

Victoria

C. Aitken and P. Dietze

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

Australian Drug Trends Series No. 184

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Campbell Aitken and Paul Dietze

Burnet Institute

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Please note that as with all statistical reports there is the potential for minor revisions to data in this report over its life. Please refer to the online version at www.ndarc.med.unsw.edu.au.

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Abbreviations and acronyms

ABS	Australian Bureau of Statistics
ACBPS	Australian Customs and Border Protection Service
ACIC	Australian Criminal Intelligence Commission
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AGDH	Australian Government Department of Health
AGDHA	Australian Government Department of Health and Ageing
AIHW	Australian Institute of Health and Welfare
AIVL	Australian Injecting and Illicit Drug Users' League
ANSPS	Australian Needle and Syringe Program Survey
AOD	Alcohol and other drugs
ATS	Amphetamine-type stimulants
AUDIT-C	Alcohol Use Disorders Identification Test–Consumption
AV	Ambulance Victoria
BBVI	Blood-borne viral infection
CAPI	Computer Assisted Personal Interviewing
CPH	Centre for Population Health
CPR	cardiopulmonary resuscitation
DPMP	Drug Policy Modelling Project
ED	Emergency department
EDRS	Ecstasy and related Drugs Reporting System
GHB	Gamma-hydroxybutyrate
GP	General Practitioner
HRPS	Harm Reduction and Pharmacotherapy Services
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
IDRS	Illicit Drug Reporting System
IDU	Injecting drug use
IRID	Injection-related injury and disease
K10	Kessler Psychological Distress Scale
LE	Law enforcement
LSD	Lysergic acid diethylamide
MDMA	3,4-methylenedioxymethamphetamine
MSM ¹	¹ Male to male sexual activity
MSM ²	² Methylsulfonylmethane
MVA	Motor vehicle accident
NCIS	National Coroner's Information Service
NDARC	National Drug and Alcohol Research Centre
NDSHS	National Drug Strategy Household Survey
NFOD	Non-fatal overdose

NHMD	National Hospital Morbidity Database
NHS	National Health Survey
NOPSAD	National Opioid Pharmacotherapy Statistics Annual Data
NPS	New psychoactive substances
NRCH	North Richmond Community Health
NSP	Needle and Syringe Program(s)
OST	Opioid substitution treatment
OTC	Over the counter
PBS	Pharmaceutical Benefits Scheme
PCR ¹	¹ Patient care record
PCR ²	² Polymerase chain reaction
PDI	Party Drugs Initiative
PPA	Price, and purity and availability
PTSD	Post-traumatic stress disorder
PWID	People who inject drugs
QDS™	Questionnaire Development System
ROA	Route of administration
RPU	Regular psychostimulant user
SD	Standard deviation
SDS	Severity of Dependence Scale
SEADS	South East Alcohol and Drug Services
SF-12	Short Form 12 Health Survey
SHARPS	Southern Hepatitis/HIV/AIDS Resource and Prevention Service
STI	Sexually transmitted infection
TGA	Therapeutic Goods Administration
THN	Take-home naloxone
UNSW	University of New South Wales
VACIS	Victorian Ambulance Clinical Information System
VDH	Victorian Department of Health
VDHHS	Victorian Department of Health and Human Services
VIFM	Victorian Institute of Forensic Medicine

Glossary of terms

Cap	Small amount of heroin, typically enough for one injection.
Homebake	Illicit preparation of heroin from pharmaceutical preparations containing codeine or morphine.
Illicit/non-prescribed pharmaceuticals	Pharmaceutical drugs (e.g. antidepressants, antipsychotics, benzodiazepines, morphine, oxycodone, methadone, buprenorphine) obtained from a prescription in someone else's name, or through buying them from a dealer or obtaining them from a friend or partner etc. This definition does not take into account the inappropriate use of prescribed pharmaceuticals such as the injection of buprenorphine or morphine.
Licit/prescribed pharmaceuticals	Pharmaceutical drugs obtained by a prescription in the user's name. This definition does not take into account 'doctor shopping' practices; however, it differentiates between prescriptions for self as opposed to pharmaceutical drugs purchased through a dealer or prescribed to a friend or partner etc.
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 or swallowing.
Point	0.1 gram of drug (usually heroin, speed or ice), although may also be used as a term referring to an amount for one injection (similar to 'cap'; see above).
Recent injection	Injection (typically intravenous) during the six months preceding interview.
Recent use	Use during the six months preceding interview via one or more of the following routes of administration—injecting, smoking, snorting or swallowing.
Session	A single continuous period of drug use.
Use	Use via one or more of the following routes of administration—injecting, smoking (inhalation), snorting (insufflation) or swallowing (oral ingestion).

Guide to days of use/injection

180 days	Daily use/injection* during the preceding six months
90 days	Use/injection* every second day during the preceding six months
24 days	Weekly use/injection* during the preceding six months
12 days	Fortnightly use/injection* during the preceding six months
6 days	Monthly use/injection* during the preceding six months

*As appropriate

Executive summary

Background

In 1998, the Australian Government Department of Health and (AGDHA) commissioned the National Drug and Alcohol Research Centre (NDARC) to implement a national Illicit Drug Reporting System (IDRS) to monitor emerging trends related to the use of heroin, methamphetamine, cocaine and cannabis in the Australian community. The IDRS study provides nationally comparable data with respect to patterns of injecting drug use (IDU) and related harms and informs future policy and research initiatives.

The majority of available data related to patterns of illicit drug use and associated morbidity and mortality are *lag indicators*, meaning the most recent data available may be up to 12 months old and therefore insufficient for strategic early warning purposes on their own. The IDRS serves as a strategic early warning mechanism because it supplements available secondary indicator data sources with *lead indicators*, such as direct surveys with groups of people who inject drugs (PWID) and key experts (until 2016) from each capital city in Australia. Findings from successive IDRS studies conducted in metropolitan Melbourne have informed health, law enforcement (LE) and community sector responses to illicit drugs in Victoria since 1997. Some recent examples of use of the IDRS methodology and/or Victorian data are:

- An evaluation of measures of needle and syringe program coverage (McCormack et al., 2016);
- Research to better understand dental care access and the oral health-related quality of life among PWID (Truong et al., 2015);
- Research that builds on previous work examining health and social differences between homeless and stably housed people who use drugs (Whittaker et al., 2015);
- Research examining Victorian trends in methamphetamine use (Lim, Cogger, Quinn, Hellard, & Dietze, 2015)
- Policy development and review activities and inquiries conducted by the Victorian Government (Law Reform Drugs and Crime Prevention Committee, 2014);
- Research exploring the prevalence and correlates of quetiapine use (Reddel et al., 2014);
- The annual *Victorian Drug Statistics Handbook* (Victorian Department of Health, 2013c);
- Research examining the use of alprazolam among PWID in Melbourne (Horyniak, Reddel, Quinn, & Dietze, 2012);
- Research into the relationship between age and risky injecting behaviours and age-related differences in patterns of criminal involvement among successive national samples (Horyniak et al., 2014; Horyniak et al., 2013); and
- Research into the self-reported wellbeing of PWID (Dietze et al., 2010).

Victorian IDRS data have also been disseminated widely at conferences and community forums, as well as through posters, quarterly bulletins, magazine articles and peer-reviewed publications.

Summary of 2017 Victorian IDRS methodology

The Centre for Population Health (CPH) at the Burnet Institute conducted the Victorian arm of the 2017 IDRS study between May and June 2017. The project consisted of:

1. A structured survey of 150 PWID recruited from six sites across metropolitan Melbourne; and
2. Analyses of Victorian and national secondary indicator data related to illicit drug use.

Data collected via these three methods were analysed in order to identify illicit drug-related trends in Melbourne for the 2016/17 financial year. Where appropriate, these data were also compared to IDRS findings from 2000 to 2016.

Demographics of the sample

The 2017 Victorian IDRS sample consisted of 150 PWID. Participants' demographic characteristics were largely unchanged from previous surveys. Twenty per cent identified as Indigenous, as opposed to 10% in 2016. At the time of interview, 89% were unemployed and 95% received a government pension, allowance or benefit, with a mean weekly income of \$777 reported. Fifty per cent of participants were in drug treatment at the time of interview (45% in 2016), and 66% (up from 58% in 2016) reported a prison history.

Consumption patterns

Current patterns of use

In 2017, the mean age at which participants first injected was 19 years; a smaller percentage reported first injecting heroin (43%) than methamphetamine (53%). As in previous years, heroin was the most common drug of choice (65%), drug injected most in the past month (63%) and last drug injected (63%). Thirty-nine per cent reported injecting at least once per day.

Heroin

Patterns of heroin use in 2017 were very similar to previous years. The prevalence of recent heroin use was 81%, whereas prevalence of recent injection rose (non-significantly) in 2016 (79%). Frequency of heroin use fell to 72 days in the past six months (about three times per week); the percentage of daily users (27%). Among recent users, white or off-white rock was the form of heroin used most (67%).

Methamphetamine

The IDRS collects information on the use and market characteristics of speed, crystal methamphetamine (ice), and base methamphetamine—the three main forms of methamphetamine available in Australia. In 2017, 27% nominated methamphetamine as their drug of choice. From 2016 to 2017 lifetime (96%) methamphetamine use (any form) was stable, but recent use fell from 74% to 66%. Frequency of use was higher than in 2016, with recent methamphetamine users reporting a median of 24 days use (approximates to weekly use) in the preceding six months.

Cocaine

Between 2016 and 2017 the prevalence of lifetime cocaine use fell (from 67% to 57%); the prevalence of recent use rose from 9% to 12%, and the lifetime prevalence of injection fell from 39% to 34%. Only 1% of the sample nominated cocaine as their drug of choice. Use was infrequent, occurring on a median of three days in the past six months.

Cannabis

In 2017, cannabis was the second most common illicit drug used by Victorian IDRS participants after heroin and methamphetamine. While 94% reported lifetime use, 71% reported recent use. Median frequency of recent cannabis use was 180 days in 2017 (approximately daily). Recent users reported smoking hydroponically grown cannabis most often.

Opioid substitution treatment (OST) medications

Methadone

In 2017 the prevalence of recent methadone use was 37%, versus 45% in 2016; the median frequency of use rose slightly to 180 days in the past six months. Few reports of recent Physeptone® use were received. Prevalence of recent *prescribed* methadone use (33%) fell slightly, as did recent non-prescribed use (7%). Consistent with previous years, the median frequency of recent non-prescribed use was low at three days in the past six months.

Buprenorphine

From 2016 to 2017, there was a non-significant decrease in lifetime buprenorphine use (to 56%). Prevalence of recent use was 9%, and median frequency of use was 14 days in the preceding six months. Lifetime prevalence of *non-prescribed* use was the same as in 2016 (33%), and *recent non-prescribed* use remained at 6%. Prevalence of recent buprenorphine injection was stable (7%).

Pharmaceutical opioids

Morphine

Over the past 10 years there has been an overall trend of declining morphine use among Victorian IDRS participants. However, between 2016 and 2017 lifetime prevalence of morphine use rose to 63%, but recent use fell (9%). Use was infrequent: *non-prescribed* injection was reported by 6% of participants on four days (median) in the past six months.

Oxycodone

In 2017, the prevalence of lifetime oxycodone use (49%) fell from 55% in 2016 and 75% in 2015; recent use was stable at 15%. Median frequency of use was five days (about once a month) in the past six months. *Non-prescribed* injection prevalence (6%) was lower than in 2016.

Fentanyl

Prevalences of fentanyl use were low: lifetime use and injection were 15% and 11%. Five per cent of participants reported recent injection, on a median of two days in the past six months.

Other opioids (not elsewhere classified)

Between 2016 and 2017 the prevalence of use of extra-medical opioids (other than those listed above) rose from 27% to 41%, but recent use fell slightly (9% to 7%). No respondents reported recent injection.

Over-the-counter (OTC) codeine

Lifetime extra-medical use of OTC codeine was reported by 33%; recent use was reported by 11%. Median frequency of use was 5 days in the past six months. One per cent of participants reported OTC codeine injection.

Benzodiazepines

Benzodiazepines (other than alprazolam)

In 2017 lifetime use of benzodiazepines other than alprazolam was 84%, as in 2016. Recent use was 48%. Recent users reported using diazepam (78%) most, followed by clonazepam (11%). Recent *prescribed* use prevalence fell (34%), while *non-prescribed* use fell significantly (21%). The median frequency of non-prescribed use was six days in the preceding six months.

Alprazolam

Prevalences of lifetime and recent alprazolam use were stable between 2016 (63% and 17%) and 2017 (65% and 16%). Alprazolam was rescheduled from a Schedule 4 to Schedule 8 drug in February 2014 (meaning that treatment permit applications are authorised for specialist short-term indications only, making the drug harder to access). Unlike other benzodiazepines, lifetime (56%) and recent (13%) *non-prescribed* use was higher than *prescribed* lifetime (22%) and recent use (3%). A median frequency of five days of non-prescribed use was reported.

Other drugs

Quetiapine

In 2017, prevalences of lifetime and recent use of quetiapine fell (54% and 21%). Median frequency of use was 13 days in the past six months. No reports of recent injection were received. The prevalences of recent *prescribed* (10%) and *non-prescribed* (12%) use were not significantly different, but prescribed users reported daily use (median, 180 days) and non-prescribed users reported a median of four days use.

Pharmaceutical stimulants

Prevalence of lifetime pharmaceutical stimulant use (44%) and injection (19%) were not significantly different from 2016; few (1%) reported recent injection. Recent use (5%) did not change significantly, with a median of eight days use reported.

Ecstasy

Lifetime and recent ecstasy use prevalences were similar to previous years (62% and 3%); recent users reported a median frequency of three days use. Over time, recent ecstasy use has fallen considerably among Victorian IDRS participants. Only 1% reported recent injection.

Hallucinogens

Few participants reported recent hallucinogenic drug use: 4% reported a median of two days of use in the past six months. One per cent reported recent injection.

Inhalants

The lifetime prevalence of inhalant use rose to 20% in 2017; 1% of participants reported recent use.

Steroids

In 2017, 9% of IDRS participants reported lifetime steroid use and 2% reported recent use.

Alcohol, tobacco and e-cigarettes

From 2016 to 2017 recent alcohol use fell slightly (from 57% to 55%). Oral consumption was the only ROA reported, occurring on a median of 84 days (about twice per week) in the previous six months. The prevalence of tobacco smoking was similar to previous years: 93% reported daily tobacco use in the past six months. Lifetime prevalence of use of e-cigarettes was 29% and recent use 14%, but use was very infrequent (median two days in the past six months).

New psychoactive substances (NPS) and synthetic cannabinoids

For the fifth time, in 2017 participants were asked about their use of NPS and synthetic cannabinoids. Twenty-three per cent reported lifetime NPS use, up from 6% in 2016; 11% reported recent use (median, four days). Lifetime use of synthetic cannabinoids was stable (23%), as was recent use (10%). Recent synthetic cannabinoid users reported smoking synthetic cannabinoids on two days (median) in the past six months.

Drug market: Price, purity, availability and purchasing patterns

Heroin

In 2017 median prices for heroin were \$250 for 1.0 gram, \$40 for a cap and \$100 for 0.25g. Participants most commonly reported purchasing 0.5 gram and paying \$150. Almost all (94%) reported that heroin was very easy or easy to obtain; 84% reported no recent changes to availability. Heroin was most commonly sourced from a known dealer (48%), at an agreed public location (40%), from a dealer's home (20%), or via home delivery (12%). The overall average purity of heroin seized in 2016/17 was 31%, vs. 26% in 2015/16.

Methamphetamine

In 2017, only six participants reported purchasing speed, and no participants reported purchasing *base*. Participants most commonly reported purchasing 0.5 gram of *ice* for \$200 (median), \$50 less than in 2016. *Ice* was reported as easy or very easy (95%) to obtain; 78% reported no recent changes to availability. *Ice* purity was reported as high (29%) or medium (27%). In 2016/17, the overall average purity of methamphetamine seized was high (71%). By contrast, purity of amphetamine seizures was low (8%).

Cocaine

In 2017 only one participant reported on the price of cocaine, so median price is not reported. In 2016/17 the overall average purity of cocaine seized was 51%, similar to previous periods.

Cannabis

Median reported prices for 1.0 gram and 1.0 ounce of hydroponically grown cannabis were consistent with previous years, while the price of 0.25 ounce fell slightly; 91% of respondents reported no recent price changes. Most (95%) reported that hydroponic cannabis was very easy or easy to obtain and 92% reported no recent changes to availability. Two bush-grown cannabis purchasers reported that it was easy to obtain. Friends and known dealers were the most common sources for hydroponic cannabis. Hydroponic cannabis potency was reported as high (54%) to medium 35%) and 69% reported no recent changes.

Methadone

Only one participant commented on the market characteristics of non-prescribed methadone, so price data are not reported. This participant suggested that non-prescribed methadone had become more difficult to obtain.

Buprenorphine

In 2017, only two participants commented on the market characteristics of non-prescribed buprenorphine. Their views on ease of access were conflicting.

Buprenorphine-naloxone film

Five participants commented on the market characteristics of non-prescribed buprenorphine-naloxone film. They paid \$5–\$20 for 8 mg film; prices were described as stable in the past six months, and access as easy.

Morphine

In 2017, four participants commented on the market characteristics of morphine. They last bought 100mg of MS Contin® for \$40 or \$50. Views on price stability varied dramatically.

Oxycodone

Only one report was received regarding the market characteristics of *non-prescribed* oxycodone. This participant reported that oxycodone was difficult to obtain and had become more so in pre preceding six months.

Alprazolam

In 2017, only one participant reported purchasing *non-prescribed* alprazolam, and no specific market characteristics were reported.

Health-related trends associated with drug use

Overdose and drug-related fatalities

In 2017, the prevalence of reported lifetime accidental heroin overdose (46%) was higher than in 2016 and 2015 but similar to previous years; the median number of lifetime overdoses was two. Among those with a history of overdose, the past year prevalence was 35%, slightly higher than in 2016 (32%). Sixty-one per cent of this group reported receiving naloxone.

In 2016, Ambulance Victoria (AV) attended 1185 non-fatal heroin overdoses in Melbourne, 7% more than the 1104 overdoses attended in 2015. In 2014 and 2015, 115 and 80 deaths respectively were officially defined as heroin-related, and 61 to date have been recorded as such for 2015 (an underestimate given the likelihood of unresolved ongoing cases).

Drug treatment

Drug treatment access among participants

In 2017, 50% of participants were in drug treatment at interview, most commonly methadone (31%) and Suboxone® (12%). Thirty-three per cent reported receiving drug treatment in the six months before interview, most commonly methadone (80%) or buprenorphine-naloxone (10%).

Specialist alcohol and other drug (AOD) treatment services

During 2016/17, 61,030 courses of treatment were delivered to an estimated 31,679 clients¹ in Victorian specialist alcohol and drug treatment services². In 2016/17, alcohol was the most commonly cited drug of concern (followed by amphetamine, cannabis, and heroin), comprising 25% of all clients and 29% of courses of treatment. Amphetamine was cited as a drug of concern in 12,234 courses of treatment delivered to 7,150 clients, increases of 11% and 9% respectively over 2015/16.

DirectLine

In 2016 DirectLine responded to 33,639 alcohol and drug-related calls, with a drug of concern³ identified in just over three quarters. Between 2015 and 2016, the number of calls to DirectLine changed very little (33,722 in 2015). Alcohol was nominated as a drug of concern in over 40% of all drug-identified calls, amphetamines & other stimulants in over 24% (most – over 20% – relating to ‘ice’), pharmaceutical opioids in 13%, cannabis in 11%, and heroin in 6%.

Pharmacotherapy consumers

As at July 2015, 14,122 people were dispensed pharmacotherapy treatment in Victoria, a decrease of 1% from 2014. Almost two-thirds (66%) were dispensed methadone and almost one-third (31%) were dispensed buprenorphine-naloxone (Suboxone®). Only 3% of pharmacotherapy consumers were dispensed buprenorphine (Subutex®).

Hospital admissions

Between 2013/14 and 2014/15 there was a 4% increase in opioid-related hospital admissions in Victoria to 1433, 23% of the Australian total. Hospital admissions with a cannabis-related primary diagnosis increased by 34% between 2013/14 and 2014/15 to 789, now comprising 25% of the Australian total. Admissions with an amphetamine-related primary diagnosis in Victoria increased by 68% between 2013/14 and 2014/15 to 2029, accounting for 32% of the Australian total. Cocaine-related hospital admissions remain relatively low in Victoria as a proportion of population, despite an increase from 40 to 78 admissions between 2013/14 and 2014/15.

Injecting risk behaviours

Injecting equipment access, reuse, access and related problems

Eight per cent reported borrowing a used needle in the past month (down from the 13% recorded in 2016), 50% on one occasion only, and most commonly from a sex partner (64%). In 2017, 15% reported lending a used needle to someone else in the preceding month, and 39% reported reusing their own needle. Almost all (94%) reported accessing a Needle and Syringe Program (NSP) in the past month, yet 10% reported trouble obtaining sterile injecting equipment when they needed it. Most (76%) reported last injecting into their arm; few reported injecting into their hand or wrist (10%), neck (6%), leg (3%), groin (3%), or foot (1%). Sixty-six per cent reported injecting in private locations, 17 in a street or park. Seventy per cent reported injection-related health problems.

¹ Clients in specialist alcohol and drug services include both drug users and non-users. Non-users may include partners, family or friends.

² Federal and state government funded.

³ A caller or user may have more than one drug of concern and totals have been adjusted for multiple drugs of concern.

Blood-borne viral infections (BBVI)

In 2016 three new human immunodeficiency virus (HIV) diagnoses in which IDU was the likely exposure were notified, comprising 0.9% of all new Victorian infections for the year. There were another 10 HIV notifications in which the likely exposures were male-to-male sexual activity (MSM) and IDU. The hepatitis C virus (HCV) continues to be a serious public health problem; in 2016 the estimated prevalence of HCV (antibodies) was 67% among Victorian Australian Needle and Syringe Program Survey (ANSPS) participants, significantly higher than in the national ANSPS sample (51%).

Alcohol Use Disorders Identification Test-Consumption (AUDIT-C)

The AUDIT-C is a reliable measure of alcohol dependence, alcohol use disorder and risky consumption; a cut-off of five or more indicates a need for further assessment. In 2017, the mean AUDIT-C score was 5.5, down from 5.9 in 2016. Fifty-three per cent of those who reported alcohol consumption in the past year scored five or more on the AUDIT-C. The mean score for men was non-significantly higher than for women (5.8 vs. 5.4).

Mental health problems and psychological distress

Self-reported mental health problems

In 2017, 49% of Victorian IDRS participants reported experiencing a mental health problem in the past six months. Among these, the prevalence of self-reported depression was 48%. Of those with a self-reported mental health problem, 69% reported attending a health professional, most commonly a GP, a psychiatrist or a psychologist. Psychotropic medication was prescribed to 59% of those with mental health issues, most commonly benzodiazepines, antipsychotics and antidepressants. Very few were prescribed mood stabilisers.

Kessler Psychological Distress Scale (K10)

According to the K10, the prevalence of psychological distress was very high in the 2017 sample (only 89 of 150 participants completed the K10); 95% were classified as having high or very high psychological distress in the four weeks prior to interview. By comparison, only 10% of the 2007/08 National Health Survey (NHS) sample was classified as having high or very high psychological distress in the preceding four weeks.

Short Form 12 Health Survey (SF-12) self-rated overall health

In 2017, participants were administered the first question of the SF-12, which asks respondents to self-rate their overall health during the past four weeks. Almost one quarter rated their health as fair and nearly half as good, similar to the figures in 2016.

Driving risk behaviour

In 2017, 25% reported driving a car, motorcycle, or other vehicle in the preceding six months, a slightly lower proportion than in 2016 (29%, $p = 0.438$). Eight per cent of recent drivers reported driving under the influence of alcohol; 76% reported using illicit drugs before driving. The median frequency of 'drug driving' occasions among this group ($n=38$) was once per month in the past six months. Participants who drove after consuming drugs most commonly reported driving after using heroin ($n=21$), cannabis ($n=2$) and crystal/ice ($n=5$).

Law enforcement-related trends associated with drug use

Self-reported criminal involvement

In 2017, 45% reported an arrest in the past months. Among these, the main reasons reported for arrest were property crime (15%), and use and/or possession of drugs (5%). Thirty-five per cent reported that they were involved in crime in the month prior to interview, slightly lower than in 2016 (38%).

Consumer and provider arrests

In 2015–16, consumer arrests outnumbered arrests of providers for all drug types both in Victoria and across Australia. For instance, in Victoria consumer arrests accounted for 93% of all heroin and other opioid-related arrests, 95% of all ATS-related arrests, 98% of all cocaine-related arrests and 96% of all cannabis-related arrests.

Expenditure on illicit drugs

Just under half (49%) of the 2017 Victorian IDRS sample reported purchasing illicit drugs on the day prior to interview, with a median reported spend of \$100.

Special topics of interest

Naloxone

Since 2013 the IDRS has included questions about participants' knowledge of and attitudes to naloxone, the short-acting opioid antagonist, and take-home naloxone (THN) in particular. Among the Victorian sample in 2017, 94% had heard of naloxone.

Opioid and stimulant dependence

The Severity of Dependence Scale (SDS) is designed to measure psychological dependence on a range of substances. A cut-off score of four indicates methamphetamine dependence and a cut-off of five indicates dependence on heroin. In 2017 the SDS was administered to 122 recent heroin and other opioid users; the mean SDS score was 7.8, with 75% of participants meeting the cut-off for dependence. The SDS was also administered to 84 recent methamphetamine and other stimulant users, yielding a mean score of 3.7; 46% met the cut-off for stimulant dependence (overwhelmingly methamphetamine).

Conclusions

The results of the 2017 Victorian IDRS indicate that, while illicit drug markets in Melbourne remained stable during the preceding twelve months in most respects, a few changes occurred.

Key findings from the 2017 IDRS include:

- Stable and high prevalence of heroin use among 11 consecutive Victorian IDRS samples and, although median frequency of use fell to approximately three days per week in 2017, little change was reported in relation to market characteristics for the drug, other than the median price for one gram increasing by \$20. Overall heroin purity remains low, according to Victoria Police seizure data (31%) and participant subjective reports. To end 2016, 132 fatalities were officially defined as heroin-related, the highest figure since 2000. Fifty per cent of participants reported being in drug treatment at interview, most commonly methadone and buprenorphine-naloxone OST, a small increase from 45% in 2016 but still below the 60% recorded in 2015.
- The prevalence of lifetime methamphetamine use among IDRS participants changed little between 2016 and 2017, with the proportion reporting using the drug in the past six months fell from 74% to 66%. Despite high use prevalence, only 27% nominated methamphetamine as their preferred drug. However, in 2017, the proportion who reported that methamphetamine was the first drug they had injected was significantly higher than in 2016 (53% vs. 41%, $p = 0.038$). Frequency of use increased from 14 to 24 days in the previous six months. Data from successive years show that from 2011, Victorian IDRS samples have “switched” from lower potency speed to higher potency ice, which recent research shows is decreasing in price relative to purity (Scott, Caulkins, Ritter, Quinn, & Dietze, 2015), making it more cost-effective to use for people who (historically) prefer heroin. Indeed, Victorian LE agency data also show that purity of seized methamphetamine has been significantly higher during the last five financial years. Victorian ADIS drug treatment data show that amphetamine has overtaken cannabis and heroin to become the second most commonly cited drug of concern in 2016/17, behind alcohol.

- For the past 12 years, there has been a trend of declining morphine use and injection among Victorian IDRS participants. After several years of stability, IDRS participants' oxycodone use and injection prevalences fell substantially between 2015 and 2016. Relative to heroin, in the IDRS low frequency patterns of use and cheaper prices suggest that pharmaceutical opioids are used opportunistically by PWID in Victoria as a substitute for heroin.
- Recent use of benzodiazepines (other than alprazolam) increased non-significantly, while prevalences of alprazolam use fell slightly. Alprazolam was rescheduled from a Schedule 4 to Schedule 8 poison in February 2014, restricting access to specialist short-term indications only. More commonly, IDRS participants are prescribed benzodiazepines other than alprazolam, whereas alprazolam is typically obtained from non-prescribed sources. According to the 2017 IDRS, the prevalence of recent use of non-prescribed benzodiazepines fell significantly, from 39% to 22%. Among users, the median frequency of non-prescribed use of benzodiazepines (other than alprazolam) was six days in the previous six months, as opposed to four in 2016.
- Naloxone awareness among IDRS participants remains very high (94%).

