<0.05$; 95% CI: 0.03–0.27), with both snorting and swallowing of crystal remaining low (3% and 3% respectively) (Table 5).

KE comments

- ◆ The majority of KE noted that their clientele didn't distinguish between speed, base and ice; rather, they just referred to meth/amphetamines more generally. However, it was generally agreed that crystal is the most popular form of methamphetamine being used, with powder and base considered 'second rate'.
- ◆ There were mixed reports regarding the prevalence of methamphetamine use: several KE reported that there was a continuing increase in methamphetamine use, whilst others reported that prevalence remained high, but stable.
- ◆ It was noted by one KE that methamphetamine is starting to be viewed more as a recreational drug, in much the same way that ecstasy is. Inversely, there were concerns that after initiation of methamphetamine use, people are becoming regular users – and subsequently dependent – much more quickly than has been observed in the past.
- ◆ One KE noted that they had seen an increase in methamphetamine use amongst their opioid dependent patients, primarily because it was easier to obtain.
- ◆ When asked what drug they considered to be most problematic at the moment, virtually all KE nominated methamphetamine. The reasons for this were varied and ranged from the fact that it was highly prevalent and addictive, to the physical, 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.

4.4 Cannabis

Key findings

- ◆ The proportion of participants who had recently used cannabis remained stable in 2013, whilst the frequency of use increased to a median of 180 days in a six month period.
- ◆ Fifty-seven percent of recent cannabis users (n=35) stated they had used on a daily basis in the last six months; this was stable from 2012.
- ◆ Of the participants who had used cannabis recently, 54 (92%) reported the use of hydro and 48 (81%) reported the use of bush within that period.

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 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.

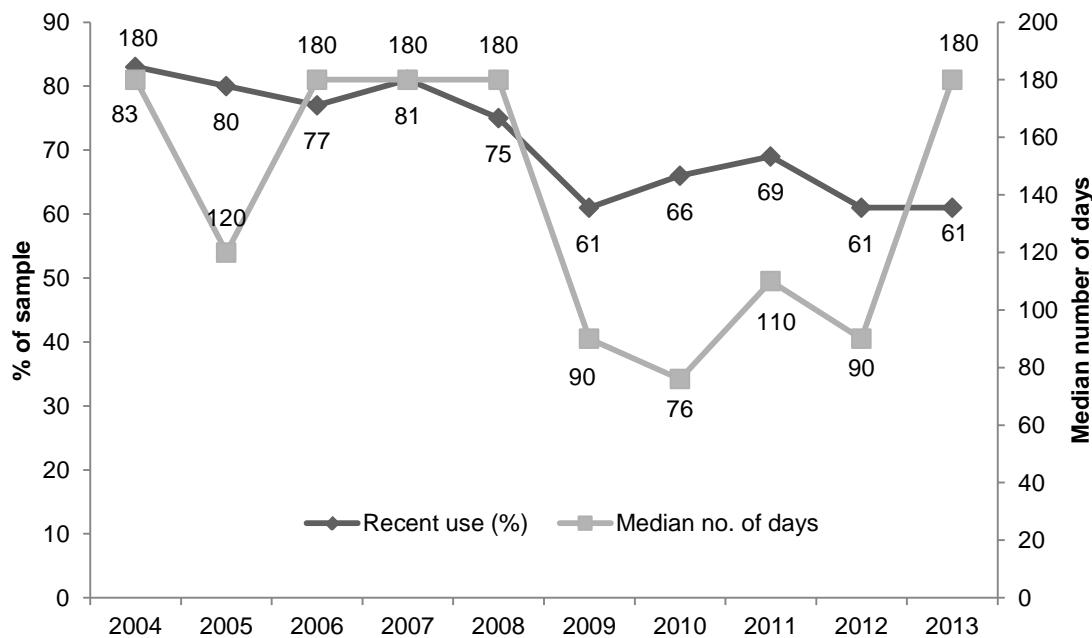
4.4.1 Current patterns of cannabis use

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

Sixty-one percent of the sample reported having used cannabis in the preceding six months, which was stable from 2012. There was, however, a non-significant increase in the frequency of use, from a median 90 days in 2012 to 180 days in 2013 (range: 1-180). Although cannabis is generally not the drug of choice among the IDRS sample, the majority of participants (88%) reported using this substance in their lifetime.

Fifty-seven percent of recent cannabis users (n=35) stated they had used on a daily basis in the last six months, which was stable from 2012 (44%).

Figure 9: Cannabis, recent use and median number of days used, 2004-2013



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/joints/other 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=44; 80%) the last time they used and had smoked a median of 3.5 cones (range: 1-25). Eight participants reported smoking a median of one joint (range: 0.5-24) the last time they smoked cannabis. One participant reported having one 'puff' on the last occasion of use. Amongst daily users, the median number of cones and joints smoked on the last occasion of use was four (range: 1-25) and five (range: 1-24) respectively.

Of the participants who had used cannabis recently, 54 (92%) reported use of hydro and 48 (81%) reported use of bush, within that period. In addition, 13 participants (22%) reported use of 'hash' (cannabis resin) and seven (12%) reported use of 'hash oil'. The majority of the cannabis-using participants reported hydro as the form they had used most in the last six months (84%, n=46), whilst 16% (n=9) reported bush was the form they had used most.

KE comments

- ◆ There was a general consensus among KE that cannabis remains popular and is still widely used among their clientele (and amongst the general population).
- ◆ One KE felt that there had been a decline in the negative perceptions surrounding cannabis use, particularly amongst the younger generation. More specifically, it was reported that young people recognise the risks of using cannabis if there is a family history of schizophrenia, but otherwise think there is "nothing to worry about" and consider it to be much safer than other illicit drugs.
- ◆ Interestingly, when asked what drug they considered to be most problematic at the moment, no KE nominated cannabis.

4.5 Opioids

Key findings

- ◆ Seventy-one percent of participants reported they had used some type of opioid substance (including licit and illicit use) in the six months prior to interview.
- ◆ Heroin was the most common opioid recently used by participants (41%), followed by methadone (36%), oxycodone (27%) and morphine (27%).
- ◆ The recent use of illicit morphine, oxycodone, methadone, buprenorphine and other opiates remained stable in 2013. Nine participants reported using fentanyl within the preceding six months.
- ◆ There were significant declines in the recent use of Suboxone® (licit and illicit) and OTC codeine (non-medicinal use).

The IDRS investigates the use patterns, harms and market characteristics of a number of pharmaceutical opioids including methadone, buprenorphine, buprenorphine-naloxone, morphine, oxycodone and fentanyl. 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 route of administration (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 route of administration ('illicit use').
3. Use of any opioids, i.e. does not distinguish between licitly and illicitly 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 and the term 'diversion'. The IDRS documents the use of opioid medications, licitly obtained or otherwise, among a sentinel sample of PWID. These include opioids prescribed for opioid substitution treatment (OST) – i.e. methadone, buprenorphine and buprenorphine-naloxone maintenance treatments – in addition to opioids prescribed for pain relief (including morphine and oxycodone). In regards to OST, it is imperative to note that screening of participants ensured that those sampled had all been active in the illicit drug markets and therefore were able to provide meaningful data on market indicators. However, whilst a proportion of those sampled in 2013 were engaged in such treatment at the time of interview, responses presented are not representative of all clients engaged in drug treatment services.

4.5.1 Overview of opioid use among participants

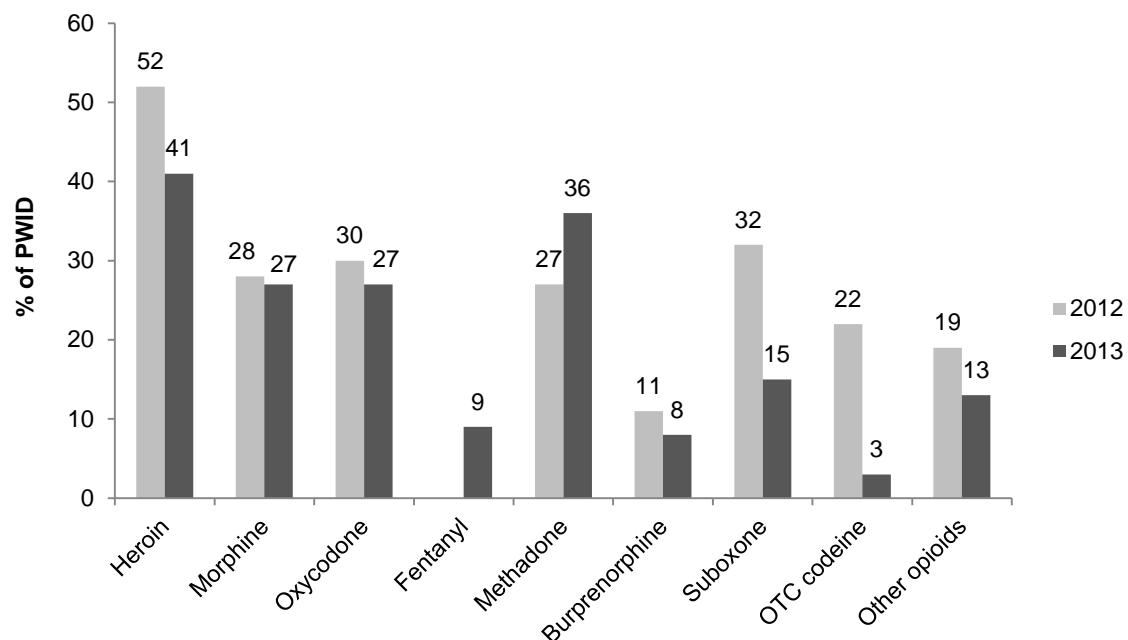
Table 5 provides data on the history of use and route of administration of opioid substances for the 2013 participant sample. Opioid substances include heroin; morphine; 'homebake' (a crude opioid substance derived from codeine) (Reynolds et al.,

1997); fentanyl; other opioids (such as codeine, pethidine, oxycodone); as well as methadone/Physeptone® and buprenorphine.

As can be seen in Figure 10, heroin was the most commonly used opioid in the six months prior to interview (41%), followed by licit or illicit methadone (36%), licit or illicit oxycodone (27%) and licit or illicit morphine (27%). These figures remained relatively stable from 2012. There were, however, significant declines in the recent use of Suboxone® (32% in 2012 versus 15% in 2013; $p<0.01$; 95% CI: 0.05–0.29) and OTC codeine (22% in 2012 versus 3% in 2013; $p<0.001$; 95% CI: 0.10–0.28).

Heroin use among participants is described in detail in section 4.2, with use of other opioids described in the following sections (data is presented for illicit use only, except for fentanyl and other opioids which don't distinguish between licit and illicit use). It should be noted that some of the sample sizes for these sections were relatively small and, therefore, should be interpreted with caution.

Figure 10: Recent use of opioids amongst PWID, 2012-2013



Source: IDRS participant interviews

Note: these figures include licit and illicit use, except for heroin and OTC codeine which include illicit/non-medicinal use only. Data for fentanyl use was not collected in 2012

When all the opioid substance categories (heroin, methadone, morphine, other opioids, oxycodone, fentanyl, buprenorphine and Suboxone®) are collapsed, 71% of participants had used some type of opioid substance (including licit and illicit use) in the six months prior to interview. When licit use (of methadone, morphine, buprenorphine, Suboxone® or oxycodone) is excluded, 62% had used any of these substances in that time. Excluding heroin and licit use (of methadone, morphine, buprenorphine, Suboxone® or oxycodone), 49% of participants had used some other opioid substance in the six months prior to interview.

4.5.2 Use of illicit morphine

Twenty-two percent of participants reported they had used illicit morphine in the six months prior to interview on a median of 22 days (range: 2-180), and on the last occasion of use had used a median of 100mg (range: 10-240). Twenty participants reported that they had injected illicit morphine in the preceding six months, and they had done so on a median of 27 days (range: 2-180).

Of those who recently injected illicit morphine and were able to comment (n=19), 47% reported heating the illicit morphine before injecting. The main filter used was a cigarette filter (n=10), followed by cotton wool (n=4) and a wheel filter (n=4).

The majority of all morphine users (70%, n=19) reported that the type they had used most during the last six months was illicit. The main brands of illicit morphine used in that time were Kapanol® (48%, n=10) and MS Contin® (48%, n=10).

4.5.3 Use of illicit oxycodone

Eighteen participants reported recent use of illicit oxycodone on a median of 18 days (range: 1-180) in the six months prior to interview, and had used a median of 60mg on the last occasion of use. Of those, 78% (n=14) reported injecting illicit oxycodone on a median of 20 days (range: 1-180). These figures are largely stable compared to 2012.

Of those who had recently injected illicit morphine and were able to comment (n=12), 83% reported heating the morphine before injecting. The main filter used was a cigarette filter (n=9), followed by cotton wool (n=3) and a wheel filter (n=1).

The majority of all oxycodone users (56%, n=15) reported that the type they had used most during the last six months was illicit. The main brands of illicit oxycodone used in the six months preceding interview were Oxycontin® (81%, n=13), followed by Endone® (13%, n=2).

4.5.4 Use of fentanyl (licit and illicit)

Nine participants reported using fentanyl on a median of one day (range: 1-120) in the six months preceding interview, and on the last occasion of use had used a median of 50mg (range: 3-100) or 52.5 mcg/hr (range: 5-100). All participants who reported recent use of fentanyl had done so by injection: of these, only one participant reporting heating fentanyl before injection. The main filter used was a cigarette filter (n=5), followed by cotton wool (n=1). Two participants reported that they hadn't used a filter on the last occasion of injection.

Among those who recently used fentanyl the form most used was illicit (78%; 22% licit).

4.5.5 Over the counter codeine

Codeine is a mild opioid. In Australia, over the counter (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 combinations (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 (in 2012 and 2013 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 et al. (2004).

In 2013, there were significant decreases in both lifetime and recent use of OTC codeine. More specifically, 9% of participants reported ever using OTC codeine for non-medicinal purposes (versus 45% in 2012; $p<0.001$; 95% CI: 0.24–0.47), and 3% reported use within the preceding six months (versus 22% in 2012; $p<0.001$; 95% CI: 0.10–0.28). Frequency of use remained stable at a median of six days within the six months preceding interview (range: 4–48), and the average amount used in a session was three pills/tablets (range: 2–4).

One participant reported having recently injected OTC codeine and they had done so on 48 days in the past six months.

4.5.6 Use of illicit methadone

In 2013, for the eleventh year running, IDRS survey participants were asked to provide separate information on the use of licit and illicit methadone syrup and Physeptone® tablets.

Fifteen participants reported having used illicit methadone syrup on a median of three days (range: 1–180) in the last six months, and on the last occasion of use had used a median of 40ml (range: 5–100). Of those, eight participants reported injecting illicit methadone syrup on a median of seven days (range: 1–24).

Seven participants reported having used illicit Physeptone® tablets on a median of two days in the last six months (range: 1–24), and on the last occasion of use had used a median of 50mg (range: 10–100). Of those, six participants reported injecting illicit Physeptone® tablets on a median of two days (range: 1–24).

Of those who recently injected illicit Physeptone® tablets and were able to comment (n=6), 33% reported using heat on the last occasion of use. The main filters used were a cigarette filter (n=3) and cotton wool (n=3).

4.5.7 Use of illicit buprenorphine

Seven participants reported having used illicit buprenorphine on a median of 48 days (range: 1–72) in the six months prior to interview, and on the last occasion of use had used a median of one milligram (range: 2–100). Most of the participants who reported use of illicit buprenorphine did so by injection (n=5), and they had done so on a median of 72 days (range: 8–72).

Of those who recently injected illicit buprenorphine and were able to comment (n=5), 20% (n=1) reported using heat on the last occasion of use. The main filters used were a cigarette filter (n=2) and cotton wool (n=2).

The majority of all buprenorphine users (63%, n=5) reported that the type they had used most during the last six months was illicit.

4.5.8 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.

In 2013, two participants reported recent use of illicit Suboxone® tablets on a median of seven days (range: 2-12), and on the last occasion of use had used a median of 8mg (no range). One participant reported injecting illicit Suboxone® tablets 12 days within the preceding six months.

Eight participants reported recent use of Suboxone® film on a median of nine days (range: 1-50 days) in the six months prior to interview, and on the last occasion of use had used 8mg (range: 2-100). Most of the participants who reported illicit use of Suboxone® film did so by injection (n=5), and they had done so on a median of 34 days (range: 5-50).

Of those who recently injected illicit Suboxone® film and were able to comment (n=5), 60% (n=3) reported using heat on the last occasion of use. The main filter used was a cigarette filter (n=3), followed by cotton wool (n=2).

Half of all Suboxone® film users (50%, n=7) reported that the type they had used most during the last six months was illicit.

4.5.9 Use of other opiates (licit and illicit)

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

Among those who recently used other opiates, the form most used was licit (85%; 15% illicit), and the main brand used was Panadeine Forte® (n=8, 67%).

KE comments

- ◆ Reports regarding the use of other opioids were mixed. Approximately half of the KE noted there had been an increase in the use of other opioids such as oxycodone and morphine, whilst half reported that prevalence had remained stable over the preceding 12 months.
- ◆ It was noted by two KE that there were limited places available on their OST programs. This was reportedly due to long waiting lists, closure of services and an unwillingness amongst GPs to take on methadone clients. However, in contrast, another KE reported that they had fewer clients in their pharmacotherapy program – this was thought to be due to a decline in heroin use and a subsequent increase in the use of speed.
- ◆ There were mixed reports regarding the preference of Suboxone® film or Suboxone® tablets. Suboxone® film was said to have a different flavouring agent to the tablets, which some people liked and some didn't. There was thought to be no difference in the ability to divert the film or tablet forms of Suboxone®.
- ◆ Methadone, on the other hand, was reported to be more popular than Suboxone® film because it is easier to inject.
- ◆ One KE reported that there had been an increase in the “number of cases of suboxone encountered in the laboratory”.
- ◆ It was reported by one KE that there had been an increase in fentanyl-related ambulance call-outs. The symptoms of fentanyl overdose are similar to those for heroin overdose, with consumers reportedly administering fentanyl by a variety of methods.

4.6 Other drugs

Key findings

- ◆ Fifteen percent of IDRS participants had used ecstasy and 6% had used some type of hallucinogen in the six months prior to interview; this remained stable from 2012.
- ◆ In 2013, approximately one-third of PWID (35%) reported recent use of any illicit benzodiazepines, which is similar to participant reports in 2012.
- ◆ The prevalence and frequency of recent cocaine use remained low among PWID.
- ◆ Recent use of illicit pharmaceutical stimulants and seroquel remained low, at 4% and 7% respectively.
- ◆ Approximately two-thirds of PWID had recently consumed alcohol, and had done so on median of 24 days in the preceding six months.
- ◆ Tobacco remains highly prevalent among PWID, with 89% reporting use within the six months preceding interview. Eighty-four percent of PWID reported daily use of tobacco.

4.6.1 Ecstasy

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 (58%) and hallucinogens (56%) within their lifetime. Fifteen percent of the sample had used ecstasy and 6% 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 two days (range: 1-60) and hallucinogens also on a median of two days (range: 1-6). The use and frequency of both ecstasy and hallucinogens remained stable when compared to 2012. Both ecstasy and hallucinogens had mainly been consumed orally (ecstasy: 93%; hallucinogens: 100%), although two ecstasy users also reported that they had injected ecstasy on a median of 16 days (range: 2-30) during the past six months. The main forms of hallucinogens used by PWID were LSD/trips (n=5), followed by mushrooms (n=1).

Since 2000, the use of ecstasy and related drugs amongst 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>.

4.6.2 Illicit benzodiazepines

In 2013, participants were asked to distinguish between their use of alprazolam (Xanax®) and other benzodiazepines. Twenty-three percent of PWID reported illicit use of alprazolam on a median of 5 days; and 23% reported illicit use of other benzodiazepines on a median of 6 days within the preceding six months.

Virtually all participants who had used illicit alprazolam and other benzodiazepines reported use by swallowing; three users of illicit alprazolam reported use by injection on a median of 2 days and one participant reported injecting other illicit benzodiazepines on 5 days within the preceding six months. In 2013, over one-third of PWID (35%) reported recent use of any illicit benzodiazepines, which is similar to participant reports in 2012 (29%).

Among those who had used 'other benzodiazepines' in the preceding six months, the main brand used was diazepam (Valium®) (72%; n=33).

4.6.3 Cocaine

Nine participants reported use of cocaine on a median of three days (range: 1-30) in the six months prior to interview; this remained stable from 2012. Four participants reported that they had injected cocaine on a median of two days (range: 1-3) in that time. Such results indicate that cocaine use among PWID in Adelaide is relatively rare.

4.6.4 Pharmaceutical stimulants

Since 2004, participants have been asked to comment on 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 2013, 19% of the sample reported using illicit pharmaceutical stimulants at least once in their lifetime (16% in 2012). Only four participants reported use within the preceding six months (8% in 2012), and they had used on a median of 25 days (range: 1-60). Recent injection of illicit pharmaceutical stimulants was reported by only one participant.

Among those who had used illicit pharmaceutical stimulants, the most common form used was Dexamphetamine® (n=3).

4.6.5 Alcohol

Not surprisingly, the majority of participants reported that they had consumed alcohol within their lifetime (93%). Almost two-thirds of the sample (64%) had used alcohol in the six months preceding interview; and they had done so on a median of 24 days (range 1-180). Nine participants reported daily use of alcohol.

4.6.6 Tobacco

Tobacco remains highly prevalent among PWID, with 94% 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 1-180). More specifically, 84% of PWID (or 94% of those who had recently used tobacco) reported daily use of tobacco.

4.6.7 Seroquel® (quetiapine)

In 2013, participants were asked about their use of Seroquel®; an antipsychotic which is used to treat major psychotic and depression disorders. Twelve percent of the sample reported lifetime use of licit Seroquel®, whilst 18% reported lifetime use of illicit Seroquel®. Six percent of participants had used licit Seroquel® in the preceding six months; and they had done so on a median of 150 days (range: 2-180). Seven percent had used illicit Seroquel® on a median of two days (range: 1-10). Swallowing was the only ROA for both licit and illicit Seroquel®, with no participants reporting injection within the preceding six months.

KE comments

- ◆ Reports regarding the ecstasy market were mixed. Several KE reported that the ecstasy market had “definitely made a comeback”, whilst others reported that the prevalence of ecstasy use had dropped off or remained stable.
- ◆ The majority of KE reported that they had had little contact with cocaine users. It was agreed that although there were ‘pockets’ of cocaine use in SA, its overall prevalence remained low and stable. However, one KE did report that there had been an increase in “the number of cases containing cocaine encountered in the laboratory”.
- ◆ Alcohol use was generally reported as stable, with no real changes over the preceding 12 months. One KE noted that there had been a shift towards wine, rather than other forms of alcohol. This was largely thought to be due to the price of wine, with a five litre cask costing \$10-12.
- ◆ Three KE nominated alcohol as the drug they considered most problematic at the time of interview, with alcohol-related violence raised as a particular concern. The social acceptability of alcohol consumption was also considered problematic, with one KE noting that individuals who don’t drink alcohol are often given a hard time by their peers.
- ◆ It was reported by one KE that there had been an increase in steroids, whilst another reported that the use of alprazolam and OTC codeine formulations remained problematic.
- ◆ One KE noted a decline in tobacco use. More specifically, it was reported that when clients enter inpatient services they are not allowed to smoke and are given nicotine replacement therapy (e.g. patches, lozenges). Throughout the process, clients realise ‘I can do this’ and subsequently attempt to quit permanently. The increasing price of cigarettes was also thought to have contributed to this decline.

5 PRICE, PURITY AND AVAILABILITY

Key findings

- ◆ The median price of heroin was reported to be \$100 for a cap and \$200 for a half weight, with the price reported as stable over the previous six months.
- ◆ The purity of heroin was perceived as low, with two-fifths of participants reporting that purity had decreased over the preceding six months.
- ◆ The majority of participants reported that heroin was easy or very easy to obtain, and that availability had remained stable over the preceding six months.
- ◆ Roughly three-fifths of the sample scored heroin from a known dealer; most commonly at an agreed location.

