Victoria

S. Cogger, C. Aitken, B. Lloyd and P. Dietze

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

Australian Drug Trends Series No. 148

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Shelley Cogger, Campbell Aitken, Belinda Lloyd and Paul Dietze

Burnet Institute

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Abbreviations and acronyms

ABS	Australian Bureau of Statistics					
ACBPS	Australian Customs and Border Protection Service					
ACC	Australian Crime 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					
СРН	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(s)					
HRPS	Harm Reduction and Pharmacotherapy Services					
HBV	Hepatitis B virus					
HCV	Hepatitis C virus					
HIV	Human immunodeficiency virus					
IDRS	Illicit Drug Reporting System					
IDU	Injecting drug use					
IRID	Injection-related injury and disease					
KE	Key expert(s)					
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
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

y				
Сар	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 name, or through buying them from a dealer or obtaining ther 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).			

Glossary of Terms

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 twelve 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 (KE) 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:

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

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 2014 Victorian IDRS methodology

The Centre for Population Health (CPH) at the Burnet Institute conducted the Victorian arm of the 2015 IDRS study between June and November 2015. The project consisted of:

1. A structured survey of 150 PWID recruited from six sites across metropolitan Melbourne;

- Semi-structured interviews with 19 KE from various professional settings, selected according to their knowledge about illicit drug use and level of contact with PWID during the six months preceding the survey; and
- 3. 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 2014/15 financial year. Where appropriate, these data were also compared to IDRS findings from 2000 to 2014.

Demographics of the sample

The 2015 Victorian IDRS sample consisted of 150 PWID. Participants' demographic characteristics were largely unchanged from previous surveys. Sixteen per cent identified as Indigenous. At the time of interview, 85% were unemployed and 88% received a government pension, allowance or benefit, with a mean weekly income of \$430 reported. The percentage of participants in drug treatment at the time of interview decreased slightly to 60% (from 66% in 2014), and 50% (down from almost two-thirds in 2014) reported a prison history.

Consumption patterns

Current patterns of use

The mean age at which participants first injected was 19 years in 2015; similar percentages reported first injecting methamphetamine (51%) or heroin (44%). As in previous years, heroin was the most common drug of choice (70%), drug injected most in the past month (60%) and last drug injected (56%). Forty per cent reported injecting at least once per day.

Heroin

Patterns of heroin use in 2015 were very similar to previous years. The prevalences of recent heroin use (73%) and injection (74%) have remained stable for the past eight years. Frequency of heroin use increased to a median of 96 days use in the past six months (about four times per week); daily use rebounded from 15% in 2014 to 27% in 2015, similar to the 30% recorded in 2013. Among recent users, white or off-white rock was the form of heroin used most (78%). Eight per cent of recent heroin users reported using heat to prepare their last injection.

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 2015, 20% nominated methamphetamine as their drug of choice. From 2014 to 2015 lifetime (97%) and recent (74%) methamphetamine use (any form) were essentially stable, as was the prevalence of recent methamphetamine smoking/inhalation (30%). Frequency of use was similar to 2014, with recent methamphetamine users reporting a median of 15 days use (approximates to fortnightly use) in the preceding six months.

Cocaine

Between 2014 and 2015 there was no significant change in the prevalence of lifetime or recent cocaine use (67% and 9%) and injection (47% and 7%). Only 1% of the sample nominated cocaine as their drug of choice. Use was infrequent, occurring on a median of five days in the past six months. Four per cent reported recent insufflation (snorting). Recent users reported using powder cocaine most often (57%).

Cannabis

In 2015, cannabis was the third most common illicit drug used by Victorian IDRS participants after heroin and methamphetamine. While 93% reported lifetime use, 76% reported recent use, very similar to the figures for 2014. Median frequency of recent cannabis use was 125 days in 2015 (approximately five days per week; 120 in 2014); prevalence of daily smoking remained similar (46%). Recent users

reported smoking hydroponically grown cannabis most often. In the last session of use, 53% reported smoking a median of six cones and 10% a median of 1 joint.

Opioid substitution treatment (OST) medications

Methadone

In 2015 the prevalence of recent methadone use was 42%, significantly lower than in 2014; the median frequency of use was consistent at 180 days in the past six months. Few reports of recent Physeptone® use were received. Prevalence of recent *prescribed* methadone use (42%) did not change significantly, nor did recent non-prescribed use (13%). Consistent with previous years, the median frequency of recent non-prescribed use was low at three days in the past six months. The median frequency of recent methadone injection fell; 10% of participants reported a median of two days injection in the preceding six months.

Buprenorphine

From 2014 to 2015, there was a non-significant decrease in lifetime buprenorphine use (to 63%). Prevalence of recent use did not change (14%). Median frequency of use was 60 days in the preceding six months. Lifetime prevalence of *non-prescribed* use fell slightly in 2015 (42%), while *recent non-prescribed* use was similar (12%). There were seven reports of recent *prescribed* buprenorphine use. Among recent users, median frequency of use in the last six months decreased to 20 days. Recent buprenorphine injection did not change significantly (11%).

Buprenorphine-naloxone tablets

The prevalence of recent buprenorphine-naloxone tablet use fell non-significantly, from 15% in 2014 to 3% in 2015. Median frequency of use was 12 days in the past six months. Two participants reported recent *prescribed* use, and four reported recent *non-prescribed* tablet use on a median of six days. Recent tablet injection declined non-significantly, from 5% in 2014 to 3% in 2015, occurring on a median of 11 days in the past six months.

Buprenorphine-naloxone film

In 2015, IDRS participants were asked to respond to separate questions about use of buprenorphinenaloxone film. Lifetime prevalence of film use was significantly higher than in 2014 (50% vs. 37%), and 32% reported recent use (vs 23% in 2014, a non-significant change). Median frequency of use was stable at 90 days in the past six months. Prevalence of recent *prescribed* film use (20%) and recent *non-prescribed* film use (17%) did not significantly change from 2014 to 2015. Recent prescribed users reported a median frequency of 90 days of use; non-prescribed users reported a median of 5 days use. Recent film injection was reported by 19%, a non-significant increase from 2014.

Pharmaceutical opioids

Morphine

Over the past 10 years there has been an overall trend of declining morphine use among Victorian IDRS participants. Between 2014 and 2015 lifetime prevalence of morphine use fell significantly to 64%, as did recent use (13%). Use was infrequent: *non-prescribed* injection was reported by 13% of participants on five days (median) in the past six months. Fifty-eight per cent of recent users reported using MS Contin® most often, while 32% used Kapanol® most.

Oxycodone

In 2015, the prevalence of lifetime oxycodone use (75%) was unchanged from 2014, and recent use was essentially static (25% vs 24% in 2014). Median frequency of use was five days (about once per month) in the past six months. *Non-prescribed* injection prevalence (16%) was slightly lower than in 2014; the median frequency was five days of injecting in the past six months. Nearly all recent users (63%) reported using OxyContin® most often, with 11% using Endone® most and 17% using OxyNorm® most.

Fentanyl

Prevalence of fentanyl use was very low: lifetime use and injection was 16% and 12%. Six per cent reported recent injection, on a median of five days in the past six months.

Other opioids (not elsewhere classified)

Between 2014 and 2015 the prevalence of extra-medical opioid use (other than those listed above) changed little (29% vs. 27%), but recent use fell significantly (27% vs. 10%). One per cent of respondents reported recent injection. Panadeine Forte® was the most commonly used brand.

Over-the-counter (OTC) codeine

Lifetime extra-medical use of OTC codeine was reported by 17%; recent use was reported by 7%. Median frequency of use was 19 days in the past six months. One participant reported OTC codeine injection.

Benzodiazepines

Benzodiazepines (other than alprazolam)

In 2015 lifetime use of benzodiazepines other than alprazolam was 90%, similar to 2014. Recent use decreased to 65%, but the change was not significant. Recent users reported using diazepam (80%) most, followed by oxazepam (7%). Recent *prescribed* use prevalence decreased (non-significantly) from 2014 (to 41%), while *non-prescribed* use was almost the same (47%). The median frequency of non-prescribed use was 7 days in the preceding six months.

Alprazolam

Prevalence of lifetime and recent alprazolam use were similar in 2014 (83% and 40% respectively) and 2015 (78% and 29% respectively), despite the rescheduling of alprazolam 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 (72%) and recent (27%) *non-prescribed* use was higher than *prescribed* lifetime (21%) and recent use (3%). A median frequency of three days non-prescribed use was reported.

Other drugs

Quetiapine

In 2015, lifetime use of quetiapine was the same as in 2014 (65%), and recent use fell non-significantly (26%). Median frequency was 72 days of use in the past six months; all recent users reported oral ingestion. Only one report of recent injection was received. The prevalence of recent *prescribed* (11%) and *non-prescribed* (16%) use was not significantly different, but prescribed users reported daily use (median, 180 days) and non-prescribed users reported a median of six days use.

Pharmaceutical stimulants

Prevalence of lifetime pharmaceutical stimulant use (46%) and injection (29%) not significantly different from 2014; few (6%) reported recent injection. Recent use (7%) did not change significantly, with a median of seven days use reported.

Ecstasy

Lifetime ecstasy use prevalence (70%) was similar to previous years; however, prevalence of recent use fell (7%), with a median reported frequency of two 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: 5% reported a median of two days use in the past six months. No reports of recent injection were received.

Inhalants

The lifetime prevalence of inhalant use rose to 28% in 2015 and 1% reported recent use.

Steroids

In 2015, 5% of IDRS participants reported lifetime steroid use and none reported recent use.

Alcohol, tobacco and e-cigarettes

From 2014 to 2015 there was no significant change in recent alcohol use (71%). Oral consumption was the only ROA reported, occurring on a median of 24 days (about once per week) in the past six months. By contrast, the prevalence of tobacco smoking was similar to previous years: 94% reported daily tobacco use in the past six months. Lifetime prevalence of use of e-cigarettes was 37% and recent use 22%, but use was very infrequent (median, two days).

New psychoactive substances (NPS) and synthetic cannabinoids

For the third time, in 2015 participants were asked about their use of NPS and synthetic cannabinoids. Seven per cent reported lifetime NPS use; 1% reported recent use (median, two days). Lifetime use of synthetic cannabinoids changed little (29%), as did recent use (16%). 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 2015 median prices for heroin were consistent with previous years, with the exception of the price paid for 1.7 gram, which decreased by \$50. Participants most commonly reported purchasing 0.5 gram and paying \$150. Almost all (94%) reported that heroin was very easy or easy to obtain; 80% reported no recent changes to availability. Heroin was most commonly sourced from a known dealer (58%), at an agreed public location (40%), from home delivery (20%) or at a dealer's home (19%). The overall average purity of heroin seized in 2013/14 was 26%, nearly double that measured in 2014 (15%).

Methamphetamine

In 2015, seven participants reported purchasing speed. According to their reports, median prices of 0.1 gram and 0.5 gram were stable, while the median price of 1.0 gram fell by \$75. Participants most commonly reported purchasing 0.1 gram of *ice* for \$50 (median), half the price in 2014. The median price paid for 0.5 gram of *ice* decreased by \$50. *Ice* was reported as easy or very easy (97%) to obtain; 70% reported no recent changes to availability, yet 24% reported access was easier. Seventy-five per cent reported that *speed* was easy or very easy to obtain, 22% reported difficulty; 88% reported no change in availability in the past six months. *Speed* purity was reported as medium (44%) or high (22%); *ice* purity was reported as high (35%) or medium (29%). Too few participants commented on the market characteristics for *base*, so reports are not included. In 2014/15, the overall average purity of methamphetamine seized was high (75%). By contrast, purity of amphetamine seizures was low (17%).

Cocaine

In 2015 very few participants reported on the price of cocaine, so median price is not reported. Five participants reported that cocaine was easy or very easy to obtain. Few reports regarding purity were received, with participants suggesting it was medium. In 2014/15 the overall average purity of cocaine seized was 50%, 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, the price of 0.25 ounce increased by \$10; 88% of respondents reported no recent price changes. Most (93%) reported that hydroponic cannabis was very easy or easy to obtain and 87% reported no recent changes to availability. Ten participants reported last purchasing bush-grown cannabis; 90% reported it was very easy or easy to obtain. Friends and known dealers were the most common sources for both hydroponic and bush-grown cannabis. Hydroponic cannabis potency was

reported as high (48%) to medium 425%) and 75% reported no recent changes. Bush-grown cannabis potency was most commonly reported as medium (60%).

Methadone

Very few participants commented on the market characteristics of non-prescribed methadone. In 2015, too few reports of current prices were received to report on median price. Reports (three) regarding availability suggested that non-prescribed methadone was easy to obtain.

Buprenorphine

In 2015, six participants commented on the market characteristics of non-prescribed buprenorphine. The median price paid for an 8 mg tablet was \$20, an increase of \$5 from 2014; prices were reported as stable. All reported that non-prescribed buprenorphine was very easy or easy to obtain, with 83% reporting no recent changes to access. Buprenorphine was most commonly sourced from a friend; friend's home, most commonly from an agreed public location.

Buprenorphine-naloxone tablets

Only two participants commented on the market characteristics of non-prescribed buprenorphinenaloxone tablets in 2015. One participant last paid \$10 for an 8 mg tablet, the other \$20; one reported stable price, the other increasing price. One reported that the tablets were very easy to obtain, with no recent changes to access reported; this participant reported sourcing buprenorphine-naloxone tablets from a street dealer.

Buprenorphine-naloxone film

Four participants commented on the market characteristics of non-prescribed buprenorphine-naloxone film. Median price for 8 mg film was \$10, the same as in 2014; most reported stable prices in the past six months. Two reported the film was very easy, one easy and one difficult to obtain. Three participants reported sourcing the film from a street dealer.

Morphine

In 2015, six participants commented on the market characteristics of morphine. Fewer reports were received on price, and these depended on the weight and type of morphine purchased (100 mg MS Contin® was most common). Three reported that price was stable and two reported an increase. Most suggested access was easy or very easy. Morphine was most commonly sourced from friends and known dealers, from an agreed public location or a street market.

Oxycodone

Four reports were received regarding the market characteristics of oxycodone. An 80 mg OxyContin® tablet was most commonly purchased for a median price of \$40, decreasing by \$5 from the price in 2014; reports of recent changes to price varied. Three reported that oxycodone was easy and one that it was difficult to obtain. Two reported access was more difficult and two that it was stable. Oxycodone was sourced from acquaintances, friends and known dealers, at a friend's home, via home delivery, at an acquaintance's home and a dealer's home.

Alprazolam

In 2015, 32 participants (21%) reported ever using prescribed alprazolam, and 107 (72%) ever using non-prescribed alprazolam. The median frequency of recent non-prescribed (illicit) alprazolam use was three days (IQR 2–9), as opposed to seven days in 2014. Six and eight participants reported ever injecting licit and illicit alprazolam respectively, but none reported injecting the drug in the six months before interview.

Health-related trends associated with drug use

Overdose and drug-related fatalities

In 2015, the prevalence of reported lifetime accidental heroin overdose (60%) was higher than in 2014 (51%) 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 19%. Forty per cent of this group reported receiving naloxone, 53% reported ambulance attendance. Most did not seek further treatment and/or information. During January–September 2014, Ambulance Victoria (AV) attended 698 non-fatal heroin overdoses in Melbourne, extrapolating the nine months of data to the full year gives an estimated 928 overdoses, slightly more than in 2013 (n = 914) but fewer than in 2012 (n = 991). In 2013 and 2014, 97 and 90 deaths respectively were officially defined as heroin-related, and 72 to date have been recorded as such for 2014 (an underestimate given the likelihood of unresolved ongoing cases).

Drug treatment

Drug treatment access among participants

In 2015, 60% of participants were in drug treatment at interview, most commonly methadone (38%) and Suboxone® (13%). Fifty per cent reported receiving drug treatment in the six months before interview, most commonly methadone and buprenorphine-naloxone. Fifteen per cent reported barriers to treatment despite trying to access services, with waiting list (43%) and being turned down by programs (22%) the most common responses. Most participants were not waiting for treatment at the time of interview; however, participants' perceptions of treatment availability were inconsistent.

Specialist alcohol and other drug (AOD) treatment services

During 2014/15, 56,392 courses of treatment were delivered to an estimated 29,877 clients¹ in Victorian specialist alcohol and drug treatment services². In 2014/15, alcohol was the most commonly cited drug of concern (after cannabis, amphetamine and heroin), comprising 40% of all clients and 41% of courses of treatment. Amphetamine was cited as a drug of concern in 8,895 courses of treatment delivered to 5,663 clients, declining 14% and 15% respectively from 2014.

DirectLine

In 2014 DirectLine responded to 36,602 alcohol and drug-related calls, with a drug of concern³ identified in just over two-thirds. Between 2013 and 2014, calls to DirectLine increased by 6%. Heroin was nominated as a drug of concern in 8% of all drug-identified calls, whereas pharmaceutical opioids were nominated in 20% of calls.

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 2012/13 and 2013/14 there was a 53% increase in opioid-related hospital admissions in Victoria, reversing the trend from the previous four years, with 1378 admissions recorded with an opioid-related primary diagnosis in 2013/14, comprising 23% of the Australian total. Similarly, hospital admissions with a cannabis-related primary diagnosis increased by 64% between 2012/13 and 2013/14 to 518, now comprising 18% of the Australian total. Hospital admissions with an amphetamine-related

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.

primary diagnosis in Victoria increased by 42% between 2012/13 and 2013/14 to 1207, accounting for 27% of the Australian total. Cocaine-related hospital admissions remain relatively low in Victoria as a proportion of population, despite an increase from 15 to 40 admissions between 2012/13 and 2013/14.

Injecting risk behaviours

Injecting equipment access, reuse, access and related problems

Similar to previous years, 11% reported borrowing a used needle in the past month, typically on one or two occasions, and most commonly from a close friend. In 2015, 16% reported lending a used needle to someone else in the preceding month, and 55% reported reusing their own needle. Almost all (97%) reported accessing a Needle and Syringe Program (NSP) in the past month, yet 18% reported trouble obtaining sterile injecting equipment when they needed it. Most (78%) reported last injecting into their arm; few reported injecting into their hand or wrist (8%), neck (4%), leg (5%), groin (2%), or foot (1%). Sixty-six per cent reported injecting in private locations and, 70%) reported injection-related health problems.

Blood-borne viral infections (BBVI)

In 2014, 13 new human immunodeficiency virus (HIV) diagnoses in which IDU was the likely exposure were notified, comprising 4.2% of all new Victorian infections for the year. HIV notifications in which the likely exposure was male-to-male sexual activity (MSM) and IDU significantly increased, accounting for 4.2% of new Victorian infections. The hepatitis C virus (HCV) continues to be an ongoing serious public health problem; in 2014 the estimated prevalence of HCV (antibodies) was 67% among Victorian Australian Needle and Syringe Program Survey (ANSPS) participants, significantly higher than HCV antibody prevalence among the national ANSPS sample (54%).

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 2015, the mean AUDIT-C score was 6.0, not significantly higher than in 2014. Additionally, 60% who reported alcohol consumption in the past year scored five or more on the AUDIT-C. Although the mean score for men was higher than for women (6.3 vs. 5.9), the difference was not significant.

Mental health problems and psychological distress

Self-reported mental health problems

In 2015, 60% of Victorian IDRS participants reported experiencing a mental health problem in the past six months. Among these, the prevalence of depression was 80% and anxiety 58%. The most common problems of lower prevalence were schizophrenia (8%), bipolar affective disorder (12%) and post-traumatic stress disorder (PTSD) (19%). Of those with a self-reported mental health problem, 74% reported attending a health professional, most commonly a GP, a psychiatrist or a psychologist. Psychotropic medication was prescribed to 65% 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 2015 sample; 71% of the sample was 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 2015, participants were administered the first question of the SF-12, which asks respondents to selfrate their overall health during the past four weeks. More than one-third respectively rated their health as fair (37%) and good (34%), very similar to 2014.