On the basis of these findings, we recommend:

1. **Continued monitoring of illicit drug markets** for changes in trends in the prevalence and patterns of drug use and injection, and price, purity and availability, and continued monitoring of related health and social outcomes among the ageing cohort of PWID in Melbourne. Monitoring should be extended to cover current gaps such as young PWID (particularly young initiates to heroin injection) and non-injectors of all ages (e.g. methamphetamine smokers) through novel recruitment methods given the relatively hidden nature of these populations.
2. **Commissioning research to examine the prevalence and patterns of methamphetamine use**, injection and inhalation not only in Melbourne, but in regional Victoria. Funding research to develop an evidence base for better access and support for effective treatment options for people who use this drug, focusing on long-term treatment options. Credible harm reduction education campaigns delivered by credible voices targeted to users pointing to the harms associated with heavy and dependent use. Reducing the negative impacts of stigma associated with ice use in the Victorian media.
3. **Continued expansion of OST programs across Victoria**, as well as ongoing consideration of full subsidisation of the OST system, even if (in the short term) only for vulnerable populations of PWID, such as pregnant women, ex-prisoners, and people living with HIV, in line with the Victorian pharmacotherapy review (King, Ritter, & Berends, 2011). Initiatives should include incentives for GPs to become pharmacotherapy prescribers.
4. **Continued monitoring of the prevalence, patterns and sources of prescribed and non-prescribed alprazolam and other benzodiazepine use**, given the rescheduling of alprazolam from Schedule 4 to Schedule 8 in February 2014. Research that examines the positive and negative outcomes associated with this policy change, including any unintended consequences such as increases in other types of benzodiazepine and/or psychotropic medication use.
5. **Continued support to increase access to THN programs for PWID.**

1. Introduction

In 1998 the Australian Government Department of Health and Ageing (AGDHA) commissioned the National Drug and Alcohol Research Centre (NDARC) to implement a national Illicit Drug Reporting System (IDRS), following a successful pilot study in Sydney in 1996 and a multi-state trial in 1997 (Hando & Darke, 1998; Hando, Darke, Degenhardt, Cormack, & Rumbold, 1998; Hando, O'Brien, Darke, Maher, & Hall, 1997). The 1998 IDRS study was conducted in New South Wales (NSW), Victoria and South Australia (SA) (McKetin, Darke, Hayes, & Rumbold, 1999), with each jurisdiction undertaking a survey of people who inject drugs (PWID), a key expert survey and analyses of available secondary indicator data. In 1999 the IDRS study was replicated in NSW, Victoria and SA, with all other remaining states and territories participating through the collection of secondary indicator data and completion of key expert interviews. In 2000 the IDRS became a truly national drug trend monitoring system when all states and territories conducted the study using the same methodology. 2017 was the 19th year in which the IDRS was conducted in Melbourne.

The aim of the IDRS is to monitor emerging trends related to the use of heroin, methamphetamine, cocaine and cannabis. The IDRS provides nationally comparable data in relation to patterns of illicit and injecting drug use (IDU) and associated harms and inform future policy and research initiatives.

The *Victorian Drug Trends 2017* report summarises data collected during May and June 2017 as part of the Melbourne arm of the 2017 IDRS. The findings contained herein pertain to the 2016/17 financial year unless otherwise indicated. The report outlines the methods used to collect data for this period and then presents an overview of the socio-demographic characteristics and recent drug use of participating PWID. The report then presents main findings for recent trends in the use of heroin, methamphetamine, cocaine, cannabis and other drugs, including pharmaceutical opioids. Following this, drug-related harms, general health and other issues are examined.

For interactive statistics and mapping on alcohol, illicit and pharmaceutical drug use among the broader Victorian population, readers should refer to the AODstats website (www.aodstats.org.au), which replaces the annual *Victorian Drug Statistics Handbook* series (Turning Point Eastern Health, 2014). Readers are also referred to the forthcoming Australian Drug Trends 2017 monograph for national IDRS data and jurisdictional comparisons.

1.1. Study aims

The primary aims of the 2017 Victorian IDRS were to:

- document patterns of heroin, methamphetamine, cocaine and cannabis use, and illicit drug market characteristics (i.e. price, purity, and availability) among PWID in Victoria;
- identify drug-related harms and relevant trends among this population; and
- detect emerging drug trends of national significance that may require further in-depth investigation.

2. Method

The 2017 IDRS replicated the methodology used for the study each year since 1997 with respect to the quantitative survey of PWID (i.e. the participants) and analyses of indicator data related to the use of illicit drugs in Victoria. Interviews with key experts (from a variety of professional settings) were not part of the 2017 IDRS. Information provided through the triangulation of these three data sources is used to identify emerging trends in drug use and illicit drug markets in Melbourne.

2.1. Survey of people who regularly inject drugs

Structured face-to-face interviews were conducted with 150 PWID recruited from metropolitan Melbourne in May and June 2016. To be eligible to participate in the study, participants were required to have injected drugs at least monthly in the six months preceding interview and to have resided in Melbourne for the duration of the previous 12 months. Convenience sampling was facilitated by recruitment notices at NSP, staff at these services advising potential participants of the research, and snowballing (i.e. the recruitment of participants' friends and associates via word-of-mouth).

Six agencies assisted the 2017 IDRS team with recruitment and provided interview sites for the PWID survey component of the research:

- Access Health (Salvation Army), St Kilda;
- InnerSpace (North Yarra Community Health), Collingwood;
- NRCH NSP (North Richmond Community Health), North Richmond;
- South East Alcohol and Drug Services (SEADS, Monash Health), Dandenong;
- Southern Hepatitis/HIV/AIDS Resource and Prevention Service (SHARPS, Peninsula Health), Frankston; and
- 131B (Dr Sherman's rooms), Footscray.

The structured interview schedule administered to participants in 2017 comprised core questions used in previous IDRS studies conducted in Melbourne, as well as other measures detailed in Chapter 8 (Special Topics of Interest). Survey items included questions covering participants' socio-demographic characteristics, drug use history, perceptions of drug market characteristics (including price, and purity and availability (PPA)) for the main illicit drugs under investigation, as well as criminal involvement, risk behaviours, mental and physical health. The average duration of each interview was approximately 50 minutes (range=30–100 minutes) and survey participants were reimbursed \$40 for their time, expertise and out-of-pocket expenses. Ethics approval was obtained from the Alfred Hospital Human Research Ethics Committee and the Victoria Police Human Research Ethics Committee.

2.2. Other indicators

Information collected from the PWID interviews was supplemented by data obtained from secondary indicator sources. Data relating to trends for the 2016/17 financial year are reported unless otherwise indicated. For secondary indicators, where current data were unavailable, the most recently available data are included.

Indicator data sources presented in this report include:

Surveys reporting on the prevalence of illicit drug use in Victoria

- Data on the prevalence of drug use in the general community are typically derived from large-scale population surveys. The most recent population survey providing estimates on the

prevalence of illicit drug use within the Australian community is the 2013 National Drug Strategy Household Survey (NDSHS) (Australian Institute of Health and Welfare, 2014b).

Drug seizure purity levels

- The Drug Analysis Branch of the Victoria Police Forensic Services Department conducts analyses of purity for all drug seizures made by the Victoria Police. Since 2001, the Victoria Police Forensic Services Department has provided drug purity data for inclusion in the Victorian IDRS report. This report presents data for the 2016/17 financial year.

Drug-related arrest data

- Information pertaining to drug-related arrests in Victoria has been obtained from the Australian Criminal Intelligence Commission (ACIC). The Victoria Police and the Australian Federal Police (AFP) provide arrest data to the ACIC for the Illicit Drug Data Report. This report presents drug-related arrest data for the 2015/16 financial year (Australian Criminal Intelligence Commission, 2016).

Specialist drug treatment presentations

- The Victorian Department of Health and Human Services (VDHHS—formerly the Department of Health) funds community-based agencies to provide specialist alcohol and drug treatment services across the state. The collection of client information is a mandatory requirement and occurs via a formalised data collection system called the Alcohol and Drug Information System (ADIS). The ADIS data presented in this report represents courses of treatment and client numbers for the 2016/17 financial year.
- The Harm Reduction and Pharmacotherapy Services (HRPS) unit at the VDHHS maintains a database that records all methadone, buprenorphine and buprenorphine-naloxone permits in Victoria. This database is the primary source of information regarding the characteristics of consumers attending Victorian pharmacotherapy programs for the treatment of opioid dependence. Data from the quarterly census showing the number of clients in treatment for the period January 2000 to June 2016 are presented in this report.
- DirectLine is a Victorian 24-hour specialist telephone service managed by HealthLink (a program of Turning Point, Eastern Health) that provides information on drug use and related issues, referrals and counselling to callers who are concerned about their own drug use or use by significant others. All calls are logged into an electronic database that provides aggregated information about callers' drug(s) of concern, and whether the call relates to the caller or a significant other. Data for the period 2000 to 2016 are presented in this report.

Ambulance attendances at non-fatal drug overdoses (NFOD) and other drug-related events

- In collaboration with AV, Turning Point, Eastern Health manages an electronic database of drug-related ambulance attendances in Victoria that comprises information obtained from electronic patient care records (PCRs) using the clinical information system VACIS®, as well as information previously extracted and coded from paper-based PCRs (for data prior to October 2006). Reliable data are available from June 1998 (Lloyd, 2013). Data for the period 2008 to 2016 are presented in this report.

National Hospital Morbidity Database

- The National Hospital Morbidity Database (NHMD) is compiled by the Australian Institute of Health and Welfare (AIHW). It is a collection of electronic records for admitted patients in public and private hospitals in Australia. *Principal diagnosis* (the diagnosis established after examination that is chiefly responsible for occasioning the patient's episode of care in hospital) has been

reported. This report presents drug-related (opioid, amphetamine, cocaine and cannabis) hospital admissions for Victoria and Australia, from 1999/2000 to 2014/2015.

Heroin-related fatalities

- Mortality information from heroin-related deaths was obtained from data collated by the VDHHS from the National Coronial Information System. This report presents data from 1991 to 2016.

Blood-borne viral infections surveillance data

- Blood-borne viral infections (BBVI) such as HIV and HCV are a major health risk for PWID. The Communicable Diseases Section, Public Health Branch at the VDH records newly diagnosed and unspecified notifications of infectious disease in Victoria. Surveillance data relating to HIV and HCV are presented in this report from 2000 to 2015.
- The Australian Needle and Syringe Program Survey (ANSPS) has been conducted annually by the Kirby Institute (formerly known as the National Centre in HIV Epidemiology and Clinical Research) since 1995. The survey is designed to supplement sentinel BBVI surveillance data via a self-completed short questionnaire on the demographic and behavioural characteristics of voluntary NSP clients together with serological testing of their finger-prick blood samples. Information from the 2008 to 2016 ANSPS data collections is presented in this report (Iversen, Chow, & Maher, 2014; Iversen & Maher, 2015a; Memedovic et al., 2017).

2.3. Data analysis

Distributions of response frequencies are presented as percentages in tables, figures and within text. Medians, interquartile ranges (IQR) and/or ranges are the reported statistics for continuous, non-parametric variables among the full sample ($N = 150$) and in subsamples in which they were relevant (e.g. median days). Where appropriate, t -tests were employed for selected continuous, normally distributed variables⁴, with the mean and standard deviation (SD) reported. Selected categorical variables were analysed using χ^2 tests for percentages. Comparisons of prevalence data from the 2016 and 2017 were performed using a one-sided test of proportions (prtesti). Analyses of 2017 Victorian IDRS data were conducted using IBM SPSS Statistics 20.0 (IBM Corp, 2011) and Stata 13.0 (StataCorp, 2013). P levels of less than 0.05 denote statistical significance.

⁴ Typically, continuous variables among convenience samples are non-parametrically dispersed (or not normally distributed). Hence, these data are best suited to presentation as medians with interquartile ranges (or ranges) and, depending on sampling and methodology, analysis using non-parametric statistical tests.

3. Demographics

3.1. Overview of the 2016 IDRS participant sample

In 2017, we interviewed 150 people who regularly inject drugs (PWID) for the Victorian IDRS. Twenty-five participants were recruited from each of six sites across Melbourne: Collingwood, Dandenong, Footscray, Frankston, North Richmond and St Kilda. Table 1 summarises the demographic characteristics of Victorian IDRS participants from 2013 to 2017.

The age of the cohort remained stable in 2017 at 42 years. As in previous years, almost three-quarters of the sample were men. More than a third reported residing in unstable accommodation, including participants who reported being homeless at the time of interview. The proportion reporting boarding house accommodation rose from 5% to 12%, and the number reporting no fixed address or homelessness increased to 22% (from c15% in 2016). In 2017, 20% of participants identified as Indigenous Australian, twice the proportion recorded in 2016 (Table 1).

As per previous years, most participants were unemployed at the time of interview. Ninety-five per cent reported a government pension, allowance or benefit as their main source of income in the past month. Participants ($n = 147$) reported receiving a mean weekly income of \$418.54 (SD 342.05, median \$392.00, before tax).

Fifty per cent of participants reported being in drug treatment at the time of interview, more than in 2016 (45%, $p = 0.388$).

In 2017, over half (67%, $n = 99$) reported a history of imprisonment, more than in 2016 (58%, $p = 0.123$) (Table 1). Unlike in 2016, a history of incarceration was significantly more common among male than female participants (75% vs. 45%, $p < 0.001$).

Table 1: Demographic characteristics of participants, Victoria, 2013–2017

	2013 (N=150)	2014 (N=150)	2015 (N=150)	2016 (N=150)	2017 (N=150)
Mean age in years (SD)	40 (7.9) [#]	40 (8.8)	42 (7.7)	42 (8.8)	42 (8.0)
Male (%)	71	75	71	71	74
Heterosexual (%)	91	89	91	89	85
Indigenous (%)	13	13	16	10	20
Accommodation (%)					
Own house/flat (includes rental) [^]	54	57	63	61	49
Parents'/family house	5	10	5	10	10
Boarding house/hostel	25	11	17	5	12
Shelter/refuge	0	1	1	3	3
No fixed address/homeless	15	19	7	15	22
Other	1	2	5	4	3
Employment (%)					
Not employed	90	89	85	90	89
Full-time	2	1	3	3	1
Part-time/casual	3	5	7	6	7
Home duties	4	1	1	1	1
Other	1	3	4		3
Mean years of school education (IQR)	9.6 (9–11)	9.9 (9–11)	9.9 (9–11)	9.9 (9–11)	
Tertiary education (%)					
None	61	54	44	56	59
Trade/technical	33	43	48	38	34
University/college	5	3	8	6	7
Government pension, allowance or benefit (%)	94	87	88	91	95
Current drug treatment* (%)	52	66	60	45	50
Prison history[†] (%)	64 [#]	64	50 [#]	58	

Source: IDRS participant interviews

[^] Includes private rental and public housing

* Includes all types of OST and drug counselling. Data missing for one participant (n = 149) in 2015. See Section 6.2 for more detailed information

[#] Data missing for one participant (n = 149) in 2013, and two participants (n = 148) in 2015

[†] Data missing for four participants (n = 146) in 2016

4. Consumption patterns

Victorian IDRS participants' IDU history and patterns of use in the month preceding interview, from 2013 to 2017, are shown in Table 2. In 2017, the mean reported age of initiation to injection was 18.7 years (median 17, IQR 15–21 years). Fewer participants in 2017 reported that their first injection was heroin (43%, vs 53% in 2016, $p = 0.084$), which was not a significant fall; however, more reported that it was methamphetamine in 2017 than 2016 (53% vs. 41% in 2016, $p = 0.038$), a significant increase. Heroin was the most commonly cited drug of choice (65%), drug injected most in the past month (63%), and last drug injected (63%). For the 34 participants who reported injecting a different drug most in the last month to their drug of choice, availability (27%) was the most common reason for doing so. In 2017, the distribution of injection frequency in the past month was similar to distributions in previous years, other than for a much lower percentage of people reporting injecting two or three times a day than in 2016 (Table 2).

Table 2: IDU history and patterns of use in the last month, Victoria, 2013–2017

	2013 (N=150)	2014 (N=150)	2015 (N=150)	2016 (N=150)	2017 (N=150)
Mean age in years at first injection (SD)	19 (5.9)	19 (5.9)	19 (6.6)	19 (5.8)	19 (5.9)
First drug injected (%)					
Heroin	47	45	44	53	43
Methamphetamine	49	50	51	41	53
Other drugs	4	5	6	6	4
Drug of choice (%)					
Heroin	71	65	70	68	65
Methamphetamine	18	23	20	19	27
Cannabis	6	5	4	7	5
Morphine	1	1	1	1	0
Cocaine	2	2	1	2	1
Other drugs	2	4	5	3	2
Drug injected most in last month (%)					
Heroin	69	63	60	66	63
Methamphetamine	20	28	29	30	32
Buprenorphine/buprenorphine-naloxone	7	4	8	1	1
Morphine	2	1	1	1	0
Other drugs	2	4	2	2	4
Last drug injected (%)					
Heroin	69	62	56	60	63
Methamphetamine	20	27	31	33	33
Morphine	2	1	1	2	1
Cocaine	1	1	0	1	0
Buprenorphine/buprenorphine-naloxone	7	5	9	3	1
Other drugs	2	4	2	1	2
Frequency of injecting in last month (%)					
Weekly or less	23	28	19	23	27
More than weekly, less than daily	32	35	40	31	30
Once a day	21	12	11	13	15
Two to three times per day	17	17	20	27	15
More than three times per day	6	7	9	7	9

Source: IDRS participant interviews

4.1. Current drug use

Table 3 summarises the self-reported patterns of lifetime and recent⁵ drug use among 2017 Victorian IDRS participants. In 2017, lifetime use of heroin (95%), various methamphetamine forms (96%), tobacco (96%), alcohol (82%) and cannabis (94%) was near-ubiquitous in the sample, as was lifetime use of prescribed and/or non-prescribed benzodiazepines (84%, including alprazolam) and methadone use (85%). These results were similar to previous years.

The proportion of participants who reported most commonly injecting heroin in the six months preceding interview was 81%, and 64% for methamphetamine.

The illicit drugs participants most commonly reported recently smoking were cannabis (75%) and methamphetamine (30%), most commonly crystal methamphetamine (ice; 25%). Insufflation (snorting) was very uncommon, with only 8% reporting recent cocaine use via this route of administration (ROA). Excluding alcohol (54%), in 2017 the drugs most commonly ingested orally by participants in the six months prior to interview were prescribed and/or non-prescribed benzodiazepines (69%) and methadone (33%), followed by buprenorphine-naloxone (26%) and the antipsychotic medication quetiapine (26%, Table 3).

⁵ In this context, 'recent' refers to use via any route of administration during the preceding six months. See page xi.

Table 3: Drug use history and patterns of drug use in the preceding six months, Victoria, 2017

	Ever used (%)	Ever injected (%)	Injected last 6 months (%)	Median days injected* last 6 months	Smoked last 6 months (%)	Snorted last 6 months (%)	Swallow last 6 months* (%)	Used* last 6 months (%)	Median days used* last 6 months*
Heroin	95	94	81	72	4	1	0	81	72
Home bake heroin	26	25	3	1	0	0	1	4	6
Any heroin	97	94	81	72	6	1	1	81	96
Methadone (prescribed)	74	13	1	–			33	33	180
Methadone (not prescribed)	39	14	3	2 [†]			5	7	3
Physeptone (prescribed)	4	1	0	–	0	0	0	0	–
Physeptone (not prescribed)	11	7	1	5 [‡]	0	0	1	1	8
Any methadone/physeptone	85	23	3	2[†]	0	0	45	37	180
Buprenorphine (prescribed)	42	23	2	180 [†]	0	0	3	4	180
Buprenorphine (not prescribed)	33	25	5	4	0	0	3	6	3
Any buprenorphine	56	35	7	12	0	0	8	9	14
Buprenorphine-naloxone film (prescribed)	43	15	3	11 [‡]	0	0	17	18	136
Buprenorphine-naloxone film (not prescribed)	31	17	5	5	0	0	0	11	6
Any buprenorphine-naloxone**	60	26	7	5	0	0	26	27	66
Morphine (prescribed)	14	5	1	8 [‡]	0	0	2	3	12 [§]
Morphine (not prescribed)	55	52	6	4	0	0	1	7	4
Any morphine	63	53	7	5	0	0	2	9	5

Table 3: Drug use history and patterns of drug use in the preceding six months, Victoria, 2016 (continued)

	Ever used (%)	Ever injected (%)	Injected last 6 months (%)	Median days injected* last 6 months	Smoked last 6 months (%)	Snorted last 6 months (%)	Swallow last 6 months* (%)	Used* last 6 months (%)	Median days used* last 6 months*
Oxycodone, generic (prescribed)	12	7	1	24 [‡]	0	0	3	3	5 [§]
Oxycodone, generic (not prescribed)	35	31	3	5	0	0	2	5	5
Any generic oxycodone	39	33	4					7	
OP oxycodone (prescribed)	6	1	0	6	0	0	2	2	180 [†]
OP oxycodone (not prescribed)	17	11	4	–	0	0	2	5	4
Any OP oxycodone	20	11	4	6				7	
Oxycodone, other (prescribed)	5	2	0	0	0	0	1	1	180 [‡]
Oxycodone, other (not prescribed)	5	3	0	0	0	0	0	0	–
Any oxycodone, other	9	5	0					1	
Any oxycodone (prescribed)		9	1					4	
Any oxycodone (not prescribed)		37	6					8	
Any oxycodone	49	40	7	9	0	0	3	15	5
Tapentadol	1	0						0	
Fentanyl	15	11	4	2	0	1	0	5	2
Over-the-counter codeine	33	3	1	5 [‡]	0	0	10	11	5
Other opioids (not elsewhere classified)	41	3	0	46	0	0	6	7	12
Speed powder	94	92	15	8	1	1	1	15	8
Amphetamine liquid	33	29	1	10 [‡]			0	1	10
Base methamphetamine	25	24	3	4 [§]	1	0	0	3	4 [§]
Crystal meth (ice)	88	84	60	24	25	1	1	63	24

<i>Any methamphetamine</i>	96	94	64	24	30	1	3	66	24
Pharmaceutical stimulants (prescribed)	7	0	0	–	0	1	1	1	166 [‡]
Pharmaceutical stimulants (not prescribed)	39	19	3	5 [§]	0	0	2	3	4 [§]
<i>Any pharmaceutical stimulants</i>	44	19	3	5[§]	0	0	3	5	8
Cocaine	57	34	6	3	1	8	0	12	3
Hallucinogens	55	8	1	1 [‡]	0	0	3	4	2
Ecstasy	62	21	1	1 [*]	0	1	3	3	3
Alprazolam (prescribed)	22	3	0	2 [*]	0	0	3	3	180
Alprazolam (not prescribed)	56	3	1	0	0	0	13	13	5
<i>Any alprazolam</i>	65	4	1	0	0	0	7	16	

Table 3: Drug use history and patterns of drug use in the preceding six months, Victoria, 2017 (continued)

	Ever used (%)	Ever injected (%)	Injected last 6 months (%)	Median days injected* last 6 months	Smoked last 6 months (%)	Snorted last 6 months (%)	Swallow last 6 months* (%)	Used* last 6 months (%)	Median days used* last 6 months*
Other benzodiazepines (prescribed)	69	7	0	4	0	0	34	34	180
Other benzodiazepines (not prescribed)	56	2	0	2	0	0	21	22	6
Any other benzodiazepines	84	8	0					48	
Any benzodiazepines	87	11	1	35*	1	0	69	53	90
Quetiapine (prescribed)	24	0	0	14	0	0	10	10	180
Quetiapine (not prescribed)	37	1	0	14	0	0	12	12	4
Any quetiapine	54	1	0	28	0	0	26	21	13
Alcohol	82	5	0	0			54	55	48
Cannabis	94				75		3	71	180
Inhalants	20							1	2‡
Tobacco	96							92	180
E-cigarettes	29							14	2
Steroids	9	7	1	42‡	0	0	1	2	42†
NPS	23	5	3	2	0	0	0	11	4
Synthetic cannabinoids	23	1			9	0	1	10	2
Mimic ecstasy or psychedelic drugs	1	0			0	0	0	1	1*

Source: IDRS participant interviews

* Refers to any route of administration (injecting, smoking, swallowing and/or snorting)

* Among participants who reported any use or injection in the preceding six months

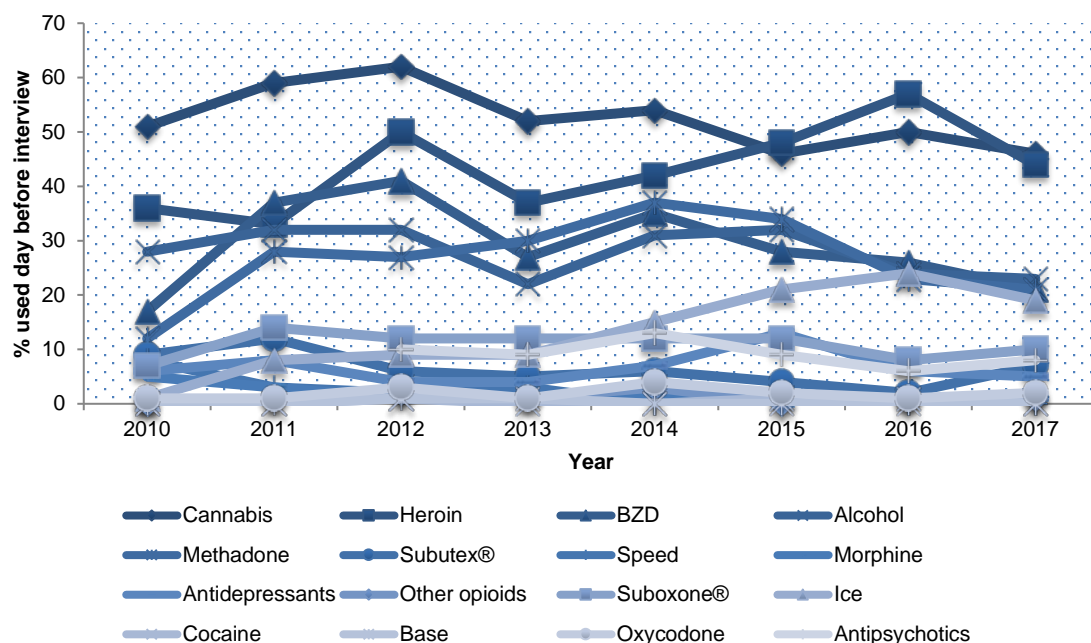
** Includes use of buprenorphine-naloxone film

+ Also refers to the sublingual administration of buprenorphine tablets and buprenorphine-naloxone tablets and/or film

¥ based on one case; ‡ based on two cases; † based on three cases; § based on four cases

Figure 1 shows the drug types Victorian IDRS participants reported using on the day prior to interview from 2010 to 2017. Multiple responses were allowed and prescribed drug use was included. In 2017, all participants reported the use of at least one drug on the day before interview, with heroin (44%), cannabis (46%), benzodiazepines (21%) and ice (19%) most commonly used (Figure 1).

Figure 1: Drugs used on the day prior to interview, Victoria, 2010–2017*



Source: IDRS participant interviews

* In 2014, data were missing for one participant and two participants reported no substance use on the day before interview. In 2015, eight participants reported no substance use on the day before interview, and nine did so in 2016.

4.2. Heroin

Key points

- In 2016, 81% of participants reported recent heroin use and injection, a non-significant increase from the prevalence in 2016 (79%).
- The median frequency of heroin use fell between 2016 and 2017 from 96 to 72 days in the previous six months.
- The percentage of daily heroin users rose non-significantly from 2016 to 2017, to 29%.
- White or off-white rock was the form of heroin used most by recent users in 2016 (67%).