5.1 Heroin

5.1.1 Price

Among those who could comment on the price of heroin, the majority of participants reported price per half weight, or per cap. The median price at last purchase for a half weight of heroin was \$200 (range: \$100-400; n=23), whilst the last purchase price for a cap of heroin was \$100 (range: \$20-100, n=17). This remained stable from 2012.

Of those participants who were confident to report on the current price of heroin (n=48), 81% reported the price as stable over the last six months (see Table 9). This has remained stable from 2012.

Table 9: Change in price of heroin over last six months, 2012-2013

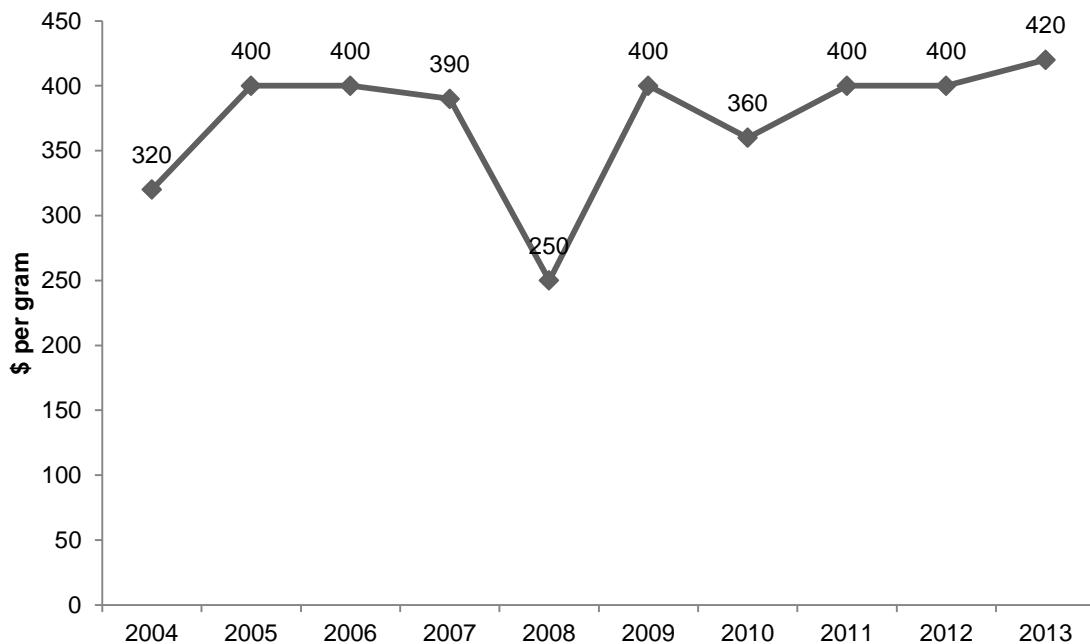
Reported price status	% able to answer	
	2012 (n=43)	2013 (n=48)
Increasing	9	17
Stable	88	81
Decreasing	0	0
Fluctuating	2	2

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 2005. However, as mentioned above, such data has generally been based on small sample sizes (n=5 in 2013), with most participants buying heroin in 'caps'.

Figure 11: Median price of a gram of heroin, last purchase, 2004-2013



Source: IDRS participant interviews

5.1.2 Purity

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 2013, the majority of those able to answer (58%) reported that the current purity of heroin was low, with one-quarter reporting that the purity was medium. This was stable from 2012. Forty-one percent of those able to answer reported that the purity of heroin had decreased over the preceding six months, with an additional 35% reporting that it had remained stable. A fifth (20%) believed that the purity of heroin had fluctuated and 4% reported it to have increased.

Table 10: Current purity/strength of heroin, 2012-2013

How pure would you say heroin is at the moment?	% able to answer	
	2012 (n=46)	2013 (n=48)
High	9	4
Medium	30	25
Low	50	58
Fluctuates	11	13

Source: IDRS participant interviews

Note: 'Don't know' was excluded

Table 11: Change in purity/strength of heroin in last six months, 2012-2013

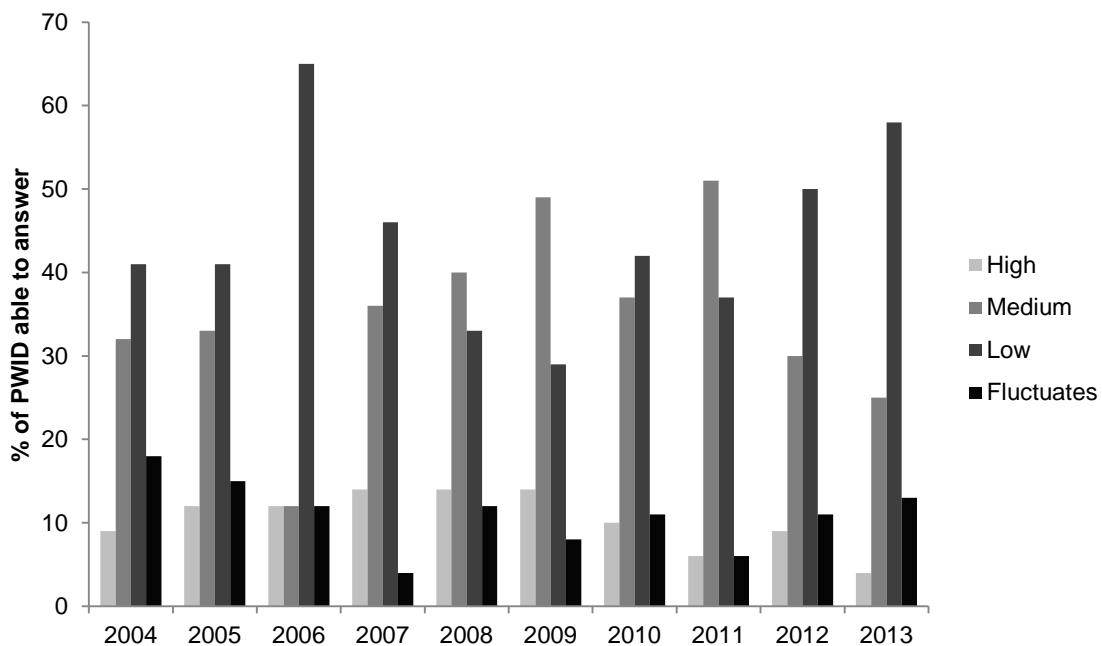
Has the purity of heroin changed in the last 6 months?	% able to answer	
	2012 (n=45)	2013 (n=46)
Increasing	16	4
Stable	33	35
Decreasing	33	41
Fluctuating	18	20

Source: IDRS participant interviews

Note: 'Don't know' was excluded

Figure 12 shows the trend in purity of heroin, as perceived by participants, from 2004 onward. 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, 2004-2013



Source: IDRS participant interviews

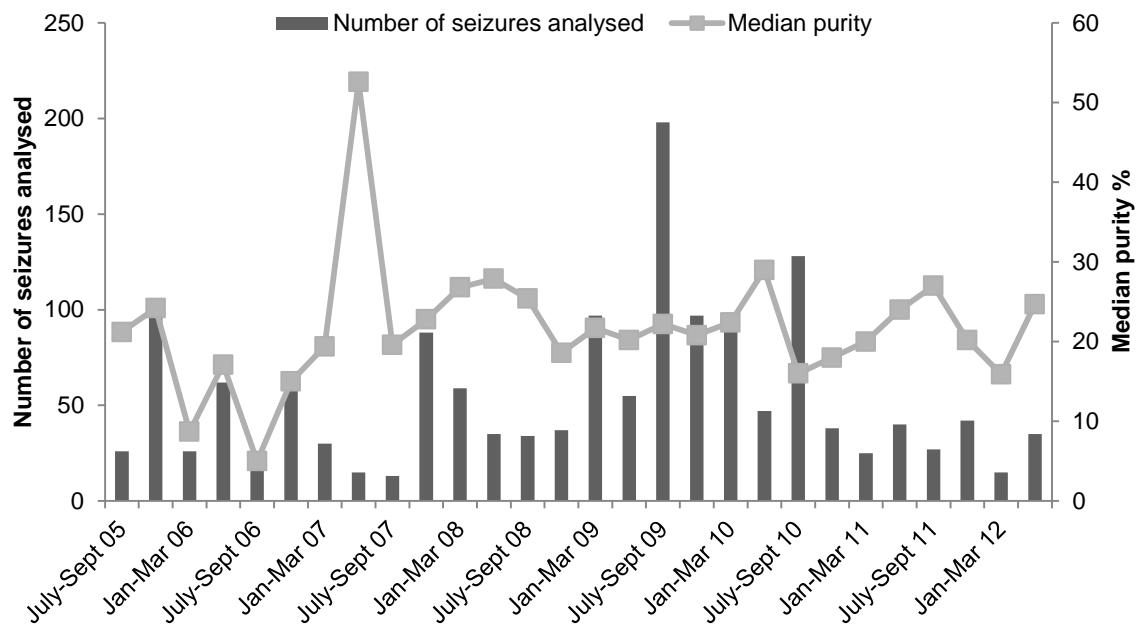
Note: 'Don't know' was excluded from 2009 onwards

ACC data were unavailable for 2012/13 at the time of publication. Hence, the data provided by the ACC only relates to the purity data on heroin seized in SA during the last financial year: 2011/12 (Australian Crime Commission, 2013). 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 2005/06 to 2011/12.

Despite quarterly variation, and variation in the number of seizures, the median purity of SAPOL heroin seizures remained relatively stable in 2011/12 at 21% (compared to 18% in 2010/11). The median purity for these years was considerably lower than that reported

for SAPOL seizures in pre-shortage 1999/00 (48.3%, n=246). The number of seizures received and analysed almost halved, from 231 in 2010/11 to 119 in 2011/12 (see Figure 13). The majority of SAPOL seizures analysed (n=76) were less than two grams.

Figure 13: Number of heroin seizures analysed and median heroin purity in SA 2005/06-2011/12



Source: Australian Crime Commission, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013

5.1.3 Availability

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, the overwhelming 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 (71%) of those able to answer perceived that heroin availability had remained stable in the six months preceding interview; this was stable from 2012.

Table 12: Availability of heroin currently, 2012-2013

How easy is it to get heroin at the moment?	% able to answer	
	2012 (n=50)	2013 (n=49)
Very easy	48	41
Easy	44	45
Difficult	8	14
Very difficult	0	0

Source: IDRS participant interviews

Note: 'Don't know' was excluded

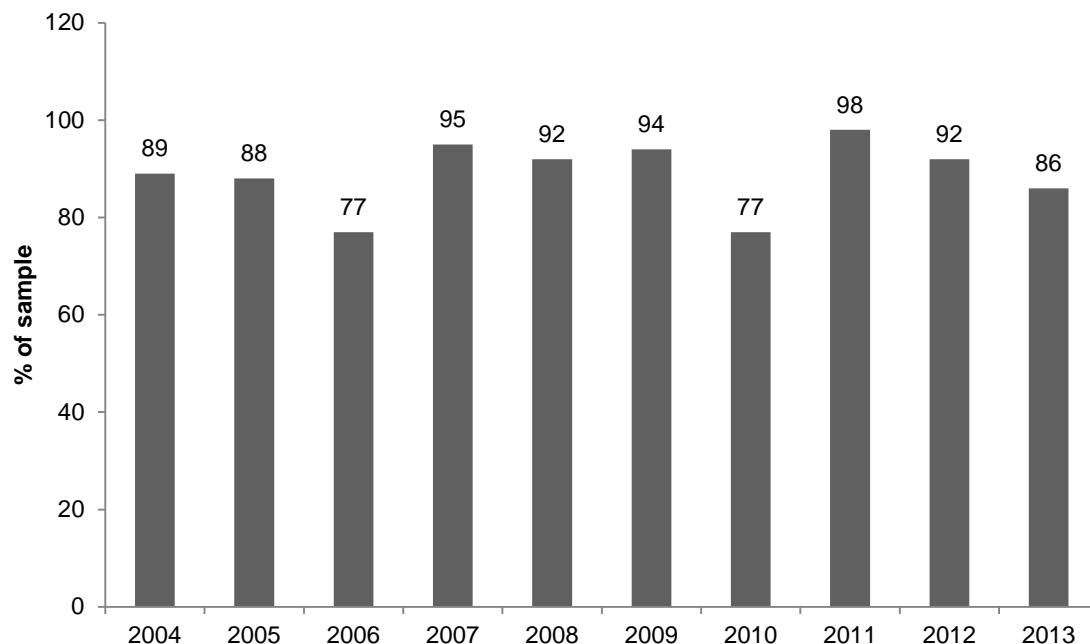
Table 13: Change in availability of heroin over the last six months, 2012-2013

Has [availability] changed in the last 6 months?	% able to answer	
	2012 (n=48)	2013 (n=48)
More difficult	6	19
Stable	81	71
Easier	6	8
Fluctuates	6	2

Source: IDRS participant interviews

Note: 'Don't know' was excluded

Long-term trend data for the availability of heroin, as reported by participants in all previous surveys, 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 fluctuated somewhat over the years. In 2013, 86% of participants able to answer reported that heroin was easy or very easy to obtain; this represents a slight decline from 2012.

Figure 14: Availability of heroin as easy or very easy in the last six months, 2004-2013

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=43) reported they usually obtained heroin from a known dealer (61%), and at an agreed public location (51%).

Table 14: Source person and source venue last time obtained heroin in the last six months, 2012-2013

Last source person and venue	2012 (n=42)	2013 (n=43)
Person		
Street dealer	21	2
Known dealer	43	61
Friends	17	26
Acquaintances	2	5
Mobile dealer	12	5
Unknown dealer	5	2
Venue	n=40	n=43
Home delivery	10	14
Dealer's home	15	16
Friend's home	0	14
Acquaintance's home	3	0
Agreed public location	63	51
Street market	8	2
Other	3	2

Source: IDRS participant interviews

KE comments

- ➔ It was reported by all KE that the heroin market had remained stable in the 12 months preceding interview.

5.2 Methamphetamine

Key findings

- ◆ The median price for all three forms of methamphetamine was \$100 for a point, and this was largely reported to have remained stable in the six months preceding interview.
- ◆ Reports regarding the purity of methamphetamine were extremely mixed; in regards to powder and base methamphetamine the largest proportion of participants perceived purity as medium, whilst for crystal methamphetamine the purity was largely perceived as high.
- ◆ 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 generally reported scoring from friends for all forms of amphetamine, and from a friend's home.

5.2.1 Price

5.2.1.1 Methamphetamine – powder

The last reported price paid for methamphetamine powder was a median of \$100 for a point (range \$25-100; n=31), which was stable from 2012 (\$100; range: \$50-100; n=22). Eight participants commented on the price for a half weight of powder, with the median price being \$200 (range \$100-400) and two participants commented on the price for a gram (\$550; range: \$450-650).

5.2.1.2 Methamphetamine – base

The last reported price paid for a point of base was \$100 (range: \$50-100, n=27), which was stable from 2012 (\$100; range: \$50-100; n=17). Only a small number of participants commented on the price for a half weight or a gram of base, with the last reported prices being a median of \$350 (range: \$250-400; n=5) and \$450 (range: \$275-650; n=4) respectively (see Table 15).

5.2.1.3 Methamphetamine – crystal

The last reported price paid for a point of crystal was \$100 (range: \$30-100; n=40), an increase from 2012 (\$100; range: \$50-100; n=33). The median price for a half weight of crystal was \$300 (range: \$125-500; n=9), and \$650 for a gram (no range, n=1); however, it is important to note that only a small number of participants commented and hence these figures must be viewed with caution.

Table 15: Reported price of all forms of methamphetamine, 2012-2013

	2012	2013
Price (\$) SPEED		
Per point	100	100
Per gram	350 [^]	550 [^]
Price (\$) BASE		
Per point	100	100
Per gram	700 [^]	450 [^]
Price (\$) ICE/CRYSTAL		
Per point	100	100
Per gram	500 [^]	650 [^]

Source: IDRS participant interviews

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

Note: 'Don't know' was excluded

Whilst Table 15 shows comparisons between 2012 and 2013, it is important to note that long-term changes in the last purchase price of a point or gram for the different forms of methamphetamine have been difficult to gauge. This is due to the fact that few participants have been able to comment.

Table 16 summarises participant reports of recent changes in the price of the three forms of methamphetamine. In 2013, the majority of participants answering this section reported the price of all forms of methamphetamine to be stable. Additionally, across all three forms of methamphetamine, there were slight decreases in the proportion of participants who reported that the price had increased in the six months preceding interview.

Table 16: Change in price of methamphetamine over last six months, 2012-2013

Reported price status	Powder		Base		Crystal	
	% able to answer					
	2012 (n=39)	2013 (n=44)	2012 (n=25)	2013 (n=36)	2012 (n=44)	2013 (n=53)
Increasing	44	32	28	8	34	13
Stable	54	61	72	75	59	76
Decreasing	3	2	0	0	5	8
Fluctuating	0	5	0	17	2	4

Source: IDRS participant interviews

Note: 'Don't know' was excluded

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 and methamphetamine base, there were non-significant increases in the proportion of participants who perceived current purity as medium or low, and a decrease in those who perceived it as high. In regards to crystal methamphetamine, the largest proportion of participants continued to describe current purity as high, whilst approximately one-third reported it as medium.

Table 17: Purity/strength of methamphetamine currently, 2012-2013

How pure would you say [powder/base/crystal] is at the moment?	Powder		Base		Crystal	
	% able to answer					
	2012 (n=39)	2013 (n=45)	2012 (n=26)	2013 (n=35)	2012 (n=46)	2013 (n=53)
High	33	20	42	17	35	40
Medium	28	36	31	46	33	30
Low	8	24	12	20	7	19
Fluctuates	31	20	15	17	26	11

Source: IDRS participant interviews

Note: 'Don't know' was excluded

Reports regarding changes in the purity of methamphetamine are also quite mixed. In regards to methamphetamine powder, equal proportions of participants reported that purity had decreased or remained stable over the preceding six months (34% respectively); whilst for base and crystal, participants largely reported that the purity had remained stable over this time (43% and 49% respectively).

Table 18: Change in purity/strength of methamphetamine in last six months, 2012-2013

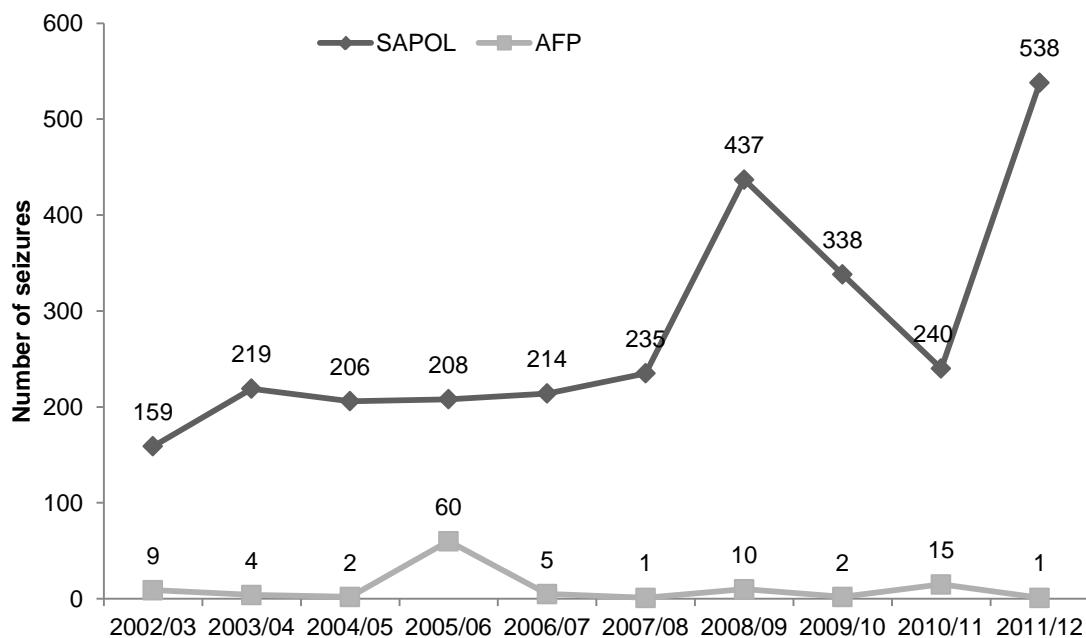
Has the purity of [powder /base/crystal] changed in the last 6 months?	Powder		Base		Crystal	
	% able to answer					
	2012 (n=38)	2013 (n=44)	2012 (n=26)	2013 (n=35)	2012 (n=43)	2013 (n=51)
Increasing	16	2	12	3	21	12
Stable	16	34	39	43	30	49
Decreasing	32	34	23	23	19	14
Fluctuating	37	30	27	31	30	26

Source: IDRS participant interviews

Note: 'Don't know' was excluded

The Australian Crime Commission (ACC) data were unavailable for 2012/13 at the time of publication. As such, data provided by the ACC relates to methamphetamine seizures in SA during the last financial year: 2011/12 (Australian Crime Commission, 2013). Figure 15 shows the number of seizures for amphetamine-type stimulants, by South Australia Police (SAPOL) and the Australian Federal Police (AFP). As can be seen, SAPOL seizures more than doubled in 2011/12, reversing the downward trend that had been observed from 2008/09-2010/11. The number of AFP seizures remained low, with only one seizure reported in 2011/12.

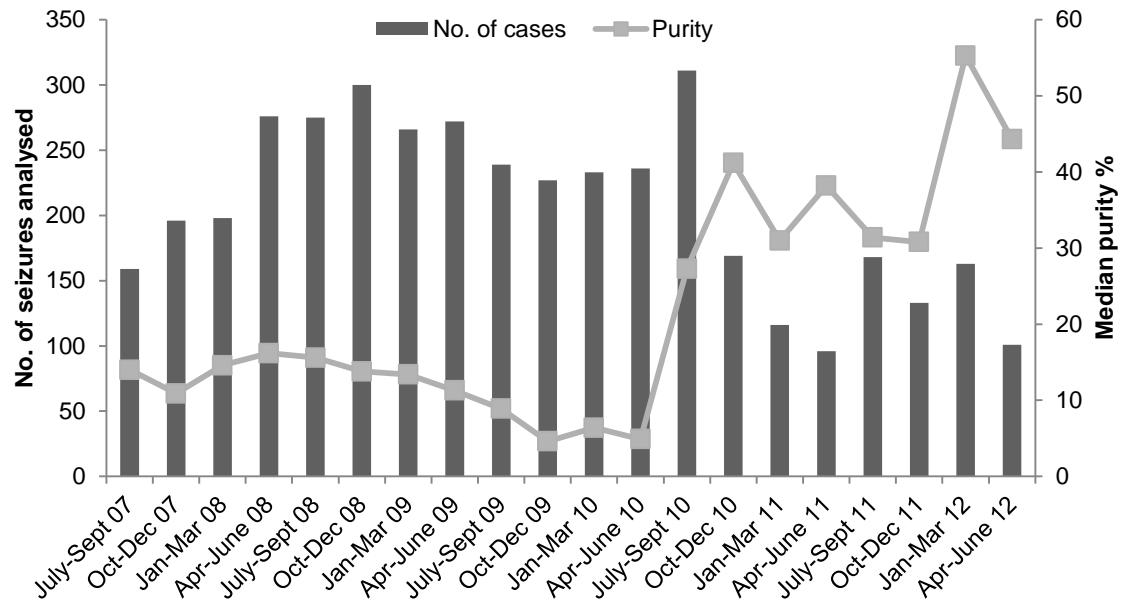
Figure 15: Number of seizures: amphetamine-type stimulants, 2002/03-2011/12



Source: Australian Crime Commission, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013

Figure 16 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 2007/08 to 2011/12. The total number of SAPOL methamphetamine seizures analysed from July 2011 to June 2012 was 565, which was a slight decrease from the 2010/11 financial year (692). However, the overall median purity of the seizures analysed increased slightly, from 31.7% in 2010/11 to 43.3%. The majority of seizures analysed were more than 2 grams.

