Victoria

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

Australian Drug Trends Series No. 112

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Burnet Institute

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

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Abbreviations and acronyms

ABS	Australian Bureau of Statistics
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
BPI	Brief Pain Inventory
CAPI	Computer Assisted Personal Interviewing
CJS	Criminal justice system
CPH	Centre for Population Health
DAA	Direct acting antivirals
DMS	Dimethyl sulphide
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
LGA	Local Government Area(s)
LSD	Lysergic acid diethylamide
MCS	Mental component score
MDMA	3,4-methylenedioxymethamphetamine
MDSW	Mobile Drug Safety Worker

MORS	Mobile Overdose Response Service
MSDR	Minimal Supervised Dosing Regime
MSM[1]	[1]Male to male sexual activity
MSM[2]	[2]Methylsulfonylmethane
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
NSAOH	National Survey of Adult Oral Health
NSP	Needle and Syringe Program(s)
OHIP-14	Oral Health Impact Profile
OHRQoL	Oral Health Related Quality of Life
OST	Opioid substitution treatment
OTC	Over the counter
PBS	Pharmaceutical Benefits Scheme
PCR[1]	[1]Patient care record
PCR[2]	[2]Polymerase chain reaction
PCS	Physical component score
PDI	Party Drugs Initiative
PTSD	Post-traumatic stress disorder
PWID	People who inject drugs
QDS™	Questionnaire Development System
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
SVR	Sustained virological response
TGA	Therapeutic Goods Administration
UNSW	University of New South Wales
VACIS	Victorian Ambulance Clinical Information System
VDH	Victorian Department of Health
VIFM	Victorian Institute of Forensic Medicine

Glossary of Terms

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

Guide to days of use/injection

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

*As appropriate

Executive Summary

Background

In 1998, the Australian Government Department of Health and (AGDHA) commissioned the National Drug and Alcohol Research Centre (NDARC) to implement a national Illicit Drug Reporting System (IDRS) to monitor emerging trends related to the use of heroin, methamphetamine, cocaine and cannabis in the Australian community. The IDRS study provides nationally comparable data with respect to patterns of injecting drug use (IDU) and related harms and provides a basis for better informing 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 (Department of Human Services, 2006; Di Natale & Ritter, 2003; Drugs and Crime Prevention Committee, 2004, 2006; Victorian Department of Health, 2007);

— The annual *Victorian Drug Statistics Handbook* (Victorian Department of Health, 2009, 2013c);

— Research into the use of amphetamine-type stimulants (ATS) and early intervention of methamphetamine-related harms (Jenkinson & Quinn, 2008);

— 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 among PWID in Australia (Horyniak et al., 2013); and

— Research exploring the prevalence and correlates of quetiapine use among a national sample of PWID (Reddel et al., 2014).

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 2013 Victorian IDRS methodology

The Centre for Population Health (CPH) at the Burnet Institute conducted the Victorian arm of the 2013 IDRS study between June and October 2013. The project consisted of:

1. A structured survey of 150 PWID recruited from six sites across metropolitan Melbourne;
2. Semi-structured interviews with 20 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 2012/13 financial year. Where appropriate, these data were also compared to IDRS findings from 2000 to 2012.

Demographics of the sample

The 2013 Victorian IDRS sample consisted of 150 PWID. Participants' demographic characteristics were largely unchanged from previous surveys, although in 2013 the mean age of the sample significantly increased to 40 years. Thirteen per cent identified as Indigenous. At the time of interview, 90% were unemployed and 94% received a government pension, allowance or benefit, with a mean weekly income of $368 reported. Over half were enrolled in pharmacotherapy treatment, most commonly methadone, and almost two-thirds reported a prison history.

Consumption patterns

Current patterns of use

The mean age of participants' first injection increased significantly from 18 years in 2012 to 19 years in 2013; similar proportions reported first injecting methamphetamine (49%) or heroin (47%). As in previous years, heroin was the most common drug of choice (71%) and the same proportions reported that heroin was the last drug they injected (69%) and the drug injected most often in month before interview (69%). Forty-four per cent reported injecting at least once per day.

Heroin

Patterns of heroin use were very similar in 2012 and 2013. The prevalence of recent heroin use and injection in 2013 was 83% respectively, which was almost the same in 2012. Frequency of heroin use was the same at a median of 72 days use in the past six months (about three times per week); 30% of recent users reported daily use. Among recent users, white or off-white rock was the form of heroin used most (83%); however, there was a small yet significant increase in the prevalence of reports of brown or beige rock being used most (11%). Fourteen per cent of recent heroin users reported using heat to prepare their last injection, the same as in 2012.

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 2013, 18% of Victorian IDRS participants nominated methamphetamine as their drug of choice. Overall, there was no significant change in the prevalence of recent methamphetamine use, however in 2013 frequency of use rose to a median of 15 days in the past six months. Prevalence of recent *speed* use (23%) and injection (22%) significantly decreased, but median frequency of use rose from five to eight days. Prevalence of recent *ice* use was the same as in 2012, although median frequency of use doubled from six to 13 days in the past six months. Reports of ice smoking fell significantly to 13%, the same as in 2011. Prevalence of recent *base* use fell to 3%, but frequency of use in the past six months increased to a median of six days.

Cocaine

Between 2012 and 2013, there was no change in the prevalence of lifetime or recent cocaine use (61% and 11%) and injection (41% and 9%). Only 2% of the sample nominated cocaine as their drug of choice. Use was infrequent, occurring on a median of four days in the past six months. Four per cent reported recent insufflation (snorting). Most recent users reported using powder cocaine most often.

Cannabis

In 2013, cannabis was the second most common illicit drug used by Victorian IDRS participants after heroin. While 96% reported lifetime use, 80% reported recent use. Median frequency of recent cannabis use fell from 178 days in 2012 to 163 days in 2013; however the prevalence of daily smoking remained similar (49%). Recent users reported smoking hydroponically grown cannabis most often and, during the last session of use, smoking a median of six cones or a median of two joints; daily users reported smoking a median of six cones or a median of four joints. In 2013, the proportion who reported smoking cones on the last occasion of use significantly declined from 2012 (53% vs. 77% respectively), while the proportion who reported smoking joints significantly increased (20% vs. 10%).

Opioid substitution treatment (OST) medications

Methadone

In 2013, the prevalence of recent methadone use was 47%, similar to 2012; the median frequency of use was consistent, at 180 days in the past six months. No reports of recent Physeptone® use were received. Prevalence of recent *prescribed* methadone use (41%) did not change significantly from 2012. However, lifetime use of *non-prescribed* methadone significantly declined (37% in 2013 vs. 51% in 2012), as did recent non-prescribed use (12% vs. 20%). Consistent with previous years, the median frequency of recent non-prescribed use was low at only three days. The median frequency of recent injection was higher in 2013 than 2012; 5% of participants reported a median of 48 days injection in the preceding six months.

Buprenorphine

From 2012 to 2013, there was a non-significant decline in lifetime buprenorphine use (59% in 2013 vs. 69% in 2012) and a significant decline in recent use (12% vs. 22%). Median days of use rose from 10 to 60 days in the preceding six months. There was a significant decline in lifetime prevalence of *non-prescribed* use (53% in 2012 to 36% in 2013), as well as a significant decline in prevalence of recent non-prescribed use (19% to 9%). However, among recent users, the median frequency of use in the last six months increased from 10 to 36 days. Three per cent reported use of *prescribed* buprenorphine, the same as 2012. Recent buprenorphine injection also significantly declined (20% to 9%).

Buprenorphine-naloxone tablets

Overall, the prevalence of recent buprenorphine-naloxone tablet use significantly declined, from 31% in 2012 to 19% in 2013. Median frequency of use was 64 days in the past six months. Ten per cent reported recent *prescribed* and *non-prescribed* tablet use; prescribed users reported a median frequency of 150 days use, and non-prescribed users reported a median frequency of 30 days use. Recent tablet injection significantly declined, from 18% in 2012 to 10% in 2013, occurring on a median of 72 days in the past six months in 2013.

Buprenorphine-naloxone film

In 2013, IDRS participants were asked to respond to separate questions about use of buprenorphine-naloxone film for the second time. Overall, lifetime prevalence of film use (31%) significantly increased over 2013, while prevalence of recent use (21%) was similar to the 2012 figure. Median frequency of use was 19 days in the past six months. Prevalence of recent *prescribed* film use (12%) and recent *non-prescribed* film use (11%) did not significantly change from 2012. Recent prescribed users reported a median frequency of 66 days of use; non-prescribed users reported a median of 10 days use. Recent film injection was reported by 8%, similar to 2012.

Pharmaceutical opioids

Morphine

Over the past 10 years there has been an overall trend of declining morphine use among Victorian IDRS participants. Between 2012 and 2013 lifetime prevalence of morphine use significantly declined from 83% to 72%, although recent use was similar (21%). Use was very infrequent: *non-prescribed* injection was reported by 19% on two days (median) in the past six months. Sixty-six per cent of participants used MS Contin® most often, while 31% used Kapanol®.

Oxycodone

The prevalence of lifetime oxycodone use (62%) significantly declined from 2012 (77%), yet there was no significant change in recent use (25%). Median frequency of use was 12 days (once per fortnight) in the past six months. *Non-prescribed* injection prevalence (22%) was similar to 2012; the median frequency was six days of injecting (about once per month) in the past six months. Nearly all (87%) reported using OxyContin® most often, while 11% reported using Endone®.

Fentanyl

Prevalence of fentanyl use was very low: 5% reported lifetime use and injection, respectively. One per cent reported recent injection, on a median of three days in the past six months.

Over-the-counter (OTC) codeine

Lifetime use of extra-medical OTC codeine was reported by 7%; recent use was reported by 3%. Median frequency was five days use in the past six months. One per cent reported OTC codeine injection.

Other opioids (not elsewhere classified)

Between 2012 and 2013 the prevalence of extra-medical opioid use (other than those listed above) significantly declined (51% vs. 29%), as did recent use (21% vs. 7%). All recent users reported oral ingestion, on a median of seven days in the past six months. No respondents reported recent injection. *Prescribed* use was more common than *non-prescribed* use and Panadeine Forte® was the most commonly used brand.

Benzodiazepines

Benzodiazepines (other than alprazolam)

Since 2000 there has been an overall declining trend in recent benzodiazepine (other than alprazolam) use. In 2013, lifetime use significantly declined from 2012 (84% vs. 96%) and although there was a decline in recent use (61% vs. 70%) as well, the change was not significant. All recent users reported using Valium® most, followed by Serapax®. Median frequency of use was 48 days (about twice per week) in the past six months. Recent *non-prescribed* use (40%) also declined, but not significantly, and the median frequency of use (seven days) was the same as 2012.

Alprazolam

Prevalence of lifetime and recent alprazolam use declined significantly between 2012 (78%) and 2013 (43%). Median frequency of use was 12 days, fortnightly in the past six months. Unlike other benzodiazepines, lifetime (75%) and recent (41%) *non-prescribed* use was higher than *prescribed* lifetime (23%) and recent use (6%). A median frequency of 11 days non-prescribed use was reported. Two per cent reported recent non-prescribed alprazolam injection on a median of six days (about once per month).

Other drugs

Quetiapine

While lifetime use of quetiapine (59%) significantly declined, there was no change in recent use (29%), despite a small decline. Median frequency of use was 28 days; all recent users reported oral ingestion.

No reports of recent injection were received. The prevalence of recent *prescribed* (14%) and *non-prescribed* (17%) use was not significantly different, but prescribed users reported a median of daily use and non-prescribed users reported a median of four days use.

Pharmaceutical stimulants

Prevalence of lifetime pharmaceutical stimulant use (27%) and injection (14%) significantly decreased from 2012. Few (3%) reported recent injection. Recent use (5%) significantly declined as well, with a median of six days use reported.

Ecstasy

While the 2013 lifetime ecstasy use prevalence (65%) was similar to previous years, prevalence of recent use (4%) significantly declined from 2012 (13%), 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: 3% reported a median of three days use in the past six months. No reports of recent injection were received.

Inhalants

The lifetime prevalence of inhalant use (21%) was similar to previous years, however, there were no reports of recent use.

Steroids

In 2013 5% reported lifetime steroid use and 1% reported recent use (both consistent with 2012).

Alcohol and tobacco

From 2012 to 2013 there was a non-significant decline in lifetime alcohol use (96%) and a significant decline in recent use (55%). Oral consumption was the only route of administration reported, occurring on a median of 48 days (twice per week) in the past six months. By contrast, the prevalence of tobacco smoking was similar to previous years: 94% reported daily (median) use in the past six months.

New psychoactive substances (NPS) and synthetic cannabinoids

For the first time in 2013, participants were asked about their use of NPS and synthetic cannabinoids. No reports were received regarding the use of NPS. Six per cent reported lifetime use of synthetic cannabinoids, 5% reported recent use. All participants reported smoking synthetic cannabinoids on one day (median) in the past six months.

Drug market: Price, purity, availability and purchasing patterns

Heroin

In 2013, the median price paid for 1.0 gram and 1.7 grams of heroin decreased by $50; prices for other amounts were consistent with previous years. Participants most commonly reported purchasing 0.5 gram and paying $150. Almost all (96%) reported that heroin was very easy or easy to obtain; 81% reported no recent changes to availability. Heroin was most commonly sourced from a known dealer (60%), at a dealer's home (28%), or agreed public location (27%). The overall average purity of heroin seized in 2012/13 was low (21%), with seizures weighing less than 1.0 gram even lower (17%).

Methamphetamine

Very few participants reported purchasing *speed* in 2013: Those who did reported that the median price of 0.1 gram decreased by $50 and the median price of 1.0 gram decreased by $40. Participants most commonly reported purchasing 0.1 gram of *ice* for $100 (median), consistent with previous years. The median price paid for 0.5 gram of *ice* increased by $50. *Ice* was reported as easy or very easy (86%) to obtain; 79% reported no recent changes to availability, while 13% reported access was easier. Two-

thirds (68%) reported that *speed* was easy or very easy to obtain, 26% reported difficulty; 74% reported no change in availability in the past six months, but 21% reported more difficulty. Consistent with 2012, reports of *speed* purity varied, while *ice* purity tended to be high (47%) or medium (32%). Too few participants commented on the market characteristics for *base*, so reports are not included here. In 2012/13, the overall average purity of methamphetamine seized was reasonably high (63%). By contrast, purity of amphetamine seizures was low (19%).

Cocaine

In 2013, only three participants reported on the price of cocaine, so median price is not reported. Reports from these participants suggested that cocaine was easy for them to obtain, with no changes to availability in the past six months. In 2012/13 the overall average purity of cocaine seized was 46%, similar to the previous period.

Cannabis

Median reported prices for 1.0 gram, 0.25 ounce and 1.0 ounce of hydroponically grown cannabis were consistent with previous years; 85% of respondents reported no recent price changes. Very few reported last purchasing bush-grown cannabis. Almost all (94%) reported that hydroponic cannabis was very easy or easy to obtain and 93% reported no recent changes to availability. Dealers (55%) and friends (36%) were the most common hydroponic cannabis sources. Few reports were received regarding access to bush-grown cannabis, but all suggested no changes to availability in the past six months. Hydroponic cannabis potency was reported as high (60%) to medium (25%) and 80% reported no recent changes. Bush-grown cannabis potency was reported as medium.

Methadone

Very few participants commented on the market characteristics of non-prescribed methadone; in 2013 no reports of current prices were received and reports regarding availability were disparate.

Buprenorphine

Few participants commented on the market characteristics of non-prescribed buprenorphine. The median price paid for an 8 mg tablet was $20, the same as 2012. All reported that non-prescribed buprenorphine was very easy or easy to obtain, with no recent changes to access. Buprenorphine was most commonly sourced from a friend or street dealer; a street market was the most common source venue.

Buprenorphine-naloxone tablets

Very few participants commented on the market characteristics of non-prescribed buprenorphine-naloxone tablets. The median price paid for an 8 mg tablet was $10; price was reported as stable. Most reported that the tablets were very easy to obtain, and most reported no recent changes to access. Although a range of sources for the tablets was reported, all sourced them from a street market.

Buprenorphine-naloxone film

Few participants commented on the market characteristics of non-prescribed buprenorphine-naloxone film. Median price for an 8 mg film was $25; most reported stable prices in the past six months. All reported the film was easy or very easy to obtain and, while most reported no recent changes to access, about a third reported obtaining the film was easier than in 2012. A range of sources for the film was reported, but all sourced them from a street market or dealer's home.

Morphine

In 2013, very few participants commented on the market characteristics of morphine. Reports regarding price were disparate, and depended on the type of morphine purchased (100 mg Kapanol® was most common). Reports of recent changes to price were also inconsistent. Reports regarding morphine availability were inconsistent as well; however most suggested access was easy or very easy, although some reported difficulty. A range of sources was reported, as was a range of source venues.

Oxycodone

Similar to morphine, few reports were received regarding the market characteristics of oxycodone. An 80 mg OxyContin® tablet was most commonly purchased, for a median price of $40. Most respondents reported no recent changes to price. While the majority reported that oxycodone was easy to obtain, a few reported difficulty; nearly all reported no recent changes to availability. Oxycodone was most commonly sourced from a known dealer, with the most common source location being a dealer's home.

Health-related trends associated with drug use

Overdose and drug-related fatalities

In 2013, the prevalence of reported lifetime accidental heroin overdose (57%) was similar to 2012, although the median number of overdoses increased from two to three. However, among those with a history of overdose, the past year prevalence (29%) increased significantly. More than half of this group reported ambulance attendance, and receiving naloxone. Most did not seek further treatment and/or information. Only two participants reported overdosing on drugs other than heroin in the preceding year. Ambo Project data show that during 2012, Ambulance Victoria (AV) attended 991 non-fatal heroin overdoses in Melbourne, a decline of 20% from 2011. In 2012, coroner's data show that 31 deaths were officially defined as heroin-related, including an additional 12 heroin-related deaths in 2013.

Drug treatment

Specialist alcohol and other drug (AOD) treatment services

During 2012/13, 58,916 courses of treatment were delivered to 35,956 clients[1] in Victorian specialist alcohol and drug treatment services[2]. In 2012/13, for the first time Alcohol and Drug Information Service (ADIS) data showed that amphetamine surpassed heroin as the most commonly cited drug of concern after alcohol and cannabis, comprising 15% of all clients and 13% of courses of treatment. Heroin was cited as a drug of concern in 10% of clients and courses of treatment, respectively, while cocaine was cited in less than 1% of clients and courses of treatment.

DirectLine

In 2012 DirectLine responded to 37,228 alcohol and drug-related calls, with a drug of concern[3] identified in nearly two-thirds. Heroin was nominated as a drug of concern in 10% of all drug-identified calls, whereas pharmaceutical opioids were nominated in 28% of calls. ATS were nominated in 19% of drug-identified calls, an increase of 75% from 2011, while cannabis accounted for 11% of all drug-identified calls.

Pharmacotherapy consumers

As at July 2013, 13,961 people were dispensed pharmacotherapy treatment in Victoria; for the first time since 1985 the number of clients plateaued. Almost two-thirds (66%) were dispensed methadone and almost one-third (30%) were dispensed buprenorphine-naloxone (Suboxone®). Only 4% of pharmacotherapy consumers were dispensed buprenorphine (Subutex®). Between 2012 and 2013, there was a small decrease in the number dispensed methadone and a slight increase in the number dispensed buprenorphine-naloxone; buprenorphine dispensing declined by 9%.

Hospital admissions

Between 2010/11 and 2011/12 there was a 10% decline in Victorian opioid-related hospital admissions with 1,049 primary admissions recorded in 2011/12, comprising 19% of opioid-related hospital

[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.

admissions in Australia. By contrast, amphetamine-related hospital admissions in Victoria increased by 52% to 644 primary admissions, accounting for 23% of Australian amphetamine-related hospital admissions. Cocaine-related hospital admissions remain relatively low in Victoria; 41 were recorded, comprising 18% of admissions in Australia. In 2011/12 there were 444 cannabis-related hospital admissions in the state, accounting for 20% of Australian cannabis-related admissions.

Injecting risk behaviours

Injecting equipment, reuse, access and related problems

Similar to previous years, 12% reported borrowing a used needle in the past month, typically on two or more occasions, and most commonly from a regular sex partner. In 2013, there was a non-significant decline from 2012 in the proportion who reported lending a used needle (17%) to someone else in the preceding month, and a significant decline in the proportion who reported reusing their own needle (41%). Almost all (97%) reported accessing a Needle and Syringe Program (NSP) in the past month, yet 10% reported trouble obtaining sterile injecting equipment when they needed it. Most (77%) reported last injecting into their arm; few reported injecting into their hand or wrist (11%), neck (5%), leg (3%), or groin (2%). Two-thirds (66%) reported injecting in private locations and, from 2012, there was a non-significant decline in self-reported injection-related health problems (41%).

Blood-borne viral infections (BBVI)

In 2012, six new human immunodeficiency virus (HIV) diagnoses were notified in which IDU was the likely exposure, comprising 2.3% of all new Victorian infections for the year. There were also three new HIV notifications in which the likely exposure was male-to-male sexual activity (MSM) and IDU; these accounted for 1.2% of new Victorian infections. The hepatitis C virus (HCV) continues to be an ongoing serious public health problem; in 2012 the estimated prevalence of HCV (antibodies) was 69% among Victorian Australian Needle and Syringe Program Survey (ANSPS) participants, significantly higher than HCV antibody prevalence among the national ANSPS sample (53%).

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 2013, the mean AUDIT-C score was 6.4, not significantly higher than 2012. Additionally, 62% who reported alcohol consumption in the past year scored five or more on the AUDIT-C. Although men returned higher mean scores than women (6.8 vs. 5.3), the difference was not significant.

Mental health problems and psychological distress

Self-reported mental health problems

In 2013, 51% of Victorian IDRS participants reported experiencing a mental health problem in the past six months, the same as in 2012. Among these, the prevalence of depression was 65% and anxiety 42%. The most common problems of lower prevalence were schizophrenia (14%), bipolar affective disorder (12%) and post-traumatic stress disorder (PTSD) (9%). Of those with a self-reported mental health problem, 71% 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.

The Kessler Psychological Distress Scale (K10)

According to the K10, the prevalence of psychological distress was very high among the 2013 sample; 62% 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)

According to the SF-12, the self-rated physical and mental health of 2013 IDRS participants was much poorer than that of the Australian general population. On the SF-12, higher mean scores indicate better self-rated physical and mental health. Participants' mean physical component score (PCS) was 45.3, while their mean mental component score (MCS) was 33.8, both significantly lower than the respective 1995 NHS general population norms of 50.1 (PCS) and 49.8 (MCS).

Driving risk behaviour

Twenty-six per cent of participants reported driving a vehicle at least once during the preceding six months. Of these, 18% reported driving under the influence of alcohol and 80% reported driving after use of illicit drugs (most commonly heroin, cannabis or benzodiazepines). Participants were asked to comment on their driving ability after illicit drug use; while 48% reported that illicit drugs had no impact on their driving ability, 39% reported that their driving was slightly impaired. Most participants who drove had never been drug-tested by roadside police.

Law enforcement-related trends associated with drug use

Self-reported criminal involvement

In 2013, 38% reported an arrest in the past twelve months, not significantly lower than 2012 (47%). Among these, the largest proportion of arrests related to property crime (50%) and use and/or possession of drugs (22%). In the month prior to interview, 36% reported that they were involved in crime, similar to 2012 (41%). Of the whole sample, 21% reported involvement in property crime and 17% reported selling drugs for profit.

Consumer and provider arrests

In 2011/12, consumer arrests outnumbered arrests of providers for all drug types both in Victoria and across Australia. For instance, in Victoria consumer arrests accounted for 70% of all heroin and other opioid-related arrests, 74% of all ATS-related arrests, 75% of all cocaine-related arrests and 80% of all cannabis-related arrests.

Expenditure on illicit drugs

Almost half (47%) of the 2013 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

In 2013, the IDRS included a series of questions to explore participants' knowledge of and attitudes to naloxone, the short-acting opioid antagonist, and take-home naloxone in particular. Among the Victorian sample, 91% had heard of naloxone. Among these, 58% reported that naloxone was used to reverse the effects of heroin and 47% reported that naloxone re-establishes consciousness. While only 17% of Victorian participants had heard of take-home naloxone at the time of interview, the majority of the sample showed preparedness to participate in take-home naloxone programs.

Pharmaceutical opioids

In 2013, 61% reported the use of prescribed and/or non-prescribed pharmaceutical opioids (including morphine, oxycodone, opioid substitution treatment (OST) medications such as methadone and buprenorphine-naloxone, and other opioids such as fentanyl, pethidine and tramadol) in the past year. The main reason for use among this group was substitution for heroin and prevention of opioid withdrawal, although 9% cited pain relief as the main reason. Among those who cited pain relief, almost all obtained pharmaceutical opioids on their own prescription, typically a Pharmaceutical Benefits Scheme (PBS) prescription from their regular doctor.

Brief Pain Inventory (BPI)

In 2013 the BPI was administered to Victorian IDRS participants. Only four participants who reported past year pharmaceutical opioid use reported experiencing pain other than everyday pain in the preceding seven days. All reported that their pain was of a chronic, non-cancer nature and that it had lasted for more than three months. Out of a possible 10, the mean pain severity score was 4.3, the mean pain interference score was 4.8 and the mean pain relief score was 5.3.

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 2013 the SDS was administered to 140 recent heroin and other opioid users; for heroin users the mean SDS score was 7.6, with 74% of participants meeting the cut-off for dependence. The SDS was also administered to 96 recent methamphetamine and other stimulant users, yielding a mean score of 4.2; 34% met the cut-off for methamphetamine dependence. Mean SDS scores did not differ significantly between men and women for either drug type.

OST medication injection

Due to the introduction of the buprenorphine-naloxone film preparation (Suboxone® film) in 2011, questions were included in both the 2012 and 2013 IDRS surveys regarding injection of OST medications (methadone, buprenorphine, and buprenorphine-naloxone tablets and film) in the past six months. Between 2012 and 2013, the prevalence of recent buprenorphine injection (10%) significantly declined. There was a non-significant decline in the prevalence of buprenorphine-naloxone tablet injection (11%). Eight per cent reported recent buprenorphine-naloxone film injection and 5% recent methadone injection.

HCV testing and treatment

In 2013, the HCV testing and treatment module was included in the IDRS to determine the extent of knowledge among PWID regarding diagnosis, available treatment and barriers to treatment uptake. Almost all (94%) participants had been tested for HCV antibodies; 74% of participants in this group reported undergoing further tests. Among these, 82% reported having a polymerase chain reaction (PCR) test (to assess current infection status), while 17% reported having a PCR viral genotype test. Sixty-three per cent of those who had a PCR test reported current HCV infection. Among HCV positive participants, 25% reported lifetime HCV antiviral treatment. Only 18 participants were aware of the new, improved treatment regime involving direct acting antivirals (DAA) for people with genotype 1.

Discrimination

In 2013, a discrimination module was included in the IDRS to complement the anti-discrimination work that the Australian Injecting and Illicit Drug Users' League (AIVL) initiated in previous years. Forty-eight per cent of the Victorian sample reported being discriminated against in the past year. The most common locations for discrimination reported by participants in this group were police (27%), hospital (24%) and pharmacy (24%), and GP/OST prescriber (21%). Most participants (81%) who reported discrimination perceived it was because they injected drugs (or people thought they did); 87% did not try to resolve the situation by making a formal complaint where appropriate.

Oral health impact profile

In 2013, the Oral Health Impact Profile (OHIP-14), an internationally recognised measure of Oral Health Related Quality of Life (OHRQoL), was included in the IDRS. The OHIP-14 is a self-report questionnaire comprised of 14 items that measure seven conceptual dimensions of impact: functional limitation, physical pain, psychological discomfort, physical disability, psychological disability, social disability and handicap. The dimensions of impact of highest prevalence were psychological disability (50%), physical pain (49%) and psychological discomfort (44%). The mean OHIP-14 severity score was 12.1, higher than the National Survey of Adult Oral Health (NSAOH) general population mean. By contrast, 35% scored zero, an indication of good subjective OHRQoL.

Conclusions

The results of the 2013 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 2013 IDRS included:

— A significant increase in the mean age of 2013 participants, from 38 years in 2012 to 40 years, corresponding with KE and other reports of an ageing cohort of PWID. A significant increase in the mean age of initiation to injection was also found; however, given the mean age of the sample, this finding may be related to recall bias rather than a real change in patterns of initiation among PWID in Melbourne.

— Stable prevalence and patterns of heroin use, with no changes reported in relation to market characteristics for the drug. Despite overall heroin purity remaining very low according to Victoria Police seizure data and a decline in non-fatal overdose (NFOD) ambulance attendances, the past-year prevalence of self-reported NFOD among participants with a history of overdose increased significantly.

— Stable prevalence of overall methamphetamine use, although frequency of use increased. Stable prevalence of recent ice use at just over half of the 2013 sample, but frequency of use doubled. Declining prevalence of recent speed use, but again, increased frequency of use among 2013 users. Ice smoking declined significantly, back to 2011 levels. Although these data accord with KE reports of high-frequency injection among PWID in the Cities of Port Phillip and Frankston, data on smoking prevalence among samples of PWID are probably not generalisable to the broader population of methamphetamine users. For instance, reports from LE and drug treatment KE suggest that the overwhelming majority of users in the community smoke the drug, with purity data from Victoria Police showing it is of high average potency. Indicator data from the ADIS, AV, DirectLine and the National Hospital Morbidity Database (NHMD) show considerable increases in methamphetamine-related presentations and harms. Taken together, these data point to an increase in the frequency of potent methamphetamine use, rather than an increase in prevalence.

— A plateau in pharmacotherapy census data, for the first time since 1985 when the Victorian OST program was implemented, with the number dispensed OST at the time of the 2013 census slightly declining from 2012. Significant declines in prevalence of lifetime and recent *non*-prescribed methadone use among 2013 participants, as well as significant declines in prevalence of lifetime and recent non-prescribed buprenorphine use. Declining prevalence of lifetime buprenorphine-naloxone tablet use. Prevalence of recent buprenorphine and buprenorphine-naloxone tablet injection also declined significantly among the 2013 sample. KE reports of constant client demand for pharmacotherapy treatment continued in 2013, with several recommending increasing access to OST for people who live in the outer suburbs of Melbourne. GP/OST KE strongly recommended fully subsidising access to pharmacotherapy programs for consumers, increasing incentives for newly trained GPs as part of routine practice, and increasing the capacity of OST prescribers to provide more holistic care.

— Significant declines in lifetime prevalence of benzodiazepine (other than alprazolam) use, with a non-significant decline in recent use, and declining frequency of use among 2013 users (twice per week). Significant declines in lifetime and recent alprazolam use, with median frequency of use unchanged from 2012 (fortnightly). Trends for alprazolam may be related to rescheduling of the drug (from 1 February 2014) to a Schedule 8 poison, with KE reports suggesting many GPs ceased prescribing the drug from mid-2013.

— High levels of awareness of naloxone among 2013 participants, with the overwhelming majority showing readiness to participate in peer-driven take-home naloxone programs.

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 also focus on capturing the prevalence and patterns of drug use among young PWID (particularly young initiates) through novel recruitment methods given the relatively hidden nature of this population.

2. **Research examining the prevalence and patterns of methamphetamine use**, injection and inhalation in metropolitan and outer suburban Melbourne, as well as regional Victoria. Funding research to develop an evidence base for more effective treatment options for this diverse population of users, focusing on residential withdrawal services in particular, given the high demand reported by KE for these services among users (and the limited evidence for efficacy). Credible harm reduction education targeted to the general population of users pointing to the harms associated with heavy and dependent use. Consideration of the provision of sterile pipes to users as a tool to engage this population with harm reduction and primary health care services.