Driving risk behaviour

Participants were asked to provide information about their driving risk behaviour (last done in the 2013 IDRS). In 2015, 41% reported driving a car, motorcycle, or other vehicle in the preceding six months, significantly greater than the proportion in 2013 (26%, p < 0.05). Eighteen per cent of recent drivers (n=44) reported driving under the influence of alcohol; 80% reported using illicit drugs before driving. The median number of 'drug driving' occasions among this group (n=35) was in the past six months. Participants who drove after consuming drugs most commonly reported driving after using heroin (n=23), cannabis (n=8) and crystal/ice (n=7).

Law enforcement-related trends associated with drug use

Self-reported criminal involvement

In 2015, 38% reported an arrest in the past twelve months, similar to 2014. Among these, the main reason reported for arrest was property crime (46%), violence (28%) and use and/or possession of drugs (19%). Forty-four per cent reported that they were involved in crime in the month prior to interview, slightly lower than in 2014 (47%). Of the whole sample, 27% reported selling drugs for profit and 23% reported involvement in property crime.

Consumer and provider arrests

In 2013/14, consumer arrests outnumbered arrests of providers for all drug types both in Victoria and across Australia. For instance, in Victoria consumer arrests accounted for 74% of all heroin and other opioid-related arrests, 74% of all ATS-related arrests, 63% of all cocaine-related arrests and 87% of all cannabis-related arrests.

Expenditure on illicit drugs

Over half (57%) of the 2015 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 a series of questions to explore participants' knowledge of and attitudes to naloxone, the short-acting opioid antagonist, and take-home naloxone (THN) in particular. Among the Victorian sample in 2015, 98% had heard of naloxone. Between 2014 and 2015, the percentage of participants who had heard of naloxone and who indicated that it was used to reverse the effects of heroin was stable at around 77%, but the percentage of participants who had heard of THN increased significantly to 71%.

Oxycodone

Post-marketing surveillance of the new oxycodone formulation (reformulated OxyContin®) is currently underway in Australia. Given the concerns regarding the original formulation of OxyContin® and changes to the types of oxycodone available, the aim of the 2015 module was to examine the use and misuse of available oxycodone products. Nearly half (49%) of the national IDRS sample reported lifetime use; of those,18% reported use of the original OxyContin® formulation and 28% use of the Reformulated OxyContin® brand tablets.

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 2015 the SDS was administered to 101 recent heroin and other opioid users; the mean SDS score was 7.2, with 74% of participants meeting the cut-off for dependence. The SDS was also administered to 101 recent methamphetamine and other stimulant users, yielding a mean score of 3.4; 40% met the cut-off for methamphetamine dependence.

Conclusions

The results of the 2015 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 2015 IDRS include:

- Stable and high prevalence of heroin use among nine consecutive Victorian IDRS samples and, although median frequency of use increased to approximately four days per week in 2015, little change was reported in relation to market characteristics for the drug. Overall heroin purity remains low according to Victoria Police seizure data (26%) and participant subjective reports; AV data show a stable rate of non-fatal overdose (NFOD) ambulance attendances and NCIS data suggest heroin-related deaths are slowly declining. However, people who cite heroin as their preferred drug still comprise the largest population of service users. Sixty per cent of participants reported being in drug treatment at interview, most commonly methadone and buprenorphine-naloxone OST.
- The prevalence of lifetime and recent methamphetamine use among IDRS participants changed little between 2014 and 2015, with three-quarters reporting using the drug in the past six months. Despite high use prevalence, only 20% nominated methamphetamine as their preferred drug. Frequency of use did not change (median days approximated to fortnightly use). Prevalence of methamphetamine use among 2015 Victorian IDRS participants was similar to that reported in the early to mid-2000s. However, 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. 2015 KE nominated methamphetamine as the "most problematic" drug, mainly due to high availability and excess use. Indeed, Victorian LE agency data also show that purity of seized methamphetamine has been significantly higher during the last four financial year periods. However, Victorian ADIS drug treatment data show that amphetamine fell to the third most commonly cited drug of concern in 2015, behind alcohol and cannabis.
- For the past 10 years, there has been a trend of declining morphine use and injection among Victorian IDRS participants, whereas for the past three years oxycodone use and injection has stayed reasonably stable. Very few reported use of reformulated OxyContin®. 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.
- Stable prevalence and patterns of prescribed and non-prescribed benzodiazepine (other than alprazolam) use, with a non-significant decrease in prescribed recent use. Similarly, there were no changes overall to the prevalence and patterns of alprazolam use, although the drug 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 2015 IDRS, the median frequency of non-prescribed use fell to three days in the previous six months, as opposed to seven in 2014.
- Levels of naloxone awareness among IDRS participants remain high (77%), and the percentage of participants who reported awareness of THN increased significantly.

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 particularly in regional Victoria given recent media reports. 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 nonprescribed 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 in awareness observed in the Victorian IDRS from 2014 to 2015.

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 (KE) 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 KE 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. 2015 is the 18th year that the IDRS has been 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 2015 report summarises data collected during the months of June through October 2015 as part of the Melbourne arm of the 2015 IDRS. The findings contained herein pertain to the 2014/15 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 (<u>www.aodstats.org.au</u>), which replaces the annual *Victorian Drug Statistics Handbook* series (Turning Point Eastern Health, 2014). Readers are also referred to the forthcoming Australian Drug Trends 2015 monograph for national IDRS data and jurisdictional comparisons (Stafford & Burns, 2015).

1.1. Study aims

The primary aims of the 2015 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;
- To identify drug-related harms and relevant trends among this population; and
- To detect emerging drug trends of national significance that may require further in-depth investigation.

2. Method

The 2015 IDRS replicates the methodology used for the study each year since 1997 and incorporates a quantitative survey of PWID (i.e. the participants), semi-structured interviews with KE recruited from a variety of professional settings in Melbourne, and analyses of indicator data related to the use of illicit drugs in Victoria. 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 June and July 2015. 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 twelve 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 2015 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 2015 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' sociodemographic 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. Survey of key experts

Nineteen KE participated in interviews between October and November 2015; 16 KE self-completed an online questionnaire and three participated in face-to-face interviews. Most were recruited from a pool of KE who had previously taken part in the IDRS. Other KE drawn from the same or similar agencies on the basis of referrals received from professionals in the sector were recruited as replacements for, or alternatives to, previous participants or as individuals representing agencies not previously surveyed.

The KE who participated in the 2015 IDRS consisted of 16 direct health workers: Primary health care/NSP worker (n = 4), medical officer/first-aid worker/drug treatment manager/addiction medicine specialist/OST prescriber (n = 8), community health worker/outreach worker (n=2), policy/government

worker (n = 1), drug user group representative (n = 1); and three LE personnel: investigator (n = 2), and lawyer (n = 1). Excluding LE personnel, participants were selected on the basis of having had at least weekly contact with PWID during the preceding six months, and/or contact with 10 or more PWID during that same period, and/or expert knowledge in one or more areas relating to the use, possession, manufacture and/or trafficking of illicit substances.

To allow KE to consider whether they would be able to address the research questions, some were sent a copy of the KE interview schedule from the previous year. The schedule included sections eliciting information on the group characteristics of people currently involved in the illicit drug market, the characteristics of the market itself, and recent observed trends in IDU and related harms.

As per previous years, the 2015 survey asked KE to focus on the drug(s) perceived to be 'most problematic' at the time of interview. To put these responses into context, the main drugs with which 2015 KE had the most contact in regards to their work were (multiple responses allowed) heroin (n = 16), methamphetamine (n = 16), cannabis (n = 9), buprenorphine (n = 7), benzodiazepines (n = 10), steroids (n = 3), methadone (n = 7), hallucinogens (n = 2) and ecstasy (n = 3). By comparison, the drugs 2014 KE cited as the 'most problematic' in relation to their work with PWID were methamphetamine (ice) (n = 7), methamphetamine in combination with alcohol (n = 1), heroin (n = 4) and alcohol (n = 4).

2.3. Other indicators

Information collected from both the PWID and KE interviews was supplemented by data obtained from secondary indicator sources. Data relating to trends for the 2014/15 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 largescale 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 2013/14 financial year.

Drug-related arrest data

Information pertaining to drug-related arrests in Victoria has been obtained from the Australian Crime Commission (ACC). The Victoria Police and the Australian Federal Police (AFP) provide arrest data to the ACC for the Illicit Drug Data Report. This report presents drug-related arrest data for the 2013/14 financial year (Australian Crime Commission, 2015).

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 2013/14 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 2015 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 2014 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 drugrelated 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 2007 to 2014 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 2013/2014.

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 2014.

Blood-borne viral infections surveillance data

- Blood-borne viral infections (BBVI) such as HIV, hepatitis B virus (HBV) 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, HBV and HCV are presented in this report from 2000 to 2014.
- 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 2014 ANSPS data collections is presented in this report (Iversen, Chow, & Maher, 2014; Iversen & Maher, 2015a).

2.4. 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 for 2014 and 2015 were performed using a one-sided test of proportions (prtesti). Analyses of 2015 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. Content analysis was used for the open-ended response data provided by the qualitative KE interviews (Kellehear, 1993).

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 2015 IDRS participant sample

In 2015, we interviewed 150 people who regularly inject drugs (PWID) for the Victorian IDRS. Twentyfive 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 2011 to 2015.

The cohort continues to age. Between 2014 and 2015 there was a non-significant increase in the mean age of participants, from 40 to 42 years (p = 0.058). As in previous years, almost three-quarters of the sample were men. About one-third reported residing in unstable accommodation, including participants who reported being homeless at the time of interview. In 2015, 16% of participants identified as Indigenous Australian, not significantly different from 2014 (Table 1).

As per previous years, most participants were unemployed at the time of interview and 88% 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 \$430.14 per week (SD 413.80, median \$375.00, IQR \$300-\$445) before tax.

Sixty per cent of participants reported being in drug treatment at the time of interview, not significantly different from 2014 (66%, p = 0.283) (see section 6.2. for more detail).

In 2015, half (50%, n = 148) reported a history of imprisonment, significantly lower than in 2015 (64%, p < 0.05) and lower than prevalence in previous years (Table 1). As with previous surveys, a history of incarceration was significantly more common among male than female participants (61% vs. 22%, p < 0.001)

Key Expert comments: Characteristics

The descriptions of the characteristics of PWID in Melbourne by 2015 KE coincided with those provided in previous years. KE gave widely differing details about the age and gender profiles of the PWID with whom they had contact during the past six to 12 months: some reported seeing mostly men, others mostly women; some described PWID as ranging from 20 to 60 years of age, others 18 to 40, others still reported seeing PWID of all ages.

Although most KE reported that the PWID with whom they were in contact were generally Australianborn and English-speaking, they mentioned a multiplicity of ethnic backgrounds and cultural identities. Some KE reported substantial contact with ATSI populations; two mentioned ethnic Vietnamese. Several health and LE KE specified that many people they worked with resided in the North West metropolitan region of Melbourne.

KE reported high levels of unemployment, with many PWID receiving Centrelink benefits of some type. People in contact with low-threshold primary health services were more likely to have low levels of education and limited formal trade and tertiary qualifications. Some sex work was reported.

All KE referred to the high prevalence of mental health problems among their cohorts, with depression, anxiety and PTSD reported as most common. Reference was also made to PWID's high rate of criminal justice system involvement and contact with police.

	2011 (N=150)	2012 (N=150)	2013 (N=150)	2014 (N=150)	2015 (N=150)
Mean age in years (SD)	37 (7.6)	38 (8.1)	40 (7.9)#	40 (8.8)	42 (7.7)
Male (%)	75	70	71	75	71
Heterosexual (%)	91	93	91	89	91
Indigenous (%)	10	11	13	13	16
Accommodation (%)					
Own house/flat (includes rental)^	34	41	54	57	63
Parents'/family house	11	11	5	10	5
Boarding house/hostel	24	27	25	11	17
Shelter/refuge	3	4	0	1	1
No fixed address/homeless	17	15	15	19	7
Other	0	3	1	2	5
Employment (%)					
Not employed	87	92	90	89	85
Full-time	1	2	2	1	3
Part-time/casual	7	5	3	5	7
Home duties	2	1	4	1	1
Other	0	1	1	3	4
Mean years of school education (IQR)	9.7 (9–11)	9.6 (8–11)	9.6 (9–11)	9.9 (9-11)	9.9 (X-X)
Tertiary education (%)					
None	39	55	61	54	44
Trade/technical	52	41	33	43	48
University/college	8	5	5	3	8
Government pension, allowance or benefit (%)	96	95	94	87	88
Current drug treatment* (%)	59	60	52	66	60
Prison history (%)	63	60	64 [#]	64	50#

Table 1: Demographic characteristics of participants, Victoria, 2011–2015

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

 $^{\scriptscriptstyle \#}$ Data missing for one participant (n = 149) in 2013, and two participants (n = 148) in 2015

4. Consumption patterns

Victorian IDRS participants' IDU history and patterns of use in the month preceding interview are shown in Table 2 from 2011 to 2015. In 2015, the mean age of injection to initiation was reported as 19.1 years (median 17, IQR 15–21 years), not significantly different from the mean age in 2014 (18.7 years, p = 0.580). Similar percentages reported that their first injection was either methamphetamine (51%) or heroin (44%). Heroin was the most commonly cited drug of choice (70%), drug injected most in the past month (60%), and last drug injected (56%). For the 34 participants who reported injecting a different drug most in the last month to their drug of choice, availability (29%) was reportedly the most common reason for doing so. In 2015, the distribution of injection frequency in the past month was similar to distributions in previous years (Table 2).

	2011 (N=150)	2012 (N=150)	2013 (N=150)	2014 (N=150)	2015 (N=150)	
Mean age in years at first injection (SD)	18 (6.1)	18 (5.1)	19 (5.9)	19 (5.9)	19 (6.6)	
First drug injected (%)						
Heroin	39	47	47	45	44	
Methamphetamine	56	45	49	50	51	
Other drugs	5	7	4	5	6	
Drug of choice (%)						
Heroin	60	74	71	65	70	
Methamphetamine	19	13	18	23	20	
Cannabis	11	4	6	5	4	
Morphine	1	2	1	1	1	
Cocaine	3	1	2	2	1	
Other drugs	7	5	2	4	5	
Drug injected most in last month (%)						
Heroin	60	72	69	63	60	
Methamphetamine	22	17	20	28	29	
Buprenorphine/buprenorphine-naloxone	14	7	7	4	8	
Morphine	1	2	2	1	1	
Other drugs	3	2	2	4	2	
Last drug injected (%)						
Heroin	59	73	69	62	56	
Methamphetamine	21	15	20	27	31	
Morphine	1	1	2	1	1	
Cocaine	0	0	1	1	0	
Buprenorphine/buprenorphine-naloxone	14	8	7	5	9	
Other drugs	5	3	2	4	2	
Frequency of injecting in last month (%)						
Weekly or less	28	23	23	28	19	
More than weekly, less than daily	36	35	32	35	40	
Once a day	13	19	21	12	11	
Two to three times per day	17	18	17	17	20	
More than three times per day	3	5	6	7	9	

Table 2: IDU histor	v and patterns	of use in the	last month.	Victoria.	2011-2015
	y and patterns		iust month,	violoriu,	

Source: IDRS participant interviews

4.1. Current drug use

Table 3 summarises the self-reported patterns of lifetime and recent⁵ drug use among 2015 Victorian IDRS participants. In 2015, lifetime use of heroin (97%), various methamphetamine forms (97%), tobacco (97%), alcohol (95%) and cannabis (93%) was ubiquitous among the sample, as was lifetime use of prescribed and/or non-prescribed benzodiazepines (93%, including alprazolam) and methadone use (87%). These results were similar to previous years.

In the six months preceding interview, the same proportions of participants reported most commonly injecting heroin (73%) and methamphetamine (73%).

The illicit drugs participants most commonly reported recently smoking were cannabis (76%) and methamphetamine (30%), most commonly crystal methamphetamine (ice). Insufflation (snorting) was very uncommon, with only 4% reporting recent cocaine use via this route of administration (ROA). Excluding alcohol (71%), in 2015 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 (47%), 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 histor	y and patterns	s of drug use in th	ne preceding s	six months, Victoria	, 2015

	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	97	97	73	96	6	1	1	74	96
Home bake heroin**	22	22	4	9	0	0	0	4	10
Any heroin	97	97	74	96	6	1	1	74	96
Methadone (prescribed)	75	21	3	11			42	42	180
Methadone (not prescribed)	47	19	3	2			11	13	3
Physeptone (prescribed)	12	3	0	0	0	0	1	1	91
Physeptone (not prescribed)	17	14	5	2	0	0	0	5	2
Any methadone/physeptone	87	38	10	2	0	0	47	49	180
Buprenorphine (prescribed)	47	33	3	125	0	0	4	5	176
Buprenorphine (not prescribed)	42	37	9	48	0	0	5	12	20
Any buprenorphine	63	49	11	72	0	0	8	15	60
Buprenorphine-naloxone tablets (prescribed)**	36	14	0	0	0	0	1	1	47
Buprenorphine-naloxone tablets (not prescribed)**	26	20	3	11	0	0	1	3	6
Any buprenorphine-naloxone tablets**	50	27	3	11	0	0	3	3	12
Buprenorphine-naloxone film (prescribed)**	34	17	9	48	0	0	19	20	90
Buprenorphine-naloxone film (not prescribed)**	28	20	11	5	0	0	9	17	5
Any buprenorphine-naloxone film**	50	32	19	23	0	0	25	32	68
Any buprenorphine-naloxone**	69	42	19		0	0	26	33	
Morphine (prescribed)	14	9	1	27	0	0	1	1	17
Morphine (not prescribed)	61	58	12	6	0	0	1	13	5
Any morphine	64	59	13	5	0	0	2	13	4
Table 3: Drug use histor	v and patterns	of drug use in the	preceding six months.	Victoria, 2015 (continued)					
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	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 (prescribed)	25	10	1	120	0	0	5	6	21
Oxycodone (not prescribed)	67	61	15	5	0	0	6	19	3
Any oxycodone	75	63	16	5	0	0	11	24	5
Fentanyl	16	12	6	5	0	0	0	6	5
Over-the-counter codeine	17	2	1	28	0	0	7	7	19
Other opioids (not elsewhere classified)	27	5	1	46	0	1	0	10	6
Speed powder**	91	89	17	2	1	1	0	18	2
Amphetamine liquid	31	30	1	20			0	1	20
Base methamphetamine**	32	30	4	6	1	0	0	4	6
Crystal meth (ice)	90	90	71	12	30	1	3	71	10
Any methamphetamine	97	96	73	12	30	1	3	74	15
Pharmaceutical stimulants (prescribed)	9	3	1	2	0	0	1	1	60
Pharmaceutical stimulants (not prescribed)	42	28	6	3	0	1	5	7	7
Any pharmaceutical stimulants	46	29	6	3	0	1	5	7	7
Cocaine	67	47	7	18	1	4	0	9	5
Hallucinogens	65	9	0	0	1	0	5	5	2
Ecstasy	70	31	1	2	0	0	5	6	2
Alprazolam (prescribed)	21	4	0	0	0	0	3	3	180
Alprazolam (not prescribed)**	72	5	0	0	0	0	27	27	3
Any alprazolam	78	8	0	0	0	0	29	29	

Table 3: Drug use history and patterns of drug use in the preceding six months, Victoria, 2015 (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)	78	10	1	4	1	0	41	41	93
Other benzodiazepines (not prescribed)	72	10	1	2	1	0	47	47	7
Any other benzodiazepines	90	15	1		1	0	65	65	
Any benzodiazepines	93	22	1	10	1	0	69	69	48
Quetiapine (prescribed)	35	2	1	14	0	0	11	11	180
Quetiapine (not prescribed)	42	1	1	14	0	0	15	16	6
Any quetiapine	65	3	1	28	0	0	26	26	72
Alcohol	95	11	0	0			71	71	24
Cannabis	93				76		2	76	125
Inhalants	28							1	46
Торассо	97							94	180
E-cigarette	37							22	2
Steroids	5	5	0	0	0		0	0	0
NPS	7	3	0	0	1	0	1	1	2
Synthetic cannabinoids	29				16		0	16	2

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

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

** n = 149

Figure 1 shows the drug types Victorian IDRS participants reported using on the day prior to interview from 2008 to 2015. Multiple responses were allowed and prescribed drug use was included. In 2015, almost all participants (95%) reported the use of at least one drug on the day before interview, with heroin (48%), cannabis (46%) and methadone (34%) most commonly used (Figure 1).



