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B. de Graaff, A. Peacock & R. Bruno

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

Australian Drug Trends Series No. 113

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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

4MMC	4-methylmethcathinone
2CI	2,5-dimethoxy-4-iodophenethylamine
ABCI	Australian Bureau of Criminal Intelligence
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
AIDS	Auto-immune Deficiency Syndrome
AIHW	Australian Institute of Health and Welfare
AOD	Alcohol and other Drugs
ATSI	Aboriginal and/or Torres Strait Islander
AUDIT	Alcohol Use Disorders Identification Test
BBVI	Blood-borne viral infection(s)
BPI	Brief Pain Inventory
CNS	Central nervous system
CPR	Cardio-pulmonary resuscitation
DHHS	Department of Health and Human Services
DSM-III-R	Diagnostic & Statistical Manual of Mental Disorders, 3rd Edition, Revised
EDRS	Ecstasy & related Drug Reporting System
FTND	Fagerstrom Test for Nicotine Dependence
GP	General Practitioner
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HILDA	Household, Income and Labour Dynamics in Australia
HIV	Human immunodeficiency virus
HSI	Heavy Smoking Index
ICD	International Classification of Diseases
IDDI	Illicit Drug Diversion Initiative
IDDR	Illicit Drug Data Report
IDRS	Illicit Drug Reporting System
IRID	Injecting-related injuries and diseases
K10	Kessler 10 Psychological Distress Scale
KE	Key expert(s) (previously referred to as key informant)
LSD	lysergic acid diethylamide
MCS	Mental Component Score
MDA	3,4-methylenedioxyamphetamine
MDEA	3,4-methylenedioxyethamphetamine
MDMA	3,4-methylenedioxymethamphetamine
MDPV	methylenedioxypyrovalerone
MMT	Methadone Maintenance Therapy
MSM	Methylsulfonylmethane

N	Number of participants
NCIS	National Coronial Information System
NDARC	National Drug and Alcohol Research Centre
NDLERF	National Drug Law Enforcement Research Fund
NDSHS	National Drug Strategy Household Survey
NGO	Non-government organisations
NHS	National Health Survey
NMDS	National Minimum Data Set (for Alcohol and Drug Treatment Services)
NSP	Needle and Syringe Program(s)
OHIP-14	Oral Health Impact Profile short form 14
OFT	Oral fluid test
OHRQL	Oral Health Related Quality of Life
OST	Oral Substitution Therapy
OTC	Over-the-counter
OTI	Opiate Treatment Index
PASW	Predictive Analysis Software
PBS	Pharmaceutical Benefits Scheme
PCS	Physical Component Score
PCR	Polymerase Chain Reaction
PWI	Personal Wellbeing Index
PWID	People who inject drugs
REU	Regular ecstasy user
S8	Schedule 8
SD	Standard deviation
SDS	Severity of Dependence Scale
SF-8	Short Form-8 Health Survey
SF-12	Short Form-12 Health Survey
SIS	State Intelligence Services, Tasmania Police
SPSS	Statistical Package for the Social Sciences
SSRI	Specific Serotonin Reuptake Inhibitor
STI	Sexually Transmitted Infection
TAS	Tasmania
TasCAHRD	Tasmanian Council on AIDS, Hepatitis and Related Diseases
TASPOL	Tasmania Police
TBI	Traumatic brain injury
TCA	Tricyclic anti-depressant
UNODC	United Nations Office of Drugs and Crime

EXECUTIVE SUMMARY

In 1998, the National Drug and Alcohol Research Centre (NDARC) was commissioned by the Commonwealth Department of Health and Family Services (now the Australian Government Department of Health) to begin a national trial of the Illicit Drug Reporting System (IDRS), following previous employment of the methodology in New South Wales, South Australia and Victoria. The intention of the IDRS was to provide a coordinated approach to the monitoring of data associated with the use of heroin, cocaine, methamphetamine and cannabis, in order that this information could act as an early warning indicator of the availability and use of drugs in these categories.

In 1999, the Tasmanian component of the national IDRS gathered information on drug trends using two methods: key expert (KE) interviews with professionals working in drug-related fields; and an examination of existing indicators. For the 2000-2005 IDRS, funding was provided by the National Drug Law Enforcement Research Fund (NDLERF) to expand this methodology and include a survey of people who regularly inject illicit drugs, in addition to the methods employed previously. Since this time, funding for this methodology has been provided by the Australian Government under the Substance Misuse Prevention and Service Improvement Grants Fund

Injecting drug user survey

One hundred and seven people who regularly injected illicit drugs (PWID) were interviewed using a standardised interview schedule which contained sections on demographics, drug use, price, purity and availability of drugs, crime, risk-taking, health and general drug trends.

Key expert survey

Twenty-three professionals working with substance-using populations provided information about a range of illicit drug use patterns in clients they had direct contact with. These 'key experts' (KE) included drug treatment workers, Needle and Syringe Program staff, Addiction Medicine specialists, general health workers, youth and outreach workers, advocacy workers, a community development worker, representatives from the peak alcohol and other drug non-government organisation and staff from police and justice-related fields. Of these individuals, eight reported on groups that predominantly used cannabis and alcohol, and six reported on groups that predominantly use methamphetamine or and pharmaceutical opioids; the remaining KE reported coming into contact with consumers of a range of substances.

Other indicators

In order to complement and validate the KE interview data, a range of drug use indicator data was sought from both health and law enforcement sectors. Guidelines for the acceptability of these sources aimed to ensure national comparability, and required that the sources were available annually, included 50 or more cases, were collected in the main study site, and included details on the main illicit drug types under study.

Included in this analysis were telephone advisory data, drug offence data, hepatitis B and C incidence data, data from the National Drug Strategy Household Survey, and data from clients of the state's Needle and Syringe and Pharmacotherapy programs, as well as drug and alcohol treatment services.

Demographic characteristics of people who inject drugs participants

Demographic characteristics of the regular injecting drug user participants interviewed were generally consistent with those interviewed in previous Hobart IDRS studies. Participants were predominantly male (57%), and had an average age of 37 years. Participants had completed 10 years of education on average, three-quarters (77%) were unemployed at the time of the interview, and almost one-fifth of the sample reported a previous prison history (37%).

Three-fifths of participants (63%) were injecting multiple times per week (but not every day), with 28% injecting at least once daily. Opioids were the predominant drug of choice among the cohort (69%), and were the class of drug most injected in the preceding month amongst almost three-quarters of the sample (71%). Half were involved in some sort of drug treatment at the time of interview (47%).

Patterns of drug use among the PWID sample

The major trends identified in the 2013 Tasmanian IDRS report relate to indications of emerging changes in patterns of methamphetamine and pharmaceutical opioid use amongst local PWID, along with an ongoing pattern of coincident opioid and benzodiazepine (particularly alprazolam) use. Summaries of major trends for each drug class are reported below by drug type, and are also summarised in Table A.

Table A: Price, availability, purity and prevalence of use of heroin, methamphetamine, cannabis, morphine at the time of the interview and over the preceding six months

	Heroin	Methamphetamine			Cannabis		Morphine
		Powder	Paste	Crystal	Bush	Hydro	
Prevalence of use	Low	Stable level of use; used in last 6 months by 61% of the sample; predominant form used	Decrease in use from 43% in 2012 to 17% in 2013; least commonly used form	Small increase in use following several years of decreased use	Gradual decline in the proportion of daily users; remains the most frequently used illicit drug; hydro the predominant form used		Two-thirds of sample using, stable level compared to 2012; MS Contin main form
Price							
1 mg	-	-	-	-	-	-	-
0.1 gram	$50	$50, stable	$50, stable	$100, increasing	-	-	$100, stable
0.5gram	$200	$150, stable	$150, stable	$150, stable	-	-	-
gram	-	$300, stable	$300, stable	-	$25, stable	$25, stable	-
ounce	-	-	-	-	$250, increasing	$280, stable	-
Purity/ Potency*	High/medium; over last 6 months: stable over last 6 months	Mixed reports; stable to decreasing over last 6 months	Medium; stable to decreasing over last 6 months	High; generally stable over last 6 months	Medium/high; stable in last 6 months	High and stable in last 6 months	*Pharmaceutical*
Availability	Mixed reports for current availability and over the last 6 months	Easy/very easy; stable over preceding six months	Easy/very easy; stable over preceding six months	Mixed reports-similar proportions reporting easy or difficult access; generally stable in last 6 months	Very easy/easy; stable over preceding 6 months	Very easy/easy; stable over preceding 6 months	Easy/very easy; stable over preceding six months

Source: IDRS PWID and KE interviews and drug use indicator data

* Based on PWID and key expert estimates of purity/potency

Heroin

Just 10% of the sample reported use of heroin in the six months preceding the interview, at a median frequency of ten days. The rate of recent heroin use among Tasmanian PWID cohorts has decreased dramatically from 38% in 2000, despite one-quarter of the sample reporting heroin as their drug of choice.

Few of the PWID participants interviewed in 2013 could report on local trends in price, purity or availability of heroin. The modal price that participants reported last paying for heroin was $50 for a 'cap' (0.1g). It should be noted that very few participants were able to comment. The majority of participants who commented noted that heroin was difficult to access in Tasmania, and that this situation had not changed in the preceding six months. Subjective reports of heroin purity suggest this to be medium to high.

The clear majority of indicators – such as the continuing low prevalence of heroin use among clients of the state's Needle and Syringe Program (NSP), the low median rate of use of heroin (ten days in the last six months among those who had used the drug) and that, of the 24% of the PWID sample that reported heroin as their drug of choice, only one-quarter had recently used heroin – indicated that the low availability of heroin in the state, identified in earlier IDRS studies, continued in 2013.

Methamphetamine

Almost all PWID participants in 2013 (94%) reported lifetime use of some form of methamphetamine (powder, base/paste, crystal/ice or liquid). Seventy-four percent of the sample reported use of any form in the six months preceding the interview, at a median frequency of 18 days (out of a maximum of 180 days), equating to use on average once per ten days. This level of use has been stable since 2010 (70-77%), but lower than reported between 2000 and 2007 (83-95%).

The most commonly used form of the drug was powder methamphetamine, used by 61% of participants. Recent use of base/paste methamphetamine was reported by just 17%, lower than reported in previous years (ranging between 25-79% since 2002). Use of crystal methamphetamine declined from 69% of the 2003 cohort to 26% in 2011; however, in 2012 and 2013, this has increased slightly (43% and 45% respectively). In 2013, frequency of use of powder methamphetamine was 10 days, for base/paste four days, and for crystal methamphetamine seven days.

Market prices locally for powder and base/paste presentations of methamphetamine appear to have remained relatively stable since 2005, particularly in relation to 'point' amounts (approximately 0.1g) of the drug, at $50 for either form. Modal purchase prices for larger amounts of powder and 'base/paste' have also remained stable since 2004 at $300 per gram. 'Point' purchases of crystal methamphetamine have increased over the preceding two years. Between 2004 and 2011, the modal price for 0.1gram purchases was consistently reported to be $50. In 2012 this increased to $60, and in 2013 to $100. No gram purchases were reported in 2013. Participants predominantly regarded the prices of each presentation of the drug as remaining 'stable' in recent months.

PWID participants reporting on subjective purity of powder methamphetamine were divided in relation to purity: one-third reported it to be medium, and one-fifth reported it as high. Participants were also divided with regard to reports on purity of 'base/paste': nearly half of participants who commented reported purity as medium, with one-fifth respectively reporting it as low and high. Participants considered ice/crystal methamphetamine used locally as 'high' in subjective purity, with potency remaining stable in recent months.

Participants interviewed in 2013 regarded powder as 'easy' or 'very easy' to access, with availability stable in recent months. Whilst participants reporting on base/paste also noted this to be 'easy' or 'very easy' to access, only a small number of participants were able to comment on the trends for

this form. Participants were divided with regard to availability of crystal methamphetamine, with half respectively reporting access to be either difficult or easy. Most participants considered this situation to have remained unchanged over the preceding six months.

Trends in 2013 represent subtle changes both for the methamphetamine market overall (for the PWID demographic) and within it; in contrast to trends in previous years, indicators suggest that overall use of methamphetamine has been lower since 2007 (both in IDRS and NSP data), and that amongst those recently using this drug the majority of participants reported powder as the predominant form of methamphetamine used. Use of crystal methamphetamine appeared to have increased in 2012 and 2013, after several years of decreasing use, and in contrast, use of base/paste methamphetamine has decreased significantly in 2013.

Cocaine

It appears that the availability and use of cocaine in Hobart continues to be very low, at least within the populations surveyed in the current study or accessing government services, with use of the drug among clients of the state's NSP virtually non-existent (<0.1% of non-pharmacy equipment transactions). Only a small proportion of the Tasmanian IDRS PWID participants reported recent use of the drug (5%), and the median frequency of this use was very low (two days of the last 180).

Reflecting the very low level of cocaine use amongst IDRS participants, few participants were able to comment on trends related to price, purity and availability. Single participants noted a 'point' (0.1gram) purchase cost a median price of $140, a quarter-gram $100, and half-gram $180. Amongst a small number of participants, availability was considered to be easy, and this had remained relatively unchanged in the preceding six months. In keeping with this low level of use, Tasmania Police have made very limited numbers of cocaine seizures in the last decade.

These patterns of low levels of availability and use in these cohorts appear to have remained reasonably stable over the past few years. In contrast to this, there had been a gradual increase in the level of recent use of the drug in different local consumer populations such as frequent ecstasy consumers, however, this trend has reversed since 2011 (Matthews & Bruno, 2013). This may provide indications of emerging changes in local markets for the drug.

Cannabis

Almost all participants in the 2013 Tasmanian sample reported lifetime use of cannabis (97%), with most reporting use in the preceding six months (71%). The median frequency of this use was daily, which has been consistent in the Tasmanian PWID cohorts since 2000; however, the proportion of PWID participants reporting daily use decreased from 75% in 2001 to 49% in 2012, with a small increase in 2013 (59%). Those PWID participants who used cannabis predominantly reported use of hydroponically-cultivated cannabis. While cannabis remains the most commonly used illicit drug, both in the PWID sample and in the state, there are indications of decreasing levels of use more generally, with the National Drug Strategy Household Survey (NDSHS) suggesting that past-year use of cannabis in Tasmania declined from 15.8% in 1998 to 8.6% of those aged 14 years and over in 2010.

Participants reported the median price of a 1g purchase of bush/outdoor-cultivated cannabis was $25; $60 for a quarter ounce; and $250 for an ounce. The majority of participants who commented reported stable price trends for this form of cannabis over the preceding six months. Hydroponically-cultivated cannabis was reported to cost a median price of $25 for 1g, $80 for a quarter ounce (7g), and $280 for one ounce. The majority of participants who commented reported that prices remained stable over the preceding six months.

Reports regarding potency of bush/outdoor cannabis were mixed: two-fifths considered this to be medium and high respectively. The majority of participants reported that potency had not changed

over the preceding six months. Hydroponically-cultivated cannabis was regarded as 'high' in subjective potency by participants who commented, with this level regarded as 'stable' in recent months. Participants commenting on cannabis reported that hydroponic cannabis was more easily accessible than outdoor forms: however, both forms were considered 'easy' to obtain.

Other opioids

Morphine

Two-thirds (65%) of the Tasmanian sample had used morphine that was not prescribed to them in recent months. MS Contin remained the predominant preparation used by this group, used by 93% (of recent morphine users), with Kapanol the next most commonly used (59%).

Tasmanian IDRS studies had shown a decreasing proportion of participants reporting recent use of morphine between 2003 and 2005, as well as a declining frequency of use amongst consumers. This occurred despite a relatively stable proportion of the PWID samples receiving maintenance pharmacotherapies (approximately 50%) and reporting an opioid as their drug of choice (approximately 60%). In 2006 this trend was reversed, with both the rate and frequency of use increasing. In 2012 and 2013, the rate of recent use (66% respectively) decreased slightly and the median frequency of use increased slightly (20days and 48days respectively) – however, these were not statistically significant changes.

The modal price reported by PWID for all commonly-used morphine formulations was $1 per mg. Prices have remained relatively stable between 2012 and 2013, following an increase from previous reports. Morphine was considered 'easy' to 'very easy' to obtain by those who commented, and this situation was reported as remaining stable in recent months by a majority of participants. The overall stable, high level of use and price of morphine indicates a strong local market.

Oxycodone

Illicit oxycodone use among local PWID samples has increased in recent years, from 30% reporting use in 2005 to 61% in 2013, at a median frequency of 18 days (equates to use once per 10 days). OxyContin tablets were the predominant formulation used in the preceding six months.

Despite their higher relative potency than morphine tablets, preparations of oxycodone tablets had been sold locally at lower comparative prices since 2005. However, between the 2007 and 2008 surveys, consumer reports suggested the cost of these drugs increased (the modal price estimate for 80mg OxyContin tablets doubled from $40 to $80 between 2007 and 2008); subsequently stabilising since this time, and are now price-equivalent with morphine ($1/mg).

Illicit oxycodone was generally considered to be either 'easy' or 'very easy' to access, and this situation was regarded as 'stable' over the preceding six months by most participants.

It is important to note also that the opioids used by this group are not coming from direct doctor-shopping, as the vast majority report obtaining them 'illicitly', i.e. not on a prescription in their name.

Methadone syrup

Illicit methadone syrup was used by 38% in the past six months, at a median frequency of 15 days, equating to use approximately once per fortnight. Most IDRS respondents reporting recent use of illicit syrup were themselves enrolled in methadone maintenance treatment during this period (81%). The median frequency of use of illicit methadone syrup was slightly higher for participants who had been enrolled in a methadone program (24 days) compared with those not accessing this treatment in the six months preceding the interview (14 days).

It is important to recall that the individuals participating in the IDRS are selected on the basis of their regular injection of drugs and, as such, are not representative of all those enrolled in maintenance pharmacotherapy programs. There may be a spectrum of reasons for the use of illicit syrup by those themselves enrolled in the program, but it is important also to consider the role of incomplete stabilisation and of problems in the systems around dose dispensing in these situations. For a recent, detailed investigation of these types of issues, see Fraser et al. (2007).

Illicit methadone syrup was reported to cost a median of approximately $1 per mg in 2013, consistent with the majority of reports since 2001. Participants reported prices to be stable in recent months. Methadone syrup was most frequently purchased from friends. Participants were mixed in their reports concerning availability: approximately half stated that it was 'easy' or 'very easy', while the other half reported access as 'difficult' or 'very difficult'.

There have been continuing reports of participants injecting combinations of alprazolam and methadone syrup in the past nine local IDRS studies, a practice that carries an increased risk of overdose, injection-related harms, and adverse social or legal consequences because of the particular disinhibitive effects of this combination, which both PWID participants and KE noted as concerns in regard to this trend. This practice has decreased from 40% of the sample in 2005 to 12% in 2013.

Physeptone

Between 2004 and 2009, reports of use of illicit Physeptone varied between 37% and 52%, with no clear trend discernible. However, since 2009, the rate of recent use has decreased from 50% to 39% in 2013. The median frequency of use has remained relatively stable over all years, ranging between three and 12 days in the preceding six months. The median price of illicit Physeptone tablets doubled between 2010 and 2011 from $10 to $20, but has remained stable since this time. Physeptone was regarded as 'difficult' or 'very difficult' to access, with this level of availability remaining stable in the preceding six months. Physeptone was most commonly sourced from friends and known dealers.

Benzodiazepines

The majority of participants reported lifetime use of prescribed or non-prescribed benzodiazepines (91%), and three-quarters of the sample reported recent use (76%), at a median frequency of 150 days (which equates to use almost daily use). Whilst a greater proportion of participants reported recent use of illicit rather than prescribed benzodiazepines (50% v. 36%), the median frequency of use was markedly higher for use of prescribed tablets (180 days v. 12 days).

Participants generally considered availability of illicit benzodiazepines to be 'easy' or 'very easy', and that this situation had remained stable in the preceding six months. Illicit benzodiazepines were most commonly sourced from friends, rather than through theft, forgery or feigning symptoms to doctors (doctor-shopping).

There are clear indications that, following a reduction of the injection of benzodiazepines among PWID between 2002 and 2003 (arising from the restriction and eventual removal of the preferred temazepam gel capsules from the market), injection of benzodiazepines remained an ongoing part of the local drug culture, with Tasmanian PWID continuing to inject at rates higher in comparison to those identified in other Australian jurisdictions. As noted in previous IDRS studies, it was also clear that alprazolam (Xanax in particular) appeared to have largely replaced the local illicit market for temazepam gel capsules among those PWID particularly interested in benzodiazepine injection, with this drug being used in similar ways to temazepam capsules by consumers, such as in simultaneous combination with methadone syrup or other opioids.

Regulatory changes were implemented in September 2007 by the Tasmanian Pharmaceutical Services Branch regarding prescribing of alprazolam, with an aim to decrease misuse of this drug.

In response to these changes, questions on alprazolam use were incorporated in the IDRS survey. Three-quarters of participants reported ever having used any alprazolam (75%), and two-fifths reported having used this drug in the preceding six months (40%). Non-prescribed alprazolam was used by 37% of the sample, at a median frequency of 11 days in the preceding six months. Prescribed alprazolam was used by just 6% of the sample, at a median frequency of 180 days. Injecting use of any alprazolam tablets in the preceding six months was reported by 21% of the sample.

Between the 2003 and 2008 studies, the proportion of the PWID samples reporting recent injection of alprazolam increased from 11% to 30%; this rate subsequently declined to 14% in 2010. Since this time, the rate of injecting use of alprazolam has remained relatively stable, with between 21% and 24% of each sample reporting this.

The ongoing injecting use of alprazolam remains a concern given the serious psychological and physical harms associated with benzodiazepine injection. Additionally, the overall level of use and availability of benzodiazepines generally remains high within local PWID, particularly among primary users of opioids, which is again of concern given the increased risk of overdose when the two substances are combined, and the highly variable half-lives across different benzodiazepine types. As such, patterns of benzodiazepine use and injection in the state continue to warrant very close attention.

Health-related trends

Non-fatal overdose

Opioids
Amongst lifetime opioid users, one-third reported ever having experienced an opioid overdose (32%), and 8% reported this occurring in the preceding 12 months related to use of morphine, methadone, oxycodone and heroin.

Fatal overdose

Opioids

The number of accidental deaths in Tasmania attributable to opioid use in 2009 was 9, which equates to a rate of 1.8 per million persons. Nationally, 563 deaths were attributable to accidental opioid deaths, which equates to a rate of 45.9 per million persons. Projected national estimates suggest an increase in deaths; however these data should be interpreted with caution (Roxburgh & Burns, 2013a).

Injecting risk behaviours

Self-reported rates of sharing of needles or syringes among clients of non-pharmacy NSP outlets had steadily declined from 2.6% of all transactions in 1995/96 to 0.3% in 2005/06; however, in 2006/07, this trend was briefly reversed, with 1.1% of client transactions reporting sharing needles or syringes. Between 2007/08 and 2011/12 this rate was notably lower, ranging between 0.05% and 0.7% of transactions, however, in 2012/13 this increased to 3.3% of transactions.

The current Tasmanian IDRS study identified a similar pattern with rates of sharing amongst PWID participants increasing sharply in 2007 from 4% to 16%. Since this time, between two and eight percent of each sample has reported sharing injecting equipment. Similarly, the number of participants reporting providing their used equipment to another person decreased from 29% in 2007 to 8% in 2013, returning to a similar level to that reported in other Tasmanian IDRS reports.

Half of the consumers interviewed (51%) reported re-using their own injection equipment in the month prior to interview, a slightly lower rate than reported in 2012. The main forms of equipment that consumers reported re-using were 20ml barrels, winged-infusion sets (‘butterflies’) and3/5ml

barrels. Requiring equipment after-hours (nights or weekends) and excessive distance from an NSP were the main reasons participants provided for sharing equipment.

These are harmful injection practices, as repeated use of needles leaves them blunt, which could cause damage to the venous system, and use of non-sterile equipment can lead to the introduction of bacteria into the bloodstream, which can lead to infections, septicaemia or endocarditis. Sharing of injecting equipment greatly increases the chance of transmission of blood-borne viruses such as hepatitis C (HCV) or the human immunodeficiency virus (HIV).

Self-reported mental health

Half of the sample reported experiencing a mental health problem in the preceding six months (54%). Depression and anxiety-related disorders were the most commonly cited. Psychological distress, as measured by the Kessler 10 (K10), and mental health component of health, as measured by the Short Form-12 Health Survey (SF-12), demonstrate substantially higher rates of psychological distress in the IDRS sample in comparison to the Australian national average.

Self-reported general health

Self-reported general health amongst PWID participants was generally poorer than was reported for general population samples. IDRS participants scored lower on the Physical Component of the SF-12 than was reported for the general Australian population in the National Health Survey (NHS) (ABS, 1995).

Driving risk behaviour

Three-fifths of the consumers interviewed, who had driven a car in the past six months, had done so within an hour of using illicit or non-prescribed drugs on at least one occasion (57%). Illicit morphine was the drug most commonly involved, followed by cannabis. While the extent of self-reported driving under the influence of drugs has remained stable in the past six local IDRS studies, the level of drug-driving involving illicit morphine increased dramatically from 18% in 2012 to 68% in 2013.

Law enforcement trends among PWID

Self-reported criminal activity

Half of the sample self-reported involvement in some type of criminal activity in the preceding month (49%). The crimes most commonly reported were property crime and dealing drugs. Two-fifths of the PWID respondents had been arrested in the previous 12 months (39%). Whilst this is similar to the rates reported in 2012 and 2011 (37% and 34% respectively), it is lower than reported between 2002 and 2010 (ranging between 41% and 55%). In Tasmania, most arrests related to property crime.

Arrests

Since 2002/03, the number of arrests relating to opioids (including heroin and other narcotics[1]) has remained relatively small and stable. With the exception of 2009/10 (30 such arrests), the number of arrests fluctuated at around 13 cases per annum (range 9-18).

Reports of arrests for methamphetamine-related offences increased from 20 in 1996/97 to 179 in 2006/07. This trend has since reversed somewhat, with 120 such arrests being reported by Tasmania Police in 2012/13[2].

[1] For recording purposes, Tasmania Police class any Schedule 8 drug as 'Narcotic'. Schedule 8 drugs are 'Drugs of Addiction'.

[2] Note: 2012/13 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

The number of arrests related to cannabis decreased from 1,830 in 2002/03 to 929 in 2005/06, however, in 2007/08, the number of such arrests increased to 1,954. This number has decreased slightly, with 1,337 arrests reported in 2012/13[3].

Drug-related charges in Tasmanian Courts

From 2010/11 to 2012/13, the number of individuals before the Hobart Magistrates Court for alleged dealing and trafficking, cultivation, and possession charges decreased. Similarly, the number of individuals incarcerated at Hobart Prison in relation to drug offences, and the number of offences amongst these individuals, decreased between 2011/12 and 2012/13.

Special topics

Use of unknown drugs

Almost one-fifth of participants reported using an unknown drug in the preceding six months, at a median frequency of two days. Participants reported a broad mix of subjective effects from these substances, including hallucinations, paranoia and anxiety, loss of vision for a short period, nausea, aggression, euphoria, pain relief, relaxation, and 'flying high as a kite'.

Pain

The Brief Pain Inventory (BPI) was included in the survey questionnaire with the aim of examining the relationship between injecting drug use, experience of pain and the therapeutic goals of pharmaceuticals used to manage pain. Almost one-fifth of participants reported experience of pain (other than everyday pain) on the day of interview. Of this group, almost all reported the pain as chronic non-cancer pain. Participants were also asked on a scale of 0 ('no relief') to 10 ('complete relief') how much relief they experienced from any treatments/medications they received. Of those who received treatment/medication for pain, a mean score of 6.8 (SD 3.1, range 2-10) was reported.

Hepatitis C

The majority of the sample (83%) had been tested for HCV in their lifetime with 66% (n=59) reporting a positive result for HCV antibodies. Almost two-thirds (63%) of those who received a Polymerase chain reaction (PCR) test (n=41) reported that the test showed an active virus. The community GP (54%) was the most common location of the last HCV test.

Naloxone

In Australia, naloxone has largely only been available for use by medical doctors (or those auspiced by medical doctors such as nurses and paramedics) for the reversal of opioid effects. In 2012 a take-home naloxone program commenced in the ACT through which naloxone was made available to peers and family members of people who inject drugs for the reversal of opioid overdose as part of a comprehensive overdose response package. Shortly after, a similar program started in NSW and some other states have followed suit.

Amongst the Tasmanian sample, three-quarters of participants reported being familiar with naloxone, and almost all participants reported they would support the expansion of the naloxone distribution program into Tasmania.

[3] Note: 2012/13 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

Discrimination

Of the participants who commented, half reported experiencing discrimination within the last 12 months, most commonly occurring with a medical doctor and/or a pharmacy (38% respectively), and less commonly with a government service provider (such as Centrelink, Housing or Children and Family Service) (24%), Police (22%) or in a hospital (20%).

Oral Health

Using the Oral Health Impact Profile, oral health problems were more commonly associated with psychological disability (63%), physical pain (58%) and psychological discomfort (56%) had the highest impact for those participants who commented.

1.0 INTRODUCTION

In 1998, the National Drug and Alcohol Research Centre (NDARC) was commissioned by the Commonwealth Department of Health and Family Services (now the Australian Government Department of Health) (AGDH) to begin a national trial of the Illicit Drug Reporting System (IDRS), following a successful pilot study of the project's methods in New South Wales in 1996 (Hando et al., 1997) and in the following year a multi-state trial in New South Wales (Hando & Darke, 1998), South Australia (Cormack et al., 1998) and Victoria (Rumbold & Fry, 1998).

The intention of the IDRS is to provide a coordinated approach to the monitoring of trends associated with the use of methamphetamine, opioids, cannabis and cocaine, in order that this information can act as an early indicator of emerging trends in illicit drug use. Additionally, the IDRS aims to be timely and sensitive enough to signal the existence of emerging problems of national importance rather than to describe phenomena in detail; instead, providing direction for issues that may require more detailed data collection, or are important from a policy perspective.

The full IDRS methodology involves a triangulated approach to data collection on drug trends, involving standardised surveys of people who regularly inject illicit drugs, a qualitative survey of key experts (KE) – individuals who have regular first-hand contact with groups of people who use illicit drugs, and an examination of existing available data sources or indicators relevant to drug use in each state. Following a replication of the IDRS process in 1998 in New South Wales, Victoria and South Australia, the IDRS was expanded nationally for 1999, with these states continuing to follow the full methodology, while Western Australia, Northern Territory, the Australian Capital Territory, Queensland and Tasmania examined drug use trends using an abbreviated design, utilising KE interviews and examination of secondary data sources only. The National Drug Law Enforcement Research Fund (NDLERF) subsequently provided these states with additional funding to expand data collection to the full IDRS methodology for 2000 through to 2005. The full methodology of the IDRS nationally has been funded by the Australian Government Department of Health since 2006. The current IDRS Project is supported by funding from the Australian Government under the Substance Misuse Prevention and Service Improvement Grants Fund.

The 2013 Tasmanian Drug Trends Report summarizes the information gathered in the Tasmanian component of the national IDRS using the three methods outlined above: a survey of people who regularly inject illicit drugs; 'key expert' interviews with professionals working with individuals who use illicit drugs; and an examination of existing indicators relating to drugs and drug use in the state. The methods are intended to complement and supplement each other, with each having its various strengths and limitations. Results are summarized by drug type to provide the reader with an abbreviated picture of illicit drug usage in Hobart and recent trends. Reports detailing Tasmanian drug trends from 1999 through to 2012 (Bruno & McLean 2000, 2001, 2002, 2003, 2004a; Bruno, 2005, 2006; de Graaff & Bruno, 2007a, 2008, 2009, 2010, 2011, 2012, 2013) and state comparisons (McKetin et al., 2000; Topp et al., 2001, 2002; Breen et al., 2003, 2004; Stafford et al., 2005; O'Brien et al. 2006; Black et al., 2007 and 2008; Stafford & Burns; 2009, 2010, 2011, 2012) are available as technical reports from the National Drug and Alcohol Research Centre, University of New South Wales[4].

1.1 Study aims

The specific aim of the Tasmanian component of the IDRS was to provide information on trends in illicit drug use in Tasmania that require further investigation.

[4] IDRS reports from all jurisdictions, as well as national reports, are available for free download in pdf format on the National Drug and Alcohol Research Centre website: http://ndarc.med.unsw.edu.au

2.0 METHOD

The IDRS is essentially a convergent validity study, where information from three main sources, each with its own inherent advantages and limitations, is compiled and compared to determine drug trends. The three components of the IDRS are a survey of people who regularly inject illicit drugs (PWID, or alternatively referred to as 'consumers'), a qualitative study of professionals ('key experts', KE) working in drug (or related) fields that have regular direct contact with individuals who use illicit drugs, and an examination of existing indicator data on drug-related issues. Details of each dataset are provided below. Previous work with the IDRS methodology has found that people who regularly inject drugs are an informative sentinel group for detecting illicit drug trends due to their high exposure to many types of illicit drugs. This group also has first-hand knowledge of the price, purity and availability of illicit drugs. KE interviews provide contextual information about drug use patterns and health-related issues, such as treatment presentations. The collection and analysis of existing drug use indicator data provides quantitative contextual support for the drug trends detected by the PWID and KE surveys (McKetin et al., 2000).

Data sources complemented each other in the nature of the information they provided, with information from the three sources used to determine whether there was convergent validity for detected trends, and the most reliable or 'best' indicator of a particular trend used when summarising such trends. Findings from the 2013 Tasmanian IDRS are also compared with findings from the previous Tasmanian studies (Bruno & McLean, 2000, 2001, 2002, 2003, 2004a, 2005; Bruno, 2006; de Graaff & Bruno 2007a, 2008, 2009, 2010, 2011, 2012, 2013) to determine any changes in drug trends over time.

2.1 Survey of people who inject drugs (PWID)

The PWID survey was conducted during June 2013, and consisted of face-to-face interviews with 107 people who regularly injected illicit drugs. Inclusion criteria for participation in the study were that the individual must have injected at least once monthly in the six months prior to interview, and have resided in Hobart for the past twelve months or more. Participants were recruited using a variety of methods, including advertisements distributed through Needle and Syringe Program (NSP) outlets, pharmacies (through flyers included with injection equipment) or health services, and snowball methods (recruitment of friends and associates through word of mouth). Participants were interviewed at places convenient to them, such as health services and NSP outlets. Three agencies – Anglicare (Hobart and Glenorchy sites), Department of Health and Human Services' Eastern Shore NSP and the Link Youth Health Service assisted the researchers by providing support as recruitment and interview sites for IDRS participants. The major locations for recruitment and subsequent interview were Hobart city and the Eastern Shore (Rosny), although approximately one-third of the sample was recruited and interviewed in Glenorchy city (in the northern suburbs of Hobart).

A standardised interview schedule used in previous IDRS research (Hando & Darke, 1998; McKetin, Darke & Godycka-Cwirko, 1999; Topp et al., 2001) was administered to participants. The interview schedule contained sections on demographics, drug use, price, purity and availability of drugs, crime, risk-taking, health and general changes in drug use. Participants were screened for appropriateness both by referring staff members of the recruitment sites and the interviewers, the latter through a series of questions designed to elicit participants' knowledge of injecting drug use practice. Both the University of New South Wales and the Tasmanian Social Sciences Human Research Ethics Committee granted ethical approval for the survey (approval H0007853 for the Tasmanian Committee). Participants were provided with an information sheet describing the interview content prior to commencement (subsequent to screening), allowing them to make an informed decision about their involvement. Information provided was entirely confidential, and participants were informed they were free to withdraw from participation without prejudice or to decline to answer any questions if they so wished. Interviews generally lasted between 50 and 60 minutes, and participants were reimbursed $40 for their time and out-of-pocket expenses.

Data analysis was conducted using PASW for windows, release 21.0.0.0 (IBM SPSS Inc., 2012).

2.2 Survey of key experts (KE)

Twenty-three KE, who were working with people who use drugs in the greater Hobart area, participated in face-to-face interviews between July and early September 2013. Sixteen KE (70%) were recruited from the pool of KE that had taken part in the 2012 IDRS (11 had also taken part in the 2011; 10 were also interviewed in 2010 IDRS; nine in 2009, seven interviewed in 2008, five in the 2007; five in 2005; three for the 2001 to 2004 surveys, and one in the 2000 study). All other participants in the current study were identified and recruited either as replacements for the 2012 IDRS participants drawn from the same agencies, or on the basis of referrals from the Tasmanian IDRS steering committee, or professionals in the field.

KE included youth workers (n=2), members of the Department of Justice (law enforcement professionals n=3, policy n=1, medical officer n=1), consumer advocates (n=2), and single KE from emergency medicine and a local community development group. The remainder worked specifically in the drug and alcohol field, comprising counsellors and outreach workers (n=4), needle and syringe outlet workers (n=5), Addiction Medicine specialists (n=1) and representatives from the peak AoD NGO sector (n=2).

Several KE were interviewed for their expert opinions on specific issues or on other particular areas (such as advocacy or dealing and production of illicit drugs). The remaining KE were interviewed in regard to their direct work with drug consumers, with entry criteria for inclusion in this aspect of the study being at least weekly contact with illicit drug users in the past six months and/or contact with ten or more illicit drug users in the last six months. Although several KE came from generic services, many worked specifically with special populations, including young people and injecting drug users.

KE were asked to specify the main illicit drug used by the drug users they had most contact with in the past six months. Seven KE reported on groups that predominantly used pharmaceutical opioids (methadone, morphine, and oxycodone), five KE commented on groups that predominantly used cannabis, three on groups primarily using methamphetamine, two KE reported on groups that predominantly used over-the-counter codeine products and single KE commented on benzodiazepines and polydrug use.

The qualitative interview schedule was a structured instrument that included sections on drug use patterns, drug availability, criminal behaviour and health issues. Interviews took between 20 and 60 minutes to administer. Notes were taken during the interview and were subsequently transcribed. Open-ended responses were analysed using word processor and spreadsheet software, sorting for recurring themes across respondents. Single reports from KE have been presented where they were deemed reliable by the interviewer, and where the information provided contributed to the explanation of particular trends. Closed-ended questions were analysed using PASW for windows, release 21.0.0.0 (IBM SPSS Inc., 2012).

2.3 Other indicators

To complement and validate data collected from the KE study and PWID survey, a range of secondary data sources was examined, including health, and law enforcement data. The pilot study for the IDRS (Hando et al., 1997) recommended that such data should be available at least annually, include 50 or more cases, provide brief details of illicit drug use, be collected in the main study site (Hobart or Tasmania for the current study), and include details on the four main illicit drugs under investigation (heroin, cannabis, cocaine and methamphetamine). However, due to the relatively small size of the illicit drug-using population in Tasmania (in comparison to other jurisdictions involved in the IDRS), and a paucity of available data, the above recommendations

have been used as a guide only. Indicators not meeting the above criteria should be interpreted with due caution, and attention is drawn to relevant data limitations in the text.

Data sources that fulfil the majority of these criteria and have been included in this report are outlined below.

2.3.1 Needle and Syringe Program data

The Needle and Syringe Program (NSP) has been operating in Tasmania since the introduction of the *HIV/AIDS Preventive Measures Act* in 1993. Staff record the number of needle/syringes ordered from all outlets participating in the program (around 90 outlets) and, for participating non-pharmacy outlets, data are collected regarding age, sex, equipment shared since last visit, last drug used, and disposal methods for each client transaction. The data provided represent responses from 16,495 occasions of service in the 2012/13 financial year. In previous years, a discrepancy was found in these datasets: in 2000/01, only 44% of the 32,507 occasions of service included information regarding principal drug used[5]. Since this time, reporting has improved greatly. For example, in 2012/13, 99.2% of occasions of service gathered data on drug use.

There has also been some inconsistency between outlets in the wording of questions asked of clients, most notably in the question regarding substance used (the majority of services ask 'what is the drug you most often inject?' while some find that asking 'what is the drug you are about to inject?' more useful for health intervention purposes), which may impede clear comparisons of trends across years for this dataset.

2.3.2 Prevalence of last drug injected by PWID in Tasmania, provided by the Australian Needle and Syringe Program (NSP), on behalf of the collaboration of Australian Needle and Syringe Programs

The Australian NSP survey has been carried out over one week each year since 1995. During a designated survey week, NSP staff ask all clients who attend to complete a brief, self-administered questionnaire and provide a finger-prick blood sample for testing the presence of blood-borne viral infections (BBVI) such as hepatitis B (HBV) and C (HCV). The data provided here represent the reported last drug injected by survey respondents in Tasmania each year from 1995 to 2012. Between 1995 and 2010[6], the number of participants in the study steadily climbed from six to 106, however, in 2011 and 2012, the numbers of participants have been notably lower (N=68 and N=75 respectively) (Iversen & Maher, 2013).

2.3.3 The 1998, 2001, 2004, 2007 and 2010 National Drug Strategy Household Surveys

The National Drug Strategy Household Survey (NDSHS), run by the Australian Institute of Health and Welfare (AIHW), represents a prevalence study of drug use amongst the general community, surveying 1,031 individuals in Tasmania in the 1998 study, 1,349 individuals in 2001, 1,208 in 2004, 1,143 in 2007, and 1,060 in 2010 who were over 14 years of age, could speak English, and who lived in private dwellings (Australian Institute of Health and Welfare, 1999, 2002b, 2005b, 2008b, 2011). The survey investigated use of the following illicit drugs relevant to this report: cannabis; methamphetamine; hallucinogens; cocaine; ecstasy/designer drugs; and heroin. Respondents were

[5] However, there has been an improvement in the data recording rate in recent years – in 2000/01, only 44% of the 32,507 occasions of service included information regarding principal drug used, while in 2001/02, the relevant rate was 78%, rising to 87.5% in 2002/03; 90.7% in 2003/04; 84% in 2005/06; 97% in 2006/07; 99% in 2007/08 – 2011/12.

[6] The numbers of participants in each survey: 1995 n=6; 1996 n=18; 1997 n=23; 1998 n=51; 1999 n=25; 2000 n=27; 2001 n=28; 2002 n=151; 2003 n=118; 2004 n=107; 2005 n=137; 2006 n=150; 2007 n=168; 2008 n=57; 2009 n=122; 2010 n=106:2011 n=68: Iversen & Maher, 2013)

asked whether they had ever used these drugs and whether they had used them within the past twelve months.

2.3.4 Police and Justice Department data

Tasmania Police State Intelligence Services, the Australian Crime Commission (ACC, previously the Australian Bureau of Criminal Intelligence or ABCI), and the state Justice Department have provided information on drug seizures, charges and prices. Data on the purity of drugs seized are also provided through the ACC; however, not all drug seizures are analysed for purity. Data from the ACC for the 2012/13 financial year were not available at the time of publication. Where available, data from Tasmania Police have been used to examine changes in key law enforcement-related variables. It should be noted that these data are preliminary and subject to revision (totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules), and this issue is noted in the text as is relevant.

2.3.5 Urine screens of prisoners

The Tasmanian Justice Department has conducted random urine screens of prisoners since 1993, aiming to test approximately 10% of the state's prison population monthly. Since 1995, these screens have been increasingly based on suspicion of drug use, rather than on a purely random basis, and sample sizes have increased since this time (1995/96 n=111; 1996/97 n=283; 1997/98 n=253; 1998/99 n=267; 1999/00 n=359; 2000/01 n=541; 2001/02 n=561; 2002/03 n=467; 2003/04 n=261; 2004/05 n=416; 2005/06 n=376; 2006/07 n=337; 2007/08 n=788; 2008/09 n=734; 2009/10 n=754; 2010/11 n=862; 2012/13 n= 574). In the 2012/13 financial year, the Justice Department utilised both standard urine screen tests and the insta-testing system for the presence of drugs.

2.3.6 Blood-borne viral infections surveillance data

Blood-borne viral infections (BBVI), in particular HIV/AIDS and HBV and HCV, are a major health risk for individuals who inject drugs. An integrated surveillance system has been established in Australia for the purposes of monitoring the spread of these diseases. The Department of Health and Human Services, Public Health Division, records notifications of diagnoses of HIV, HBV and HCV in Tasmania, and, where possible, records the relevant risk factors for infection that the person may have been exposed to. There are limitations to the interpretation of this dataset in terms of monitoring trends in the spread of these viruses. For example, many injecting drug users who have been exposed to HCV may not undergo testing. Further, it is difficult to confidently determine whether notifications represent new cases or those that have been established for some time.

2.3.7 Tasmanian Pharmacotherapy Program data

Pharmaceutical Services Branch (Tasmanian Department of Health and Human Services) maintains a database that records all maintenance pharmacotherapy program registrations (methadone, buprenorphine, and buprenorphine-naloxone) in Tasmania, along with applications to prescribe a combination of an opioid and alprazolam. The number of annual new admissions to the pharmacotherapy program, the number of active daily clients and applications to prescribe both an opioid and alprazolam, are presented.

2.3.8 Coronial findings on illicit drug-related fatalities

In previous IDRS reports, overdose-related fatalities data from 1998 to the present (provided by the Australian Bureau of Statistics, ABS) have been presented. The ABS has changed the way they collate deaths data, making comparisons to earlier overdose bulletins published by the National Drug and Alcohol Research Centre difficult (Roxburgh & Burns, 2013a,b). Since 2003, the ABS has progressively ceased visiting jurisdictional coronial offices to manually update causes of death that had not been loaded onto the computerised National Coronial Information System (NCIS), and in 2006 the ABS began to rely solely on data contained on NCIS at the time of closing the deaths data file. This data is subject to a revision process: preliminary data is released and then two successive

revisions are published at 12 month intervals. The 2006 data were not subject to this revision process. With the aim of offsetting potential incorrect figures from 2006 data, Roxburgh and Burns (2013) analysed changes between the 2007 and 2008 preliminary and revised data, averaged these out and applied these to the 2006 figures (the 2006 figures should be interpreted with caution).

2.3.9 Hospital morbidity data

Hospital morbidity data in relation to use of drugs have been provided by the Australian Institute of Health and Welfare (AIHW) for the 1999/00 to 2011/12 financial year periods (data for 2012/13was not available at the time of publication). These data relate to public hospital admissions for individuals aged between 15 and 54 years, where drug use was recorded as the 'principal diagnosis'; namely, where the effect of a drug was established, after study, to be chiefly responsible for occasioning the patient's episode of care in hospital (with the exception of admissions for psychosis and withdrawal). These figures were based on diagnoses coded according to the International Classification of Diseases (ICD) 10, second edition. It is also important to note that data from the state's single public specialist detoxification centre are only included in this dataset from June 2002.

2.3.10 Tasmanian alkaloid poppy crop data

Tasmania has had a commercial opiate alkaloid industry for many years, where farmers are licensed to grow the poppy (*Papaver somniferum*) for production of codeine and related products by pharmaceutical companies. The Tasmanian Government has international obligations under the United Nations Convention on Narcotic Drugs to ensure licensing of crops, and that there is limited diversion, as some of the poppy strains grown can be converted into opium. Data on diversion rates of Tasmanian poppy crops have been provided by the Poppy Advisory and Control Board of the Tasmanian Justice Department, as they are a useful indicator of potential illicit use of opium or poppy tar.

2.3.11 Telephone advisory services data

Tasmania has two 24-hour alcohol and drug-related telephone information services. In mid-May 2000, Turning Point Alcohol and Drug Centre in Victoria took over responsibility for administration of the Tasmanian Alcohol and Drug Information Service (ADIS), a confidential drug and alcohol counselling, information and referral service. Turning Point systematically records data for each call received, which comprised 2,208 calls to ADIS during the 2000/01 financial year; 2,129 calls in 2001/02; 1,984 in 2002/03; 1,554 during 2003/04; 1,332 calls during 2004/05; 1,469 calls in 2005/06; 1,474 calls in 2006/07; 1,525 in 2007/08; 1,556 in the 2008/09 financial year, 1,416 in 2009/10, 1,414 in 2010/11; 977 in 2011/12; and 1,042 in 2012/13.

3.0 DEMOGRAPHICS

Key Points:

- A total of 107 participants were interviewed for the IDRS in 2013;
- Mean age was 37 years (range 19-63 years);
- 57% of the sample were male;
- Three-quarters of the sample were unemployed at the time of the interview;
- Almost half the sample was engaged in a form of drug treatment at the time of the interview, predominantly methadone maintenance treatment; and
- Almost two-fifths of participants had a prison history.

3.1 Overview of the PWID sample

A total of 107 consumers were interviewed. The demographic characteristics of the PWID sample are presented in Table 1 below. The mean age of participants in the 2013 study was 37 years (SD = 8.0, range 19-63 years). The average age of the cohort over the preceding fourteen years has increased from 26 years in 2000. Fifty-seven percent of the 2013 cohort was male.

The majority of participants described themselves as heterosexual (90%), with smaller proportions identifying as bisexual (6%) or homosexual (4%). Almost half of the sample reported they were single (45%); and one-quarter reported they either had a partner (26%) or were married/de facto (24%) at the time of the interview. English was the dominant language spoken amongst all participants. Among those interviewed in 2013, there was a mean of 10 years of school education (SD = 1.3, range 7-12), similar to that of cohorts in previous years. One-fifth of the participants interviewed in the IDRS had attained a trade or technical qualification (20%); 8% had completed tertiary studies at a university or college, and three-quarters of the sample had not completed any form of tertiary education (73%).

Table 1: Demographic characteristics of the PWID sample, 2012-2013

Characteristic	2012 N=106	2013 N=107
Age (mean years, range)	35 (range 20-65)	37 (range 19-63)
Sex (% male)	59	57
Employment (%):		
Not employed/on a pension	77	77
Full-time	7	0
Part-time/casual	9	9
Home duties	1	13
Student	5	1
Work and study	0	0
Received income from sex work last month	0	0
Aboriginal and/or Torres Strait Islander (%)	10	19
Sexual orientation (%):		
Heterosexual	87	90
Bisexual	9	6
Gay or lesbian	4	4
Other	0	1
Relationship status (%):		
Married/de facto	23	24
Partner	26	26
Single	48	45
Separated	1	1
Divorced	3	2
School education (mean no. years, range)	10 (range 7-12)	10 (range 7-12)
Tertiary education (%):		
None	66	73
Trade/technical	28	20
University/college	6	8
Currently in drug treatment^ (%)	49	47
Prison history (%)	38	37

Source: IDRS PWID interviews

^ Refers to any form of drug treatment, including pharmacotherapies, counselling, detoxification, etc.

Three-quarters of the 2013 sample (77%) were not employed at the time of the interview, 9% were employed on either a part-time or casual basis and 13% were engaged in home duties. No participants reported engagement in full-time employment at the time of the interview. Almost all participants reported receiving some form of government benefit in the preceding six months (98%); and 8% reported receiving income from either a wage/salary or from criminal activity in this period. In keeping with this, the majority of participants reported their main source of income in the preceding six months as a government benefit (97%, n=104). The average fortnightly income received by the sample in the preceding fortnight was $727 (median $735, SD=$282, range $200-1,800).

Amongst the 105 participants reporting having received any government benefit in the preceding six months, 18% (n=19) reported these payments had been stopped during this period. All bar five of this group reported this had occurred due to not meeting administrative requirements such as lodging forms and attending appointments.

Participants were also asked questions about financial stress. These questions were taken from the Household, Income and Labour Dynamics in Australia (HILDA) Survey (Wilkins et al., 2010). This study, which is conducted by the Melbourne Institute of Applied Economic and Social Research, University of Melbourne, reports representative national longitudinal data of residents of Australian households occupying private dwellings on four broad life domains: household and family life; incomes and economic wellbeing; labour market outcomes; and life satisfaction, health and wellbeing. The questions taken from the HILDA survey focus on measures of financial stress, as defined by the content items in Table 2 below.

The Tasmanian IDRS participants scored significantly higher on all measures of financial stress than the general community sample (Table 2): half of the IDRS sample reported that in the preceding six months, they were unable to pay a power, phone or gas bill on time (50%); 45% reported they had pawned or sold something; and 43% had gone without meals due to a lack of money. Overall, almost three-fifths of the sample had asked for financial help from family or friends (58%), and half had requested such assistance from a welfare organisation (51%).

Table 2: Financial stress among IDRS and HILDA participants

	2007 HILDA sample N=12,789 %	**2013 Tasmanian IDRS sample N=107 %**	**Significance [#]**
In the last six months:			
Could not pay power, phone or gas bill on time	11	50	p<0.001
Could not pay rent or mortgage on time	6	25	p<0.001
Pawned or sold something	4	45	p<0.001
Went without meals	3	43	p<0.001
Unable to heat home	2	27	p<0.001
Asked for financial help from family or friends	12	58	p<0.001
Asked for financial help from welfare organisation	3	51	p<0.001

Source: IDRS PWID interviews, Wilkins et al, 2010

[#]Using χ^2 tests with 1 degree of freedom

The sample was drawn from suburbs within the northern, eastern, southern, and inner city areas of Hobart, with most participants either living in close proximity to Hobart city (29%) or Glenorchy city (30%). A more detailed breakdown on the basis of local council areas is as follows: Hobart City (29%); Glenorchy City (30%); Clarence (27%); and small proportions form Kingborough, Brighton, the Huon Valley, Tasman Peninsula and New Norfolk. The majority of participants lived in their own (rented or owned) house or flat (81%) and 10% in their parent's or family home. Six percent reported no fixed address, and just 1% reported living in a boarding house or hostel.

Almost two-fifths of the sample (37%) had been imprisoned at some stage in their lives: this was slightly, but not significantly, lower than rates reported in previous IDRS surveys (between 43% and 47% from 2008-2010). The was a greater proportion of males reporting a prison history (51%, n=29) than females (20%, n=9) (χ^2 ($1_{n=103}$)=10.72, p=0.001).

Notably, almost half of the sample (47%) was in some form of drug treatment at the time of interview. This was similar to rates reported in 2012 (49%), however, this rate has varied between 40% and 56% since 2006.

The demographic characteristics of the Tasmanian 2013 PWID sample are largely similar to previous Tasmanian PWID samples (Bruno & McLean 2001, 2002, 2003, 2004a; Bruno 2005, 2006; de Graaff & Bruno 2007a, 2008, 2009, 2010, 2011, 2012, 2013). There have been substantial overlaps in those participating in the IDRS studies over time: of the 107 participants in the 2013 study, three-fifths (62%) had previously participated in another IDRS study. Of this group, 28 participated in the 2012 study, 24 participated in the 2011 study, 18 participated in the 2010 study, seven in 2009, five in 2008, four in 2007. This is consistent with patterns in previous IDRS studies.

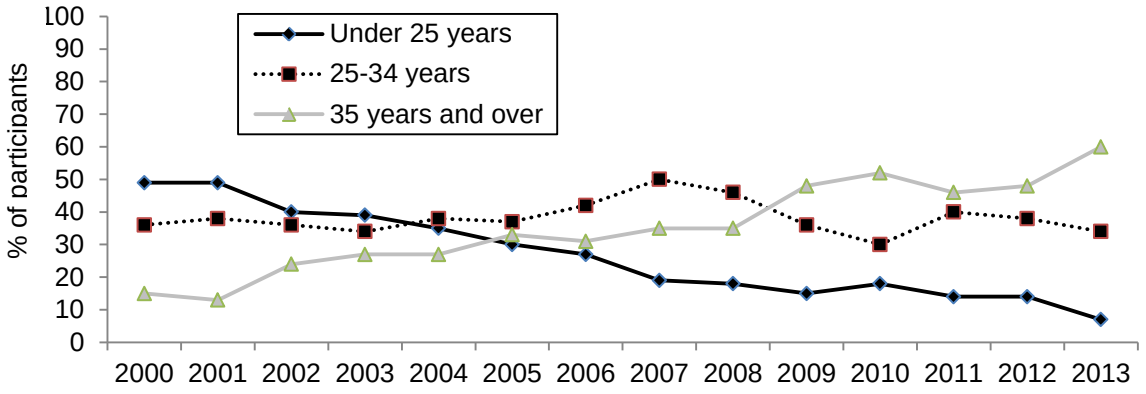
Given that the sampling procedure for the IDRS studies is largely convenience-based in nature, there is the possibility for notable shifts in demographics to occur which may impact on the interpretation of differences in the patterns of drug use identified in the annual consumer cohorts. Between the 2012 and 2013 local PWID cohorts, of the demographics examined in Table 1, small but notable differences were observed for employment status. The proportion of participants reporting being in full-time employment decreased from 7% to no such reports in 2013 ($\chi^2(1_{n=213})=5.38$, $p=0.02$); and reports of being engaged in home duties increased from 1% to 13% ($\chi^2(1_{n=213})=10.2$, $p=0.001$). This variation may have an impact on the patterns of substance use reported amongst the PWID participants, and reference to this, along with other notable discrepancies between the 2013 PWID and previous PWID samples, will be discussed in subsequent sections of this report.

3.1.1 Age and sex of the PWID sample over time

As could be expected, with a noteworthy overlap in participants across these annual samples, the mean participant age in the Tasmanian PWID cohorts steadily increased between 2002 and 2013, from 28 years to 37 years. The rate of participants aged 35 years or older steadily increased from 15% in 2000 to 52% in 2010. This trend stabilised over the subsequent two years, however, in 2013, this rate has increased to 60% (Figure 1). According to the Tasmanian NSP data, there has been a marked increase in the proportion of clients older than 35 accessing NSP outlets in recent years, with steady declines in those under 25[7] (Figures 2 and 3). In 2012/13, half (49%) of non-pharmacy NSP transactions involved clients aged 35 or over, whereas this group comprised only 14% of clients in 2000/01. Interestingly, an increasing age of PWID has also been seen in other jurisdictions conducting the IDRS where there is minimal participant overlap between samples (Degenhardt et al., 2008), and has also been noted in independent studies of NSP attendees nationally (Iversen & Maher, 2013).

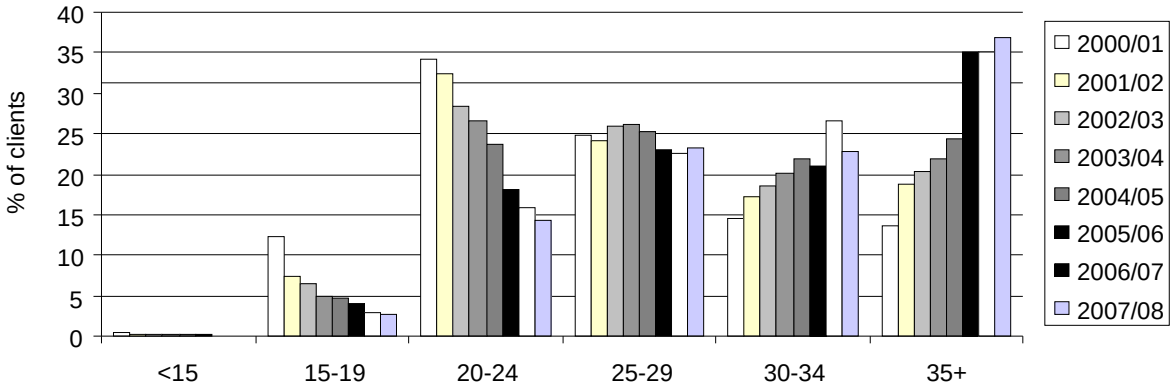
[7] In 2008/09, changes were made to the way in which these data were collected (i.e. age categories), rendering more specific comparisons with previous years not possible.

Figure 1: Age distribution of PWID in the Tasmania (Hobart) IDRS samples, 2000-2013



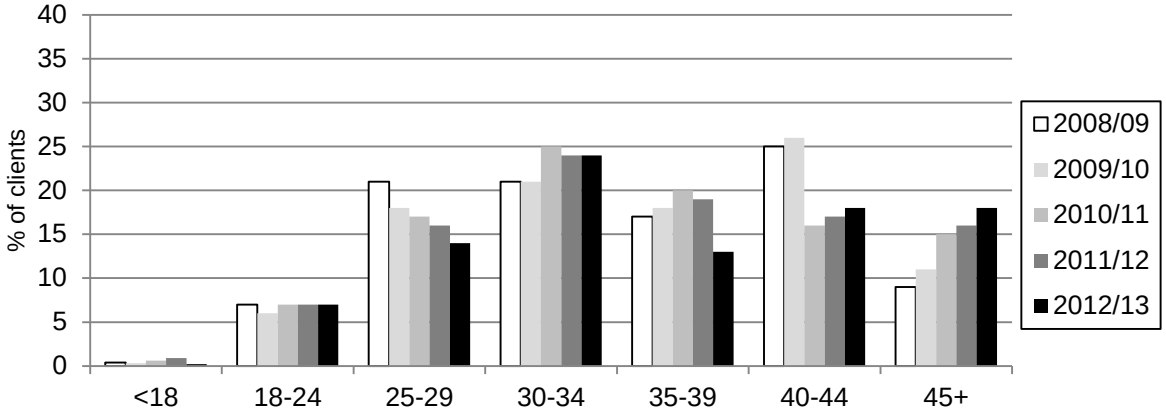
Source: IDRS PWID interviews

Figure 2: Age of clients of non-pharmacy Needle and Syringe Program outlets in Tasmania, 2000/01-2007/08



Source: Tasmanian Needle and Syringe Program

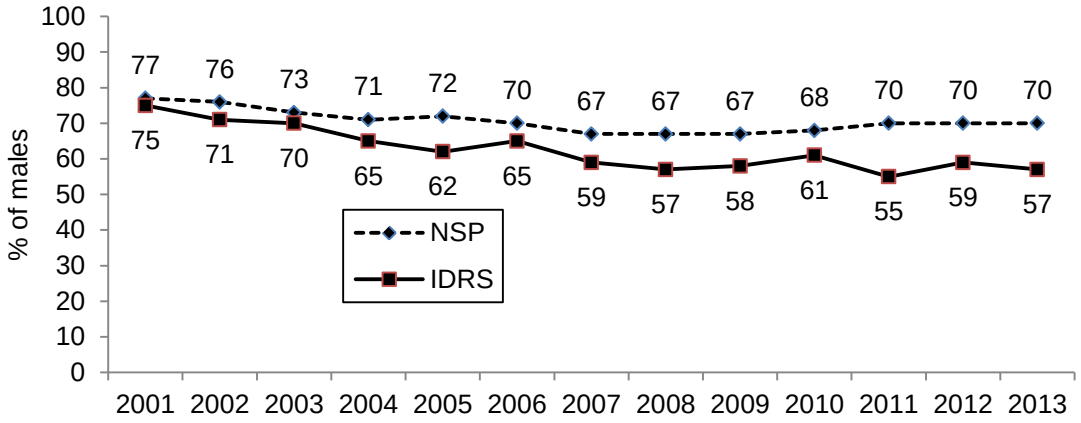
Figure 3: Age of clients of non-pharmacy Needle and Syringe Program outlets in Tasmania, 2008/09-2012/13



Source: Tasmanian Needle and Syringe Program
Note: In 2008/09, changes were made to the way in which these data were collected (i.e. age categories), rendering comparisons with previous years not possible

Within the IDRS PWID cohorts, the proportion of male participants gradually declined from 77% in 2001 to 67% in 2007. Since this time, this rate has remained relatively unchanged (ranging between 67-70%) (Figure 4). Data from the Tasmanian NSP program shows relatively stable proportions of male clients, ranging between 67% and 77% of all client transactions from 2001 to 2013 (NSP: Figure 4).

Figure 4: Proportion of males amongst Tasmanian IDRS PWID cohorts and Tasmanian non-pharmacy Needle and Syringe Program clients, 2001-2013



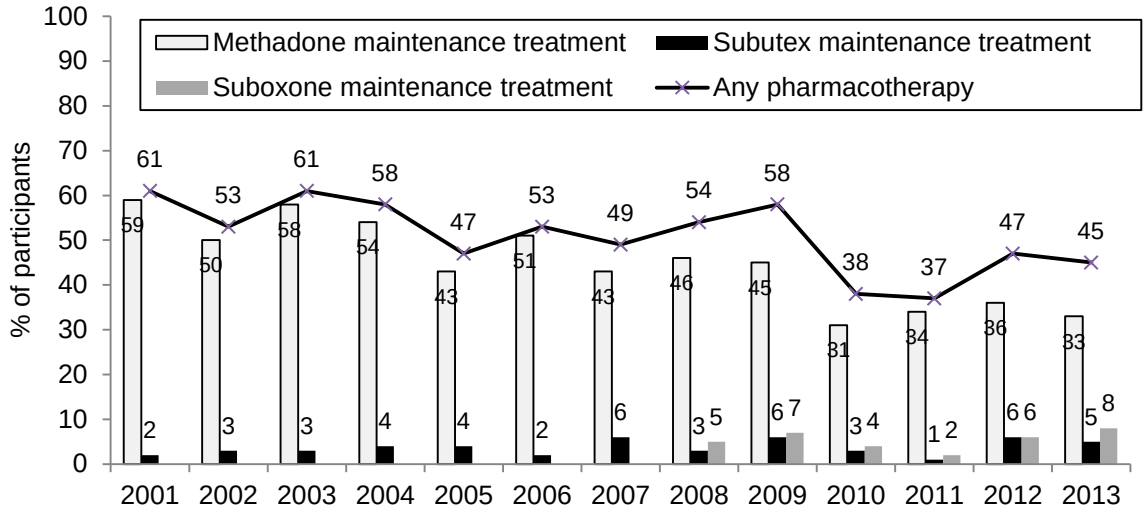
Source: IDRS PWID interviews and Tasmanian Needle and Syringe Program

3.2 Current and previous drug treatment

Almost half of the participants (47%) reported being engaged in some form of drug treatment at the time of interview: similar to rates reported since 2010 (ranging between 40% and 49%). Most participants who were engaged in treatment reported accessing methadone maintenance treatment (33%), Suboxone (8%) or Subutex treatments (5%). The mean duration of time in methadone maintenance treatment was 86 months (SD=67, range 0.5-240 months); for Suboxone 22 months (SD=31, range 1-81 months); and for Subutex 24 months (SD=23, range 3-60 months). Figure 5 shows a trend of decreasing proportions of cohorts reporting engagement in opioid substitution therapy (OST), from around three-fifths of samples in the early 2000s, down to around two-fifths in 2010 and 2011. In 2012 and 2013, this rate has been slightly higher (47% and 45% respectively). Methadone has consistently remained the predominant form of OST reported by IDRS participants.

Engagement in other forms of drug treatment over the preceding six months is shown in Table 3. Eight percent of the current cohort reported having accessed drug counselling. The rate of access to this form of treatment has declined from around one-fifth of samples between 2002 and 2007 to less than 10% since 2010. Low rates of access to other forms of treatment have been consistently reported since 2002.

Figure 5: Proportion of the PWID sample accessing methadone or buprenorphine maintenance treatments at the time of interview, 2001-2013



Source: IDRS PWID interviews

Table 3: Proportion of participants reporting treatments other than opioid replacement pharmacotherapy in past six months, 2002-2013

Treatment type	2002 %	2003 %	2004 %	2005 %	2006 %	2007 %	2008 %	2009 %	2010 %	2011 %	2012 %	2013 %
AOD Counselling	19	18	25	17	20	17	11	10	3	4	9	8
Detoxification	7	5	3	0	0	4	5	0	1	1	3	3
Therapeutic community or rehabilitation	0	2	1	0	0	1	2	0	1	2	3	1
Naltrexone	0	0	1	0	5	0	0	0	0	0	0	0
Narcotics Anonymous	0	0	0	0	0	0	0	0	1	1	2	1
Other	2	4	2	2	2	2	1	1	0	0	2	1

Source: IDRS PWID interviews
Note: Multiple responses could be selected

4.0 CONSUMPTION PATTERNS

Key Points:

- The mean age of first injection was 20 years (range 12-60 years);
- Three-fifths of the sample reported a form of methamphetamine as the first drug they injected;
- Two-thirds of the sample reported an opioid as their drug of choice, predominantly morphine and heroin; one-quarter reported this to be methamphetamine;
- Three-quarters of the sample reported an opioid as the drug most frequently injected in the preceding month; and
- Polydrug use was common across the sample.

4.1 Drug use history and current drug use

The mean age reported at first injection was 20.0 years (SD=6.5, range 12-60) (Table 4). This was similar to the age reported in 2012 (20.2 years, SD=6.7, range 11-45), and previous samples. There were no significant sex differences in the age of first injection (20.0 years for both females and males).

The mean injecting drug using career for the 2013 cohort was 16.9 years (SD=8.3, range 1-37 years). Males reported a mean injecting career of 18.2 years (SD=7.8, range 1-37), and females reported a mean duration of 15.2 years (SD=8.7, range 1-34 years), a difference that approached statistical significance (p=0.06). Three-fifths of the cohort reported methamphetamine as the first drug injected (59%), 24% reported morphine and 10% heroin (Table 4).

One-quarter of the 2013 IDRS PWID cohort respectively reported that morphine, heroin or methamphetamine was their drug of choice (26%, 24% and 23% respectively). Overall preference for any form of opioid (including heroin, methadone, morphine and oxycodone) was 64%, slightly, but not significantly, higher than the rate reported in 2012 (53%, p=0.10).

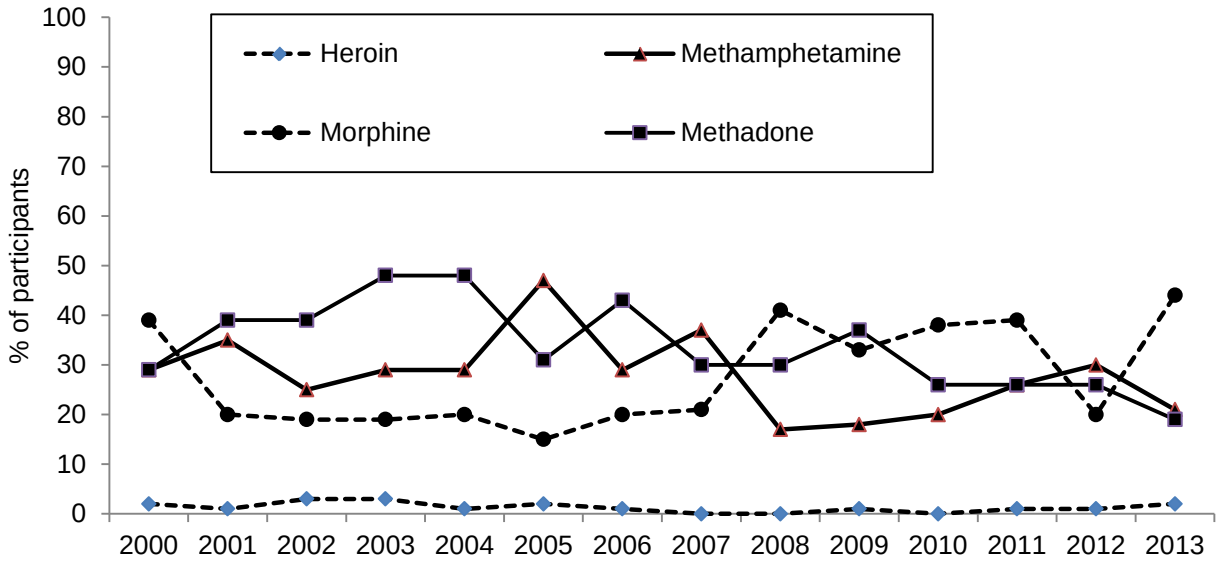
Consistent with the high preference for opioids among the participants in the current study, 76% reported an opioid as the drug they had most often injected in the preceding month. Despite heroin being the drug of choice of 24% of the cohort, morphine (44%) and methadone (19%) were the most commonly injected opioid drugs. Just two participants reported heroin as the drug most injected in the last month. Participant reports of morphine as the drug most injected in the last month increased from 20% in 2012 to 44% in 2013(χ^2 ($1_{n=213}$)=113.16, p<0.001) (Figure 6).

Table 4: Injection history, drug preferences and polydrug use of participants, 2012-2013

Variable	2012 N=106	2013 N=107
Age first injection (years)	20.2 (range 11-45)	20.0 (range 12-60)
First drug injected (%)		
Heroin	17	10
Methamphetamine	53	59
Methadone	2	1
Morphine	18	24
Oxycodone	1	1
Cocaine	0	1
Drug of choice (%)		
Heroin	25	24
Cocaine	8	1
Methamphetamine (any form)	25	23
Speed	*22*	*16*
Base	*0*	*1*
Crystal (ice)	*3*	*6*
Methadone	10	8
Morphine	12	26
Oxycodone	6	6
Benzodiazepines	3	2
Cannabis	3	5
Methadone and benzodiazepines	0	0
Drug injected most often in last month (%)		
Heroin	1	2
Cocaine	0	0
Methamphetamine (any form)	30	21
Speed	*27*	*13*
Base	*2*	*0*
Crystal (ice)	*1*	*8*
Methadone	26	19
Morphine	20	44
Benzodiazepines	0	1
Buprenorphine	1	2
Oxycodone	12	9
Most recent drug injected (%)		
Heroin	2	2
Cocaine	0	0
Methamphetamine (any form)	32	16
Speed	*29*	*12*
Base	*2*	*0*
Crystal (ice)	*1*	*4*
Methadone	22	27
Buprenorphine (all forms)	1	3
Morphine	16	31
Oxycodone	12	12
Frequency of injecting in last month (%)		
Weekly or less	16	9
More than weekly, but less than daily	58	63
Once per day	13	12
2-3 times a day	9	15
>3 times a day	4	1
Polydrug use		
Mean number of drug classes ever used* (range)	6.5 (2-7)	6.5 (3-7)
Mean number of drug classes used* in last 6 months (range)	5.1 (2-7)	4.6 (1-7)
Mean number of drug classes ever injected^ (range)	2.7 (1-5)	2.6 (1-4)
Mean number of drug classes injected^ in last 6 months (range)	2.0 (1-4)	1.9 (1-3)

Source: IDRS PWID interviews. ***** 'used' refers to any of the following routes of administration: smoke/inhale, snort, swallow/ingest and inject. The seven categories refer to: stimulants, opioids, hallucinogens, benzodiazepines, cannabis, alcohol and tobacco. ^ Refers to 5 categories only (omitted tobacco and cannabis)

Figure 6: Drug injected most last month, 2000-2013



Source: IDRS PWID interviews
Note: In 2000, morphine was included in a grouping with opioids other than methadone or heroin

Participants were asked about the frequency of injection in the month preceding the interview (Table 4). Three-fifths of the sample reported injecting more than weekly but not daily (63%), 28% injected at least once per day, and 9% had injected weekly or less. The proportion of respondents reporting daily injection has remained between one-quarter and one-third of participants between 2005 and 2013, with the exception of 2010 (43%), but this difference was not statistically significant (p=0.08).

Respondents reported on their drug use on the day prior to their interview. Almost all participants reported using a drug on the previous day (96%) (notably, in contrast to just 57% reporting having spent money on drugs on that day). Cannabis was the most commonly used drug on the day prior to interview, reported by 54% (Table 5). Almost half of the sample reported use of a benzodiazepine (48%), and approximately one-third reported use of methadone (32%, although only two of these respondents were not currently enrolled in methadone maintenance treatment) and/or morphine (30%) on the day prior to the interview (Table 5).

Between 2006 and 2009, the rate of use of methadone (both prescribed and non-prescribed) remained stable (41-46%), however, this rate decreased slightly in subsequent years (ranging between 32% and 35%). This difference is largely due to lower rates of participants reporting engagement in methadone maintenance treatment at the time of the interview.