3. **Continued expansion of OST programs across Victoria**, as well as 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 recent review of pharmacotherapy in Victoria (King, Ritter, & Berends, 2011). Further initiatives to strengthen current pharmacotherapy services as outlined in the Victorian Government Whole of Government Drug Strategy (Victorian Department of Health, 2012) should be encouraged. These could include incentives for newly trained GPs to take on OST clients as part of routine practice, including increasing the level of education and training around working with populations with complex health needs. Increasing financial incentives for current OST GPs to do more than prescribe to their patients so that holistic approaches to OST treatment and ancillary healthcare become entrenched as part of general medical practice.

4. **Continued monitoring of the prevalence, patterns and sources of prescribed and non-prescribed alprazolam use**, given the drug's rescheduling from 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 use. Recognition that some PWID have a genuine need for prescription use of these drugs.

5. **Funding support to increase PWIDs' access to peer-based naloxone programs**, given that the overwhelming majority of the 2013 IDRS sample supported the idea of a take-home naloxone program. Providing PWID with comprehensive education and training around overdose management and naloxone administration that continues to dispel overdose myths ought to empower people to effectively respond in the event of an overdose within a peer-based context.

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. This is the 16th 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 drug use and associated harms and is a basis for better informing future policy and research initiatives.

The *Victorian Drug Trends 2013* report summarises data collected during the months of June through October 2013 as part of the Melbourne arm of the 2013 IDRS. The findings contained herein pertain to the 2012/13 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 drug use history of the 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 of significance are examined.

For details to June 2011 regarding trends in alcohol and other drug use among the broader Victorian population, readers should refer to the annual *Victorian Drug Statistics Handbook* series (Victorian Department of Health, 2013c). Readers are also referred to the forthcoming Australian Drug Trends 2013 monograph for national IDRS data and jurisdictional comparisons (see Stafford & Burns, 2014).

1.1. Study aims

The primary aims of the 2013 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 2013 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 2013. To be eligible to participate in the study, participants were required to have injected drugs on an at least monthly basis 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 2013 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, Southern 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 2013 comprised core questions used in previous IDRS studies conducted in Melbourne, as well as other measures detailed in Chapter 8 (Special Topics of Interest). Survey items included questions covering participants' socio-demographic characteristics, drug use history, perceptions of drug market characteristics (including price, and purity and availability) 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=25–110 minutes) and survey participants were reimbursed $40 for their time, expertise and out-of-pocket expenses. Ethics approval for this study was obtained from the Alfred Hospital Human Research Ethics Committee and the Victoria Police Human Research Ethics Committee.

2.2. Survey of key experts

Twenty KE (10 men and 10 women) participated in both face-to-face and telephone interviews between August and October 2013. 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 2013 IDRS consisted of 13 direct health workers: NSP team leaders, Mobile Overdose Response Service/Mobile Drug Safety Workers (MORS/MDSW), outreach workers (n=6), drug treatment workers, including GP/OST prescribers (n=4), paramedics (n=2), and ED

physicians (n=1); three LE personnel: investigator, detective and forensic analyst; two drug outreach lawyers; and two workers from the government/policy sector. Excluding LE personnel, participants were selected on the basis of having had at least weekly contact with illicit drug users during the preceding six months, and/or contact with ten or more illicit drug users 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 screened after they had received the participant information statement and consent form and a copy of the KE interview schedule. Other KE did not wish to receive the materials in advance and were deemed eligible after telephone screening. The KE interview 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 illicit drug use and related harms.

As per 2011 and 2012, the 2013 survey focused on the drug (or drugs) KE perceived to be 'most problematic' at the time of interview. To put these responses into context, the main drugs that 2013 KE had the most contact with in regards to their work with PWID were heroin (n=9), methamphetamine (n=7) and cannabis (n=4). By comparison, the drugs 2013 KE cited as the 'most problematic' in relation to their work with PWID were methamphetamine (ice) (n=12), benzodiazepines—particularly alprazolam—when used in combination with other CNS depressants (n=4), heroin (n=2) and alcohol (n=2). One KE who could not provide a response suggested reframing the question given the overall pattern of polydrug use among his patients. On average, the interviews with KE were completed in 38 minutes (range=20–60 minutes). Detailed notes were taken by the researcher during each interview and the raw data transcribed and coded soon after their conclusion.

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 2012/13 financial year are reported unless otherwise indicated. For secondary indicators, where current data were unavailable, the most recently available data are included.

Indicator data sources presented in this report include:

Surveys reporting on the prevalence of illicit drug use in Victoria

— Data on the prevalence of drug use in the general community are typically derived from large-scale population surveys. The most recent population survey providing estimates on the prevalence of illicit drug use within the Australian community is the 2010 National Drug Strategy Household Survey (NDSHS) (Australian Institute of Health and Welfare, 2011).

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 IDRS report. This report presents data for the 2012/13 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 2011/12 financial year.

Specialist drug treatment presentations

— The Victorian Department of Health (VDH—formerly the Department of Human Services) 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 2012/13 financial year.

— The Harm Reduction and Pharmacotherapy Services (HRPS) unit at the VDH 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 1985 to December 2013 are presented in this report.

— DirectLine is a Victorian 24-hour specialist telephone service operated by Turning Point Alcohol and Drug Centre that provides information on drug use and related issues, referrals to other services, 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 1999 to 2012 are presented in this report.

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

— In collaboration with AV, Turning Point Alcohol and Drug Centre manages an electronic database of all drug-related ambulance attendances in Victoria, which 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 2012 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 2011/2012.

Heroin-related fatalities

— Mortality information from heroin-related deaths was obtained from data collated by the VDH from the National Coronial Information System. This report presents data from 1991 to 2013.

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 2012.

— 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 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 2012 ANSPS data collections is presented in this report (Iversen & Maher, 2013).

2.4. Data analysis

T-tests were employed for selected continuous, normally distributed variables, with the mean and standard deviation (SD) reported; where appropriate, medians and ranges are reported. Categorical variables were analysed using χ^2 tests for percentages and χ^2 tests for selected trends over time. Analyses of 2013 Victorian IDRS data were conducted using IBM SPSS Statistics 20.0 (IBM Corp, 2011). Stata 11.0 SE was used to conduct one-sided tests of proportions between data from 2013 and 2012 (StataCorp, 2009). *P* levels of less than 0.05 were taken to denote statistical significance.

Content analysis was used for the open-ended responses in KE interviews (Kellehear, 1993). Categorical data for KE estimates of drug price, purity and availability were analysed using Microsoft Excel.

3. Demographics

3.1. Overview of the IDRS participant sample

In 2013, 150 people who regularly inject drugs (PWID) were interviewed for the Victorian IDRS. As with previous years, 25 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 2013. The mean age (40 years) of participants was significantly higher in 2013 than in 2012 ($p < 0.01$). Almost three-quarters of the sample were men and more than half reported living in stable accommodation. One-quarter reported residing in a boarding house or hostel at the time of interview and 15% reported that they were homeless or had no fixed address (Table 1).

Similar to previous years, most of the sample was single, while minorities reported having a regular partner and being married or in a de facto relationship.

A very large majority of participants were born in Australia, although a few reported being born in Vietnam, the United Kingdom, and New Zealand, among other countries. In 2013, 13% of participants identified as Indigenous Australian, which was similar to the proportions in 2012 and 2011.

Consistent with previous years, participants reported completing approximately 10 years of school education. One-third reported completion of a trade or technical qualification since leaving school and 5% reported completion of a university qualification. Most participants were unemployed at the time of interview, and almost all reported that their main source of income in the preceding month was a government pension, allowance or benefit. Participants reported receiving a mean income of $368 per week (SD=215.8, range=$60–2,000).

In 2013, 52% of participants reported being in drug treatment at the time of interview. Of those participants currently receiving drug treatment (n=74 with complete data), most had been on an opioid substitution treatment (OST) such as methadone (70%) or buprenorphine-naloxone (23%) for a median duration of 24 months (range=0.5–240 months).

In 2013, nearly two-thirds of the Victorian IDRS sample reported a history of imprisonment, which was similar to the proportion in 2012 and 2011 (Table 1). As in previous years, a history of incarceration was significantly more common among male participants than female participants (73% vs. 42%, $p < 0.001$).

Table 1: Demographic characteristics of participants, Victoria, 2011–2013

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

Source: IDRS participant interviews

* Includes all types of pharmacotherapy treatment and drug counselling

[#] Data missing for one participant (n=149)

3.2. KE reports: Characteristics of PWID

Comments from KE regarding the characteristics of PWID that they had the most contact with in the past year generally reflected the demographic characteristics of the 2013 IDRS participant sample. For instance, KE typically reported working with populations mostly comprised of Australian-born men aged between 25 and 45 years. Core groups of PWID of Asian and Eastern and Western European descent were noted in Melbourne, as well as emerging small subgroups of PWID of Middle Eastern, African and Indian descent. Although all KE reported that men outnumbered women, one noted that women tended "to carry the load" and "do all the work" in terms of drug-related business and sex work. KE reported that most "visible" PWID were from low socioeconomic backgrounds with low levels of education; intergenerational disadvantage and limited social capital were common features of this group. Although high levels of unemployment were noted, some KE reflected that many had prior histories of employment and, currently, up to 50% of some service users were employed in varying capacities. However, most received government pensions or benefits, or had their income managed by the State Trustee. Involvement in the criminal justice system (CJS) was very common, primarily due to petty infringements rather than serious crime. Enduring stress related to CJS involvement exacerbated already compromised mental and physical health and, while incarceration histories were ubiquitous, KE emphasised that for many people, these were not necessarily recent.

4. Consumption patterns

Table 2 presents Victorian IDRS participants' injecting history and current patterns of IDU, from 2011 to 2013. In 2013, participants reported that they first injected a drug at 19.4 years of age, a significant increase from the mean age reported in 2012 (18.1 years, $t(298)=2.13$, $p < 0.05$). As in 2012, similar proportions reported that their first injection was either methamphetamine (49%) or heroin (47%) and, at the time of interview, almost three-quarters (71%) reported that heroin was their drug of choice. More than two-thirds reported that heroin was the drug injected most often during the previous month and the drug injected most recently (69%, respectively). In 2013, 44% of participants reported injecting drugs at least once per day in the month prior to interview (Table 2).

Table 2: Injecting history and patterns of use in the last month, Victoria, 2011–2013

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

Source: IDRS participant interviews

4.1. Current drug use

The self-reported lifetime and recent[4] patterns of drug use among the 2013 Victorian IDRS sample are summarised in Table 3. As with previous years, almost all participants reported lifetime use of heroin (99%), alcohol (97%), cannabis (96%) and tobacco (96%), as well as various forms of methamphetamine (93%) and benzodiazepines (89%).

In the six months preceding interview, participants most commonly reported injecting heroin (83%) and methamphetamine (59%), followed by oxycodone (22%) and morphine (19%).

The illicit drugs participants most commonly reported recently smoking were cannabis (79%) and methamphetamine (13%). Insufflation (snorting) as ROA was very uncommon; for instance, only 4% of participants reported recent cocaine use via this method. Excluding alcohol, in 2013 the drugs most commonly ingested orally by participants in the six months prior to interview were benzodiazepines (69%, any form), methadone (45%, any form), and quetiapine (29%, any form) (Table 3).

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

Table 3: Drug use history and patterns of drug use in the preceding six months, Victoria, 2013

	Ever used (%)	Ever injected (%)	Injected last 6 months (%)	Median days injected* last 6 months	Ever smoked (%)	Smoked last 6 months (%)	Ever snorted (%)	Snorted last 6 months (%)	Ever+ swallow (%)	Swallow last 6 months+ (%)	Used^ last 6 months (%)	Median days in tx*# last 6 months	Median days used^ last 6 months*
Heroin	99	99	83	72	35	3	10	0	7	1	83		72
Homebake heroin	13	13	2	8	0	0	0	0	0	0	2		8
Any heroin	**99**	**99**	**83**	**72**	**35**	**3**	**10**	**0**	**7**	**1**	**83**		**72**
Methadone (prescribed)	71	13	3	48	1	0	0	0	70	41	41	180	180
Methadone (not prescribed)	37	9	1	11	0	0	0	0	32	11	12		3
Physeptone (prescribed)	7	1	0	0	0	0	0	0	6	0	0	0	0
Physeptone (not prescribed)	6	6	0	0	0	0	0	0	2	0	0		0
Any methadone/ physeptone	**83**	**21**	**5**	**24**	**1**	**0**	**0**	**0**	**79**	**45**	**47**		**180**
Buprenorphine (prescribed)	43	27	2	150	1	0	0	0	41	3	3	180	150
Buprenorphine (not prescribed)	36	31	7	41	0	0	0	0	17	2	9		36
Any buprenorphine	**59**	**41**	**9**	**60**	**1**	**0**	**0**	**0**	**47**	**5**	**12**		**60**
Buprenorphine-naloxone tablets (prescribed)	45	19	5	180	0	0	0	0	43	9	10	180	150
Buprenorphine-naloxone tablets (not prescribed)	33	21	7	38	1	0	0	0	19	4	10		30
Any buprenorphine-naloxone tablets	**63**	**32**	**10**	**72**	**1**	**0**	**0**	**0**	**52**	**13**	**19**		**64**

Table 3: Drug use history and patterns of drug use in the preceding six months, Victoria, 2013 (continued)

	Ever used (%)	Ever injected (%)	Injected last 6 months (%)	Median days injected* last 6 months	Ever smoked (%)	Smoked last 6 months (%)	Ever snorted (%)	Snorted last 6 months (%)	Ever+ swallow (%)	Swallow last 6 months+ (%)	Used^ last 6 months (%)	Median days in tx*# last 6 months	Median days used^ last 6 months*
Buprenorphine-naloxone film (prescribed)	16	3	1	114	0	0	0	0	16	12	12	92	66
Buprenorphine-naloxone film (not prescribed)	19	11	7	10	0	0	0	0	13	7	11		10
Any buprenorphine-naloxone film	**31**	**13**	**8**	**16**	**0**	**0**	**0**	**0**	**25**	**18**	**21**		**19**
Any buprenorphine-naloxone	**68**	**34**	**13**		**1**	**0**	**0**	**0**	**57**	**25**	**31**		
Morphine (prescribed)	19	15	1	24	1	0	0	0	15	1	1	180	102
Morphine (not prescribed)	63	62	19	2	1	0	0	0	16	5	20		2
Any morphine	**72**	**67**	**19**	**2**	**1**	**0**	**0**	**0**	**26**	**6**	**21**		**2**
Oxycodone (prescribed)	12	8	2	96	0	0	0	0	9	2	3	96	96
Oxycodone (not prescribed)	60	57	21	6	0	0	0	0	13	5	23		12
Any oxycodone	**62**	**57**	**22**	**6**	**0**	**0**	**0**	**0**	**20**	**7**	**25**		**12**
Fentanyl	5	5	1	3	1	0	0	0	0	0	1		3
Over-the-counter codeine	7	1	1	1	0	0	0	0	6	2	3		5
Other opioids (not elsewhere classified)	29	0	0	0	0	0	0	0	29	7	7		7
Speed powder	88	85	22	8	14	1	34	1	25	1	23		8
Amphetamine liquid	9	8	0	0	0	0	0	0	1	0	0		0

Table 3: Drug use history and patterns of drug use in the preceding six months, Victoria, 2013 (continued)

	Ever used (%)	Ever injected (%)	Injected last 6 months (%)	Median days injected* last 6 months	Ever smoked (%)	Smoked last 6 months (%)	Ever snorted (%)	Snorted last 6 months (%)	Ever+ swallow (%)	Swallow last 6 months+ (%)	Used^ last 6 months (%)	Median days in tx*# last 6 months	Median days used^ last 6 months*
Base methamphetamine	16	15	3	6	1	0	1	0	1	0	3		6
Crystal/ice	81	80	54	12	33	13	2	0	3	0	55		13
Any methamphetamine	**93**	**93**	**59**	**14**	**35**	**13**	**35**	**1**	**27**	**1**	**61**		**15**
Pharmaceutical stimulants (prescribed)	5	1	1	170	0	0	0	0	4	1	1	180	175
Pharmaceutical stimulants (not prescribed)	23	13	3	7	0	0	0	0	17	3	4		4
Any pharmaceutical stimulants	**27**	**14**	**3**	**8**	**0**	**0**	**0**	**0**	**20**	**3**	**5**		**6**
Cocaine	61	41	9	3	3	1	31	4	3	0	11		4
Hallucinogens	57	5	0	0	1	1	1	0	55	2	3		3
Ecstasy	65	17	1	4	1	0	4	1	59	3	4		2
Alprazolam (prescribed)	23	3	0	0	0	0	0	0	22	6	6	180	180
Alprazolam (not prescribed)	75	9	2	6	0	0	1	1	73	41	41		11
Any alprazolam	**78**	**10**	**2**	**6**	**0**	**0**	**1**	**1**	**77**	**43**	**43**		**12**
Other benzodiazepines (prescribed)	65	5	0	0	0	0	0	0	65	39	39	180	72
Other benzodiazepines (not prescribed)	61	8	0	0	0	0	0	0	60	40	40		7
Any other benzodiazepines	**84**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**84**	**61**	**61**		**48**
Any benzodiazepines	**89**	**19**	**2**	**3**	**0**	**0**	**1**	**1**	**89**	**69**	**70**		**94**

Table 3: Drug use history and patterns of drug use in the preceding six months, Victoria, 2013 (continued)

	Ever used (%)	Ever injected (%)	Injected last 6 months (%)	Median days injected* last 6 months	Ever smoked (%)	Smoked last 6 months (%)	Ever snorted (%)	Snorted last 6 months (%)	Ever+ swallow (%)	Swallow last 6 months+ (%)	Used^ last 6 months (%)	Median days in tx*# last 6 months	Median days used^ last 6 months*
Quetiapine (prescribed)	26	1	0	0	0	0	0	0	26	14	14	180	180
Quetiapine (not prescribed)	38	0	0	0	1	0	0	0	37	17	17		4
Any quetiapine	**59**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**58**	**29**	**29**		**28**
Alcohol	96	7	0	0					96	55	55		48
Cannabis	96				95	79			42	4	80		163
Inhalants	21										0		0
Tobacco	97										94		180
Steroids	5	5	1	1	0	0	0	0	1	0	1		1
NPS	0												
Synthetic cannabinoids	6				6	5	0	0	0	0	5		1

Source: IDRS participant interviews

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

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

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

Refers to the median number of days in treatment among participants who reported prescribed drug use in the preceding six months

Table 4 shows the proportion of Victorian IDRS participants who reported using drugs on the day prior to interview, by drug type, from 2007 to 2013. Multiple responses were allowed. In 2013, almost all participants (97%) reported the use of at least one drug on the day before interview, with cannabis (52%), heroin (37%) and methadone (30%) most commonly used (Table 4).

Table 4: Drugs used on the day prior to interview, Victoria, 2007–2013

	2007 (N=149)	2008 (N=150)	2009 (N=150)	2010 (N=151)	2011 (N=150)	2012 (N=150)	2013 (N=150)
Cannabis (%)	42	53	43	51	59	62	52
Heroin (%)	40	45	37	36	33	50	37
Benzodiazepines (%)	31	30	23	17	37	41	27
Alcohol (%)	21	24	28	28	32	32	22
Methadone (%)	17	25	26	12	28	27	30
Buprenorphine (%)	12	10	16	9	12	6	5
Speed (%)	10	13	8	8	3	2	3
Morphine (%)	9	7	3	5	3	1	1
Antidepressants (%)	7	4	9	6	8	4	4
Other opiates (%)	4	3	0	0	1	2	1
Buprenorphine-naloxone (%)	3	8	5	7	14	12	12
Ice/crystal (%)	2	2	3	1	8	9	9
Cocaine (%)	1	3	2	0	0	1	0
Base (%)	0	0	1	0	0	1	1
Oxycodone (%)	-	-	-	1	1	3	1
Antipsychotics (%)	-	-	-	-	-	10	9

Source: IDRS participant interviews

4.2. Heroin

Key points

— In 2013, 83% of participants each reported recent heroin use and injection, almost the same prevalence as in 2012 (84%).

— The frequency of heroin use did not change: the median days of use was 72 in 2013, the same as in 2012. Thirty per cent reported daily use.

— White or off-white rock was the form of heroin used most by recent users in 2013 (83%), although there was a small but significant increase over 2012 in reports of brown/beige rock being used most (11%).

— Fourteen per cent of the sample reported using heat to prepare their last heroin injection, the same as in 2012.

— Only two of 20 KE nominated heroin as the 'most problematic drug', despite nine reporting that heroin was "core business".

— Overall, patterns of use were reported as stable in the preceding six to twelve months. The heroin using population was again described as an ageing cohort of PWID, with KE continuing to recommend increasing access to OST programs for this group across the state of Victoria.

4.2.1. Prevalence of heroin use

For the past seven years in Victoria, the prevalence of recent heroin use among IDRS participants has remained reasonably stable. As with previous years, in 2013 heroin was the most widely used illicit drug by Victorian IDRS participants. Almost the entire sample (99%) reported lifetime heroin use, with 83% reporting recent heroin use and injection, respectively. Seventy-one per cent of participants nominated heroin as their drug of choice in 2013, almost the same as in 2012 (74%, $p = 0.561$).

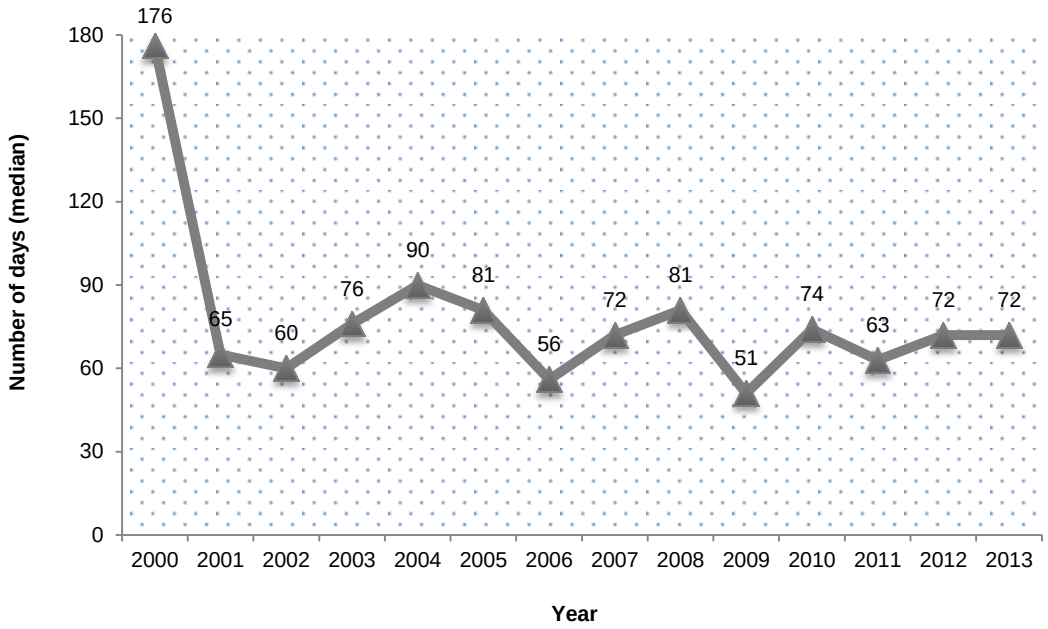
Sixty-nine per cent of 2013 Victorian IDRS participants reported that heroin was the last drug they injected before interview, similar to Victorian findings from the 2012 ANSPS. Of the 463 Victorian ANSPS participants surveyed, 65% reported that heroin was the last drug they injected before completing the survey (Iversen & Maher, 2013).

4.2.2. Current patterns of heroin use

Of all Victorian IDRS participants in 2013, 124 (83%) reported heroin use in the preceding six months, with all of these participants reporting recent heroin injection. Only 3% of the sample reported recently smoking heroin (i.e. heating the drug and inhaling the vapours), while 1% reported ingesting the drug orally. No participants reported recent insufflation (i.e. snorting) of heroin. As in previous years, KE reported that most heroin users in Melbourne administered the drug intravenously, although LE KE reported a significant proportion of SE Asian people who preferred smoking as their main ROA, primarily due to the stigma associated with visible track marks within their own communities and the broader population in general. One health KE from the City of Maribyrnong reported a recent "influx of [male heroin] smokers from the Punjab region in India" accessing pharmacotherapy treatment for recreational use of the drug.

Figure 1 illustrates the median days of heroin use, from 2000 to 2013, by Victorian participants who reported use in the preceding six months. In 2013, heroin was used on a median of 72 days (range=1–180 days) in the six months before interview, the same as the median days of use reported by participants in 2012 (about three 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 1). In 2013, daily heroin use was reported by 30% of recent heroin users during the six months prior to interview.

Figure 1: Median days of heroin use in the past six months, Victoria, 2000–2013



Source: IDRS participant interviews

4.2.3. KE reports: Heroin

While the majority of KE from the health and LE sectors described heroin as part of "core business", only two KE nominated heroin as the 'most problematic drug' in 2013. No significant changes in heroin use patterns were reported. KE from the policy sector posited that according to several indicator data sources there were higher rates of heroin use in the Cities of Yarra and Maribyrnong than other Victorian local government areas (LGA), with heroin use tending to decline outwards from the City of Port Phillip. However, a few changes were observed. According to a KE from the City of Port Phillip, a significant number of "new" young people had been repeatedly sourcing sterile injecting equipment from the NSP and dabbling in heroin use in St Kilda. In the City of Maribyrnong, heroin users tended to be quite young, with an average age of 32 years reported by LE KE. KE from the Melbourne central business district (CBD) reported observing an increase in newer users with very limited histories of heroin use who had "instantly" switched from heroin to methamphetamine use, a phenomenon attributed to social network influences. In addition, KE from the City of Frankston speculated that heroin use might be "making a comeback" locally, mainly due to a perceived increase in availability and a concurrent increase in new OST enrolments. Nonetheless, this KE also reported that primary heroin users were increasingly using ice, even though heroin was (in theory) less expensive to purchase. Another KE from the same LGA reported that in relation to heroin, fewer young people were accessing NSP and that the cohort was ageing. One KE from the City of Dandenong provided anecdotal reports of rising numbers of heroin/methamphetamine polydrug presentations to the Drug Court, a trend not previously observed. It was reported that use and supply were both prevalent in the driving industry. Consistent with previous years, KE from both the health and LE sectors recommended increasing access to OST programs for heroin users across Victoria (see section 6.2.1.3 for more detail).

4.2.4. Forms of heroin used

As in previous years, in 2013 Victorian IDRS participants who reported the recent use of heroin 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 5 presents the forms of heroin used by Victorian IDRS participants from 2011 to 2013, and the forms of heroin participants used most. Among recent heroin users (n=124) in 2013, 82% reported using white/off-white rock in the preceding six months, similar to figures in 2012 and 2011. Reports of recent use of white/off-white powder have fluctuated, decreasing significantly from 44% in 2012 to 19% in 2013 ($p < 0.001$). The reported use of brown/beige powder significantly decreased between 2012 and 2013 (24% to 7%, $p < 0.001$), whereas there was a slight increase in use of brown/beige rock (29% vs. 37% respectively, $p = 0.178$) (Table 5).

For years, Victorian IDRS participants have reported that most of the available heroin in Melbourne is white/off-white rock. Consistent with this, 83% of recent heroin injectors (n=124) reported using white/off-white rock heroin most in the preceding six months. However, in 2013 there was a non-significant increase in the proportion of recent heroin injectors reporting use of brown/beige rock most often (11% vs. 5% in 2012, $p = 0.081$) (Table 5). In support of participant reports, LE KE reported that heroin seized from PWID across the North Western suburbs of Melbourne was typically in the form of white rock or powder and compressed into small quantities (e.g. 0.1 gram) for sale in balloons. A forensic KE concurred with reports that seized heroin was in crystal and powder form and was both white and brown in colour.

Table 5: Forms of heroin used in the preceding six months, Victoria, 2011–2013

	Forms used*			Form used most		
	2011 (n=122)	2012 (n=126)	2013 (n=124)	2011 (n=121)	2012 (n=125)	2013 (n=124)
White/off-white heroin (%)						
Powder	25	44	19	8	10	5
Rock	89	87	82	79	82	83
Brown/beige heroin (%)						
Powder	13	24	7	2	3	1
Rock	21	29	37	7	5	11
Other colour heroin (%)						
Powder	0	1	1	0	0	0
Rock	7	3	1	3	1	0
Homebake heroin (%)	3	1	1	--	--	--

Source: IDRS participant interviews

* Multiple responses allowed

-- No reports received

In 2013, 124 participants completed the survey questions regarding their most recent episode of heroin injection. Of these, 17 participants (14%) reported using heat to prepare their most recent injection, same as the figure in 2012. Sixteen participants provided information on the type of heroin used on this occasion: 13 (76%) reported heating white/off-white heroin and three (18%) reported heating brown/beige heroin. No reports were received regarding the use of citric acid to dissolve heroin.

4.3. Methamphetamine

Key points

- In 2013, the prevalence of recent methamphetamine use was 61% and recent injection 59%, similar to 2012. Overall, however, the median frequency of methamphetamine use increased to 15 days in the preceding six months. Eighteen per cent nominated methamphetamine as their drug of choice.
- Lifetime prevalence of speed injection significantly declined (85%), so did prevalence of recent speed use and injection (to 23% and 22%, respectively). However, frequency of use rose from a median of five to eight days in the preceding six months.
- The prevalence of recent ice use (55%) was almost the same as 2012 (59%). Ice smoking fell significantly, from 24% to 13%, the same as in 2011. However, frequency of use rose from a median of six to 13 days in the preceding six months.
- Lifetime prevalence of base injection significantly declined (15%), as did prevalence of recent use (3%), but median days of use in the preceding six months rose from two to six days.
- Twelve of 20 KE reported that methamphetamine was the 'most problematic drug' in 2013.
- Overall, KE reported increasing frequencies of methamphetamine use among a range of diverse client groups, with several reporting that methamphetamine injection was far less prevalent than methamphetamine smoking.

4.3.1. Prevalence of methamphetamine use

Several forms of methamphetamine are available in Australia: speed powder, crystal methamphetamine (ice), 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 5). Information is also collected on the use of amphetamine liquid and pharmaceutical stimulants such as dexamphetamine and methylphenidate.

According to the 2010 NDSHS, the estimated prevalence of past year methamphetamine use among the Victorian general population (aged 14 years and over) was 2.3% (Australian Institute of Health and Welfare, 2011). By contrast, in 2013 almost all Victorian IDRS participants reported lifetime use (93%) and injection (93%) of methamphetamine (any form), with 61% reporting recent use and 59% reporting recent injection. Prevalence was similar in 2012, when 67% reported recent use and 64% reported recent injection ($p = 0.279$, $p = 0.374$). There was a non-significant increase in the proportion of participants nominating methamphetamine as their primary drug of choice from 2012 to 2013 (13% vs. 18%, $p = 0.231$).

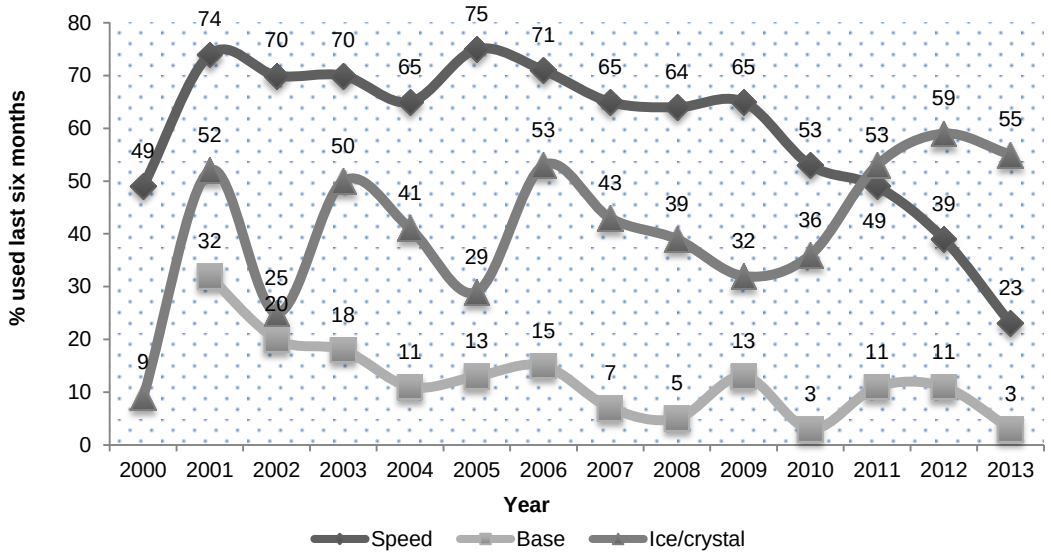
Similar to 2012, the lifetime injection of specific methamphetamine types was very common in 2013. There was a non-significant decline in the lifetime prevalence of *speed powder* injection (92% in 2012 to 85% in 2013, $p = 0.057$), whereas the lifetime prevalence of *ice* injection was the same (82% in 2012 vs. 80% in 2013, $p = 0.659$). Between 2012 and 2013, there was a significant decline in the lifetime prevalence of *base methamphetamine* injection (30% in 2012 to 15% in 2013, $p < 0.01$), while the lifetime prevalence of *amphetamine liquid* injection remained unchanged (11% in 2012 and 8% in 2013, $p = 0.375$).