Figure 1: Drugs used on the day prior to interview, Victoria, 2008–2015*

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.

The median drug quantities participants reported using in a session in the six months preceding interview are shown in Table 4. Quantities are shown in grams by drug type for (i) the average amount reportedly used in a session (i.e. a period of continuous use), (ii) the largest amount used in a session, and (iii) the average amount used over the course of a day. For cannabis, instead of grams the median number of cones and joints are shown. Among heroin users in the past six months, for instance, the median quantity reportedly used in a session was 0.3 gram, whereas 0.5 gram was the median quantity used most. Note that among recent crystal methamphetamine users, 0.1 gram was the median amount reportedly used in a session, the median amount used most, and the median amount used during the course of a day (Table 4). Findings in 2015 were consistent with those in 2014.

	Median amount used in a session* Grams (IQR)	Median amount used <i>most</i> in a session* Grams (IQR)	Median amount used in a day Grams (IQR)
Heroin (n = 109)	0.3 (0.15–0.5)	0.5 (0.3–1.0)	0.5 (0.2–0.7)
Speed (n=24)	0.28 (0.1–0.5)	0.3 (0.1–0.7)	0.3 (0.16–0.5)
lce (n=106)	0.1 (0.05–0.15)	0.1 (0.1–0.25)	0.1 (0.09–0.2)
Cocaine (n=10) *	0.5 (0.1–1.0)	0.5 (0.25–1.0)	0.75 (0.4–1.0)
Cannabis (n=72)	1.0 (0.5–1.0)^	1.3 (1.0–3.0)	1.0 (0.88–2.0)^^
Joints (n=7)	1.0 (1–2)	1.0 (1–5)	1.0 (1–3)
Cones (n=38)	6.0 (3–10)	10.0 (4.5–20) [#]	10.0 (5–20)

Table 4: Median drug quantities used in the preceding six months, Victoria, 2015

Source: IDRS participant interviews

Note: Only six participants reported on the average amount of base used in the preceding six months so median quantities used per session are not reported. Participant reports of quantities used in \$AUD amounts are excluded.

* Session refers to a period of continuous use

⁺ Data missing for one participant

[#] Data missing for five participants

^ Data missing for three participants

^ Data missing for two participants

4.2. Heroin

Key points

- In 2015, 74% of participants reported recent heroin use and injection, a near-significant decline from the prevalence in 2014 (83%).
- The frequency of heroin use increased: the median was 96 days in 2015, compared with 48 days in 2014.
- There was a significant rebound in the percentage of daily heroin users between 2014 and 2015 (15% to 27%).
- White or off-white rock was the form of heroin used most by recent users in 2015 (78%). The percentage of participants who reported using brown/beige rock most decreased (non-significantly) to 6%.
- Nine per cent of the sample reported using heat to prepare their last heroin injection, similar to 2014.

4.2.1. Prevalence of heroin use

For 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 prevalence of recent use and injection fell (non-significantly) from 83% to 74% (p = 0.058). Lifetime use was reported by 97% (n = 146) of the sample. Seventy per cent nominated heroin as their drug of choice, similar to 2014 (65%, p = 0.357). Fifty-six per cent of 2015 participants reported heroin as the last drug injected, compared with 62% in 2014 (p = 0.291).

This figure (56%) was not significantly different from that reported in the 2014 ANSPS, in which 59% of Victorian ANSPS participants nominated heroin as the last drug injected before survey (Iversen & Maher, 2015b).

4.2.2. Current patterns of heroin use

As in previous years, of the 111 IDRS participants who reported recent heroin use, all reported recent heroin injection. Only 6% reported recently smoking heroin (i.e. heating the drug and inhaling the vapours) and 1% respectively reported oral ingestion and insufflation (snorting). These results are similar to findings in 2014.

Figure 2 illustrates the median days of heroin use, from 2000 to 2015, by Victorian participants who reported use in the preceding six months. In 2015, heroin was used on a median of 96 days (range 1– 180 days) in the six months before interview, or about four days per week. This was double the median days of use reported by participants in 2014 (48 days, or about two 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 2015, 27% of recent heroin users reported daily use, a significant increase from the percentage reporting daily use in 2014 (15%, p < 0.05), but similar to the level recorded in 2013 (30%).



Figure 2: Median days of heroin use in the past six months, Victoria, 2000-2015

Source: IDRS participant interviews

4.2.3. Forms of heroin used

As in previous years, in 2015 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 (Warhaft, 2008).

Table 6 presents the forms of heroin used by IDRS participants from 2011 to 2015, and the forms of heroin participants reported using most. Among recent heroin users (n = 111) in 2015, 78% reported using white/off-white rock in the preceding six months, a non-significant increase over the 2014 figure but lower than figures for the preceding three years. Reports of recent use of white/off-white powder increased significantly from 19% in 2013 to 37% in 2014 (p < 0.01) and again (non-significantly) to 41% in 2015. The reported use of brown/beige powder rose (non-significantly) from 11% in 2014 to 20% in 2015 (p = 0.07), but use of brown/beige rock remained stable (33% vs. 31% respectively) (Table 6).

For years, Victorian IDRS participants have reported that most of the heroin available in Melbourne is white/off-white rock. Consistent with this, in 2015 68% of recent heroin injectors reported using white/off-white rock most often in the preceding six months. The percentage of recent heroin injectors reporting use of brown/beige rock most often decreased, but non-significantly (10% in 2014 vs. 6% in 2015) (Table 5).

	Forms used*				Form used most					
	2011 (n=122)	2012 (n=126)	2013 (n=124)	2014 (n=125)	2015 (n=111)	2011 (n=121)	2012 (n=125)	2013 (n=124)	2014⁺ (n=122)	2015 (n=111)
White/off-white heroin (%)										
Powder	25	44	19	37	41	8	10	5	9	19
Rock	89	87	82	72	78	79	82	83	76	68
Brown/beige heroin (%)										
Powder	13	24	7	11	20	2	3	1	1	5
Rock	21	29	37	33	31	7	5	11	10	6
Other colour heroin (%)										
Powder	0	1	1	3	1	0	0	0	2	0
Rock	7	3	1	2	2	3	1	0	2	2
Homebake heroin (%)	3	1	1	3	5				1	0

Table 5: Forms of heroin used in the preceding six months, Victoria, 2011–2015

Source: IDRS participant interviews

* Multiple responses allowed

⁺ Data missing for three participants

-- No reports received

In 2015, 111 participants completed the survey questions regarding their most recent episode of heroin injection. Of these, 10 participants (9%) reported using heat to prepare their last injection, similar to 2014 (10%). Ten participants provided information on the type of heroin used on this occasion: five reported heating white/off-white heroin and four reported heating brown/beige heroin. No reports were received regarding the use of citric acid to dissolve heroin.

Key Expert comments: Heroin

Six KE reported that heroin was the main illicit drug they had come into contact with during the course of their work with PWID, and six reported perceiving heroin as the "most problematic" drug in 2015. For instance, some health KE nominated heroin as most problematic due to the high prevalence and frequency of use among people accessing services – presentations with the most significant and complex needs. Several other health KE concurred, reporting that heroin was most problematic in their workplaces due to the "sheer volume" of opioid-dependent clients accessing services (sometimes just NSP), as well as a range of other related factors including overdose, financial costs, injecting ROA, stigma and discrimination, legal consequences of use, physical and mental health issues, trauma, parenting/child protection issues, motor vehicle accidents (MVA) and fall injuries, and unstable housing. Health consequences related to heroin injection such as hepatitis C, sepsis and other injecting-related injuries were also cited.

4.3. Methamphetamine

Key points

- In 2015, the prevalence of recent methamphetamine use was 74% and recent injection 73%, almost identical to 2014. The median frequency of methamphetamine use was 15 days in the preceding six months (fortnightly use), slightly higher than in 2014 (12).
- Twenty per cent nominated methamphetamine as their drug of choice.
- The prevalence of recent *ice* use (74%) was almost identical to 2014. Ice smoking rose non-significantly to 30%. Median frequency of *ice* use was 10 days in the preceding six months.
- Prevalence of recent *speed* use was lower in 2015 (18%) than in 2014 (25%). Median frequency of *speed* use was two days in the preceding six months.
- Prevalence of recent *base methamphetamine* use changed little in 2015 (4%). Median frequency of use was six days.

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). By comparison, between 2014 and 2015 there were non-significant decreases in lifetime methamphetamine use (from 99% to 97%, p = 0.251) and injection (from 97% to 96%, p = 0.759) among Victorian IDRS participants. Recent use (any ROA) of methamphetamine also non-significantly decreased, from 77% of participants in 2014 to 74% in 2015 (p = 0.500); recent injection barely changed (74% vs. 73%). Overall, however, Table 2 shows no change between 2014 and 2015 in the percentage of participants who nominated methamphetamine as their primary drug of choice (23% vs. 20%, p = 0.484).

The percentages of Victorian IDRS participants who reported ever injecting various methamphetamine forms remained stable between 2014 and 2015. Lifetime prevalence of *ice* injection was 90% in both 2014 and 2015. The lifetime prevalence of *speed powder* injection was 89% in 2012, versus 92% in 2014 and 85% in 2013. In 2015, lifetime prevalence of *base methamphetamine* injection was the same as in 2014 (30%). The lifetime prevalence of *amphetamine liquid* injection rose from 24% in 2014 to 30% in 2014 (p = 0.242).

Referring back to Table 2, in 2015 the percentage of participants who reported injecting methamphetamine most often in the month preceding interview was 29%, not significantly different from the 28% recorded in 2014 (p = 0.800). Thirty-one per cent reported that methamphetamine was the last drug injected (vs. 27% in 2014, p = 0.447). Among the 448 Victorian NSP attendees surveyed for the 2013 ANSPS, 21% reported that methamphetamine was the last drug injected (lversen et al., 2014).

4.3.2. Current patterns of methamphetamine use

The percentage of Victorian IDRS participants reporting methamphetamine use in the preceding six months, from 2000 to 2015, is shown in Figure 3 by methamphetamine type. In 2015 participants most commonly reported recently using *crystal methamphetamine* or *ice* (69%), not significantly different from 2014 (75%, p = 0.245) and underpinning the high prevalence of methamphetamine use overall (71%). There was no significant change in the prevalence of recent *speed* use from 2014 to 2015 (25% vs. 18%, p = 0.123), or in the prevalence of recent *base methamphetamine* use. Figure 3 shows that from 2011 there has been a switch from *speed powder* to *ice* use among Victorian IDRS participants.





Source: IDRS participant interviews

Consistent with previous years, in 2015 the most common recent methamphetamine ROA among Victorian IDRS participants was injection; 71% reported recent *ice* injection (the same as in 2014). There was no change in the prevalence of recent *speed* injection (24% in 2014 vs. 23% in 2015, p = 0.8921). Prevalences of recent injection of *base methamphetamine* and *amphetamine liquid* were very low (4% and 1%, respectively). Six per cent reported the recent injection of *pharmaceutical stimulants* (prescribed or non-prescribed).

Reports of recent *ice* smoking were stable, with 30% of participants in 2015 indicating they had smoked the drug in the preceding six months, compared with 29% in 2014.

Figure 4 illustrates the median days of methamphetamine use among Victorian IDRS participants who reported recent use, from 2002 to 2015, according to methamphetamine type. In 2015 recent users reported using the drug at very similar frequencies to 2014. In 2015, for instance, recent *ice* users (n = 107) reported use about once per fortnight (median 10 days, IQR 2–72 days) in the preceding six months, compared with 12 days in 2014. Recent *speed* users (n = 27) reported use on a median of two days (IQR 1–6 days), compared with five days in 2013. The few participants (n = 6) who reported recent use of *base* reported a median frequency of six days use (IQR 2–13 days) in 2015, versus eight days in 2014. Overall, in 2015 the 111 Victorian IDRS participants who reported the recent use of any methamphetamine used on a median of 15 days (IQR 3–72 days) in the preceding six months, or on about two days per month.



Figure 4: Median days of methamphetamine use in the past six months, Victoria, 2002–2015

Source: IDRS participant interviews

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

Key Expert comments: Methamphetamine

Ten of 19 KE nominated methamphetamine (or more specifically, ice) as the "most problematic" drug in 2015, a smaller proportion than in 2014. Participants' reasons for nominating ice were reasonably consistent, with most KE citing the mental and behavioural consequences associated with methamphetamine use as the biggest concern. All KE acknowledged that methamphetamine use occurred across the social and cultural spectrum. Aggression and violence—attributed to low prices, high potency and high availability, sleep deprivation and experiences of agitation—were reported by KE at the coalface, particularly those working in NSP, ED, and general practice and policing.

4.4. Cocaine

Key Points

- The estimated prevalence of cocaine use among the Victorian general population in 2013 was 2.1%.
- In 2015, the lifetime prevalence of cocaine use among IDRS participants was 67%, and lifetime prevalence of cocaine injection was 47%.
- Recent use was reported by 9% and recent injection was reported by 7%.
- Only one respondent nominated cocaine as the drug of choice.
- Frequency of use was very low at a median of five 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 2015, 100 Victorian IDRS participants (67%) reported lifetime cocaine use, compared with 65% in 2014 (p = 0.72). By contrast, 9% reported using cocaine in the preceding six months, almost the same as in 2014 (10%, p = 0.69). In 2015, only one participant (0.7%) nominated cocaine as their drug of choice, even fewer than in 2014. The prevalence of lifetime cocaine injection was 47% (n = 65), whereas in 2014 lifetime prevalence was 43%. Despite a reasonably high prevalence of lifetime injection, only 10 participants (7%) reported cocaine injection in the preceding six months, also similar to the figure in 2014 (8%).

Consistent with previous years, in 2015 injection remained the most common lifetime and recent ROA reported by IDRS participants. Only 4% (n = 6) 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 relatively low. The median frequency of recent cocaine use (any ROA) was five days (IQR 1–42 days) in the preceding six months, while the median frequency of injection was 1 day (IQR 0–1 days).

All 14 recent cocaine users provided information in 2015 on the forms of the drug they had used most in the past six months. Eight participants (57%) reported using powder cocaine, five (36%) reported using rock cocaine, and one (7%) reported using crack most often.

4.5. Cannabis

Key Points

- In 2015, the prevalence of cannabis use among the IDRS sample was almost the same as 2014; lifetime use was reported by 93% and recent use was reported by 76%. Daily use was reported by 46%. Median frequency of use was 125 days, translating to use approximately five days per week.
- Four per cent of participants nominated cannabis as their drug of choice.
- Among recent users, hydroponically grown cannabis was smoked most.
- During the most recent session of use, 53% of recent users reported smoking a median of six cones, while 10% reported smoking a median of one joint.

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 2015 sample similar to those in 2014. For instance, in 2015 almost all participants (93%) reported lifetime use, very close to the figure in 2014 (97%, p = 0.638). A significant majority (76%) reported recently using cannabis, versus 75% in 2014. Despite a high prevalence of cannabis use in 2015, only 4% nominated cannabis as their primary drug of choice.

In 2015, 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 = 114), 110 (96%) provided responses about the cannabis types used during the past six months. Of these, 93% reported recently using hydroponically grown cannabis and 43% reported recently using bush-grown cannabis; 5% reported the recent use of hashish and hashish oil. Regarding the form of cannabis used most during the preceding six months (n = 107), 88% reported using hydroponically grown cannabis most, while 12% reported using bush-grown cannabis most.

4.5.1. Current patterns of cannabis use

In 2015, recent cannabis users (n = 113) reported a median frequency of 125 days (IQR 48–180 days) use in the preceding six months, slightly higher than in 2014 (median 120 days) but much lower than in 2013 (median 163 days). One hundred and twenty-five days of use equates to use on approximately five days per week. Of recent users, almost half (46%) reported daily cannabis use, almost the same as the percentages in recent years.

All recent users provided information on the amount of cannabis used during their most recent session of use. Of these, 53% reported smoking a median of six cones (IQR 3–10 cones), while 10% reported smoking a median of one joint (IQR 1–2 joints).

4.6. OST medications

Key Points

Methadone

- In recent years, overall there have been fluctuating levels of lifetime and recent OST medication use among Victorian IDRS participants.
- In 2015, the prevalence of recent methadone use was 42%, a significant decrease from 2014 (59%). The median frequency of use was stable at 180 days.
- Very few participants reported recent prescribed (2%) and non-prescribed (5%) Physeptone® use.

Buprenorphine

- In 2015 the prevalence of recent buprenorphine use was 15%, almost the same as in 2014 (14%).
- Recent buprenorphine use occurred at a median frequency of 60 days. Recent injection was reported by 11%.

Buprenorphine-naloxone

- There was a significant increase in lifetime but not recent buprenorphine-naloxone tablet use between 2014 and 2015 (to 68% and 3% respectively). Median frequency of use rose from five days to 12 days.
- Lifetime and recent prevalences of buprenorphine-naloxone film use were higher than in 2014 (50% and 32%, respectively).
- Nineteen per cent reported recent injection of any buprenorphine-naloxone formulation, on a median of 36 days (about three times per fortnight) in the preceding six months.

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, 2015 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 2015 Victorian IDRS sample, 87% (n = 130) reported lifetime use of methadone (*prescribed* and *non-prescribed*), almost the same as in 2013 (85%, p = 0.897). Forty-nine per cent (n = 74) reported recent use, not significantly different to the percentage in 2014 (47%, p = 0.664). Recent users of methadone reported a median frequency of 180 days (IQR 166–180 days) use in the previous six months, or a median of daily use.

In 2015, 75% (n = 113) reported lifetime use of *prescribed* methadone, with 42% (n = 63) reporting use on a median of 180 days (IQR 166–180 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 2015, the lifetime prevalence of illicit use was 47%, about the same as in 2014 (51%). Recent illicit use declined (but non-significantly) to 13% in 2015 from 19% in 2014 (p = 0.160). As in 2010–2013, the median days of non-prescribed methadone use was three days (five in 2014).

Use of both prescription and non-prescription Physeptone® remains uncommon among Victorian IDRS participants, but in 2015 12% of participants (n = 18) reported lifetime *prescribed* use (vs. 7% in

2014, p = 0.166), with 17% (n = 26) reporting lifetime *non-prescribed* use (the same as in 2014). Only 1% of the sample reported recent *prescribed* use, while 5% reported recent *non-prescribed* use.

In 2015 lifetime prevalence of (prescribed and non-prescribed) methadone injection was 38%, a nonsignificant increase from 2014 (33%, p = 0.376). Figure 5 shows the prevalence of recent methadone injection from 2001 to 2015, with a declining trend evident from 2008. In 2015, the percentage of participants reporting recent methadone injection (10%) was similar to previous years. Among the 15 participants who reported injection in 2015, the median frequency was two days (IQR 2–20 days) in the preceding six months.

Participants who reported recent use of *non-prescribed* methadone were asked to nominate the main reasons for their last occasion of illicit use; only one participant responded, citing substitution for heroin/other opioids.





Recent methadone injection

Source: IDRS participant interviews

4.6.2. Buprenorphine

In 2015 the lifetime prevalence of buprenorphine use (Subutex®, *prescribed* and *non-prescribed*) was 63%, a non-significant decline from 2014 (68%, p = 0.354). Between 2014 and 2015, prevalence of recent buprenorphine use did not change (14% vs. 15%, p = 0.762). Among recent users (n = 23), median frequency of use was 60 days (IQR 5–120 days). Lifetime prevalence of buprenorphine injection (prescribed or non-prescribed) did not change significantly (49% in 2015 vs. 46% in 2014, p = 0.602). As in previous years, the 2015 sample was asked to provide responses to separate questions about the use of prescribed and non-prescribed buprenorphine.

In 2015 the lifetime prevalence of *prescribed* buprenorphine use was 47%, unchanged from 2014 (45%, p = 0.729). There were seven reports of recent *prescribed* use in 2015 (5%). Lifetime prevalence of *non-prescribed* buprenorphine use was 42% in 2015, a slight decrease from 2014 (46%, p = 0.485), whereas the prevalence of recent use was similar (12% vs. 9%, p = 0.443). Among the 18 participants who reported recent illicit use, the median frequency was 20 days (IQR 2–90 days) in the past six months, compared with 29 days in 2014.