4.2.1. Prevalence of heroin use

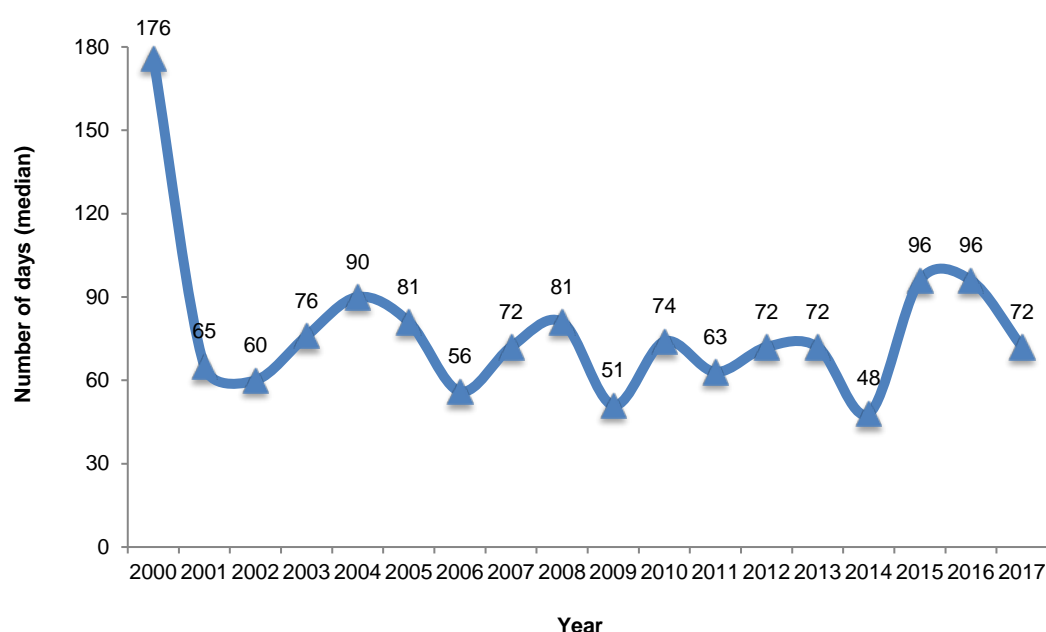
During the eight years to 2014 the prevalence of heroin use remained the same among Victorian IDRS participants, with 83% of participants in consecutive samples reporting recent use and injection. However, in 2015 the prevalences of recent use and injection fell (non-significantly) from 83% to 74% ($p = 0.058$). In 2016, prevalences of recent use and injection rose again (non-significantly) to 79% ($p = 0.275$); in 2017, prevalences of recent heroin use and injection were both 81%, not significantly different to 2016 ($p = 0.667$). Lifetime use was reported by 95% ($n = 143$) of the sample. Sixty-five per cent nominated heroin as their drug of choice, similar to 2016 (70%, $p = 0.345$). Sixty-three per cent of 2017 participants reported heroin as the last drug injected, compared with 60% in 2016 ($p = 0.604$). This figure (63%) was not significantly different from that reported in the 2016 ANSPS, in which 52% of Victorian ANSPS participants nominated heroin as the last drug injected before survey (Memedovic et al., 2017).

4.2.2. Current patterns of heroin use

As in previous years, of the 122 IDRS participants who reported recent heroin use, all reported recent heroin injection. Only 4% reported recently smoking heroin (i.e. heating the drug and inhaling the vapours) and 1% and none respectively reported oral ingestion and insufflation (snorting). These results are similar to findings in 2016.

Figure 2 illustrates the median days of heroin use, from 2001 to 2017, by Victorian participants who reported use in the preceding six months. In 2017, heroin was used on a median of 72 days (range 1–180 days) in the six months before interview, or about three days per week. This was less than the median days of use reported by participants in 2016 (96 days, or about four days of use per week). Since 2001, the reported frequency of recent heroin use by Victorian IDRS participants has fluctuated between approximately two and four days per week (Figure 2). In 2017, 29% of recent heroin users reported daily use, not significantly different from 2016 (27%).

Figure 2: Median days of heroin use in the past six months, Victoria, 2001–2017



Source: IDRS participant interviews

4.2.3. Forms of heroin used

As in previous years, in 2017 Victorian IDRS participants who reported recent heroin use were asked to nominate the types of heroin used in the six months preceding interview, and whether heat or citric acid was used to prepare the drug for their most recent injection. White/off-white heroin (diamorphine hydrochloride) dissolves easily in water and is prepared for injection without heat or acid, while brown/beige heroin (diamorphine base) typically requires heating with citric acid so that the preparation is soluble for injection.

Table 4 presents the forms of heroin used by IDRS participants from 2013 to 2016, and the forms of heroin participants reported using most from 2013 to 2017. Among recent heroin users ($n = 122$) in 2017, 67% reported using white/off-white rock most in the preceding six months, a lower proportion than in 2016 (75%). 'Most often' use of white/off-white powder decreased from 15% in 2016 to 12% in 2017 ($p < 0.001$). 'Most often' use of brown/beige powder increased between 2016 and 2017 (from 1% to 4%), as did use of brown/beige rock (9% vs. 17%) (Table 4).

Table 4: Forms of heroin used in the preceding six months, Victoria, 2013–2017

	Forms used*					Form used most				
	2013 (n=124)	2014 (n=125)	2015 (n=111)	2016 [†] (n=118)	2017(n =122)	2013 (n=124)	2014* (n=122)	2015 (n=111)	2016 [†] (n=118)	2017 (n=122)
White/off-white heroin (%)										
Powder	19	37	41	39		5	9	19	15	12
Rock	82	72	78	67		83	76	68	75	67
Brown/beige heroin (%)										
Powder	7	11	20	17		1	1	5	1	4
Rock	37	33	31	30		11	10	6	9	17
Other colour heroin (%)										
Powder	1	3	1	1		0	2	0	--	0
Rock	1	2	2	4		0	2	2	1	1
Homebake heroin (%)										
	1	3	5	1		--	1	0	1	4

Source: IDRS participant interviews

* Multiple responses allowed

+ Data missing for three participants

[†] Data missing for one participant

-- No reports received

4.3. Methamphetamine

Key points

- In 2017 the prevalence of recent methamphetamine use was 66% and recent injection 66%, down from 2016. The median frequency of methamphetamine use was 24 days in the preceding six months (fortnightly use), higher than in 2016 (14).
- Twenty-seven per cent nominated methamphetamine as their drug of choice (19% in 2016).
- The prevalence of recent *ice* use (63%) was lower than in 2016. (72%) Prevalence of *ice* smoking fell non-significantly to 25%. Median frequency of *ice* use was 24 days in the preceding six months.
- Prevalence of recent *speed* use was higher in 2017 (15%) than in 2016 (9%). Median frequency of *speed* use was eight days in the preceding six months.
- Only three participants reported recent *base methamphetamine* use in 2017.

4.3.1. Prevalence of methamphetamine use

Several forms of methamphetamine are currently available in Australia: crystal methamphetamine (*ice*) is most common, followed by *speed powder* and *base methamphetamine*. The IDRS collects information on the prevalence of methamphetamine use among PWID, as well as information on the price, purity and availability of these three main forms (see Chapter 6). Information is also collected on the use of *amphetamine liquid* and pharmaceutical stimulants such as *dexamphetamine* and *methylphenidate*.

According to the most recent population-based survey, the 2013 NDSHS, the estimated prevalence of past year methamphetamine use among the Victorian general population (aged 14 years and over) was 1.9%, a decline from 2.3% in 2010 (Australian Institute of Health and Welfare, 2014a). In comparison, between 2016 and 2017 prevalence of lifetime methamphetamine use was stable at 96%, and prevalence of lifetime methamphetamine injection increased non-significantly, from 91% to 94% ($p = 0.285$) among Victorian IDRS participants. Recent use (any ROA) of methamphetamine fell non-significantly between 2016 and 2017 from 74% to 66% ($p = 0.130$), as did recent injection (73% to 64%, $p = 0.081$). Table 2 shows no significant change between 2016 and 2017 in the percentage of participants who nominated methamphetamine as their primary drug of choice (19% vs. 27%, $p = 0.101$).

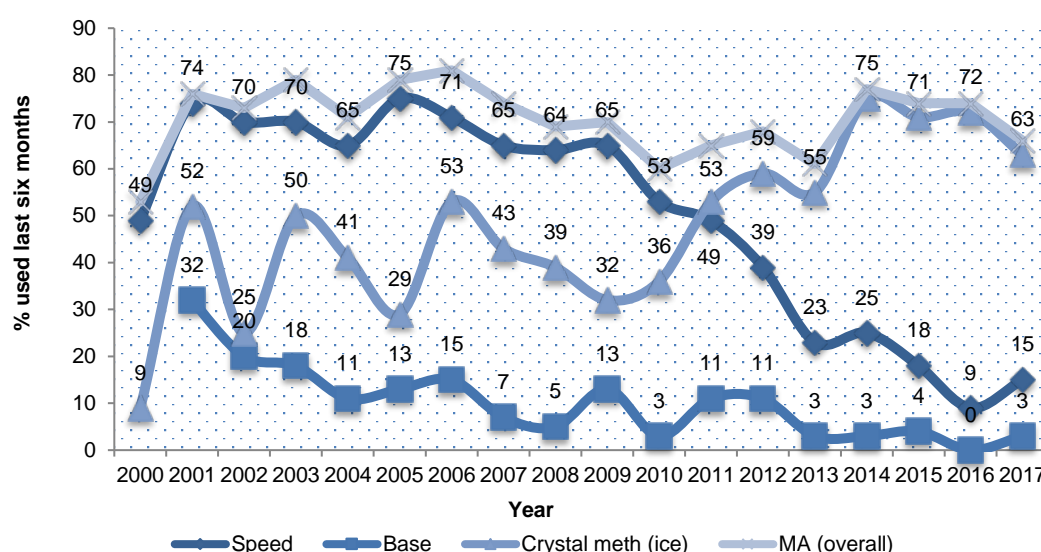
The percentages of Victorian IDRS participants who reported ever injecting various methamphetamine forms varied between 2016 and 2017. Lifetime prevalence of *ice* injection was 87% in 2016 and 84% in 2017; the lifetime prevalence of *speed powder* injection rose significantly, from 78% in 2016 to 92% in 2017 ($p = 0.013$). In 2017, lifetime prevalence of *base methamphetamine* injection was about the same as in 2016 (24% vs. 22%). The lifetime prevalence of *amphetamine liquid* injection rose non-significantly from 26% in 2016 to 29% in 2017 ($p = 0.542$).

In 2017 the percentage of participants who reported injecting methamphetamine most often in the month preceding interview was 30%, the same as in 2016 (Table 2). Thirty-three per cent reported that methamphetamine was the last drug injected, as in 2016.

4.3.2. Current patterns of methamphetamine use

The percentage of Victorian IDRS participants reporting methamphetamine use in the preceding six months, from 2001 to 2017, is shown in Figure 3 by methamphetamine type. In 2017 participants most commonly reported recently using *crystal methamphetamine* or *ice* (63%), not significantly different from 2016 (72%, $p = 0.109$) and underpinning the prevalence of methamphetamine use overall (66%). There was a non-significant rise in the prevalence of recent *speed* use from 2016 to 2017 (9% vs. 15%, $p = 0.114$), and the prevalence of recent *base methamphetamine* use rose from zero to 3%. Figure 3 shows that since 2011 there has been a switch from *speed powder* to *ice* use among Victorian IDRS participants.

Figure 3: Percentage of participants reporting methamphetamine use in the past six months, Victoria, 2000–2017



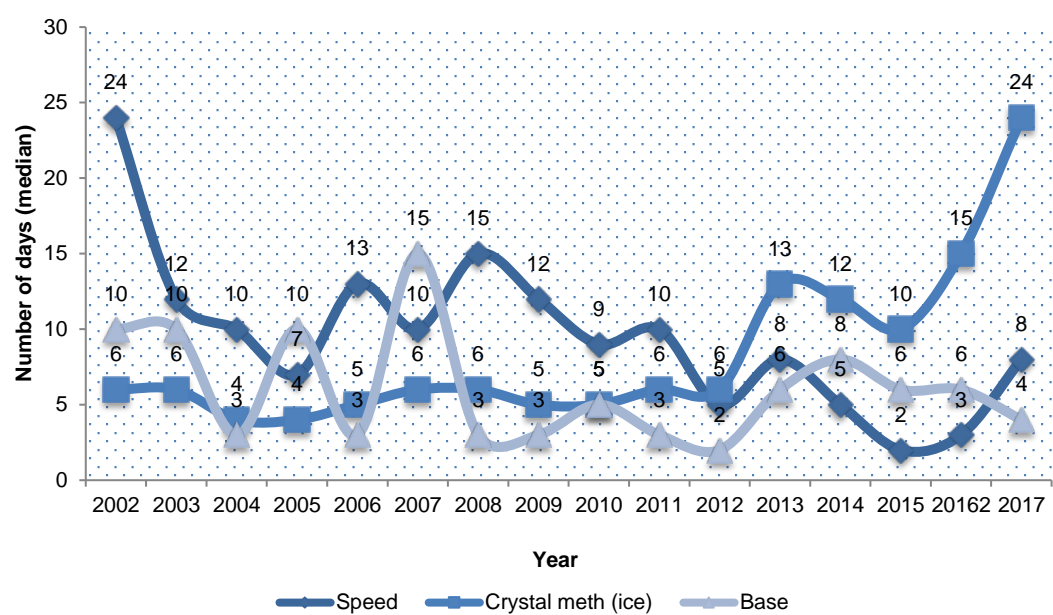
Source: IDRS participant interviews

Consistent with previous years, in 2017 the most common recent methamphetamine ROA among Victorian IDRS participants was injection; 60% reported recent *ice* injection (down significantly from 71% in 2016, $p = 0.039$). The prevalence of recent *speed* injection rose non-significantly (11% in 2016 vs. 15% in 2017, $p = 0.308$). Prevalences of recent injection of *base methamphetamine* and *amphetamine liquid* were very low (3% and 1%, respectively). Three per cent reported the recent injection of *pharmaceutical stimulants* (prescribed or non-prescribed), up from 1% in 2016.

Reports of recent *ice* smoking fell slightly, with 25% of participants in 2017 indicating they had smoked the drug in the preceding six months, against 30% in 2016 ($p = 0.366$).

Figure 4 illustrates the median days of methamphetamine use among Victorian IDRS participants who reported recent use, from 2002 to 2017, according to methamphetamine type. In 2017 recent users reported using the drug at a greater frequency than in 2016. In 2017, recent *ice* users ($n = 99$) reported use about twice per fortnight (median 24 days) in the preceding six months, compared with 15 days in 2016. Recent *speed* users ($n = 13$) reported use on a median of eight days, compared with three days in 2016. Three participants reported recent use of *base* in 2016, at a median of four days in the previous six months. Overall, in 2017 the 99 Victorian IDRS participants who reported the recent use of any methamphetamine used on a median of 24 days in the preceding six months, or on about four days per month.

Figure 4: Median days of methamphetamine use in the past six months, Victoria, 2002–2017



Source: IDRS participant interviews

* Data were not available for base methamphetamine prior to 2002. Fluctuations are likely due to small numbers reporting

4.4. Cocaine

Key Points

- The estimated prevalence of cocaine use among the Victorian general population in 2013 was 2.1%.
- In 2017, the lifetime prevalence of cocaine use among IDRS participants was 57%, and lifetime prevalence of cocaine injection was 34%.
- Recent use was reported by 12% and recent injection was reported by 3%.
- Only one respondent (1%) nominated cocaine as their drug of choice.
- Frequency of use was very low at a median of three days in the previous six months.

According to the 2013 NDSHS, the estimated prevalence of past-year cocaine use among the Victorian general population (aged 14 years and over) was 2.1% (Australian Institute of Health and Welfare, 2014a). In 2017, 86 Victorian IDRS participants (57%) reported lifetime cocaine use and 12% reported using cocaine in the preceding six months, up from 9% in 2016 ($p = 0.454$). In 2017, only one participant (1%) nominated cocaine as their drug of choice. The prevalence of lifetime cocaine injection was 34%, whereas in 2016 lifetime prevalence was 39% ($p = 0.338$). Despite a reasonably high prevalence of lifetime injection, only 5 participants (3%) reported cocaine injection in the preceding six months, vs. 7% in 2016.

Unlike in previous years, in 2017 injection was not IDRS participants' most commonly reported recent ROA for cocaine. Eight per cent ($n = 12$) reported recent use via insufflation (snorting), and 1% via smoking. No other recent ROA were reported.

As in previous years, the frequency of recent cocaine use was low. The median frequency of recent cocaine use (any ROA) was three days in the preceding six months, as was the median frequency of injection.

Four of the 5 recent cocaine users provided information on the forms of the drug they had used in the past six months. All reported using powder cocaine, all reported using rock cocaine, and none reported using crack.

4.5. Cannabis

Key Points

- In 2017, the prevalence of cannabis use among the IDRS sample was almost the same as 2016; lifetime use was reported by 94% and recent use was reported by 71%. Daily use was reported by 56% of recent users. Median frequency of use was 180 days, translating to median daily use.
- Five per cent of participants nominated cannabis as their drug of choice.
- Among recent users, hydroponically grown cannabis was smoked most.

Cannabis is the most widely used illicit drug among the Victorian general population. According to the 2013 NDSHS, the estimated prevalence of use among those aged 14 years and over in the past year was 9.1% (vs. 9.4% in 2010) (Australian Institute of Health and Welfare, 2014a). Cannabis use is very common among Victorian IDRS participants, with prevalences of lifetime and recent use among the 2017 sample very similar to those in 2016. In 2017 almost all participants (94%) reported lifetime use, almost identical to the figure in 2016. A significant majority (71%) reported recently using cannabis. Despite a high prevalence of cannabis use in 2017, only 5% nominated cannabis as their primary drug of choice.

In 2017, the IDRS sample was asked again to respond to separate questions relating to hydroponically grown cannabis, bush-grown cannabis and hashish/hashish oil. Of recent users ($n = 107$), 98 (92%) provided responses about the cannabis types used during the past six months. Of these, 96% reported recently using hydroponically grown cannabis and 32% reported recently using bush-grown cannabis; 5% reported the recent use of hashish and 3% hashish oil. Regarding the form of cannabis used most during the preceding six months ($n = 96$), 92% reported using hydroponically grown cannabis most, while 8% reported using bush-grown cannabis most.

4.5.1. Current patterns of cannabis use

In 2017, recent cannabis users ($n = 107$) reported a median frequency of 180 days (IQR 24–180 days) use in the preceding six months, double that than in 2016 (median 90 days). One hundred and eighty days of use equates to daily use. Of recent users, 56% reported daily cannabis use, significantly higher than in 2016 (41%; $p = 0.027$).

4.6. OST medications

Key Points

Methadone

- In recent years levels of lifetime and recent OST medication use among Victorian IDRS participants have fluctuated.
- In 2017, the prevalence of recent methadone use was 37%, down from 45% in 2016. Median frequency of use was stable at 170 days.
- Very few participants reported recent *prescribed* (0%) and *non-prescribed* (1%) Physeptone® use.

Buprenorphine

- In 2017 the prevalence of recent buprenorphine use was 9%, up from 7% in 2016.
- Recent buprenorphine use occurred at a median frequency of 14 days. Recent injection was reported by 7%.

4.6.1. Methadone

For the purposes of the IDRS, the classification ‘any methadone’ includes the oral liquid preparations Methadone Syrup® and Biodone Forte® and the tablet preparation Physeptone®, as well as prescription and non-prescription use. As in previous years, 2017 IDRS participants were asked to respond to separate questions regarding *prescribed* and *non-prescribed* use of both the oral liquid preparations and the tablets.

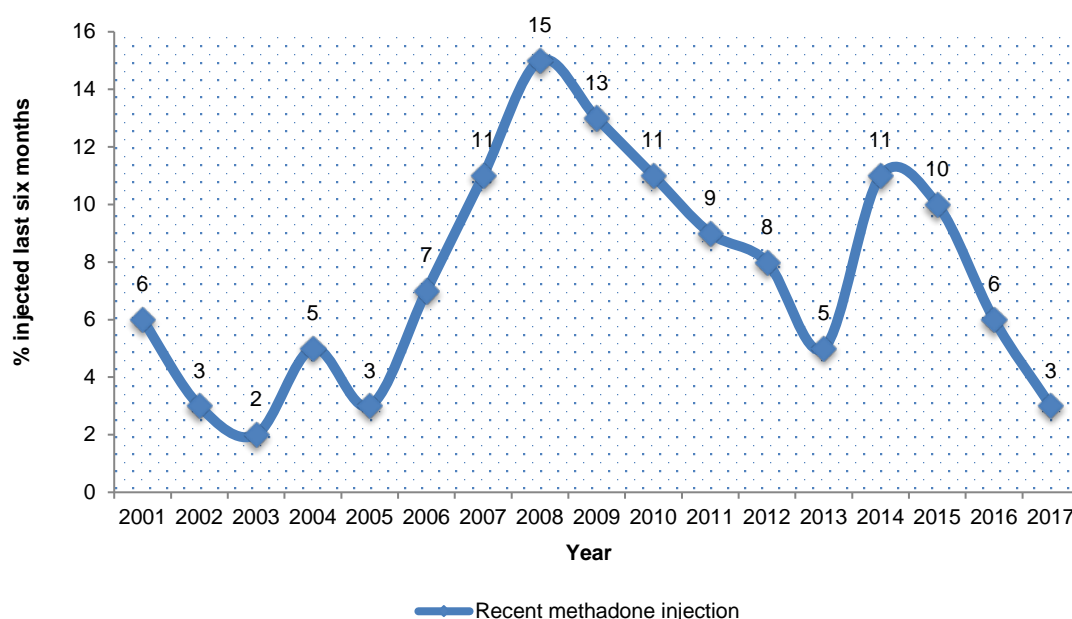
Among the 2017 Victorian IDRS sample, 85% (n = 127) reported lifetime use of methadone (*prescribed* and *non-prescribed*), not significantly different to 2016 (78%). Thirty-seven per cent (n = 56) reported recent use, not significantly different to the percentage in 2016 (45%, $p = 0.159$). Recent users of methadone reported a median frequency of 170 days use in the previous six months, or a median of approximately daily use.

In 2017, 74% (n = 111) reported lifetime use of *prescribed* methadone, with 33% (n = 50) reporting use on a median of 108 days in the preceding six months. As in previous years, reports of lifetime and recent use of *non-prescribed* illicitly sourced methadone (i.e. methadone not prescribed to the participant) were less frequent. In 2017, the lifetime prevalence of illicit use was 39%, slightly up from 2016 (33%) but lower than in 2015. Recent illicit use declined (non-significantly) from 11% in 2016 to 7% in 2017 ($p = 0.234$). The median number of days of non-prescribed methadone use was three (four in 2016).

Use of both prescription and non-prescription Physeptone® remains uncommon among Victorian IDRS participants, but in 2017 4% of participants (n = 6) reported lifetime *prescribed* use (vs. 11% in 2016, $p = 0.017$), with 11% (n = 16) reporting lifetime *non-prescribed* use (almost identical to 2016). None of the sample reported recent *prescribed* use, and 1% reported recent *non-prescribed* use.

In 2017 lifetime prevalence of (*prescribed* and *non-prescribed*) methadone or Physeptone® injection was 23%, a about the same as in 2015). Figure 5 shows the prevalence of recent methadone injection from 2001 to 2017, with a declining trend evident from 2008. In 2017, the percentage of participants reporting recent methadone injection (3%) was similar to 2005 and earlier. Among the 3% of participants who reported injection in 2017, the median frequency was two days in the preceding six months.

Figure 5: Percentage of participants reporting any methadone injection in the past six months, Victoria, 2001–2017



Source: IDRS participant interviews

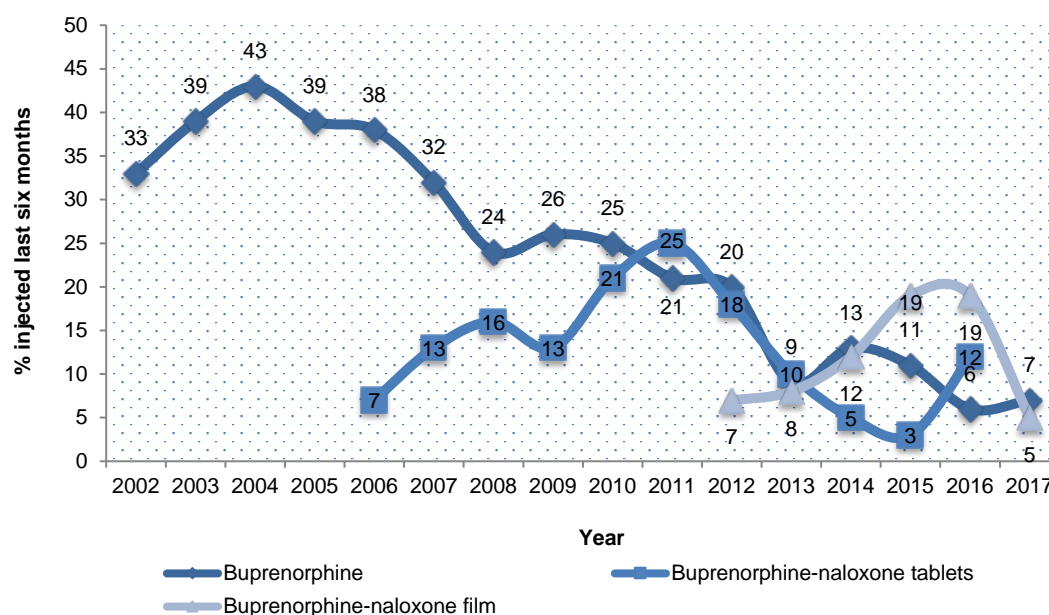
4.6.2. Buprenorphine

In 2017 the lifetime prevalence of buprenorphine use (Subutex®, *prescribed* and *non-prescribed*) was 56%, about the same as in 2016 (59%). Between 2016 and 2017, prevalence of recent buprenorphine use was stable (7% to 9%). Among recent users ($n = 13$), median frequency of use was 14 days. Lifetime prevalence of buprenorphine injection (prescribed or non-prescribed) did not change significantly (35% in 2017 vs. 41% in 2016, $p = 0.285$). As in previous years, the 2017 sample was asked to provide responses to separate questions about the use of prescribed and non-prescribed buprenorphine.

In 2017 the lifetime prevalence of *prescribed* buprenorphine use was 42%, little different from 2016 (43%). There were six reports of recent *prescribed* use in 2017 (4%). Lifetime prevalence of *non-prescribed* buprenorphine use was 33% in 2017, the same as in 2016, while the prevalence of recent use was stable at 6%). Among the nine participants who reported recent illicit use, the median frequency was 3 days (IQR 3–33 days) in the past six months, compared with 30 days in 2016.

Figure 6 shows the prevalence of recent buprenorphine and buprenorphine-naloxone tablet and film injection (see section 4.6.3) from 2002 to 2017. Between 2016 and 2017 the prevalence of recent buprenorphine injection rose slightly (6% vs. 7%) (Figure 6). The decline over time in recent *prescribed* and *non-prescribed* buprenorphine use and injection among consecutive Victorian IDRS samples is a product of the 2005 introduction of the combination product buprenorphine-naloxone (i.e. Suboxone®) and declining availability of buprenorphine to pharmacotherapy consumers (King et al., 2011; Lintzeris et al., 2006).

Figure 6: Percentage of participants reporting any buprenorphine and buprenorphine-naloxone* tablet and film injection in the past six months, Victoria, 2002–2017



Source: IDRS participant interviews

Note: Data refer to prescribed and non-prescribed injection of all preparations.