The proportion of Victorian IDRS participants who reported injecting methamphetamine most often in the preceding month in 2013 was 20%, similar to 2012 when it was 17% ($p = 0.503$). Twenty per cent also reported methamphetamine as the last drug injected, similar to findings from the ANSPS. For instance, among the 463 Victorian participants surveyed for the 2012 ANSPS, 18% reported that methamphetamine was the last drug injected, consistent with the proportion in 2011 (Iversen & Maher, 2013).

4.3.2. Current patterns of methamphetamine use

The proportion of Victorian IDRS participants reporting methamphetamine use in the preceding six months from 2000 to 2013 is shown in Figure 2, by methamphetamine type. In 2013 participants most commonly reported recently using *crystal methamphetamine* or *ice* (55%), not significantly different from the proportion in 2012 (59%, $p = 0.484$). There was a significant decline in the prevalence of recent *speed* use, from 39% in 2012 to 23% in 2013 ($p < 0.01$). The prevalence of recent *base methamphetamine* use also decreased significantly, from 11% in 2012 to 3% in 2013 ($p < 0.01$) (Figure 2).

Figure 2: Proportion of participants reporting methamphetamine use in the past six months, Victoria, 2000–2013



Source: IDRS participant interviews

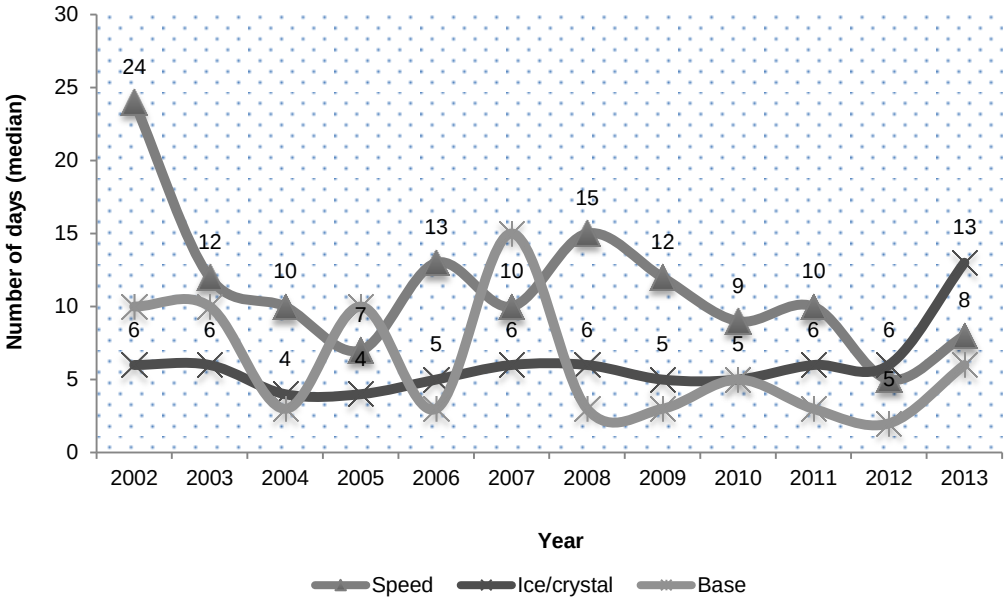
Consistent with previous years, in 2013 the most common recent methamphetamine ROA among Victorian IDRS participants was injection; 54% reported recent *ice* injection. There was a significant decline in the prevalence of recent *speed* injection, from 38% in 2012 to 22% in 2013 ($p < 0.01$). Recent injection of *base* and *pharmaceutical stimulants* was very low (3%, respectively), and no participants reported recent injection of *amphetamine liquid*.

While there was a significant increase in the proportion of participants who reported recently smoking *ice* between 2011 and 2012 (13% vs. 24%, $p < 0.05$), prevalence of recent smoking dropped back to 13% in 2013 ($p < 0.05$). This finding was contravened by some KE reports, with many from the LE and drug treatment sectors reporting that prevalence of methamphetamine smoking in the community far outweighed injection. For instance, LE KE in the City of Port Phillip speculated that up to about 80% of methamphetamine use was via inhalation, particularly among street-based sex workers and their clients. Similarly, LE KE from the City of Maribyrnong reported widespread evidence of methamphetamine inhalation, due to the number of glass pipes found during the course of police work. Nonetheless, in 2013 very few participants provided reports regarding other routes of recent administration across all distinct methamphetamine forms, similar to 2012.

Figure 3 illustrates the median days of methamphetamine use among Victorian IDRS participants who reported recent use, from 2002 to 2013, according to methamphetamine type. In 2013 recent users reported using the drug at higher frequencies than in 2012. For instance, in 2013 recent *speed* users (n=35) reported use on a median of eight days (range=1–120 days), compared with a median of five days in 2012. In 2013, recent *ice* users (n=82) reported use on a median of 13 days (range=1–180 days), compared with six days (range=1–180 days) in 2012. The few participants (n=5) who reported

recent use of *base* reported use on a median of six days (range=3–24 days) in 2013, compared with two days (range=1–50 days) in 2012. Overall, in 2013 Victorian IDRS participants who reported the recent use of any methamphetamine (n=91) used the drug on a median of 15 days (range=1–180 days) in the preceding six months, equating to two to three days use per month.

Figure 3: Median days of methamphetamine use in the past six months, Victoria, 2002–2013*



Source: IDRS participant interviews

* Data were not available for base and ice/crystal methamphetamine prior to 2002

4.3.3. KE reports: Methamphetamine

In 2013, while seven KE reported that methamphetamine was the main drug used by the populations they worked with, twelve of 20 nominated methamphetamine as the 'most problematic drug'. KE from the policy sector reported lower NSP distribution data in 2013 than 2012, suggesting an increase in methamphetamine IDU; methamphetamine injection is typically less frequent than heroin injection. NSP data were reportedly supported by 2013 pharmacotherapy census data, which for the first time show a plateau in numbers accessing OST (see Figure 19 on page 56). Moreover, this KE suggested that methamphetamine injection was more common in the outer suburbs of Melbourne than in the inner suburbs, as indicated by the ANSPS (Iversen & Maher, 2013). In support of 2013 IDRS participant reports of increasing injection frequencies, NSP KE from the City of Frankston reported that local PWID had replaced heroin with methamphetamine and were injecting it more frequently than previously. Heavier patterns of use were described as "relentless", whereby people were "up all the time" due to sleep deprivation. KE found it difficult to understand why people were injecting the drug so frequently given the deleterious effects associated with heavy and dependent use. Reports from KE in the City of Port Phillip supported this, with higher rates of use and injection eventually inducing "frenetic" behaviour whereby frequent use could not be sustained (compared with heroin). Several KE referred to the broad social demographic characteristics of users, ranging from more affluent regular psychostimulant users (RPU) to groups of young males from socially disadvantaged backgrounds of varying ethnicities. For instance, drug treatment KE reported that some methamphetamine users accessing treatment tended to be from higher socioeconomic backgrounds than previous heroin using groups. KE from Indigenous health services also reported significant increases in the prevalence and frequency of methamphetamine smoking among Koori clients in the City of Darebin, which was supported by other NSP KE who reported increases in the Cities of Yarra and Port Phillip as well. In addition, an NSP KE from the City of Maribyrnong commented that

methamphetamine users were by and large a hidden population that do not access services and suggested that Harm Reduction Victoria's (HRV) Peer Networker Program may be a useful model for reaching this group. This KE asked, "What can a [primary health] service offer a methamphetamine…smoker in terms of harm reduction and health promotion? How [can we] effectively reach this group?" With regards to intravenous use, NSP has been able to offer PWID a free syringe as a tool to engage in health promotion; a similar strategy that attracts populations of smokers to primary health services might be effective.

4.4. Cocaine

Key points

— In 2013, the prevalence of recent cocaine use was 11% and recent injection 9%, similar to 2012.

— Two per cent of participants nominated cocaine as drug of choice.

— KE reported that cocaine use was more prevalent among affluent groups of RPU than PWID.

4.4.1. Prevalence of cocaine use

In 2013, 91 Victorian IDRS participants (61%) reported lifetime use of cocaine. By contrast, 16 participants (11%) reported using cocaine in the preceding six months, similar to 2012 (9%, p = 0.591). While 62 (41%) reported lifetime cocaine injection, only 13 participants (9%) reported injecting cocaine during the preceding six months, with figures very similar to 2012 (45% lifetime and 7% recent injection). Three participants (2%) nominated cocaine as their drug of choice.

Consistent with previous years, injection was the most common recent ROA reported by 2013 Victorian IDRS participants. Among recent users, most (81%, n=13) reported injecting cocaine in the preceding six months. About one-third (31%, n=47) reported lifetime cocaine insufflation (snorting); however, very few (4%, n=6) reported recent use via this method. As in 2012, in 2013 frequency of cocaine use remained relatively low; use was reported on a median of four days (range=1–90 days) and injection was reported on a median of three days (range=1–170 days) in the previous six months.

All recent users provided information on the forms of cocaine they had used most in the past six months: of these (n=16), 69% reported using powder cocaine, 25% reported using rock cocaine and 6% reported using crack cocaine.

4.4.2. KE reports: Cocaine

In 2013, few KE reports were received regarding patterns of cocaine use and injection in Melbourne. LE KE from the City of Port Phillip reported that in the nightlife district of St Kilda, more affluent groups used the drug recreationally in nightclubs, most likely in conjunction with alcohol, ecstasy and a "bit of ice". An ED physician from a major teaching hospital in Melbourne reported an increase in "business type people" presenting with anxiety, myocardial infarction, chest pain and other cardiac complications. This KE reported that this increase had been gradual however, occurring over the past five years as opposed to the preceding six to twelve months. The most recent data available showing cocaine-related hospital admissions from 1999/2000 to 2011/12 in Victoria are presented in section 6.3.3; as in previous years, in 2011/12 cocaine-related presentations were relatively rare.

4.5. Cannabis

Key points

- In 2013, the prevalence of cannabis use among the IDRS sample was similar to 2012: lifetime use was reported by 96% and recent use was reported by 80%. Daily use was reported by 49%.
- The median frequency of use fell from 178 to 163 days in the past six months.
- Among recent users, hydroponically grown cannabis was smoked most (93%).
- During the last session of use, recent users reported smoking a median of six cones or two joints; daily users reported smoking a median of six cones or four joints. In addition, with respect to the last occasion of use, there was a significant decline in the proportion of cone smokers (53%) and a significant increase in joint smokers (20%) relative to 2012.
- In 2013, one KE nominated cannabis as the 'most problematic drug', mainly due to the low cost and high availability of hydroponic cannabis, and a perception among users of few associated harms.

4.5.1. Prevalence of cannabis use

According to the 2010 NDSHS, cannabis is the most widely used illicit drug among the Victorian general population, with prevalence of use in the past twelve months estimated at 9.4% among those aged 14 years and over (Australian Institute of Health and Welfare, 2011). Cannabis use was universal among 2013 Victorian IDRS participants, with the prevalence of lifetime and recent use remaining reasonably consistent with the prevalence in 2012. In 2013, almost the entire sample (96%) reported lifetime use (vs. 99% in 2012, $p = 0.096$), while the majority (80%) reported use in the preceding six months (vs. 85% in 2012, $p = 0.254$). Despite the high prevalence of cannabis use, only 6% nominated cannabis as their primary drug of choice in 2013.

In 2013, the IDRS sample was asked again to respond to separate questions relating to hydroponically grown cannabis, bush-grown cannabis and hashish/hashish oil. All recent users (n=120) provided responses about the cannabis types used during the past six months. Of these, 97% reported recently using hydroponically grown cannabis and 42% reported recently using bush-grown cannabis; only one participant reported the recent use of hashish/hashish oil. Regarding the form of cannabis used most during the preceding six months, 93% of reported using hydroponically grown cannabis most, while 8% reported using bush-grown cannabis most.

4.5.2. Current patterns of cannabis use

In 2013, recent cannabis users (n=120) reported a median frequency of 163 days (range=1–180 days) use in the preceding six months, lower than in 2012 (median=178 days). Almost half (49%) of recent users reported daily cannabis use, close to the proportions in 2012 (50%) and 2011 (52%).

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 (range=1–100 cones), while 20% (n=24) reported smoking a median of two joints (range=1–10 joints). Between 2012 and 2013, the proportion of recent cannabis users who reported smoking cones on their last occasion of use significantly decreased (77% to 53%, $p < 0.001$), while the proportion who reported smoking joints significantly increased (10% to 20%, $p < 0.05$). Among daily cannabis users (n=59), 58% reported smoking a median of six cones (range=1–100 cones) during their most recent session of use. Daily cannabis users who smoked joints (n=5) reported smoking a median of four joints (range=4–10 joints).

4.5.3. KE reports: Cannabis

In 2013, four of 20 KE reported that cannabis was the main drug used by the populations they worked with, although only one KE nominated cannabis as the 'most problematic drug'. This LE KE reported

that for young people, cannabis was a “gateway to dependence on other drugs”, particularly given its low cost, high availability and a perception among users of few related harms. A high prevalence of use was reported in people aged about 40 years and over. According to this KE, more drug education was needed in schools because of the “harmful effects associated with hydroponic cannabis use” and the possible development of serious mental health problems among younger users of the drug. KE from the health sector continued to report a high and stable prevalence of use in the community, with one GP/OST prescriber KE referring to it as “undercurrent” or “noise”. This KE reported an increase in smoking-related problems (whether from cannabis and/or tobacco use) among patients aged 40 years and over who were treated for recurrent chest infections and pneumonia, with chronic obstructive pulmonary disease seen among some of this group as well.

4.6. OST medications

Key points

- In 2013, the prevalence of recent methadone use was 47%, similar to 2012. The median frequency of use was stable at 180 days.
- No reports of recent Physeptone® use were received from participants.
- The prevalence of lifetime non-prescribed methadone use significantly declined (37%); so did the prevalence of recent use (12%). Consistent with previous years, the median frequency of use was low.
- Between 2012 and 2013, there was a non-significant decline in lifetime buprenorphine use (59%) and a significant decline in recent use (12%). Among recent users, the median frequency of use increased. The prevalence of lifetime non-prescribed buprenorphine use significantly declined (36%), as did the prevalence of recent use (9%), but among recent users, frequency of use increased.
- The prevalence of recent buprenorphine-naloxone tablet use significantly declined between 2012 and 2013 (19%). Ten per cent of participants reported recent prescribed use and recent non-prescribed use, respectively.
- There was a significant increase in the prevalence of lifetime buprenorphine-naloxone film use (31%), but recent use was similar to 2012 (21%). The proportions of participants reporting lifetime and recent prescribed (12%) and non-prescribed (11%) use were similar.
- KE reported that pharmacotherapy was still in high demand, despite a plateau in the number of people dispensed OST in Victoria. Difficulty sourcing prescribers was reported; incentives and up-skilling of new GPs was recommended to increase the pool of prescribers.
- GP/OST prescriber KE also recommended increasing access to pharmacotherapy via full subsidisation of the OST system, even if only for vulnerable subgroups in the interim.

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, 2013 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 Victorian sample, 83% (n=124) reported lifetime use of methadone (*prescribed* and *non-prescribed*), very similar to the proportion in 2012 (87%, p = 0.332). Forty-seven per cent (n=70) of participants reported recent use, not significantly different from 2012 (55%, p = 0.166). Recent methadone users reported a median of 180 days (range=1–180 days) use in the previous six months, equating to a median of daily use.

In 2013, 71% (n=107) reported lifetime use of *prescribed* methadone, with 41% (n=62) reporting use on a median of 180 days (range=7–180 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. Between 2012 and 2013, there was a significant

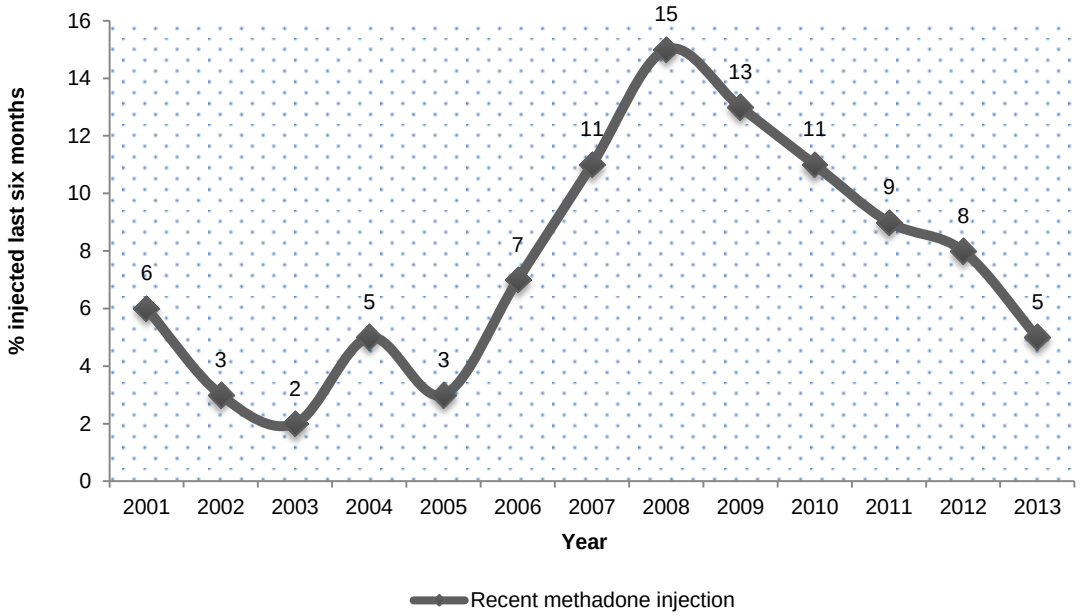
decrease in the prevalence of lifetime illicit use (51% to 37%, $p < 0.05$) and a non-significant decline in the prevalence of recent illicit use (20% to 12%, $p = 0.059$). Each year since 2010, the reported median days of non-prescribed methadone use has been three days, with this trend continuing in 2013 (median=3 days, range 1–20 days).

Use of both prescription and non-prescription Physeptone® remains uncommon among Victorian IDRS participants. In 2013, only 7% (n=10) reported lifetime *prescribed* use, with 6% (n=9) reporting lifetime illicit use. No reports of recent Physeptone® use (prescribed and non-prescribed) were received in 2013.

Between 2012 and 2013, lifetime prevalence of prescribed and non-prescribed methadone injection significantly declined, from 34% to 21% ($p < 0.05$). Figure 4 shows the prevalence of recent methadone injection from 2001 to 2013, with a declining trend evident since 2008. In 2013, the proportion of participants reporting recent methadone injection was similar to the proportion in 2012 (8% vs. 5%, $p = 0.291$). Among these seven participants, the median days of injection was 48 (range=1–120 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 two participants provided responses (multiple responses were allowed). The main reasons reported were self-treatment and substitution for heroin and other opioids.

Figure 4: Proportion of participants reporting any methadone injection in the past six months, Victoria, 2001–2013



Source: IDRS participant interviews

4.6.2. Buprenorphine

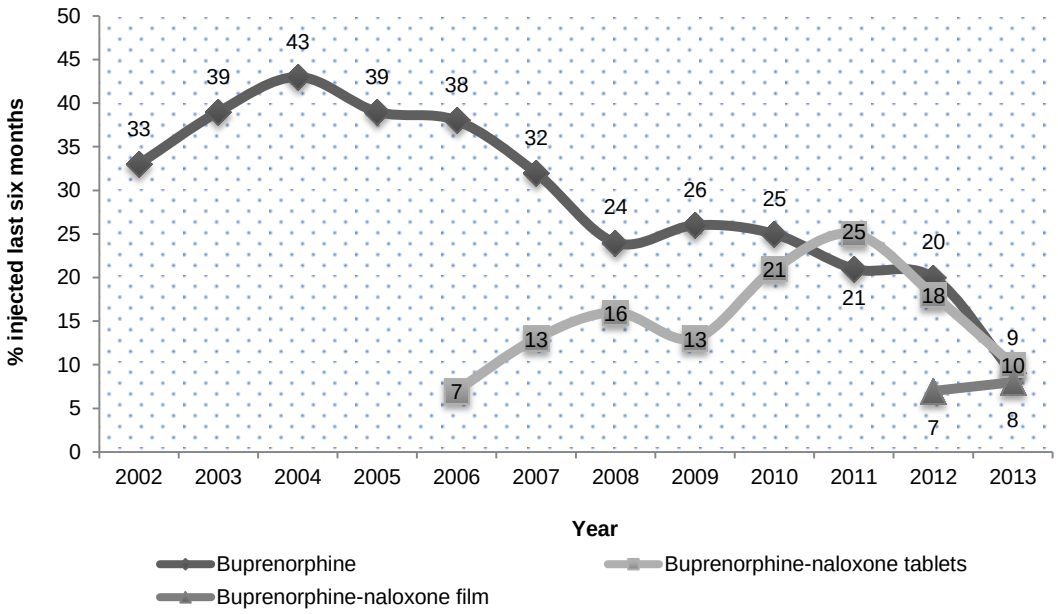
Between 2012 and 2013, lifetime prevalence of buprenorphine use (Subutex®, *prescribed* and *non-prescribed*) declined (69% to 59%, $p = 0.071$), and so did the prevalence of recent use (22% to 12%, $p < 0.05$). However, the median days of use increased substantially among recent users (n=18), from 10 days in 2012 to 60 days in 2013. As in previous years, the 2013 sample was asked to provide responses to separate questions about the use of prescription and non-prescription buprenorphine.

In 2013 the prevalence of lifetime and recent *prescribed* buprenorphine use remained consistent with 2012; 43% reported lifetime use (vs. 46% in 2012) and 3% reported recent use (that same as in 2012). Participants who were prescribed buprenorphine (n=5) used the drug on a median of 150 days

(range=60–180 days) during the preceding six months. Lifetime and recent prevalence of *non-prescribed* buprenorphine use significantly declined between 2012 and 2013 (lifetime use: 53% vs. 36%, $p < 0.01$; recent use: 19% vs. 9%, $p < 0.05$). Among the 13 participants who reported recent illicit use, the median frequency was 36 days (range=1–180 days) in the past six months, compared with a median of 10 days in 2012. Participants who reported recent non-prescribed use were asked to nominate the main reasons for their last occasion of illicit use. Multiple responses were allowed. Six participants provided responses, with the main reasons being substitution for heroin and other opioids (n=4), self-treatment (n=3) and intoxication (n=2). The decline over time in recent *prescribed* and *non-prescribed* buprenorphine use and injection among consecutive Victorian IDRS samples reflects the introduction of the combination product buprenorphine-naloxone (i.e. Suboxone®) in 2005 and the concomitant gradual decline in the availability of buprenorphine to pharmacotherapy consumers (King et al., 2011; Lintzeris et al., 2006).

Lifetime injection of buprenorphine (prescribed or non-prescribed) decreased from 53% in 2012 to 41% in 2013 ($p < 0.05$). Figure 5 shows the prevalence of recent buprenorphine and buprenorphine-naloxone tablet and film injection (see section 4.6.3) from 2002 to 2013. Between 2012 and 2013 the prevalence of recent buprenorphine injection significantly decreased as well (20% vs. 9%, $p < 0.01$) (Figure 5).

Figure 5: Proportion of participants reporting any buprenorphine and buprenorphine-naloxone tablet and film injection in the past six months, Victoria, 2002–2013



Source: IDRS participant interviews

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

4.6.3. Buprenorphine-naloxone

Prior to July 2005, the mono product Subutex® was the only buprenorphine preparation available in Australia for the treatment of opioid dependence. In July 2005 a second sublingual combination product, buprenorphine-naloxone (Suboxone®), was approved by the Therapeutic Goods Administration (TGA), becoming available on the Pharmaceutical Benefits Scheme (PBS) by April 2006 (Lintzeris et al., 2006; Minister for Health and Ageing, 2006). The combination product buprenorphine-naloxone was developed to limit the abuse liability of the mono buprenorphine product 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 in

September 2011 to improve consumers' dosing experience (Dunlop & Jordens, 2011). The greatest advantage of buprenorphine-naloxone for some pharmacotherapy consumers 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

In 2013, almost two-thirds (63%) of the Victorian IDRS sample reported lifetime use of buprenorphine-naloxone tablets (*prescribed* and *non-prescribed*), similar to the proportion in 2012 (66%, $p = 0.587$). Between 2012 and 2013, however, there was a significant decline in the prevalence of recent tablet use from 31% to 19% ($p < 0.05$), with recent users (n=28) reporting a median frequency of 64 days (range=1–180 days) use in the preceding six months. As noted previously, the successive decrease in the prevalence of recent buprenorphine-naloxone tablet use since 2011 is probably related to the incremental increase in the number of PWID accessing the Suboxone® sublingual film preparation, as well as the decline in availability of the tablet formulation to pharmacotherapy consumers. The IDRS will continue monitoring this trend in 2014.

In 2013, the lifetime prevalence of *prescribed* buprenorphine-naloxone tablet use was higher than the lifetime prevalence of *non-prescribed* illicit tablet use (45% vs. 33%, $p < 0.05$). Recent use of *prescribed* and *non-prescribed* use was at the same prevalence (10%, respectively), although *prescribed* use occurred on a median of 150 days (range=1–180 days) and *non-prescribed* use occurred on a median of 30 days (range=1–180 days).

The lifetime prevalence of buprenorphine-naloxone tablet injection (*prescribed* and *non-prescribed*) was 32% in 2013, similar to prevalence in 2012 (39%, $p = 0.205$). In 2013, 10% of participants reported injection in the preceding six months, as shown in Figure 5, significantly declining from 18% in 2012 ($p < 0.05$). Recent buprenorphine-naloxone tablet injectors (n=15) reported doing so on a median of 72 days (range=1–180 days) in the preceding six months.

Participants (n=15) 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. Four participants provided responses; the main reasons cited were self-treatment (n=2) and substitution for heroin and other opioids (n=2).

4.6.3.2. Buprenorphine-naloxone film

In 2013, the lifetime prevalence of buprenorphine-naloxone film use (*prescribed* and *non-prescribed*) was 31%, a significant increase from the 2012 figure (21%, $p < 0.05$). Similar to 2012, when 19% reported recent use of the film preparation, 21% reported recent use in 2013 ($p = 0.665$). Among recent users (n=31), the median days of film use was 19 days (range=1–180 days) in the past six months.

Consistent with 2012, in 2013 the proportions of participants reporting lifetime and recent prescribed and non-prescribed use were similar. For instance, 16% reported lifetime use of *prescribed* buprenorphine-naloxone film, while 19% reported lifetime use of *non-prescribed* film. Twelve per cent reported recent *prescribed* use and 11% reported *non-prescribed* use. Recent users of *prescribed* film reported a median frequency of 66 days (range=1–180 days) use in the preceding six months, while recent users of *non-prescribed* film reported a median frequency of 10 days (range=1–50 days) use during the same period.

Lifetime injection of buprenorphine-naloxone film was reported by 13% (n=19) of the 2013 Victorian IDRS sample, similar to 2012 (8%, $p = 0.158$). As shown in Figure 5, prevalence of recent injection in 2013 was also similar to 2012, with 8% (n=12) reporting injection on a median of 16 days (range=1–180 days) in the preceding six months.

Only four of 17 participants who reported recent *non-prescribed* buprenorphine-naloxone film use nominated their main reason for their last occasion of illicit use. Multiple responses were allowed. The most common reasons cited by participants were substitution for heroin and other opioids (n=3), self-treatment (n=2) and intoxication (n=2).

4.6.4. KE reports: OST medication

In 2013, no KE nominated OST medications as the 'most problematic drug' and few commented on patterns of OST medication use. However, as mentioned in section 4.3.3, for the first time since the Victorian OST program was implemented, there was a plateau in the number of clients who were dispensed pharmacotherapy. Despite this, KE still found it difficult to source OST prescribers for new enrolments. For instance, one NSP KE from the City of Yarra reported "constant demand" among clients for pharmacotherapy. For this KE, sourcing pharmacies that dispensed OST was reportedly not too difficult; however, the opposite was true when it came to sourcing prescribers who were prepared to take on new enrolments. Each of the GP/OST prescriber KE interviewed for the 2013 IDRS recommended increasing patient access to OST via full government subsidisation of the pharmacotherapy system. A high number of new OST enrolments were reported by one of these in the City of Frankston. However, both reported that the current model provided no incentives for newly trained GPs to take on new OST enrolments as part of routine practice, and very few incentives for current GP/OST prescribers to do much more than prescribe. Given the complexity of the population involved and limited resource allocation, each recommended developing career pathways and incentives for new GP training programs and up-skilling. Even if only for special populations (such as pregnant women, prisoners, ex-prisoners, people living with HIV, and newly enrolled patients), an OST program fully subsidised by state and federal governments might increase GP capacity to take on new clients and reduce these subgroups' vulnerability to overdose. Further, several health KE reported that dispensing fees were too burdensome for most of this already impoverished population, particularly taking current Melbourne rental market prices into consideration. One Indigenous health KE from the City of Darebin reported difficulty sourcing residential withdrawal treatment options for clients prescribed methadone who also smoked ice, and posited that treatment-seekers for this particular polydrug use pattern were only the "tip of the iceberg" in relation to overall prevalence of use. NSP KE from the City of Frankston reported a high prevalence of OST prescription among their client group, these days most commonly the buprenorphine-naloxone (Suboxone®) film preparation. Although this KE proposed an overall local decline in Suboxone® IDU, he reported that many clients who injected the prescribed film were part of the same high frequency methamphetamine-using group discussed in section 4.3.3. LE KE from the City of Maribyrnong recommended vast increases in OST programs in the outer Western suburbs of Melbourne, retaining current treatment programs in Footscray while increasing services in the Cities of Brimbank and Melton. An NSP KE from the same LGA also recommended easier access to OST (particularly as a strategy for potentially reducing the prevalence of benzodiazepine use among PWID) across the board and increasing access to the Minimal Supervised Dosing Regime (MSDR) for people who were stabilised on pharmacotherapy in particular.

4.7. Other opioids

Key points

- Between 2012 and 2013 prevalence of lifetime morphine use (72%) significantly declined, whereas recent use (21%) did not change. Sixty-nine per cent of recent users reported using MS Contin® most, 31% reported using Kapanol® most.
- Over the past 10 years there has been an overall trend of declining morphine use among Victorian IDRS participants. The median frequency of use in 2013 was very low.
- Nineteen per cent reported recent morphine injection, on a median of two days in the past six months.
- The prevalence of lifetime oxycodone use (62%) significantly declined, yet there was no significant change in recent use (25%). Eighty-seven per cent of recent users reported using OxyContin® most, while 11% reported using Endone® most. The median frequency was 12 days use in the past six months.
- Prevalence of prescribed use (3%) was lower than non-prescribed use (23%). The prevalence of recent oxycodone injection (22%) did not change and occurred on a median of six days in the past six months.
- Lifetime and recent use of fentanyl was very low at 5% and 1% respectively. Median frequency of use was three days in the past six months.
- The extra-medical use of OTC opioids was also very low, with 7% reporting lifetime use and 3% reporting recent use. Median frequency was five days use in the past six months.
- Lifetime and recent extra-medical opioid use (other than those listed above) significantly declined between 2012 and 2013; 29% reported lifetime use and 7% reported recent use.
- While no KE nominated pharmaceutical opioids as the 'most problematic drug', paramedic KE reported that oxycodone was the most problematic of all the pharmaceutical opioids. Changes to the formulary were recommended if ongoing rises in intravenous use were observed.