Participants who reported recently using *non-prescribed* buprenorphine were asked to nominate the main reasons for their last occasion of illicit use. Multiple responses were allowed. Six participants

provided responses, with substitute for heroin/other opioids (n = 3) reported as the main reason for illicit use.

Figure 6 shows the prevalence of recent buprenorphine and buprenorphine-naloxone tablet and film injection (see section 4.6.3) from 2002 to 2015. Between 2014 and 2015 the prevalence of recent buprenorphine injection was essentially unchanged (13% vs. 11%, p = 0.599) (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).





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. Since 2012, Victorian IDRS participants have been asked to respond to separate questions regarding the use of prescribed and non-prescribed buprenorphine-naloxone tablets and buprenorphine-naloxone film.

4.6.3.1. Buprenorphine-naloxone tablets

Between 2014 and 2015, lifetime prevalence of *prescribed* or *non-prescribed* buprenorphine-naloxone tablet use among Victorian IDRS participants did not change significantly (47% vs. 50%, p = 0.605). Prevalence of recent tablet use was similarly stable, with 3% reporting use in 2015, compared with

5% in 2014 (p < 0.395). The median frequency of use was 12 days in 2015, versus five days (IQR 2– 24 days) in 2014. The continuing decrease in the prevalence of recent buprenorphine-naloxone tablet use since 2011 is probably related to the rising numbers of PWID accessing the Suboxone® sublingual film preparation, as well as the decline in availability of the tablet formulation. The IDRS will continue monitoring this trend in 2016.

In 2015, lifetime prevalence of *prescribed* buprenorphine-naloxone tablet use was 36%, and lifetime prevalence of *non-prescribed* illicit tablet use was 26%. Two participants (1%) reported *prescribed* use, on a median of 47 days in the past six months, while four (3%) reported *non-prescribed* use on a median of six days.

Lifetime prevalence of buprenorphine-naloxone tablet injection (*prescribed* and *non-prescribed*) was 27% in 2015, the same as in 2014. In 2015, 3% of participants reported injection in the preceding six months, as shown in Figure 6, compared with 5% in 2014 (p = 0.125). Recent buprenorphine-naloxone tablet injectors (n = 4) reported doing so on a median of 11 days (IQR 2–24 days) in the preceding six months.

Participants (n = 4) who reported recent use of *non-prescribed* buprenorphine-naloxone tablets were asked to nominate the main reasons for their last occasion of illicit use. Multiple responses were allowed. Only one participant provided a response, giving the main reason as substitution for heroin/other opioids.

4.6.3.2. Buprenorphine-naloxone film

In 2015, the lifetime prevalence of buprenorphine-naloxone film use (*prescribed* and *non-prescribed*) was 50%, significantly higher than the 2014 figure (37%, p < 0.05); 32% reported recent use of the film preparation, versus 23% in 2014 (p = 0.093). Among recent users who provided data (n = 48), the median days of film use was 68 days (IQR 12–180 days) in the past six months.

Consistent with previous years, in 2015 the percentages of participants reporting lifetime and recent prescribed and non-prescribed use were similar. For instance, 34% reported lifetime use of *prescribed* buprenorphine-naloxone film, while 28% reported lifetime use of *non-prescribed* film. Twenty per cent reported recent *prescribed* use and 17% reported *non-prescribed* use. Recent users of *prescribed* film reported a median frequency of 90 days (IQR 42–180 days) use in the preceding six months, while recent users of *non-prescribed* film reported a median frequency of 5 days (IQR 2–23 days) use during the same period.

Lifetime injection of buprenorphine-naloxone film was reported by 19% (n = 29) of the 2015 Victorian IDRS sample, similar to 2014 (15%, p = 0.360). As shown in Figure 5, prevalence of recent injection in 2015 was higher (but non-significantly) than in 2014, with 19% (n = 29) reporting injection on a median of 23 days (IQR 2–113 days) in the preceding six months.

Only four of 29 participants who reported recent *non-prescribed* buprenorphine-naloxone film use nominated the reason for their last occasion of illicit use. Multiple responses were allowed. The most common reason cited by participants was as a substitute for heroin/other opioids (n = 2).

4.7. Other opioids

Key Points

- Between 2014 and 2015 prevalence of lifetime (64%) and recent (13%) morphine use decreased. Fifty-eight per cent of recent users reported using MS Contin® most, 32% reported using Kapanol® most.
- Over the past 10 years there has been a trend of declining morphine use among participants. The median frequency of use in 2014 was less than once per month.
- Thirteen per cent reported recent morphine injection, on a median of four days in the past six months.
- The prevalence of lifetime oxycodone use stayed constant at 75%. Prevalence of recent use was almost unchanged (24%), with median reported frequency of use at five days.
- Sixty-three per cent of recent users reported using OxyContin® most, 11% reported using Endone® most and 17% reported using OxyNorm most.
- Prevalence of recent oxycodone injection (16%) did not change significantly, and occurred on a median of five days in the previous six months.
- Lifetime and recent injection of fentanyl was very low at 12% and 6% respectively. Median frequency of injection was five 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 2014 Victorian IDRS sample (64%, n = 96), but prevalence was down from the 2014 figure of 77% (p < 0.05).

In 2015, the prevalence of recent morphine use was 13%, well below the 25% recorded in 2014 (p = 0.001). Median frequency of use in the past six months was four days (IQR 2–12 days). Of 20 recent users, 19 specified the brand of morphine used most in the past six months: 58% reported using MS Contin® most, while 32% reported using Kapanol® most. This statistically significant reduction in the prevalence of recent morphine use among Victorian IDRS participants is the first in the past 10 years, despite an overall trend of declining use (Cogger, Dietze, & Lloyd, 2013, 2014).

As with other pharmaceutical opioids, in 2015 participants were asked separate questions distinguishing between prescribed and non-prescribed morphine use. With regards to *prescribed* morphine, in 2015 14% (n = 21) reported lifetime use. One per cent reported recent prescribed use, at a median frequency of 17 days (IQR 3–17 days) in the past six months. By contrast, lifetime use of *non-prescribed* or illicitly sourced morphine was reported by 61% of participants, similar to 2014 (69%, p = 0.112); recent illicit use fell substantially and significantly (24% in 2014 vs. 13% in 2015, p < 0.05). In 2015, recent non-prescribed users (n = 18) reported a median frequency of five days (IQR 2– 21 days) use in the preceding six months.

Participants who reported *non-prescribed* morphine use in the past six months were also asked to nominate the main reason for their last occasion of illicit use. Multiple responses were allowed. In 2015, 7 of 19 participants provided comments. The reasons cited for the last occasion of use were substitution for heroin and other opioids (n = 3), self-treatment (n = 1) and intoxication (n = 1), and other reasons (n = 2).

Between 2014 and 2015, lifetime prevalence of any pharmaceutical morphine injection fell, but nonsignificantly, from 68% to 59% (p = 0.112). Figure 7 shows the prevalence of recent morphine injection among Victorian IDRS participants, from 2001 to 2015. As in previous years, in 2015 injection was the most commonly reported route of recent morphine administration among recent users. Thirteen per cent (n = 18) reported any recent morphine injection in 2015, compared with 22% in 2014 (p < 0.05) (Figure 7). Among these participants, morphine injection occurred on a median of five days (IQR=2–21 days) in the preceding six months.

As in previous years, in 2014 reports of lifetime *non-prescribed* morphine injection were significantly more common than reports of lifetime *prescribed* morphine injection (58% vs. 9%, p < 0.001). Recent injection of *non-prescribed* morphine was reported by 12% of participants, and recent *prescribed* morphine injection by 1%. Illicitly sourced morphine was reportedly injected by recent users on a median of six days (IQR 2–10 days) in the preceding six months.





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 75% (n = 112) of 2014 Victorian IDRS participants, the same as in 2014. Twenty-four per cent (n = 36) reported recent use, consistent with reports in 2014 (25%). The median frequency of use was five days (IQR=2–26 days) in the past six months, declining from 2014 when a median of seven days use was reported. Almost all recent users (n = 35) provided information on the brand of oxycodone used most in the preceding six months. Of these, 63% reported using OxyContin® most, 11% reported using Endone® most and 17% reported using OxyNorm® most.

As in previous years, participants in 2015 were asked separate questions about the use of prescribed and non-prescribed oxycodone, with patterns of use comparable to patterns of morphine use. In 2015, lifetime prevalence of *prescribed* oxycodone use was 25%, from the same as in 2014. Six per cent reported recent prescribed use, on a median of 21 days (IQR 5–150 days) in the preceding six months, similar to 2014 (5%, median 96 days). By comparison, in 2015 lifetime prevalence of *non-prescribed* oxycodone use was 67%, almost identical to prevalence in 2014 (68%). Prevalence of recent non-prescribed use declined non-significantly from 2014 to 2015 (22% vs. 15%). The median frequency of non-prescribed use was three days (IQR 2–10 days) in the previous six months.

Participants who reported recent *non-prescribed* oxycodone use were asked to provide reasons for their last occasion of illicit use. Multiple responses were allowed. Four of 22 participants responded in 2015; self-treatment, substitution for heroin and other opioids, intoxication and other reasons were cited once each.

From 2014 to 2015, lifetime prevalence of (prescribed and non-prescribed) oxycodone injection did not change significantly (65% vs. 63%, p = 0.718). Injection was the most commonly reported recent ROA: 16% of participants reported injecting oxycodone on a median of five days (IQR 2–28 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 2015 prevalence of lifetime *non-prescribed* oxycodone injection was significantly higher than prevalence of lifetime *prescribed* injection (61% vs. 10%, p < 0.001). Recent *non-prescribed* oxycodone injection also remains significantly more common than recent *prescribed* injection (15% vs. 1%, p < 0.001). However, *non-prescribed* oxycodone was injected at a median frequency of five days (IQR 2–22 days), while *prescribed* oxycodone was injected (by one participant) at a frequency of 120 days in the preceding six months.

4.7.3. Fentanyl

In 2015, for the third time, IDRS participants were asked about their history of fentanyl use; as in 2014 prevalence of use was low in Victoria. Lifetime prevalence of use and injection was 16% and 12%. Six per cent reported recent use, and injection. The median frequency of use was five days (IQR 1–35 days) in the preceding six months, as was the median frequency of injection (IQR 1–35 days).

4.7.4. Other opioids (not elsewhere classified)

In 2015, lifetime prevalence of extra-medical opioid (other than those listed above) use was 27%, significantly lower than in 2014 (57%, p < 0.001) but similar to prevalence in 2013 (29%). The prevalence of recent use was 10%, again significantly lower than 2014 (27%, p < 0.001) but close to the prevalence in 2013 (7%). Lifetime prevalence of injection was 5% and recent injection was 1%. Among recent users (n = 15), Panadeine Forte® (n = 7) was the most common brand used.

4.7.5. Over the counter (OTC) codeine

In 2015, lifetime prevalence of extra-medical OTC codeine use was 17% (n = 26) and recent extramedical use was reported by 7% (n = 12. Participants who reported recent use of these medications reported a median frequency of 19 days (IQR 4–77 days) use in the preceding six months. Only one participant reported recent OTC codeine injection (see Table 3).

4.8. Benzodiazepines

Key Points

- In 2015, prevalence of lifetime benzodiazepine use (other than alprazolam) did not change significantly (90%). Recent use decreased to 65% but the change was not significant and was similar to the level in 2013; trends in recent use have remained reasonably stable.
- Between 2014 and 2014 the prevalence of lifetime alprazolam use remained stable but recent use fell significantly. 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 2015, lifetime use of benzodiazepines other than alprazolam (*prescribed* and *non-prescribed*) was 90%, very similar to the figure in 2014 (88%, p = 0.580). Recent use decreased to 65% (n = 97) in 2015 (from 71% in 2014), but the difference was not significant (p = 0.216). The prevalence of recent benzodiazepine use (other than alprazolam) has remained reasonably stable from 2000 to 2015, as shown in Figure 8.

There was only one report of recent benzodiazepine (other than alprazolam) injection in 2015. 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 2015 prevalence of both lifetime and recent use of *prescribed* and *non-prescribed* benzodiazepines (other than alprazolam) was similar (lifetime: 78% vs. 72%, p = 0.230, recent 41% vs. 47%, p = 0.296). Between 2014 and 2015, there was no change in the prevalence of lifetime prescribed use (77% to 78%) and lifetime non-prescribed use (71% to 72%). There was a non-significant change in the prevalence of recent prescribed use (50% to 41%, p = 0.132), whereas recent non-prescribed use was almost identical (46% to 47%, p = 0.817). *Prescribed* users reported a median frequency of 93 days (IQR 41–180 days) use in the preceding six months, while *non-prescribed* users reported a median of 7 days (IQR 4–24 days) use. Among recent users (n = 97), 80% reported using diazepam most (e.g. Valium, n = 60) and 7% reported using oxazepam (e.g. Serapax®) most.





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 2014 to 2015, there were no significant changes in lifetime prevalence of any (prescribed and non-prescribed) alprazolam use (83% to 78%, p = 0.296). As shown in Figure 8, recent use continued to fall, with prevalence at 29% in 2015 compared to 40% in 2014 (p < 0.05). No participants 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 2015 lifetime prevalence of *non-prescribed* alprazolam use continued to be significantly higher than lifetime prevalence of *prescribed* alprazolam use (72% vs. 21%, p < 0.001). Recent *non-prescribed* use was also higher than *prescribed* use (27% vs. 3%, p < 0.001). Patterns of use in 2015 were similar to those reported in 2013 and 2012. In 2015, recent users of *prescribed* alprazolam reported a median frequency of 180 days use (IQR 46–180 days) in the past six months, whereas *non-prescribed* users reported a median of three days use (IQR 2–9 days).

4.9. Other drugs

Key Points

- Prevalence of lifetime quetiapine use did not change significantly (65%), nor did prevalence of recent use (26%). Recent quetiapine users reported a median of 72 days years (almost thrice weekly).
- Prevalences of lifetime pharmaceutical stimulant use (46%) and injection (29%) were very similar to the 2014 figures. Recent use was reported by 7% on a median of seven days in the past six months. Six per cent reported recent injection.
- The prevalence of recent ecstasy use fell non-significantly from 11% to 6%.
- Five per cent reported recent hallucinogen use. There were no reports of lifetime or recent injection.
- One per cent reported recent inhalant use.
- No participants reported recent steroid use.
- The prevalence of recent alcohol use (71%) did not change significantly. Median frequency of use was 24 days (approximately once per week) in the past six months.
- Prevalence of recent tobacco use (94%) was consistent with previous years. Twenty-two per cent reported recent e-cigarette use on a median of two days in the past six months.
- One per cent reported recent NPS use on a median of two days in the six months before interview.
- Lifetime prevalence of synthetic cannabinoid use was non-significantly higher at 29%, with recent use non-significantly decreasing to 16%. 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 2015 participants responded to questions distinguishing between prescribed and non-prescribed use.

Between 2014 and 2015, lifetime prevalence of any (prescribed and non-prescribed) quetiapine use did not change (65%). Prevalence of recent use was 26% in 2015, not significantly different from the 33% reported in 2014 (p = 0.164), at a median frequency of 72 days use (IQR 4–180 days) in the preceding six months. Similar to previous years, lifetime quetiapine injection was reported by a very small proportion (3%) of the sample. Only one report of recent injection was received. Oral ingestion was reported by all recent users.

In 2015 lifetime *non-prescribed* quetiapine use was (non-significantly) higher than lifetime *prescribed* quetiapine use (42% vs. 35%, p = 0.192), as was recent non-prescribed and prescribed use (16% vs. 11%, p = 0.239). *Prescribed* quetiapine users (n = 17) reported a median frequency of daily use of 180 days (IQR 180–180 days), while *non-prescribed* users (n = 24) reported a median frequency of six days use (IQR 2–26 days) in the preceding six months.

4.9.2. Pharmaceutical stimulants

In 2015, lifetime prevalence of pharmaceutical stimulant use (e.g. dexamphetamine and methylphenidate, prescribed and non-prescribed) was 46%, not significantly higher than in 2014 (39%, p = 0.243). Lifetime injection prevalence in 2015 was 29%, almost the same as in 2014 (28%).

Few (6%) reported recent injection. Prevalence of recent use did not change significantly from 2014 to 2015 (11% to 7%, p = 0.234); median frequency of use was seven days (IQR 3–12 days) in the preceding six months. The main brands reportedly used were generic dexampletamine (66%) and Ritalin® (11%).

As with most other pharmaceutical preparations, in 2015 lifetime prevalence of *non-prescribed* pharmaceutical stimulant use was significantly higher than *prescribed* use (42% vs. 9%, p < 0.001). Recent illicit use was significantly higher than recent prescribed use (7% vs. 1%, p < 0.001). *Non-prescribed* users reported use on a median of seven days (IQR 2–12 days) in the preceding six months.

4.9.3. Ecstasy

Similar to previous years, 70% (n = 105) of the 2015 Victorian IDRS sample reported lifetime ecstasy (3,4-methylenedioxymethamphetamine/MDMA) use. Six per cent reported use in the preceding six months, a non-significant decrease from 2014 when 11% reported recent use (p < 0.05). Over time, the prevalence of recent ecstasy use has declined considerably among IDRS participants, from about two-fifths of the sample in 2001. In 2015, the median frequency of use was two days (IQR 1–5 days) in the past six months. Between 2014 and 2015, reported lifetime injection of ecstasy increased significantly (31% vs. 17%, p < 0.005) but only 1% reported recent injection in 2015.

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 2015 Victorian EDRS are available in early 2016 (Truong, Dietze, & Lloyd, 2015).

4.9.4. Hallucinogens

In 2015, lifetime prevalence of hallucinogenic drug use (e.g. LSD (lysergic acid diethylamide) and 'magic mushrooms' (psilocybin mushrooms)) was 65%, similar to 2014 when it was 61% (p = 0.550). Five per cent reported recent use, at a median frequency of two days (IQR 2–5 days) in the past six months. No participants reported lifetime or recent injection.

4.9.5. Inhalants

Between 2014 and 2015 the lifetime prevalence of inhalant use rose, but not significantly (21% and 28% respectively, p = 0.181). In 2015 1% reported recent use.

4.9.6. Steroids

In 2015 lifetime prevalence of steroid use was 5%, the same as in 2014. No participants reported recent use.

4.9.7. Alcohol, tobacco and e-cigarettes

Lifetime prevalence of alcohol use was 95% in 2015, similar to previous years. Prevalence of recent use was 71%, not significantly different from the 68% recorded in 2014 (p = 0.617). All recent alcohol users (n = 106) reported oral consumption at a median frequency of 24 days (IQR 6–90 days) in the past six months, translating to an approximate pattern of weekly use. Fifteen per cent of recent users consumed alcohol daily.

In 2015, lifetime prevalence of tobacco use was 97%, also similar to previous years. Recent use was reported by 94%, as in 2013. Among recent smokers, the prevalence of daily tobacco smoking was 95% and the median frequency of use was 180 days (IQR 180–180 days) in the preceding six

months. Lifetime prevalence of e-cigarette use was 37% (vs 27% in 2014, P = 0.064) and in 2015, 22% of participants reported use at a median frequency of two days (IQR 1–7 days) in the preceding six months.

4.9.8. **NPS** and synthetic cannabinoids

In 2015, for the third 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 at a median frequency of two days (IQR 1–5 days) in the preceding six months. In 2015 7% reported lifetime use, with 1% reporting recent use at a median frequency of two days.

Between 2014 and 2015, lifetime prevalence of synthetic cannabinoid use changed little, from 25% to 29% (p = 0.516). Recent use went from 20% to 16% (p = 0.367). The median frequency of use in the past six months was two days (IQR 1–3 days).

Key Expert comments: Drugs other than heroin and methamphetamine

Alcohol was the only drug other than heroin and ice/crystal mentioned as "problematic" by KE from the health and LE sectors. All KE who mentioned alcohol as "problematic" cited reasons for their concerns such as widespread frequent consumption, high availability, association with violence, criminal justice and child protection issues, toxicity, and as a factor in motor vehicle accidents.