Table 5: Drugs taken on the day prior to interview among the PWID sample, 2006-2013

Drug*	2006 %	2007 %	2008 %	2009 %	2010 %	2011 %	2012 %	2013 %
Cannabis	60	62	71	57	60	64	59	54
Methadone^	46	45	41	41	32	34	35	32
Benzodiazepines	39	45	33	39	32	38	30	48
Morphine	22	11	31	28	28	24	16	30
Methamphetamine: powder	5	18	4	9	10	8	17	5
Methamphetamine: base/paste	5	3	0	2	3	3	3	1
Methamphetamine: crystal	4	0	1	2	0	1	2	2
Pharmaceutical stimulants	0	1	2	2	3	2	3	1
Heroin	0	0	0	0	0	1	0	0
Cocaine	0	0	0	0	1	0	1	0
Alcohol	16	22	13	22	27	29	31	15
Antidepressant	11	6	1	4	5	17	11	21
Buprenorphine	1	7	3	5	2	3	4	8
Buprenorphine-naloxone	0	0	3	4	1	2	8	8
Oxycodone	0	4	2	2	9	6	11	10
Other opiates	3	2	1	4	2	8	4	4
Did not use any drugs	7	3	3	5	1	0	0	4

Source: IDRS PWID interviews

* Could list more than one drug

^ Includes prescribed methadone

Participants were also asked about the location in which they last injected (Table 6). A small minority injected in public spaces (10%). The proportion of the cohort reporting injecting in public places has significantly decreased since 2007 (32% in 2007 v. 10% in 2013: χ^2 ($1_{n=205}$)=14.5, p<0.001).

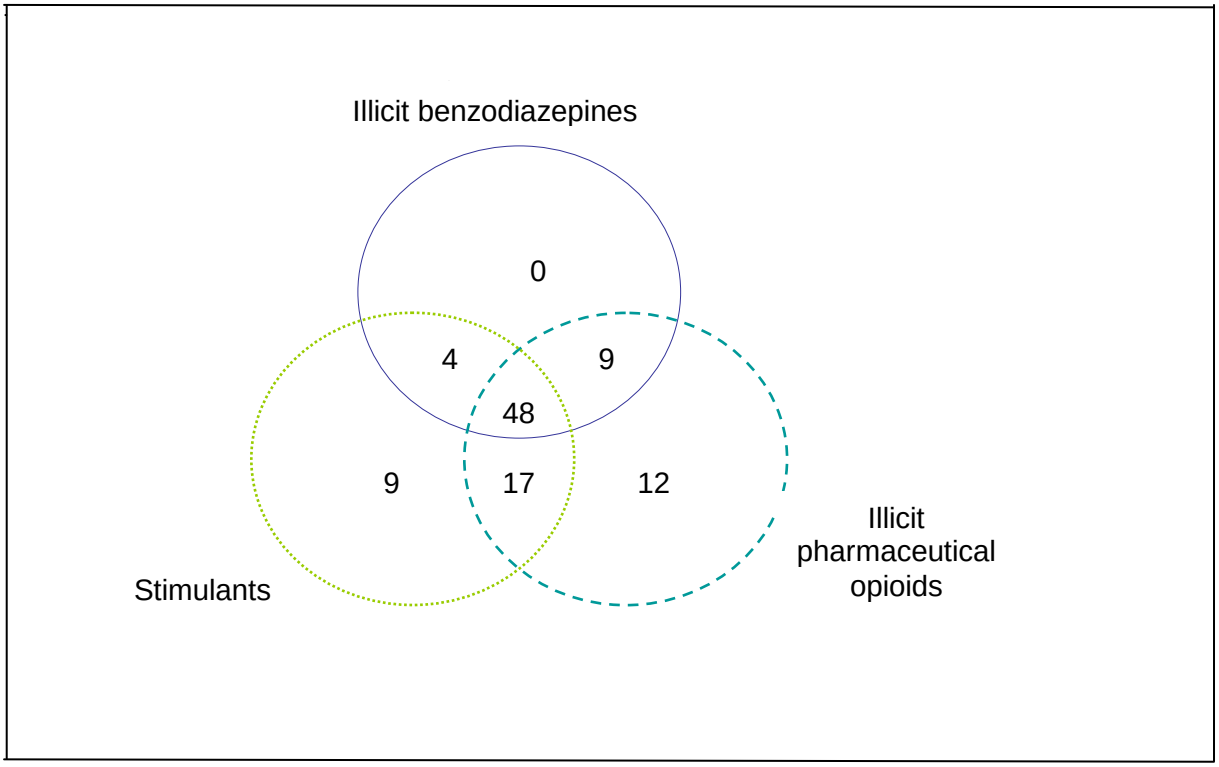
Table 6: Location in which respondents last injected, 2007-2013

	2007 N=98 %	**2008 N=100 %**	**2009 N=100 %**	**2010 N=100 %**	**2011 N=100 %**	**2012 N=106 %**	**2013 N=105 %**
Private home	67	87	86	86	79	87	91
Public toilet	15	6	6	7	4	4	3
Car	15	7	6	4	12	9	7
Street/park or beach	2	0	2	2	2	1	0

Source: IDRS PWID interviews

Drug use histories of the 2013 IDRS PWID respondents are summarised in Table 7. There was a substantial level of polydrug use among this group, as almost all individuals had used methamphetamine, morphine, methadone, oxycodone, benzodiazepines, alcohol, cannabis and tobacco at some stage in their lives. Of the 7 possible drug classes examined (opioids, stimulants, hallucinogens, cannabis, benzodiazepines, tobacco and alcohol), participants had used a median of 7 (mean = 6.5, SD = 1.0, range 3-7) drug classes in their lives, and 5 (mean = 4.6, SD = 1.4, range 1-7) in the preceding six months. A median of 3 drug classes had been injected over their lifetimes (mean = 2.6, SD = 0.8, range 1-4), and 2 (mean = 1.9, SD = 0.7, range 1-3) in the preceding six months. These figures are consistent with those in the 2012 cohort (Table 4). Figure 7 below illustrates polydrug use over the preceding six months, specifically for illicit benzodiazepines, stimulants and illicit pharmaceutical opioids. Half of the participants (48%) had used stimulants, illicit pharmaceutical opioids and illicit benzodiazepines in the preceding six months, with a further 17% using both stimulants and illicit pharmaceutical opioids in this time. Given that only 12% of the current cohort reported solely using illicit pharmaceutical opioids and 9% solely using stimulant drugs, it is clear that the current cohort could predominantly be considered as polydrug consumers. This is an important consideration, as descriptions of 'primary methamphetamine consumers' or 'primary opioid consumers' in subsequent sections of the report will likely also be consumers of drugs of the opposing class.

Figure 7: Polydrug use in the preceding six months amongst the PWID cohort, 2013



Source: IDRS PWID interviews

Table 7: Polydrug use history of the PWID sample, 2013

Drug Class	Ever used %	Ever Injected %	Injected last 6 mths %	Days injected in last 6 mths*	Ever Smoked %	Smoked last 6 mths %	Ever snorted %	Snorted last 6 mths %	Ever Swallowed %	Swallowed last 6 mths+ %	Used^ last 6 mths %	Days in treatment* last 6 mths	Days used^ in last 6 mths*
Heroin	63	61	10	3	15	0	6	0	4	0	10		3
Homebake heroin	19	18	1	1	3	0	1	0	1	0	1		1
Any heroin (inc. homebake)	*64*	*64*	*10*	*3*	*15*	*0*	*6*	*0*	*4*	*0*	*10*		*3*
Methadone (prescribed)	60	46	28	48					56	30	33	180	180
Methadone (not prescribed)	65	64	37	15					8	2	38		15
Physeptone (prescribed)	8	5	1	12	0	0	0	0	7	1	1	12	12
Physeptone (not prescribed)	63	61	38	7	0	0	0	0	10	8	39		7
Any methadone (inc Physeptone)	*85*	*80*	*57*	*48*					*59*	*33*	*60*		*96*
Buprenorphine (prescribed)	25	8	1	24	0	0	0	0	19	5	8	180	180
Buprenorphine (not prescribed)	19	15	8	10	1	0	0	0	2	1	9		11
Any Buprenorphine (excl buprenorphine-naloxone)	*39*	*8*	*8*	*10*	*1*	*0*	*0*	*0*	*19*	*6*	*18*		*41*
Buprenorphine-naloxone tablets (prescribed)	17	4	1	180	0	0	0	0	14	3	3	180	180
Buprenorphine-naloxone tablets (not prescribed)	15	11	3	12	0	0	0	0	5	1	4		22
Any Buprenorphine-naloxone tablets	*29*	*14*	*4*	*18*	*0*	*0*	*0*	*0*	*19*	*4*	*7*		*24*
Buprenorphine-naloxone film (prescribed)	12	0	0	0	0	0	0	0	12	7	7	180	90
Buprenorphine-naloxone film (not prescribed)	11	7	6	17	1	1	0	0	4	3	9		12
Any Buprenorphine-naloxone film	*22*	*7*	*6*	*22*	*1*	*1*	*0*	*0*	*16*	*9*	*15*		*45*
Morphine (prescribed)	19	14	3	96	0	0	0	0	10	1	3	180	180
Morphine (not prescribed)	93	93	64	48	0	0	0	0	13	6	65		48
Any Morphine	*94*	*94*	*65*	*48*	*0*	*0*	*0*	*0*	*22*	*7*	*66*		*48*

Table 7: Polydrug use history of the PWID sample, 2013 (continued)

Drug Class	Ever used %	Ever Injected %	Injected last 6 mths %	Days injected in last 6 mths*	Ever Smoked %	Smoked last 6 mths %	Ever snorted %	Snorted last 6 mths %	Ever Swallowed %	Swallowed last 6 mths+ %	Used^ last 6 mths %	Days in treatment* last 6 mths	Days used^ in last 6 mths*
Oxycodone (prescribed)	15	8	2	96	0	0	0	0	11	2	4	60	54
Oxycodone (not prescribed)	83	79	59	15	0	0	1	0	11	5	61		15
Any Oxycodone	*85*	*81*	*60*	*18*	*0*	*0*	*1*	*0*	*21*	*7*	*62*		*18*
Fentanyl (any)	11	4	1	5	0	0	0	0	2	0	5		21
Over the counter codeine	36	0	0	0	0	0	0	0	36	22	22		8
Other opioids (not elsewhere classified)	55	3	2	2	1	0	1	1	55	29	29		10
Speed powder	94	94	61	10	4	1	22	4	20	3	61		10
Base/point/wax	40	38	17	4	2	1	0	0	3	0	17		4
Ice/shabu/crystal	74	70	45	7	17	8	2	1	4	1	45		7
Amphetamine liquid	22	22	6	3					3	1	6		3
Any form methamphetamine	*94*	*94*	*74*	*16*	*21*	*9*	*22*	*4*	*22*	*3*	*74*		*18*
Pharmaceutical stimulants (prescribed)	6	3	2	57	0	0	0	0	4	0	2	57	57
Pharmaceutical stimulants (not prescribed)	65	53	28	5	0	0	4	2	23	5	29		6
Any form pharmaceutical stimulants	*67*	*54*	*29*	*6*	*0*	*0*	*4*	*2*	*27*	*5*	*30*		*6*
Cocaine	43	22	3	2	8	0	26	2	3	0	5		2
Hallucinogens	64	3	0	0	4	1	2	1	61	12	12		2
Ecstasy	65	19	4	4	1	0	10	2	60	10	12		4
Alprazolam (prescribed)	20	7	1	3	1	0	0	0	18	6	6	180	180
Alprazolam (not prescribed)	71	39	20	10	1	0	1	0	57	27	37		11
Any alprazolam	75	42	21	*n/r*	1	0	1	0	61	30	40		12

Table 7: Polydrug use history of the PWID sample, 2013 (continued)

Drug Class	Ever used %	Ever Injected %	Injected last 6 mths %	Days injected in last 6 mths*	Ever Smoked %	Smoked last 6 mths %	Ever snorted %	Snorted last 6 mths %	Ever Swallowed %	Swallowed last 6 mths+ %	Used^ last 6 mths %	Days in treatment* last 6 mths	Days used^ in last 6 mths*
Benzodiazepines (prescribed) (excl. alprazolam)	56	5	2	9	1	0	0	0	56	36	36	180	180
Benzodiazepines (not prescribed)(excl. alprazolam)	71	8	3	24	0	0	0	0	68	48	50		12
Any benzodiazepines (incl. alprazolam)	*91*	*45*	*23*	*10*	*2*	*0*	*1*	*0*	*88*	*70*	*76*		*90*
Seroquel (prescribed)	19	0	0	0					19	8	8	180	180
Seroquel(not prescribed)	31	3	2	1					31	10	10		3
Any Seroquel	*45*	*0*	*0*	*0*					*45*	*17*	*17*		*12*
Steroids	5	5	1	21					0	0	1		21
Alcohol	94	2	0	0					94	40	40		12
Cannabis	97				96	71			43	13	76		180
Inhalants	20										1		3
Tobacco	95										85		180

Source: IDRS PWID interviews

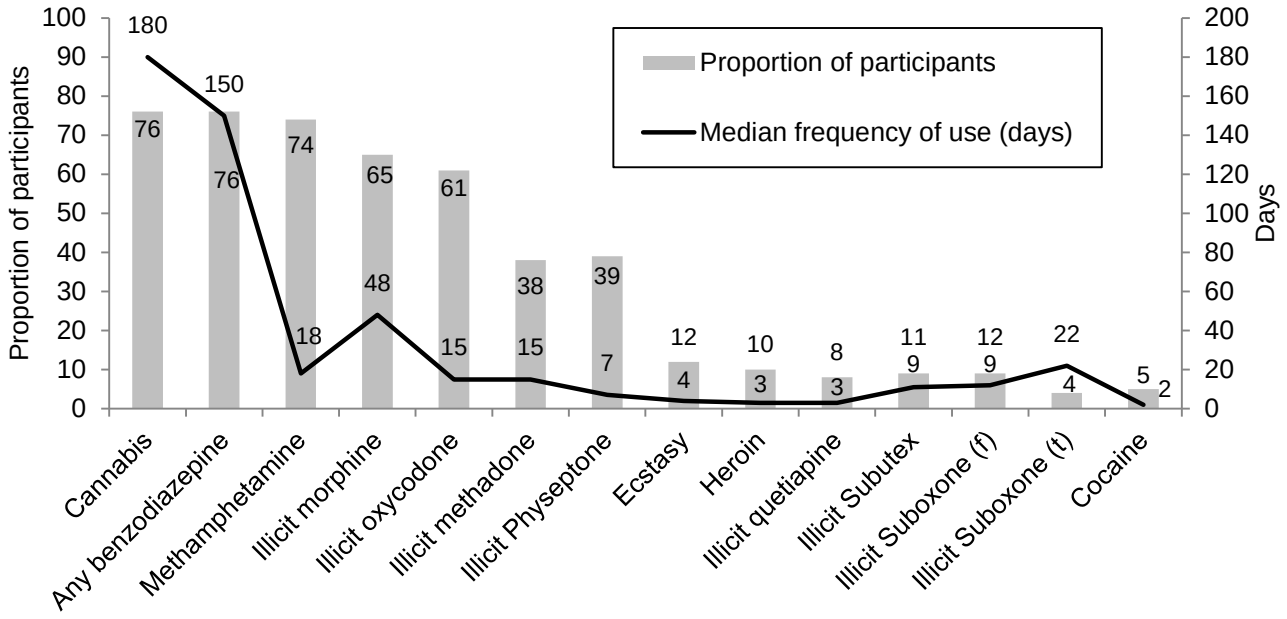
^ Refers to any route of administration, i.e. includes use via injection, smoking, swallowing, and snorting

+ Refers to/includes sublingual administration of buprenorphine

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

Overall, the most commonly used illicit drugs in the six months preceding interview were cannabis and benzodiazepines, with 76% of participants respectively reporting use, at a median frequency of 180 days (daily use) and 150 days respectively (Figure 8). Three-quarters of the sample reported recent use of methamphetamine (74%: at a median frequency of 18 days); 65% reported use of illicit morphine (at a median frequency of 48 days (twice per week)); and 61% reported use of illicit oxycodone (at a median frequency of 15 days (once per fortnight)). Illicit methadone and Physeptone were used by 38% and 39% of the sample respectively, at a median frequency of around once per fortnight for methadone and once per month for Physeptone (Figure 8).

Figure 8: Patterns of drug use among the 2013 IDRS sample



Source: IDRS PWID interviews

4.2 Heroin

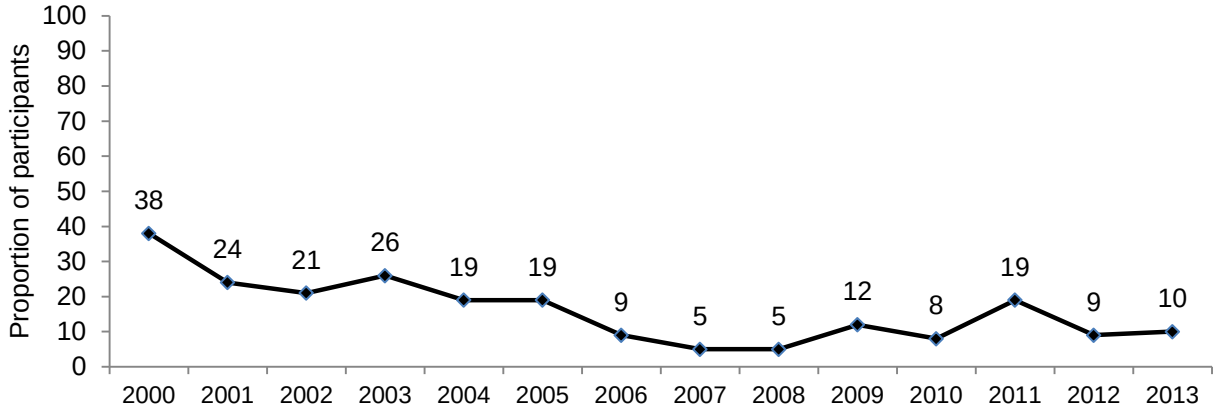
Key Points

- Just 10% of participants in the current study reported use of heroin in the preceding six months, at a median frequency of three days;
- Overall, heroin use in Tasmania remains low amongst IDRS participants and NSP clients; and
- Despite the low level of use of heroin, it is the drug of choice of one-quarter of the sample.

4.2.1 Current patterns of heroin use

Among the 2013 PWID sample, 63% reported they had tried heroin at some stage of their lives, and 10% (n=11) reported use in the six months preceding the interview (Figure 9). Of these 11 recent consumers, all had injected it, at a median frequency of three days (range 1-48 days). Recent use of heroin amongst IDRS cohorts has declined from 38% in 2000 to 10% in 2013, with a small, increase in 2011 to 19%. Despite these low rates of heroin use, a substantial proportion of participants in each cohort have reported heroin to be their drug of choice: reported by 25-33% of each sample between 2007 and 2013 (24% in 2013). This relatively low level of use in a regularly injecting group, in which one-quarter report heroin as their drug of choice, indicates heroin supply in Tasmania has been limited (refer to Section 5.1).

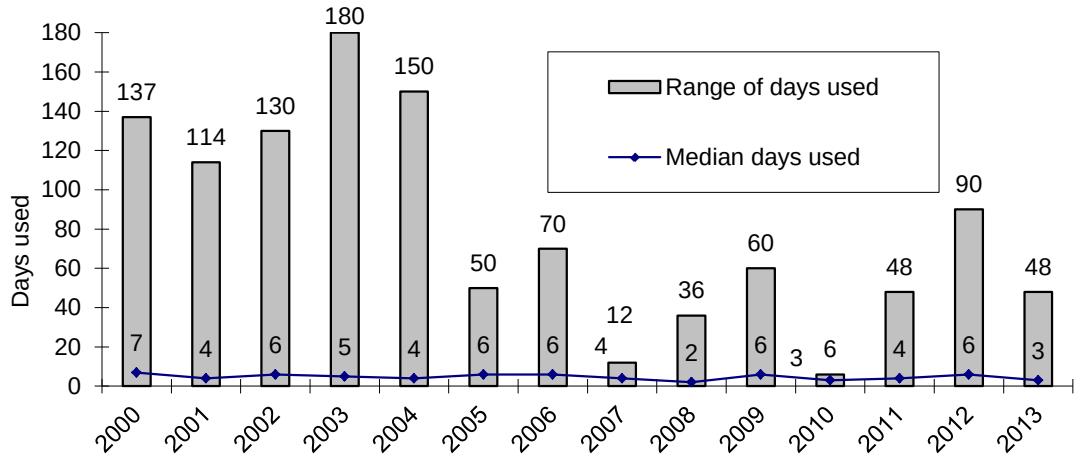
Figure 9: Proportion of PWID participants reporting recent use of heroin, 2000-2013



Source: IDRS PWID interviews

The median frequency of use has remained relatively low and unchanged between 2000 and 2013 (ranging between three and seven days) (Figure 10). However, there has been a wide range in frequency of use amongst the cohorts, with some participants in earlier studies able to access heroin regularly (Figure 10). In keeping with the overall decline in the proportion of the IDRS PWID cohorts reporting recent use of heroin since 2003, there has been a reduction in the range of days that heroin had been used among recent cohorts. In support of these findings, nine KE – employed in legal/law enforcement fields, and drug treatment field – noted heroin use was rare to non-existent amongst the client groups they were familiar with.

Figure 10: Median days and range of heroin use in the past six months, 2000-2013



Source: IDRS PWID interviews

There was a high level of polydrug use amongst those who had used heroin in the past six months (Table 8), predominantly of illicit forms of morphine, oxycodone, alprazolam and other benzodiazepines, as well as powder methamphetamine. This finding is in keeping with reports from KE in previous studies that, because of fluctuating availability, primary users of opioids have to be flexible in their patterns of use, turning to other opioids, methamphetamine or benzodiazepines if their opioid drug of choice is unavailable.

Table 8: Patterns of drug use reported by those PWID who had used heroin in the past six months, 2013

	% of those who had used heroin in last 6 months reporting use (n=11)	Median days use for those using the drug
Methadone syrup (illicit)	27 (n=3)	24 (range 12-24)
Physeptone (illicit)	45 (n=5)	7 (range 1-12)
Morphine (illicit)	82 (n=9)	96 (range 3-180)
Oxycodone (illicit)	64 (n=7)	24 (range 3-180)
Alprazolam (illicit)	64 (n=7)	22 (range 2-180)
Other benzodiazepines (illicit)	64 (n=7)	14 (range 3-180)
Methamphetamine:		
Powder	73 (n=8)	8 (range 1-48)
Base/paste	18 (n=2)	4 (range 2-6)
Ice/crystal	55 (n=6)	6 (range 1-12)
Alcohol	36 (n=4)	72 (range 3-180)

Source: IDRS PWID interviews

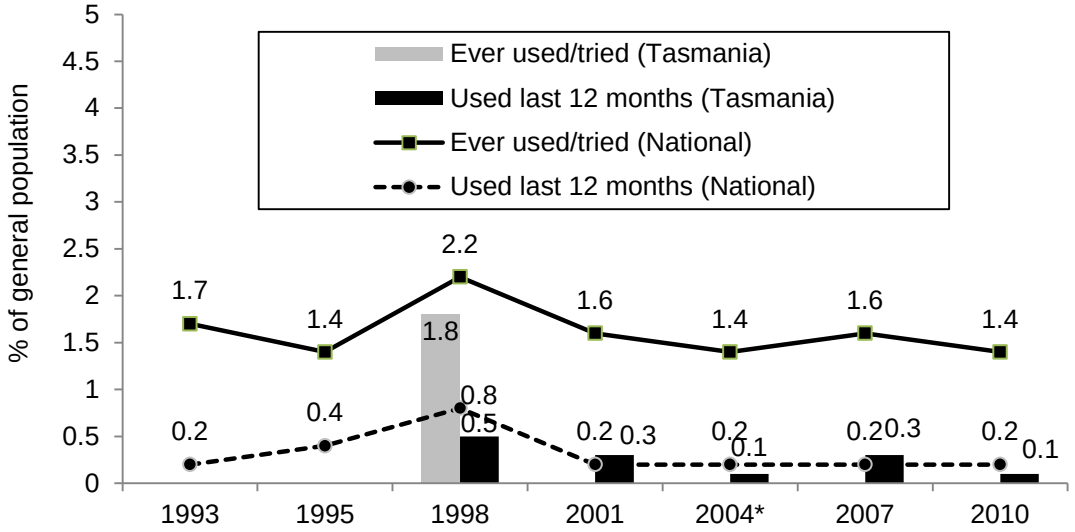
Of those PWID who had reported heroin use in the preceding six months (n=11), two-thirds regarded heroin as their drug of choice (64%, n=7) and 27% (n=3) reported morphine. Despite this, just two participants noted that heroin was the drug they had injected most often in the preceding month. Participants were asked to clarify the discrepancy between their drug of choice and the drug most used in the preceding month. Of the group reporting heroin as their drug of choice (n=25), 80% (n=20) reported lack of availability as the primary reason that heroin was not the main drug they had used.

Participants were asked to describe the form/s of heroin they had used in the preceding six months. Of these 11 participants, six reported use of white or off-white heroin and five reported use of brown powder or rock.

4.2.2 Prevalence of heroin use

The 1998 National Drug Strategy Household Survey (AIHW, 1999) reported that 1.8% of Tasmanians sampled had ever used heroin, while 0.5% had used it in the year prior to interview (Figure 11). While the small numbers involved mean that meaningful inferences are difficult to draw, past year use in the 2001 and 2004 surveys are similar (0.3% and less than 0.1% respectively: AIHW, 2002a; 2005b). Similarly, the 2007 and 2010 National Drug Strategy Household Surveys (n=1,143; n=1,060 respectively) reported that 0.3% and 0.1% respectively of Tasmanians sampled had used heroin in the preceding 12 months, consistent with rates in the national sample (0.3% and 0.2% respectively) (AIHW, 2008b, 2011).

Figure 11: Prevalence of heroin use in Australia and Tasmania among those aged 14 years and over, 1993-2010



Source: National Drug Strategy Household Survey 1993-2011

* In 2004, less than 0.1% of the Tasmanian sample reported recent use of heroin

4.2.3 Heroin use among NSP clients

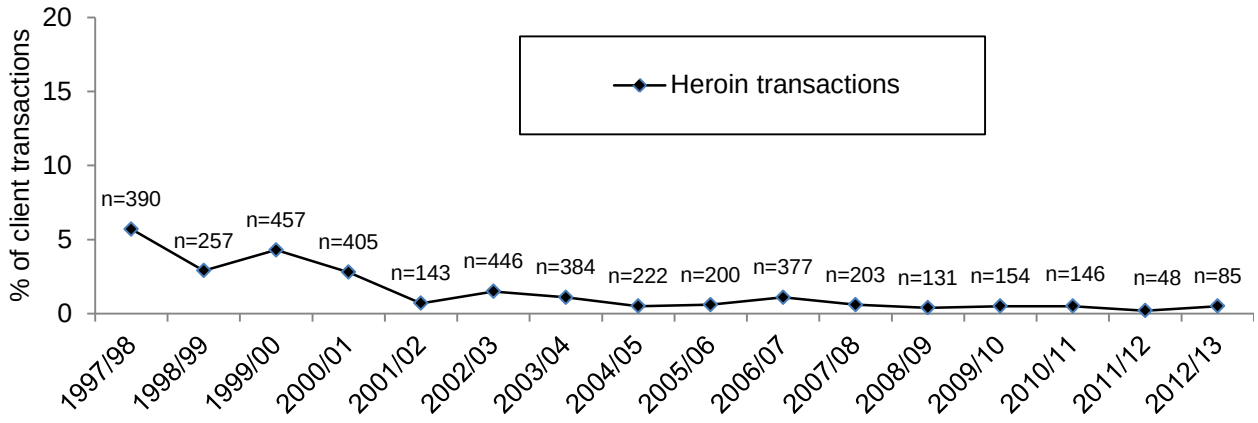
Reported use of heroin as the main drug injected by non-pharmacy NSP outlet clients has remained low (2% or less of all transactions since 2001/02) (Figure 12). While it should be noted that data from the NSP reported here includes some imputation of missing data (thus these figures should best be regarded as estimates), of note in these figures is a decline in client transactions between 2000/01 and 2001/02 (falling from 405 to 143 respectively) where heroin was reported as the drug most often injected. Following a return to similar levels in 2002/03 (446 transactions), these cases steadily declined in subsequent years to 200 in 2005/06. In 2006/07, a small increase in the proportion of heroin-related client transactions was observed (1.1%, n~377); however, this was short-lived, as the rate decreased to 0.6% (n~203) in 2007/08[8] and has remained stable since then

[8] It should be noted that prior to 2007/08, NSP data included data from both primary and secondary NSP outlets across Tasmania; in 2007/08-2009/10, data was collected exclusively from primary outlets. Whilst the number of transactions may vary in accordance with the change in reporting style, rates remain a useful way to monitor these trends over time for this dataset.

(0.4%, n=131 in 2008/09; 0.5%, n=154 in 2009/10; 0.5%, n=146 in 2010/11; 0.2%, n=48 in 2011/12; 0.5%, n=85 in 2012/13).

It is important to note that NSP data may underestimate the extent of heroin use, as different NSP outlets ask slightly differing questions in regard to drug use – with some asking 'what is the drug you most often inject?', while others prefer 'what is the drug you are about to inject?', with the different questions having different biases against identification of use of drugs accessed in low frequency. For example, in the current cohort, although 10% of the PWID sample had used heroin in the past six months, just two participants reported it as the drug they most often injected.

Figure 12: Proportion of heroin reported as 'drug most often injected' in transactions at Tasmanian non-pharmacy Needle and Syringe Program outlets, 1997/98-2012/13



Source: Population Health, Department of Health and Human Services

The Australian Needle and Syringe Program Survey (Iversen & Maher, 2013) has reported heroin as the last drug injected by 3% or less of participants between 2004 and 2012, with the exception of 2008 (Table 9). In 2008, 7% of the sample reported heroin as the last drug injected, however, the sample size was notably lower than previous years (57 in 2008 compared with 107-168 in 2003 to 2007), and so this finding should be interpreted with caution. Overall, these figures estimate the level of use of heroin as higher than that seen in the NSP client data, although they underscore the point that heroin use is not common amongst Tasmanian PWID.

Table 9: Australian Needle and Syringe Program (NSP) Survey: Prevalence of heroin as the 'last drug injected', Tasmania, 2004-2012

	2004 (N=107)		2005 (N=137)		2006 (N=150)		2007 (N=168)		2008 (N=57)		2009 (N=122)		2010 (N=106)		2011 (N=68)		2012 (N=75)	
	n	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**
Heroin	*0*	0	*2*	1	*3*	2	*3*	2	*4*	7	*4*	3	*1*	1	*1*	1	*1*	1

Source: Iversen, & Maher, 2013

4.3 Methamphetamine

Key Points

- Three-quarters of the Tasmanian sample reported use of a form of methamphetamine in the preceding six months, at a median frequency of 18 days;
- Powder was the predominant form used, followed by crystal and then base/paste methamphetamine, although data indicated an increase in the use of crystal and decrease in the use of base/paste over recent years;
- Amongst IDRS participants, the rate of recent use of any form of methamphetamine has remained relatively stable between 2012 and 2013, but is lower than reported prior to 2008; and
- Similarly, indicator data point to overall stable rates of use of methamphetamine in the preceding four years, notably lower than was reported between 2003 and 2006.

In the initial years of the IDRS studies, reports used the overarching term 'amphetamine' to refer to both amphetamine and methylamphetamine (methamphetamine[9]). Throughout the 1980s, the form of illicit amphetamine most available in Australia was amphetamine sulphate (Chesher, 1993). Following the legislative controls introduced in the early 1990s on the distribution of the main precursor chemicals for the production of amphetamine sulphate (Wardlaw, 1993), illicit manufacturers were forced to rely on different procedures for the preparation of amphetamine. During the 1990s, the proportion of amphetamine-type substance seizures that were methamphetamine (rather than amphetamine) steadily increased until methamphetamine clearly dominated the market (ABCI, 1999, 2000, 2001). Across Australia today, the powder traditionally known as 'speed' is almost exclusively methamphetamine rather than amphetamine. For example, in the 2006/07 financial year, of the 4,396 seizures of amphetamine-type (non-phenethylamine) seizures analysed for purity in Australia, 97.9% (by number) were methamphetamine rather than amphetamine (ACC, 2008).

As methamphetamine markets across the country have expanded in recent years, it has become apparent that there is a diversity of forms, or presentations, of methamphetamine sold in the Australian illicit drug market. These more potent forms may be known by terms such as ice, shabu, base, paste and crystal meth, but they are all methamphetamine in basis. While there is some disagreement among consumers and researchers as to the nature of these forms and the distinguishing divisions between forms, it is clear that these are marketed differently to consumers and often sold on differing price scales. As such, trends in regard to each of these forms will be discussed separately where appropriate, and the term methamphetamine will be used in the IDRS to refer to the drugs available in this class.

With the exception of methamphetamine-based tablets marketed as 'ecstasy', and pharmaceutical stimulants such as dexamphetamine and methylphenidate, it appears that there are three dominant 'preparations' of methamphetamine used within the Tasmanian (and Australian) PWID market – each falling at three points along a continuum of form, but, again, all of which are the same substance.

Powder form methamphetamine[10] is the presentation of the drug which has traditionally been available in Australia. This is commonly a powder that can range from fine to more crystalline or coarse, and may take different colours (commonly white, brown or pink), depending on the chemical process used in its production and the quality of that process. It is produced within Australia, most

[9] Methamphetamine is an abbreviation of the name methylamphetamine, and, as such, both terms are interchangeable.
[10] Powder form methamphetamine is also referred to in national and other jurisdiction IDRS reports as 'speed'.

commonly in small, portable 'laboratories', and is usually based on pharmaceutical pseudoephedrine (extracted from, for example, Sudafed tablets). Because of its powder form, it is fairly easy to 'cut' (dilute) and is commonly sold at fairly low purity/potency, although this can vary substantially. Consumers interviewed for the 2012 IDRS survey reported that methamphetamine powder was either a dry powder or slightly wet, and sometimes contained small crystals. Colour varied, but was generally described as appearing white to off-white in colour, or alternatively yellow or beige/brown. The presence of crystals in powder methamphetamine may represent higher purity methamphetamine, or alternatively it may be explained by the use of an adulterant (methylsulfonylmethane, MSM) in the late stages of production. The introduction of MSM forms crystals, giving the powder methamphetamine a crystalline appearance (Fetherston & Lenton, 2006).

The two other 'forms' of methamphetamine are traditionally higher in potency (due to being more difficult to 'cut') and have increased in availability across all Australian jurisdictions in the past decade (Topp et al., 2002). The first, referred to in some jurisdictions as 'base' or 'paste', is commonly a gluggy, waxy, oily, 'wet' powder. It is usually sold in units of 'points' (0.1 grams). This form of the drug appears oily because the conversion process from pseudoephedrine to methamphetamine produces the alkaline (base) form of methamphetamine, which is 'oily'. To convert this to a more easily injectable form (methamphetamine hydrochloride crystals, which may take the appearance of powder, or, when no impurities are present, and carefully crystallised, may take the form of the 'ice' crystals discussed below) requires a high level of skill, and when not completed correctly, the result of this process is an oily powder that often has a yellow or brownish tinge due to the presence of iodine and other impurities (Topp & Churchill, 2002). In the 2012 study, participants who had recently purchased this form locally commonly described it as wet, damp or sticky, and reported the colour as ranging from yellow/orange, to white, beige or brown, and described it as looking like 'ear wax'.

The final form of methamphetamine examined in the current study is often referred to as 'ice' or 'crystal meth(amphetamine)'. This is the product of a careful production process, and is believed to be chiefly imported into Australia from Asian countries (Topp & Churchill, 2002), although there are also indications of local production in recent years (ACC, 2009). It commonly appears as clear, ice-like crystals, and, as such, is difficult to 'cut' (dilute), resulting in a relatively high-purity/potency product. However, as previously noted, MSM is an adulterant that can be used to give lower purity powder methamphetamine the appearance of higher purity crystal methamphetamine (although it should be noted that there is currently no forensic validation that this has been present in drugs used in Tasmania). Consumers in the 2012 and previous IDRS studies have generally described this form as white/clear crystals or rocks, looking like crushed glass or rock salt (with crystals commonly larger than sugar crystals).

4.3.1 Current patterns of methamphetamine use

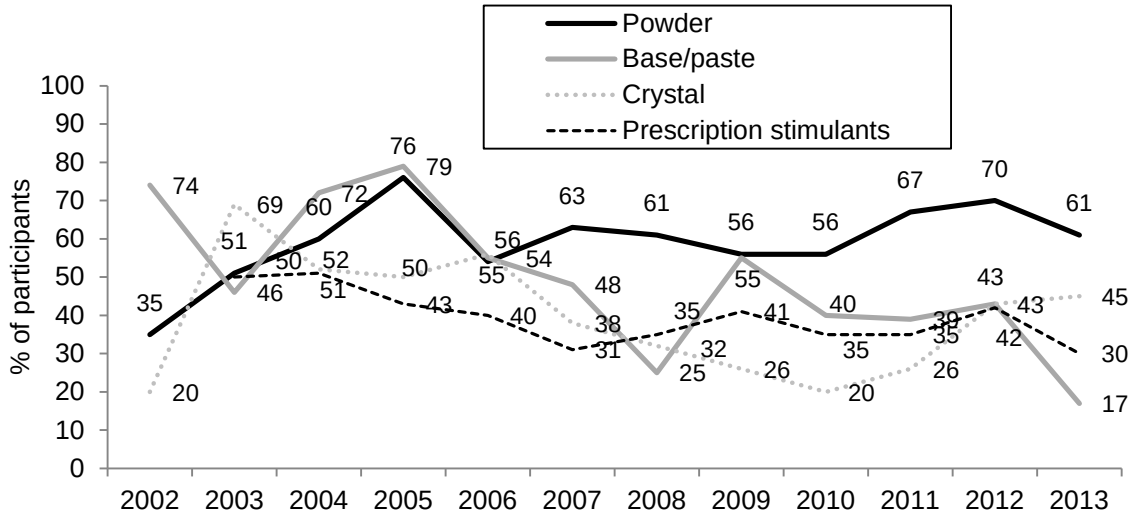
Seventy-four percent of the 2013 PWID cohort reported use of any form of methamphetamine in the six months preceding the interview, at a median frequency of 18 days, equating to use approximately weekly to fortnightly. This level of use is similar to the rate reported in the 2012 Tasmanian IDRS study (77%, at a median frequency of 23 days).

Demographic characteristics of those who had recently used methamphetamine were similar to the rest of the cohort (see Section 3.1) in terms of age, accommodation, sexual identity, educational background, prison history, injection frequency, age of first injection, current engagement in treatment and duration of injecting career. Participants who reported recent use of methamphetamine were more likely to be female (85% v. 66%: $\chi^2(1_{n=107})=5.01$, =0.02), to be unemployed (68% v. 32%: %: $\chi^2(1_{n=107})=5.57$, p=0.013) and more likely to be single (82% v. 18%: $\chi^2(1_{n=107})=3.888$, p=0.04).

For the 2013 IDRS, PWID were asked to differentiate between methamphetamine powder, base/paste and crystalline methamphetamine. This distinction had a good level of face validity to those PWID surveyed, despite there often being a substantial amount of overlap in the physical appearance of these 'forms'. PWID reported making these distinctions on the basis of physical form, purchase cost, and potency of subjective stimulant effect.

PWID reports of the forms of methamphetamine they had used in the previous six months clearly showed that a wide range of forms and potencies of the drug were available to local consumers (Figure 13). Across the entire cohort, 61% reported recent use of powder form, 45% had recently used crystal, and just 17% had used base/paste form (Figure 13).

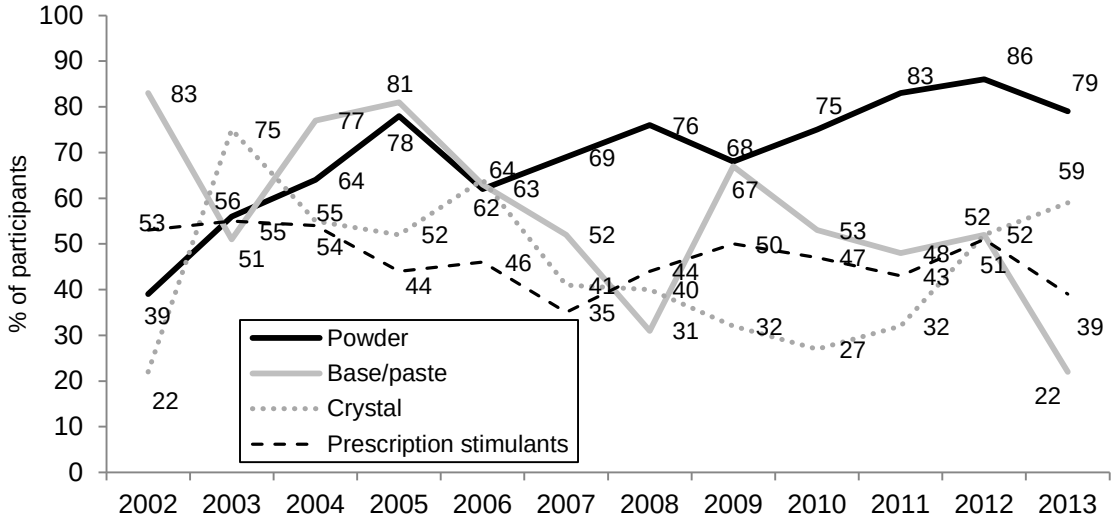
Figure 13: Proportion of PWID reporting methamphetamine and pharmaceutical stimulant use in the past six months, 2002-2013



Source: IDRS PWID interviews
Note: Pharmaceutical stimulants include use of licit and illicit prescription amphetamines: this item was asked from 2003 onwards

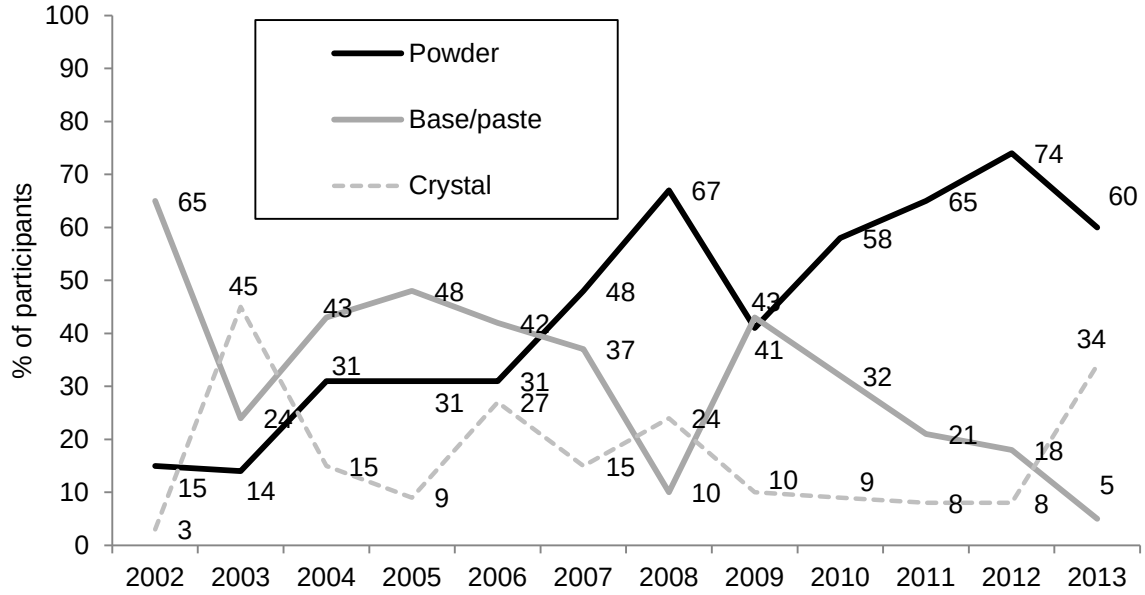
Amongst participants reporting recent use of any form of amphetamine (including powder, base/paste, crystal and prescription stimulants: n=82), powder was the predominant form used (79%). Three-fifths of this group reported recent use of crystal methamphetamine (59%), two-fifths prescription stimulants (39%, both licit and illicit forms), and just one-fifth reported recent use of base/paste (22%) (Figure 14).

Figure 14: Use of various forms of methamphetamine and prescription stimulants among IDRS PWID participants who reported recent use of a form of an amphetamine, 2002-2013



Source: IDRS PWID interviews
Note: Pharmaceutical stimulants include use of licit and illicit prescription amphetamines

Figure 15: Forms of methamphetamine most often used among IDRS PWID participants that had recently used a form of methamphetamine or prescription stimulant, 2002-2013



Source: IDRS PWID interviews

The patterns of use of the differing 'forms' of methamphetamine and pharmaceutical stimulants in the preceding six months by IDRS PWID participants across the 2002 to 2013 studies (Figures 13-15) display the changing face of the local methamphetamine market in this time. There are three major changes apparent in these data.

The first has revolved around the availability and, therefore, use of crystalline methamphetamine. In the 2002 study, use of crystal was quite rare, consumed by just 22% of amphetamine-using PWID in the preceding six months, with only 3% nominating it as the methamphetamine form they had most often used in this time. However, in the 2003 study, not only had recent use of this form more than trebled to 75% of those recently using amphetamine but it was also the form most commonly used by the largest proportion of those using the drug (45%). In the 2004 and 2005 samples, both the proportion of the cohort reporting recent use of crystal methamphetamine (55% of all amphetamine consumers in 2004 and 52% in 2005) and the proportion reporting this as the form they had predominantly used in the preceding six months (15% in 2004 and 9% in 2005) were substantially lower, representing a decline from the level of availability and use of crystalline methamphetamine since the 2003 survey. Following a slight increase in 2006, overall use of crystal methamphetamine declined up to 2010. Since 2010, the proportion of recent use of crystal amongst recent amphetamine users increased from 27% to 59% in 2013 ($\chi^2(1_{n=157})=14.9$, $p<0.001$) (Figure 14). When observing trends for the form of methamphetamine most used, crystal remained the least frequently cited in most years of the IDRS, however, in 2013, a significant increase was observed ($\chi^2(1_{n=146})=1.9$, $p<0.001$). In line with these findings, eleven KE noted increasing reports of use and availability (although some KE reported unchanging rates of use).

Trends in the use of the base/paste form of methamphetamine have generally been the opposite of that for the use of crystal: in 2002, base was the form recently used by the majority of the PWID cohort (83% of those recently using amphetamine), and was similarly the form of the drug most often used by the majority of consumers (65% of those recently using amphetamine). Both overall use (51% of all recent methamphetamine consumers) and predominant use (24%) declined sharply in 2003 when the availability of crystal methamphetamine increased; however, these rebounded to a stable level in the 2004 and 2005 studies, consistent with that in 2002, with the majority of amphetamine consumers reporting recent use of this form (77% in 2004 and 81% in 2005), and 'base/paste' returning as the form typically reported as being predominantly used by consumers (43% in 2004 and 48% in 2005). Between 2006 and 2008, the proportion of participants reporting recent use of base/paste decreased significantly from 63% to 31% ($\chi^2(1_{n=167})=15.8$, $p<0.001$), as did the proportion of participants reporting this as the form of methamphetamine most used (from 42% in 2006 to 10% in 2008: $\chi^2(1_{n=155})=18.9$, $p<0.001$). However, in 2009, the proportion of amphetamine-using participants reporting recent use of base increased significantly, from 31% to 67% ($\chi^2(1_{n=162})=19.4$, $p<0.001$), as did the proportion reporting base as the main form used (2008: 10%; 2009: 43%: ($\chi^2(1_{n=151})=19.5$, $p<0.001$). Between 2009 and 2012, the proportion of participants reporting recent use of base remained relatively stable, however in 2013, this rate decreased (52% in 2012 v. 22% in 2013: $\chi^2(1_{n=168})=15.3$, $p<0.001$). In keeping with this trend, a decrease was also noted for the rate of participants reporting this as the form most used (18% in 2012 v. 5% in 2013: $\chi^2(1_{n=143})=4.8$, $p=0.03$).

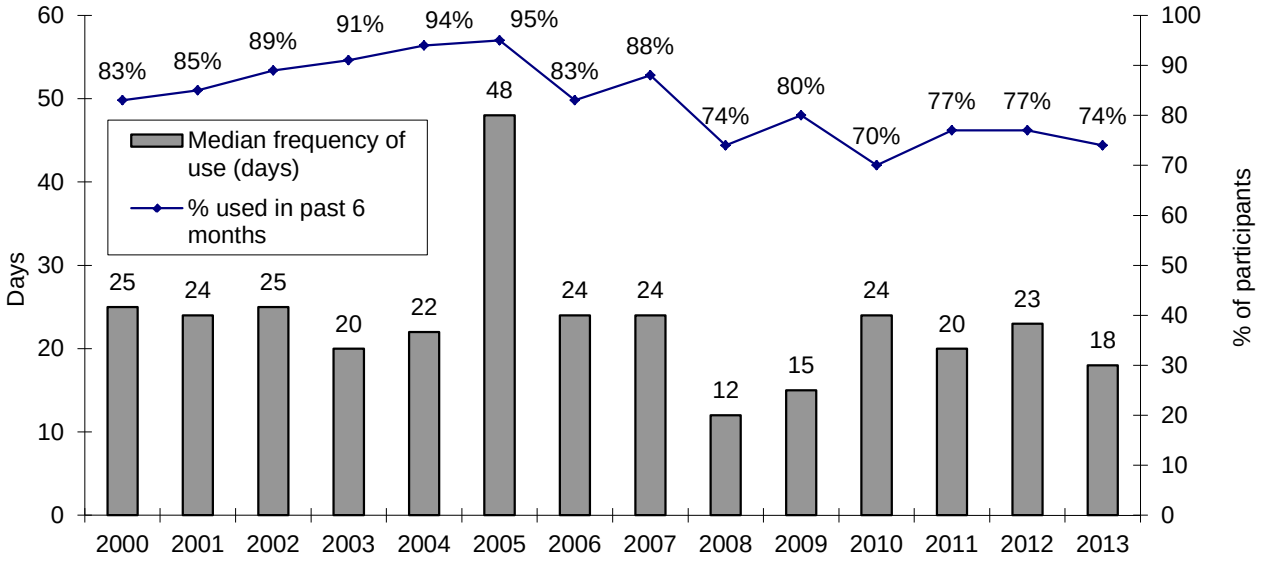
As use of both crystal and base/paste forms of methamphetamine decreased in 2007, use of powder form increased. Between 2002 and 2005, recent use of powder amongst current users of any form of amphetamine gradually increased from 39% to 78%. Over this period, the proportion of amphetamine-using participants reporting powder as the predominant form they had used doubled from 14% to 31%. In 2006, use of powder methamphetamine by this group decreased to 62% ($\chi^2(1_{n=184})=5.1$, $p=0.02$); however, the proportion reporting powder as the predominant form used remained unchanged. In 2007, the proportion reporting any use of powder was similar (69%), whereas the proportion reporting predominant use of this form increased markedly to 48%, making powder methamphetamine the form most used by the current cohort for the first time since 2002. This trend of increasing use of powder form continued into 2008, with 76% of amphetamine-using participants using this form, and 67% reporting powder as the predominant form they had used in the preceding six months. This trend was briefly reversed in 2009, with a significant decrease in the proportion of amphetamine users reporting powder as the form most used, decreasing from 67% in 2008 to 41% in 2009 ($\chi^2(1_{n=151})=9.3$, $p=0.002$). Since this time, use of powder has generally

increased, from 68% in 2009 to 79% in 2013 (p=0.2). Seven KE noted increased reports of powder use and availability in the last six months.

While prescription stimulants such as methylphenidate and dexamphetamine are not themselves methamphetamine, given that almost without exception those that had used diverted prescription stimulants had also used methamphetamine (only three participants that had recently used pharmaceutical stimulants had not used some form of methamphetamine in 2013), these pharmaceuticals form an important part of the overall picture of stimulant use amongst these PWID cohorts. The use of these prescription stimulants has remained relatively stable across the 2002 to 2013 IDRS studies. In 2002 and 2003, half of the samples reported recent use of a prescription stimulant (50% and 51% respectively). Over the following three years, use decreased to 31% ($\chi^2(1_{n=200})=8.24$, p=0.004), and has remained relatively stable since this time (30% in 2013) (Figure 13).

Examining the frequency of use of methamphetamine in more detail, 74% of the current cohort had used methamphetamine at a median frequency of 18 days, which is approximately once per ten days (Figure 16). Between 2008 and 2013, 70-80% of each sample reported recent use of methamphetamine, and the median frequency of this use ranged from 12 to 24 days. These results indicate lower levels of use of methamphetamine between 2008 and 2013 than were reported in previous local IDRS studies. Prior to 2008, between 83% and 95% of each cohort reported recent use of methamphetamine, at a median frequency between 20 and 48 days. The consistently high proportions of the PWID cohorts reporting recent use of methamphetamine have occurred despite similar proportions of the PWID cohorts in each study reporting an opioid as their drug of choice (two-thirds or more in each sample, except in 2005, 2007, 2009 and 2012: ranging between 53% and 59%).

Figure 16: Prevalence and frequency of use of methamphetamine in the preceding six months, 2000-2013



Source: IDRS PWID interviews

In the preceding month, the majority of participants reporting recent use of methamphetamine had done so weekly or less (65%), and one-third had used methamphetamine more than weekly but less than daily (33%) (Table 10).

Table 10: Patterns of methamphetamine use in the preceding month, by type, 2013

	Among the entire sample	Among those who had used		
Form used	% who had used	% used weekly or less	% used more than weekly, but less than daily	% used daily
Powder	61	79 *(n=51)*	19 *(n=12)*	3 *(n=2)*
Base	17	89 *(n=16)*	11 *(n=2)*	0
Ice	45	83 *(n=40)*	17 *(n=8)*	0
Any form methamphetamine*	74	65 *(n=51)*	33 *(n=26)*	3 *(n=2)*

Source: IDRS PWID interviews
* Also includes liquid methamphetamine

Almost all participants interviewed (94%) had used some form of methamphetamine at some stage in their lives (74% had used a form of methamphetamine in the preceding six months). Interestingly, only one-fifth of the sample (22%) indicated that a form of methamphetamine was their drug of choice. Of these consumers, the majority (58%, n=14) reported a form of methamphetamine as the drug they had injected most often in the month prior to interview. Of the remaining PWID that had not used their drug of choice most often in the previous months, eight had predominantly used pharmaceutical opioids (morphine, oxycodone or methadone), and single participants cited benzodiazepines and mephedrone (4-methylmethcathinone (4-MMC), or 4-methylephedrone) instead. Regarding the discrepancy between drug of choice and the drug most often injected, most participants noted that this was due to either a lack of availability or concern regarding health effects associated with methamphetamine use. For those participants that had reported methamphetamine as the drug they had most often injected in the preceding month (n=22), the drug class was used for a median of 60 days in the preceding six months (SD=41.6, range 13-180).

Six KE reported on groups of consumers that primarily used methamphetamine. KE included an NSP worker (n=4), drug and alcohol worker (n=1), and a person employed in licensed venues (n=1). The consumers described by KE were predominantly male who were predominantly unemployed, although three KE noted a significant proportion of employed professionals reporting use.

While some KE were unfamiliar with the range of drugs used by the primary methamphetamine-consuming groups they were working with, some general usage patterns were noted. Firstly, primary methamphetamine consumers described by KE were generally noted to also use cannabis, alcohol, pharmaceutical opioids and/or benzodiazepines, often to assist with 'comedown' effects such as anxiety and insomnia.

4.3.2 Self-reported symptoms of stimulant dependence

IDRS participants that had used stimulants (methamphetamine, pharmaceutical stimulants, cocaine), during the preceding six months were asked about how they felt about their use of this drug in the last year using the Severity of Dependence Scale (SDS) (n=77). This consists of 5 multiple choice questions each rated on a scale of 0-3, resulting in a range of possible scores from 0-15, where higher scores suggest greater psychological dependence. Participants were asked if they thought that their use of the specific drug was out of control, if the prospect of missing a dose

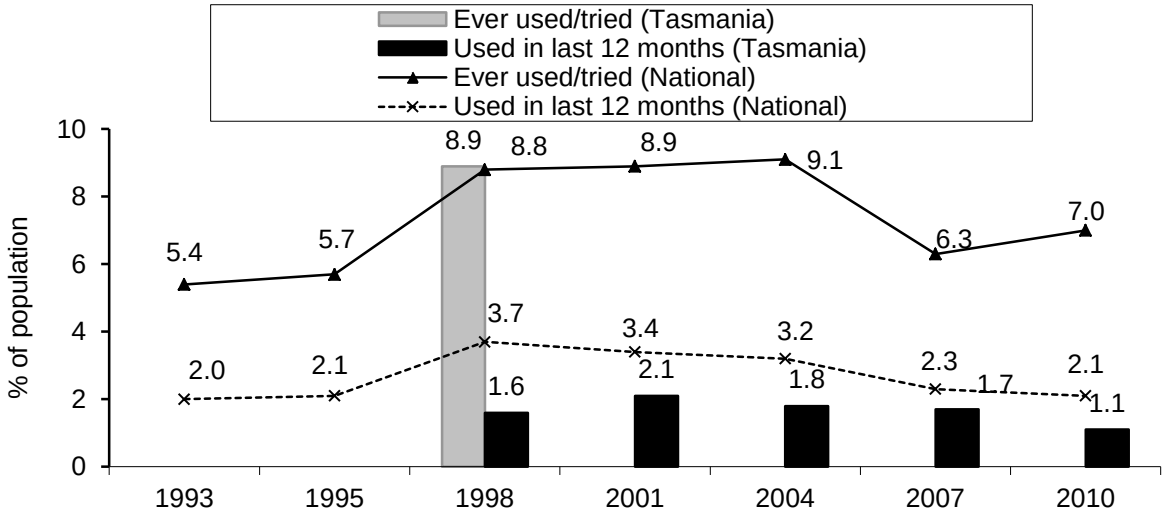
had made them feel anxious, if they had worried about their use of the drug, if they had wished they could have stopped, and if they would find it difficult to stop, or go without, the drug.

The median SDS score for those who had used a stimulant (i.e. powder, base/paste, crystal/ice, pharmaceutical stimulants or cocaine) in the preceding six months was 2 (range 0-14). Thirty-three percent of this group (n=25) received a score of zero, indicating no symptoms of dependence. A score of four on the SDS in relation to methamphetamine use has been validated as a cut-off for predicting DSM-III-R diagnosis of amphetamine dependence (Topp & Mattick, 1997). Half of those participants who completed the stimulant SDS (39%, n=30) had a score of 4 or greater, and it is reasonable to assume that some proportion of these people had experienced significant psychological symptoms of dependence. Of this group, just half had accessed some form of drug treatment in the preceding six months (50%, n=15).

4.3.3 Prevalence of methamphetamine use

The most recent survey of methamphetamine use within the general community of Tasmania was undertaken within the 2010 National Drug Strategy Household Survey (AIHW, 2011), which sampled 1,060 Tasmanian residents aged 14 years and over. These results indicated that 1.1% had used the drug in the 12 months prior to interview (Figure 17). This rate is consistent with the national rate in the 2010 survey (2.1%, with this observed difference within the range of sampling error). It would appear that there has been little substantial change in the level of methamphetamine use in the Tasmanian community up until 2010, as the proportion reporting past-year use was 1.6% in the 1998 survey (AIHW, 1999; sample size = 1,031), and has varied little since this time (2.1% of those aged 14 years and above in 2001, 1.8% in 2004, 1.7% in 2007 and 1.1% in 2010). Where slight differences in 'prevalence' rates have occurred between surveys, these have uniformly remained within the range of variability due to sampling for these studies and are, therefore, unlikely to reflect meaningful changes in the extent of the use of these drugs in the population.

Figure 17: Prevalence of meth/amphetamine use in Australia and Tasmania among those aged 14 years and over, 1993-2010



Source: National Drug Strategy Household Survey 1993-2010

4.3.4 Methamphetamine use in particular populations

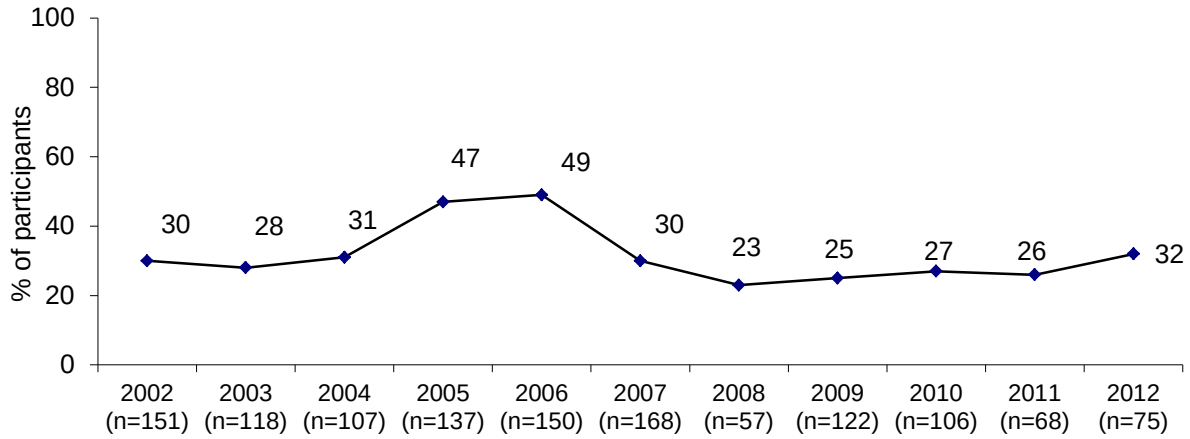
Data from urine screens of Tasmanian prisoners revealed a very low rate of sympathomimetic amines among positive tests, accounting for 4% or less of all positive tests between 1995/96 and 2012/13. In 2012/13, just six positive urine drug screens for sympathomimetic amines/amphetamines (6% of all positive urine screens) were reported. However, these figures

may underestimate the level of use amongst this group due to the relatively rapid elimination of this drug from the body.

4.3.5 Methamphetamine use among PWID

The Australian Needle and Syringe Program Survey (Iversen & Maher, 2013) takes an annual survey of individuals presenting to NSP outlets. Those that participate in the survey are asked, among other things, the last drug they injected. Between 2002 and 2004, methamphetamine was the last drug injected of around 30% of the Tasmanian participants (Figure 18). In 2005, consistent with trends seen in the IDRS PWID cohort and among clients of the state's NSP, the proportion of survey participants reporting methamphetamine as the last drug injected increased to 47%, and this remained stable in 2006 (49%). Since 2007, this trend has been reversed, with the proportion of participants reporting methamphetamine ranging between 23% and 32%. These findings are consistent with the trends of decreasing use identified in the NSP data between 2006/07 and 2012/13.

Figure 18: Australian Needle and Syringe Program Survey: Prevalence of methamphetamine as 'last drug injected' amongst Tasmanian PWID, 2002-2012



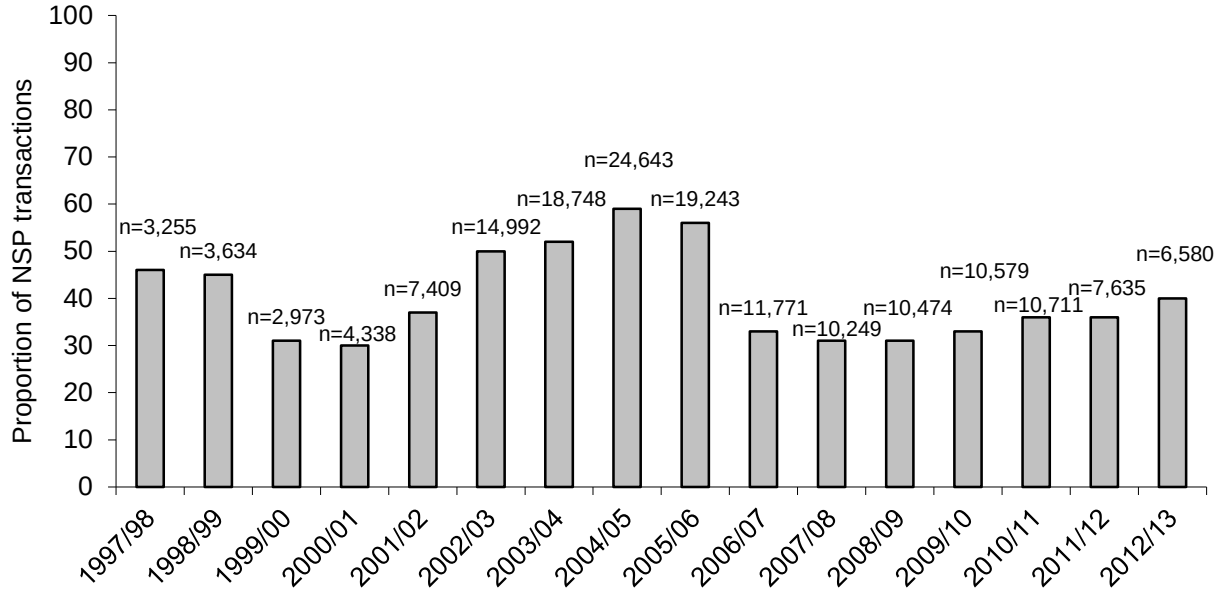
Source: Iversen & Maher, 2013

Since 1997, clients of non-pharmacy NSP outlets have been asked which drug they mostly inject. While methamphetamine has been the most commonly reported single drug used across the years of data collection, the proportion of NSP clients reporting methamphetamine as the drug they most commonly used was in steady decline from 46% in 1997/98 to 30% in 2000/01 (Figure 19). However, this trend was reversed between 2001/02 and 2004/05, with proportions increasing from 37% to 59% respectively. In 2006/07, a dramatic decrease occurred, with around one-third of client transactions being reported for methamphetamine. Over the following five financial years, this rate remained relatively unchanged (Figure 19).

While this appears to represent a substantial change in the market over time and is consistent with use patterns among the IDRS samples, these data should be interpreted with caution: firstly, it has been estimated that approximately 15% of all injection equipment distributed on a monthly basis is distributed through pharmacy-based outlets (Bruno, 2004a), where no client data are collected. This proportion may have increased since 2005/06, as the only 24-hour NSP program in Hobart closed in February 2006, which recorded on average more than 1,200 transactions per month, primarily for methamphetamine. No increases in transactions recorded by other non-pharmacy NSP have been observed since this closure; therefore, it is possible that many of these transactions are now

occurring in pharmacy-based outlets. Given that the clear bulk of injection equipment distributed through pharmacy outlets (1ml barrels) is appropriate for methamphetamine injection (and not for pharmaceutical opioids, the other type of drugs most commonly injected in Tasmania); it is likely that the majority of this equipment is used for injection of methamphetamine. As such, the non-pharmacy NSP outlet data presented in Figure 19 are likely to be an underestimation of the true proportion of methamphetamine injection amongst Tasmanian PWID. Secondly, this decline in reports of methamphetamine use amongst NSP client transactions may also partially reflect changes in regard to the provision of certain injecting equipment. Late in 2006, a policy was introduced by the Department of Health and Human Services (Population Health) to limit the availability of winged-infusion sets (butterflies) to those clients injecting large quantities of liquid (e.g. methadone syrup). Over recent years, there has been a local culture of using winged-infusion sets for a broad range of drugs, including methamphetamine, benzodiazepines and pharmaceutical opioids. As a result of this change in availability (according to KE in the 2007-2012 surveys, all of whom were working in NSP outlets) many clients were reporting injecting use of methadone to access this equipment, when in fact they were most probably using another substance. In support of this, a dramatic increase in client reports of methadone injection was apparent in the NSP client data (Figure 30). Given these contextual issues, it is unclear exactly how much of the apparent decline in methamphetamine use amongst non-pharmacy clients of the NSP program reflects a real change in the market of this drug.

Figure 19: Proportion of Tasmanian non-pharmacy Needle and Syringe Program clients reporting methamphetamine as 'drug most often injected', 1997/98-2012/13



Source: Population Health, Department of Health and Human Services
Note: These figures include some estimated data for a number of services, based on average monthly client transactions, where data were missing

4.4 Cocaine

Key Points:

- In 2013, 5% of the Tasmanian IDRS sample reported use of cocaine in the preceding six months, at a median frequency of two days;
- Amongst local IDRS cohorts, cocaine use has been consistently low since 2000, ranging between 2 and 12%; and
- Indicator data shows lower rates of cocaine use in Tasmania in comparison with national rates.

4.4.1 Current patterns of cocaine use

Just 5% of participants (n=5) in the current IDRS study reported use of cocaine in the six months preceding interview, at a median frequency of two days (range 2-16 days) in this time (Table 11). Two participants reported exclusive intranasal use and three reported exclusive intravenous use.

Despite this very low level of recent use of cocaine, 43% of the sample indicated that they had tried cocaine at some stage in their lives. Intranasal administration was reported by 61% of the Tasmania IDRS sample, and intravenous use was reported by 52%, whilst small minorities reported lifetime use of cocaine either via oral administration (7%) or smoking (17%). Four KE reported being aware of very small numbers of clients using cocaine recreationally, and two KE (NSP outlet staff) stating no reports of use.

Amongst Tasmanian IDRS participants, low levels of recent use of cocaine have been reported since 2000, ranging between 2% and 12% of each sample. Similarly, the median frequency of use has also remained very low: between one and five days, which equates to use less than once per month. Despite these low levels of use, between 39% and 61% of each sample since 2000 has reported lifetime use of cocaine (Table 11). One participant in the 2013 sample reported that cocaine was their drug of choice, however, no participants reported it as the drug most injected in the month preceding the interview. Due to the extremely small number of respondents who were able to provide information on cocaine, the data provided in this section should be interpreted with caution.

Table 11: Patterns of cocaine use among Tasmanian IDRS PWID participants, 2000-2013

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Proportion using cocaine in last 6 months (%)	6	8	12	9	4	8	12	5	4	2	5	7	11	5
Median days used (range)	4 (1-40)	5 (1-20)	2 (1-12)	4 (1-74)	2 (1-3)	5 (1-24)	3 (1-11)	2 (1-3)	5 (1-48)	3 (2-3)	3 (2-8)	2 (1-7)	1 (1-20)	2 (2-16)
Proportion ever using cocaine (%)	39	39	47	52	48	46	61	46	47	51	39	42	61	46

Source: IDRS PWID interviews

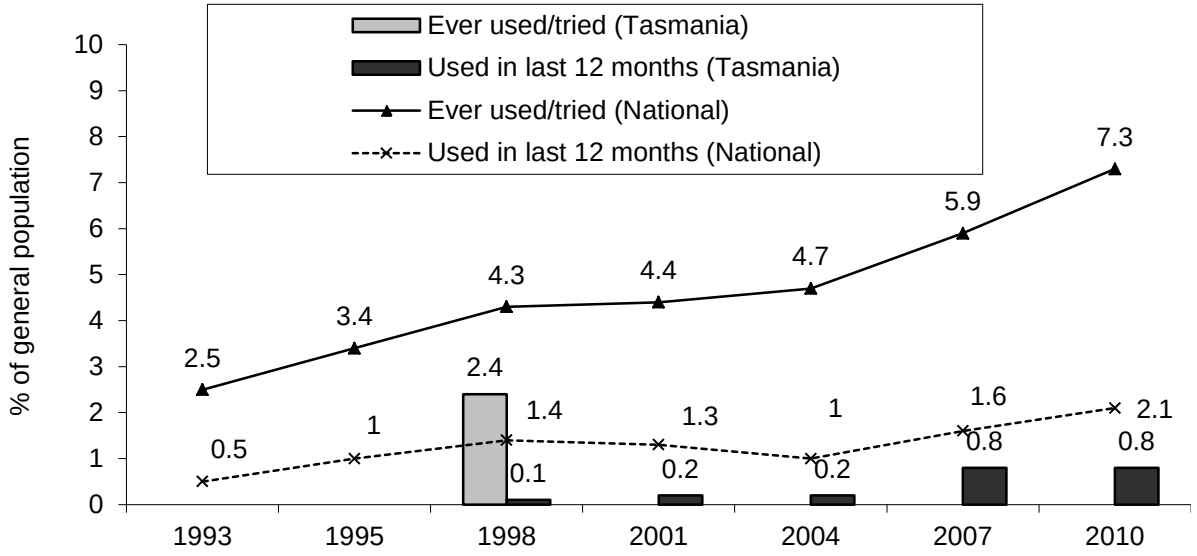
4.4.2 Prevalence of use

According to the findings of the 2010 National Drug Strategy Household Survey (Figure 20; AIHW, 2011), 0.8% of surveyed Tasmanians aged 14 years and older reported using cocaine in the preceding year. This rate is lower than that reported for the national sample, with 2.1% of

respondents reporting use of cocaine in the preceding 12 months ($\chi^2(1_{n=27,708})=8.55$, p=0.003). However, the extent of use in Australia is unchanged from the 2007 survey.

According to the findings of the 1998 National Drug Strategy Household Survey (AIHW, 1999), 2.3% of surveyed Tasmanian residents reported ever trying cocaine, while only 0.1% had used it in the 12 months prior to interview. Findings of the 2001 and 2004 surveys (AIHW, 2002b, 2005b) were very similar, with 0.2% of those sampled reporting using the drug in the preceding year. According to the findings of the 2007 NDSHS (Figure 20; AIHW, 2008b) 0.8% (95%CI 0.6%-0.9%) of surveyed Tasmanian residents reported using cocaine in the preceding year, which is significantly greater than the proportion of the 2004 Tasmanian sample (0.2%, 95%CI 0.1%-0.3%), but significantly lower relative to the national sample in 2007 (1.6%, 95%CI 1.55%-1.64%). A significantly greater proportion of the 2007 national sample also reported lifetime (5.9%) and past year use (1.6%) of cocaine relative to the 2004 sample (4.7% and 1% respectively), suggesting national increases in the prevalence of use of cocaine between 2004 and 2007.

Figure 20: Prevalence of cocaine use in Australia and Tasmania among those aged 14 years and over, 1993-2010



Source: National Drug Strategy Household Survey 1993-2010

4.4.3 Cocaine use among PWID

There were only 33 transactions in which clients of non-pharmacy NSP outlets in 2012/13 indicated that cocaine was the drug they most often injected. This figure has been consistently low over the past 13 financial years (Table 12), relating to around 13-40 transactions each year. However, it is important to note that, despite there being some discrepancy between NSP outlets in the question asked (some asking 'what is the drug you most often inject?', while others prefer 'what is the drug you are about to inject?'), it is likely that the question 'what is the drug you most often inject?' will tend to underestimate the extent of use of cocaine, as none of the PWID sampled in the IDRS survey reported it as the drug they most often used in the preceding month (despite 3% recently injecting the drug).