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 2013 Victorian IDRS sample (72%, n=108), despite a significant decline in prevalence from 2012 (83%, $p < 0.05$). In 2013, the prevalence of recent morphine use was 21%, similar to 2012 (29%, $p = 0.110$). The median frequency of use in the past six months was two days (range=1–180 days). All recent users (n=32) provided information on the brand of morphine used most often in the past six months: 69% reported using MS Contin® most, while 31% reported using Kapanol® most. While there has been no statistically significant change in the prevalence of recent morphine use among Victorian IDRS participants over the past 10 years, there has been an overall trend of declining use (Cogger, Dietze, & Lloyd, 2013; Kirwan, Dietze, & Lloyd, 2012; Reddel, Horyniak, Dietze, & McElwee, 2011).

As with other pharmaceutical opioids, in 2013 participants were asked separate questions distinguishing between prescribed and non-prescribed morphine use. With regards to *prescribed* morphine, in 2013 19% (n=29) reported lifetime use. One per cent reported recent prescribed use, at a median frequency of 102 days (range=24–180 days) in the past six months. By contrast, lifetime use of *non-prescribed* or illicitly sourced morphine was reported by 63% of participants, a significant decline from 2012 (77%, $p < 0.01$); recent illicit use did not significantly change (27% in 2012 vs. 20% in 2013, $p = 0.153$). In 2013, recent non-prescribed users (n=30) reported a median frequency of two days (range=1–156 days) use in the preceding six months.

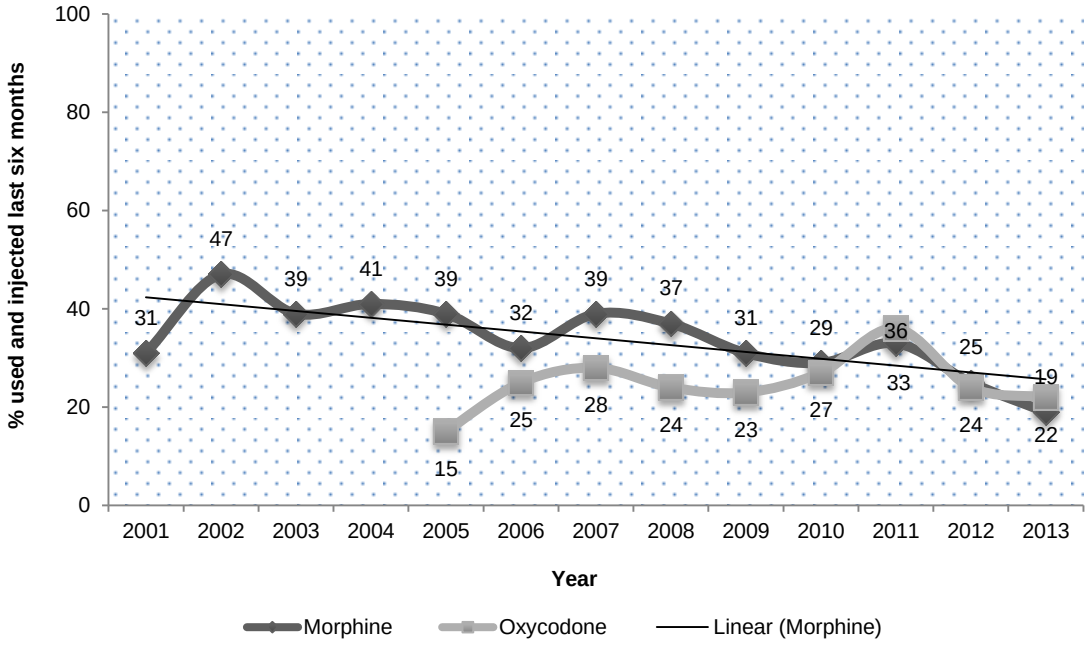
Between 2012 and 2013, lifetime prevalence of any pharmaceutical morphine injection declined significantly from 79% to 67% ($p < 0.05$). Figure 6 shows the prevalence of recent morphine injection among Victorian IDRS participants, from 2001 to 2013. As in previous years, in 2013 injection was the most commonly reported route of recent morphine administration among recent users, although there is an overall declining trend. Nineteen per cent (n=28) reported any recent morphine injection in 2013,

compared with 25% in 2012 (p = 0.210) (Figure 6). Among these participants, injection occurred on a median of two days (range=1–156 days) in the preceding six months.

Consistent with 2012, reports of lifetime *non-prescribed* morphine injection were significantly more common than reports of lifetime *prescribed* morphine injection in 2013 (62% vs. 15%, p < 0.001). Recent injection of *non-prescribed* morphine was also significantly more common than *prescribed* morphine injection (19% vs. 1%, p < 0.001). In 2013, illicit morphine was reportedly injected on a median of two days (range=1–156 days), while prescribed morphine was injected on a median of 24 days (no range).

Participants who reported recent *non-prescribed* morphine use were also asked to nominate their main reason for their last occasion of illicit use. Multiple responses were allowed. In 2013, seven of 30 participants provided comments. The most common reasons cited were intoxication (n=4), substitution for heroin and other opioids (n=4), and self-treatment (n=2).

Figure 6: Proportion of participants reporting any morphine and oxycodone* injection in the past six months, Victoria, 2001–2013



Source: IDRS participant interviews

*Data were not available for oxycodone injection prior to 2005

4.7.2. Oxycodone

In 2013, lifetime oxycodone use (prescribed and non-prescribed) was reported by 62% (n=93) of Victorian IDRS participants, declining significantly from 77% in 2012 (p < 0.01). Twenty-five per cent (n=38) reported recent use, not significantly different from 2012 (29%, p = 0.435). The median frequency of use was 12 days (range=1–180 days) in the past six months. All recent users (n=38) provided information on the brand of oxycodone used most in the preceding six months: 87% reported using Oxy Contin®, while 11% reported using Endone®, 3% reported using an unspecified brand.

In 2013 Victorian IDRS participants were asked separate questions about the use of prescribed and non-prescribed oxycodone, with patterns of use similar to patterns of morphine use. Twelve per cent (n=18) reported lifetime *prescribed* oxycodone use. Three per cent (n=5) reported recent prescribed use, at a median frequency of 96 days (range=7–180 days) in the preceding six months. By comparison, lifetime illicit or *non-prescribed* oxycodone use was reported by 60% of participants in

2013, a significant decline from 72% in 2012 ($p < 0.05$). Prevalence of recent illicit oxycodone use was similar from 2012 to 2013 (26% vs. 23%, $p = 0.546$). *Prescribed* use occurred on a median of 12 days (range=1–180 days) in the previous six months.

Between 2012 and 2013, lifetime prevalence of any oxycodone injection did not significantly change (66% vs. 57%, $p = 0.109$). Among recent users (n=38), injection was the most commonly reported ROA. As shown in Figure 6, in 2013 prevalence of recent oxycodone injection was very similar to 2012 (22% vs. 24%, $p = 0.681$). Participants who recently injected (n=33) reported doing so on a median of six days (range=1–180 days), about once per month, in the past six months.

As with morphine, in 2013 reports of lifetime *non-prescribed* oxycodone injection were significantly more common than reports of lifetime *prescribed* injection (57% vs. 8%, $p < 0.001$). Similarly, recent injection of *non-prescribed* oxycodone was significantly more common than *prescribed* injection (21% vs. 2%, $p < 0.001$). However, *non-prescribed* oxycodone was injected at a median frequency of six days (range=1–180 days) in the past six months, while *prescribed* oxycodone was injected at a median frequency of 96 days (range=10–180 days).

Participants who reported recent *non-prescribed* oxycodone use were asked to provide reasons for their most recent occasion of illicit use. Multiple responses were allowed. Eleven of 35 participants provided comments in 2013; the most common reasons cited were substitution for heroin and other opioids (n=6) and intoxication (n=4).

4.7.3. Fentanyl

For the first time in 2013, IDRS participants were asked about their history of fentanyl use; prevalence of use was very low. Five per cent of the 2013 sample reported lifetime use and injection, respectively; the median days of use in the past six months was one. One per cent reported injecting the drug on a median of three days (range=2–3 days) in the preceding six months.

4.7.4. Over the counter (OTC) codeine

In 2013, the lifetime prevalence of extra-medical OTC codeine use was 7% (n=10) and recent extra-medical use was reported by 3% (n=4). Participants who reported recent use of these drugs reported doing so on a median of five days (range=1–48 days) in the preceding six months. As in 2012, very few participants reported OTC codeine injection (see Table 3).

4.7.5. Other opioids (not elsewhere classified)

The lifetime prevalence of extra-medical opioid (other than those listed above) use was 29% in 2013, decreasing significantly from 51% in 2012 ($p < 0.001$). Seven per cent of participants reported use in the preceding six months, also a significant decrease from 2012 (21%, $p < 0.001$). All recent users (n=11) reported oral ingestion, on a median of seven days (range=1–180 days) in the past six months. There were no reports of recent injection. Among recent users, prescribed use was more common than non-prescribed use (55% vs. 45%) and Panadeine Forte® (n=8) was the most common brand used.

4.7.6. KE reports: Other opioids

In 2013, no KE reported that pharmaceutical opioids were the 'most problematic drugs' at the time of interview, with the exception of one paramedic who reported that, of all the pharmaceutical opioids, oxycodone was the most problematic with regards to off-label use and administration. Despite this, he reported a slow but steady increase over the past two years in the number of previous PWID currently using pharmaceutical opioids via on-label routes of administration. For instance, in the course of paramedic work, NFOD cases in which oxycodone had been ingested orally and/or on-label administration of fentanyl patches had been observed. A few doctors reportedly prescribed fentanyl in relative isolation and use had been linked to property crimes in and around aged care facilities and

nursing homes. However, compared with the prevalence of oxycodone use, the numbers using fentanyl were reportedly very small. This KE recommended considering changing the oxycodone formulary to reduce vein damage and overdose if continuing rises in the prevalence of intravenous use were observed. An OST GP reported that while the trend towards polydrug use was increasing, the "expected tsunami of prescription opioid use [had] not eventuated". However, one policy KE reported higher rates of recent pharmaceutical opioid use in regional areas such as the La Trobe Valley, as reflected in data from Turning Point Alcohol and Drug Centre's Ambo Project (Lloyd, 2013). LE KE from the City of Maribyrnong reported recently observing an increase in street-based prescription opioid "trafficking", particularly involving OxyContin® and Tramadol®.

4.8. Benzodiazepines

Key points

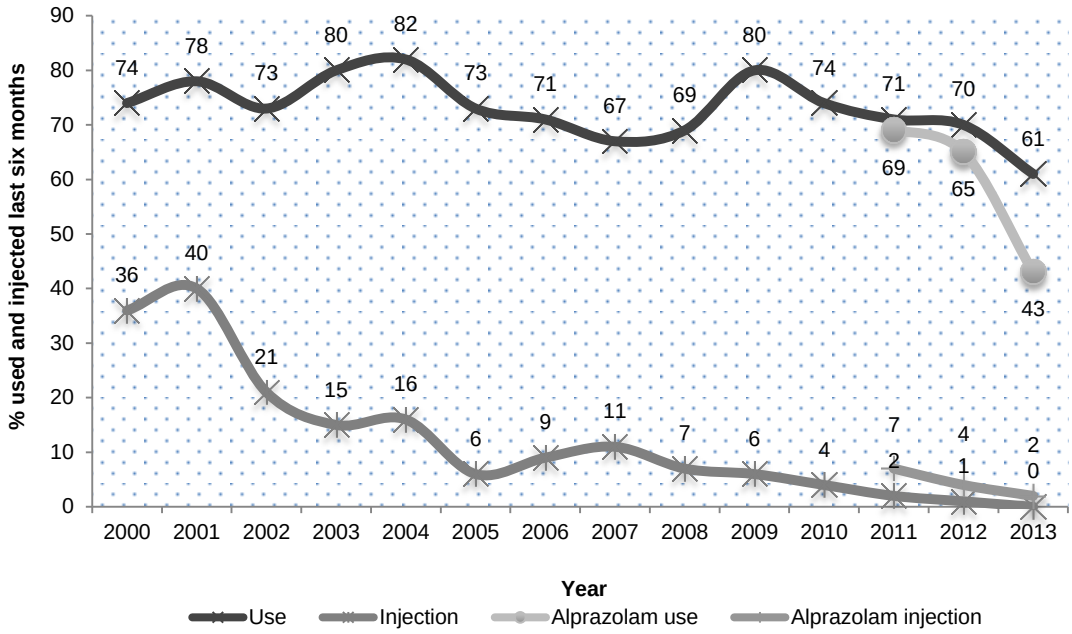
- In 2013, prevalence of lifetime benzodiazepine use (other than alprazolam) (84%) significantly decreased from 2012. There was no significant change in recent use (61%). Similar proportions reported prescribed and non-prescribed use; there were no reports of recent benzodiazepine injection.
- Prevalence of lifetime alprazolam use (78%) decreased significantly between 2013 and 2012, as did recent use (43%). The median frequency of use was 12 days in the past six months. Prevalence of non-prescribed lifetime and recent use was significantly higher (but less frequent) than prescribed use.
- Four of 20 KE reported that benzodiazepines were the 'most problematic drugs' at the time of interview, mainly due to the risk of aspiration and NFOD among people who used concurrent CNS depressants.
- Alprazolam is being rescheduled from 1 February 2014, causing anxiety among some subgroups of PWID.

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 relating to the use of benzodiazepines other than alprazolam. In this section, patterns of general benzodiazepine use are addressed first, followed by patterns of alprazolam use, which are addressed in section 4.8.2.

Between 2012 and 2013, lifetime use of benzodiazepines other than alprazolam (*prescribed* and *non-prescribed*) declined significantly from 96% to 84% ($p < 0.001$). Although recent use also declined (from 70% in 2012 to 61% in 2013), the difference was not significant ($p = 0.101$). In 2013, recent users (n=91) reported using at a median frequency of 48 days (range=1–180 days), translating to about twice weekly in the preceding six months. Figure 7 shows that the proportions of Victorian IDRS participants reporting recent benzodiazepine use from 2000 to 2013 have remained reasonably stable. However, in 2013, for the first time in the IDRS, there were no reports of recent benzodiazepine (other than alprazolam) injection. The reduction over time in benzodiazepine injection reflects the withdrawal of temazepam gel capsule preparations from the market in 2004 (Breen, Degenhardt, Bruno, Roxburgh, & Jenkinson, 2004; Dobbin, 2002; Wilce, 2004) and subsequent awareness among most current PWID regarding the harms associated with injection.

Figure 7: Proportion of participants reporting any* benzodiazepine use and injection in the past six months, Victoria, 2000–2013



Source: IDRS participant interviews

* 'Any' denotes the prevalence of both prescribed and non-prescribed use and injection. 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.

In 2013, similar proportions of Victorian IDRS participants reported lifetime and recent use of *prescribed* and *non-prescribed* benzodiazepines (lifetime: 65% vs. 61%, $p = 0.473$; recent 39% vs. 40%, $p = 0.859$). However, between 2012 and 2013, there was a significant decline in the prevalence of lifetime prescribed use (81% to 65%, $p < 0.01$) and lifetime non-prescribed use (77% to 61%, $p < 0.01$). Recent prescribed and non-prescribed use also declined (from 47% and 48% in 2012, to 39% and 40% in 2013, respectively), but these differences were not statistically significant. *Prescribed* users reported a median frequency of 72 days (range=3–180 days) use in the past six months, while *non-prescribed* users reported a median of seven days (range=1–180 days) use. Among recent users (n=91), 70% reported using Valium® most often and 13% reported using Serapax®.

4.8.2. Alprazolam

Prevalence of lifetime alprazolam use (prescribed and non-prescribed) declined significantly from 91% in 2012 to 78% in 2013 ($p < 0.01$). Recent use declined as well, from 65% in 2012 to 43% in 2013 ($p < 0.001$), shown in Figure 7. The decline in alprazolam use among Victorian IDRS participants between 2012 and 2013 may have been related to the upcoming rescheduling of alprazolam from a Schedule 4 to Schedule 8 poison in February 2014 (Victorian Department of Health, 2013a). In 2013, recent users (n=65) reported a median frequency of 12 days (range=1–180 days) use in the preceding six months. Two per cent reported alprazolam injection in the preceding six months, on a median of six days (range=1–30 days). Unlike other benzodiazepines, in 2013 lifetime use of *non-prescribed* alprazolam was significantly higher than lifetime use of *prescribed* alprazolam (75% vs. 23%, $p < 0.001$); recent *non-prescribed* use was also higher than *prescribed* use (41% vs. 6%, $p < 0.001$). Similar to 2012, in 2013 users of *prescribed* alprazolam reported daily use (median=180, range 45–180 days) in the past six months, whereas *non-prescribed* users reported a median of 11 days (range=1–180 days) use.

4.8.3. KE reports: benzodiazepines

In 2013, four of 20 KE reported that benzodiazepines were the 'most problematic drugs' at the time of interview, particularly when used concurrently with CNS depressants such as alcohol, heroin and other opioids. According to each paramedic KE, the risk of aspiration is greatest when multiple CNS depressants are on board, with benzodiazepines increasing the complications of every other drug ingested. For instance, one Mobile Drug Safety Worker KE from the City of Yarra described difficulties in managing street-based heroin NFOD when benzodiazepines had also been consumed. It was standard practice for this service to respond at the street level to one to two serious heroin overdoses per month involving benzodiazepines. Another NSP KE from the City of Maribyrnong also reported difficulties with NFOD management when alprazolam (Xanax®) was ingested and expressed concerns regarding disinhibited behaviour induced by high frequency benzodiazepine use. For instance, this KE reported greater levels of criminal involvement, amnesia, physical injuries, risky sexual activity, and vulnerability to sexual and other forms of assault among this group. He posited that some PWID initially began using alprazolam as a way to manage their tolerance to heroin, yet it "eventually…becomes part of their habit". A drug outreach lawyer KE from the City of Port Phillip concurred that the amnetic effect of benzodiazepines (particularly in conjunction with methamphetamine use) was concerning, particularly in terms of representing this particular population of drug users in court. Three KE who work directly with populations of PWID in which alprazolam use is prevalent mentioned the upcoming rescheduling of alprazolam in 2014. From 1 February 2014, alprazolam will be rescheduled to a Schedule 8 poison, meaning that prescribers will need to apply for permits to prescribe (for more information, see Victorian Department of Health, 2013a). One KE from the City of Port Phillip who reported a high demand for the drug in the community asked, "Demand won't go away, so what's next?" In this context, many GPs were responding to demand. She reported that PWID who were prescribed alprazolam for mental health issues were "anxious about the changes", with those who had a stake in the market (e.g. via doctor shopping or on-selling) described as being "most anxious". At the time of interview, however, many GPs had reportedly already stopped prescribing alprazolam to patients. Several KE reported increases in the street price of alprazolam: three 2 mg tablets used to be sold for $10, whereas prices had increased to between $5 and $10 per 2 mg tablet. Another KE from the City of Maribyrnong suggested that while the rescheduling may have a short-term benefit, in the long term PWID may move to higher levels of alcohol consumption, online benzodiazepine purchasing and increased use of other benzodiazepine types. All remarked on the possible unintended consequences of this policy change, with one positing that lorazepam (Ativan®) might become the new "alprazolam of choice". A paramedic KE with years of experience finished by commenting that despite the issues associated with benzodiazepine use, prescription of these drugs shouldn't be denied given there are populations who need them with respect to daily functioning and life management.

4.9. Other drugs

Key points

- Prevalence of lifetime quetiapine use (59%) significantly declined between 2013 and 2012; there was no significant change in recent use (29%), despite a small decline. Median frequency of use was 28 days. Non-prescribed use was infrequent.
- Prevalence of lifetime pharmaceutical stimulant use (27%) and injection (14%) significantly decreased, as did prevalence of recent use (5%). Few (3%) reported recent injection.
- The prevalence of recent ecstasy use significantly declined (4%). One per cent reported recent injection.
- Three per cent reported recent hallucinogen use. There were no reports of recent injection.
- No respondents reported recent inhalant use.
- One per cent reported recent steroid use.
- The prevalence of recent alcohol use (55%) significantly declined from 2012. Median frequency of use was 48 days (two days per week) in the past six months.
- Prevalence of recent tobacco use (94%) was consistent with previous years.
- There were no reports of lifetime NPS use. Five per cent reported recent use of synthetic cannabinoids.

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 2013 participants responded to questions distinguishing between prescribed and non-prescribed use.

Between 2012 and 2013, reports of lifetime (prescribed and non-prescribed) quetiapine use significantly declined, from 70% to 59% ($p < 0.05$). The prevalence of recent use was 29% in 2013, not significantly different from the 37% recorded in 2012 ($p = 0.141$). Recent use (n=43) occurred on a median of 28 days (range=1–180 days) in the preceding six months. Consistent with 2012, in 2013 lifetime quetiapine injection was reported by 1% of the sample. No reports of recent injection were received. Oral ingestion was the only ROA reported by participants.

As with the benzodiazepine alprazolam, in 2013 lifetime use of *non-prescribed* quetiapine was significantly higher than lifetime use of *prescribed* quetiapine (38% vs. 26%, $p < 0.05$), but there was no difference in recent non-prescribed and prescribed use (17% vs. 14%, $p = 0.473$). Participants who were *prescribed* quetiapine (n=21) reported daily use (median=180 days, range=2–180 days), while *non-prescribed* users (n=25) reported use on a median of four days (range=1–180 days) in the past six months.

4.9.2. Pharmaceutical stimulants

In 2013, there was a significant decline in the lifetime prevalence of pharmaceutical stimulant use (e.g. dexamphetamine and methylphenidate, prescribed and non-prescribed) to 27%, from 42% in 2012 ($p < 0.01$). Fourteen per cent reported lifetime injection, also declining significantly from 2012 (27%, $p < 0.01$). Few reported recent injection (3%). The prevalence of recent use declined significantly between 2012 and 2013, from 13% to 5% ($p < 0.05$). Recent users (n=7) reported a median frequency of six days (range=1–180 days) use in the preceding six months.

As with most other pharmaceutical preparations, in 2013 lifetime use of illicitly sourced (*non-prescribed*) pharmaceutical stimulants was significantly higher than lifetime *prescribed* use (23% vs. 5%, $p < 0.001$). The difference between recent illicit use and recent prescribed use was not significant (4% vs. 1%, $p = 0.096$). *Prescribed* users reported use on a median of 175 days (range=170–180 days) in the past six months, while *non-prescribed* users reported use on a median of four days (range=1–12 days).

4.9.3. Ecstasy

Similar to previous years, 65% (n=97) of the 2013 Victorian IDRS sample reported lifetime ecstasy (3,4-methylenedioxymethamphetamine or MDMA) use. However, only 4% reported use in the past six months, a significant decrease from 2012 when 13% reported recent use ($p < 0.01$). Over time, the prevalence of recent ecstasy use has declined considerably among IDRS participants, from a peak of 39% in 2001 to a low of 4% in 2013. In 2013, the median frequency was two days (range=1–6 days) use in the past six months. Reported lifetime injection of ecstasy also significantly declined, from 27% in 2012 to 17% in 2013 ($p < 0.05$); only 1% reported recent injection.

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 10 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 2013 Victorian EDRS are available in early 2014 (Papanastasiou, Dietze, & Lloyd, 2014) .

4.9.4. Hallucinogens

In 2013, 57% (n=86) of the Victorian IDRS sample reported lifetime hallucinogenic drug use (e.g. LSD (lysergic acid diethylamide) and 'magic mushrooms' (psilocybin mushrooms)), similar to previous years. Few participants reported recent use; 3% reported a median of three days (range=1–8 days) use in the past six months. While 5% reported lifetime injection, in 2013 there were no reports of recent injection.

4.9.5. Inhalants

In 2012 and 2013, the lifetime prevalence of inhalant use was similar (19% vs. 21%, $p = 0.665$). As in 2012, in 2013 there were no reports of recent inhalant use.

4.9.6. Steroids

Consistent with 2012, in 2013 5% of Victorian IDRS participants reported lifetime steroid use, with 1% reporting recent use.

4.9.7. Alcohol and tobacco

There was a slight decline in the prevalence of lifetime alcohol use among IDRS participants from 2012 to 2013, although the difference was not significant (99% vs. 96%, $p = 0.096$). However, prevalence of recent alcohol use declined significantly, from 69% in 2012 to 55% in 2013 ($p < 0.05$). All recent alcohol users reported oral consumption at a median frequency of 48 days (range=1–180 days) in the past six months, translating to a pattern of twice weekly use.

In 2012 and 2013, the prevalence of tobacco use was similar. In 2013, lifetime tobacco use was reported by 97% (vs. 99% in 2012, $p = 0.216$), with recent use reported by 94% (vs. 95% in 2012, $p = 0.704$). The median frequency of tobacco use was 180 days (range=21–180 days) in the preceding six months.

4.9.8. NPS and synthetic cannabinoids

For the first time in 2013, Victorian IDRS participants were asked to provide information about their experiences using NPS and synthetic cannabinoids. No reports were received from participants regarding any NPS use. However, 6% (n=9) reported lifetime use of synthetic cannabinoids and 5% (n=7) reported use in the preceding six months. All recent users (n=7) reported smoking the drug at a median frequency of one day (range=1–3 days) in the past six months.

4.9.9. KE reports: Other drugs

One KE from the City of Yarra reported that among the PWID accessing their service, quetiapine had become the drug of choice for GPs to prescribe as a sleep aid, which brought with it a different set of problems than benzodiazepine prescription. A senior paramedic KE reported that quetiapine was the 'most problematic' of all the antipsychotic medications at ambulance attendances, given use of the drug can result in unconsciousness whether used alone or in combination with others.

NSP KE from the City of Port Phillip reported that steroid injectors were still prevalent, however they only engaged with the NSP rather than accessing other available primary health services. An ED physician KE from a prominent Melbourne hospital commented that, in relation to synthetic cannabinoids, "users do not see synthetic cannabis as cannabis" so upon presentation did not disclose that they had smoked the drug. This KE reported that people who were presenting with vomiting, anxiety and hyperemesis syndrome were typically admitted to the short-stay unit.

Several KE reported that alcohol consumption would always be problematic among PWID due to the CNS depressant effects of the drug when used in combination with heroin and benzodiazepines. An NSP KE from the City of Port Phillip reported that after benzodiazepines alcohol was the second most problematic drug, primarily because it was "at the heart of most issues", particularly overdose and poor behaviour. The chronic health problems associated with alcohol consumption by PWID were also of concern, particularly among an ageing cohort. A GP/OST prescriber KE from the City of Frankston concurred by also reporting an observed increase in the physical effects of long-term alcohol consumption in relation to ageing. A drug outreach lawyer KE in the City of Port Phillip reported that police were picking up an increasing number of intoxicated people on the streets and detaining them in the cells for public drunkenness—some of whom were fined up to $1,000 for one offence. Being detained under these circumstances was detrimental to health, particularly if people were also under the influence of multiple drugs at the time. It was reported that these cases were particularly time consuming to process through the system, with the person often continuing to drink in public anyway. She recommended implementation of sobering up units, which would be a better alternative to incarceration and better for public health.

Several KE from the health sector reported that the recent implementation of smoking bans in and around Victorian drug treatment services, particularly residential services, was deterring people from seeking help.

Only one KE commented on NPS use. KE in the City of Port Phillip reported no observations of NPS use among their client groups, which was possibly related to their older age and social disadvantage. It was reported that many people wouldn't have the resources or knowledge to access these drug types from the online market place.

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

5.1. Heroin

Key points

Price

— In 2013, the median reported prices for 1.0 gram and 1.7 grams of heroin decreased by $50. Prices for other amounts were consistent with previous years.

— Participants most commonly reported purchasing 0.5 gram of heroin and paying $150.

Availability

— Almost all (96%) reported that heroin was very easy or easy to obtain, with 81% reporting that the heroin market was stable in the past six months. Ten per cent reported heroin was easier to obtain.

— Heroin was primarily sourced from a known dealer (60%) or a friend (26%), from a dealer's home (28%), agreed public location (27%), or home delivery (19%).

Purity

— Participants reported that heroin was typically of low (48%) to medium (35%) purity. Fifty-three per cent reported that purity was stable in the six months before interview, 27% reported a decrease.

— In 2012/13, the overall average purity of heroin seizures was low (21%). Seizures weighing less than 1.0 gram had an average purity of 17%.

5.1.1. Price

In 2013, 67% (n=101) 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 2013, according to weight. Median heroin prices were estimated from participants' most recent heroin purchase. In 2013, participants (n=57) most commonly reported recently purchasing 0.5 gram of heroin; the median price paid on the last purchase occasion was $150 (range=$100–300). Thirty-seven participants reported most recently purchasing 1.7 grams of heroin (a standard amount of heroin sold on the streets of Melbourne), while 26 participants reported most recently purchasing 1.0 gram (Table 6).

Table 6: Median prices paid for most recent heroin purchase, according to weight, Victoria, 2011–2013

	2011 $	2012 $	2013 $
Cap (range)	50 (30–100)	50 (30–100)	50 (35–80)
Quarter-gram (range)	100 (70–150)^	110 (70–150)	100 (50–120)^
Half-gram (range)	150 (20–350)	150 (120–300)	150 (100–300)
Gram (range)	250 (150–450)	300 (200–350)	250 (160–700)
1.7 gram (range)	--	350 (250–500)	300 (100–1000)

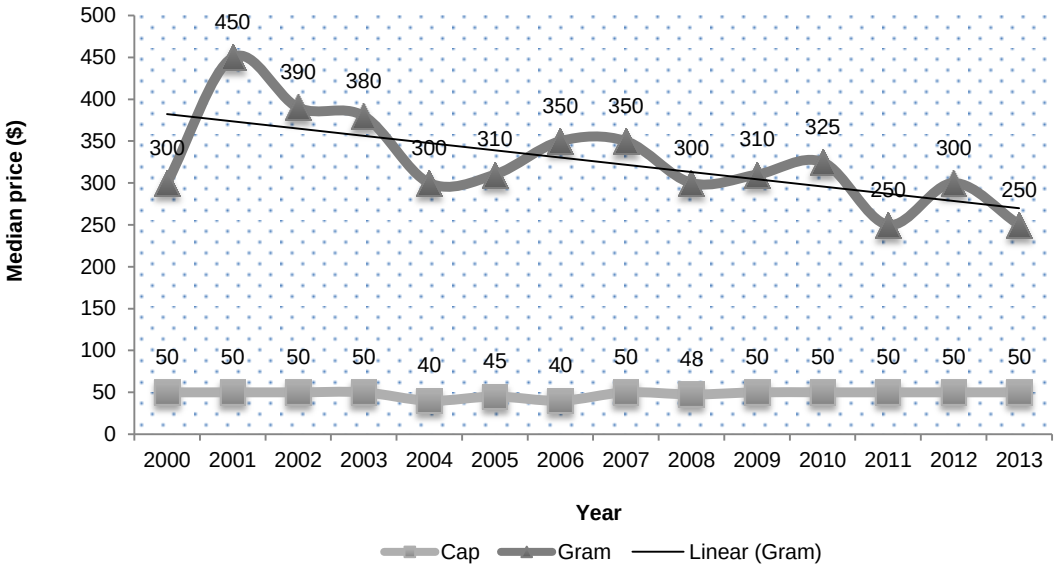
Source: IDRS participant interviews

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

-- Not reported

Figure 8 shows the median prices of a cap (about 0.1 gram) and 1.0 gram of heroin from 2000 to 2013, 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. In 2013, the reported median price of a gram fell to $250 and, with the exception of 2011, was the lowest median price reported for all years shown (Figure 8).