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

5.1. Heroin

Key Points

Price

- In 2015, the median reported price for 1.7 g of heroin fell to \$300. Prices for other amounts were consistent with previous years.
- 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 80% reporting that the heroin market was stable in the past six months. Ten per cent reported heroin was more difficult to obtain.
- Heroin was primarily sourced from known dealers (58%) or friends (18%), from an agreed public location (40%), home-delivered (20%), a dealer's home (19%) or a street market (12%).

Purity

- Participants reported that heroin was typically of low (45%) to medium (28%) purity.
 Forty-four per cent reported that purity was stable in the six months before interview, and 16% reported a decrease.
- In 2014/15, the average purity of heroin seizures was low (26%) but considerably higher than in the previous year.

5.1.1. Price

In 2015, 66% (n = 99) 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 6 presents Victorian IDRS participants' reports of the median price paid for their most recent heroin purchase, from 2011 to 2015, according to weight. Median heroin prices were estimated from participants' most recent heroin purchase. In 2015, participants (n = 63) most commonly reported recently purchasing 0.5 gram of heroin; the median price paid on the last purchase occasion was \$150 (IQR \$120–150). Fifty-two participants reported most recently purchasing 1.7 grams of heroin (a standard amount of heroin sold on the streets of Melbourne), while 43 participants reported most recently purchasing a cap/0.1 gram (Table 6).

	2011 2012 2013 \$ \$ \$		2013 \$	2014 \$	2015 \$
Cap/0.1 g (range)	50 (30–100)	50 (30–100)	50 (35–80)	50 (20–300)	50 (25–150)
0.25 g (range)	100 (70–150)^	110 (70–150)	100 (50–120)^	100 (50–150)	100 (50–500)
0.5 g (range)	150 (20–350)	150 (120–300)	150 (100–300)	150 (100–250)	150 (30–600)
1.0 g (range)	250 (150–450)	300 (200–350)	250 (160–700)	250 (50–480)	250 (135–450)
1.7 g (range)		350 (250–500)	300 (100–1000)	350 (180–400)	300 (50–500)

Table 5: Median prices paid for last heroin purchase, according to weight, Victoria, 2011–2015

Source: IDRS participant interviews

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

-- Not reported

Figure 9 shows the median prices of a cap (about 0.1 gram) and 1.0 gram of heroin from 2000 to 2015, 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 2015, the reported median price of a gram was \$250, consistent with 2013 and 2014 (Figure 9).





Source: IDRS participant interviews

In 2015, 96 participants provided information on changes to the price of heroin during the preceding six months. Stable heroin prices were reported by 70%, while 16% reported that the price of heroin decreased and 7% reported that the price increased. Seven per cent reported that the price of heroin fluctuated during the preceding six months.

5.1.2. Availability

Ninety-seven participants commented on perceptions of current heroin availability. Most reported that heroin was very easy (55%) or easy (39%) to obtain; 6% reported that obtaining heroin at the time of interview was difficult. Most participants reported no changes to recent heroin availability; 80% reported that the market was stable in the past six months, 10% reported that heroin had become more difficult to obtain, while 7% reported it was easier. Two 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, 58% reported sourcing heroin from known dealers, while 18% reported sourcing it through friends. Smaller proportions reported last sourcing heroin from a street dealer (11%) and an acquaintance (7%). Participants most commonly reported sourcing their last purchase from an agreed public location (40%), having it home-delivered (20%), from a dealer's home (19%), street market (12%) or a friend's home (6%).

5.1.3. Purity

In 2015, 97 participants provided information on their perceptions of current heroin purity. Forty-five per cent – a lower percentage than in previous years – reported that heroin purity was low, and 28% reported it was medium. Only 11% reported purity as high at the time of interview and 15% reported it as fluctuating.

Ninety-seven participants commented on their perceptions of changes to heroin purity in the past six months. Of these, 44% reported that purity was stable, 26% reported fluctuating purity, 16% reported a decrease and 13% reported an increase.

Figure 10 shows the average purity of heroin seizures made by Victorian LE agencies during 2013/14. The average monthly purity of the heroin seizures analysed was 26% (range 10–45%), 11 points higher than in the 2012/13 financial year when it was 15% (range 17–32%). Compared with the average purity of seizures during the height of heroin supply in Melbourne from 1998 to 2001, overall purity in 2014/15 was considerably lower (Cogger et al., 2013; Quinn, 2009). In 2013/14, seizures weighing 1.0 gram or less had an average purity of 22% (range 10–45%), with the average purity of seizures weighing more than 1.0 gram somewhat higher (30%, range 21–44%).





Source: Forensic Drug Branch, Victoria Police Forensic Services Department

* At the time of data collation, in June 2014 Victoria Police had recorded no heroin seizures weighing more than one gram.

5.1.4. Heroin detected at the Australian border

Figure 11 shows the number and weight of heroin shipments seized at the border by the Australian Customs and Border Protection Service (ACBPS) from 2001/02 to 2014/15. The weight of heroin seizures increased sharply between 2013/14 and 2014/15, but this followed an even sharper decline between 2012/13 and 2013/14, so seizure weight returned to a level similar to that in 2011/12. The number of heroin seizures has declined overall since 2006/07, but in 2014/15 291 seizures were made, the highest number since 2006/07 (n = 389; n = 283 in 2007/08) (Figure 11).





Source: ACBPS

5.2. Methamphetamine

Key Points

Price

- In 2015, seven participants reported purchasing speed. Median prices of 0.1 gram and 0.5 gram were stable. The reported median price of 1.0 gram dropped by \$75.
- Participants (n = 67) most commonly reported purchasing 0.1 gram of ice for \$50, half the price of previous years. The reported median price of 0.5 gram decreased by \$50. The median price for 1.0 gram decreased by \$150 from 2014.

Availability

- Over 75% reported that speed was easy or very easy to obtain; 22% reported difficulty. Eighty-eight per cent reported no change in availability in the past six months.
- Ice was easy or very easy to obtain (97%); 3% reported difficulty. Seventy per cent reported no change in availability in the past six months, but 24% reported access was easier.

Purity

- In 2015, 44% reported speed purity was medium, 22% reported it was high. Reports regarding changes to speed purity varied widely, but 43% reported no changes, 29% a decrease and 14% an increase.
- Thirty-five per cent reported that ice purity was high, 29% reported it was medium.
 Thirty-two per cent reported that purity was stable in the six months before interview, 30% reported a decrease and 23% fluctuation.
- In 2014/15 the overall average purity of methamphetamine seizures increased again, to 75%. By contrast, the overall average purity of amphetamine seizures was only 17%.

5.2.1. Price

5.2.1.1. Speed powder

In 2015, seven 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 7. Participants (n = 6) most commonly reported last purchasing 0.1 gram of speed. Two participants reported purchasing 1.0 gram, while one participant reported purchasing 0.5 gram. According to these reports, median prices for 0.1 gram and 0.5 gram were stable between 2014 and 2015 (Table 7). Seven participants provided information on changes to the price of speed in the preceding six months. Of these, 71% reported that the price of speed was stable, while 14% reported an increase and 14% reported fluctuation.

5.2.1.2. Crystal methamphetamine (ice)

Table 7 also shows the median prices participants paid for their most recent ice purchase from 2011 to 2015. As with speed, median prices were estimated from participant reports of the last price paid. In 2015, 67participants reported confidence in their knowledge of the ice market. Of these, most (n = 65) reported last purchasing 0.1 gram of ice. Thirty participants reported purchasing 0.5 gram, while 16 participants reported purchasing 1.0 gram (Table 7). Sixty-seven participants provided information

on changes to the price in the six months before interview: 49% reported it was decreasing, 39% reported that it was stable, 8% reported fluctuating prices and 5% increasing prices.

Table 7: Median prices paid for last speed and crystal methamphetamine* purchase, according to weight, Victoria, 2012–2015

		Spe	eed		Crystal methamphetamine					
	2012	2013	2014	2015	2012	2013	2014	2015		
	\$	\$	\$	\$	\$	\$	\$	\$		
0.1 g	100	50	50	55	100	100	100	50		
(range)	(20–150)	(25–100)^	(50–100)	(20–200)^	(50–100)	(20–100)	(50–100)	(25–100)		
0.5 g	100	100	100	90	300	350	300	250		
(range)	(70–500)	(100–100)^	(100–300)^	(90–90)^	(200–450)	(150–370)	(200–500)	(120–350)		
1.0 g	200	160	175	100	500	300	500	350		
(range)	(100–500)	(100–240)^	(90–800)	(100–100)^	(220–996)	(100–600)^	(300–800)	(220–600)		

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

5.2.1.3. Base methamphetamine

In 2015, only one participant provided information on the price of base methamphetamine. Median prices are therefore not reported.

5.2.2. Availability

5.2.2.1. Speed powder

In 2015, nine participants commented on their perceptions of speed availability. The majority reported that speed was very easy (44%) or easy (33%) to obtain, suggesting greater availability than in 2014 (26% and 44% respectively); 22% reported access was difficult. With regards to participants' perceptions of recent changes to speed availability, 88% reported the market was stable. One participant reported that obtaining speed was easier (in the six months preceding interview.

Participants were asked to nominate the source of their most recent speed purchase; nine did so in 2015. At the last purchase, participants most commonly reported sourcing the drug from known dealers (44%) and friends (33%), then street dealers (11%) and acquaintances (11%). Participants (n = 9) reported that the most common locations for sourcing their last purchase were an agreed public location (44%), friend's home (22%), home delivery (22%) and a dealer's home (11%).

5.2.2.2. Crystal methamphetamine (ice)

In 2015, 83 Victorian IDRS participants provided information on their perceptions of ice availability. Most participants reported that ice was very easy (63%, vs. 54% in 2014) or easy (34%) to obtain; 3% reported it was difficult. Regarding participants' (n = 70) perceptions of recent changes to availability, 70% reported the market was stable, 24% reported that ice was easier to obtain, while 4% reported more difficulty.

Participants were asked to nominate the source of their last ice purchase and, in 2015, 69 did. At the last purchase, the most common sources were known dealers (39%), friends (35%), acquaintances (10%) and street dealers (9%). Participants (n = 69) reported that the most common source locations were home delivery (28%), agreed public location (23%), friend's home (17%), dealer's home (17%) and street market (12%).

5.2.2.3. Base methamphetamine

Only one participant was able to comment on the market characteristics for base methamphetamine in 2015. Market characteristics are therefore not reported.

5.2.3. Purity

5.2.3.1. Speed powder

In 2015, 9 Victorian IDRS participants provided information on their perceptions of speed purity. Of these, 44% reported that speed purity was medium, 22% reported it was high, 22% reported it was low, and 11% reported fluctuating purity. Seven participants commented on recent changes to purity: 43% reported purity was stable, 14% reported increasing purity, 14% reported it was fluctuating and 29% reported a decrease.

5.2.3.2. Crystal methamphetamine (ice)

In 2015, 68 participants provided information on their perceptions of ice purity at the time of interview. Of these, 35% reported purity was high, 29% reported it was medium, 15% reported it was low and 21% reported it was fluctuating. Sixty-nine participants commented on perceived recent changes to ice purity. Of these, 32% reported no changes in the past six months, 30% reported that ice purity was decreasing, 23% fluctuating, and 15% increasing.

5.2.3.3. Base methamphetamine

Only one participant commented on the purity of base methamphetamine in 2014, thus reports are not included.

Figure 12 shows the average purity of methamphetamine seized by Victorian LE agencies during 2014/15. Overall, the average monthly purity of methamphetamine seizures analysed was 75% (range 62–86%), up from 2013/14 when it was 67%. 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 (Cogger et al., 2013). In 2014/15, smaller seizures weighing 1.0 gram or less had an average monthly purity of 74% (range 70–78%), higher than the average purity of smaller seizures in 2013/14 (69%). The average purity of larger seizures of more than 1.0 gram was higher again at 76% (range 62–86%), and substantially higher than mean purity in 2013/14 (64%).

As per previous years, fewer amphetamine than methamphetamine seizures were made by Victorian LE agencies during 2014/15 and, in comparison with methamphetamine the purity of amphetamine seizures was low. Overall average monthly purity was 17% (range 4–48%), a reduction from 2013/14 (26%). In 2014/15, smaller amphetamine seizures weighing 1.0 gram or less had an average purity of 13% (range 4–22%), whereas larger seizures of more than 1.0 gram had a higher average purity of 23% (range 5–48%).



Figure 12: Average purity of methamphetamine seizures by Victorian law enforcement, July 2013 to June 2014

Source: Forensic Drug Branch, Victoria Police Forensic Services Department

* At the time of data collation, in May 2014 Victoria Police had recorded no methamphetamine seizures weighing more than one gram.

5.2.4. Crystal methamphetamine detected at the Australian border

Figure 13 shows the number and weight of crystal methamphetamine shipments the ACBPS seized at the border from 2001/02 to 2014/15. The weight of crystal methamphetamine seizures increased substantially between 2011/12 and 2012/13, declined marginally to 2013/14, and rose markedly again in 2014/15. The number of seizures increased rapidly during the same period. The highest number of crystal methamphetamine seizures was made in 2014/15 (n = 1,721), weighing 2,615 kilograms (Figure 13).





Source: ACBPS

* Includes only the crystalline variety of methamphetamine called 'ice'. Excludes MDMA (ecstasy)

5.3. Cocaine

Key Points

- In 2015 too few participants provided information on their last cocaine purchase, so median prices are not reported.
- Only five participants reported on cocaine availability, suggesting it was easy or very easy to obtain.
- Comments from five participants suggested purity was medium.
- In 2014/15, the overall average purity of cocaine seizures was moderate (50%). Seizures weighing more than 1.0 gram had an average purity of 51%.

5.3.1. Price

In 2015, five Victorian IDRS participants reported confidence in their knowledge of the cocaine market in Melbourne, but only two provided information about the price of their last cocaine purchase in the past six months. Median prices are therefore not reported.

5.3.2. Availability

Five participants supplied their perceptions of cocaine availability in 2015. Reports suggest that for this population cocaine was easy (40%) to very easy (40%) to obtain at the time of interview, as well as during the preceding six months. On the last purchase occasion, participants reported sourcing cocaine from known dealers, unknown dealers and friends, from various venues (home delivery, friend's home, agreed public location).

5.3.3. Purity

In 2015, five participants commented on cocaine purity, variously suggesting that it was high (20%), medium (60%) and low (20%) at the time of interview and either stable (50%) or decreasing (50%) in the preceding six months.

Figure 14 shows the average purity of cocaine seizures made by Victorian LE agencies in 2014/15. Overall, the average monthly purity of cocaine seizures analysed was 50% (range 36–75%), similar to 2013/14 (44%) and 2012/13 (46%), but higher than previous years (Cogger et al., 2013). In 2014/15, smaller seizures weighing 1.0 gram or less had an average monthly purity of 53% (range 38–75%), whereas seizures weighing more than 1.0 gram had an average of 51% (range 36–70%).



Figure 14: Average purity of cocaine seizures by Victorian law enforcement, July 2013 to June 2014

Source: Forensic Drug Branch, Victoria Police Forensic Services Department

* At the time of data collation, from April to May 2014, Victoria Police had recorded no cocaine seizures weighing less than or equal to 1.0 gram. No cocaine seizures weighing more than 1.0 gram were recorded in February 2014 and May 2014.

5.3.4. Cocaine detected at the Australian border

Figure 15 shows the number and weight of cocaine shipments the ACBPS seized at the border from 2001/02 to 2014/15. The weight of cocaine seizures rose substantially between 2009/10 and 2011/12, then declined. The number of seizures reached a peak (n = 2003) in 2012/13, more than double the number recorded in the previous financial year, while the total weight of cocaine seizures almost halved. In 2014/15, ACPBS made 1,781 seizures weighing a total of 369 kilograms (Figure 15).



Figure 15: Number and weight of detections of cocaine detected at the border by the Australian Customs and Border Protection Service, 2001/02-2014/15

Source: ACBPS
5.4. Cannabis

Key Points

Price

- In 2015, the median prices for 1.0 gram and 1.0 ounce of hydroponically grown cannabis were consistent with previous years; the price of 0.25 ounce increased by \$10 (back to the median price in 2013). Eighty-eight per cent of participants reported no recent price changes.
- Nine participants reported that their last purchase was bush-grown cannabis.

Availability

- Ninety-three per cent reported that hydroponic cannabis was very easy or easy to obtain and 87% reported no recent changes to availability; 8% reported difficulty.
- Ninety per cent reported that bush-grown cannabis was very easy or easy to obtain and 80% reported no recent changes to access.
- Cannabis, hydroponic and bush-grown, was most commonly purchased from friends and known dealers.

Potency

- Hydroponic cannabis potency was reported as high (48%) and medium (42%), with 75% reporting no recent changes to potency.
- Bush-grown cannabis potency was reported as medium, with varied reports received regarding recent changes to potency.

5.4.1. Price

In 2015, 59 Victorian IDRS participants reported confidence in their knowledge of the cannabis market in Melbourne. Table 8 presents participant reports of the median price paid for the last cannabis purchase, from 2012 to 2015, for hydroponic and bush-grown cannabis. In 2015, participants (n = 37) most commonly reported most recently purchasing 1.0 gram of hydroponic cannabis. Thirty-five participants reported last purchasing 0.25 ounce (7.0 grams) and 18 participants reported last purchasing 1.0 ounce. Few participants reported purchasing bush-grown cannabis; five reported last purchasing 1.0 gram and four an ounce (Table 8).

Table 8: Median prices paid for la	st cannabis purchase,	, according to weight,	Victoria, 2012-
2015			

	Hydroponic				Bush-grown				
	2012	2013	2014	2015	2012	2013	2014	2015	
	\$	\$	\$	\$	\$	\$	\$	\$	
Gram	20	20	20	20	20		20	20	
(range)	(10–20)	(10–25)	(15–25)	(15–20)	(10–20)^		(10–20)	(10–20)^	
0.25 ounce (range)	80 (50–180)	80 (50–100)	70 (70–120)	80 (50–90)	70 (0–80)^	70 (70–80)^	80 (70–80)^	60 (50–80)^	
Ounce	250	250	250	250	240	150	230	210	
(range)	(150–280)	(180–300)	(200–280)	(200–320)	(200–250)^	(150–150)^	(100–250)^	(150–250)^	

Source: IDRS participant interviews

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

-- No reports received

Figure 16 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 2015. 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; however, since 2007, prices have remained consistent at \$250 (Figure 16).





Source: IDRS participant interviews

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

In 2015, of the 59 participants who provided information on recent changes to hydroponic cannabis price, 88% reported it was stable. Nine of the 10 participants who reported on recent changes to price for bush-grown cannabis also noted stable prices.

5.4.2. Availability

In 2015, 60 participants commented on hydroponic cannabis availability. Of these, the majority reported it was very easy (53%) or easy (40%) to obtain; only 7% reported difficulty obtaining hydroponic cannabis at the time of interview. With regards to participants' perceptions of recent changes to availability, 87% reported it was stable and 8% reported that this form of cannabis was more difficult to obtain.

Participants (n = 51) were asked to nominate the source of their last hydroponic cannabis purchase. In 2015, the most common last source was friends (53%) and known dealers (32%), followed by street dealer (9%). The most commonly reported source venues were a friend's home (39%), a dealer's home (22%), and an agreed public location (19%).

In 2015, 10 participants provided information on their perceptions of current availability of bush-grown cannabis. Bush-grown cannabis was reportedly very easy (40%) or easy (50%) to obtain, and access was reported as stable (80%) in the preceding six months. Among the 10 participants, the most common source of the last bush-grown cannabis purchase was known dealers (40%) and friends (30%).

5.4.3. Potency

In 2015, 59 participants gave their perceptions of hydroponic cannabis potency: 48% reported it was high and 42% reported it was medium. Fifty-nine participants commented on their perceptions of recent changes to potency. Of these, 75% reported it was stable and 12% that it was increasing. By contrast, 10 participants commented on bush-grown cannabis potency, with 60% reporting it was medium, 20% high and 10% fluctuating. Perceptions of recent changes to bush-grown cannabis potency varied: 60% reported it was stable, 20% reported fluctuation and 20% reported an increase.