Figure 16: Number of methamphetamine seizures analysed and median methamphetamine purity in SA, 2007/08-2011/12



Source: Australian Crime Commission, 2009, 2010, 2011, 2012, 2013

5.2.3 Availability

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 2013, 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, 2012-2013

How easy is it to get [powder/base/crystal] at the moment?	Powder		Base		Crystal	
	% able to answer					
	2012 (n=39)	2013 (n=42)	2012 (n=26)	2013 (n=35)	2012 (n=47)	2013 (n=54)
Very easy	62	62	54	54	47	50
Easy	31	31	39	40	43	41
Difficult	8	5	8	6	11	9
Very difficult	0	2	0	0	0	0

Source: IDRS participant interviews

Note: 'Don't know' was excluded

Table 20: Change in availability of methamphetamine over the last six months, 2012-2013

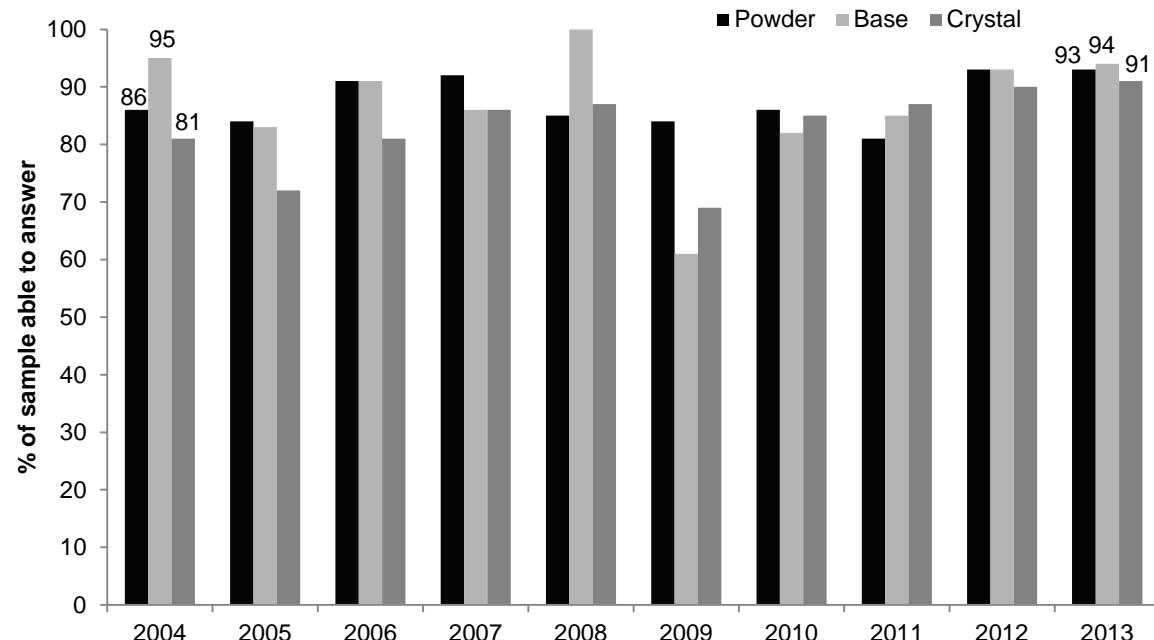
Has [availability] changed in the last 6 months?	Powder		Base		Crystal	
	% able to answer					
	2012 (n=38)	2013 (n=43)	2012 (n=26)	2013 (n=35)	2012 (n=44)	2013 (n=54)
More difficult	5	5	4	6	9	2
Stable	79	77	69	80	77	78
Easier	11	2	15	11	9	13
Fluctuates	5	16	12	3	5	7

Source: IDRS participant interviews

Note: 'Don't know' was excluded

Long-term trend data depicting the availability of methamphetamine from 2004 onwards, as reported by participants, are presented in Figure 17. As shown, methamphetamine has generally been considered easy or very easy to obtain across all years and for all forms (for figures prior to 2004, please see previous editions of the IDRS SA report).

Figure 17: Availability of methamphetamine in the last six months, easy or very easy, 2004-2013



Source: IDRS participant interviews

Note: 'Don't know' was excluded

Participants were asked about both the person and location from which they had last obtained the various forms of methamphetamine. Table 21 shows that the majority of methamphetamine users reported obtaining all forms of methamphetamine from friends, followed by known dealers.

The locations/venues from which participants most commonly obtained all three forms of methamphetamine were a friend's home, followed by home delivery.

Table 21: Last usual source person and venue used for obtaining various forms of methamphetamine in the last six months, 2013

Usual source person and venue of those able to answer (%)	Powder (n=41)	Base (n=32)	Crystal (n=51)
Person			
Street dealer	0	3	4
Friend	66	59	55
Known dealer	22	25	28
Mobile dealer	0	3	0
Acquaintances	10	3	4
Unknown dealer	0	3	2
Partner	2	3	4
Venue			
Home delivery	27	25	27
Dealer's home	15	22	18
Friend's home	37	34	28
Acquaintance's home	5	0	4
Street market	0	0	0
Agreed public location	15	19	24
Other	2	0	0

Source: IDRS participant interviews

KE comments

- ◆ Of those who were able to comment, the majority of KE agreed that the price and availability of methamphetamine had remained relatively stable over the past 12 months. It was generally reported that the price of methamphetamine was \$100 for a point (range: \$50 for those 'in the know' to \$125).
- ◆ Reports regarding the purity of methamphetamine were mixed: two KE reported that the purity of methamphetamine had declined over the preceding 12 months, whilst others reported it had remained stable or fluctuated. One KE noted that their clients judged the purity of methamphetamine based on its colour – i.e. products which had a pink/red/green tinge were considered to have been cut with an adulterant and were thus deemed as being low purity.
- ◆ In regards to the manufacture of methylamphetamine, one KE noted that there had been a shift away from small user laboratories towards large scale laboratories. This was demonstrated by a marked increase in the seizures of large quantities of methylamphetamine, which could also be indicative of an increase in importation and higher-level association.

5.3 Cannabis

Key findings

- ◆ The price for both hydro and bush cannabis remained stable in 2013 at \$25 for a bag.
- ◆ The purity of hydro cannabis was reported to be high, whilst for bush cannabis purity was reported as medium. This was believed to have remained stable over the preceding six months.
- ◆ Availability of both forms of cannabis was reported as easy or very easy, and had remained stable over the preceding six months.
- ◆ Participants scored cannabis primarily from friends and from a friend's home.

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); this has been done from 2003 onwards.

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 et al., 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 2.5 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

Participants reported the price for their last purchase to be a median of \$200/ounce for hydro (range: \$180-250, n=17) and \$205/ounce for bush (range: \$150-250, n=8). 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: \$20-30, n=29) and bush (range: \$20-30, n=21). 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, 2012-2013

	2012	2013
Price (\$) HYDRO		
Per gram	-	18.75^
Per quarter ounce	60	60
Per ounce	220	200
Per bag	25	25
Price (\$) BUSH		
Per gram	-	-
Per quarter ounce	62.5^	50
Per ounce	180^	205^
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. More specifically, in regards to hydro cannabis, there was a significant increase in the proportion of participants who reported that the price had remained stable ($p<0.01$; 95% CI: -0.42 – -0.09), and an inverse decline in those who reported that the price had increased over the preceding six months ($p<0.05$; 95% CI: 0.04–0.35) (see Table 23).

Table 23: Change in price of cannabis over the last six months, 2012-2013

Reported price status	% able to answer			
	2012		2013	
	Hydro (n=49)	Bush (n=37)	Hydro (n=49)	Bush (n=44)
Increasing	31	19	10*	5
Stable	59	70	86**	82
Decreasing	2	5	2	5
Fluctuating	8	5	2	9

Source: IDRS participant interviews

* $p<0.05$; ** $p<0.001$

Note: 'Don't know' was excluded

5.3.2 Purity

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 2013, the strength of hydro was reported as high by the majority of participants, whilst the potency of bush cannabis was reported as medium. The majority of participants reported that the potency of both hydro and bush cannabis had remained stable over the last six months.

Table 24: Current potency/strength of cannabis, 2012-2013

How strong would you say cannabis is at the moment?	% able to answer			
	2012		2013	
	Hydro (n=48)	Bush (n=38)	Hydro (n=49)	Bush (n=45)
High	52	32	67	29
Medium	29	47	22	58
Low	4	16	2	4
Fluctuates	15	5	8	9

Source: IDRS participant interviews

Note: 'Don't know' was excluded

Table 25: Change in potency/strength of cannabis in last six months, 2012-2013

Has the strength of cannabis changed in the last 6 months?	% able to answer			
	2012		2013	
	Hydro (n=45)	Bush (n=36)	Hydro (n=48)	Bush (n=43)
Increasing	22	17	13	5
Stable	56	64	69	70
Decreasing	7	8	2	9
Fluctuating	16	11	17	16

Source: IDRS participant interviews

Note: 'Don't know' was excluded

5.3.3 Availability

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 2013, the majority of participants reported both types of cannabis as easy or very easy to obtain; 90% for hydro and 62% for bush. Three-quarters of those able to answer (75%) reported that the availability of hydro was stable in the last six months. The majority of the participants who were able to answer also reported the availability of bush to be stable (68%).

Table 26: Availability of cannabis currently, 2012-2013

How easy is it to get cannabis at the moment?	% able to answer			
	2012		2013	
	Hydro (n=50)	Bush (n=40)	Hydro (n=51)	Bush (n=44)
Very easy	50	28	59	32
Easy	36	43	31	30
Difficult	14	30	10	32
Very difficult	0	0	0	7

Source: IDRS participant interviews

Note: 'Don't know' was excluded

Table 27: Change in availability of cannabis over the last six months, 2012-2013

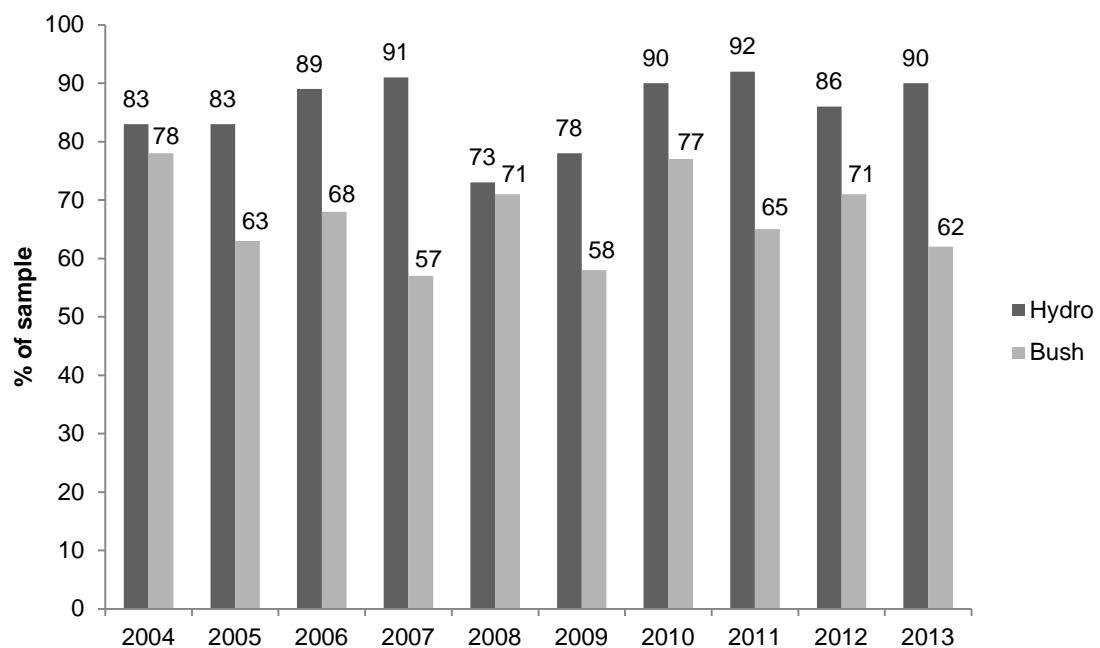
Has [availability] changed in the last 6 months?	% able to answer			
	2012		2013	
	Hydro (n=50)	Bush (n=40)	Hydro (n=51)	Bush (n=44)
More difficult	14	18	6	21
Stable	80	65	75	68
Easier	4	13	8	7
Fluctuates	2	5	12	5

Source: IDRS participant interviews

Note: 'Don't know' was excluded

Figure 18 shows the long-term trend in the proportion of participants reporting availability of cannabis as easy or very easy, from 2004 onwards. As can be seen, the reported ease of availability has fluctuated over the years, although it has generally remained high. In 2013, the majority of the sample reported that both hydro and bush cannabis were easy or very easy to obtain; stable from 2012.

Figure 18: Availability of cannabis in the last six months, easy or very easy, 2004-2013



Source: IDRS participant interviews

Note: Prior to 2004, availability of hydro and bush was combined; '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 2013, the majority of participants who were able to comment reported that they usually obtained cannabis from a friend (78% respectively) in the six months prior to interview. Participants reported that the venue they had usually obtained cannabis from was a friend's home (hydro: 50%; bush: 58%).

Table 28: Source person and source venue of last purchase of hydro and bush cannabis, 2013

Usual source or method of obtainment	Hydro (n=46)	Bush (n=41)
Person[#]		
Street dealer	2	2
Friend	78	78
Known dealer	13	5
Workmates	0	0
Acquaintances	2	5
Unknown dealer	0	0
Mobile dealer	0	0
Other	4	10
Venue[#]		
Home delivery	15	15
Dealer's home	17	8
Friend's home	50	58
Acquaintance's home	2	5
Street market	0	0
Agreed public location	9	10
Work	0	0
Other	7	5

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 for a bag (n=5).
- ◆ It was also noted by one KE that there had been an increase in clients buying an ounce of cannabis for \$220-240, re-packaging it into 'j-bags' and then selling them on for a cash profit. This was only noted in one suburb, south of Adelaide, and is perhaps attributable to increasing financial difficulties.

5.4 Morphine

Key findings

- ◆ The median last purchase price for 100mg of MS Contin® and 100mg Kapanol® was \$50 respectively.
- ◆ Illicit morphine was largely reported as easy or very easy to obtain (63%), although over a third (38%) perceived availability as difficult or very difficult.
- ◆ Participants most commonly obtained illicit morphine through friends.

In 2013, 17% of the sample were confident enough to complete survey items relating to the illicit morphine market.

5.4.1 Price

In 2013, the median price paid by participants at last purchase was \$50 for 100mg of Kapanol®, this was stable from 2012. The median price paid for 100mg of MS Contin® at last purchase was also \$50, which was again stable from 2012 (see Table 29). Readers should note the small number of participants commenting on prices.

Table 29: Price of morphine at last purchase by participants, 2012-2013

Amount bought	Median price paid, \$ (range)	
	2012	2013
MS Contin® – 60mg	22.5^ (15-30)	25^ (no range)
MS Contin® – 100mg	50^ (20-50)	50^ (30-60)
Kapanol® – 50mg	27.5^ (25-50)	25^ (20-25)
Kapanol® – 100mg	50^ (30-80)	50^ (40-110)

Source: IDRS participant interviews

^ n<10

Sixteen participants were able to comment on whether the price of morphine had changed in the six months prior to interview: over half (56%; n=9) reported that the price had remained stable and two-fifths (44%; n=7) reported that it had increased. Comparisons were not made with 2012 due to small numbers.

5.4.2 Availability

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, 44% reported illicit morphine as easy to obtain; this was stable from 2012. Half of the sample (50%) reported that the availability of morphine had remained stable over the past six months, with two-fifths (44%) reporting that it had become more difficult to obtain.

Table 30: Availability of illicit morphine currently, 2012-2013

How easy is it to get morphine at the moment?	% able to answer	
	2012 (n=20)	2013 (n=16)
Very easy	30	19
Easy	35	44
Difficult	15	13
Very difficult	20	25

Source: IDRS participant interviews

Note: 'Don't know' was excluded

Table 31: Change in availability of illicit morphine over the last six months, 2012-2013

Has [availability] changed in the last 6 months?	% able to answer	
	2012 (n=21)	2012 (n=16)
More difficult	33	44
Stable	57	50
Easier	0	0
Fluctuates	10	6

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=13), the majority of participants reported that they had obtained morphine from a friend (69%), followed by an acquaintance (15%) or known dealer (15%). In regards to the venue from which they had obtained morphine, an equal proportion of participants reported home delivery and a friend's home (31% respectively).

Participants were also asked to nominate the reasons for using illicit morphine. The main reasons given were self-treatment (n=8), substitution for heroin/other opiates (n=3) and intoxication (n=2).

Table 32: Usual source person and source venue used to obtain illicit morphine in the last six months, 2012-2013

Usual source person and venue	% able to answer	
	2012 (n=17)	2013 (n=13)
Person		
Street dealer	6	0
Friend	65	69
Known dealer	6	15
Acquaintance	24	15
Unknown dealer	0	0
Mobile dealer	0	0
Other	0	0
Venue		
Home delivery	0	31
Dealer's home	6	8
Friend's home	53	31
Acquaintance's home	6	8
Street market	0	0
Agreed public location	29	23
Work	6	0

Source: IDRS participant interviews

5.5 Methadone

Key findings

- ◆ The median price of illicit methadone was reported to be \$0.5 for 1ml, and this was perceived to have remained stable over the preceding six months.
- ◆ The majority of participants reported that illicit methadone was difficult to very difficult to obtain.
- ◆ All participants obtained methadone through friends, and primarily from a friend's home or agreed public location.

As with other drug types, all participants were asked about the illicit methadone market. Eleven percent of the sample were able to comment on the price, purity and/or availability of illicit methadone and among these participants the median price for methadone liquid was reported to be 50 cents per ml (range \$0.5-1; n=4). One participant reported paying \$20 for a 10mg Physeptone® tablet.

In response to the question 'Has the price of illicit methadone changed in the past six months?', the majority of those commenting (60%; n=6) reported that the price had remained stable, whilst 40% (n=4) reported that the price had increased over the preceding six months.

With regard to the current availability of street methadone, 40% of those who commented said that it was 'very-easy' (30%) to 'easy' (10%) to obtain. Sixty percent thought it was 'difficult' (50%) to 'very difficult' (10%) to obtain. When asked whether availability had changed over the preceding six months, the majority of those commenting (70%; n=7) reported that it had remained stable. Two participants (20%) reported that illicit methadone had become more difficult to obtain and one participant (10%) reported that availability had fluctuated in the preceding six months.

Among those that had recently bought illicit methadone, all participants reported purchasing from friends, with the most common venues being a friend's home or agreed public location (33% respectively). In addition, the majority of participants (83%) reported that they had mainly bought illicit methadone, with only one participant reporting that they had been given it for free. In all cases, the original source was reported to be someone else's take-away dose.

The reasons for using illicit methadone were as follows: a substitute for heroin/other opiates (n=5), self-treatment (n=1) and boredom (n=1).

5.6 Oxycodone

Key findings

- The median price of illicit oxycodone was \$20 for an 40mg tablet, and this was reported to have remained stable over the preceding six months.
- The availability of illicit oxycodone was largely reported as 'easy' to 'very easy'.
- Participants obtained oxycodone most commonly through friends and at a friend's home.

In 2013, 17% of the sample were confident enough to complete survey items relating to the illicit oxycodone market. The most commonly purchased amounts were 40mg tablets (OxyContin®), bought for a median of \$20 each (range: \$10-40; n=8); and 80mg tablets (OxyContin®), bought for a median of \$40 each (range: \$20-50; n=5). There were insufficient purchases of Endone® to report on prices. The overall price for oxycodone was reported as having been stable (94%; n=16) over the past six months.

In regards to availability, the majority (71%) reported that it was 'very-easy' (18%) to 'easy' (53%) to obtain, whilst 29% reported that it was 'difficult' to obtain. Availability was reported by the majority of those commenting (59%) to have remained stable over the preceding six months, while 24% reported it had become more difficult, 12% reported that it had become easier and 6% reported that it had fluctuated.

Oxycodone was most commonly purchased from friends (87%), followed by acquaintances and known dealers (7% respectively). The most commonly cited locations for purchase were a friend's home (60%), followed by an agreed public location (27%) or home delivery (13%).

The main reasons for using illicit oxycodone were: self-treatment (n=5), intoxication (n=5), as a substitute for heroin/other opiates (n=2) and pain relief (n=1).

5.7 Other drugs

The number of participants who answered questions relating to the cocaine, illicit buprenorphine (subutex), illicit buprenorphine-naloxone (suboxone), illicit benzodiazepines, steroids and fentanyl markets were extremely low (n<10). As such, the data from these sections will not be presented.

6 HEALTH-RELATED TRENDS ASSOCIATED WITH DRUG USE

Key findings

Overdose

- Only one participant reported overdosing on heroin in the previous 12 months, and five participants had accidentally overdosed on another drug within the preceding 12 months.

Drug treatment

- Approximately one-third (31%) 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 being received was maintenance pharmacotherapy treatment.

Health service use

- Telephone calls to ADIS remained relatively stable for alcohol, amphetamines, cannabis and opioids. Cocaine and ecstasy related calls continued to remain very low.
- Alcohol dominated 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.

Mental health

- Almost half of the sample self-reported mental health problems in the six months preceding interview, which was stable from 2012. Among those who had suffered from a mental health problem, depression and anxiety continued to be the most commonly reported disorders.
- Just over half of the IDRS sample (53%) were assessed as having high to very high levels of psychological distress; this was much higher than reported among the general population.
- IDRS participants scored a mean of 37 for the mental component score and 44 for the physical component score; this was lower than the Australian population scores, indicating that IDRS participants had poorer mental and physical health than the population average.

Alcohol Use Disorders Identification Test

- Among those who drank alcohol recently, the mean score on the AUDIT-C was 5.9.
- Seventy percent of males and 41% of females scored 5 or more on the AUDIT-C, indicating the need for further assessment

6.1 Overdose and drug-related fatalities

6.1.1 Heroin and other opioids

6.1.1.1 Non-fatal overdose

Of the 77 participants who reported lifetime use of heroin, 36 (47%) also reported that they had overdosed on heroin on a median of one occasion (range: 1-7). Of these, 97% (n=35) had overdosed six times or less, with the majority reporting that they had overdosed once (n=19; 53%), twice (n=8, 22%), or three times (n=5, 14%). As can be seen in Table 33, there was a non-significant increase in the proportion of participants who had overdosed once, and an inverse decrease in those who had overdosed three times or more.

Of those participants who had ever overdosed on heroin, only one had done so in the past 12 months and none had overdosed in the past month.