Figure 8: Median prices of a cap and a gram of heroin estimated from participants' purchases, Victoria, 2000–2013



Source: IDRS participant interviews

In 2013, 100 participants provided information on changes to the price of heroin during the preceding six months. Stable heroin prices were reported by 68%, while 12% reported that the price of heroin increased, and 12% that it fluctuated. Eight per cent reported that the price of heroin decreased during the preceding six months.

5.1.2. Availability

Comments on perceptions of current heroin availability were provided by 101 participants in 2013. Most reported that heroin was very easy (54%) or easy (42%) to obtain, 4% reported that obtaining heroin at the time of interview was difficult. Most participants reported no changes to recent heroin availability; 81% reported that the market was stable in the past six months, 10% reported that heroin had become easier to obtain, while 8% reported it was more difficult. One 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; 101 participants provided comment. On the last purchase occasion, 60% reported sourcing heroin from a known dealer, 26% reported sourcing it through a friend. Smaller proportions reported last sourcing heroin from a street dealer (10%) and an acquaintance (3%). Participants most commonly reported sourcing their last purchase from a dealer's home (28%), an agreed public location (27%) or home delivery (19%).

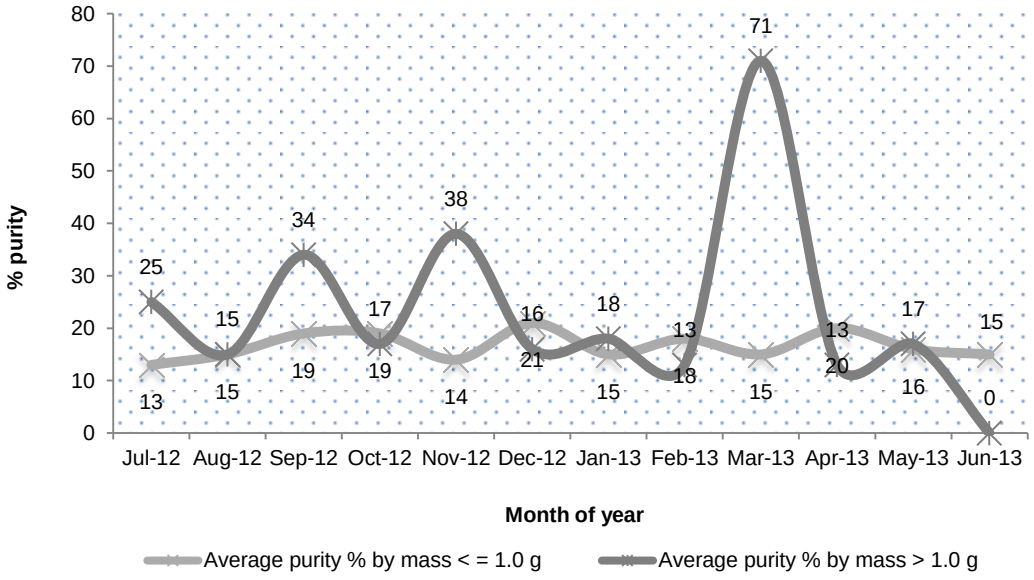
5.1.3. Purity

In 2013, 99 participants provided information on their perceptions of current heroin purity. Similar to 2012, almost half (48%) reported that heroin purity was low, over one-third (35%) reported it was medium. Only 6% reported purity as high at the time of interview and 10% reported it as fluctuating.

One hundred participants commented on their perceptions of changes to heroin purity in the past six months. Of these, 53% reported that purity was stable, 27% reported a decrease, 17% reported fluctuating purity and 3% reported an increase.

Figure 9 shows the average purity of heroin seizures made by Victorian LE agencies during 2012/13. Overall, the average purity of heroin seizures analysed was 21% (range=13–71%), similar to the 2011/12 financial year when it was 18% (range=11–81%) (p = 0.592). Compared with the average purity of seizures during the height of heroin supply in Melbourne from 1998 to 2001, overall purity in 2012/13 was significantly lower, but stable with previous years (Cogger et al., 2013; Quinn, 2009). In 2012/13, seizures weighing 1.0 gram or less had an average purity of 17% (range=13–21%), while the average purity of seizures weighing more than 1.0 gram was somewhat higher at 25% (range=13–71%).

Figure 9: Average purity of heroin seizures by Victorian law enforcement, July 2012 to June 2013*



Source: Victoria Police Forensic Services Department

* At the time of data collation, in June 2013 Victoria Police had recorded no heroin seizures weighing more than one gram.

These data concurred with reports from forensic KE, who reported that most of the heroin seized in Melbourne was both in powder or crystalline form and between 10% and 20% pure at the street level. In this context, purity in Melbourne had been consistent for many years. Typically, heroin was cut with dimethyl sulphide (DMS) and xylitol (sugar).

5.2. Methamphetamine

Key points

Price

— In 2013, very few participants reported purchasing speed. The median price of 0.1 gram of speed decreased by $50, while the price of 1.0 gram decreased by $40.

— Participants most commonly reported purchasing 0.1 gram of ice for $100—price was consistent with previous years. The reported median price of 0.5 gram increased by $50, however only 11 participants reported on price for this weight.

Availability

— Approximately 68% reported that speed was easy or very easy to obtain, 26% reported difficulty. Seventy-four per cent reported no change in availability in the past six months, but 21% reported more difficulty.

— Ice was easy or very easy to obtain (86%), 14% reported difficulty. Seventy-nine per cent reported no change in availability in the past six months, but 13% reported access was easier.

Purity

— In 2013, reports regarding speed purity varied; 42% reported it was medium, 26% reported it was high, 26% reported it was low. Sixty-eight per cent reported no changes to purity in the past six months, 32% reported a decrease.

— Forty-seven per cent reported that ice purity was high, 32% reported it was medium. Fifty-three per cent reported that purity was stable in the six months before interview, 22% reported a decrease.

— In 2012/13, the overall average purity of methamphetamine seizures was reasonably high (63%). By contrast, the overall average purity of amphetamine seizures was low (19%).

5.2.1. Price

5.2.1.1. Speed powder

In 2013, 19 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. In 2013, fewer reports were received. Participants (n=9) most commonly reported last purchasing 0.1 gram of speed. Five participants reported most recently purchasing 0.5 gram, while four participants reported most recently purchasing 1.0 gram. According to these reports, median prices for 0.1 gram and 1.0 gram decreased between 2012 and 2013 (Table 7). Nineteen participants provided information on changes to the price of speed in the preceding six months. Of these, 79% reported that the price of speed was stable in the six months prior to interview, while 16% reported an increase and 5% reported a decrease.

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 2013. As with speed, median prices were estimated from participant reports of the last price paid. In 2013, 51 participants reported confidence in their knowledge of the ice market. Of these, most (n=39) reported purchasing 0.1 gram of ice. Eleven participants reported purchasing 0.5 gram, while three participants reported purchasing 1.0 gram (Table 7). Forty-five participants provided information on changes to the price in the six months before interview; 89% reported it was stable, very few participants reported a decrease (4%) or fluctuation (4%) in price and only 2% reported an increase.

Table 7: Median prices paid for most recent methamphetamine* purchase, according to weight, Victoria, 2011–2013

	Speed			Ice/crystal		
	2011 $	2012 $	2013 $	2011 $	2012 $	2013 $
Point (range)	50 (20–100)	100 (20–150)	50 (25–100)^	100 (50–120)	100 (50–100)	100 (20–100)
Half-gram (range)	100 (75–150)	100 (70–500)	100 (100–100)^	400 (50–600)	300 (200–450)	350 (150–370)
Gram (range)	200 (100–500)	200 (100–500)	160 (100–240)^	800 (350–1000)	500 (220–996)	300 (100–600)^

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 2013, two participants provided information on the price of a 0.1 gram of base methamphetamine and one participant reported on the price of 1.0 gram. Median prices are therefore not reported.

5.2.2. Availability

5.2.2.1. Speed powder

In 2013, 19 participants commented on their perceptions of speed availability. The majority reported that speed was easy (42%) or very easy (26%) to obtain, 26% reported it was difficult, with a further 5% reporting it was very difficult. With regards to participants' perceptions of recent changes to speed availability, 74% reported the market was stable, 21% reported that speed was more difficult to obtain, whereas 5% reported it was easier.

Participants were asked to nominate the source of their most recent speed purchase; 19 did so in 2013. At the last purchase, participants most commonly reported sourcing the drug from a known dealer (68%), followed by street dealer and friend (16% respectively). Participants (n=19) reported that the most common locations for sourcing their last purchase were dealer's home (37%), agreed public location (21%), and home delivery (21%).

5.2.2.2. Crystal methamphetamine (ice)

In 2013, 49 Victorian IDRS participants provided information on their perceptions of ice availability. Most participants reported that ice was easy (47%) or very easy (39%) to obtain, 14% reported it was difficult. Regarding participants' (n=48) perceptions of recent changes to availability, 79% reported the market was stable, 13% reported that ice was easier to obtain, while 8% reported more difficulty.

Participants were asked to nominate the source of their last ice purchase and, in 2013, 51 did. At the last purchase, the most common sources were known dealer (63%), friend (22%), and street dealer (10%). Participants (n=51) reported that the most common source locations were dealer's home (27%), agreed public location (25%), and home delivery (16%). Fourteen per cent reported a street market and a friend's home, respectively.

5.2.2.3. Base methamphetamine

Only three participants were able to comment on their perceptions of base methamphetamine availability in 2013. Reports from these participants suggested that this form of methamphetamine

was easy for them to obtain at the time of interview, with no changes to availability in the past six months.

5.2.3. Purity

5.2.3.1. Speed powder

In 2013, 19 Victorian IDRS participants provided information on their perceptions of speed purity. Similar to 2012, in 2013 reports varied widely; 42% reported that speed purity was medium, 26% reported that purity was high and low, respectively, and 5% reported fluctuating purity. Nineteen participants commented on perceived recent changes in purity. Of these, 68% reported it was stable, whereas 32% reported a decrease.

5.2.3.2. Crystal methamphetamine (ice)

In 2013, 47 participants provided information on their perceptions of ice purity at the time of interview. Of these, 47% reported purity was high, 32% reported it was medium, 11% reported it was low and 11% reported it was fluctuating. Forty-five participants commented on perceived recent changes to ice purity. Of these, 53% reported no changes in the past six months, 22% reported a decrease, 18% reported fluctuating purity in the six months before interview and 7% reported an increase.

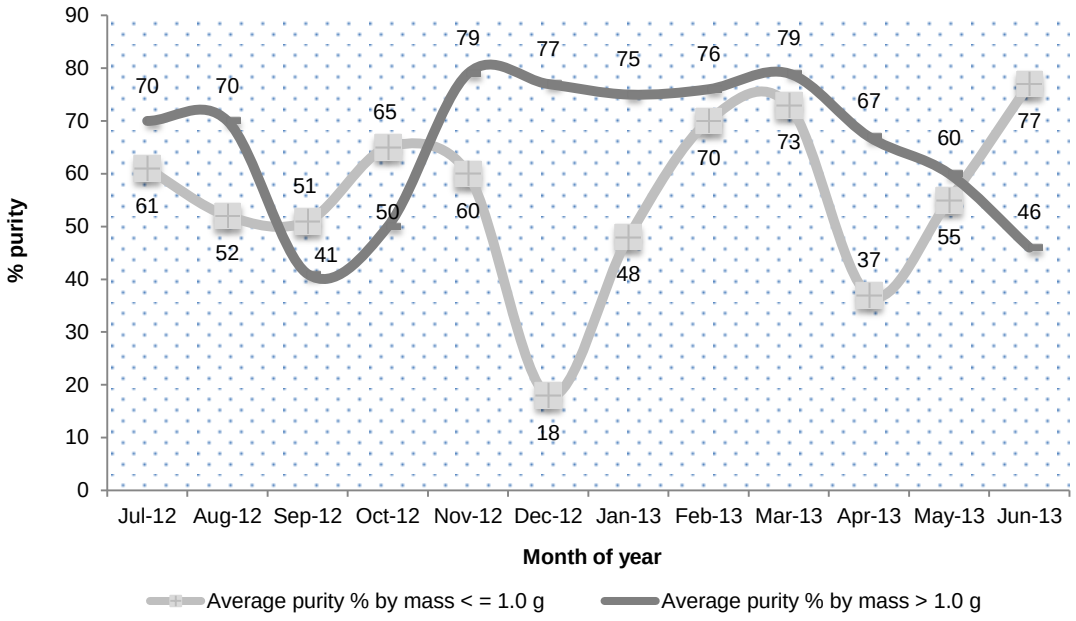
5.2.3.3. Base methamphetamine

Only three participants commented on the purity of base methamphetamine in 2013. Reports from these participants suggested that purity was medium to high at the time of interview, and that it had decreased during the preceding six months.

Figure 10 shows the average purity of methamphetamine seized by Victorian LE agencies during 2012/13. Overall, the average purity of methamphetamine seizures analysed was 63% (range=18–79%), not significantly different from the 2011/12 when it was 56% (range=5–87%, p = 0.313). Note that the overall average purity of methamphetamine seizures made during the last two financial years has been significantly higher than overall average purity prior to 2011/12 (Cogger et al., 2013). In 2012/13, smaller seizures weighing 1.0 gram or less had an average purity of 56% (range=18–77%), while the average of larger seizures of more than 1.0 gram was higher at 66% (range=41–79%).

These data concurred with reports from forensic KE, who reported that most of the methamphetamine seized in Victoria was in crystalline form and between 50% and 60% pure. This KE reported no manufacturing changes to chemical compounds; the drug was consistently extracted from pseudoephedrine and cut with the crystalline substances methylsulfonylmethane (MSM) and/or DMS. Five years ago, different cutting agents were observed across a range of different drugs, but nowadays MSM and DMS were reportedly found in most illicit substances.

Figure 10: Average purity of methamphetamine seizures by Victorian law enforcement, July 2012 to June 2013



Source: Victoria Police Forensic Services Department

As per previous years, fewer amphetamine than methamphetamine seizures were made by Victorian LE agencies during 2012/13. In addition, in comparison with methamphetamine the purity of amphetamine seizures was very low. Overall average purity was 19% (range=1–77%) in 2012/13, similar to 2011/12 when it was 14% (range=1–72%) (p = 0.341).

5.3. Cocaine

Key Points

- In 2013, too few participants provided information on their last cocaine purchase, so median prices are not reported.
- Only three participants reported on cocaine availability, suggesting it was easy to obtain.
- Very few comments regarding purity were received; reports suggested it was medium to high.
- In 2012/13, the overall average purity of cocaine seizures was moderate (46%). Seizures weighing more than 1.0 gram had an average purity of 55%.

5.3.1. Price

In 2013, three Victorian IDRS participants provided information on the price of varying weights of their most recent cocaine purchases. Median prices are therefore not reported.

5.3.2. Availability

Three participants were able to comment on their perceptions of cocaine availability in 2013. Reports suggested that cocaine was easy to obtain for them at the time of interview, as well as during the preceding six months. On their last purchase occasion, these participants mostly sourced cocaine from a friend, at a friend's home.

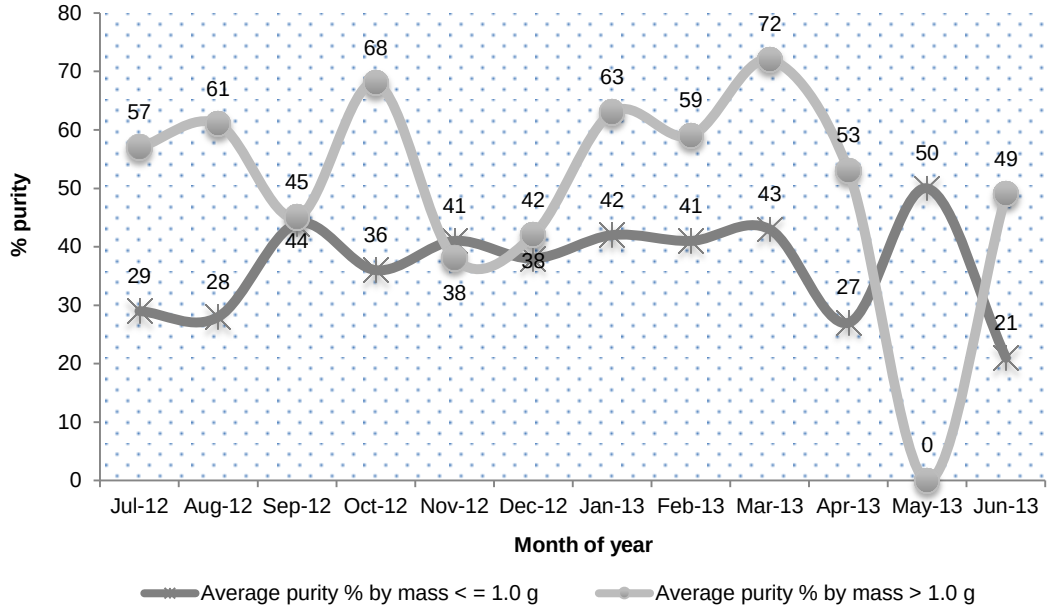
5.3.3. Purity

In 2013, three participants commented on cocaine purity. Reports suggested that it was medium to high at the time of interview and of stable purity in the preceding six months.

Figure 11 shows the average purity of cocaine seizures made by Victorian LE agencies in 2012/13. Overall, the average purity of cocaine seizures analysed was 46% (range=21–72%), similar to 2011/12 when average purity was 49% (range=19–82%) (p = 0.671). The average purity of cocaine seizures was higher in 2011/12 and 2012/13 than in previous years (Cogger et al., 2013). In 2012/13, smaller seizures of 1.0 gram or less had an average purity of 37% (range=21–50%), whereas seizures weighing more than 1.0 gram had an average of 55% (range=38–72%).

These data concurred with reports from forensic KE, who reported rarely seeing seized cocaine in the laboratory; however, usually purity was about 50%.

Figure 11: Average purity of cocaine seizures by Victorian law enforcement, July 2012 to June 2013



Source: Victoria Police Forensic Services Department

* At the time of data collation, in May 2013 Victoria Police had recorded no cocaine seizures weighing more than 1.0 gram

5.4. Cannabis

Key points

Price

— In 2013, the median prices for 1.0 gram, 0.25 ounce and 1.0 ounce of hydroponically grown cannabis were consistent with previous years. Eighty-five per cent reported no recent price changes.

— Very few participants reported that their last purchase was bush-grown cannabis.

Availability

— Ninety-four per cent reported that hydroponic cannabis was very easy or easy to obtain, 93% reported no recent changes to availability.

— Hydroponic cannabis was most commonly purchased from a dealer (55%) and friend (36%).

— Few reports were received regarding availability of bush-grown cannabis, but all reported no recent changes to access.

Potency

— Hydroponic cannabis potency was reported as high (60%) and medium (25%), with 80% reporting no recent changes to potency.

— Bush-grown cannabis potency was reported as medium, with no recent changes to potency.

5.4.1. Price

Table 8 presents Victorian IDRS participant reports of the median price paid for the last cannabis purchase, from 2011 to 2013, for hydroponic and bush-grown cannabis. In 2013, participants (n=39) most commonly reported most recently purchasing 0.25 ounce (7.0 grams) of hydroponic cannabis. Thirty participants reported last purchasing 1.0 gram and 16 participants reported last purchasing 1.0 ounce. Very few participants reported purchasing bush-grown cannabis; three participants reported last purchasing 0.25 ounce and the median price was $70 (Table 8).

Table 8: Median prices paid for most recent cannabis purchase, according to weight, Victoria, 2011–2013

	Hydroponic			Bush-grown		
	2011 $	2012 $	2013 $	2011 $	2012 $	2013 $
Gram (range)	20 (15–30)	20 (10–20)	20 (10–25)	20 (no range)^	20 (10–20)^	--
Quarter-ounce (range)	80 (50–150)	80 (50–180)	80 (50–100)	--	70 (0–80)^	70 (70–80)^
Ounce (range)	250 (160–360)	250 (150–280)	250 (180–300)	210 (200–250)^	240 (200–250)^	150 (no range)^

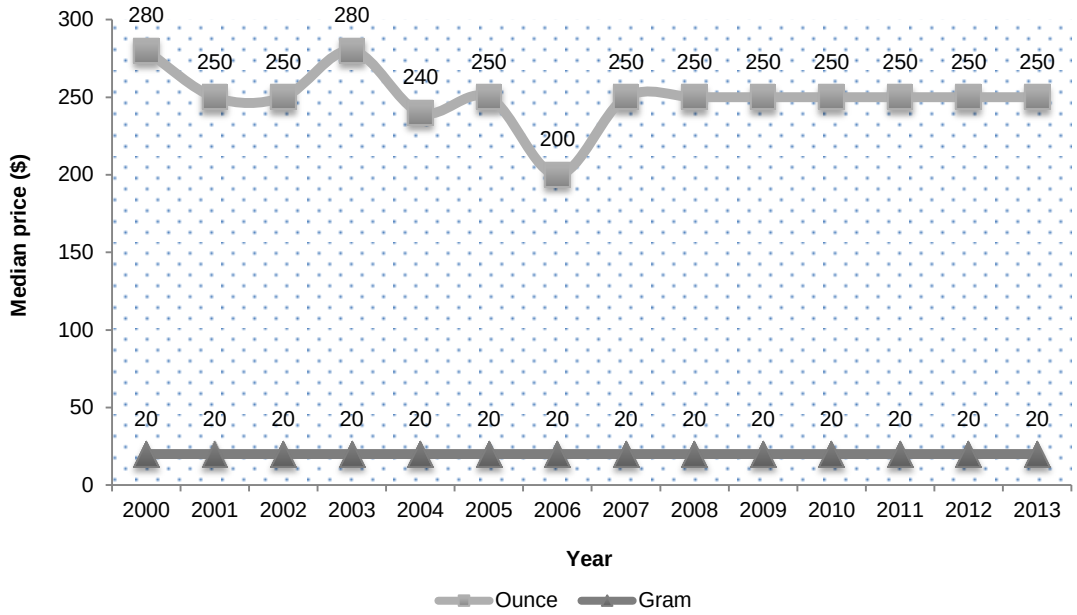
Source: IDRS participant interviews

^ Small numbers reporting (<10) – interpret with caution. No range indicates one report was received

-- No reports received

Figure 12 shows the median prices of 1.0 gram and 1.0 ounce of cannabis, estimated from Victorian IDRS participants' most recent purchase, from 2000 to 2013. 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 (Figure 12).

Figure 12: Median prices of a gram and an ounce of cannabis estimated from participants' purchases, Victoria, 2000–2013*



Source: IDRS participant interviews

* 2003–2013 prices reflect those for hydroponic cannabis only (the form used most).

In 2013, of the 75 participants who provided information on recent changes to hydroponic cannabis price, 85% reported it was stable. Three of the four participants who reported on recent changes to price for bush-grown cannabis also noted stable prices.

5.4.2. Availability

In 2013, 76 participants commented on hydroponic cannabis availability. Of these, the majority reported it was very easy (51%) or easy (43%) to obtain; only 5% reported difficulty obtaining hydroponic cannabis at the time of interview. With regards to participants' perceptions of recent changes to availability, 93% reported it was stable, 4% reported that this form of cannabis was more difficult to obtain and 3% reported that access fluctuated.

Participants (n=75) were asked to nominate the source of their last hydroponic cannabis purchase. In 2013, the most common last source was known dealer (55%), followed by friend (36%) and acquaintance (8%). The most commonly reported locations for sourcing the last hydroponic cannabis purchase were dealer's home (36%), friend's home (21%) and agreed public location (19%).

In 2013, only four participants provided information on their perceptions of current availability of bush-grown cannabis. These participants reported that bush-grown cannabis was easy (n=2) or very easy (n=1) to obtain, and that access was stable (n=4) in the preceding six months. Of four participants, the most common source of the last bush-grown cannabis purchase was known dealer (n=3) and friend (n=1), with dealer's home (n=2) the most commonly reported last source location.

5.4.3. Potency

In 2013, 75 participants gave their perceptions of hydroponic cannabis potency: 60% reported it was high and 25% reported it was medium. Seventy-six participants commented on their perceptions of recent changes to potency. Of these, 80% reported it was stable and 8% reported it fluctuated. By contrast, three out of four participants reported that bush-grown cannabis potency was medium. All four participants reported stable potency in the past six months.

5.5. Methadone

In 2013, only two Victorian IDRS participants were able to comment on the market characteristics of *non-prescribed* methadone (Methadone Syrup®, Biodone Forte® and Physeptone® tablets); no reports were received on current prices. Regarding availability, participants suggested that for them, obtaining illicit methadone was very easy (n=1) and very difficult (n=1), with both reporting no changes in the preceding six months. On the last occasion of purchase, one participant reported the last source was friend, from friend's home. One bought non-prescribed methadone, while the other received it as a gift. One participant reported the source of their last purchase was someone else's take-away dose.

5.6. Buprenorphine

Few participants (n=6) provided comment on the market characteristics of *non-prescribed* buprenorphine (Subutex®) in 2013. Three reported the price paid for their last purchase; all paid $20 for an 8 mg tablet, consistent with the median price in 2012. Four of six participants reported that prices were stable in the preceding six months. In relation to availability, illicit buprenorphine was reported as very easy (n=5) and easy (n=1) to obtain, with no changes to access (n=6) in the past six months. Participants reported last sourcing it from a friend (n=3), street dealer (n=2) and known dealer (n=1), with street market (n=3) the most commonly reported source venue. On the last occasion of use, five of six participants reported purchasing buprenorphine and that the original source was someone else's take-away dose.

5.7. Buprenorphine-naloxone

5.7.1. Buprenorphine-naloxone tablets

In 2013, four participants provided information on the market characteristics of *non-prescribed* buprenorphine-naloxone tablets (Suboxone® tablets). Two reported on the price paid for their most recent illicit tablet purchase; both reported paying $10 for 8 mg. All four participants reported stable prices in the preceding six months. Regarding availability, three of four reported the tablets were very easy to obtain at the time of interview, whereas one reported difficulty. Similarly, three of four reported no recent changes to availability, while one reported access was more difficult. Although participants reported sourcing the tablets from a range of people on their last occasion of purchase (street dealer (n=1), friend (n=1), acquaintance (n=1) and unknown dealer (n=1)), all reported sourcing the tablets from a street market (n=4). On their last occasion of use, participants (n=4) reported purchasing the tablets, with all (n=4) reporting that the original source was someone else's take-away dose.

5.7.2. Buprenorphine-naloxone film

Six participants provided information on the market characteristics of *non-prescribed* buprenorphine-naloxone film (Suboxone® film). All six reported on the price paid for their most recent 8 mg film purchase; median price was $20 (range=$10–70). Four of six reported that the price of illicit film was stable in the previous six months, while two reported it was fluctuating. In relation to availability, participants reported the film was easy (n=5) and very easy (n=1) to obtain. Four participants reported no recent changes to availability, while two participants reported access was easier. Four of six participants provided information on the last source of the film; responses varied (street dealer (n=1), friend (n=1), known dealer (n=1) and acquaintance (n=1)). Of these participants, three reported sourcing the film from a street market and one reported a dealer's home. On the last occasion of use, four reported purchasing the film, and all (n=4) reported that the original source was someone else's take-away dose.

5.8. Morphine

In 2013, seven 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 2013. As only seven reports were received in 2013, prices must be interpreted with caution. For instance, two participants reported most recently purchasing a 100 mg MS Contin® tablet, one reported purchasing a 60 mg tablet. Similarly, four participants reported purchasing a 100 mg Kapanol® capsule, one reported purchasing a 50 mg capsule (Table 9). Four of seven participants reported price was fluctuating during the past six months, two reported it was stable and one reported an increase.

Table 9: Median prices paid for most recent morphine purchase, according to tablet weight, Victoria, 2011–2013

	MS Contin®*			Kapanol®*		
	2011 $	2012 $	2013 $	2011 $	2012 $	2013 $
60 mg tablet* (range)	30 (10–60)	20 (10–60)^	25 (no range)^	--	--	25 (no range)^#
100 mg tablet/ capsule* (range)	50 (20–100)	50 (40–100)	35 (20–50)^	40 (30–80)	45 (40–100)^	25 (20–50)^

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 2013, there were no participant reports of recent 5 mg, 10 mg or 30 mg MS Contin® tablet purchases or 20 mg Kapanol® capsule purchases

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

Price refers to 50 mg Kapanol® capsule

-- No reports received

In 2013, seven participants provided information on illicit morphine availability. Reports were mixed; five suggested that morphine was easy (n=4) or very easy (n=1) to obtain, two reported it was difficult. Most participants (n=6) reported no changes to access in the past six months. Participants reported a range of sources for their last morphine purchase, including a friend (n=2), known dealer (n=2), acquaintance (n=2), and street dealer (n=1). Likewise, reports of the most recent source venue varied; dealer's home (n=3), home delivery (n=1), friend's home (n=1), acquaintance's house (n=1), and street market (n=1).

5.9. Oxycodone

In 2013, 11 participants provided reports on the market characteristics of *non-prescribed* oxycodone (OxyContin®) in 2013. Table 10 shows the median prices Victorian IDRS participants paid for their most recent oxycodone purchase from 2011 to 2013. As so few reports were received, prices for 2013 must be interpreted with caution. For instance, six participants reported most recently purchasing an 80 mg OxyContin® tablet, five reported purchasing a 40 mg tablet and one reported purchasing a 20 mg tablet (Table 10). Eight of 11 participants reported no recent changes to the price of oxycodone, whereas two reported price was fluctuating, one reported an increase.

Table 10: Median prices paid for most recent oxycodone purchase, according to tablet weight, Victoria, 2011–2013

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

Source: IDRS participant interviews

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

-- No reports received.

Eleven participants commented on non-prescribed oxycodone availability at the time of interview. Most reported it was easy (n=8) to obtain, but a few reported it was difficult (n=3). Eight of 11 participants reported no changes to availability in the preceding six months. Participants reported last sourcing illicit oxycodone from a known dealer (n=6) and unknown dealer (n=2), as well as street dealer (n=1), friend (n=1) and acquaintance (n=1). A range of source venues were reported; dealer's home (n=6), home delivery (n=2), friend's home (n=1), street market (n=1), and agreed public location (n=1).

6. Health-related trends associated with drug use

6.1. Overdose and drug-related fatalities

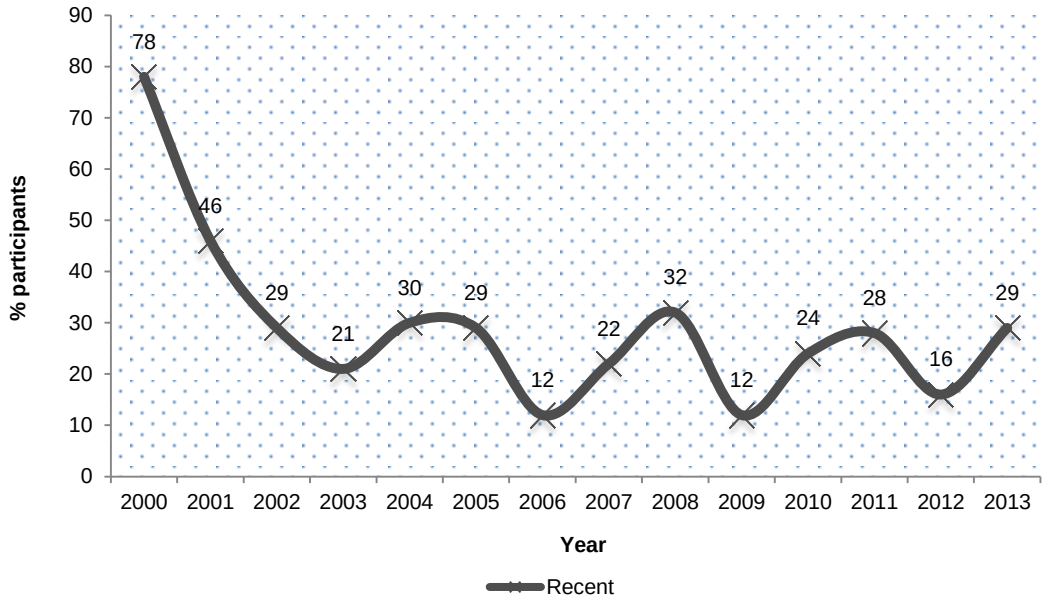
Information on drug-related overdose contained in this report is collected from several sources. These include self-report data from the 2013 Victorian IDRS participant sample, data on the number of Victorian drug-related fatalities (sourced from the National Coroner's Information System (NCIS) via the VDH), 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

Over half (57%, n=86) of the 2013 Victorian IDRS sample reported a lifetime accidental heroin overdose, very similar to 2012 (55%, $p = 0.727$). Ninety-two per cent of participants with an overdose history provided further detail about their experiences. Among these (n=79), the median number of lifetime overdoses was three (range=1–30 overdoses). Figure 13 shows the prevalence of self-reported heroin overdose among Victorian IDRS participants in the past year, from 2000 to 2013. In 2013, among those with a history (n=79), the prevalence was 29%, significantly higher than in 2012 (16%, $p < 0.05$) (Figure 13). Eight per cent of participants with a history reported an accidental heroin overdose in the month before interview, close to the proportion in 2012 (4%, $p = 0.284$).