* Data were not available for buprenorphine-naloxone tablets prior to 2006 and buprenorphine-naloxone film prior to 2012

4.6.3. Buprenorphine-naloxone

As mentioned in section 4.6.2, in 2005 buprenorphine-naloxone (Suboxone®) was approved by the Therapeutic Goods Administration (TGA) and by 2006 was available on the Pharmaceutical Benefits Scheme (PBS) (Lintzeris et al., 2006; Minister for Health and Ageing, 2006). Buprenorphine-naloxone was developed to limit the abuse liability of buprenorphine by reducing the potential for injection, particularly by opioid-dependent users who were not in treatment (Lintzeris et al., 2006). In 2011, a new formulation of buprenorphine-naloxone, the Suboxone® sublingual film preparation, was approved by the TGA and released on the PBS to improve consumers' dosing experience (Dunlop & Jordens, 2011). The greatest advantage of buprenorphine-naloxone is the potential for unsupervised dosing.

4.7. Other opioids

Key Points

- Between 2016 and 2017 prevalence of lifetime morphine use increased (to 63%) and recent morphine use decreased (to 9%). Sixty-four per cent of recent users reported using MS Contin® most, and 36% reported using Kapanol® most.
- The prevalence of lifetime oxycodone use fell from 55% to 49%.
- Prevalence of recent oxycodone injection (7%) did not change significantly from 2016, and occurred on a median of five days in the previous six months.
- Lifetime and recent injection of fentanyl were low at 11% and 4% respectively. Median frequency of injection was two days in the past six months.

4.7.1. Morphine

Consistent with previous years, lifetime use of pharmaceutical morphine (e.g. MS Contin® and Kapanol®) was reported by the majority of the 2017 Victorian IDRS sample (63%, $n = 94$); prevalence was up slightly from the 2016 figure of 55% ($p = 0.158$).

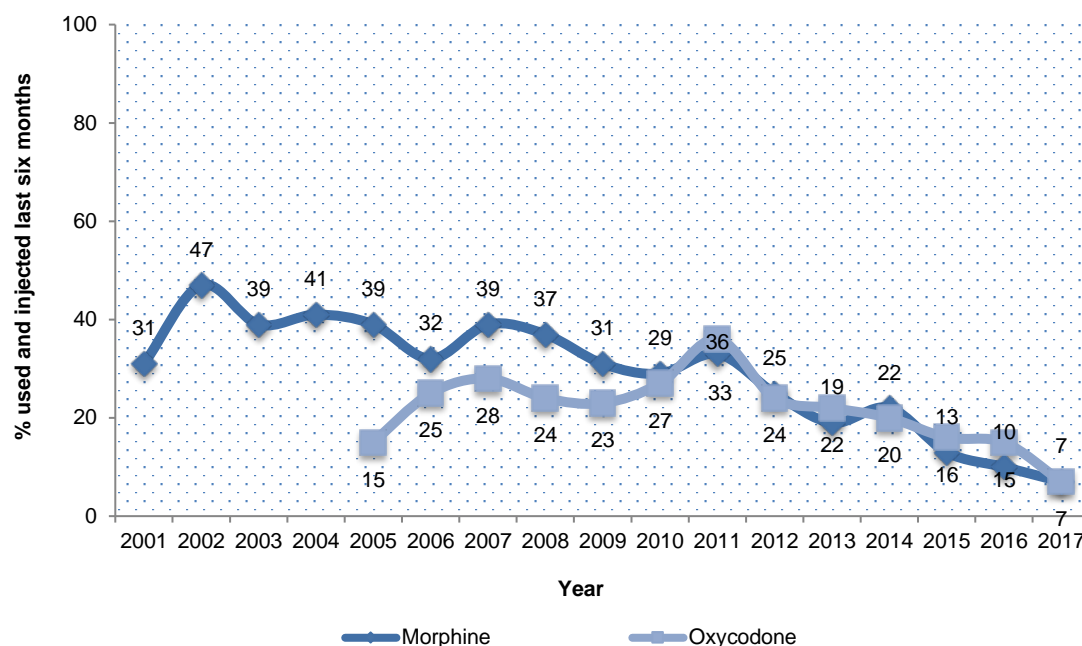
In 2017 the prevalence of recent morphine use was 9%, down from the 13% recorded in 2016 ($p = 0.275$). Median frequency of use in the past six months was five days. Of 14 recent users, 11 specified the brand of morphine used most in the past six months: 64% reported using MS Contin® most, and 36% reported using Kapanol® most.

As with other pharmaceutical opioids, in 2017 participants were asked separate questions distinguishing between prescribed and non-prescribed morphine use. With regards to *prescribed* morphine, in 2017 14% ($n = 21$) reported lifetime use. Three per cent (four participants) reported recent prescribed use, at a median frequency of 12 days in the past six months. In contrast, 55% of participants reported lifetime use of *non-prescribed* or illicitly sourced morphine, up from 49% in 2016 ($p = 0.298$); recent illicit use fell slightly (11% in 2016 vs. 7% in 2017). In 2017, recent non-prescribed users ($n = 10$) reported a median frequency of four days use in the preceding six months.

Between 2016 and 2017, lifetime prevalence of any pharmaceutical morphine injection rose slightly, from 49% to 53% ($p = 0.488$). Figure 7 shows the prevalence of recent morphine injection among Victorian IDRS participants, from 2001 to 2017. As in previous years, in 2017 injection was the most commonly reported route of recent morphine administration among recent users. Seven per cent ($n = 11$) reported any recent morphine injection in 2017, compared with 10% in 2016 (Figure 7). Among these participants, morphine injection occurred on a median of five days in the preceding six months.

As in previous years, in 2017 reports of lifetime *non-prescribed* morphine injection were significantly more common than reports of lifetime *prescribed* morphine injection (55% vs. 14%, $p < 0.001$). Recent injection of *non-prescribed* morphine was reported by 6% of participants, and recent *prescribed* morphine injection by 1%. Illicitly sourced morphine was reportedly injected by recent users on a median of four days in the preceding six months.

Figure 7: Percentage of participants reporting morphine and oxycodone* injection in the past six months, Victoria, 2001–2017



Source: IDRS participant interviews

Note: Data refer to prescribed and non-prescribed injection of all preparations.

* Data were not available for oxycodone injection prior to 2005

4.7.2. Oxycodone

Lifetime oxycodone use (prescribed and non-prescribed) was reported by 49% ($n = 74$) of 2017 Victorian IDRS participants, fewer than in 2015 (55%, $p = 0.298$). Fifteen per cent ($n = 22$) reported recent use, from the same as in 2016. The median frequency of use was five days in the past six months, up from three days in 2016. One user provided information on the brand of oxycodone used most in the preceding six months, specifying Endone®.

As in previous years, participants were asked separate questions about the use of prescribed and non-prescribed oxycodone. In 2017, 1% reported recent prescribed use, on a median of two days in the preceding six months. In 2017 lifetime prevalence of *non-prescribed* oxycodone use was 6%.

In 2017, 7% of participants reported injecting oxycodone on a median of five days in the preceding six months. Figure 7 shows that the prevalence of recent oxycodone injection has declined each year since 2011.

As in previous years and similar to findings for morphine, in 2017 prevalence of lifetime *non-prescribed* oxycodone injection was significantly higher than prevalence of lifetime *prescribed* injection (37% vs. 9%, $p < 0.001$). Recent *non-prescribed* oxycodone injection also remains significantly more common than recent *prescribed* injection (6% vs. 1%, $p = 0.032$).

4.7.3. Fentanyl

In 2017, for the fourth time, IDRS participants were asked about their history of fentanyl use; as in 2016, prevalence of use was low in Victoria. Lifetime prevalences of use and injection were 15% and 11% respectively. Five per cent reported recent use and 4% recent injection. The median frequency of use was two days in the preceding six months.

4.7.4. Other opioids (not elsewhere classified)

In 2017, lifetime prevalence of use of extra-medical opioids (other than those listed above) was 41%, significantly up from the 27% recorded in 2016 ($p = 0.011$). The prevalence of recent use was 7%, very close to the 9% recorded in 2016. Lifetime prevalence of injection was 3%, and no participants reported recent injection. Among recent users ($n = 10$), Panadeine Forte® ($n = 9$) was the most common brand used.

4.7.5. Over the counter (OTC) codeine

In 2017, lifetime prevalence of extra-medical OTC codeine use was 33% ($n = 50$) and recent extra-medical use was reported by 11% ($n = 16$). Participants who reported recent use of these medications reported a median frequency of five days (IQR 3–20 days) use in the preceding six months. One participant reported recent OTC codeine injection (see Table 3).

4.8. Benzodiazepines

Key Points

- In 2017, prevalence of lifetime benzodiazepine use (other than alprazolam) did not change (84%)
- Prevalence of recent benzodiazepine use increased non-significantly, from 37% in 2016 to 48% in 2017.
- Between 2016 and 2017 the prevalence of lifetime alprazolam use rose slightly (from 63% to 65%, and prevalence of recent use fell slightly (from 7% to 6%). Prescribed users typically used daily, whereas non-prescribed users typically used less than monthly.

4.8.1. Benzodiazepines other than alprazolam

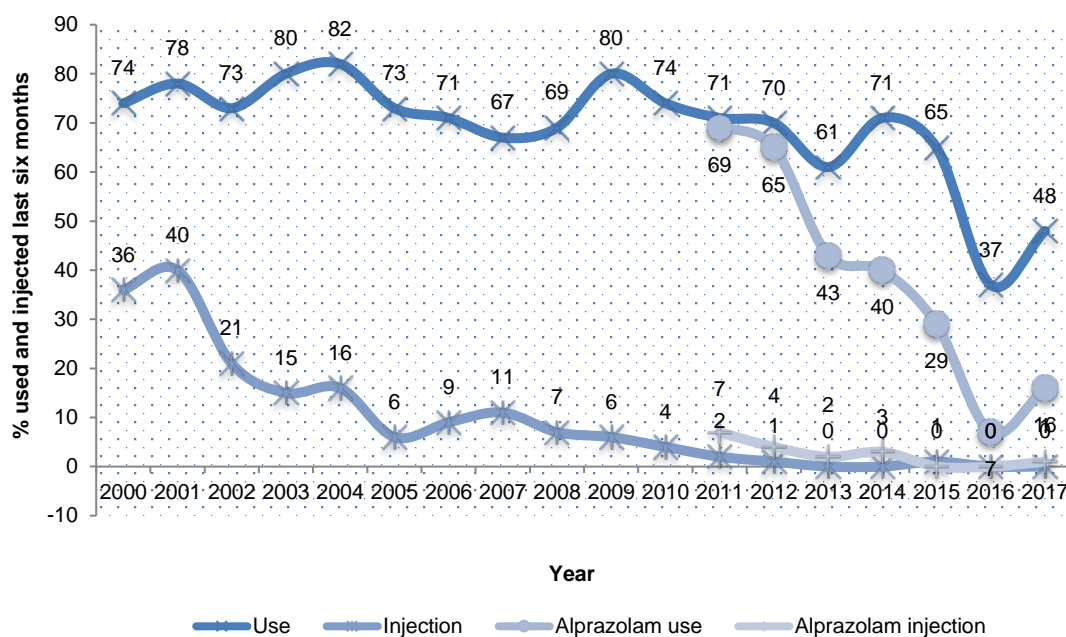
Since 2011, Victorian IDRS participants have been asked to respond to separate questions distinguishing between use of prescribed and non-prescribed alprazolam (Xanax®) and the use of other benzodiazepines such as diazepam (Valium®). This change to the participant survey may have reduced the prevalence of reports regarding the use of benzodiazepines other than alprazolam. In this section, patterns of general benzodiazepine use are addressed first, followed by patterns of alprazolam use, addressed in section 4.8.2.

In 2017, prevalence of lifetime use of benzodiazepines other than alprazolam (*prescribed* and *non-prescribed*) was 84%, as in 2016. Recent use increased non-significantly to 48% ($n = 72$) in 2017 (from 37% in 2016; $p < 0.062$), after a long period of stability from 2000 to 2015, as shown in Figure 8.

There were no reports of recent benzodiazepine (other than alprazolam) injection in 2017. The reduction over time in benzodiazepine injection continues to reflect the withdrawal of temazepam gel capsule preparations from the market in 2004 (Breen, Degenhardt, Bruno, Roxburgh, & Jenkinson, 2004; Dobbin, 2002; Wilce, 2004) and subsequent increased awareness among Victorian PWID regarding the harms associated with tablet injection.

In 2017 prevalence of both lifetime and recent use of *prescribed* and *non-prescribed* benzodiazepines (other than alprazolam) diverged significantly (lifetime: 69% vs. 56%, $p = 0.017$, recent: 34% vs. 22%, $p = 0.021$). Between 2016 and 2017, the prevalence of lifetime prescribed use rose (67% to 69%, $p = 0.088$) and lifetime non-prescribed use fell slightly (59% to 56%). The prevalence of recent prescribed use fell (42% to 34%, $p = 0.154$), as did recent non-prescribed use (39% to 22%, $p = 0.001$). *Prescribed* users reported a median frequency of 180 days (IQR 25–180 days) use in the preceding six months, while *non-prescribed* users reported a median of six days (IQR 2–8 days) use. Among recent users who reported brands ($n = 72$), 78% reported using diazepam most (e.g. Valium, $n = 56$) and 11% reported using clonazepam.

Figure 8: Percentage of participants reporting use and injection of Alprazolam, and any benzodiazepine other than Alprazolam, in the past six months, Victoria, 2000–2017



Source: IDRS participant interviews

Note: Data refer to prescribed and non-prescribed injection of all preparations. Since 2011, participants have been asked separate questions distinguishing between alprazolam use and use of other benzodiazepines; therefore separate data for alprazolam use and injection are presented from 2011.

4.8.2. Alprazolam

From 2016 to 2017, lifetime prevalence of any (*prescribed* and *non-prescribed*) alprazolam use changed little (63% to 65%). As shown in Figure 8, recent use fell slightly, with prevalence at 6% in 2017 compared to 7% in 2016. One participant reported alprazolam injection in the preceding six months. In February 2014, alprazolam was rescheduled from a Schedule 4 to Schedule 8 poison (Victorian Department of Health, 2013a), restricting access to the drug.

Unlike other benzodiazepines, in 2017 lifetime prevalence of *non-prescribed* alprazolam use continued to be significantly higher than lifetime prevalence of *prescribed* alprazolam use (56% vs. 22%, $p < 0.001$). Recent *non-prescribed* use was also higher than *prescribed* use (13% vs. 3%, $p = 0.002$). In 2017, recent users of *prescribed* alprazolam reported a median frequency of 180 days use in the past six months, whereas *non-prescribed* users reported a median of five days of use.

4.9. Other drugs

Key Points

- Prevalence of lifetime quetiapine use did not change significantly (63%), nor did prevalence of recent use (25%). Recent quetiapine users reported a median of 180 days of use in the past six months (daily).
- Prevalence of lifetime pharmaceutical stimulant use (46%) was identical to the 2015 figure, but prevalence of lifetime injection was 16%, much lower than in 2015. Recent use was reported by 5% on a median of three days in the past six months. One per cent reported recent injection.
- The prevalence of recent ecstasy use was 7% (vs. 6% in 2015).
- Three per cent reported recent hallucinogen use. Seven per cent reported lifetime injection, but none reported recent injection.
- No participants reported recent inhalant use.
- Thirteen participants reported recent steroid use.
- The prevalence of recent alcohol use (57%) was significantly lower than in 2015 (7%). Median frequency of use was 24 days (approximately once per week) in the past six months.
- Prevalence of recent tobacco use (97%) was consistent with previous years. Fourteen per cent reported recent e-cigarette use, on a median of three days in the past six months.
- Two per cent reported recent NPS use on a median of four days in the six months before interview.
- Lifetime prevalence of synthetic cannabinoid use fell non-significantly to 23%, with recent use non-significantly decreasing to 13%. Recent use occurred on a median of two days in the preceding six months.

4.9.1. Quetiapine

Since 2011 the antipsychotic medication quetiapine (Seroquel®) has been included as a distinct category in the IDRS participant survey due to reports of an emerging street market for the drug among PWID in Melbourne. As with other pharmaceutical drug preparations, in 2017 participants responded to questions distinguishing between prescribed and non-prescribed use.

Between 2016 and 2017, lifetime prevalence of any (prescribed and non-prescribed) quetiapine use did not change significantly (63% to 54%, $p = 0.100$). Prevalence of recent use was 21% in 2017, not significantly different from the 25% reported in 2015 ($p = 0.413$), at a median frequency of 13 days use (IQR 95–180 days) in the preceding six months. Similar to previous years, lifetime quetiapine injection was reported by a very small proportion (1%) of the sample. No reports of recent injection were received.

In 2017 lifetime *non-prescribed* quetiapine use was significantly higher than lifetime *prescribed* quetiapine use (37% vs. 24%, $p = 0.012$), but recent non-prescribed use was about the same as recent prescribed use (12% vs. 10%, $p = 0.580$). *Prescribed* quetiapine users ($n = 15$) reported a median frequency of use of 180 days, while *non-prescribed* users ($n = 17$) reported a median frequency of four days use (IQR 1–7 days) in the preceding six months.

4.9.2. Pharmaceutical stimulants

In 2017, lifetime prevalence of pharmaceutical stimulant use (e.g. dexamphetamine and methylphenidate, prescribed and non-prescribed) was 44%, about the same as in 2016. Lifetime

injection prevalence in 2017 was 19%, similar to 2016 (16%). Few (3%) reported recent injection. Prevalence of recent use did not change significantly from 2016 to 2017 (3% to 5%); median frequency of use was eight days in the preceding six months. Six participants reported a brand, five of them citing generic dexamphetamine.

As with most other pharmaceutical preparations, in 2017 lifetime prevalence of *non-prescribed* pharmaceutical stimulant use was significantly higher than *prescribed* use (39% vs. 7%, $p < 0.001$). Recent illicit use was higher than recent prescribed use (3% vs. 0%). *Non-prescribed* users reported use on a median of four days in the preceding six months.

4.9.3. Ecstasy

Similar to previous years, 62% ($n = 93$) of the 2017 Victorian IDRS sample reported lifetime ecstasy (3,4-methylenedioxymethamphetamine/MDMA) use. Three per cent reported use in the preceding six months, a non-significant decrease from 2016 (7%, $p = 0.123$). Over time, the prevalence of recent ecstasy use has declined considerably among IDRS participants, from about two-fifths of the sample in 2001. In 2017, the median frequency of use was three days (IQR 2–6 days) in the past six months. Between 2016 and 2017, prevalence of reported lifetime injection of ecstasy fell significantly (31% and 21% respectively, $p = .0493$) and only 1% reported recent injection in 2017.

A more comprehensive picture of ecstasy and hallucinogen use is provided by other sentinel groups of drug users such as regular psychostimulant users (RPU). The Ecstasy and related Drugs Reporting System (EDRS) employs a similar methodology to the IDRS and has been conducted in each Australian jurisdiction for the past 11 years. One component involves data collection from approximately 100 RPU on their patterns of use and perceptions of market characteristics of 'party' drugs, including ecstasy, GHB (gamma-hydroxybutyrate) and ketamine. Results from the 2017 Victorian EDRS are available in early 2018 (Truong, Dietze, & Lloyd, 2017).

4.9.4. Hallucinogens

In 2017, lifetime prevalence of hallucinogenic drug use (e.g. LSD (lysergic acid diethylamide) and 'magic mushrooms' (psilocybin mushrooms)) was 55%, slightly below the 61% of 2016 ($p = 0.292$). Four per cent reported recent use, at a median frequency of two days in the past six months. Eight per cent reported lifetime injection and one reported recent injection.

4.9.5. Inhalants

Between 2016 and 2017 the lifetime prevalence of inhalant use rose slightly (from 17% to 20%). In 2017, 1% of participants reported recent use.

4.9.6. Steroids

In 2017, lifetime prevalence of steroid use was 9%, not significantly different from the 7% in 2016 ($p = 0.531$). Two per cent of participants reported recent use.

4.9.7. Alcohol, tobacco and e-cigarettes

Lifetime prevalence of alcohol use was 82% in 2016, a near-significant fall from the 2016 figure (89%, $p = 0.051$) – which itself was a near-significant fall from the 2015 figure (95%); the change between 2015 and 2017 is significant ($p < 0.001$). Prevalence of recent use was 55%, about the same as in 2016. All recent alcohol users ($n = 82$) reported oral consumption at a median frequency of 48 days (IQR 10–153 days) in the past six months, translating to an approximate pattern of twice-weekly use. Twenty-one per cent of recent users consumed alcohol daily.

In 2017, lifetime prevalence of tobacco use was 96%, similar to previous years. Recent use was reported by 92%. Among recent smokers, the prevalence of daily tobacco smoking was 93% and the median frequency of use was 180 days in the preceding six months. Lifetime prevalence of e-

cigarette use was 29% (vs 33% in 2016, $p = 0.455$) and in 2017, 14% of participants reported recent use, as in 2016, at a median frequency of two days in the preceding six months.

4.9.8. NPS and synthetic cannabinoids

In 2017, for the fifth time, Victorian IDRS participants were asked to provide information about their experiences using NPS and synthetic cannabinoids. No reports were received from participants regarding NPS use in 2013, and in 2014 5% reported lifetime use, with 2% reporting recent use. In 2015 7% reported lifetime use, and 1% recent use. In 2016, 6% reported lifetime use, and 4% recent use at a median frequency of four days (IQR 1–33 days) in the preceding six months. In 2017, 23% reported lifetime use, and 11% recent use.

Between 2016 and 2017 lifetime prevalence of synthetic cannabinoid use fell non-significantly, from 29% to 23% ($p = 0.198$). Recent use went from 13% to 10%.

5. Drug market: Price, purity, availability and purchasing patterns

5.1. Heroin

Key Points

Price

- In 2016, the median reported price for 1.0 g of heroin returned to \$250, for a cap fell to \$40, and for 0.25 g rose to \$100.
- Participants most commonly reported purchasing 0.5 g of heroin and paying \$150.

Availability

- Almost all (94%) reported that heroin was very easy or easy to obtain, with 84% reporting that the heroin market was stable in the past six months. Six per cent reported heroin was more difficult to obtain.
- Heroin was primarily sourced from known dealers (48%) or friends (21%), from an agreed public location (40%), a dealer's home (20%), home-delivered (12%) or a street market (18%).

Purity

- Participants reported that heroin was typically of low (39%) to medium (28%) purity. Thirty-eight per cent reported that purity was stable in the six months before interview, and 13% reported a decrease.
- In 2016/17, the average purity of heroin seizures was low: 31% for < 1 gram (vs 26% in 2015/16), and 33% for > 1 gram (vs 27% in 2015/16).

5.1.1. Price

In 2017, 63% (n = 95) of the Victorian IDRS sample reported confidence in their knowledge of the heroin market in Melbourne and provided information pertaining to the price, purity and availability of heroin during the past six months. Table 5 presents Victorian IDRS participants' reports of the median price paid for their most recent heroin purchase, from 2012 to 2017, according to weight. Median heroin prices were estimated from participants' most recent heroin purchase. In 2017, participants (n = 50) most commonly reported recently purchasing 0.5 gram of heroin; the median price paid on the last purchase occasion was \$150. Forty-four participants reported most recently purchasing 1.7 grams of heroin (a standard amount of heroin sold on the streets of Melbourne), and 34 participants reported most recently purchasing a cap/0.1 gram (Table 5).

Table 5: Median prices paid for last heroin purchase, according to weight, Victoria, 2013–2017

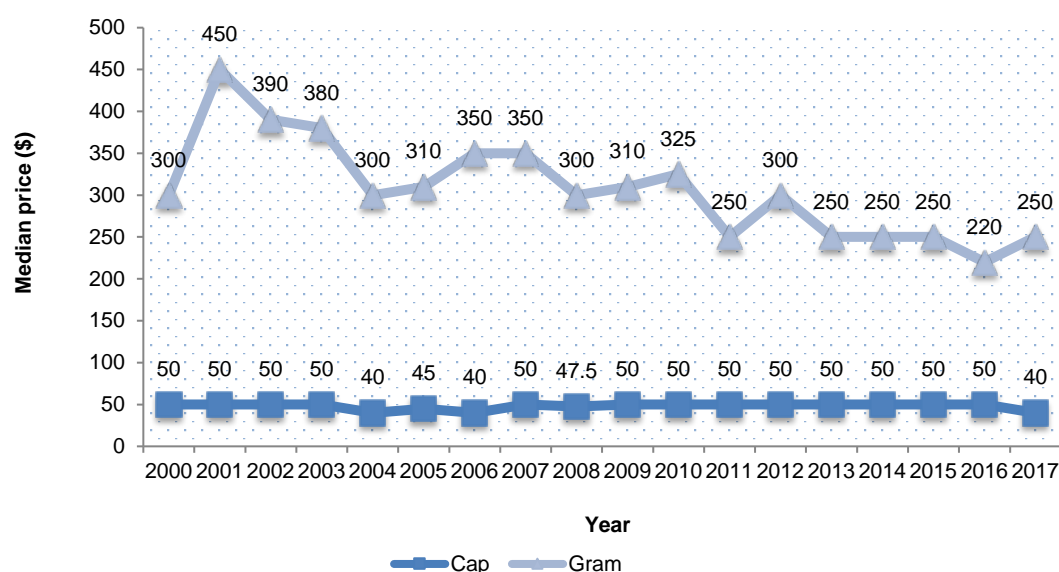
	2013 \$	2014 \$	2015 \$	2016 \$	2017 \$
Cap/0.1 g (range)	50 (35–80)	50 (20–300)	50 (25–150)	50 (20–70)	40 (20–100)
0.25 g (range)	100 (50–120)^	100 (50–150)	100 (50–500)	80 (50–500)	100 (50–500)
0.5 g (range)	150 (100–300)	150 (100–250)	150 (30–600)	150 (100–350)	150 (80–400)
1.0 g (range)	250 (160–700)	250 (50–480)	250 (135–450)	220 (150–320)	250 (120–500)
1.7 g (range)	300 (100–1000)	350 (180–400)	300 (50–500)	300 (200–400)	250 (30–700)

Source: IDRS participant interviews

^ Small numbers reporting (<10) – please interpret with caution

Figure 9 shows the median prices of a cap (about 0.1 gram) and 1.0 gram of heroin from 2000 to 2017, estimated from Victorian IDRS participants' most recent purchases. Median prices of a cap have remained stable at between \$40 and \$50 since 2000. The median price per gram of heroin has fluctuated over the years, peaking at \$450 in 2001 following the heroin 'glut' (Dietze & Fitzgerald, 2002). From 2004 to 2010 the median price remained stable, between \$300 and \$350, after which it declined. In 2017, the reported median price of a gram was \$250, higher than in 2016 but a return to the median amount in the previous three years (Figure 9).

Figure 9: Median prices of a cap and a gram of heroin estimated from participants' purchases, Victoria, 2000–2017



Source: IDRS participant interviews

In 2017, 94 participants provided information on changes to the price of heroin during the preceding six months. Stable heroin prices were reported by 68%, while 21% reported that the price of heroin decreased and 2% reported that the price increased. Nine per cent reported that the price of heroin fluctuated during the preceding six months.

5.1.2. Availability

Ninety-five participants commented on perceptions of current heroin availability. Most reported that heroin was very easy (62%) or easy (32%) to obtain; 6% reported that obtaining heroin at the time of

interview was difficult. Most participants reported no changes to recent heroin availability; 84% reported that the market was stable in the past six months, 10% reported that heroin had become more difficult to obtain, while 3% reported it was easier. Three per cent reported fluctuating availability in past six months.

As in previous years, participants were asked to nominate the source of their last heroin purchase; 98 participants provided comment. On the last purchase occasion, 48% reported sourcing heroin from known dealers (vs 61% in 2016), while 21% reported sourcing it through friends. Smaller proportions reported last sourcing heroin from a street dealer (19%) and an acquaintance (5%) or an unknown dealer (4%). Participants most commonly reported sourcing their last purchase from an agreed public location (40%), from a dealer's home (20%), having it home-delivered (12%), a street market (18%, up from 11% in 2016) or a friend's home (8%).