Table 33: Lifetime experience of heroin overdose*, 2009-2013

Heroin overdose variable	2009 (n=44)	2010 (n=79)	2011 (n=38)	2012 (n=34)	2013 (n=36)
Overdosed once (%)	46	43	53	35	53
Overdosed twice (%)	14	19	21	21	22
Overdosed 3 times or more (%)	40	38	26	44	25

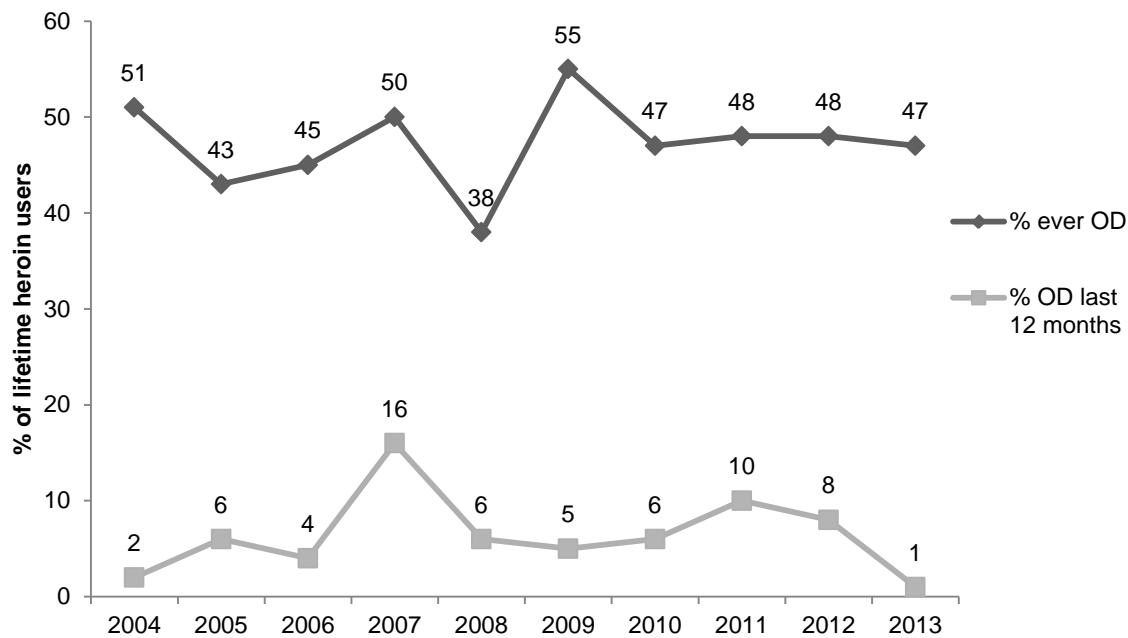
Source: IDRS participant interviews

*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 19. As can be seen, recent heroin overdoses were fairly low and stable from 2004-2006, before a sharp rise was noted in 2007. Overdoses declined the following year in 2008, and remained relatively stable until 2012. In 2013, there was a slight decline in recent overdoses, with only one participant reporting that they had overdosed on heroin in the preceding 12 months.

In regards to lifetime heroin overdose, prevalence fluctuated considerably across 2004-2009, however has remained stable from 2010 onwards. In 2013, the median amount of time between interview and last overdose was 120 months (range: 9-360 months; n=36), representing an increase from 2012 (96 months).

Figure 19: Experience of lifetime and past 12 month heroin overdose, as a proportion of participants that had ever used heroin, 2004-2013



Source: IDRS Participant interviews

In 2013, questions relating to the use of Narcan® again referred only to the last time the participants overdosed. Twenty-three participants (64% of those who had ever experienced a heroin overdose) reported having been administered the opioid antagonist naloxone (Narcan®) for heroin.

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, 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.

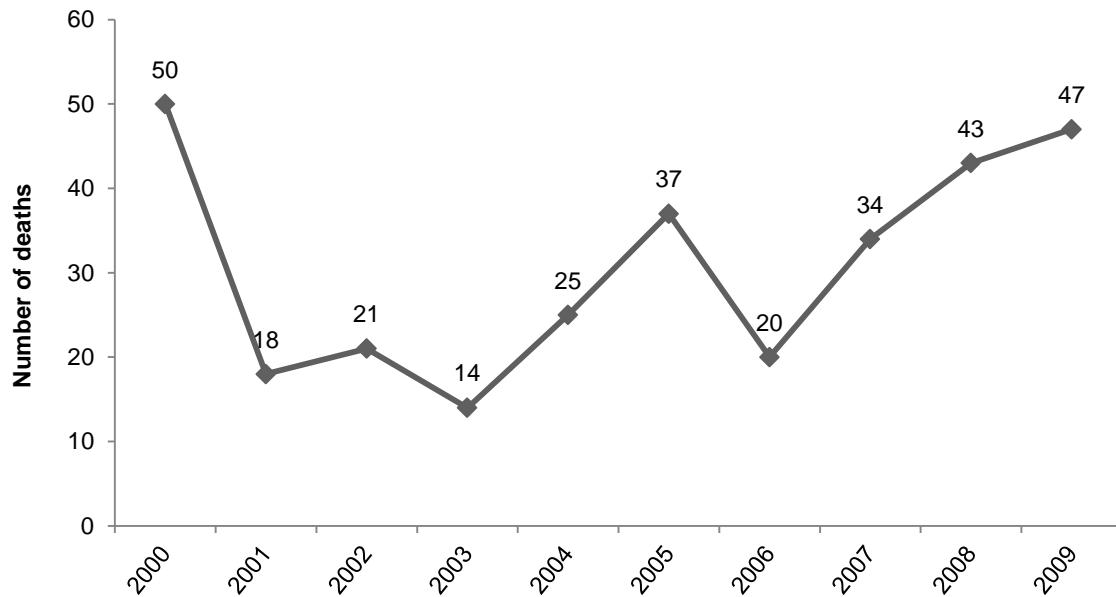
Data for the years 2007-2009 represent the second and final revision of each dataset, and are therefore methodologically comparable. Again these data should be interpreted

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 2009, there were 563 accidental deaths due to opioids at a national level. Most of these deaths occurred in NSW, VIC and QLD (174, 143 and 103 respectively), with 47 deaths being recorded in SA (8% of the total number of deaths). This remained stable from 2008, in which SA recorded 43 deaths due to accidental opioid overdose. It should be noted that the deaths reported are opioid-related and not necessarily heroin overdose deaths.

Figure 20: Number of accidental deaths due to opioids among those aged 15-54 years in SA, 2000-2009



Source: ABS causes of death data (Roxburgh and Burns, 2013)

Note: the 2006 data will be underestimates and not necessarily reflective of a downward trend (given that enhanced methodology was not introduced until 2007); the 2007-2009 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 heroin), how long since that had happened, and which drugs were involved. Eighteen participants reported that they had accidentally overdosed on another drug within their lifetime, and they had done so on a median of one occasion (range: 1-2). The median period of time since last overdose was 48 months (or 4 years; range 2-216 months). Five participants had accidentally overdosed within 12 months of interview. Of these participants, two reported overdosing on alcohol, two on cannabis and one on fentanyl. Only one participant received immediate treatment as a result of such

overdoses; and that was at a hospital emergency department. No participants received any information or treatment post-overdose.

6.2 Drug treatment

6.2.1 IDRS participant survey

As mentioned in section 3.1, approximately one-third of the sample (31%) were in drug treatment at the time of the interview, with the majority of participants in maintenance pharmacotherapy treatment. More specifically, 20% reported being on a methadone program (compared to 16% in 2012) and 8% reported being on a buprenorphine program, including those receiving suboxone treatment (compared to 15% in 2012).

Participants who were in treatment at the time of interview reported having been in that treatment for a median of 39 months (range: 0.1-336 months).

In 2013, only six participants reported that at some stage throughout their life they had sought treatment, but been turned away or told they had to wait longer than one week before they could enter. This represents a significant decline from 2012 (26%; $p<0.001$; 95% CI: 0.01-0.30). The services that they had tried to access included: a GP (n=3), an opiate substitution program (n=3), a counsellor (n=1) and a rehabilitation service (n=1).

6.2.2 Treatment services

The following drug treatment data for SA comes from two sources: telephone calls to the SA Alcohol & Drug Information Service (ADIS), and Drug & Alcohol Services SA (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 *Report on the National Minimum Data Set* (Australian Institute of Health & Welfare, 2011), which details findings from DASSA and other non-government treatment agencies in SA.

6.2.3 Heroin and other opioids

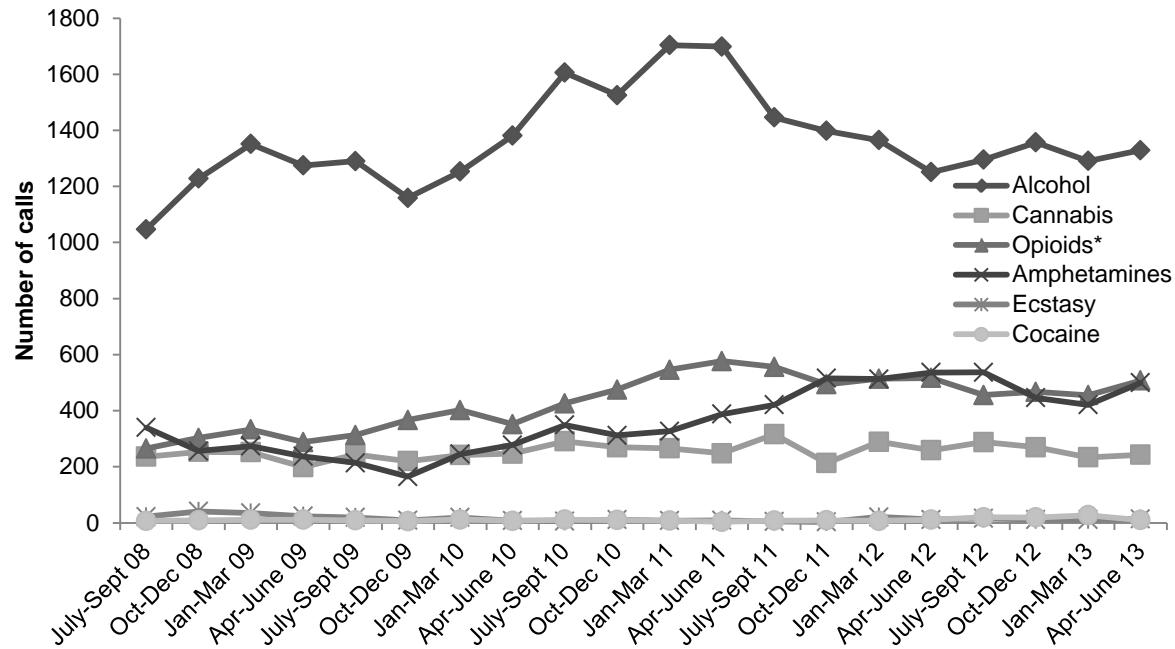
6.2.3.1 Treatment services – ADIS

Telephone calls to ADIS regarding any opioid substance accounted for 12.37% of the total coded telephone contacts (drug-related) in the 2012/13 financial year (n=15,252), which was relatively stable from 2011/12 (13.20% of 15,761 calls). Since 2004, the breakdown of number of calls per opioid substance category (e.g. heroin, methadone) has been unavailable.

Figure 21 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, although there has been a decline in the number of alcohol-related calls over the past two financial years. In regards to opioids and amphetamines, there appears to have been a slight upward trend in the numbers of calls to ADIS, whilst the number of cannabis-related calls has remained relatively stable. Calls relating to ecstasy or cocaine

have constituted less than 1% of the total coded calls to SA ADIS across all years depicted.

Figure 21: Number of drug-related calls to ADIS per quarter, by selected drug type, July 2008-June 2013



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 34. In 2012/13, the proportion of clients nominating heroin as their primary drug of concern (8.6%) remained relatively stable from 2011/12 (7.8%). In addition, the proportion of total DASSA clients nominating heroin as their primary drug of concern was lower than that for opioid analgesics (8.9%), amphetamines (19.1%) and substantially less than that for alcohol (47.5%).

Table 34: Primary drug of concern nominated by clients of DASSA as a percentage of total number of clients, 2008/09-2012/13

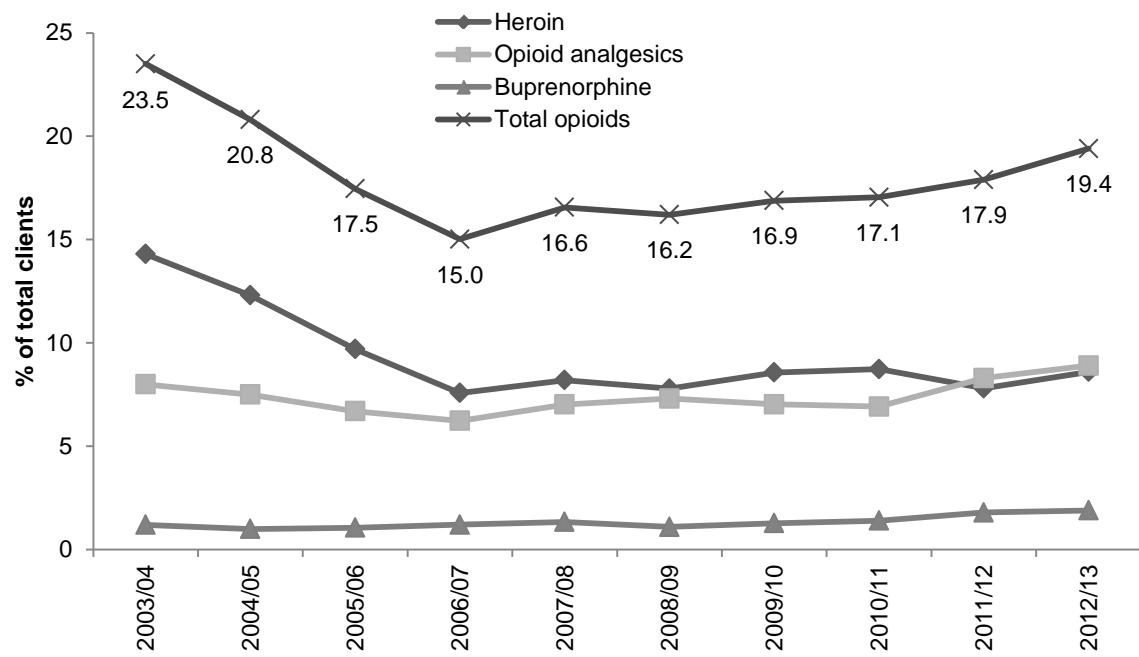
Drug type (%)	2008/09 N=5,816	2009/10 N=5,716	2010/11 N=5,430	2011/12 n=5,438	2012/13 N=5,262
Alcohol	57.5	57.1	54.7	49.4	47.5
Amphetamines	15.2	13.3	16.0	19.4	19.1
Heroin	7.8	8.6	8.7	7.8	8.6
Opioid analgesics	7.3	7.0	6.9	8.3	8.9
Cannabis	10.3	10.8	11.4	13.9	13.9
Benzodiazepines	2.0	1.9	1.9	1.9	2.0
Ecstasy	2.0	1.6	1.0	0.5	0.3
Cocaine	0.5	0.4	0.2	0.2	0.2
Tobacco	0.4	0.6	0.7	0.5	0.5
Unknown	0.2	0.1	0.1	0.3	0.1
Buprenorphine	1.1	1.3	1.4	1.8	1.9
Other	1.7	2.5	2.1	1.2	3.0

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 22, the percentage of DASSA clients nominating opioid analgesics as their primary drug of concern has remained relatively stable over the past decade, from 8.0% in 2003/04 to a current level of 8.9%. In contrast, there has been an overall downward trend in those nominating heroin as their primary drug of concern (14.3% in 2003/04 to 8.6% in 2012/13), whilst the nomination of buprenorphine as a primary drug of concern has remained low and stable. In 2012/13, the proportion of clients nominating 'any' type of opioid substance as their primary drug of concern was 19.4%, which was a slight decline from 2011/12 (17.9%).

Figure 22: Percentage of total DASSA clients with opioid as the primary drug of concern, 2003/04-2012/13



Source: DASSA

Table 35 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 2012/13 the greatest number of clients attended inpatient detoxification services for treatment related to amphetamines, followed by cannabis, opioid analgesics and heroin. Interestingly, when compared to 2011/12 data, there was a substantial drop in the number of clients attending inpatient detoxification services for cannabis and heroin.

Table 35: Number of clients to DASSA inpatient detoxification treatment services, by primary drug of concern, 2008/09-2012/13

Drug type	2008/09	2009/10	2010/11	2011/12	2012/13
Alcohol	522	503	524	494	478
Amphetamines	92	65	83	111	116
Heroin	123	102	61	74	44
Opioid analgesics	85	74	60	78	76
Cannabis	97	102	99	121	87
Benzodiazepines	45	30	23	30	26
Cocaine	1	2	3	2	5
Tobacco	0	0	0	0	0
Buprenorphine	13	16	15	18	7
Unknown	0	1	-	0	1
Other	15	15	19	10	10
TOTAL	939	854	852	896	807

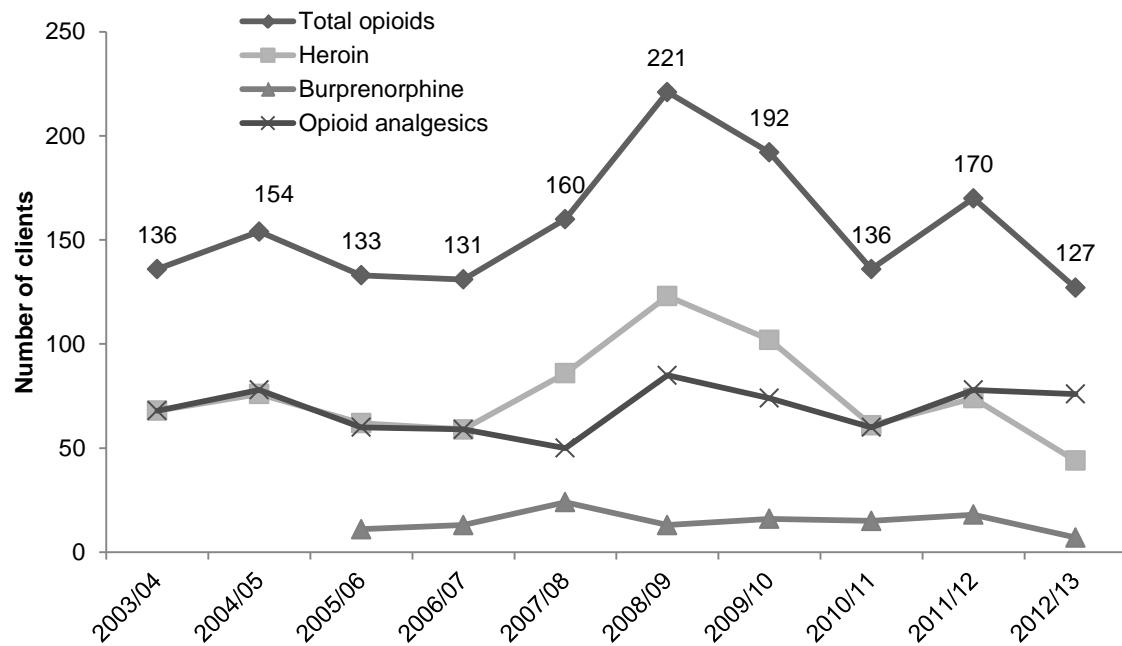
Source: DASSA

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 23 presents the number of clients admitted to DASSA's inpatient detoxification treatment services for heroin, opioid analgesics or buprenorphine, from 2003/04 to 2012/13. As can be seen, there was quite a substantial decline in the number of clients nominating heroin as their primary drug of concern in 2012/13, continuing the overall downward trend that has been observed from 2008/09 onwards. There was also a slight decrease in the number of clients nominating buprenorphine as their primary drug of concern (18 in 2012 versus 7 in 2013), whilst the number of clients nominating opioid analgesics as their drug of concern remained stable.

In 2012/13 the number of inpatient admissions for amphetamines (116) exceeded that for heroin (44). However, when the data was analysed in terms of whether the primary drug of concern was amphetamines or *any* opioid substance (heroin or other opioid analgesics), it was found that the total number of clients entering treatment for *any* opioid substance (127) was slightly higher than that for amphetamines (116).

Figure 23: Number of clients to DASSA inpatient detoxification treatment services per year, with heroin or other opioid as the primary drug of concern, 2003/04-2012/13



Source: DASSA

6.2.4 Methamphetamine

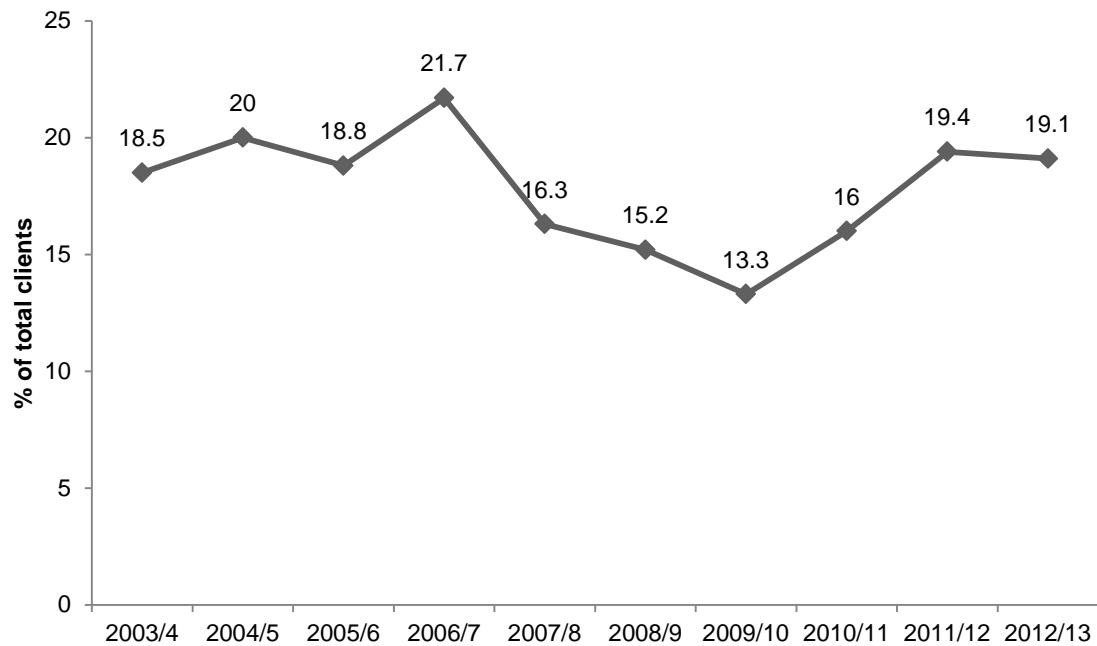
6.2.4.1 Treatment services – ADIS

Telephone calls to ADIS regarding amphetamines accounted for 12.5% (n=1,904) of the 15,252 total drug-related calls in the 2012/13 financial year. This was stable from the previous financial year (12.6% of a total 15,761 calls), and represents a plateauing of the upward trend observed from 2009-2012. Figure 21 depicts the number of amphetamine-related calls, per quarter, for the last five financial years compared to calls relating to other drug types. As can be seen, calls relating to methamphetamine have overtaken those for cannabis and are now comparable to the number of calls relating to opioids.

6.2.4.2 Treatment services – DASSA

The proportion of clients nominating amphetamines as their primary drug of concern remained stable in 2012/13, stabilising the upward trend that was observed from 2009/10-2011/12 (see Table 34 and Figure 24). In 2012/13, amphetamines (19.1%) were the second most commonly nominated drug of concern by DASSA clients, and dominated as the most common illicit drug of concern, well above cannabis (13.9%).