Table 12: Percentage of Tasmanian non-pharmacy Needle and Syringe Program clients reporting cocaine as the 'drug most often injected', 2000/01-2012/13

Year	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Number of transactions reporting cocaine	13	20	36	29	16	15	40	17	16	36	19	18	33
% of total transactions reporting cocaine	0.1	0.1	0.1	0.1	<0.1	<0.1	0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1

Source: Population Health, Department of Health and Human Services

With the exception of the 2006 survey, cocaine has not been reported as the last drug injected in any of the 1995-2012 Australian Needle and Syringe Program Surveys (Iversen, Topp & Maher, 2011; Iversen & Maher, 2013) (in 2006, just one participant reported this).

4.5 Cannabis

Key Points:

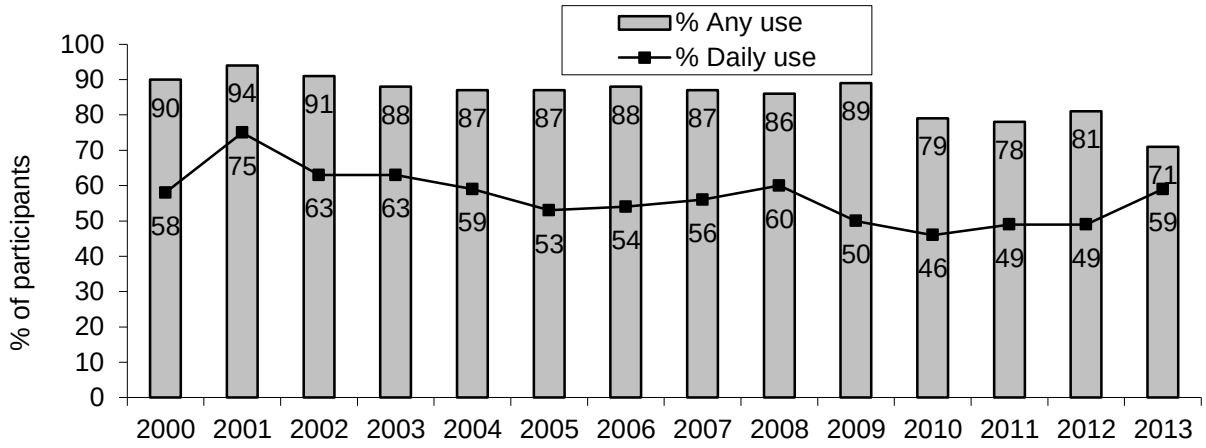
- Cannabis remains the most commonly used illicit drug amongst Tasmanian IDRS samples: nearly three-quarters of the 2013 sample reported use in the preceding six months, at a median frequency of 180 days (daily use);
- Since 2001, a small decrease in daily use of cannabis has been observed amongst Tasmanian IDRS participants;
- Hydroponic/indoor-cultivated cannabis is the predominant form used;
- Synthetic forms of cannabis were used by a small minority of participants on an infrequent basis; and
- The 2010 NDSHS reported a lower level of recent cannabis use for the general Tasmanian population in comparison to the previous four surveys.

4.5.1 Cannabis use among PWID participants

Among the IDRS PWID respondents in 2013, cannabis was the most commonly used illicit drug, with 97% of participants using it at some time in their lives, and 71% using in the six months prior to interview. Among those that had recently used cannabis, the median frequency of use was 180 days (range 1-180), which equates to daily use. Examining recent cannabis use in the thirteen Tasmanian IDRS PWID cohorts (2000-2013) (Figure 21), there has been little change in the proportions reporting use of the drug across these samples (Figure 21).

Most KE reported, or suspected (some did not directly discuss cannabis use due to the nature of their professional roles) some level of cannabis use within the populations they had contact with. Four drug and alcohol workers and one community development worker KE reported that cannabis was the one of the primary drugs of concern in their population of interest. Most KE referring to primary consumers of opioids or methamphetamine reported, or suspected, some level of cannabis use within the populations they had contact with.

Figure 21: Proportion of Tasmanian IDRS PWID cohorts reporting use of cannabis in the six months prior to interview, 2000-2013



Source: IDRS PWID interviews

Participants who reported recent use of cannabis were asked to comment on the last occasion they consumed cannabis, providing information on the method and quantity of this use. Of the 84 consumers who commented, 77% (n=58) reported to have smoked a 'cone' on the last occasion. A cone is used with either a standard pipe or a water-pipe ('bong') into which cannabis is placed. The exact amount of cannabis per 'cone' will vary between individuals depending on preference for strength and whether other components, such as tobacco, are added. Among this group of participants, the median number of cones smoked on the last occasion was five (range 1-40 cones, SD=7.8). Twenty-one percent of cannabis consumers (n=16) reported smoking a cannabis-cigarette ('joint') on the last occasion; the median number of 'joints' was one (range 1-10 'joints', SD=2.4).

4.5.2 Forms used

IDRS PWID participants were asked to comment on all forms of cannabis they had used in the last six months. Of this group, 87% (n=65) reported use of indoor-cultivated/hydroponic cannabis, 75% (n=56) reported use of outdoor-cultivated/bush cannabis, 19% (n=14) reported use of hashish and 9% (n=7) reported use of hashish oil.

The cannabis used in the past six months by those participating in the PWID survey was cannabis head (the flowering top sections of the female plant), with most cannabis-using PWID reporting some use of both hydroponically/indoor-cultivated and outdoor crops (61% of those participants who commented, n=46). This marks a reduction from 2012, when 82% of the sample reported use of both forms (χ^2 ($1_{n=151}$)=6.64, p=0.009). One-quarter of this group reported exclusive use of indoor-cultivated cannabis (25%, n=19), and 13% outdoor-cultivated cannabis (n=10). Participants were also asked to comment on the main form they had used in preceding six months: 71% (n=51) reported indoor-cultivated cannabis and 28% (n=20) reported outdoor-cultivated cannabis. This reflects a significant decrease in primary indoor-cultivated cannabis use; in 2012, 80% of recent cannabis users reported indoor-cultivated cannabis as the predominant form used (p=0.2).

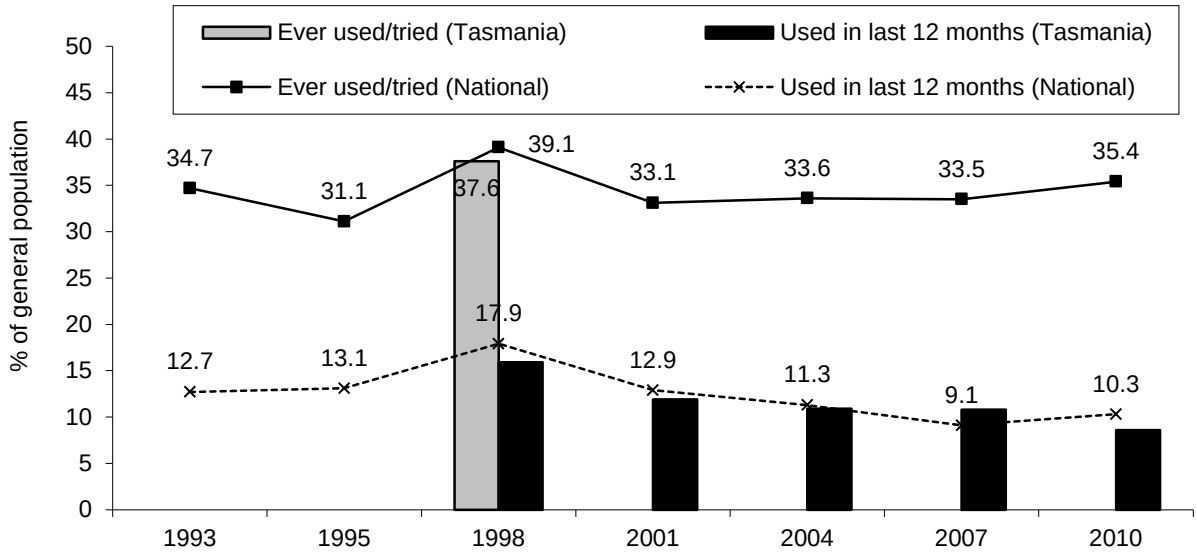
In response to local anecdotal reports of use of synthetic forms of cannabis, questions relating to this were included in the 2012 and 2013 survey. In 2012, 6% (n=6) of the sample reported ever having used a form of synthetic cannabis, all of whom had done so in the preceding six months. Even fewer reported use in 2013: only 3% of the IDRS PWID participants reported ever having used a form of synthetic cannabis, and these participants had all done so in the past six months. Forms used include 'Kronic' and 'Daydream'. Frequency of use was very low: median use over the

preceding six months was ten days, with a range 1 to 180 days. Three KE (two alcohol and drug workers and one NSP outlet worker) reported decreased or low rates of use, with one KE working in a rehabilitation and counselling setting noting frequent reports of cannabis consumers moving back to indoor-cultivated cannabis due to the reputed negative mental health effects of synthetic forms. One KE providing alcohol and drug counselling to clients following workplace referral (as well as self-referral) reported increased rates of use amongst their client group.

4.5.3 Prevalence of cannabis use

In the 2010 National Drug Strategy Household Survey (AIHW, 2011), the estimated prevalence of cannabis use in the preceding 12 months in Tasmania remained relatively stable in comparison to the 2007 rate (8.6%, p=0.1).

Figure 22: Prevalence of cannabis use in Australia and Tasmania among those aged 14 years and over, 1993-2010



Source: National Drug Strategy Household Survey 1993-2010

4.5.4 Cannabis use in particular populations

Cannabis has made up the vast majority of positive urine-screen tests amongst Tasmanian prison inmates since the inception of such screens in 1993. The proportion of all positive urine screens indicating cannabis use has remained at around 70-80% between 1997/98 and 2003/04, despite the number of positive tests varying substantially (from 97 in 1997/98 to 215 in 2000/01, although dropping to 136 in 2001/02 and 109 in 2003/04) during this period. In the 2004/05 financial year, the proportion of positive tests for cannabis fell to around half of all urine drug screens; however, in 2005/06, the proportion increased, returning to levels seen previous to 2004/05, with 76% of all positive tests returning positive for cannabis. Between 2006/07 and 2009/10, the proportion of positive tests for cannabis remained stable, ranging between 58% and 66%, however, in 2010/11 to 2012/13 period, this rate decreased to between 48% and 50% (n=79 of 156 positive tests in 2012/13).

4.6 Opioids

Key Points:

Morphine

- Two-thirds of the Tasmanian IDRS sample reported use of illicit morphine in the preceding six months, matching the rate of use reported for the 2012 cohort (66%);
- The median frequency of use increased from 20 days in 2012 to 48 days in 2013;
- Morphine was considered to be the drug of choice for one-quarter (26%) in 2013, an increase from 2012 (12%);
- The predominant preparation used was MS Contin, followed by Kapanol, and then MS Mono; and
- Half of the participants that had recently used illicit morphine reported this use was for self-treatment purposes (including for opioid dependence, pain or a mental health condition).

Oxycodone

- Illicit oxycodone was used by three-fifths (61%) of the sample in the preceding six months, at a median frequency of 15 days;
- Overall, use of oxycodone increased from 31% in 2006 to 62% in 2013;
- OxyContin was the predominant preparation used; and
- Just over two-fifths of participants that had recently used illicit oxycodone reported use was for self-treatment purposes.

Methadone syrup

- Just over one-third of the sample (38%) reported recent use of illicit methadone syrup at a median frequency of 15 days;
- The rate of use declined from 52% in 2009 to 29% in 2012, with a slight increase in 2013; and
- A substantial minority (37%) used illicit methadone syrup for self-treatment purposes.

Physeptone

- Just over one-third of the sample (39%) reported recent use of illicit Physeptone tablets at a median frequency of seven days; and
- Since 2005, the rate of use of illicit Physeptone has varied between 34% and 50%.

Buprenorphine

- All three available preparations of buprenorphine (Subutex and Suboxone tablets and film) were illicitly used recently by very small proportions of the sample (9%, 4% and 3% respectively); however, the frequency of this use increased compared to 2012 (2012: 2, 4 and 2 days respectively, versus 2013: 11, 22, and 12 days respectively).

The IDRS investigates patterns of use, harms and the 'black market' characteristics of a number of pharmaceutical products, including opioids, benzodiazepines and stimulants, amongst people that inject drugs. The aim of the IDRS system in relation to these drugs is to document these patterns of use and associated harms in order to provide an evidence base for drug services and policymakers.

When considering such issues in relation to pharmaceutical products, it is necessary to consider the fact that some individuals may be receiving these drugs as part of a medical treatment program; some may be accessing and using these drugs without medical oversight; and that some may access these drugs from a combination of these two sources. The combination of all of these sources is important when considering issues such as health outcomes (e.g. overdose).

In the IDRS reports, the distinction is made between 'licit' use: that is, use of a pharmaceutical drug that has been directly prescribed to the person using the drug; and 'illicit' use: use of a pharmaceutical drug that has not been prescribed to the person using the drug (see Black et al., 2008, for a more detailed discussion of this distinction and related issues).

It is important to note that in making such a distinction, the authors are not expressing any particular stance in relation to the use of these drugs. Indeed, previous research in the IDRS and other contexts (e.g. Bruno, 2007; Winstock, Lea & Sheridan, 2008; Treloar, Fraser & Valentine, 2007) have clearly identified that within each of these broad categories there exists a spectrum of methods and reasons for use. Among those using 'licit' pharmaceuticals, many of the IDRS participants may be using these in strict adherence with their prescriber's regime; others may be administering these drugs in a different manner (e.g. intravenously), on a different dosing schedule, or at a different dose than prescribed. Similarly, among those accessing 'illicit' pharmaceuticals, there may be a spectrum of reasons and motivations underlying such use, including intoxication, self-medication for physical or psychological complaints, to self-manage a detoxification process, to self-medicate when drug treatment is undesirable or unavailable (e.g. in the case of long waiting times or physically distant treatment services, or where shame or fear of discrimination at being identified as a 'drug user' prevent the seeking of formal treatment), or to replace doses of licitly prescribed medications (e.g. where doses have been missed due to theft, the experience of external threat or pressure to provide their medication to others, or due to practical issues such as transport, dosing times, employment or lack of childcare interfering with a person's ability to pick up maintenance pharmaceuticals dispensed on a daily basis).

The use of pharmaceutical products such as opioids outside of medical supervision, or in ways other than prescribed, is currently an area of considerable debate, and the reader is encouraged to acquaint themselves with this literature before drawing conclusions or making policy decisions with regard to the prescription of these drugs. For example, specific research has examined the complexities of not-as-prescribed methadone use and methadone dispensing policy (Ritter & di Natale, 2005; Fraser et al., 2007; Treloar, Fraser & Valentine, 2007), barriers to accessing drug treatment (Treloar et al., 2004), and the importance of the availability of appropriate treatment for the management of pain (Brennan, Carr & Cousins, 2007).

4.6.1 Use of morphine

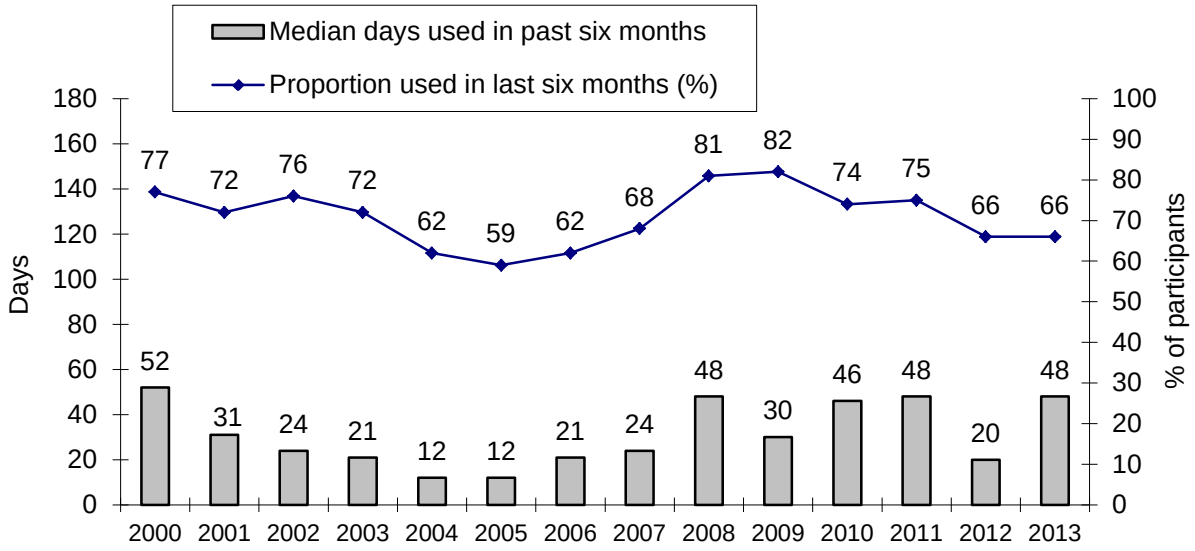
Morphine was reported as the drug of choice by 26% of the sample in 2013, and two-thirds (66%) reported use of licit or illicit morphine in the six months preceding the interview. Of those who had recently used illicit morphine (n=70, 65%), the median frequency of use in the past six months was 48 days (range 1-180), equating to twice-weekly use of the drug. The median dose participants reported normally consuming was 60mg (range 3-180mg, SD=40, n=68). Just 3% (n=3) of the sample reported recent use of morphine that was prescribed to them, all of whom reported injecting this drug. Morphine was reported as the last drug injected prior to interview by 31% of the PWID sample, and as the drug most injected in the past month by 44% of the sample.

As displayed in Figure 23, there was a trend toward decreasing levels of morphine use between 2003 and 2005 This occurred despite a relatively stable proportion of the PWID samples receiving maintenance pharmacotherapies (45%) and reporting an opioid as their drug of choice (62%). Between 2005 and 2008, there was a trend toward increasing morphine use, with particularly notable increases between the 2007 and 2008 samples in terms of proportions reporting recent morphine use (68% and 81% respectively: $\chi^2(1_{n=200})=3.8$, p=0.05) and in the frequency of this use (24 v. 48 days respectively). In 2009, 82% of the sample reported recent use; however, the frequency of this use decreased to 30 days. This trend of increasing proportions reporting recent use appeared to have stabilised in 2010 and 2011, with three-quarters of each sample (74% and 75% respectively) reporting recent use of morphine, and the median frequency of use has also stabilised (46 days in 2010; 48 days in 2011). However, in 2012, a small decrease in the proportion

reporting recent use was observed (66%, p=0.21), and the median frequency also declined (from 48 days to 20 days). In 2013, there are consistent rates of use compared to 2012, but the frequency of use more than doubled compared to 2012, increasing from 20 to 48 days.

KE commenting on morphine use (n=7) generally reported that rates of use were steady, although two KE working in alcohol and drug counselling reported recent increased rates of use, with all noting that use of illicit morphine was common amongst the client groups they were familiar with. KE noted also noted that polydrug use was common amongst this group: cannabis, benzodiazepines and other pharmaceutical opioids were most commonly cited, followed by methamphetamine, with some KE commenting on low rates of alcohol polydrug use.

Figure 23: Proportion of Tasmanian IDRS PWID cohorts reporting use of morphine, and the median frequency of this use, in the six months prior to interview, 2000-2013



Source: IDRS PWID interviews

Of the PWID sample, 93% reported they had tried illicit morphine at some stage in their lives, with all having injected the drug. Sixty-five (n=70) of participants reported use of illicit morphine in the preceding six months, with 97% of these participants (n=68) reporting injecting the drug over this period at a median frequency of 48 days (range 1-180), or approximately two days per week.

The demographics of the group that had used illicit morphine (n=70) in the past six months were similar to that of other PWID (see Section 3.1) in terms of age, sex, cultural background, treatment and employment status, education, accommodation, prison history, relationship status, sexual preference, age first injected, frequency of injection and duration of injecting career. KE working in NSP outlets (n=4) noted that morphine users were generally aged in their 20s to 30s, with more males reporting use. Lower socioeconomic status and low rates of employment were reportedly characteristic of this group.

Forms used

Consumer respondents were asked to nominate the preparations of morphine that they had used in the preceding six months. Of the 70 participants reporting recent use of non-prescribed morphine, use of MS Contin was the most common (93%, n=65), followed by Kapanol (59%, n=41) and MS

Mono (47%, n=33). Smaller proportions reported recent use of Anamorph (26%, n=18), liquid morphine (e.g. Ordine[11]) (17%, n=12) and Momex (1%, n=1).

When asked to nominate which form they had used most often in the preceding six months, three-quarters reported illicit MS Contin (78%, n=55), 13% reported illicit Kapanol (n=9) and 9% (n=6) reported illicit MS Mono.

All but three of the participants reporting use of morphine in the last six months (licit and illicit, n=71) had accessed morphine from sources other than a medical practitioner. It is clear from these figures that the majority of morphine used by participants in the current study did not come directly from medical practitioners.

Reasons for use

Half of the 68 participants who commented on reasons for recent use of illicit morphine reported 'self-treatment' as a reason (49%, n=36). 'Self-treatment' includes participants using this drug to self-treat dependence on an opioid, a mental health problem such as depression or anxiety, or insomnia. Similarly, nearly half also reported intoxication as a reason for use (45%, n=32).

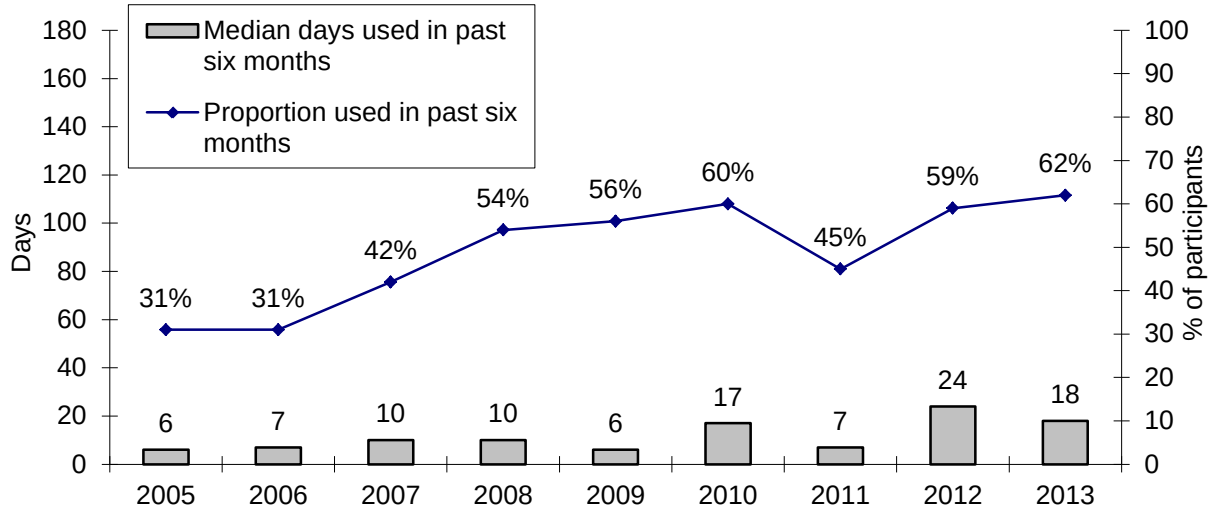
4.6.2 Use of oxycodone

While more than half of the participants interviewed in the current study had used illicit oxycodone in the six months prior to interview (61%, n=65), just 6% reported this as their drug of choice, and 9% reported oxycodone as the drug they had most injected in the month preceding the interview. The median frequency of use of illicit oxycodone was 15 days in the last six months (range 1-180), equating to use more than once per fortnight. The median dose participants reported normally taking was 80mg (range 20-240mg, n=64). Use of oxycodone among the Tasmanian IDRS PWID cohorts increased from 31% in 2006 to 60% in 2010, however, in 2011, this trend was briefly reversed, with 45% of the sample reporting recent use. In 2012 and 2013, use returned to a similar level as reported in 2010, with 59% and 62% of the sample reporting use (of licit or illicit forms) respectively (Figure 24).

KE in the current study commented on use of oxycodone: three KE reported no change in the rates of reported oxycodone use, although two KE did note a slight increase in use over the preceding six to twelve months. One alcohol and drug worker commented on relatively higher rates of oxycodone versus morphine use, with the former viewed by consumers as 'trendier'.

[11] Ordine is morphine hydrochloride in aqueous (water) solution, and contains sugar as a preservative.

Figure 24: Proportion of Tasmanian IDRS PWID cohorts reporting use of oxycodone, and the median frequency of this use, in the six months prior to interview, 2005-2013



Source: IDRS PWID interviews
Note: includes prescribed and illicit oxycodone use

Three-quarters of PWID sampled (83%, n=89) had ever used illicit oxycodone tablets, with all but four of this group having injected oxycodone at some stage. More than half of the current cohort (61%) reported using illicit oxycodone in the preceding six months: of this group, all but two reported injecting this drug. In addition, small proportions of the cohort reported oral (8%) use in the preceding six months. Recent use of prescribed oxycodone was reported by 4% (n=4) of the sample, at a median frequency of 54 days in the preceding six months (approximately twice per week), and injecting use of prescribed oxycodone was reported by 2% (n=2) of the sample (one had also used illicit oxycodone), at a median frequency of 96 days (range 48 to 144).

The demographics of the group that had used illicit oxycodone (n=65) in the past six months were similar to that of other PWID (see Section 3.1) in terms of age, sex, cultural and educational background, relationship status, employment status, income source, accommodation, prison history, age of first injection and duration of injection career. However, participants reporting recent use of illicit oxycodone were more likely to report current engagement in a form of AOD treatment ($\chi^2(1_{n=107})=4.55$, p=0.03) and to report daily injection in the preceding month ($\chi^2(1_{n=107})=8.92$, p=0.002) than participants reporting no recent use of illicit oxycodone.

Three-fifths of the current PWID sample (61%, n=65) reported use of some preparation of non-prescribed oxycodone in the six months prior to interview. OxyContin was the most commonly reported form of the drug, with 94% (n=61) of this group of participants reporting recent use, and 29% (n=19) reported also using Endone. A KE working in an emergency medical context reported Endone as the most common form of oxycodone reported by clients in this context. In addition, 22% (n=14) of participants reported recent use of OxyNorm and a single participant reported use of Targin. When asked which form they had used most often in the preceding six months, 88% (n=56) reported illicit OxyContin.

Almost all participants reporting recent use of oxycodone (licit and illicit, n=66) had accessed oxycodone from sources other than a medical practitioner. Four participants reported use of oxycodone that was prescribed to them. As noted for morphine, the majority of oxycodone used by participants in the current study did not come directly from medical practitioners.

Reasons for use

Two-fifths of participants commenting on reasons for recent use of illicit oxycodone reported 'self-treatment' for opiate dependence and mental health (44%, n=28), and two-fifths (44%, n=28) reported 'intoxication'; less than one-tenth (8%, n=5) used illicit oxycodone as a substitute for heroin or other opiates.

4.6.3 Use of methadone

Methadone was reported as the drug of choice of 5% of the PWID sample, with 60% (n=64) of the entire sample reporting some use of methadone (syrup and tablet forms) in the preceding six months. Consistent with previous reports, methadone was injected in the preceding six months by all of the consumers reporting recent use of the drug who responded to this question (100%, n=61).

In regard to use of methadone syrup, 33% (n=35) of the sample had been prescribed this drug in the preceding six months, using it at a median frequency of 180 days in this time (range 5-180 days). Across IDRS PWID cohorts, the proportion of participants reporting recent use of licit methadone syrup has declined from 64% in 2004 to 33% in 2013 ($\chi^2(1_{n=207})=8.71$, p=0.003). It is noteworthy that the majority of participants who reported use of prescribed methadone – both recent and lifetime use – had injected this drug (86% of those reporting recent use and 76% of those reporting lifetime use). This practice is not consistent with the policy or the mode of dispensing of the drug within the Tasmanian methadone maintenance program. It is important to note that participants in the IDRS are recruited on the basis of their regular injection, and as such, this pattern of use of licit methadone syrup is not representative of any general pattern amongst clients of the program.

Less than one-fifth of the sample reported recent use of illicit methadone syrup (38%, n=41), at a median frequency of 15 days (which equates to use once per fortnight). The median frequency of illicit methadone syrup use was slightly higher for participants who had been enrolled in a methadone program (24 days, n=21) compared with those not accessing this treatment in the six months preceding the interview (14 days, n=16). The median dose of illicit methadone syrup that participants reported normally consuming was 50mg (range 15-180mg, n=36). There may be a spectrum of reasons for the use of illicit syrup by those enrolled in the program (as discussed in Section 4.6), including a desire for intoxication, but it is important to also consider the role of incomplete stabilisation, unmet pain management requirements and of problems in the systems around flexibility of dose dispensing in these situations. For a recent, detailed investigation of these types of issues, see, for example, Fraser et al. (2007).

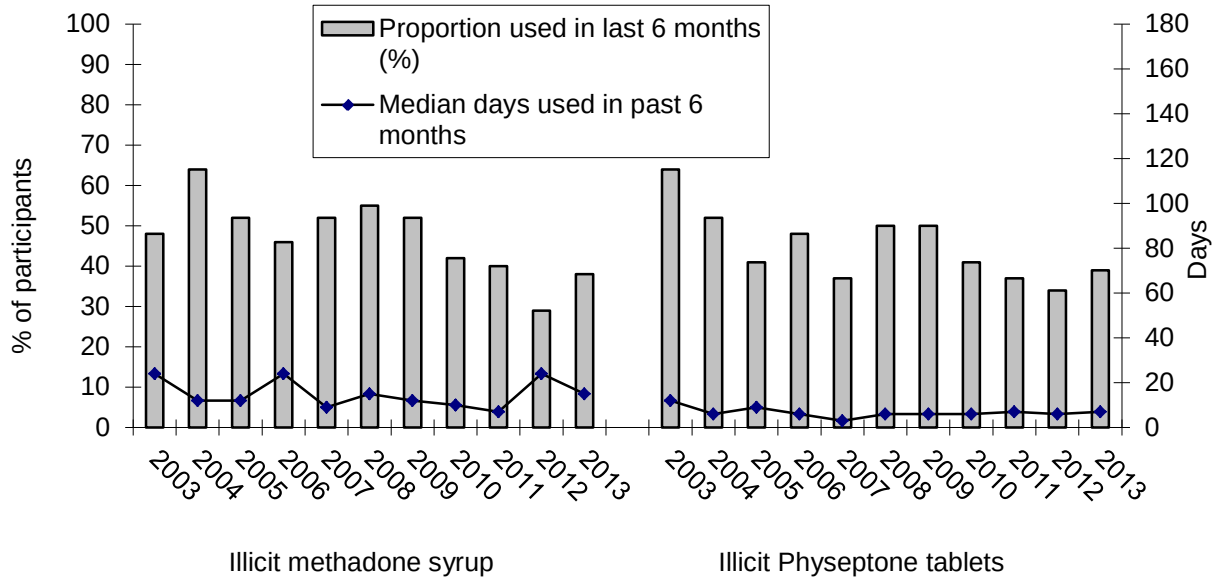
The proportion of the cohort reporting recent use of illicit methadone syrup has remained relatively stable in recent years (48% in 2003; 40% in 2011); while a small decrease was observed in 2012 (29%), the proportion reporting recent use in the current sample (38%) reflects that observed in previous years. Over this period, the median frequency of use has remained relatively infrequent: ranging between 7 and 24 days of the preceding six months. Amongst those participants reporting recent use of illicit syrup (n=41), all except one reported having recently injected this drug, and two participants reported also swallowing it in this time. It is noteworthy that half of those recently using illicit syrup (51%, n=21) were themselves receiving methadone maintenance treatment. Comments from KE reflect these outcomes, with NSP outlet workers (n=3) commenting that the majority of use was licit, although illicit use was still substantial.

The demographics of those that had used illicit methadone syrup in the past six months (n=41) were similar to that of other PWID (see Section 3.1) in terms of age, sex, cultural background, relationship status, education, accommodation, employment status, prison history, frequency of injection, age of first injection and duration of injecting career.

Lifetime use of illicit Physeptone (methadone tablets) was reported by three-fifths of IDRS participants (63%, n=67) and recent use by one-third of the sample (39%, n=42). Between 2004 and

2009, reports of use of illicit Physeptone varied between 37% and 52%, with no clear trend discernible. However, between 2009 and 2012, the rate of recent use declined from 50% to 34% ($\chi^2(1_{n=106})=4.80$, p=0.03). In 2013, 39% of the sample reported recent use. Median frequency of use of illicit Physeptone was generally infrequent, with participants reporting a median frequency of use of seven days in the last six months (range 1-175 days), which equates to use approximately once per month. The median dose participants reported normally taking was 40mg (range 10-200mg, n=39). Of the participants reporting recent use, all except one reported recent injection of Physeptone, at a median frequency of seven days (range 1-170 days). In addition to this, eight participants (19%) reported oral use of Physeptone. The frequency of use of illicit Physeptone has remained at relatively stable low levels over recent years: ranging between three and 12 days between 2003 and 2013 (Figure 25).

Figure 25: Proportion of Tasmanian IDRS PWID cohorts reporting use of methadone, and the median frequency of this use, in the six months prior to interview, 2003-2013



Source: IDRS PWID interviews

The demographics of those that had used illicit Physeptone tablets in the past six months (n=42) were similar to that of other PWID (see Section 3.1) in terms of sex, accommodation, educational and cultural background, relationship status, sources of income, prison history, employment status, sexual preference, current engagement in treatment, frequency of injection and age of first injection than participants who reported no recent use of illicit Physeptone. However, participants reporting recent use of illicit Physeptone were younger (35yrs v. 40yrs: F(1,67)=9.7, p=0.003) and were more likely to report a shorter duration of injecting career (17yrs v. 21yrs: F(1,66)=9.02, p=0.004) than participants reporting no recent use of Physeptone.

All participants reporting use of Physeptone in the last six months (licit and illicit) had accessed it from a source other than a medical practitioner, and a single participant had accessed a combination of both prescribed and illicit Physeptone. Similar to the trends for morphine and oxycodone, the majority of Physeptone used by participants did not come directly from medical practitioners.

Forms used

When asked to describe the form of methadone they had predominantly used in the preceding six months (n=60), over half reported licit methadone syrup (53%, n=32), one-quarter reported illicit syrup (20%, n=27), and 20% (n=12) reported illicit Physeptone tablets.

Reasons for use

Participants provided a range of reasons for use of illicit methadone syrup. Nearly half (46%, n=16) of those who commented (n=35) used illicit methadone syrup primarily for 'intoxication' purposes. Self-treatment of dependence or pain was another primary motive for use (37%, n=13), with less than one-fifth of the sample using illicit methadone syrup recently as a substitute for heroin or other opiates (14%, n=5).

4.6.4 Use of buprenorphine

Subutex (buprenorphine)

With the advent of Subutex (buprenorphine) as a maintenance treatment option for opioid dependence in the 2000/01 financial year, trends in buprenorphine use among regular PWID groups have been examined since the 2002 IDRS survey. In the current cohort, 39% (n=42) reported ever using Subutex with 25% ever receiving the drug licitly, and 19% ever using illicit Subutex. Just 9% (n=10) of the current PWID participants reported recent use of illicit buprenorphine in the six months prior to interview, at a median frequency of 11 days (range 1-48 days). Injecting use was reported by all except two of this group (n=8); at a median frequency of 10 days over the preceding six months (range 1-48 days). None of the ten participants reporting recent use of illicit buprenorphine had accessed Subutex treatment in the preceding six months.

Suboxone (Buprenorphine-naloxone)

Participants were also asked if they had used Suboxone, which is a combination of buprenorphine and naloxone. Suboxone is also an opioid substitution therapy (OST) for opioid dependence. When taken orally its effects are virtually the same as Subutex; however, if the tablet is injected, the naloxone is active and likely to precipitate opioid withdrawal symptoms. In 2012, the oral film formulation of Suboxone was introduced into treatment settings in Tasmania. In response to this, questions regarding both preparations were included in the survey in the last two years.

One-third of the sample (29%, n=31) reported lifetime use of Suboxone tablets; this was a similar proportion to that reported in the 2012 cohort (32%: $\chi^2(1_{n=213})=10.12$, p=.732) Of those reporting lifetime use, 17% (n=18) had ever used licit Suboxone tablets and 15% (n=16) had used illicit Suboxone tablets. Just four participants had used illicit Suboxone tablets in the six months preceding the interview at a median frequency of 22 days (range 10-24 days). Of these four participants, three reported injecting the drug on a median of 15 days (range 10-24 days), one participant reported smoking the drug, and one participant reported swallowing the drug. Only one of the four participants reporting recent use of illicit use had accessed Suboxone treatment in the preceding six months.

Whilst only 3 participants used Suboxone film in the preceding six months in the 2012 PWID cohort, there was a significant increase in the proportion of PWID sample reporting Suboxone film use, with 15% (n=16) of the 2013 cohort reported recent use ($\chi^2(1_{n=213})=8.20$, p=.004) Of these participants, 11% (n=12) reporting recent licit use, and 9% (n=10) reported recent illicit use. The latter participants reported typically using illicit Suboxone film at a median frequency of 12 days (range 1-180 days), equivalent to use approximately once per fortnight. Six of the ten participants reporting recent illicit use had injected the drug in the six months preceding the interview, one participant had smoked the drug, and three participants had swallowed the drug. Only one of the ten participants reporting recent use of illicit use had accessed Suboxone treatment in the preceding six months.

Reasons for use

Of those who commented on the reasons for their recent illicit Subutex use (n=7), three (43%) used the drug for self-treatment, three used it for intoxication purposes (43%), and one (14%) used it as a substitute for other opiates.

The primary reasons listed for recent illicit Suboxone tablets were self-treatment of pain or dependence (n=3) or as a substitute for heroin or other opiates (n=1). Endorsement of reasons for illicit film use was more varied: of the seven participants reporting recent illicit Suboxone film use who commented on their reasons for use, three (43%) reported self-treatment, two (29%) reported use as a substitute for heroin or other opiates, and two (29%) reported using for the intoxication experience.

4.6.5 Self-reported symptoms of opioid dependence

IDRS participants that had recently used opioids (n=95) were asked how they felt about their use of this drug in the last 12 months using the Severity of Dependence Scale (SDS). This consists of 5 multiple choice questions rated on a scale of 0-3, resulting in a range of possible scores from 0-15, where higher scores suggest greater psychological dependence. Participants were asked if they thought that their use of opioids was out of control, if the prospect of missing a dose had made them feel anxious, if they had worried about their use of the drug, if they had wished they could have stopped, and if they would find it difficult to stop or go without opioids.

The median SDS score for those who had used opioids (i.e. heroin, morphine, oxycodone, methadone) in the preceding six months was 8 (range 0-15, n=95). Just four participants (4%) of those who completed the opioid SDS received a score of zero, indicating no symptoms of dependence.

A score of five on the SDS in relation to opioid use has been validated as a cut-off for predicting DSM-III-R diagnosis of opioid dependence (Iraurgi et al., 2010). Using this cut-off score of five, 78% (n=74) of participants completing the SDS scored five or above, indicating a high level of opioid dependence and/or problematic use amongst the sample. The majority of this group (53%; n=39) were engaged in OST treatment at the time of interview.

4.6.6 Other pharmaceutical opioids and related substances

Due to recent developments of new opioid-based, or strong analgesic pharmaceuticals, and the known interest/preference among the Tasmanian illicit drug market for pharmaceutical drugs, PWID were also asked about use of other pharmaceutical opioids and related substances in the preceding six months. Eleven percent of participants reported using illicit/diverted Tramadol in the six months prior to interview, and no participants reported use of illicit Fentanyl or illicit pethidine. One KE working in an NSP outlet reported increased rates of reporting tramadol use, predominantly among primary morphine consumers. One KE noted an increasing number of clients in an alcohol and drug treatment setting reporting recent use of Fentanyl in the preceding six months. Two KE working in an advocacy context noted anecdotal reports of injecting use amongst clients in Tasmania.

4.6.7 Use of different forms of pharmaceutical opioids across IDRS studies

Use of the different types of pharmaceutical opioids across the IDRS PWID samples is presented in Figures 26 and 27 below. It should be noted that these figures report on the proportion of the PWID participants reporting accessing these drugs illicitly (rather than directly from a doctor's prescription for them) in the six months prior to interview; and as such these results differ slightly from the total proportion of the PWID samples in each study reporting any use of these products. Moreover, to allow for more consistent comparisons, Figure 26 presents illicit use of each pharmaceutical opioid

type as a proportion of the number of pharmaceutical opioid consumers in each cohort, while Figure 27 presents illicit use as a proportion of the entire IDRS sample each year.

Figure 26 indicates that the proportion of the sample reporting recent use of illicit morphine – which was the predominant non-prescription pharmaceutical opioid used by IDRS PWID participants in all years with the exception of 2004 – had been in decline from 2001 to 2006. Between 2006 and 2008 this trend was reversed, with statistically significant increases in both the proportions of the entire cohort (58% in 2006, 81% in 2009: $\chi^2(1_{n=200})=11.4$, $p<0.001$) (Figure 27) and of opioid consumers (65% in 2006; and 84% in 2009; $\chi^2(1_{n=185})=8.12$, $p=0.004$) (Figure 26) reporting recent use of illicit morphine. In the 2010-2013 studies, the rate of use of illicit morphine stabilised (ranging between 70% and 77% of recent opioid users) (Figure 26).

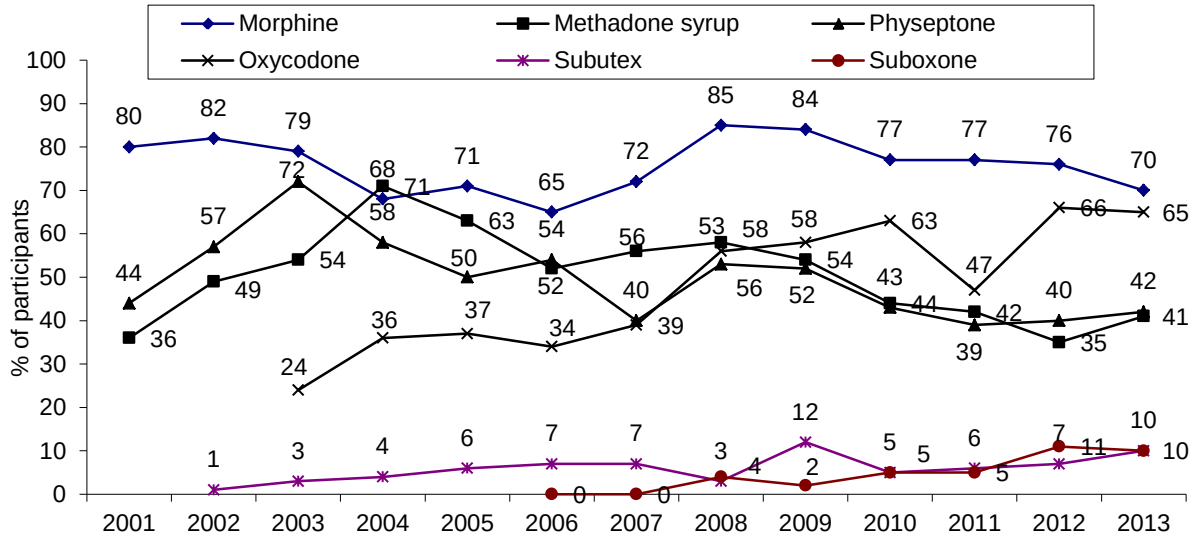
Use of illicit methadone (Physeptone) tablets steadily increased from 2001, where 40% of the sample had recently used the drug, rising to 64% in 2003, with use subsequently declining in 2004 and further still in 2005 to just 41%. Since 2005, the rate of use of Physeptone has varied between 34% and 50% (Figure 27).

Prior to 2003, use of illicit oxycodone was reported by a small number of participants anecdotally. Since this time, use of illicit oxycodone across samples increased from 21% in 2003 to 61% in 2013 ($\chi^2(1_{n=107})=32.01$, $p<0.001$) (Figure 27).

Across the early years of the IDRS study locally, the proportion reporting recent use of illicit methadone syrup increased (32% in 2001 to 64% in 2004); however, this was most commonly used amongst those already enrolled in the methadone maintenance program. Between 2005 and 2009, the rate of recent use of methadone ranged between 46-55%. Since this time, recent use of illicit syrup across the samples has decreased (52% in 2009 v. 29% in 2012: ($\chi^2(1_{n=206})=10.15$, $p=0.001$). However, there has been a slight increase in use of illicit methadone syrup from 2012 to 2013 (29% in 2012 v. 38% in 2013, $p=0.2$). It is important to note that amongst most cohorts (with the exception of 2008 and 2010-2012), the majority of those reporting illicit purchases of methadone syrup were individuals who themselves were also receiving methadone maintenance treatment (51%, n=21 in 2013).

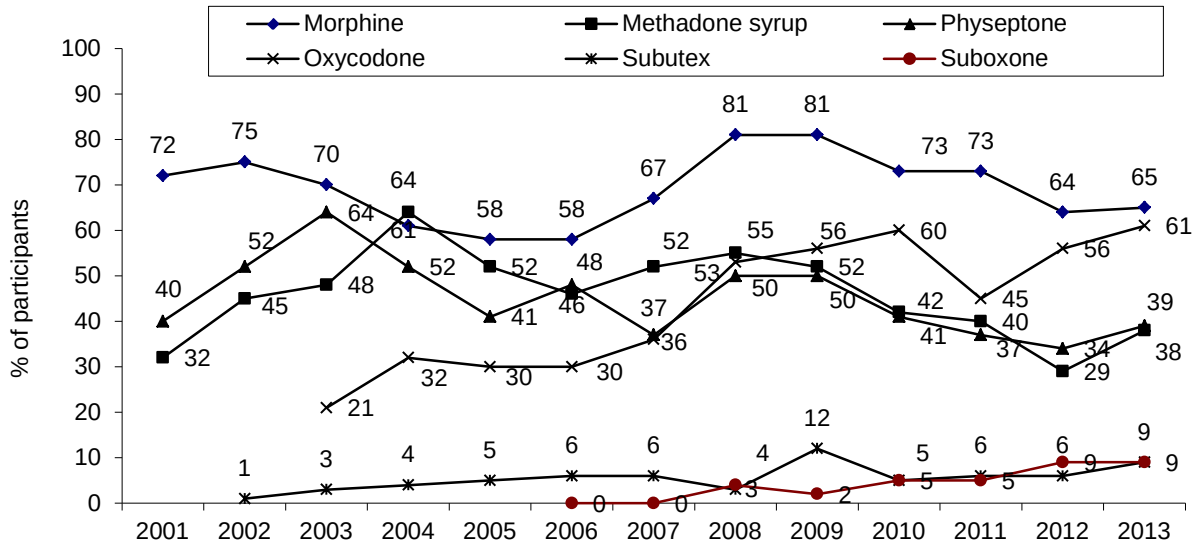
Use of illicit buprenorphine (Subutex) has remained very low across the ten years where the drug has been available for pharmacotherapy. In 2002, just one participant reported illicit use of this drug, and in 2013 this had increased to 9% (Figure 27). Similarly, use of illicit buprenorphine-naloxone tablets (Suboxone) has remained very low across the six years where the drug has been available for pharmacotherapy. In 2006 and 2007, no participants reported use of illicit Suboxone; since this time the rate of recent use has remained very low (between 2% and 10%).

Figure 26: Proportion of opioid consumers within the Tasmanian IDRS PWID cohorts reporting non-prescription use of pharmaceutical opioids in the six months prior to interview, 2001-2013



Source: IDRS PWID interviews

Figure 27: Proportion of Tasmanian IDRS PWID cohorts reporting use of different types of diverted pharmaceutical opioids or related products in the six months prior to interview, 2001-2013

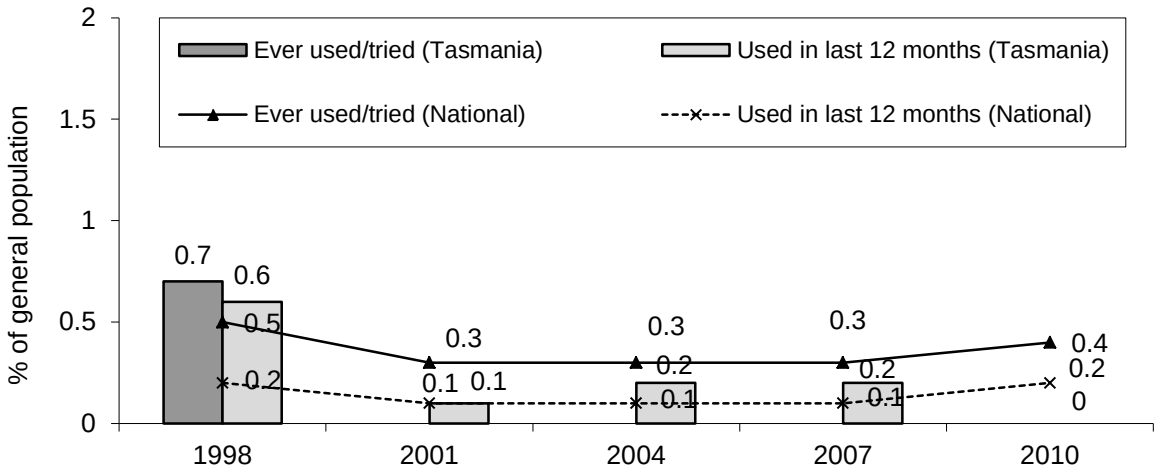


Source: IDRS PWID interviews

4.6.8 Prevalence of opioid use

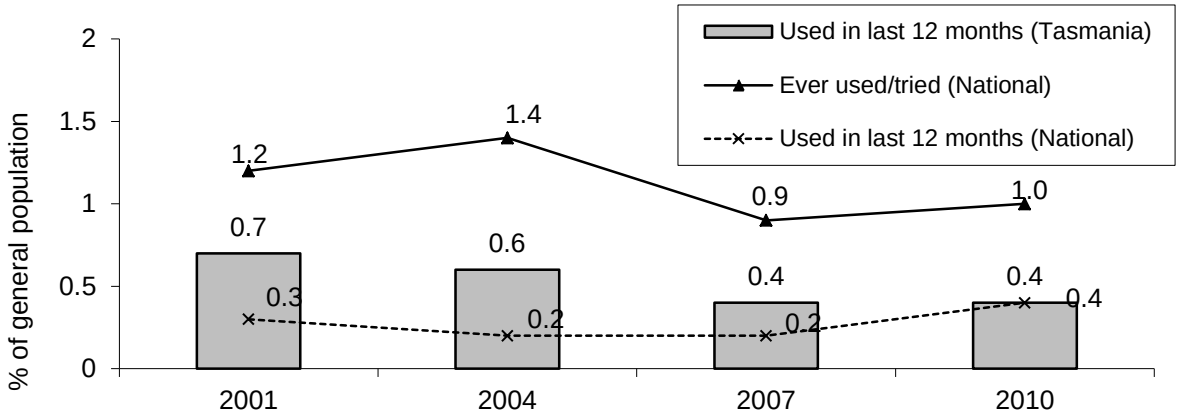
The 2010 National Drug Strategy Household Survey (NDSHS) interviewed 1,060 Tasmanians aged 14 years or above about their drug use. This study did not report any use of methadone or buprenorphine for non-maintenance purposes in the year prior to interview, whereas 0.4% had used other types of opioids for non-medical purposes in this time (AIHW, 2011). The 2007 NDSHS reported that 0.2% of those sampled reported using methadone or buprenorphine in the year prior to interview, and 0.4% had used other types of opioids for non-medical purposes in this time (AIHW, 2008b) (Figures 28 and 29).

Figure 28: Prevalence of methadone or buprenorphine* use in Australia and Tasmania among those aged 14 years and over, 1998-2010



Source: National Drug Strategy Household Survey 1998-2010
* Use of buprenorphine was only included in the 2007 survey

Figure 29: Prevalence of other opioid use (excluding heroin, methadone and buprenorphine) in Australia and Tasmania among those aged 14 years and over, 2001-2010



Source: National Drug Strategy Household Survey 2001-2010

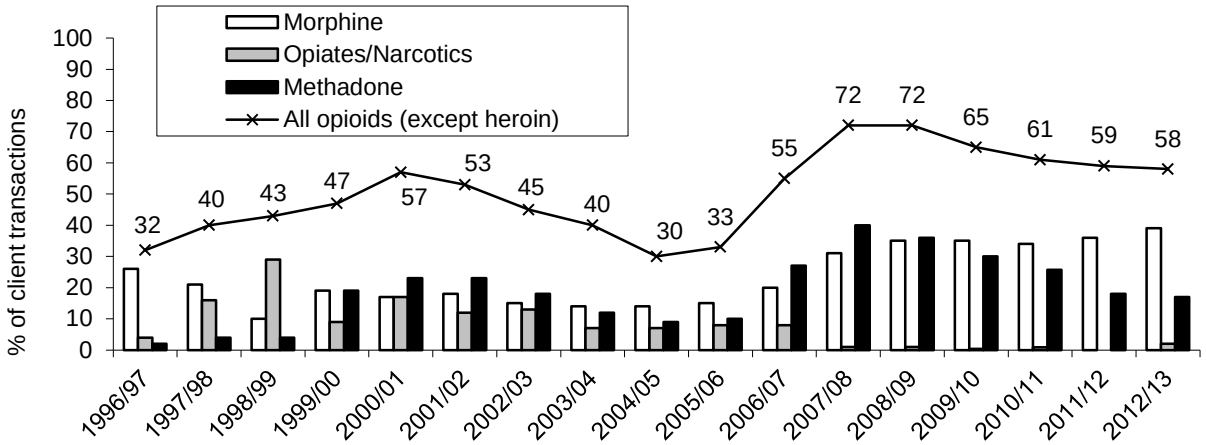
4.6.9 Pharmaceutical opioid use among PWID and other groups

Data from clients of non-pharmacy NSP outlets reporting an opioid as the drug they most often inject have been highly variable over the past fifteen years (Figure 30), due primarily to clients nominating the catch-all 'opiates-narcotics' category rather than indicating a specific single drug[12]. When these data are collapsed, a trend becomes clearer, with the percentage of clients reporting opioids (excluding heroin) as the drug they most often injected steadily increasing from 32% in 1996/97 to 57% in 2000/01, then steadily decreasing to 30% in 2004/05. This was followed by more dramatic increases from 33% in 2005/06 to 72% in 2008/09, however, since 2009/10 this increasing trend appears to have stabilised (between 58-65% of client transactions reporting an opioid, excluding heroin). This trend of increasing and subsequent stabilisation of use of opioids is the

[12] In 2009/10, the 'opiates-narcotics' category was not included in the NSP dataset, instead specific opioids were reported. These have been collapsed into an opiates-narcotic group, to allow for comparisons with previous years.

inverse of the trend noted for methamphetamine use among non-pharmacy NSP clients (see Section 4.3.5). While this appears to represent a substantial change in the market over time, these findings should be interpreted with caution, as there are several caveats to this data. These are discussed in detail in Section 4.3.3.

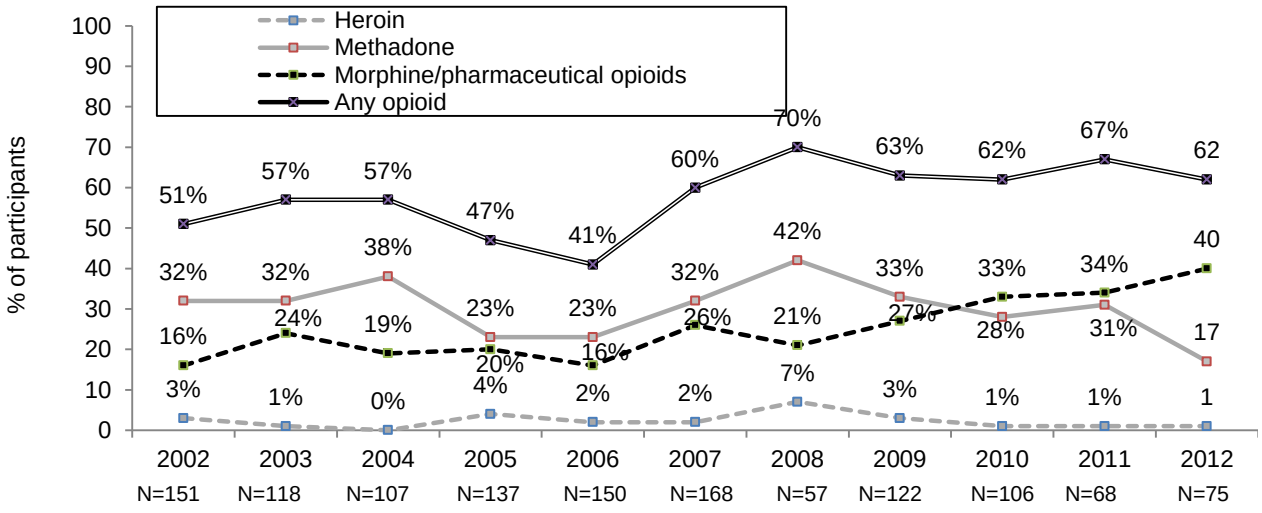
Figure 30: Percentages of Tasmanian non-pharmacy Needle and Syringe Program clients reporting opioids as their 'drug most often injected', 1996/97-2012/13



Source: Population Health, Department of Health and Human Services

The Australian Needle and Syringe Program Survey (Iversen, Topp, & Maher, 2007) identified opioids as the last drug injected by 50% or more of the Tasmanian participants for the 1996-2004 surveys, with small decreases in 2005 and 2006 (to 47% and 41% respectively) (Figure 31). Over the subsequent two survey periods, this trend was reversed, with 60% of the sample in 2007 and 70% in 2008 reporting an opioid as the last drug injected. In 2009, a non-significant decrease was noted (p=0.4), with 63% of the sample reporting an opioid as the last drug injected, and this remained largely unchanged in subsequent reporting periods.

Figure 31: Australian Needle and Syringe Program (NSP) Survey: Prevalence of opioids within 'last drug injected', 2002-2012



Source: Iversen & Maher, 2013

4.7 Benzodiazepines

Key Points:

- Three-fifths of the sample reported recent use of benzodiazepines that were not prescribed to them, and nearly one-quarter reported injecting a benzodiazepine in the six months preceding the interview;
- The majority of participants consume benzodiazepines orally, whilst almost one-half had ever injected a benzodiazepine;
- Diazepam is the most commonly swallowed benzodiazepine, whereas alprazolam is more commonly injected; and
- Concomitant injection of benzodiazepines and opioids has decreased since 2005.

4.7.1 Benzodiazepine use

The majority of IDRS participants had used benzodiazepines at some stage in their lives (91%, n=97) and, of this group, 97% (n=94) had ever swallowed benzodiazepines. Three-quarters of the sample reported use of benzodiazepines in the six months preceding the interview (76%, n=81). Lifetime injection of benzodiazepines was reported by almost half (45%, n=48) of the 2013 PWID cohort, with 23% (n=25) of the whole sample reporting injecting the drug in the six months prior to the interview. As is shown in Figure 32, rates of overall recent use have remained fairly stable (73-88% across the 2000 to 2013 surveys), while recent injection rates in the IDRS cohorts have been more variable. The proportion of participants reporting recent injection fell slightly between 2002 and 2005 (from a stable 37-38% between 2000 and 2002, to 23% in 2005), however, this rate increased over the following three surveys to 36% in 2008. Between 2008 and 2010, this rate decreased to 16% ($\chi^2(1_{n=200})=9.38$, p=0.002), and subsequently increased slightly to 26% in 2012 (p=0.09) (Figure 32). A similar rate of 23% was reported for the 2013 cohort. The rate of recent injecting use of benzodiazepine for the Tasmanian IDRS cohort in 2013 was significantly higher than reported for the national IDRS cohort (23% v. 6%: $\chi^2(1_{n=994})=41.56$, p<0.001) (Stafford & Burns, 2014).

The reduction in injection rates between 2002 and 2003 occurred following a policy change to reduce the availability of gel capsules of temazepam, the benzodiazepine and formulation most preferred for injection by PWID at this time, through the Pharmaceutical Benefits Scheme (PBS) in mid-2002. The effect of this policy change was more marked in other jurisdictions, with rates of recent benzodiazepine injection across the national IDRS samples declining from 24% in 2001 to 14% in 2004 (in contrast to the local change from 38% to 30% in this period) (Stafford et al., 2005).

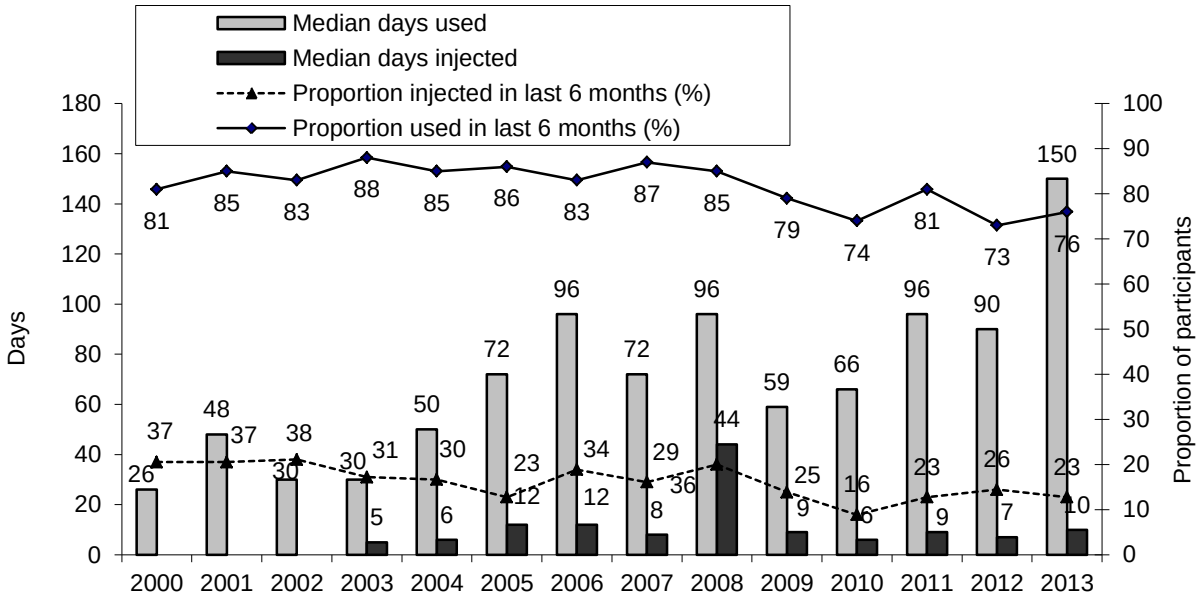
Use of licitly-accessed benzodiazepines (those prescribed directly to the individual using the drug) and illicit benzodiazepines (use of benzodiazepines that had not been prescribed to the individual) was also examined. Over half of the cohort reported ever having been prescribed a benzodiazepine (59%, n=63), with all having used the drug orally, and 11% (n=12) of the total 2013 PWID sample reporting ever having injected licit benzodiazepines. While 40% (n=43) reported recent licit use of benzodiazepines, recent injection of prescribed benzodiazepines was reported by just 3% (n=3) of the total cohort.

Lifetime use of illicit benzodiazepines was reported by 86% (n=92) of participants; of this group, the majority reported oral use (98%, n=90), and two-thirds (63%, n=43) reporting ever having injected this type of drug. In the preceding six months, 60% (n=64) of participants reported use of illicit benzodiazepines and 22% (n=23) reported recent injection. There was a large amount of overlap in the use of licit and illicit benzodiazepines: in the current cohort, 47% (n=38) of those who had recently used benzodiazepines reported exclusive use of illicit benzodiazepines; 21% reported exclusive licit use (n=17); and 32% had used benzodiazepines accessed both licitly and illicitly (n=26).

The median frequency of use of any form of benzodiazepine was 150 days in the preceding six months (SD=77.0, range 1-180). Between 2000 and 2006, the overall median frequency of use increased from 26 days to 96 days. In 2009 and 2010, the median frequency was lower (59 days and 66 days respectively), however, since then median frequency of use has been higher (96 days in 2011 and 90 days in 2012) (Figure 32). This proportion increased again to 150 days in 2013. Among the 25 participants that had recently injected any form of benzodiazepines, the median frequency of injection was 10 days in the preceding six months (SD=51.8, range 1-180 days).

The demographic characteristics of those that had used illicit benzodiazepines in the past 6 months were similar to those of other PWID (see Section 3.1) in terms of age, sex, educational and cultural background, employment, relationship status, sexual preference, prison history, accommodation, age of first injection, frequency on injecting in the preceding month and duration of injecting career. However, participants reporting recent use of illicit benzodiazepines were more likely to report being engaged in a form of AOD treatment at the time of interview (44% v. 3%: $\chi^2(1_{n=107})=5.007$, p=0.023) than participants who reported no recent use of these drugs.

Figure 32: Proportion of participants reporting recent use of benzodiazepines and median frequency of this use, 2000-2013



Source: IDRS PWID interviews
Note: Frequency of injection of benzodiazepines was not collected prior to 2003

High levels of oral benzodiazepine use in the last six months were seen amongst those PWID who had most often injected methadone (89%), morphine (75%) and methamphetamine (46%). Injection of benzodiazepines was reported by 33% of primary users of methadone, 19% of primary morphine users and 23% of primary methamphetamine users (Table 13).

Table 13: Patterns of use of benzodiazepines amongst primary users of other drugs in the PWID sample, 2013

Drug most injected in the past month	Swallowed benzodiazepines in past 6 months	Injected benzodiazepines in the past 6 months
Methadone (n=18)	89% (n=16)	33% (n=6)
Morphine (n=47)	75% (n=35)	19% (n=9)
Methamphetamine (n=22)	46% (n=10)	23% (n=5)

Source: IDRS PWID interviews
Note: N=107, number of respondents in parentheses

Examination of Table 14 clearly indicates that, as per trends in previous IDRS cohorts, diazepam is the most commonly used benzodiazepine among those swallowing the drug (used by 91% of those swallowing a benzodiazepine in the preceding six months, n=74). Oral use of alprazolam (Xanax, Kalma, Aplrax) in the preceding six months remained relatively stable between 2005 and 2010, ranging between 44% and 63% of recent users of benzodiazepines reporting use. In 2011, this rate decreased to 35% (54% in 2010: $\chi^2(1_{n=150})=4.25$, p=0.04), however, slightly higher rates were reported in 2012 and 2013 (43% and 40% respectively). Oral use of temazepam tablets (Temtabs, Normison, Temaze) increased between 2009 and 2010, from 19% (n=14) to 34% (n=34: $\chi^2(1_{n=100})=5.0$, p=0.02). In 2013, the rate of oral use of temazepam was slightly lower (32% in 2011, 21% in 2013, p=0.2). Use of oxazepam (Serepax, Murelax, Alepam) was reported by between 37% and 49% of recent oral benzodiazepine users between 2005 and 2010. In 2011 this decreased to 29% ($\chi^2(1_{n=150})=5.6$, p=0.02), and has remained relatively stable since this time (27% in 2013, p=0.4)

Table 14: Benzodiazepine and related formulations used by PWID orally in the six months prior to interview, 2005-2013

Benzodiazepines	2005 (n=86) %	2006 (n=83) %	2007 (n=87) %	2008 (n=75) %	2009 (n=75) %	2010 (n=71) %	2011 (n=79) %	2012 (n=77) %	2013 (n=81) %
Alprazolam	44	63	46	55	49	54	35	43	40
Clonazepam	5	6	5	7	17	17	1	13	9
Diazepam	85	80	82	97	96	100	89	95	91
Flunitrazepam	7	10	6	9	7	6	5	3	5
Nitrazepam	10	25	11	9	21	21	9	13	19
Oxazepam	37	43	44	37	49	49	29	35	27
Temazepam									
Capsules	3	1	5	1	3	-	-	-	-
Tablets	10	20	23	24	19	34	32	26	21
Doxylamine	-	-	3	1	-	3	1	3	4
Zolpidem	-	-	2	1	1	4	-	3	0

Source: IDRS PWID interviews

In contrast to trends reported for oral use of benzodiazepines, use of alprazolam tablets was far more common amongst those injecting benzodiazepines than was diazepam (Table 15). Comparing the injection of the main types of benzodiazepines used for injection across IDRS PWID cohorts over time, it is clear that use of gel capsule formulations of temazepam decreased (36% of the sample in 2001, falling to 4% in 2005 and no reports of this since 2008), reflecting their restriction and eventual removal from the market. Rates of injection of diazepam have remained relatively stable over time (4-12% of the cohorts between 2005 and 2013) (Table 15). The proportion of the PWID cohorts reporting recent injection of alprazolam steadily increased between 2005 and 2008

from 19% to 30%; decreased to 14% in the following two years, however, in the subsequent three years, this rate increased slightly (21% in 2013).

Table 15: Types of benzodiazepines commonly injected by PWID, 2005-2013

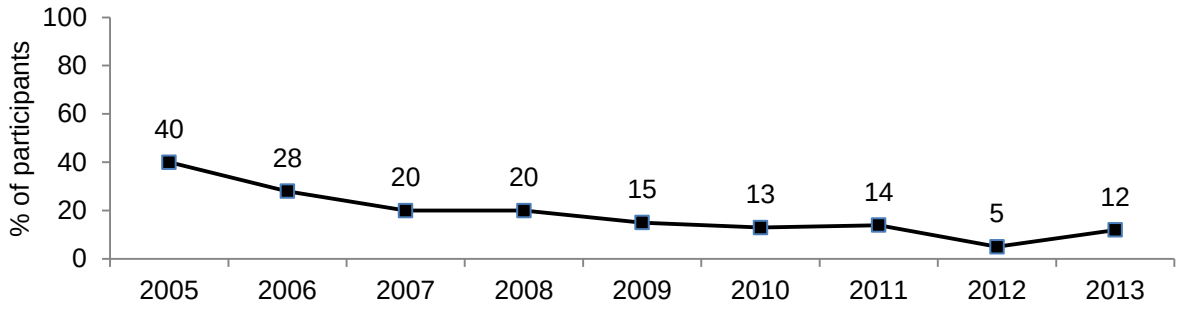
Injected in last 6 months:	2005 (N=100)	2006 (N=100)	2007 (N=100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=106)	2013 (N=107)
Temazepam gel capsules	4	-	1	-	-	-	-	-	-
Alprazolam	19	27	25	30	20	14	22	24	21
Diazepam	8	10	6	12	11	6	5	4	5
Oxazepam	5	4	2	3	1	4	-	1	-
Clonazepam	2	2	2	3	4	2	-	2	-
Flunitrazepam	2	2	2	4	2	-	-	1	1

Source: IDRS PWID interviews

Participants were also asked if they had injected a benzodiazepine concomitantly with an opioid. This combination of use is of considerable concern, not solely due to the deleterious effects of injection of benzodiazepines (see Fry & Bruno, 2002), but also due to the increased risk of overdose following use of multiple central nervous system (CNS) depressant drugs, and, moreover, the extremely disinhibited behaviour that can occur following such combined use. Since 2009, this rate has remained relatively stable, ranging between 12% and 15%, with the exception of 2012 (5%) (Figure 33). Methadone (both syrup and tablets), morphine and oxycodone were most commonly injected in combination with alprazolam, with small numbers of participants citing injection of methadone syrup and tablets, morphine and oxycodone with diazepam, and oxycodone with Hypnodorm.

KE commenting on predominant opioid users noted that use of both licit and illicit benzodiazepines was common in these groups. Diazepam and alprazolam were the predominant benzodiazepine KE were aware of people using, although two KE noted a decrease in use, primarily related to alprazolam forms. One KE noted that the clients they were familiar with were using licit benzodiazepines but regularly consuming them in excess of their prescribed dose. This KE, employed in the drug treatment field, noted that people are using benzodiazepines to manage opioid withdrawal symptoms when unable to access an opioid.

Figure 33: Proportion of participants reporting recent concomitant injection of a pharmaceutical opioid and a benzodiazepine, 2005-2013



Source: IDRS PWID interviews

4.7.2 Alprazolam

As discussed in Section 4.7.1, injecting use of alprazolam increased from 3% of the IDRS cohort in 2002 to 30% in 2008, as did concomitant injecting use of alprazolam and opioids. Both KE and PWID participants provided anecdotal reports of harms associated with this use, such as vascular damage, gangrene, amputations of limbs and overdose. Partly as a result of this, on 1 September 2007, Pharmaceutical Services Branch (of the Tasmanian Department of Health and Human Services) implemented regulatory changes regarding the prescribing and dispensing of alprazolam. These changes included restricting alprazolam prescribing amongst patients receiving opioid medication: prescribers for patients enrolled in methadone maintenance or buprenorphine treatments were required to obtain approval from the Clinical Director of Alcohol and Drug Services in order to prescribe alprazolam; and prescribers for patients receiving other types of opioid medications required authority from Pharmaceutical Services in order to continue prescribing alprazolam for longer than four weeks.

In response to these changes, questions on alprazolam use were incorporated in the IDRS survey. Three-quarters of the 2013 IDRS cohort reported ever having used any alprazolam (75%, n=80), and two-fifths reported having used this drug in the preceding six months (40%, n=43). Non-prescribed alprazolam was used by 37% (n=40) of the sample, at a median frequency of 11 days (range 1-180 days) in the preceding six months. Prescribed alprazolam was used by just 6% of the sample, at a median frequency of 180 days (range 24-180 days). Injecting use of any alprazolam tablets in the preceding six months was reported by 21% (n=22) of the sample.

Twenty percent (n=21) of the sample reported ever having been prescribed alprazolam, with all except two participants reporting oral use, and 7% (n=7) reporting injecting alprazolam at some stage. Lifetime use of illicit alprazolam was reported by nearly three-quarters of the sample (71%, n=76), and one-third of the sample reported ever having injected the drug (39%, n=42). Injecting use of illicit alprazolam was reported by 20% (n=21), at a median frequency of 10 days (range 1-96).

Participants who reported recent use of alprazolam were asked to comment on the predominant source of these drugs in the preceding six months, with almost all participants reporting illicit alprazolam (88%, n=38). These participants were also asked to report on the quantity of alprazolam they consumed on the last occasion: participants who responded to this question (n=35) reported a median amount of 4mg, however, there was a broad range of doses reported (1mg-50mg, SD=8.2).