5.5. Methadone

In 2015, three Victorian IDRS participants were able to comment on the market characteristics of *non-prescribed* methadone (Methadone Syrup®, Biodone Forte® and Physeptone® tablets). Due to the small number of participants in this group, findings must be interpreted with caution. Few reports were received from these participants about the price of their most recent methadone purchase, so median prices are not reported. All three commented on availability, reporting that obtaining illicit methadone was easy, and that ease of access was stable in the preceding six months. Of the three participants, one reported last sourcing methadone from friends, and one from acquaintances. Two participants reported that they bought non-prescribed methadone; both reported that the source of their last purchase was someone else's take-away dose.

5.6. Buprenorphine

Six participants provided comment on the market characteristics of *non-prescribed* buprenorphine (Subutex®) in 2015. Four reported paying a median price of \$20 for an 8 mg tablet, an increase of \$5 from 2014 (but the same median price as in 2013). All six participants reported that prices were stable in the preceding six months. In relation to availability, illicit buprenorphine was reported as very easy (67%), easy (17%) and difficult (17%) to obtain, with 83% reporting no changes to access in the past six months and 17% reporting more difficulty. Six participants provided information on non-prescribed sources: 67% reported last sourcing it from friends, most commonly from an agreed public location (33%). All six reported purchasing buprenorphine on the last occasion of use, and that the original source was someone else's daily dose. Given the small number of participants reporting, findings for buprenorphine must be interpreted with caution.

5.7. Buprenorphine-naloxone

5.7.1. Buprenorphine-naloxone tablets

In 2015 only two participants provided information on the market characteristics of *non-prescribed* buprenorphine-naloxone tablets (Suboxone® tablets), thus findings must be treated with caution. One participant last paid \$10 for an 8 mg tablet, the other \$20. One participant reported stable prices in the preceding six months and the other increasing prices. Regarding availability, one participant said the tablets were very easy to obtain at the time of interview, with no recent changes to availability noted. One participant reported sourcing tablets from a street dealer on the last occasion of purchase and that the original source was someone else's take-away dose.

5.7.2. Buprenorphine-naloxone film

Four participants provided information on the market characteristics of *non-prescribed* buprenorphinenaloxone film (Suboxone® film) in 2015. One paid \$5 for 2 mg film at last purchase. The median last price paid for 8 mg film (four participants) was \$10, the same as in 2014. Four participants reported that prices were stable in the preceding six months. Participants reported that the film was very easy (50%), easy (25%) or difficult (25%) to obtain, with three reporting no recent changes to availability and one reporting more difficult access. Three participants reported last sourcing the film from a street dealer. On the last occasion of use, three of four reported purchasing the film, and that the original source was someone else's take-away dose.

5.8. Morphine

In 2015, six participants provided information on the market characteristics of *non-prescribed* morphine (MS Contin® tablets and Kapanol® capsules). Table 9 presents median prices of non-prescribed morphine, estimated from participants' most recent purchase, for 2011 to 2015. As fewer than 10 participants reported on price, these data must be interpreted with caution (for instance, no participant reported last purchasing a 100 mg MS Contin® tablet and only one reported purchasing a 60 mg tablet). One participant reported purchasing a 100 mg Kapanol® capsule, none reported purchasing a 50 mg capsule (Table 9). Six participants provided information on recent changes to price and, of these, 50% reported price was stable, while 33% reported a decrease.

Table 9: Median prices paid for last morphine'	^r purchase, according t	o tablet weight, \	/ictoria,
2011–2014	-	-	

		MS Co	ontin®		Kapanol®				
	2012 \$	2013 \$	2014 \$	2015 \$	2012 \$	2013 \$	2014 \$	2015 \$	
60 (MS Contin) or 50 (Kapanol) mg tablet* (range)	20^ (10–60)	25^ (25–25)	30^ (20–35)	20^ (20–20)		25^# (25–25)	25^ [#] (25–25)		
100 mg tablet/ capsule* (range)	50 (40–100)	35^ (20–50)	50^ (30–100)		45^ (40–100)	25^ (20–50)	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.

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

[#] Price refers to 50 mg Kapanol® capsule

-- No reports received

In 2015, seven participants provided information on illicit morphine availability. Forty-three per cent reported that accessing morphine was easy and 29% very easy, whereas 29% reported that access was difficult. Of the seven participants who reported on changes to availability in the preceding six months, 71% reported that access was stable, 14% reported it was more difficult and 14% easier. Participants most commonly reported sourcing their last morphine purchase from friends (33%), known dealers (33%) or acquaintances (33%), with the most common source venues an agreed public location (67%) or a street market (33%).

5.9. Oxycodone

In 2015, four participants provided reports on the market characteristics of *non-prescribed* oxycodone (OxyContin®, original formulation (OC)). Table 10 shows the median prices Victorian IDRS participants paid for their most recent oxycodone purchase from 2011 to 2015. All prices must be interpreted with caution as no more than two participants reported purchasing any oxycodone tablet weight in 2015. Of four participants, three reported no recent changes to the price of oxycodone and one reported a decrease.

Table 6: Median prices paid for last OxyContin® purchase, according to tablet weight, Victoria,2011–2015

	2011	2012	2013	2014*	2015
	\$	\$	\$	\$	\$
10 mg tablet (range)	10^ (5–30)	5^ (5–5)		20^ (20–20)	
20 mg tablet	10^	14^	10^	10^	10^
(range)	(10–25)	(10–20)	(10–10)	(1.50–20)	(10–10)
40 mg tablet	20	22.50	25^	20^	15^
(range)	(15–35)	(20–40)	(20–50)	(20–25)	(10–20)
80 mg tablet	40	45	40^	45	40^
(range)	(30–80)	(30–80)	(30–50)^	(10–50)	(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

Four participants commented on the availability of non-prescribed oxycodone at the time of interview. Three reported access was easy, and one that it was difficult to obtain. Regarding recent changes to availability, 50% reported access was stable and 50% reported it was more difficult. Participants most commonly reported last sourcing illicit oxycodone from acquaintances (50%), friends (25%) and known dealers (25%), from venues such as a friend's home (25%), home delivery (25%), an acquaintance's home and a dealer's home (18%).

5.10. Alprazolam

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

In 2015, 32 participants (21%) reported ever using prescribed alprazolam, 107 (72%) reported ever using non-prescribed alprazolam, and 116 (78%) reported both prescribed use and non-prescribed use. The figures for recent alprazolam use were 4 (3%) prescribed, 41 (27%) non-prescribed, and 43 (29%) either prescribed or non-prescribed. The median frequency of recent non-prescribed (illicit) alprazolam use was three days (IQR 2–9), as opposed to seven days in 2014.

Six and eight participants reported ever injecting licit and illicit alprazolam respectively, but none reported injecting the drug in the six months before interview.

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 2015 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 Alcohol and Drug Centre).

6.1.1. Heroin

6.1.1.1. Self-reported non-fatal overdose

In 2015, 133 Victorian IDRS participants provided information regarding non-fatal overdose. Of these, 80 (60%) reported a lifetime accidental heroin overdose, higher than in 2014 (51%) but similar to percentages in 2013 (57%) and 2012 (55%). Among these, the median number of lifetime overdoses was two (IQR 1–4 overdoses). Figure 17 shows the prevalence of self-reported heroin overdose among Victorian IDRS participants in the past year, from 2000 to 2015. In 2015, among those with a history (n = 80), the prevalence was 19%, almost identical to prevalence in 2014 (20%) (Figure 17). Five per cent of participants with a history reported an accidental heroin overdose in the month before interview, close to the proportion in 2014 (4%).

Figure 17: Self-reported heroin overdose in the past year among participants with an overdose history, Victoria, 2000–2015



Source: IDRS participant interviews

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

As in previous years, in 2015 participants who reported a past-year heroin overdose (n = 15) were asked to provide information on any immediate treatment received following the last event. Multiple responses were allowed. Of these, 40% reported receiving the opioid antagonist naloxone (Narcan®) and 53% reported ambulance attendance. One reported receiving cardiopulmonary resuscitation (CPR) from a friend, partner or peer, another received CPR from another (non-medical) person, and three reported attending a hospital ED.

Participants (n = 15) were also asked whether they sought further treatment and/or information as a result of this overdose event afterwards, and to nominate from which health service/professional type. Multiple responses were allowed. Most participants (80%) reported that they did not seek further treatment and/or information; however, one reported seeing a counsellor and two reported visiting a drug health service for information.

6.1.1.2. Non-fatal heroin overdose attended by ambulance

Figure 18 shows the number of non-fatal heroin⁶ overdoses attended by AV in the greater Melbourne region, by month, from January 2008 to December 2013. 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. Between January and September 2014^7 , 698 non-fatal heroin overdoses were attended by AV in greater Melbourne; extrapolating the nine months of data to the full year gives an estimated 928 overdoses, slightly more than in 2013 (n = 914) but fewer than in 2012 (n = 991). In 2014, the median age of cases was 38 years (range 17–73 years), three years older than in 2013. The average number of attendances per month was 78 (range 62–89) similar to 2013 (Figure 18).



Figure 18: Number of non-fatal heroin overdoses attended by Ambulance Victoria per month, Melbourne, 2008–2013

Source: Turning Point Alcohol and Drug Centre

6.1.1.3. Heroin-related deaths

Figure 19 summarises data for trends in heroin-related mortality in Victoria from 2000 to 2015. A total of 1,438 heroin-related deaths were recorded for the period, an average of 90 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

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.

2004, the annual number of heroin-related deaths in Victoria returned to the level observed during the mid-1990s (Cogger et al., 2013). Ninety deaths were officially defined as heroin-related in Victoria in 2012 and 81 in 2013. To end 2015, 72 fatalities were officially defined as heroin-related (Victorian Department of Health, 2013b, 2014).



Figure 19: Heroin-related deaths, Victoria, 2000–2015*

Calendar year

Source: Victorian Department of Health, 2015

Note: These figures have been extracted from the NCIS database. Deaths generally take approximately six weeks to be entered into the database; therefore the last (and previous) month of entry (e.g. December 2014) may be incomplete. Some data are also 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

* 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 2015, 17% of Victorian IDRS participants reported a lifetime accidental overdose on drugs other than heroin, not significantly higher than the figure in 2014 (11%, p = 0.183). Among these participants (n = 25), the median number of lifetime overdoses was one (IQR 1–3 overdoses). Almost half (44%) reported an overdose in the past year, and 13% (n = 3) reported an overdose in the past month. Of the 11 participants who reported an accidental past-year overdose, four (each) specified that the drugs used prior to the most recent event were crystal methamphetamine (ice), alcohol, benzodiazepines, and cannabis, opiates other than homebake, heroin, methadone, morphine and oxycodone. Other drugs used at the last overdose event were fentanyl (n = 2) and Suboxone (n = 1).

Participants were asked to provide information on the immediate treatment received following their last overdose and, in 2015, eight responded. Multiple responses were allowed; they were ambulance attendance (n = 5), Narcan (n = 2), CPR from a friend, partner or peer (n = 1), oxygen (n = 1), hospital ED (n = 1) and 'other' (n = 2). Participants were also asked whether they sought further treatment and/or information as a result. Nine participants reported that they did not seek any treatment and/or information; one reported presenting to a drug health service and another to a counsellor.

6.1.2.2. Other drug-related events attended by ambulance

Figure 20 shows the number of amphetamine-related events attended by AV in the greater Melbourne region by month, from January 2009 to September 2014⁸. During the first nine months of 2014 AV attended 1,293 amphetamine-related events, which (assuming the mean monthly rate continued) can be extrapolated to 1,720, a 48% increase on the 1,160 events attended in 2013. In 2014, the median age of cases was 28 years (range 13–70 years) and the average number of attendances per month was 144 (range 130–157 attendances), increasing from an average of 133 (range 106–172 attendances) in 2013, 96 (range 64–126) in 2012, 64 (range 43–100) in 2011, 44 (range 37–60) in 2010 and 35 (range 21–55) in 2009 (Figure 20).

Figure 20: Number of amphetamine-related events attended by Ambulance Victoria per month, Melbourne, 2008–2013



Source: Turning Point Alcohol and Drug Centre

The number of crystal methamphetamine-related (ice) events attended by AV in greater Melbourne from 2012 to 2013 is shown in Figure 21 by month, compared with regional Victoria. During the first nine months of 2014⁹, AV attended 954 ice-related events in Melbourne and a further 235 events in regional Victoria; assuming the mean monthly rates continued, these figures can be extrapolated to 1269 and 313 respectively, increases of 5% and 15% from 2013. In 2014, the median age of Melbourne cases in which ice was involved was 29 years (range 13–70 years), nearly the same as the median age of cases in regional Victoria (28 years, range 3–55 years), both higher than reported median ages in 2013. In Melbourne the average number of attendances per month was 106 (range 97–127 attendances), roughly equivalent on a population basis with regional Victoria, where the monthly average was 26 (range 17–38 attendances) (Figure 21).

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

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





Source: Turning Point Alcohol and Drug Centre

During the first nine months of 2014^{10} , approximately 115^{11} cocaine-related events were attended by AV in the greater Melbourne region. Assuming the mean monthly rate continued, this figure can be extrapolated to 153, a 38% increase over the number in 2013 (n = 111). The median age of cases in which cocaine was involved was 29 years (range 14–57 years), the same as the median age in 2013. In 2014, the average number of cocaine-related attendances per month was 13 (range <5–19 attendances).

6.2. Drug treatment

6.2.1. Current drug treatment

In 2015, the IDRS included more detailed questions asking participants about their access to drug treatment services at the time of interview and in the preceding six months. Figure 22 shows that of the Victorian participants who responded (n = 149), 60% were in current drug treatment, particularly OST such as methadone (38%) and Suboxone® (13%). Among participants who were in treatment at the time of interview (n = 89), the median duration was 36 months (IQR 12–72 months). For those currently in methadone treatment (n = 56), the median duration of the treatment episode was 48 months (IQR 24–120 months).

¹⁰ Data for October-December 2014 are missing due to industrial action.

 $^{^{11}}$ The figure for September was recorded as '< 5' so assumed to be 2.





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. Fifty per cent (n = 74) reported being in drug treatment during the six months leading to interview. Of these, the most common treatment types were methadone (54%) and buprenorphine-naloxone (32%), followed by drug counselling (23%), and buprenorphine (7%).

The sample was also asked about their recent experiences accessing drug treatment services. In the six months before interview, 15% reported barriers to treatment despite trying to access services. Participants in this group (n = 23) most commonly reported trying to access AOD treatment services such as detoxification (30%) and residential rehabilitation (39%), followed equally by AOD treatment through a GP (13%), counsellor (13%) and OST program (17%). Twenty-three participants answered questions about problems they had accessing treatment, with waiting list (43%) and being turned down by programs (22%) cited as the most common barriers.Participants were asked whether they were currently trying to get into drug treatment; 78% reported they were not waiting for treatment (multiple responses allowed). Two participants reported that they had given up seeking treatment. Among those who reported trying to get into treatment, detoxification (8%), drug counselling (6%) and residential rehabilitation (6%) were the most common services sought.

Participants were also asked questions about their perception of current access to and recent availability of drug treatment services. Figure 23 shows 2015 Victorian IDRS participants' perception of access to drug treatment services at the time of interview. While nearly half perceived drug treatment to be difficult (31%) or very difficult (17%) to access if they wanted to, others reported that it was easy (27%) or very easy (12%). Access to drug treatment services in the preceding six months was reported by participants as stable (49%), more difficult (19%), easier (5%) and fluctuating (1%). Twenty-six per cent reported no knowledge of recent changes to drug treatment availability.





Very difficult Difficult Easy Very easy Don't know

Source: IDRS participant interviews

6.2.2. Heroin

6.2.2.1. Alcohol and Drug Information System

During 2014/15, 56,392 courses of treatment¹² were delivered to an estimated 29,877 clients¹³ in federal and state government-funded Victorian specialist alcohol and drug treatment services. Overall, the number of courses of treatment delivered to clients decreased 14%, from 65,875¹⁴ in 2013/14.¹⁵ A 14% decrease in the number of clients was also recorded, from 34,786⁹ in 2013/14. In previous years, apart from alcohol and cannabis, heroin was cited as the most common drug of concern (Cogger et al., 2013). In 2014/15, alcohol was the most commonly cited drug of concern (40% of clients and 41% of treatment episodes), followed by cannabis (21% of episodes), amphetamine (16%), and heroin (10%).

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 2014 DirectLine responded to 36,602 alcohol and drug-related telephone calls, with a specific drug of concern¹⁶ identified in 67% of enquiries. Between 2013 and 2014, calls to DirectLine increased by 6%.

¹² 2014/15 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.

¹³ 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.

¹⁴ The 2012/13 ADIS data included in the 2013 Victorian Drug Trends report were revised for the 2014 edition due to a specific service not reporting past year activity until 2013/14. After the revision, in 2012/13 the number of courses of treatment increased from 58,916 to 60,452, while clients reduced from 35,956 to 32,271.

¹⁵ The reduction in Victorian Alcohol and Other Drug Treatment activity is associated with service system reform in 2014-15.

¹⁶ A caller or user may have more than one drug of concern and totals are adjusted for multiple drugs of concern.

Figure 24 shows the percentages of calls to DirectLine in which heroin and other opioids were identified, from 2000 to 2014. In 2014, heroin was identified as a drug of concern in 2008 telephone calls, representing 8% 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 2014, an additional 4,921 calls were received identifying opioids other than heroin as the drug of concern, comprising 20% of all drug-identified calls for the period. Since 2002, the percentage of calls identifying other opioids as a concern has remained similar, fluctuating between 25% and 32% (Figure 24).





Source: Turning Point Alcohol and Drug Centre

6.2.2.3. Pharmacotherapy consumers

A quarterly census of pharmacies is conducted by the Harm Reduction Pharmacotherapy Services (HRPS) unit at the VDH on the first day of July each year to determine how many clients in Victoria are dispensed pharmacotherapy treatment (methadone, buprenorphine, and buprenorphinenaloxone). Figure 25 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, buprenorphinenaloxone (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 25). As in previous years, some health KE recommended making OST more available and affordable.





Source: Harm Reduction and Pharmacotherapy Services, Victorian Department of Health Note: Census data are collected on the first day of July each year

6.2.3. Methamphetamine

6.2.3.1. Alcohol and Drug Information System

In 2014/15, amphetamine was cited as a drug of concern in 8,895 courses of treatment delivered to 5,663 clients in Victorian specialist alcohol and drug treatment services. Compared with 2013/14, there was a 14% decrease in the number of amphetamine-related courses of treatment delivered, and a 15% decrease in the number of clients citing the drug as their primary concern. After alcohol and cannabis, in 2014/15, for the third time, amphetamine surpassed heroin as the third-most commonly cited drug of concern, representing 17% of all clients and 18% of all courses of treatment for the period.

6.2.3.2. DirectLine calls

Figure 26 shows the proportion of calls made to DirectLine in which amphetamines or other stimulants (ATS) were identified, from 2000 to 2014. In 2014 ATS were identified in 4,860 calls, representing 20% of calls to DirectLine in which a drug of concern was identified. Between 2014 and 2015 there was a 1% increase in the number of calls identifying ATS as a concern.

Figure 26: Percentage of calls to DirectLine in which amphetamines or other stimulants were identified as drugs of concern, Victoria, 2000–2014



Source: Turning Point Alcohol and Drug Centre Note: Includes 'amphetamine', ecstasy, cocaine and other stimulants

6.2.4. Cocaine

6.2.4.1. Alcohol and Drug Information System

During 2014/15, cocaine was cited as a drug of concern in 89 courses of treatment delivered to 71 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 2013/14 and 2014/15, the number of courses of treatment for cocaine decreased by 39% and the number of clients by 38%.

6.2.4.2. DirectLine calls

Figure 27 shows the percentage of calls made to DirectLine in which cocaine was identified as the drug of concern, from 2000 to 2014. In 2014, cocaine was identified as a drug of concern in 174 calls, representing 0.7% of calls to the service – an increase of 20% over 2013. The percentage of calls received by DirectLine relating to cocaine has been low and stable for all years shown (Figure 27).

Figure 27: Percentage of calls to DirectLine in which cocaine was identified as a drug of concern, Victoria, 2000–2014



Source: Turning Point Alcohol and Drug Centre

6.2.5. Cannabis

6.2.5.1. Alcohol and Drug Information System

Consistent with previous years, in 2014/15 cannabis was the most commonly cited illicit drug of concern in the Victorian Alcohol and Drug Information System, representing 19% of courses of treatment and 17% of clients. During the period, 9,484 courses of treatment were delivered to 5,586 clients, decreasing by 28% and 29% from 2013/14.