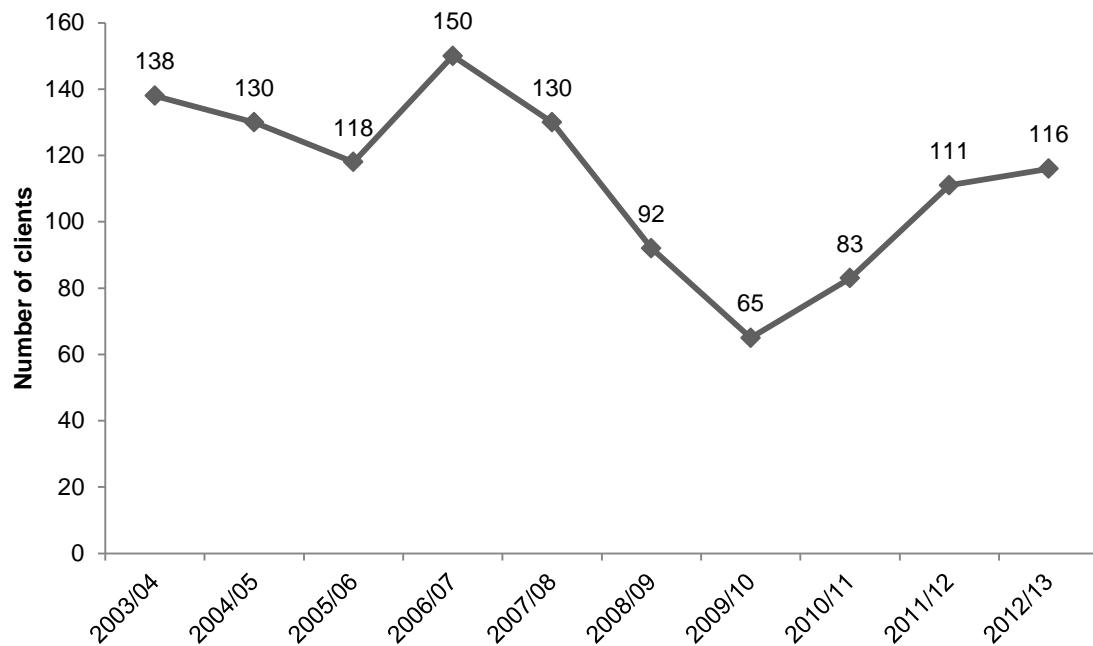
Figure 24: Percentage of total DASSA clients with amphetamines as the primary drug of concern, 2003/04-2012/13



Source: DASSA

Figure 25 presents the number of clients attending DASSA's inpatient detoxification treatment services for amphetamines, from 2003/04 to 2012/13. Consistent with the stabilisation in the number of amphetamine-related clients to all DASSA services, the number of inpatient detoxification clients who nominated amphetamines as their primary drug of concern also remained stable, from 111 in 2011/12 to 116 in 2012/13.

Figure 25: Number of clients to DASSA inpatient detoxification treatment services, with amphetamines as the primary drug of concern, 2003/04-2012/13



Source: DASSA

Note: During 2002/03 a new data collection system was employed to meet the requirements of the AODTS-NMDS

6.2.5 Cocaine

6.2.5.1 Treatment services – ADIS

Telephone calls to ADIS regarding cocaine accounted for only 0.5% (n=76) of total drug-related telephone calls in 2012/13. This was a slight increase from 2011/12 (n=35), with cocaine-related calls being consistently low over the years. Figure 21 depicts the number of cocaine-related calls, per quarter, for the last five financial years compared to calls related to other drug types.

6.2.5.2 Treatment services – DASSA

The proportion of clients nominating cocaine as their primary drug of concern has remained relatively stable and low across all years reported (Table 34). Of the clients attending any DASSA treatment services in 2012/13, 0.21% (n=11 of 5,262 individuals) nominated cocaine as their primary drug of concern.

6.2.6 Cannabis

6.2.6.1 Treatment services – ADIS

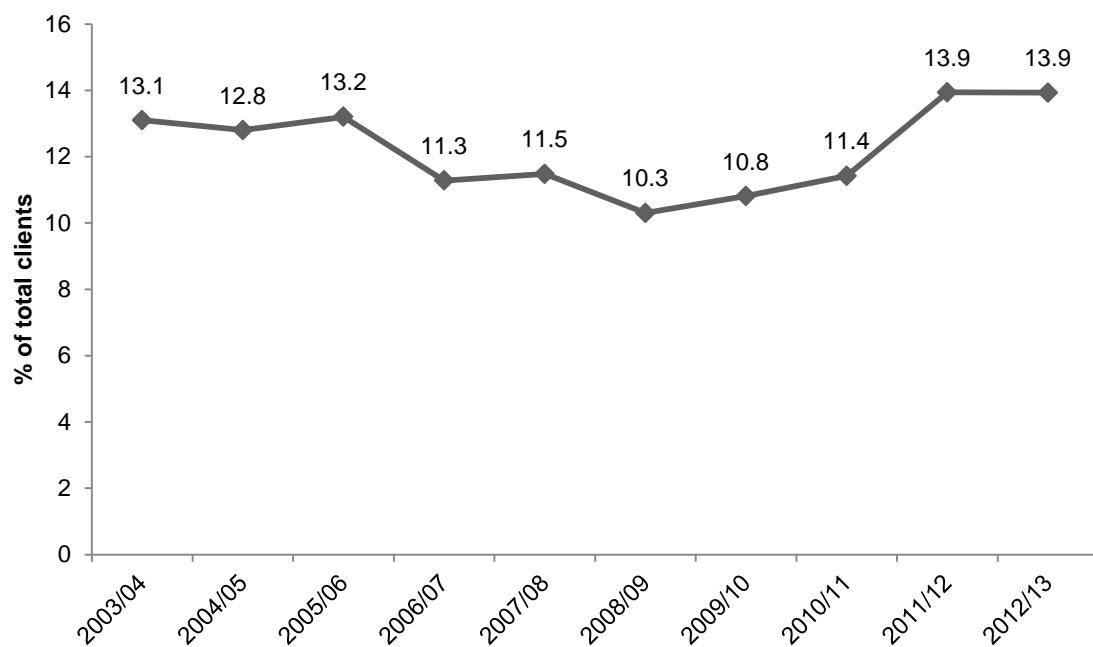
Telephone calls to ADIS regarding cannabis accounted for 6.8% (n=1,035) of the total coded telephone contacts in the 2012/13 financial year; this was stable from 2011/12 (6.8%; n=1,077). Figure 21 depicts the number of cannabis-related calls per quarter for the last five financial years compared to calls related to other drug types. As can be seen, the number of cannabis-related calls has remained relatively stable over the past

five years. In 2012/13, the number of enquiries regarding cannabis continued to be lower than for both amphetamines (12.5% of total) and opioids (12.4% of total).

6.2.6.2 Treatment services – DASSA

The proportion of clients nominating cannabis as their primary drug of concern remained stable in 2012/13. Of clients to all DASSA treatment services, 13.93% (n=733 of 5,262 individuals) nominated cannabis as their primary drug of concern in 2012/13. This represents a plateauing of the upward trend observed from 2008/09-2011/12.

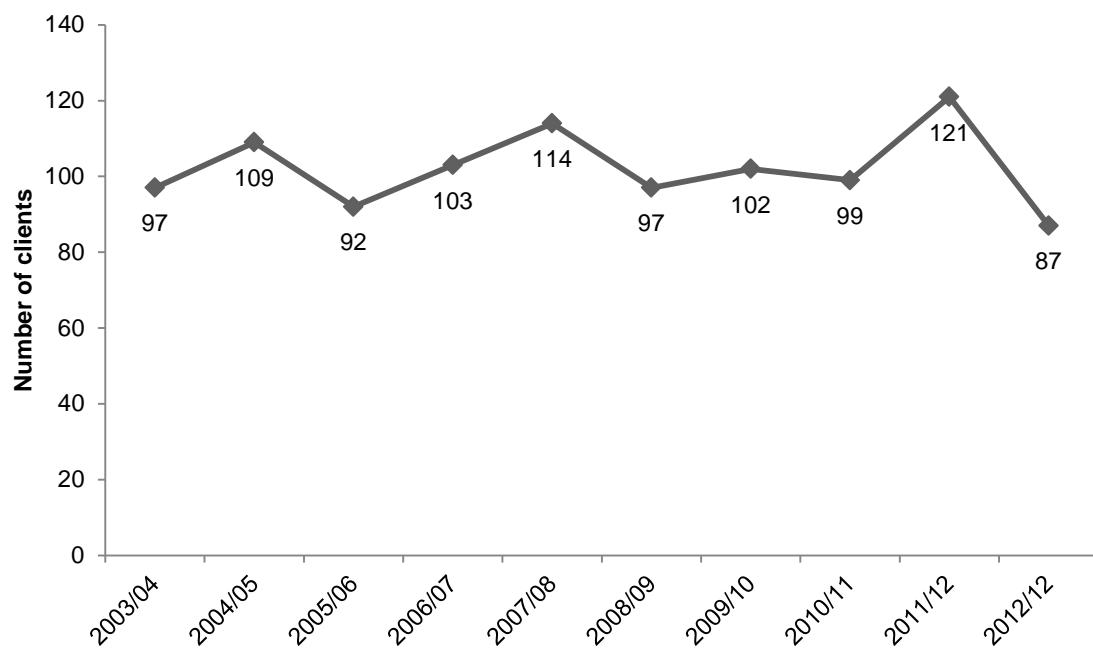
Figure 26: Percentage of total DASSA clients with cannabis as the primary drug of concern, 2003/04-2012/13



Source: DASSA

Figure 27 presents the number of DASSA clients attending inpatient detoxification treatment services for cannabis, from 2003/04 onwards. In 2012/13, the number of cannabis-related clients attending inpatient detoxification decreased to 87 – the lowest number recorded over the past decade. However, despite this decline, the number of clients entering inpatient detoxification for cannabis continued to be higher than those entering treatment for heroin and opioid analgesics.

Figure 27: Number of admissions to DASSA inpatient detoxification treatment services, with cannabis as the primary drug of concern, 2003/04-2012/13



Source: DASSA

6.3 Hospital admissions

An analysis of data from the National Hospital Morbidity Dataset (provided by the AIHW for the period 1997/98 to 2010/11) was undertaken by NDARC. This data reports on both state-specific and national drug-related hospital admissions² 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.³ 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 2012/2013.

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, South Australian data differed quite substantially to the trends observed at the national level (see Appendix).

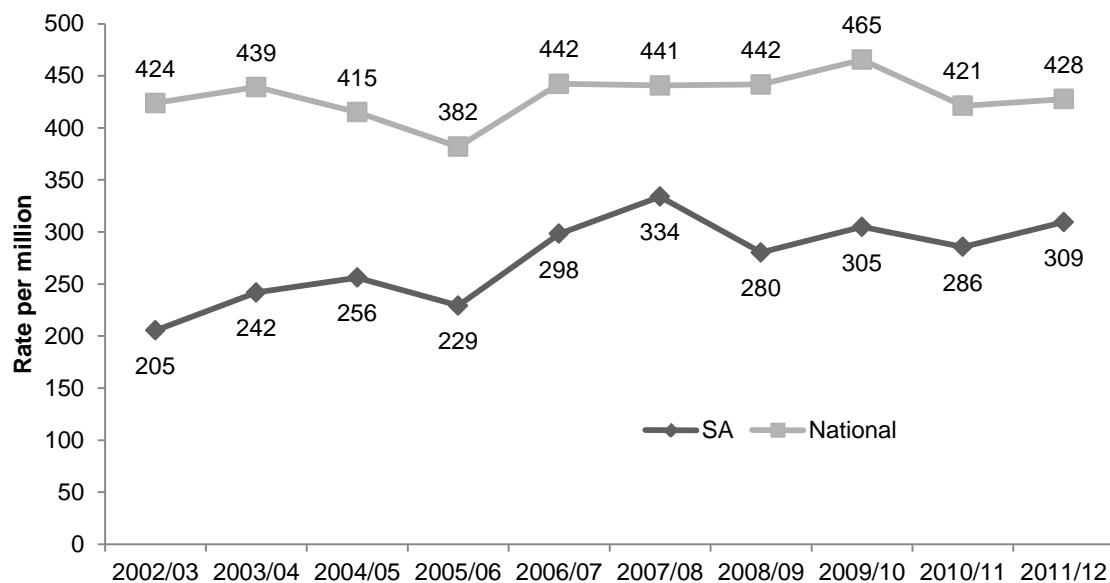
² The National Hospital Morbidity Dataset includes admissions data from public and private hospitals across metropolitan, regional and remote locations.

³ 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 28 shows the rates of opioid-related admissions from 2002/03 onwards. In 2011/12, there was a slight increase in admissions; from 286 per million in 2010/11 to 309 per million. At the national level, opioid-related admissions have remained relatively stable over the past six years.

Figure 28: Rate of opioid-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 2002/03-2011/12



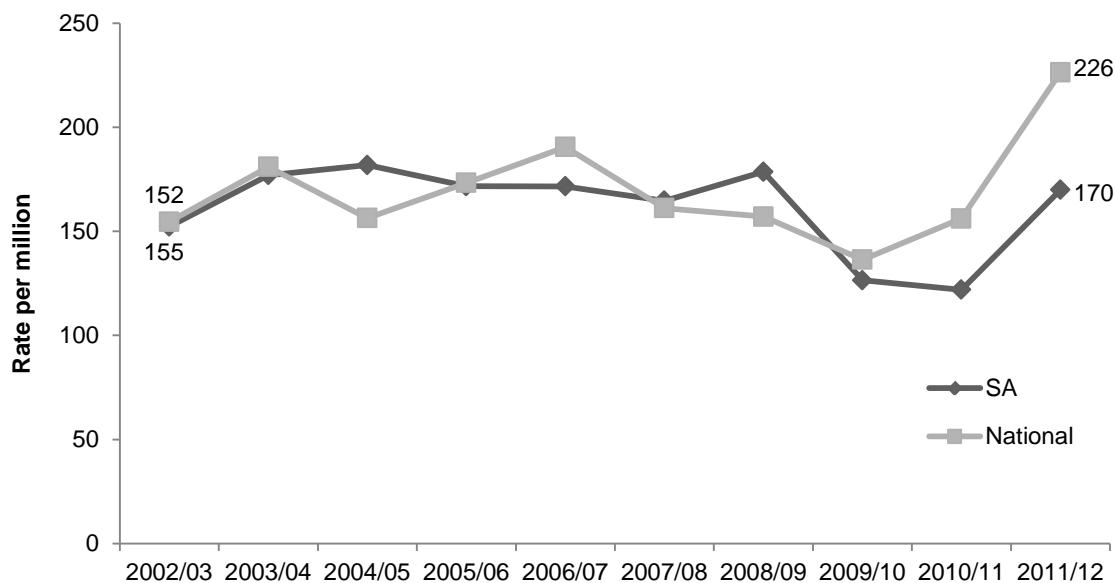
Source: Australian Institute of Health and Welfare

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 29 shows the long-term trend of amphetamine-related hospital admissions, from 2002/03 onwards. Admissions with amphetamines as a primary diagnosis increased sharply in 2011/12; from 122 per million in 2010/11 to 170 per million. There was also a sharp increase at the national level, from 156 per million in 2010/11 to 226 per million; this continues an upward trend that has been observed from 2009/10 onwards. Readers are reminded that this figure does not include amphetamine-related psychosis or withdrawal admissions.

Figure 29: Rate of amphetamine-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 2002/03-2011/12



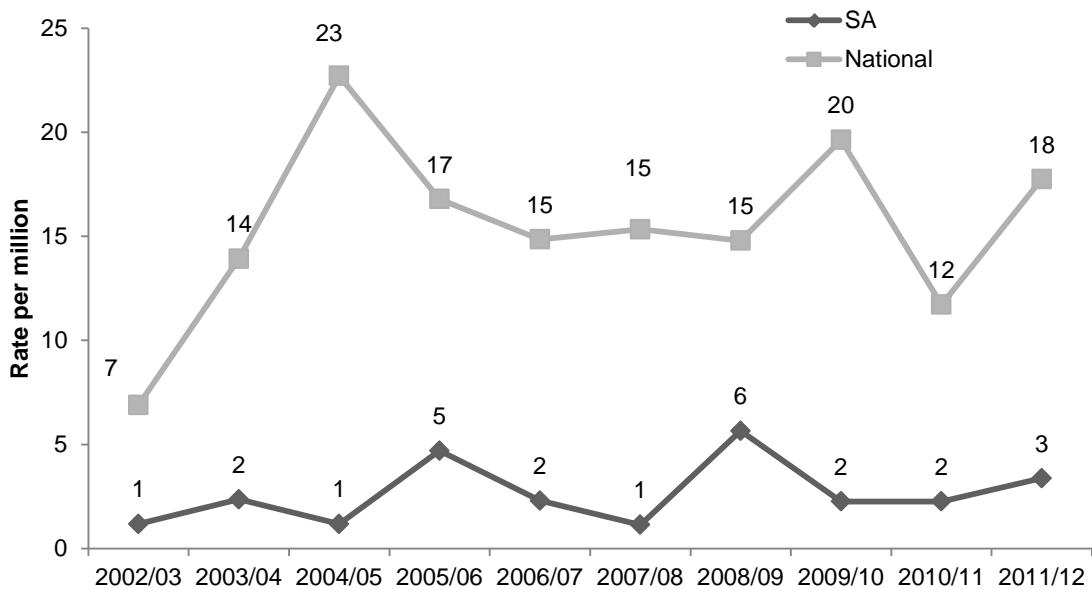
Source: Australian Institute of Health and Welfare

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 30 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 observed in SA. Interestingly, in 2011/12 the rates of admissions observed at the national level increased (from 12 per million in 2010/11 to 18 per million), whilst in SA admissions remained stable (at 3 per million).

Figure 30: Rate of cocaine-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 2002/03-2011/12



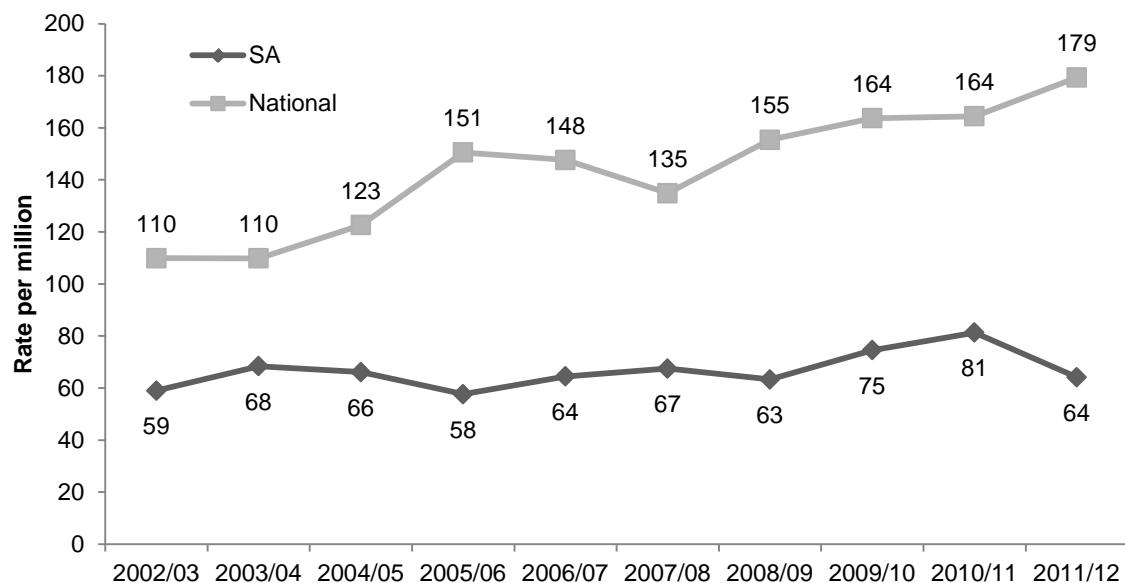
Source: Australian Institute of Health and Welfare

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 31 depicts the long-term trend in cannabis-related hospital admissions (primary diagnosis), both nationally and in SA from 2002/03 onwards. As can be seen, national rates have been trending upwards over the last decade, whilst SA rates have remained relatively stable. Interestingly, in 2011/12 the rates of admissions observed at the national level increased (from 164 per million in 2010/11 to 179 per million), whilst in SA admissions decreased (from 81 per million in 2010/11 to 64 per million). Readers are reminded that this figure does not include cannabis-related psychosis or withdrawal admissions.

Figure 31: Rate of cannabis-related admissions (primary diagnosis) to hospital in SA and nationally, per million people, 2002/03-2011/12



Source: Australian Institute of Health and Welfare

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 36. It is important to note that these data are 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; however, 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 stable in 2012/13. Attendances regarding heroin declined slightly in 2012/13 (55 versus 63 in 2011/12), whilst the number of amphetamine-related attendances increased (109 versus 83 in 2011/12). Amphetamines continued to dominate as the most common illicit drug-related attendances. 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 in 2005/06 (from 89 to 31), increased slightly in 2006/07 to 37, and again decreased in 2007/08 with no attendances recorded for 2008/09-2012/13. The number of attendances in relation to cannabis have remained stable and low across the years depicted.

Table 36: Number of attendances to the emergency department at the Royal Adelaide Hospital, SA, from 2003/04-2012/13 (per drug or diagnosis)

	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013
Amphetamines	81	91	61	82	67	58	61	61	83	109
Cocaine	1	4	6	4	1	4	5	1	2	4
LSD	2	6	3	2	3	7	7	3	2	2
GHB	28	48	38	14	15	15	17	20	20	17
Alcohol	1,106	1,465	1,409	1,559	1,554	1,585	2,078	2,119	1,835	1,860
Cannabis	11	15	13	15	15	13	11	14	22	14
Heroin	25	30	32	39	44	66	51	66	63	55
Other opioid**	57	70	68	59	28	38	36	38	40	47
Benzodiazepines	138	141	122	174	145	151	169	162	147	117
Antidepressants	80	87	55	74	78	67	58	71	73	67
Drug addiction[#]	20	37	28	17	8	1	0	0	0	0
Drug-induced psychosis[#]	44	89	31	37	28	0	0	0	0	0
Drug withdrawal[#]	24	26	19	20	0	0	0	0	0	0
Other^{##}	442	434	360	579	528	464	480	471	439	448
TOTAL	2,059	2,543	2,245	2,675	2,514	2,469	2,973	3,026	2,726	2,740

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 Mental and physical health problems and psychological distress

6.5.1. Self-reported mental health problems

In 2013, 47% of participants reported experiencing a mental health problem (other than drug dependence) in the six months preceding interview. This was stable from 2012 (47%). Among those who had experienced a mental health disorder, depression and anxiety continued to be the most commonly reported problems (see Table 37).

Table 37: Mental health problem reported by participants, 2012-2013

Mental health problem (%)	2012 (N=93)	2013 (N=100)
Depression	26	33
Mania	1	0
Manic depression	4	5
Anxiety	26	24
Phobias	4	0
Panic	8	3
Obsessive compulsive disorder (OCD)	4	0
Paranoia	3	1
Personality disorder	5	1
Drug-induced psychosis	1	1
Other psychosis	1	0
Schizophrenia	2	5
Post traumatic stress disorder (PTSD)	7	6
Other	0	1

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, three-quarters (75%; n=35) reported that they had attended a professional for such problems; this was a significant increase from 2012 (34%; $p<0.01$; 95% CI: -0.52 – -0.15). Of those who reported attending a mental health professional, 60% reported visiting a general practitioner (GP), 29% visited a psychologist, 20% a psychiatrist, 9% a counsellor, 3% a mental health nurse and 3% a community nurse.

Twenty-seven participants reported that they had been prescribed medication for their mental health disorder in the preceding six months; predominantly antidepressants (n=16), followed by benzodiazepines (n=6), antipsychotics (n=8) and mood stabilisers (n=2).

The main reasons for not attending a health professional for the self-reported mental health problems in the last six month were: self-treatment (n=4) and couldn't be bothered/didn't want to (n=3).