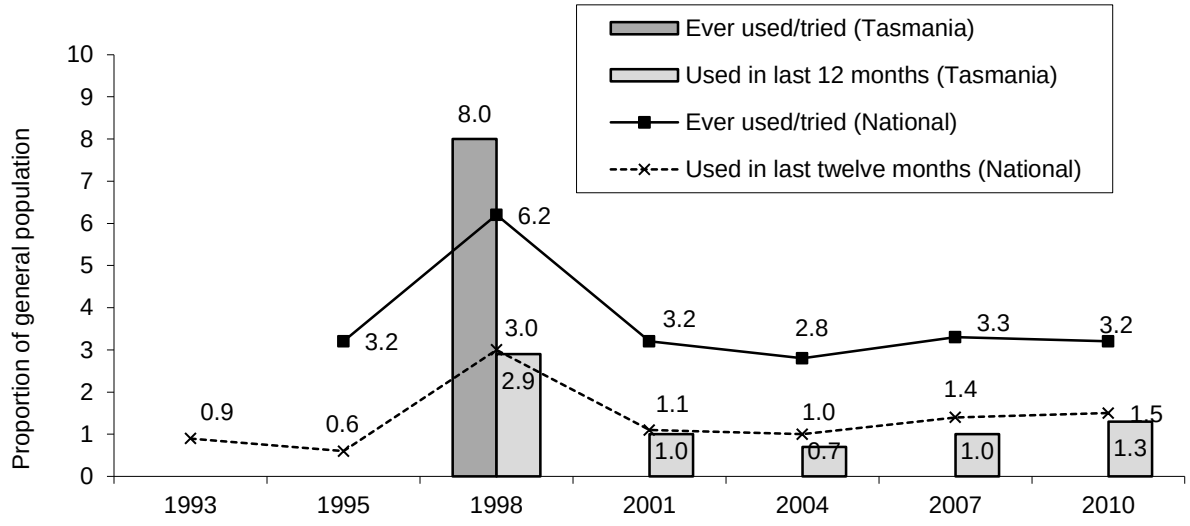
There are clear indications that, following a reduction of the injection of benzodiazepines among PWID between 2002 and 2003, arising from the restriction and eventual removal of the preferred temazepam gel capsules from the market, injection of benzodiazepines remains an ongoing part of the local drug culture, with Tasmanian PWID continuing to inject at rates relatively higher than those identified in other Australian jurisdictions. As noted in previous IDRS reports, it is also clear that alprazolam (Xanax in particular) has largely replaced the local illicit market for temazepam gel capsules among those PWID particularly interested in benzodiazepine injection, with this drug being used in similar ways to temazepam capsules by consumers, such as in simultaneous combination with methadone syrup or other opioids. Between the 2003 and 2008 studies, the proportion of the PWID samples reporting recent injection of alprazolam increased from 11% to 30%. In 2010, this rate of injection decreased significantly to 14% ($\chi^2(1_{n=100})=6.56$, p=0.01), however, in subsequent reporting periods this rate has remained stable at a slightly higher rate (ranging between 21-24%) (Table 15). The regulatory changes regarding alprazolam prescribing that were implemented by Pharmaceutical Services in September 2007 may account for indications of increased price of illicit alprazolam. Anecdotal reports from both PWID and KE in the 2009 to 2013 surveys pointed to an increasing awareness amongst consumers of the physical and psychological harms associated with alprazolam injection. The level of use and availability of benzodiazepines generally remains high for local PWID, particularly among primary users of opioids, which is of concern given the increased risk of overdose when the two substances are combined. One KE noted that people often use

benzodiazepines on top of other drugs, being unaware of, not considering, or discounting the potential harms of mixing with other substances based on the fact that they are prescribed medications, and thus deemed safer. While KE noted no change or decreased rates of injecting due to consumer awareness of the harms, one KE noted higher rates of injecting oxazepam formulations. As such, patterns of benzodiazepine use and injection in the state continue to warrant very close attention.

4.7.3 Prevalence of benzodiazepine use

In the 2010 National Drug Strategy Household Survey (AIHW, 2011) (n=1,060), 1.3% of Tasmanian respondents reported using benzodiazepines in the preceding year, similar to the rate reported in 2007 (1.0%). The rates reported for Tasmania are similar to those reported nationally in 2007 (1.4%) and 2010 (1.5%) (AIHW, 2011). While these are low base rates of reported benzodiazepine users, this does seem to suggest little evidence for a change in non-medical benzodiazepine use at the general population level between the 2001 and 2010 surveys (Figure 34).

Figure 34: Prevalence of benzodiazepine use in Australia and Tasmania among those aged 14 years and over, 1993-2010



Source: National Drug Strategy Household Survey 1993-2010

4.7.4 Use in particular populations

Benzodiazepines have consistently comprised approximately 10-16% of all positive urine screens for illicit drug use among Tasmanian prisoners between 1996/97 and 2000/01, despite markedly increasing numbers of positive urine screens during this period[13]. However, in 2001/02, the proportion of positive urine screens indicating use of benzodiazepines dropped to 7% (n=9), the lowest proportion since 1995/96 (6%). During 2002/03, however, the proportion of positive urine screens testing positive for benzodiazepines returned to 14%, a similar level to that in the 1996/97-2000/01 period, with the number of positive screens remaining at similar levels in subsequent years (12% in 2003/04; 20% in 2004/05; 16% in 2005/06). In 2006/07, this rate increased slightly to 24% of all positive urine screens and in the subsequent six financial years, the reported rate again decreased (7% in 2007/08; 9% in 2008/09; 6% in 2009/10; 5% in 2010/11, 4% in 2011/12 and 2012/13 respectively). It should be noted that an increasing proportion of urine screens are conducted on suspicion of use rather than random screens (e.g. in 2012/13, of those identified as

[13] These figures only include positive urine screens for benzodiazepines that were not prescribed to the prisoner.

positive for benzodiazepines, 100% of these cases were identified on suspicion), so these figures will necessarily be an overestimate of the prevalence of drug use in this context.

4.7.5 Benzodiazepine use among PWID

Reported use of benzodiazepines as the main drug injected by non-pharmacy NSP outlet clients has undergone subtle changes in the past ten years. In 2001/02, 3.8% of NSP transactions were reported for use of benzodiazepines (Table 16). Between 2002/03 and 2005/06, reports of benzodiazepines as the main drug injected remained at 0.4% or less of non-pharmacy client transactions per annum, with small numbers of transactions relating to benzodiazepines. In 2006/07 and 2007/08, more than 300 transactions per annum occurred related to benzodiazepines (around 1% of total transactions), a notable increase from previous years. In the subsequent five reporting periods (2008/09-2012/13), this rate decreased, ranging between 0.4% and 0.7%, as did the number of transactions (ranging between 63-215) (Table 16). It should be noted, however, that there are limitations with this dataset (see Section 2.3.1) and that data from the NSP are likely to underestimate the true level of injection of benzodiazepines (as the question usually asked is 'what is the drug you usually inject?', and data from the IDRS indicates that benzodiazepine-injecting PWID will often report another drug as the drug they most often injected). In addition, one KE in the 2010 study, employed in an NSP, noted that in general, clients won't state they are injecting benzodiazepines – especially alprazolam – as they are likely to receive a "*lecture about it".*

Table 16: Proportion of transactions in which benzodiazepines were reported as 'drug most often injected' by Tasmanian non-pharmacy Needle and Syringe Program clients, 2001/02-2012/13

Year	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Number of transactions reporting benzo-diazepines	761	52	139	36	52	304	399	147	201	215	125	63
Percent of total transactions reporting benzo-diazepines	3.8%	0.2%	0.4%	>0.1%	0.2%	0.9%	1.2%	0.4%	0.6%	0.7%	0.6%	0.4%

Source: Population Health, Department of Health and Human Services

4.8 Other drugs

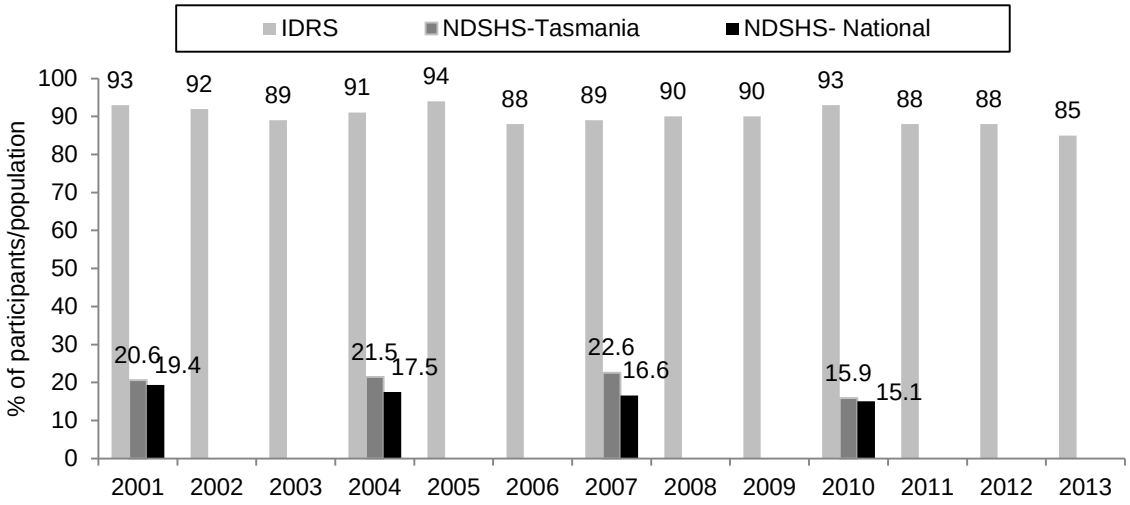
Key Points:

- Most of the sample reported use of tobacco in the preceding six months, with the majority smoking on a daily basis;
- Two-fifths of the sample reported use of alcohol in the preceding six months, at a median frequency of 12 days. This level of use has reflected a decrease in the percentage of the sample reporting use, and the frequency of use, compared to previous years;
- Just over one-tenth of the sample reported recent use of ecstasy, at a median frequency of four days;
- Almost one-third of the sample reported recent use of prescription stimulants, with methylphenidate more commonly used than dexamphetamine. These are generally used as second-line drugs; and
- One-tenth had used illicit quetiapine in the preceding six months, at a median frequency of three days.

4.8.1 Tobacco

Almost all participants in the current study reported lifetime use of tobacco (95%, n=102), with a similarly high proportion reporting use in the preceding six months (85%, n=91). The median frequency of this use was 180 days (range 10-180 days), equating to daily use. Eighty percent (n=86) of the current sample reported daily use of tobacco, a notably higher rate than was reported in the 2010 National Drug Strategy Household Surveys (NDSHS) (AIHW) both nationally and for Tasmania (15.1% and 15.9% respectively), and for an age-matched sub-sample (aged 30-39) from the national 2010 NDSHS (20.2%) (Figure 35). Nationally, the NDSHS has estimated prevalence of daily tobacco use as decreasing from 19.4% in 2001 to 15.1% in 2010; in Tasmania this rate also decreased, from 22.6% in 2007 to 15.9% in 2010.

Figure 35: Rates of tobacco use amongst Australian and Tasmanian populations and Tasmanian IDRS samples, 2001-2013



Source: IDRS PWID interviews, National Drug Strategy Household Surveys, 2001-2010 (AIHW, 2002a&b, 2005a&b, 2008a&b, 2011)

Heavy Smoking Index for nicotine dependence

Participants who smoked daily were asked questions from the Fagerstrom Test for Nicotine Dependence (FTND) (n=86). These questions included 'how soon after waking do you smoke your first cigarette?', 'do you find it difficult to refrain from smoking in places where is forbidden?', 'which cigarette would you hate to give up', 'how many cigarettes a day do you smoke?', do you smoke more frequently in the morning' and 'do you smoke even when you are sick in bed?'.

The FTND gives a score between zero and 10. The sum of these scores was computed and a cut-off score between 6 and 8 was used to indicate 'high' nicotine dependence. A score of 8 or more was used to indicate 'very high' nicotine dependency (Heatherton et al., 1991).

As seen in Table 17, almost two-fifths of the participants who completed the FTND reported smoking their first cigarette within five minutes of waking (42%) or between five to 30 minutes of waking (36%). Half of daily smokers reported smoking between 11-20 cigarettes a day (49%) and two-fifths reported smoking 10 or less cigarettes a day (38%).

Two-fifths (42%) of daily smokers reported that they find it difficult to refrain from smoking in forbidden places such as a library; 66% reported that they would hate to give up the first cigarette in the morning compared to other times of the day. Almost three-quarters (71%) reported smoking when sick in bed. The mean FTND score was 5.0 (SD=2.4). Half of the sample scored 6 or greater (48%), indicating high or very high nicotine dependence.

Table 17: Heavy Smoking Index for nicotine dependence, 2013

Time till first cigarette (after waking)	**n=85**
Within 5 minutes (%)	42
5-30 mins (%)	36
31-60 mins (%)	6
60+ mins (%)	16
Number of cigarettes smoked a day	**n=85**
10 or less cigarettes (%)	38
11-20 cigarettes (%)	49
21-30 cigarettes (%)	12
31 or more cigarettes (%)	1
Difficult to refrain from smoking	42
Which cigarette would you hate to give up:	
first in the morning	66
any other	34
Smoke when sick in bed	71
High or very high dependence* (%)	48
Mean score	5.0

Source: IDRS participant interviews

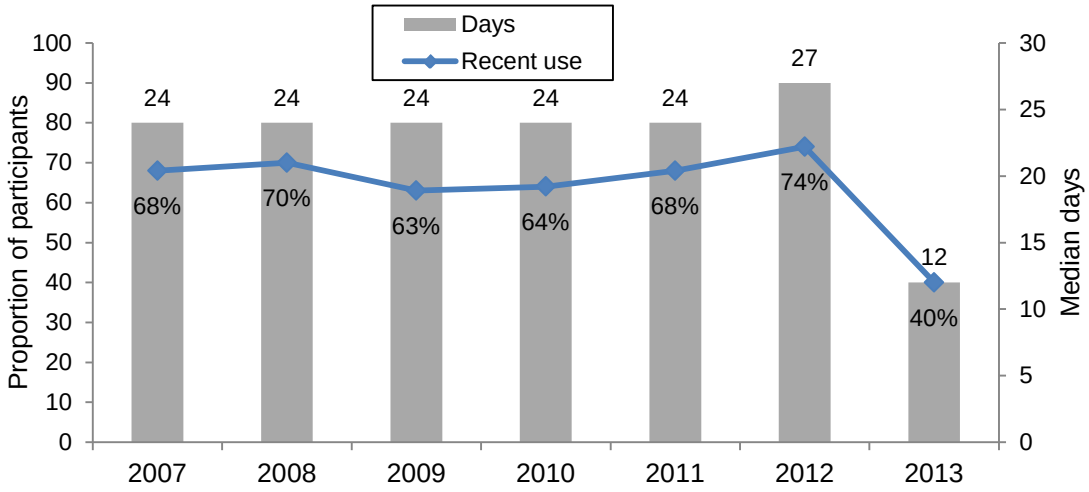
* Scored 4 or above

4.8.2 Alcohol

Almost all participants in the 2013 IDRS study reported lifetime use of alcohol (94%, n=101), and 40% (n=43) of the cohort had used alcohol in the preceding six months. This rate of recent use of alcohol is significantly lower in 2013 than reported in previous years (74% in 2012 v. 40% in 2013: $\chi^2(1_{n=1213})=22.86$, $p<0.001$). The median frequency of use amongst those who had recently consumed alcohol was 12 days (range 1-180), which equates to use once per fortnight. Similarly, this rate was lower than reported in preceding years (24-27 days from 2007 to 2012). Four percent

of participants (n=4) reported daily alcohol use in the preceding six months, and 15% (n=16) reported use of alcohol at least weekly (but not daily) during the six months preceding the interview (Figure 36).

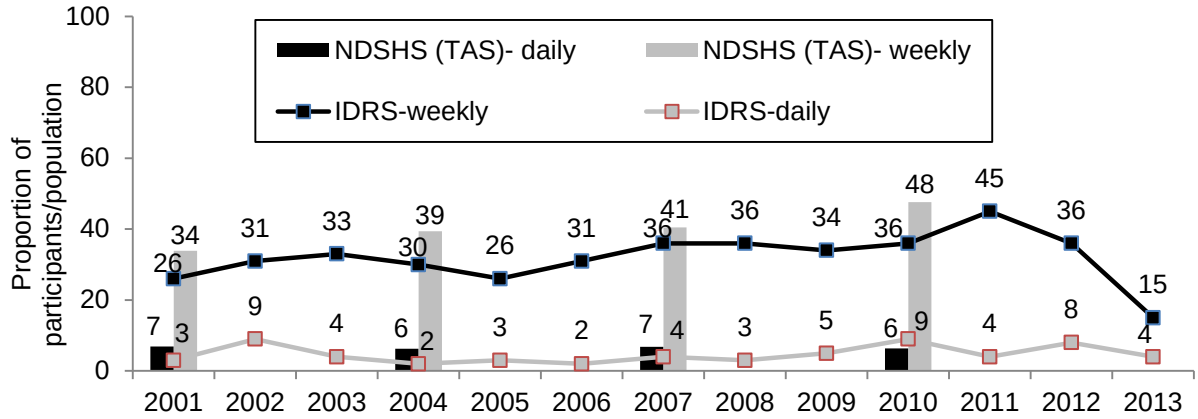
Figure 36: Rates of alcohol use and median frequency of use amongst Tasmanian IDRS samples, 2007-2013



Source: IDRS participant interviews

Based on data from the 2010 National Drug Strategy Household Survey, it was estimated (from the sample of 1,060 participants) that approximately 47.6% of Tasmanians had used alcohol on a weekly basis in the year prior to interview (Figure 37), compared with 45.2% Australians nationally (AIHW, 2011). The proportion of the Tasmanian NDSHS sample that had used alcohol daily in the year prior to interview was similar to the national estimate (6.4% vs. 7.2%, p=0.4). Among those aged between 30 and 39 in the 2010 national NDSHS sample, 50.2% had used alcohol on a weekly basis and 6.6% had used alcohol on a daily basis in the past 12 months.

Figure 37: Rates of alcohol use amongst Tasmanian NDSHS participants aged 14 years and older and IDRS samples, 2001-2013



Source: IDRS PWID interviews, National Drug Strategy Household Surveys, 2001-2010 (AIHW, 2002b, 2005b, 2008b, 2011)

IDRS participants were also asked to complete the Alcohol Use Disorders Identification Test (AUDIT) (Saunders et al., 1993) which is a brief screening scale to identify individuals with alcohol problems, including those in early stages. It is a 10-item scale, which assesses three conceptual domains: alcohol intake; dependence; and adverse consequences (Reinert & Allen, 2002). Total scores of 8 or more are recommended as indicators of hazardous and harmful alcohol use, as well as possible alcohol dependence (Babor et al., 2001). Higher scores indicate greater likelihood of hazardous and harmful drinking; such scores may also reflect greater severity of alcohol problems and dependence, as well as a greater need for more intensive treatment (Babor et al., 2001). Amongst participants who reported use of alcohol in the preceding six months, the overall mean AUDIT score was 10.2 (median 9.0; range 1-25, SD=6.2, n=43).

The total AUDIT score places respondents into one of four 'zones', or risk levels. Amongst participants reporting consumption of alcohol in the preceding six months (n=43), 37% of participants scored in zone 1 (n=16), a level reflecting low risk drinking or abstinence; 42% scored in zone 2 (n=18), indicative of alcohol use in excess of low-risk guidelines; 9% (n=4) scored in zone 3, harmful or hazardous drinking; and 12% (n=5) scored in zone 4, indicating that those in this zone may benefit from referral to assessment and possible treatment for alcohol dependence.

4.8.3 Ecstasy and related drugs

There have been multiple indicators pointing to a tightening of the ecstasy market over the past few years. KE reported largely infrequent, oral use of 'ecstasy'[14] among a small minority of users of other illicit drugs, most commonly amongst groups that were primarily methamphetamine consumers, although reporting some use amongst primary cannabis-consuming groups and primary opioid-using groups.

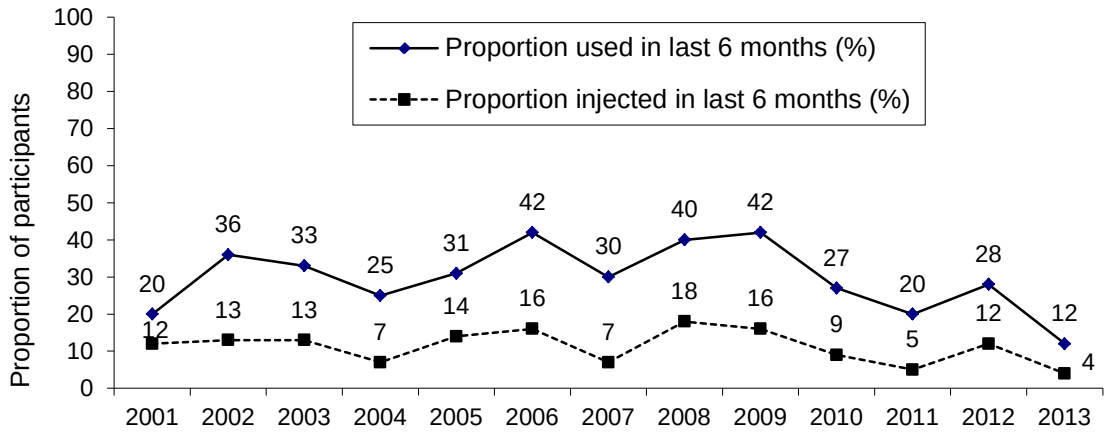
In the PWID sample, 65% (n=69) had used ecstasy at some stage in their lives: swallowing of the drug was most common, reported by 93% of the sample; and 29% of the sample reported injecting at some point in their lifetime. Use of ecstasy in the previous six months was reported by 12% (n=13), at a median frequency of four days (range 1-180 days), which equates to use approximately once every two months. Use of ecstasy has been declining amongst local IDRS cohorts: in 2008 and 2009, approximately 40% of each sample reported recent use. This declined over 2010 and 2011 (27% and 20% respectively), however, a small increase was observed in 2012. Subsequently, in 2013 this rate has dropped to the lowest reported in local IDRS studies (28% in 2012 and 12% in 2013: $\chi^2(1_{n=213})=7.65$, p=0.006). This is reflected in comments from KE working in alcohol and drug treatment services and NSP outlets, noting decreased client reports of recent use.

Recent oral use of ecstasy was reported by 10% of the sample, and 4% reported injecting in this period, at a median frequency of four days (range 2-180 days). As shown in Figure 38, these findings indicate a trend of decreasing use of ecstasy between 2009 and 2013.

The demographics of those that had used ecstasy in the past six months did not differ greatly from those of the larger PWID sample (see Section 3.1) in terms of age, sex, cultural background, sexual preference, relationship status, accommodation, employment status, current engagement in AOD treatment, age of first injection, duration of injecting career and frequency of injection. However, participants reporting recent ecstasy use were more likely to report completing more years of their education (11.2yrs v. 10.3yrs: F91,107)=4.293, p=0.041), less likely to report a prison history (8% v. 41%: $\chi^2(1_{n=103})=4.76$, p=0.025).

[14] Intelligence reports from police in previous years suggest that many of the tablets sold as 'ecstasy' may not necessarily contain 3,4 methylenedioxymethamphetamine (MDMA) as the primary active ingredient, although in recent years local seizures have increasingly identified the presence of tablets containing MDMA. As such, in this section, the term 'ecstasy' will be used to refer to tablets or powder sold under that name, rather than necessarily referring to MDMA.

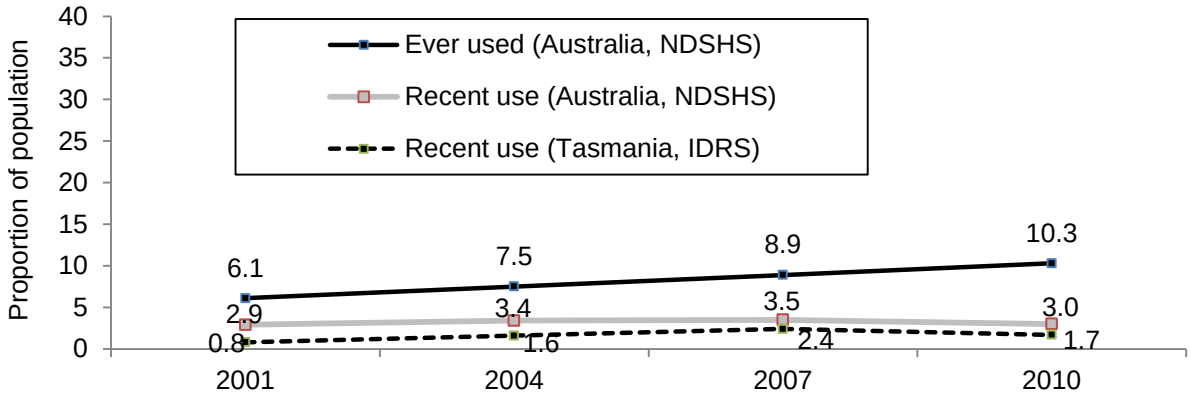
Figure 38: Proportion of PWID reporting ecstasy use and injection in the preceding six months, 2001-2013



Source: IDRS PWID interviews

Between the 2007 and 2010 National Drug Strategy Household Surveys (AIHW, 2011), a decrease in past yearly use of ecstasy for the national sample was reported (3.5% in 2007 v. 3.0% in 2010: $\chi^2(1_{n=50,004})=9.78$, p=0.002). In Tasmania, the estimated prevalence of use was 2.4% in 2007, slightly – but not significantly – higher than reported in 2010 (1.7%, p=0.3) (Figure 39).

Figure 39: Rates of ecstasy use amongst Tasmanian NDSHS and IDRS samples, 2001-2010



Source: National Drug Strategy Household Surveys, 2001-2010 (AIHW, 2002a&b, 2005a&b, 2008a&b, 2011)

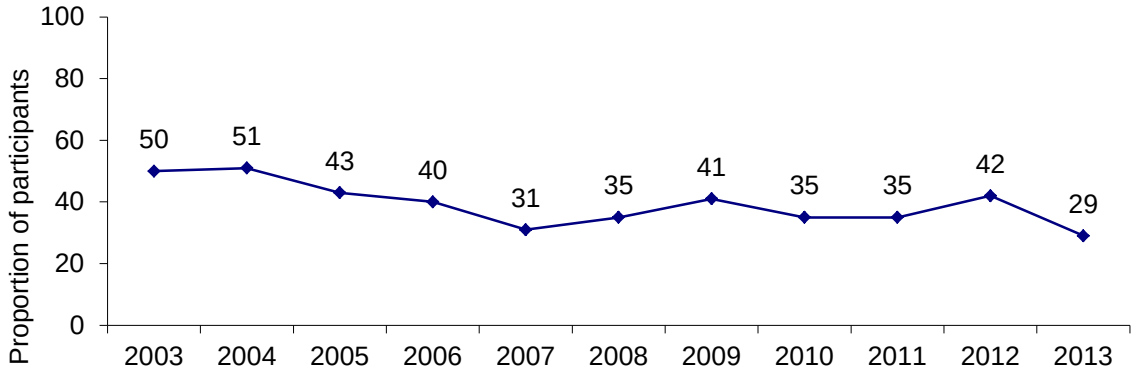
4.8.4 Prescription stimulants (dexamphetamine, methylphenidate)

In the 2013 PWID sample, 65% (n=69) had used illicit prescription stimulants at some stage in their lives. Injection of these drugs was most common, reported by 53% of the sample at some stage of their lives, and 29% in the preceding six months, at a median frequency of five days in this period (range 1-140 days, SD=27.1). Swallowing of prescription stimulants was reported by 23% of the sample at some stage in their lives, while 5% had swallowed these drugs in the past six months. Of those who commented on the main type of pharmaceutical stimulant used (n=29), methylphenidate was cited more commonly (59%) than dexamphetamine (41%).

While use of these drugs was relatively common among the PWID cohort, it appeared that they were predominantly used as a second-line drug, as no participants reported prescription stimulants as the drug they had most commonly used in the preceding month. Looking at use of

pharmaceutical stimulants over time, one notable trend was evident: the proportion of participants reporting recent use decreased from 51% in 2004 to 31% in 2007 ($\chi^2(1_{n=100})=7.5$, p=0.006), and has remained stable since this time (42% in 2012 vs. 29% in 2013, p=0.06) (Figure 40).

Figure 40: Recent use of illicit pharmaceutical stimulants amongst IDRS participants, 2003-2013



Source: IDRS PWID interviews

The demographic characteristics of those who had used illicit prescription stimulants in the past six months did not differ from those of the larger PWID sample (see Section 3.1) in terms of age, sex, cultural background, sexual preference, education, employment status, relationship status, stable accommodation, prison history, engagement in drug treatment, frequency of injection and age at first injection. However, participants reporting recent use of illicit prescription stimulants were more likely to report a longer duration of injecting career (19.3yrs v. 15.9yrs: F(1,106)=3.784, p=0.05) than participants reporting no recent use of this drug. KE in previous IDRS studies have suggested that such prescription stimulants are more commonly used by younger (predominantly school-age) people. This was not supported in the current cohort, with no significant differences in age identified between those that had recently used pharmaceutical stimulants (36 years) and those that had not (35 years, p=0.45).

4.8.5 Quetiapine

In response to increasing anecdotal reports of extra-medical use of quetiapine, new questions regarding use of this drug were introduced in the 2011 survey. Quetiapine is an antipsychotic medication, marketed as Seroquel. Almost half of the sample reported lifetime use of quetiapine in 2013, a similar proportion to that reporting use in the 2012 sample (2013: 45% v. 2012: 46%). In the preceding six months, 8% of the sample reported licit use and 10% illicit use (just one participant had used both forms). The median frequency of use of illicit quetiapine was just three days (range 1-152 days, SD=45.3, n=11). All participants reporting recent illicit use had exclusively swallowed the drug (n=11); no participants had recently injected it.

4.8.6 Inhalants

While 20% of the PWID respondents reported ever using inhalants, just one participant had used inhalants (nitrous oxide) on three occasions in the six months prior to interview. In previous IDRS studies, KE reported that the substance users they were associated with were extremely negative toward use of inhalants, regarding it as a ‘primary school thing’.

4.8.7 Hallucinogens

Twelve percent of the PWID respondents in the current study reported use of hallucinogens in the six months prior to interview, although two-thirds (64%) had used this class of drugs at some stage in their lives. The current frequency of use was low, at a median of two days in the past six months

(range 1-7 days). The types of hallucinogens most commonly used amongst this group were lysergic acid diethylamide (LSD) (50%, n=6) and psychedelic mushrooms (42%, n=5). These indications of use are all similar to those reported in previous Tasmanian IDRS samples, with recent use remaining generally stable at around 20% of each cohort over this time, and the median frequency of use remaining at just one or two days in the preceding six months across each of these samples.

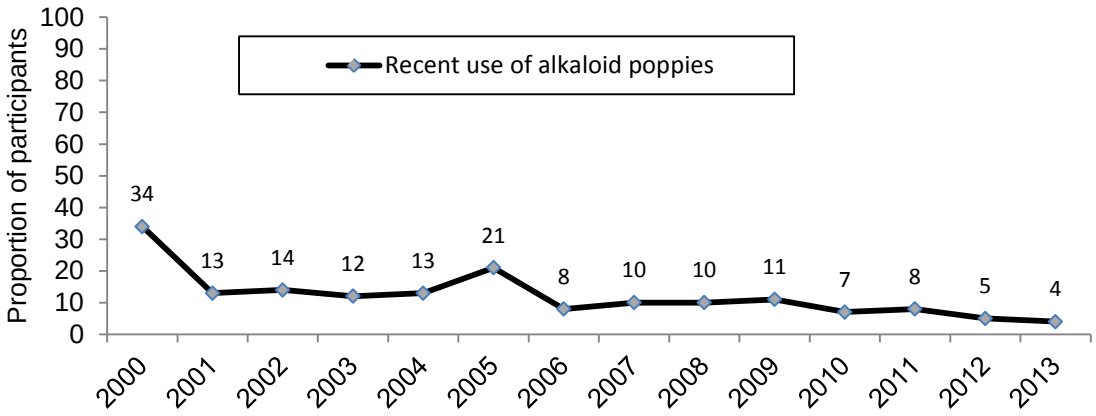
In the current study and in previous years, KE reports noted irregular use, most commonly of psychedelic mushrooms and LSD/'trips' amongst a small proportion of the consumers that they had contact with, with such reports more common amongst primary cannabis or methamphetamine consumers rather than groups that primarily used opioids.

In support of this, the Ecstasy and related Drugs Reporting System – using similar methods to the IDRS but a primary ecstasy-using group as its consumer sample and conducted in Hobart (Matthews & Bruno, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2013; Matthews, Peacock & Bruno, 2012; and Matthews, Bruno & Nicholls, 2013) – found higher levels of hallucinogen use relative to the IDRS PWID cohort (albeit also at a low frequency) among frequent ecstasy users (38% of the 76ecstasy users interviewed reported using LSD in the six months prior to interview in 2012; and 15% using mushrooms). More details in regard to patterns of hallucinogen use in such demographic groups can be found in Matthews, Bruno and Nicholls (2014).

4.8.8 Alkaloid poppies

Four percent of the current cohort reported use of alkaloid poppies at some stage in the preceding six months (described by the PWID as opium or poppy tar or poppy wash). This rate of recent use of alkaloid poppies has declined slightly since the early 2000s, from around 13% in 2004 to 4% in 2013 (p=0.06) (Figure 41).

Figure 41: IDRS participant use of alkaloid poppies, 2000-2013



Source: IDRS PWID interviews

5.0 DRUG MARKET: PRICE, PURITY, AVAILABILITY AND PURCHASING PATTERNS

5.1 Heroin

Key Points:

- The modal prices that participants reported last paying for heroin were $50 for a cap. Participants commented that these prices had not changed in the last six months;
- Three-fifths of participants who commented noted that heroin was difficult to access in Tasmania, and that this situation had not changed in the preceding six months;
- Subjective reports of heroin purity suggest this is medium-to-high; and
- It should be noted that very few participants were able to comment on heroin prices, purity or availability.

5.1.1 Price

In previous years, PWID who could comment on the price of heroin generally referred to purchasing it in units of 'points' (referring to 0.1g), 'packets', 'caps' or 'tastes', the latter two appearing to be a generic descriptor for a varying amount of the drug, generally between 0.05-0.15g. In the current study, just two participants commented on the price of one 'cap' of heroin, reporting this to cost a median price of $50 (mean $50, range $50). Just single participants were able to comment on the price of larger quantities: 0.25g was reported to cost $250 and 0.5g $200. In previous years when IDRS PWID cohorts reported higher levels of heroin use, information regarding price was more common (see Table 18). None of the KE could confidently comment on purchase prices of heroin.

Table 18: Modal price of heroin purchased by PWID, 2000-2013

Descriptor	2000		2001		2002		2003		2004		2005		2006	
	$	*n*	$	*n*	$	*n*	$	*n*	$	*n*	$	*n*	$	*n*
Cap,taste, point (~0.05-0.15g)	$50	*1*	$50	*15*	$100	*12*	$50	*7*	$50	*6*	$100	*4*	-	*0*
'Points'/'2 tastes'(~0.2g)	$100	*2*	$100	*8*	$93*	*2*	$100	*1*	$50	*1*	-	*0*	$200[#]	*1*
1/4 gram (0.25g)	$50	*1*	$100	*1*	$135*	*4*	$100	*1*	$100	*1*	-	*0*	-	*0*
Half-weight (0.5g)	-	*0*	$170	*1*	$250	*1*	-	*0*	$370*	*2*	-	*0*	-	*0*
Gram (1.0g)	$375*	*2*	$300	*2*	$350	*1*	$350	*2*	$350	*4*	$360*	*3*	-	*0*

Source: IDRS PWID interviews

[*] Where multiple modes existed, median price was substituted

[#] Refers to 2-3 points

Table 18: Modal price of heroin purchased by PWID, 2000-2013 (continued)

Descriptor	2007		2008		2009		2010		2011		2012		2013	
	$	*n*	$	*n*	$	*n*	$	*n*	$	*n*	$	*n*	$	*n*
Cap,taste, point (~0.05-0.15g)	$50	*1*	$50	*1*	-	*0*	-	*0*	$75	*2*	$50	*4*	$50	*2*
'Points'/'2 tastes'(~0.2g)	-	*0*	-	*0*	-	*0*	-	*0*	-	*0*	-	-	-	-
1/4 gram (0.25g)	-	*0*	-	*0*	-	*0*	-	*0*	-	*0*	-	-	$250	*1*
Half-weight (0.5g)	-	*0*	$500	*0*	$150	*1*	-	*0*	$400	*1*	$225	*2*	$200	*1*
Gram (1.0g)	-	*0*	-	*0*	$450	*1*	-	*0*	$400	*2*	-	-	-	-

Source: IDRS PWID interviews

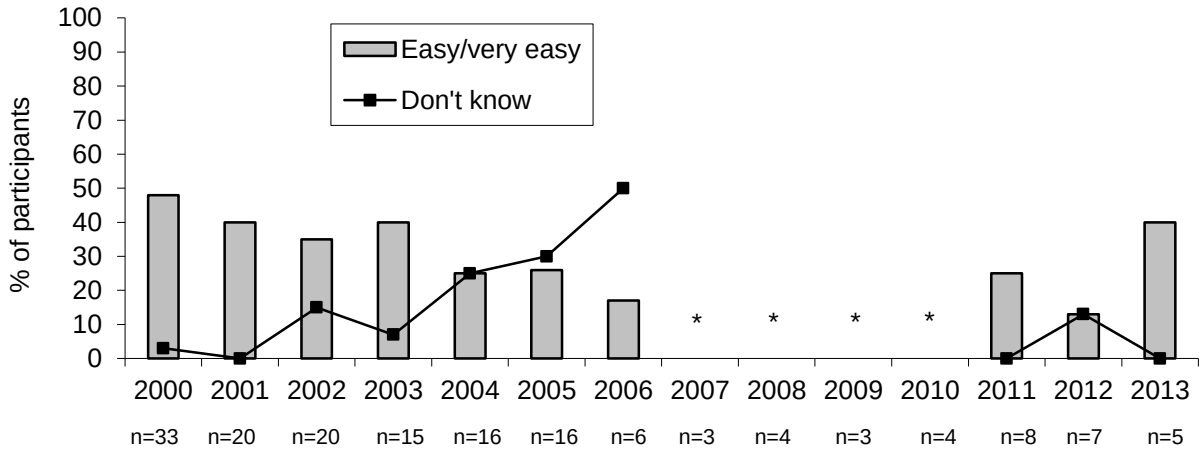
[*] Where multiple modes existed, median price was substituted

5.1.2 Availability

Of the five PWID participants that were able to comment on the availability of heroin, two noted it to be either 'easy' or 'very easy' to access, and three participants noted it was either 'difficult' or 'very difficult' to access heroin. This is largely similar to reports over the preceding two years, in which most of the very small number of participants able to comment reported it to be difficult to access.

Participants were also asked to comment on changes in availability over the six months preceding the interview. Participants were divided in their responses (n=5): three noted no change, and single participants stated it had either become easier to access or they did not know. KE working in law enforcement who were interviewed in 2013 commented that availability was consistently low in Tasmania. Examining trends in reported heroin availability over time in the local IDRS study (Figure 42), between 2000 and 2006, 25-49% of respondents considered heroin as 'easy' or 'very easy' to access. Between 2007 and 2010, very small numbers of participants (i.e. less than 5) were able to comment, so this data was not included when examining trends over time (Figure 42). Since 2011, between 13% and 40% of each sample reported that heroin was 'easy' or 'very easy' to access.

Figure 42: Participant reports of current heroin availability, of those who commented, 2000-2013



Source: IDRS PWID interviews

* The estimates in 2007-2010 were not included as they were based on an extremely small number of reports (i.e. <5 per annum)

Note: These estimates are based on an extremely small number of reports and should be interpreted with caution

Tasmania Police reported no heroin seizures in 2012/13[15]. In 2011/12, just two heroin seizures were reported, totalling 1gram. In 2004/05 and 2005/06 single seizures (0.2g and 2.8g respectively) of a drug believed to be heroin were reported Between 2000/01 - 2003/04[16] and 2006/07 - 2010/11, no such seizures were reported.

[15] Note: 2012/13 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

[16] In 2002/03, a joint operation involving the Australian Federal Police, Victoria Police and Tasmania Police resulted in the seizure of 125kg of heroin. No seizures related to this were recorded by Tasmania Police, however, eight seizures were analysed for purity by Tasmania Police in 2002/03.

When reviewing this information, it appears that the historical pattern of limited availability of heroin locally has continued. While some better-connected PWID may have reasonably stable access to the drug, the availability of heroin in the state remained low, as indicated by the low level of recent use of the drug by the PWID sample.

5.1.3 Purity

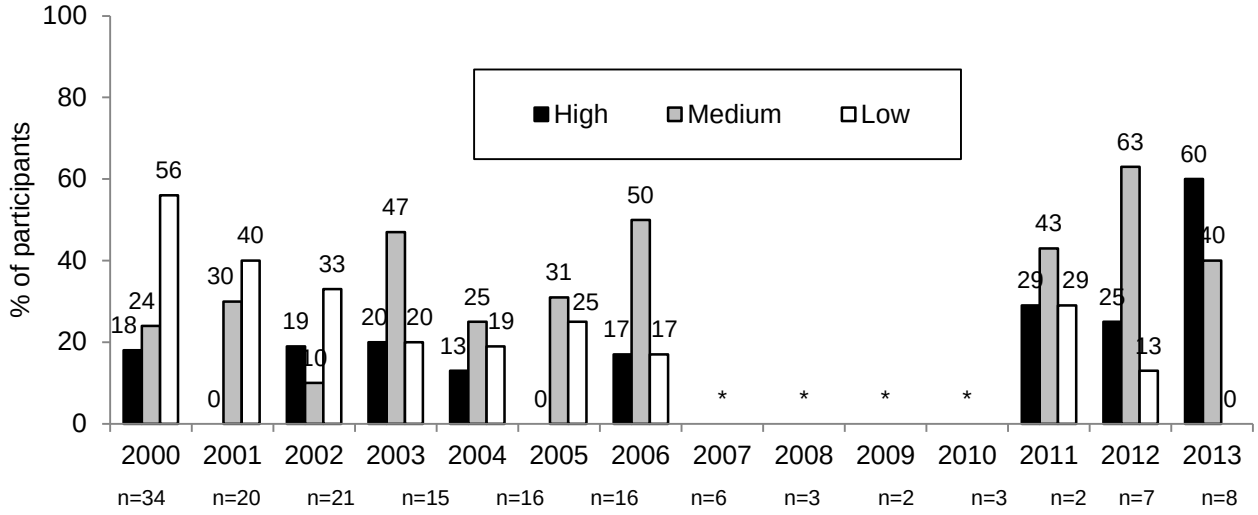
Participants were asked to comment on the subjective purity of heroin they had recently used. Of the small number of participants reporting on this, three noted purity to be 'high' and two participants reported it to be 'medium'. No KE in 2013 could comment on the purity of heroin used by the groups that they were familiar with. In previous surveys, PWID have commented that the relatively poor quality of heroin (at a relatively high cost) had led them to be generally wary of buying heroin for fear of being 'ripped off', and because of this, they preferred to purchase pharmaceutical opioids, as the exact quantity of drug purchased is clear.

Participants were also asked to comment on any perceived changes in heroin purity in the preceding six months. Just three participants commented: two noted no change, whilst a single participant noted increased purity

Examining subjective reports of heroin purity in the Tasmanian PWID cohorts over time, it is clear that, while these reports have fluctuated somewhat over the samples, since 2003 the majority of those able to comment on purity have considered the heroin available to them as 'medium' in purity (Figure 43).

Overall, the number of heroin seizures and analyses of these in Tasmania are infrequent, resulting in limited objective purity data available for comparison to these subjective reports. The Australian Crime Commission (ACC) reported a single seizure of less than two grams of heroin in the first quarter of 2000, made by the Australian Federal Police (AFP), which returned a measurement of 74.6% purity. In 2002, the ACC reported on the purity of eight seizures made by Tasmania Police and analysed during the third quarter of 2002, returning a median of 70.4% purity (range 69.6-71.0%). Seizures of heroin were made by Tasmania Police in 2004/05, 2005/06 and 2011/12; however, analyses of these seizures were not conducted.

Figure 43: Proportion of IDRS participants reporting on current heroin purity, 2000-2013



Source: IDRS PWID interviews

* The estimates in 2007-2010 were not included as they were based on an extremely small number of reports (i.e. <4 per annum)

5.1.4 Trends in heroin use

The proportion of local IDRS participants reporting recent use of heroin has remained low over several years, as has the median frequency of this use (three days in the preceding six months). Similarly, transactions related to heroin use noted in the Tasmanian NSP dataset have also remained very low. Amongst the small number of participants able to comment, availability of heroin in Tasmania remains poor, and participants reporting on subjective purity note that it is of a medium level. In addition, Tasmania Police reported no seizures related to heroin in the 2012/13 period. These indicators suggest that the low levels of heroin availability – and consequently use – that have been reported in previous Tasmanian IDRS studies, have continued into 2013.

The Australian Crime Commission (ACC) 2008/09 *Australian Illicit Drug Data Report* (2010) noted that there had been an increase in the number of embarkation countries for heroin importation into Australia: increasing from 11 in 1999/00 to 29 in 2008/09. In 2009/10, this remained unchanged, however in 2010/11 and 2011/12 this decreased to 20 and 19 respectively (ACC, 2012; ACC 2013). Afghanistan, Cambodia, Thailand and Vietnam were the primary embarkation points in terms of weight of detections of heroin importations, whereas in terms of number of detections, India, Singapore and Thailand were the primary points (ACC, 2013). The Australian Federal Police Australian Illicit Drug Data Centre conducts drug profiling on certain heroin seizures, which allows for identification of regions of origin. Between 2005 and 2008, the proportion of profiled heroin seizures from South-West Asia increased from 18% to 66%. This trend was subsequently reversed – with 48% in 2009 and 6% in 2010 – of profiled seizures of heroin coming from South-West Asia (ACC, 2012). In 2011, a dramatic increase was observed, with 61% of sampled heroin originating from South-west Asia, however, in the first six months of 2012, just 12% of sampled heroin originated from this region of Asia (ACC, 2013).

Internationally, Afghanistan and Pakistan remain the predominant producers of opium and heroin. In the Golden Triangle region of South-East Asia (Myanmar, Thailand and Laos), Myanmar is the primary cultivating country. Much of this cultivation and production is driven by Myanmar's food insecurity and ongoing poverty, as this industry provides an excellent source of revenue for some sectors of the community (UNODC, 2012).

With the high use of opioids and stable strong preference for heroin amongst the PWID sampled by the IDRS, both locally and nationally (Stafford & Burns, 2014), future trends in use of the drug continue to merit close attention, particularly as heroin markets nationally regain momentum.

5.2 Methamphetamine

Key Points:

Powder form

- The median price for 1 'point' (0.1g) of powder form methamphetamine was $50, and $300 for 1 gram. Participants considered that these prices had remained stable over the preceding six months;
- Availability of this form was considered to be either 'easy' or 'very easy', and that this situation had remained unchanged over the preceding six months;
- Most purchases occurred from a known dealer or friend, with these most commonly occurring in a dealer's or friend's home; and
- Participants were divided in relation to purity: one-third reported it to be low, one-third reported it to be medium, and one-fifth reported it as high.

Base/paste form

- The median price for 1 'point' (0.1g) of base/paste methamphetamine was $50, and $300 for 1 gram. Participants considered that these prices had remained stable over the preceding six months;
- Availability of this form was considered to be either 'easy' or 'very easy', and that this situation had remained unchanged over the preceding six months;
- Most purchases occurred from a friend, known dealer or street dealer, with these most commonly occurring in a friend's, street market, or dealer's home; and
- Nearly half of participants who commented reported purity as medium, with one-fifth respectively reporting it as low and high.

Crystal/ice

- The median price for 1 'point' (0.1g) of crystal methamphetamine was $100, higher than reported in previous local IDRS surveys ($50-60). Despite this, the majority of participants who commented considered that the price for this form had remained stable over the preceding six months;
- Participants were divided with regard to availability, with half respectively reporting access to be either difficult or easy. Most participants considered this situation to have remained unchanged over the preceding six months;
- Most purchases occurred from a known dealer or friend, with these most commonly occurring in a dealer's or friend's home or occurring via home delivery; and
- Purity was generally considered to be high, and over half of those who commented stated that this had not changed over the preceding six months.

5.2.1 Price

As discussed in Section 4.3, it is clear that there are three main 'forms' of non-pharmaceutical methamphetamine available in Hobart, each with separate pricing schedules (which traditionally become more apparent at larger purchase amounts), which will be discussed separately. However, across all forms of the drug, the majority (80%) of PWID that were able to comment on price considered that it had remained stable in the preceding six months.

Table 19: Participants' reports of price trends of methamphetamine in the past six months

	2013 IDRS N=107		
	Powder	**Base/Paste**	**Crystal**
Price Trend			
Able to respond (n)	59	15	36
Of those who responded:			
Increasing (%)	12	7	17
Stable (%)	85	80	72
Decreasing (%)	0	13	0
Fluctuating (%)	4	0	11

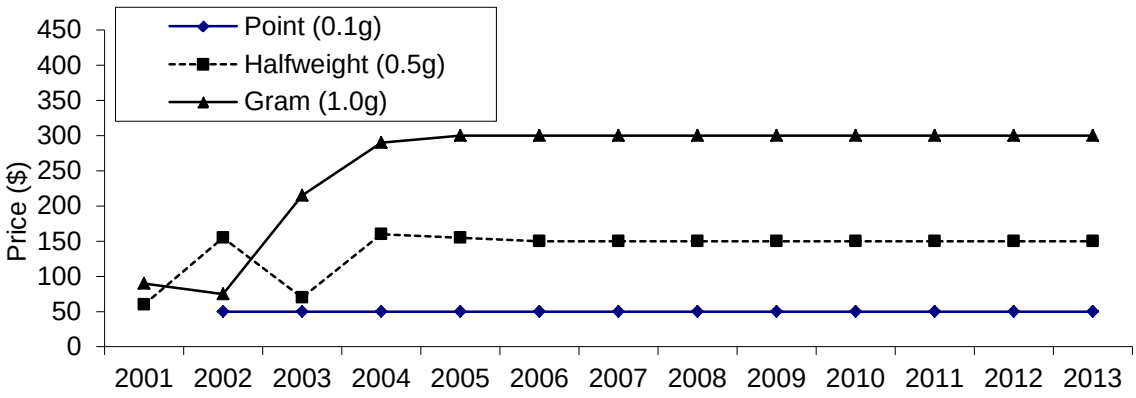
Source: IDRS PWID interviews

Methamphetamine Powder

PWID reported the median last purchase price of powder methamphetamine as $50 per 0.1g (modal price $50, range $40-100, n=35); $150 for 0.5g purchases (modal price $150, range $150-200, n=22); and $300 per gram (modal price $300, range $100-300, n=10). These prices were consistent with the prices reported in surveys since 2005 (Table 20, Figure 44). Comments from four KE (n=3 law enforcement, n=1 community worker) reflected these outcomes, with all noting a point cost $50. The clear majority (85%, n=50) of those consumers that were able to comment[17] reported stable prices for methamphetamine powder in the preceding six months, with only small minorities of PWID participants reporting either perceived recent increases (12%, n=7) or fluctuating prices (4%, n=2) (Table 19).

Between 2012 and 2013, the upper price range for 'points' increased (from $50 in 2012 to $100 in 2013) (Table 20). The price range of prices paid for half-gram purchases tightened from $100-300 in 2012 to $150-200 in 2013, as did the price range for gram purchases ($180-400 in 2012 to $100-300 in 2013) (Table 20).

Figure 44: Median prices of powder methamphetamine estimated from PWID purchases, 2001-2013



Source: IDRS PWID interviews

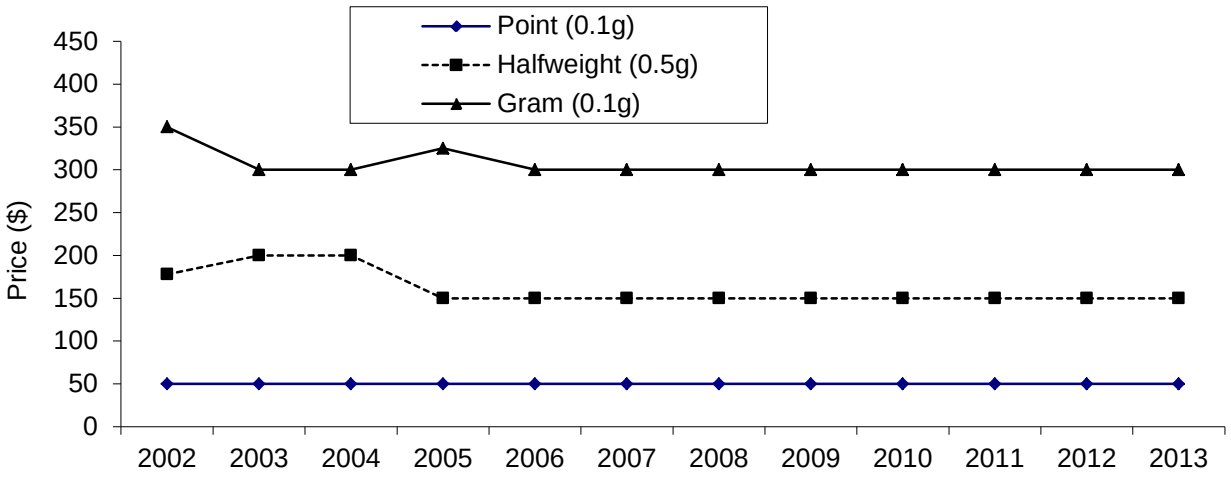
[17] Note that these figures do not include those that reported 'don't know' in response to this question, for consistency with national IDRS data.

Base/paste methamphetamine

PWID reported the median purchase price of 'base/paste' methamphetamine as $50 per 'point' (0.1g: modal price $50, range $30-100, n=9), $150 per 0.5g (modal price $150, range $120-150, n=5), and $300 per gram (n=1) (Table 20). These prices have remained stable since the 2006 IDRS survey (Figure 45). Similar to trends for powder methamphetamine, 80% of consumers (n=12) able to comment felt that prices for 'base/paste' methamphetamine had remained stable in the preceding six months (Table 19). KE interviewed in 2013 did not comment on the price of 'base/paste' methamphetamine.

Between 2012 and 2013, the range of prices paid for 'points' widened from $40-70 to $30-100. For half-gram purchases, the high end of the price range tightened from $200 in 2012 to $150 in 2013. In 2012, 18 participants commented on the last purchase price for one gram of base, however, in 2013, just one participant reported this (Table 20).

Figure 45: Median prices of base/paste methamphetamine estimated from PWID purchases, 2002-2013



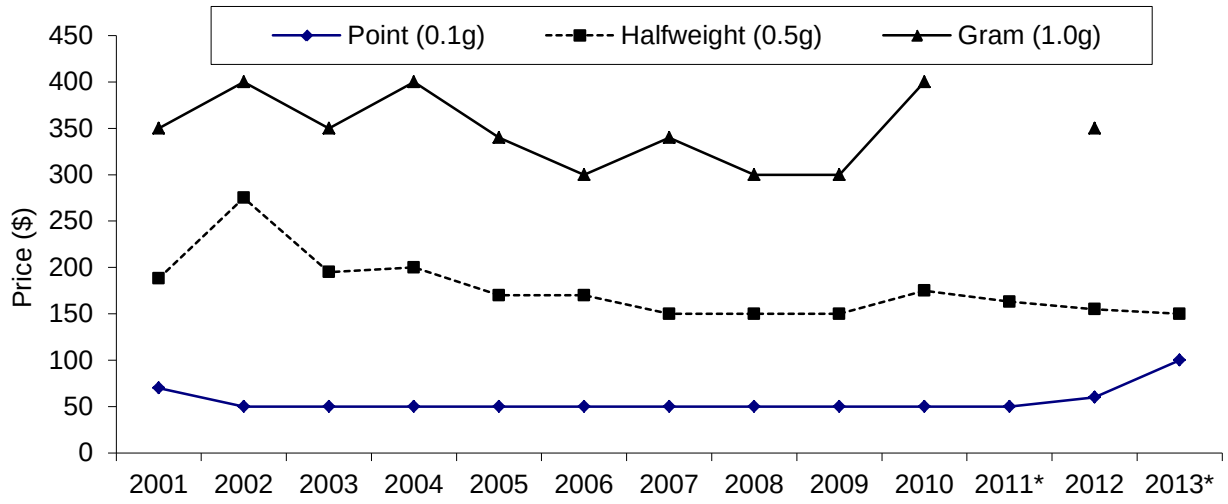
Source: IDRS PWID interviews

Crystal Methamphetamine

The median purchase price consumers reported last paying for the higher-purity crystal methamphetamine was $100 per 0.1g (modal price $100, range $50-100, n=30). This marks an increase from previous years: for all years the modal and median price estimates have been $50 (with the exception of 2012: median price $60). This was reflected in KE reports, with two law enforcement workers reporting one point as costing $100, commenting that crystal methamphetamine achieves a higher price due to purity. The median price estimate in 2013 for 0.5g was $150 (modal price $150, range $150-300, n=8), and there were no reports for one gram purchases (Table 20). Despite this increase in median and modal price for point purchase, the majority of participants who commented reported prices had remained stable in the preceding six months (72%, n=26) (Table 19).

Examining overall trends in reported purchase prices for crystal methamphetamine, there have been shifts in the range of prices that participants reported paying. The low-range of price paid for half-gram purchases of crystal increased slightly ($40 in 2012 to $50 in 2013) and for half-gram purchases the high-range increased from $200 to $300. No participants commented on the price for gram purchases in 2013 (Table 20).

Figure 46: Median prices of crystal methamphetamine/ ice estimated from PWID purchases, 2001-2013



Source: IDRS PWID interviews

* In 2011 and 2013, no participants reported on price for 1gram purchases of crystal methamphetamine

Note: 'Eightballs' were not included as the number of participants reporting purchasing this amount was insufficient (n<3 each year)

Pharmaceutical Stimulants

Twelve participants could confidently comment on the last purchase price for 5mg dexamphetamine tablets, reporting a median price of $6 (modal price $5, range $3-10). Eleven participants commented on last purchase price for methylphenidate preparations, reporting a median price of $8 for a 10mg tablet (modal price $8, range $5-15) (Table 20). The modal price for 10mg methylphenidate has been around $5 in all local IDRS surveys, with the exception of 2009 and 2010 ($10) and 2013 ($8). Three-fifths of those consumers able to report on price changes for pharmaceutical stimulants perceived no changes in the preceding six months (60%, n=12). However, two-fifths of participants perceived an increase in the price over this period (40%, n=8).

General Price Trends

Tasmania Police district Drug Investigation Services gather regular information regarding current prices of illicit drugs. Since July 1999, this has been provided to the authors through the Tasmanian Police State Intelligence Services and, prior to this, such information has been attained through the Australian Bureau of Criminal Intelligence (ABCI, now the ACC). During the 2011/12 financial year, Tasmania Police reported methamphetamine (non-crystal) prices as $50-70 per 'point' (0.1 g) and $300 per gram (Table 21). The price for crystal methamphetamine was reported to be $50-100 for a point. Data for the 2012/13 reporting period was unavailable at the time of publication.

Table 20: Most common amounts and prices of methamphetamine purchased by PWID, 2004-2013

Descriptor*	2004 Survey Modal Price *(range in parentheses)*	*n*	2005 Survey Modal Price *(range in parentheses)*	*n*	2006 Survey Modal Price *(range in parentheses)*	*n*	2007 Survey Modal Price *(range in parentheses)*	*n*	2008 Survey Modal Price *(range in parentheses)*	*n*
Crystal methamphetamine										
'point' or packet (0.1 g)	$50 *($30-80)*	*34*	$50 *($50-80)*	*24*	$50 *($40-80)*	*13*	$50*($20-80)*	*17*	$50 *($40-50)*	*14*
half-gram (0.5 g)	$200 *($180-250)*	*6*	$150 *($120-275)*	*13*	$150 *($120-300)*	*25*	$150† *($120-225)*	*12*	$150 *($150-250)*	*10*
gram (1.0 g)	$400† *($280-500)*	*7*	$340† *($250-400)*	*6*	$300 *($300-480)*	*7*	$340†*($300-380)*	*2*	$300 *($190-450)*	*5*
Methamphetamine base/paste										
'point' or packet (0.1 g)	$50 *($35-80)*	*45*	$50 *($30-80)*	*56*	$50 *($20-70)*	*23*	$50*($30-50)*	*30*	$50 *($20-100)*	*16*
half-gram (0.5 g)	$200 *($100-250)*	*21*	$150 *($150-400)*	*38*	$150 *($140-200)*	*25*	$150*($120-200)*	*23*	$150 *($150)*	*4*
gram (1.0 g)	$300 *($200-350)*	*7*	$300 *($150-400)*	*18*	$300 *($250-300)*	*11*	$300*($250-300)*	*3*	$300 *($300)*	*3*
Methamphetamine powder										
'point' or packet (0.1 g)	$50 *($40-50)*	*34*	$50 *($30-50)*	*54*	$50 *($30-50)*	*20*	$50 *($40-50)*	*34*	$50 *($50)*	*34*
half-gram (0.5 g)	$160† *($30-250)*	*16*	$150 *($100-200)*	*36*	$150 *($80-200)*	*26*	$150*($150-200)*	*29*	$150 *($75-200)*	*28*
gram (0.8 g)	$300 *($50-350)*	*10*	$300† *($250-350)*	*15*	$300 *($250-300)*	*8*	$300*($270-300)*	*3*	$300 *($250-300)*	*9*
Pharmaceutical stimulants										
dexamphetamine tablet	$5 *($0-15)*	*52*	$4† *($0.6-9)*	*28*	$5 *($2-10)*	*17*	$5 *($0.5-45)*	*20*	$5 *($1.5-10)*	*21*
(5 mg)	$5 *($0-10)*	*12*	$5 *($2-15)*	*16*	$5 *($2-30)*	*12*	$5 *($2.5-13)*	*10*	$5 *($5-15)*	*13*
methylphenidate tablet (10 mg)										

Source: IDRS PWID interviews

***** Common quantities and weight range for each purchase unit in parentheses

† Median price was substituted where no single mode was reported

Table 20: Most common amounts and prices of methamphetamine purchased by PWID, 2004-2013 *(continued)*

Descriptor*	2009 Survey Modal Price *(range in parentheses)*	*n*	2010 Survey Modal Price *(range in parentheses)*	*n*	2011 Survey Modal Price *(range in parentheses)*	*n*	2012 Survey Modal Price *(range in parentheses)*	*n*	2013 Survey Modal Price *(range in parentheses)*	*n*
Crystal methamphetamine										
'point' or packet (0.1 g)	$50 *($35-100)*	*20*	$50 *($50-80)*	*5*	$50 *($50-100)*	*15*	$50 *($40-100)*	*21*	$100 *($50-100)*	*30*
half-gram (0.5 g)	$150 *($150-200)*	*7*	$175† *($100-250)*	*7*	$150 *($150-250)*	*4*	$150 *($150-200)*	*8*	$150 *($150-300)*	*8*
gram (1.0 g)	$300 *($250-500)*	*4*	$400† *($250-500)*	*3*	-	*0*	$400 *($190-800)*	*12*	-	*12*
Methamphetamine base/paste										
'point' or packet (0.1 g)	$50 *($40-80)*	*42*	$50 *($40-50)*	*21*	$50 *($40-70)*	*11*	$50 *($40-70)*	*16*	$50 *($30-100)*	*9*
half-gram (0.5 g)	$150 *($100-180)*	*26*	$150 *($100-250)*	*15*	$150 *($130-200)*	*16*	$150 *($120-200)*	*24*	$150 *($120-150)*	*5*
gram (1.0 g)	$300 *($250-350)*	*5*	$300 *($250-400)*	*6*	$300 *($180-400)*	*7*	$300 *($250-350)*	*18*	$300 *($300)*	*1*
Methamphetamine powder										
'point' or packet (0.1 g)	$50 *($40-50)*	*38*	$50 *($30-70)*	*31*	$50 *($30-70)*	*21*	$50 *($30-50)*	*31*	$50 *($40-100)*	*35*
half-gram (0.5 g)	$150 *($100-300)*	*37*	$150 *($100-200)*	*35*	$150 *($150-200)*	*23*	$150 *($100-300)*	*48*	$150 *($150-200)*	*22*
gram (0.8 g)	$300 *($250-320)*	*7*	$300 *($180-350)*	*18*	$300 *($200-300)*	*12*	$300 *($180-400)*	*25*	$300 *($100-300)*	*10*
Pharmaceutical stimulants										
dexamphetamine (5mg)	$5 *($4-10)*	*25*	$5 *($4-7)*	*21*	$5 *($2-10)*	*19*	$10 *($2.5-15)*	*23*	$5 *($3-10)*	*12*
methylphenidate (10mg)	$10 *($5-10)*	*31*	$10 *($3-10)*	*8*	$10 *($2.5-10)*	*16*	$5.50† *($2.5-10)*	*8*	$8 *($5-15)*	*11*

Source: IDRS PWID interviews

* Common quantities and weight range for each purchase unit in parentheses

† Median price was substituted where no single mode was reported

Table 21: Methamphetamine prices in Tasmania reported by Tasmania Police Drug Investigation Services, 2006/07 – 2011/12

Non-crystal form	Point (~0.1g)	Full gram (1.0g)	Ounce (28.0g)
2006/07	$50	$270-380	$4,000-5,000
2007/08	$30-50	$200-300	$5,000-8,000
2008/09	$50	$300	-
2009/10	-	-	-
2010/11	$50-80	$300-400	$4,000-5,000
2011/12	**$50-70**	**$300**	**$4,000-5,000**
Crystal form	**Point (~0.1g)**	**Full gram (1.0g)**	**Ounce (28.0g)**
2006/07	-	-	-
2007/08	-	-	-
2008/09	$50	$300	-
2009/10	-	-	-
2010/11	$50	$400	-
2011/12	**$50-100**	**-**	**-**

Source: Australian Crime Commission (2007, 2008, 2009, 2010, 2011, 2012, 2013)
Note: Data for 2012/13 financial year were not available at the time of publication; prior to 2006/07 amphetamine/methamphetamine (all forms) were reported in one category

5.2.2 Availability

Across all methamphetamine 'forms', most PWID reporting on availability considered that the drug was 'easy' (46%) or 'very easy' (30%) to obtain, and that availability had remained stable (79%) in the previous six months. Trends for each form of the drug are discussed separately below.

Methamphetamine Powder

Most PWID sampled, who could comment on the availability of powder form methamphetamine, thought that it was 'easy' or 'very easy' to obtain (83%, n=49: 'easy' 53%; 'very easy' 31%) (Figure 49, Table 22). The clear majority of PWID participants also perceived the availability of powder methamphetamine to have remained stable in the preceding six months (83%, n=48), with a small minority considering that it had decreased (12%, n=7) in availability in this time.

Base/Paste Methamphetamine

In regards to 'base/paste' methamphetamine, the majority of participants (88%) who commented reported it was either 'easy' (57%, n=8) or 'very easy' (29%, n=4) for them to obtain in the preceding six months. More than four-fifths of this group perceived this level of availability to have remained stable in the six months prior to interview (85%, n=11). No KE commented on availability of this form of methamphetamine.

Crystalline Methamphetamine

In regards to crystal methamphetamine, the majority of participants (64%) who commented reported it was either 'easy' (33%, n=13) or 'very easy' (31%, n=12) for them to obtain in the preceding six months; although one-third (36%) did state that it was difficult to access. The majority of participants able to comment (72%, n=26) perceived availability to have remained stable in the six months prior to interview. Three KE (n=2 working in alcohol and drug treatment, n=1 community worker) reported increased availability of crystalline methamphetamine, with one KE noting that this increase was most evident in the November-December period, 2012. One KE working in alcohol and drug

treatment reported observing a shift in the predominant form used, with clients making the transition from predominant power to predominant crystalline use.

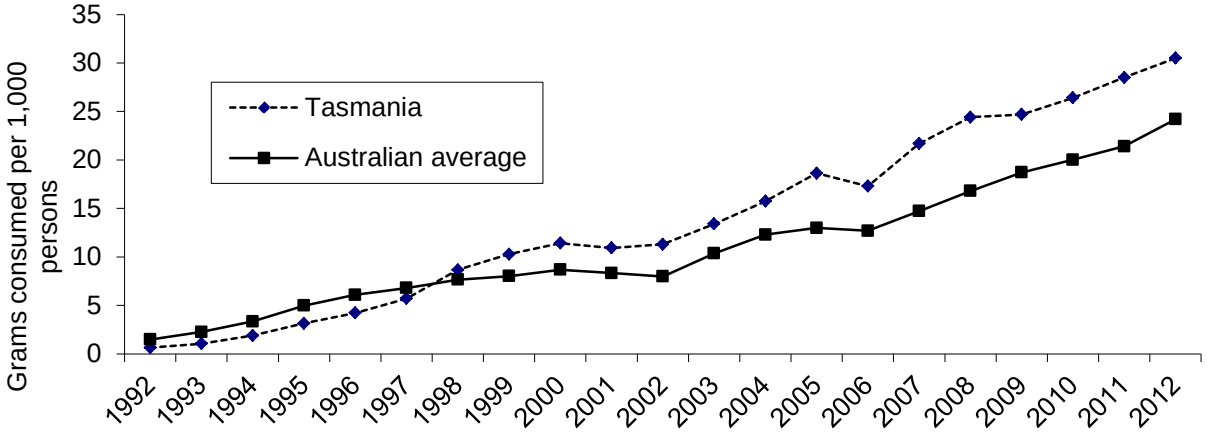
Pharmaceutical Stimulants

Participants who commented on availability of pharmaceutical stimulants were divided in their responses: 48% considered these as either 'easy' or 'very easy' to access ('easy' 29%; 'very easy' 19%), and 52% reported these as 'difficult' or 'very difficult' to obtain in the preceding six months ('difficult 48%; 'very difficult' 5%). Two-thirds of participants reported availability over the preceding six months to have remained stable (67%, n=14), and almost one-third noted that availability had decreased (29%, n=6).

Tasmanian prescription rates of methylphenidate and dexamphetamine (Figures 47 and 48) provide some context for these reports. Over the past decade, prescriptions of these stimulants have steadily grown nationally, most markedly for methylphenidate. Tasmanian consumption rates of methylphenidate were consistently below that of the Australian average until 1998, and rose to 128% of the national average in 1999, maintaining this level over time (being 126% of the national level in 2012), even in the context of an increasing national prescription rate.

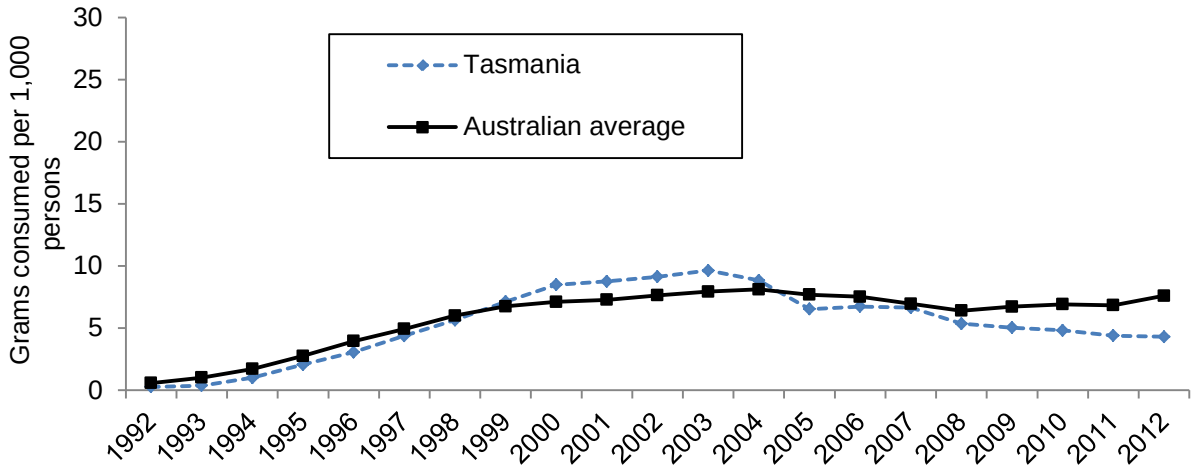
Tasmanian consumption rates of dexamphetamine were comparable to that of the national level between 1997 and 1999, rising to 120% of that of the steadily increasing Australian average between 2000 and 2003. However, in the first decline in prescription rates seen in these data, rates of dexamphetamine prescription fell to a level comparable to the national rate in 2004. In 2005, this decline in the Tasmanian consumption rates of dexamphetamine continued, falling to 85% of the Australian average. Between 2006 and 2008, the rates of prescriptions in Tasmania ranged between 84% and 96% of the national level, whereas since 2009 – in the face of small increases in the national rate of prescription and small decreases in the Tasmanian rate – the Tasmanian rate has decreased to 57% of the national rate.

Figure 47: Consumption of methylphenidate (Ritalin) per 1,000 persons, 1992-2012



Source: National Drug System (formerly DRUMS), Pharmaceutical Services, Department of Health and Human Services

Figure 48: Consumption of dexamphetamine per 1,000 persons, 1992-2012

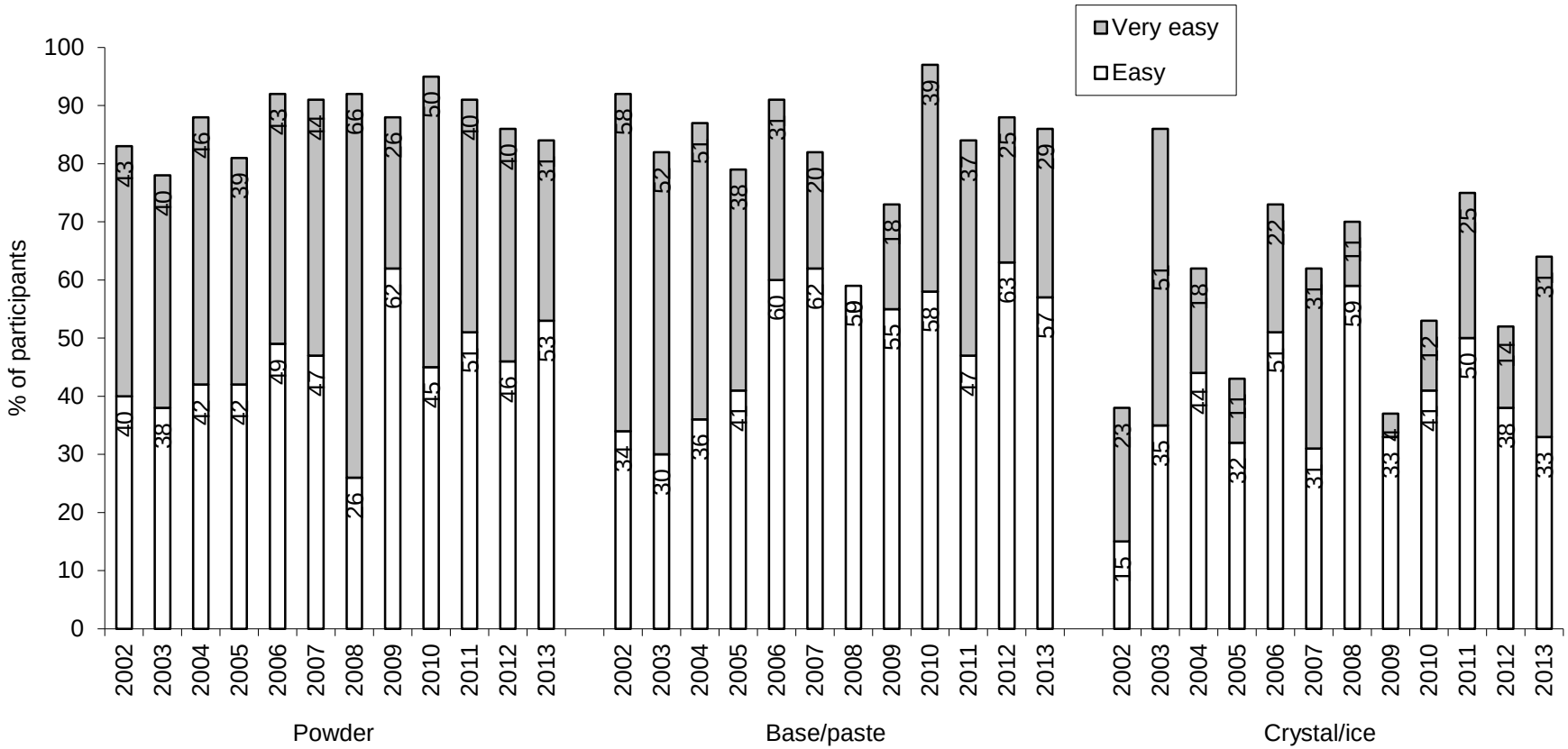


Source: National Drug System (formerly DRUMS), Pharmaceutical Services, Department of Health and Human Services

General Availability Trends

As can be seen in Figure 49, PWID reports of availability of powder methamphetamine have, overall, remained relatively stable between 2002 and 2013. In 2008, the proportion of participants reporting availability of powder to be 'very easy' increased from around two-fifths of each cohort in previous years to two-thirds. This change was not sustained in 2009, with 26% of those commenting reporting availability to be 'very easy'. Between 2010 and 2012, 40-50% of each sample reported access to be 'very easy', however, in 2013 this decreased slightly to 31% (p=0.3). Availability of base/paste methamphetamine also appears to have fluctuated across the past twelve surveys. Overall, base/paste had been reported to be easily accessed by consumers between 2002 and 2007; however, access decreased in 2008. Access to this form increased in 2009 and has remained relatively stable since this time. Availability reports for crystalline methamphetamine have been variable between 2002 and 2013, with lower levels of availability reported in 2009, 2010 and 2012 than were reported between 2006 and 2008 and in 2011 and 2013.