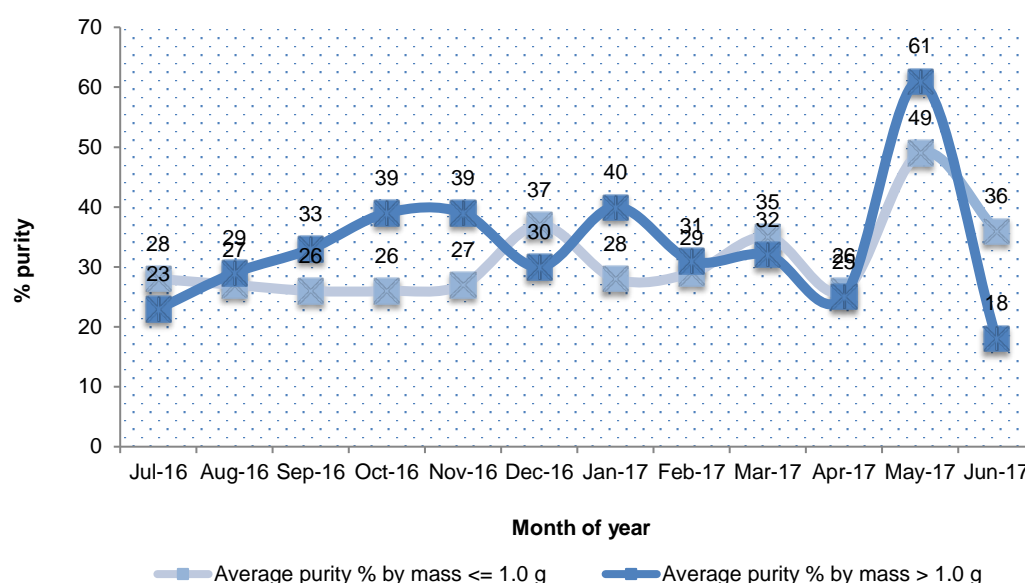
5.1.3. Purity

In 2017, 91 participants provided information on their perceptions of current heroin purity. Thirty-nine per cent reported that heroin purity was low (vs 44% in 2016), and 28% reported it was medium. Only 16% reported purity as high at the time of interview and 18% reported it as fluctuating.

Ninety participants commented on their perceptions of changes to heroin purity in the past six months. Of these, 38% reported that purity was stable, 34% reported fluctuating purity, 14% reported a decrease and 13% reported an increase.

Figure 10 shows the average purity of heroin seizures made by Victorian LE agencies during 2016/17. The average monthly purity of the heroin seizures under 1 gram was 31% (range 26–37%), higher than in the 2015/16 financial year (31%). The average purity of seizures weighing more than 1.0 gram was slightly higher (33%, range 18–61%), and higher than in 2015/16 (27%). Compared with the average purity of seizures during the height of heroin supply in Melbourne from 1998 to 2001, overall purity in 2016/17 was considerably lower (Cogger et al., 2013; Quinn, 2009).

Figure 10: Average purity of heroin seizures by Victorian law enforcement, July 2016 to June 2017



Source: Forensic Drug Branch, Victoria Police Forensic Services Department

5.2. Methamphetamine

Key Points

Price

- In 2017, only six IDRS participants reported purchasing speed. Participants (n = 19) most commonly reported purchasing 0.5 gram of ice for \$200, \$50 less than in 2016. Median reported prices for 0.1 gram and 1.0 gram of ice were unchanged from 2016.

Availability

- Three participants reported that speed was easy to obtain, two said it was difficult to obtain; five of six reported no change in availability in the past six months.
- Ice was described as easy or very easy to obtain (95%). Seventy-eight per cent reported no change in availability in the past six months; 10% reported easier access.

Purity

- In 2017, three participants reported speed purity was high, one low, one medium. Two reported no recent changes in purity, two said purity was increasing and one decreasing.
- Twenty-nine per cent reported that ice purity was high, 27% reported it was medium, 27% low. Forty-six per cent reported that purity was stable in the six months before interview, 25% reported a decrease, 27% fluctuation and 2% increasing.

5.2.1. Price

5.2.1.1. Speed powder

In 2017, only six Victorian IDRS participants reported confidence in their knowledge of the Melbourne speed market and provided information about price in the past six months. Median speed prices were estimated from participant reports of the price paid for their most recent purchase, detailed in Table 6. Two participants reported last purchasing 0.1 gram of speed, two reported purchasing 0.5 gram and two reported purchasing 1.0 gram. Table 6 shows median prices for speed powder between 2016 and 2017. Three participants said the price of speed had been stable in the preceding six months, and one each stated that it was increasing, decreasing or fluctuating.

5.2.1.2. Crystal methamphetamine (ice)

Table 6 also shows the median prices participants paid for their most recent ice purchase from 2014 to 2017. As with speed, median prices were estimated from participants' reports of the last price paid. In 2017, 61 participants reported confidence in their knowledge of the ice market. Of these, most (n = 19) reported last purchasing 0.5 gram of ice. Five participants reported purchasing 0.25 gram, and two reported purchasing an eighth of a gram (Table 6). Sixty-one participants provided information on changes to the price in the six months before interview: 37% reported it was stable, 12% reported that it was decreasing, 26% reported fluctuating prices (as against only 2% in 2016) and 24% increasing prices (as against 3% in 2016).

Table 6: Median prices paid for last speed and crystal methamphetamine* purchase, according to weight, Victoria, 2014–2017

	Speed				Crystal methamphetamine			
	2014 \$	2015 \$	2016 \$	2017 \$	2014 \$	2015 \$	2016 \$	2017 \$
0.1 g (range)	50 (50–100)	55 (20–200)^	40 (20–60)^	50 (50– 50)^	100 (50–100)	50 (25–100)	50 (25–100)	50 (40–70)
0.5 g (range)	100 (100–300)^	90 (90–90)^	--	--	300 (200–500)	250 (120–350)	250 (120–350)	200 (110–350)
1.0 g (range)	175 (90–800)	100 (100–100)^	110†	110†	500 (300–800)	350 (220–600)	350 (220–600)	350 (250–700)

Source: IDRS participant interviews

^ Small numbers reporting (<10) – please interpret with caution

* Base methamphetamine prices are not shown due to very few participants reporting recent purchases from 2011

-- Not reported

5.2.1.3. Base methamphetamine

In 2017, only one participant provided information on the price of base methamphetamine, paying \$500 for a gram and stating that the price was stable.

5.2.2. Availability

5.2.2.1. Speed powder

In 2017, six participants commented on their perceptions of speed availability. Three reported that speed was easy to obtain, two difficult, and one very difficult to obtain. With regards to perceptions of recent changes to speed availability, five of six reported the market was stable. The sources of their most recent speed purchases were friends (n=4) or known dealers (n=2).

5.2.2.2. Crystal methamphetamine (ice)

In 2017, 61 Victorian IDRS participants provided information on their perceptions of ice availability. Most participants reported that ice was very easy (56%, vs. 64% in 2016) or easy (39%, vs. 35% in 2015) to obtain; 5% reported it was difficult. Regarding participants' (n = 61) perceptions of recent changes to availability, 78% reported the market was stable, 10% reported that ice was easier to obtain, and 12% reported more difficulty.

Participants were asked to nominate the source of their last ice purchase and, in 2016, 61 did. At the last purchase, the most common sources were friends (43%), known dealers (30%), acquaintances (12%) and street dealers (12%). Participants (n = 60) reported that the most common source locations were an agreed public location (45%), home delivery (18%), a friend's home (13%), a dealer's home (8%) and a street market (10%).

5.2.2.3. Base methamphetamine

Only one participant commented on the market characteristics of base methamphetamine in 2017, stating that access was easy and stable; this participant last bought base from a street dealer.

5.2.3. Purity

5.2.3.1. Speed powder

In 2017, five Victorian IDRS participants provided information on their perceptions of speed purity. Three reported that speed purity was high, one low, one medium. All commented on recent changes to purity: two reported purity was stable, two increasing and one decreasing.

5.2.3.2. Crystal methamphetamine (ice)

In 2017, 59 participants provided information on their perceptions of ice purity at the time of interview. Of these, 29% reported purity was high, 27% reported it was medium, 27% reported it was low and 17% reported it was fluctuating. Fifty-nine participants commented on perceived recent changes to ice purity. Of these, 46% reported no changes in the past six months, 25% reported that ice purity was decreasing, 27% fluctuating, and 2% increasing.

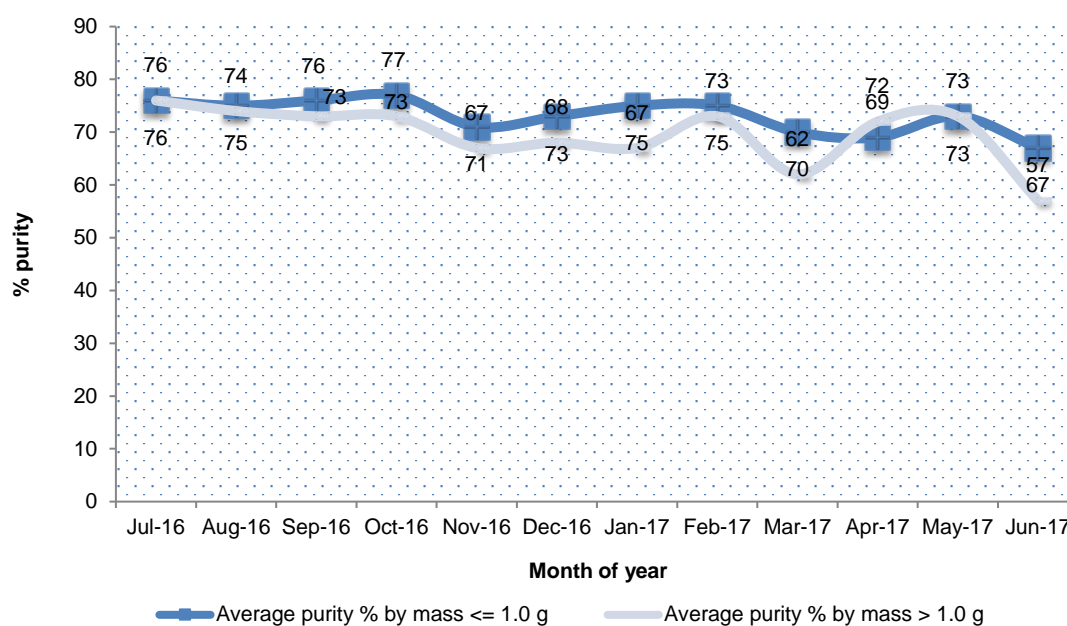
5.2.3.3. Base methamphetamine

Only one participant commented on the purity of base methamphetamine in 2017, stating it was medium and stable.

Figure 11 shows the average purity of methamphetamine seized by Victorian LE agencies during 2016/17. Overall, the average monthly purity of methamphetamine seizures analysed was 71% (range 57–77%), lower than in 2015/16. Note that the overall average purity of methamphetamine seizures during the last three financial years has been significantly higher than overall average purity prior to 2011/12. In 2016/17, seizures weighing 1.0 gram or less had an average monthly purity of 73% (range 67–77%), almost the same as the average purity of smaller seizures in 2015/16 (75%). The average purity of seizures of more than 1.0 gram was 70% (range 57–76%), lower than in 2015/16.

In comparison with methamphetamine, the purity of amphetamine seizures was low. Overall average monthly purity was 8% (range 1–34%), similar to 2015/16 (8%) but a large reduction from 2014/15 (17%). In 2015/16, amphetamine seizures weighing 1.0 gram or less had an average purity of 10% (range 3–34%), whereas seizures of more than 1.0 gram had an average purity of 7% (range 1–17%).

Figure 11: Average purity of methamphetamine seizures by Victorian law enforcement, July 2016 to June 2017



Source: Forensic Drug Branch, Victoria Police Forensic Services Department

5.3. Cocaine

Key Points

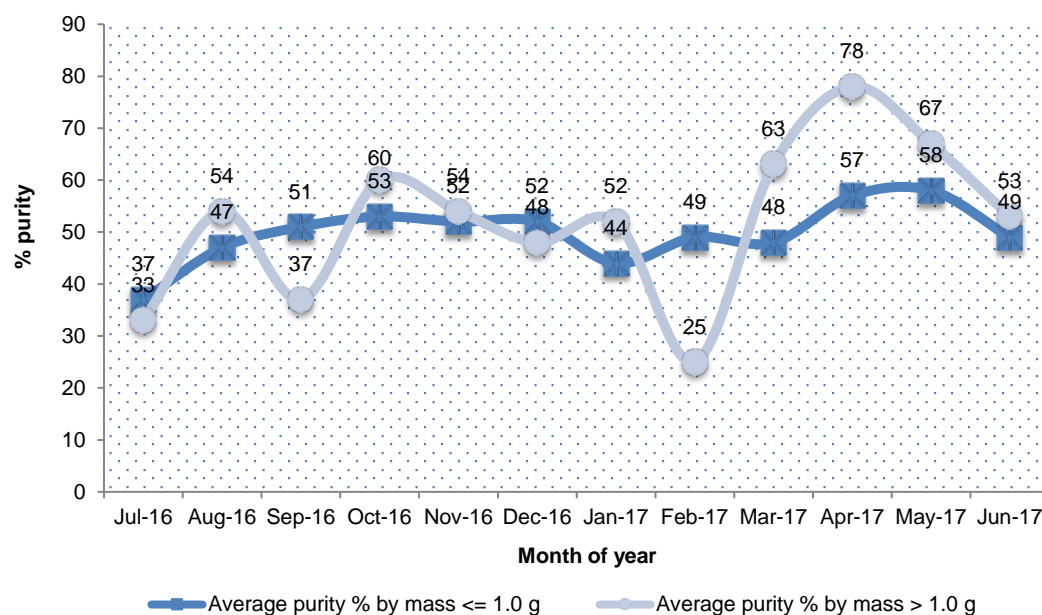
- In 2017 only one participant provided information on the last cocaine purchase, so median prices are not reported.
- In 2015/16, the overall average purity of cocaine seizures in Victoria was moderate (51%). Seizures weighing more than 1.0 gram had an average purity of 52%.

5.3.1. Price

In 2017, only one participant provided information about the price of their last cocaine purchase in the past six months. Median prices are therefore not reported. This participant said that prices were increasing, purity was high and increasing, that cocaine was difficult to obtain and that this had not changed in the previous six months.

Figure 12 shows the average purity of cocaine seizures made by Victorian LE agencies in 2016/17. Overall, the average monthly purity of cocaine seizures analysed was 51% (range 25–67%), similar to 2015/16 (48%) and 2014/15 (50%), but higher than previous years (Cogger et al., 2013). In 2016/17, seizures weighing 1.0 gram or less had an average monthly purity of 50% (range 37–58%), whereas seizures weighing more than 1.0 gram had an average purity of 52% (range 25–78%).

Figure 12: Average purity of cocaine seizures by Victorian law enforcement, July 2016 to June 2017



Source: Forensic Drug Branch, Victoria Police Forensic Services Department

5.4. Cannabis

Key Points

Price

- In 2017, the median prices for 1.0 gram and 1.0 ounce of hydroponically grown cannabis were consistent with most previous years. Ninety-one per cent of participants reported no recent price changes.
- Three purchasers of bush-grown cannabis reported stable prices.

Availability

- Ninety-five per cent reported that hydroponic cannabis was very easy or easy to obtain and 92% reported no recent changes to availability.
- Two participants reported that bush-grown cannabis was easy to obtain and that access was stable.
- Cannabis was most commonly purchased from friends and known dealers.

Potency

- Hydroponic cannabis potency was reported as high (54%) and medium (35%), with 69% reporting no recent changes to potency.

5.4.1. Price

In 2017, 37 Victorian IDRS participants reported confidence in their knowledge of the hydroponic cannabis market in Melbourne, and 40 in their knowledge of the bush cannabis market. Table 7 presents participants' reports of the median price paid for the last cannabis purchase, from 2014 to 2017, for hydroponic and bush-grown cannabis. In 2017, participants (n = 34) most commonly reported most recently purchasing 1.0 gram of hydroponic cannabis. Twenty-eight participants reported last purchasing 0.25 ounce (7.0 grams) and 16 participants reported last purchasing 1.0 ounce. Few participants reported purchasing bush-grown cannabis; five reported last purchasing 1.0 gram and two an ounce (Table 7).

Table 7: Median prices paid for last cannabis purchase, according to weight, Victoria, 2014–2017

	Hydroponic				Bush-grown			
	2014 \$	2015 \$	2016 \$	2017 \$	2014 \$	2015 \$	2016 \$	2017 \$
Gram (range)	20 (15–25)	20 (15–20)	20 (15–20)	20 (10–20)	20 (10–20)	20 (10–20)^	20 (10–20)^	20 (20–20)^
0.25 ounce (range)	70 (70–120)	80 (50–90)	78 (50–80)	08 (70–90)	80 (70–80)^	60 (50–80)^	60 (50–70)^	–
Ounce (range)	250 (200–280)	250 (200–320)	140 (100–250)	250 (200–280)	230 (100–250)^	210 (150–250)^	260 (220–300)^	–

Source: IDRS participant interviews

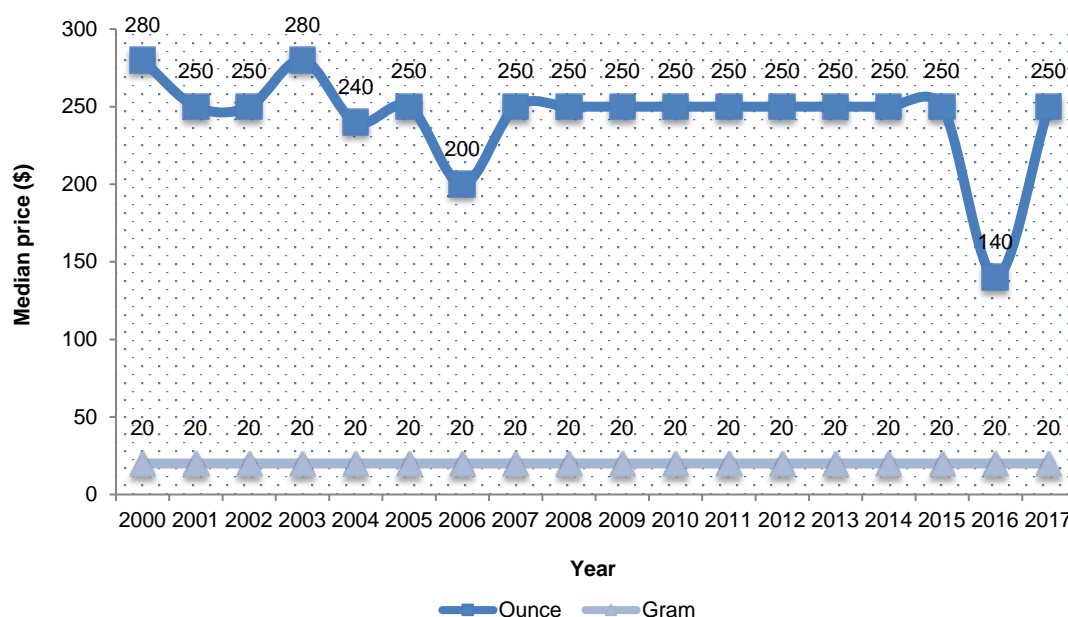
^ Small numbers reporting (< 10) – interpret with caution

-- No reports received

Figure 13 shows reported median prices of 1.0 gram and 1.0 ounce of cannabis, estimated from Victorian IDRS participants' most recent purchase, from 2000 to 2017. The median reported price of a gram has remained consistent at \$20. By contrast, the reported median price of an ounce fluctuated

somewhat between 2000 and 2006; between 2007 and 2015, prices have remained consistent at \$250, but fell to \$140 in 2016, then rebounded to \$250 in 2017 (Figure 13).

Figure 13: Median prices of a gram and an ounce of cannabis estimated from participants' purchases, Victoria, 2000–2017*



Source: IDRS participant interviews

* 2003–2015 prices reflect those for hydroponic cannabis only (the form used most).

In 2017, of the 37 participants who provided information on recent changes to hydroponic cannabis price, 91% reported it was stable (vs. 85% in 2016). The three participants who reported on prices for bush-grown cannabis also noted they were stable.

5.4.2. Availability

In 2017, 37 participants commented on hydroponic cannabis availability. Of these, the majority reported it was very easy (76%) or easy (19%) to obtain; only 2% reported difficulty obtaining hydroponic cannabis at the time of interview. With regard to participants' perceptions of recent changes to availability, 92% reported it was stable.

Participants (n = 58) nominated the source of their last hydroponic cannabis purchase. In 2017, the most common last source was friends (54%) and known dealers (35%), followed by friends (5%). The most commonly reported source venues were home-delivered (32%), a dealer's home (24%), and an agreed public location (19%).

In 2017, three participants provided information on their perceptions of current availability of bush-grown cannabis. Two said it was easy to obtain, and two reported access as stable in the preceding six months.

5.4.3. Potency

In 2017, 37 participants gave their perceptions of hydroponic cannabis potency: 54% reported it was high (vs. 55% in 2016) and 35% reported it was medium. Thirty-six participants commented on their perceptions of recent changes to potency. Of these, 69% reported it was stable and 11% that it was decreasing.

5.5. Methadone

In 2017, only one Victorian IDRS participant was able to comment on the market characteristics of *non-prescribed* methadone (Methadone Syrup®, Biodone Forte® and Physeptone® tablets), hence findings must be interpreted with extreme caution. No prices were reported. The participant reported that obtaining illicit methadone had become more difficult but that prices were stable in the preceding six months.

5.6. Buprenorphine

Only two participants provided comment on the market characteristics of *non-prescribed* buprenorphine (Subutex®) in 2017. Reported prices paid were \$10 for a 0.4mg Subutex tablet and \$20 for an 8mg Subutex tablet. One participant reported that illicit buprenorphine was easy to obtain, while the other said access was difficult; one said prices had increased, the other said they were stable; both said access was stable in the last six months. Acquaintances were the source in both cases.

5.7. Buprenorphine-naloxone film

Five participants provided information on the market characteristics of *non-prescribed* buprenorphine-naloxone film (Suboxone® film) in 2017. They paid \$5–\$20 for 8 mg film, and all described prices as stable in the preceding six months. Ease of access was characterised as easy or very easy and stable in the preceding six months. Sources were friends (2), acquaintances (2), and an unknown dealer.

5.8. Morphine

In 2017, four participants provided information about *non-prescribed* morphine. They last bought 100mg of MS Contin® for \$40 or \$50. Two stated that prices had been stable in the preceding six months; three said access was easy and one said very difficult; three said access had been stable and one said access had become easier in the preceding six months. MS Contin® had been obtained from friends (2) a known dealer (1) and an acquaintance (1). Table 8 presents median prices of non-prescribed morphine, estimated from participants' most recent purchase, for 2014 to 2017.

Table 8: Median prices paid for last morphine* purchase, according to tablet weight, Victoria, 2014–2017

	MS Contin®				Kapanol®			
	2014 \$	2015 \$	2016 \$	2017 \$	2014 \$	2015 \$	2016 \$	2017 \$
60 (MS Contin) or 50 (Kapanol) mg tablet* (range)	30^ (20–35)	20^ (20–20)	--	45^ (40–50)	25^# (25–25)	--	--	--
100 mg tablet/ capsule* (range)	50^ (30–100)	--	--		25^ (20–40)	30^ (30–30)	--	--

Source: IDRS participant interviews

* MS Contin® is formulated in 5 mg, 10 mg, 30 mg, 60 mg and 100 mg tablets. Kapanol® is formulated in 20 mg, 50 mg and 100 mg capsules. In 2014, less than three participants reported recent 5 mg, 10 mg and 30 mg MS Contin® tablet purchases, as well as 20 mg and 50 mg Kapanol® capsule purchases. In 2015, fewer than three participants reported recent 60 mg MS Contin® tablet purchases and 100 mg Kapanol® capsule purchases. No prices were reported in 2016.

^ Small numbers reporting (<10) – please interpret with caution

Price refers to 50 mg Kapanol® capsule

-- No reports received

5.9. Oxycodone

In 2017, only one participant reported on the market characteristics of *non-prescribed* oxycodone (OxyContin®, OP formulation). Table 9 shows the median prices Victorian IDRS participants paid for their most recent oxycodone purchase from 2013 to 2017. All prices must be interpreted with caution as no more than two participants reported purchasing any oxycodone tablet weight in 2015, and only one in 2016 and 2017.

Table 9: Median prices paid for last OxyContin® purchase, according to tablet weight, Victoria, 2013–2017

	2013 \$	2014* \$	2015 \$	2016 \$	2017 \$
10 mg tablet (range)	--	20^ (20–20)	--	--	--
20 mg tablet (range)	10^ (10–10)	10^ (1.50–20)	10^ (10–10)	--	--
40 mg tablet (range)	25^ (20–50)	20^ (20–25)	15^ (10–20)	20^	--
80 mg tablet (range)	40^ (30–50)^	45 (10–50)	40^ (40–40)	--	40^ (40–40)

Source: IDRS participant interviews

* In 2014, median price is reported for the original formulation of OxyContin® only. The original formulation is branded “OC” whereas the new, tamper-resistant reformulation that was introduced in 2014 is branded “OP”. Only one participant reported purchasing the reformulated tablets in 2014. In 2015, there were no participant reports of recent “OC” purchases. Fewer than three reported recent “OP” purchases.

^ Small numbers reporting (<10) – please interpret with caution

-- No reports received

The sole participant said non-prescribed oxycodone was difficult to obtain, and access had become more difficult in the previous six months, and prices were stable. The participant reported last sourcing illicit oxycodone from a known dealer (home delivered).

5.10. Alprazolam

On 1 February 2014, the TGA rescheduled alprazolam (Xanax®) in all forms and preparations from Schedule 4 to Schedule 8 (controlled drug).

In 2017, only one participant reported purchasing *non-prescribed* alprazolam, and no specific market characteristics were reported.

6. Health-related trends associated with drug use

6.1. Overdose and drug-related fatalities

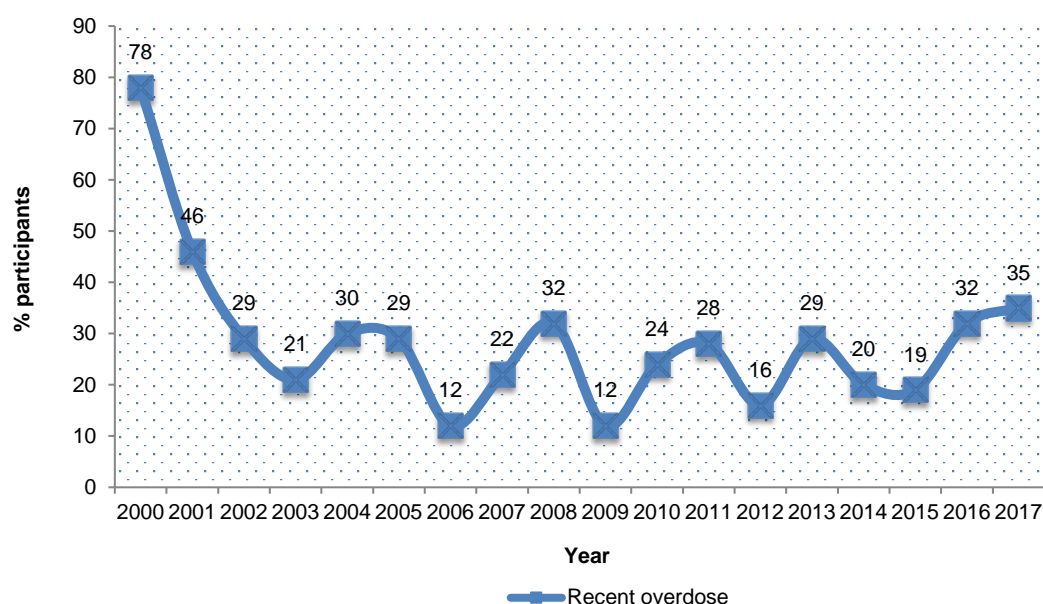
Information on drug-related overdose contained in this report is collected from several sources, including self-report data from the 2017 Victorian IDRS participant sample, data on the number of Victorian drug-related fatalities (sourced from the National Coroner's Information System (NCIS) via DHHS), and a database of all drug-related ambulance attendances in the community (maintained by Turning Point).