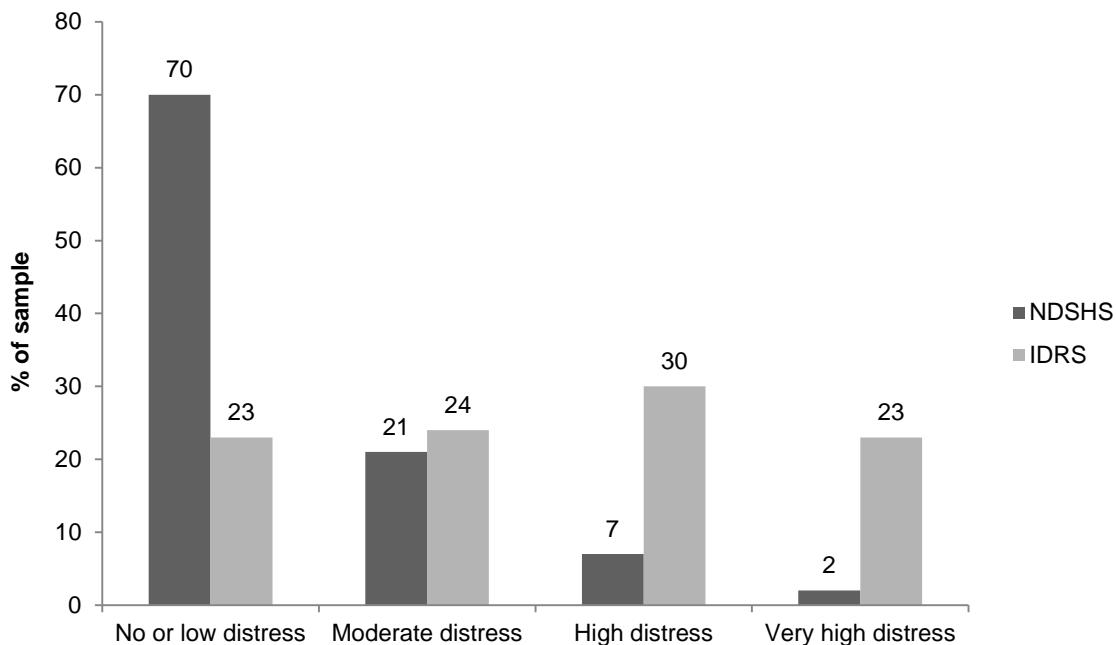
6.5.2 Psychological distress

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 that has been found to have good psychometric properties and which can identify 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) (Kessler et al., 2002; Andrews & Slade, 2001). 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, 2011a). 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). The 2010 National Drug Strategy Household Survey (NDSHS) (Australian Institute of Health & Welfare, 2011a) 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 32).

Figure 32: K10 scores in the NDSHS (2010) and the SA IDRS interviews, 2013



Source: IDRS participant interviews; Australian Institute of Health & Welfare (2011a)

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

Twenty-three participants had scores between 10 and 15 on the K10 (low risk), 24 scored between 16 and 21 (moderate distress), 30 participants scored from 22 to 29 (high distress), and 23 scored from 30-50 (very high distress). The median total score for the sample was 22 (range: 10-48), indicating that half of the sample was at high or very high risk of psychological distress as measured by the K10.

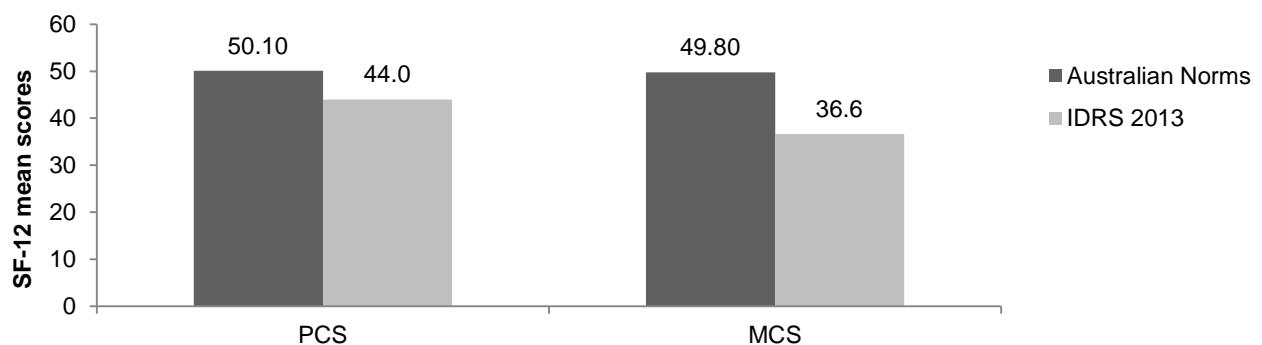
6.5.3 Mental and physical health problems

The Short Form 12 Item Health Survey (SF-12) is a questionnaire designed to provide information on general health and wellbeing and includes 12 questions from the Short Form 36 Item Health Survey (SF-36). The SF-12 measures health states across eight dimensions concerning physical functioning, role limitations due to physical health

problems, bodily pain, general health, energy/fatigue, social functioning, role limitations due to emotional problems and psychological distress and wellbeing. The scores generated by these eight components are combined to generate two composite scores: the Physical Component Score (PCS) and the Mental Component Score (MCS) (Ware et al., 1995; 1996). A higher score indicates better health.

The SF-12 scoring system was developed to yield a mean of 50 and a standard deviation of 10. Participants in the 2013 IDRS scored a mean of 37 ($SD=11.3$) for the MCS and 44 ($SD=12.1$) for the PCS (Figure 33). The MCS and PCS were found to be one standard deviation below the Australian population mean score. This would indicate that IDRS participants had poorer mental and physical health than the population average.

Figure 33: SF-12 scores for SA IDRS participants compared with the general Australian population (ABS), 2013



Source: IDRS participant interviews; Australian Bureau of Statistics (1995)

6.6 Alcohol Use Disorders Identification Test

Recently, a lot of media attention has focused on young people and alcohol. However, there has been less focus on alcohol use amongst PWID, despite the fact that they are particularly at risk for alcohol-related harms due to a high prevalence of HCV. Half of the participants interviewed in the Australian NSP Survey 2012 ($n=2,391$) were found to have HCV antibodies (Kirby Institute, 2013). 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 (Coffin et al., 2007; Schiff & Ozden, 2004; Darke, Ross & Hall, 1996), it is important to monitor risky drinking among PWID.

The information on alcohol consumption currently available in the IDRS includes the prevalence of lifetime and recent use, and number of days of use over the preceding six months. Participants of the IDRS were asked the Alcohol Use Disorders Identification Test-Consumption (AUDIT-C) as a valid measure of identifying heavy drinking (Bush et al., 1998). The AUDIT-C is a three item measure, derived from the first three consumption questions in the AUDIT. Dawson 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 2013, the overall mean score on the AUDIT-C was 5.9 ($SD=3.9$, range: 1-12). There was no significant difference between male and female scores. According to Dawson et

al. (2005) and the AGDH&A's Guidelines for the Treatment of Alcohol Problems (Haber et al., 2009), a cut-off score of five or more indicates the need for further assessment.

Over one-half (57%) of the sample scored five or more on the AUDIT-C, which was stable from 2012. The proportion of males and females who scored 5 or more also remained stable at 70% and 41% respectively (Table 38), with males significantly more likely to score 5 or more ($p<0.05$).

Table 38: AUDIT-C among PWID, 2012-2013

	2012 (n=67)	2013 (n=75)
Mean AUDIT-C score* (SD; range)	5.1 (3.4; 1-12)	5.9 (3.9; 1-12)
Score of 5 or more* (%)	52	57
Males	62	70
Females	37	41

Source: IDRS participant interviews

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

KE comments

- ◆ Although not asked directly about the issues reported above, a number of KE did raise some important health-related issues that are worth considering.
- ◆ A number of KE expressed concern regarding the mental health problems and brain damage associated with drug use. More specifically, it was reported that these problems have been "grossly underestimated" and that there has been an increase in such problems over the preceding 12 months.
- ◆ It was also reported by a couple of KE that there had been an increase in methamphetamine-related aggression/violence. One KE noted that there had been an increase in the administration of sedatives in methamphetamine-related ambulance call-outs, as well as an increase in the dosage administered.
- ◆ Finally, it was reported that although the incidence of BBVIs has remained stable, HCV treatment uptake remains difficult. That is, due to the length of treatment and the side-effects that it can entail, it can be difficult convincing patients to undergo HCV treatment.

7 RISK BEHAVIOURS

Key findings

- ◆ Receptive sharing (borrowing) and lending of needles/syringes remained low in 2013, at 3% and 6% respectively. Sharing of injecting equipment such as mixing containers (e.g. spoons), tourniquets and filters was more common (15%), although there has been a sharp decline in such behaviours from 2010 onwards.
- ◆ Forty-one percent of the sample reported re-using their own needles in the last month. Sterile needles and syringes were predominantly obtained from a NSP, although a range of other sources were also used. The majority of participants 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 – most commonly prominent scarring/bruising and difficulty injecting (e.g. in finding a vein). There was a significant decline in the proportion of PWID who had experienced a dirty hit.
- ◆ In Australia, hepatitis C (HCV) continued to be more commonly notified than hepatitis B (HBV). The prevalence of human immunodeficiency virus (HIV) among PWID in Australia remained low, although there has been a gradual upward trend from 2010 onwards.

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: 0-28; n=98). In addition, the median number of needles and syringes obtained within the preceding month was 50 (range: 0-800; n=93), with participants reporting that they had given away or sold a median of 9 needles or syringes (range 0-750; n=95). Ten participants reported that they had experienced difficulty in obtaining needles/syringes in the preceding month.

Needle and Syringe Programs were by far the most common source of needles and syringes in the preceding six months (93%), followed by NSP vending machines (11%) and friends (10%). As can be seen in Table 39, a range of other sources were also used.

Table 39: Main sources of needles and syringes in the preceding six months, 2013

Accessing from (%)	2013 (N=100)
NSP	93
NSP vending machine	11
Chemist	8
Partner	2
Friend	10
Dealer	4
Hospital	0
Outreach/peer worker	0

Source: IDRS participant interviews

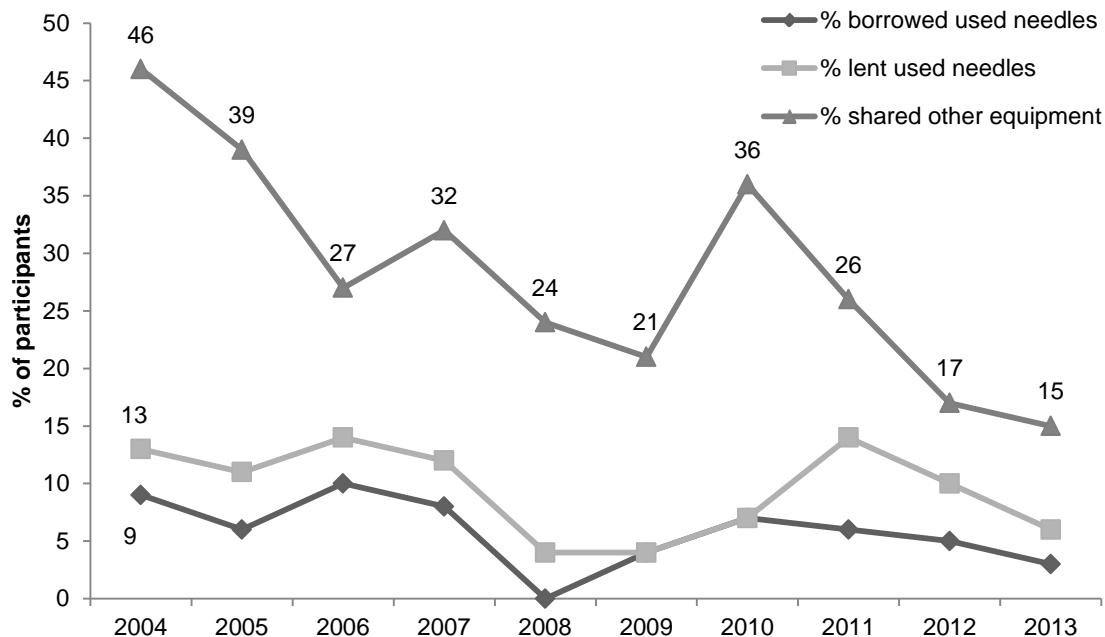
Note: Multiple responses allowed

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 human immunodeficiency virus (HIV) and hepatitis C virus (HCV). In 2013, three participants reported that they had used a needle after someone else ('borrowed'). This was stable from 2012 (n=5). Among those who had borrowed a needle in the preceding month, the majority reported doing so on one occasion (n=2; 67%), although one participant reported borrowing needles between 3-5 times. In all cases, participants reported that only one person had used a needle before them; this was usually a regular sex partner (n=2) or family member (n=1).

In comparison, six participants reported that they had used a needle *before* someone else in the month prior to interview ('lent'); this was stable from 2012 (n=9). Three participants reported lending needles on one occasion (50%) and three participants had done so on two occasions (50%).

Figure 34: Sharing of needles and injecting equipment by participants in the month preceding interview, 2004-2013



Source: IDRS participant interviews

Fifteen percent of the sample reported that they had shared injecting equipment in the preceding month, the details of which are displayed in Table 40. As can be seen, the sharing of all forms of injecting equipment remained relatively stable in 2013, although there has been a sharp decline in such behaviours from 2010 onwards. Spoons and tourniquets were the most commonly shared items.

Table 40: Sharing of injecting equipment (other than needles) among participants in the month preceding interview, 2012-2013

Injecting equipment	2012 (N=93) %	2013 (N=100) %
Spoons/mixing container	12	10
Filters	8	3
Tourniquet	12	8
Water	5	2
Swabs	1	0
Other	0	0

Source: IDRS participant interviews

Note: Multiple responses allowed

Re-use of one's own needles (41%) and equipment (46%) was much more common among this sample. Similar to the table above, the most common equipment to be re-

used was spoons/mixing containers (n=36) and tourniquets (n=21), followed by filters (n=3) and water (n=2).

7.1.3 Location of injecting

In 2013, the majority of participants reported that the last location in which they had injected drugs was a private home (92%), with very small proportions reporting use in public locations (see Table 41). The last location of injecting was unchanged compared to 2012.

Table 41: Location when last injected in the month preceding interview, 2012-2013

Location when injecting %	2012 (n=91)	2013 (N=100)
Private home	87	92
Street/car park/beach	0	1
Car	9	5
Public toilet	4	1
'Shooting room'	0	1

Source: IDRS participant interviews

Not surprisingly, the majority of participants reported that their last injection 'site' was their arm (75%), followed by their hand/wrist (12%), leg (7%) and neck (5%).

7.1.4 Self-reported injecting-related health problems

Participants were asked if they had experienced six different injecting-related health problems in the last month (as listed in Table 42). In 2013, 66% of the sample reported experiencing at least one type of injecting-related health problem in the month prior to interview. By far the most commonly experienced problems were prominent scarring or bruising around the injection site (49%) and difficulty injecting (40%), both of which were stable from 2012. Interestingly, there was a significant decline in the proportion of PWID who had experienced a dirty hit in the preceding month (37% in 2012 versus 14% in 2013; $p<0.001$; 95% CI: 0.11–0.35).

Table 42: Injecting-related health problems experienced in the month preceding interview, 2012-2013

Reported injection related health problems %	2012 (n=92)	2013 (N=100)
Overdose	8	2
Dirty hit	37 (n=90)	14*** (N=100)
Abscesses/infections	13	7
Prominent scarring/bruising	49	49
Difficulty injecting	47	40
Thrombosis	8	5
Any problems (%)	73	66
Total median score[#]	2	2

Source: IDRS participant interviews

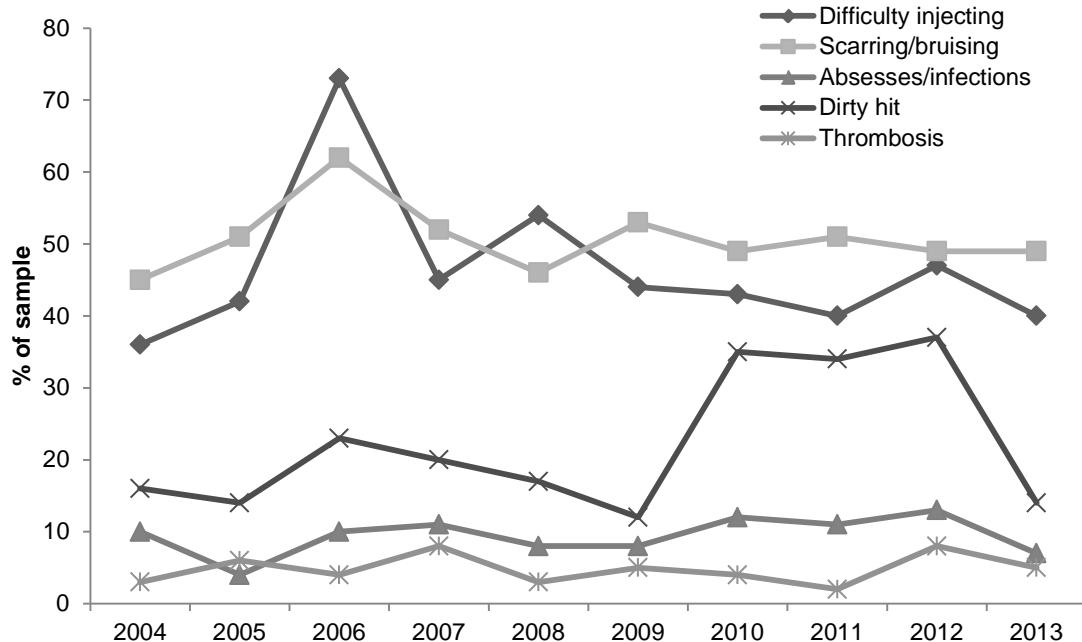
[#] Among those who reported an injection-related problem

*** $p<0.001$

Among those who had overdosed in the last month (n=2), heroin (n=1) and methamphetamine (n=1) were reported as the drugs they had overdosed on. Those who had experienced a dirty hit (n=14) most commonly attributed it to the injection of methamphetamine (n=29%), followed by heroin (21%), methadone (14%) and morphine (14%).

Figure 35 depicts the long-term trends for experience of injection-related problems from 2004 onwards. It can be seen that, despite various fluctuations over the years, the overall prevalence of injection-related problems has remained relatively stable over the past decade. Prominent scarring/bruising and difficulty injecting have remained the most common problems across all years depicted, whilst thrombosis and abscesses/infections have remained relatively low and stable. There was a significant decline in the prevalence of dirty hits in 2013 ($p<0.001$), which brings to an end the peak prevalence rates observed across 2010-2012.

Figure 35: Experience of injection-related problems by participants in the month preceding interview, 2004-2013



Source: IDRS participant interviews

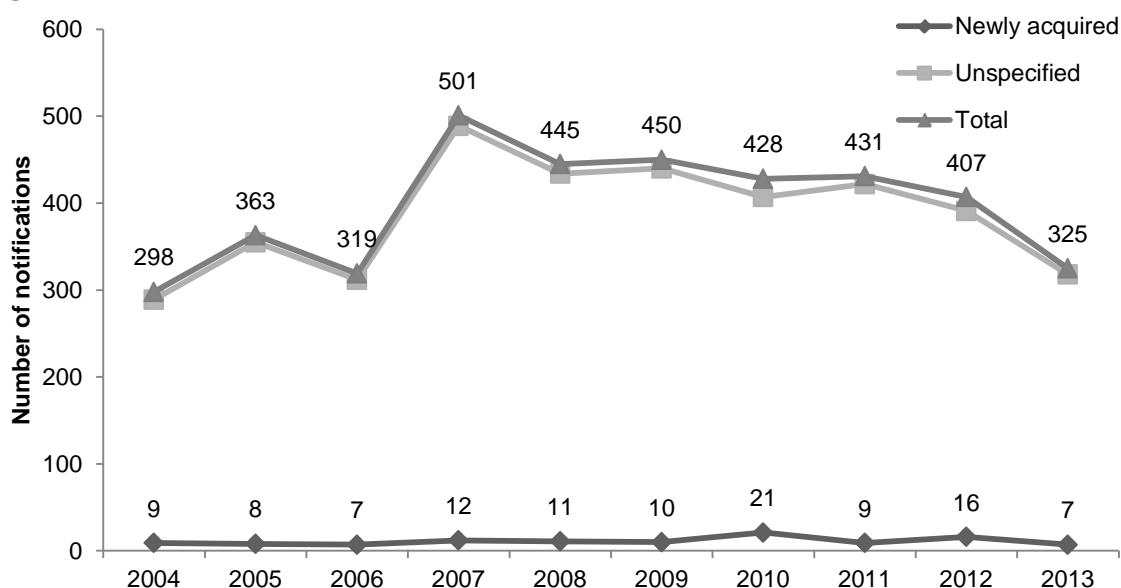
7.2 Blood-borne viral infections (BBVI)

PWID are at significantly greater risk of acquiring HBV, HCV⁴ 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 – NNDSS. Incident or newly acquired infections, and unspecified infections (i.e. where the timing of the disease acquisition is unknown), are presented. In 2013, HCV continued to be more commonly notified than HBV. There was a sharp decline in HBV notifications, continuing a downward trend that has been observed from 2007-2013. HCV notifications also decreased slightly, with 2013 marking the lowest number of HCV infections ever recorded.

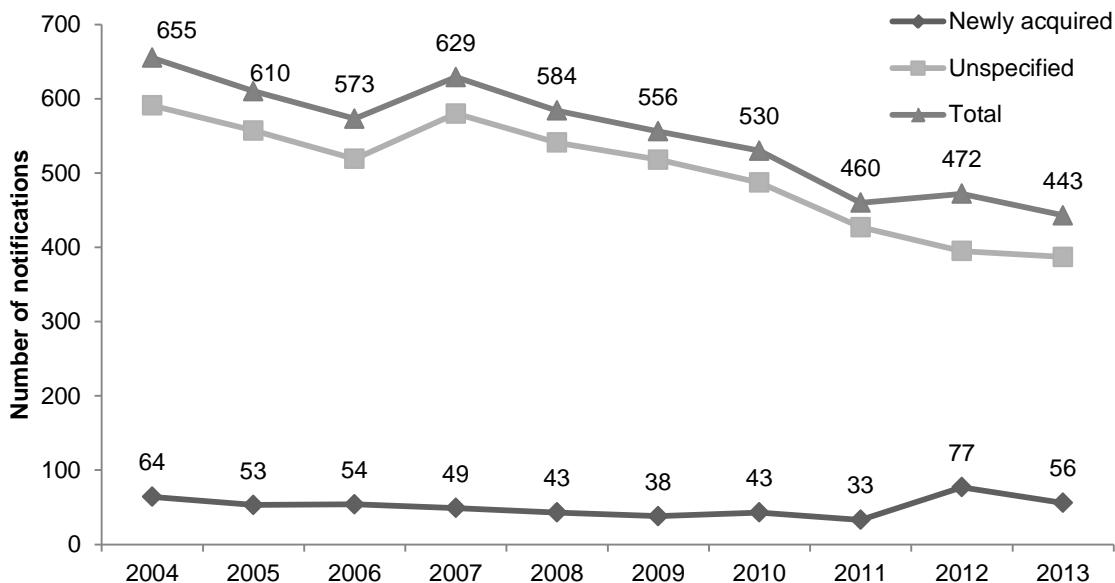
⁴ HCV antibody testing has only been available since 1990.

Figure 36: Notifications for HBV infections, South Australia, 2004-2013



Source: National Notifiable Diseases Surveillance System – NNDSS

Figure 37: Notifications for HCV infections, South Australia 2004-2013



Source: National Notifiable Diseases Surveillance System – NNDSS ⁵

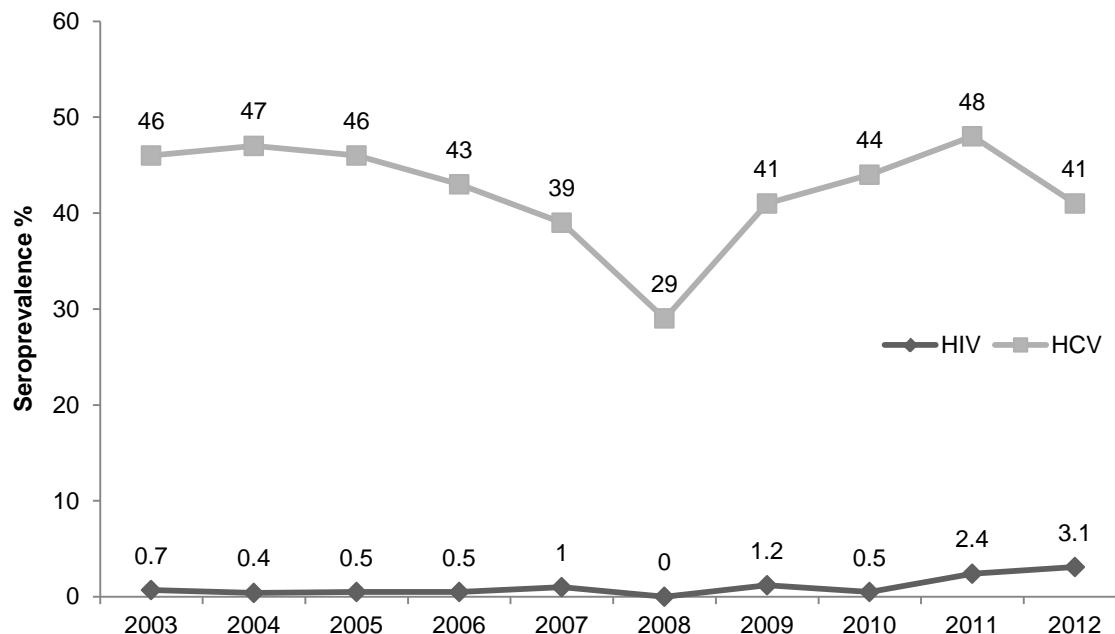
Note: Data accessed on 03 February 2014. Figures are updated on an ongoing basis

In 2012, the prevalence of HIV among PWID in Australia continued to be low at 3.1%. However, as seen in Figure 38, this continues a gradual upward trend that has been

⁵ 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.

observed from 2010 onwards. HCV prevalence among this group was much higher at 41%. This was stable from 2011 and remains substantially higher than found in 2008.