Figure 49: PWID reports of ease of availability of different methamphetamine forms, amongst those who commented, 2002-2013



Source: IDRS PWID interviews

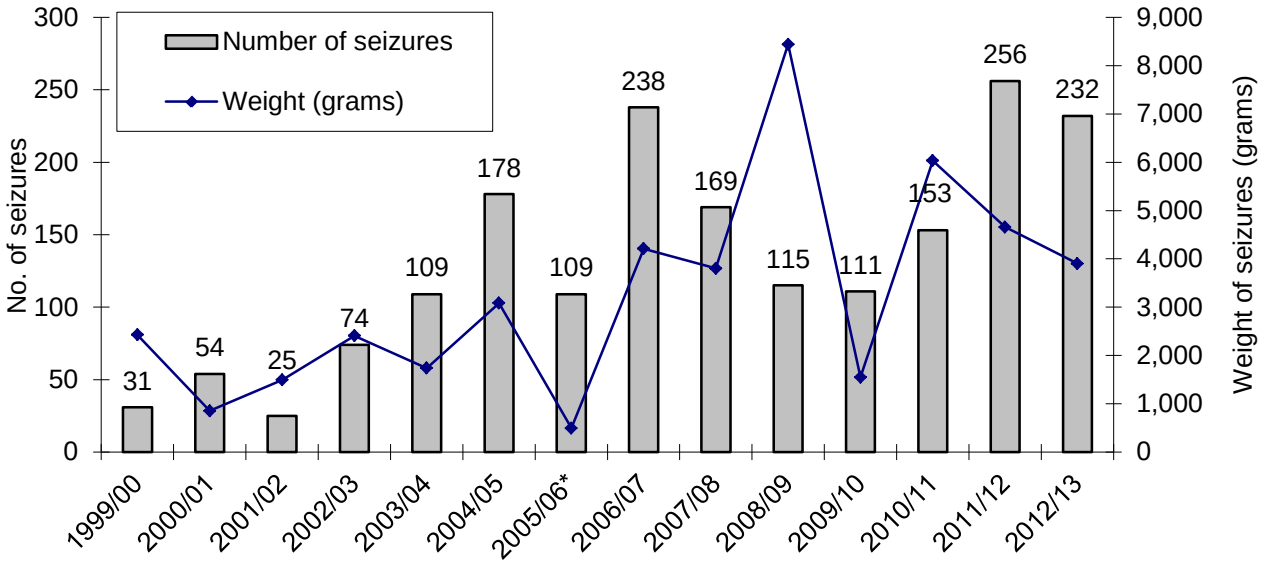
Table 22: Participants' reports of methamphetamine availability in the past six months, 2012-2013

	Powder		Base		Crystal/Ice	
	2012 (N=106)	2013 (N=107)	2012 (N=106)	2013 (N=107)	2012 (N=106)	2013 (N=107)
Current availability						
Able to respond (%)	72	59	40	14	37	39
Of those who responded:						
Very easy (%)	40	31	25	29	14	31
Easy (%)	46	53	63	57	38	33
Difficult (%)	14	17	13	7	41	36
Very difficult (%)	0	0	0	7	8	0
Availability change over the last six months						
Able to respond (%)	71	58	40	13	35	36
Of those who responded:						
More difficult (%)	9	12	10	8	20	17
Stable (%)	87	83	77	85	74	72
Easier (%)	3	5	8	8	6	11
Fluctuates (%)	1	0	5	0	0	3

Source: IDRS PWID interviews

Tasmania Police seizures (Figure 50) of drugs suspected to be methamphetamine have varied somewhat in recent years. There were notable increases in both the weight and number of seizures between 2001/02 and 2006/07 (seizures for 2005/06 were only reported to ACC for part of the financial year). The number of methamphetamine seizures decreased between 2006/07 and 2009/10 with a large peak in the weight of seizures observed in 2008/09. Since 2009/10 the number of seizures has increased or remained stable, with a decline in the total weight of seizures observed over the past two years. In addition to the 232 seizures coded in grams in 2012/13 (Figure 50), there were eight seizures totalling 332 tablets, two seizures totalling 23 capsules and two seizures totalling 5 units of powder.

Figure 50: Seizures of methamphetamine by Tasmania Police, 1999/00-2012/13



Source: Australian Crime Commission, State Intelligence Service, Tasmania Police
* Only part-year data were reported in 2005/06
Note: 2012/13 data were provided by Tasmania Police State Intelligence Service, include only seizures weighed in grams, and are preliminary and subject to revision. In 2012/13 there were an additional 12 seizures coded in units other than grams. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules

5.2.3 Sources of methamphetamine purchases

Powder methamphetamine

Participants reported that they last purchased powder in the preceding six months through known dealers (48%) and friends (39%) (Table 23). The venues most commonly reported to be used for the last purchase of methamphetamine powder were a dealer's home (43%) or a friend's home (30%).

Base methamphetamine

'Base/paste' methamphetamine was most commonly purchased from a friend (56%), and less commonly from a known dealer or a street dealer (19% respectively). Participants reported the last purchase venue to be a friend's home (38%), a street market (25%) or a dealer's home (19%) (Table 23).

Crystal methamphetamine

Crystal methamphetamine was most commonly purchased through friends (47%) and known dealers (40%) (Table 23). The most commonly cited venues used for purchases were a dealer's home and a friend's home (33% respectively), followed by home delivery (21%).

Table 23: Source of last purchase of methamphetamine in the preceding six months, 2013

	Powder n=61 %	Base/Paste n=16 %	Crystal n=43 %
Source person			
Known dealers	48	19	40
Friends	39	56	47
Acquaintances	3	6	7
Street dealer	10	19	7
Source venue			
Dealer's home	43	19	33
Agreed public location	8	0	7
Home delivery	12	13	21
Friend's home	30	38	33
Street market	7	25	2

Source: IDRS PWID interviews

5.2.4 Purity

PWID participants that had recently used the various methamphetamine 'forms' were asked to rate their subjective purity. When asked to describe the purity of powder methamphetamine, one-third of the participants that were able to comment considered this as 'low' or 'medium' in subjective purity in the preceding six months (34%, n=20; 31% n=18 respectively) (Figure 51). Participants were divided with regard to perceived changes in subjective purity over the preceding six months: half reported purity to have remained stable (49%, n=27), one-quarter noted purity has decreased (25%, n=14) and one-fifth stated it had fluctuated (20%, n=11).

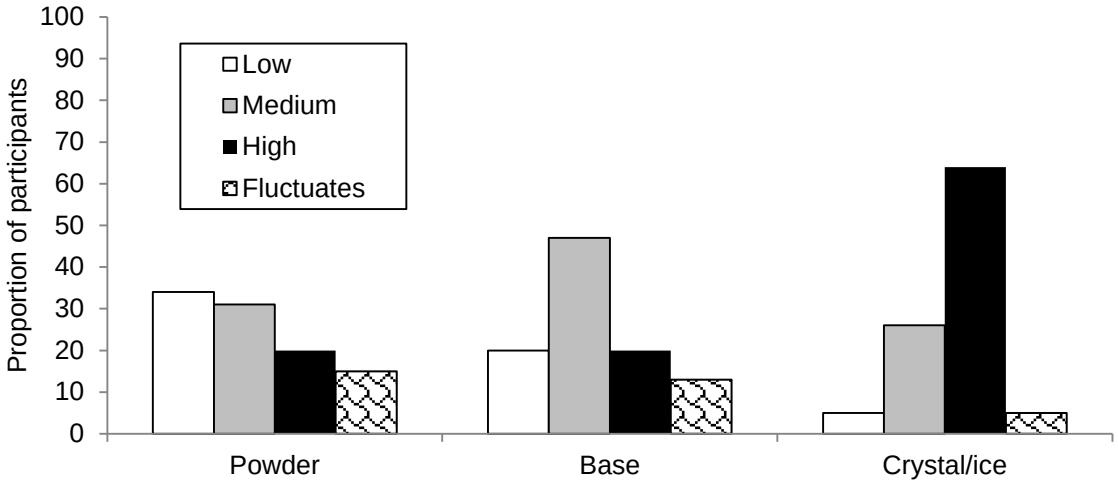
In the 2008 and 2009 local IDRS surveys, several PWID participants reported a dramatic decrease in the purity of speed, and that this had occurred as a result of the incarceration of "*the main cook"*. This trend has been reversed since then, with increasing proportions of participants reporting purity to be high (2% in 2009 v. 20% in 2013: $\chi^2(1_{n=117})=8.46$, p=0.003). Four KE noted that purity of speed was poor, and one KE reported fluctuating levels of purity over the preceding six to 12 months.

Over the last three surveys, several PWID noted the presence of crystals in powder methamphetamine. The presence of crystals in powder may represent higher purity methamphetamine, or alternatively it may be explained by the use of an adulterant (methylsulfonylmethane, MSM) in the late stages of production. This introduction of MSM forms crystals, giving the powder a crystalline appearance (Fetherston & Lenton, 2006).

Regarding subjective purity of base/paste methamphetamine, almost half of the small number of participants who were able to comment (n=15) noted purity to be 'medium' (47%, n=7), and one-fifth noted it to be either 'low' or high' (20%, n=3 respectively). Most participants who commented on the stability of subjective purity levels over the preceding six months noted that this had remained largely unchanged (53%, n=8), and one-quarter felt purity had declined (27%, n=4). No KE were able to comment on purity of 'base/paste' methamphetamine.

Two-thirds of the participants who commented on purity of crystal methamphetamine reported this to be 'high' (64%, n=25), and one-quarter reported it to be 'medium' (26%, n=10). Just over half of participants who commented reported that purity had remained stable over the preceding six months (56%, n=19), and a quarter noted a decline in purity (24%, n=8). Three KE across law enforcement, entertainment, and community sectors reported high quality of crystalline methamphetamine at present, with one NSP outlet worker reporting the opposite.

Figure 51: Participant perceptions of methamphetamine purity, among those who commented, 2013



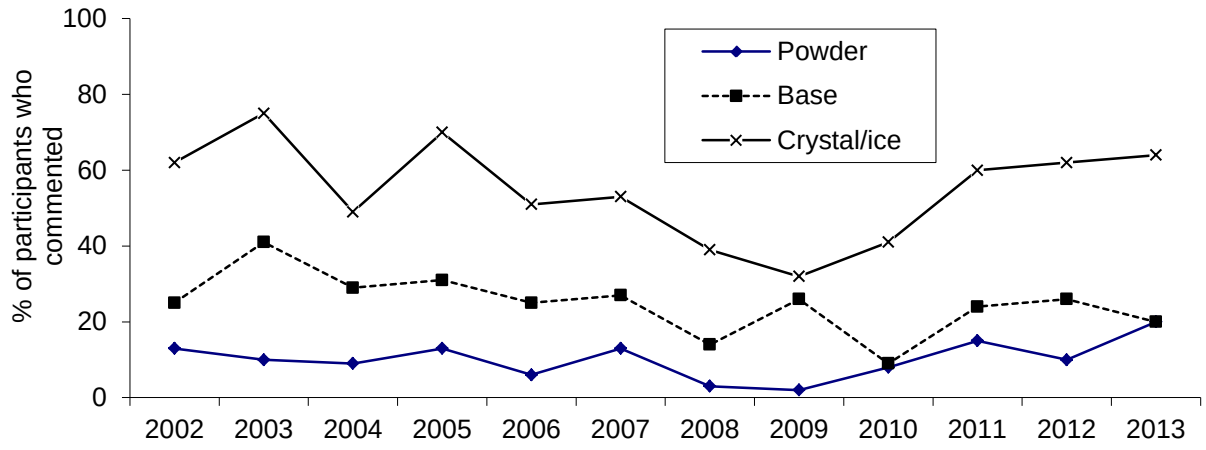
Source: IDRS PWID interviews

Figure 52 displays the proportion of those reporting on purity levels of the different 'forms' of methamphetamine in the past twelve years of the Tasmanian IDRS studies. This figure suggests that there have been small changes in overall reports of subjective purity of powder form methamphetamine in this time. Between 2002 and 2007, 9-13% of each sample reported purity to be 'high', with the exception of 2006 (6%). In the subsequent two surveys, reports of 'high' purity of powder form decreased to 3% in 2008 and 2% in 2009. According to several participants and KE, this low purity was due to one of the more skilled Tasmanian methamphetamine *"cooks"* being incarcerated during this period. Since 2010, subjective reports of 'high' purity have increased (ranging between 8% and 20%).

The reported purity of base/paste methamphetamine has been more variable. In 2002, one-quarter of PWID participants reported perceived high levels of purity; this increased to 41% in 2003, and trended downwards to 9% in 2010 (with the exception of 2009). Since 2011, this rate has been slightly higher (2013: 20%).

Consumer reports on subjective purity of crystal methamphetamine have varied in recent surveys: the vast majority of participants considered this form as 'high' in purity in 2003 (75%) – the year when local availability of the drug was at its highest; in 2004 the proportion of consumers considering this form of the drug as high in subjective purity dropped to 49%, a year when availability had markedly reduced as well (see Section 5.2.2). In 2005, indicators pointed to decreased availability again; however, the proportion of participants reporting purity of crystal methamphetamine as 'high' had returned to similar levels reported in 2003. Between 2006 and 2010, both availability (Figure 49) and the proportions of the samples considering crystal methamphetamine as high in purity declined (Figure 52). Since 2011, the majority of participants noted purity of this form to be 'high' (ranging between 60% and 64%), despite some fluctuations regarding availability over this period.

Figure 52: Proportion of participants reporting speed powder, base and crystal/ice purity as 'high', amongst those who commented, 2002-2013



Source: IDRS PWID interviews
Note: Data on all three forms commenced in 2002

Data for purity of methamphetamine received at police analytical laboratories are presented for the 1997/98 to 2011/12 financial years (Tables 24 and 25; data for 2012/13 were not available at the time of publication). All amphetamine-type stimulants seized in Tasmania and tested for purity during 2003/04 and 2011/12 were methamphetamine rather than amphetamine. Drugs seized by Tasmania Police are not routinely tested for composition and purity, hence, purity data for drug seizures in the state are minimal. This very restricted sample size renders it difficult to make clear inferences about trends in purity of methamphetamine. Notably, during 2004/05, purity was reported to be 32%, and this coincided with increased use of methamphetamine in the IDRS PWID cohort, and was in line with PWID reports of 'medium' purity levels overall for the two most commonly used forms of the drug in the 2005 IDRS study. This is tempered, however, by the analysis of a very small number of seizures in 2004/05 (n=10), and the fact that they were all of small seizures of the drug (two grams or less), which have, in previous years, been higher in purity than seizures of larger amounts (purity range of 2-81% for seizures of two grams or less, and 4-22% for larger seizures analysed in 2003/04). In 2011/12, 23 seizures of methamphetamine were analysed – all except two of which were greater than 2 grams – returning an overall median purity of 7.9%.

Table 24 also indicates substantial variability in the purity range of analysed seizures, with some particularly high purity seizures reported over the 2001/02-2003/04 period and in 2011/12 (up to 80.5%). These are unusual by national standards (ACC, 2005), and may reflect the selection of particularly unusual seizures of the drug for analysis by police[18].

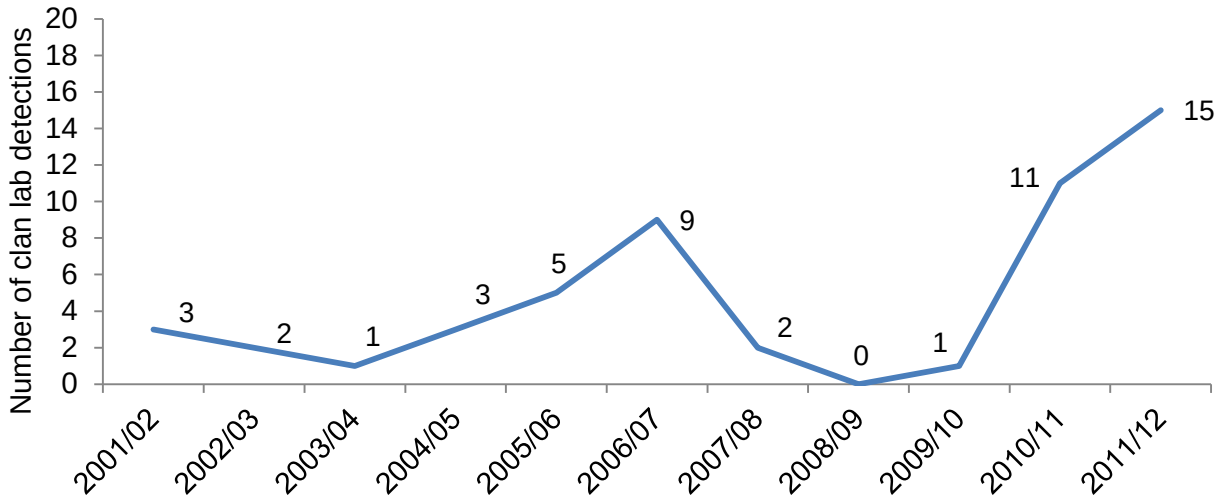
A law enforcement KE in the 2008 study noted Tasmania Police targeted amphetamines and amphetamine-related offences in early 2007, resulting in a peak in seizures and arrests for serious offences. Overall, however, the number of seizures over recent years has remained relatively stable. In the current study and in previous years, Tasmania Police have reported that the majority of methamphetamine in the Tasmanian illicit drug market is imported into the state, most commonly by members of particular criminal groups, via post, or domestic sea or air terminals. In previous studies, law enforcement officials have noted cases of *"smaller scale meth cooking"* in Tasmania. Law enforcement KE in the current study noted increased *"stand-over"* tactics in the

[18]Anecdotal reports from Tasmania Police in previous IDRS surveys have suggested that these particularly high-purity samples may have been seizures of small amounts of crystal methamphetamine.

methamphetamine market in Tasmania, with anecdotal reports of groups going into *"meth cook's houses, taking their drugs, and then selling them or acquiring for personal use"*.

These reports were supported by data regarding interceptions of illegal methamphetamine production laboratories (also called 'clan' (clandestine) or 'box' labs) (Figure 53). Between 2003/04 and 2006/07, the number of clandestine laboratory detection increased from one to nine. In the subsequent three financial years, the number of detections declined to between zero and two. In the last three reporting periods, this has increased to 15 laboratories detected in 2011/12 (data for 2012/13 were not available at the time of publication). From a national perspective, detection of clandestine labs increased from 252 in 2001/02 to 809 in 2011/12 (ACC, 2013). In 2011/12, the Australian Crime Commission Illicit Drug Data Report included data on the size of these clandestine laboratories for the first time. Whilst data specific to Tasmania is not available, the report states that nationally, 92% of these detected labs were small-scale.

Figure 53: Number of clandestine laboratory detections in Tasmania, 2001/02-2011/12



Source: Australian Bureau of Criminal Intelligence; Australian Crime Commission.

These multiple pathways of access and production sources may underlie the fluctuating nature of the forms and potency of methamphetamine in the local illicit drug market. In previous IDRS studies, consumers have reported that the presentation (colour and consistency as well as potency) of the form of methamphetamine available from their regular provider would fluctuate regularly, with some providers having two or more different presentations of the drug available for sale at one time.

Table 24: Purity of seizures of methamphetamine made by Tasmania Police received for laboratory testing, 1997/98-2011/12

	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
≤2g															
n	*4*	*31*	*9*	*10*	*20*	*30*	*9*	*10*	*6*	*15*	*7*	*11*	*-*	*3*	*2*
Avg % purity	5 %	5 %	7.4 %	10.4%	26.6%	12.7%	25.6%	32.3%	15%	24.6%	7.6%	12.6%		33.6%	5.2%
>2g															
n	*2*	*8*	*11*	*14*	*28*	*13*	*14*	*-*	*3*	*23*	*32*	*9*	*5*	*50*	*21*
Avg % purity	7 %	21 %	6.6 %	3.6 %	19.2%	11.2%	9.8%	-	6.9%	6.5%	8.5%	7.8%	4.4%	9.3%	7.9%
Total															
n	*6*	*39*	*20*	*24*	*48*	*43*	*23*	*10*	*9*	*38*	*39*	*20*	*5*	*53*	*23*
Avg % purity	**6 %**	**8 %**	**7 %**	**6.4 %**	**22.2%**	**12.2%**	**16.9%**	**32.3%**	**13.1%**	**12.4%**	**8.5%**	**9.2%**	**4.4%**	**9.3%**	**7.9.**
Range in % purity	*(3-8%)*	*(2-59%)*	*(2-26%)*	*(0.5-50%)*	*(0.1-71%)*	*(1.9-79%)*	*(2-81%)*	*(19-36%)*	*(2-59%)*	*(2-28%)*	*(2-40%)*	*(3-14%)*	*(1-7%)*	*(1.8-36.6%)*	*(8.7-71.9%)*

Source: Australian Bureau of Criminal Intelligence; Australian Crime Commission; Tasmania Police State Intelligence Services
Note: No seizures made by the Australian Federal Police in the state were analysed between 1997/98 and 2010/11. All analysed seizures of amphetamines in this period revealed methamphetamine rather than amphetamine
Data for 2012/13 were not available at the time of publication

Table 25: Purity of seizures of methamphetamine made by Tasmania Police received for laboratory testing, by quarter, July 2003 – June 2012

	Jul-Sep 2003	Oct-Dec 2003	Jan-Mar 2004	Apr-Jun 2004	Jul-Sep 2004	Oct-Dec 2004	Jan-Mar 2005	Apr-Jun 2005	Jul-Sep 2005	Oct-Dec 2005	Jan-Mar 2006	Apr-Jun 2006	Jul-Sep 2006	Oct-Dec 2006	Jan-Mar 2007	Apr-Jun 2007	Jul-Sep 2007	Oct-Dec 2007
≤2g																		
n	*2*	*2*	*4*	*1*	*10*	*-*	*-*	*-*	*1*	*-*	*5*	*-*	*-*	*14*	*-*	*1*	*2*	*1*
Median % purity	40.0	28.4	50.6	16.9	32.3	-	-	-	25.6	-	13.1	-	-	24.6	-	7.3	12.0	9.7
>2g																		
n	*8*	*1*	*5*	*-*	*-*	*-*	*-*	*-*	*1*	*-*	*-*	*2*	*3*	*8*	*1*	*12*	*6*	*6*
Median % purity	17.4	15.4	4.1	-	-	-	-	-	38.7	-	-	5.5	9.9	2.4	8.4	7.0	9.6	8.0
Total																		
n	*10*	*3*	*9*	*1*	*10*	*-*	*-*	*-*	*2*	*-*	*5*	*2*	*3*	*21*	*1*	*13*	*8*	*7*
Avg % purity	17.4	25.6	4.1	16.9	32.3	-	-	-	32.2	-	13.1	5.5	9.9	24.6	8.4	7.3	10.1	8.5

Source: Australian Bureau of Criminal Intelligence; Australian Crime Commission; Tasmania Police State Intelligence Services

- No seizures in this period

Note: No seizures made by the Australian Federal Police in Tasmania were submitted from Oct/Dec 2004-April/June 2005 for purity testing. All analysed seizures of amphetamines in this period revealed methamphetamine rather than amphetamine. Figures represent the purity of seizures received at the laboratory within the relevant quarter, and the interval between the date of seizure by police and the date of receipt at the laboratory may vary between one day and several months

Table 25: Purity of Tasmanian seizures of methamphetamine made by Tasmania Police received for laboratory testing, by quarter, July 2003-June 2012 (continued)

	Jan-Mar 2008	Apr-Jun 2008	Jul-Sep 2008	Oct-Dec 2008	Jan-Mar 2009	Apr-Jun 2009	Jul-Sep 2009	Oct-Dec 2009	Jan-Mar 2010	Apr-Jun 2010	Jul-Sep 2010	Oct-Dec 2010	Jan-Mar 2011	Apr-Jun 2011	Jul-Sep 2011	Oct-Dec 2011	Jan-Mar 2012	Apr-Jun 2012
≤2g																		
n	*1*	*3*	*-*	*1*	*3*	*7*	*-*	*-*	*-*	*-*	*-*	*-*	*2*	*1*	*1*	*1*	*-*	*-*
Median % purity	7.6	6.6	-	12.1	6.1	12.9	-	-	-	-	-	-	21.2	36.6	8.7	1.7	-	-
>2g																		
n	*13*	*7*	*5*	*1*	*3*	*-*	*-*	*-*	*3*	*2*	*2*	*5*	*22*	*21*	*3*	*4*	*9*	*5*
Median % purity	9.1	7.1	8.3	11.8	6.1	-	-	-	6.2	1.3	1.9	11.0	8.9	9.4	7.9	6.7	8.8	8.8
Total																		
n	*14*	*10*	*5*	*2*	*6*	*7*	*-*	*-*	*3*	*2*	*2*	*5*	*24*	*22*	*4*	*5*	*9*	*5*
Avg % purity	9.1	6.9	8.3	12.0	6.3	12.9	-	-	6.2	1.3	1.9	11.0	8.9	9.4	8.3	6.3	8.8	8.8

Source: Australian Bureau of Criminal Intelligence; Australian Crime Commission; Tasmania Police State Intelligence Services

- No seizures in this period.

Note: No seizures made by the Australian Federal Police in Tasmania were submitted from Oct/Dec 2004-April/June 2005 for purity testing. All analysed seizures of amphetamines in this period revealed methamphetamine rather than amphetamine. Figures represent the purity of seizures received at the laboratory within the relevant quarter, and the interval between the date of seizure by police and the date of receipt at the laboratory may vary between one day and several months

Data for 2012/13 was not available at the time of publication

5.3 Cocaine

Key Points:

- Few participants could comment on the price of cocaine in Tasmania, with single reports of a point (0.1g) as $140, quarter-gram as $100, and half-gram $180;
- Of the small number of participants able to comment, availability was generally considered 'very easy' or 'easy';
- The few subjective reports consistently pointed towards high purity, and that this had remained largely unchanged in the preceding six months;
- Tasmania Police reported making no seizures of cocaine for 2012/2013; and
- Very small numbers of participants were able to comment on trends relating to cocaine. It appears that the use of this drug in Hobart is very low, at least within the populations surveyed in the current study.

5.3.1 Price

Participants were asked to comment of the price of cocaine in Tasmania. Just three participants were able to comment on the last purchase price for cocaine. Single participants reported the purchase price for a 'point' (typically 0.1g) as $140, $100 for a quarter-gram and $180 for a half gram. No KE in the current study commented on the current price of cocaine.

Tasmania Police had been unable to report prices of cocaine between 1995/96 and 1999/00; however, in 2001 Southern Drug Investigation Services estimated the price of cocaine as $250 per gram. Price information for cocaine was not provided to the ACC between 2002/03 and 2004/05. In 2005/06, the ACC reported that one gram of cocaine in Tasmania cost between $300 and $400. In 2006/07, no price data was reported by the ACC. In 2007/08, the ACC reported that 1g cocaine cost $350, and in 2008/09, this was reported to cost $300. In 2009/10, the ACC reported 1 cap to cost $60 and 1 gram $300-400. No reports were made for 2010/11, however, in 2011/12 one gram was reported to cost $350 and one ounce between $7,000 and $10,000 (data from 2012/13 were not available at the time of publication). These very limited reports of cocaine prices reflect the weakness of the local market of the drug.

5.3.2 Availability

Reflecting the very low level of use of cocaine amongst the current sample, just 4 participants were able to comment on the local availability of cocaine in the preceding six months. These reports were mixed: two participants noted it was 'easy' to access the drug locally, one participant stated it was 'very easy', and a fourth participant stated it was 'difficult'.

Tasmania Police reported no seizures of cocaine between 1995/96 and 2004/05, with the exception of a single 1g seizure in 2000/01. In 2005/06, the ACC reported one seizure of a drug believed to be cocaine (1g), and in 2006/07, two seizures were reported, amounting to 7g. In 2007/08, no seizures of cocaine were reported, and in 2008/09 two seizures were made, amounting to 7g. In 2009/10, the ACC reported that Tasmania Police made three seizures of cocaine, totalling 46g, and the AFP made one seizure in Tasmania, weighing 750g. In 2010/11, three seizures were made, totalling 28g, and similarly in 2011/12 seven seizures were made, totalling 64g. No seizures were reported for 2012/13[19] .

[19] Note: 2012/13 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

The combination of few PWID reporting recent cocaine use (n=5 at a median frequency of use of two days), along with few participants being able to comment on trends relating to price, purity or availability, and no KE being able to reliably comment on these outcomes, together suggest that there is very low availability of cocaine in Tasmania, at least among the demographic sampled in this survey.

5.3.3 Purity

Just four participants were able to comment on subjective purity of cocaine: all noted this to be high. The ACC reported on the purity of single seizure of cocaine in 2011/12, noting this to be 29.8% (data for 2012/13 was not available at the time of publication). In 2009/10, the ACC reported on the purity of a single seizure of cocaine in 2009/10 (AFP seizure of 750g), reporting this to be 71.7%. Prior to this, the last analysed sample of cocaine seized within the state by Tasmania Police was from the first quarter of 2001. This was an amount of less than two grams, and was analysed during the first quarter of 2002 at 44% purity. Data for the 2012/13 period were not available at the time of publication.

5.3.4 Summary of cocaine trends

In summary, it appears that the use of cocaine in Hobart is very low, at least within the populations surveyed in the current study or accessing government services. These patterns seem to have remained reasonably stable over the past few years. However, it is noteworthy that between 39% and 61% of the cohorts between 2002 and 2013 have reported lifetime use of cocaine, an increase from patterns seen in the 2000 and 2001 surveys. There are also indications of an increasing prevalence level of use in the general population (AIHW, 2011). As such, trends in cocaine markets in the state merit continued examination.

5.4 Cannabis

Key Points:

Bush/outdoor-cultivated cannabis

- The median price of a 1g purchase was $25; $60 for a quarter ounce (7g), and $250 for one ounce. The majority of participants who commented reported stable price trends over the preceding six months;
- The majority of participants reported availability to be either 'very easy' or 'easy', and that this situation had not changed in the preceding six months This was most commonly purchased from friends or known dealers; and
- Mixed reports regarding potency: two-fifths considered this to be 'medium' and 'high' respectively. The majority of participants reported that potency had not changed over the preceding six months.

Indoor/hydroponically-cultivated cannabis

- The median price of a 1g purchase was $25; $80 for a quarter ounce (7g), and $280 for one ounce. The majority of participants who commented reported that prices remained stable over the preceding six months;
- The majority of participants reported availability to be either 'very easy' or 'easy', and that this situation had not changed in the preceding six months;
- This was most commonly purchased from friends or known dealers; and
- Potency generally was considered to be 'high'; this has not changed over the preceding six months.

5.4.1 Price

Participants were asked to comment on their last purchase of bush/outdoor-cultivated cannabis (Table 26). A $25 deal contained a modal amount of 1.0g (median 1.1g, range 1.0-3.0g, n=4) and no participants reporting purchasing a $50 deal. The modal last purchase price for a quarter-ounce of outdoor cannabis was $60 (median price $60, range $60, n=4), and the modal last purchase price for an ounce was $250 (median $245, range $150-250, n=8). The most common amounts of outdoor cannabis purchased by the PWID interviewed were $25 deals (n=9) and ounces (n=8) (Table 26).

Between 2012 and 2013, the modal price of quarter-ounce purchases of outdoor cultivated cannabis declined, from $70 to $60, and ounce purchases increased, from $200 to $250. It is important to note, however, that a smaller number of participants in 2013 commented on prices, so these findings should be interpreted with caution.

'Deals' costing $25 contained a modal amount of 1.0g (median 1.0g, range 1.0-2.0g, n=20) of indoor-cultivated cannabis, with $50 'deals' containing a modal amount of 3.0g (median 3.0g, range 3.0-7.0g, n=5). Quarter-ounce amounts of hydroponically-cultivated cannabis were reported to cost a median price of $80 (no single mode, range $50-180, n=7) and the modal last purchase price for an ounce was $300 (median $280, range $150-350, n=15). Between 2012 and 2013, prices for hydroponically cultivated cannabis remained stable for most quantities, however, the modal purchase price for ounces increased from $250 to $300 (Table 27).

The majority of PWID (85% overall, 88%, n=36 in relation to outdoor cannabis and 83%, n=49 in relation to hydroponic cannabis) reported that the price of cannabis had not changed in the last six months. Similarly, KE reported that prices had remained stable over the last few years, noting that a $25 purchase bought 1.3 to 1.5g of cannabis and $250-300 bought one ounce (n=4).

Table 26: Modal prices and quantities of 'bush'/outdoor-cultivated cannabis purchased by PWID, 2004-2013

Unit	2004 IDRS			2005 IDRS			2006 IDRS			2007 IDRS			2008 IDRS		
	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n
$10 deal	1.0g *(0.5-1.0g)*	$10	3	1.0 g* *(1.0 g)*	$10	2	1.0g	$10	2	1.0g	$10	3	-	-	-
$25 deal	1.0g *(1.0-3.0g)*	$25	24	1.0 g *(1.0-28.0 g)*	$25	11	1.7g* *(1.5-2.0g)*	$25	8	1.0g *(1.0-2.0g)*	$25	14	2.0g *(1.0-3.0g)*	$25	18
$50 deal	7.0g* *(5.5-7.0g)*	$50	9	7.0 g* *(2.0-7.0 g)*	$50	9	7.0g	$50	8	7.0g *(1.0-7.0g)*	$50	9	7.0g	$50	4
Quarter ounce	7.0g	$60* *($35-85)*	30	7.0 g	$50 *($50-90)*	24	7.0g	$50 *($25-100)*	28	7.0g	$60 *($50-90)*	29	7.0g	$70 *($50-90)*	17
Half ounce	14g	$100 *($70-120)*	6	14 g	$120 *($100-200)*	5	14.0g	$130* *($120-140)*	3	14.0g	$113* *($100-125)*	2	14.0g	$100 *($75-100)*	4
Ounce	28g	$200 *($100-260)*	21	28 g	$200 *($25-350)*	24	28.0g	$170* *($90-250)*	19	28.0g	$150 *($150-300)*	9	28.0g	$200 *($75-300)*	20

Source: IDRS PWID interviews
* Median substituted, as no single mode exists
Note: Range in parentheses

Table 26: Modal prices and quantities of 'bush'/outdoor-cultivated cannabis purchased by PWID in Hobart, 2004-2013 (continued)

Unit	2009 IDRS			2010 IDRS			2011 IDRS			2012 IDRS			2013 IDRS		
	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n
$10 deal	1.0g* *(0.7-1.3g)*	$10	2	1.0g	$10	1	1.0g	$10	1	1.0g *(0.5-1.0g)*	$10	3	1.0g *(1-4g)*	$10	4
$25 deal	1.0g *(1.0-3.0g)*	$25	18	2.0g *(1.0-7.0g)*	$25	24	1.0g *(1.0-3.0g)*	$25	16	1.0g *(1.0-3.0g)*	$25	13	1.0g *(1-3g)*	$25	9
$50 deal	7.0g *(3.0-14.0g)*	$50	13	7.0g *(3.0-7.0g)*	$50	9	7.0g *(7.0-14.0g)*	$50	4	7.0g *(2.0-7.0g)*	$50	5	-	-	-
Quarter ounce	7.0g	$50 *($50-90)*	22	7.0g	$60* *($25-90)*	23	7.0g	$70* *($50-80)*	11	7.0g	$70 *($50-80)*	14	7.0g	$60 *($60)*	4
Half ounce	14.0g	$150 *($50-160)*	14	14.0g	$100 *($75-150)*	5	14.0g	$90* *($50-100)*	3	14.0g	$120 *($100-120)*	3	14.0g	$60 *($60)*	1
Ounce	28.0g	$250 *($100-300)*	20	28.0g	$200 *($100-300)*	24	28.0g	$200* *($150-250)*	14	28.0g	$200 *($150-200)*	9	28.0g	$250 *($150-250)*	8

Source: IDRS PWID interviews
* Median substituted, as no single mode exists
Note: Range in parentheses

Table 27: Modal prices and quantities of hydroponic/indoor-cultivated cannabis purchased by PWID, 2004-2013

Unit	2004 IDRS			2005 IDRS			2006 IDRS			2007 IDRS			2008 IDRS		
	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n
$10 deal	0.5g *(0.3-0.5g)*	$10	4	0.9g* *(0.7-1.0 g)*	$10	2	1.0g *(1.0-2.0g)*	$10	4	0.8g *(0.5-0.8g)*	$10	4	-	-	-
$25 deal	1.0g *(1.0-2.0g)*	$25	37	1.0g *(1.0-2.0 g)*	$25	22	1.0g *(1.0-2.0g)*	$25	12	1.0g *(1.0-2.0g)*	$25	24	1.0 g *(1.0-2.0 g)*	$25	16
$50 deal	3.0g *(2.5-3.5g)*	$50	6	3.0g *(2.0-3.5g)*	$50	4	3.0g	$50	2	3.0g *(1.0-7.0g)*	$50	8	3.0 g* *(2.0-7.0 g)*	$50	3
Quarter ounce	7.0g	$80 *($60-100)*	48	7.0g	$90 *($70-100)*	37	7.0g	$90 *($60-120)*	43	7.0g	$90 *($20-120)*	29	7.0g	$90 *($50-100)*	31
Half ounce	14.0g	$150 *($100-180)*	10	14.0g	$150 *($100-200)*	9	14.0g	$160 *($120-200)*	6	14.0g	$160* *($125-200)*	4	14.0g	$150 *($100-160)*	7
Ounce	28.0g	$250 *($150-350)*	27	28.0g	$300 *($220-350)*	26	28.0g	$250 *($200-450)*	21	28.0g	$250* *($140-350)*	14	28.0g	$300 *($200-340)*	25

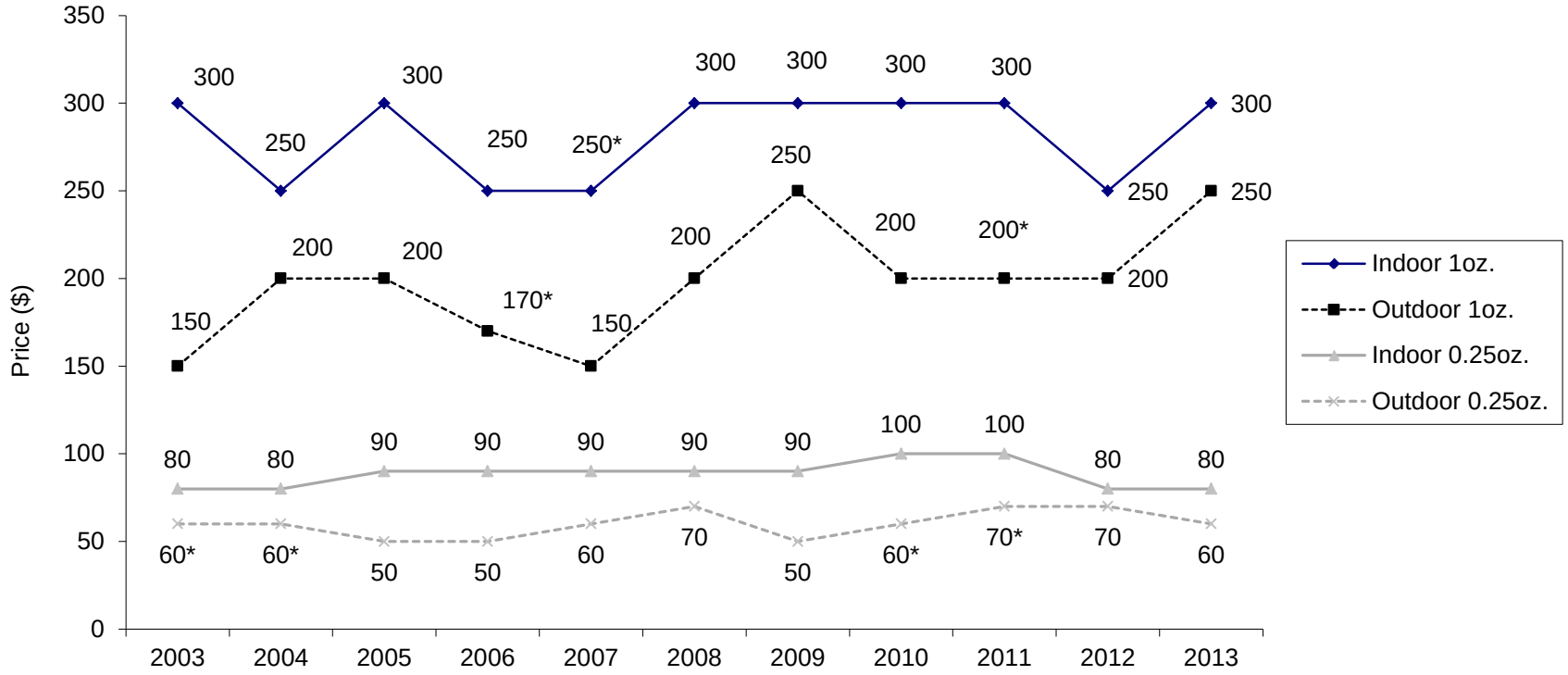
Source: IDRS PWID interviews
* Median substituted, as no single mode exists
Note: Range in parentheses

Table 27: Modal prices and quantities of hydroponic/indoor-cultivated cannabis purchased by PWID, 2004-2013 (continued)

Unit	2009 IDRS			2010 IDRS			2011 IDRS			2012 IDRS			2013 IDRS		
	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n	Modal amount (grams)	Modal price	n
$10 deal	0.5g *(0.5-0.7g)*	$10	3	0.5g	$10	1	0.5g *(0.5-1.0g)*	$10	3	1.0g	$10	1	0.75*g *(0.5-1.0g)*	$10	2
$25 deal	1.0g *(0.8-3.0g)*	$25	38	1.2g *(2.0-7.0g)*	$25	15	1.0g *(1.0-2.5g)*	$25	30	1.0g *(1.0-2.0g)*	$25	36	1.0g *(1.0-2.0g)*	$25	20
$50 deal	3.0g *(2.0-7.0g)*	$50	9	3.0g *(2.0-7.0g)*	$50	18	3.0g *(2.0-6.0g)*	$50	6	3.0g *(2.0-7.0g)*	$50	9	3.0g *(3.0-7.0g)*	$50	5
Quarter ounce	7.0g	$90 *($50-100)*	29	7.0g	$100 *($50-100)*	33	7.0g	$100 *($60-100)*	18	7.0g	$80 *($50-100)*	34	7.0g	$80* *($50-180)*	7
Half ounce	14.0g	$150 *($120-180)*	15	14.0g	$160* *($100-250)*	11	14.0g	$150 *($140-250)*	4	14.0g	$150* *($90-170)*	8	14.0g	$150	1
Ounce	28.0g	$300 *($200-350)*	22	28.0g	$300 *($200-400)*	23	28.0g	$300 *($200-350)*	19	28.0g	$250 *($150-330)*	24	28.0g	$300 *($150-350)*	15

Source: IDRS PWID interviews
* Median substituted, as no single mode exists
Note: Range in parentheses

Figure 54: Modal prices of quarter and one ounce purchases of indoor and outdoor cultivated cannabis, 2003-2013



Source: IDRS PWID interviews
* Median substituted as no single mode

Table 28: Cannabis prices in Tasmania reported to the Australian Crime Commission, 2000/01-2011/12

	Deal (1g approx)		1/4 Bag (7g)		1/2 Bag (14g)		1 Ounce (28g)	
	Head	Hydro	Head	Hydro	Head	Hydro	Head	Hydro
2000/01	$20-25	$25	$80-90	$90-110	$150-160	$170-220	$200-300	$300-350
2001/02	$20-25	$25	$80-90	$90-110	$150-160	$160-220	$200-300	$300-350
2002/03	$20-25	$25	$65-90	$85-100	$125-150	$150-180	$250-300	$300
2003/04	$25	$25	$65-90	$85-100	$125-150	$150-180	$250-300	$300
2004/05	$20-25	$25	$70-100	$80-100	$100	$150-200	$150-300	$300-350
2005/06	$25	$25	$75	$75	$120	$120	$250-350	$250-350
2006/07	n/r	n/r	n/r	n/r	n/r	n/r	n/r	n/r
2007/08	$25	$25	$80-100	n/r	$120-150	$150-200	$250-300	$300-350
2008/09	$10-25	$25	$70	n/r	$125	$150	$200-300	$300
2009/10	$25	$25	$75	n/r	n/r	$150-200	$250	$300-350
2010/11	$25	$25	$100-150	n/r	$200-250	$200-250	$300-350	$300-350
2011/12	$25	$25	$80	-	$150	$150	$200-300	$300

Source: Australian Crime Commission (previously the Australian Bureau of Criminal Intelligence), Tasmania Police State Intelligence Services
n/r Not reported
Note: Data for 2012/13 not available at time of publication

Tasmania Police and the ACC provide annual reports on the price of illicit drugs (Table 28). Since 2000/01, the price of quarter-ounce purchases of cannabis head has fluctuated between $65 and $100 in all years with the exception of 2010/11, when this was reported as ranging between $100-150. The price for one ounce has also fluctuated over this period, with the price ranging between $150 and $350 ($300 in 2011/12). Conversely, the price for a half-ounce had decreased slightly, from $150-160 in 2000/01 to $125 in 2008/09, however, in 2010/11 this had increased to $200-250. In 2011/12 this decreased to $150. The price for an ounce of hydro has remained relatively unchanged since 2000/01, costing between $300 and $350. Overall, these findings are similar to the 2012 IDRS, which reported on cannabis prices for the same period.

Tasmania Police reported the price of 1g of cannabis hash/resin as $30-50 in the 2001/02 financial year, $20-25 during the 2002/03 and 2003/04 financial years, and $25 in 2004/05. No data were reported in 2005/06 or 2006/07, however, in 2007/08 this price estimate had increased to $50-100. No price estimate has been reported since 2008/09. In the current IDRS study, two participants commented on the last purchase price paid for one gram of hashish: the median price was $45 (range $40-50), and just one participant commented on the price of a cap of hashish oil, reporting this to cost $100.

5.4.2 Availability

For both indoor- and outdoor-cultivated cannabis, the majority of the PWID sample who reported recent use perceived that cannabis was 'very easy' (53%) or 'easy' (45%) to obtain, and that the availability of cannabis had remained stable (92% of reports across both cannabis forms). Trends in availability and routes of access will be discussed separately for each type of cannabis.

All participants who commented reported that hydroponic/indoor-cultivated cannabis had been either 'very easy' or 'easy' (61%, n=37 and 39%, n=24 respectively) for them to access in the preceding six months (Table 29). Almost all of these respondents (97%, n=59) believed that the availability of this type of cannabis had remained stable in the preceding six months.

Hydroponically-cultivated cannabis was more commonly purchased from friends (57%, n=35), and less frequently from known dealers (30%, n=18) (Table 30). Participants also commented on the last venue in which they purchased hydroponic cannabis, of which the majority purchased at either a friend's home (43%, n=26) or dealer's home (26%, n=16).

In regard to outdoor or 'bush' cannabis, the majority of the PWID commenting believed this to be 'easy' (53%, n=24) or 'very easy' (42%, n=19) to access in the preceding six months. The majority of participants in the current study reported that availability had remained stable in this time (87%, n=39) (Table 29). Most PWID reported last purchasing this type of cannabis from friends (62%, n=28) or known dealers (29%, n=13). Venues in which these purchases were last made were primarily reported to be a friend's home (53%, n=24) and a dealer's home (24%, n=11) (Table 30).

Table 29: Participants' reports of cannabis availability in the past six months, 2012-2013

Current availability	Hydro		Bush	
	2012 (N=106)	2013 (N=107)	2012 (N=106)	2013 (N=107)
Able to respond (%)	74	61	60	45
Of those who responded:				
Very easy (%)	51	61	35	42
Easy (%)	45	39	60	53
Difficult (%)	4	0	5	4
Very difficult (%)	0	0	0	0
Availability change over the last six months				
Able to respond (%)	74	61	58	45
Of those who responded:				
More difficult (%)	5	0	3	2
Stable (%)	89	97	83	87
Easier (%)	4	2	10	4
Fluctuates (%)	1	2	3	7

Source: IDRS PWID interviews

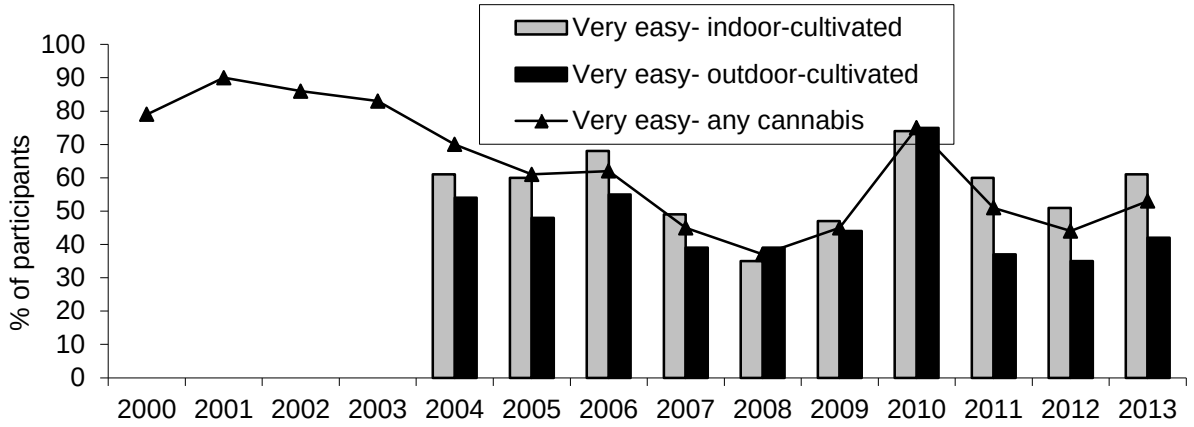
Table 30: People and venues from which cannabis was last purchased in the preceding six months, 2013

	Hydroponic cannabis n=61	Bush/outdoor cannabis n=45
Friends	57% (n=35)	62% (n=28)
Known dealers	30% (n=18)	29% (n=13)
Acquaintance	1% (n=1)	0
Street dealer	5% (n=3)	2% (n=1)
	Hydroponic cannabis n=61	**Bush/outdoor cannabis n=45**
Friend's home	43% (n=26)	53% (n=24)
Dealer's home	26% (n=16)	24% (n=11)
Home delivery	16% (n=10)	4% (n=2)
Agreed public location	5% (n=3)	4% (n=2)
Acquaintance's home	3% (n=2)	0
Street market	3% (n=2)	7% (n=3)

Source: IDRS PWID interviews
Note: Multiple responses allowed

As depicted in Figure 55, between 2001 and 2008 there was a gradual decline in the proportion of PWID respondents who considered cannabis (any form) as 'very easy' to access (90% in 2001 v. 37% in 2008: $\chi^2(1_{n=100})=64.6$, $p<0.001$). In 2009 and 2010, this trend was temporarily reversed, with the proportion reporting very easy access increasing to 75% in 2010 ($\chi^2(1_{n=100})=39.7$, $p<0.001$). Since this time, this rate has decreased, ranging between 44% and 53% of each sample reporting 'very easy' access.

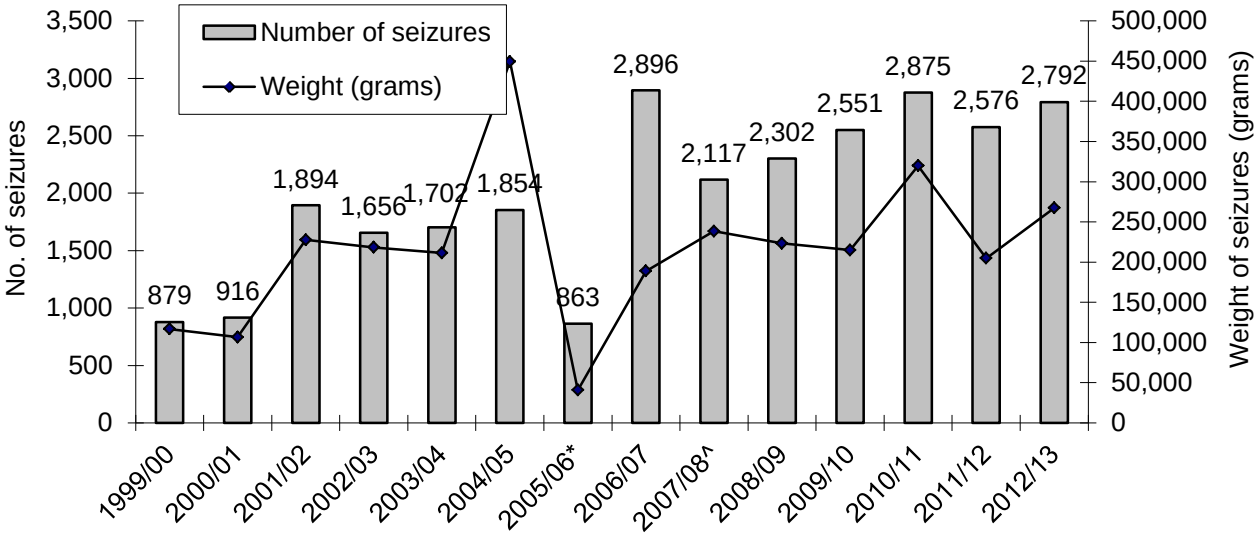
Figure 55: Participant reports of current cannabis availability, among those who recently used cannabis, 2000-2013



Source: IDRS PWID interviews
Note: A distinction between hydroponic and bush cannabis was introduced in 2004. Prior to this time, survey items referred to any form of cannabis

Figure 56 shows cannabis seizures made by Tasmania Police, between 1999/00 and 2012/13. The volume of cannabis seized has remained relatively stable over time, with notable peaks observed in 2004/05 and 2010/11. There was a gradual increase in the number of seizures between 2007/08 and 2010/11, and a slight decline in 2011/12. In 2012/13 there was an increase in both the weight and number of seizures relative to 2011/12. In addition to the seizures coded in grams in 2012/13 (Figure 56), Tasmania Police reported and additional 571 seizures including 465 seizures of plants (totalling 3,087 plants).

Figure 56: Seizures of cannabis by Tasmania Police, 1999/00-2012/13



Source: Australian Crime Commission, State Intelligence Service, Tasmania Police
* Seizures for 2005/06 were only reported to the ACC for part of the financial year
^ In 2007/08, the AFP made 3 seizures of cannabis, amounting to 21g
Note: Data in 2012/13 were provided by Tasmania Police State Intelligence Service. These data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules

5.4.3 Potency

The potency of cannabis across both modes of cultivation was generally rated as ‘high’ (53%) or ‘medium’ (35%) by the PWID sample, with most respondents indicating that this potency had remained stable (77%) in the preceding six month period. These reports are similar to those provided in recent IDRS studies.

Participants were divided regarding reports of subjective potency of outdoor or ‘bush’ cultivated cannabis: two-fifths noted this form to be either ‘high’ or medium’ in potency (43%, n=19 respectively). This level of potency was regarded as having remained stable (81%, n=35) in the preceding six months.

Hydroponically-cultivated cannabis, however, was generally reported by PWID as being ‘high’ in potency (61%, n=37); almost one-third of participants reported potency to be ‘medium’ (30%, n=18). Potency was predominantly regarded as remaining stable in the preceding six months (75%, n=44). Seizures of cannabis by Tasmania Police are not analysed for potency, and, as such, no empirical data are available to examine trends.

5.5 Opioids

Key Points:

Morphine

- The median price was $1/mg for all quantities of morphine, and in general, participants noted no change to price over the preceding six months;
- Availability was considered to be 'easy'/'very easy'; the majority of participants noted that availability of morphine had remained stable over the preceding six months;
- Illicit morphine was most commonly sourced from known dealers and friends; and
- Preliminary data from Tasmania Police suggests an increase in the number of morphine tablets seized in 2012/13 relative to 2011/2012, a year characterised by a low rate of seizures.

Oxycodone

- The median price was $1/mg for all quantities of oxycodone; the majority of participants noted that prices had remained stable over the preceding six months;
- Availability was considered to be 'easy'/'very easy'; the majority of participants noted that availability of oxycodone had remained stable over the preceding six months; and
- Illicit oxycodone was most commonly sourced from friends and known dealers.

Methadone syrup

- The median price was $1/mg for all quantities of methadone syrup; the majority of participants noted that prices had remained stable over the preceding six months;
- Perception of availability was divided, with over half of participants stating that it was 'easy' or 'very easy', while the other half reported access as 'difficult' or 'very difficult'; despite this, the majority of participants noted that availability had remained stable over the preceding six months; and
- Illicit methadone was most commonly sourced from friends, generally in the context of a standing arrangement.

Physeptone

- The modal price of Physeptone tablets was $2/mg. Participants were divided regarding price changes over the preceding six months, noting that prices had either increased or remained stable;
- Availability was considered to be 'difficult'/'very difficult'; almost three-fifths of participants noted that availability had remained stable over the preceding six months, while one-third reported decreased availability; and
- Illicit Physeptone was most commonly sourced from friends and known dealers.

5.5.1 Price

Morphine

Participants reported the modal price paid for their most recent purchase of morphine was $1 per mg. Modal prices for MS Contin were $30 for a 30mg tablet (range $15-35, n=18), $60 per 60mg tablet (range $40-80, n=43), and $100 for 100mg tablets (range $80-100, n=20) (Table 31). Purchase prices for Kapanol were similar: 50mg capsules cost a modal price of $50 (range $50-60, n=20), and 100mg Kapanol capsules cost a modal price of $100 (range $100, n=5). The majority of consumers reporting on morphine prices (81%, n=56 of those able to comment) stated that these prices had remained stable in the preceding six months.

These modal purchase prices are consistent with prices reported in the 2009 to 2012 IDRS studies, however, they are higher than reported in previous local IDRS surveys: 60mg MS Contin tablets cost a modal purchase price of $50 between 2002 and 2008, increasing to $60 in 2009; similarly, the modal purchase price for 100mg MS Contin tablets increased from $70 during 2003 to 2005 to $80 between 2006 to 2008, and in 2009 the price again increased to $100. The modal purchase price for Kapanol also increased: 50mg capsules cost a modal price of $35 in 2005; this increased to $50 in 2008, and has remained stable since then. Similarly, the modal price for 100mg capsules increased from $70 between 2003 and 2007 to $100 in 2009.

Oxycodone

Participants reported a modal purchase price of $1 per mg: modal price for a 20mg OxyContin tablet was $20 (range $20-30, n=21); $40 per 40mg tablet (range $20-60, n=26), and $80 per 80mg tablet (range $40-120, n=28) (Table 31). When examining reported prices for OxyContin over time, it is clear that modal price estimates have increased, particularly regarding 80mg tablets, which increased from $50 in 2006 to $80 in 2008. An increase in the modal price for 40mg tablets was also observed: increasing from $25 in 2006 to $40 in 2007 (Table 31).

Participants were asked to comment on perceived changes in price over the preceding six months. Amongst those participants who were able to comment on price trends for oxycodone, three-quarters reported the price to have remained stable (75%, n=45), and one-fifth commented that the price for oxycodone had increased (23%, n=14). Comparison of the modal prices for most recent purchases of the drug amongst the 2012 and 2013 survey respondents provides support for reports of stable prices (Table 31).

Methadone

Consistent with reports in previous local IDRS studies, consumers reported the modal purchase price of methadone was $1 per mg. Since the nature of access to methadone syrup does not easily allow for standard purchase amounts to be made, PWID were asked to report the amounts and costs of their most recent purchase of methadone. Purchases, irrespective of quantity, cost a modal amount of $1 per mg (Table 31). The majority of participants who commented on price trends for methadone syrup in the preceding six months indicated that the purchase price had remained stable (73%, n=24), however one-quarter noted the price had increased (27%, n=9). When purchase prices for illicit syrup are compared over time, a stable trend can be clearly seen, which shows a purchase price for $1.00 per mg, except for 2005, when the cohort reported $0.80 per mg of syrup (Table 31).

The modal purchase price for illicit 10mg Physeptone tablets of methadone was $20 (median=$20; range $10-20, n=28). This is consistent with reports in 2011 and 2012, however, it marks a 100% increase from modal price reports between 2002 and 2010, with the exception of 2007 (modal price $15) and 2009 (median price $12.50). Two KE commented on the price of Physeptone, noting this had recently increased, now costing up to $30 per 10mg tablet. This trend toward stable to increasing prices was supported by participant comments, with 59% (n=19) of those able to comment reporting the price to have remained stable, and 34% (n=11) noting it had increased in the preceding six months.

Table 31: Modal last purchase price for most recent purchase of pharmaceutical opioids, 2004-2013

Preparation	2004 IDRS		2005 IDRS		2006 IDRS		2007 IDRS		2008 IDRS	
	Price	***n***	**Price**	***n***	**Price**	***n***	**Price**	***n***	**Price**	***n***
MS Contin										
10 mg tablet	$4 ($3-15)	*3*	$10 ($10)	*2*	$5 ($5-10)	*3*	$5	*1*	$5	*2*
30 mg tablet	$20 ($1-25)	*26*	$25 ($15-35)	*21*	$25 ($15-30)	*25*	$20($15-50)	*20*	$25 ($15-35)	*28*
60 mg tablet	$50 ($4-58)	*50*	$50 ($25-60)	*42*	$50 ($20-60)	*14*	$50($30-80)	*53*	$50 ($20-70)	*69*
100 mg tablet	$70 ($5-80)	*44*	$70 ($50-90)	*47*	$80 ($50-120)	*16*	$80($30-90)	*40*	$80 ($60-100)	*40*
Kapanol										
20 mg capsule	$13 ($5-20)	*9*	$13* ($5-20)	*6*	$10 ($5-20)	*11*	$10($8-20)	*7*	$20 ($15-30)	*7*
50 mg capsule	$40 ($15-50)	*35*	$35 ($15-50)	*29*	$35 ($10-80)	*31*	$40($20-50)	*24*	$50 ($30-55)	*49*
100 mg capsule	$70 ($30-80)	*20*	$70 ($30-90)	*25*	$70 ($20-120)	*34*	$70($50-95)	*22*	$80 ($50-100)	*23*
Anamorph										
30 mg tablet	$30 ($15-30)	*16*	$25*($22-45)	*3*	-	*-*	-	*-*	$30	*1*
OxyContin										
10 mg tablet	-	*-*	$7.50*($5-10)	*2*	$5	*1*	$10($10-20)	*3*	$10 ($5-10)	*4*
20 mg tablet	-	*-*	$15($10-20)	*5*	$15*($10-20)	*5*	$20($20)	*4*	$20 ($10-20)	*20*
40 mg tablet	$40	*1*	$20($15-30)	*11*	$25 ($5-40)	*14*	$40*($15-50)	*9*	$40 ($20-50)	*26*
80 mg tablet	-	*-*	$40*($30-80)	*9*	$50 ($40-50)	*7*	$40($30-100)	*11*	$80 ($50-80)	*13*
Methadone syrup (price per mg)	$1.0 ($0.4-1.0)	*72*	$0.8 ($0.4-1.0)	*38*	$1.0($0.3-2.0)	*43*	$1.0($0.5-2.0)	*52*	$1.0 ($0.5-2.0)	*53*
Physeptone										
5 mg tablet	$10	*2*	$5	*1*	$4.25*($3.5-5.0)	*2*	$5	*1*	$5	*1*
10 mg tablet	$10 ($5-15)	*43*	$10 ($5-15)	*33*	$10 ($7-150)	*36*	$15($5-20)	*17*	$10 ($5-20)	*35*

Source: IDRS PWID interviews

*Median substituted for mode, as no single mode existed

Note: Reported price range in parentheses

Table 31: Modal last purchase price for most recent purchase of pharmaceutical opioids, 2004-2013 (continued)

Preparation	2009 IDRS		2010 IDRS		2011 IDRS		2012 IDRS		2013 IDRS	
	Price	*n*	Price	*n*	Price	*n*	Price	*n*	Price	*n*
MS Contin										
10 mg tablet	$10($10-20)	*4*	$10	*14*	$10	*1*	$10 ($10-30)	*4*	$10 ($10-15)	*3*
30 mg tablet	$30 ($15-30)	*30*	$30($20-30)	*40*	$30($25-40)	*13*	$30 ($20-50)	*28*	$30 ($15-35)	*18*
60 mg tablet	$60 ($40-60)	*69*	$60($40-80)	*64*	$60($40-80)	*45*	$60 ($30-70)	*51*	$60 ($40-80)	*43*
100 mg tablet	$100 ($60-100)	*46*	$100($60-100)	*48*	$100($70-120)	*7*	$100($50-110)	*28*	$100 (80-100)	*20*
Kapanol										
20 mg capsule	$20($10-25)	*9*	$20($10-20)	*16*	$20($40-60)	*5*	$20 ($10-25)	*15*	$20	*5*
50 mg capsule	$50($30-80)	*46*	$50($25-50)	*44*	$50($40-60)	*18*	$50 ($25-50)	*25*	$50 ($50-60)	*20*
100 mg capsule	$100($60-100)	*23*	$100($50-100)	*30*	$100($80-100)	*14*	$100($50-100)	*9*	$100	*5*
Anamorph										
30 mg tablet	$30($20-30)	*5*	$30	*10*	$30	*5*	$30	*11*	-	-
OxyContin										
10 mg tablet	$10($7-10)	*3*	$10($5-20)	*17*	$9.5*($9-10)	*2*	$10	*8*	$10 ($5-20)	*13*
20 mg tablet	$20($5-20)	*12*	$20($10-25)	*27*	$20($20-25)	*7*	$20 ($6-30)	*22*	$20 ($20-30)	*21*
40 mg tablet	$40($15-40)	*28*	$40($10-50)	*43*	$40($20-60)	*15*	$40 ($20-50)	*42*	$40 ($20-60)	*26*
80 mg tablet	$80($40-80)	*26*	$80($40-80)	*35*	$80($50-100)	*22*	$80 ($40-100)	*42*	$80 ($40-120)	*28*
Methadone syrup (price per mg)	$1.0($0.4-1.0)	*46*	$1.0($0.5-1.0)	*30*	$1.0($0.7-2.0)	*25*	$1.0($0.8-1.33)	*34*	$1 ($0.63-2)	*26*
Physeptone										
5 mg tablet	-	*0*	$5($5-12.5)	*9*	$5	*2*	-	*0*	$5	*1*
10 mg tablet	$12.5*($5-25)	*44*	$10($10-20)	*28*	$20($5-20)	*23*	$20 ($6-20)	*23*	$20 ($10-20)	*28*

Source: IDRS PWID interviews

*Median substituted for mode, as no single mode existed

Note: Reported price range in parentheses

5.5.2 Availability

Morphine

The majority of the consumers interviewed who could comment on availability trends for morphine reported that morphine was 'easy' or 'very easy' for them to obtain (78%: 51% 'easy'; 28% 'very easy'), and that the availability of morphine had remained stable (66%, n=47) in the six months prior to interview, with 25% (n=18) reporting access had decreased. In keeping with these reports, one KE noted that morphine was still consistently easy to access according to anecdotal reports.

Among the IDRS consumer sample, participants reported last purchasing morphine from a known dealer (45%, n=32) or friend (39%, n=28). Participants were also asked to comment on the last venue in which these recent purchases occurred: 42% (n=30) reported purchasing at a dealer's home and 35% (n=25) reported purchasing from a friend's home.

Seizures of morphine and other narcotic pills by Tasmania Police remained reasonably stable between 1999/00 and 2002/03: 215 tablets (100 of these being morphine) in 1999/00; 322 tablets in 2000/01 (21 morphine tablets); 254 tablets (63 morphine) in 2001/02; and 211 morphine tablets in 2002/03. Perhaps partially due to more specific coding of seizures of pharmaceuticals, a marked increase in the number of morphine tablets seized in 2003/04 was noted, with 686 morphine tablets seized in this period. However, in 2004/05, seizures had returned to their previous level at 230 tablets, and 6ml of liquid morphine. This decline in seizures continued, with 51 morphine tablets seized in 2005/06 and in 2006/07, 58 tablets and 14 units of liquid morphine were seized. In 2007/08, this trend was reversed, with 150 tablets and two ampoules of liquid morphine being seized. This trend continued, with 230 tablets and 4ml of liquid morphine seized in 2008/09, and large increases in 2009/10 (932 tablets, 88 capsules and 15 ampoules seized) and 2010/11 (1,596 tablets of morphine, 37mls liquid morphine, 2.7g powder and one capsule). In 2011/12, a marked decrease in seizures was reported, with 55 tablets, 9 capsules and 5mls of liquid morphine seized. Finally, in 2012/13[20], seizures of morphine increased: 721 tablets/capsules and 0.75 units of liquid morphine were reported.

Oxycodone

Almost three-quarters of participants who commented noted that oxycodone was 'easy' or 'very easy' to access (72%: 45% 'easy' and 28% 'very easy'). In addition, three-quarters of the sample who commented reported that this situation had remained stable (75%, n=44) in the preceding six months.

Participants had most commonly last purchased oxycodone from either friends or a known dealer (40%, n=25 respectively). Oxycodone was most commonly purchased from a dealer's home (40%, n=25), or a friend's home (32%, n=20).

Methadone

Participants were mixed with regard to their responses concerning availability of methadone syrup: 53% noted that this was either 'easy' or 'very easy' to access (41%, n=13 and 13%, n=4 respectively) whilst 47% found it 'difficult' or 'very difficult' to access (34%, n=11 and 13%, n=4 respectively). As noted by PWID in previous years, the degree of availability is highly dependent on standing arrangements, with one participant from a previous study describing the situation as such: "*it is very easy to access if you have a pre-existing arrangement, but very difficult if you try to find it on a whim".* Three-fifths of those participants reporting on trends in availability of illicit syrup perceived it as remaining stable in the preceding six months (63%, n=20), and 28% considered it

[20] 2012/13 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules. In addition, 45.8grams of powder form of morphine was also reported.

had become more difficult to access (n=9). One KE commented that a decrease in the allocation of unsupervised ('takeaway') doses to clients receiving methadone maintenance treatment has, according to anecdotal reports, impacted the availability of diverted methadone.

The majority of participants that had used illicit methadone syrup reported last purchasing the drug from a friend (66%, n=25), with small minorities purchasing from an acquaintance (11%, n=4) or an unknown dealer (8%, n=3). There were several venues in which these purchases occurred, including a friend's home (42%, n=15), an agreed public locations (25%, n=9) and home delivered (19%, n=7) (Table 32).

In a continuation of trends identified in the 2004 study, the majority of participants reporting on the availability of illicit Physeptone tablets considered these as 'difficult' or 'very difficult' to access (60%: 49% 'difficult'; 11% 'very difficult') in the preceding six months. Almost three-fifths of participants reported stable availability of Physeptone over the preceding six months (57%, n=20), whilst 31% (n=11) noted decreasing availability. Most PWID reported last purchasing Physeptone through a friend (50%, n=18) or known dealer (28%, n=10). Venues which were most commonly cited for these transactions included a friend's home (33%, n=12) and an agreed public location (31%, n=11) (Table 32).

Table 32: Pathways to illicit methadone access, 2013

	Illicit methadone syrup (n=33)	Illicit Physeptone tablets (n=36)
Last source person of illicit purchase*		
Friend	66%	50%
Known dealers	5%	28%
Acquaintances	11%	11%
Last source venue for illicit purchase*		
Agreed public location	25%	31%
Friend's home	42%	33%
Acquaintance's home	6%	3%
Home delivery	19%	8%
Dealer's home	6%	25%

Source: IDRS PWID interviews

* For those reporting source

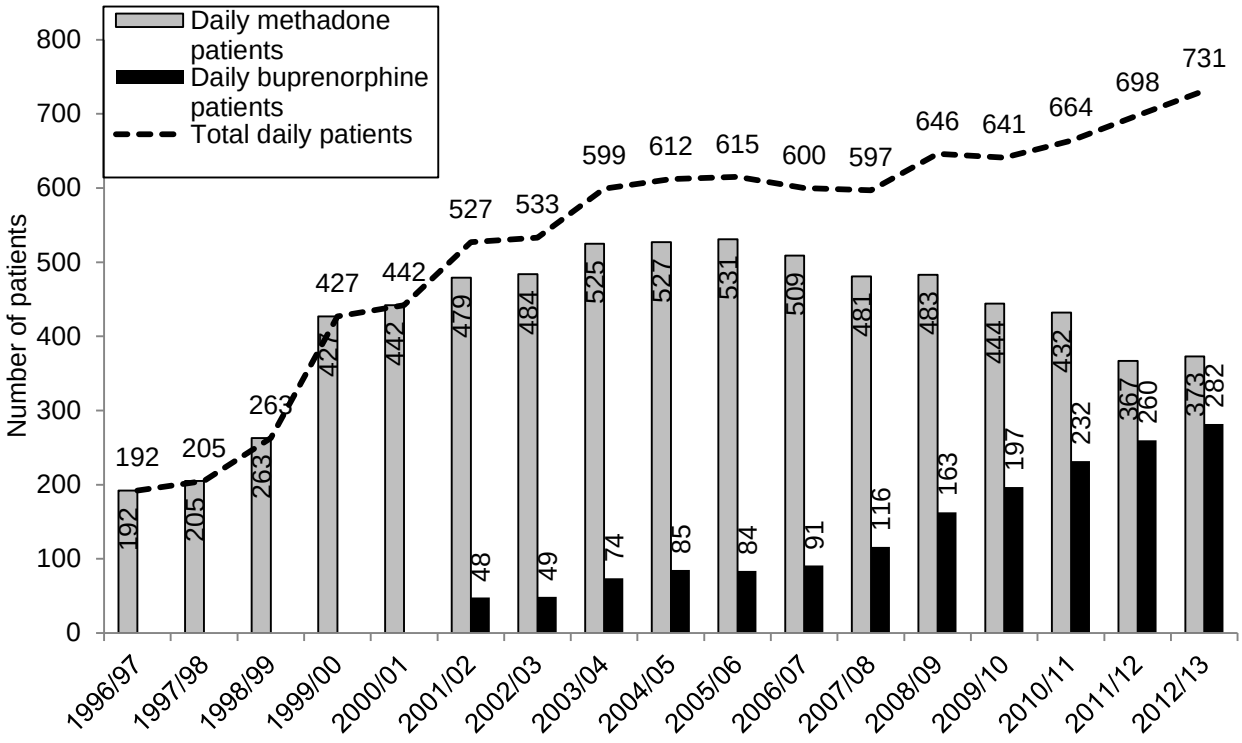
5.5.3 Prescription rates of opioid pharmaceuticals in Tasmania

There has been little change in the number of clients on Tasmania's pharmacotherapy program in recent years, in contrast to the steady growth in the early years of the program (Figure 57). In 2012/13, there were 373 daily recipients of methadone. A trend toward decreasing numbers of patients receiving methadone has been observed since 2006/07. Conversely, since 2006/07, the number of patients receiving buprenorphine (Subutex and Suboxone tablets and film) has increased from 91 to 282 in 2012/13.