Figure 13: Self-reported heroin overdose in the past year among participants with an overdose history, Victoria, 2000–2013



Source: IDRS participant interviews

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

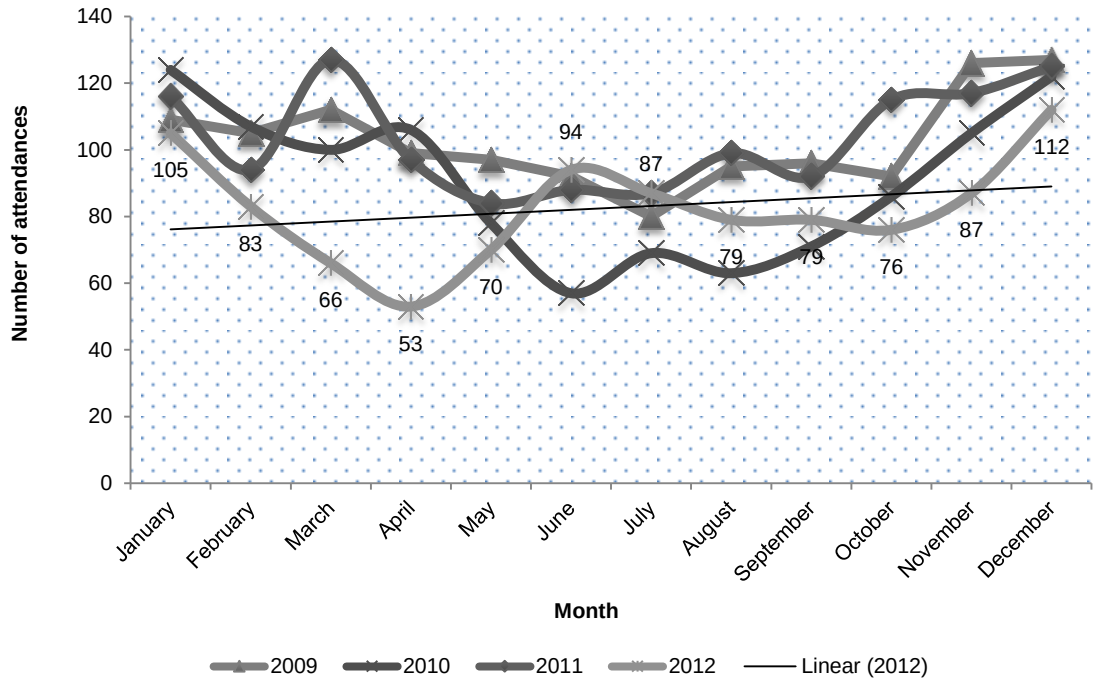
As in 2012, in 2013 participants who reported a recent heroin overdose (n=23) were asked to provide information on any immediate treatment received following the last event. Multiple responses were allowed. Of these, 57% each respectively reported ambulance attendance (n=13) and receiving the opioid antagonist naloxone (n=13). Five participants reported receiving CPR from a friend, partner or peer, while one participant reported receiving CPR from a health professional. Four participants reported receiving oxygen and three reported receiving treatment from a hospital ED. A further four

reported no immediate treatment. Participants (n=23) were also asked whether they sought further treatment and/or information as a result of this event, and to nominate from which health service/professional type. Multiple responses were allowed. Most participants (91%) reported that they did not seek further treatment and/or information; however, one reported presenting to a generalist health service.

6.1.1.2. Non-fatal heroin overdose attended by ambulance

Figure 14 shows the number of non-fatal heroin[5] overdoses attended by AV in the greater Melbourne region, by month, from January 2009 to December 2012. 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. During 2012, 991 non-fatal heroin overdoses were attended by AV, a decrease of 20% from the figure in 2011 (n=1,241), and less than in 2010 (n=1,088) and 2009 (n=1,230). In 2012, the median age of non-fatal heroin overdose cases was 35 years (range=17–70 years). The average number of attendances per month declined from 103 (range=80–127 attendances) in 2011 to 83 (range=53–112 attendances) in 2012, the lowest monthly average for all years shown (Figure 14). Paramedic KE commented that among people who received naloxone in the community, very few were unhappy post-overdose. However, one of the main problems with a concurrent heroin and benzodiazepine overdose was the longer onset of naloxone, with patients taking about 20 minutes to positively respond, meaning artificial ventilation occurred for longer than would normally be necessary.

Figure 14: Number of non-fatal heroin overdoses attended by Ambulance Victoria per month, Melbourne, 2009–2012



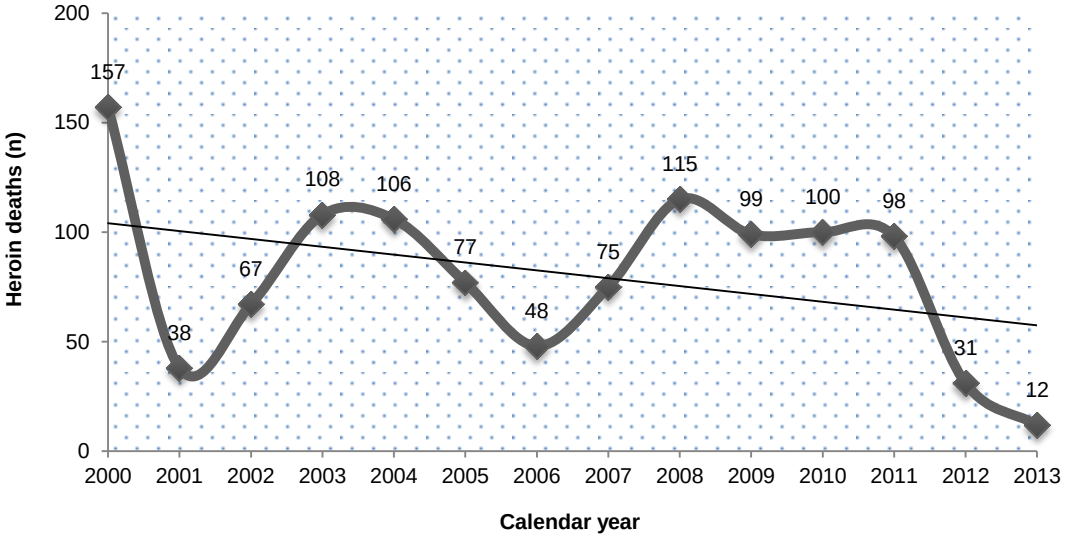
Source: Turning Point Alcohol and Drug Centre

[5] 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.

6.1.1.3. Heroin-related deaths

Figure 15 summarises data for trends in heroin-related mortality in Victoria from 2000 to 2013. A total of 1,131 heroin-related deaths were recorded for the period, with an average of 81 fatalities (range=12–157 deaths) per year. The sharp decline in fatalities observed in Victoria from 2000 to 2001 was consistent with the timing of the end of the heroin "glut" in Melbourne (Fry & Miller, 2001). Between 2003 and 2004, the annual number of heroin-related deaths in Victoria returned to the level observed during the mid-1990s (Cogger et al., 2013). In 2011, 98 deaths were officially defined as heroin-related in Victoria. The decline in mortality from 2011 is probably a reflection of the number of incomplete and/or open cases in which the cause of death remains unidentified, rather than a true decline in the number of heroin-related deaths in Victoria (Victorian Department of Health, 2013b).

Figure 15: Heroin-related deaths, Victoria, 2000–2013



Source: Victorian Department of Health, 2013

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 2013) 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.

6.1.2. Drugs other than heroin

6.1.2.1. Self-reported non-fatal overdose

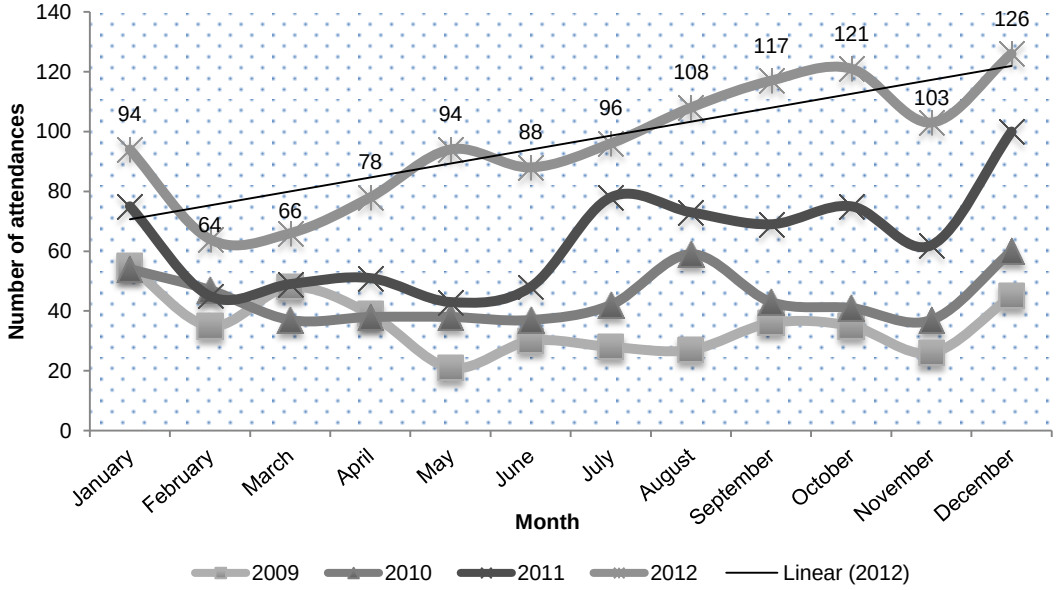
In 2013, 9% of Victorian IDRS participants reported a lifetime accidental overdose on drugs other than heroin, a significant decline from 21% in 2012 ($p < 0.01$). Among these participants (n=13), the median number of overdoses was three (range=1–20 overdoses). Only two participants reported overdosing in the past year and there were no reports of overdose in the month before interview. Only one participant who reported an accidental past-year overdose specified the drug used prior to the most recent event (morphine); the other participant did not disclose.

Participants (n=2) were asked to provide information on the immediate treatment received following their last overdose. Multiple responses were allowed, and included receiving CPR from a health professional (n=1), ambulance attendance (n=1), receiving oxygen (n=1) and hospital ED attendance (n=1). Participants were also asked whether they sought further treatment and/or information as a result. One participant reported that they did not seek any treatment and/or information; however, one reported presenting to a drug health service.

6.1.2.2. Other drug-related events attended by ambulance

Figure 16 shows the number of amphetamine-related events attended by AV in the greater Melbourne region by month, from January 2009 to December 2012. During 2012, AV attended 1,155 amphetamine-related events, a 50% increase compared with the 768 events attended in 2011. In 2012, the median age of cases was 27 years (range=13–70 years) and the average number of attendances per month was 96 (range=64–126 attendances), increasing from an average of 64 (range=43–100 attendances) in 2011, 44 (range=37–60 attendances) in 2010 and 35 (range=21–55 attendances) in 2009 (Figure 16).

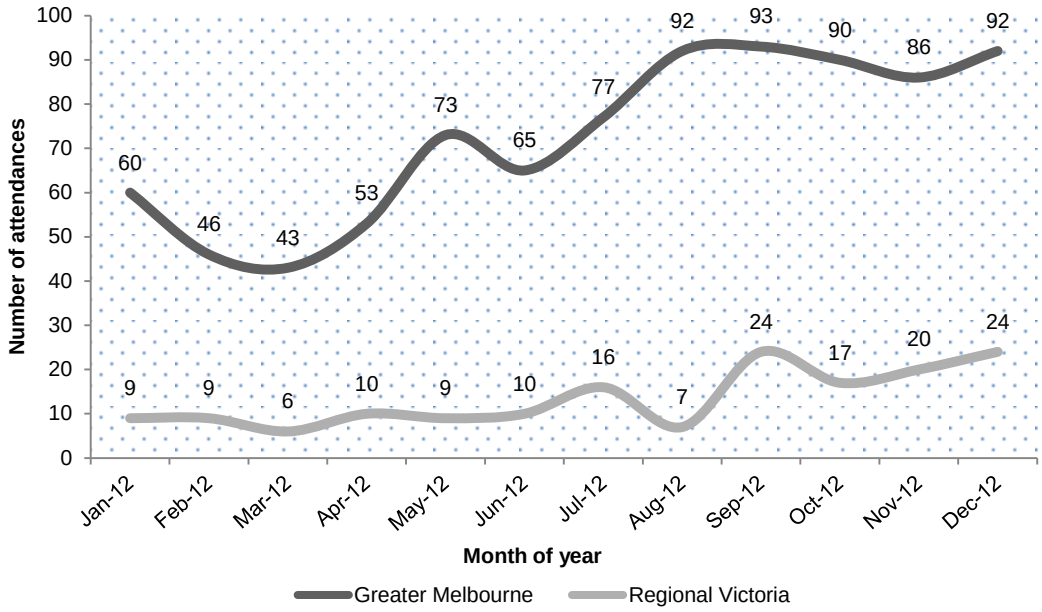
Figure 16: Number of amphetamine-related events attended by Ambulance Victoria per month, Melbourne, 2009–2012



Source: Turning Point Alcohol and Drug Centre

The number of crystal methamphetamine-related (ice) events attended by AV in greater Melbourne in 2012 is shown in Figure 17 by month, compared with regional Victoria. During 2012, AV attended 870 ice-related events in Melbourne and a further 161 events in regional Victoria. The median age of Melbourne cases in which ice was involved was 26 years (range=14–70 years), the same as the median age of cases in regional Victoria (median=26 years, range=13–60 years). However, in Melbourne the average number of attendances per month was 73 (range=24–93 attendances), much higher than the monthly average of 13 (range=6–24 attendances) in regional Victoria (Figure 17). Note that this difference would be smaller if population size was adjusted for.

Figure 17: Number of crystal methamphetamine-related events attended by Ambulance Victoria per month, Melbourne and regional Victoria, 2012



Source: Turning Point Alcohol and Drug Centre

During 2012, 120 cocaine-related events were attended by AV in the greater Melbourne region, an increase of 67% compared with the number in 2011 (n=72). The median age of cases in which cocaine was involved was 29 years (range=15–61 years), one year older than the median age in 2011 (28 years, range=<1–67 years). In 2012, the average number of attendances per month was 10 (range=5–15 attendances).

6.2. Drug treatment

6.2.1. Heroin

6.2.1.1. Alcohol and Drug Information System

During 2012/13, 58,916 courses of treatment[6] were delivered to 35,956 clients[7] in federal and state government funded Victorian specialist alcohol and drug treatment services. Overall, there was a 7% increase in the number of courses of treatment delivered to clients, rising from 55,069[8] in 2011/12. There was also a 9% increase in the number of clients, rising from 32,865[9] in 2011/12. In previous years, apart from alcohol and cannabis, heroin has typically been cited as the most common drug of concern (Cogger et al., 2013; Kirwan et al., 2012). However, in 2012/13, for the first time, heroin was the second most commonly cited drug of concern after amphetamine, comprising 10% of all clients (n=3,593) and courses of treatment (n=5,912) for the period.

[6] 2012/13 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.

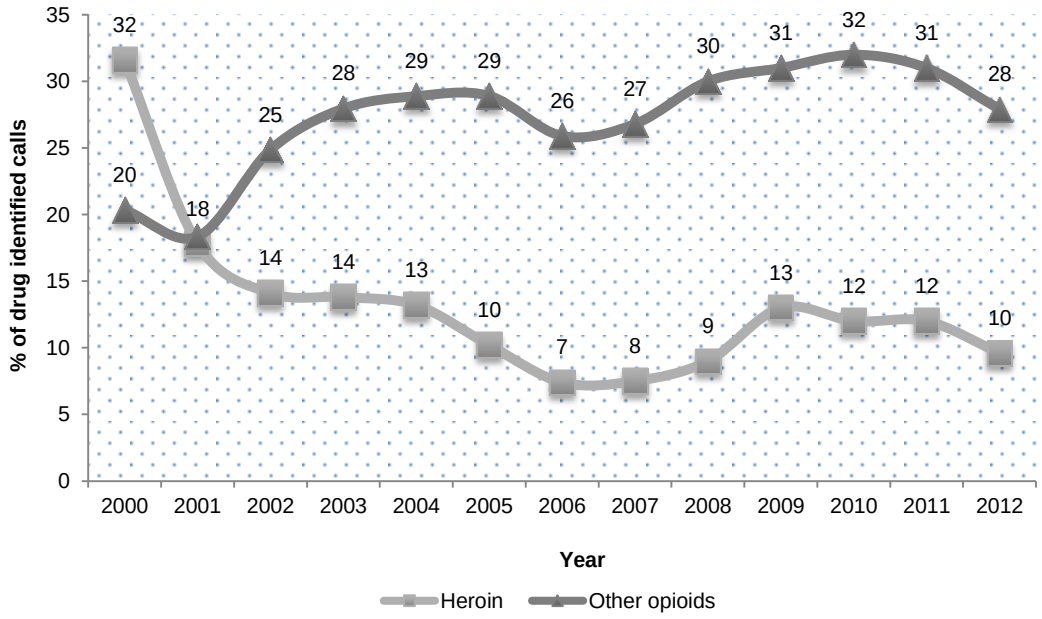
[7] Clients in specialist alcohol and drug services include both drug users and non-users. Non-users may include partners, family or friends.

[8] The 2011/12 ADIS data included in the 2012 Victorian Drug Trends report have been revised for the 2013 edition due to a specific service not reporting 2011/12 data until 2012/13. After the revision, numbers for 2011/12 increased from 51,742 to 55,069 courses of treatment and from 30,428 to 32,865 clients.

6.2.1.2. 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 2012, DirectLine responded to 37,228 alcohol and drug-related telephone calls, with a specific drug of concern[9] identified in nearly two-thirds (63%, n=23,422) of all enquiries. Figure 18 shows the proportion of calls to DirectLine in which heroin or other opioids were identified, from 2000 to 2012. In 2012, heroin was identified as a drug of concern in 2,248 telephone calls, representing 10% of all calls to DirectLine where a drug of concern was cited. The proportion of heroin-related calls significantly decreased from 2000 to 2001; however, since 2002 calls identifying heroin as a drug of concern have remained reasonably stable. In 2012, an additional 6,546 calls were received identifying opioids other than heroin as the drug of concern, comprising 28% of all drug-identified calls for the period. Since 2003, the proportions of calls identifying other opioids as a concern have remained similar (Figure 18).

Figure 18: Proportion of calls to DirectLine in which heroin or other opioids were identified as drugs of concern, Victoria, 2000–2012



Source: Turning Point Alcohol and Drug Centre

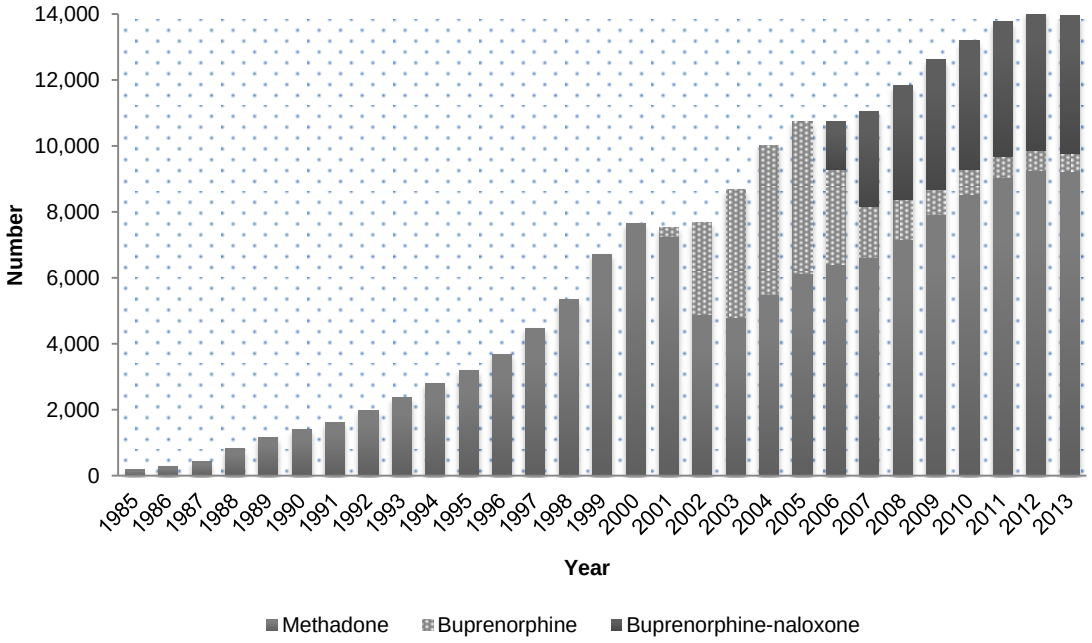
6.2.1.3. Pharmacotherapy consumers

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 buprenorphine-naloxone). Figure 19 shows the number of Victorian pharmacotherapy consumers dispensed OST by treatment type from 1985 to 2013. As detailed in the figure, the number of consumers who were dispensed methadone increased steadily from 181 in 1985 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 dispensed methadone decreased, falling to a low of 4,795. In 2006, buprenorphine-naloxone (Suboxone®) became available on the PBS and, since then, many more

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

consumers have been transferred to the combination product. As at July 2013, 13,961 people were dispensed pharmacotherapy treatment in Victoria, a slight decrease from 2012 (N=14,035). As in previous years, almost two-thirds (66%, n=9,234) were dispensed methadone, while almost one-third (30%, n=4,196) were dispensed buprenorphine-naloxone. Between 2012 and 2013, however, there was a small decrease in the number of clients dispensed methadone, and a slight increase in the number dispensed buprenorphine-naloxone. Only 531 people were dispensed buprenorphine in 2013 (a decline of 9% from 2012), comprising only 4% of all pharmacotherapy consumers in Victoria (Figure 19).

Figure 19: Number of pharmacotherapy consumers dispensed opioid substitution treatment in Victoria, by treatment type, 1985–2013



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

6.2.1.4. KE reports: Treatment for opioid dependence

Despite OST being the treatment of choice for many dependent heroin users, KE from the drug treatment sector reported "real issues" for people prescribed OST with regards to accessing residential drug treatment services, whether inpatient withdrawal or residential rehabilitation. Some residential services had changed their eligibility criteria for entry in relation to opioid dependence, with a requirement for prospective clients to reduce methadone doses to between 25 and 40 mg prior to entering treatment, and Suboxone® doses to 4 mg. This KE reported that this requirement often destabilised stable patients and that residential treatment services needed to think through the implications of this approach, particularly in terms of supporting clients to choose their own treatment plan whether through an OST maintenance or reduction regime.

6.2.2. Methamphetamine

6.2.2.1. Alcohol and Drug Information System

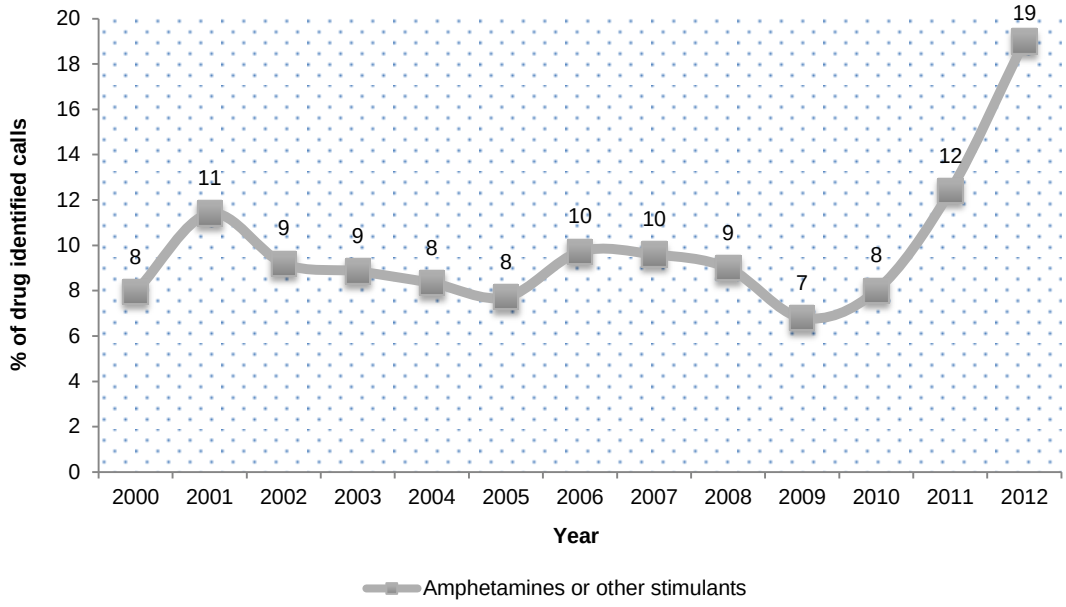
In 2012/13, amphetamine was cited as a drug of concern in 7,907 courses of treatment delivered to 5,228 clients in Victorian specialist alcohol and drug treatment services. Compared with 2011/12, in 2012/13 there was a 47% increase in the number of amphetamine-related courses of treatment delivered, and a 46% increase in the number of clients citing the drug as their primary concern. After

alcohol and cannabis, amphetamine surpassed heroin as the most commonly cited drug of concern for the first time in 2012/13, representing 15% of all clients and 13% of all courses of treatment for the period.

6.2.2.2. DirectLine calls

Figure 20 shows the proportion of calls made to DirectLine in which amphetamines or other stimulants (ATS) were identified, from 2000 to 2012. In 2012 ATS were identified in 4,511 calls, representing 19% of all calls to DirectLine in which a drug of concern was identified. Between 2011 when 2,580 calls were received by DirectLine and 2012, there was a 75% increase in the number of calls identifying ATS as a concern. Prior to this increase, the proportion of calls relating to ATS was reasonably stable (Figure 20).

Figure 20: Proportion of calls to DirectLine in which amphetamines or other stimulants were identified as drugs of concern, Victoria, 2000–2012



Source: Turning Point Alcohol and Drug Centre

6.2.2.3. KE reports: Treatment for methamphetamine dependence

KE from the drug treatment sector reported that methamphetamine dependent people in residential withdrawal treatment had a completely different withdrawal symptom profile than those who were dependent on CNS depressants. For instance, following admission people in this group were sleeping for up to three or four days in a withdrawal program restricted to a seven-day stay. Staff of this centre concluded together that they had not adjusted services to accommodate methamphetamine dependent people—and that there was no evidence-based withdrawal treatment for this group. Thus, they amended the program to include sleep as an outcome of treatment. It was reported that at seven days, no reductions were observed in methamphetamine withdrawal symptoms and that at this point program participants were at their most vulnerable, but nevertheless being sent back out into the community. This KE reported that a 10-day stay increased health and wellness among young people in the youth unit, but that longer periods were needed for older people with longer histories of use. Difficulties engaging this population in long-term treatment were reported. This KE recommended funding for methamphetamine treatment research in Melbourne, and that treatment services needed to work harder to engage and work closely with Indigenous populations in this group. A GP/OST prescriber KE in the City of Maribyrnong recommended revisiting the idea of dexamphetamine pharmacotherapy for people with chronic methamphetamine dependence issues.

6.2.3. Cocaine

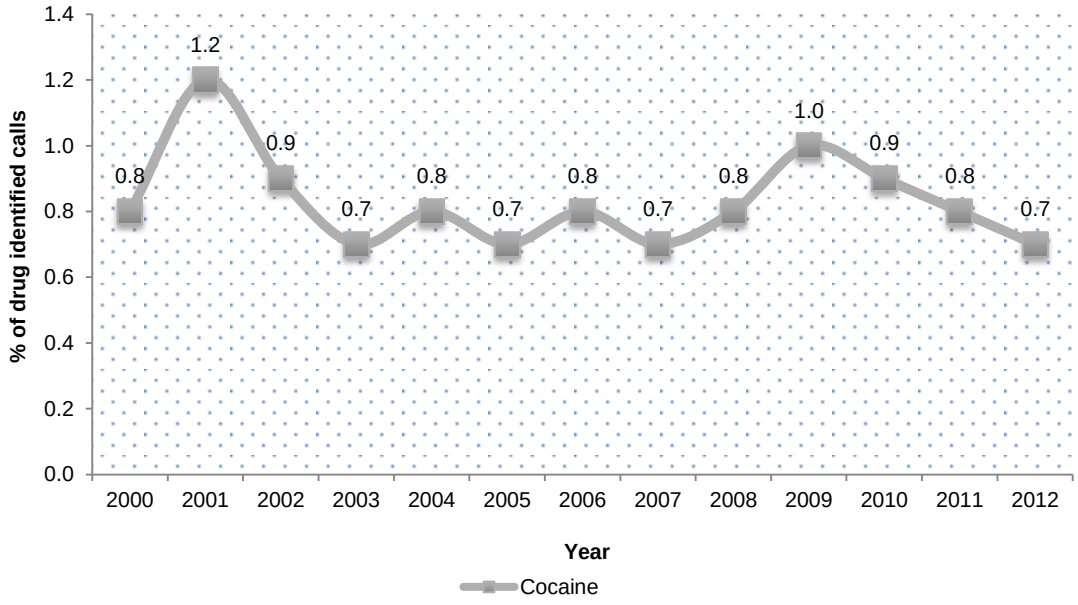
6.2.3.1. Alcohol and Drug Information System

During 2012/13, cocaine was cited as a drug of concern in 123 courses of treatment delivered to 100 clients in Victorian specialist alcohol and drug treatment services. Proportionally, cocaine was cited in fewer than 1% of all courses of treatment and clients for the period, respectively. However, between 2011/12 and 2012/13, the number of courses of treatment increased by 24% and the number of clients by 18%.

6.2.3.2. DirectLine calls

Figure 21 shows the proportion of calls made to DirectLine in which cocaine was identified as the drug of concern, from 2000 to 2012. In 2012, cocaine was identified as a drug of concern in 173 calls, representing fewer than 1% of all calls to the service. The proportion of calls received by DirectLine relating to cocaine has remained low and stable for all years shown (Figure 21).