6.1.1. Heroin

6.1.1.1. Self-reported non-fatal overdose

In 2017, 126 Victorian IDRS participants provided information regarding non-fatal overdose. Of these, 81 (64%) reported a lifetime accidental heroin overdose, more than in 2016 (56%). Among these, the median number of lifetime overdoses was two. Figure 14 shows the prevalence of self-reported heroin overdose among Victorian IDRS participants in the past year, from 2000 to 2017. In 2017, among those with a history ($n = 81$), the prevalence was 35%, up from 32% in 2016 and the highest figure since 2001 (Figure 14). Nine per cent of participants with a history reported an accidental heroin overdose in the month before interview, similar to the proportion in 2016 (8%).

Figure 14: Self-reported heroin overdose in the past year among participants with an overdose history, Victoria, 2000–2017



Source: IDRS participant interviews

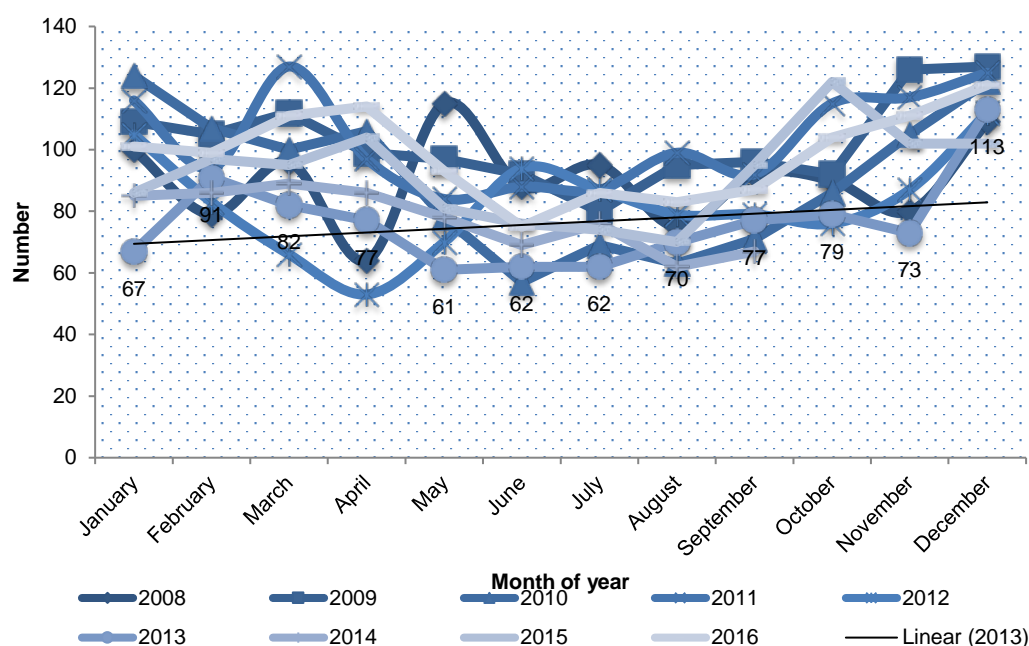
* In this context, recent refers to any heroin overdose in the preceding 12 months

As in previous years, in 2017 participants who reported a past-year heroin overdose ($n = 28$) were asked to provide information on any immediate treatment received following the last event. Multiple responses were allowed. Of these, 17 (61%) reported receiving the opioid antagonist naloxone (Narcan®).

6.1.1.2. Non-fatal heroin overdose attended by ambulance

Figure 15 shows the number of non-fatal heroin⁶ overdoses attended by AV in the greater Melbourne region, by month, from January 2008 to December 2016. Non-fatal heroin overdose case numbers are reported for those patients who responded positively to the opioid antagonist naloxone, and do not include heroin-related cases in which naloxone was not administered. In 2016, 1,185 non-fatal heroin overdoses were attended by AV in greater Melbourne, 7% more than the 1,104 overdoses in 2014⁷. In 2016, the median age of cases was 39 years (range 19–69 years). The average number of attendances per month was 99 (range 75–121) (Figure 15).

Figure 15: Number of non-fatal heroin overdoses attended by Ambulance Victoria per month, Melbourne, 2008–2016



Source: Turning Point

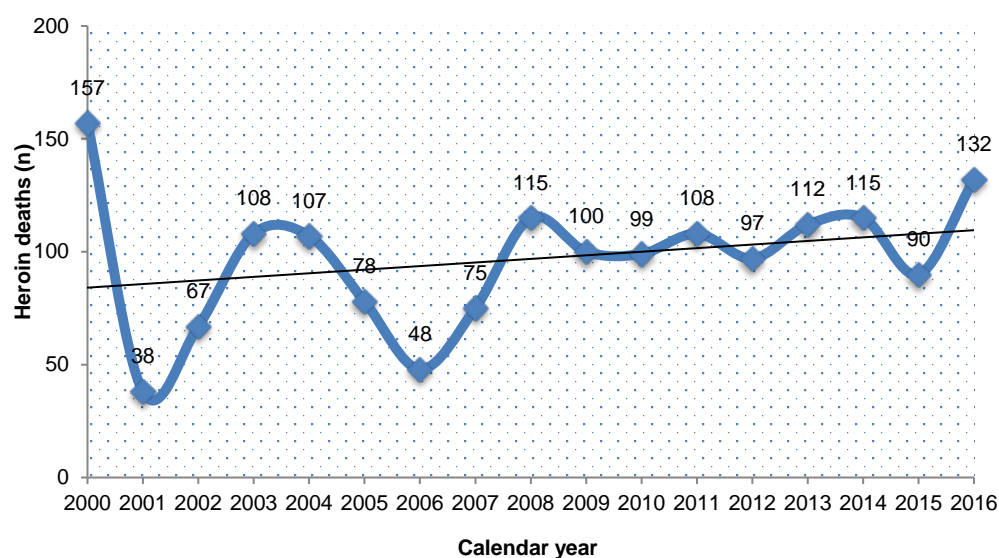
6.1.1.3. Heroin-related deaths

Figure 16 summarises data for trends in heroin-related mortality in Victoria from 2000 to 2016. A total of 1,636 heroin-related deaths were recorded for the period, an average of 97 fatalities (range 38–157 deaths) per year. The sharp decline in fatalities observed in Victoria from 2000 to 2001 was consistent with the timing of the end of the heroin “glut” in Melbourne (Fry & Miller, 2001). Between 2003 and 2004, the annual number of heroin-related deaths in Victoria returned to the level observed during the mid-1990s (Cogger et al., 2013). One hundred and fifteen deaths were officially defined as heroin-related in Victoria in 2014 and 90 in 2015. To end 2016, 132 fatalities were officially defined as heroin-related, the highest figure since 2000.

⁶ Note that this figure may include non-fatal overdoses for other opioids as well as heroin, given that naloxone is an antagonist for all opioids.

⁷ Data for October–December 2014 are missing due to industrial action.

Figure 16: Heroin-related deaths, Victoria, 2000–2016*



Source: Victorian Department of Health, 2017

Note: These figures were extracted from the NCIS database. Some data are modified once the coroner has concluded cases and a finding has been completed, therefore some figures may change. Cases remain open until the coroner makes a finding as to the cause of death – some data remain incomplete until this time. On occasion, cases can remain open for several years. As such, figures may underestimate the true number of heroin-related fatalities in Victoria and are subject to change in future as cases are resolved. The death is counted as heroin-related if the drug is seen to have contributed to the death. For 2017, only data for the first quarter were available so are not shown.

* Data for 2012 and 2013 were initially incomplete due to industrial action; significant changes have since been made to figures for these years. Therefore note that data provided by VDH in 2015 supersede those included in the 2012 and 2013 *Victorian Drug Trends* reports

6.1.2. Drugs other than heroin

6.1.2.1. Self-reported non-fatal overdose

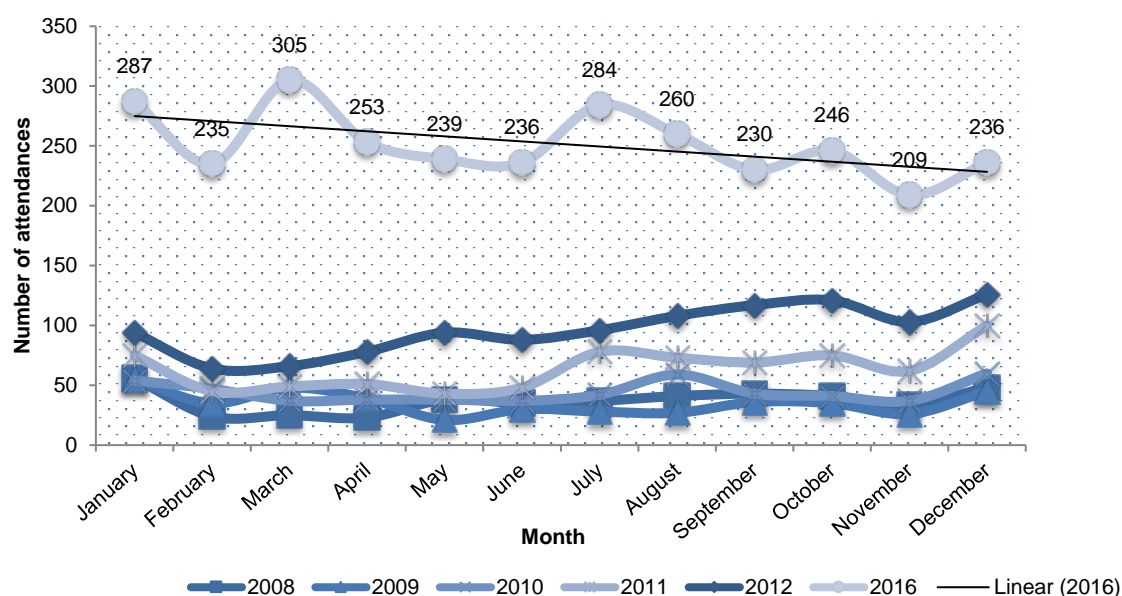
In 2017, 7% of Victorian IDRS participants reported a lifetime accidental overdose on drugs other than heroin, the same as in 2016. Among these participants (n = 10), the median number of lifetime overdoses was 2.

6.1.2.2. Other drug-related events attended by ambulance

Figure 17 shows the number of amphetamine-related events attended by AV in the greater Melbourne region by month in 2016. AV attended 3,020 amphetamine-related events, a 13% increase on the 2,661 events attended in 2015⁸. In 2016, the median age of cases was 31 years (range 14–83 years) and the average number of attendances per month was 252 (range 209–305 attendances), increasing from averages of 144 in 2014, 96 in 2012, 64 in 2011, 44 (range 37–60) in 2010 and 35 (range 21–55) in 2009 (Figure 17).

⁸ Data for October–December 2014 are missing due to industrial action.

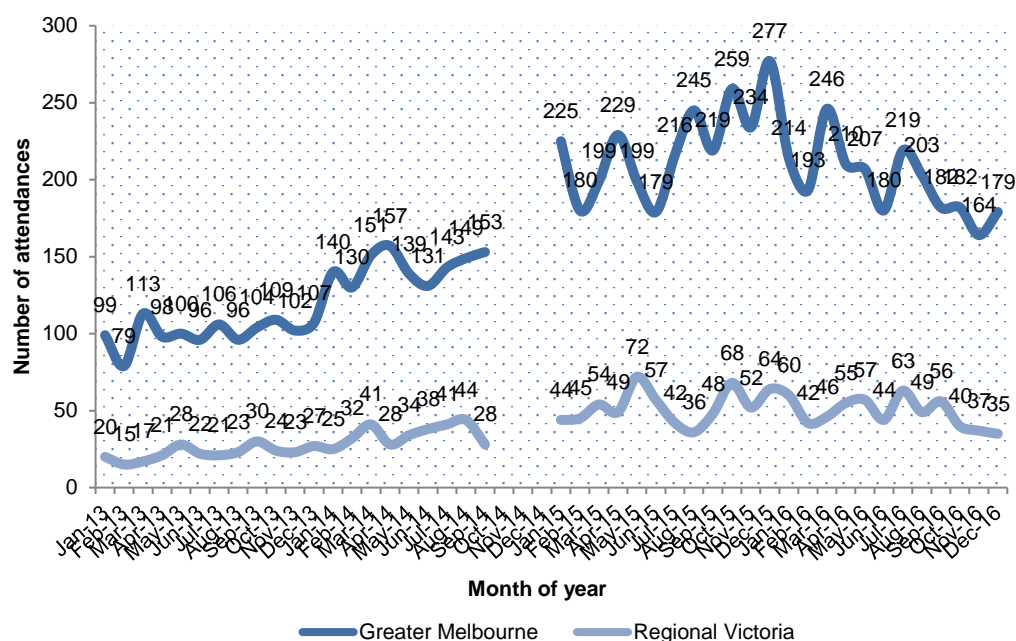
Figure 17: Number of amphetamine-related events attended by Ambulance Victoria per month, Melbourne, 2008–2016



Source: Turning Point

The number of crystal methamphetamine-related (ice) events attended by AV in greater Melbourne from 2012 to 2016 is shown in Figure 18 by month, compared with regional Victoria. During 2016, AV attended 2,379 ice-related events in Melbourne and a further 584 in regional Victoria, increases of 13% and 14% from 2015. In 2016, the median age of Melbourne cases in which ice was involved was 31 years (range 14–72 years), nearly the same as the median age of cases in regional Victoria (29 years, range 13–61 years), both higher than reported median ages in 2015. In Melbourne the average number of attendances per month was 198 (range 164–246 attendances), roughly equivalent on a population basis with regional Victoria, where the monthly average was 49 (range 35–60 attendances) (Figure 18).

Figure 18: Number of crystal methamphetamine-related events attended by Ambulance Victoria per month, Melbourne and regional Victoria, 2013–2016



Source: Turning Point

During 2016, AV attended 263 cocaine-related events in the greater Melbourne region, a 19% increase over 2015 ($n = 221$)⁹. The median age of cases in which cocaine was involved was 27 years (range 15–60 years), higher than the median age in 2015. In 2016, the average number of cocaine-related attendances per month was 22 (range 8–38 attendances).

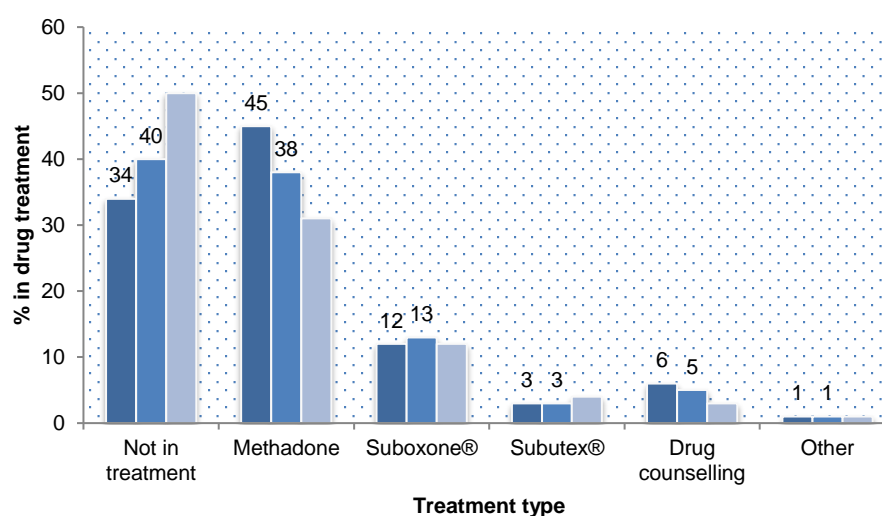
6.2. Drug treatment

6.2.1. Current drug treatment

In 2017, the IDRS included detailed questions about access to drug treatment services at the time of interview and in the preceding six months. Figure 19 shows that of the Victorian participants who responded ($n = 150$), 50% were in current drug treatment, particularly OST such as methadone (31%) and Suboxone® (12%). Among participants who were in treatment at the time of interview ($n = 68$), the median duration was 30 months. For those currently in methadone treatment ($n = 46$), the median duration of the treatment episode was 24 months.

⁹ Data for October–December 2014 are missing due to industrial action.

Figure 19: Drug treatment status at interview, Victoria, 2015–2017



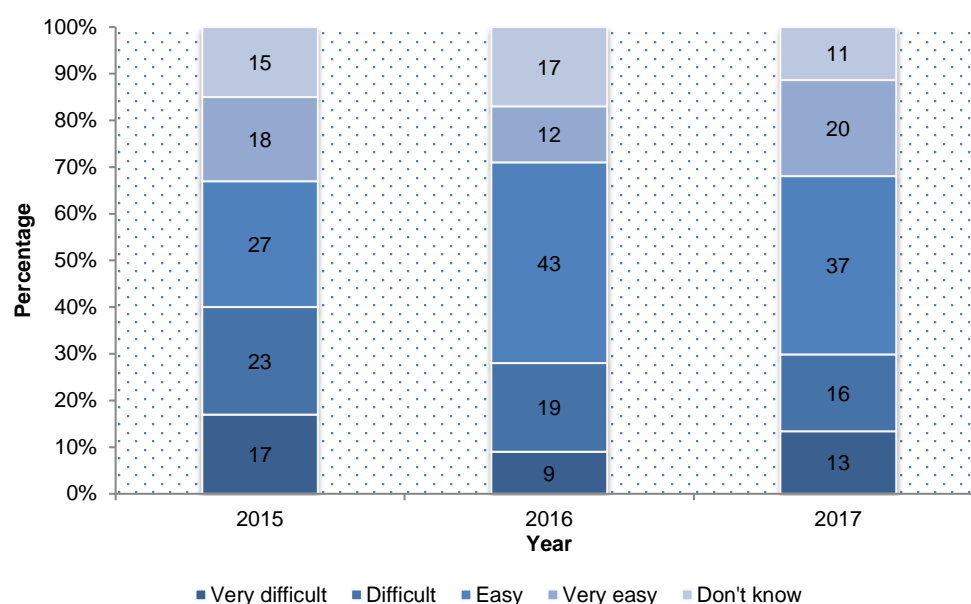
Source: IDRS participant interviews

As well as current drug treatment, participants were asked to indicate whether they had received any drug treatment in the preceding six months and the treatment type. Multiple responses were allowed. Thirty-three per cent ($n = 50$) reported being in drug treatment during the six months before interview. Of these, the most common treatment types were methadone (80%) and buprenorphine-naloxone (10%), followed by drug counselling (3%) and buprenorphine (2%).

The sample was also asked about their recent experiences of accessing drug treatment services. Nine per cent reported being turned away from treatment in the six months before interview. Participants in this group ($n = 13$) most commonly reported trying to access treatment for heroin (77%) and methamphetamine (15%).

Participants were also asked questions about their perception of current access to and recent availability of drug treatment services. Figure 20 shows 2017 Victorian IDRS participants' perception of access to drug treatment services at the time of interview. While some perceived access to drug treatment to be difficult (16%) or very difficult (13%) to access if they wanted to, others reported that it was easy (37%) or very easy (20%).

Figure 20: Perception of access to drug treatment services at interview, Victoria, 2015–2017



Source: IDRS participant interviews

6.2.2. Heroin

6.2.2.1. Alcohol and Drug Information System

During 2016–17, 61,030 courses of treatment¹⁰ were delivered to an estimated 31,679 clients¹¹ in federal and state government-funded Victorian specialist alcohol and drug treatment services. Overall, the number of courses of treatment delivered to clients increased 4.4%, from 58,481 in 2015/16. A 1.2% increase in the number of clients was recorded, from 31,302⁹ in 2014/15. In 2016/17, alcohol was the most commonly cited drug of concern (25% of clients and 29% of treatment episodes), followed by, amphetamines (20% of episodes), cannabis (17%) and heroin (5%).

6.2.2.2. DirectLine calls

The DirectLine telephone service provides 24-hour counselling, information and referral services to people in Victoria wishing to discuss drug-related issues or concerns (Victorian Department of Health, 2013c). In 2016 DirectLine responded to 33,639 alcohol and drug-related telephone calls, with a specific drug of concern¹² identified in 76% of enquiries. Between 2014 and 2015, the number of calls to DirectLine changed very little (33,722 in 2015).

Figure 21 shows the percentages of calls to DirectLine in which heroin and other opioids were identified, from 2000 to 2016. In 2016, heroin was identified as a drug of concern in 1604 telephone calls, representing 6% of all calls to DirectLine in which a drug of concern was cited. Since 2002, the percentage of heroin-related calls has fluctuated around 10%. In 2016, an additional 3,339 calls were received identifying opioids other than heroin as the drug of concern, comprising 13% of all drug-identified calls for the period. Between 2002 and 2013 the percentage of calls identifying other opioids

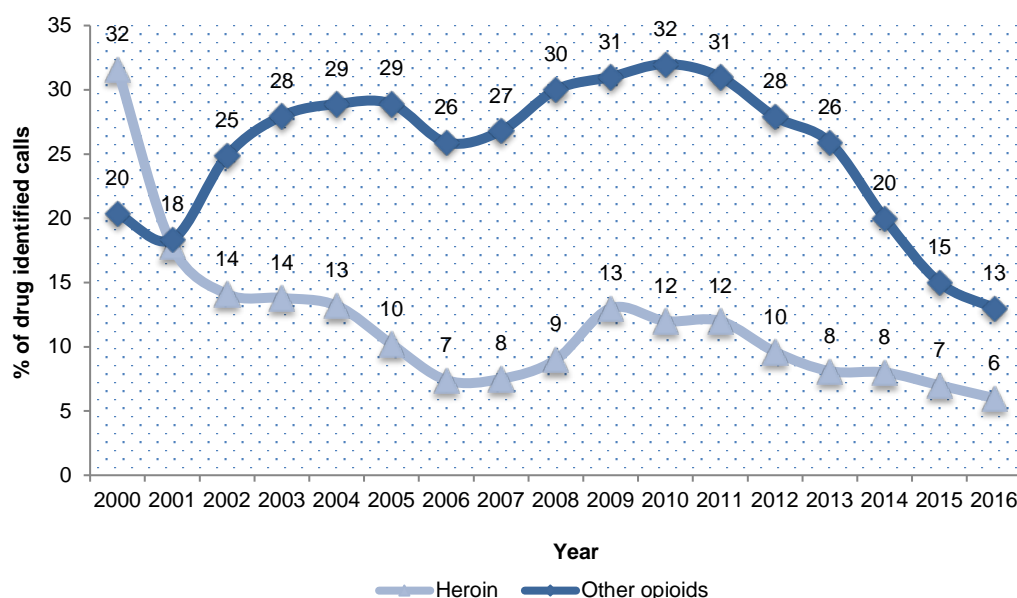
¹⁰ 2015–16 data may be subject to change due to late agency data returns. As such, these data are likely to underestimate the total numbers of courses of treatment and clients for this period.

¹¹ Clients in specialist alcohol and drug services include both people who use drugs and non-users. Non-users may include partners, family or friends. Clients can receive more than one course of treatment during a year with different primary drug types. Hence the count of distinct clients by drug type and year is greater than the count of distinct clients for year only.

¹² A caller or user may have more than one drug of concern and totals are adjusted for multiple drugs of concern.

as a concern remained similar, fluctuating between 25% and 32%, but has been declining steadily since a high of 32% in 2010 (Figure 21). Calls relating to heroin have declined similarly, from 13% in 2010.

Figure 21: Percentage of calls to DirectLine in which heroin or other opioids were identified as drugs of concern, Victoria, 2000–2016

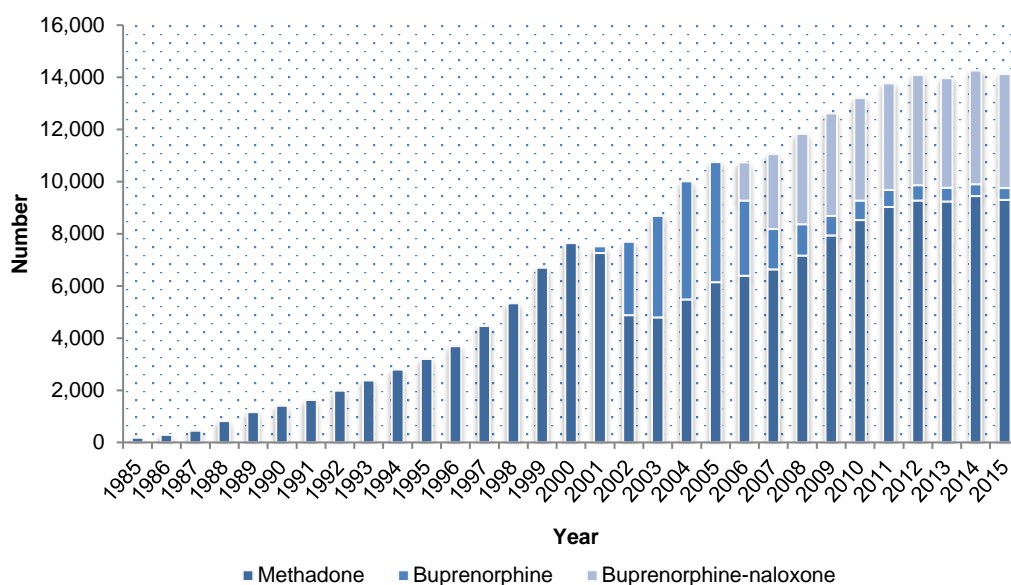


Source: Turning Point

6.2.2.3. Pharmacotherapy consumers

The National Opioid Pharmacotherapy Statistics Annual Data (NOPSAD) collection provides information on a snapshot day in June 2015 on people receiving opioid pharmacotherapy treatment (methadone, buprenorphine, and buprenorphine-naloxone) in Australia. Figure 22 shows the number of Victorian pharmacotherapy consumers dispensed OST by treatment type from 1985 to 2015. As detailed in the Figure, the number of consumers who were dispensed methadone increased steadily to over 7,500 in the year 2000. In 2001, buprenorphine (Subutex®) became available on the PBS and was prescribed to 258 people during that year. Over the next five years, there was a substantial increase in the number of pharmacotherapy consumers dispensed buprenorphine, peaking at 4,605 during 2005; concurrently, in 2003 the number of consumers who were dispensed methadone decreased, falling to 4,795. In 2006, buprenorphine-naloxone (Suboxone®) became available on the PBS and, since then, many more consumers have been transferred to the combination product. As at July 2015, 14,122 people were dispensed OST in Victoria, a decrease of 1% from 2014 (n = 14,255). As in previous years, 66% (n = 9,303) were dispensed methadone, while 31% (n = 4,367) were dispensed buprenorphine-naloxone. Only 452 people were dispensed buprenorphine (five fewer than in 2014), comprising only 3% of all pharmacotherapy consumers in Victoria (Figure 22).