Overall, the number of new admissions to pharmacotherapy treatments was stable between 1996/97 and 2001/02, ranging between 171 and 223. Since this time, the number of new admissions has been lower, ranging between 71 and 155 per financial year (Figure 58). Between June 2012 and July 2013, 77 new admissions were reported.

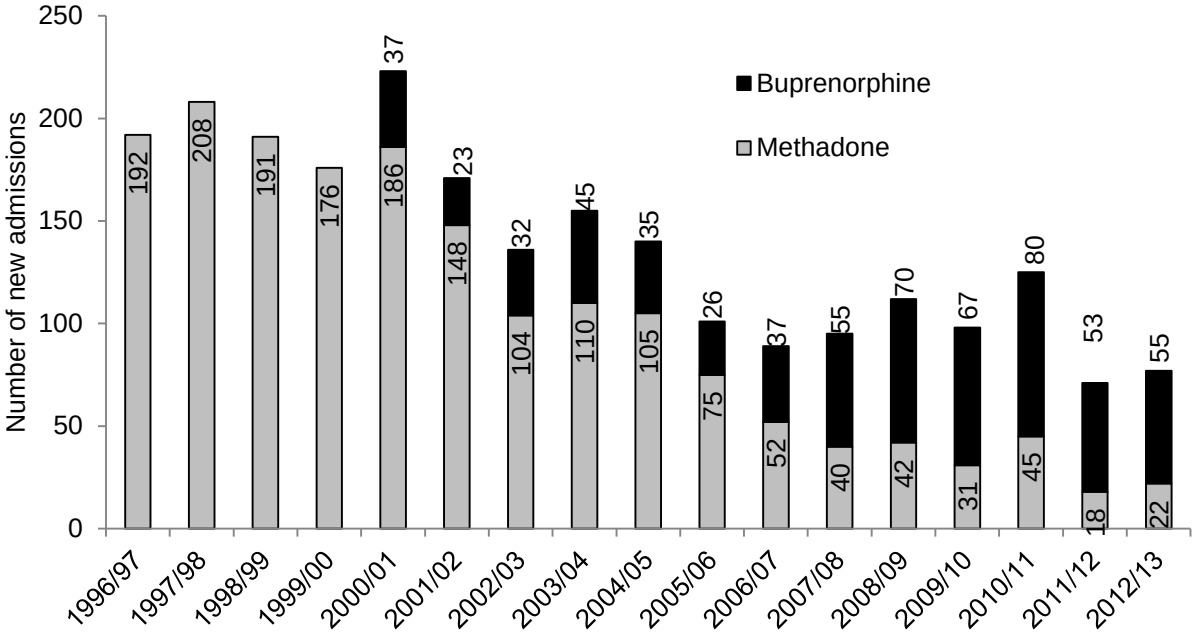
Several KE and participants in the current and previous studies have noted it has become increasingly difficult to access pharmacotherapy treatment, and that there was a considerable waiting list associated with accessing this treatment in the public sector.

Figure 57: Clients of the Tasmanian pharmacotherapy programs, 1996/97-2012/13



Source: Pharmaceutical Services, Department of Health and Human Services, Tasmania
Note: Daily buprenorphine patients includes Subutex and Suboxone in both tablet and film formulations

Figure 58: New admissions to pharmacotherapy treatments in Tasmania, 1996/97-2012/13

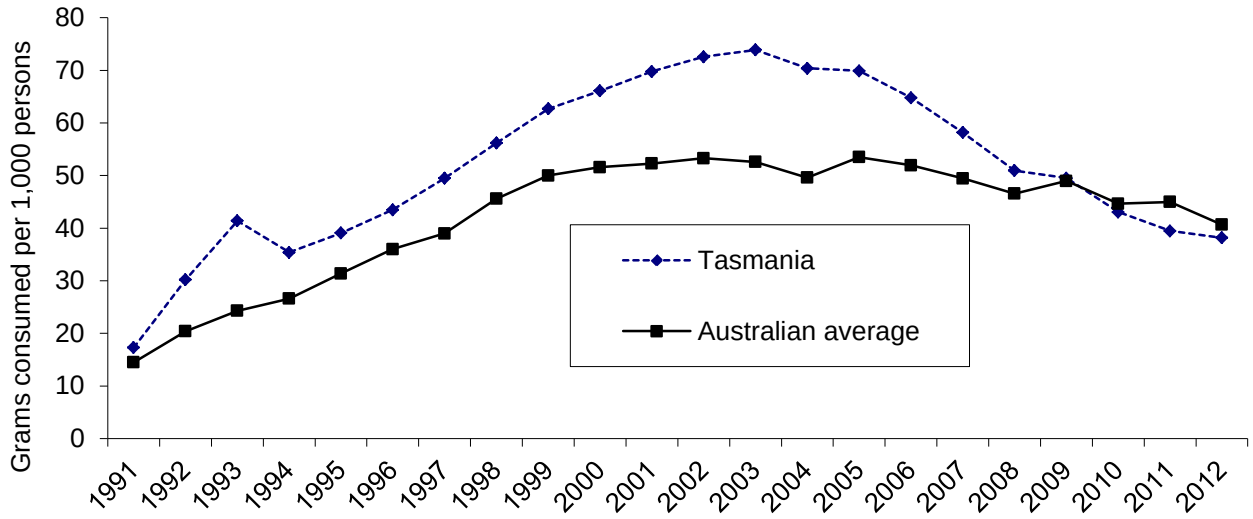


Source: National Drug System and Pharmaceutical Services, Department of Health and Human Services, Tasmania
Note: Buprenorphine admissions includes Subutex and Suboxone in both tablet and film formulations

Tasmanian prescription rates for Schedule 8 (S8) pharmaceuticals[21] since 1991 were also provided by Pharmaceutical Services (Tasmanian Department of Health and Human Services). Between 1991 and 2007, the rate of Tasmanian consumption of morphine was consistently 110% or more of the national average. Since 2008, this rate has decreased, with consumption of morphine in Tasmania in 2010 less than the national rate for the first time (96%). This trend toward decreasing consumption continued in 2011, with the Tasmanian rate 88% of the national rate. In 2012, the Tasmanian rate was 93.9% of the national rate (Figure 59).

Despite consumption of morphine per 1,000 persons in Tasmania decreasing from 73.9g in 2003 to 38.2g in 2012, the number of applications received by Tasmanian Pharmaceutical Services for approval to prescribe narcotics[22] steadily increased, almost exponentially in recent years, from 351 in 1989/90 to 2,644 applications[23] in 2005/06, with a particularly marked increase in applications in 2006/07 to 4,317, and again in 2009/10, with 6,439 applications. In 2011/12, 6,521 applications were received, however, in 2012/13 another increase was reported, with 7,359 applications (Figure 60).

Figure 59: Consumption of morphine per 1,000 persons, 1991-2012



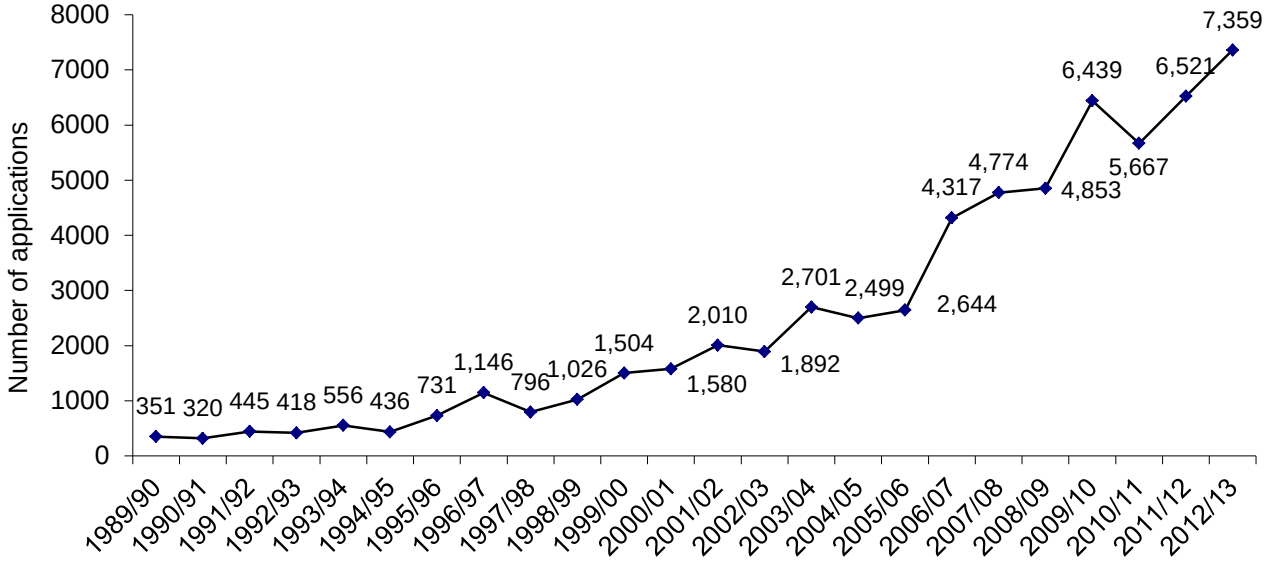
Source: National Drug System and Pharmaceutical Services, Department of Health and Human Services

[21] Pharmaceuticals classed under Schedule 8 (termed Section 59 from 2009) are variously classed as narcotic substances or drugs of addiction/dependence in differing jurisdictions.

[22] The *Alcohol and Drug Dependency Act 1968* requires medical practitioners to seek the approval of the Secretary of Pharmaceutical Services when narcotics are prescribed for a patient for more than two months, or for a person who is drug dependent.

[23] It is worth noting that the level of compliance in regard to submission of applications is significantly dependent on reminders being sent to doctors, and as such these figures are unlikely to reflect the absolute number of cases requiring such a submission.

Figure 60: S22/Section 59 applications received by Pharmaceutical Services, Tasmania, 1989/90-2012/13



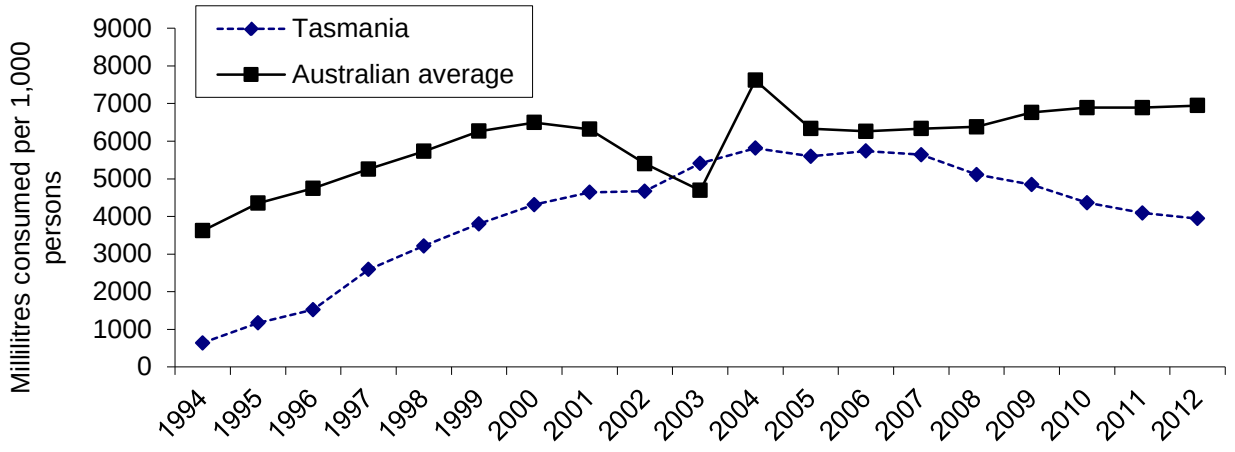
Source: Pharmaceutical Services, Department of Health and Human Services.
Note: Applications are for approval to prescribe narcotics to a patient for more than two months or for a person who is drug dependent

Despite the use of methadone syrup amongst a large proportion of the PWID sample in Tasmanian IDRS studies, local population rates of consumption of methadone syrup were continuously below that of the national average until 2003 (Figure 61). This partially reflected a sharp decline in consumption of methadone syrup nationally, beginning in 2001 with the wide introduction of Subutex (buprenorphine) maintenance treatment. Following some fluctuations in the extent of use of methadone syrup nationally, consumption has stabilised, whilst consumption rates in Tasmania have decreased over the preceding five years (57% of the national average in 2012) (Figure 61).

Tasmanian consumption of methadone 10mg tablets, in contrast to the level of use of methadone syrup, has been consistently above 200% that of the national average since 1995, with the exception of 2012 (196%) (Figure 62), with a rapid increase in use to 2000 (where local prescription rates were 260% of the national average), and again from 2003 to 2006 (from 253% of the national average to 278%) (Figure 62). However, since 2006, the rate of consumption in Tasmania has been decreasing, whilst the national rate has remained stable. Despite this, the consumption rate for Tasmania was 196% of the national rate in 2012.

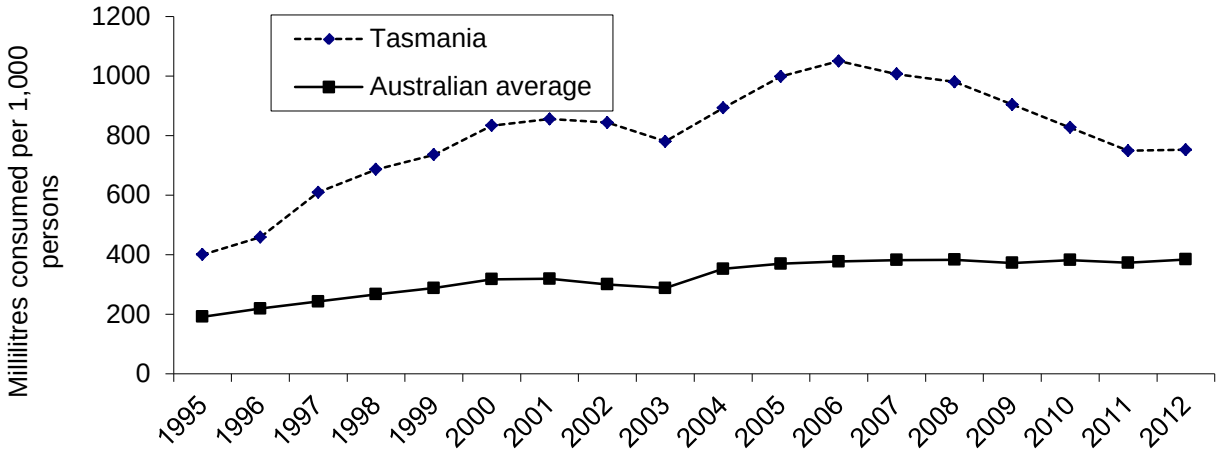
When trends across both preparations of methadone are combined, overall consumption of methadone in Tasmania remained below that of the Australian average until 2002, and in 2003 grew to 130% of the national average, due to a sharp decrease in the national rate of consumption (Figure 63). Between 2004 and 2007, the national and local rates of consumption stabilised, with Tasmanian rates approximately 110% of the national average (Figure 63). In 2008, however, the rate of use in Tasmania was comparable with the national average. In 2009, following a small increase in the national rate of consumption and a decrease in the local rate, the Tasmanian rate was below the national rate, and this trend continued into 2012 (70% of the national rate).

Figure 61: Consumption of methadone syrup per 1,000 persons, 1994-2012



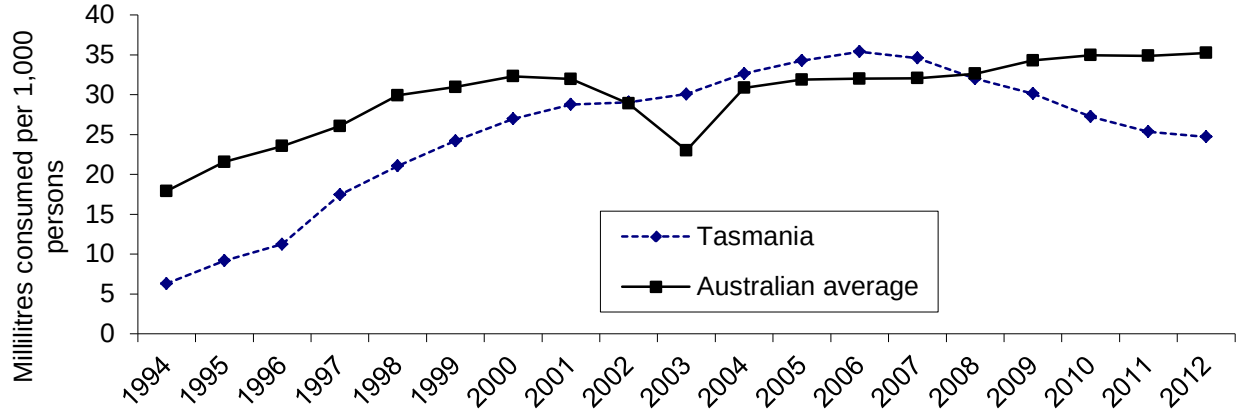
Source: National Drug System and Pharmaceutical Services, Department of Health and Human Services

Figure 62: Consumption of methadone 10mg tablets per 1,000 persons, 1995-2012



Source: National Drug System and Pharmaceutical Services, Department of Health and Human Services

Figure 63: Consumption of methadone per 1,000 persons, 1994-2012

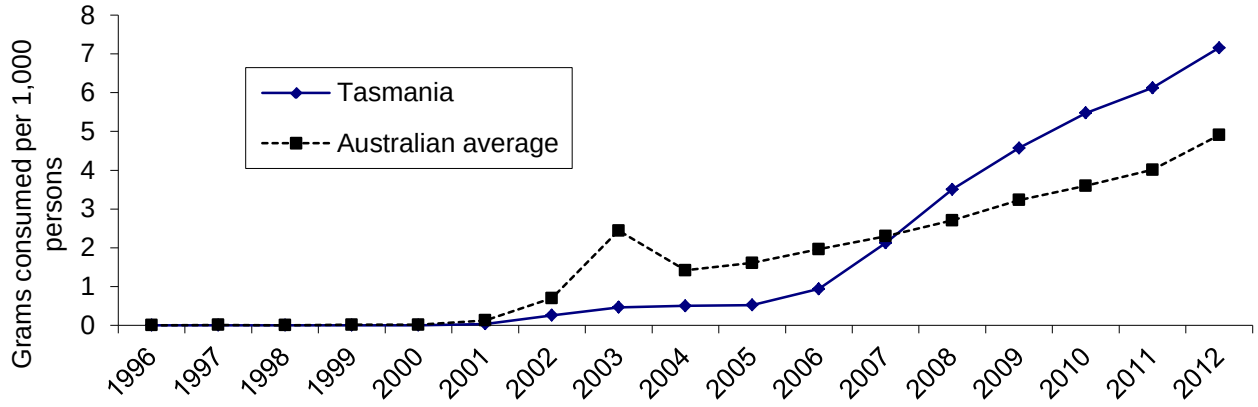


Source: National Drug System and Pharmaceutical Services, Department of Health and Human Services

Tasmanian prescription rates for buprenorphine are detailed below in Figure 64. Following the trends in buprenorphine maintenance admissions, the rate of prescription of all forms of the drug[24] in the state increased tenfold between 2001 and 2003 from 0.04g to 0.46g per 1,000 persons, and again between 2005 and 2012, increasing fourteen-fold from 0.5g to 7.2g per 1,000 persons. National prescription rates for all forms of buprenorphine have also increased remarkably rapidly since 2001, largely due to the enthusiastic uptake of buprenorphine treatment in Victoria. Despite this, the Tasmanian population rate of prescriptions is greater than the national rate (146%).

In the current study, three KE were aware of anecdotal reports of diversion of Suboxone. In the 2009 study, one KE was aware of anecdotal reports of people finely cutting up buprenorphine patches, making a suspension from this and injecting it. This practice was reported in the 2013 study, with one NSP outlet worker noting anecdotal reports of this practice, and another noting significant client interest in this practice but being hampered by lack of knowledge regarding the actual method of preparation. The latter KE noted that, anecdotally, illicit use was primarily driven by people trying to *"tide themselves over"* or *"self-taper"*, using buprenorphine as it is cheap, long-lasting, allows people to be independent in their treatment, and is an alternative to going into, or waiting to be accepted into, 'formal' maintenance treatment. Given the high use of illicit pharmaceutical opioids among the regular IDU population locally, and the notable rates of diversion of buprenorphine in other jurisdictions (Stafford & Burns, 2013), trends in use of buprenorphine merit continued attention as the drug continues to be more widely adopted as a treatment option locally in the coming years.

Figure 64: Consumption of all forms of buprenorphine per 1,000 persons, 1996-2012



Source: National Drug System (formerly DRUMS), Pharmaceutical Services, Department of Health and Human Services

Finally, prescriptions of oxycodone are detailed in Figure 65. Nationally, there has been a rapid uptake in the use of this drug since 1999, with uptake in Tasmania being particularly enthusiastic: prescription rates have increased nine-fold in the thirteen years between 2000 and 2012. Tasmanian consumption rates have consistently been greater that national rates, however, in 2011 this trend was reversed (falling to 86% of the national rate). This change was related to a dramatic increase in the national rate (from 73g per 1,000 persons in 2010 to 91g in 2011), whilst the Tasmanian consumption rate stabilised (78g in both 2010 and 2011). In 2012, the national rate declined and the Tasmanian rated increased, resulting in the Tasmanian rate being 99% of the national rate.

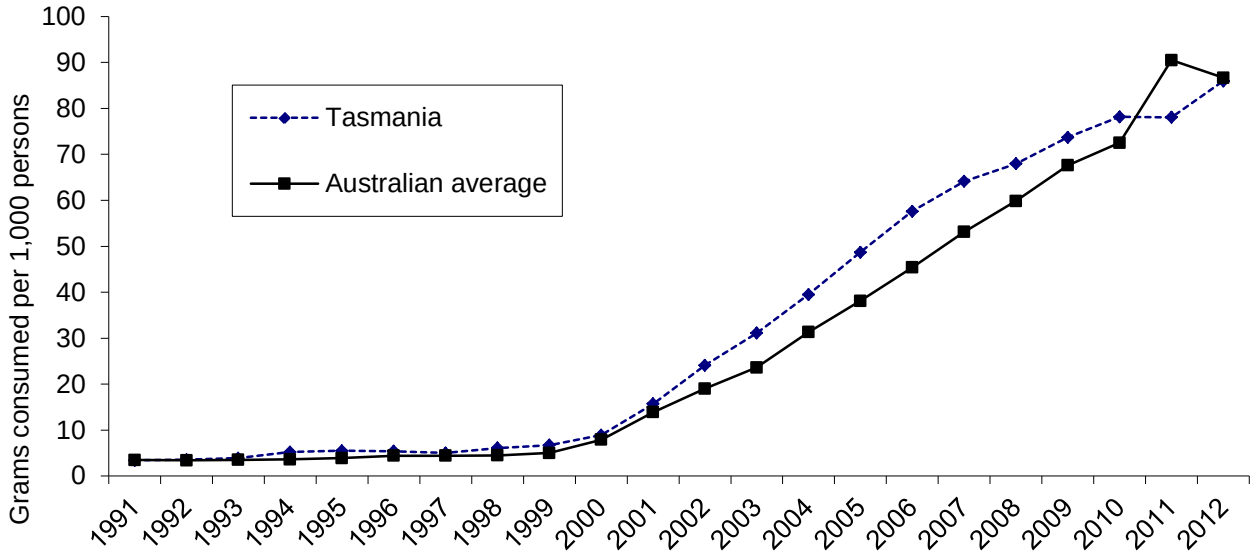
To some degree, the traditionally higher rates of consumption of oxycodone in Tasmania can be accounted for by idiosyncrasies in prescription practices and the aging nature of the Tasmanian

[24] This data includes both buprenorphine (Subutex, Norspan) and buprenorphine-naloxone (Suboxone) preparations.

population. It is important to note that higher-than-average levels of prescription of opioid products certainly do not necessarily imply inappropriate patterns of clinical practice – indeed, there are many indications that, internationally, chronic pain (for which opioids are appropriately prescribed) is often under-recognised and unrelieved (see Brennan, Carr & Cousins, 2007 for a review on this issue).

Similarly, higher-than-average levels of opioid prescription do not indicate that PWID are directly responsible for these elevated rates. Indeed, a near-negligible proportion of PWID reported accessing opioids via licit means[25] in the six months prior to interview: with the exception of methadone as part of a maintenance program, only eight of the current PWID cohort reported accessing morphine, oxycodone or methadone tablets via licit means in this time. More detailed examination of the issue of 'doctor shopping' and local PWID experience with access to analgesia from medical practitioners (Bruno, 2007) concur with the fact that PWID are generally not accessing opioids from medical practitioners directly via 'doctor shopping'.

Figure 65: Consumption of oxycodone per 1,000 persons, 1991-2012



Source: National Drug System and Pharmaceutical Services, Department of Health and Human Services

5.5.4 Trends in availability of different forms of pharmaceutical opioids across IDRS studies

When PWID reports of the availability of illicit pharmaceutical opioids are compared across the 2003[26] and 2013 IDRS studies (Figure 66), several changes are notable. Firstly, in regard to morphine availability, between 2003 and 2013 there has been only slight variation in the overall proportion reporting that availability was 'easy' or 'very easy'. In 2013, the overall proportion of participants reporting 'easy' or 'very easy' access remained stable (78% in 2013; 80% in 2012).

Availability of illicit methadone syrup has been more variable. Between 2003 and 2005, a steady decline in the proportion of consumers considering the drug as 'easily' or 'very easily' available was observed; however, this trend was reversed temporarily in 2006. Between 2007 and 2010, availability of methadone syrup was relatively stable: between 51% and 62% of each sample

[25] During interviewing, 'licit means' was defined as having the drug prescribed directly to the individual. By this definition, doctor-shopping would be considered as 'licit means', which suggests that there is a stable illicit source of these drugs to IDU.

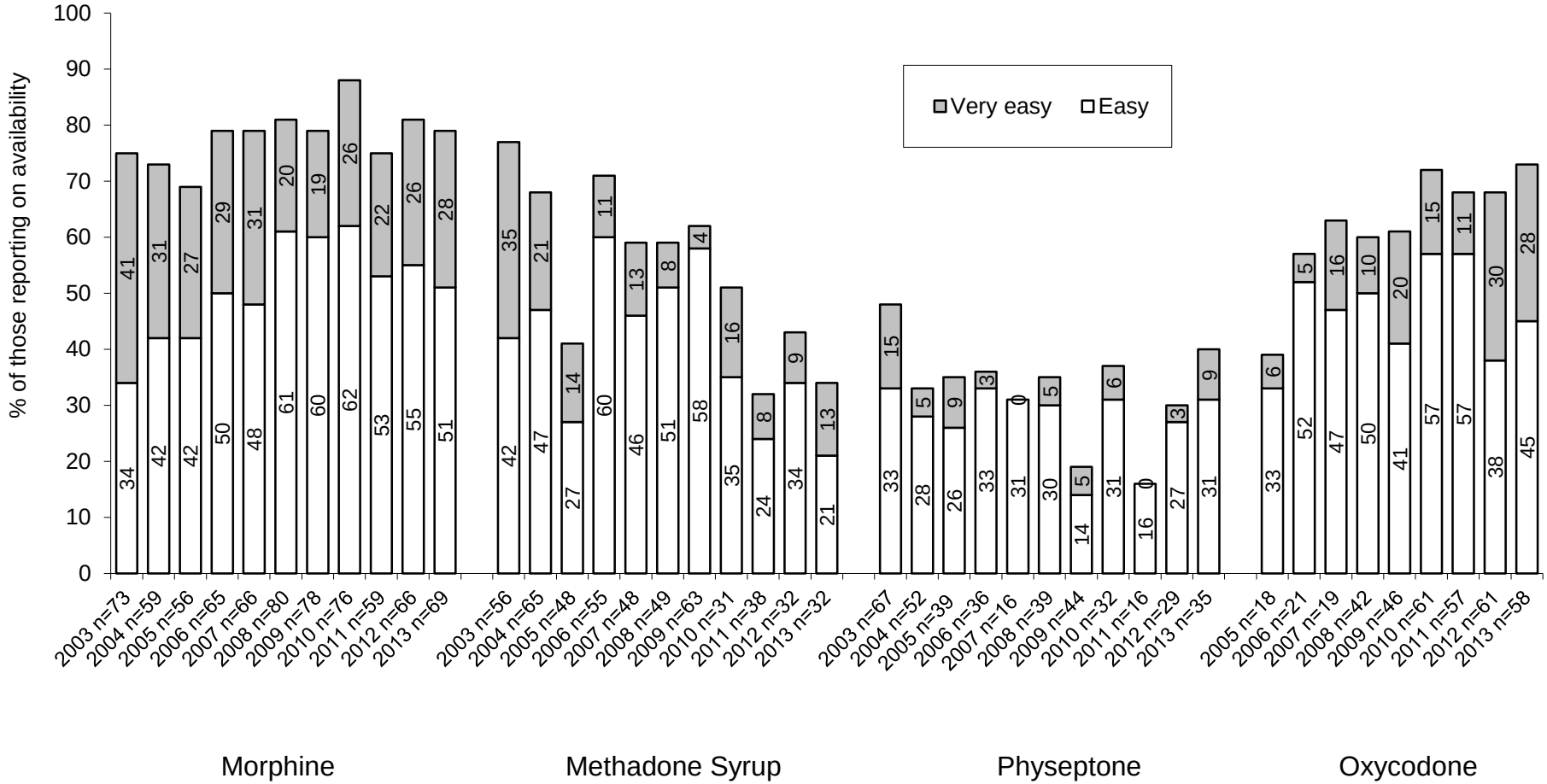
[26] 2003 was the first year in which explicit differentiation was made between methadone syrup and Physeptone tablets in regard to availability.

reported access to be either ‘easy’ or ‘very easy’. Since 2011, this rate has been slightly lower, ranging between 32% and 43%.

Availability reports for Physeptone have remained relatively stable between 2004 and 2013 (between 30-40% reporting ‘easy’ or ‘very easy’ access), with the exception of 2009 and 2011, when ‘easy’ and ‘very easy’ access decreased to 19% and 16% respectively.

Finally, while data on availability of oxycodone has only been collected since 2005, there appears to have been a trend toward increasing availability over this period. In 2005, 39% of participants who commented reported access to be ‘easy’ or ‘very easy’; this rate has increased to 72% in the current study ($\chi^2(1_{n=76})=5.36$, p=0.02).

Figure 66: PWID reports of 'easy' or 'very easy' availability of illicit pharmaceutical opioids, 2003-2013



Source: IDRS PWID interviews

5.6 Benzodiazepines

Key Points:

- Benzodiazepines were most commonly sourced from medical practitioners, from friends (given or purchased) and dealers; and
- Participants generally considered availability of illicit benzodiazepines to be 'easy' or 'very easy', and that this situation had remained stable in the preceding six months; and
- Preliminary data for 2013 indicate a dramatic increase in tablet seizures by Tasmania Police relative to previous years.

Alprazolam

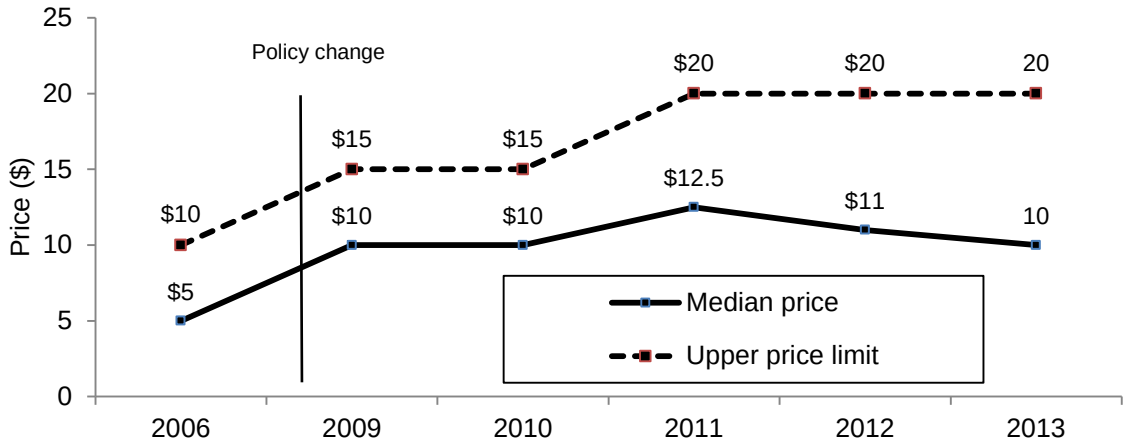
- The median purchase price of a 2mg alprazolam tablet was $10, with an upper limit of $20. This has increased substantially following regulatory change aimed at limiting extra-medical use of alprazolam. Over half of those who commented on price reported that it had increased over the past six months, with one-third reporting it as stable; and
- The number of patients receiving prescriptions in Tasmania for alprazolam decreased since 2012, as did the number of patients receiving prescriptions for both alprazolam and an S8 (850 in 2011/12 to 762 in 2012/13).

5.6.1 Price

Data regarding purchase price was collected for alprazolam. This was in response to regulatory changes made by the Pharmaceutical Services Branch (of the Tasmanian Department of Health and Human Services) in September 2007. These changes were aimed at reducing extra-medical use of alprazolam – including injection – as anecdotal evidence indicated an increase in various harms, primarily vascular damage (which in some instances lead to gangrene and amputation of affected limbs/digits) and overdose. These changes included restricting alprazolam prescribing amongst patients receiving opioid medication: prescribers for patients enrolled in methadone maintenance or buprenorphine treatments were required to obtain approval from the Clinical Director of Alcohol and Drug Services in order to prescribe alprazolam; and prescribers for patients receiving other types of opioid medications required authority from Pharmaceutical Services in order to continue prescribing alprazolam for longer than four weeks.

In the current study, the median last purchase price for a 2mg alprazolam tablet was $10 (range $10-20, n=27). The median purchase price has increased from $5 in 2006 following the regulatory change (Figure 67). Similarly, the range of prices paid by participants has increased: in 2006, $10 was the maximum price paid for a 2mg tablet, in 2011 this increased to $20. Participants were asked to comment on perceived changes in price over the six months preceding the interview: 56% reported an increase (n=15) and 33% (n=9) noted no change in price.

Figure 67: Median and upper limit of prices paid for 2mg alprazolam, 2006-2013*



Source: IDRS PWID interviews
***** This data was not collected in the 2007 and 2008 surveys

5.6.2 Availability and access

In some instances KE found it difficult to separate licit and illicit use of benzodiazepines amongst the groups of consumers they were reporting on, as often there was a substantial amount of overlap in use, with, for example, some people receiving illicit medications as a gift from a friend, or others bingeing on a benzodiazepine prescription then having to purchase illicit benzodiazepines to maintain their usual base level of use. When PWID were asked their primary source of prescribed/licit benzodiazepines in the preceding six months, all participants who had accessed this form noted accessing these through a medical doctor for genuine symptoms (n=44) (Table 34). Illicit benzodiazepines were most commonly purchased from friends (41%, n=23), provided as a gift (29%, n=16) or purchased from a dealer (25%, n=14).

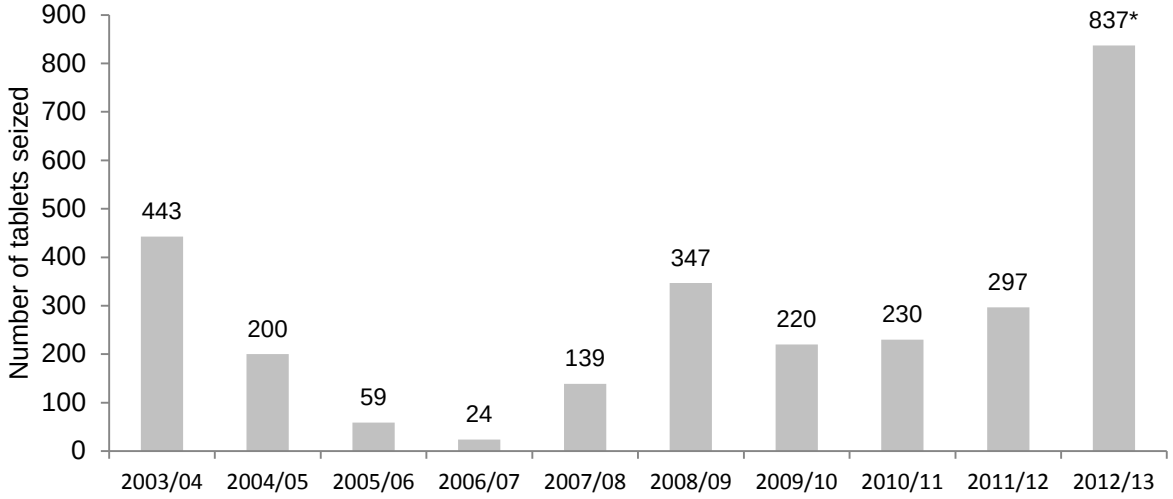
Similarly, when considering all modes of access to benzodiazepines in the preceding six months, the majority of respondents reported accessing tablets via a doctor for genuine symptoms (58%, n=44),a purchase from friends (39%, n=30), and from a dealer (28%, n=21) (Table 33).

Those participants that had accessed illicit benzodiazepine tablets in the six months prior to interview were asked about their ease of access to such drugs in this time. Two-thirds of participants who commented (67%, n=29) felt that benzodiazepines were either 'easy' or 'very easy' to access ('easy': 42%; 'very easy': 26%), however, one-third of this group reported that it was 'difficult' or 'very difficult' for them to access illicit benzodiazepines (33%: 'difficult': 26%; 'very difficult': 7%). In addition, two-thirds of this group reported availability had remained unchanged during the six months preceding (68%, n=28).

Trends from Tasmania Police in regard to benzodiazepines appeared to remain relatively stable between 2000/01 and 2001/02, with seizures of 2,511 pills associated with Schedule 4 drugs in 2001/02, in comparison to 2,374 pills in 2000/01. During the 2003/04 financial year a new series of exhibit sheet rules were instigated for Tasmania Police seizures, which allowed the explicit recording of the types of tablets seized. In 2003/04, 443 tablets were seized. In subsequent years, there has been a varying number of benzodiazepine seizures reported: 200 in 2004/05 (96 being diazepam, 54 temazepam, 49 oxazepam and one flunitrazepam, 95% of which were seized in the south); 59 in 2005/06 (all diazepam); and six seizures of benzodiazepine, totalling 24 tablets, all of which were believed to be diazepam in 2006/07. In 2007/08, 139 tablets believed to be benzodiazepines were seized. Of these, 63 were believed to be diazepam, 54 were temazepam and 22 were flunitrazepam. In 2008/09, 347 tablets were seized: of these, 265 were believed to be diazepam, 50 were believed to be flunitrazepam and 32 temazepam. In 2009/10, 220 tablets were

seized (121 temazepam and 99 diazepam tablets). In 2010/11, 230 tablets were seized (180 tablets that were believed to be diazepam and 50 temazepam tablets). In 2011/12 and 2012/13[27], 297 and 837 tablets were seized respectively, all of which were reported to be diazepam (Figure 68).

Figure 68: Total numbers of benzodiazepine tablets seized by Tasmania Police, 2003/04-2012/13



Source: State Intelligence Services, Tasmania Police
* 2012/13 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules

[27] 2012/13 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

Table 33: All modes of obtaining benzodiazepines in the six months prior to interview, 2003-2013

All modes of access	2003 (n=88)* %	2004 (n=85) %	2005 (n=86) %	2006 (n=81) %	2007 (n=77) %	2008 (n=83) %	2009 (n=75) %	2010 (n=70) %	2011 (n=81) %	2012 (n=75) %	2013 (n=76) %
Doctors (genuine symptoms)	n/a	59 *(n=50)*	64 *(n=55)*	59 *(n=48)*	62 *(n=47)*	49 *(n=41)*	56 *(n=42)*	47 *(n=33)*	63 *(n=51)*	56 *(n=42)*	58 *(n=44)*
Doctors (fake symptoms)	n/a	2 *(n=2)*	0	2 *(n=2)*	9 *(n=7)*	2 *(n=2)*	9 *(n=7)*	9 *(n=6)*	2 *(n=2)*	0	0
Forged prescriptions	n/a	0	0	0	1 *(n=1)*	0	1 *(n=1)*	0	1 *(n=1)*	0	0
Friends† (gift or purchase)	n/a	56 *(n=48)*	53 *(n=46)*	69 *(n=56)*	75 *(n=57)*	60 *(n=50)*	65 *(n=49)*	70 *(n=49)*	47 *(n=38)*	75 *(n=56)*	59 *(n=45)*
Friends (purchase)†	n/a	40 *(n=34)*	30 *(n=26)*	44 *(n=36)*	21 *(n=16)*	47 *(n=39)*	41 *(n=30)*	49 *(n=34)*	27 *(n=22)*	64 *(n=48)*	39 *(n=30)*
Dealer / street (purchased)	n/a	22 *(n=19)*	9 *(n=8)*	12 *(n=10)*	21 *(n=16)*	30 *(n=25)*	24 *(n=18)*	33 *(n=23)*	20 *(n=16)*	32 *(n=24)*	28 *(n=21)*
Dealer / street (swap drugs)	n/a	31 *(n=26)*	17 *(n=15)*	37 *(n=30)*	28 *(n=21)*	12 *(n=10)*	19 *(n=14)*	19 *(n=13)*	17 *(n=14)*	15 *(n=11)*	13 *(n=10)*
Theft	n/a	2 *(n=2)*	1 *(n=1)*	0	9 *(n=7)*	2 *(n=2)*	4 *(n=3)*	0	4 *(n=3)*	3 *(n=2)*	0

Source: IDRS PWID interviews

*Data were only collected on 79 participants: proportions are calculated with reference to this number

†In 2003, data were divided according to purchase from friend or gift from friend to distinguish between these two methods of acquisition

Table 34: Primary modes of obtaining benzodiazepines in the six months prior to interview, 2003-2013

Primary mode of access	2003* (n=88) %	2004 (n=85) %	2005 (n=86) %	2006 (n=80) %	2007 (n=76) %	2008 (n=83) %	2009 (n=75) %	2010 (n=57) %	2011 (n=81) %	2012 (n=42) %	2013 (n=44) %
Doctor (genuine symptoms)	97 *(n=38)*	95 *(n=37)*	100 *(n=48)*	95 *(n=42)*	90 *(n=46)*	95 *(n=41)*	93 *(n=39)*	86 *(n=32)*	98 *(n=49)*	100 *(n=42)*	100 *(n=44)*
Doctor (fake symptoms)	3 *(n=1)*	5 *(n=2)*	0	5 *(n=2)*	10 *(n=5)*	5 *(n=2)*	7 *(n=3)*	14 *(n=5)*	2 *(n=1)*	0	0
	(n=88) %	**(n=85) %**	**(n=86) %**	**(n=80) %**	**(n=76) %**	**(n=83) %**	**(n=75) %**	**(n=57) %**	**(n=81) %**	**(n=61) %**	**(n=56) %**
Forged prescriptions	0	0	0	0	0	0	0	0	1 *(n=1)*	0	0
Friends (gift or purchase)†	27 *(n=21)*	26 *(n=22)*	20 *(n=17)*	19 *(n=15)*	64 *(n=49)*	52 *(n=43)*	67 *(n=38)*	63 *(n=36)*	42 *(n=34)*	74 *(n=45)*	70 *(n=39)*
Friends (purchase) †	20 *(n=16)*	13 *(n=11)*	14 *(n=12)*	18 *(n=14)*	25 *(n=19)*	37 *(n=31)*	27 *(n=20)*	47 *(n=27)*	26 *(n=21)*	66 *(n=40)*	41 *(n=23)*
Dealer/street (purchase)	4 *(n=3)*	5 *(n=4)*	5 *(n=4)*	4 *(n=3)*	17 *(n=13)*	23 *(n=19)*	12 *(n=9)*	30 *(n=17)*	15 *(n=12)*	23 *(n=14)*	25 *(n=14)*
Dealer/street (swap drugs)	n/a	7 *(n=6)*	6 *(n=5)*	5 *(n=4)*	16 *(n=12)*	4 *(n=3)*	13 *(n=10)*	7 *(n=4)*	10 *(n=8)*	3 *(n=2)*	5 *(n=3)*
Theft	n/a	0	0	0	3 *(n=2)*	0	0	0	4 *(n=3)*	0	0

Source: IDRS PWID interviews

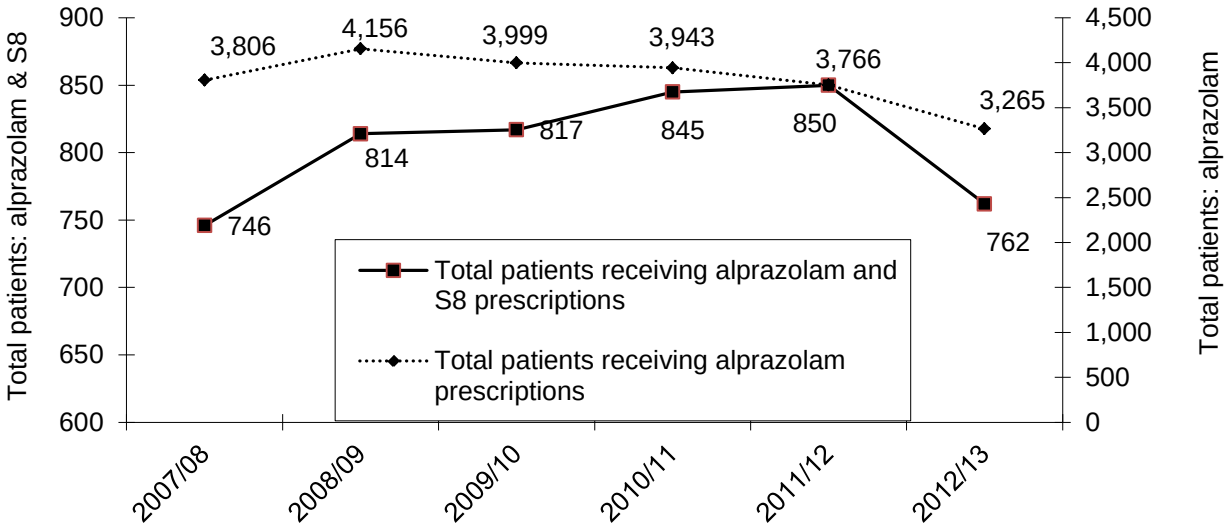
*Data were only collected on 79 participants: proportions are calculated with reference to this number

†In 2003, data were divided according to purchase from friend or gift from friend to distinguish between these two methods of acquisition

Alprazolam prescription rates

Pharmaceutical Services (Tasmanian Department of Health and Human Services) has provided data summarising alprazolam prescription changes from 2007/08 (when the regulatory changes were implemented) to 2012/13. The total number of patients receiving prescriptions for alprazolam in the 2007/08 period was 3,806 (Figure 69). This number has gradually decreased since then, with 3,265 patients in 2012/13. The total number of patients receiving prescriptions for both alprazolam and a Schedule 8 (S8) drug gradually increased from 746 in 2007/08 to 850 in 2011/12, however, in 2012/13 this decreased to 762 patients.

Figure 69: Total numbers of Tasmania patients receiving alprazolam and both alprazolam and a Schedule 8 drug, 2007/08-2012/13

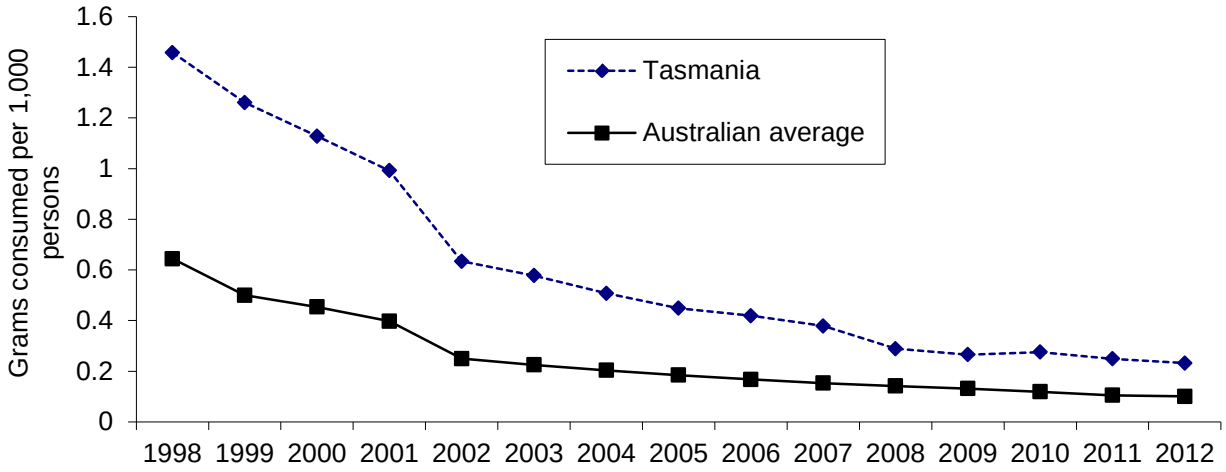


Source: Pharmaceutical Services, Department of Health and Human Services

Flunitrazepam consumption

Flunitrazepam (Hypnodorm, previously sold as Rohypnol) is a benzodiazepine that is preferred by some PWID due to its potent and quick-acting effect. Despite the prescription of this drug being tightly defined through the Pharmaceutical Benefits Scheme and its classification as a Schedule 8 drug, participants in recent local IDRS and related studies have continued to report some oral and intravenous use of Hypnodorm tablets, albeit in small amounts. Prescription rates of flunitrazepam in Tasmania (Figure 70) show low and declining levels of prescription of the drug both in the state and nationally, although prescription rates of flunitrazepam in Tasmania have remained consistently above 200% that of the national average between 1998 and 2012.

Figure 70: Consumption of flunitrazepam per 1,000 persons, 1998-2012



Source: National Drug System (formerly DRUMS), Pharmaceutical Services, Department of Health and Human Services

5.7 Other drugs

Key Points:

Ecstasy:

- The Tasmanian EDRS reported the median price of ecstasy ($30) matched that reported in the 2011 and 2012 studies, but was lower than that reported in previous studies;
- Subjective availability of ecstasy declined from 2012 to 2013, with purity reported as 'medium' or 'fluctuating'; and
- Preliminary data from Tasmania Police suggest a marked decline in seizures since 2008/09.

Alkaloid poppies:

- From 2007/08, the number of thefts of alkaloid poppies has decreased, as has the number of seizures reported by Tasmania Police; a slight increase in these rates were observed in 2013.

5.7.1 Ecstasy and related drugs

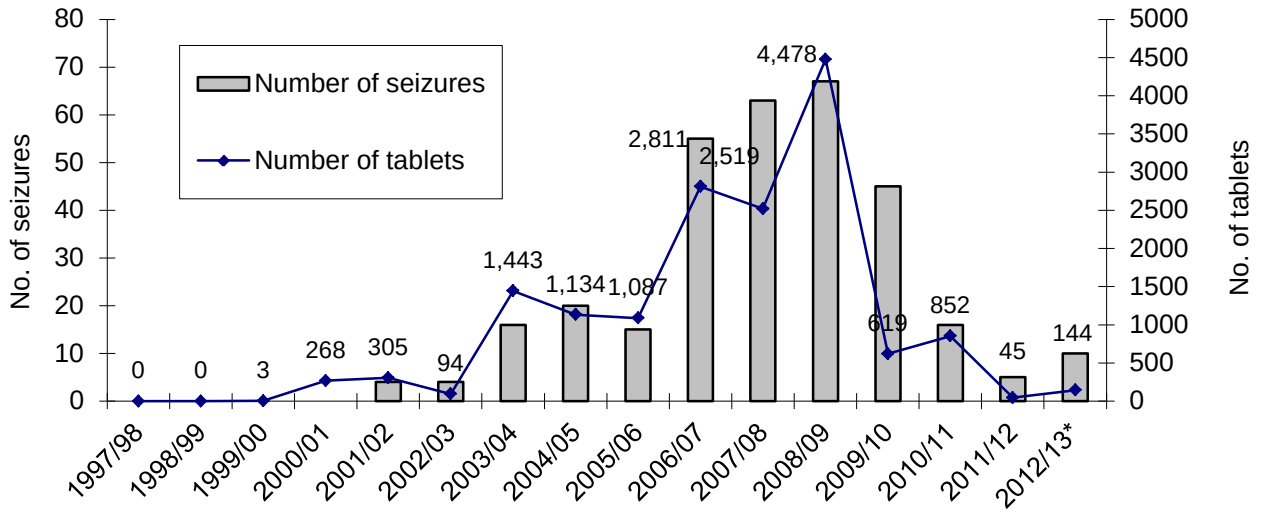
Trends in regard to price, purity and availability of ecstasy are not examined in detail within the IDRS study. However, a study conducted during a similar time-frame and methodology to the current study, using regular ecstasy users (REU) as the drug user cohort, has been conducted (Matthews, Bruno & Nicholls 2014), and examines trends in ecstasy and other 'party drug' use in greater depth. This study found that the median price of ecstasy was $30 in 2013; the same as reported in 2012 and 2011, but cheaper than reported between 2003 and 2010 (ranging between $35 and $45). Participants noted that ecstasy was generally more difficult to access in 2013 than in 2012. Ecstasy was reported to be 'medium' (49%) or 'fluctuating' (30%) in purity in the past six months, consistent with 2012 reports.

Figure 71 shows that there were no ecstasy tablets seized by Tasmania Police prior to the 1999/00 financial year. Since this time the number of tablets and the number of seizures have increased, with considerable increases observed in the number and total weight of seizures in the 2003/04 and 2006/07 reporting periods and a substantial increase in the total number of tablets seized during the 2008/09 period (4,478 tablets). In 2009/10 there was a considerable decrease in both the number of

seizures and the total number of tablets seized and the number of seizures continued to reduce substantially in 2010/11 and 2011/12. In 2012/13[28], the number of seizures and the total number of tablets seized was slightly higher with a total of 144 tablets/capsules seized across 10 seizures.

There were three samples of phenethylamines (the class of drugs that ecstasy, or MDMA, and drugs such as 3,4 methylenedioxyamphetamine (MDA), 3,4 methylenedioxyethamphetamine (MDEA) and mescaline belong to) seized by Tasmania Police analysed for purity in 2003, returning a median purity of 28.5% (range 28.5-28.6%) (ACC, 2004). Similar results were returned from seizures analysed in 2003/04 (median purity 26.0%, range 10.4-44.5%, n=33) (ACC, 2005). No seizures were analysed for purity in 2004/05 or 2005/06. In 2006/07, four seizures were analysed, returning a median purity of 27.1% (range 26.0-54.7%), in 2007/08, three seizures were analysed, returning a median purity of 24.6% (range 6.4-26.6%), and in 2008/09, two seizures were analysed returning a median purity of 34.3% (range 33.8-34.8%) (ACC, 2010). In 2009/10, just one seizure was analysed, returning a purity level of 34.2%. No seizures were analysed in 2010/11 or 2011/12, and data for 2012/13 was not available at the time of publication.

Figure 71: Total number of tablets suspected to contain ecstasy seized by Tasmania Police, 1997/98-2012/13



Source: ACC & State Intelligence Services, Tasmania Police
* 2012/13 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules
Note: Number of seizures was not available for the 1999/00 and 2000/01 periods

5.7.2 Hallucinogens

In 2001/02, the ACC reported the price of one tab of LSD as $20-25 in this period. No price data was reported until 2008/09, when one tab was reported to cost $40; in 2009/10 one tab was reported to cost $25; and in 2011/12, this price was $20. No further price data has been reported.

ACC data for hallucinogens include tryptamines such as LSD and psilocybin (mushrooms). There have been a small number of arrests and seizures in Tasmania in relation to hallucinogens between 1997/98 and 2012/13. In the 2011/12 period, the ACC reported one consumer and two provider

[28] 2012/13 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

arrests in relation to hallucinogens. In the 2012/13[29] period, Tasmania police reported three provider arrests in relation to LSD and 5 seizure of LSD totalling 174 tabs.

5.7.3 Alkaloid poppies

Tasmania Police State Intelligence Services reported stable prices of $10 and $20 per 'ball' of poppy tar between January 2000 and June 2001, but have not reported price information for alkaloid poppy preparations since this time. Seizures of poppy products are reported in a variety of measures (including grams of tar, resin, seed, poppy product and vegetable matter, numbers of capsules and plants, and units of plant material), rendering it difficult to clearly identify trends in seizure data (Table 35). In 2012/13[30], Tasmania Police reported making seizures of 1,258 capsules, 1,001 liquid units, 200 plants and 17g seeds.

The diversion rates of Tasmanian alkaloid poppy crops, shown in Table 35 below, indicate a substantial amount of poppies stolen from crops in 1998/99 and 1999/00. It should be noted that a small number of particularly large hauls were largely responsible for these rates of diversion (in one case, a single haul of approximately 50,000 capsules were stolen). In concert with trends suggesting a decline in alkaloid poppy use amongst PWID during 2001, there was a major decrease in the numbers of poppies stolen during 2000/01, when compared to the two earlier financial years (7,765 capsules in comparison to over 60,000 in 1998/99 and 1999/00). The 2001/02 financial year saw a doubling of the number of stolen poppy capsules (15,946) in comparison to the previous year, and thefts continued to rise in 2002/03 and 2003/04 (to 20,223 and 24,128 capsules stolen per annum respectively). However, since 2003/04, the number of capsules stolen and the number of theft incidents recorded has declined, with a small increase in 2012/13 (2012/13: 2,895 capsules stolen and 19 incidents of theft reported).

[29] Note: 2012/13 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.
[30] Note: 2012/13 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules.

Table 35: Tasmanian alkaloid poppy crop diversion rates, 1998/99-2012/13

	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Number of capsules stolen	66,013	62,700	7,765	15,946	20,223	24,128	16,201	10,263	9,344	820	2,280	4,772	1,473	687	2,895
Cost per hectare of securing poppy crops	$33	$27	$28	$28	$30	$47	$44	$62	$68	$71	$33	$30	$26	$26	$19
Number of capsules stolen per hectare sown	4.41	2.99	0.39	0.81	1.11	1.97	1.25	1.06	1.04	0.07	0.14	0.23	0.06	0.03	0.09
Number of theft incidents reported	34	39	20	27	27	39	35	13	7	8	17	33	11	11	19
% of PWID sample reporting use	-	34	13	14	12	13	21	8	10	10	11	7	8	5	4
Median days used (among PWID using)	-	6 (1-151)	6 (1-81)	4 (1-45)	5 (1-48)	3 (1-96)	3 (1-144)	3 (1-100)	2 (1-45)	7 (1-100)	3 (1-90)	14 (1-45)	15 (2-30)	n/r	n/r
TASPOL seizures	-	*3,933 caps*; 50g tar*	*3,522 caps**	*382 caps*; plus 9,319g of capsules*	*7 caps plus 1,473.3g caps; 84 plants; 2g tar*	*601 caps; 18g resin; 31 plants*+*	*626 caps; 2,515.4g caps; 2.7g resin; 473 plants; 11.7g seed*	*59 caps; 33 plants; 3 seeds; 224.7g poppy products*	*363 caps; 283.2g of caps; 290ml liquid; 8 plants; 8 seeds*	*144 plants; 26 caps; 64g*	*445 g of poppy products; 231 units*	*908 caps; 3 units liquid; 2 units plant material; 49.2g seed; 0.3g veg matter*	*56 plants; 15.5g seed; 114g veg matter*	*24 plants;4 units veg matter; 116 caps; 0.6g resin*	*1,258 caps; 1001 liquid units; 200 plants; 17g seeds*

Source: Poppy Advisory and Control Board, Justice Department of Tasmania, Tasmania Police State Intelligence Services, IDRS PWID interviews.
Note: 'caps' refers to poppy capsules
* May be an overestimate of seizures as Tasmania Police data are an amalgamation of plants, capsules and weight of seizures. Data reported here are the best estimate of seizure quantity. Note: 2012/13 data from Tasmania Police is preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules

6.0 HEALTH-RELATED TRENDS ASSOCIATED WITH DRUG USE

6.1 Overdose and drug-related fatalities

Key Points:

- Nearly one-third of the sample reported ever having experienced an opioid overdose, and 6% reported this occurring in the preceding 12 months; and
- 2% of the sample reported experience of a stimulant overdose in the preceding 12 months.

6.1.1 Opioids

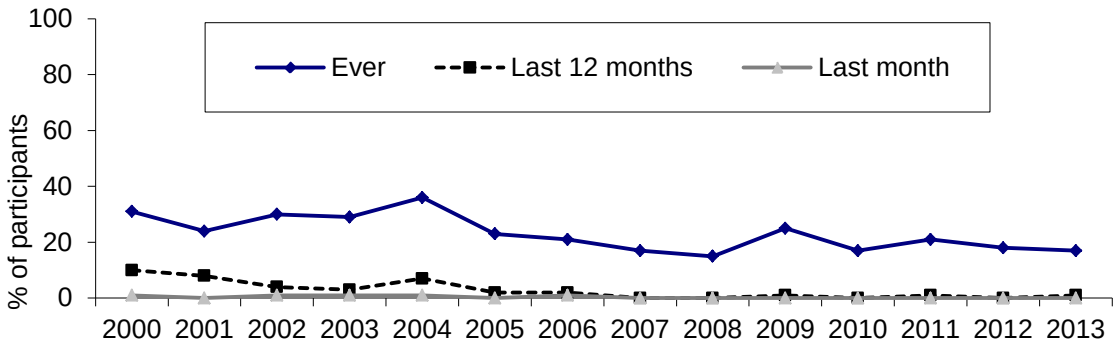
Non-fatal overdose

All but two participants reported that they had used some form of opioid in their lifetime, and 32% of these had ever experienced a (non-fatal) opioid overdose (Table 36). Among the 33 individuals that had ever experienced an opioid overdose, 18 had overdosed on heroin, 11 with morphine, eight on methadone and two on oxycodone. The proportion of the sample reporting ever having overdosed on an opioid was similar in 2013 to 2012 (32% and 25% respectively). Eight participants in the current cohort (7%) had overdosed on any opioid in the year prior to interview: three with morphine, two with methadone, two with a combination of morphine and oxycodone and a single participant with heroin. Of those participants who had ever overdosed on any opioid, the median number of times they had overdosed was once. Specifically, for heroin overdose: median twice, range 1-25 times; for morphine overdose: median once, range 1-6 times; for methadone overdose: median once, range 1-2; and for oxycodone: median once, range 1). Among those that had ever experienced an opioid overdose, the median time since their last overdose was five years: amongst those that had overdosed on heroin it was ten years (range 1-28 years); for morphine it was two years (range 4-240 months); for methadone four years (range 6-108 months) and for oxycodone 8 months (range 4-12 months). KEs working in alcohol and drug treatment and NSP outlets commenting on rates of overdose reported no recent change in rates of accidental opioid overdose.

Heroin

A single participant in the current cohort reported experiencing a non-fatal heroin overdose in the year prior to interview. Examining trends in experience of heroin overdose in the IDRS PWID cohorts over time (Figure 72), it appears that recent experience of heroin overdose has been declining over time, consistent with the decline in use of this drug in successive cohorts.

Figure 72: Proportion of IDRS participants who had ever overdosed on heroin, overdosed in the last 12 months, and the past month, 2000-2013



Source: IDRS PWID interviews

Methadone

Eight participants in the current cohort reported ever having experienced a non-fatal methadone overdose. Of this group, two had experienced this in the 12 months preceding the interview. The numbers of reports of experience of methadone overdose are similar to those in 2012, where five participants had experienced a methadone overdose in their lifetime, and four in the 12 months prior to interview.

Morphine

Overall, eleven PWID participants (10%) in the current cohort reported ever having experienced a non-fatal morphine overdose and three participants reported such an experience in the year prior to interview (a further 2% reported an overdose after use of a combination of morphine and oxycodone). The rate of these experiences in the current cohort was similar to previous local IDRS studies.

Oxycodone

Two participants (2%) in the current cohort reported ever having experienced a non-fatal oxycodone overdose (in combination with morphine), both of which occurred in the year prior to interview.

Table 36: Reported experience of non-fatal opioid overdose among the PWID sample, 2001-2013

% of PWID in past month													
	2001	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Overdosed (ever)˜	25%*	33%	34%	46% *Heroin 35% Morphine 18%*	33% *Heroin 22% Morphine 6% Methadone 9%*	32% *Heroin 21% Morphine 8% Methadone 6%*	34% *Heroin 17% Morphine 11% Methadone 9%*	26% *Heroin 15% Morphine 7% Methadone 11%*	40% *Heroin 25% Morphine 10% Methadone 5%*	29% *Heroin 17% Morphine 10% Methadone 7% Oxycodone3%*	36% *Heroin 21% Morphine 11% Methadone 4% Oxycodone 1%*	25% *Heroin 18% Morphine 7% Methadone 5% Oxycodone 2%*	32% *Heroin 17% Morphine 10% Methadone 7% Oxycodone 2%*
Median times ever overdosed	1	1	2	3 *Heroin thrice Morphine once*	2 *Heroin twice Morphine & Methadone once*	2 *Heroin thrice Morphine once*	1 *Heroin twice Morphine once*	1 *Heroin & Morphine twice Methadone once*	1 *Heroin, morphine & Methadone once*	1 *Heroin morphine & methadone once*	1 *Heroin, morphine & methadone once Oxycodone thrice*	1 *Heroin once Morphine once Methadone once oxycodone@ 10*	1 *Heroin twice Morphine once Methadone once Oxycodone once*
Overdosed last 12 months˜	8%	7%	5%	11%	6% *Heroin 2% Methadone4%*	1% *Heroin*	7% *Methadone 4% Morphine3%*	4% *Methadone 4% Morphine3%*	11% *Heroin 1% Morphine 5% Methadone 4% Morphine & Methadone; 1%*	4% *Morphine 1% Methadone 1% Oxycodone 1% Morphine & Oxycodone 1%*	7% *5% morphine; 1% heroin; 1% multiple pharmaceutical opioids*	6% *Methadone 4% Morphine 1% Oxycodone 1%*	8% *Morphine 3% Methadone 2% Morphine & Oxycodone 2% Heroin 1%%*

Source: IDRS PWID interviews.

Note: N=100 in 2001-2011; N=106 in 2012; N=107 in 2013

*All but one of these cases reported overdosing on heroin, rather than any other opioid. The varying case was a reported morphine overdose

˜Multiple responses allowed

@Two participants reported experience of an overdose associated with oxycodone use: one participant reported this occurred once, a second participant reported this had occurred 20 times.

Fatal Opioid Overdoses

The Australian Bureau of Statistics (ABS) has changed the way they collate deaths data, making comparisons to earlier overdose bulletins published by the National Drug and Alcohol Research Centre difficult (Roxburgh & Burns, 2013 a,b). Since 2003, the ABS has progressively ceased visiting jurisdictional coronial offices to manually update causes of death that had not been loaded onto the computerised National Coronial Information System (NCIS), and in 2006 the ABS began to rely solely on data contained on NCIS at the time of closing the deaths data file. This data is subject to a revision process: preliminary data is released and then two successive revisions are published at 12 month intervals.

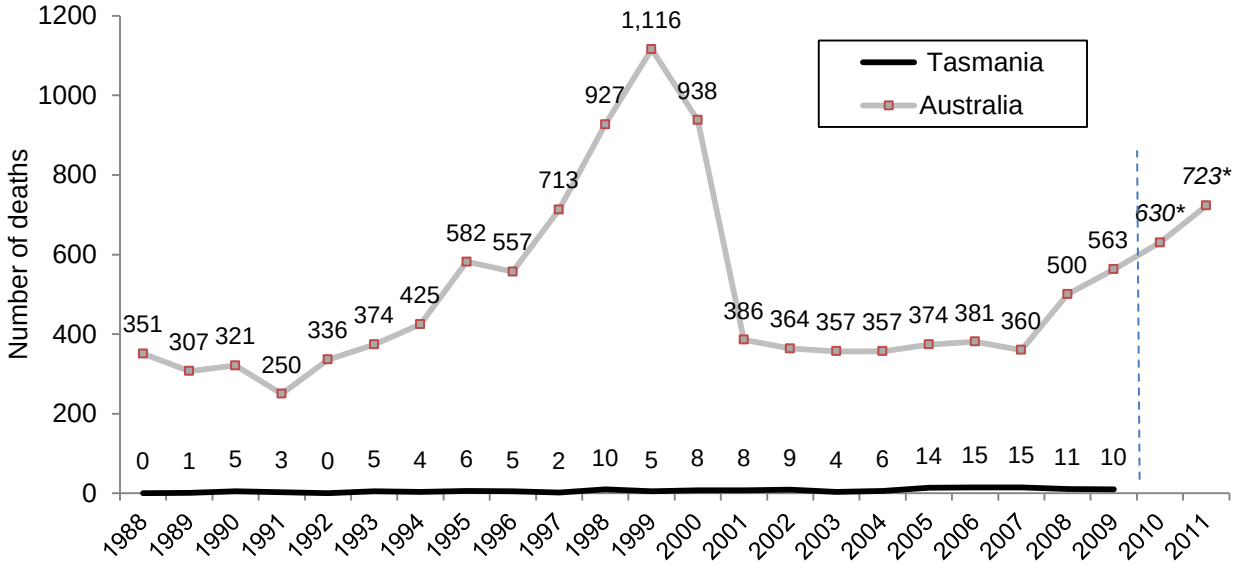
In addition, 2010 and 2011 data presented in the reports by Roxburgh and Burns (2013a,b) are projected estimates which have been based on changes that were observed in the 2008 and 2009 data. Therefore, these data should also be interpreted with caution. For a full description of the methodology and caveats concerning these data, see the full reports (Roxburgh and Burns, 2013a, b)

Between 1988 and 1993, the number of accidental deaths amongst people aged 15 to 54 due to opioid use (heroin and other opioids) was relatively stable, ranging between 250 and 374 deaths nationally (Roxburgh & Burns, 2013a) (Figure 73). From 1994 this rate steadily increased to a peak of 1,116 in 1999, which coincided with the peak of the heroin glut. As supply of heroin decreased around 2000 and 2001, the number of opioid-related deaths declined dramatically (386 in 2001). Up until 2007, the number of accidental opioid related deaths remained stable (ranging between 360 and 381), however in 2008 and 2009, the number of deaths increased to 500 and 563 respectively. Projected estimates suggest 630 deaths occurred in 2010 and 723 in 2011 (Roxburgh & Burns, 2013a).

The number of accidental Tasmanian deaths that were attributable to opioids was stable between 1988 and 1997, ranging between zero and five deaths per year. In 1998 this increased to 10 deaths, but then was slightly lower in subsequent years (ranging between 4 and 9 deaths). Between 2005 and 2009, higher numbers were reported (ranging between 14 and 10), which also coincided with increasing reports of pharmaceutical opioid use locally (de Graaff & Bruno. 2008). Projected estimates for 2010 and onwards were not available at the time of publication.

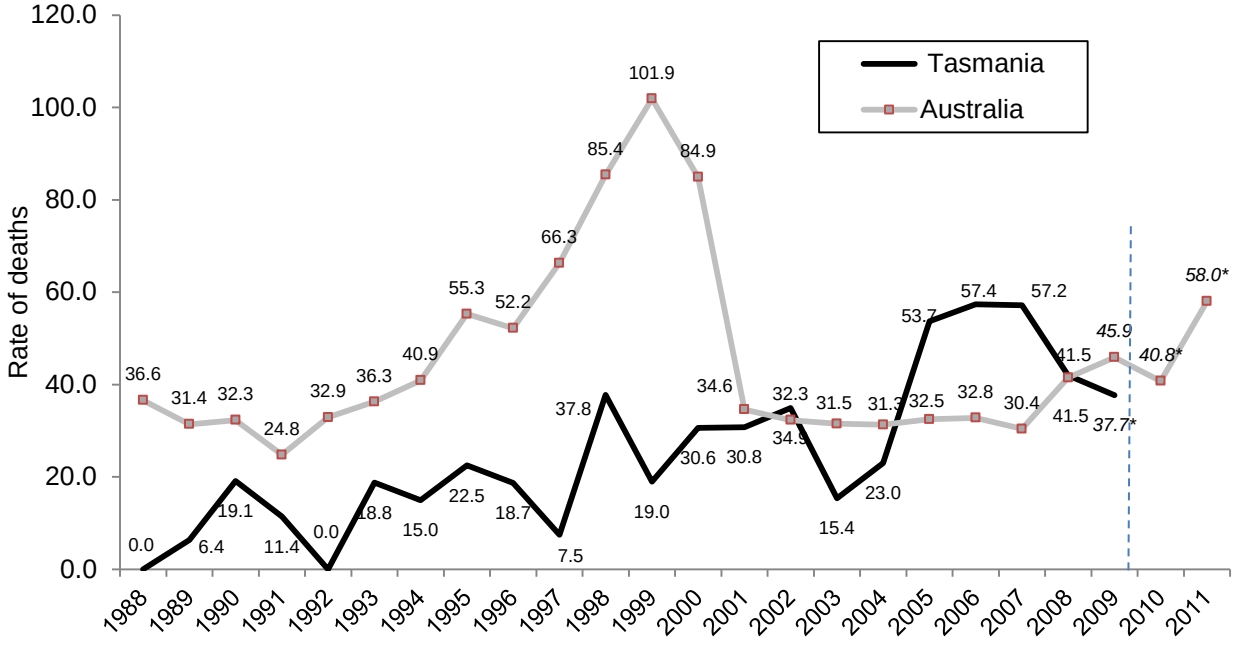
Figure 74 shows the rate of accidental opioid-related deaths per million persons. The dramatic increase nationally can be observed, peaking in 1999, with a rate of 101.9 deaths per million persons nationally, and then decreasing to a stable rate of approximately 32 deaths per million persons. In 2008 and 2009, this rate was slightly higher, 41.5 and 45.9 deaths per million persons respectively. A different pattern is seen for Tasmanian rates: the dramatic increase in 1999 observed in the national rate was not observed locally, in part because Tasmania is geographically removed from the mainland heroin market. The Tasmanian rate of deaths increased notably in 2005 from a mean of 20 deaths per million persons (between 1990 and 2004) to 53.7 deaths per million persons. As noted above, this local increase coincided with increased reports of use of pharmaceutical opioids, such as morphine and oxycodone (de Graaff & Bruno, 2008). Over the subsequent two reporting periods, this rate remained stable (57.4 in 2006 and 57.2 in 2007), and has decreased to 42.0 and 37.7 deaths per million persons in 2008 and 2009 respectively.