Figure 21: Proportion of calls to DirectLine in which cocaine was identified as a drug of concern, Victoria, 2000–2012



Source: Turning Point Alcohol and Drug Centre

6.2.4. Cannabis

6.2.4.1. Alcohol and Drug Information System

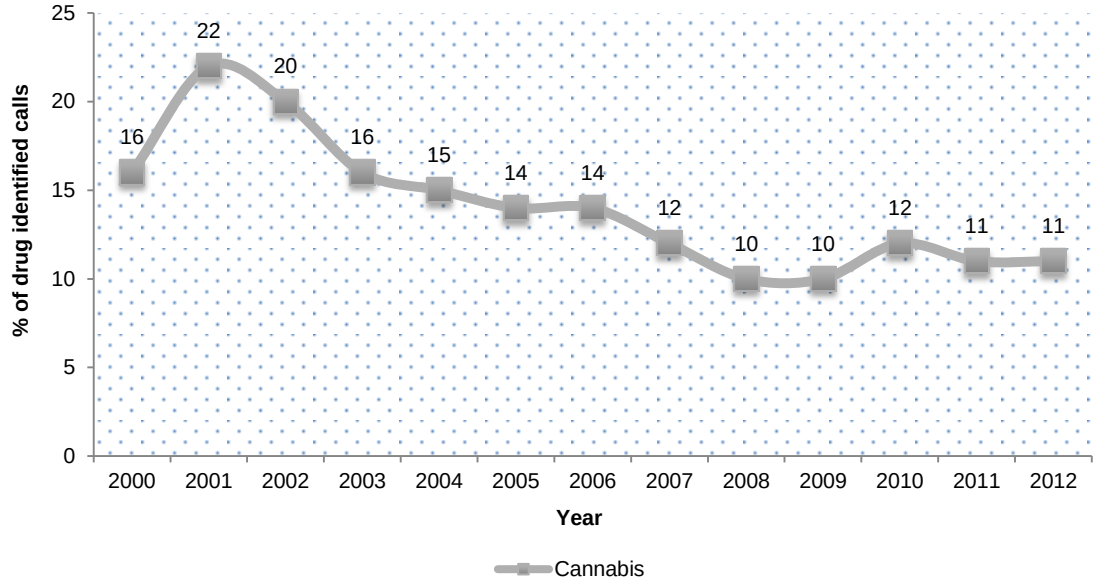
Consistent with previous years, in 2012/13 cannabis was the most commonly cited illicit drug of concern in the Victorian Alcohol and Drug Information System, with 12,590 courses of treatment delivered to 7,369 clients during the period. In 2012/13, cannabis was identified as a drug of concern in 21% of courses of treatment and among 20% of clients, similar to 2011/12.

6.2.4.2. DirectLine calls

Figure 22 shows the proportion of calls made to DirectLine where cannabis was identified as a drug of concern, from 2000 to 2012. In 2012, DirectLine responded to 2,588 calls where cannabis was cited, representing 11% of all drug-identified calls to the service during the period. Since 2001, when 22% of callers to DirectLine cited cannabis as a drug of concern, the proportion of cannabis-related calls to

the telephone service declined substantially. However, from 2007 figures have remained stable at between 10% and 12% (Figure 22).

Figure 22: Proportion of calls to DirectLine in which cannabis was identified as a drug of concern, Victoria, 2000–2012



Source: Turning Point Alcohol and Drug Centre

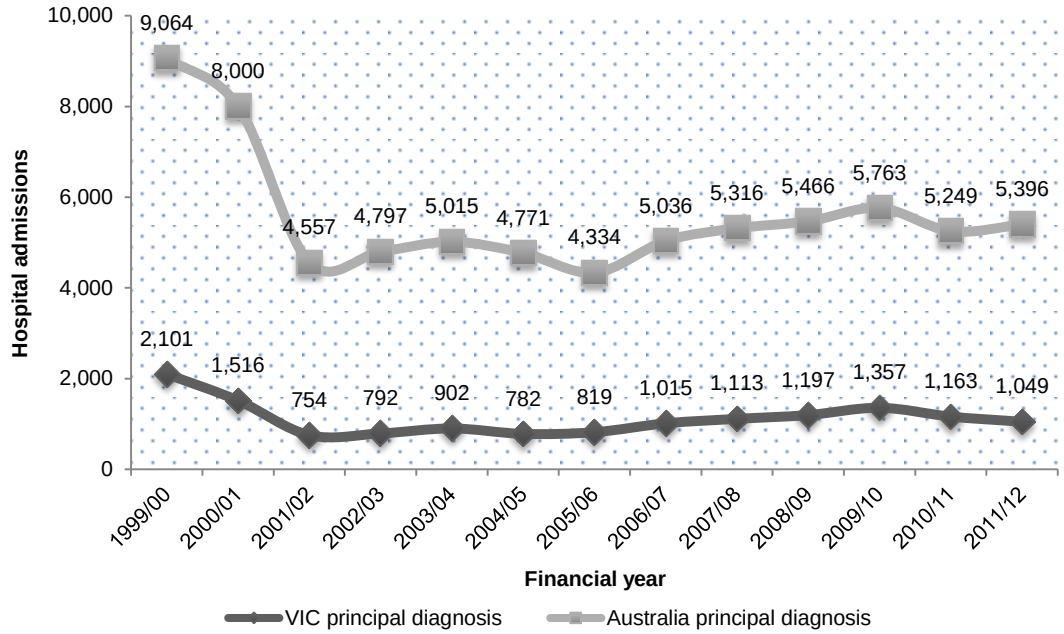
6.3. Hospital admissions

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 2011/12, the most recent data available (Roxburgh & Burns, In press). 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

Figure 23 shows the number of opioid-related hospital admissions among persons aged 15 to 54 years in Victoria and Australia, from 1999/2000 to 2011/12. Compared with cannabis, amphetamine and cocaine, 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 of opioid-related hospital admissions has been reasonably stable, although there was evidence of a slow increase over time. From 2010/11 to 2011/12, however, there was a 10% decline in Victorian opioid-related hospital admissions with 1,049 primary admissions recorded, comprising 19% of opioid-related admissions in Australia (Figure 23).

Figure 23: Number of opioid-related hospital admissions, Victoria and Australia, 1999/2000–2011/12

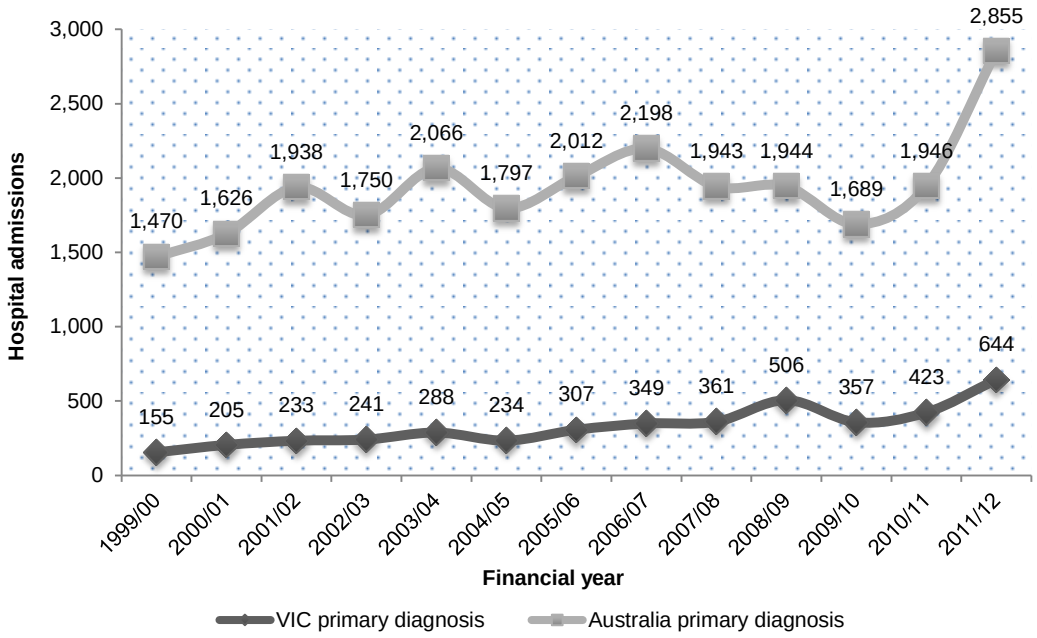


Source: Roxburgh and Burns, in press

6.3.2. Methamphetamine

Amphetamine-related hospital admissions from 1999/2000 to 2011/12 in Victoria and Australia among persons aged 15 to 54 years are presented in Figure 24. The annual number of national amphetamine-related hospital admissions fluctuated until 2010/11, with the number peaking in 2011/12 at 2,855 admissions, an increase of 47% on the previous year. In Victoria, admissions gradually increased to a peak of 506 in 2008/09, declining to 357 in 2009/10, and increasing again to 423 in 2010/11. In 2011/12, Victorian amphetamine-related hospital admissions increased by 52% to 644, comprising 23% of Australian hospital admissions for the drug (Figure 24).

Figure 24: Number of amphetamine-related hospital admissions, Victoria and Australia, 1999/2000–2011/12

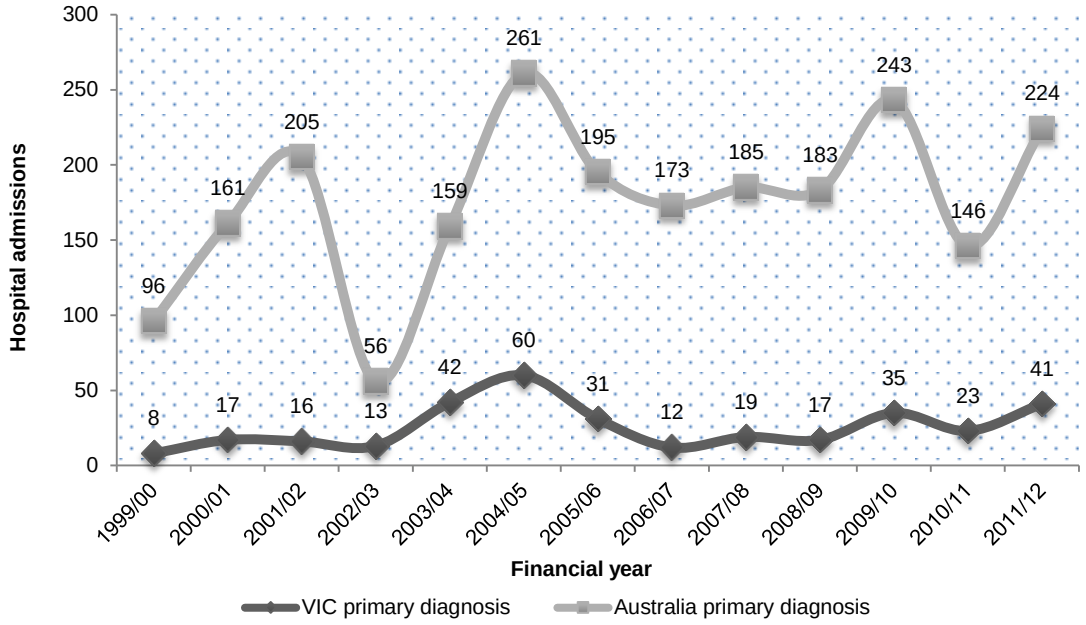


Source: Roxburgh and Burns, in press

6.3.3. Cocaine

Figure 25 shows the number of cocaine-related hospital admissions among persons aged 15 to 54 years in Victoria and Australia, from 1999/2000 to 2011/12. The number of national cocaine-related admissions increased between 1999/2000 and 2001/02, before significantly decreasing in 2002/03, and increasing again during 2004/05. Between 2005/06 and 2008/09, the number was relatively stable, although it increased in 2009/10 before declining in 2010/11. In 2011/12, the number rose by 53% to 224 admissions. In Victoria, cocaine-related hospital admissions are relatively rare; in 2011/12, there were 41 cocaine-related hospital admissions in Victoria, comprising 18% of Australian cocaine-related admissions (Figure 25).

Figure 25: Number of cocaine-related hospital admissions, Victoria and Australia, 1999/2000–2011/12

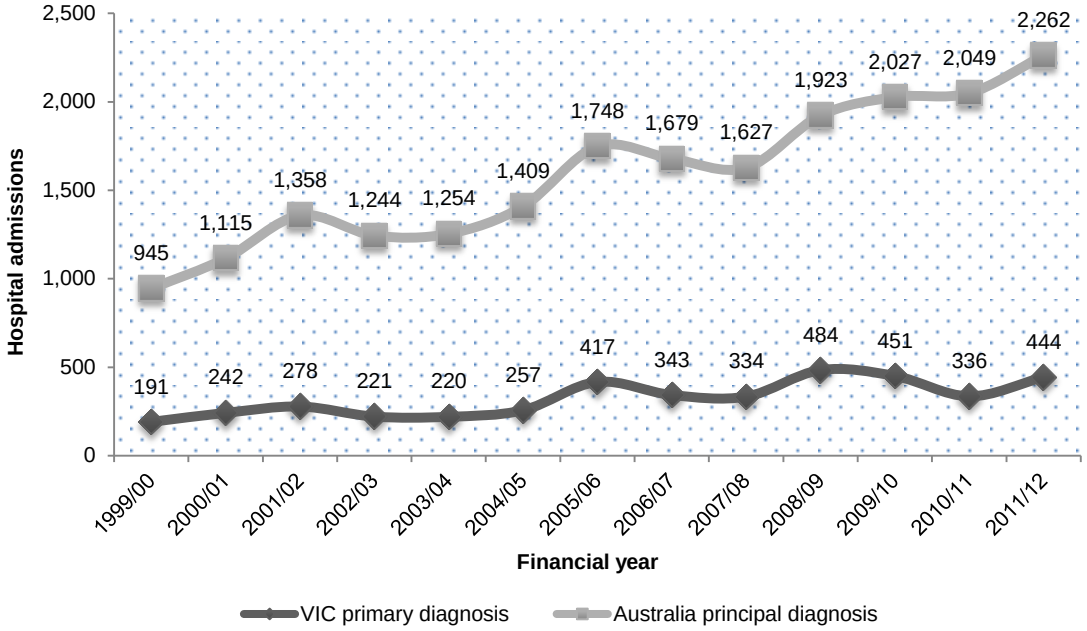


Source: Roxburgh and Burns, in press

6.3.4. Cannabis

Cannabis-related hospital admissions among persons aged 15 to 54 years are shown in Figure 26 for Victoria and Australia, from 1999/2000 to 2011/12. Over time, the number of national cannabis-related hospital admissions has increased, peaking at 2,262 admissions during the 2011/12 financial year. The number in Victoria increased from 2005/06, fluctuating between 334 and 484 admissions during the past six reporting periods. In 2011/12, there were 444 cannabis-related hospital admissions, an increase of 32% on the previous figure. In 2011/12, cannabis-related hospital admissions in Victoria comprised 20% of all cannabis-related admissions in Australia (Figure 26).

Figure 26: Number of cannabis-related hospital admissions, Victoria and Australia, 1999/2000–2011/12



Source: Roxburgh and Burns, in press

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 2013 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 2013. The majority (77%) reported that their most recent injection site was their arm, while smaller proportions reported most recently injecting into their hand or wrist (11%), neck (5%), leg (3%) or groin (2%).

Table 11 presents the self-reported injecting risk practices of Victorian IDRS participants, from 2007 to 2013. Similar to previous years, 12% of the 2013 sample reported borrowing a used needle in the month before interview (Table 11). Among participants in this group (n=18), seven reported reusing another person's needle twice (39%) in the past month, four reported reuse more than 10 times (22%), three reported reuse once (17%), and three participants reported three to five times (17%). Participants were asked to nominate the person who used the needle before them; 10 participants nominated their regular sex partner (56%), three nominated their close friends (17%), and two an acquaintance (11%).

Seventeen per cent (n=25) of participants reported lending a used needle to someone else in the preceding month, not significantly different from 2012 (25%, $p = 0.089$). A further 25% (n=37) reported use of other injecting equipment after someone else, with the type of equipment used detailed in Table 11.

Table 11: Self-reported injecting risk practices in the past month, Victoria, 2007–2013

	2007	2008	2009	2010	2011	2012	2013
Borrowed a used NS^ (%)	**7**	**9**	**12**	**15**	**11**	**11**	**12**
Loaned a used NS^ (%)	**10**	**16**	**21**	**21**	**22**	**25**	**17**
Used spoon after someone else (%)	41	31	26	45	21	92*	97*
Used filter after someone else (%)	19	19	7	20	5	21*	24*
Used tourniquet after someone else (%)	7	11	3	9	1	16*	3*
Used water after someone else (%)	29	17	13	20	7	13*	32*
Used any equipment after someone else (%)	45	59	27	48	24	25	25

Source: IDRS participant interviews

* In 2012 and 2013, 38 and 37 participants reported sharing any injecting equipment in the past month. The percentages for both years denoted by an asterisk refer to the proportion of participants who shared injecting equipment among this group.

^ NS refers to needle and/or syringe

6.4.1.1. Reuse of own injecting equipment

Less than half (41%, n=62) of the 2013 Victorian IDRS sample reported reuse of their own needle in the month before interview, a significant decline from the proportion in 2012 (60%, p = 0.001). Specifically, in the preceding month 15% of participants reported reusing their own needle twice, 11% reported reuse on three to five injecting occasions, and 8% reported reuse on more than 10 occasions. The full sample was asked to nominate which injecting items they had reused in the past month; multiple responses were allowed. Participants most commonly reported reusing a 1 ml needle and syringe (40%), followed by a 10 ml syringe barrel (2%), and a winged infusion set (2%). While 56% reported no reuse of any ancillary injecting equipment, reuse of another item more than once was nominated by 43%. Among this group (n=65), the most commonly reused pieces of equipment were spoons or mixing containers (86%), tourniquets (17%), filters (14%), and water (6%).

6.4.1.2. Injecting equipment access and coverage

In 2013, most (97%) Victorian IDRS participants reported accessing an NSP in the past month for sterile injecting equipment. Equipment was also accessed from pharmacies (9%), outreach/peer workers (8%), and friends (5%). Participants (n=149) were asked to nominate the types of sterile injecting equipment used in that month; multiple responses were allowed. Almost all (96%) reported using a 1 ml needle and syringe and 10% reported using a 3 ml barrel. Very small proportions reported using a detachable needle tip (5%) and wheel filter (5%), respectively.

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 2013, participants (n=148) reported collecting needles and syringes four times (median, range=0–180 occasions) in the past month. During that month, participants injected drugs on 20 occasions (median, range=0–300 occasions), collected a median of 60 needles and syringes (range=0–800 syringes), and reportedly gave away or sold three (median, range=0–400 syringes) to other people. Ten per cent reported trouble obtaining sterile injecting equipment in the past month when it was needed.

As in previous years, participants were asked to nominate the location of their last injection: 66% reported injecting in private, similar to 2012 (64%, $p = 0.717$). Seventeen per cent reported injecting in a street or park, 7% in a public toilet, and 3% in a car. In 2013, the proportion of participants who reported private versus public injecting was similar to the proportions in previous years (Cogger et al., 2013; Reddel et al., 2011).

6.4.2. Injection-related health problems

Table 12 shows Victorian IDRS participants' self-reported injecting-related health problems, from 2007 to 2013. In 2013, 41% of participants reported experiencing at least one injection-related health problem in the month before interview, not significantly different from the 2012 figure (51%, $p = 0.083$). Participants in this group (n=62) were asked to nominate the problems experienced, as detailed in Table 12.

Table 12: Self-reported injection-related health problems among participants in the past month, Victoria, 2007–2013

	2007	2008	2009	2010	2011	2012	2013
Prominent scars/bruising (%)	63	47	43	19	41	75*	74*
Difficulty injecting (%)	35	39	41	25	33	51*	50*
Dirty hit (%)	17	15	18	12	10	26*	13*
Thrombosis (%)	9	10	7	5	6	9*	10*
Abscesses/infections (%)	10	7	6	6	8	20*	7*
Overdose (%)	3	3	5	2	3	9*	8*

Source: IDRS participant interviews

* In 2012 and 2013, 77 and 62 participants reported experiencing an injecting-related health problem in the past month, respectively. The data for 2012 and 2013 denoted by an asterisk refer to the proportions of participants 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=5), all reported primarily using heroin, with three reporting the concurrent use of benzodiazepines. Among participants who reported a dirty hit (n=8), the primary drugs involved were heroin (n=5), other opioids (n=1), methamphetamine (n=1) and buprenorphine-naloxone (n=1).

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 2012, six new cases of HIV infection were notified to the VDH in which IDU was the likely exposure, comprising 2.3% of all new HIV infections for the 2012 calendar year. There was an additional three new HIV notifications in 2012 in which both male to male sexual activity (MSM) and IDU were the likely exposures (Table 13).

Table 13: New HIV diagnoses where injecting drug use was reported as the likely exposure, Victoria, 2000–2012

	2000 n (%)	2001 n (%)	2002 n (%)	2003 n (%)	2004 n (%)	2005 n (%)	2006 n (%)	2007 n (%)	2008 n (%)	2009 n (%)	2010 n (%)	2011 n (%)	2012 n (%)
IDU: hetero	12 (6.4)	9 (4.5)	4 (1.9)	11 (5.4)	8 (3.9)	11 (4.6)	8 (3.1)	5 (1.9)	6 (2.3)	2 (0.8)	0 (0.0)	3 (1.1)	6 (2.3)
IDU: MSM	5 (2.7)	7 (3.5)	8 (3.8)	8 (3.9)	13 (6.3)	12 (5.0)	5 (1.9)	5 (1.9)	7 (2.7)	6 (2.3)	5 (2.1)	4 (1.4)	3 (1.2)
Total new diagnoses	187	201	209	204	206	241	259	262	261	261	235	278	261

Source: Victorian Department of Health

National prevalence estimates of HIV infection among PWID are derived from data collected for 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 2008 and 2012 the estimated prevalence of HIV infection among PWID in Australia remained low and stable at 1.5% or less. In 2012 the prevalence of HIV infection among the 2,279 ANSPS participants who provided blood samples was 1.2%, the same as in 2011 (Iversen & Maher, 2012, 2013).

Hepatitis C infection among PWID in Australia continues to be a major public health concern due to its ongoing high prevalence. Table 14 presents prevalence estimates of new Victorian HIV and HCV infections attributed to IDU between 2007 and 2012, derived from data collected for the ANSPS (Iversen & Maher, 2012, 2013). In 2012, the estimated prevalence of HIV among ANSPS participants in Victoria was 0.2%. By contrast, the estimated prevalence of HCV antibodies among ANSPS participants in Victoria was 69% (Table 14). Compared with the national ANSPS sample, in 2012 HCV antibody prevalence was significantly higher among the Victorian ANSPS sample (69% vs. 53%, $p < 0.001$), similar to 2011.

Table 14: Estimated prevalence of HIV and HCV infection among Victorian ANSPS participants, 2007–2012

	2007	2008	2009	2010	2011	2012
HCV (%)	73	72	55	64	66	69
HIV (%)	0.0	0.7	0.9	0.5	0.8	0.2

Source: Iversen & Maher, 2012, 2013

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 HCV. As mentioned in section 6.5, HCV antibodies were found in more than two-thirds (69%) of 2012 Victorian ANSPS participants who provided a finger-prick blood sample (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 of alcohol consumption in the preceding six months (see Table 3). For the past three 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 2013. In 2013, participants who reported consuming alcohol in the past year (n=91) returned a mean AUDIT-C score of 6.4 (median=6), not significantly different from the mean score in 2012 (p = 0.575). Although men returned higher mean scores than women, the difference failed to reach significance (6.8 vs. 5.3, p = 0.092).The proportion of participants scoring five or more on the AUDIT-C has been similar since 2011 (Table 15).

Table 15: AUDIT-C scores among participants who drank alcohol in the past year, Victoria, 2011–2013

	2011 (n=112)	2012 (n=107)	2013 (n=91)
Mean AUDIT-C score (SD)	6.1 (3.5)	6.1 (3.6)	6.4 (3.9)
Range	1–12	1–12	1–12
Total score of > = 5 (%)	60	63	62
Men score of > = 5 (%)	59	65	66
Women score of > = 5 (%)	63	59	52

Source: IDRS participant interviews

6.7. Mental health problems and psychological distress

As in previous years, the 2013 Victorian IDRS participant sample was 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. Fifty-one per cent reported experiencing a mental health problem in the past six months, the same as the proportion in 2012 (51%). These participants were asked to specify their mental health problem. Among this group (n=77), the prevalence of self-reported depression was 65% and the prevalence of anxiety was 42%. In 2013, the most commonly reported problems of lower prevalence were schizophrenia (14%), bipolar affective disorder (12%) and PTSD (9%).

Of the 77 participants who reported a recent mental health issue, 71% reported attending a health professional for their problem in the six months before interview. Participants in this group (n=55) most commonly reported seeing a GP (64%), a psychiatrist (24%) and psychologist (24%), followed by a counsellor (15%) and mental health nurse (11%). Among those who did not see a health professional (n=22), the most commonly reported reasons were self-treatment (n=5) and thinking their problem wasn't serious enough to warrant treatment (n=4).

In the previous six months, 65% of those with a self-reported mental health problem reported being prescribed psychiatric medication. Multiple responses were allowed. Among these participants (n=50),

52% reported being prescribed benzodiazepines for their mental health: namely diazepam (n=20), alprazolam (n=4), oxazepam (n=1) and nitrazepam (n=1). Fifty per cent reported that they were prescribed an antipsychotic: quetiapine (n=14) was most common, followed respectively by olanzapine (n=2), risperidone (n=2), zuclopenthixol (n=2), and flupenthixol (n=2). Thirty-six per cent were prescribed antidepressants. In this group, the most common medication was mirtazapine (n=7), followed by escitalopram (n=2) and venlafaxine (n=2). Four per cent reported being prescribed the mood stabiliser carbamazepine (n=2).

6.7.1. Kessler Psychological Distress Scale (K10)

Given that mental illness is of high prevalence in the general community, it is useful to distinguish more serious cases by symptom severity. 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 2013 the complete K10 was administered to 149 participants; among these, the mean score was 24.5 (median=24, SD=9.1, range=10–50). Levels of psychological distress among Victorian IDRS participants are shown in Table 16, from 2009 to 2013, compared with the 2007/08 NHS general population sample. According to the K10, the majority of participants in 2013 were classified as having high or very high psychological distress in the four weeks before interview. Even though the distributions of K10 scores have been similar across years, a higher proportion had low (20%) and high (34%) levels of psychological distress in 2013 than previous participants. Compared with the NHS general population sample, IDRS participants had a higher prevalence of high and very high psychological distress (62% vs. 10%, $p < 0.001$), very similar to findings in previous years (Table 16).

Table 16: Levels of psychological distress among Victorian IDRS participants, 2009–2013, compared with the 2007/08 NHS general population sample

	IDRS					NHS
	2009 (n=149)	2010 (n=143)	2011 (n=147)	2012 (n=144)	2013 (n=149)	2007/08 (n=15,362)
Psychological distress (%)						
Low (10–15)	9	11	14	8	20	71
Moderate (16–21)	28	22	19	17	20	20
High (22–29)	32	33	30	33	34	7
Very high (30–50)	31	34	37	41	28	3

Source: IDRS participant interviews; ABS, 2010

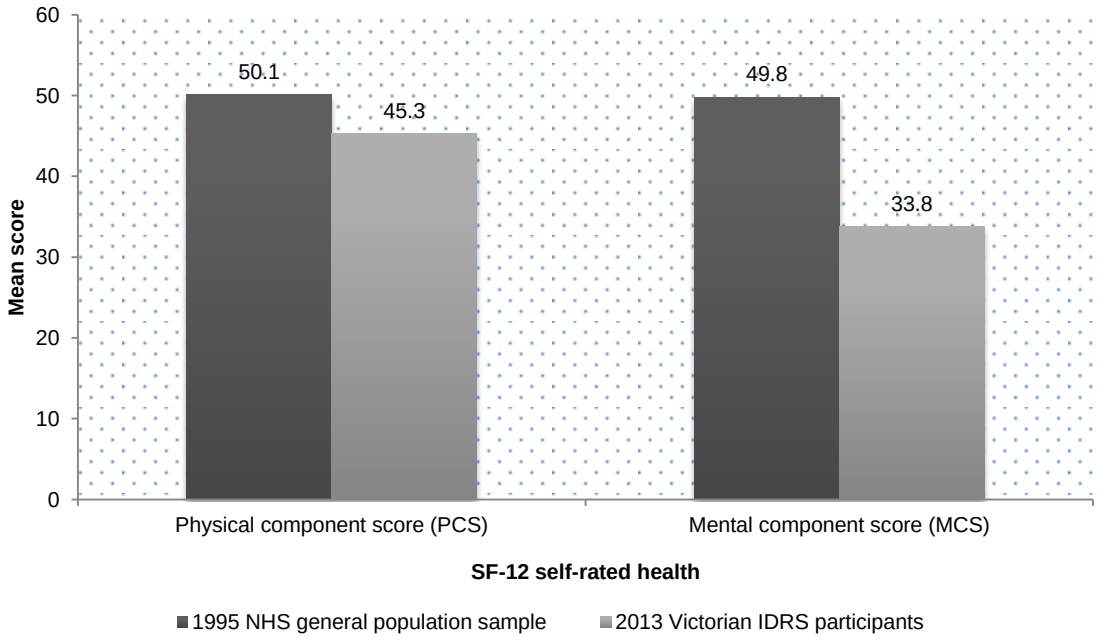
Note: The extent to which K10 cut-offs derived from general population samples can be applied to IDRS participants is yet to be established. Therefore these findings should be taken as a guide only.

6.7.2. Short Form 12 Health Survey (SF-12)

The Short Form 12 (SF-12) is a 12-item health survey derived from the SF-36 that provides information on health and wellbeing by measuring participants' health states across eight self-rated domains: physical functioning, role limitations due to poor physical health, bodily pain, general health, energy and fatigue, social functioning, as well as role limitations due to emotional problems and psychological distress, and wellbeing. Scores generated by these eight summary scales are weighted and computed to generate two standardised composite scores—the physical component score (PCS) and the mental component score (MCS). The scoring system was developed to yield a mean of 50 and a standard deviation of 10 (Ware, Kosinski, & Keller, 1995; Ware, Kosinski, & Keller, 1996). Higher mean scores indicate better self-rated health.

Figure 27 shows the mean SF-12 PCS and MCS among the 2013 Victorian IDRS sample, compared with Australian norms derived from the 1995 NHS general population sample (Australian Bureau of Statistics, 1995, 2009). In 2013, 112 participants completed the SF-12. Victorian IDRS participants' self-rated physical and mental health was significantly lower than the general population, similar to previous years. For instance, participants scored a mean PCS of 45.3 (SD=11.7) compared with the Australian general population mean of 50.1 ($p < 0.001$), indicating significantly poorer self-rated physical health among the IDRS sample. The mean MCS among IDRS participants was also significantly lower than Australian population norms; participants scored a mean MCS of 33.8 (SD=12.1) compared with the general population mean of 49.8 ($p < 0.001$), indicating significantly poorer self-rated mental health (Figure 27).

Figure 27: SF-12 scores among 2013 Victorian IDRS participants, compared with the 1995 NHS general population sample



Source: ABS, 1995, 2009; IDRS participant interviews

6.8. Driving risk behaviour

Participants were asked to provide information about their driving risk behaviour, as in previous years. In 2013, 26% reported driving a car, motorcycle, or other vehicle in the preceding six months, not significantly different from the proportion in 2012 (31%, p = 0.337). Among these participants (n=39), 59% reported having their full driver's licence whereas, at the time of interview, 33% reported having no licence.

Eighteen per cent of recent drivers (n=39) reported driving under the influence of alcohol; three of these participants (8%) recounted driving with a blood alcohol concentration over the legal limit on three occasions (median, range=1–6 occasions) 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 2007 to 2013, by drug type. Among recent drivers in 2013, 80% reported using illicit drugs before driving. The median number of 'drug driving' occasions among this group (n=31) was 24 (range=1–180 occasions) in the past six months, translating to about once per week. Participants who drove after consuming drugs most commonly reported driving after using heroin (n=18), cannabis (n=14), and benzodiazepines (n=7) (Table 18).