Figure 38: HIV and HCV antibody prevalence among NSP survey participants, SA, 2003-2012



Source: Australian NSP survey (Kirby Institute 2012, 2013; National Centre in HIV and Epidemiology Clinical Research, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011)

8 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH DRUG USE

Key findings

- ◆ Self-reported criminal activity remained stable in 2013, with drug dealing being the most commonly reported crime.
- ◆ The proportion of the sample who had been arrested in the preceding 12 months remained stable at 30%.
- ◆ The median expenditure on illicit drugs the day before interview was \$100.
- ◆ Driving a car while under the influence of alcohol was reported by 28% of participants who had driven in the preceding six months. Eighty percent reported driving under the influence of an illicit drug during that time, mainly methamphetamines, heroin and cannabis.

8.1 Reports of criminal activity among participants

In 2013, approximately two-fifths of the sample (39%) reported involvement in any type of crime during the last month, stable from 2012 (36%). The most commonly reported types of crime also remained stable from 2012, with participants primarily reporting involvement in drug dealing (25%), followed by property crime (17%) and, to a lesser extent, violent crime (2%). No participants reported any involvement in fraud in the month prior to interview. In 2013, the number of participants who reported having ever been in prison remained stable (52%).

Similarly, the proportion of participants who reported being arrested in the 12 months prior to interview also remained stable at 30% (see Table 43). Of the 30 participants who had been arrested in the preceding 12 months, the most common reasons for arrest were general driving offences (n=8), property crime (n=6) and alcohol-related driving offences (n=5). Small numbers reported being arrested for a violent crime (n=3), breaching an Apprehended Violence Order (AVO) (n=2), fraud (n=2), drug driving (n=2), use/possession of drugs (n=1), use/possession of weapons (n=1) and dealing/trafficking (n=1).

Table 43: Criminal activity as reported by participants, 2012-2013

Criminal behaviour (%)	2012 (N=93)	2013 (N=100)
Criminal activity in last month		
Property crime	18	17
Drug dealing	25	25
Fraud	3	0
Violent crime	2	2
<i>Any crime</i>	36	39
Arrested in last 12 months	30	30
Ever in prison	(n=91) 50	(n=99) 52

Source: IDRS participant interviews

In 2013, participants who had committed an offence in the preceding month were asked whether they had been under the influence of drugs and/or alcohol at the time of their last offence, and if so, what drugs they were under the influence of. The results are presented in Table 44; due to low numbers, figures are not presented for violent crime and fraud.

Table 44: Under the influence of drugs and/or alcohol at the time of last offence*, 2013

%	Dealing (n=25)	Property crime (n=17)	Violent crime (n=2)	Fraud (n=0)
Under the influence of AOD	80	77	50	N/A
Drugs under the influence of**:	n=20	n=13	n=1	n=0
Heroin	15	23	-	-
Cannabis	35	0	-	-
Crystal	10	23	-	-
Speed	45	31	-	-
Base	0	8	-	-
Morphine	10	0	-	-
Alcohol	25	31	-	-
Benzodiazepines	0	8	-	-

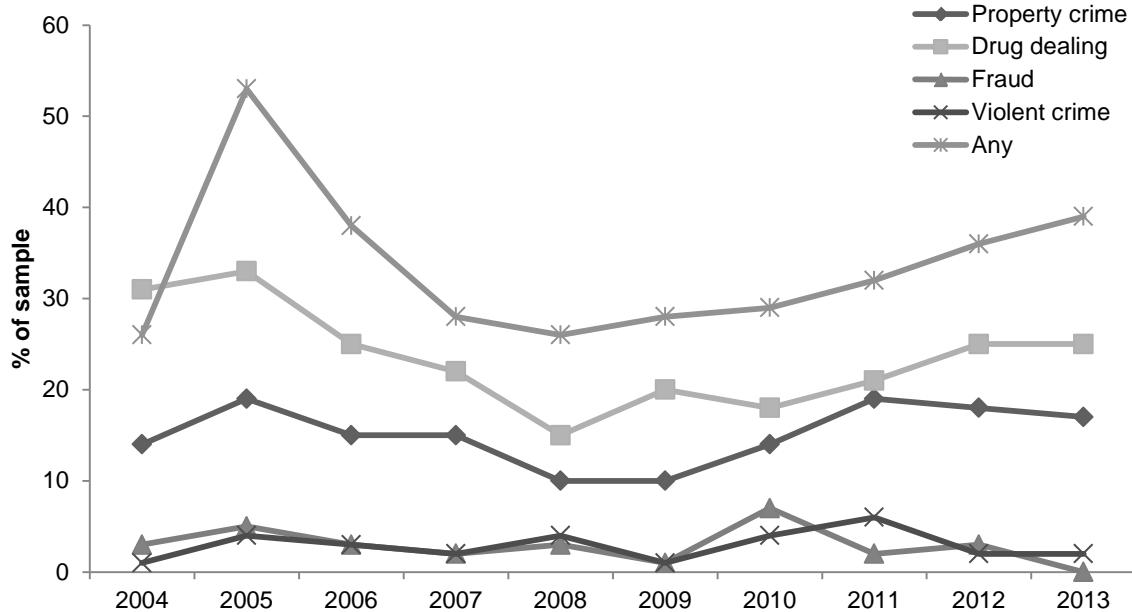
Source: IDRS participant interviews

*Amongst those who had committed an offence in the preceding month

**Amongst those who reported being under the influence of drugs and/or alcohol at the time of last offence

Figure 39 shows the long-term trends in criminal activity, by offence type, from 2004 onwards. It can be seen that, after a peak of criminal activity in 2005, prevalence rates declined sharply from 2006-2008. However, from 2008 onwards it appears that there has been a gradual upward trend in the prevalence of past month criminal activity amongst PWID. The two most prominent types of criminal activity across all years are drug dealing and property crime, with fraud and violent crime remaining low.

Figure 39: Self-reported involvement in crime, by offence type, in the month prior to interview, 2004-2013



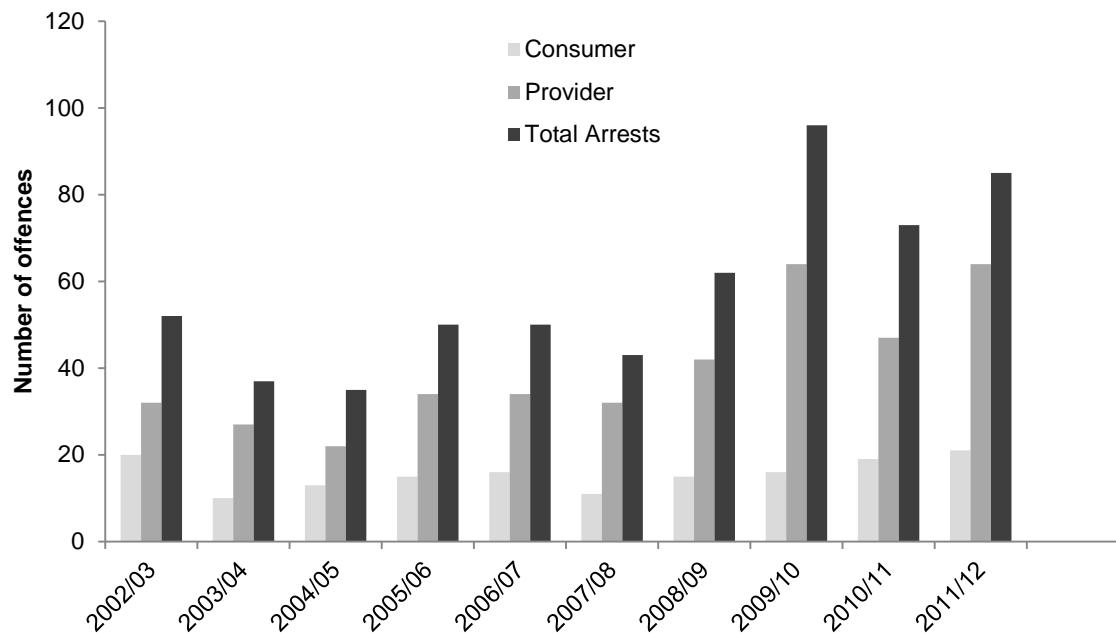
Source: IDRS participant interviews

8.2 Arrests

8.2.1 Heroin

Figure 40 presents the number of consumer and provider arrests for heroin and other opioids made in SA between 2002/03 and 2011/12. '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 2011/12, the number of consumer arrests remained stable (21), whilst the number of provider arrests increased slightly (64 compared to 47 in 2010/11).

Figure 40: Number of heroin and other opioid consumer and provider arrests, 2002/03–2011/12



Source: Australian Crime Commission (2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013)

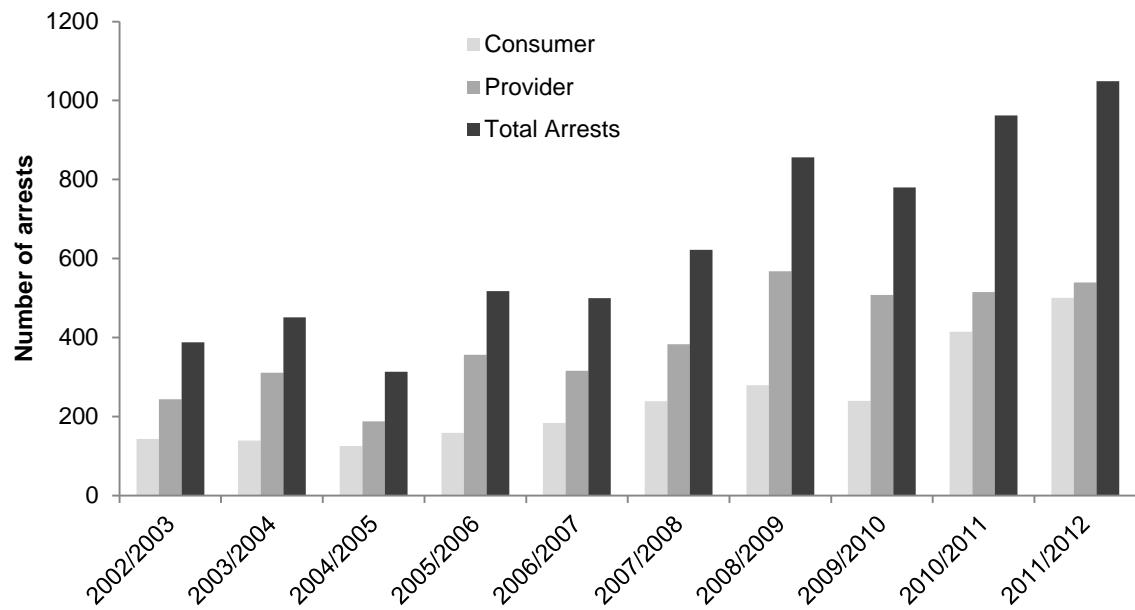
Note: Data not available for the 2012/2013 financial year. Also, total arrests includes those offenders for whom consumer/provider status was not stated and thus may exceed the sum of consumer and provider arrests.

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 2002/03 and 2011/12. Amphetamine-type stimulants include amphetamine, methamphetamine and phenethylamines. The number of total arrests increased in 2011/12 (to 1,049), continuing an overall upward trend that has been observed since 2004/05.

Figure 41: Number of amphetamine-type stimulants consumer and provider arrests, 2002/03–2011/12



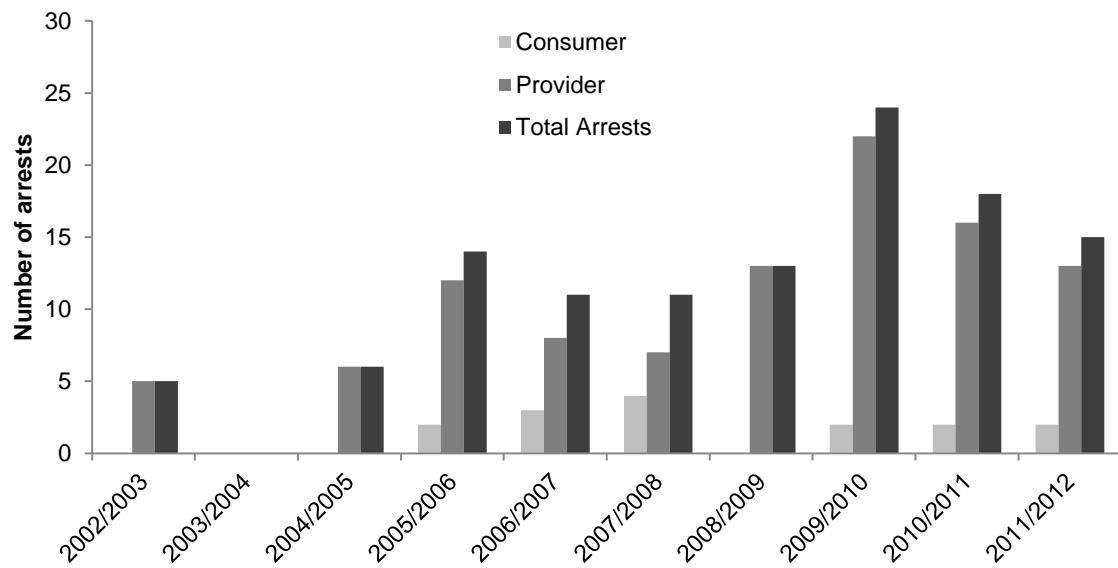
Source: Australian Crime Commission (2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013)

Note: Data not available for the 2012/2013 financial year. Also, total arrests includes 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 2011/2012, provider arrests decreased slightly from 16 to 13, and consumer arrests remained stable at 2. Total cocaine-related arrests remained low.

Figure 42: Number of cocaine consumer and provider arrests, 2002/03–2011/12



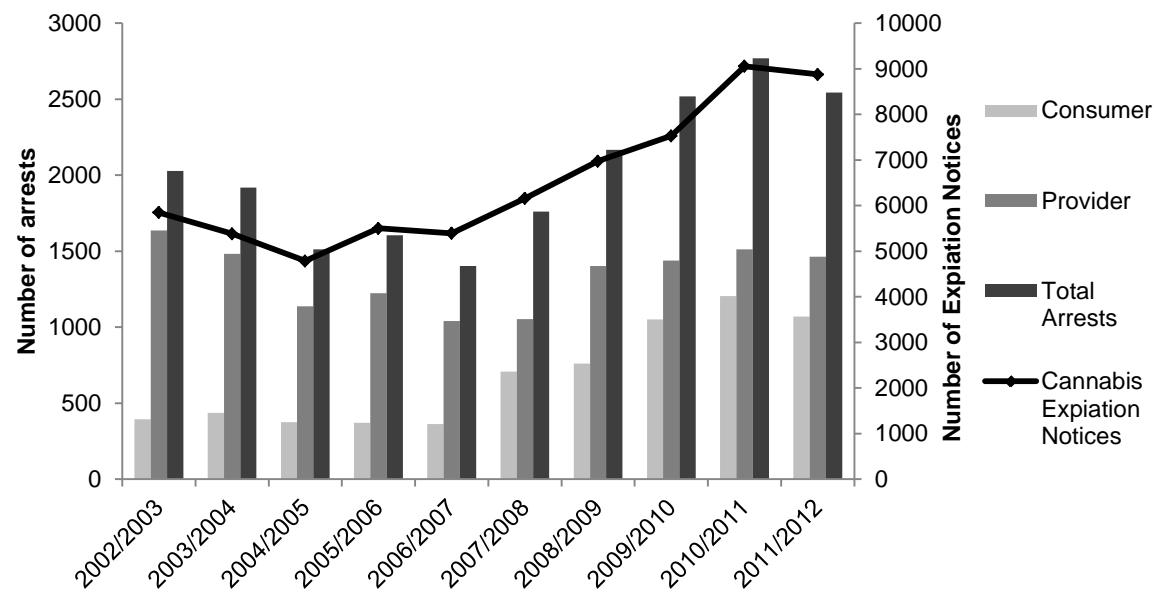
Source: Australian Crime Commission (2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013)

Note: Data not available for the 2012/2013 financial year. Also, total arrests includes 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 2002/03 to 2011/12. 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 decreased slightly in 2011/12, perhaps signifying a plateauing of the upward trend observed from 2006/07–2010/11. The number of Cannabis Expiation Notices issued in SA also decreased, from 9,055 in 2010/11 to 8,878 in 2011/12.

Figure 43: Number of cannabis consumer and provider arrests, 2002/03–2011/12



Source: Australian Crime Commission (2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013)

Note: Data not available for the 2012/2013 financial year. Also, total arrests includes 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

Sixty-three participants had purchased illicit drugs on the day prior to interview. Among these participants, the median amount spent on illicit drugs was \$100 (range: \$10-600). This was stable from 2012 (\$100; range: \$2-2,200). Table 45 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 45: Expenditure on illicit drugs on the day preceding interview, 2012-2013

Expenditure (%)	2012	2013
	(N=93)	(N=100)
Nothing	54	36
Less than \$20	2	1
\$20-49	2	12
\$50-99	8	16
\$100-199	19	22
\$200-399	14	8
\$400 or more	1	4
Median expenditure* (\$)	\$100	\$100

Source: IDRS participant interviews

*Among those who had spent money on drugs

8.4 Driving risk behaviour

8.4.1 Self-report data for driving under the influence of alcohol and illicit drugs

Sixty participants reported that they had driven a vehicle in the six months prior to interview ('recent drivers'). Among these participants, 28% (n=17) reported driving under the influence of alcohol and 8% (n=5) had driven over the blood alcohol concentration limit. Those who reported driving over the limit had done so on a median of one occasion (range 1-24).

Eighty percent of recent drivers (n=48) reported driving after the consumption of illicit drugs in the six months prior to interview, and they had done so on a median of 17 occasions (range 1-240). In addition, 23% of drug drivers (n=11) reported driving under the influence of drugs on a daily basis. Methamphetamine (any form) was the most common drug involved in drug driving episodes (56%; n=27), followed by heroin (33%, n=16) and cannabis (33%; n=16) (see Table 46).

Table 46: Driving behaviour amongst PWID, 2012-2013

	2012 (N=93)	2013 (N=100)
Driven in the last six months (%)	54	60
Driven under the influence of alcohol last six months* (%)	19	28
Driven while over the limit of alcohol[#] (%)	38	29
Driven soon after using an illicit drug(s) last six months* (%)	81	80
Drug(s) taken prior to driving** (%)	(n=43)	(n=48)
Heroin	35	33
Methadone	7	2
Buprenorphine	0	2
Bup-naloxone	5	0
Morphine	16	2
Oxycodone	14	8
Speed	19	33
Base	16	19
Ice/crystal	30	33
<i>Any methamphetamine</i>	54	56
Cocaine	0	2
Benzodiazepines	7	0
Cannabis	33	33

Source: IDRS participant interviews

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

[#]Among those who had driven while under the influence of alcohol

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

The *last* time participants drove under the influence of any illicit drug, methamphetamine (any form) was the most commonly used drug (54% n=26), followed by heroin (29%,

n=14) and cannabis (27%, n=13) (see Table 47). The median amount of time between consumption and operation of a motor vehicle was 30 minutes (range: 1-2,160 minutes), with the majority (75%; n=35) reporting that the use of illicit drugs had had no impact upon their ability to drive. Twenty-one percent (n=10) reported that when driving under the influence of drugs they felt their driving ability was impaired, whilst 4% (n=2) reported that their driving had improved slightly as a result of using illicit drugs.

Table 47: Illicit drugs involved in most recent drug driving episode, 2012-2013

Drug (%)	2012 (n=43)	2013 (n=48)
Cannabis	21	27
Heroin	28	29
Methadone**	2	0
Oxycodone**	0	4
Morphine**	14	2
Benzodiazepines**	2	0
Methamphetamine – powder	12	27
Methamphetamine – base	12	10
Methamphetamine – crystal	21	19
Any methamphetamine^	44	54
Cocaine	0	0

Source: IDRS participant interviews

**Refers to illicit use of these substances

^Includes powder, base and crystal forms

Note: Recent use means in the six months preceding interview

Random breath testing assesses blood alcohol content, while 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, while, saliva drug testing is becoming more common. In 2013, 67% (n=40) of recent drivers reported ever having been saliva drug tested at the roadside. Twelve participants reported a positive result, with most testing positive to amphetamines (n=10) and cannabis (n=6).

In 2013, participants were asked a number of additional questions regarding roadside drug testing and its impact upon their behaviour. When asked about future drug driving, participants reported that they would probably drug drive on a median of 8 times over the next six months (range: 0-240). Twenty-three participants reported that the introduction of roadside drug testing had changed their driving behaviour such that they didn't drive after using drugs (n=11), would wait a few hours before driving (n=4), organise for someone else to drive (n=2) or take public transport (n=2). Additionally, when asked about the probability of getting caught, participants believed that out of the next 100 people who were to drive after taking drugs, a median of 15 people (range: 0-100) would get caught.

For further information regarding the driving practices of PWID in SA, please refer to:
Sutherland, R & Burns, L. (2011). *Driving behaviours among people who inject drugs in South Australia, 2006-2011*. Drug Trends Bulletin, December 2011. Sydney: National Drug and Alcohol Research Centre, University of New South Wales,
http://ndarc.med.unsw.edu.au/sites/all/shared_files/ndarc/resources/IDRS%20Bulletin%20Dec11.pdf.

9 SPECIAL TOPICS OF INTEREST

Key findings

Pharmaceutical opioids

- ◆ Fifty-eight percent of the sample had used pharmaceutical opioids within the previous year.
- ◆ The most common reason for the use of pharmaceutical opioids was pain relief.
- ◆ Only one participant reported being refused pharmaceutical medications due to their injecting history.

Brief Pain Inventory

- ◆ Amongst those who had used pharmaceutical opioids for pain relief, 81% had experienced pain (other than everyday pain) on the day of interview; this was most commonly non-cancer pain (71%), followed by acute pain (24%).
- ◆ The mean 'pain severity score' was 5.6, with 75% scoring 5 or more and no participants scoring 10.
- ◆ The mean 'pain interference score' was 6.3, with almost two-thirds scoring 5 or more.
- ◆ The mean score for 'relief from pain medication' was 5.1, with 54% scoring 5 or more and 15% scoring 10.

Opioid and stimulant dependence

- ◆ Of those who recently used a stimulant drug (mainly methamphetamine) and commented, the median SDS score was 3, with 46% scoring 4 or above.
- ◆ Of those who recently used an opioid drug and commented, the median SDS score was 6, with 62% scoring 5 or above.

Opioid substitution treatment medication injection

- ◆ Twelve percent of participants reported recently injecting methadone, 5% buprenorphine, 7% buprenorphine-naloxone 'film' and 1% buprenorphine-naloxone 'tablet'.