Figure 73: Accidental deaths due to opioid use among those aged 15-54 years, 1988-2011



Source: Roxburgh & Burns, 2013a
* Data for causes of death for 2010 and 2011 are projected estimates, and are likely to change with the release of the revised reports. Projected estimates were only available for national rates.

Figure 74: Rate of accidental deaths per million persons due to opioid use amongst those aged 15-54 years, 1988-2011



Source: Roxburgh & Burns, 2013a; ABS population data cubes
* Data for causes of death for 2010 and 2011 are projected estimates, and are likely to change with the release of the revised reports. Projected estimates were only available for national rates.

6.1.2 Stimulants

Non-fatal stimulant overdoses

Participants were asked if they had ever experienced a non-fatal methamphetamine overdose. Methamphetamine overdose is often characterised by profuse sweating, increased pulse, blood pressure and body temperature, and in severe cases (which occur infrequently) can also result in cardiovascular problems, stroke, kidney failure and death. Amongst the current cohort, two participants reported ever having experienced a non-fatal methamphetamine overdose, both of which occurred in the preceding 12 months. This is in keeping with reported overdose in 2012.

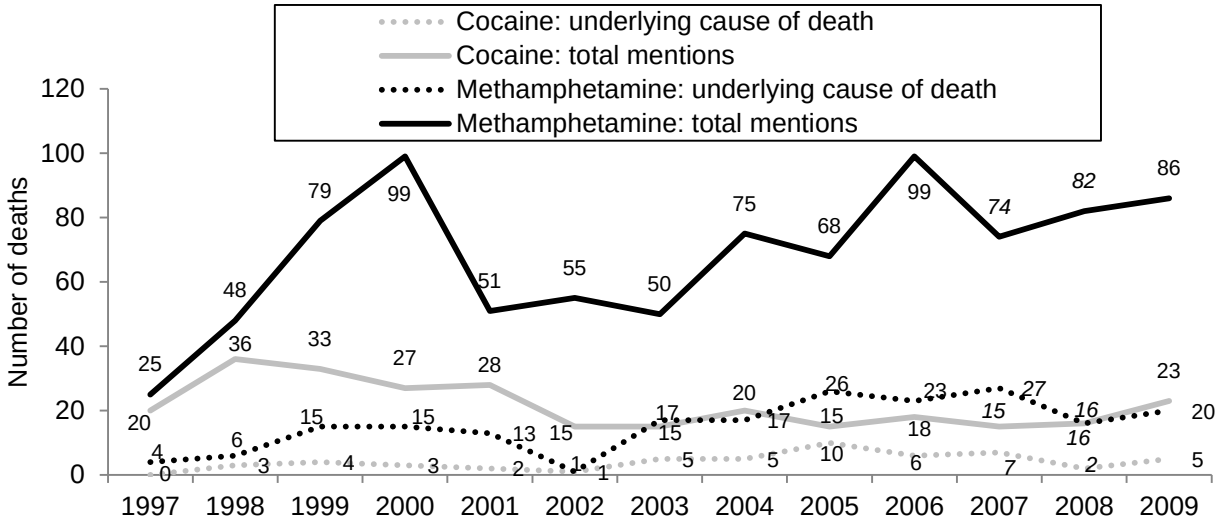
Fatal stimulant overdoses

As mentioned above, the Australian Bureau of Statistics (ABS) has changed the way they collate deaths data, making comparisons to earlier overdose bulletins published by the National Drug and Alcohol Research Centre (Roxburgh & Burns, 2013b) difficult. Data for 2010 to 2013 were not available at the time of publication.

There were fewer deaths attributable to methamphetamine than to opioids. There was a limited understanding of the role of methamphetamine in causing death and, therefore, mortality data may under-represent cases where methamphetamine contributed to the death, such as premature death related to cerebral vascular pathology (e.g. haemorrhage or thrombosis in the brain). Nationally in 2009, there were a total of 86 deaths in which methamphetamine was mentioned among those aged 15-54 years (Figure 75). Methamphetamine was determined to be the underlying cause of death in 20 cases in 2009 (Roxburgh & Burns, 2013b).

Nationally in 2009, 23 drug related deaths in which cocaine was mentioned occurred among the 15-54 year age group (Roxburgh & Burns, 2013b). Cocaine was determined to be the underlying cause of death in five of all cocaine-related deaths in 2009.

Figure 75: Number of accidental deaths due to stimulant use among those aged 15-54 years, 1997-2009



Source: Roxburgh & Burns, 2013b

6.2 Drug treatment

Key Points:

- The 2011/12 National Minimum Data Set - Alcohol and Other Drug treatment data (AIHW, 2012) reported that alcohol was the principal drug of concern in 39% of treatment episodes in Tasmania, significantly lower than the national rate (46%);
- Cannabis was reported as a primary drug of concern of 35% of Tasmanian treatment episodes, and this rate was significantly higher than the national rate (22%);
- Meth/amphetamine was reported as the principal drug of concern for 10% of treatment episodes in Tasmania, similar to rates nationally (11%); and
- Morphine was reported as the principal drug of concern in 7% of treatment episodes in Tasmania (no national data available)

6.2.1 Information-seeking: Alcohol and Drug Information Service (ADIS)

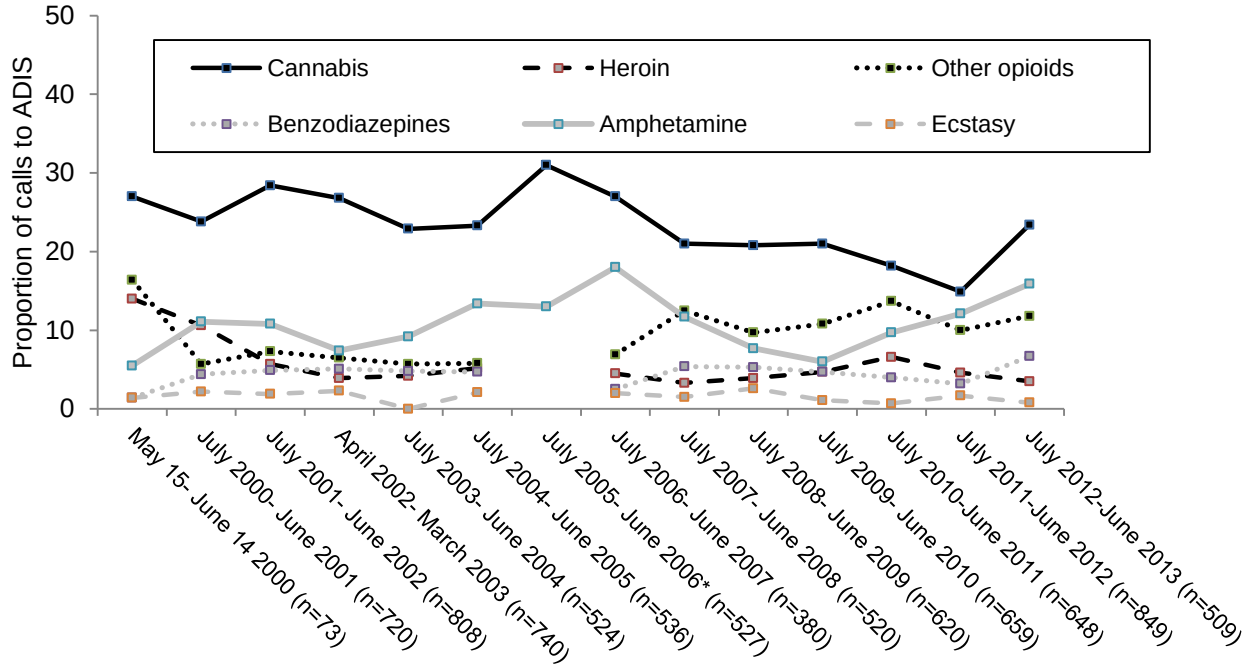
The Tasmanian Alcohol and Drug Information Service (ADIS) has been administered by Turning Point Alcohol and Drug Centre in Victoria since May 2000. Turning Point systematically records data for each call received; however, data has been reported over differing time periods due to the requirements of the Department of Health and Human Services. Thus, for comparative purposes (and since these annual data are the only information available to the authors), these slightly differing reporting periods will each be treated as financial year periods. The number of calls made to ADIS has slowly declined in recent years: between 2000/01 and 2003/04, there were between 1,827 and 2,422 calls per financial year. Since this time, this has ranged between 1,177 and 1,525 calls (1,199 in 2012/13).

Among calls in 2000/01, where the demographics of a specific drug consumer were identified, there was an approximately equal gender distribution (50.1% male), which was particularly noteworthy, given that statistics from similar services in Victoria have consistently demonstrated a preponderance of male drug users in calls to their services, usually in the order of two-thirds male. In 2001/02, the drug users identified in calls to ADIS fell more closely to this 'traditional' bias, with 58% of calls relating to males, a ratio that continued into 2012/13 (57% male).

Trends in the age of drug consumers identified in calls to ADIS over time are difficult to identify due to differences in the age groupings adopted across reports. During 2000/01, the majority of drug users identified were aged between 22 and 40 years of age (59%), although a sizeable proportion of calls related to people in the 16 to 18 year age group (15.5%). In subsequent years, there has been a slow shift towards an increasing age of drug consumers identified in ADIS calls: the proportion over age 40 has increased from 19% in 2001/02 to 50% in 2012/13.

In terms of the types of drugs that were enquired about in ADIS calls, again, it is difficult to make clear inferences regarding trends due to shifts in reporting criteria; however, from 2000/01 to 2006/07, the bulk of calls pertaining to illicit drugs in each year were most commonly related to cannabis use, followed by amphetamine. Call data from the 2007/08 period indicated a decrease in the proportion of calls related to amphetamine and an increase in calls relating to use of 'other opioids', which includes methadone, morphine and oxycodone. This trend continued for the subsequent two reporting periods, however, in 2010/11 the proportion of calls related to amphetamine again increased, overtaking 'other opioids' in 2011/12 and 2012/13 (Figure 76).

Figure 76: Percentage of calls to ADIS referring to persons using specific drugs, May 2000-June 2013



Source: ADIS Tasmania Reports, Turning Point Alcohol and Drug Centre
* 2005/06 data were only provided for amphetamines and cannabis
Note: Calls referring to heroin, other opioids, benzodiazepines and ecstasy were not specified in the 2004 reporting

6.2.2 Treatment: Tasmanian Alcohol and Other Drug Treatment Minimum Data Set

The National Minimum Data Set (NMDS) for Alcohol and other Drug (AOD) Treatment Services was developed as a nationally consistent response to data collection for AOD treatment services. Data collection began on 1 July 2000, and data from Tasmanian government and non-government agencies across the state are presented in Table 37 below. Data from clients receiving only methadone maintenance treatment, and admitted patients in psychiatric hospitals or general hospital wards, are not included in these figures.

The findings from the 2011/12 data show 72% of those receiving services were male. Alcohol was reported as the principal drug of concern in 39% of treatment episodes, and cannabis in 34% (Table 37). An amphetamine was reported as the principal drug in 10% of episodes and morphine in 7%.

There are several notable changes in the NMDS figures between the 2000/01 and 2011/12 datasets (Figure 77). Chief amongst these are the changes regarding alcohol being the predominant drug identified as primary drug of concern. Between 2000/01 and 2002/03, alcohol was commonly reported as the principal drug of concern for the largest proportion of drug treatment clients (approximately 40% of cases), with cannabis the next most commonly reported principal drug of concern, by a substantially smaller proportion (approximately 20% of clients). Between 2003/04 and 2005/06, alcohol and cannabis were the principal drugs of concern for equal proportions of treatment clients (approximately 30% of clients respectively); and have remained relatively equivalent since this time. Variations in the proportion of treatment episodes related to nicotine have also occurred. In 2000/01, just 2.4% of episodes were reported for nicotine as the primary drug of concern. Between 2001/02 and 2004/05, this was the principal drug of concern for approximately one-sixth of clients (~17%); however, since 2006/07, 1% or less of treatment episodes were reported for nicotine. Specific changes in relation to other drug types are discussed separately in following sections.

Table 37: Tasmanian Alcohol and other Drug Treatment Service Minimum Data Set, 2002/03-2011/12

Total Data Set	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08*	2008/09*	2009/10	2010/11	2011/12
n	2,568	2,357	1,921	1,512	1,564	2,302	2,081	1,544	1,738	1,672
% receiving service for their own use	89% (n=2,286)	68% (n=1,603)	71% (n=1,364)	90% (n=1,357)	95% (n=1,478)	92% (n=2,124)	95% (n=1,983)	94% (n=1,452)	95% (n=1,653)	93% (n=1,554)
For those receiving services for their own use										
Sex (% male)	66% (n=1,509)	58% (n=930)	59% (n=805)	60% (n=814)	64% (n~950)	69% (n~1,455)	70% (n=1,388)	71% (n=1,030)	74% (n=1,215)	72% (n=1,117)
Aboriginal and/or Torres Strait Islander	8% (n=183)	6% (n=96)	7% (n=95)	7% (n=95)	11% (n~165)	11% (n~232)	10% (n=198)	10% (n=141)	11% (n=189)	n/r
Principal drug of concern										
Alcohol	41% (n=933)	29% (n=463)	31%(n=423)	38%(n=515)	36% (n=532)	32% (n~682)	38%(n~748)	34% (n=500)	39% (n~641)	39% (n=619)
Nicotine	18% (n=412)	13% (n=200)	17%(n=226)	2% (n=27)	0	n/r	1%(n~22)	<1% (n=4)	<1% (n~7)	1% (n=16)
Cannabis	19% (n=426)	37% (n=593)	31% (n=423)	34% (n=462)	39% (n=583)	45% (n~936)	39% (n~767)	44% (n=644)	39% (n~643)	34% (n=540)
Amphetamine	8% (n=180)	9% (n=136)	10% (n=134)	12% (n=160)	13% (n=190)	11% (n~239)	9% (n=167)	6% (n=88)	9% (n~142)	10% (n=154)
Cocaine	0	<1% (n=2)	0	<1% (n=1)	0	0	0	<1% (n=1)	<1% (n~2)	<1% (n=1)
'Ecstasy' and related	0	<1% (n=11)	<1% (n=10)	1% (n=15)	2% (n=25)	2% (n~36)	1% (n~26)	2% (n=28)	<1% (n~10)	<1% (n=8)
Heroin	<1% (n=12)	<1% (n=13)	<1% (n=3)	<1% (n=11)	<1% (n=6)	<1% (n~7)	<1% (~10)	<1% (n=9)	<1% (n~8)	<1% (n=6)
Morphine	n/r	n/r	6% (n=80)	5% (n=64)	3% (n=40)	5% (n~97)	6% (n~127)	6% (n=89)	5% (n~84)	7% (n=102)
Methadone	4% (n=79)	3% (n=48)	2% (n=27)	3% (n=46)	2% (n=25)	1% (n~23)	1% (n~26)	1% (n=18)	1% (n~20)	1% (n=15)
Other opioids	8% (n=173)	n/r	<1% (n=12)	n/r	n/r	<1% (n~12)	2% (n~38)	2% (n~22)	2% (n~36)	4% (n=64)
Benzodiazepines	<1% (n=16)	1% (n=16)	<1% (n=11)	1% (n=18)	1% (n=21)	1% (~27)	1% (n~28)	1% (n~19)	2% (n~31)	1% (n=17)
Other	2% (n=55)	7% (n=114)	1% (n=15)	1% (n=15)	3% (n=48)	2% (n~36)	0	3% (n~36)	<1% (n~5)	<1% (n=12)

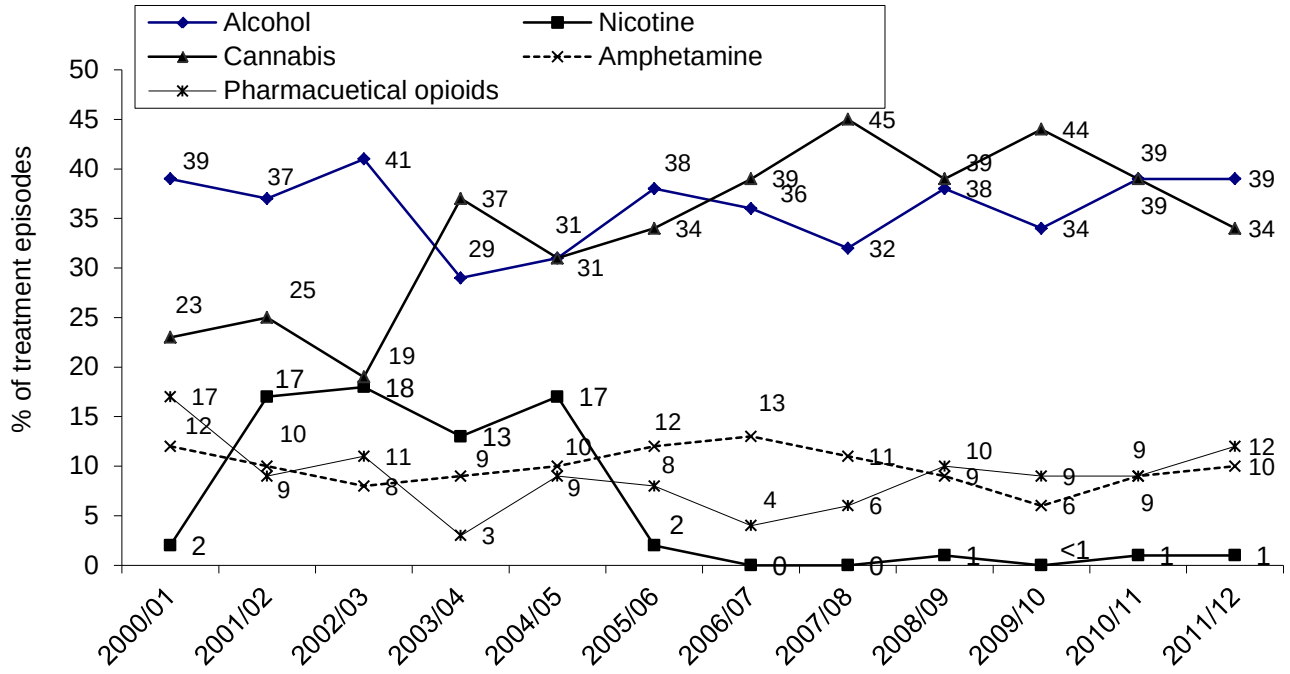
Source: Australian Institute of Health and Welfare

* The total number of closed treatment episodes may be undercounted because two agencies only supplied drug diversion data

n/r Not recorded

Note: Multiple presentations of the same individual excluded. The data presented for 2009/10 were taken from AIHW data cubes, and differ from the NMDS 2009/10 National Report, as there were errors in the Tasmanian data that were included in this report

Figure 77: Tasmanian Alcohol and Other Drug Treatment Services Minimum Data Set: Principal drug of concern, 2000/01-2011/12



Source: Australian Institute of Health and Welfare

Heroin

The proportion of treatment episodes noting heroin as the principal drug of concern has remained very low in Tasmania, at 1% or less since 2001/02. Local rates are notably lower than those reported nationally, where 9% of treatment episodes were related to heroin as a principal drug of concern in 2011/12 ($\chi^2(1_{n=148,502})=139.2$, $p<0.001$) (AIHW, 2013). Data for the 2012/13 financial year were not available at the time of publication.

Methamphetamine

In the 2011/12 NMDS, meth/amphetamine was reported as the principal drug of concern for 10% of treatment episodes in Tasmania and 11% nationally (p=0.1) (AIHW, 2013) (Table 37).

Calls relating to use of amphetamine to the Tasmanian ADIS telephone service increased relatively between 2000 and 2006/07, from 6% to 18%, however, in the subsequent three reporting periods, this rate decreased to 6%. Since this time, a small increase has been observed (12% in 2011/12; 18% in 2012/13) (Figure 76).

Cocaine

In 2011/12, there was just 0.06% of treatment episodes provided in which cocaine was the principal drug of concern in Tasmania. Reports of cocaine as the principal drug of concern amongst Tasmanian clients of drug treatment services are uncommon, comprising just 0.2% or less of annual treatment episodes between 2000/01 and 2011/12 (AIHW, 2008c, 2013). This is comparable with national figures: in 2011/12, just 0.3% of treatment episodes reported in the NMDS related to individuals whose principal drug of concern was cocaine.

Cannabis

In 2011/12, 35% of Tasmanian drug treatment episodes reported to the NMDS related to clients reporting cannabis as their principal drug of concern (AIHW, 2013). This was significantly higher

than the national rate reported for cannabis (22%: $\chi^2(1_{n=148,502})=141.1$, $p<0.001$). This higher rate locally may be related to the inclusion of treatment episodes from the Illicit Drug Diversion Initiative (IDDI), which addresses cannabis use in Tasmanian jurisdictions. The proportion of treatment episodes in Tasmanian drug treatment services relating to concerns with cannabis has varied over the past eight years: between 2000/01 and 2002/03 the proportion of such episodes ranged between 19% and 25%. In 2003/04, this increased sharply to 37%, and has remained between 31% and 45% since this time.

Methadone

The proportion of treatment episodes where methadone was the principal drug of concern in Tasmania was 1% in 2011/12 (AIHW, 2013). Whilst the national rate was not published for this financial year, in 2010/11 it was 1.4% (AIHW, 2012). Between 2002/03 and 2005/06, the proportion of treatment episodes in Tasmania for individuals reporting methadone as their principal drug of concern ranged between 2.0% and 3.5%, slightly higher than reported between 2006/07 and 2011/12 (ranging between 1.0 and 1.7%).

Morphine

During 2011/12, morphine was reported as the principal drug of concern in 7% of treatment episodes in Tasmania (AIHW, 2013). The local Tasmanian rate of treatment episodes for morphine has remained relatively unchanged since 2000/01, ranging between 2.7% to 7.2%.

Alcohol

In 2011/12, 39% of Tasmanian drug treatment episodes reported to the NMDS related to clients reporting alcohol as their principal drug of concern (AIHW, 2013). This was significantly lower than the national rate reported for alcohol (46%: $\chi^2(1_{n=148,502}=25.4$, $p<0.001$).

6.3 Hospital Admissions

Key Points:

Heroin and other opioids

- Following a dramatic increase in the number of hospital admissions in 2006/07, admissions have been lower since 2008/09; the rate per million population of hospital admissions in Tasmania was 59% of the national rate in 2011/12.

Methamphetamine

- Between 2006/07 and 2007/08, the Tasmanian rate of admissions was 130% of the national rate; this was reversed in subsequent reporting periods, with the Tasmanian rate decreasing to 34% of the national rate in 2011/12.

Cannabis

- In 2011/12, the rate of admissions per million persons in Tasmania increased to 255 per million persons, equating to 138% of the national rate.

Hospital morbidity data in relation to use of drugs have been provided by the AIHW for the 1993/94 to 2011/12 financial year periods (data for 2012/13 were not available at the time of publication) (Roxburgh & Burns, *in press*). These data relate to Tasmanian public hospital admissions for individuals aged between 15 and 54 years where drug use was recorded as the 'principal diagnosis'; namely, where the effect of drugs was established, after study, to be chiefly responsible for occasioning the patient's episode of care in hospital (with the exception of admissions for psychosis and withdrawal). These figures were based on diagnoses coded according to the International Classification of Diseases (ICD) 10, second edition. It is also important to note that

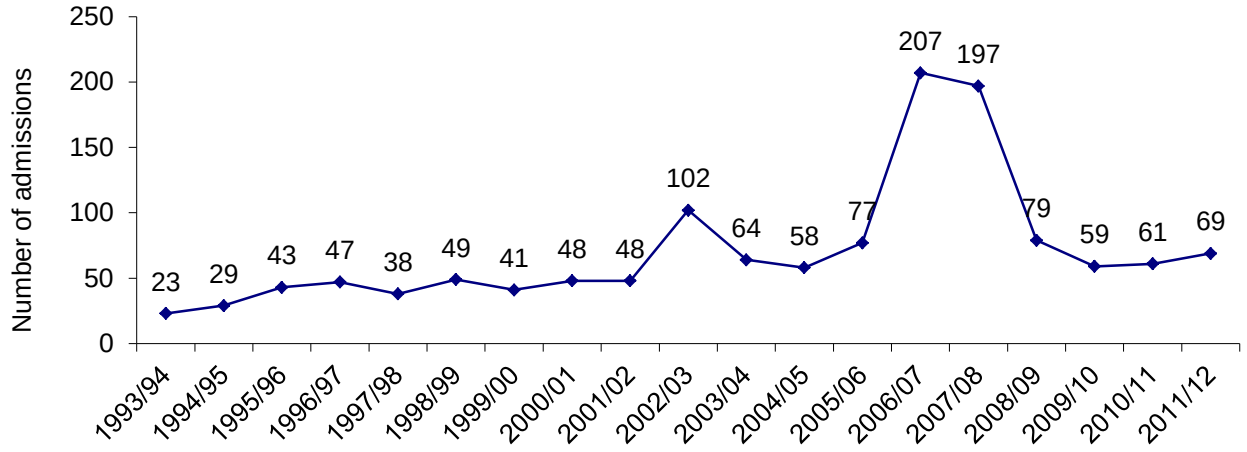
data from the state's single public specialist detoxification centre were only included in this dataset from June 2002.

6.3.1 Heroin and other opioids

Tasmanian hospital admissions in relation to opioids are presented in Figure 78. Between 1993/94 and 2001/02, primary diagnoses relating to opioid use in Tasmania had remained relatively stable – between 23 and 49 admissions per financial year. However, when data from the state's public detoxification centre were included in these figures (July 2002), there was a marked but unsustained increase in the number of admissions (rising from 48 admissions in 2001/02 to 102 in 2002/03, and falling to 64 in 2003/04). Over the following two financial years, the number of opioid-related hospital admissions remained slightly higher than seen prior to 2002 (58 and 77 admissions respectively). In 2006/07, the number of hospital admissions increased dramatically to 207. This increase was sustained in 2007/08 (197 admissions), however, in the subsequent four reporting periods this decreased (79, 59, 61 and 69 admissions respectively) (data for 2012/13 were not available at the time of publication) (Roxburgh & Burns, *in press*).

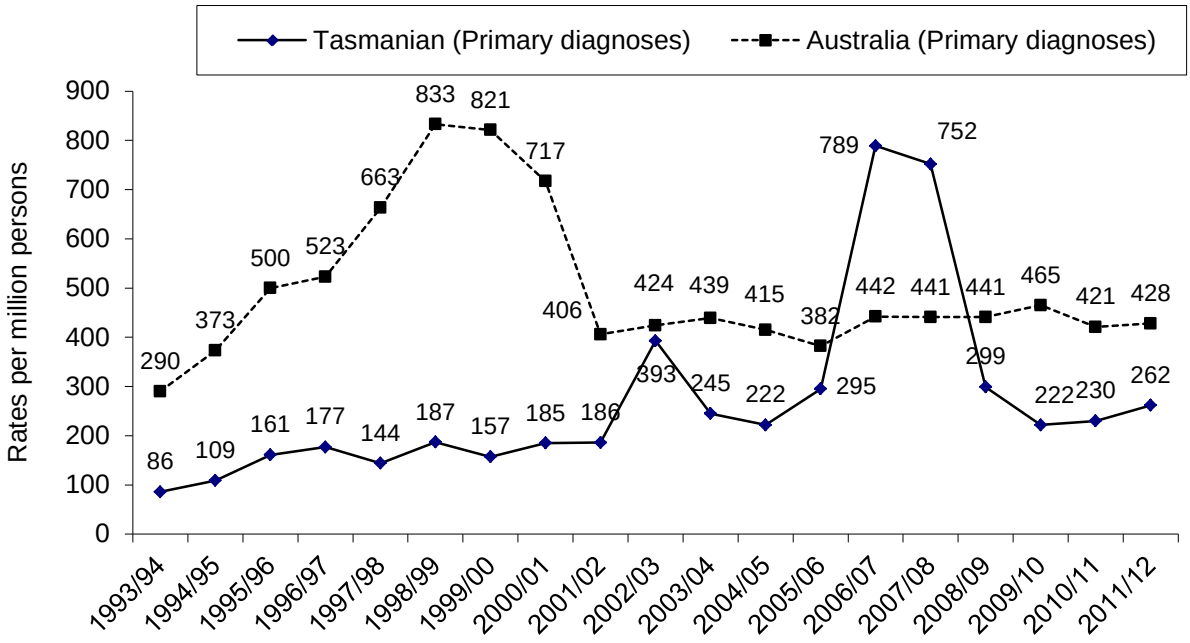
As can be seen in Figure 79, when the Tasmanian rate of opioid-related admissions per million population is compared to that of the national Australian level, prior to the inclusion of figures from the public detoxification service (July 2002), local admission rates for such cases were substantially lower than the national rates. In 2002/03, when detoxification patients were included, local admission rates were comparable to those nationally (393 v. 424 admissions per million persons between the ages of 15 and 54 years respectively). However, in 2003/04, local admission rates returned to around half that of the national level, and remained at a similar level in 2004/05 (222 v. 415 admissions per million persons between the ages of 15 and 54 years respectively), reflecting the decrease in admissions locally in comparison to a stable level nationally. In 2005/06, the rate of Tasmanian admissions increased to 77% of the national rate, and over the subsequent two financial years, the rate of Tasmanian admissions increased dramatically to 164% in 2006/07 and 170% in 2007/08 of the national rate. This trend was reversed in the subsequent reporting periods, with a dramatic decrease in the rate of admissions locally (ranging between 48% and 68% of the national rate) (Figure 79) (Roxburgh & Burns, *in press*).

Figure 78: Public hospital admissions amongst persons aged 15-54 in Tasmania where opioid use was noted as the primary factor contributing to admission, 1993/94-2011/12



Source: Roxburgh & Burns, *in press*
Note: 2012/13 data were not available at the time of publication

Figure 79: Public hospital admissions among persons aged 15-54 where opioids were noted as the primary factor contributing to admission, rates per million population, 1993/94-2011/12

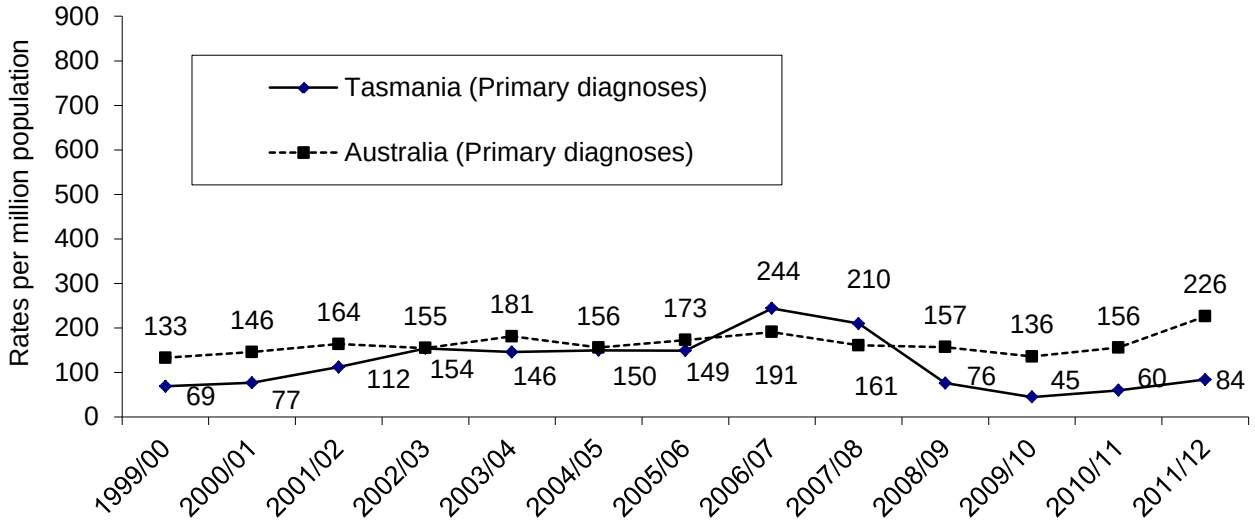


Source: Roxburgh & Burns, *in press*
Note: 2012/13 data were not available at the time of publication

6.3.2 Methamphetamine

Population-adjusted rates of Tasmanian public hospital admissions, where methamphetamine use was noted as the principal diagnosis, are presented in Figure 80. Local population-adjusted rates were substantially lower than the national figures prior to 2002/03. However, these figures did not include data from the state's detoxification service (introduced for the first time in the 2002/03 figures). Between 2002/03 and 2005/06, local population-adjusted rates were similar to the national figures. However, in 2006/07 and 2007/08, the Tasmanian rate of admissions per million persons increased to approximately 130% of the national rate. This was reversed in 2008/09, with the Tasmanian rate of admissions per million population decreasing from 210 in 2007/08 to 76 in 2008/09 (48% of the national rate). Between 2009/10 and 2011/12, the Tasmanian rates decreased further to (45, 60 and 84 admissions per million population respectively), whilst the national rate has increased from 136 to 226 admissions per million population over this time (data for 2012/13 were not available at the time of publication) (Roxburgh & Burns, *in press*).

Figure 80: Public hospital admissions among persons aged 15-54 where methamphetamine was noted as the primary factor contributing to admission, rates per million population, 1999/00-2011/12

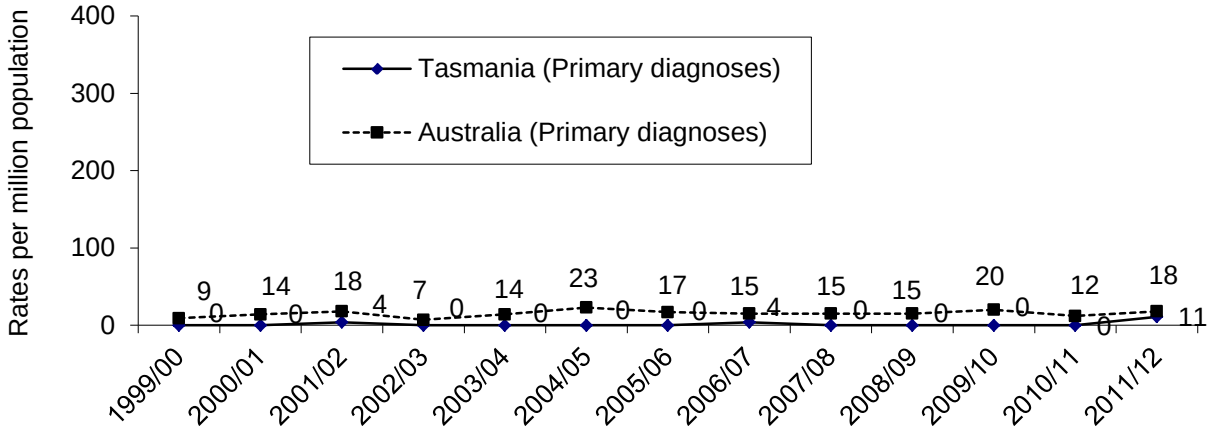


Source: Roxburgh & Burns, *in press*
Note: 2012/13 data were not available at the time of publication

6.3.3 Cocaine

Consistent with the apparent low levels of availability and use of cocaine locally, the rate of cocaine-related hospital admissions amongst those aged between 15 and 54 years in Tasmania is consistently very low (between zero and four persons per million between 1999/00 and 2010/11) (Figure 81). When the local rates of cocaine-related public hospital admissions are compared to the national Australian rate (Figure 81), these are substantially lower, with the total local cases where cocaine was noted as the primary factor contributing to the admission remaining 26% or less than that of the national rate between 1999/00 and 2011/12 (data for 2012/13 were not available at the time of publication) (Roxburgh & Burns, *in press*).

Figure 81: Public hospital admissions among persons aged 15-54 where cocaine was noted as the primary factor contributing to admission, rates per million population, 1999/00-2011/12



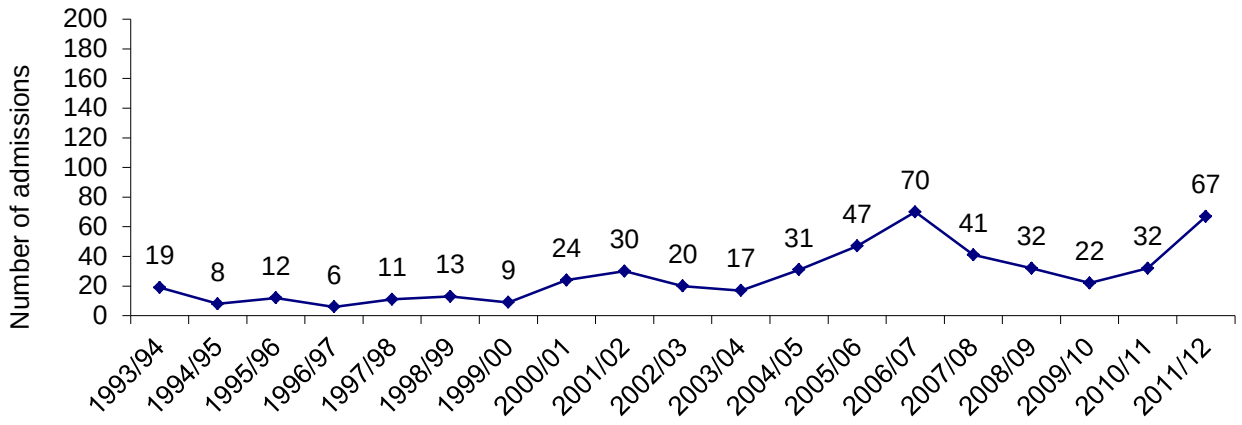
Source: Roxburgh & Burns, *in press*
Note: 2012/13 data were not available at the time of publication

6.3.4 Cannabis

Tasmanian public hospital admissions where cannabis use was noted as the principal diagnosis among persons aged 15-54 years are presented in Figure 82. Examining these figures, it appears that the number of cases per annum has varied in recent years: between 1993/94 and 2004/05, the number of admissions ranged between 11 and 31 per financial year. In 2006/07, the number of admissions spiked, with 70 reported. In the subsequent four reporting periods, the numbers were lower, ranging between 22 and 41 admissions. In 2011/12, a second spike in admissions was observed, with 67 reported (Roxburgh & Burns, *in press*).

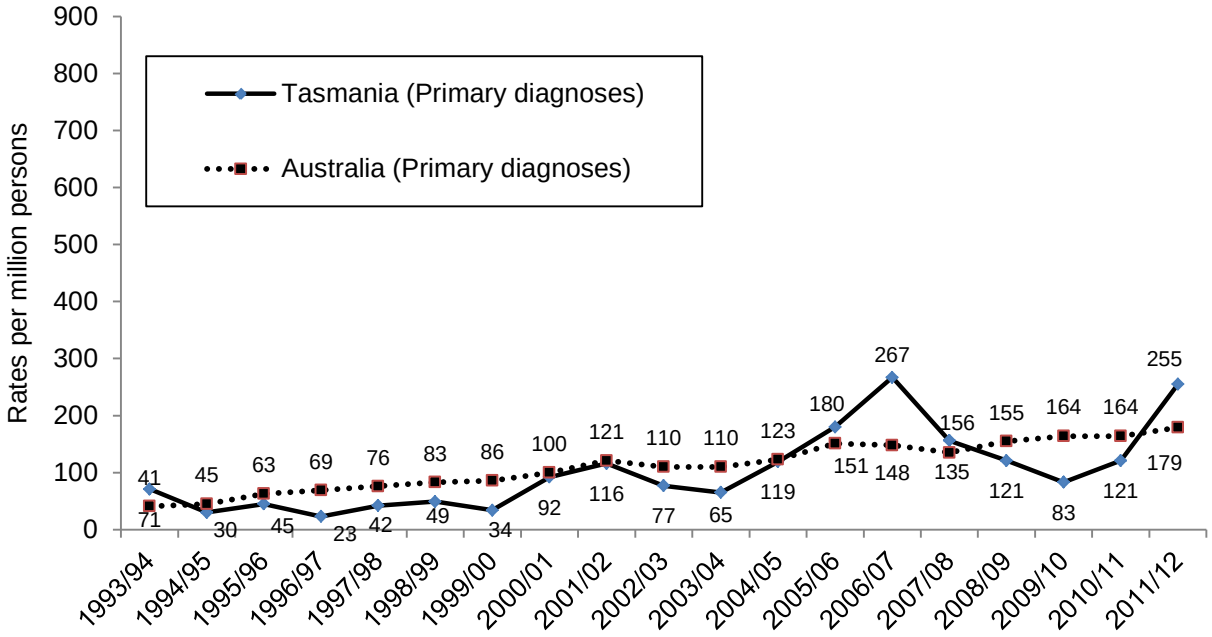
The population-adjusted rates for cannabis-related admissions in Tasmania increased overall between 1994/95 and 2005/06, from 30 per million population to 180, with a spike in admissions occurring in 2006/07 (267 per million population) (Figure 83). In the subsequent four reporting periods, this trend was reversed, with between 83 and 156 admissions per million population reported. However, again in 2011/12, a second spike was observed, with 255 admissions per million population reported: equating to 142% of the national rate (Figure 83) (Roxburgh & Burns, *in press*).

Figure 82: Public hospital admissions among persons aged 15-54 in Tasmania where cannabis use was noted as the primary factor contributing to admission, rates per million population, 1993/94-2011/12



Source: Roxburgh & Burns, *in press*
Note: 2012/13 data were not available at the time of publication

Figure 83: Public hospital admissions among persons aged 15-54 where cannabis was noted as the primary factor contributing to admission, rates per million population, 1993/94-2011/12



Source: Roxburgh & Burns, *in press*
Note: 2012/13 data were not available at the time of publication

6.4 Injecting risk behaviours

Key Points:

- In 2013, 7% of participants reported using another person's used needle/syringe in the preceding month, and 8% reported lending their used needle/syringe to another person in this period;
- Half of the sample reported re-using their own injecting equipment in the preceding month, most commonly 20ml syringes followed by winged-infusion sets ('butterflies'), and 3/5mL barrels;
- The majority of participants reported use of filters in the preparation of morphine and oxycodone; one-quarter reported no use of a filter when last injecting prescription stimulants, one-third reported no use when last injecting benzodiazepines, half noted no use when last injecting methadone - in both syrup and tablet forms, and two-thirds did not filter the last time they injected methamphetamine; and
- Nearly two-fifths of the sample reported boiled water as the most common diluent when preparing to inject and one-fifth commonly used tap water, with almost half the sample reporting that the introduction of sterile water costs at NSP outlets had lead them to decrease or cease sterile water use.

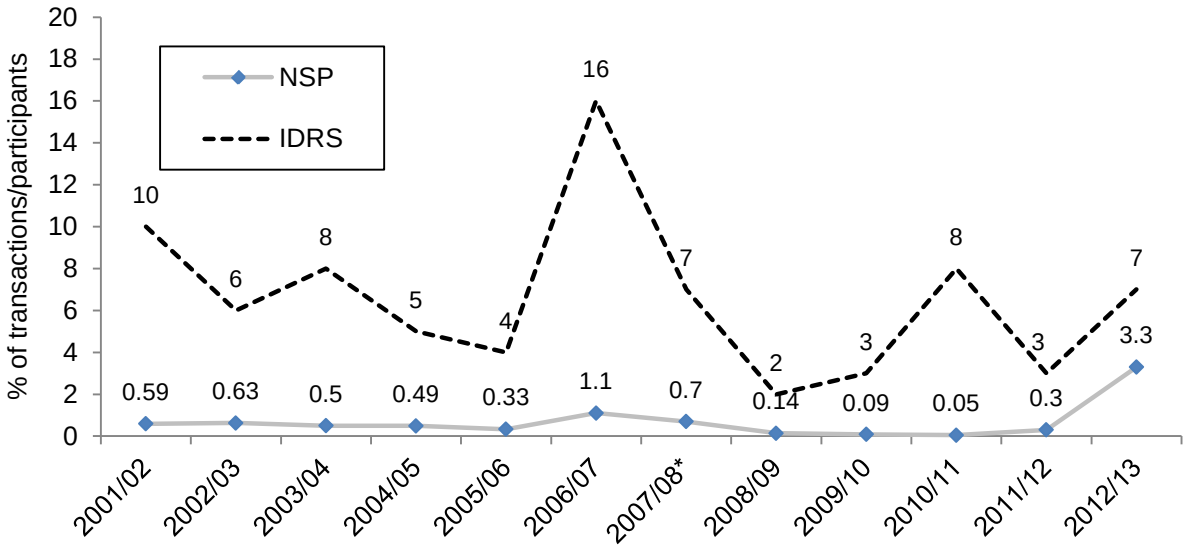
6.4.1 Sharing of injecting equipment

Needle and Syringe Program Data

The sharing of needles, syringes and other equipment associated with the preparation or injection of drugs is important with respect to the risk of exposure to blood-borne viral infections (BBVI) such as HIV, HBV and HCV. Clients of non-pharmacy NSP outlets are routinely asked whether they have shared needles and syringes or other injection equipment since their last visit to the service.

Reports of sharing of needles/syringes by clients of non-pharmacy Needle and Syringe Program remained at or below 1% in all years since 2001/02. However, in 2012/13, this has increased to 3.3% (Figure 84).

Figure 84: Reported sharing of needles and syringes by non-pharmacy Needle and Syringe Program clients and IDRS participants, 2001/02-2012/13



Source: Population Health, Department of Health and Human Services. IDRS PWID interviews
* In 2007/08, one NSP outlet, accounting for 19% of transactions, did not collect data on sharing. The transactions from this outlet were excluded from this calculation

IDRS PWID data

Amongst the 2013 IDRS PWID sample, sharing and re-use of injecting equipment was seen at similar levels to previous studies, with the exception of 2007 (in 2007, many of the measures for sharing of injecting equipment increased dramatically from previous stable levels).

Among these samples of regular injecting drug users in Hobart, the proportion of respondents reporting using a needle/syringe after it had been used by someone else has remained relatively stable since 2003, ranging between 2% and 8% of each sample, with the exception of 2007, when 16% of the sample reported this behaviour (Figure 84). It is noteworthy that despite a decreased rate of sharing, this level of recent sharing among a regular injecting cohort remains substantially greater than that reported in the NSP client data.

Among the 2013 IDRS PWID sample, 5% (n=5) of participants reported providing a used needle/syringe to others in the month prior to interview, similar to the rate reported in 2012 (8%) (Table 38). These participants reported providing their used equipment to others either once or twice (n=2 respectively), or on three to five occasions (n=1).

Overall, 9% of the sample had used another person's used needle/syringe and/or lent such equipment to another person in the preceding month. This is a similar rate as reported in 2012.

Half of the consumers sampled (51%) reported re-using their own injection equipment in the month prior to interview: a slightly lower rate than reported in 2012 (63%, p=0.11). Among the current group who reported re-use of their injecting equipment, the majority had done this on either one (35%, n=18), two occasions (29%, n=15) or three to five occasions (25%, n=13) in the last month; with small minorities doing so on six to ten occasions (6%, n=3) or more than 10 occasions (4%, n=2) in the month preceding the interview.

The equipment most commonly re-used were 20ml syringes (27%, n=14), winged-infusion sets ('butterflies', 25%, n=13), and 3/5ml barrels (24%, n=12). Less commonly re-used equipment was 1ml syringes (16%, n=8), 10ml barrels (10%, n=5) and needles only (8%, n=4). Participants predominantly noted that they had re-used because they required equipment on occasions when accessible outlets were closed (nights or weekends, 50%, n=25) or because the outlet was too far away for them to access (20%, n=10).

Sharing of other types of injecting equipment in the month prior to interview (such as tourniquets, water, swabs and mixing containers) was reported by 30% of the sample in 2013. Spoons and mixing containers were shared by 19% of participants, tourniquets were shared by 13%, water by 11% and filters were shared by 12% of participants in this time. All rates of sharing of injecting equipment appear to have remained relatively stable since 2004, with the exception of sharing filters (Table 38). In 2012, 4% of the sample reported sharing this form of equipment, whereas in 2013 this rate increase to 12% ($\chi^2(1_{n=211})=4.17$, p=0.04). It is important to note that these reports of sharing of equipment include cases where all individuals involved were using sterile equipment (e.g. two people using sterile syringes to draw a drug mix from a spoon), however, even these practices provide some risk of exposure to BBVI.

Table 38: Proportion of the PWID sample reporting sharing of injection equipment in the month prior to interview, 2004-2013

	Proportion of IDRS PWID in the past month									
	2004 %	2005 %	2006 %	2007 %	2008 %	2009 %	2010 %	2011 %	2012 %	2013 %
Borrowed used needles	8	5	4	16	7	2	3	8	2	7
Lent used needles to others	12	14	13	29	9	13	13	10	8	5
Shared spoons/containers	8	4	7	20	15	17	19	17	15	19
Shared water	11	5	11	17	11	6	6	8	9	11
Shared filters	8	2	5	8	6	8	12	3	4	12
Shared tourniquets	21	15	16	22	11	16	14	10	11	13

Source: IDRS PWID interviews
Note: N=100 in 2004-2011, N=106 in 2012, N=107 in 2013: multiple responses allowed

In the current study, some aspects of injection practices were examined in more detail. Despite the current PWID cohort being regular injecting drug users, one-fifth (19%) reported that they did not always inject themselves. Nine percent of participants stated they 'usually' injected themselves (n=9), 6% 'never' self-injected (n=6), 3% self-injected 'about half the time' (n=3) and 2% self-injected 'sometimes' in the preceding month (n=2). The demographic characteristics of participants that did not always self-inject were similar to participants that always self-injected in terms of age, cultural background, sexual preference, education, employment, accommodation, prison history, frequency of injection, engagement in drug treatment. However, participants reporting not always self-injecting were significantly more likely to be female (65% v. 35%: $\chi^2(1_{n=100})=4.95$, p=0.025) and were more likely to report a shorter duration of injecting career (13years v. 18years: F(1,104)=5.69, p=0.019) than those participants reporting always injecting themselves in the preceding month.

Participants were also asked to comment on the last venous site they injected into. Three-quarters of the sample reported last injecting in their arm (73%, n=77) and 14% (n=15) into their hand/wrist. Small proportions reported last injecting into their leg (5%, n=5), groin (4%, n=4), foot or neck (2%, n=2 respectively).

6.4.2 Use of filters

Injection of pharmaceutical and other drugs (such as methamphetamine or heroin) carries a variety of risks to the user. The range of ingredients contained within a solution for injection in addition to the desired active ingredient varies widely, with many carrying the potential to cause harm when injected. Both pharmaceuticals and 'street' drugs contain particles that may not dissolve in solution and, when injected, may be large enough to form tissue granulomas in various body organs (particularly the liver and lungs) or to cause blockage of pulmonary capillaries, which may potentially lead to pulmonary hypertension and right-sided heart failure. Larger particles or clumps of particles can also become lodged in blood vessels, decreasing and potentially stopping the blood supply to the surrounding tissue, resulting in death of that tissue (gangrene). Use of filters in the preparation of drugs for injection can assist in reducing some of these risks.

Participants in the current study were asked to comment on their use of commercial and makeshift filters in the preparation of drugs for injection. Filter types commonly used include commercially-available syringe filters: 0.45μm wheel filters (hereafter referred to as a 'pill filter'); 0.22μm wheel filter ('bacterial filter'); and makeshift filters, including filters commercially sold for use with hand-rolling tobacco ('roll-your-own filter'), filters taken from tailor-made cigarettes ('tailor cigarette filter'), and cotton buds, cotton balls, tampons, or alcohol swabs.

Opioids

Morphine

The majority of participants who commented had used some form of filter the last time they prepared morphine for injection (92%, n=65). The most commonly used filter amongst this group was roll-your-own cigarette filters (58%, n=41) followed by pill filters (18%, n=13) (Table 39). Amongst participants reporting no use of a filter on the last occasion of morphine use (n=6), four reported they felt there was no need to filter, and a single participant stated they did not know how to use a filter (one participant did not provide a response). In previous years, participants had reported not filtering morphine tablets due to a concern they would lose part of the drug during this process. However, a recent study examining the effectiveness of a range of filters on morphine tablets found no significant loss of the active drug when at least two flushes with water for injection were carried out (McLean et al., 2009).

Participants reporting recent injecting use of morphine were asked if they had heated the morphine tablet/capsule during preparation for injection. This question was included as a recent study investigating effectiveness of filtration on morphine tablets for injection found that heating morphine tablets in water for injection prior to filtering may allow wax to pass through filters, subsequently forming into particles when cooling, which effectively undermines the effectiveness of the filtering process (McLean et al., 2009). Of those participants commenting, 63% (n=22) reported using heat whilst preparing morphine tablets for injection.

Oxycodone

Of those participants commenting on use of a filter during the preparation of oxycodone tablets for injection (n=62), the majority used some sort of filter (92%, n=57). The filters most commonly used for the last injection of oxycodone were roll-your-own cigarette filters (66%, n=41) followed by pill filters (19%, n=12) (Table 39). Similar to morphine users, amongst participants reporting no use of a filter on the last occasion of injection (n=5), the main reason participants gave for this was that they saw no need to filter. In addition, participants reporting recent injection of oxycodone were asked if

they had heated the tablet during preparation. Just over half of recent oxycodone injectors who responded reported this practice (54%, n=20).

Methadone syrup

Among those able to comment on preparation of methadone syrup for injection (n=46), more than half had not used a filter last time they injected this drug (57%, n=26), with the majority of this group reporting that they saw no need to filter (77%, n=20). Amongst participants filtering, the most commonly used filter was a bacterial filter (39%, n=18) (Table 39).

Five KE employed in NSP outlets reported increased demand for filters in general, with one employee noting a specific increase in bacterial filters. One KE noted that clients report a greater propensity to use filters due to increased use of tap water, instead of purchasing sterile water from NSP outlets (see below). Another KE noted that clients also attributed increased filtering to dosing practices: at one location where methadone doses were dispensed, clients can reportedly opt to pay extra for filtered water.

Physeptone

Half of the participants who commented on use of a filter in preparation of Physeptone to inject had used a filter the last time they injected the drug (50%, n=15). Pill filters were the most commonly used (33%, n=10), followed by roll-your-own cigarette filters (13%, n=4). Of the 15 participants reporting no use of a filter on the last occasion of Physeptone injection, 87% reported they felt no need to filter (n=13).

Methamphetamine

Participants who reported recent use of any form of methamphetamine were asked if they had used a filter the last time they injected this drug (n=73) (Table 39). Two-thirds of this group reported no use of a filter (68%, n=50), with the majority of the remainder reporting use of a roll-your-own cigarette filter (26%, n=19). Of the 50 participants reporting they had not used a filter, the majority reported they saw no need for filtering (82%, n=41). One KE in a NSP outlet aimed at youth noted a recent increase in use of filters amongst this group, with an associated decrease in people presenting with or reporting vein care issues.

Pharmaceutical stimulants

Three-quarters of participants who reported recent injection of pharmaceutical stimulants noted they had used some form of a filter the last time they injected this drug (74%, n=17). The most commonly cited filter was a pill filter (48%, n=11) and/or a roll-your-own cigarette filter (13%, n=3) (Table 39). This is reflected in KE reports, with one NSP outlet worker reporting increased pick-up of pill filters for pharmaceutical stimulant use.

Benzodiazepines

Fifteen participants commented on their use of a filter during the preparation of a benzodiazepine tablet or capsule for injection. One-third of this group reported no use of a filter the last time they injected (33%, n=5). The most commonly used filter was a pill filter (53%, n=8) (Table 39).

Table 39: Use of a filter the last time injected a drug, 2013 (N=104)

	No filter	0.45 μm wheel filter *('pill filter')*	0.22 μm wheel filter *('bacterial filter')*	Commercial filter for hand-rolling tobacco *('roll-your-own filter')*	Filter from tailor-made cigarette *('tailor cigarette filter')*	Cotton wool
Opioids						
Morphine (n=71)	8% (n=6)	18% (n=13)	7% (n=5)	58% (n=41)	6% (n=4)	7% (n=5)
Oxycodone (n=62)	8% (n=5)	19% (n=12)	10% (n=6)	66% (n=41)	2% (n=1)	8% (n=5)
Methadone syrup (n=46)	57% (n=26)	4% (n=2)	39% (n=18)	0	2% (n=1)	2% (n=1)
Physeptone (n=30)	50% (n=15)	33% (n=10)	3% (n=1)	13% (n=4)	3% (n=1)	3% (n=1)
Methamphetamine *(n=73)*	68% (n=50)	0	1% (n=1)	26% (n=19)	7% (n=5)	4% (n=3)
Pharmaceutical stimulants *(n=23)*	26% (n=6)	48% (n=11)	9% (n=2)	13% (n=3)	4% (n=1)	0
Benzodiazepines *(n=15)*	33% (n=5)	53% (n=8)	7% (n=1)	13% (n=2)	0	0

Source: IDRS PWID interviews
Note: Multiple responses allowed

6.4.3 Use of sterile water for injection

Budgetary constraints across Tasmanian Government departments since 2011 have resulted in changes to equipment provision in Tasmanian NSP. The decision was made to provide bacterial and pill filters without charge, however a small fee for sterile water was introduced. Unlike heroin, and methamphetamine which are readily soluble in small amounts of solution, significant amounts of water (3-6mL per dose) are needed for injection of pharmaceutical opioid tablets (e.g. morphine, oxycodone) according to best-practice evidence (McLean et al, 2009). Non-sterile water may be contaminated with bacteria or insoluble particles, which, if injected, may cause harm to the consumer, for example, with infections or inflammation at injection sites.

Two-fifths of the sample reported sterile water as the most common diluent used when preparing an injection (43%, n=43). Less ideally, 37% (n=37) noted most commonly using boiled water and 18% of respondents used tap water (Table 40).

Almost half of the sample (46%, n=47) reported that the cost of sterile water had impacted on their injecting practices: 28% noted they continued to use sterile water, but less often; and 19% stated they no longer used sterile water. In addition, 14 of these participants noted experience of a health problem in the preceding four weeks due to injection of non-sterile water. The majority of this group (n=12) reported they had experienced a 'dirty hit', with effects such as feeling physically unwell soon after injection, nausea, vomiting and shaking uncontrollably.

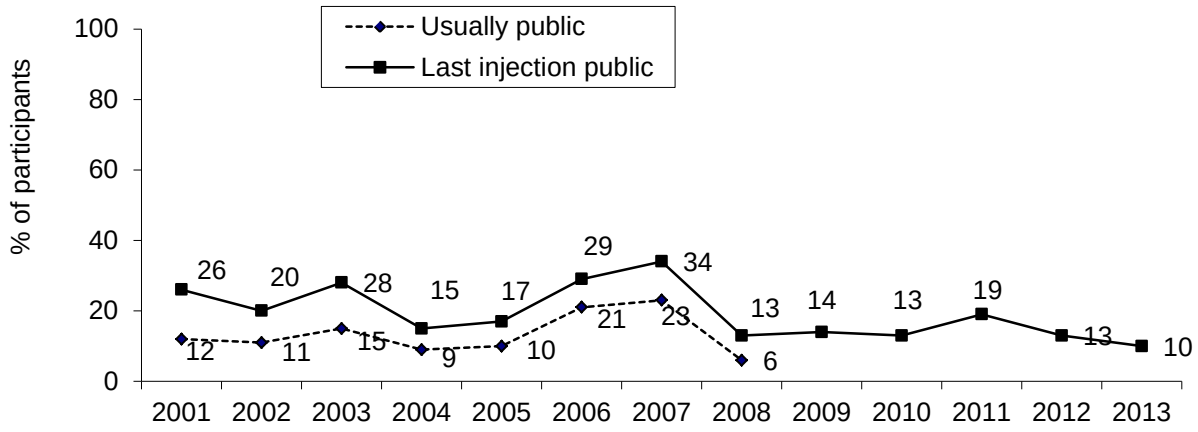
Table 40: Main type/source of water used in injections in the last 4 weeks, 2013 (N=101)

	N=101 %
Sterile water	43
Bottled water	3
Boiled water	37
Tap water	18

6.4.4 Location of injections

Participants were asked to comment on the location in which they last injected in the month preceding the interview (Figure 85). Injecting in a public space is of particular concern as it is related to increased risk of overdose and injecting related vascular problems (Darke, Kaye & Ross, 2001). Between the 2001 and 2007 surveys, 15% to 34% of each cohort reported last injecting in public; however, since the 2008 survey, the proportion reporting last injecting in public locations such as a public toilet, a car, or on the street, has been lower (ranging between 10% and 19%), with only 10% of the 2013 sample reporting last injecting in a public location (Figure 85).

Figure 85: Proportion of PWID participants reporting injecting in a public place, 2001-2013



Source: IDRS PWID interviews
Note: Since 2009, only 'location of last injection' was asked

6.4.5 Sources of new injecting equipment

Almost all participants (98%) reported having accessed clean needles/syringes from a non-pharmacy NSP in the six months preceding the interview (Table 41). This is consistent with the fact that the majority of participants were recruited and interviewed at non-pharmacy NSP outlet sites.

Table 41: Source of clean injecting equipment in the preceding six months, 2013

Sources of needles/syringes	% (N=104)
Non-pharmacy NSP	98%
Vending machine	29%
Pharmacy	16%
Friend	11%
Partner	3%
Dealer	1%

Source: IDRS PWID interviews.
Note: Multiple responses allowed

6.5 Blood-borne viral infections

Blood-borne viral infections (BBVI), in particular HIV/AIDS, HBV and HCV, are a major health risk for individuals who inject drugs. An integrated surveillance system has been established in Australia for the purposes of monitoring the spread of BBVI diseases. The Department of Health and Human Services, Public Health Division, records notifications of diagnoses of HIV, HBV and HCV in Tasmania, and, where possible, records the relevant risk factors for infection the person may have been exposed to. Table 42 indicates the number of cases of BBVI recorded in the state between 1991 and 2013. In regards to the markedly increased incident (new) cases of HCV infection between 1997 and 1998, this is likely to simply reflect improvement in the surveillance system. Up until 2003, incident cases of HCV remained between 13 and 18 cases per annum, with the exception of 2000, in which 30 cases were reported. Since 2003, the number of incident cases has been slightly higher, ranging between 18 and 27 cases per annum, with the exception of 2006 (10 cases reported) (Figure 86).

In contrast, unspecified (not new infections) notifications of HCV had steadily increased between 1997 and 2003 (rising from 195 to 345 cases in this period), but declined over 2004 and 2005 (falling from 345 cases in 2003 to 213 in 2005). The number of unspecified notifications remained relatively stable between 2006 and 2010, ranging between 240 and 260 cases per annum (with the exception of a small increase in 2008 to 327 cases). Since 2011, the number of such cases has been slightly lower (Table 42).

Similar to the pattern for incident cases of HCV, incident cases of HBV have remained between 17-21 cases per annum between 2000 and 2004, with the exception of a smaller number of cases in 2003 (n=10), and very small numbers of cases reported between 2005 and 2013 (ranging between 3 and 11 cases over this period). Reports of unspecified HBV infections (not new cases) have varied around 40 cases (22-76) per annum between 1991 and 2013, showing no clear trend in any direction.

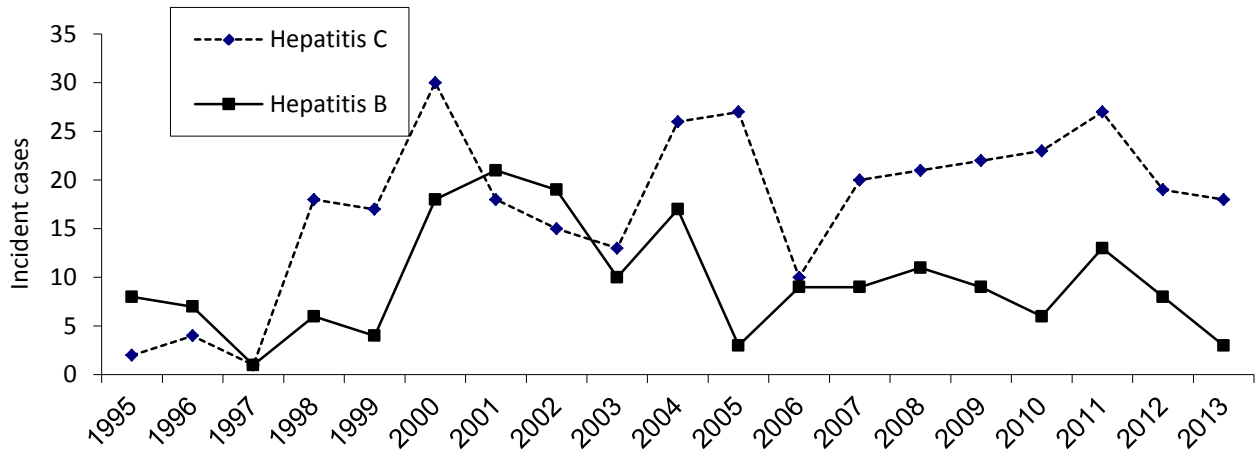
Table 42: Numbers of notifiable blood-borne viral infections in Tasmania, 1991-2013

	Blood-borne viral infections			
Year	**Hepatitis C (incident)**	**Hepatitis C (unspecified)**	**Hepatitis B (incident)**	**Hepatitis B (unspecified)**
1991	*n/a*	*n/a*	*n/a*	50
1992	*n/a*	*n/a*	*n/a*	52
1993	*n/a*	*n/a*	0	33
1994	*n/a*	*n/a*	0	40
1995	2	226	8	56
1996	4	262	7	38
1997	1	195	1	22
1998	18	255	6 (5)	28
1999	17	281	4 (4)	27
2000	30	298	18 (5)	39
2001	18	316	21	20
2002	15	320	19	34
2003	13	345	10	71
2004	26	285	17	60
2005	27	213	3	52
2006	10	259	9	46
2007	20	254	9	36
2008	21	327	11	59
2009	22	260	9	76
2010	23	240	6	51
2011	27	202	13	40
2012	19	223	8	62
2013	18	212	3	57

Source: Communicable Diseases Network – Australia New Zealand – National Notifiable Diseases Surveillance System, and Public Health, Department of Health and Human Services (data as of Jan 22, 2014 and subject to revision)

n/a Refers to cases where either no data were available or where recorded data were not specifically broken into incident and unspecified cases

Figure 86: Total notifications of incident hepatitis B and C infections in Tasmania, 1995-2013



Source: Communicable Diseases Network – Australia New Zealand – National Notifiable Diseases Surveillance System, and Public Health, Department of Health and Human Services. (data as of Dec11, 2012 and subject to revision)

6.6 Self-reported injection-related health problems

Key Points:

- Almost three-fifths (58%) of the sample reported experience of at least one injection-related problem in the preceding month, most commonly difficulty injecting and scarring/bruising of the injection site. This is similar to reports in 2012.

There was a substantial rate of injection-related problems reported by the PWID surveyed, with 58% reporting at least one such problem in the preceding month (Table 43). This rate of experience of injection-related health problems is similar to the rate reported in 2012 (59%). Between 2002 and 2004, 72% to 76% of each sample reported an injection-related health problem; this decreased over the 2005 to 2013 period, with between 50% and 63% of each sample reporting this – with the exception of 2009 (80%).

The most commonly reported problems among the current PWID cohort were 'difficulty injecting' (40%), indicating vascular damage, and scarring/bruising of injection sites (40%). Rates of recent injection-related problems between 2012 and 2013 have remained relatively stable.

Reported rates of experience of 'dirty hits' amongst the cohorts ranged between 18% and 31% between 2002 and 2005. Since this time, the rate has been lower, ranging between 9% and 17% (Table 43). Experience of a 'dirty hit' – feeling physically unwell soon after injection – is commonly due to the injection of contaminants or impurities. In the 2013 cohort, just six participants reported details of the drug which lead to experience of a 'dirty hit'. Of this, group, 33% were attributed to benzodiazepines, and 17% respectively for methadone syrup, oxycodone, morphine and other opioids.

Table 43: Injection-related health problems reported by participants in the month prior to interview, 2002-2013

	2002 %	2003 %	2004 %	2005 %	2006 %	2007 %	2008 %	2009 %	2010 %	2011 %	2012 %	2013 %
Scarring/bruising	53	49	42	31	29	33	31	71	51	38	42	40
Difficulty injecting	48	51	49	47	38	40	39	53	42	42	46	40
Thrombosis	5	10	8	12	5	3	4	10	9	4	3	1
'Dirty hit'	18	31	24[~]	19[@]	15[^]	15[+]	9[**]	17[α]	12[^^]	14[#]	14[π]	17[£]
Infections/abscesses	8	8	11	11	7	11	5	7	10	4	9	3
Overdose	0	0	1	1	1	4	0	4	2	1	2	0
At least one injection-related problem	72 (range 1-5, median 2*)	76 (range 1-5, median 2*)	72 (range 1-5, median 2*)	62 (range 1-5, median 2*)	50 (range 1-3, median 1*)	57 (range 1-5, median 2*)	54 (range 1-5, median 1*)	80 (range 1-5, median 2*)	63 (range 1-4, median 2*)	61 (range 1-4, median 1*)	59 (range 1-4, median 2*)	58 (range 1-3, median 2)
Median injection frequency	More than once per week	More than once per week	More than once per week	More than once per week	More than once per week	More than once per week	More than once per week	More than once per week	More than once per week	More than once per week	More than once per week	More than once per week
% injecting daily	29	17	27	30	37	20	29	30	43	36	26	28

Source: IDRS PWID interviews

[*] For those noting injection-related problems:

[~] 58% of these were attributed to methadone injection, 25% from morphine, 17% to methamphetamine

[@] 50% of these were due to methadone injection, 28% to methamphetamine injection, 17% to morphine injection and 6% attributed to benzodiazepine injection

[^] 67% of these were attributed to methadone injection, 13% to methamphetamine, 13% to morphine and 7% to benzodiazepines

[+] 40% were attributed to methadone; 13% to morphine; and 7% to each to methamphetamine, methamphetamine and other opiates, methamphetamine and morphine, benzodiazepines and morphine and benzodiazepines and methadone

[**] 44% of these were attributable to methadone injection, 33% to morphine injection and 11% to benzodiazepine injection and homebake injection

[α] 47% of these were attributable to methadone injection, 41% to morphine, and 12% to methamphetamine injection and benzodiazepine injection

[^^] 25% of these were attributable to either methadone or methamphetamine, 17% to morphine, 8% to either oxycodone, Suboxone, a combination of oxycodone and morphine or morphine and benzodiazepines

[#] 43% of these were attributable to methadone, 21% to methamphetamine, 7% respectively to either morphine, morphine and heroin, benzodiazepines, oxycodone and methadone

[π] 43% of these were attributable to methadone, 7% benzodiazepine, oxycodone, methylphenidate, Subutex, Suboxone, methadrone and MDPV

[£] Of those who commented, 33% were attributable to benzodiazepines, and 17% respectively for methadone syrup, oxycodone, morphine and other opioids

Note: N=100 in 2002-2011; N=106 in 2012 ; N=95 in 2013

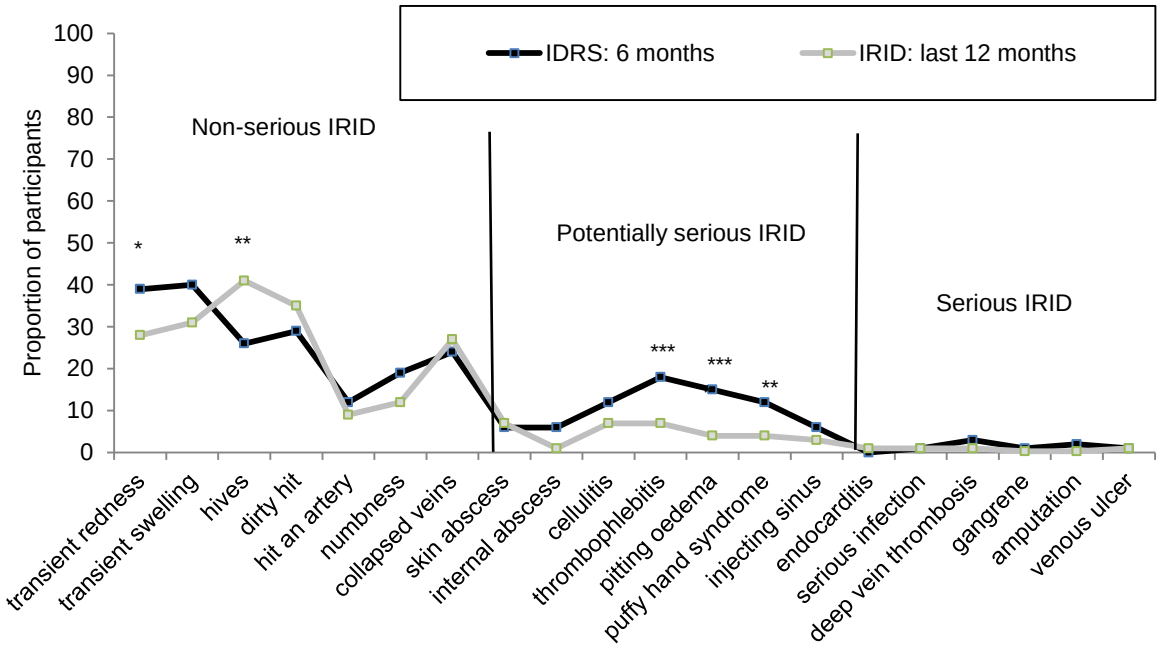
In 2012, a new set of questions were included in the PWID survey focused on experience of non-viral injecting-related injuries and diseases (IRID). These injuries and diseases vary from non-serious events such as hives, to medical emergencies including endocarditis. Dwyer and colleagues (2007) conducted a large Australian multi-site study (Victoria, New South Wales & Queensland) into the experience of IRID. Questions regarding lifetime and recent experience of IRID were taken from this study, and IRID were classified in accordance with Dwyer et al.'s system, to allow for comparison between the cohorts:

- Non-serious IRID: transient redness, transient swelling, hives, 'dirty hit', hitting an artery, numbness or pins and needles and collapsed/blocked veins;
- Potentially serious IRID: abscesses, cellulitis, thrombophlebitis, oedema, puffy hands syndrome, injecting sinus, and;
- Serious IRID: systemic infections, deep vein thrombosis, gangrene, amputation and venous ulcer.