6.2.5.2. DirectLine calls

Figure 28 shows the percentage of calls made to DirectLine where cannabis was identified as a drug of concern, from 2000 to 2014. In 2014, DirectLine responded to 2,522 calls in which cannabis was cited as a drug of concern, 8% more than in the previous year, representing 10% of all drug-identified calls to the service during the period. Since 2007 figures have remained stable at between 10% and 12% (Figure 28).

Figure 28: Percentage of calls to DirectLine in which cannabis was identified as a drug of concern, Victoria, 2000–2014



Source: Turning Point Alcohol and Drug Centre

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 2013/14, the most recent data available (Roxburgh & Burns, 2016). 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 29 shows the number of opioid-related hospital admissions among persons aged 15 to 54 years in Victoria and Australia, from 1999/2000 to 2013/14. 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 2013/14 there were 1378 admissions with a opioid-related primary diagnosis in Victoria (424 per million people) – an increase of 53% over the previous year – comprising 23% of opioid-related admissions in Australia (5931; 460 per million people). The 2013/14 figures are the highest for both Victoria and Australia since 2000/01; in Victoria, the 2013/14 figure reverses a downward trend since 2009/10.



Figure 29: Number of opioid-related hospital admissions, Victoria and Australia, 1999/2000–2013/14

Source: Roxburgh and Burns, 2016

6.3.2. Meth/amphetamine (amphetamine)

Amphetamine-related hospital admissions from 1999/2000 to 2013/14 in Victoria and Australia among persons aged 15 to 54 years are presented in Figure 30. The annual number of hospital admissions with an amphetamine-related primary diagnosis has been increasing since 2007/08. In 2013/14, these amphetamine-related hospital admissions increased by 42% in Victoria to 1207 (371 per million people, vs 342 per million for Australia), continuing the increase from the previous year, but at nearly double the rate. This figure comprises 27% of Australian hospital admissions related to the drug (n=4414), a slight increase from the previous year.

Figure 30: Number of amphetamine-related hospital admissions, Victoria and Australia, 1999/2000–2012/13



Source: Roxburgh and Burns, 2016

6.3.3. Cocaine

Figure 31 shows the number of cocaine-related hospital admissions among persons aged 15 to 54 years in Victoria and Australia, from 1999/2000 to 2013/14. Nationally, the number of admissions with a primary diagnosis related to cocaine has been increasing since 2010/11, peaking in 2013/14 (n=439), the last year for which data are available. This pattern was not observed in Victoria, where cocaine-related admissions declined to only 15 in 2012/13 but rebounded to 40 (12 per million people, vs 34 per million for Australia) in 2013/14, comprising 9% of the national total.





Source: Roxburgh and Burns, 2016

6.3.4. Cannabis

Cannabis-related hospital admissions among persons aged 15 to 54 years are shown in Figure 32 for Victoria and Australia, from 1999/2000 to 2013/14. Nationally, the number of hospital admissions with a cannabis-related primary diagnosis has increased steadily over the period, peaking in 2013/14. The number in Victoria has been fluctuating around 400 since 2005/06, but in 2013/14 there were 518 hospital admissions with a cannabis-related primary Victorian admissions comprised 18% of all cannabis-related admissions in Australia for 2013/14.





Source: Roxburgh and Burns, 2016

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 2015 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; 149 did so in 2015, and responses were similar to previous years. The majority (78%) reported that their most recent injection site was their arm, while smaller proportions reported most recently injecting into their hand or wrist (8%), leg (5%), neck (4%), groin (2%) or foot (1%).

Table 11 presents the self-reported injecting risk practices of Victorian IDRS participants, from 2007 to 2015. The same as in previous years, 11% of the 2015 sample reported borrowing a used needle in the month before interview (Table 11). Among participants in this group (n = 16), 63% reported reusing a borrowed needle once, 13% reported reuse twice, 13% reported reuse three to five times, and 13% reported reuse six to 10 times. Participants were asked (14 responded) to nominate their relationship with the person who used the needle before them: 50% nominated a regular sex partner, 29% nominated close friends, and 14% nominated an acquaintance.

In 2015, 16% (n = 24) of participants reported lending a used needle to someone else in the preceding month, similar to 2014. A further 27% (n = 41) reported use of other injecting equipment after some else, with the type of equipment used detailed in Table 11.

	2008	2009	2010	2011	2012	2013	2014	2015
Borrowed a used NS^ (%)	9	12	15	11	11	12	11	11
Loaned a used NS [^] (%)	16	21	21	22	25	17	17	16
Used spoon after someone else (%)	31	26	45	21	92*	97*	95*	90*
Used filter after someone else (%)	19	7	20	5	21*	24*	15*	20*
Used tourniquet after someone else (%)	11	3	9	1	16*	3*	7*	15*
Used water after someone else (%)	17	13	20	7	13*	32*	15*	24*
Used any equipment after someone else (%)	59	27	48	24	25	25	27	27

Table 7: Self-reported injecting risk practices in the past month, Victoria, 2008–2015

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

Eighty-three (55%) of the 2015 sample reported reusing their own needle in the month preceding interview, not significantly different from 2014 when 49% reported reuse (p = 0.298). Ten per cent reported reusing their own needle once in the past month and 15% reported reuse twice, while 17% reported reuse on three to five occasions, 6% on six to 10 occasions, and 8% on more than 10 occasions. Reuse of any ancillary injecting equipment was nominated by 64%. Among this group (n = 95), the most commonly reused pieces of equipment were spoons or mixing containers (96%), tourniquets (31%), filters (10%), and water (12.

6.4.1.2. Injecting equipment access and coverage

In 2015, of 149 Victorian IDRS participants, 97% reported accessing sterile injecting equipment from an NSP in the preceding six months. Equipment was also accessed from outreach/peer workers (13%), friends (13%), pharmacies (11%), dealers (5%) and syringe vending machines (4%).

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 2015, participants (n = 149) reported collecting needles and syringes four times (median, IQR 2–8 times) in the past month. During that month, participants reported a median of 25 drug injection episodes (IQR 11–60 episodes) and collecting a median of 50 needles and syringes (IQR 20–150 needles). Participants reportedly gave away or sold 10 needles and syringes (median, IQR 0–48 needles) to other people and, at the time of interview, reportedly had a median of five needles (IQR 0–20 needles) stored at home. Eighteen 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: 66% reported injecting in private. Thirteen per cent reported injecting in a street or park, 7% in a car and

11% in a public toilet. In 2015, the proportions of participants who reported private and public injecting were similar to those in previous years.

6.4.2. Injection-related health problems

Table 12 shows Victorian IDRS participants' self-reported injecting-related health problems, from 2008 to 2015. In 2015, 70% of participants reported experiencing at least one injection-related health problem in the month before interview, non-significantly higher than the percentage in 2014 (64%, p = 0.269). Participants in this group (n=105) were asked to nominate the problems experienced, detailed in Table 12.

Fable 8: Self-reported injection-related health problems among participants in the past month,
/ictoria. 2008–2015
······································

	2008	2009	2010	2011	2012 n=77	2013 n=62	2014 n=96	2015 n=105
Prominent scars/bruising (%)	47	43	19	41	75*	74*	67*	71*
Difficulty injecting (%)	39	41	25	33	51*	50*	62*	52*
Dirty hit (%)	15	18	12	10	26*	13*	17*	17*
Thrombosis (%)	10	7	5	6	9*	10*	6*	7*
Abscesses/infections (%)	7	6	6	8	20*	7*	12*	10*
Overdose (%)	3	5	2	3	9*	8*	3*	9*

Source: IDRS participant interviews

* In 2012, 2013, 2014 and 2015, 77, 62, 96 and 105 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 = 9), the primary drugs involved were heroin (n = 4) and methamphetamine (n = 2). Among participants who reported a dirty hit (n = 18), the primary drugs involved were heroin (n = 11), methamphetamine (n = 3) and buprenorphine-naloxone (n = 2).

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 13 shows the number and proportion of new HIV diagnoses in Victoria in which IDU was reported as the likely exposure factor. In 2014, 13 new cases of HIV infection were notified to the VDH in which IDU was the likely exposure, comprising 4.2% of all new HIV infections for the 2014 calendar year. There were an additional 14 new HIV notifications in 2014 in which both male-to-male sexual activity (MSM) and IDU were the likely exposures, almost identical to the number of notifications in 2014 (n = 13) (Table 13).

Table 9: New HIV diagnoses	where injecting drug	use was reported	as the likely	exposure,
Victoria, 2005–2014				

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
	n	n	n	n	n	n	n	n	n	n
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
IDU	11	8	5	6	2	0	3	6	8	13
	(4.6)	(3.1)	(1.9)	(2.3)	(0.8)	(0.0)	(1.1)	(2.3)	(2.6)	(4.2)
IDU: MSM	12	5	5	7	6	5	4	3	13	14
	(5.0)	(1.9)	(1.9)	(2.7)	(2.3)	(2.1)	(1.4)	(1.2)	(4.2)	(4.6)
New diagnoses (N)	240	259	263	261	262	235	278	262	307	306

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 14 presents prevalence estimates of new Victorian HIV infections and exposure to HCV attributed to IDU between 2008 and 2014, derived from ANSPS data (Iversen et al., 2014; Iversen & Maher, 2012, 2015b). From 2013 to 2014, there was a non-significant increase in the estimated prevalence of HIV Ab among Victorian ANSPS participants, from 1.3% to 1.7% (p = 0.742). Although high, the estimated prevalence of HCV Ab among the Victorian ANSPS sample was stable at 67% (Table 15). Compared with the national ANSPS sample, in 2014 HCV Ab prevalence was significantly higher among the Victorian ANSPS sample (67% vs. 54%, 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 10: Estimated	prevalence of HIV	Ab infection a	and HCV Ab	exposure among `	Victorian
ANSPS participants,	2007–2014				

	2008	2009	2010	2011	2012	2013	2014
HCV Ab (%)	72	55	64	66	69	67	67
HIV Ab (%)	0.7	0.9	0.5	0.8	0.2	1.3	1.7

Source: Iversen, Chow & Maher, 2015; Iversen & Maher, 2012, 2015b

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).

Presently, 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). For the past five years, the AUDIT-C has been administered to Victorian IDRS participants. 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 15 presents AUDIT-C scores among Victorian IDRS participants from 2011 to 2015. In 2015, participants who reported consuming alcohol in the past year (n = 103, 69%) returned a mean AUDIT-C score of 6.0 (median 6, IQR 3–9), not significantly different from the mean score in 2014 (p = 0.708). Although men (n = 76) returned a higher mean score than women (n = 27), the difference was not significant (6.3 vs. 5.9, p = 0.695). The proportion of participants scoring five or more on the AUDIT-C has been similar since 2011 (Table 15).

	2011 (n=112)	2012 (n=107)	2013 (n=91)	2014 (n=101)	2015 (n=103)
Mean AUDIT-C score (SD) Range	6.1 (3.5) 1–12	6.1 (3.6) 1–12	6.4 (3.9) 1–12	6.6 (3.5) 1–12	6.0 (3.7) 1–12
Total score of > = 5 (%)	60	63	62	67	60
Men score of $> = 5$ (%)	59	65	66	73	65
Women score of > = 5 (%)	63	59	52	50	48

Table 11: AUDIT-C scores among participants who drank alcohol in the past year, Vie	ctoria,
2011–2015	

Source: IDRS participant interviews

6.7. Mental health problems and psychological distress

As in previous years, 2015 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. Sixty per cent reported experiencing a mental health problem in the past six months, not significantly higher than the proportions in 2014 and 2013 (51% each; p = 0.141). These participants were asked to specify their mental health problem (multiple responses allowed for comorbidity). Among this group (n = 84), the prevalence of self-reported depression was 80% and the prevalence of anxiety was 58%, not significantly changed from 2014 (73% and 48% respectively). In 2015, the most commonly reported problems of lower prevalence were somewhat different to those in 2014: schizophrenia (8% and 14% respectively), bipolar affective disorder (12%)

vs 9%) and PTSD (19% vs 8%). Panic (17% vs. 10%) was more commonly specified by participants in 2015 than in 2014.

Of the 84 participants who reported a recent mental health issue, in 2015 74% reported attending a health professional for their problem in the six months before interview, nearly the same as in 2014. Participants in this group (n = 62) most commonly reported seeing a GP (69%), psychologist (24%) and a psychiatrist (23%), followed by a counsellor (21%) and social worker (8%), similar to the previous year. Among those who did not see a health professional (n = 22), the most commonly reported reason was 'don't know' (27%), with participants citing a range of qualitative influences, including 'couldn't be bothered' (n=3), 'bad experiences with mental health services previously' (n=3), 'service too busy/waiting list too long' (n=2).

In the six months before interview, 65% of those with a self-reported mental health problem reported being prescribed psychiatric medication. Multiple responses were allowed. Among these participants (n = 54), 69% (n = 37) reported being prescribed benzodiazepines for their mental health: typically diazepam (79%), followed by oxazepam (5%) and alprazolam (5%). Thirty-two per cent (n = 17) reported they were prescribed an antipsychotic, mostly quetiapine (53%) or olanzapine (24%). Sixty-three per cent (n = 34) reported they were prescribed anti-depressants. In this group, the most common medications were mirtazapine (18%), escitalopram (15%), venlafaxine (12%) and desvenlafaxine (12%). Four 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 2015 the complete K10 was administered to 141 participants; among these, the mean score was 26.7 (SD 8.6, median 27, IQR 20–32), almost identical to that in 2014. Levels of psychological distress among Victorian IDRS participants are shown in Table 17, from 2009 to 2015, compared with the 2007/08 NHS general population sample. According to the K10, the majority of participants in 2015 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 years. IDRS participants have a significantly higher prevalence of psychological distress than the NHS general population sample (71% vs. 10%, p < 0.001), very similar to findings in previous years (Table 17).

	IDRS						NHS
	2010 (n=143)	2011 (n=147)	2012 (n=144)	2013 (n=149)	2014 (n=142)	2015 (n=141)	2007/08 (n=15,362)
Psychological distres	s (%)						
Low (10–15)	11	14	8	20	11	9	71
Moderate (16–21)	22	19	17	20	20	20	20
High (22–29)	33	30	33	34	31	33	7
Very high (30–50)	34	37	41	28	37	38	3

 Table 12: Levels of psychological distress among Victorian IDRS participants, 2010–2015, compared with the 2007/08 NHS general population sample

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 2015, the 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 2014 are shown in Figure 32, with similar percentages rating their health as fair (37%) and good (34%).



Figure 33: Self-rated general health among 2014 Victorian IDRS participants, 2014–2015

Source: IDRS participant interviews

6.8. Driving risk behaviour

Participants were asked to provide information about their driving risk behaviour, as last done in the 2013 IDRS. In 2015, 41% reported driving a car, motorcycle, or other vehicle in the preceding six months, significantly greater than the proportion in 2013 (26%, p < 0.05). Among these participants (n=44), 82% reported having their full driver's licence and 18% reported having no licence.

Eighteen per cent of recent drivers (n=44) reported driving under the influence of alcohol; three of these participants (7%) reported driving with a blood alcohol concentration over the legal limit on two days (median 3, range=1–180) in the past six months.

Table 18 shows the proportion of Victorian IDRS participants who reported illicit drug use before driving a vehicle in the past six months, from 2008 to 2015, by drug type. Among recent drivers in 2015, 80% reported using illicit drugs before driving. The median number of 'drug driving' occasions among this group (n=35) was 40 (range=1–180 occasions) in the past six months, translating to about 1.5 times per week. Participants who drove after consuming drugs most commonly reported driving after using heroin (n=23), cannabis (n=8) and crystal/ice (n=7) (Table 18).

Table 13: Proportion of participants who reported using illicit drugs prior to driving in the past six months, Victoria, 2008–2015

	2008 (n=60)	2009 (n=53)	2010 (n=44)	2011 (n=45)	2012 (n=35)	2013 (n=31)	2015 (n=35)
Heroin (%)	68	66	82	64	69	58	66
Cannabis (%)	65	59	48	51	49	45	23
Speed (%)	28	28	16	20	9	0	0
Crystal/ice (%)	7	2	7	18	11	13	20
Benzodiazepines (%)	12	25	18	16	20	23	6
Ecstasy (%)	2	6	2	2	0	0	0

Source: IDRS participant interviews

Participants (n=35) were asked to provide further detail about their drug use prior to their most recent driving occasion. In 2015, 32 participants reported waiting a median of 8 minutes (range=1–3660 minutes) before they last drove after using; the most commonly used drugs beforehand were heroin (n=23), cannabis (n=8) and crystal/ice (n=7).

Most participants (68%) in this group had never been drug-tested by roadside police, however, 20% reported being tested more than once, and 11% reported being tested once. Only one participant reported that their most recent saliva test returned a positive result, for amphetamine.

7. Law-enforcement related trends associated with drug use

7.1. Criminal involvement

As per previous iterations of the IDRS, the 2015 sample was asked to provide information about their involvement in crime in the month preceding interview. Table 19 presents the self-reported prevalence of criminal involvement in the past month, from 2007 to 2015. In 2015, 44% (n = 66) of the sample reported that they were involved in a crime during the past month, slightly lower than in 2014 (47%) (p = 0.643) (Table 19).

Table 14: Percentage of participants reporting criminal involvement during the past month	n,
Victoria, 2007–2014	

	2008 (N=150)	2009 (N=150)	2010 (N=150)	2011 (N=150)	2012 (N=150)	2013 (N=150)	2014 (N=150)	2015 (N=150)
Property crime (%)	21	17	19	27	27	21	23	23
Drug dealing (%)	35	27	23	29	20	17	28	27
Fraud (%)	5	1	1	5	3	3	7	5
Violence (%)	3	7	8	7	3	5	7	5
Any crime (%)	47	39	40	47	41	36	47	44

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 2015, for the first time, Victorian IDRS participants were asked to report whether they had been a victim of a crime involving violence in the month before interview. Eighteen per cent of the sample reported experiencing violence such as an assault, sexual assault and/or domestic violence in the past month. Participants in this group (n = 26) were asked whether they thought the perpetrator was under the influence of substances at the time. Of these, 46% reported that the perpetrator was under the influence of drugs, 19% reported that alcohol and drugs were involved and 8% reported that alcohol was involved. Twenty-seven per cent reported that the perpetrator was not under the influence of substances during the event.

7.2. Arrests

In 2015, 38% of the sample reported an arrest in the 12 months preceding interview, similar to 2014 (43%, p = 0.359). Among these (n = 54), the main reason reported for arrest was property crime (46%), followed by violence (28%) and use and/or possession of drugs (19%).

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 2013/14 financial year relating to heroin and other opioids, methamphetamine, cocaine and cannabis, sourced from the ACC's *Illicit Drug Data Report 2013– 2014* (Australian Crime Commission, 2014). 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 19 to 22, 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 20 presents the number and percentage of consumer and provider arrests relating to heroin and other opioids in Victoria and Australia for the financial year 2013/14. Victorian arrests accounted for 40% of all heroin and other opioid-related arrests in Australia, a significantly lower percentage than in the previous period (49%, p < 0.001). Between 2012/13 and 2013/14, Victorian consumer arrests relating to heroin and other opioids decreased substantially (57% to 38%) as a percentage of national arrests, but the proportion of Victorian provider arrests was almost unchanged (47% to 45%). In Victoria, consumer arrests accounted for 74% of all heroin and other opioid-related arrests for the period (Table 20).

Table 15: Consumer and provider arres	sts relating to heroin and o	other opioids, Victoria, 2013/14
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	Victoria (n)	Australia (N)	Percentage of national arrests (%)
Consumer arrests	792	2,067	30%
Provider arrests	314	699	45%
Total arrests	1,106	2,766	40%

Source: Australian Crime Commission, 2015

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 2013/14 financial year are detailed in Table 20. During the period, as a percentage of national arrests, Victorian ATS-related consumer arrests decreased slightly from 30% in 2012/13 to 28% in 2013/14, as did provider arrests (32% to 32%). In Victoria, consumer arrests accounted for 74% of all arrests relating to ATS for the financial period, similar to previous years (Table 20).