Hepatitis C virus testing and treatment

- ◆ The majority of the sample had been tested for HCV in their lifetime with 53% reporting a positive result for HCV antibodies.
- ◆ Forty-three percent reported undergoing further testing for HCV, with two-thirds reporting a polymerase chain reaction (PCR) test to see if the virus was active.
- ◆ Amongst those who received a PCR test and had an active virus (n=5), only two participants reported that they had received HCV medical/antiviral treatment and one reported that the treatment was successful.

Naloxone program and distribution

- ◆ Almost two-thirds of the sample had heard of naloxone, which was substantially lower than what was reported at the national level. Amongst those who had heard of naloxone, three-fifths (61%) reported that naloxone was used to 'reverse heroin', whilst 27% believed that it was used to 're-establish consciousness'.

Naloxone program and distribution (continued)

- ◆ Forty-percent reported that they had heard of the take-home naloxone program, whilst 60% had not. Two-thirds reported that they would 'strongly support' an expansion of the take-home naloxone program.
- ◆ Nine participants reported that they had been resuscitated with naloxone by somebody who had been trained through the take-home naloxone program, and ten participants had completed training in naloxone administration.
- ◆ 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.
- ◆ Ninety-one percent of those who had not completed training in naloxone administration reported that if trained they would stay with someone after giving them naloxone and 90% would want their peers to give them naloxone if they overdosed.

Oral Health Impact Profile

- ◆ The mean OHIP-14 total score was 14.3. Twenty-six percent of those who commented scored 'zero'. Participants can have an overall OHIP-14 total score ranging from zero to 56 with higher scores indicating poorer oral health-related quality of life.
- ◆ Psychological discomfort had the highest impact with 59% of the sample reporting the impact as either 'occasionally', 'fairly often' and 'very often'.

Discrimination

- ◆ Ninety-three percent of the sample commented on the discrimination section, of which 44% reported discrimination within the last 12 months.
- ◆ The main location of the discrimination took place at a pharmacy, followed by the police or a doctor/prescriber.
- ◆ The majority reported the main reason (perceived) for the discrimination was 'because I'm an injecting drug user (or people think I am)'. The majority did not try to resolve the discrimination

9.1 Pharmaceutical opioids

Since the heroin shortage (2001), the Illicit Drugs Reporting System (IDRS) has noted an increase in the use and injection of morphine and oxycodone. Over the same period the age of people who inject drugs (PWID) has also increased. We know from a number of Australian and international studies that PWID experience excess morbidity and mortality when compared to those in the general population (English et al., 1995; Hulse et al., 1999; Randall et al., 2011; Vlahov et al., 2004) and that prescribers are often reluctant to prescribe opioid analgesics to people with a history of injecting drug use (Merrill and Rhodes, 2002; Baldacchino et al., 2010). This section aimed to examine the complex interplay among PWID, pain management and the extra-medical use of pharmaceutical opioids (PO).

In 2013, participants in the IDRS were asked questions about the use of PO and pain. Pharmaceutical opioids included methadone, buprenorphine, buprenorphine-naloxone, morphine, oxycodone, and other PO such as fentanyl, pethidine and tramadol. Of the SA sample, 58% reported the use of PO in the last 12 months (Table 48). Among those who

had recently used PO and commented (n=57), 37% reported using PO for pain relief, while 19% reported using PO as a substitute for heroin.

Among those who recently used PO for pain relief (n=21), the majority (86%) obtained the PO from their own script while 10% reported purchasing them from somebody else.

Of those who used their own prescription for pharmaceutical opioids (n=18), 67% reported the prescription origin as a PBS prescription from their regular doctor, 17% from a private prescription from their regular doctor and 17% from a private prescription from another doctor.

Those participants who had recently used PO for pain relief were asked if they had been refused PO in the past six months. The majority commented 'no', with only one participant reporting that they had been refused PO due to their injecting history (Table 48). Six participants reported selling, trading or giving away their prescribed PO.

Table 48: Pharmaceutical opioids use among people who inject drugs, 2013

	2013
Used pharmaceutical opioids in the last 12 months (%)	58
Reason for using pharmaceutical opioids* (%)	n=57
Substitute for heroin	19
Experience an opioid effect	9
Pain relief	37
Prevent withdrawal	14
To top up heroin	2
Other	19
Method of obtaining pharmaceutical opioids for pain relief in the last 12 months## (%)	n=21
On own prescription	86
Purchased	10
Don't know/refused	5
Refused pharmaceutical opioids medications for pain due to injecting history## (%)	n=20
No	95
Yes, injecting history	5

Source: IDRS participant interviews

* Among those who recently used. Multiple responses were allowed

Among those who used pharmaceutical opioids for pain relief.

9.2 Brief Pain Inventory

In 2013, the Brief Pain Inventory (BPI) was asked to examine the association between injecting drug use and the legitimate therapeutic goals of pharmaceutical opioids (e.g. pain management). Comparisons between PWID and the general population, both in Australia and internationally, have consistently shown excess mortality and morbidity (English et al., 1995; Hulse et al., 1999; Vlahov et al., 2004) yet there is no current evidence in Australia on the characteristics or the extent to which PWID obtain pharmaceutical opioids (licitly or illicitly) for the management of chronic non-malignant pain. Furthermore, there is growing evidence that prescribers are often reluctant to prescribe pharmaceutical opioids to people with a history of injecting drug use

(Baldacchino et al., 2010). This module seeks to examine the complex interplay among PWID, pain management and the extra-medical use of pharmaceutical opioids.

The BPI is a tool used for the assessment of pain in both clinical and research settings. The BPI uses rating scales from 0 to 10. For questions 3 to 6, 0 is 'no pain' and 10 is 'pain as bad as you can imagine'. The mean of questions 3 to 6 is then calculated to make the 'pain severity score'. For questions 9A to 9G, 0 is 'Does not interfere' and 10 is 'Completely interferes'. The mean of questions 9A to 9G is then calculated to make the 'pain interference score'. The 'pain interference score' looks at how much pain interferes with daily activities: general activity, mood, walking, normal work, relations, sleep and enjoyment of life.

As can be seen in Table 49, 81% (n=17) of those who reported using pharmaceutical opioids for pain relief in the past 12 months had experienced pain (other than everyday pain) on the day of interview. Of those who experienced pain, the majority (71%) reported the pain as chronic non-cancer pain (continuous pain which lasts for more than three months), while 24% reported acute pain. The mean 'pain severity score' was 5.6 (SD 1.4; range 2.5-7.5), with 75% scoring 5 or more and no participants scoring 10. The mean 'pain interference score' was 6.3 (SD 2.1; 3.3-9.1), with 63% scoring 5 or more.

Participants were also asked on a scale of 0 to 10 (0=no relief, 10=complete relief) how much relief they experienced from any treatments/medications they received in the past week. Of those who received treatment/medication for pain (n=13), a mean score of 5.1 (SD 3; range 1-10) was reported. Over half (54%) scored 5 or more and 15% scored 10.

Of those who experienced pain (other than everyday pain) the last seven days (n=17), 47% attributed the pain to an illness/disease, 35% to an accident/injury or assault and 18% to other causes. Eighty-two percent reported that they were in pain at the time of the interview, and the majority (94%) reported having been in pain for more than three months.

Table 49: Brief Pain Inventory (BPI) among participants who had used pharmaceutical opioids for pain relief, 2013

	SA n=21
Experienced pain today (other than everyday pain)* (%)	81
Nature of pain (%)	n=17
Acute/short term	24
Chronic non-cancer pain	71
Chronic cancer/malignant pain	6
Other	0
Mean 'Pain Severity' score	5.6
Mean relief experience from treatment/medications**	5.1
Mean 'Pain Interference' score	6.3

Source: IDRS participant interviews

*amongst those who had used pharmaceutical opioids for pain relief in the past 12 months

**amongst those who received treatment/medication for pain and commented

9.3 Opioid and stimulant dependence

Understanding whether participants are dependent is an important predictor of harm, and typically demonstrates stronger relationships than simple frequency of use measures.

In 2013, the participants in the IDRS were asked questions from the Severity of Dependence Scale (SDS) for the use of stimulants and opioids.

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 et al., 2002).

Previous research has suggested that a cut-off of 4 is indicative of dependence for methamphetamine users (Topp and Mattick, 1997) and a cut-off value of 3 for cocaine (Kaye and Darke, 2002). No validated cut-off for opioid dependence exists; however, researchers typically use a cut-off value of 5 for the presence of dependence.

Of those who had recently used a stimulant and commented (n=76), the median SDS score was 3 (mean 4.1, range 0-14), with 46% scoring 4 or above. There were no significant differences regarding gender and mean stimulant SDS score, or regarding gender and those who scored 4 or above. Of those who scored 4 or above (n=35), 97% reported specifically attributing responses to methamphetamines.

Of those who had recently used an opioid and commented (n=60), the median SDS score was 6 (mean 5.6, range 0-14), with 62% scoring 5 or above. There were no significant differences regarding gender and mean opioid SDS score, or regarding

gender and those who scored 5 or above. Of those who scored 5 or above (n=37), 60% reported specifically attributing their responses to heroin, 22% to methadone, 8% to oxycodone, 5% to morphine and 3% to buprenorphine.

9.4 OST medication injection

Due to the introduction of buprenorphine-naloxone film in 2011, questions were included in the 2013 IDRS survey asking about the recent injection (last six months) of opioid substitution treatment (OST) medications (methadone, buprenorphine and buprenorphine-naloxone).

Of the SA sample, 12% of participants reported recently injecting methadone, 5% reported recently injecting buprenorphine, 1% buprenorphine-naloxone 'tablet' and 7% buprenorphine-naloxone 'film'.

Please refer to Larance and colleagues for further information on OST medication injection (Larance et al., 2013).

9.5 Hepatitis C virus testing and treatment

Despite efforts to improve access to antiviral therapy for Hepatitis C virus (HCV) infection and improved treatment outcomes, treatment uptake for chronic HCV infection remains low among people who inject drugs (Doab et al., 2005).

The aim of this module was to assist in determining: (a) the extent of knowledge PWID have regarding a hepatitis C (HCV) diagnosis; (b) their knowledge and perceptions about diagnosis and available treatment, and; (c) the perceived barriers to treatment uptake.

The majority of the sample (94%) had been tested for HCV in their lifetime, with 53% reporting a positive result for HCV antibodies. Of those with a positive result for HCV antibodies, 68% reported this result more than 12 months ago and 32% within the last 12 months. Forty-three percent reported undergoing further testing for HCV (i.e. to determine whether an active virus is present and which genotype). The main reasons for no further testing among those who commented (n=29) were: 'provider didn't mention the need for further tests' (31%) and 'wasn't a priority' (24%) (Table 49).

Among those who received further tests (n=21), 67% reported a polymerase chain reaction (PCR) test (to see if the virus is active) and 43% a PCR viral genotype test. Of those who received a PCR test (n=14), five participants reported that the test showed an active virus. Genotype one and three were the most common genotypes reported among those who received a PCR viral genotype test. The community GP (41%) was the most common location of the last HCV test.

Of those who received a PCR test and reported an active virus (n=5), only two participants reported that they had received HCV medical/antiviral treatment and one reported that the treatment was successful. Treatment is considered successful if the patient clears the virus as proved by a negative PCR result six months or more after treatment finishes. This is referred to as a 'sustained virological result' and is effectively a 'cure'.

Amongst those who reported an active HCV result and commented (n=4), 50% (n=2) were aware of the new HCV treatment. Of those aware of the treatment, one participant reported that they would consider the new HCV treatment, and reported that a GP would be a convenient setting to receive such treatment.

Table 50: Hepatitis C testing and treatment, 2013

	SA N=100
Ever tested for HCV (%)	94
Positive HCV test (%)	n=53
Within last 12 months	32
More than 12 months	68
Further testing for HCV antibody	43
Reasons for no further testing (%)	n=29
Provider didn't mention the need for further tests	31
Wasn't a priority	24
Blood tests are difficult for me	0
Don't feel sick	3
Concerned about confidentiality	3
Other reason	35
Further tests for HCV (%)	n=21
PCR test (see if virus is active)	67
PCR viral genotype test	43
Other	0
Location last tested for HCV (%)	n=22
Community GP	41
OST clinic	9
Specialist clinic	14
Prison	9
Other	27

Source: IDRS participant interviews

9.6 Naloxone program and distribution

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

In 2013, the IDRS included a series of questions about take-home naloxone and naloxone more broadly. Of those who commented (n=100), 64% had heard of naloxone, which is substantially lower than what was reported at the national level (Table 51). Amongst those who had heard of naloxone, three-fifths (61%) reported that naloxone was used to 'reverse heroin', whilst 27% believed that it was used to 're-establish consciousness'. Three per cent said naloxone was used to 'help start breathing' and 24% gave 'other' descriptions of what naloxone did.

Participants were then asked if they had heard about take-home naloxone programs. Of those who commented, 40% reported that they had heard of the take-home naloxone program, whilst 60% had not. When asked if they would support the expansion of the take-home naloxone program, the majority reported that they would 'strongly support' an expansion (67%), 23% reported that they would 'support' an expansion, while 4% reported that they would 'oppose' or 'strongly oppose' an expansion (Table 51). Nine participants reported that they had been resuscitated with naloxone by somebody who had been trained through the take-home naloxone program.

Ten percent of the sample reported that they had completed training in naloxone administration and had received a prescription for Narcan®; of these, 20% (n=2) had used the naloxone to resuscitate an average of one person.

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 (n=90) reported that they would call 000, while 47% reported that they would perform mouth-to-mouth cardiopulmonary resuscitation (CPR; Table 51).

Participants who had not completed training in naloxone administration and commented (n=90) 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. Ninety-one percent reported that they would stay with someone after giving them naloxone, 90% would want their peers to give them naloxone if they overdosed, 89% reported that they would administer naloxone after witnessing someone overdose, and 66% reported that they would carry naloxone on them (Table 51).

Table 51: Take-home naloxone program and distribution, 2013

	National N=857	SA N=100
Heard of naloxone (%)	86	64
Naloxone description (%)	N=729	n=62
Reverses heroin	62	61
Help start breathing	10	3
Re-establish consciousness	33	27
Other	19	24
Heard of the take-home naloxone program (%)	N=857	n=100
Yes	35	40
No	65	60
Expand naloxone program (%)	N=857	n=100
Strongly support	66	67
Support	25	23
Neutral	4	3
Oppose	2	1
Strongly oppose	2	3
Don't know enough to say	2	3
Witness overdose (%)	N=790	n=90
Turn victim on side	37	32
Mouth-to-mouth CPR	46	47
Call 000	94	94
Stay with victim	39	27
Other remedies	18	27
If naloxone was available would you: (%)	N=779	n=90
Carry naloxone if trained	74	66
Administer naloxone after overdose	90	89
Want peers give you naloxone	88	90
Stay after giving naloxone	92	91

Source: IDRS participant interviews

9.7 Oral Health Impact Profile

The oral health of people who inject drugs (PWID) has traditionally been neglected in research, service provision and health promotion. In order to address this issue we included the Oral Health Impact Profile (OHIP-14) (Slade, 1997), an internationally-recognised measure of oral health related quality of life (OHRQoL), in the 2013 IDRS. OHRQoL is defined as an individual's assessment of how oral functional factors, psychological factors, social factors and experience of oro-facial pain or discomfort affect his or her well-being.

The OHIP-14 is a self-filled questionnaire that focuses on seven dimensions of impact (functional limitation, pain, psychological discomfort, physical disability, psychological disability, social disability and handicap) with participants asked to respond according to frequency of impact on a 5-point Likert scale. The scale is coded never (score 0), hardly ever (score 1), occasionally (score 2), fairly often (score 3) and very often (score 4), and

uses a 12 month recall period. However, the IDRS asked participants to respond based on the last three months (instead of 12 months).

For this report the OHIP-14 was divided into the seven dimensions of impact and percentages calculated for those who responded 'occasionally', 'fairly often' and 'very often'. Psychological discomfort had the highest impact with 59% of the sample reporting either 'occasionally', 'fairly often' and 'very often'. This was followed by psychological disability (57%) and physical pain (56%; Table 52).

A mean scale score of the 14 items was computed, with higher scores indicating poorer oral health-related quality of life. Participants can have an overall OHIP-14 total score ranging from zero to 56. Using the 'additive' method, the mean OHIP-14 total score was 14.3 (range 0-54). Twenty-six percent of those who commented scored 'zero' (Table 52).

Table 52: Oral Health Impact Profile 14 short form (OHIP-14) score, 2013

	SA
Dimensions of impact	N=100
Functional limitation	34
Physical pain	56
Psychological discomfort	59
Physical disability	47
Psychological disability	57
Social disability	34
Handicap	37
Mean total scores (range)	14.3 (0-54)
Score of 'zero' (%)	26

Source: IDRS participant interviews

9.8 Discrimination

People who inject drugs often manage complex situations in relation to poor treatment and discriminatory practices. In 2013, a discrimination module was included in the IDRS questionnaire to complement the work that the Australian Injecting and Illicit Drug Users League (AIVL) has initiated with the AIVL National Anti-Discrimination Project (Parr & Bullen, 2010).

Ninety-three percent of the sample commented on the discrimination section. Of those who responded, 44% reported discrimination within the last 12 months, 16% over 12 months ago and 40% reported no discrimination. Amongst those who had experienced discrimination in the last 12 months (n=41), the main location where the discrimination took place was at a pharmacy (34%), followed by police (22%) and a doctor/prescriber (20%). The majority (68%) reported the main reason (perceived) for the discrimination was 'because I'm an injecting drug user (or people think I am)'. The majority (95%) did not try to resolve the discrimination (Table 53).

Table 53: Discrimination among people who inject drugs, 2013

	2013
Ever discriminated against (%)	n=93
Yes, within the last 12 months	44
Yes, but no in the last 12 months	16
No	40
Location of discrimination (%)	n=41
Doctor/prescriber	20
Pharmacy	34
Dentist	2
Health services	5
Government service (e.g. housing or Centrelink)	10
Police	22
Hospital	17
Needle and Syringe Program	2
Drug and alcohol service	5
Prison	5
Other	51
Reason for the discrimination (%)	n=41
Person who injects drugs	68
On OST medication	22
HCV positive	7
HIV positive	2
Other	7
Result of discrimination (%)	n=41
Refused service	2
Taken off/reduced OST medication	2
'Outed' as a person who uses drugs	7
Experienced violence/abuse	0
Lost job	5
Other	81
Tried to resolve discrimination (%)	n=41
No didn't try to resolve	95
Australian Human Rights Commission	0
Health Care Complaint Commission	0
Directly to service provider/organisation	2
Other	2

Source: IDRS participant interviews

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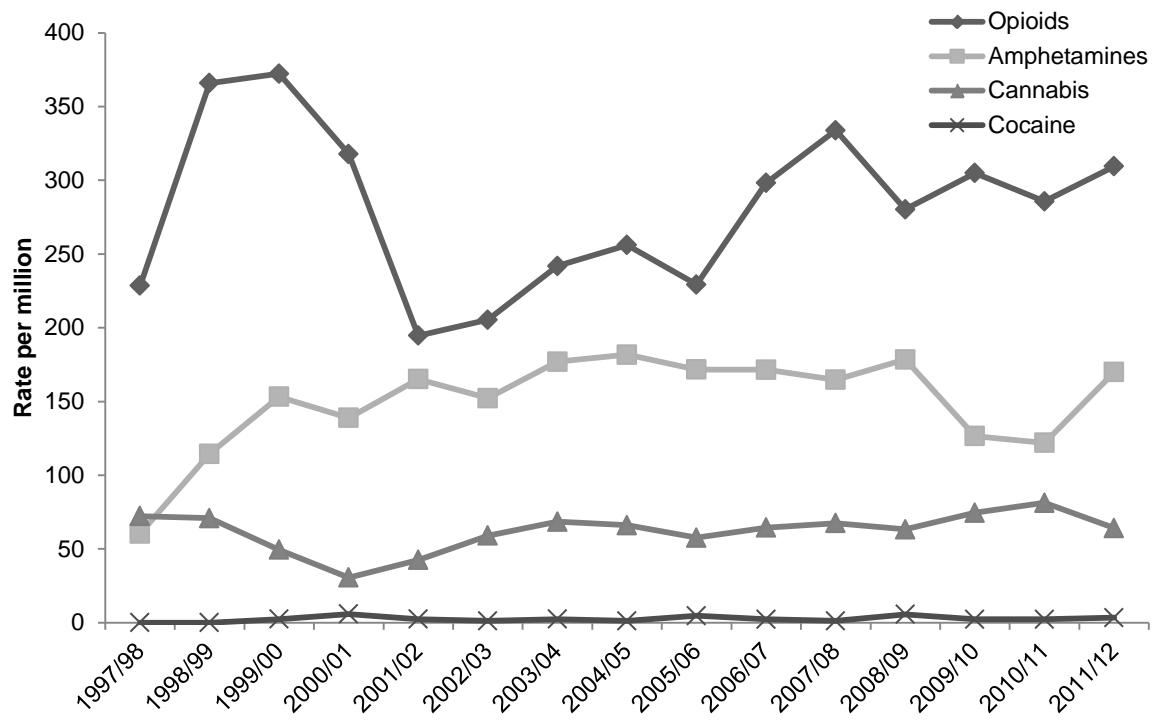
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APPENDIX: SUBSTANCE-RELATED ADMISSIONS TO HOSPITALS IN SOUTH AUSTRALIA AND AUSTRALIA

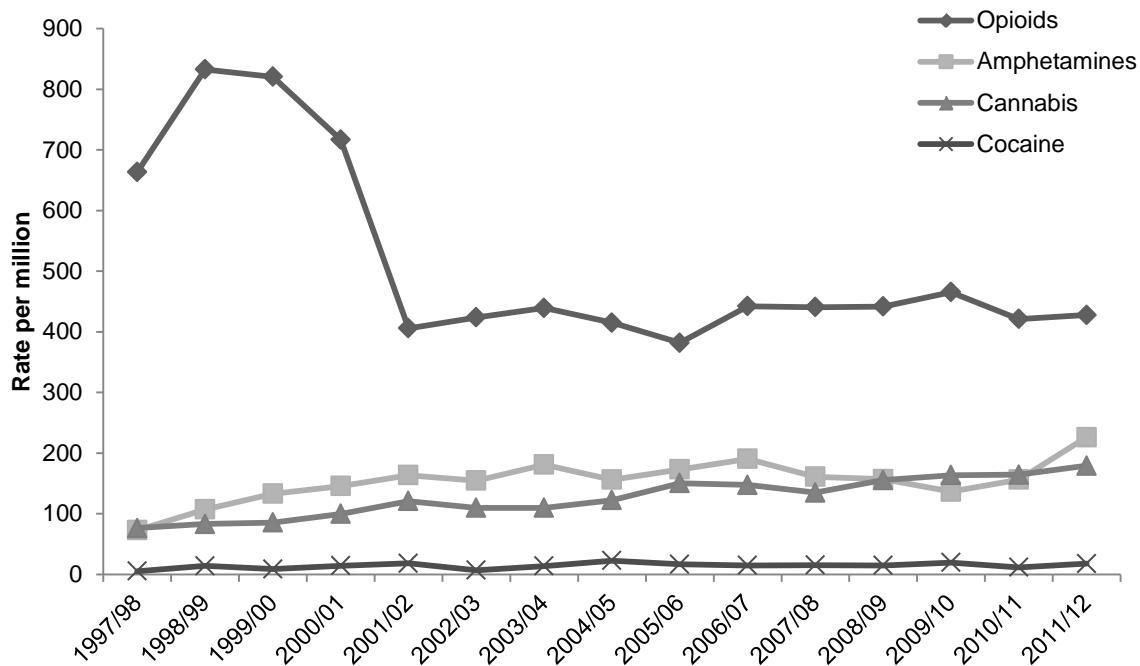
Appendix 1: Rate of substance-related admissions (primary diagnosis) to hospitals in South Australia, 1997/98-2011/12



Source: Australian Institute of Health and Welfare

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, 1997/98-2011/12



Source: Australian Institute of Health and Welfare

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