Figure 87 presents the rates of recent experience of IRID amongst the 2012 IDRS sample (last six months) and the IRID cohort (last 12 months) reported on by Dwyer et al. (2007). Dwyer and colleagues' cohort was recruited from a range of sites across Victoria, New South Wales and Queensland. The predominant drugs used in the preceding 12 months by this group were heroin and methamphetamine. In contrast, the Tasmanian IDRS cohort reported higher rates of injecting of pharmaceutical opioids such as morphine, oxycodone and Physeptone, along with methamphetamine.

The IRID cohort was significantly more likely to report recent experience of the hives (26% v. 41%: $\chi^2(1_{n=496})=7.17$, p=0.007), however, IDRS participant were more likely to report recent experience of transient redness around the injecting site (39% v. 28%: $\chi^2(1_{n=496})=3.84$, p=0.05), thrombophlebitis (18% v. 7%: $\chi^2(1_{n=496})=10.91$, p<0.001), pitting oedema (15% v. 4%: $\chi^2(1_{n=496})=13.59$, p<0.001) and puffy hand syndrome (12% v. 4%: $\chi^2(1_{n=496})=7.44$, p=0.006). It is possible that these higher rates of experience of IRID amongst IDRS participants are related to injecting pharmaceutical tablets, as there are large quantities of particulate matter, much of which is insoluble and large enough to block blood vessels; however, further work needs to be done in this area before conclusions may be drawn. In saying this, it is notable that the reporting period for IDRS participants was just half of that of the IRID participants (i.e. 6 months v. 12 months).

Figure 87: Recent experience of IRID amongst IDRS (2013) and IRID (2007) study cohorts



Source: IDRS PWID interviews, Dwyer et al, 2007
Note: IDRS N=103, IRID cohort, N=393
*p<0.05; **p<0.01; *** p<0.001

6.7 Mental health and psychological distress

Key Points:

- Over half (54%) of the sample self-reported experience of a mental health problem in the preceding six months, a similar rate to that reported in 2012 (46%); four-fifths of this group (81%) had recently attended a health professional for mental health issues. Depression and anxiety were most commonly cited;
- Using a measure of psychological distress, one third (31%) of the 2013 IDRS sample scored in the 'very high' category (indicative of the need for professional help). This was significantly higher than the rate reported for the general Australian population (4%); and
- The mean Physical and Mental Component Scores generated by the SF12 indicate that IDRS participants experienced poorer mental and physical health than the population average.

6.7.1 Mental health

As there exists a substantial body of work identifying increased rates of mental health issues among those who use illicit drugs, PWID participants were asked if they had experienced a mental health problem in the six months preceding the interview (Table 44). Fifty-four percent of participants self-reported experiencing a mental health problem in this period, a similar rate to that reported in 2012 (46%) (Table 44). Four-fifths of the group reporting recent experience of a mental health problem had recently attended a health professional for mental health issues (81%, n=42), a significantly higher rate than reported in 2012 (58%: $\chi^2(1_{n=102})=4.80$, p=0.03), but in keeping with previous years

(ranging between 61% and 82%). Participants had predominantly seen a psychologist (38%, n=15), psychiatrist (26%, n=11) and counsellor (14%, n=6) for support with their mental health problems

The most commonly reported mental health problems amongst this group of participants were depression (74%, n=39) and anxiety (57%, n=30). These have remained the predominant issues in each of the IDRS cohorts, just as they are in the general population (ABS, 2006).

In regard to changes in self-reported mental health problems amongst PWID participants across these studies, reports of depression (among those reporting recent experience of any mental health problem) have remained relatively stable since 2005 (between 72% and 83%), with the exception of the 2007 and 2009 samples, in which 57% and 67% respectively reported recent experience of depression. This change was partially offset by a slight increase in the proportions reporting experience of bipolar affective disorder (which is related to depression). In keeping with the lower levels of use of the high-potency forms of methamphetamine amongst the cohorts since 2007, the proportions self-reporting anxiety disorders have decreased. In 2006, 62% of those reporting recent experience of a mental health problem; over the following three years this rate decreased to 43% (in 2009). Since this time the rate of participants self-reporting anxiety has fluctuated between 46% and 67%. Similarly, reports by participants regarding experiences of paranoia, a symptom that is common following extended methamphetamine use, was higher in 2004 and 2005 (11% and 14% respectively), and remained at very low levels between 2006 and 2011 (ranging between 0% and 4%, with the exception of 2010: 12%). However, in 2012, the rate of self-reported experience of paranoia increased significantly to 20% (2011: 3%: %: $\chi^2(1_{n=101})=5.122$, p=0.024). In 2013, this rate returned to previously observed low levels (6%). Self-reported rates of psychosis and related problems (psychotic episodes, schizophrenia, drug-induced psychosis) have ranged between 11% and 21% between 2004 and 2013, with the exception of 2008 (7%).

Three-quarters of the participants self-reporting a mental health problem reported they had been prescribed medication for this in the preceding six months (75%, n=40). Of this group, three-quarters had been prescribed an antidepressant (73%, n=29), most commonly mirtazepine (n=9) and venlafaxine (n=4). Two-fifths commented that they had been prescribed a benzodiazepine (38%, n=15), predominantly diazepam. One quarter (28%, n=11) of participants reported having had an antipsychotic prescribed to them in the preceding six months, predominantly quetiapine.

Table 44: Experience of mental health problems amongst IDRS participants, 2005-2013

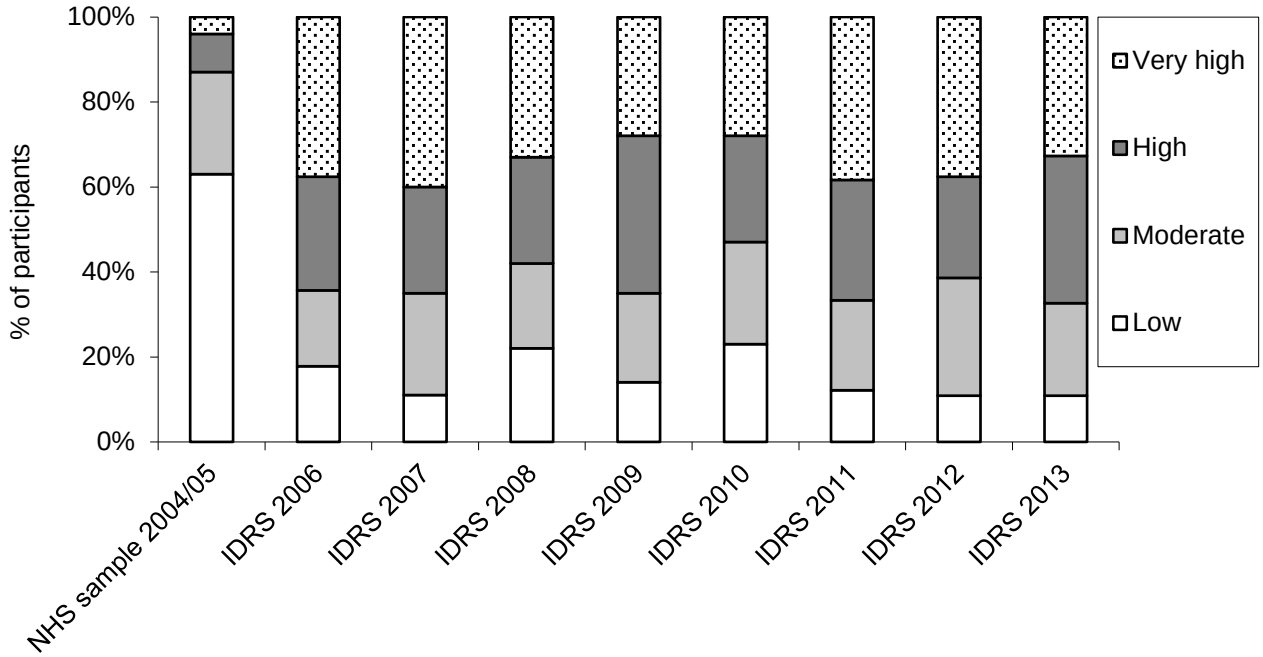
	2005 IDRS		2006 IDRS		2007 IDRS		2008 IDRS		2009 IDRS		2010 IDRS		2011 IDRS		2012 IDRS		2013 IDRS	
	%	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	%	*n*
% self-reporting mental health problem last 6 months	58	*58*	50	*50*	60	*60*	43	*43*	46	*46*	52	*52*	69	*65*	46	*49*	54	*53*
Of these:																		
% attending a health prof. for a mental health problem in past 6 months	74	*43*	76	*38*	82	*49*	72	*31*	61	*28*	73	*38*	80	*52*	58	*28*	81	*42*
Specific type of mental health problem experienced amongst those with a self-reported mental health problem																		
	%	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***
Depression	83	*48*	80	*40*	57	*34*	79	*34*	67	*31*	77	*40*	72	*47*	82	*40*	74	*39*
Bipolar Disorder	5	*3*	6	*3*	15	*9*	9	*4*	20	*9*	14	*7*	12	*8*	12	*6*	19	*10*
Anxiety	57	*33*	62	*31*	48	*29*	42	*18*	43	*20*	52	*27*	46	*30*	67	*33*	57	*30*
Panic	19	*11*	8	*4*	8	*5*	19	*19*	11	*5*	19	*10*	9	*6*	25	*12*	17	*9*
Paranoia	14	*8*	4	*2*	2	*1*	-	-	4	*2*	12	*6*	3	*2*	20	*10*	6	*3*
Schizophrenia/Psychosis	17	*10*	14	*7*	18	*10*	7	*3*	11	*5*	15	*8*	15	*10*	20	*10*	21	*11*
Obsessive-compulsive disorder	2	*1*	2	*1*	2	*1*	-	-	-	-	4	*2*	2	*1*	8	*4*	8	*4*
Personality disorder	3	*2*	4	*4*	5	*3*	-	-	7	*3*	10	*5*	5	*3*	14	*7*	8	*4*
Post-traumatic stress disorder	-	-	-	-	5	*3*	-	-	4	*2*	8	*4*	12	*8*	-	-	25	*13*

Source: IDRS PWID interviews

With the aim of a more objective assessment of the degree of psychological distress amongst the PWID samples, participants were asked to complete the Kessler 10 Scale (K10) (Kessler, R. et al, 2010). The K10 examines negative emotional states, with a focus on anxiety and depressive symptoms, in the four weeks preceding the interview. The scores are totalled and grouped into four categories of psychological distress: low; medium; high; and very high. Participants who fall into the 'very high' category may require professional help (ABS, 2001), and demonstrate high concordance with the presence of a diagnosable mental health disorder. Ninety-five participants in the current study completed the K10 in 2013 (Figure 88). One-third of participants scored in either the 'very high' or 'high' categories of psychological distress (33%, n=31 and 35%, n=33 respectively); 22% scored in the 'moderate' category (n=21); and just 11% fell into the 'low' level of psychological distress category (n=10).

These findings are similar to those from previous IDRS studies, but are dramatically and statistically significantly different to those found in the National Health Survey (2004/05, which focused on a sample of 19,680 from the general population) (ABS, 2006), in which two-thirds of the participants (63%) were classified in the 'low' level of psychological distress (compared with 11% of the Tasmanian IDRS: $\chi^2(1_{n=19,775})=20.67$, $p<0.001$), and just 4% were classified in the 'very high' level (compared with 33% in the IDRS: $\chi^2(1_{n=19,775})=184.62$, $p<0.001$), indicative of a potential need for professional assistance (Figure 88). In keeping with these findings, KE commenting on primary consumers of cannabis and methamphetamine noted mental health problems amongst these client groups including depression, anxiety, paranoia and difficulties with emotional regulation. KE in emergency medical settings and alcohol and drug treatment settings noted an increase in mental health presentations specifically related to crystal methamphetamine use, paralleling the increase in use of this form amongst the 2013 sample. Two KE commented that high rates of anxiety and depression, alongside other serious health issues, also extended to users of over-the-counter codeine presenting to alcohol and drug treatment services.

Figure 88: Responses to the K10 questionnaire in the National Health Survey 2004/05 and Tasmanian IDRS, 2006-2013



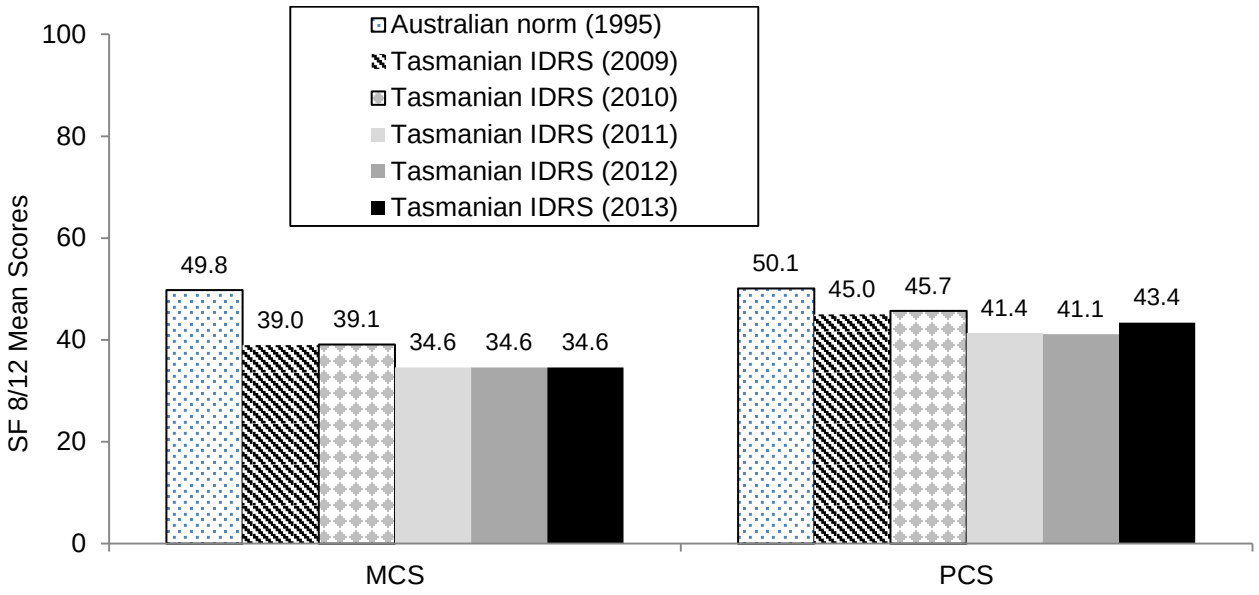
Source: IDRS PWID interviews and National Health Survey (ABS), 2004/05

6.8 Physical health

6.8.1 Physical Health problems (SF-12)

The Short Form-8 Health Survey (SF-8) and Short Form-12 Health Survey (SF-12) are questionnaires designed to provide information on general health and wellbeing. These questionnaires were administered for the first time in the IDRS in 2008. The SF-8 and SF-12 measure eight health concepts: physical functioning; role limitations due to: physical health problems; bodily pain; general health; energy/fatigue; social functioning; role limitations due to emotional problems; and psychological distress and wellbeing. The scores generated by these eight variables are combined to generate two composite scores, the physical component score (PCS) and the mental component score (MCS) (Lefante et al., 2005). The SF-8 scoring system was developed to yield a mean of 50 and a standard deviation of 10. Participants in the 2013 Tasmanian IDRS study scored a mean of 34.6 (SD=10.2) for the MCS, one and a half standard deviations lower than the Australian general population mean score of 49.8 (ABS, 1995) ($t_{(67)}$=12.3, p<0.001). Similarly, the mean score for the PCS for the IDRS sample was 41.1 (SD=10.9), almost one standard deviation lower than the Australian general population mean score of 50.1 (ABS, 1995) ($t_{(67)}$=5.06 p<0.001). This indicates that PWID had both poorer mental and physical health than the population average (Figure 89).

Figure 89: SF-8/12 scores for PWID compared with the general Australian population, 2009-2013



Source: IDRS PWID interviews, Australian Bureau of Statistics, 1995

6.9 Driving risk behaviour

Key Points:

- Almost three-fifths (57%) of participants who reported having driven a vehicle in the preceding six months reported doing so within one hour of consuming illicit drugs;
- Illicit morphine was the most commonly reported drug used prior to driving (68%), a dramatic increase relative to rates in the 2012 sample (18%). Use of cannabis was also common (65%), as was methamphetamine, increasing from 15% in 2012 to 48% in 2013; and
- Three-fifths of participants commenting on the effect drug use had on their last occasion of driving noted no impact.

More than half of consumers interviewed in the current study had driven a car in the preceding six months (55%) (Table 46). Of these participants, almost three-fifths self-reported that they had driven within one hour of consuming illicit drugs[31] (57%, n=31). This rate is slightly lower than reported in 2012 (67%, p=0.4). Table 46 summarises the drugs that were used: illicit morphine (68%), cannabis (65%) and methamphetamine (48%).

When reviewing rates of reported driving soon after consuming an illicit drug over time, one of the more notable changes was the overall reduction in use of illicit methadone. In 2006, 56% of participants reporting recent driving had done so within one hour of consuming illicit methadone syrup. By 2008, this had decreased to 22%, and since this time has ranged between 15% and 35% (Table 46).

Use of illicit morphine in the context of drug driving remained relatively stable between 2006 and 2001, ranging between 24% and 42%. In 2012, this decreased to 18%, however, a dramatic increase was reported in 2013, with 68% of recent drivers reporting driving within one hour of consuming illicit morphine in the last six months ($\chi^2(1_{n=64})=14.13$, $p<0.001$).

Use of methamphetamine has also been variable: in 2006, 62% of participants reported use of methamphetamine, however, between 2008 and 20012 this rate was lower, ranging between 7% and 25%. In 2013, this rate increased to 48% (15% in 2012: $\chi^2(1_{n=64})=6.74$, $p=0.009$).

Given the overall relatively stable and high rates of driving under the influence of drugs in the past eight cohorts, it is important to monitor changes in such behaviour in future PWID cohorts as roadside drug testing and drug driving education campaigns are increasingly implemented in the state.

Forty-four participants who had recently drug-driven commented on their perceived level of impairment on the last occasion this occurred. Sixty-eight percent of this group perceived that their drug use had had no impact on their driving ability on this occasion (n=30), and one-fifth reported their driving was slightly impaired (18%, n=8). Small minorities noted their driving was either slightly improved (9%, n=4) or quite improved (5%, n=2).

Roadside drug testing was introduced in Tasmania in 2005. Drivers who are selected for this are required to provide a saliva sample, which is then analysed, returning a result in approximately five minutes. Drivers who test positive are then requested to provide a blood sample for confirmation of this result. In Tasmania, drivers are typically tested for cannabis, amphetamine and MDMA. Nineteen percent of participants in the current study (n=20) reported they had ever undergone such testing, with 11 participants reporting this had occurred on one occasion and 9 reporting this had

[31] Note that this includes prescription drugs but only if they were not prescribed to the individual using them.

occurred on more than one occasion. Five of these participants reported testing positive for the most recent test to drugs including opiates, cannabis, amphetamine and MDMA.

Table 45 presents the number of positive drug screens conducted by Tasmania Police for drug driving in 2012/13. It is important to note that in some cases an individual tested positive to both tests; whilst in some cases individuals tested negative to the initial oral fluid test (OFT) and positive to the blood test. Also, the OFT is a screening test which at times returns a false-positive result. In 2012/13, 1,698 roadside drug tests were conducted: cannabis was the most commonly detected drug, with 274 OFT and 380 blood tests returning positive results. Positive OFT and blood tests for amphetamine were also relatively common (n=211 and n=164 respectively), as were positive blood test results for methamphetamine (n=192).

Table 45: Tasmania Police positive roadside drug test results, 2012/13

	Oral Fluid Testing	Blood Testing
Amphetamine	211	164
Cocaine	14	0
Meth/amphetamine	80	192
Opiates	40	33
Cannabis	274	380

Source: Tasmania Police State Intelligence Services
Note: Difference between oral fluid testing (OFT) and blood testing results are due to some individuals testing negative to the OFT but positive to the blood test. These results are preliminary and are subject to change, and in some instances further analysis on tests was being conducted at the time of publication

Of the 54 participants who reported having driven a vehicle in the preceding six months, 13% (n=7) reported they had driven whilst under the influence of alcohol in this period. Of this group, two reported they had driven whilst over the legal limit for blood alcohol concentration in the preceding six months.

Table 46: Proportion of PWID driving a car in the preceding six months that had driven soon after using non-prescription drugs, 2006-2013

	2006		2007		2008		2009		2010		2011		2012		2013	
	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	n
Drove a vehicle in last 6months	73	*73*	57	*57*	64	*64*	65	*65*	59	*59*	63	*60*	64	*68*	55	*54*
Of these:																
% driven within 1 hour of consuming illicit drugs	68	*50*	74	*42*	64	*41*	78	*51*	73	*43*	67	*40*	67	*33*	57	*31*
Opioids																
Heroin	*2*	*1*	-	-	-	-	-	-	-	-	3	*1*	0	*0*	6	*2*
Methadone (illicit)	56	*28*	50	*21*	22	*9*	18	*9*	35	*15*	15	*6*	33	*11*	19	*6*
Morphine (illicit)	38	*19*	33	*14*	42	*17*	24	*12*	30	*13*	33	*13*	18	*6*	68	*21*
Methamphetamine																
(any)	62	*31*	40	*17*	7	*3*	25	*13*	12	*5*	20	*8*	15	*5*	48	*15*
Powder	30	*15*	36	*15*	5	*2*	16	*8*	12	*5*	15	*6*	12	*4*	*35*	*11*
Base	26	*13*	5	*2*	-	-	10	*5*	-	-	3	*1*	3	*1*	*6*	*2*
Crystal/ice	24	*12*	5	*2*	2	*1*	-	-	-	-	3	*1*	0	*0*	*29*	*9*
Cannabis	56	*28*	67	*28*	56	*24*	51	*26*	37	*16*	35	*14*	58	*19*	65	*20*
Benzodiazepines	18	*9*	33	*14*	22	*9*	6	*3*	9	*4*	20	*8*	12	*4*	29	*9*
Ecstasy	-	-	-	-	-	-	2	*4*	2	*1*	-	-	0	*0*	6	*2*

Source: IDRS PWID interviews

7.0 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH DRUG USE

Key Points:

- Two-fifths of participants reported they had been arrested in the preceding 12 months, most commonly for property crimes and driving offences.

Tasmania Police arrests

- The number of methamphetamine-related arrests decreased between 2011/12 and 2012/13;
- The number of cannabis-related arrests has been decreasing since 2010/11.

Drug-related charges in Tasmanian courts

- From 2010/11 and 2012/13, the number of individuals before the Hobart Magistrates Court for alleged dealing and trafficking, cultivation, and possession charges decreased; and
- The number of individuals incarcerated at Hobart Prison in relation to drug offences, and the number of offences amongst these individuals, decreased between 2011/12 and 2012/13.

7.1 Reports of criminal activity among PWID participants

Two-fifths of participants self-reported they had been arrested in the preceding 12 months (39%) (Table 47). Participants predominantly reported property crimes (50%) and driving offences (36%) as the crimes they were arrested for. The proportion of participants reporting recently being arrested for a property crime remained relatively stable between 2003 and 2012, ranging between 14% and 29%, however in 2013, this rate increased to 50% (14% in 2012: $\chi^2(1_{n=81})=9.40$, p=0.002). Similarly, the rate of participants reporting recent arrest for a driving offence remained relatively low, ranging between 2% and 12% between 2003 and 2012. In 2013, this rate has also increased, with 36% of recent arrests being for a driving offence (11% in 2012: $\chi^2(1_{n=81})=5.95$, p=0.01).

Participants were asked to comment on the frequency of any criminal activity in the month preceding the interview. Among those reporting involvement in property crimes (n=33), 48% (n=16) noted such activity occurring less than weekly; 40% (n=13) once per week; and 12% (n=4) less than once per week (but more than daily).

One-quarter of participants reported dealing drugs in the month preceding the interview (26%, n=28). Amongst this group, participants reported dealing drugs frequently, with 43% (n=12) doing so more than once per week and 39% (n=11) doing so less than weekly (but more than daily); only small minorities reported this behaviour occurring once per week (14%, n=4) or daily (4%, n=1).

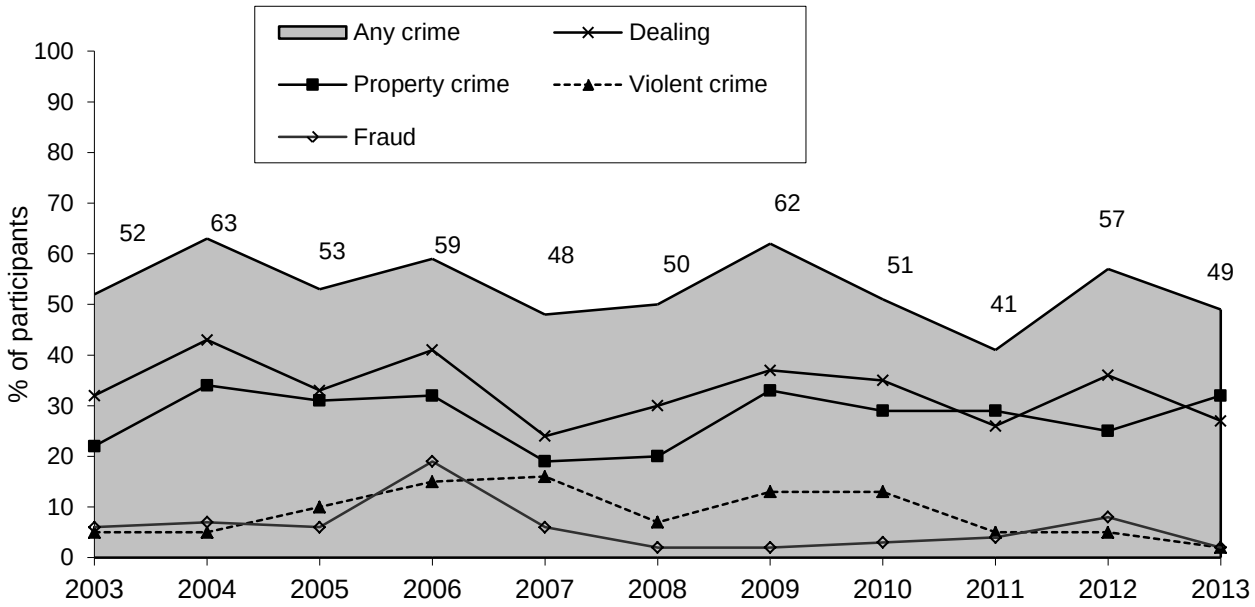
In 2013, the rate of participants self-reporting involvement in any criminal activity in the month preceding the interview was 49%; similar to the rate reported in 2012 (57%, p=0.3). With the exception of 2011, this rate has fluctuated between 48% and 63% since 2003 (Figure 90). It should be noted that these fluctuations are within the range expected for sampling variability.

Table 47: Self-reported arrests among PWID, 2003-2013

Activity	2003 %	2004 %	2005 %	2006 %	2007 %	2008 %	2009 %	2010 %	2011 %	2012 %	2013 %
% arrested last 12 months	46	51	47	55	46	47	49	47	34	37	39
% arrested for:											
Property crime	21	29	16	16	19	20	23	20	15	14	50
Use/possession-drugs	2	9	5	5	2	10	4	9	4	8	10
Violent crime	5	9	11	16	9	8	10	19	4	7	14
Fraud	3	2	1	3	2	1	2	0	1	-	-
Dealing/trafficking	0	1	2	3	1	0	4	2	1	4	2
Driving offence	2	6	11	10	6	10	12	6	7	11	36
Alcohol and driving	1	1	0	0	6	1	5	5	1	4	2
Drugs and driving	3	2	0	1	6	1	2	2	5	6	5
Use/possession-weapons~	-	-	-	-	-	2	5	2	-	-	2
Other reason	16	14	16	22	17	11	9	6	5	5	12

Source: IDRS PWID interviews
~ This response was only included in the 2008-2013 studies

Figure 90: Self-reported criminal activity in the preceding month amongst PWID, 2003-2013



Source: IDRS PWID interviews

7.2 Arrests

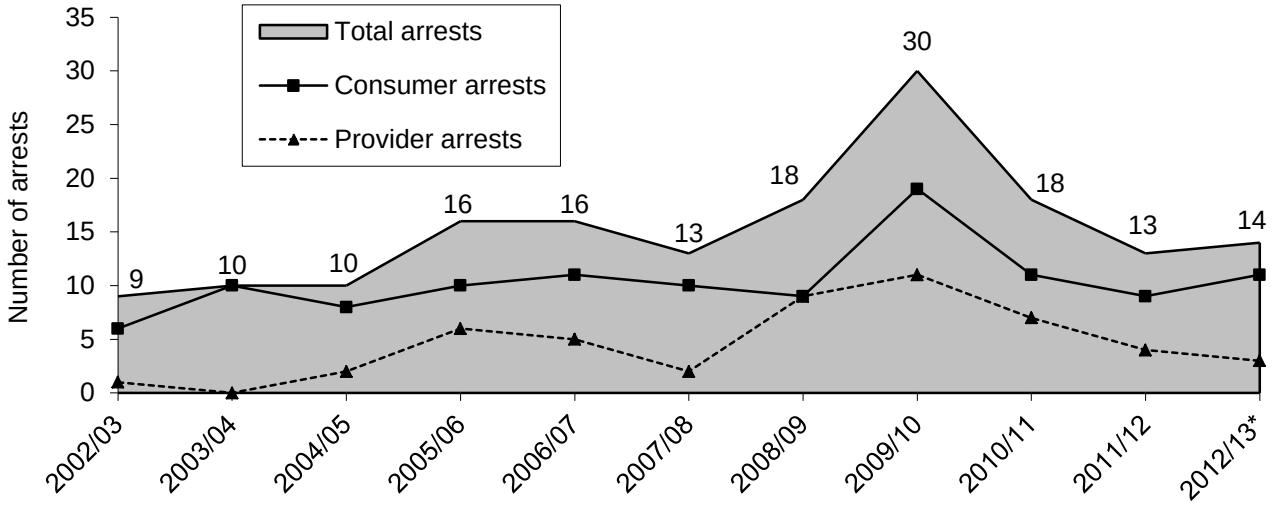
Since 2000, Tasmania has had a drug diversion program (the Illicit Drug Diversion Initiative). This diversion model encompasses individuals who have been apprehended for no more than three offences in the past ten years, and follows a three-tiered approach to diversion. Individuals with a first minor cannabis offence are cautioned and provided with health and legal information, as well as contact details of referral and treatment services, and do not receive any criminal record. Second-time offenders are cautioned and diverted into a brief face-to-face intervention with a health professional. Again, there is no criminal conviction; however, if they fail to attend the brief intervention the individual is prosecuted for the drug offence. Third-time offenders are cautioned and diverted directly to assessment and treatment through the Department of Health and Human Services, Alcohol and Drugs Service. Charges are not pursued providing there is attendance and

compliance with the requirements of treatment as assessed. In the case of a first offence with an illicit drug other than cannabis, individuals are immediately diverted to the third tier of diversion (as per third time cannabis offenders). As such, while diversions may be employed for consumer offences for any illicit drug, as the majority of diversions involve cannabis consumers, data from the Illicit Drug Diversion Initiative are summarised in the cannabis arrests section below (Section 7.2.4).

7.2.1 Heroin and other opioids

Since 2002/03, the number of arrests relating to opioids (including heroin and other narcotics[32]) has remained relatively small and stable. With the exception of 2009/10 (30 such arrests), the number of arrests fluctuated at around 13 cases per annum (range 9-18) (Figure 91).

Figure 91: Number of arrests for opioid-related offences in Tasmania, 2002/03-2012/13



Source: Australian Illicit Drug Reports 1997/98-2001/02, Australian Bureau of Criminal Intelligence; Illicit Drug Data report 2002/03- 2008/09, Australian Crime Commission; and Tasmania Police State Intelligence Services State-wide Illicit Drug Reports

* 2012/13 data are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report and ACC-IDDR due to differences in counting rules

Note: Counting rules for arrests prior to 2002/03 differ from those applied currently, so these years are not directly comparable. Arrests for 2005/06 were only reported to the ACC for part of the financial year.

7.2.2 Methamphetamine

Arrest data for methamphetamine-related offences indicate a marked increase in the total number of arrests in 2006/07 and 2007/08 (177-179 arrests) relative to previous years (39-83 arrests) (Table 48). While a reduced number of arrests was reported between 2008/09 and 2010/11 (104-128 arrests) an increase in the total number of arrests was reported in 2011/12 (161 arrests). This increase was largely attributable to an increase in the number of consumer arrests, with 100 arrests reported compared to 56 in 2010/11. In 2012/13, there was a slight reduction in both consumer and provider arrests relative to 2011/12, with 120 arrests reported in total (79 consumer and 41 provider). It is important to note that these data are preliminary and subject to revision (totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules), and as such, care should be taken when interpreting it.

[32] For recording purposes, Tasmania Police class any Schedule 8 drug as 'Narcotic'. Schedule 8 drugs are 'Drugs of Addiction'.

Table 48: Consumer and provider arrests for methamphetamine and related substances, 2002/03-2012/13

	2002/03 n	2003/04 n	2004/05 n	2005/06 n	2006/07 n	2007/08 n	2008/09 n	2009/10 n	2010/11 n	2011/12 n	2012/13† n
Consumers											
Female	8	10	9	10	24	26	10	16	12	23	18
Male	34	21	34	33	84	81	37	61	44	77	61
Unknown	0	0	0	0	0	0	0	0	0	0	0
Total	**42**	**31**	**43**	**43**	**108**	**107**	**47**	**77**	**56**	**100**	**79**
Providers											
Female	2	1	3	9	14	13	7	9	5	8	8
Male	17	7	23	25	55	57	61	42	40	53	33
Unknown	0	0	0	0	0	0	0	0	0	0	0
Total	**19**	**8**	**26**	**34**	**69**	**70**	**68**	**51**	**45**	**61**	**41**
Total arrests*	**66**	**39**	**69**	**83**	**179**	**177**	**117**	**128**	**104**	**161**	**120**

Source: Australian Crime Commission (previously the Australian Bureau of Criminal Intelligence) and State Intelligence Services, Tasmania Police

† 2012/13 data is preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules. Cases here relate to both arrest and summons charges for methamphetamine-related offences

* Includes those offenders whose consumer/provider status was not stated, so total may exceed the sum of the table cells

Note: 'Consumer' refers to persons charged with use-type offences (e.g. possession, administration), while 'provider' refers to persons charged with supply-type offences (e.g. supply, cultivation or manufacture). Where a person has been charged with multiple offences within a category, that person is only counted once in these statistics

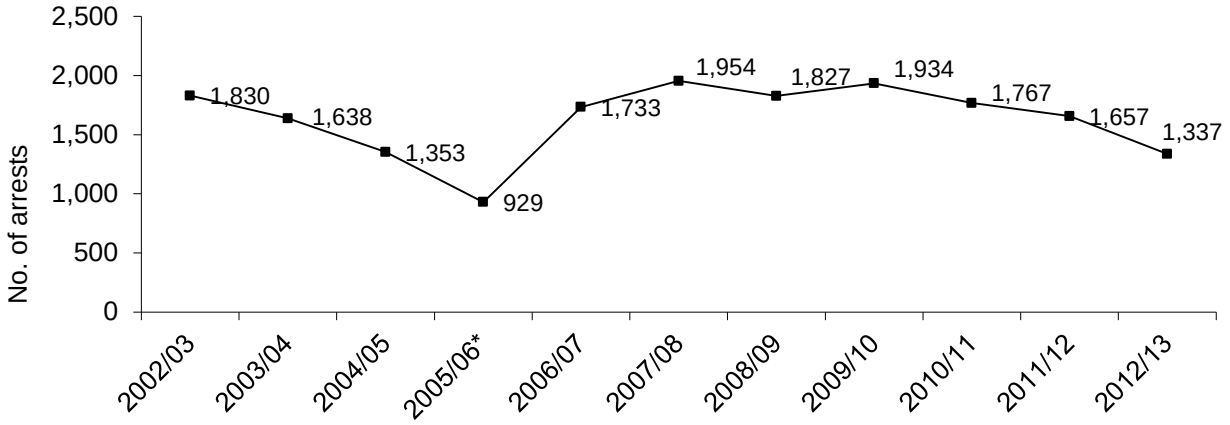
7.2.3 Cocaine

Arrests for cocaine-related offences in Tasmania have been infrequent. In 2012/13, no arrests were reported in relation to cocaine. Between 2000/01 and 2011/12, the number of arrest relating to cocaine offences ranged between none and three (Australian Bureau of Criminal Intelligence, 2001; Australian Crime Commission, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011 & 2012; and State Intelligence Services, Tasmania).

7.2.4 Cannabis

Figure 92 shows the number of cannabis-related arrests made by Tasmania Police between 2002/03 and 2012/13. Cautions and arrests relating to cannabis declined to 929 cases in 2005/06 (although arrests for 2005/06 were only reported to the ACC for part of the financial year) from 1,830 in 2002/03. A substantial increase in cannabis-related arrests was observed in 2006/07 and rates remained relatively stable until decreases were observed in 2010/11, 2011/12 and 2012/13.

Figure 92: Number of arrests (including cautions and diversions) for cannabis-related offences in Tasmania, 2002/03-2012/13



Source: Australian Crime Commission and State Intelligence Services, Tasmania Police
*Arrests for 2005/06 were only reported to the ACC for part of the financial year
Note: 2012/13 data were provided by State Intelligence Services and are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules

The Tasmanian Illicit Drug Diversion Initiative, which primarily but not exclusively relates to cannabis consumer offences, has been well supported by police, with well in excess of 1,000 diversions made per annum between 2003/04 and 2006/07 (Table 49). A notable increase in diversions was apparent in 2007/08 (1,681 diversions) with this level maintained in the subsequent reporting periods (1,528-1,609). There was a reduction in the total number of diversions between 2009/10 (1,609 diversions) and 2010/11 (1,132 diversions).

The reductions observed in 2010/11 were in part due to a change in the way IDDI cautions and diversions were made: at the end of 2010, following advice from the Solicitor General, Tasmania Police made a policy decision that minor drug offenders under the age of 18 years would be dealt with in accordance with the *Youth Justice Act 1997* and encouraged to access appropriate health interventions, but would not be included in IDDI. As a result, data from the second half of the 2010/11 does not include persons less than 18 years of age.

Since 2010/11 there have been further reductions in both the total number of diversions (869 in 2011/12 vs. 778 in 2012/13) and in the number of second-level and third-level diversions (to health interventions) (307 in 2011/12 vs. 260 in 2012/13).

Table 49: Drug diversions or cautions issued statewide by Tasmania Police, 2003/04-2012/13

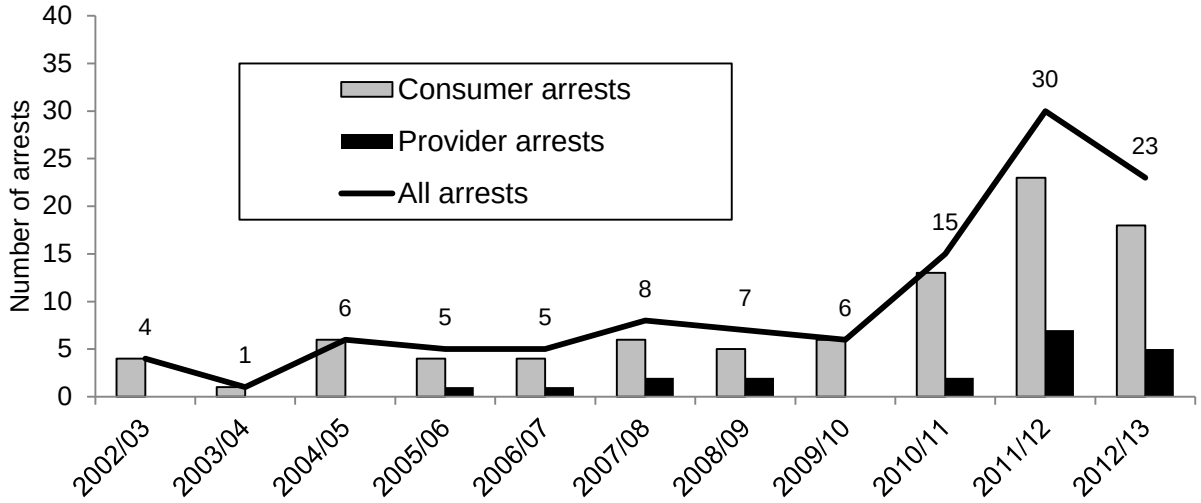
	2003/04	2004/05	2005/06*	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Number cautions/ diversions	1,398	1,330	1,158	1,361	1,681	1,528	1,609	1,132	869	778
No. diverted to health intervention	179	365	236	369	634	536	615	413	307	260

Source: Department of Police and Emergency Management Corporate Reporting Services, Annual Corporate Performance Reports – Total District Drug Diversions; Alcohol and Drug Service
*Arrests and cautions for 2005/06 were only reported for part of the financial year
Note: These figures may differ from data submitted to the Australian Crime Commission if the decision to charge persons was altered to a caution after the figures were forwarded to State Intelligence Services

7.2.5 Benzodiazepines

Since 2002/03, police arrests related to benzodiazepines have increased, albeit involving small numbers. In 2002/03, four arrests were reported; this subsequently increased to 30 arrests in 2011/12, with a small decrease reported for 2012/13 (23 arrests). Consumers-type offences have made up the bulk of these arrests each year (Figure 93).

Figure 93: Number of arrests for benzodiazepine-related offences in Tasmania, 2002/03-2012/13



Source: Tasmania Police
Note: 2012/13 data were provided by State Intelligence Services and are preliminary and subject to revision. Totals may differ from those reported in the Department of Police and Emergency Management annual report due to differences in counting rules

7.2.6 Drug-Related Charges in Tasmanian Courts

There has been a downward trend in the total number of drug-related offences over the past two years (Figure 92). This decline is largely due to decreases in the number of offences relating to the possession of illicit drugs (188 individuals in 2010/11 compared to 116 in 2012/13), dealing/trafficking of illicit drugs (114 individuals in 2010/11 compared to 65 in 2012/13), and the cultivation of illicit drugs (107 individuals in 2010/11 compared to 73 in 2012/13) (Table 50).

The number of individuals incarcerated at Hobart Prison in relation to drug offences in 2012/13 (47 individuals) was also considerably lower compared to 2011/12 (81 individuals), as was the number of offences among those incarcerated (237 individuals in 2011/12 compared to 111 in 2012/13 (Table 50).

Data relating to drug-related offences before the Supreme Court were not available for inclusion in the present report.

Table 50: Number of individuals before Tasmanian courts or imprisoned on drug charges, 2003/04-2012/13

	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08	2008/ 09	2009/ 10	2010/ 11	2011/ 12	2012/ 13
HOBART MAGISTRATES COURT										
Number of individuals before the court for:										
(alleged number of offences in parentheses)										
Import/export of illicit drugs	2(2)	0	1 (1)	0	1 (1)	3 (4)	1 (1)	3 (3)	6 (13)	2 (6)
Deal or traffic in illicit drugs - commercial quantity	28 (39)	35 (45)	38 (59)	42 (62)	53 (72)	60 (72)	55 (90)	66 (98)	48 (66)	42 (66)
Deal or traffic in illicit drugs - non-commercial quantity	38 (107)	27 (98)	35 (76)	28 (71)	17 (38)	40 (84)	56 (106)	48 (103)	43 (90)	23 (67)
Manufacture of illicit drugs	5(9)	3 (4)	1 (2)	0	1 (1)	0	0	3 (4)	1 (3)	0
Cultivation of illicit drugs	90 (111)	86 (105)	64 (78)	88 (104)	59 (77)	82 (100)	86 (99)	107 (143)	83 (103)	73 (87)
Possession of illicit drug	88 (518)	106 (564)	91 (440)	120 (561)	129 (494)	151 (653)	159 (677)	188 (843)	179 (746)	116 (660)
Use of illicit drug	3 (39)	2 (39)	2 (41)	1 (50)	2 (51)	5 (71)	3 (81)	3 (90)	7 (85)	8 (93)
Other Illicit drug offences	3 (122)	12 (135)	15 (129)	10 (150)	18 (151)	19 (184)	16 (169)	15 (214)	18 (191)	7 (150)
HOBART PRISON*										
Number of individuals incarcerated	36	55	57	56	n/p	84	53	80	81	47
Number of offences among those incarcerated	83	101	117	128	144	166	121	183	237	111
OFFENCE BREAKDOWN:										
Grow prohibited plant/substance										
Cultivate a controlled plant	4	11	4	7	10	11	8	8	14	1
Cultivate prohibited plant	0	2	9	6	1	5	1	0	1	0
Possession/use										
Possess a controlled drug	12	14	8	7	12	18	14	25	32	10
Possess a prohibited plant	2	1	2	3	0	2	1	0	0	0
Possess controlled plant or its products	21	26	36	41	42	38	30	56	70	44
Possess prohibited substance	4	1	3	1	0	1	1	0	0	0
Possess restricted substance	0	2	1	0	0	0	0	1	8	0
Possess/Use/Administer a controlled drug	0	1	2	2	5	0	1	2	10	8
Possess narcotic substance	3	1	0	0	0	0	0	0	0	0
Use a controlled drug	3	7	6	3	9	7	16	16	16	9
Use prohibited substance	2	1	2	0	0	0	0	0	0	0
Possess thing used for administration of controlled drug	3	9	11	15	15	10	12	22	30	12

Sources: Department of Public Prosecutions (Supreme Court data); Magistrates Court (Magistrates Court data); Corrective Services (Prison data), Department of Justice

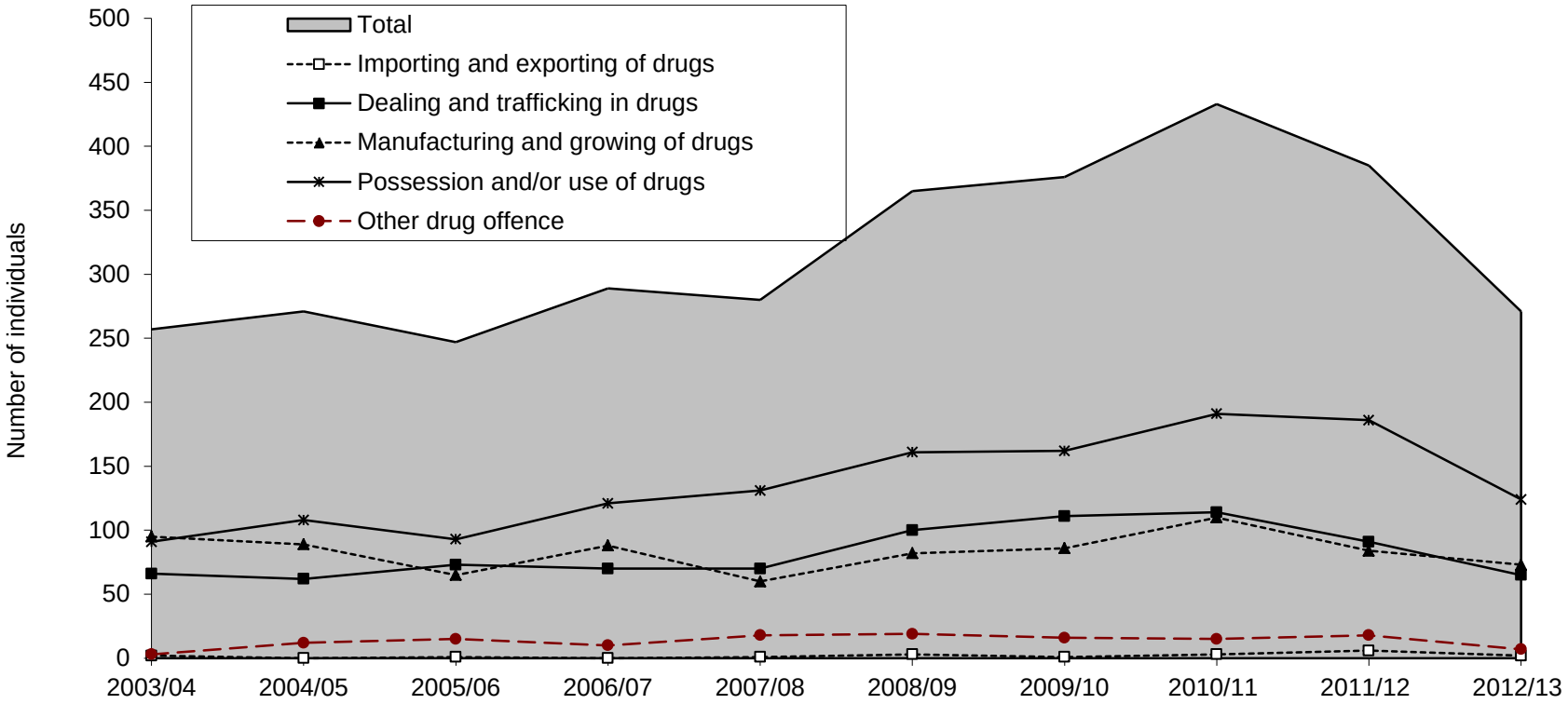
***** This includes all indictable charges under the *Misuse of Drugs Act 2001*, which includes manufacturing a controlled drug for sale, cultivating a controlled plant for sale, possession of thing used in manufacture of a controlled substance for sale, possession of thing used for cultivation of a controlled plant for sale, manufacturing a controlled precursor intended for use in manufacture of controlled drugs for sale, selling a controlled precursor for use in manufacturing a controlled drug, trafficking in controlled substances and controlled drugs

Table 50: Number of individuals before Tasmanian courts or imprisoned on drug charges, 2003/04-2012/13 (continued)

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Prescription offences										
Possess a prescription knowing it to be forged or unlawfully altered	0	0	1	0	0	0	0	0	0	0
Unlawfully alter a prescription	0	0	1	0	1	0	0	0	0	0
Unlawfully possess blank prescription form	0	0	1	0	0	0	0	0	0	0
Utter a prescription knowing it to be forged or unlawfully altered	1	0	3	0	1	1	2	0	10	0
Sell/supply narcotic substance										
Supply or Sell raw narcotic or narcotic substance	1	0	0	0	0	0	0	0	0	0
Selling/Supplying controlled drug	5	6	4	1	3	8	5	10	13	5
Sell/supply prohibited substance/plant										
Make, refine, prepare, sell or supply a prohibited substance	0	1	0	0	0	0	0	0	0	0
Sell prohibited substance	0	2	0	1	0	0	1	0	0	0
Sell or supply controlled plant	3	3	1	1	4	4	5	10	12	8
Sell prohibited plant	0	0	1	0	0	0	0	0	0	0
Cultivate a controlled plant for sale	1	0	1	1	1	5	2	0	2	0
Possessing thing intended for use in cultivation of controlled plant for sale	1	0	0	0	0	1	1	3	0	0
Traffic in controlled/prohibited/narcotic substance										
Traffic narcotic substance	1	0	3	0	0	0	0	0	0	0
Trafficking in controlled substance	7	7	8	22	36	52	22	23	17	13
Traffic prohibited plant										
Traffic in a prohibited plant	4	1	4	1	1	0	0	0	0	0
Manufacture a controlled drug for sale										
Manufacturing a controlled drug for sale	0	0	2	1	0	1	0	1	0	0
Manufacturing controlled drug	0	0	0	0	1	0	0	0	0	0
Possessing thing intended for use in manufacture of controlled substance for sale	1	1	1	1	0	1	0	0	0	0
Other										
Fail to comply with *Poisons Act* provisions	2	0	0	0	0	0	0	0	0	0
Possess implement Contrary to the Act	1	3	1	0	0	0	0	0	0	0
Supplying controlled drug to a child	0	0	1	1	2	0	0	0	0	0

Sources: Department of Public Prosecutions (Supreme Court data); Magistrates Court (Magistrates Court data); Corrective Services (Prison data), Department of Justice

Figure 92: Number of individuals before the Hobart Magistrates Court for drug-related offences, 2003/04-2012/13



Source: Hobart Magistrates Court

7.3 Expenditure on illicit drugs

PWID participants were asked how much money they had spent on illicit drugs on the day prior to interview (Table 51). This shows that almost three-fifths of the cohort (57%) spent money on illicit drugs the day prior to the interview. The average amount of money spent amongst the sample was $55 (SD=$81, range $0-400, median $25). Amongst the group that did spend money on illicit drugs on the day prior to the interview, the average expenditure was $98 (SD=$87, range $10-400, median $60).

Table 51: Amount spent on illicit drugs on the day prior to interview, 2005-2013

Amount spent on day prior to interview	2005 N=100 %	2006 N=100 %	2007 N=100 %	2008 N=100 %	2009 N=96 %	2010 N=89 %	2011 N=98 %	2012 N=106 %	2013 N=106 %
Nothing	55	45	49	46	34	30	52	29	43
<$20	2	4	4	2	5	5	3	5	2
$20-$49	15	12	19	18	15	15	13	15	15
$50-$99	14	17	13	15	24	21	15	16	16
$100-$199	8	11	12	17	18	21	11	22	17
$200-$399	4	8	2	2	4	6	4	8	6
≥$400	2	3	1	0	0	2	0	6	1

Source: IDRS PWID interviews

8.0 SPECIAL TOPICS OF INTEREST

8.1 Use of unknown drugs

In response to reports from KE and members of the Tasmanian IDRS steering committee, new questions regarding use of unknown analogue substances were included. Anecdotal reports were received of people using substances they were not familiar with, often powder packaged into a capsule, and experiencing negative effects, including anxiety, paranoia and palpitations. Eighteen percent of participants (n=19) reported using an unknown drug in the preceding six months. The median number of days participants used an unknown drug was 2 (mean 9, range 1-120 days). Three-fifths of these participants reported experience of a negative effect from an unknown drug (63%, n=12). Of this group, three participants reported hallucinations, paranoia and anxiety, a fourth participant reported complete loss of vision for a short period, with other participants reporting general anxiety, nausea and aggression. Sixty-eight percent of participants reported positive effects from an unknown drug (n=13), including feelings of euphoria, pain relief, relaxation, and 'flying high as a kite'. Clearly, these unknown substances bring both positive and negative consequences to the user. Anecdotal reports from PWID suggest that dealers of these substances may have different analogue drugs for sale from week to week.

KE noted anecdotal reports of increased rates of use, primarily amongst those people reporting long-term drug use, with injection of these substances occurring mainly amongst more *"seasoned campaigners"*. KE commented that use is primarily exploratory, occurring once or twice, although they noted that there is a proportion of consumers who report consistent regular use. Some caps were perceived as containing a mixture of ketamine and methamphetamine with other substances (e.g., caffeine; although it should be noted that these reports are not analytically verified), with one KE noting that consumers regularly comment that *"too much can be a bad thing",* with one type of cap nicknamed *"death"* as the effects felt presumably like dying, described by one consumer as *"like opening the gates of hell".* One KE in an NSP outlet said that several consumers have reported using caps of identical appearance together, only to experience contrasting physiological and psychological responses. The rapidly changing nature of the psychoactive drug market makes this a very challenging area for researchers and clinicians to adequately address. Nevertheless, in order to reduce harm to users, rapid dissemination of targeted harm reduction information to frontline workers and people who use drugs is essential.

8.2 Brief Pain Inventory

The Brief Pain Inventory (BPI) was included in the survey questionnaire with the aim of examining the relationship between injecting drug use, experience of pain and the therapeutic goals of pharmaceuticals used to manage pain. A number of international studies have shown that PWID experience higher levels of mortality and morbidity (English et al., 1995; Hulse et al., 1999; Vlahov et al., 2004), however, at this time there has been no work in Australia investigating the characteristics or the extent to which PWID obtain pharmaceutical opioids (licitly or illicitly) for the management of chronic non-malignant pain. In addition, there is growing evidence that prescribers are often reluctant to prescribe pharmaceutical opioids to people with a history of injecting drug use (Baldacchino et al., 2010).

The BPI is a tool used for the assessment of pain in clinical and research settings. The BPI uses rating scales from 0 to 10. The 'pain severity score' ranges from 0 ('no pain') to 10 ('pain as bad as you can imagine'). The 'pain interference score' looks at how much pain interferes with daily activities: general activity; mood; walking; normal work; relations; sleep; and enjoyment of life. This scale ranges from 0 ('does not interfere') to 10 ('completely interferes').

In Table 52, nearly one-fifth (17%, n=18) of participants reported experience of pain (other than everyday pain) on the day of interview. Of this group, almost all reported the pain as chronic non-cancer pain (continuous pain which lasts for more than three months: 94%), and 6% reported chronic cancer/malignant pain. The mean 'pain severity score' was 5.3 (SD=1.6; range 2.3-7.5). The mean 'pain interference score' was 5.9 (SD=3.1, range 0.4-10.0) (Table 52).

Participants were also asked on a scale of 0 ('no relief') to 10 ('complete relief') how much relief they experienced from any treatments/medications they received. Of those who received treatment/medication for pain (n=9), a mean score of 6.8 (SD 3.1, range 2-10) was reported.

Table 52: Brief Pain Inventory (BPI), 2013

	TAS IDRS (N=105)
Experienced pain today (other than everyday pain)	17%
Nature of pain (%):	(n=18)
Acute/short term	0%
Chronic non-cancer pain	94%
Chronic cancer/malignant pain	6%
Other	0%
Mean 'Pain Severity' score	5.3
Mean relief experience from treatment/medications*	6.8
Mean 'Pain Interference' score	5.9

Source: IDRS PWID interviews

* Among those who received treatment/medication for pain and commented (n=9)

8.3 Hepatitis C testing and treatment module

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

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

The majority of the sample (83%, n=89) had been tested for HCV in their lifetime, with 66% (n=59) reporting a positive result for HCV antibodies. Of those with a positive result for HCV antibodies, 54% reported this result more than 12 months ago and 46% within the last 12 months. Seventy percent reported undergoing further testing for HCV (i.e., to determine whether an active virus is present and which genotype). The main reason for no further testing among those who commented (n=17) was 'wasn't a priority' (47%). Almost half of the sample gave other reasons, including 'hoping it's *(HCV)* gone', pregnant and no time (Table 53).

Among those who received further tests (n=41), 85% reported a polymerase chain reaction (PCR) test (to see if the virus is active) and 46% reported a PCR viral genotype test. Almost two-thirds (63%) of those who received a PCR test (n=41) reported that the test showed an active virus. The community GP (54%) was the most common location of the last HCV test.

Table 53: Hepatitis C testing and treatment, 2013

	N=107 (%)
Ever tested for HCV (%)	83
Positive HCV test (n=59)	
Within last 12 months	46
More than 12 months	54
Further testing for HCV antibody	70
Reasons for no further testing (n=17)	
Provider didn't mention the need for further tests	6
Wasn't a priority	47
Blood tests are difficult for me	0
Don't feel sick	6
Concerned about confidentiality	0
Other reason	47
Further tests for HCV (n=41)	
PCR test (see if virus is active)	85
PCR viral genotype test	46
Other	0
Location last tested for HCV (n=28)	
Community GP	54
OST clinic	7
Specialist clinic	7
Prison	7
Other	25

Source: IDRS PWID interviews

8.4 Naloxone program and distribution

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

In 2013, the IDRS included a series of questions about take-home naloxone and naloxone more broadly. Of the local sample who commented (n=106), 76% had heard of naloxone. Of this group, 54% reported that naloxone was used to 'reverse heroin', 42% to 're-establish consciousness' and 30% to 'help start breathing' (Table 54).

Participants were asked if they had heard of the take-home naloxone programs: 18% of participants reported that they had. When participants were asked if they would support the expansion of the naloxone program into Tasmania, the majority reported that they would 'strongly support' an expansion (72%) and 24% reported that they would 'support' such an expansion (Table 54).

Participants were asked what they would do if they witnessed someone overdose or found someone they had suspected had overdosed. Almost all participants reported that they would call 000 (97%), 58% stated they would stay with the person, 52% would turn the person on to their side (i.e. recovery position) and 45% would perform mouth-to-mouth cardiopulmonary resuscitation (CPR) (Table 54).

Participants were also asked if naloxone was available would they; (a) carry naloxone if trained in its use, (b) administer naloxone after witnessing someone overdose, (c) want peers to give them naloxone if they overdosed, and (d) stay with someone after giving them naloxone? Almost all participants answered in the affirmative to these questions (Table 54).

Table 54: Take-home naloxone program and distribution, 2013

	N=106 (%)
Heard of naloxone	76
Description of naloxone (n=81)	
Reverses heroin	54
Help start breathing	30
Re-establishes consciousness	42
Heard of take-home naloxone program	18
Support for expansion of program:	
Strongly support	72
Support	24
Neutral	2
Oppose	0
Strongly oppose	1
Don't know enough to say	2
If you witnessed an overdose, would you:	
Turn person on their side	52
Mouth-to-mouth CPR	45
Call 000	97
Stay withperson	58
If naloxone was available, would you:	
Carry naloxone if trained	92
Administer naloxone after overdose	94
Want peers to give you naloxone	97
Stay with person after giving naloxone	96

Source: IDRS PWID interviews

8.5 Discrimination

Very often PWID manage complex situations in relation to poor treatment and discriminatory practices. The discrimination module aimed to complement the work that the Australian Injecting and Illicit Drug Users League (AIVL) have initiated with the AIVL National Anti-Discrimination Project (Parrand Bullen, February 2010) .

Eighty-two percent of the 2013 Tasmanian PWID sample commented on the discrimination section. Of those who responded (n=88), 51% reported discrimination within the last 12 months, 14% over 12 months ago and 35% reported no discrimination (Table 55). Discrimination in the last 12 months most commonly occurred with a medical doctor and/or a pharmacy (38% respectively), and less

commonly with a government service provider (such as Centrelink, Housing or Children and Family Service) (24%), Police (22%) or in a hospital (20%). The majority of participants reported the main reason for the discrimination was 'because I'm an injecting drug user (or people think I am)' (71%). One third (33%) of participants had experienced violence or abuse and 29% reported that they were refused service as a result of the discrimination.

Table 55: IDRS participants' reports of discrimination, 2013

	N=88 %
Ever been discriminated against	
Yes, within the last 12 months	51
Yes, but not in the last 12 months	14
No	35
Location of discrimination (n=45)*	
Doctor/prescriber	38
Pharmacy	38
Dentist	4
Health services	11
Government service (housing, children's services, Centrelink)	24
Police	22
Hospital	20
Needle and syringe program	2
Drug and Alcohol Service	11
Prison	0
Other	29
Reason for discrimination (n=45)	
Person who injects drugs	71
On OST medication	27
HCV positive	7
Other	16
Result of discrimination (n=45)	
Refused service	29
Taken off/reduced OST medication	0
'Outed' as a person who uses drugs	13
Experienced violence/abuse	33
Lost job	0
Other	27
Attempt to resolve discrimination (n=45)	
No, didn't try to resolve	84
Australian Human Rights Commission	2
Health Care Complaints Commission	0
Directly to service provider/organisation	4
Other	7

Source: IDRS PWID interviews

* Amongst participants reporting experience of discrimination in the last 12 months

8.6 Oral Health Impact Profile

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

The OHIP-14 is a self-report questionnaire that focuses on seven dimensions of impact (functional limitation, pain, psychological discomfort, physical disability, psychological disability, social disability and handicap), with participants asked to respond according to frequency of impact on a 5-point Likert scale coded never (score 0), hardly ever (score 1), occasionally (score 2), fairly often (score 3) and very often (score 4) using a 12-month recall period. However, the IDRS asked participants to respond based on the last three months (instead of 12 months).

For this report the OHIP-14 was divided into the seven dimensions of impact and percentages calculated for those who responded 'occasionally', 'fairly often' and 'very often'. Psychological disability (63%), physical pain (58%) and psychological discomfort (56%) had the highest impact for those participants who commented (Table 56).

A mean scale score of the 14 items was computed, with higher scores indicating poorer oral health-related quality of life (total score range 0 to 56). Using the 'additive' method, the mean OHIP-14 total score for the national sample was 15.9 (range 0-55). Twenty-six percent of those who commented scored 'zero' (Table 56).

Table 56: Oral Health Impact Profile 14 short form (OHIP-14) score, 2013

	N=89 %
Dimensions of impact	
Functional limitation	46
Physical pain	58
Psychological discomfort	56
Physical disability	44
Psychological disability	63
Social disability	40
Handicap	36
Mean total score (range)	15.9 (0-55)
Score of 'zero' (%)	26

Source: IDRS PWID interviews

9.0 IMPLICATIONS

The findings of the Tasmanian 2013 IDRS suggest the following areas for further investigation and possible consideration in policy.

1. Roll-out of take-home naloxone program in Tasmania

In 2012 a take-home naloxone program commenced in the ACT through which naloxone was made available to peers and family members of people who inject drugs for the reversal of opioid overdose as part of a comprehensive overdose response package. The intervention includes an education program with subsequent dispensing of the naloxone.

In Tasmania in 2009, the rate of accidental opioid-related deaths per million population was 38. In addition, amongst the local 2013 IDRS sample, one-third reported ever experiencing a non-fatal opioid overdose, and 8% had experienced such an event in the preceding 12 months. Participants were overwhelmingly supportive of such a program being introduced locally. Other Australian jurisdictions such as the ACT and NSW have already established such programs, as they have been recognised as an effective way to reduce opioid overdose deaths. The Tasmanian Department of Health and Human Services, in conjunction with NGOs, should ensure the establishment of such a program in Tasmania as a matter of priority.

2. Use of unknown drugs

Participants and KE both noted increased use of unknown drugs, which in some instance were associated with unpleasant and potentially harmful effects including loss of vision, anxiety and paranoia. Whilst it has been well established that an inherent risk exists with aspects of most drug use, use of unknown drugs carries extra potential risks such as overdose and neurotoxicity. In the last few years, rapid development and dissemination of new psychoactive substances has occurred locally and internationally by manufactures hoping to keep one legislative-step ahead of policy makers and police, to meet the ever-present demand.

One of the potential unintended consequences of supply reduction approaches is the harms to users. Whilst a person choosing to consume MDMA or heroin is aware of the positive effects of such a drug, they are also aware of the potential harms, and can take proactive steps to minimise the risk of these occurring. With unknown substances, the consumer is unable to do this. Unless there are substantial policy changes, such as has been the case with the regulation of ‘low risk’ new psychoactive substances in the New Zealand Psychoactive Substances Act, it is highly likely that this process of new, unknown substances appearing in drug markets will continue.

In terms of general harm reduction principles when consuming unknown psychostimulants, the general principles suggested by Winstock, Marsden and Mitcheson (2010) should be considered: avoiding regular use to avoid development of tolerance, avoiding co-incident use of multiple psychostimulants or in combination with large doses of alcohol or other depressants, avoiding becoming overheated, not consuming ‘stacked’ multiple doses, and avoiding psychostimulants in particular if a person has a history of mental health disorder, cardiac or neurological problems.

3. Monitoring of the impact of changes in the availability of equipment through needle syringe programs in Tasmania; and interventions to improve injection-related health

Budgetary cuts across Tasmanian Government departments since 2011 have resulted in clients being charged for sterile waters from the Tasmanian NSP. Unlike heroin and methamphetamine which are readily soluble in small amounts of solution, substantial amounts of water (3-6mL per dose) are needed for injection of pharmaceutical opioid tablets (e.g. morphine, oxycodone) according to best-practice evidence (McLean et al, 2009). Non-sterile water may be contaminated with bacteria or insoluble particles, which, if injected, may cause harm to the consumer, for example, with infections or inflammation at injection sites.

Two-fifths of the sample reported sterile water as the most common diluent used when preparing an injection (43%, n=43). Less ideally, 37% (n=37) noted most commonly using boiled water and 18% of respondents used tap water. In addition, a notable number of these participants reported experience of a health problem – predominantly a 'dirty hit' – in the four weeks preceding the interview, which was considered by participants to be associated with use of non-sterile water. In response to this, NSP should continue to encourage clients to use bacterial filters, which are provided free of charge. This would not only remove a sizeable proportion of contaminants from the non-sterile water, but also particulate matter from non-sterile pharmaceutical tablets and other drugs such as methamphetamine.

4. Proactive harm reduction interventions targeted to injectors of pharmaceuticals

Tasmania, like a number of other regions removed from heroin distribution networks (such as the Northern Territory and New Zealand) has a long-established culture of injection of opioid-based pharmaceuticals. In the 2013 Tasmanian IDRS, high levels of injecting use of morphine and oxycodone have continued. In addition, new formulations of drugs, such as Suboxone sublingual film, potentially introduce new harms to consumers who inject these drugs. As such, research into factors that would reduce the harms associated with these preparations used within the local PWID population, and dissemination of this information to users through continued training of NSP staff and peer groups, are necessary.

Recent Hobart-based studies investigated the efficacy of a range of different filtration methods on samples of morphine and oxycodone tablets. These studies found that the commercially available filters (0.22 μm bacterial filter and 0.45 μm pill filter) dramatically reduced the presence of large particles that may potentially cause harm to the user, and, when used appropriately, do not result in any loss of the active drug (McLean et al., 2009). However, preparation of injections using a sterilising 0.22 μm bacterial filter is a time-consuming process. Evaluation of a new filter that is effective and simplifies the filtering process has commenced in several sites nationally.

In the face of relatively high rates of injection of pharmaceutical opioid tablets and capsules amongst injecting drug users locally and in other Australian jurisdictions, consideration of other effective harm reduction approaches such as trials of injectable opioid treatments warrant renewed attention.

5. Harm reduction approaches for alprazolam use

Since 2002, when Temazepam gel caps – the favoured benzodiazepine amongst many PWID – were removed from the Australian market, alprazolam tablets have been preferred. In 2007, following a growing body of reports regarding the harms associated with use of alprazolam, including vascular damage, gangrene, amputations of limbs and overdose, the Pharmaceutical Services Branch (of the Tasmanian Department of Health and Human Services) implemented regulatory changes regarding the prescribing and dispensing of alprazolam. These changes were aimed at restricting alprazolam prescribing, particularly amongst people in receipt of opioid prescriptions. In subsequent years, it appears that after a brief decrease in use and availability, alprazolam use amongst IDRS participants has returned to a level similar to before the regulatory changes, illicit availability has improved, however, the price of these tablets has more than doubled. In the face of ongoing use of alprazolam, often in combination with opioids, harm reduction interventions aimed at educating people about overdose risk and potential vascular damage are important. As data from the current study clearly show that people are continuing to inject alprazolam, further research into more effective methods of reducing particulate matter is warranted. In addition, policy initiatives aimed at reducing harms relating to drug use should involve PWID representatives, with the aim of increasing the potential effectiveness of interventions. The effects of such policy and regulatory changes should also be closely monitored and evaluated, to better inform future initiatives.

6. Experience of discrimination

May participants reported experience of various forms of discrimination, most commonly related to interactions with medical doctors and pharmacy staff. Services such as Advocacy Tasmania and the office of the Anti-Discrimination Commissioner are able to provide advice and assist consumers in many circumstances. However, health professionals are expected to provide services to clients without judgement and discrimination, so the high rates of reported recent experience of discrimination amongst the current cohort is particularly noteworthy. Services working with people with drug use issues should liaise with the office of the Anti-Discrimination Commissioner to ensure that their policies are in line with current legislative requirements, and to provide training to staff as required, in order to reduce discrimination.

7. Increased attention to mental and physical health and wellbeing amongst people with substance dependence issues

The current study identified, on average, poorer physical and mental health and function among the IDRS sample in comparison with samples from the general Australian population. Similarly, levels of psychological distress amongst the IDRS sample were also found to be significantly greater than reported by a sample of the general population. Half of the IDRS participants self-reported experience of a recent mental health problem, and one-fifth of these did not attend a health professional for this.

These findings support the large body of knowledge relating to comorbid disorders and complex vulnerabilities that affect this population, and underpin the need for clients of general and drug treatment services to be assessed and provided with treatment for physical and mental health problems, both of which can be integral to substance use treatment. Partnerships and establishment of clear referral pathways between services including – but not limited to – mental health and AOD sectors, general practitioners, pain clinics, Housing and Child and Family Services, are crucial to meet the needs of this group.

8. Monitoring and dissemination of information in regard to emergent trends in use of diverted pharmaceuticals

Oxycodone prescriptions both locally and nationally have continued a rapid increase in recent years. With diverted oxycodone use increasing amongst local PWID, and the 2014 introduction of a new formulation of oxycodone with abuse deterrent properties, it may be the case that approaches toward preparation of the drug for injection may be rapidly evolving. Virtually no information exists in relation to the resulting solution from attempts to circumvent the abuse deterrent properties of the new oxycontin formulation, and significant harms may occur if people inject such products. Frontline workers need to be aware of these issues and to implement harm reduction interventions with potential injecting consumers of this drug.

Research examining misuse of pharmaceutical products, such as opioids, benzodiazepines and codeine-based products in populations other than PWID is warranted, as this has been a demographic identified in both KE interviews in the current study and in associated local research (Nielsen & Cameron, 2009; Fry & Bruno, 2002; Bruno, 2004b) but not accessed within the methodology of the IDRS, and this population has, to date, been largely invisible in research or other data collections.

9. Implementation of harm reduction approaches to reflect the needs of methadone pharmacotherapy clients

With the entrenchment of a culture of injection of methadone syrup locally (although this remains predominantly an issue for individuals enrolled in the state methadone maintenance program injecting their own methadone), continued consideration of pragmatic harm reduction approaches to such use is warranted, either at the level of the consumer, with ongoing provision of free or

affordable biological filters, and/or at the policy level, requiring use of sterile water for dilution of methadone doses or switching to Biodone syrup, as this preparation does not contain the agent sorbitol, which can cause irritation and harm to the venous system.

10. Monitoring and application of region-specific drug trend information

As the Tasmanian illicit drug use culture has been consistently shown to differ substantially from other jurisdictions (with regard to patterns of use of pharmaceutical products rather than substances such as heroin, due the low local availability of this drug), drug education programs and harm reduction information campaigns need to be tailored to the particular needs and types of substances used within the state.

It would be beneficial to continue to extend the methodology of the IDRS into the other regions of the state (such as Launceston and the North-West coast) to form a state-wide drug trend monitoring framework. There has been little specific research examining patterns of drug use within these areas, and similarly, there is a paucity of indicator data that is available on a region-specific basis. Due to their access to air and sea ports and establishment of organised motorcycle group headquarters, availability and use of illicit substances may differ substantially in these regions from patterns seen in Hobart. Pilot studies extending the IDRS methodology into the north and north-west of Tasmania in 2003 and 2006 have provided evidence that there are clear distinctions between the drug markets in these regions (Bruno, 2004a; de Graaff & Bruno 2007b). As such, it may not be appropriate to infer similarity between drug trends and emergent issues identified in Hobart-based studies to these regions.

11. Evaluation of the impact of, and further targeting of, drug driving interventions among regular drug consumers

A substantial proportion of the consumers interviewed in the IDRS study reported driving while affected by drugs (two-thirds of those with access to a vehicle). This has remained stable across the past seven IDRS PWID cohorts, despite the implementation of roadside drug-testing by Tasmania Police and associated driver education campaigns. While reports of driving while affected by several drug types remained relatively unchanged, there was an increase in reports of driving after use of illicit morphine. This suggests that drug-driving interventions may require further monitoring and evaluation, particularly where this information could be used to tailor campaigns to this particularly risky demographic.

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