Table 16: Consumer and provider arrests relating to amphetamine-type stimulants,	, Victoria,
2013/14	

	Victoria (n)	Australia (N)	Percentage of national arrests (%)
Consumer arrests	5,614	19,955	28
Provider arrests	1,941	6,265	31
Total arrests	7,555	26,220	29

Source: Australian Crime Commission, 2014

Note: Arrest data for Victoria include Australian Federal Police data

7.2.1.3. Cocaine

Table 21 shows the number and percentage of cocaine-related consumer and provider arrests in Victoria and Australia for the 2013/14 financial year. During the period, 16% of all Australian arrests relating to cocaine occurred in Victoria. As a percentage of national arrests, Victorian cocaine-related consumer arrests declined from 17% in 2012/13 to 15% in 2013/14, and provider arrests from 21% to 19%. In 2013/14, consumer arrests for cocaine comprised 63% of all cocaine-related arrests in Victoria (Table 21).

Table 17: Consumer and provider arrests relating to cocaine, Victoria, 2013/14

	Victoria (n)	Australia (n)	Percentage of national arrests (%)
Consumer arrests	151	1005	15
Provider arrests	89	461	19
Total arrests	240	1,466	16

Source: Australian Crime Commission, 2014

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 2013/14 financial year are shown in Table 22. During the period, 13% of all Australian cannabis-related consumer and provider arrests occurred in Victoria. As a percentage of national arrests, Victorian cannabis-related consumer arrests fell from 13% in 2012/13 to 12% in 2013/14, whereas provider arrests were unchanged (19%). Consumer arrests for cannabis comprised the overwhelming majority of cannabis-related arrests (87%) across Australia, and 81% of all cannabis-related arrests in Victoria (Table 22).

Table 18:	Consumer	and provider	arrests relating	g to cannabis,	Victoria,	2012/13
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	Victoria (n)	Australia (n)	Percentage of national arrests (%)		
Consumer arrests	6,922	58,201	12		
Provider arrests	1,636	8,460	19		
Total arrests	8,588	66,684	13		

Source: Australian Crime Commission, 2014

Note: Arrest data for Victoria include Australian Federal Police data

7.3. Participants' expenditure on illicit drugs

Over half (57%) of 2014 Victorian IDRS participants reported purchasing illicit drugs on the day before completing the survey. Participants' (n = 86) median reported spend on illicit drugs was \$100 (IQR \$50–\$200). Figure 33 shows the distributions of participants' financial spend, with most (48%) reporting spending nothing on the day before interview. Thirty per cent reported spending between \$20 and \$99 on illicit drugs the day prior to interview (Figure 33).

Figure 34: Distribution of drug expenditure among all participants, day before interview, Victoria, 2014–2015



^{2014 2015}

Source: IDRS participant interviews

8. Special topics of interest

8.1. Naloxone

Naloxone (Narcan®), the short-acting opioid antagonist, has been used for over 40 years as the frontline medication to reverse the effects of heroin and other opioids, particularly in the event of overdose. In Australia, until recently, naloxone was only available for use by medical doctors, nurses and paramedics. In 2012, a THN program commenced in the Australian Capital Territory through which naloxone was made available to peers and family members of PWID as part of a comprehensive overdose response package (Canberra Alliance for Harm Minimisation and Advocacy, 2012). Shortly thereafter, a similar program began in NSW and more recently in other Australian jurisdictions such as Victoria. For more information about THN, please see www.naloxoneinfo.org.

In 2013, the IDRS included a series of questions to explore participants' knowledge of and attitudes to naloxone, and THN in particular. Given the ongoing implementation of THN programs in Australia, the same were included in the 2014 and 2015 questionnaires to measure potential changes to knowledge. Participants' responses are detailed in Table 23. In 2015, 98% of the Victorian sample had heard of the opioid antagonist naloxone. In 2014 and 2015, the percentage of participants who had heard of naloxone and knew that it was used to reverse the effects of heroin was stable (77% vs. 76%, p < 0.001).

Only 17% of Victorian participants had heard of THN at the time of interview in 2013, not surprising given that at the time of data collection Victorian programs were not yet implemented. However, in 2014 the percentage of Victorian participants who had heard of THN significantly increased to 52% (p < 0.001), and in 2015 it increased significantly again, to 71% (p < 0.005).

Participants were asked to indicate whether they had been resuscitated with naloxone by someone trained in THN programs after a recent overdose. Of these (n = 133), 96% reported they had not been resuscitated, 25% they had never overdosed and 8% reported resuscitation by someone trained in THN. In 2015, 21% (n = 42) of participants reported they had been through a THN training course and received a prescription for naloxone. Of these participants, 31% (n = 13) reported that, since doing the course, they had used naloxone to resuscitate someone who had overdosed. The median number of people participants had attempted to resuscitate was one (IQR 1–2).

Participants (n = 91) were asked what they would do if they witnessed someone overdose or found a suspected overdose. In 2015 99% reported that they would call 000, versus 95% in 2014 (p = 0.100). The percentage of participants who reported preparedness to carry THN on their person was unchanged from 2014, with 100% of participants who would participate in naloxone programs (n = 66) reporting that they would administer it someone in the event of an opioid overdose (Table 23).

	2013 (N = 150)	2014 (N = 147)	2015 (N = 133)
Heard of naloxone (%)	91	94	98
Description of naloxone* (%)	(n=136)	(n=132)	(n=130)
Reverses the effects of heroin	58	77	76
Helps someone start breathing	5	18	15
Re-establishes consciousness	47	40	32
Other	14	8	8
Heard of take-home naloxone programs (%)			
Yes	17	52	71
No	83	46	29
Unsure	0	2	0
Witness overdose* (%)	(N=150)	(n=113)	(n=91)
Turn victim on side	51	39	47
Mouth to mouth CPR	49	43	43
Call 000	96	95	99
Stay with victim	52	38	45
Other remedies (e.g. ice, shower, slap)	23	16	13
If available, would you* (%)	(N=150)	(n=78)	(n=66)
Carry naloxone if trained	77	94	96
Administer naloxone after witnessing overdose	85	100	100
Want peers to give you naloxone	86	98	97
Stay with someone after giving them naloxone	85	99	100

Table 19: Knowledge of and attitudes to take-home naloxone, Victoria, 2013–2015

Source: IDRS participant interviews

* Multiple responses allowed.

8.2. HCV testing and treatment

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

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

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

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

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

The majority (93%) of the national sample had been tested for HCV antibodies (anti-HCV) in their lifetime with 62% reporting a positive result. The median number of anti-HCV tests was reported to be 3.5 nationally (range 1-200 times). The majority of PWID reported the test had been ordered by their regular GP (52%), followed by a liver specialist (6%), OST prescribing doctor (5%) and OST clinic (5%) (Table 20).

Sixty-two percent of the national sample who commented (N=441) reported a PCR test to determine if the virus was active, with the median number of PCR tests being three. The majority of PWID reported the PCR test had been ordered by their regular GP (46%), followed by a liver specialist (16%), OST prescribing doctor (5%) and OST clinic (4%) (Table 20).

All participants who had screened positive to an antibody test or a PCR test were asked what they remembered discussing with the health professional at the time of diagnosis. While 9% couldn't remember what they were told, 25% remembered discussing the impact of dietary choices on HCV, 23% the long-term effects of HCV, 9% the types of tests needed, 9% the benefit of limiting alcohol intake, 8% the different strains of HCV (genotypes) and 8% the available treatments for HCV (Table 20).

	National N=792	NSW n=143	ACT n=92	VIC n=117	TAS n=84	SA n=97	WA n=69	NT n=98	QLD n=92
% Ever tested for HCV	93	94	91	97	95	91	87	93	90
% Antibody positive result	(N=732)	(n=135)	(n=84)	(n=114)	(n=80)	(n=87)	(n=59)	(n=91)	(n=82)
Yes	62	68	62	72	61	55	58	55	60
No	35	30	36	24	38	44	39	43	39
Unsure	2	2	2	4	1	1	3	2	1
% Ordered the antibody test	(N=454)	(n=92)	(n=52)	(n=81)	(n=49)	(n=47)	(n=34)	(n=50)	(n=49)
Regular GP	52	26	75	62	67	53	62	40	49
OST clinic	5	14	2	0	2	2	6	2	4
OST doctor	5	8	2	4	0	4	0	4	14
Liver specialist	6	10	0	3	4	6	3	10	10
Other	26	30	15	30	22	26	24	42	16
Unsure	6	12	6	3	4	9	6	2	6
Median number of times tested for antibodies ever (range) [#]	3.5 (1-200)	3 (1-200)	3 (1-180)	4 (1-60)	4 (1-50)	3.5 (1-80)	4 (1-100)	3 (1-100)	4 (1-60)
% Screened or tested for RNA (PCR test)	(N=441)	(n=92)	(n=52)	(n=75)	(n=49)	(n=43)	(n=31)	(n=50)	(n=49)

Table 20: Hepatitis C testing among PWID, by jurisdiction, 2015

Yes	62	55	71	89	59	63	55	38	57
No	29	32	21	11	39	37	19	44	33
Unsure	9	13	8	0	2	0	26	18	10
% Ordered the PCR test	(N=270)	(n=51)	(n=37)	(n=63)	(n=29)	(n=26)	(n=17)	(n=19)	(n=28)
Regular GP	46	26	73	56	45	42	35	42	36
OST clinic	4	12	3	0	3	0	6	0	4
OST doctor	5	10	3	3	0	4	0	0	14
Liver specialist	13	16	8	5	10	19	35	21	7
Other	23	22	8	32	31	31	12	21	18
Unsure	10	16	5	5	10	4	12	16	21
Median number of times tested for RNA ever (range)	3 (1-70)	2 (1-12)	3 (1-70)	4 (1-60)	3 (1-20)	2.5 (1-40)	5 (1-12)	1 (1-28)	2.5 (1-10)
% Discussed by a health professional when told HCV antibody or RNA positive	(N=414)	(n=80)	(n=46)	(n=76)	(n=47)	(n=46)	(n=31	(n=47)	(n=41)
Long term effects of HCV	23	10	15	28	40	26	10	30	24
Genotypes	8	5	4	8	11	7	16	2	12
Different tests	9	4	11	13	9	7	10	11	10
Available treatments	8	8	9	7	13	7	0	9	10
Alcohol intake	9	21	4	5	2	7	13	13	5
Dietary choices	25	35	37	25	9	33	26	17	10
Other	1	3	2	0	0	4	0	0	2
							40	4.5	

Source: IDRS participant interviews

[#] Among those who were ever HCV tested and commented

* Among those who were ever PCR tested and commented

Participants were also asked to endorse a list of statements related to their perceptions of HCV as either true or false. Statements included: "Don't feel sick I must have cleared HCV"; "I don't have symptoms I can't pass on HCV"; "Treatment for HCV only works for a few people"; "If I already have HCV, I can't get it again"; "If I wait, HCV will clear up on its own"; "I can wait until I feel really sick before seeking treatment" and "I can't get HCV treatment if I am still injecting drugs". The majority of participants believed the statements to be false indicating most participants had a moderately good understanding of the virus (see Table 21).
Table 21: Perceptions	s of HCV, by	y jurisdiction,	, 2015
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	National	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
% Don't feel sick I must have cleared HCV	(N=817)	(n=144)	(n=94)	(n=136)	(n=85)	(n=97)	(n=69)	(n=99)	(n=93)
True	10	19	11	10	6	8	6	9	5
False	87	81	83	90	88	92	94	91	80
Unsure	3	0	6	0	6	0	0	0	15
% Don't have symptoms I can't pass on HCV	(N=819)	(n=144)	(n=94)	(n=141)	(n=85)	(n=95)	(n=69)	(n=98)	(n=93)
True	8	19	12	8	2	4	0	7	4
False	89	80	85	92	94	96	100	91	84
Unsure	2	1	3	0	4	0	0	2	12
% Treatment for HCV works only for a few people	(N=793)	(n=144)	(n=94)	(n=122)	(n=85)	(n=90)	(n=69)	(n=96)	(n=93)
True	38	40	33	40	35	43	42	44	28
False	55	51	56	60	53	57	57	50	54
Unsure	7	8	11	0	12	0	1	6	18
% I have HCV, I can't get it again	(N=809)	(n=144)	(n=94)	(n=138)	(n=85)	(n=89)	(n=69)	(n=97)	(n=93)
True	16	18	14	11	8	23	16	19	24
False	80	79	81	89	84	78	81	77	65
Unsure	4	3	5	0	8	0	3	4	12
% If I wait, HCV will clear up on its own	(N=814)	(n=144)	(n=94)	(n=137)	(n=85)	(n=95)	(n=69)	(n=97)	(n=93)
True	15	22	16	16	9	10	9	21	13
False	82	76	80	84	88	91	91	75	76
Unsure	3	2	4	0	2	0	0	4	11
% I can wait until I feel real sick before seeking treatment	(N=818)	(n=144)	(n=94)	(n=139)	(n=85)	(n=97)	(n=68)	(n=98)	(n=93)
True	11	15	16	9	6	7	12	9	13
False	87	84	81	91	89	93	88	91	79
Unsure	2	1	3	0	4	0	0	0	9
% I can't get HCV treatment if still injecting drugs	(N=801)	(n=144)	(n=94)	(n=133)	(n=85)	(n=84)	(n=69)	(n=99)	(n=93)

True	19	19	15	18	21	14	30	18	19
False	74	76	75	82	65	86	65	74	62
Unsure	7	4	11	0	14	0	4	8	18

Source: IDRS participant interviews

8.3. Blood donations

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

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

Of those who commented nationally (N=745), 15% reported that they had given blood in their lifetime. A quarter (28%) of those that had given blood reported that they had commenced injecting drug use before donating blood (Table 26).

Participants were asked about their most recent episode between injection and blood donation. Of participants who commented (N=18), six reported they had injected a week or less before they donated blood, five reported between two weeks and three months, and the remainder (n=7) reported injecting a year or more before donating blood.

	National N=745	NSW n=135	ACT n=94	VIC n=115	TAS n=84	SA n=91	WA n=71	NT n=81	QLD n=74
% Ever donated blood	15	7	49	20	14	18	1	24	18
% Injected before blood donation*	28	30	28	23	0	44	0	42	25

Table 22: Blood donations, by jurisdiction, 2015

Source: IDRS participant interviews

* Among those who had ever donated blood

8.4. Oxycodone

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

In response, pharmaceutical companies have developed formulations that are less prone to tampering. Oxycodone is a semi-synthetic opioid agonist prescribed for the treatment of moderate to severe chronic pain. A tamper-resistant formulation of controlled release oxycodone hydrochloride tablets (Reformulated OxyContinC) was released onto the Australian market on 1st April 2014 (rapidly replacing the original version, OxyContinV). The tablets are designed to be bioequivalent to the original formulation, and employ a controlled release technology (that makes them difficult to crush) with a hydro-gelling matrix. This makes the tablet develop into a viscous gel when dissolved in water (Sellers, Perrino, Colucci et al., 2013). Early U.S. surveillance of the reformulation suggests that there have been reductions in misuse (Butler, Cassidy, Chilcoat et al., 2013; Havens, Leukefeld, Deveaugh-Geiss et al., 2014), street price (Sellers, Perrino, Colucci et al., 2013) and OxyContin® poisonings (Severtson, Bartelson, Davis et al., 2013).

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

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

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

In 2015, of the national sample who commented (N=845), nearly half (49%) reported ever using any form of oxycodone (licit or illicit). Of those who reported ever using oxycodone (N=417), over a quarter (28%) reported recently using the Reformulated OxyContin® brand tablets (licit or illicit) and 18% reported recently using the original (non-tamper-resistant) OxyContin® brand tablets (**Error!** eference source not found.). Nearly half (46%; 51% in 2014) of those who reported the recent use of original (non-tamper-resistant) OxyContin® brand (N=74) reported recently using the 80mg tablets, followed by the 40mg tablets (31%; 22% in 2014). The original (non-tamper-resistant) OxyContin® brand was reported to be used on a median of six days in the last six months and injected on a median of three days (8.5 days used in 2014). In 2015 the Reformulated OxyContin® was reported to be used on a median of 4.5 days in the last six months (three days in 2014).

	National		NSW	АСТ	VIC	TAS	SA	WA	NT	QLD
	N=858	N=845	n=146	n=98	n=148	n=82	n=99	n=86	n=98	n=88
	2014	2015								
% Ever used oxycodone	57	49	51	46	59	70	58	23	40	43
Recent use of oxycodone (licit or illicit)*	(N=489)	(N=417)	(n=74)	(n=45)	(n=87)	(n=57)	(n=57)	(n=20)	(n=39)	(n=38)
% Endone	11	13	18	12	9	14	16	15	10	11
% Generic controlled released Oxycodone	n.a.	11	21	12	4	5	9	35	5	14
% Reformulation Oxycodone 'OP"	15	28	25	23	14	28	40	50	37	38
% OxyNormtabs	4	8	10	11	5	4	9	25	10	3
% OxyNormliquid	<1	1	3	0	1	0	2	0	3	0
% OxyNorm Solution	<1	<1	1	0	0	0	0	0	0	0
% Targin	2	4	0	0	7	2	4	20	8	5
% Proladone	<1	<1	1	0	1	0	0	0	0	0
% Original Oxycodone 'OC'	44	18	24	16	12	11	11	33	21	37

Table 23: Lifetime and recent use of oxycodone (any form), by jurisdiction, 2015

Source: IDRS participant interviews

*Among those who reported ever using oxycodone.

n.a. Data not available

Please refer to Degenhardt, Larance and colleagues for further information on oxycodone use (Degenhardt, Bruno, et al., 2015; Larance et al., 2015; Peacock, Degenhardt, Hordern, et al., 2015; Peacock, Degenhardt, Larance, et al., 2015).

8.5. 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 2015, 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 101 Victorian IDRS participants who reported the recent use of heroin and/or other opioids in 2015, as shown in Table 28. Among these, the mean SDS score was 7.2, just less than the mean score in 2014 (7.3), with 74% of recent heroin and/or opioid users meeting the cut-off for dependence. In 2015, 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; 100 participants provided responses. Of these, 66% attributed their responses to heroin, 12% to methadone and 10% to buprenorphine-naloxone.

The SDS was also administered to 101 participants who reported the recent use of methamphetamine or other stimulants (i.e. cocaine or pharmaceutical stimulants). The mean SDS score was 3.4 in 2015, compared with 3.2 in 2013. Forty 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: 40 participants provided responses. Of these, 85% nominated methamphetamine, 8% cocaine and 8% no particular stimulant.

Note that the percentages of female IDRS participants who scored above the cut-offs for heroin and methamphetamine dependence were substantially higher in 2015 than 2014, while the corresponding figure for male participants changed only marginally.

	Heroir	n and/or other o	pioids	Methamphetamine and/or other stimulan				
	2013 n=140	2014 n=141	2015 n=136	2013 n=96	2014 n=115	2015 n=101		
Mean SDS score (SD)	7.6 (4.4)	7.3 (4.3)	7.2 (4.0)	4.2 (9.1)	3.2 (3.6)	3.4 (3.9)		
Mean SDS score for men (SD)	7.8 (4.4)	7.2 (4.1)	6.8 (3.9)	3.9 (7.8)	3.0 (3.3)	3.2 (4.0)		
Mean SDS score for women (SD)	7.1 (4.5)	7.8 (4.9)	8.5 (3.8)	5.1 (12.7)	3.7 (4.3)	3.9 (3.8)		
Scored above cut-off* (%)	74	72	74	34	36	40		
Men who scored above cut-off (%)	75	72	69	37	34	36		
Women who scored above cut-off (%)	71	74	86	26	41	50		

Table 24: SDS scores among participants who reported recent opioid and/or stimulant u	use,
Victoria, 2013–2015	

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 2015 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 (King et al., 2011). Initiatives should include incentives for GPs to become pharmacotherapy prescribers.
- 4. Continued monitoring of the prevalence, patterns and sources of prescribed and nonprescribed 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 improvements in knowledge and support for THN observed in successive Victorian IDRS samples from 2013 to 2015.

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