Figure 22: Number of pharmacotherapy consumers dispensed opioid substitution treatment in Victoria, by treatment type, 1985–2015



Source: National Opioid Pharmacotherapy Statistics Annual Data (NOPSAD)

6.2.3. Methamphetamine

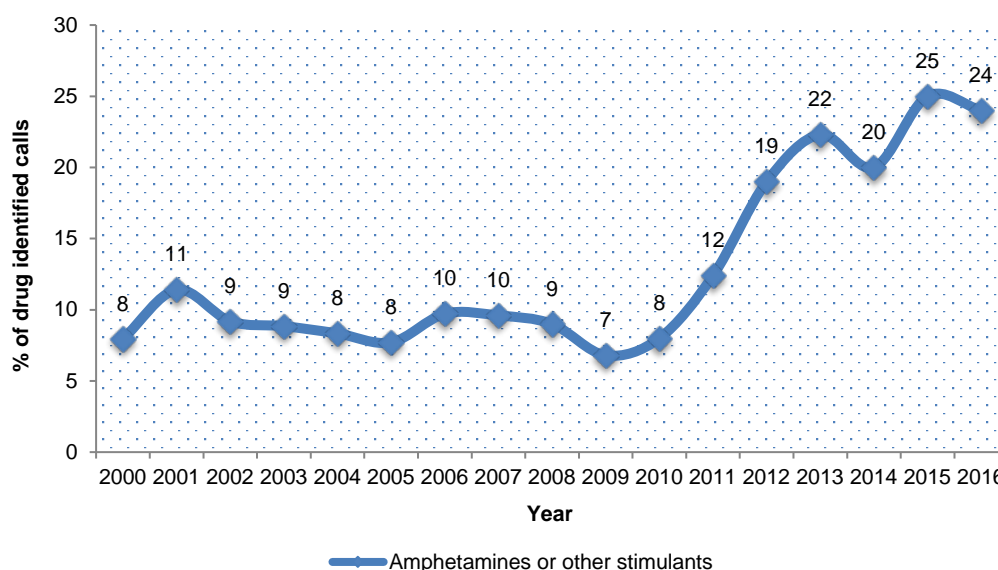
6.2.3.1. Alcohol and Drug Information System

In 2016/17, amphetamine/s was cited as a drug of concern in 12,234 courses of treatment delivered to 7,150 clients in Victorian specialist alcohol and drug treatment services. Compared with 2015/16, there was an 11% increase in the number of amphetamine-related courses of treatment delivered, and a 9% increase in the number of clients citing the drug as their primary concern. In 2016/17, for the second time, amphetamine surpassed heroin and cannabis as the second-most commonly cited drug of concern, representing 18% of all clients and 20% of all courses of treatment for the period.

6.2.3.2. DirectLine calls

Figure 23 shows the proportion of calls made to DirectLine in which amphetamines or other stimulants (ATS) were identified, from 2000 to 2016. In 2016 ATS were identified in 6,300 calls, representing 24% of calls to DirectLine in which a drug of concern was identified, and 20% of all calls related to 'ice' alone. This represents a slight fall from 2015, when 6,544 calls related to ATS, representing 25% of all calls (21% related to 'ice').

Figure 23: Percentage of calls to DirectLine in which amphetamines or other stimulants were identified as drugs of concern, Victoria, 2000–2016



Source: Turning Point

Note: Includes calls relating to 'amphetamine', ecstasy, cocaine and other stimulants.

6.2.4. Cocaine

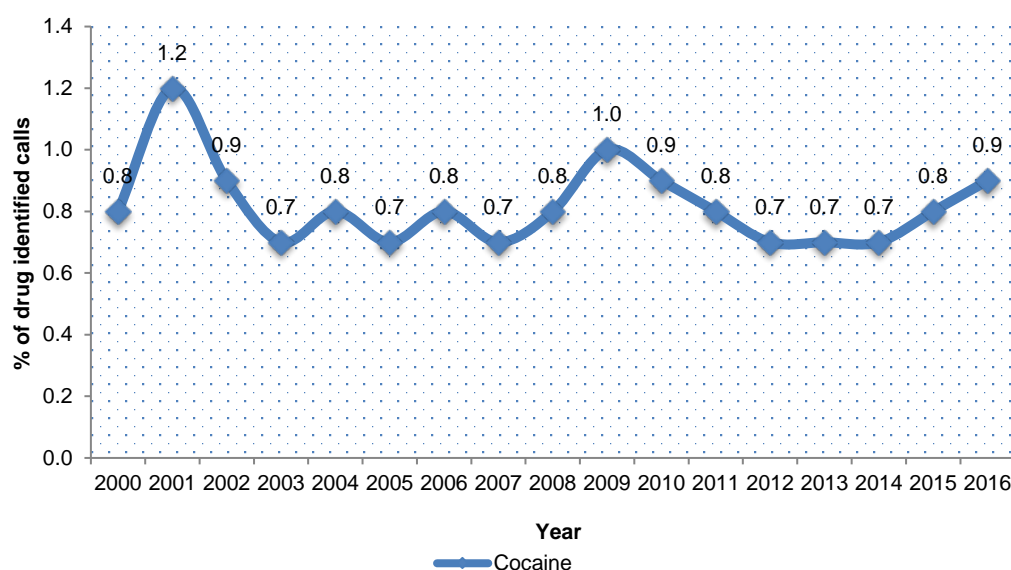
6.2.4.1. Alcohol and Drug Information System

During 2016/17, cocaine was cited as a drug of concern in 108 courses of treatment delivered to 92 clients in Victorian specialist alcohol and drug treatment services. As in previous years, cocaine was cited in fewer than 1% of all courses of treatment and clients for the period. Between 2015/16 and 2016/17 the number of courses of treatment for cocaine increased by 24%, as did the number of clients.

6.2.4.2. DirectLine calls

Figure 24 shows the percentage of calls made to DirectLine in which cocaine was identified as the drug of concern, from 2000 to 2016. In 2016, cocaine was identified as a drug of concern in 238 calls, representing 0.9% of calls to the service. The percentage of calls received by DirectLine relating to cocaine has been low and stable for all years shown (Figure 24).

Figure 24: Percentage of calls to DirectLine in which cocaine was identified as a drug of concern, Victoria, 2000–2016



Source: Turning Point

6.2.5. Cannabis

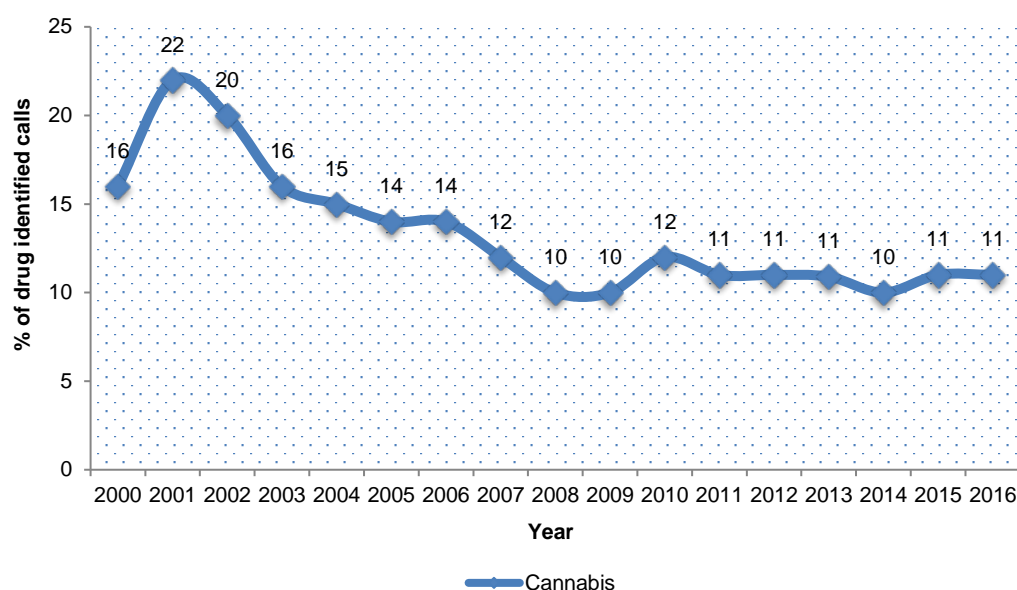
6.2.5.1. Alcohol and Drug Information System

Before 2015/16 cannabis was the most commonly cited illicit drug of concern in the Victorian Alcohol and Drug System, but in 2016/17 was exceeded by amphetamine for the second time. Cannabis accounted for 17% of courses of treatment and 14% of clients. During the period, 10,300 courses of treatment were delivered to 5,641 clients, increasing by 7% and 2% respectively from 2015/16.

6.2.5.2. DirectLine calls

Figure 25 shows the percentage of calls made to DirectLine in which cannabis was identified as a drug of concern, from 2000 to 2016. In 2015, DirectLine responded to 2,706 calls in which cannabis was cited as a drug of concern (very slightly fewer than in 2015), representing 11% of all drug-identified calls to the service during the period. Since 2007 figures have remained stable at between 10% and 12% (Figure 25).

Figure 25: Percentage of calls to DirectLine in which cannabis was identified as a drug of concern, Victoria, 2000–2016



Source: Turning Point

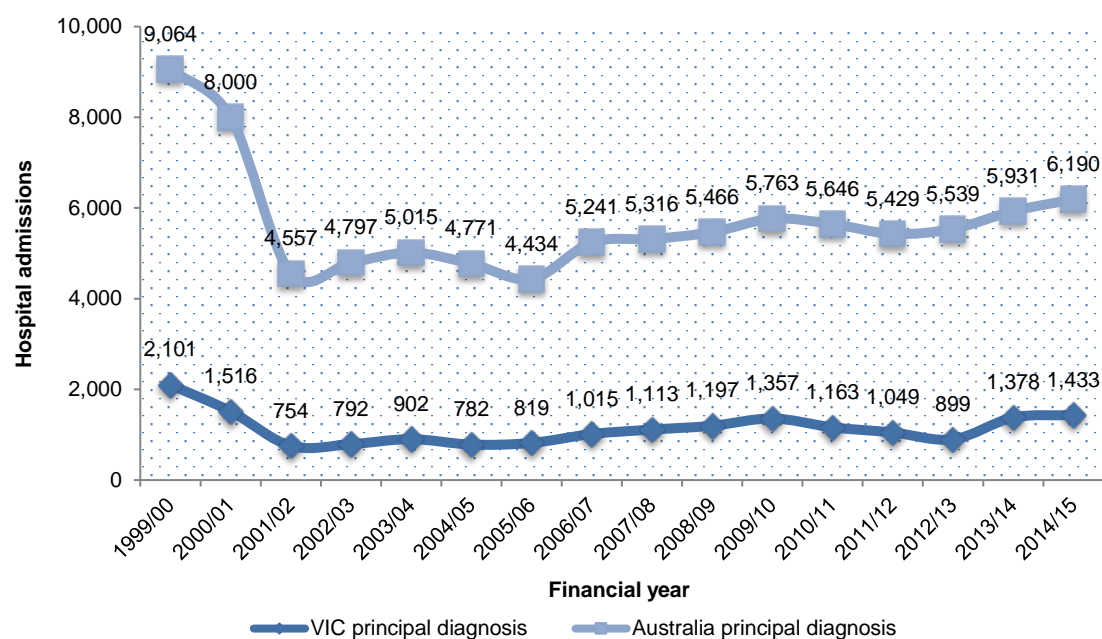
6.3. Hospital admissions

The National Hospital Morbidity Database (NHMD) is a collection of electronic records for hospital admissions in public and private hospitals compiled by the AIHW. Drug-related hospital admissions for opioids, amphetamine, cocaine and cannabis are reported below for Victoria and Australia, from 1999/2000 to 2014/15 (Roxburgh & Breen, 2017). Following examination, the principal diagnosis refers to the established diagnosis that is primarily responsible for occasioning the patient's episode of care in hospital.

6.3.1. Heroin and other opioids

Figure 26 shows the number of opioid-related hospital admissions among persons aged 15 to 54 years in Victoria and Australia, from 1999/2000 to 2014/15. Opioid-related hospital admissions account for the highest proportion of drug-related admissions in Victoria and Australia. Between 1999/2000 and 2001/02, the number of opioid-related hospital admissions significantly declined, consistent with reports of the end of the heroin "glut" (Jenkinson, Miller, & Fry, 2004). Since 2001/02, the number was reasonably stable, then declined from 2010/11 to 2012/13. However, in 2014/15 there were 1433 admissions with an opioid-related primary diagnosis in Victoria (435 per million people) – an increase of 4% over the previous year – comprising 23% of opioid-related admissions in Australia (6190; 476 per million people). The 2014/15 figures are the highest for both Victoria and Australia since 2000/01.

Figure 26: Number of opioid-related hospital admissions, Victoria and Australia, 1999/2000–2014/15

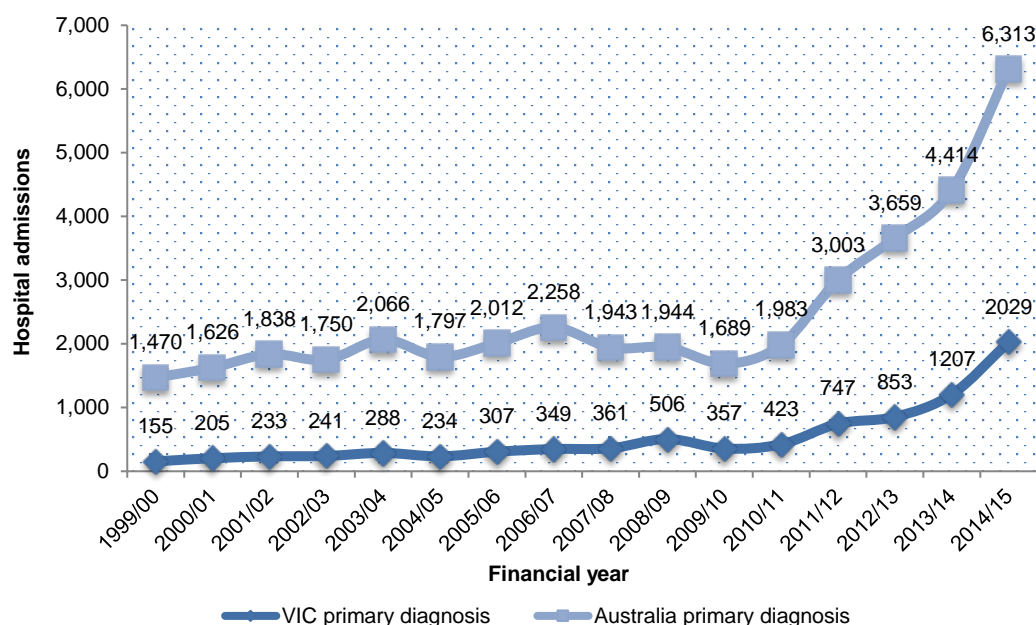


Source: Roxburgh and Breen, 2017

6.3.2. Meth/amphetamine (amphetamine)

Amphetamine-related hospital admissions from 1999/2000 to 2014/15 in Victoria and Australia among persons aged 15 to 54 years are presented in Figure 27. The annual number of hospital admissions with an amphetamine-related primary diagnosis has been increasing since 2007/08. In 2014/15, amphetamine-related hospital admissions increased by 68% in Victoria to 2029 (616 per million people, vs 485 per million for Australia), continuing the increase from the previous year, but at over 1.5 times the rate. This figure comprises 32% of Australian hospital admissions related to the drug (n=6313), an increase from the previous year (27%).

Figure 27: Number of amphetamine-related hospital admissions, Victoria and Australia, 1999/2000–2014/15

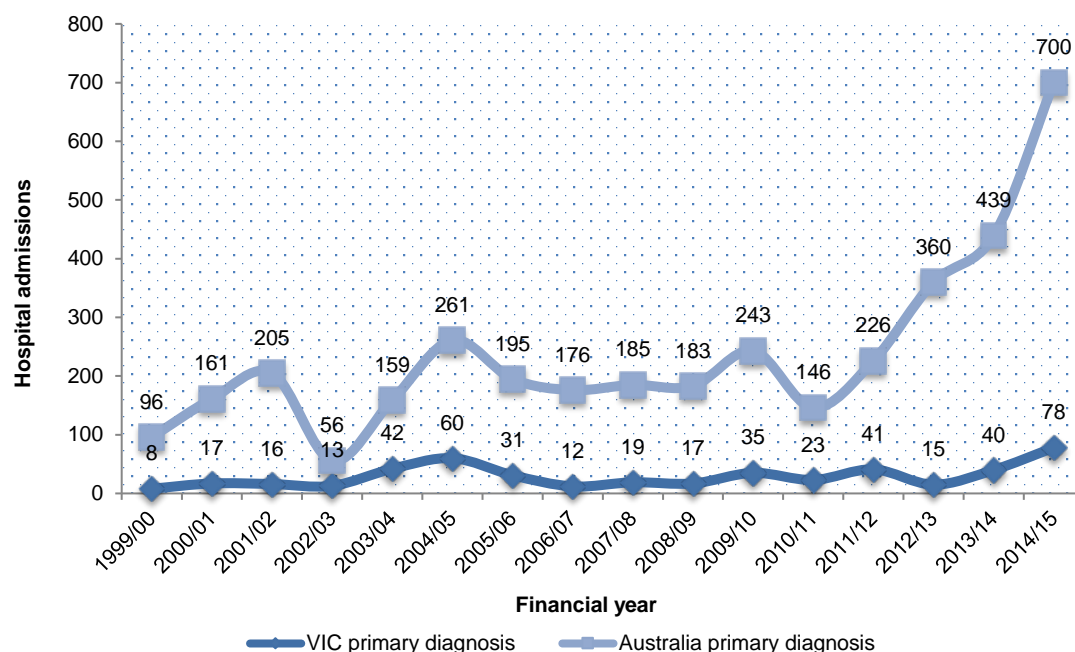


Source: Roxburgh and Breen, 2017

6.3.3. Cocaine

Figure 28 shows the number of cocaine-related hospital admissions among persons aged 15 to 54 years in Victoria and Australia, from 1999/2000 to 2014/15. Nationally, the number of admissions with a primary diagnosis related to cocaine has been increasing since 2010/11, peaking in 2014/15 (n=700), an increase of 37% over the previous year. This pattern was not observed in Victoria, where cocaine-related admissions declined to only 15 in 2012/13, rebounded to 40 (12 per million people, vs 34 per million for Australia) in 2013/14, and climbed to 78 in 2014/15, comprising 11% of the national total.

Figure 28: Number of cocaine-related hospital admissions, Victoria and Australia, 1999/2000–2014/15

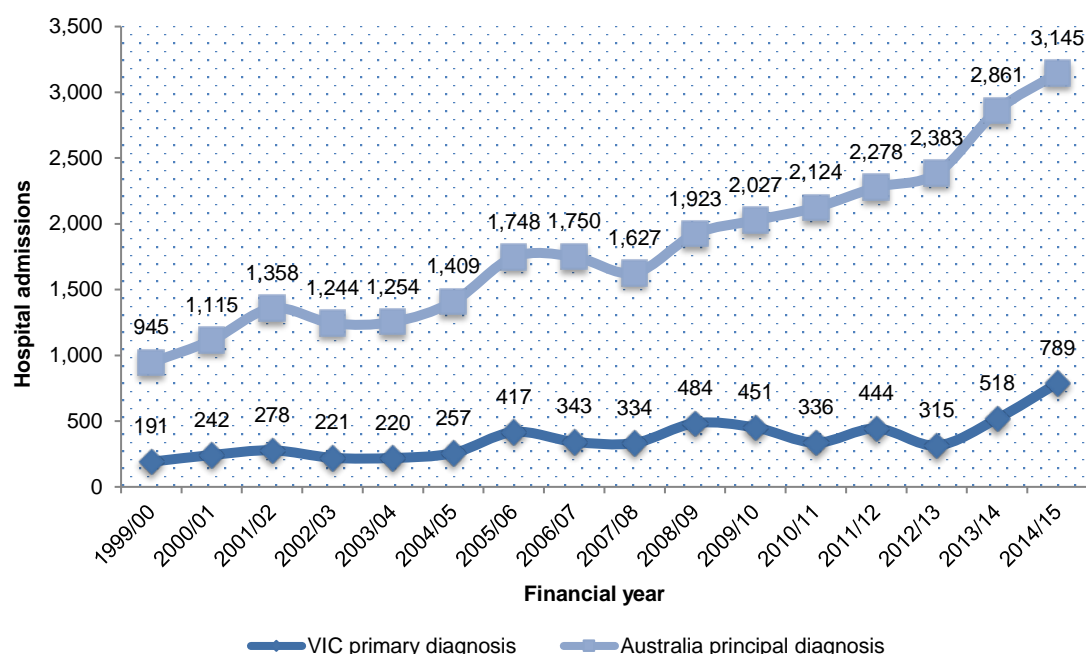


Source: Roxburgh and Breen, 2017

6.3.4. Cannabis

Cannabis-related hospital admissions among persons aged 15 to 54 years are shown in Figure 28 for Victoria and Australia, from 1999/2000 to 2014/15. Nationally, the number of hospital admissions with a cannabis-related primary diagnosis has increased steadily over the period, peaking in 2014/15. The number in Victoria has been fluctuating around 400 since 2005/06, but in 2014/15 there were 789 hospital admissions with a cannabis-related primary diagnosis, an increase of 34% over the previous year. Victorian admissions comprised 25% of all cannabis-related admissions in Australia for 2014/15, up from 18% in 2013/14.

Figure 29: Number of cannabis-related hospital admissions, Victoria and Australia, 1999/2000–2014/15



Source: Roxburgh and Breen, 2017

6.4. Injecting risk behaviours

6.4.1. Sharing of injecting equipment

Sharing needles and syringes and other injecting equipment used to prepare drugs for injection is a significant risk factor for exposure to BBVI such as HIV, hepatitis B and hepatitis C (Crofts, Aitken, & Kaldor, 1999). As in previous years, in 2017 Victorian IDRS participants were asked to answer questions relating to their injection practices in the past month and access to injecting equipment.

Participants were asked to nominate the site on their body where they last injected before being interviewed; 144 did so in 2017, and responses were similar to previous years. The majority (76%) reported that their most recent injection site was their arm, while smaller proportions reported most recently injecting into their hand or wrist (10%), leg (3%), neck (6%), groin (3%) or foot (1%).

Table 10 presents the self-reported injecting risk practices of Victorian IDRS participants from 2009 to 2017. Eight per cent of the 2017 sample reported borrowing a used needle in the month before interview, down from 13% in 2016 (Table 10). Among participants in this group ($n = 12$), 50% reported using a borrowed needle once in the last month, 17% reported using twice, 25% reported use three to five times, and 8% reported use more than 10 times. Participants were asked (11 responded) to nominate their relationship with the person who used the needle before them: 64% nominated a regular sex partner, 45% nominated close friends, and one nominated an acquaintance.

In 2017, 15% of participants ($n = 22$) reported lending a used needle to someone else in the preceding month, down from 20% in 2016. Thirteen per cent ($n = 19$) reported use of other injecting equipment after some else, with the type of equipment used detailed in Table 10.

Table 10: Self-reported injecting risk practices in the past month, Victoria, 2009–2017

	2010	2011	2012	2013	2014	2015	2016	2017
Borrowed a used NS^ (%)	15	11	11	12	11	11	13	8
Loaned a used NS^ (%)	21	22	25	17	17	16	20	15
Used spoon after someone else (%)	45	21	92*	97*	95*	90*	84*	89*
Used filter after someone else (%)	20	5	21*	24*	15*	20*	29*	16*
Used tourniquet after someone else (%)	9	1	16*	3*	7*	15*	12*	5*
Used water after someone else (%)	20	7	13*	32*	15*	24*	39*	26*
Used any equipment after someone else (%)	48	24	25	25	27	27	34	13

Source: IDRS participant interviews

* In 2012, 2013 and 2014, 38, 37 and 41 participants reported sharing any injecting equipment in the past month, respectively. In 2015, 41 participants reported any sharing. The percentages for these years denoted by an asterisk refer to the proportion who shared injecting equipment among this subgroup.

^ NS refers to needle and/or syringe

6.4.1.1. Reuse of own injecting equipment

Fifty-six (39%) of the 2017 sample reported reusing their own needle in the month preceding interview, fewer than in 2016 when 44% reported reuse ($p = 0.389$). Eight per cent reported reusing their own needle once in the past month and 8% reported reuse twice, while 10% reported reuse on three to five occasions, 4% on six to 10 occasions, and 6% on more than 10 occasions.

6.4.1.2. Injecting equipment access and coverage

In 2017, of 150 Victorian IDRS participants, 94% reported accessing sterile injecting equipment from an NSP in the preceding six months. Equipment was also accessed from outreach/peer workers (13%), friends (8%), pharmacies (12%), dealers (2%) and syringe vending machines (13%).

Participants were asked to nominate the number of times sterile injecting equipment was collected from an NSP or other outlet in the past month; reports were similar to previous years. In 2017, participants ($n = 143$) reported collecting needles and syringes a median of four times (IQR 2–8 times) in the past month. During that month, participants reported a median of 20 drug injection episodes (IQR 8–60 episodes) and collecting a median of 60 needles and syringes (IQR 20–150). Participants gave away or sold eight needles and syringes (median, IQR 0–50 needles) to other people and, at the time of interview, had a median of four needles (IQR 0–38 needles) stored at home. Ten per cent reported trouble obtaining sterile injecting equipment in the past month when it was needed.

As in previous years, participants were asked to nominate the location of their last injection: 58% reported injecting in private. Twenty-seven per cent reported injecting in a street or park, 5% in a car and 5% in a public toilet. In 2017, the proportion of participants who public injecting was higher than in 2016 ($p = 0.147$).

6.4.2. Injection-related health problems

Table 11 shows Victorian IDRS participants' self-reported injecting-related health problems, from 2010 to 2017. In 2017, 69% of participants reported experiencing at least one injection-related health problem in the month before interview, almost the same percentage as in 2016. Participants in this group (n=89) were asked to nominate the problems experienced, detailed in Table 11.

Table 111: Self-reported injection-related health problems among participants in the past month, Victoria, 2010–2017

	2010	2011	2012 n=77	2013 n=62	2014 n=96	2015 n=105	2016 n=105	2017 n=89
Prominent scars/bruising (%)	19	41	75*	74*	67*	71*	77*	65*
Difficulty injecting (%)	25	33	51*	50*	62*	52*	64*	63*
Dirty hit (%)	12	10	26*	13*	17*	17*	11*	11*
Thrombosis (%)	5	6	9*	10*	6*	7*	10*	8*
Abscesses/infections (%)	6	8	20*	7*	12*	10*	14*	8*
Overdose (%)	2	3	9*	8*	3*	9*	4*	6*

Source: IDRS participant interviews

* In 2012, 2013, 2014, 2015 and 2016, 77, 62, 96, 105, 105 and 89 participants reported experiencing an injecting-related health problem in the past month, respectively. The data for these years denoted by an asterisk refer to the proportion in these groups who experienced injection-related health problems in the past month.

Participants who reported an overdose or a dirty hit in the past month were asked to nominate the main drug used beforehand, as well as other drugs used at the same time. Of participants who reported an overdose (n = 4), the primary drugs involved were heroin (n = 4) and methamphetamine (n = 1). Among participants who reported a dirty hit (n = 10), the primary drugs identified were methamphetamine (n = 4) and heroin (n = 6).

6.5. Blood-borne viral infections (BBVI)

An integrated surveillance system monitors the incidence and prevalence of HIV, HBV and HCV among Australian PWID. Table 12 shows the number and proportion of new HIV diagnoses in Victoria in which IDU was reported as the likely exposure factor. In 2016, 3 new cases of HIV infection were notified to the VDH in which IDU was the likely exposure, comprising 0.9% of all new HIV infections for the 2016 calendar year. There were an additional 10 new HIV notifications in 2016 in which both male-to-male sexual activity (MSM) and IDU were the likely exposures (Table 12).

Table 12: New HIV diagnoses where injecting drug use was reported as the likely exposure, Victoria, 2007–2016

	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)	2011 n (%)	2012 n (%)	2013 n (%)	2014 n (%)	2015 n (%)	2016 n (%)
IDU	5 (1.9)	6 (2.3)	2 (0.8)	0 (0.0)	3 (1.1)	6 (2.3)	8 (2.6)	13 (4.3)	8 (2.8)	3 (0.9)
IDU: MSM	5 (1.9)	7 (2.7)	6 (2.3)	5 (2.1)	4 (1.4)	3 (1.2)	13 (4.2)	14 (4.6)	10 (3.5)	10 (3.1)
New diagnoses (N)	263	261	262	235	278	262	307	302	283	319

Source: Victorian Department of Health

Note: Data are subject to change due to ongoing case investigations. The figures contained here supersede data from previous Victorian Drug Trends reports.

National prevalence estimates of HIV infection among PWID are derived from data from the ANSPS. The ANSPS is conducted each year in every Australian jurisdiction and is designed to serve as a strategic early warning system to monitor the prevalence of BBVI among PWID. Finger-prick blood samples are collected from all consenting participants recruited from participating NSPs. Between 2009 and 2012 the estimated prevalence of HIV infection among PWID in Australia remained low and stable at 1.2% or less. However, there was an increasing trend in HIV antibody (Ab) prevalence from 1.2% in 2009 to 1.7% among the 2,378 ANSPS participants who provided blood samples in 2014 (Iversen et al., 2015b).