Table 17: Proportion of participants who reported using illicit drugs prior to driving in the past six months, Victoria, 2007–2013

	2007 (n=51)	2008 (n=60)	2009 (n=53)	2010 (n=44)	2011 (n=45)	2012 (n=35)	2013 (n=31)
Heroin (%)	77	68	66	82	64	69	58
Cannabis (%)	53	65	59	48	51	49	45
Speed (%)	29	28	28	16	20	9	0
Crystal/ice (%)	4	7	2	7	18	11	13
Benzodiazepines (%)	16	12	25	18	16	20	23
Ecstasy (%)	2	2	6	2	2	0	0

Source: IDRS participant interviews

Participants (n=31) were asked to provide further detail about their drug use prior to their most recent driving occasion. In 2013, 31 participants reported waiting a median of 10 minutes (range=0–305 minutes) before they last drove after using; the most commonly used drugs beforehand were heroin (n=15), cannabis (n=11) and benzodiazepines (n=6). These participants were asked about their perceptions of impairment: 48% reported that drugs had no impact on their driving, 39% reported their ability was slightly impaired, 10% reported slight improvement, and 3% reported quite an improvement. Most participants (81%) in this group had never been drug-tested by roadside police, however, 13% reported being tested more than once, and 7% reported being tested once. Only two participants reported that their most recent saliva test returned a positive result, namely for cannabis (n=1) and benzodiazepines (n=1).

7. Law-enforcement related trends associated with drug use

7.1. Criminal involvement

As per previous IDRS, the 2013 sample was asked to provide information about their involvement in crime in the month preceding interview. Table 18 presents the prevalence of criminal involvement in the past month, from 2007 to 2013. In 2013, 36% (n=54) of the sample reported that they were involved in a crime during the past month, not significantly different from the previous year (41%, p = 0.374) (Table 18).

Table 18: Proportion of participants reporting criminal involvement during the past month, Victoria, 2007–2013

	2007 (N=149)	2008 (N=150)	2009 (N=150)	2010 (N=150)	2011 (N=150)	2012 (N=150)	2013 (N=150)
Property crime (%)	22	21	17	19	27	27	21
Drug dealing (%)	24	35	27	23	29	20	17
Fraud (%)	5	5	1	1	5	3	3
Violence (%)	7	3	7	8	7	3	5
Any crime (%)	**38**	**47**	**39**	**40**	**47**	**41**	**36**

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 2013, participants were asked to disclose whether they were under the influence of alcohol and/or drugs before their last criminal offence, and to nominate their main reason for offending in the past month. Among those who reported involvement in property crime (n=31), 74% reported being under the influence last time: heroin (n=13), benzodiazepines (n=8) and alcohol (n=7) were most common. The main reason cited for the last property crime was the need for money to buy drugs (n=11), followed by the need for money to support self/family (n=7), and other financial reasons such as the need for money to buy food (n=4). Of the 25 participants who reported selling drugs for profit, 76% reported being under the influence last time: heroin (n=11), cannabis (n=8) and methadone (n=5) were most common. The main reason cited for selling drugs last time was the need for money to support self/family (n=10), followed by the need for money to buy drugs (n=8). Of the eight participants who reported involvement in violence, four reported that they were under the influence last time: heroin (n=2), benzodiazepines (n=1), cannabis (n=1) and ice (n=1) were most common. The main reason cited for the last act of violence was self-defence (n=3), followed by loss of temper (n=2). Only one participants who reported fraud reported being under the influence at the time of their last offence.

7.2. Arrests

In 2013, 39% of the sample reported an arrest during the past twelve months, slightly lower than 2012 (47%, p = 0.115). Among these (n=58), the largest proportion of arrests was related to property crime (50%), followed by use and/or possession (22%), violence (21%), and dealing or trafficking (12%).

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 2011/12 financial year relating to heroin and other opioids, methamphetamine, cocaine and cannabis, sourced from the ACC's *Illicit Drug Data Report 2011–2012* (Australian Crime Commission, 2013). 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 (Australian Crime Commission, 2013). 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 19 presents the number and proportion of consumer and provider arrests relating to heroin and other opioids in Victoria and Australia for the financial year 2011/12. Victorian arrests accounted for 53% of all heroin and other opioid-related arrests in Australia, consistent with the previous period (53%). Between 2010/11 and 2011/12, Victorian consumer arrests relating to heroin and other opioids increased (53% vs. 57%, $p < 0.05$) as a proportion of national arrests, whereas Victorian provider arrests declined (54% vs. 47%, $p < 0.01$). In Victoria, consumer arrests accounted for 70% of all heroin and other opioid-related arrests for the period (Table 19).

Table 19: Consumer and provider arrests relating to heroin and other opioids, Victoria, 2011/12

	Victoria (n)	Australia (N)	Proportion of national arrests (%)
Consumer arrests	999	1,800	57
Provider arrests	426	907	47
Total arrests	1,425	2,715	53

Source: Australian Crime Commission, 2013

Note: Arrest data for Victoria include Australian Federal Police data.

7.2.1.2. Methamphetamine

The number and proportion of consumer and provider arrests relating to ATS for the 2011/12 financial year are detailed in Table 20. During the period, more than one-quarter of all Australian consumer and provider arrests for ATS occurred in Victoria (27%, respectively). As a proportion of national arrests, Victorian ATS-related consumer arrests significantly increased from 23% in 2010/11 to 27% in 2011/12 ($p < 0.001$), while provider arrests remained the same (27%, respectively). Between 2010/11 and 2011/12, there was a 51% increase in the number of Victorian ATS-related consumer arrests, and a 29% increase in the number of Victorian ATS-related provider arrests. In Victoria, consumer arrests accounted for 74% of all arrests relating to ATS for the financial period (Table 20).

Table 20: Consumer and provider arrests relating to amphetamine-type stimulants, Victoria, 2011/12

	Victoria (n)	Australia (N)	Proportion of national arrests (%)
Consumer arrests	3,339	12,590	27
Provider arrests	1,155	4,216	27
Total arrests	4,494	16,828	27

Source: Australian Crime Commission, 2013

7.2.1.3. Cocaine

Table 21 shows the number and proportion of cocaine-related consumer and provider arrests in Victoria and Australia for the 2011/12 financial year. During the period, 19% of all Australian arrests relating to cocaine occurred in Victoria. As a proportion of national arrests, Victorian cocaine-related consumer arrests significantly increased from 13% in 2010/11 to 20% in 2011/12 ($p < 0.001$), whereas provider arrests did not (15% vs. 17%, $p = 0.525$). Between 2010/11 and 2011/12, there was an 84% increase in the number of Victorian cocaine-related consumer arrests, and an 18% increase in the number of Victorian cocaine-related provider arrests. In 2011/12, consumer arrests for cocaine comprised 75% of all cocaine-related arrests in Victoria (Table 21).

Table 21: Consumer and provider arrests relating to cocaine, Victoria, 2011/12

	Victoria (n)	Australia (n)	Proportion of national arrests (%)
Consumer arrests	140	714	20
Provider arrests	47	280	17
Total arrests	187	995	19

Source: Australian Crime Commission, 2013

7.2.1.4. Cannabis

The number and proportion of cannabis-related consumer and provider arrests in Victoria and Australia for the 2011/12 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 proportion of national arrests, Victorian cannabis-related consumer arrests significantly increased from 11% in 2010/11 to 12% in 2011/12 ($p < 0.001$), while provider arrests significantly declined (21% vs. 18%, $p < 0.001$). Between 2010/11 and 2011/12, there was a 14% increase in the number of Victorian cannabis-related consumer arrests, whereas the number of Victorian cannabis-related provider arrests remained the same. Consumer arrests for cannabis comprised the overwhelming majority of cannabis-related arrests (86%) across Australia, and 80% of all cannabis-related arrests in Victoria (Table 22).

Table 22: Consumer and provider arrests relating to cannabis, Victoria, 2011/12

	Victoria (n)	Australia (n)	Proportion of national arrests (%)
Consumer arrests	6,342	52,413	12
Provider arrests	1,574	8,546	18
Total arrests	7,916	61,011	13

Source: Australian Crime Commission, 2013

7.3. Expenditure on illicit drugs

In 2013, almost half (47%) of 2013 Victorian IDRS participants reported purchasing illicit drugs on the day before completing the survey. Participants' (n=70) median reported spending on illicit drugs was $100 (range=$5–1,800).

8. Special topics of interest

8.1. Naloxone

Naloxone, 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 take-home naloxone 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 take-home naloxone, please see www.naloxoneinfo.org.

In 2013, the IDRS included a series of questions to explore participants' knowledge of and attitudes to naloxone, and take-home naloxone in particular. Participants' responses are detailed in Table 23. Among the Victorian sample, 91% had heard of naloxone. Of those who had heard of naloxone (n=136), 58% reported that naloxone was used to reverse the effects of heroin and 47% knew that naloxone re-establishes consciousness (Table 23). Responses in the 'other' category (14%) tended to refer to the unpleasant effects associated with heroin withdrawal, and included comments such as "wrecks your taste", "a rude awakening" and "horrid, wake-up effects" (Cogger & Dietze, 2013).

Only 17% of 2013 Victorian IDRS participants had heard of take-home naloxone at the time of interview, not surprising given that at the time of data collection Victorian programs were yet to be implemented. Nonetheless, when asked, most either strongly supported (63%) or supported (23%) expanding the availability of take-home naloxone programs in Victoria. Participants were asked what they would do if they witnessed someone overdose or found a suspected overdose: 96% reported that they would call 000, with similar proportions reporting that they would stay with the victim (52%), turn the victim on their side (51%), and commence mouth-to-mouth CPR (49%). Participants showed preparedness to participate in take-home naloxone programs. The majority reported that they would carry naloxone on their person (77%), administer naloxone after witnessing a person overdose (85%) and stay with the victim after administering naloxone (85%). Eighty-six per cent reported that they would want their peers to give them naloxone in the event that they themselves overdosed (Table 23).

Table 23: Knowledge of and attitudes to take-home naloxone, Victoria, 2013

	2013 (N=150)
Heard of naloxone (%)	91
Description of naloxone* (%)	(n=136)
Reverses the effects of heroin	58
Helps someone start breathing	5
Re-establishes consciousness	47
Other	14
Heard of take-home naloxone programs (%)	
Yes	17
No	83
Support for expanding take-home naloxone programs (%)	(N=150)
Strongly support	63
Support	23
Neither support, nor oppose	5
Oppose	4
Strongly oppose	2
Don't know enough to say	2
Witness overdose* (%)	(N=150)
Turn victim on side	51
Mouth to mouth CPR	49
Call 000	96
Stay with victim	52
Other remedies (e.g. ice, shower, slap)	23
If available, would you* (%)	(N=150)
Carry naloxone if trained	77
Administer naloxone after witnessing overdose	85
Want peers to give you naloxone	86
Stay with someone after giving them naloxone	85

Source: IDRS participant interviews

* Multiple responses allowed.

8.1.1. KE reports: Naloxone

KE from the health sector recommended increased education for PWID regarding preventing and responding to overdose. Several NSP KE recommended implementation of peer take-home naloxone programs in Victoria, particularly those from the Cities of Maribyrnong, Port Phillip and Yarra. Many of these services already had naloxone on premises to reverse instances of opioid overdose as they occurred. However, this strategy was only useful when overdoses occurred in or around primary health service premises. Great resistance among clients regarding use of naloxone in this context was described by an NSP KE from the City of Yarra (e.g. "[it'll] ruin [his/her] stone!"…"He'll be alright!"); changing this culture was required. Paramedic KE also recommended increasing peer access to take-home naloxone, particularly among marginalised groups of PWID. However, more was needed than focusing on naloxone administration alone, with the "best bang for buck" perceived to be from integrating naloxone into an emergency care module that could be used as a vehicle for broader life education skills in the community. Late in 2013, HRV's Peer Naloxone program for PWID was implemented, and Anex's Community Overdose Prevention and Education program held its first high

level reference group and frontline services planning forums (Anex, 2013; Harm Reduction Victoria, 2014).

8.2. Pharmaceutical opioids

Since the supply of heroin to Australia returned to historic levels in the early 2000s (Dietze & Fitzgerald, 2002; Miller, Fry, & Dietze, 2001), both the IDRS and the ANSPS have observed increases in the use and injection of pharmaceutical opioids, as well as an increase over time in the age of PWID (Iversen & Maher, 2012, 2013; Iversen, Topp, & Maher, 2011). Previous research has shown that PWID have excess morbidity and mortality relative to the general population, and that medical practitioners are reluctant to prescribe opioid analgesics to individuals with a history of IDU (Baldacchino, Gilchrist, Fleming, & Bannister, 2010; English et al., 1995; Hulse, English, Milne, & Holman, 1999; Merrill & Rhodes, 2002; Randall et al., 2011; Vlahov et al., 2004). This section describes the complex interplay between IDU, pain management, and the extra-medical use of pharmaceutical opioids among Victorian IDRS participants.

The characteristics of pharmaceutical opioid use among the 2013 Victorian IDRS sample are detailed in Table 24. In this context, pharmaceutical opioids include medications such as morphine and oxycodone, OST medications such as methadone, buprenorphine and buprenorphine-naloxone, as well as other prescription opioids such as fentanyl, pethidine, tramadol and dextropropoxyphene. In 2013, 61% of participants reported the use of prescribed and/or non-prescribed pharmaceutical opioids in the twelve months preceding interview. These participants (n=91) were asked to indicate the main reason for use; the most common reasons cited were substitution for heroin (47%) and prevention of opioid withdrawal (31%). Nine per cent cited that pain relief was their main reason for use (Table 24).

Participants who cited pain relief (n=8) as their main reason for use were asked to provide further detail about their access to pharmaceutical opioids in the past six months. Seven (88%) participants reported obtaining pharmaceutical opioids on their own prescription; of these, five (71%) reported obtaining a PBS prescription from their regular doctor, while one (14%) reported obtaining a PBS prescription from another doctor. No one reported a private prescription. In the past six months, one of eight participants (13%) reported being refused pharmaceutical opioids by a doctor because of their IDU history, and two (25%) reported that they had sold, traded or given away some of their own pharmaceutical opioids (Table 24).

Table 24: Characteristics of pharmaceutical opioid use in the past year, Victoria, 2013

	2013 (N=150)
Used pharmaceutical opioids in past 12 months (%)	61
Main reason for using pharmaceutical opioids* (%)	(n=91)
As a substitute for heroin	47
To prevent withdrawal	31
Pain relief	9
Other reason (not specified)	7
To experience an opioid effect	6
To top up heroin	1
Source of pharmaceutical opioids for pain relief[#] (%)	(n=8)
Own prescription	88
Purchased from others	13
Source of prescription[##] (%)	(n=7)
PBS prescription from regular doctor	71
Private prescription from regular doctor	0
PBS prescription from another doctor	14
Private prescription from another doctor	0
Don't know/refused	14
Refused pharmaceutical opioids for pain relief in past six months (%)	(n=8)
No	88
Yes, not clinically appropriate	0
Yes, history of IDU	13
Sold, traded, given away prescribed pharmaceutical opioids in past six months (%)	(n=8)
No	75
Yes	25

Source: IDRS participant interviews

* Among participants who reported recent use

[#] Among participants who reported that pain relief was the main reason for use

[##] Among participants who reported the source of pharmaceutical opioids for pain relief was their own prescription. Multiple responses allowed

8.3. Brief Pain Inventory

The Brief Pain Inventory (BPI) is a multidimensional assessment of pain used in both clinical and research settings. The BPI uses rating scales from 0 to 10 that allow respondents to rate the severity of their pain and the degree to which it interferes with their daily functioning (Cleeland, 2009). For items 3 to 6, respondents rate their pain from 0 (no pain) to 10 (pain as bad as you can imagine), from which a mean 'pain severity score' is calculated. For items 9a to 9g, respondents rate their pain from 0 (does not interfere) to 10 (completely interferes), from which a mean 'pain interference score' is calculated. The pain interference score is designed to examine the degree to which pain interferes with an individual's daily activities, in particular general activity, mood, walking, normal work, relationships, sleep and enjoyment of life (Cleeland, 2009). In 2013, the BPI was administered to Victorian IDRS participants who reported pharmaceutical opioid use in the past year, as shown in Table 25.

In 2013, only four participants (4%) who reported past year pharmaceutical opioid use reported experiencing pain other than everyday pain in the preceding seven days, with all (100%) reporting that their pain was of a chronic, non-cancer nature and that it had lasted for more than three months. Among these four participants, the mean pain severity score was 4.3 (SD=1.5) and the mean pain interference score was 4.8 (SD=3.6). All participants reported receiving treatment to relieve their pain; the mean pain relief score was 5.3 (SD=4.1) out of 10 (Table 25).

Table 25: Brief Pain Inventory, Victoria, 2013

	2013 (N=91)
Experienced pain (other than everyday pain) past week (%)	4
Nature of pain (%)	(n=4)
Acute/short-term pain[a]	0
Chronic non-cancer pain[b]	100
Chronic cancer/malignant pain[c]	0
Cause of pain (%)	(n=4)
Accident/injury/assault	75
Illness/disease	25
In pain now (%)	50
Experienced pain for more than three months (%)	100
Mean Pain Severity score* (SD)	4.3 (1.5)
Mean relief experienced from medications* (SD)	5.3 (4.1)
Mean Pain Interference score* (SD)	4.8 (3.6)

Source: IDRS participant interviews

[a] Refers to pain typically caused by injury to tissue that resolves when the tissue heals.

[b] Refers to continuous pain that persists for more than three months, and beyond the normal time for healing. May also refer to pain associated with progressive, debilitating diseases such as arthritis.

[c] Refers to advanced, progressive disease-related pain such as cancer, multiple sclerosis, late stage HIV/AIDS, and terminal kidney disease.

* Among those who received treatment/medication for pain and commented.

8.4. 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 2013, 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 cut-off of five to indicate the presence of dependence.

The SDS was administered to 140 Victorian IDRS participants who reported the recent use of heroin and/or other opioids in 2013, as shown in Table 26. Among these, the mean SDS score was 7.6, not

significantly different from the mean score in 2012 (8.2, $p = 0.204$), with 74% of recent heroin and/or opioid users meeting the cut-off for dependence. In 2013, mean SDS scores for women and men were similar (7.1 vs. 7.8, $p = 0.396$). Participants who scored five or more on the SDS were asked to nominate the opioids their responses related to; 98 participants provided responses. Of these, 85% attributed their responses to heroin, 25% to methadone and 12% to buprenorphine.

The SDS was also administered to 96 participants who reported the recent use of methamphetamine or other stimulants (i.e. cocaine or pharmaceutical stimulants). The mean SDS score was 4.2 in 2013, compared with 3.4 in 2012 ($p = 0.426$). Thirty-four per cent of recent users scored met the cut-off for stimulant dependence. Although women had higher mean scores than men, the difference was not significant (5.1 vs. 3.9, $p = 0.574$). Participants who scored four or more on the SDS were asked to nominate the stimulants to which their responses related; 28 participants provided responses. Of these, 93% nominated methamphetamine, 7% cocaine and 4% pharmaceutical stimulants.

Table 26: SDS scores among participants who reported recent opioid and/or stimulant use, Victoria, 2013

	Heroin and/or other opioids (n=140)	Methamphetamine and/or other stimulants (n=96)
Mean SDS score (SD)	7.6 (4.4)	4.2 (9.1)
Mean SDS score for men (SD)	7.8 (4.4)	3.9 (7.8)
Mean SDS score for women (SD)	7.1 (4.5)	5.1 (12.7)
Scored above cut-off* (%)	74	34
Men who scored above cut-off (%)	75	37
Women who scored above cut-off (%)	71	26

Source: IDRS participant interviews;

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

8.5. OST medication injection

Due to the introduction of the buprenorphine-naloxone film preparation (Suboxone® film) in 2011, questions were included in both the 2012 and 2013 IDRS surveys regarding the injection of OST medications (methadone, buprenorphine, and buprenorphine-naloxone tablets and film) in the past six months. Among the 2013 sample, the prevalence of recent OST medication injection was low, as shown in Table 27. From 2012 to 2013, the prevalence of recent buprenorphine injection significantly declined (18% vs. 10%, $p < 0.05$). While buprenorphine-naloxone tablet injection also declined, the difference was not significant ($p = 0.205$). For further information on OST medication injection among PWID in Australia, please refer to recent reports by Larance and colleagues (Larance et al., 2011; Larance et al., In press).

Table 27: OST medication injection, Victoria, 2012–2013

	2012 (N=150)	2013 (N=150)
Buprenorphine (%)	18	10
Buprenorphine-naloxone tablets (%)	16	11
Buprenorphine-naloxone film (%)	6	8
Methadone (%)	5	5

Source: IDRS participant interviews

8.6. HCV testing and treatment

Despite efforts to improve access to antiviral therapy for hepatitis C virus (HCV) infection and improved treatment outcomes, treatment uptake among PWID for chronic HCV remains low (Doab, Treloar, & Dore, 2005). In 2013, the HCV testing and treatment module was included in the IDRS with the aim of determining the extent of knowledge among PWID regarding an HCV diagnosis, their knowledge and perceptions about available treatment and barriers to treatment uptake.

As shown in Table 28, almost all (94%) of the 2013 Victorian IDRS sample had been tested for HCV antibodies in their lifetime, with 70% reporting a positive result. Of those with HCV antibodies (n=105), 56% reported receiving their last positive test result over twelve months ago, while 44% received it within the last twelve months. Seventy-four per cent of participants with HCV antibodies reported undergoing further HCV testing. Among these (n=78), 82% reported having a polymerase chain reaction (PCR) test to determine whether the virus was active (i.e. current HCV infection); only 17% reported having a PCR viral genotype test. Almost two-thirds (63%) of those who had a PCR test (n=64) reported current HCV infection (i.e. an active virus). Thirty-one per cent reported receiving a negative result, meaning they had either spontaneously cleared the virus or successfully completed HCV treatment and were subsequently considered HCV negative. Among the 13 participants who reported having a PCR viral genotype test, genotype 3 was most common (n=6). Most participants who had further testing reported having their last HCV PCR test in ‘other’ locations, such as through participation in a cohort study examining HCV, at IDU-specific primary health centres (35%), or at their community GP (31%) (Table 28).

Table 28: HCV testing and treatment, Victoria, 2013

	2013 (N=150)
Ever tested for HCV (%)	94
Most recent positive HCV antibody test (%)	(n=105)
Within the last 12 months	44
More than 12 months ago	56
Had further tests after receiving HCV Ab+ result (%)	74
Reasons for no further tests (%)	(n=26)
Provider didn't mention the need for further tests	23
Not a priority	23
Blood tests too difficult (e.g. vein problems)	4
Don't feel sick	4
Concerned about confidentiality of result (e.g. OST)	0
Other	54
Further tests for HCV* (%)	(n=78)
PCR test (to determine current infection)	82
PCR viral genotype test	17
Don't know/can't remember	12
Other	4
Location of last HCV test (%)	
Prison	8
Community GP	31
OST clinic	14
Specialist clinic	13
Other (e.g. part of HCV cohort study, primary health care service)	35

Source: IDRS participant interviews

* Multiple responses allowed.

Participants who were HCV positive (n=40) were asked about their experience of treatment; 25% of this group reported receiving HCV antiviral treatment in their lifetime. Of the 10 participants who initiated HCV treatment, four reported treatment success (i.e. sustained virological response at six months post-completion), four reported non-completion (and subsequently not knowing whether treatment was successful), and two reported undergoing treatment at the time of interview. These participants (n=10) were asked to disclose their main reasons for undergoing HCV treatment; multiple responses were allowed. The most common reasons were "don't want to live with HCV" (n=9) and "it was the right time for me" (n=2).

The 30 participants who had not received HCV antiviral treatment were asked whether they were aware of the new, improved treatment available for people with genotype 1—the addition of the DAAs boceprevir and telaprevir to the standard treatment regime of pegylated interferon and ribavirin. Eighteen participants (60%) were aware of the new treatment regime. Of these, 14 (78%) reported that they would consider undergoing the new HCV treatment. The settings considered most convenient for receiving treatment (multiple responses allowed) were GP clinic (n=7), HCV clinic (n=4) and OST provider (n=4), as well as IDU-specific primary health (n=2) and residential rehabilitation (n=2) centres. Among the four participants who would not consider undergoing the new treatment, the main reasons were fear of side effects (n=3), having a different genotype (n=1) and receiving a recommendation from their doctor to wait (n=1).

8.6.1. KE reports: HCV treatment

Two NSP KE from the Cities of Maribyrnong and Port Phillip each reported increased promotion of HCV testing and treatment among their client groups associated with the ageing of PWID in Melbourne and the potential progression to liver disease. As the City of Port Phillip KE noted, “Peoples’ 20 years is up!” The KE from the City of Maribyrnong reported that their service had established an onsite fibroscan clinic in response to the extremely high prevalence of HCV among their clients. The model incorporated a shared care plan in which it was no longer necessary for people to present to hospital for HCV treatment, together with an incentive program to encourage people to pick up their most recent BBVI test results. In the City of Port Phillip, there was also increased focus on the HCV clinic, with workers trying to engage with clients around treatment as well as using HCV treatment to prevent further HCV transmission among PWID in the area. In the City of Frankston, GP/OST prescriber KE reported that a hepatitis nurse from the Alfred Hospital was working with HCV positive patients.

8.7. Discrimination

Discrimination against PWID is widespread and in many cases deemed acceptable by the general public (Australian Injecting and Illicit Drug Users' League, 2010). Very often PWID manage complex situations in relation to poor treatment and discriminatory practices in a range of settings. In 2013, the discrimination module was included in the IDRS to complement the work that the Australian Injecting and Illicit Drug Users’ League (AIVL) initiated in previous years with the AIVL National Anti-Discrimination Project (Parr & Bullen, 2010). Questions focused on whether participants had experienced discrimination in their lifetime as a result of their perceived or actual IDU status, HCV and/or HIV status, and/or their participation in OST programs.

Table 29 shows the experiences of discrimination reported by the 2013 Victorian IDRS sample; 146 participants completed the initial discrimination section. Of these, 48% reported being discriminated against in the past twelve months. Participants in this group (n=70) were asked to disclose the location or context of the discrimination in the past year, with multiple responses allowed. The most common locations or contexts in which participants reported experiencing discrimination were the police (27%), hospital (24%), pharmacy (24%) and GP/OST prescriber (21%). The majority of these participants (57%) also reported experiencing discrimination in other contexts, most commonly specified as the general public and among family members. Eighty-one per cent reported a perception that they were discriminated against because they injected drugs (or people thought they did). Twenty-three per cent reported that they had experienced violence or abuse as a result of the discrimination, while 21% reported that they were ‘outed’ as a person who uses drugs. Eighty-nine per cent of participants who had experienced discrimination in the past twelve months did not try to resolve the situation by making a formal complaint (Table 29).

Table 29: Self-reported experiences of discrimination among participants, Victoria, 2013

	2013 (N=146)
Lifetime experience of discrimination (%)	
Yes, within the past 12 months	48
Yes, but not within the past 12 months	12
Never	40
Location/context of discrimination in past year* (%)	(n=70)
GP/OST prescriber	21
Pharmacy	24
Dentist	1
Health service (e.g. mental health, youth, community etc.)	16
Government service (e.g. Centrelink, Office of Housing, etc.)	17
Police	27
Hospital	24
NSP	3
AOD service	3
Prison	6
Other (e.g. general public, among family members)	57
Reasons for discrimination* (%)	(n=70)
Because I inject drugs (or people think I do)	81
Because I'm on OST (or people think I am)	20
Because I have HCV (or people think I have)	13
Because I have HIV (or people think I have)	0
Other (e.g. Indigenous status & IDU, tattoos)	10
Result of discrimination (%)	
Refused service	19
Taken off/reduced OST medication	0
'Outed' as a person who uses drugs	21
Experienced violence or abuse	23
Lost job	7
Other (e.g. negative comments/judgement, maltreatment, not prioritised by services)	46
Tried to resolve discrimination by making formal complaint* (%)	
No	89
Australian Human Rights Commission	0
Health Care Complaints Commission	0
Directly to service provider/organisation	10
Other	6

Source: IDRS participant interviews

* Multiple responses allowed.

8.8. Oral health impact profile

The oral health of PWID has been neglected in research, service provision and health promotion. In 2013, the Oral Health Impact Profile (OHIP-14), an internationally recognised measure of Oral Health Related Quality of Life (OHRQoL), was included in the IDRS. The OHRQoL model is defined as an individual's subjective assessment of how oral functional factors, psychological factors, social factors and the experience of oro-facial pain or discomfort affect personal wellbeing (Slade, 1997). The OHIP-14 is a self-report questionnaire comprised of 14 items that measure seven conceptual dimensions of impact: functional limitation, physical pain, psychological discomfort, physical disability, psychological disability, social disability and handicap. Using a three month period of recall instead of the standard 12 months, IDRS participants were asked to respond to each item using a five-point Likert scale according to the frequency of impact: never (score 0), hardly ever (score 1), occasionally (score 2), fairly often (score 3) and very often (score 4). For this report, the OHIP-14 was divided into the seven dimensions of impact, with percentages calculated for participants who responded 'occasionally', 'fairly often' and 'very often'. Severity of impact was the sum of ordinal responses for each of the 14 items; with a mean scale score computed ranging from 0 to 56. Higher mean severity scores indicate poorer OHRQoL (Crocombe, Mahoney, Spencer, & Waller, 2013).

One hundred and thirty-seven 2013 Victorian IDRS participants completed the measure, as shown in Table 30. The dimensions of impact of highest prevalence among the sample were psychological disability (50%), physical pain (49%) and psychological discomfort (44%). The mean OHIP-14 severity score was 12.1 (95%CI 9.7, 14.5), much higher than for respondents to the National Survey of Adult Oral Health (NSAOH) 2004–06 (mean=7.6, 95%CI 7.1, 8.1) from the Australian general population (Crocombe et al., 2013). Thirty-five per cent of IDRS participants who completed the OHIP-14 scored zero, an indication of good subjective OHRQoL (Table 30).

Table 30: OHIP-14, Victoria, 2013

	2013 (n=137)
Dimensions of impact, past three months (%)	
Functional limitation	35
Physical pain	49
Psychological discomfort	44
Physical disability	34
Psychological disability	50
Social disability	31
Handicap	31
Mean severity score (SD, range)	12.1 (14.2, 0–55)
Score of zero (%)	35

Source: IDRS participant interviews

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 populations 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. Subsequently, 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. To provide a more comprehensive picture of emerging trends in Victoria, the IDRS methodology requires expansion to include a sample of PWID in rural and regional settings.

10. Implications

The results from the 2013 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 also focus on capturing the prevalence and patterns of drug use among young PWID (particularly young initiates) through novel recruitment methods given the relatively hidden nature of this population.

2. **Research examining the prevalence and patterns of methamphetamine use**, injection and inhalation in metropolitan and outer suburban Melbourne, as well as regional Victoria. Funding research to develop an evidence base for more effective treatment options for this diverse population of users, focusing on residential withdrawal services in particular, given the high demand reported by KE for these services among users (and the limited evidence for efficacy). Credible harm reduction education targeted to the general population of users pointing to the harms associated with heavy and dependent use. Consideration of the provision of sterile pipes to users as a tool to engage this population with harm reduction and primary health care services.

3. **Continued expansion of OST programs across Victoria**, as well as 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 recent review of pharmacotherapy in Victoria (King et al., 2011). Further initiatives to strengthen current pharmacotherapy services as outlined in the Victorian Government Whole of Government Drug Strategy (Victorian Department of Health, 2012) should be encouraged. These could include incentives for newly trained GPs to take on OST clients as part of routine practice, including increasing the level of education and training around working with populations with complex health needs. Increasing financial incentives for current OST GPs to do more than prescribe to their patients so that holistic approaches to OST treatment and ancillary healthcare become entrenched as part of general medical practice.

4. **Continued monitoring of the prevalence, patterns and sources of prescribed and non-prescribed alprazolam use**, given the drug's rescheduling from 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 use. Recognition that some PWID have a genuine need for prescription use of these drugs.

5. **Funding support to increase PWIDs' access to peer-based naloxone programs**, given that the overwhelming majority of the 2013 IDRS sample supported the idea of a take-home naloxone program. Providing PWID with comprehensive education and training around overdose management and naloxone administration that continues to dispel overdose myths ought to empower people to effectively respond in the event of an overdose within a peer-based context.

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