Hepatitis C infection among PWID in Australia continues to be a major public health concern due to its ongoing high background prevalence. Table 13 presents prevalence estimates of new Victorian HIV infections and exposure to HCV attributed to IDU between 2009 and 2016, derived from ANSPS data (Memedovic et al., 2017). From 2015 to 2016, there was a non-significant fall in the estimated prevalence of HIV Ab among Victorian ANSPS participants, from 2.2% to 1.9% ($p = 0.764$). Although still high, the estimated prevalence of HCV Ab among the Victorian ANSPS sample fell non-significantly from 72% to 67% ($p = 0.140$) (Table 13). Compared with the national ANSPS sample, in 2016 HCV Ab prevalence was significantly higher among the Victorian ANSPS sample (67% vs. 51%, $p < 0.001$), as in previous years. Note that with regards to hepatitis C, at this time finger-prick testing measures exposure to HCV Ab only and cannot distinguish between participants who have chronic infection and those who have resolved spontaneously or through treatment.

Table 13: Estimated prevalence of HIV Ab infection and HCV Ab exposure among Victorian ANSPS participants, 2009–2016

	2009	2010	2011	2012	2013	2014	2015	2016
HCV Ab (%)	55	64	66	69	67	67	72	67
HIV Ab (%)	0.9	0.5	0.8	0.2	1.3	1.7	2.2	1.9

Source: Iversen, Chow & Maher, 2015; Iversen & Maher, 2012, 2015b; Memedovic et al., 2017)

6.6. Alcohol Use Disorders Identification Test-Consumption (AUDIT-C)

During the past few years, there has been considerable media attention focusing on young people's alcohol consumption in Australia (Connell, 2014; Davey, 2012; Wright, 2013). However, there is much less focus on alcohol use among PWID, despite this population being particularly at risk of alcohol-related harm given their high prevalence of poly-CNS-depressant use and injection (potentiating overdose) and HCV. As mentioned in section 6.5, using finger-prick blood samples, HCV antibodies have been found in approximately two-thirds of Victorian ANSPS participants since 2010 (Iversen et al., 2014; Iversen & Maher, 2012, 2013). Given that alcohol consumption is hepatotoxic, known to exacerbate HCV infection, and associated with a greater risk of non-fatal and fatal opioid-related and depressant overdose, it is important to monitor the prevalence of risky alcohol consumption among PWID (Coffin et al., 2007; Darke, Duflou, & Kaye, 2007; Darke, Ross, & Hall, 1996; Schiff & Ozden, 2004).

The IDRS includes self-report data on the prevalence of lifetime and recent alcohol use, and the median number of days that alcohol has been consumed in the preceding six months (see Table 3), as well as the AUDIT-C. Derived from the first three consumption questions in the AUDIT, the AUDIT-C is a three-item validated measure that identifies heavy and high-risk drinking among respondents during the past year (Bush, Kivlahan, McDonell, Fihn, & Bradley, 1998). According to previous research, the AUDIT-C is a reliable measure of alcohol dependence, alcohol use disorder and risky alcohol consumption, with a cut-off score of five or more indicating a need for further assessment (Dawson, Grant, Stinson, & Zhou, 2005; Haber, Lintzeris, Proude, & Lopatko, 2009).

Table 14 presents AUDIT-C scores among Victorian IDRS participants from 2012 to 2017. In 2017, among participants who reported consuming alcohol in the past year ($n = 80$, 53% – vs. 58% in 2016, $p = 0.416$), the mean AUDIT-C score was 5.5 (median 5, IQR 2–9). Although men ($n = 61$) returned a higher mean score than women ($n = 19$), the difference was not significant (5.8 vs. 5.4, $p = 0.673$). The proportion of participants scoring five or more on the AUDIT-C was similar between 2011 and 2015, but dropped to the lowest yet recorded in 2016, and was similar in 2017 (Table 14).

Table 14: AUDIT-C scores among participants who drank alcohol in the past year, Victoria, 2012–2017

	2012 (n=107)	2013 (n=91)	2014 (n=101)	2015 (n=103)	2016 (n=87)	2017 (n=)
Mean AUDIT-C score (SD)	6.1 (3.6)	6.4 (3.9)	6.6 (3.5)	6.0 (3.7)	5.9 (3.8)	5.5 (3.7)
Range	1–12	1–12	1–12	1–12	1–12	1–12
Total score of ≥ 5 (%)	63	62	67	60	51	53
Men score of ≥ 5 (%)	65	66	73	65	48	52
Women score of ≥ 5 (%)	59	52	50	48	57	53

Source: IDRS participant interviews

6.7. Mental health problems and psychological distress

As in previous years, in 2017 Victorian IDRS participants were asked to indicate whether they had experienced any problems with their mental health in the preceding six months, including issues not discussed with a health professional. Of 131 who responded, 64 (49%) reported experiencing a

mental health problem in the past six months, lower than the proportions in 2016 and 2015 (61% and 60%). These participants were asked to specify their mental health problem (multiple responses allowed for comorbidity). Among this group ($n = 62$), the prevalence of self-reported depression was 48%, significantly lower than in 2016 (73%).

Of the 64 participants who reported a recent mental health issue, in 2017 69% reported attending a health professional for their problem in the six months before interview, nearly the same as in 2016 (70%). Participants in this group ($n = 44$) most commonly reported seeing a GP (57%), psychologist (11%) or a psychiatrist (23%).

In the six months before interview, 59% of those with a self-reported mental health problem reported being prescribed psychiatric medication. Multiple responses were allowed. Among these participants ($n = 38$), 61% ($n = 23$) reported being prescribed benzodiazepines for their mental health: typically diazepam (70%). Thirty-seven per cent ($n = 14$) reported they were prescribed an antipsychotic, mostly quetiapine (57%) or olanzapine (21%). Forty-five per cent ($n = 17$) reported they were prescribed anti-depressants; 11 types were cited. Two participants were prescribed mood stabilisers.

6.7.1. Kessler Psychological Distress Scale (K10)

Given the high prevalence of mental illness in the general community, distinguishing more serious cases by symptom severity is important. The Kessler Psychological Distress Scale (K10) was designed to measure non-specific psychological distress in the general population (Kessler et al., 2002). The K10 discriminates between people with and without serious mental illness by yielding a global score of psychological distress in the past four weeks. Scores are calculated from five responses to a 10-item scale, with a maximum score of 50 indicating severe distress and a minimum score of 10 indicating no distress (Andrews & Slade, 2001). Cut-off scores are categorised into levels representing low (10–15), moderate (16–21), high (22–29) and very high (30–50) psychological distress, with higher scores indicating a need for further mental health assessment (Australian Bureau of Statistics, 2010).

In 2017 the complete K10 was administered to 89 participants; among these, the mean score was 30.2 (SD 8.2, median 31, IQR 25–36), considerably higher than the 26.1 recorded in 2016. Levels of psychological distress among Victorian IDRS participants are shown in Table 15, from 2010 to 2017, compared with the 2007/08 NHS general population sample. According to the K10, the majority of participants in 2017 were classified as having high or very high psychological distress in the four weeks before interview. The distributions of K10 scores have been similar across most years. IDRS participants have a significantly higher prevalence of psychological distress than the NHS general population sample (95% vs. 10%, $p < 0.001$), very similar to findings in previous years (Table 15).

Table 15: Levels of psychological distress among Victorian IDRS participants, 2012–2017, compared with the 2007/08 NHS general population sample

	IDRS						NHS
	2012 (n=144)	2013 (n=149)	2014 (n=142)	2015 (n=141)	2016 (n=147)	2017 (n=147)	2007/08 (n=15,362)
Psychological distress (%)							
Low (10–15)	8	20	11	9	8	6	71
Moderate (16–21)	17	20	20	20	25	9	20
High (22–29)	33	34	31	33	31	28	7
Very high (30–50)	41	28	37	38	36	67	3

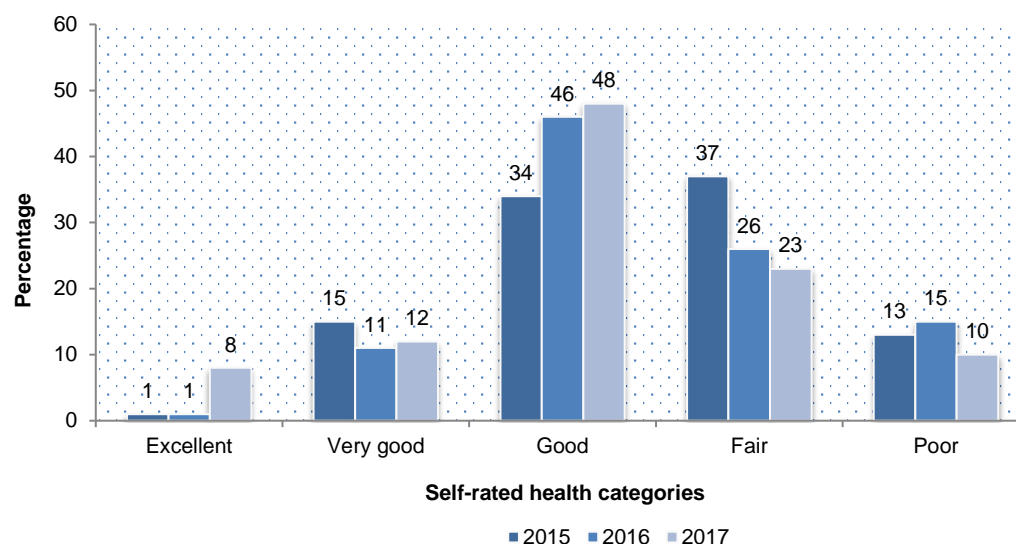
Source: IDRS participant interviews; ABS, 2010

Note: The extent to which K10 cut-offs derived from general population samples can be applied to IDRS participants is yet to be established. Therefore these findings should be taken as a guide only.

6.7.2. Short Form 12 Health Survey (SF-12) self-rated physical health

In 2017, a 12-item health survey, the Short Form 12 (SF-12, derived from the SF-36) (Ware, Kosinski, & Keller, 1995; Ware, Kosinski, & Keller, 1996), was excluded from the IDRS participant questionnaire in part to shorten the survey length and lessen the burden on participants. In place of the full measure, the sample was asked to self-rate their overall health according to the first question of the SF-12: “Overall, how would you rate your health during the past four weeks?” Responses among participants in 2017 are shown in Figure 30. Almost one quarter rated their health as fair and nearly half as good, similar to the figures in 2016.

Figure 30: Self-rated general health among Victorian IDRS participants, 2015–2017



Source: IDRS participant interviews

6.8. Driving risk behaviour

Participants were asked to provide information about their driving risk behaviour. In 2017, 25% reported driving a car, motorcycle, or other vehicle in the preceding six months, a slightly smaller proportion than in 2016 (29%, $p = 0.438$). Among these participants ($n=38$), 63% reported having their full driver's licence and 24% reported having no licence. Eight per cent of recent drivers ($n=3$) reported driving under the influence of alcohol.

Table 16 shows the proportion of Victorian IDRS participants who reported illicit drug use before driving a vehicle in the past six months, from 2010 to 2017, by drug type. Among recent drivers in 2017, 76% reported using illicit drugs less than three hours before driving. The median frequency of reported 'drug driving' occasions this group ($n=38$) was once per month in the past six months. Participants who drove after consuming drugs most commonly reported driving after using heroin ($n=21$), cannabis ($n=2$) and crystal/ice ($n=5$) (Table 16).

Table 16: Proportion of participants who reported using illicit drugs prior to driving in the past six months, Victoria, 2010–2017

	2010 ($n=44$)	2011 ($n=45$)	2012 ($n=35$)	2013 ($n=31$)	2015 ($n=35$)	2016 ($n=44$)	2017 ($n=38$)
Heroin (%)	82	64	69	58	66	77	55
Cannabis (%)	48	51	49	45	23	60	5
Speed (%)	16	20	9	0	0	-	-
Crystal/ice (%)	7	18	11	13	20	34*	13*
Benzodiazepines (%)	18	16	20	23	6	11	-
Ecstasy (%)	2	2	0	0	0	-	-

Source: IDRS participant interviews

* includes speed

7. Law-enforcement-related trends associated with drug use

7.1. Criminal involvement

As per previous iterations of the IDRS, the 2017 sample was asked to provide information about their involvement in crime in the month preceding interview. Table 17 presents the self-reported prevalence of criminal involvement in the past month, from 2010 to 2017. In 2017, 35% (n=52) of the sample reported that they were involved in a crime during the past month, slightly fewer than in 2016 (38%) ($p = 0.632$).

Table 17: Percentage of participants reporting criminal involvement during the past month, Victoria, 2010–2017

	2010 (N=150)	2011 (N=150)	2012 (N=150)	2013 (N=150)	2014 (N=150)	2015 (N=150)	2016 (N=150)	2017 (N=150)
Property crime (%)	19	27	27	21	23	23	23	15
Drug dealing (%)	23	29	20	17	28	27	18	5
Fraud (%)	1	5	3	3	7	5	9	1
Violence (%)	8	7	3	5	7	5	11	3
Any crime (%)	40	47	41	36	47	44	38	35

Source: IDRS participant interviews

Note: Property crime indicates shoplifting, break and enter, stealing or receiving; drug dealing indicates selling drugs for a cash profit; fraud indicates the forging of cheques, prescriptions, credit cards, or scams; violence indicates assault, violent or armed robbery, sexual assault, breaking violence orders.

In 2017, Victorian IDRS participants were asked to report whether they had been a victim of a crime involving violence in the month before interview. Fifteen per cent of the sample reported experiencing violence such as an assault, sexual assault and/or domestic violence in the past month.

7.2. Arrests

In 2017, 45% of the sample reported an arrest in the 12 months preceding interview, a higher proportion than in 2016 (38%, $p = 0.228$). Among these (n = 66), the main reason reported for arrest was property crime (37%), followed by violence (13%).

7.2.1. Consumer and provider arrests

The following section details consumer (i.e. use/possession) and provider (i.e. manufacture/trafficking) arrests in the 2015/16 financial year relating to heroin and other opioids, methamphetamine, cocaine and cannabis, sourced from the ACC's *Illicit Drug Data Report 2015–16* (Australian Criminal Intelligence Commission, 2017). Data should be interpreted with caution given the lack of uniformity between jurisdictions regarding the recording and storage of illicit drug-related arrest data. Further, the total numbers of arrests may include offenders for whom consumer and/or provider status was not stated. As shown in Tables 18 to 21, however, consumer arrests outnumber provider arrests for all drug types both in the state of Victoria and across Australia.

7.2.1.1. Heroin and other opioids

Table 18 presents the number and percentage of consumer and provider arrests relating to heroin and other opioids in Victoria and Australia for the financial year 2015/16. Victorian arrests accounted for 40% of all heroin and other opioid-related arrests in Australia, the same as in the previous period. Between 2014/15 and 2015/16, Victorian consumer arrests relating to heroin and other opioids increased as a proportion of national arrests, while provider arrests fell substantially in absolute and percentage terms. In Victoria, consumer arrests accounted for 93% of all heroin and other opioid-related arrests for the period, as against 71% in 2014/15 (Table 18).

Table 188: Consumer and provider arrests relating to heroin and other opioids, Victoria and Australia, 2015/16

	Victoria (n)	Australia (N)	Percentage of national arrests (%)
Consumer arrests	1209	2,487	49%
Provider arrests	88	480	18%
Total arrests	1,297	2,967	44%

Source: Australian Criminal Intelligence Commission, 2017

Note: Arrest data for Victoria include Australian Federal Police data

7.2.1.2. Methamphetamine

The number and percentage of consumer and provider arrests relating to ATS for the 2015/16 financial year are detailed in Table 19. Victorian ATS-related consumer arrests and provider arrests changed substantially from 2014/15 both in absolute numbers and as proportions of national arrests. Victorian provider arrests fell 76%, and from 31% to 9% of national provider arrests. Victorian consumer arrests rose 41%, accounting for 95% of all arrests relating to ATS for the period, a much higher proportion than in previous years (Table 19).

Table 19: Consumer and provider arrests relating to amphetamine-type stimulants, Victoria and Australia, 2015/16

	Victoria (n)	Australia (N)	Percentage of national arrests (%)
Consumer arrests	10,311	40,527	25
Provider arrests	584	6,885	9
Total arrests	10,896	47,412	22

Source: Australian Criminal Intelligence Commission, 2017

Note: Arrest data for Victoria include Australian Federal Police data

7.2.1.3. Cocaine

Table 20 shows the number and percentage of cocaine-related consumer and provider arrests in Victoria and Australia for the 2015/16 financial year. During the period, 18% of all Australian arrests relating to cocaine occurred in Victoria. As percentages of national arrests, Victorian cocaine-related consumer arrests increased slightly, and provider arrests fell substantially. In 2015/16, consumer arrests for cocaine comprised 98% of all cocaine-related arrests in Victoria (Table 20).

Table 200: Consumer and provider arrests relating to cocaine, Victoria, 2015/16

	Victoria (n)	Australia (n)	Percentage of national arrests (%)
Consumer arrests	404	1,906	21
Provider arrests	51	683	7
Total arrests	455	2,589	18

Source: Australian Criminal Intelligence Commission, 2017

Note: Arrest data for Victoria include Australian Federal Police data

7.2.1.4. Cannabis

The number and percentage of cannabis-related consumer and provider arrests in Victoria and Australia for the 2015/16 financial year are shown in Table 21. During the period, 12% of all Australian cannabis-related consumer and provider arrests occurred in Victoria. As a percentage of national arrests, Victorian cannabis-related consumer arrests did not change from 2014/15, but provider arrests fell in absolute terms and as a proportion of national arrests. Consumer arrests for cannabis comprised the overwhelming majority of cannabis-related arrests (91%) across Australia, and 96% of all cannabis-related arrests in Victoria (Table 21).

Table 211: Consumer and provider arrests relating to cannabis, Victoria, 2015/16

	Victoria (n)	Australia (n)	Percentage of national arrests (%)
Consumer arrests	9,333	72,198	13
Provider arrests	384	7,317	5
Total arrests	9,717	79,515	12

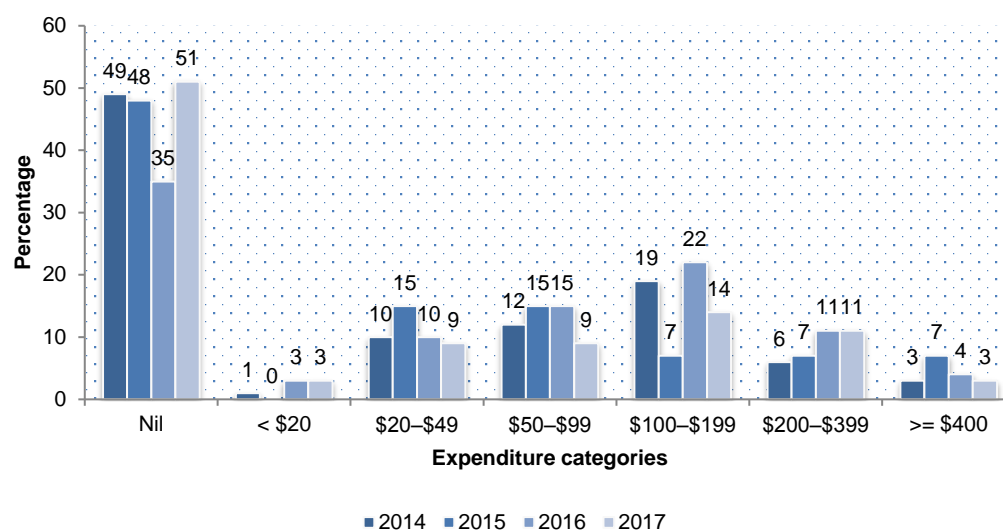
Source: Australian Criminal Intelligence Commission, 2017

Note: Arrest data for Victoria include Australian Federal Police data

7.3. Participants' expenditure on illicit drugs

Just under half (49%) of 2017 Victorian IDRS participants reported purchasing illicit drugs on the day before completing the survey. Participants' (n = 74) median reported spend on illicit drugs was \$100 (IQR \$48–\$200). Figure 31 shows the distributions of participants' financial spend, with the single largest group (51%) reporting spending nothing on the day before interview. Twenty-seven per cent reported spending between \$20 and \$99 on illicit drugs the day prior to interview (Figure 31).

Figure 31: Distribution of drug expenditure among all participants, day before interview, Victoria, 2015–2017



Source: IDRS participant interviews

8. Special topics of interest

8.1. Naloxone

Naloxone is a short-acting opioid antagonist that has been used for over 40 years to reverse the effects of opioids, particularly in the case of overdose. 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 overdose response. 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. This program was shortly followed by similar programs in NSW, VIC, and WA. In early 2016, the TGA effectively placed 'naloxone when used for the treatment of opioid overdose' on a dual listing of Schedule 3 and Schedule 4, meaning naloxone can be purchased OTC at pharmacies without a prescription (Lenton et al., 2016) but dual listing means it is still available at reduced cost via prescription.

Since 2013, the IDRS has included a series of questions about take-home naloxone and naloxone more broadly. Of the Victorian participants who commented in 2017 (n=123), 94% had heard of naloxone.

Participants were then asked if they had heard about take-home naloxone programs. Among those national sample who commented (n=123), 70% reported that they had heard of take-home naloxone programs. Ten per cent of those who responded (n=86) reported that they had been resuscitated with naloxone.

8.2. Opioid and stimulant dependence

Substance dependence is an important predictor of other drug-related harm and typically demonstrates stronger relationships between other health and social outcomes than simpler frequency of use measures. In 2017, Victorian IDRS participants were administered the SDS in relation to use of heroin and other opioids in the past six months, as well as methamphetamine and other stimulants. The SDS is a five-item scale designed to measure the degree of dependence on a range of substances by focusing on the psychological aspects of dependence, including impaired control and preoccupation with and anxiety about use. The scale is a reliable measure of dependence, with good psychometric properties demonstrated in five samples of heroin, cocaine, amphetamine and methadone users in both Sydney and London (Dawe, Loxton, Hides, Kavanagh, & Mattick, 2002). Previous research suggests that a cut-off of four is indicative of dependence among methamphetamine users, while a cut-off of three is indicative of dependence among cocaine users (Kaye & Darke, 2002; Topp & Mattick, 1997). While there is no validated cut-off for heroin and other opioid dependence, researchers typically use a score of five or more to indicate the presence of dependence.

The SDS was administered to 122 Victorian IDRS participants who reported the recent use of heroin and/or other opioids in 2017, as shown in Table 22. Among these, the mean SDS score was 7.8, higher than the mean score in 2016 (7.4), with 75% of recent heroin and/or opioid users meeting the cut-off for dependence. In 2017, mean SDS scores for women and men were similar. Participants who scored five or more on the SDS were asked to nominate the opioids to which their responses related; 91 participants provided responses. Of these, 77% attributed their responses to heroin, 9% to methadone and 10% to buprenorphine-naloxone.

The SDS was also administered to 84 participants who reported the recent use of methamphetamine or other stimulants (i.e. cocaine or pharmaceutical stimulants). The mean SDS score was 3.7 in 2017,

higher than in 2016 (3.2). Forty-six per cent of recent users met the cut-off for stimulant dependence. Participants who scored four or more on the SDS were asked to nominate the stimulants to which their responses related: 39 participants provided responses. Of these, 90% nominated methamphetamine.

Table 22: SDS scores among participants who reported recent opioid and/or stimulant use, Victoria, 2015–2017

	Heroin and/or other opioids			Methamphetamine and/or other stimulants		
	2015 n=136	2016 n=127	2017 n=122	2015 n=101	2016 n=99	2017 n=84
Mean SDS score (SD)	7.2 (4.0)	7.4 (4.0)	7.8 (4.2)	3.4 (3.9)	3.4 (3.9)	3.4 (3.9)
Mean SDS score for men (SD)	6.8 (3.9)	7.3 (4.1)	8.0 (4.3)	3.2 (4.0)	2.8 (3.1)	3.4 (5.0)
Mean SDS score for women (SD)	8.5 (3.8)	7.7 (3.5)	7.4 (4.1)	3.9 (3.8)	4.1 (4.4)	4.5 (3.9)
Scored above cut-off* (%)	74	79	75	40	38	46
Men who scored above cut-off (%)	69	72	75	36	35	45
Women who scored above cut-off (%)	86	95	74	50	48	50

Source: IDRS participant interviews;

* The cut-off score for heroin and/or other opioids is five, and the cut-off score for methamphetamine is four.

9. Study limitations

The primary aim of the Victorian IDRS is to monitor emerging trends in IDU and related issues in Melbourne. The project is not designed to provide definitive or detailed explanations of these trends. Rather, where appropriate, the main purpose of the IDRS is to inform future research initiatives and policy responses to the public health challenges presented by illicit drug use in each state and territory of Australia.

The Victorian IDRS relies on the perceptions of individuals who are involved in and exposed to the injecting drug scene in Melbourne. These individuals include both PWID and professionals working with PWID. Where possible, reports from professionals are used to supplement self-report data from PWID; these two data sources are compared with relevant secondary indicators. However, given the marginalisation and stigmatisation of IDU, and the hidden nature of various subpopulations of PWID, indicator data are often unreliable, particularly given the low prevalence of IDU in the general population, and the lag in time from collection to availability for publication.

In addition, the IDRS principally gathers evidence on emerging trends from a convenience sample of PWID who are in contact with NSP, drug treatment, primary health care and other services and who are often involved in the street-based drug scene. This population is not representative of all PWID in Melbourne. For instance, PWID who do not routinely access services and/or recreational populations of PWID are typically not reached via IDRS recruitment methods. Consequently, the generalisability of findings contained herein is limited. Another key limitation of the IDRS methodology is that the focus on drug-related issues within metropolitan Melbourne excludes exploration of illicit drug trends in rural and regional Victoria, or in emerging outer suburban markets. To provide a more comprehensive picture of trends in Victoria, the IDRS methodology requires expansion to include a sample of PWID in rural and regional settings and increase the numbers participating from outer suburban Melbourne.

10. Implications

The results from the 2017 Victorian IDRS suggest action in the following priority areas:

1. **Continued monitoring of illicit drug markets** for changes in trends in the prevalence and patterns of drug use and injection, and price, purity and availability, and continued monitoring of related health and social outcomes among the ageing cohort of PWID in Melbourne. Monitoring should be extended to cover current gaps such as young PWID (particularly young initiates to heroin injection) and non-injectors of all ages (e.g. methamphetamine smokers) through novel recruitment methods, given the relatively hidden nature of these populations.
2. **Research on the prevalence and patterns of methamphetamine use**, injection and inhalation, not only in Melbourne but in regional Victoria. Funding research to develop an evidence base for better access and support for effective treatment options for people who use this drug, focusing on long-term treatment options. Credible harm reduction education campaigns delivered by credible voices targeted to users pointing to the harms associated with heavy and dependent use. Reducing the negative impacts of stigma associated with ice use in the Victorian media.
3. **Continued expansion of OST programs across Victoria**, as well as ongoing consideration of full subsidisation of the OST system, even if (in the short term) only for vulnerable populations of PWID, such as pregnant women, ex-prisoners, and people living with HIV, in line with the Victorian pharmacotherapy review. Initiatives should include incentives for GPs to become pharmacotherapy prescribers.
4. **Continued monitoring of the prevalence, patterns and sources of prescribed and non-prescribed alprazolam and other benzodiazepine use**, given the rescheduling of alprazolam from Schedule 4 to Schedule 8 in February 2014. Research that examines the positive and negative outcomes associated with this policy change, including any unintended consequences such as increases in other types of benzodiazepine and/or psychotropic medication use.
5. **Continued support to increase access to THN programs for PWID**, given the improvement and consolidation in knowledge and support for THN observed in successive Victorian IDRS samples from 2013 to 2017.

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